Peru's Energy Investment Guide 2024/2025

PERU Ministry of Foreign Affairs

Perú petro

Peru's Energy Investment Guide 2024/2025

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A NOTE FROM THE MINISTER OF FOREIGN AFFAIRS

Elmer Schialer
Minister of Foreign Affairs

The current Peruvian government is promoting a new investment cycle that allows us to capitalize on the prospects created by the energy and climate transition. In this context, the Ministry of Foreign Affairs is focused on consolidating the image of Peru as a friendly investment destination country and communicating the opportunities the Peruvian economy provides, highlighting its strengths as well as its potential in international markets.

The Peruvian energy sector stands out for its extensive natural resources and a favorable environment for energy investment, including hydrocarbons, renewable energy, and energy efficiency projects. The purpose of the policy implemented is to guarantee a reliable, affordable, and sustainable energy supply that supports our economic development and improves the quality of life of citizens.

Peru has an outstanding energy industry. The oil and gas deposits discovered (e.g., Camisea, Aguaytía, and Talara) show the potential of this sector. Through responsible and efficient management, the government has guaranteed natural gas and electricity for more Peruvians, benefiting and contributing to the improvement of their quality of life.

A reliable energy supply is essential to sustain industrial production and critical services such as health and education, as well as to reduce environmental emissions. Therefore, maintaining competitive prices becomes a fundamental factor in attracting foreign investment, especially in sectors such as mining and manufacturing, which are an integral part of the country's overall development.

Legal stability and sustained economic growth provide a conducive environment for energy infrastructure development and the inflow of foreign capital. The public policies implemented by the Peruvian government have fostered the transformation and strengthening of the energy sector.

In this context, Peru has exceptional potential for renewable energy production, possessing wind, solar, and geothermal resources. There are enormous solar resources on the Peruvian coast and mountains. The solar resource of the jungle is comparable to that of Germany, one of the countries with the most domestic photovoltaic solar systems

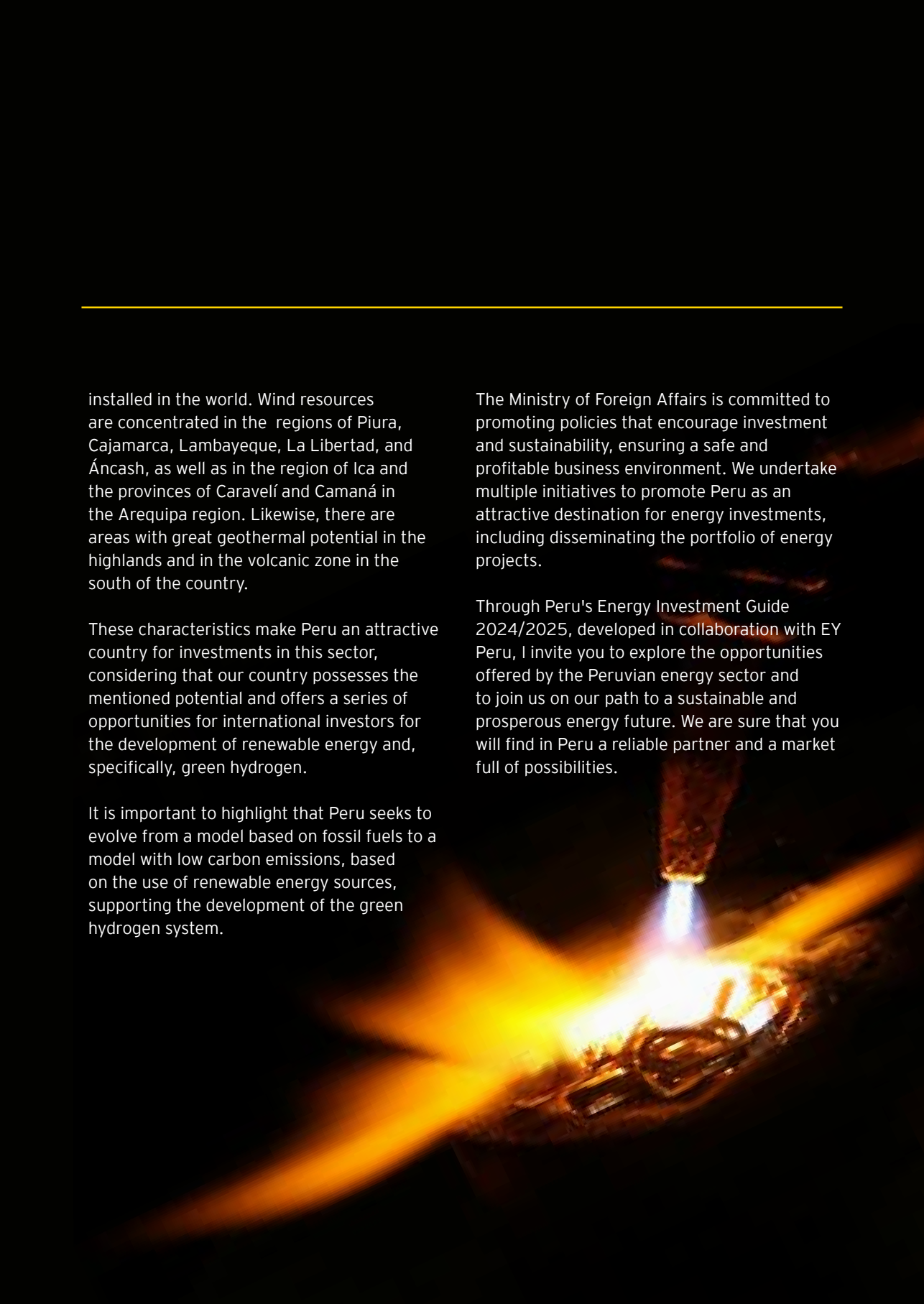
installed in the world. Wind resources are concentrated in the regions of Piura, Cajamarca, Lambayeque, La Libertad, and Áncash, as well as in the region of Ica and the provinces of Caravelí and Camaná in the Arequipa region. Likewise, there are areas with great geothermal potential in the highlands and in the volcanic zone in the south of the country.

These characteristics make Peru an attractive country for investments in this sector, considering that our country possesses the mentioned potential and offers a series of opportunities for international investors for the development of renewable energy and, specifically, green hydrogen.

It is important to highlight that Peru seeks to evolve from a model based on fossil fuels to a model with low carbon emissions, based on the use of renewable energy sources, supporting the development of the green hydrogen system.

The Ministry of Foreign Affairs is committed to promoting policies that encourage investment and sustainability, ensuring a safe and profitable business environment. We undertake multiple initiatives to promote Peru as an attractive destination for energy investments, including disseminating the portfolio of energy projects.

Through Peru's Energy Investment Guide 2024/2025, developed in collaboration with EY Peru, I invite you to explore the opportunities offered by the Peruvian energy sector and to join us on our path to a sustainable and prosperous energy future. We are sure that you will find in Peru a reliable partner and a market full of possibilities.



A NOTE FROM THE DIRECTOR GENERAL OF ECONOMIC PROMOTION

PERU | Ministry of Foreign Affairs

Augusto Morelli
Director General of
Economic Promotion

In a global economic recovery context, the Ministry of Foreign Affairs is steadfast in strengthening national competitiveness. This commitment is based on solid macroeconomic stability and favorable economic prospects. For the current year, the Peruvian economy is projected to grow by around 3.1%, one of the highest rates in the region.

The Ministry of Foreign Affairs is promoting the attraction of foreign investment to the Peruvian market to achieve economic recovery and improve citizens' well-being. This initiative drives our efforts to maximize growth and development potential and enhance Peru's positioning within the international community.

Through our extensive network of diplomatic missions abroad, we have secured Peru's image as an attractive investment destination through continuous and diligent work in informational fairs, roadshows and virtual forums, highlighting success stories in various sectors and the profitability of projects that our country offers.

The year 2024 holds significant importance for Peru as we will host the APEC Summit for the third time. This event is a prominent platform to showcase the government's goals and the progress achieved thus far.

In this context, the publication of this new Investment Guide reflects the Ministry's commitment to promoting worldwide the opportunities available in the Peruvian energy sector. This sector is recognized as fundamental to our economy due to its high performance and significant economic contribution.

Among the notable projects in the energy sector is the Transmission Plan 2023–2032, which includes 15 electricity projects organized into four groups. These projects include significant improvements to the electrical transmission networks in various regions of the country, such as Ancash, Junin, Ucayali, Apurimac, Puno, Arequipa, Ayacucho, Ica, and Lima. The awarding of these projects, under the

Public-Private Partnership (PPP) modality, is scheduled for different quarters of 2024, to strengthen the reliability of the electricity supply and benefit millions of people across the country.

Additionally, the Ministry guides foreign investors interested in starting private projects by providing detailed legal, tax, and labor information. It also fosters collaboration between public entities and the private sector, including strategic partnerships like the agreement with EY Peru.

Peru's Energy Investment Guide 2024/2025 is a strategic tool for identifying opportunities in the energy sector and facilitating their implementation in the country. It offers a detailed overview of the Peruvian energy landscape, highlights strategic investment areas, and provides information on the regulations and procedures necessary for project success.

A NOTE FROM EY

Paulo Pantigoso
Country Managing Partner
EY Peru
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This edition of the Energy Guide has as its main objective to be a tool in the process of evaluating the energy landscape in Peru to ensure that foreign investors have the most recent and accurate information to start and develop their operations in the country on a long-term basis.

This guide includes various aspects usually taken into consideration by investors from around the world before making critical decisions on the development of new operations. In this sense, we provide information on Peru's economic, legal, tax, labor and financial issues applicable to the energy sector, as well as other that can be used for developing activities and making business decisions.

The increasing demand of energy in Peru during the last twenty years due to the developing of mining and industrial projects, and the growth of its main cities, has served to better position the oil & gas and electricity activities. However, this scenario is going to evolve as the economy grows and new sources of energy are considered.

The 2014-2025 National Energy Plan highlighted the need to diversify the sources of energy production due to trends of investment in clean energy in the global market. According to the Renewable Energy Country Attractiveness Index (RECAI), Peru is the fifth most attractive country to invest in renewable energies in Latin America, positioning it among the main markets with potential for the development of projects in this sector.

We firmly believe that Peru offers great opportunities for favorable investment, as well as an ideal business climate for investment.

Peru's economy is showing indicators of evident recovery in a number of sectors as a result of the accurate measures being executed within a challenging and constantly changing environment.

At EY we reaffirm our commitment to the development of Peru, as well as to the building of a better world for business. We invite you to read this Guide in the hope that it will be of use to discover new initiatives, and we are at your disposal for any assistance you may require.

David Warthon
Oil & Gas Tax Partner
EY Peru
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This is a very particular year for the Oil & Gas industry in Peru. It has been in the loop of all the stakeholders since all the License Contracts in the Upstream subsector are finalizing between 2023 and 2025. Moreover, the prices have been increasing and maintaining in high prices, at least- the last two years, which gives the business an extra booster for foreign investors into Peru.

In 2024, and until this Guide is published, the average price of the oil is around USD90 per barrel which is a higher than previous years and it is expected to be at this price in the next few years, securing the importance of production in Peru and in the whole world.

The main sites to be developed in Peru includes the Amazon, the north coast, and the offshore coast until the border with Ecuador. This year will be particularly special since the Talara Refinery (located in the north shore, specifically in Piura´s region) is now in function, starting from December 2023. The production of this refinery is expected to increase this 2024.

But not only the Upstream subsector is an extremely important business, also the production of natural gas has been deeply developed and has reached an important part of the "Government take", contributing around USD1,206 million in 2023 as part of the Royalties together with Oil, which it is an important contribution to the authorities to perform improvements on the quality of life of the Peruvian population, focusing on the people close to the exploitation sites.

Also, this 2024 Perupetro (Peruvian Oil & Gas Government Agency) has granted some blocks to be developed by Petroperu (Peruvian Government Oil & Gas Company) and some private sector companies as part of a Joint Venture. The interest in bidding the available Oil Blocks is increasing and is an important factor in the recovery of the foreign investment interest.

We invite you to contact us for any interest in the opportunities that Peru offers, and we wish all the best in the development of your activities in Peru.

Carla Puente
Tax Partner
EY Peru
in/cpuente

In the energy sector, the local and foreign stakeholders seem to share the same purposes to support investments in Peru: to increase the energy production and to make this increase in a sustainable way.

As a developing country with a solid growing economy, the energy demand is not yet covered and it is guaranteed to increase, therefore access to cost efficient and sustainable energy must be ensured for economic activities to continue to grow and most important, to achieve the goal for all Peruvians to have access to energy.

This is why the Peruvian government promotes investments projects in transmission, supports the construction of generation plants using renewable resources, and implements projects to procure energy to the Peruvian population. Together with the focus of the government on the above, the local and foreign financial sector is also committed with supporting the purchase and development of projects in the energy sector, while users and nonusers within the area of influence are also on board as this is aimed to guarantee their access to energy and to improve their lives and businesses.

Considering the Peruvian natural potential for developing renewable energy projects, as wind and solar power seems to be exploitable in our land, Peru is certainly an attractive country to invest in.

Fortunately for everyone, the government, businesses, and other stakeholders interested in the execution of energy projects in Peru are conscious of the importance of sustainability as a key driver. Environmental preservation is taken into consideration as a main sustainable matter specifically in this sector. The social aspect of sustainability is also present in the energy sector as access to energy is essential for the development of the population's social and economic activities. Governance also takes a leading role because energy activities are regulated as Public Services in Peru and many of the investors are public entities or governmental entities.

Most of the new projects and M&As in Peru are related to: a) the generation of electricity with renewable resources, b) the safe construction and operation of transmission lines that deliver energy to businesses and populations, c) the expansion of projects providing energy to the population, and d) the implementation of innovation projects to improve the energy performance from a sustainable point of view.

In this guide, readers will find the key local framework that will allow them to better understand how energy businesses are developed in Peru and all the opportunities that our country energy sector offers.

A NOTE FROM PERUPETRO

Jorge Pesantes
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In a global context where the demand for energy resources is constantly increasing, Peru stands out in the offshore scenario. With notable hydrocarbon potential yet to be explored, the country hosts promising oil and gas reserves, offering significant opportunities for investment and development in this vital industry of the economy. In this regard, the Energy Investment Guide provides accurate information on the country's energy situation and the development of long-term operations.

Eight of the eighteen sedimentary basins in Peru are located partially or entirely along the Coast – that is, out to sea. These are: Tumbes - Progreso, Talara, Sechura, Salaverry, Trujillo, Lima, Pisco and Mollendo.

Of these eight basins, three have proven production: the Tumbes – Progreso, Talara, and Sechura Basins, while Trujillo, Salaverry, Pisco, Lima, and Mollendo present evidence confirming their potential to contain oil and gas, making it necessary to promote their exploration.

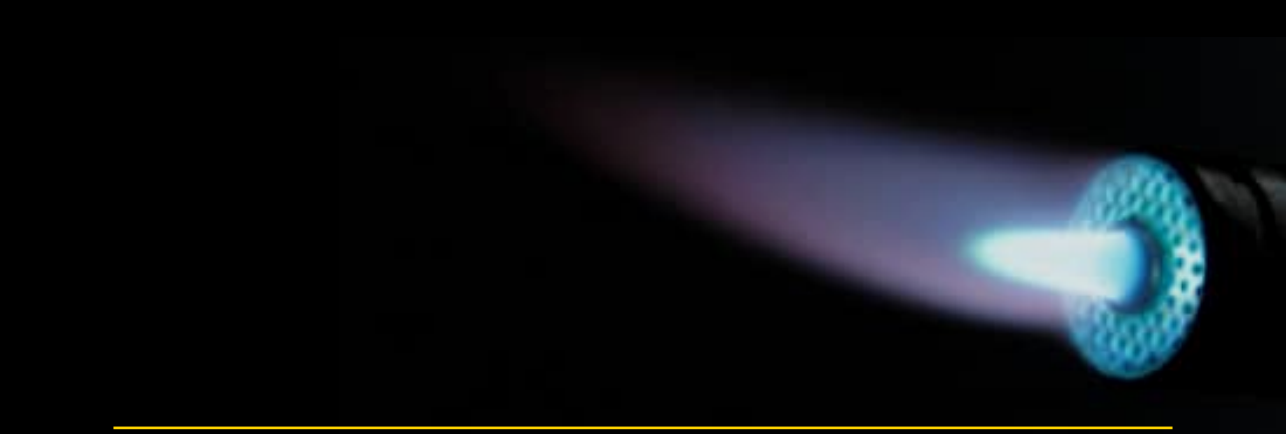
Various studies show that Peru's offshore basins have prospective oil resources amounting to 8.65 billion barrels and 8.40 trillion cubic feet of gas to be discovered. Moreover, the probability of success in some of these basins ranges between 25% and 30%, a higher figure than other countries in the region with a probability of 8% and 10%.

Undoubtedly, this demonstrates the country's hydrocarbon potential and explains why, in recent years, the interest of some of the world´s major hydrocarbon industry players has been rekindled. Peru faces a significant opportunity to revive exploration efforts, especially in offshore basins, which have attracted the interest of large international companies' unseen in the hydrocarbon sector for many years.

Trujillo Basin

In 2017, because of the promotional efforts by Perupetro S.A., Hydrocarbon Exploration and Exploitation Operating License Agreements for Blocks Z-61, Z-62, and Z-63 were signed with Anadarko Peru B.V. Sucursal Peruana.

The Operating License Agreements are in the Trujillo Basin in Offshore Peru, 30 to 45 nautical miles from the coastline of the Lambayeque and La Libertad regions, where seabed depths vary from East to West between 100 and 2,400 meters. Due to the pandemic, the execution of



activities under the Minimum Work Program (PMT) for the first period of the Exploration Phase of the Operating License Agreements dated March 2022. was delayed. However, the Contractor is currently in the Second Phase and progressing with the project to acquire 6,123 Km2 of 3D marine seismic data in Blocks Z-61, Z-62, and Z-63.

Perupetro has undertaken significant multisector coordination with the entities linked to the industry to ensure this project can commence within the scheduled deadlines. This project could change the country's hydrocarbon trade balance if study results confirm the expected potential.

The project to acquire seismic lines will help define the oil and gas potential of Blocks Z-61, Z-62 and Z-63 and quantify their prospects. According to the existing geological data, the Trujillo Basin has a 30% probability of success, hence the importance of expediting exploration in this basin.

Tumbes and Talara Basins

Recently, we announced the signing of three Technical Evaluation Agreements with the French giant Total Energies E&P, one of the world's five most significant oil and gas producers. Comprehensive geological-geophysical desktop studies will be undertaken to increase the knowledge level about the oil and gas potential that could exist in the Talara and Tumbes Basins.

At Perupetro, we are taking significant steps to reactivate exploration. Perupetro is committed to this objective; without exploration, it is impossible to conceive a discovery that would allow the country to increase its oil and/or gas reserves, strengthen energy security, and, most importantly, provide thousands of Peruvians access to energy they do not have today. We recently promoted Peru's hydrocarbon potential to investors in Houston, and we confirmed that interest remains. We need to continue coordinating with different entities to expedite project development and position us in the focus of investors. This is the challenge assumed by Perupetro.

The Technical Evaluation Agreements are in effect for 24 months and allow companies to conduct studies and non-intrusive activities that include satellite studies, geological-geophysical reevaluation of existing information in the Perupetro Database. It should be noted that depending on the obtained results, companies, after fulfilling their commitments, may exercise the Right of First Refusal for an eventual negotiation and signing of a Operating License Agreement.

In this regard, with the commitment of Perupetro and the sustained interest of leading world actors in the hydrocarbon industry, the country is on track to leverage its potential in this vital sector. Multisector coordination, investment promotion, and the stimulus for exploration are fundamental pillars to ensure its development. With a proactive and collaborative approach, Peru is ready to position itself as a significant player in the global offshore landscape, thus contributing to economic growth and the well-being of its citizens.

CONTENT

I. Background information

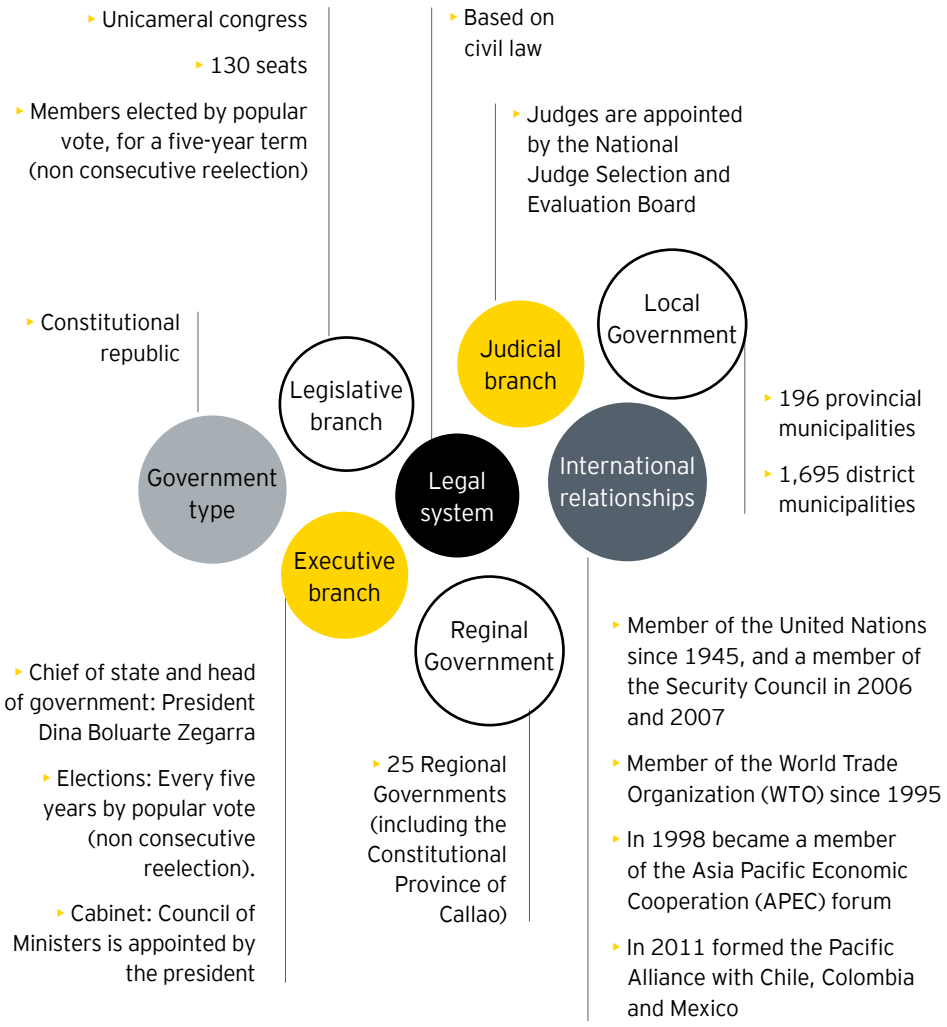
1 Government

Peru is a democratic constitutional republic with a multiparty system. Under the Constitution of 1993, the President is the Chief of State and Head of Government. The President is elected every five years and cannot run for re-election immediately. The President appoints the Prime Minister and the members of the Cabinet. There is a unicameral Congress of 130 members elected for a five-year period.

The legislative proposals can be submitted by both the executive and legislative branch and will become law once they are approved by the Congress and promulgated by the President. The judicial and electoral bodies are independent.

The Peruvian Government is elected directly through a mandatory vote, applicable to all citizens between the age of 18 and 70. In the current period, Dina Boluarte Zegarra is the President of the Republic.

Country overview



Source: Peruvian Constitution, Ministry of Foreign Affairs (MRE).

2 Geography

Peru, located on west central coast of South America is bordered by the Pacific Ocean to the west, Chile to the south, Bolivia and Brazil to the east, and Colombia and Ecuador to the north. With a total land area of 1.29 million of km2, Peru is the third largest country in South America after Brazil and Argentina. It may be divided geographically in three regions:

- The Coast (Costa), which is a narrow desert strip 3,080 km long that accounts for only 11.7% of Peru's territory even when it contains approximately 58.9% of the population. Lima, the political and economical capital of the country is located in this region.
- The Highlands (Sierra), which consists of the Andean Mountain Range, covers 27.9% of the territory and holds almost 26.6% of the population. This region contains the country's major mineral deposits.
- The Amazon Jungle (Selva), is the largest region occupying 60.4% of Peru's territory and holds around 14.5% of the population. This region is rich in petroleum and forestry resources.

Peru's geographic information

- **Area**
  1.29 million of km^2
- **Climate**
  Varies from tropical in the amazon region to dry on the Coast temperate to very cold on the highlands.
- **Natural Resources**
  Gold, copper, zinc, silver, gas, petroleum, fish, phosphates, timber agricultural products.
- **Timezone**
  GMT-5 (Greenwich Mean Time minus five hours). There is no daylight saving time, and there is only one time zone throughout the entire country.
- **Main Languages**
  Spanish, Quechua and Aymara

Source: National Institute of Statistics and Information (INEI).

3 People

The estimated population of Peru for the year 2023 is 33.7 million, of which 12.3 million (approximately 36.5%) reside in Lima (including the population of the Constitutional Province of Callao). The labor force is estimated to be about 18.2 million.

The predominant religion is Roman Catholicism, and the main official languages are Spanish and Quechua. Aymara is also spoken in some parts of the southern Highlands Region of the country. With respect to the literacy rate, 94.0% age 15 and over can read and write.

People Overview (2023)

Population	33.7 million
Age Structure	0-14 years: 24.1% 15-59 years: 62.3% 60 years and over: 13.6%
Growth Rate	1.0%
Birth Rate	15.5 births /1,000 population
Death Rate	5.2 deaths /1,000 population
Gender Ratio	1.02 male/female
Life Expectancy at Birth	77.2 years

Source: National Institute of Statistics and Information (INEI).

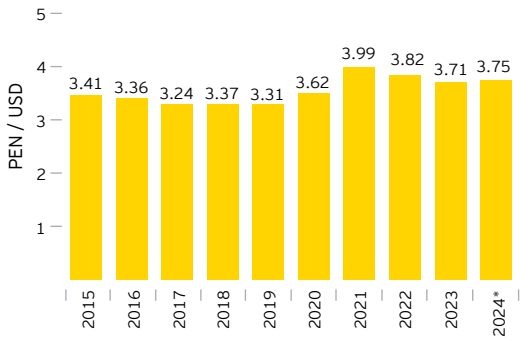
4

Currency and monetary policy

The Peruvian currency is the Sol (PEN). The Central Bank of Peru (BCRP) conducts a managed floating regime for the exchange rate of the PEN versus the US Dollar (USD). The Bank allows the market to determine the value of the currency, although it intervenes to avoid large fluctuations.

Banks are currently (June 30, 2024) buying USD at PEN3.827 and selling USD at PEN3.837. Parallel market rates are slightly different. There are no restrictions or limitations on holding bank accounts in foreign currency or to remit funds abroad.

Exchange Rate



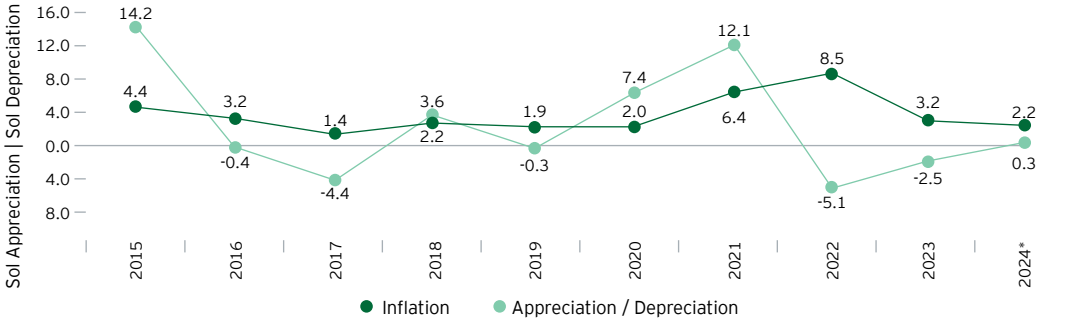
*Projection. June 2024 Inflation Report.
Source: Central Reserve Bank of Peru (BCRP).

The BCRP started targeting inflation in 2002 and is now committed to keeping the annual inflation rate within a target range of 1% to 3%. The central bank's commitment to stable inflation has favored inflows of capital as well as exchange rate stability.

The annual inflation closed at 3.2% in 2023, shifting away from the Central Bank's target, as the pandemic recovery efforts elevated consumer prices. However, it remained among the lowest in the region. The Bank's officials now expect inflation to finish 2024 within the target range.

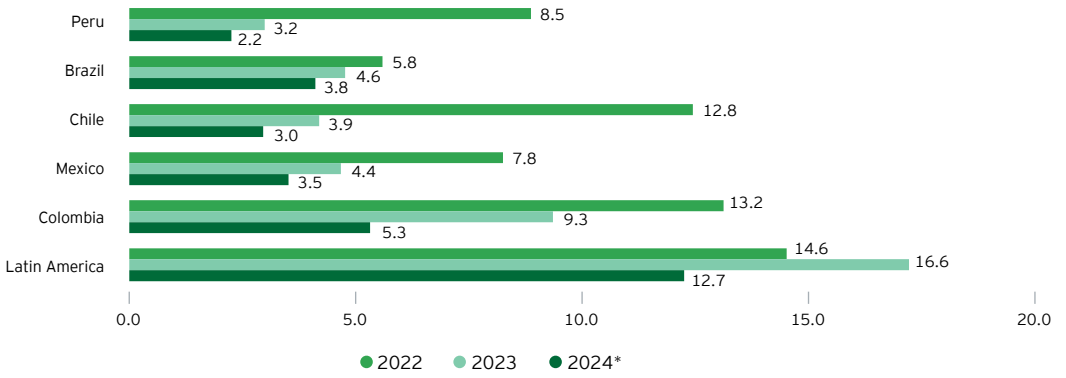
As may be seen in the following charts, Peru's level of inflation is one of the lowest in Latin America, with a rate of 3.2% in 2023, well below the regional average (16.6%). In addition, over the past decade, the Peruvian economy had the lowest average annual inflation rate among the largest economies in Latin America, at 3.6%, below that of Chile (4.5%) Colombia (4.9%) and Brazil (6.0%).

Average appreciation/depreciation and Inflation



*Projection. June 2024 Inflation Report.
Source: Central Reserve Bank of Peru (BCRP).

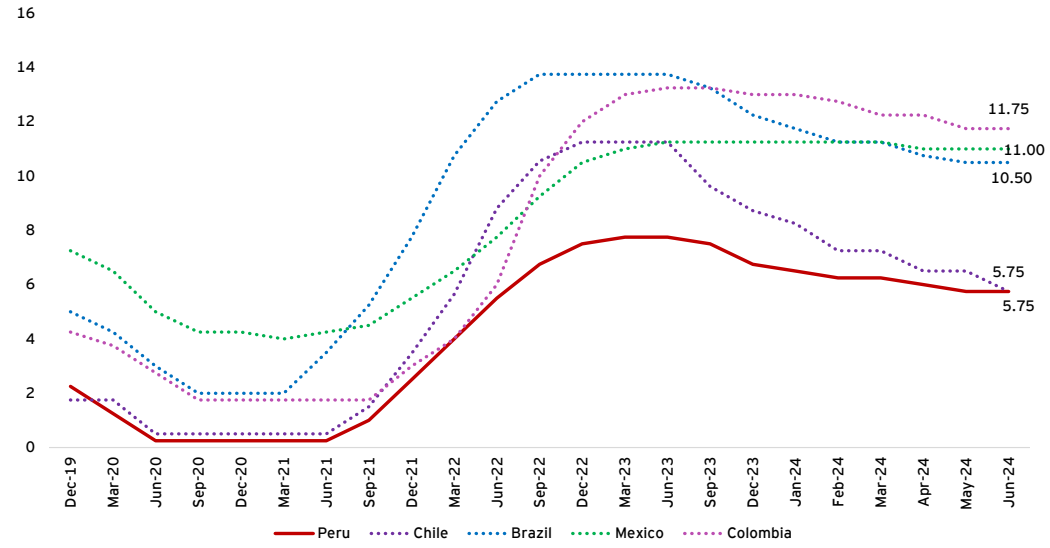
Inflation rates in Latin America (%)



*Estimate. World Economic Outlook Database, April, 2024. For Peru, forecasts are based in the June 2024 Inflation Report.
Source: International Monetary Found (IMF), Central Reserve Bank of Peru (BCRP).

As of June 2024, Peru has an interest rate of 5.75%, one of the lowest rates in the region (Colombia 11.75%; Mexico 11.00%; Brazil 10.50%; Chile 5.75%). During the pandemic, monetary policy has been expansive in response to a greater liquidity requirement. Since August 2023, monetary policy has been contractionary according to the world tendency to control inflation.

Monetary Policy Interest Rates in Latin America (%)



Source: Central Banks.

5 Economy Overview

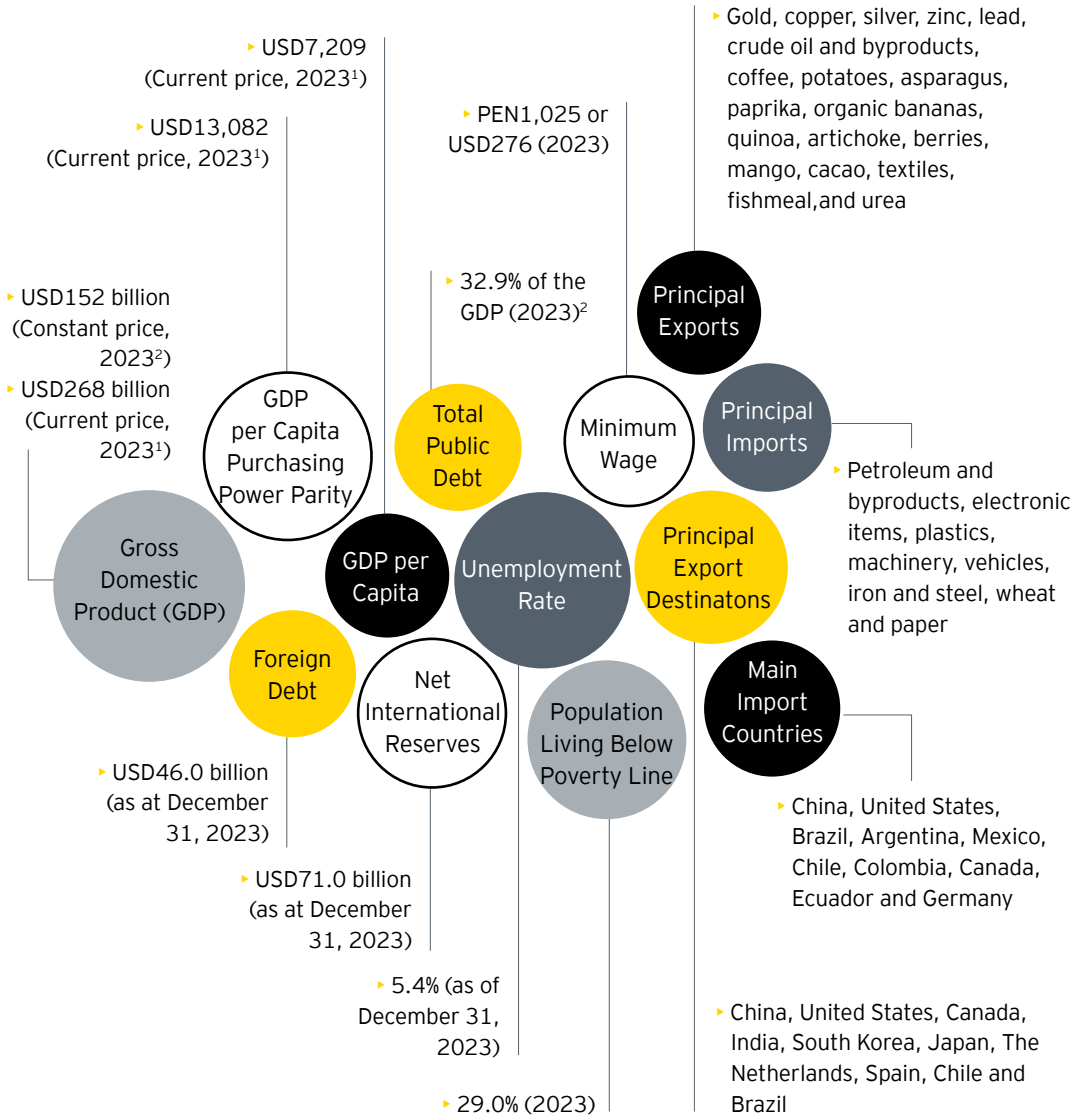
The Peruvian economy has strong macroeconomic indicators thanks to the implementation of a countercyclical macroeconomic policy and a favorable external environment.

The country has had continuous economic and political stability since the early 1990's and grew 119% between 2000 and 2020.

Due to prudent macroeconomic policies, investor friendly market policies and the government's aggressive trade liberalization strategies, Peru has achieved significant progress in social and economic development indicators as well as dynamic GDP growth rates, reduction of external debt, a stable exchange rate and low inflation. According to estimates by the Ministry of Economy and Finance, the Peruvian economy would grow 3.0% annually on average between 2024 and 2027.

Peru also stands out for its controlled inflation and public debt ratio. The Peruvian economy has expectations anchored within the target range set by the Central Reserve Bank of Peru (BCRP) (between 1% and 3%).

Peru´s Economic Overview



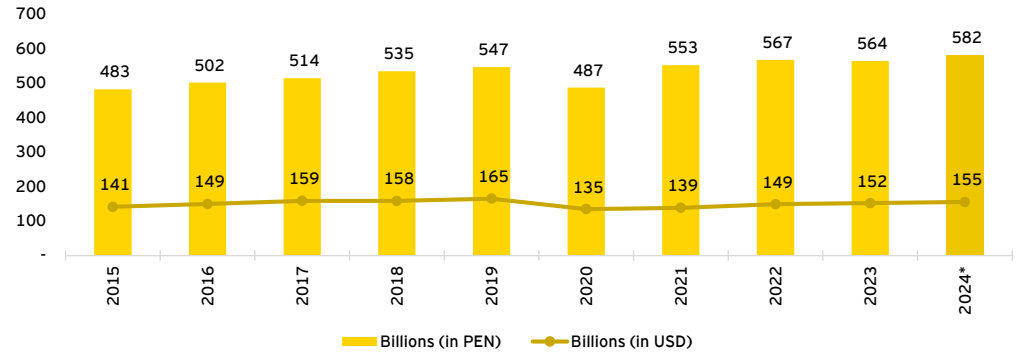
[1.] World Economic Outlook for April 2024. International Monetary Fund (IMF).
[2.] June 2024 Inflation Report. Central Reserve Bank of Peru (BCRP).
Sources: Central Reserve Bank of Peru (BCRP), Ministry of Economy and Finance (MEF), National Institute of Statistics and Information (INEI), International Monetary Fund (IMF).

Meanwhile, the public debt ratio is significantly lower (32.9% of GDP as of 2023) compared to emerging economies (67.0% of GDP) and Latin America (68.1% of GDP).

Peru is estimated to maintain a comfortable level of international reserves. As at December 31, 2023, these reserves total USD71.0 billion, equivalent to 26.6% of the GDP.

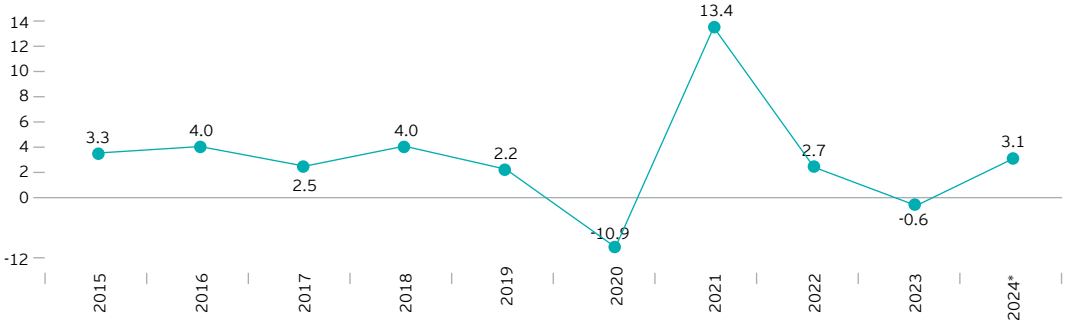
As a result of the estimated evolution over the coming years of its public finances and its economy in general, Peruvian public debt has maintained its credit rating (S&P: BBB- / Fitch Rating: BBB / Moody's: Baa1), with a stable outlook.

Gross Domestic Product (Constant GDP)



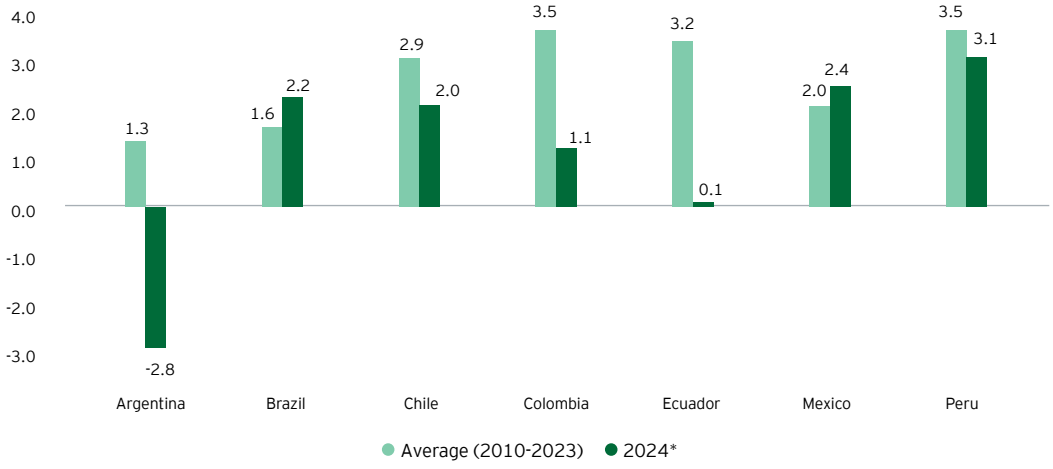
*Projection. June 2024 Inflation Report.
Source: International Monetary Found (IMF), Central Reserve Bank of Peru (BCRP).

Gross Domestic Product (Constant GDP) (percentage change)



*Projection. June 2024 Inflation Report.
Source: Central Reserve Bank of Peru (BCRP).

Constant GDP of the main economies in Latin America (percentage change)



*Projection. World Economic Outlook Database, April 2024. For Peru, forecasts are based in the June 2024 Inflation Report.
Source: International Monetary Found (IMF), Central Reserve Bank of Peru (BCRP).

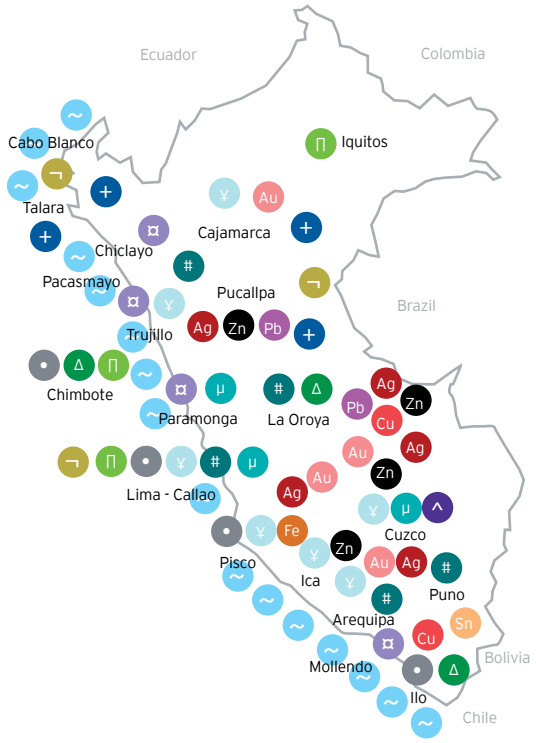
Peru 's main economic activities

Peru has a rich deposit of copper, silver, gold, lead, zinc, natural gas, and petroleum. Due to climate variations in its regions, as well as its natural and cultural resources, it is internationally classified as a mega-diverse country.

Peru's main economic of goods, most notably textiles. The sharply contrasting geographical areas of Peru make it a particularly diverse country, with a wide variety of ecosystems, and thus, flora and fauna.

Peru is among the six countries with the greatest mineral wealth in the world. In 2023, Peru is the second producer of zinc, third in silver and copper, and fourth in tin worldwide. The main destinations for Peruvian copper are China and Japan, gold to Switzerland, Canada and India, zinc to South Korea and silver to the United States.

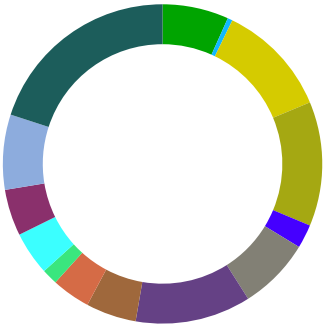
Main Economic Activities by Region



- Fisheries
- Petroleum
- Oil Refinery
- Sugar Refinery
- Fishmeal Plant
- Natural Gas
- Gold
- Silver
- Copper
- Zinc
- Textile Industry
- Cement Plant
- Chemical Plant
- Metal Industry
- Smeltering
- Metallurgical Industry
- Lead
- Iron
- Tin

Source: University of Texas - Perry Castaneda Library Map Collection.

Composition of Peru's Gross Domestic Product by Economic Sector in 2023 (percentage)



- **6.7%** Agriculture and Livestock
- **0.5%** Fisheries
- **11.5%** Mining and Oil & Gas
- **12.6%** Manufacture
- **2.4%** Electricity and Water
- **7.3%** Construction
- **11.7%** Commerce
- **5.1%** Transportation and Couriers
- **3.9%** Accommodation and Restaurants
- **1.6%** Telecommunications
- **4.4%** Finance and Insurance
- **4.7%** Public Administration and Defense
- **7.6%** Import Duties and other Taxes
- **20.0%** Other Services

Source: National Institute of Statistics and Information (INEI).

Gross domestic product (Constant GDP) by industry (percentage change)

Industry	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024*
Agriculture and Livestock	3.5	2.7	2.9	7.7	3.5	1.0	4.6	4.5	-2.8	3.5
Fisheries	15.9	-10.1	4.7	47.7	-17.2	4.2	9.9	-11.4	-19.7	20.2
Mining	15.7	21.2	4.5	-1.7	-0.8	-13.8	10.5	0.0	9.2	2.0
Hydrocarbons	-11.5	-5.1	-2.4	0.0	4.6	-11.0	-4.6	4.0	0.7	1.5
Manufacturing	-1.5	-1.4	-0.2	5.9	-1.7	-12.5	18.6	1.0	-6.6	3.9
Electricity and Water	5.9	7.3	1.1	4.4	3.9	-6.1	8.5	3.9	3.7	3.3
Construction	-5.9	-3.2	2.2	5.3	1.4	-13.3	34.9	3.1	-7.9	3.2
Commerce	3.9	1.8	1.0	2.6	3.0	-16.0	17.8	3.3	2.4	3.2
Services	5.0	4.2	3.3	4.5	4.2	-9.6	10.0	3.2	-0.4	3.1
GDP	3.3	4.0	2.5	4.0	2.2	-10.9	13.4	2.7	-0.6	3.1

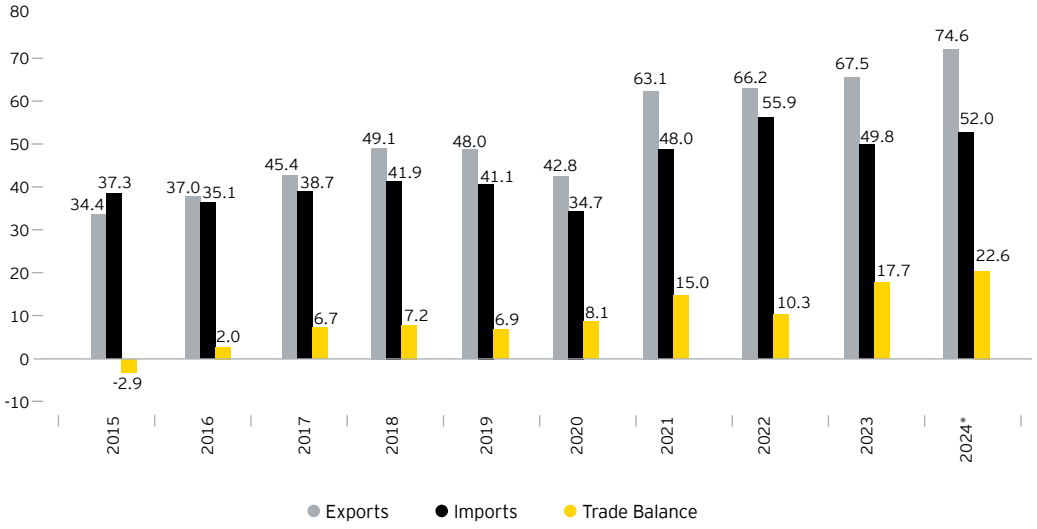
*Projection. June 2024 Inflation Report.
Source: Central Reserve Bank of Peru (BCRP), National Institute of Statistics and Information (INEI).

The country has benefited from a steady improvement in its terms of trade since 2000, which has had a positive impact on the trade balance. Moreover, the country has engaged in several bilateral and multilateral trade agreements that have opened new markets for its exports. In 2023, Peru's total exports reached USD67.5 billion, while trade balance reached a historic record of USD17.7 billion.

In 2023, traditional exports totaled USD48.9 billion, 73% of total exports abroad. In addition, nontraditional exports were USD18.4 billion in 2023, an increase of 1.6% over the previous year. Likewise, 91% of shipments in 2023 were to countries which we have free trade agreements.

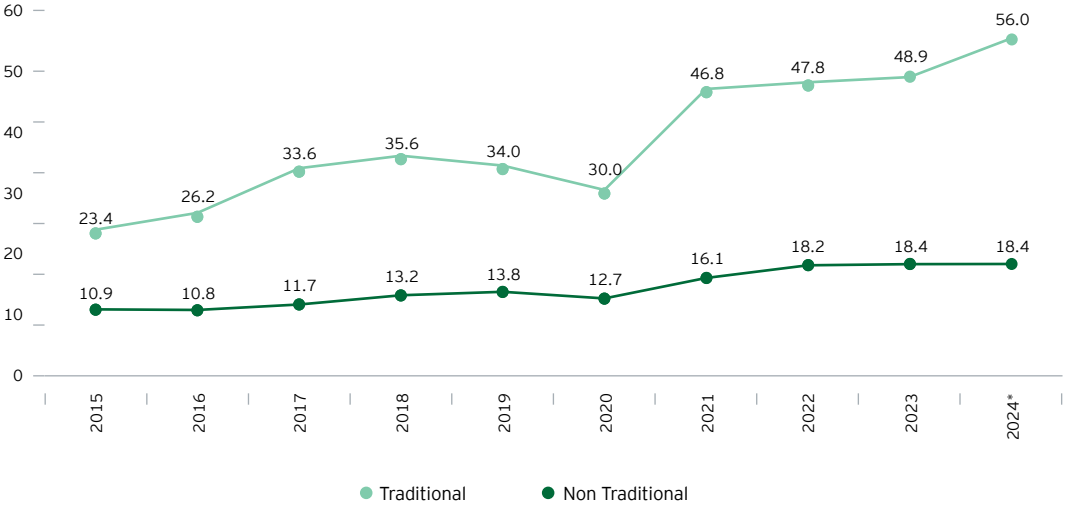

Foto de Jeanson Wong en Unsplash

Trade Balance (in USD billions)



*Projection. June 2024 Inflation Report.
Source: Central Reserve Bank of Peru (BCRP).

Traditional and Non-Traditional Exports (in USD billions)



*Projection. June 2024 Inflation Report.
Source: Central Reserve Bank of Peru (BCRP).

6 Investment and services

It is expected that Peru will only realize its full economic potential after reducing its infrastructure bottlenecks. According to the National Infrastructure Plan for Competitiveness (NIPC), updated to 2019, the current infrastructure gap is USD35.4 billion in the short term (five years) and USD109.8 billion in the long term (20 years). Hydrocarbons is one of the sectors affected by this constraint since oil & gas companies need to have access to transportation facilities to deliver their products to national and international markets. Well-developed infrastructure reduces the effect of distance between regions, with the result of truly integrating the national market and connecting it at low cost to markets of other countries and regions.

The Government has been evaluating different alternatives to reduce such problems. One of those alternatives is the construction of pipelines, i.e. to transport natural gas extracted from Camisea's gas fields to the center and south region of Peru (covering 7 regions). Another important alternative under analysis is the modernization of the Northern Peruvian Pipeline, constructed to transport oil -40 years ago- from the north region of Peru to the coast.

Moreover, this need for infrastructure also reaches the electricity sector. According to the NIPC, the electricity sector has a significant number of transmission and sub-transmission

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projects to be developed. The economic benefits of its implementation are expected to facilitate investment and development of new industries that require a continuous supply of electricity. Likewise, this is expected to contribute to the creation of new jobs and the transformation of primary products, generating added value and new opportunities. In addition, it is expected to have universal access and continuous service of electricity, reducing power outages, benefiting both business activity and education.

In recent years, Peru has begun to take the necessary measures to improve its underprivileged infrastructure (transport facilities, hydrocarbons, electricity, water and communications) in order to promote new investments which will contribute to the development of the productive sectors of the country.

In this sense, the Promotion Agency of Private Investment of Peru (ProInversion) have been working on the design of a standardized Public-Private Partnerships (PPP) contract, as established by Legislative Decree No.1362 and its regulations, in order to give the market predictability, and to adopt international best practices and adapt them to national legislation. From 2009 to March 2024, a total of 537 works were awarded for an amount of PEN7.6 billion. Likewise, as of 2023, ProInversion exposed, along with other entities of the National, Local and Regional Governments and Public Universities, the Works for Taxes portfolio for a total of 422 prioritized projects, with a total investment of PEN12.9 billion (approximately USD3.4 billion).

a. Public-Private Partnerships

Peruvian laws have incorporated PPP as a kind of private investment participation. PPP are executed under the form of concession, operation, management, joint venture, and any other modality admitted by Peruvian laws. The main characteristic of PPP is the distribution of risks between the Peruvian Government and the privates.

PPP projects provide the opportunity to invest by means of the use of expertise, equipment, technology, among other tools in order to create, develop, improve, operate or maintain public infrastructure or provide public services. This modality of investment can be requested as of a private initiative or through a public tender. In its 22 years of existence, ProInversion has carried out processes that have meant more than USD50.0 billion in investment commitments. To this regard, the 2024 portfolio of ProInversion is comprised of 24 matured PPP projects for an amount more than USD6.7 billion.

Regarding projects related to the energy sector, in its current portfolio, ProInversion has announced a total of 4 projects for an investment amount of USD782 million. The Massive Natural Gas Use Project for Central and South Peru is a self-funded project to carry out the construction of natural gas distribution systems by pipeline network in 12 cities located in the regions of the Apurímac, Ayacucho Regions, Huancavelica, Junín, Cusco, Puno and Ucayali. The 500 KV Transmission Line Project and the Piura Nueva - Frontera substation (263.2 km) is an international interconnection project with Ecuador, which begins its journey in Piura's substation, located in the north of the country, and extends to the point of crossing the border with Ecuador. The project of the transmission line 138 kv Puerto Maldonado - Iberia and the 100 mva 220/60/23 kv Valle del Chira Substation aims to supply the electricity supply to the city of Iberia with energy from the National Interconnected Electric System, to expand the substation of Puerto Maldonado and allow greater reliability of energy supply in the region of Piura.

The last two electric projects were included as part of the ambitious plan to expand the energy transport capacity launched by the Ministry of Energy and Mines, the Transmission Plan, which consists of a periodic study by means of which the necessary projects to maintain or improve the quality, reliability, safety or economy of the country's electrical system are identified.

Foto de David Thielen en Unsplash

b. Proyects in Assets (PA)

This mechanism is used for the development of those cases in which the private investor seeks to perform a project on an asset property of the government, whether as owner, holder, lessor, or any other status permitted by law. However, these projects shall be carried out without any commitment of government resources.

Private investment in assets property of the Peruvian state are promoted through the respective OPIP (which may belong to ministries, regional or local governments), based on the following scenarios:

- Sale of assets, including total or partial transfer.
- Use, lease, usufruct, or any other form permitted by Peruvian law.

The Peruvian legal framework on PAs is the same as that applicable to PPPs.

The main difference between a PPP and PAs is that while in the former, the government may use its own resources and there is an assignment of risks between the private sector and the government, in the latter the private sector assumes all the risks tied to the project and state resources will not be used.

C. Works for taxes

Works for taxes is a regime that consists of the joint participation between a private company and a public entity to develop and execute a public investment project. Upon the signature of an agreement, the private company commits to carry out a project in exchange of the recognition of the investment and disbursements made as a credit against income tax, through the issuance of a Regional and Local public Investment Certificate.

This regime has become an efficient tool of Corporate Social Responsibility, allowing an efficient and direct application of public funds on behalf of regional governments, local governments, public universities and national government's entities in sectors such education, health, security, tourism, agriculture and irrigation, culture, sanitation, sports, and the environment, among others.

It is important to highlight that on December of 2016, by means of Legislative Decree No. 1202, Petroperu (National Oil Company) was authorized to use Works for Taxes mechanism. The reason of such decision relies on the difficulties Petroperu faced when was developing its activities in areas in which social conflicts arise easily. In this sense, Petroperu can develop corporate responsibility activities by this mechanism in the areas of influence of its projects.

Note that also in the case of the energy sector, the investments can cover the remediation, construction and equipment of electric systems and rural electrification projects.

As of December 2023, according to the information sent by ProInversion, 16 projects are expected to be awarded for PEN620 million in 9 regions.

7 Investment grade rating

Peru has maintained its investment-grade credit rating since Moody's Investors Services raised it to that level in December 2009 matching moves made by Standard & Poor's and Fitch Ratings the previous year. The country's stable, credible, and consistent macroeconomic policies in various administrations are the key supporting factors for the investment-grade rating.

It is well known that countries with investment grade ratings gain a higher level of confidence that generates more foreign and domestic investment. The risk premium demanded by multinationals and foreign investors is slashed after the upgrade. At the same time, the investment horizon is elongated.

The same occurs with domestic investment. Local investors gain more self-confidence, thus allowing themselves to consider opportunities with lower rates of return. The impact is immediate, as consumers gain access to credit with more favourable terms.

The upgrade to investment grade has brought Peru a lot of positive attention worldwide. More importantly, it has had a positive impact on the local economy. For this reason, nowadays, many multinational corporations eye the country more seriously, as higher private investment is flowing into the country. This should contribute to alleviate a still complex social situation in Peru, by achieving improvements in employment and decreases in poverty.

S&P/Fitch	Moody's	Feature
AAA	Aaa	Risk Free
AA+, AA, AA-	Aa1, Aa2, Aa3	High Grade
A+, A, A-	A1, A2, A3	High Repayment Capacity
BBB+, BBB, BBB-	Baa1, Baa2, Baa3	Moderate Repayment Capacity
BB+, BB, BB-	Ba1, Ba2, Ba3	Some Repayment Capacity
B+, B, B-	B1, B2, B3	Highly Uncertain Repayment Capacity
CCC+, CCC, CCC-, CC	Caa1, Caa2, Caa3	Extremely Vulnerable to Default
SD/RD	C	Default

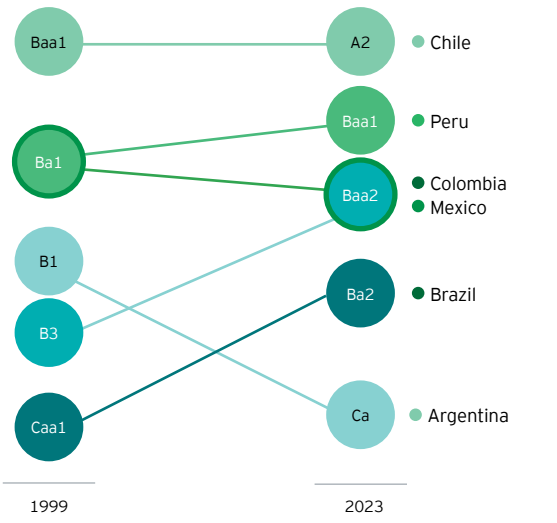
Source: Bloomberg.

Peru´s investment grade ratings (long-term debt in foreign currency)

Country	S&P	Fitch	Moody's
Chile	A	A-	A2
Peru	BBB-	BBB	Baa1
Mexico	BBB	BBB-	Baa2
Colombia	BB+	BB+	Baa2
Uruguay	BBB+	BBB-	Baa2
Paraguay	BB+	BB+	Ba1
Brazil	BB-	BB-	Ba2
Bolivia	CCC+	B-	Caa1
Ecuador	B-	B-	Caa3
Argentina	CCC+	CCC-	Ca
Venezuela	N/A	RD	C

As of June 2024.
Source: Standard & Poor's, Fitch Ratings, Moody's.

Risk rating of the region according to Moody´s

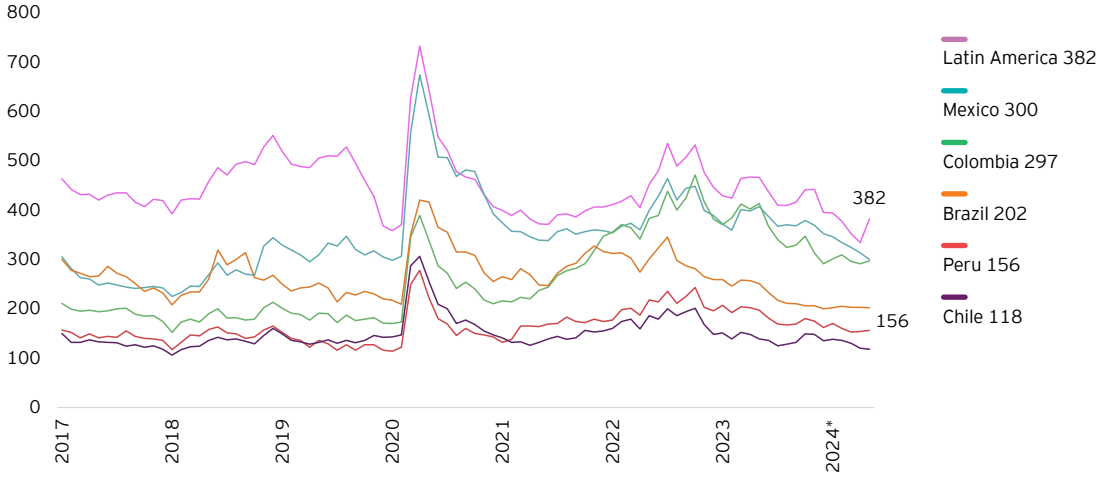


Source: Moody´s.

Country Risk (EMBIG)

As of May 31, 2024, Peru had a country risk of 156 base points, positioning itself as one of the countries with the lowest risk in Latin America. This score is less than half of the regional average (382 points).

Country risk (EMBIG) indicator (in base points)



*As of May, 2024.
Source: Reuters, Central Reserve Bank of Peru (BCRP).

8 Investment promotion conditions

Photo by Jared Evans in Unsplash

a. Foreign investment legislation and trends in Peru

The Peruvian government is committed to pursuing an investor-friendly policy climate. It actively seeks to attract both foreign and domestic investment in all sectors of the economy. It has therefore taken the necessary steps to establish a consistent investment policy which eliminates all obstacles for foreign investors, with the result that now Peru is considered to have one of the most open investment regimes in the world.

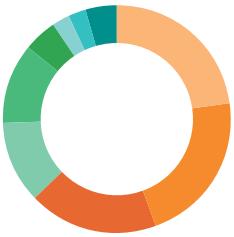
In an attempt to reduce the political risk perception of the country, Peru has adopted a legal framework for investments which offers automatic investment authorization and establishes the necessary economic stability rules to protect private investors from arbitrary changes in the legal terms and conditions of their ventures and reduces government interference with economic activities.

Foreign direct investment (FDI) is largely seen as a catalyst for economic growth in the future. The United States, United Kingdom, the Netherlands, Spain, Brazil and Chile appear as Peru's leading investors. FDI is concentrated in the mining, financial, telecommunications, electricity and industry sectors.

Peru guarantees foreign investors legal stability on income tax regulations and dividend distributions. Foreign investors entitled to obtain tax and legal stability are those willing to invest in the country, in a two-year term, at least USD10 million in the mining and/or hydrocarbon sectors; USD5 million in any other economic activity or to acquire more than 50% of the shares of a privatized state-owned company.

Peruvian laws, regulations, and practices do not discriminate between national and foreign companies. Accordingly, national treatment is offered to foreign investors. There are no restrictions on repatriation of earnings, international transfers of capital, or currency exchange practices. The remittance of dividends, interests and royalties has no restrictions either. Foreign currency may be used to acquire goods abroad or cover financial obligations so long as the operator is in compliance with the relevant Peruvian tax legislation.

Balance of Foreign Direct Investment by Industry 2023 (in USD Millions)

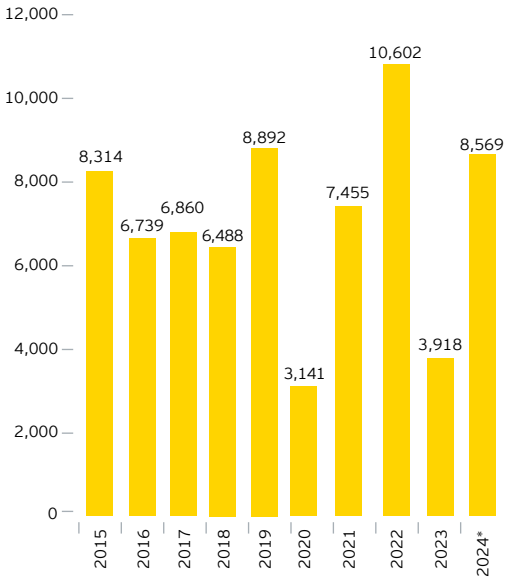


Total
USD30,172

- **22.8%** Mining USD6,917
- **22.0%** Finance USD6,624
- **18.3%** Communications USD5,488
- **11.6%** Energy USD3,501
- **11.4%** Industry USD3,442
- **4.3%** Services USD1,346
- **2.7%** Commerce USD869
- **2.3%** Oil USD680
- **4.6%** Others USD1,335

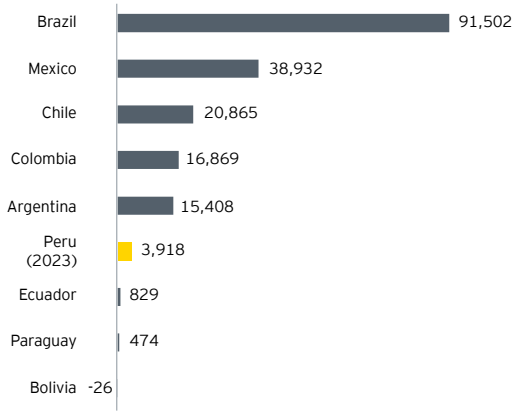
Source: Private Investment Promotion Agency (Proinversion).

Foreign direct investment flow (in USD million)



*Projection. June 2024 Inflation Report.
Source: Central Reserve Bank of Peru (BCRP).

Foreign Direct Investment Flow Received in Latin America 2022 (in USD millions)



Source: Economic Commission for Latin America and the Caribbean (CEPAL), Central Reserve Bank of Peru (BCRP).

b. Business Climate Index of Latin America

Business Climate Index (BCI) is the result of the Latin American Business Survey, carried out by the IFO Institute of Germany and the Getúlio Vargas Foundation of Brazil. This survey is prepared every three months and serves for the monitoring and anticipation of the financial trends of the countries and financial blocs. As of the first quarter of 2024, Peru reached 85.3 points, ranking fifth.

Business Climate Index (BCI) in the following country (Q1, 2024)

Country	S&P	Fitch
1	Paraguay	154.6
2	Uruguay	139.4
3	Brazil	114.6
4	Mexico	114.0
5	Peru	85.3
6	Colombia	72.8
7	Chile	72.7
8	Ecuador	42.2
9	Argentina	42.7
10	Bolivia	20.8
11	Latin America	105.7

Source: Latin American Business Survey - IFO Institute, Getulio Vargas Foundation, First Quarter of 2024.

c. Index of Economic Freedom

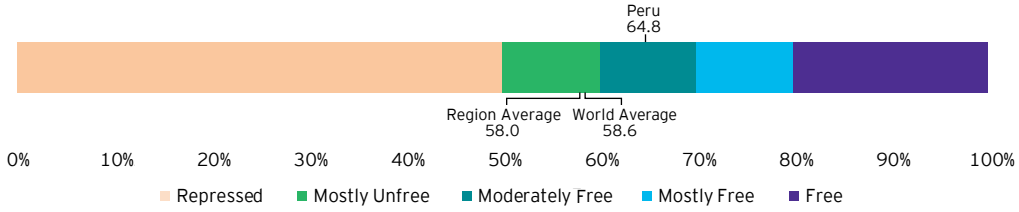
According to the Index of Economic Freedom prepared by The Heritage Foundation, which includes an analysis of the environment and economic freedom of each country based on ten indicators covering issues such as compliance with the law, the level of government intervention, market openness, and efficient State regulations, the overall results obtained confirm that promoting economic freedom in terms of the rule of law, government, regulations, and open markets generates a broad economic dynamism. Thus, boosting these levels will prove significant in order to sustain the wealth of nations, as well as being the most effective way to eradicate poverty in a progressive manner.

Index of Economic Freedom by country

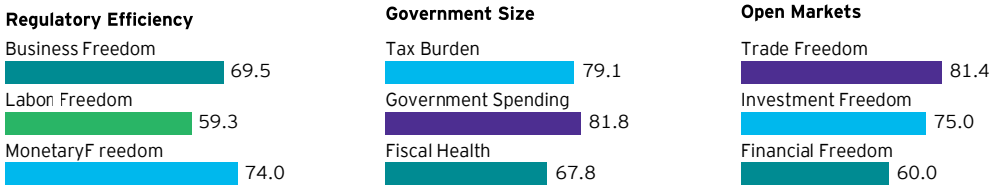
Economy	Worldwide Ranking	South America Ranking	2024 Score
Singapore	1	-	83.5
Switzerland	2	-	83.0
Ireland	3	-	82.6
Canada	16	-	72.4
Chile	21	1	71.4
Uruguay	27	2	69.8
Peru	49	3	64.8
Mexico	68	-	62.0
Paraguay	81	4	60.1
Colombia	84	5	59.2
Ecuador	114	6	55.0
Brazil	124	7	53.2
Argentina	144	8	49.9
Bolivia	165	9	43.5
Venezuela	174	10	28.1

Source: The Heritage Foundation.

Economic Freedom Score Comparison



Economic Freedom in Perú



Source: The Heritage Foundation.

d. Settlement of investment disputes

Foreign Investors are protected against inconvertibility, expropriation, political violence, and other non-commercial risks through access to the corresponding multilateral and bilateral conventions such as the Overseas. Private Investment Corporation (OPIC) and the Multilateral Investment Guarantee Agency (MIGA) Also, Peru has joined the International Convention for settlement of International Disputes (CSID) as an alternative to settle disputes arising between Investors and the government.

Additionally, Peru has a total of 24 free trade agreements and economic integration agreements (TLCs & EIAs) with the Andean Community (CAN), MERCOSUR, the World Trade Organization (WTO), the Asia-Pacific Economic Cooperation Forum (APEC), the Pacific Alliance, the European Free Trade Association (EFTA), Australia, Canada, Chile, China, South Korea, Costa Rica, Cuba, United States, Honduras, Japan, Mexico, Panama, United Kingdom, Singapore, Thailand, the European Union, Venezuela and the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP). The CPTPP has given Peru access to four countries with which it previously had no trade agreements: New Zealand, Vietnam, Brunei, and Malaysia.

e. Bilateral Investment Treaties (BIT)

Peru has signed 32 Bilateral Investment Treaties (BIT).

- Argentina
- Canada
- China
- Colombia
- Cuba
- Czech Republic
- Denmark
- El Salvador
- Finland
- France
- Germany
- Italy
- Japan
- Malaysia
- The Netherlands
- Norway
- Paraguay
- Portugal
- Romania
- Spain
- Sweden
- Switzerland
- Thailand
- The Belgium-Luxembourg Economic Union
- The United Kingdom
- Venezuela
- Australia
- Bolivia
- Chile
- Ecuador
- Singapore
- South Korea

Source: ProInversion.

II. Starting a business in Peru

In Peru, the three forms of legal organizations most commonly used by foreign investors are the corporation (Sociedad Anónima - S.A.), limited-liability company (Sociedad Comercial de Responsabilidad Limitada - S.R.L.) and the branch (sucursal), although Peruvian company law also provides for other forms of legal entities, including two special forms of corporations: the closely held corporation (Sociedad Anónima Cerrada) and the public corporation (Sociedad Anónima Abierta).

a. Requirements of an S.A.

A corporation (Sociedad Anónima - S.A.) is composed of shareholders whose liability is limited to the value of their shares. The S.A. is managed by a board of directors and one or more managers. To form an S.A., investors (i.e. the shareholders) must sign the deed of incorporation before a public notary and file it with the Mercantile Registry. The registrar receives the public deed and proceeds to register the company. The registrar is also interconnected with the Tax Authority (SUNAT) to register the company as a taxpayer and obtain the tax identification number (Registro

Único de Contribuyente, RUC). The legal steps that an investor must complete to incorporate and register a new standard S.A. normally take between 15-30 days. Notary fees are up to 1% of capital, depending on the company size, the length of the public deed, and the initial capital contribution. The registration fees are also paid to the notary.

The incorporation documents must include, at least, (a) the company's name; (b) business purpose and duration; (c) the company's domicile; (d) the name, nationality, marital status and residence of any individual shareholder and name, place of incorporation and address of any corporate shareholder (a minimum of two shareholders are required to set up an S.A.); (e) the names of the initial directors, managers and agents; (f) the start-up date of operations; and (h) the capital structure (the shares nominal value and the total number of shares), classes of shares, if applicable, and details of individual initial capital contributions (whether in cash or kind). Sufficient proof that a minimum of 25% of capital stock has been paid into a bank before registration must also be provided.

Requirements of a Corporation ("S.A.") in Peru

Capital	Is divided into shares which may be freely transferred unless such transfers are restricted by the corporate bylaws. There are no minimum or maximum capital requirements although issued capital must be fully subscribed and at least 25% thereof paid in upon incorporation. Capital may be supplied in cash or in kind. Value of non-monetary contributions must be reviewed and approved by a majority of the board of directors within 60 days of incorporation and may be challenged in court during the following 30 days. An S.A. must set aside at least 10% of net profits after taxes in a legal reserve fund till this amounts to 20% of capital. Loss of more than two-thirds of subscribed capital normally requires liquidation of the company.
Founders, shareholders	An S.A. must have a minimum of two individual or corporate shareholders, with no requirements as to their nationality or residence. The shareholders' general meeting is the supreme body of the S.A. and has powers of decision on any subject and the exclusive power of decision with respect to dissolution, amendments of the corporate bylaws and a capital increase or reduction, among other key corporate decisions.
Board of directors	An S.A. must have a minimum of three directors, with no maximum number provided by the law. There are no requirements as to their nationality or residence. Directors need not be shareholders, and they serve one to three-year renewable terms. Directors may be elected by cumulative voting, in which each share has as many votes as there are directors to be elected, and shareholders either accumulate their votes in favor of one candidate or distribute them among several. A quorum is half the board membership plus one. The board of directors has all the powers vested in it by law and the corporate by-laws.

Management	One or more managers are named (and removed) by the board of directors, unless bylaws stipulate naming by a general shareholders meeting. When only one manager is appointed, he/she will be the general manager. There are no nationality requirements. Legal entities can also be appointed as managers.
Type of shares	Shares must be nominative, and they represent the unit into which the proprietary interests in a corporation are divided. As a general rule, each share gives the right to one vote, but non-voting shares may be issued. Different classes or series of shares may be issued, with different rights and/or obligations. Shares must be recorded in the Share Register Book. All shares must have the same par value but may be issued at a premium or at discount from par. Corporations may purchase their own shares in certain circumstances. Bylaw restrictions on transfer of shares are permitted.
Control	An annual general meeting is required. Bylaws may specify a higher quorum and larger majorities than those laid down by law. The minimum quorum for a general meeting is 50% of capital on the first call and any number on the second call. Most decisions are taken by a simple majority of the paid-up voting shares represented. For major decisions, such as capital increases or decreases or corporate bylaw changes, the minimum quorum is two-thirds of total voting shares represented on the first call and 60% on the second call, and the decision requires in absolute majority of total voting shares represented.

b. Closely held corporation

A corporation can be classified as closely held if it does not have more than 20 shareholders and its shares are not listed in the Stock Exchange. The closely held corporation has certain features found in a limited-liability company (for example, limited liability of equity owners, absence of freely transferable equity shares and no requirement for a board of directors).

c. Public corporation

A corporation will be considered "public" where (i) it has undertaken an initial public offering (IPO) or stock market launch to sale its stock to the public; (ii) it has more than 750 shareholders; (iii) at least 35% of its shares is held by at least 175 shareholders, each of whom owns at least two per thousand (0.002%) but no more than 5% of the shares representing the corporation's capital (iv) it is incorporated as a public corporation; or (v) all the shareholders with voting rights agree unanimously to subject the company to the legal regime applicable to public corporations.

d. Limited Liability Company

The Limited Liability Company or S.R.L. is subject to registration procedures, reporting and accounting requirements similar to those for the S.A. The minimum number of owners is two, the maximum 20, whose liability is limited to their capital contributions.

At least 25% of each participant's contribution to capital must be paid in upon founding. The S.R.L.'s capital is divided into and represented by participating interests which cannot be denominated shares, and which are not freely negotiable certificates. Capital holdings may be transferred outside the company only after they have been offered through the management to other partners or the company itself and they have declined to purchase the offered interests. Further restrictions on transfers may be set out in the bylaws.

As a general rule, an S.R.L. is managed and represented by all its partners. However, the partner's general meeting may entrust the company's management to one or more managers who need not be partners in the S.R.L. or Peruvian citizens. Decisions are determined by a majority of capital contributions.

The main characteristics of the S.R.L. are:

Limited liability	▸ Partners are not personally liable for the corporation's liabilities.
Centralized management	▸ Partners general meeting and one or more managers (no board of directors is required).
Transfer of interest	▸ Transfer of partners' interest to third parties is subject to approval by the existing partners and must be registered in the public register.
Continuity	▸ Death, illness, bankruptcy, retirement or resignation of any partner does not cause the dissolution of the entity.

e. Establishing a branch

Procedures for organizing a branch in Peru are similar to the procedures applicable to organizing corporations or limited liability companies. It takes between two to three weeks to register a branch once the necessary documents have been submitted to the Peruvian notary. These include copies of the parent firm's corporate charter and bylaws, minutes of the shareholders agreement to set up a branch in Peru, certification of the branch's address, assigned capital and line of business, notifications of the appointment and powers of a legal representative in Peru; and a Peruvian consul's certification that the parent company is duly constituted in the country of origin and entitled to set up a branch in a foreign country.

III. Energy in Peru

According to the Multiannual Energy Sector Plan - PESEM 2024-2030 of the Peruvian Ministry of Energy and Mines, the Peruvian government has set the goal of increasing the competitiveness of the Peruvian energy sector as a mechanism for the economic development of the country. In this regard, our country aims to increase investments in energy projects, improve the use of renewable energy resources and promote the sustainable use of natural resources, through the development of large-scale investment opportunities and the provision of a legal framework and policies focused on environmental and social issues.

In order to achieve these objectives, the implementation of four strategies has been proposed and would be possible with the participation of MINEM and government institutions (PCM, MEF, MINAM, MTPE, ANA, Osinerming and others), as described below:

i) Renewable energy in Peru's energy matrix:

Until 2030, the energy generation from renewable sources is expected to increase by 28.5 % through strategic measures, such as providing a proper regulatory framework and promote mechanisms for renewable energy resources (RER).

The measures include establishing tax incentives for renewable energy companies, encouraging the planning of RER projects, and promoting the use of photovoltaic systems.

ii) Sustainable use of natural resources:

The Ministry expects a reduction of the CO2 emissions generated by the transformation from primary to secondary energy. In this regard, the main objective is to promote energy and mining projects investments focused on environmental sustainability that develop regional electricity interconnection projects, as well as the use of light hydrocarbons (such as natural gas).

In addition, it is also proposed the implementation of a regulatory framework that adequately regulates mining and energy activities so that quality standards are met with a focus on sustainability.

A reduction from 14,734,106 kg (2021) to 12,000,106 kg of CO2 (2030) would be estimated.

iii) Energy investment:

It has been proposed to increase energy investments with a strong emphasis on sustainability, social conflicts reduction and climate change awareness. To this end, the Oil & Gas industry is expected to:

- Develop the areas of influence of exploitation projects with a sustainable approach.
- Reach efficiency through reduction of bureaucracy.
- Greater State involvement in creating spaces for dialogue and agreements when faced with conflict for social license.
- For communities directly affected by hydrocarbon projects, raise funds and strengthen social programs.
- Prioritize investments in natural gas distribution and promoting its use in the population.

The amount of hydrocarbon investments (upstream) is increase of USD74 million, which will accumulate an energy investment in Peru of USD400 million by 2030.

For electricity, the ministry expects to:

- Promote energy megaprojects, through the implementation of policies and subsidy programs to meet the needs of the vulnerable population.
- Inform stakeholders about energy projects in a timely manner.

iv) Energy Security:

The SEIN electricity reserve margin c/RF (MW) is expected to increase from 56 in 2022 to 57 by 2030.

To this end, it is proposed to focus on the development of strategic infrastructure to cover the needs of distribution, supply and energy autonomy; to increase the use of natural gas; to promote investment in the exploration and exploitation of hydrocarbon, oil and natural gas reserves and resources for their better use; and to update an energy policy in order to allow the coexistence and operation of renewable and non-renewable energy sources.

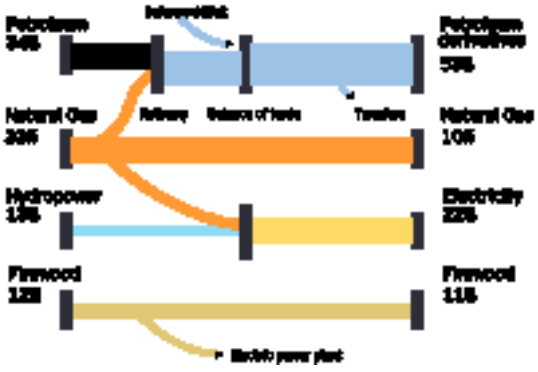
In relation to the hydrocarbons subsector, it is worth highlighting the importance of the Camisea project in Peru. The PESEM claims that the natural gas production has allowed a greater efficiency in the development of various economic activities; thus, in the electricity system, almost 50% of the national electricity production generated in the thermal power plants by natural gas comes from Camisea, whose main consequence is the lower cost of electricity for the population.

As a result, the country's production of natural gas in 2022 closed at 1,326 million cubic feet per day, 20.5% more than in the previous year.

Finally, it can be stated that Peru is aiming to reach 2030 with a stronger and more sustainable energy industry. It is expected that the proposed measures will contribute to mitigate the effects of climate change and environmental degradation, generate greater political and social stability, and also seek to massively increase the use of renewable energy and improve corporate sustainability governance.

Energy Balance 2022 - Flow diagram of main energy products

Energy Supply	
Energy Type	%
Petroleum	34%
Natural gas	33%
Hydropower	13%
Mineral carbon	3%
Firewood	12%
Sugar cane and der.	2%
Ethanol/ Biodiesel	1%
Others	2%
Total	100%

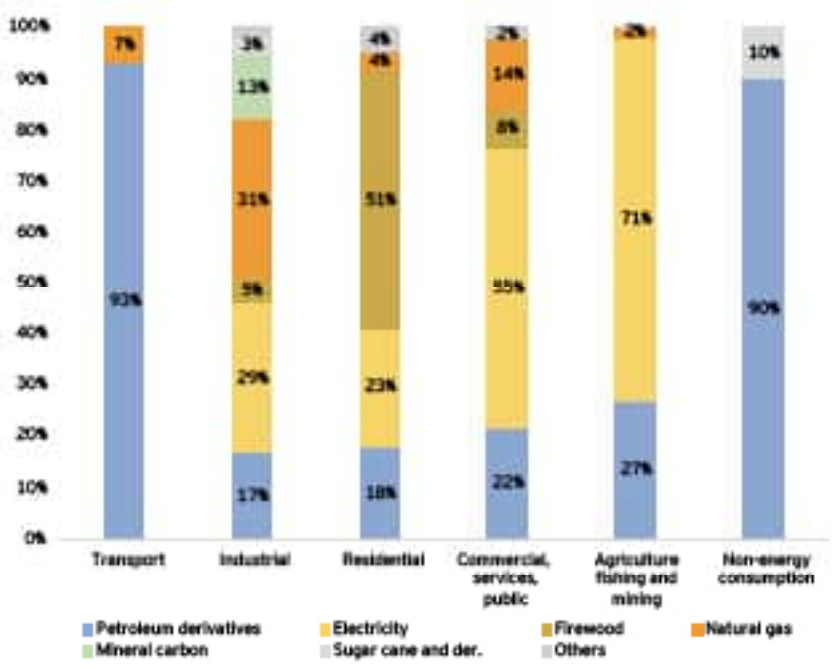


Final Consumption	
Energy Type	%
Petroleum derivatives	53%
Electricity	22%
Firewood	11%
Natural gas	10%
Mineral carbon	2%
Sugar cane and der.	1%
Others	1%
Total	100%

Source: The Latin American Energy Organization (OLADE).

Structure of final energy consumption by productive sectors 2022 (%)

Final Consumption	
Energy Type	%
Transport	43%
Industrial	17%
Residential	20%
Commercial, services, public	6%
Agriculture, fishing and mining	11%
Non-energy consumption	3%
Total	100%



Source: The Latin American Energy Organization (OLADE).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Oil and gas

National Energy Plan 2014-2025

On November 2014, the Ministry of Energy and Mines presented the National Energy Plan 2014-2025. This document forecasts the energy demand of the country until 2025. It also sets down how this demand could be satisfied through alternative and traditional energy sources.

The provision set forth in the energy planning for the country through 2025 expects an increase in the consumption of liquid hydrocarbons from 209,000 bpd to 285,000 bpd or, in another scenario, from 212,000 bpd to 339,000 bpd, stressing the necessity of new infrastructure. Therefore, the optimization projects of the Talara and La Pampilla refineries will gain special importance to reach those expectations, as well as onshore and offshore exploration and exploitation projects. Another relevant topic regarding demand of hydrocarbons is the massification of natural gas, which is already consolidating with the beginning of operations of multiple gas distribution through pipelines concessions, and more biddings on that matter. It is expected that the national demand for natural gas will rise from 1,900 MMscfd to 2,400 MMscfd by 2025, making it necessary to develop a national pipeline system for its supply.

In order to achieve this demand, minimum annual goals will be established. It is worth mentioning that the optimization of the Talara and La Pampilla refineries and the biddings and direct negotiations on new Blocks will be crucial to complete this task.

In that sense, some bidding processes have been launched that together add up to 60% of the country's production. For instance, Block I in Talara (Piura Region) has been transferred in October 2023. In the same year, Blocks V (Piura Region) and VII (Piura Region) have been transferred to different companies. Finally, in 2024 Block X, the most productive block of Piura Region, Block 192 and Block 8 were granted to different companies. On the other hand, in Ucayali Region, the contract of Block 31-C has been extended for 10 years.

Natural gas and liquefied petroleum gas consumption might increase as a source of energy in the country, due to the new exploration projects with commercially viable exploitation and developing pipeline infrastructure that will reduce the transportation cost.

Moreover, natural gas projects could establish themselves as the cornerstone to developing new gas-to-power projects, like those that are already operating in southern Lima and the Southern Power Node.

Perupetro's Strategic Plan 2022-2026

Perupetro has engaged into the Strategic Plan 2022-2026, with the purpose of managing hydrocarbon resources efficiently, thereby promoting their sustainable exploitation to secure Peru's energy supply.

The purpose of the Plan is clear: to increase oil production to 107 mbpd, and that of natural gas to 1,927 MMCFD. In order to do so, Perupetro looks forward working on these strategic objectives:

- Promote self-sufficiency in oil and natural gas.
- Improve the recognition and reputation of the hydrocarbon sector and Perupetro.
- Increase the knowledge of the basins.
- Optimize the management of human resources and company processes.

The Plan considers that it is essential for Perupetro to assume a more leading role in the definition and application of energy policy, and to contribute effectively to the design and implementation of the national energy transition plan.

a. Importance of Peru's oil & gas sector

The oil & gas sector in Peru has gone through a transformation, from an industry in decline to a major contributor to the economic growth in Peru.

Historically, Peru became an importer in the late 1980s and early 1990s. The combination of a Government-dominated turn in Peru's energy sector in the 1960s (political interference such as policies that changed from various governments, refusal by authorities to grant new contracts, and fixed petroleum prices) and a lack of significant discoveries over the years, set Peru on a path of dwindling reserves. The implementation of such policies caused a decline in private investment.

Under these circumstances, in 1968 the military regime decided to expropriate the International Petroleum Company and created a state-owned oil company named Petroperu, which controlled the sector for approximately 25 years. The government in force through the 90's decided to restructure the company implementing a privatization process, ceasing Petroperu's downstream operations, and assigning Perupetro (newly created governmental agency) the commercial and administrative faculties to negotiate and subscribe license and service contracts with investors.

As a result, Peru's oil & gas sector became more competitive. From 1990 to 1997, investment in the sector increased from USD 20 million to USD 4.3 billion. Areas under operation hiked from 1 million to 23 million hectares in the same period. Also, prices were set by the market, not by the State.

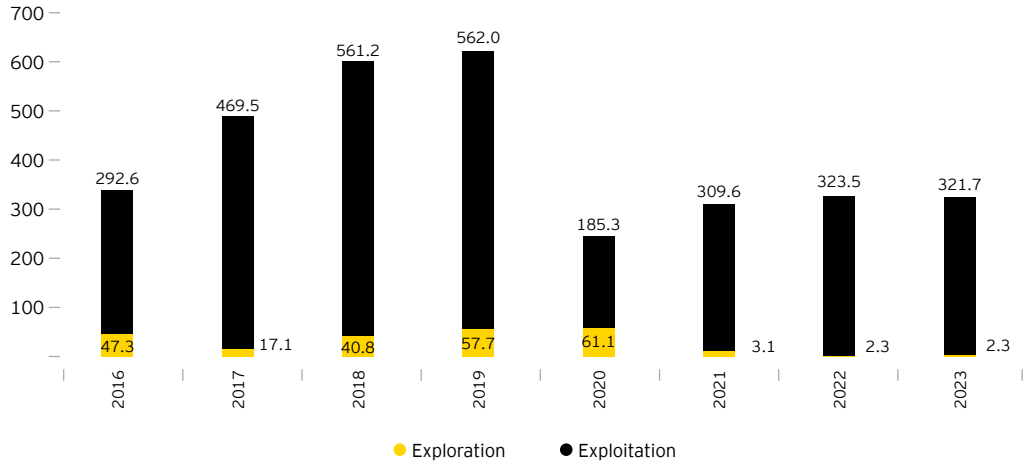
This growth increased significantly in 2004-2005, when the major discoveries of natural gas reserves near the Camisea River in the Amazon began producing (which now is known as the "Camisea Project")[1]. From that moment on, Peru has entered into a takeoff stage, explained not only by the Camisea discovery and the geology of the country's potential, but also by the economic and political stability that it has achieved during the last years. Despite recent events in late 2022 and early 2023, the economy has maintained its strong resilience and the political situation stabilized. This situation boosted the oil & gas sector, as well as its discoveries in several locations of the country. The rising investment in Peru during the last years reflects such growth.

Due to smarter energy management, Peru began to diversify its energy use, reduce its dependence on imports, and position itself as an exporter of liquefied natural gas (LNG). Still, challenges remain, particularly as exploration and development activities begin to recover from a context of low prices.

[1] The Camisea Project was discovered in 1989.

Hydrocarbon Investment (exploration and exploitation phase in millions of USD)

	2016	2017	2018	2019	2020	2021	2022	2023
Exploration	47.3	17.1	40.8	57.7	61.1	3.1	2.3	2.3
Exploitation	292.6	469.8	561.2	562.0	185.3	309.6	323.5	321.7
Total	340.0	486.9	601.9	619.7	246.4	312.7	325.8	324.0



*The numbers shown for year 2020 include instruments performed on September 2020.
Source: Perupetro.

Estimated investment by sector percentage (2023)

Sector	Participation %
Mining	23%
Conmmunications	18%
Finance	22%
Energy	12%
Oil & Gas	2%
Other sectors	23%
Total	100%

Source: Private Investment Promotion Agency (ProInversion).

According to Peru's Private Investment Promotion Agency (ProInversion), 2% of the investments are related to oil & gas activities.

Investments will continue to be made through 2024, projects which will lead to new opportunities for people and growth. Especially those related to the massification of natural gas.

In relation to upstream projects, the most important investments are focused in the northern and southeastern regions. The first ones show promising results in offshore blocks, while the latter ones are taking advantage of the infrastructure developed for the Camisea Project (gathering systems, infrastructure, among other facilities).

Midstream projects are still some of the most promising projects nowadays. The Integrated System of transport Gas - South Zone concessions expected to begin construction soon.

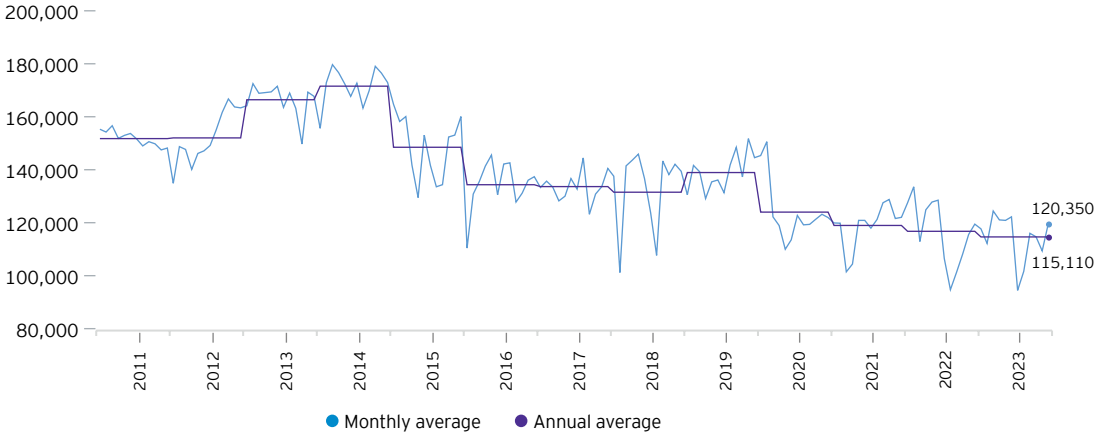
The new Integrated System of transport Gas is made with the purpose of the Project is to transport natural gas and natural gas liquids in the regions of Cusco, Arequipa and Moquegua.

In addition, Petroperu has stated that the modernization works of the Northern Peruvian Pipeline will continue to be carried out.

Downstream activities have renewed investors and Governments interests. Principally, due to the Talara Refinery Modernization Project that is expected to produce 95,000 oil barrels a day.

Additionally, La Pampilla Refinery started producing low sulfur fuels on September 2018; several gas distribution concessions are already operating in the northern and southern regions of Peru. In this last regard, ProInversion granted a natural gas distribution concession to the Peruvian Government in June 2021 named the "7 region" project, which will comprise seven regions (Apurímac, Ayacucho, Cusco, Huancavelica, Junín, Puno and Ucayali) and is expected to become a major key player in the sector with an approximate gas supply to 113,000 family residences.

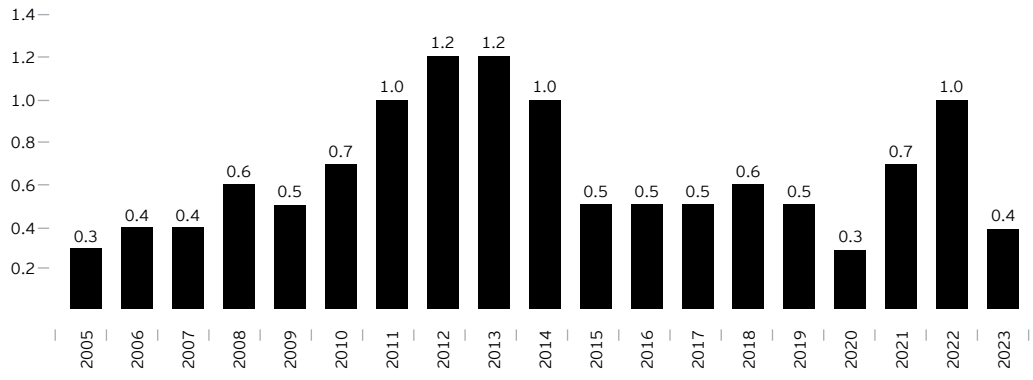
Oil and liquid hydrocarbons average audited production* (in barrel per day)



*Includes petroleum and natural gas liquids.
Source: Ministry of Energy and Mines (MINEM).

The oil & gas canon is a portion of the generated income obtained by the Government for the oil & gas exploitation. The beneficiaries of such revenues are the Local and Regional Governments, among other public entities located in the area exploited. The following chart shows the amount of revenues obtained and destined to oil & gas canon since 2005.

Oil & gas canon revenues (in USD billions)



Source: Perupetro.

Transparency in oil & gas activities

EITI (Extractive Industries Transparency Initiative), a global coalition of governments, companies and civil society, is an international organization that is working together to improve openness and accountable management of revenues from natural resources.

By joining EITI, countries implement the EITI Standard to ensure full disclosure of taxes and other payments made by oil, gas and mining companies to governments, which are disclosed annually in the EITI report, so that citizens can be aware and informed of how much their governments receive from the exploitation of natural resources and also where such funds are destined.

Peru joined EITI as a full member in 2005, given the importance of oil & gas, and mining activities in the national income, and its meaningfulness in the Latin American and global production. Thus, Peru became the first Latin American country to join the initiative and show meaningful progress towards meeting the 2016 EITI Standard, ensuring transparency and stability of the rules related to the incomes from extractive industries.

As of 2023, Peru continues to be an active member of the 50 state organization that continues to seek for transparency.

b. Hydrocarbon production and projects

The investment and work involved in the sector contributed to the recovery and the positive evolution of the hydrocarbon national production. An emblematic example of this growth is the Camisea project. This project was not only significant to the country, but it also contributed to putting Peru on the map of natural gas producers.

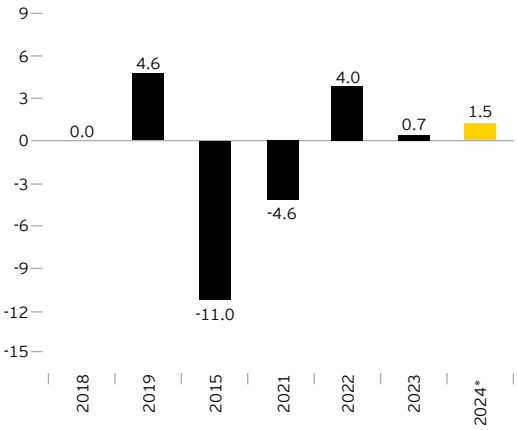
The oil production per day reached more than 44 thousand barrels in December 2023.

Hydrocarbons audited production

	2016	2017	2018	2019	2020	2021	2022	2023
Petroleum (MBLS)	14,773	15,900	17,837	19,339	9,520	38,391	40,538	44,369
NGL (MBLS)	34,671	33,134	31,198	31,659	17,475	81,117	76,666	75,984
Natural Gas (MBLS)	494,930	457,050	449,244	474,234	218,450	119,508	117,204	120,352

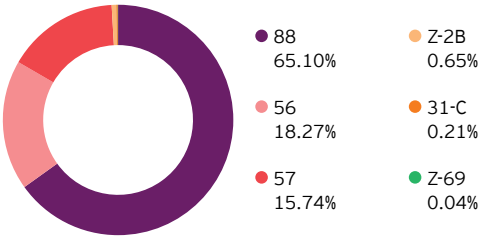
NGL: Natural Gas Liquids.
Source: Perupetro.

Estimated Hydrocarbon GDP growth (in percentage change)



*Projection. June 2024 Inflation Report.
Source: Central Reserva Bank of Peru (BCRP).

Natural gas audited production by oil well (2023)



Block	Accumulated (BPD)	%
88	16,623,824	65.1%
56	4,664,749	18.2%
57	4,018,145	15.7%
Z-2B	164,772	0.7%
31-C	54,322	0.2%
Z-69	9,208	0.1%
Total	25,535,020	100.0%

Source: Perupetro.

Oil & Gas Projects in the mid and long-term

The hydrocarbon projects that could attract even more investment in the sector are the following projects:

- Distribution concessions of natural gas North and Center of Perú.
- 7 Regions Project.
- Integrated System of transport Gas - South Zone.
- North Oil Pipeline.
- International Bids of Blocks II, V, VII, XV and Z-2B.
- Block 64 (NOC looking for partners).

Projects stated above show a clear interest by investors in upstream and midstream projects. Certainly, in addition to those projects which are underway, there are three Technical Agreements in force.

Blocks V and VII produce an average of 90 and 1,000 barrels of oil per day, and their contracts has been granted in 2023 to Corporacion del Sur and Olympic, respectively.

Now, regarding the blocks in which investment is expected in future years, there is the Block 31-C, which the expansion will recently extended for 10 years for the exploitation contract that includes the execution of an additional program exploratory and Block 192, located in the Loreto region, which has a production capacity of 12,000 BPD due to the fact that the operating company's exploitation contract expired on March 2020 and was extended until the first quarter of 2021. Since February 2023, Petroperu is the new contractor of Block 192.

According to Petroperu, regarding the investment in offshore exploration projects in the first months of 2020, an increase of more than 18.1% was expected in the Peruvian Oil Industry as oil companies had shown considerable interest in the offshore blocks offered by Peru. This further continuing with 6 active exploration contracts and an overall investment of USD2.29 million in 2022.

However, even though the growth figure is no longer what was expected for 2020 due to the sanitary crisis, it is necessary to highlight that the interest of investors in offshore projects in Peru has not been lost. Blocks Z-67 and Z-68 are in the Ancash region and an investment of more than USD2.47 billion is expected in the exploration and development phases.

Moreover, through the years, interest has continued growing specially with the 2023 report made by a company that details the huge potential of Blocks Z-61, Z-62 and Z-63 to produce 200,000 bpd in the Northern Region of La Libertad. Therefore, offshore blocks in Peru continue to be desirable for investors and have huge growth potential.

In relation to midstream projects, Petroperu, the National Oil Company, has undergone works to keep the Northern Peruvian Pipeline operating as of 2023, and has continued modernizing the pipeline to adequate to the nation's necessities. This is crucial, due to the importance of the Northeast Blocks, them being one of the largest producers in the entire country.

In this regard, the Northern Peru Pipeline had to stop its operations in the beginning of the sanitary crisis. However, in January 2021 its activities resumed under the required sanitary

protocols against COVID-19. This greatly benefited the northern blocks, reaffirming investor confidence in Peru.

On the other hand, growth of the southern Region's economy might push Government to hasten the reformulation of the Southern Peruvian Pipeline Project's international bid.

The importance of the abovementioned project resides not only in the undeniable growth of the economies of the southern Regions (boosted by large mining operations), but also in the eventual export opportunities available thereafter. For instance, it should be noted that Bolivian companies are evaluating possible gas pipelines through the southern Regions up to Ilo's port, in Moquegua.

Investments in upstream will continue, while investments in midstream infrastructure await crucial decisions to be unfold. Notwithstanding, downstream projects will also be rampant in the coming years.

The main downstream project was the Modernization of Talara's Refinery in order to produce 95,000 oil bpd. This refinery is able to produce low sulfur fuels which complies with Peruvian regulations. Therefore, this project turned reality demonstrates the huge potential Peru has as a nation in the sector and the overall benefits it brings.

On the other hand, the Government is looking to consolidate plan to make the use of natural gas massive.

Since natural gas distribution concessions in the northern and southern Regions of the country have shown promising results in their first year of operations, with over 20,000 connections that include residential and industrial customers, the Government has been awarded with the project "7 Regions" (Apurimac, Ayacucho, Huancavelica, Junin, Cusco, Puno and Ucayali) in 2023.

The Integrated System of transport Gas – South Zone concession is a Co-financed Project to design, finance built, operate and maintain the project. According to the Ministry of Energy and Mines, one of the main objectives of the Integrated System of transport Gas is to provide supply of natural gas for users in the main cities of southern Peru: Cusco, Apurimac, Puno, Arequipa, Moquegua and Tacna, and the "Power Node of South Peru in Mollendo and Ilo" (Thermoelectric Power Plants of Puerto Bravo and Ilo, respectively).

Following this route, the Ministry of Energy and Mines in early 2023 has set a goal to provide 305,000 houses with natural gas (NG), demonstrating a firm stance on improving life quality and continuing a path of growth.

c. Diversifying the energy matrix: Natural gas

The development of natural gas and condensates from the Camisea project have created a new strategic option for the energy sector in Peru.

Such development has contributed to increase the reserves and hydrocarbon production and, therefore, the supply and demand patterns of such an energetic matrix.

Before the arrival of natural gas, the energy matrix of Peru depended on liquid fuels – primarily imported diesel, coal, wood and other traditional sources of energy. Nowadays, the consumption of liquid fuels has been reduced in order to introduce different energy sources, such as LPG (Liquefied Petroleum Gas) and VNG (Vehicle Natural Gas). In the future, Peru intends to generate a matrix based not only on petroleum, but equally on renewable energy and natural gas.

The global trend in terms of fuel oil is to replace oil with other sources that are cleaner and cheaper. Therefore, there is a prime focus on developing Camisea's full potential (Blocks 57, 58, etc.) in order for Peru to be energetically integrated into this trend.

Camisea Project

Camisea's estimated hydrocarbon reserves are around 13 million cubic feet of gas and 660 million liquified. It is estimated that these reserves will continue reducing the cost of electricity and national fuel in the mid-term. Natural gas: the fuel of the Camisea has contributed greatly to Peru's development by providing a steady and increasing flow of a clean energy source.

Camisea's gas impact on savings in power generation were estimated around USD22.4 billion during its first 10 years (the project began operating in 2004). Without a doubt, it has dramatically changed Peru's energy matrix, and because of this, it has paved the way for some of the most ambitious energy and infrastructure projects for the mid-term.

Thermoelectric plants projects

Due to the development of the Camisea project, and the increasing availability of natural gas through the pipeline that connects such fields to the coast, many projects regarding thermoelectric power plants have started operating in recent years.

Certainly, the gas pipeline has allowed thermoelectric power plants to be constructed and operated few kilometers to the south of Lima, in Chilca. 4 companies operate thermoelectric power plants in Chilca, generating around 16,000,000 MWh of a great total of 48,587,388 MWh generated in the country during 2016. Some of these companies have currently developed extensions of their power plants in Chilca.

Nonetheless, the southern power node has already received investments to develop thermoelectric power plants. One international operator is running some of those plants, and some other investors might find it attractive for new projects in the node and its surroundings, especially when the southern Peruvian pipeline starts operating.

Camisea's deposits are large enough to satisfy the actual energy needs of the country for more than a decade. This is why it is one of the most important energy sources of the country.

The Camisea zone is located approximately 500 kilometers to the southeast of the city of Lima, the capital of Peru, on the eastern slopes of the Andes in the region of Cusco. It is located in the Bajo Urubamba valley, one of the areas with the most natural biological diversity in the world. A major part of the reserves are located in two main gas fields, San Martín and Cashiriari. Blocks 88 and 56 are known as the Blocks of the Camisea project.

Camisea's gas is also currently available in the Ica´s region, as well as some southern and northern regions of the country, through distribution concessions. In that regard, the region of Piura might also benefit from the supply of liquefied natural gas coming from Pampa Melchorita's plant in 2018, while the central regions of the country are benefitting from the "7 Regions" gas project. As can be noted, natural gas is on its way to becoming the standard energy source for Peruvian society.

Natural Gas Transportation Infrastructure (2021)

Owner company / Infrastructure	Origin	Destiny	Length (Km)	Accumulated Capacity (MMSCFD)
TGP				
Main pipeline	Camisea	City Gate Lurín	730	-
Coast Loop I	Pampa Mechorita	Chilca	105	-
Coast Loop II	Chilca	City Gate Lurín	31	920
Kamani Compressor	Camisea-Lima LP 127		NA	-
Derivation pipeline	Camisea-Lima LP 277	Ayacucho	18	-
Peru LNG	Chiquintirca	Pampa Melchorita	408	620
Other pipelines				
Olimpic Perú Inc.	La Casita Station	Olimpic Station	33	11
Petrochina	Talara Basin	Malacas Thermoelectric	ND	ND
Perú LNG	Pampa Mechorita	Pampa Mechorita	1,4	ND
Aguaytía Energy	Curimaná	Padre Abad and Pucallpa	174	55
Pluspetrol	Humay	Pisco	40	35
BPZ	Pariñas	Peña Negra (Talara)	27	ND
Total			1,568	

Source: TGP, Osinergmin, Perú LNG and Promigas.

d. Growth potential

Peru has 18 sedimentary basins with hydrocarbon exploration potential. Eight of which are offshore. These basins hold huge hydrocarbon potential and have been exploited such as the Talara and Ucayali basin. However, only three of them have been exploited, which shows that an important part of the national territory with hydrocarbon potential has not been explored yet, especially in the jungle and in the coast.

According to Perupetro, Peru is one of the few countries in the world whose territory is relatively underdeveloped, which means that it has an almost intact hydrocarbon potential. Ten basins are located in the continental zone of Peru (in the coast and in the south and north jungle), and the rest are located offshore.

The basins located in Talara, Marañon and Ucayali are the best known. Further studies have been conducted at these basins, especially in the Talara basin, that has been explored and has had production fields since the 19th century. On the other hand, the Marañon basin (northern jungle) already has production oil wells and new structures have been discovered, but still this basin is only partially exploited.

In the same sense, even though the Ucayali basin (northern and central) has not been explored yet, in the south zone are the Camisea fields, which are the principal natural gas deposits of Peru.

Regarding the other 15 basins whose potential have not been explored in detail, we have the Santiago and Huallaga basins, where abundant crude samples have been found, inferring the existence of active oil systems. We also have the Madre de Dios basin, where preliminary studies confirm the presence of gas deposits.

A case that may bring attention is the Titicaca basin, which produced light oil in very antique fields at the beginning of the 20th century. In the case of natural gas, in 2014 a Chinese company acquired Petrobras' assets in the country, comprising an investment of USD1.4 billion in exploration activities in Block 58, near Camisea fields. It was estimated at up to 8 trillion cubic feet (TCF) of natural gas. Moreover, recent Block 58 exploratory efforts were proven successful, granting almost 4 TCF in reserves.

Natural Gas users up to 2023 (Total users: 800,000)

#	**North Region**	**Operational start-up: 2017** Executed Investments: USD135M
μ	**Lima and Callao**	**Operational start-up: 2004** Executed Investment: USD1.080B
∏	**Ica**	**Operational start-up: 2014** Executed Investment: USD381M
¥	**South West**	**Operational start up: 2017** Executed Investment: USD40M
¬	**Center and South**	**Operational start up: to be granted by Proinversion in 2021** Expected Investment: USD200M Potential Users: 113,535 (8 years)

Source: Promigas, EY.

Petroperu (National Oil Company)

Camisea's estimated hydrocarbon reserves are around 13 million cubic feet of natural gas and 660 million liquid barrels. It is estimated that these reserves will reduce the cost of electricity and national fuel.

Even though Petroperu, a state-owned company of private law, initially was not actively involved in exploration and exploitation of hydrocarbon activities, which occurred as a consequence of the privatization process during the 90's; nowadays it is re-assuming its participation in the hydrocarbon production scenario.

In 2006, Peruvian Congress passed Law No. 28840, which allowed Petroperu to return to participate in all stages of hydrocarbon activities, especially in exploration and production. Thus, it could be a competitor in every activity of the industry.

The first step into reinserting Petroperu into upstream activities was taken in October 2014, when Petroperu associated with a private company planning on exploring and producing hydrocarbons in Block 64. Then the acquisition of significant interest in Block 192's License Contract was completed on 2015. Block 192 was the highest producing block in the country during the last decade, and was the ideal opportunity for Petroperu to return to upstream operations.

On the second half of 2020 was approved the extension of the exploitation contract with Frontera Energy (main operator of the Block 192) until the first quarter of 2021. On the other hand, PetroPeru has been selected as the owner of Block 192 and has begun the process to operate such block. As of 2023, more bidding processes are expected to be made as some contracts are soon to expire.

Aside from Petroperu's return to upstream activities, it should be mentioned that in 2016 the aforementioned NOC was authorized by Congress to adopt all the necessary measures to assure the correct engineering, procurement and construction of the new assets that will let Talara's Refinery to be able to produce LPG, oils and 50 ppm sulfur diesel. Not only does this project make the Peruvian northern region more dynamic, allowing refining of heavy oil from Jungle's Blocks, but it also assures the total nationwide supply through Petroperu's fuel distribution grid.

Petroperu's reorganization and its participation in social projects

On December 31, 2016, by means of Legislative Decree No. 1292, the government declared the necessity to modernize and reorganize Petroperu.

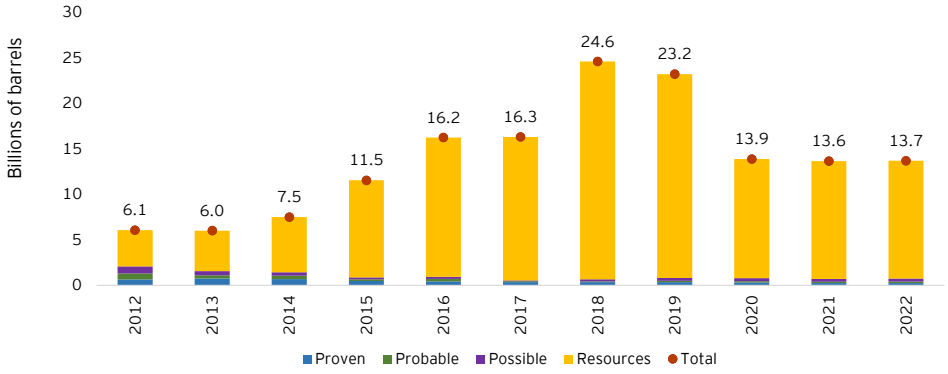
For this purpose, it authorized Petroperu to modify totally or partially its internal structure in order to improve the efficiency of its operation, increase its operational capacity and to modify its services to reach an adequate standard of performance, considering the necessity to protect the environment and the nearby communities.

Also, Petroperu has been authorized to contract third parties by means of joint venture, services contracts, among other forms, regarding the management and operation of its current projects and the future ones. By this, the government has noted that despite the authorizations given to Petroperu, it is still a public entity.

In the same Legislative Decree, Petroperu has been authorized to participate as a partner and also as an operator (if agreed) in the exploration and the exploitation of hydrocarbon activities

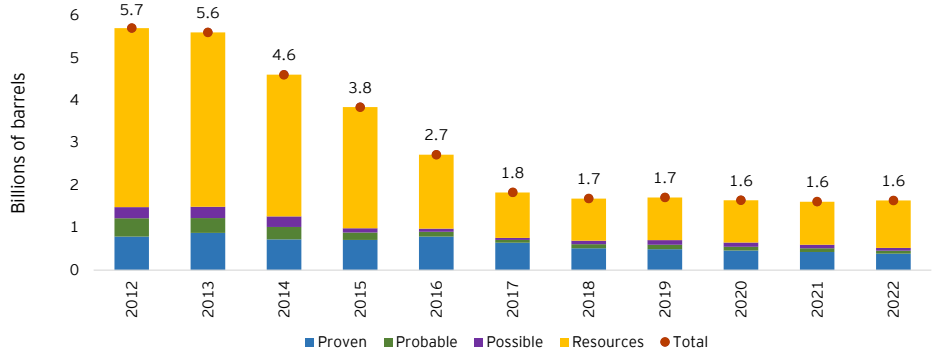
according to the terms and conditions included in the correspondent contract. For these purposes, the only condition that it must fulfill is not making any disbursement while developing exploration activities. It is worth mentioning that due to the said Legislative Decree No. 1292, Petroperu is now authorized to organize and carry social responsibility activities through the Regime called Construction work for Taxes, according to Law No. 29230.

Oil reserves and resources



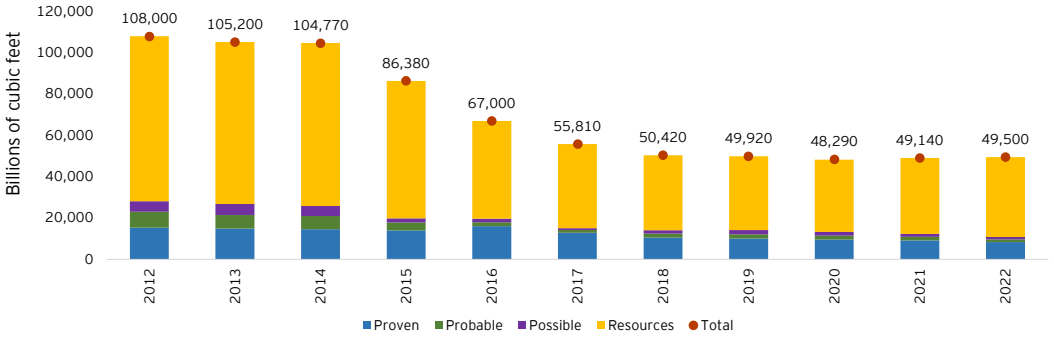
Source: Perupetro.

Reserves and resources of natural gas liquid



Source: Perupetro.

Natural gas reserves and resources



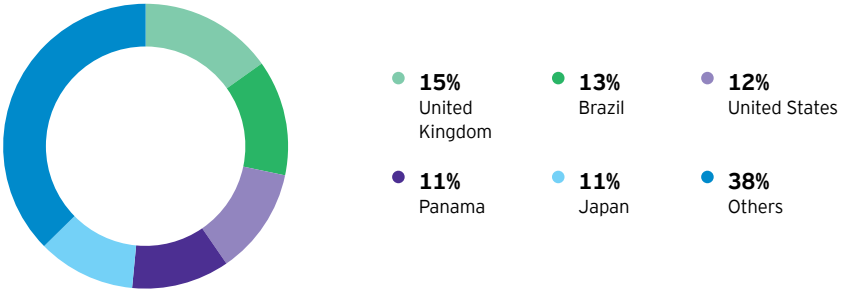
Source: Perupetro.

Hydrocarbons export (FOB value in USD millions)

Petroleum and Natural Gas	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Crude	496	120	24	26	139	122	152	290	509	222
Derivates	3,280	1,733	1,669	2,571	2,858	2,230	842	1,722	2,230	2,177
Natural Gas	787	449	524	772	1,042	623	599	1,703	3,166	1,553
Total	4,563	2,302	2,217	3,369	4,039	2,975	1,593	3,715	5,905	3,951

Source: National Superintendency of Customs and Tax Administration (SUNAT).

Hydrocarbons export by country of destination 2023 (in percentage)

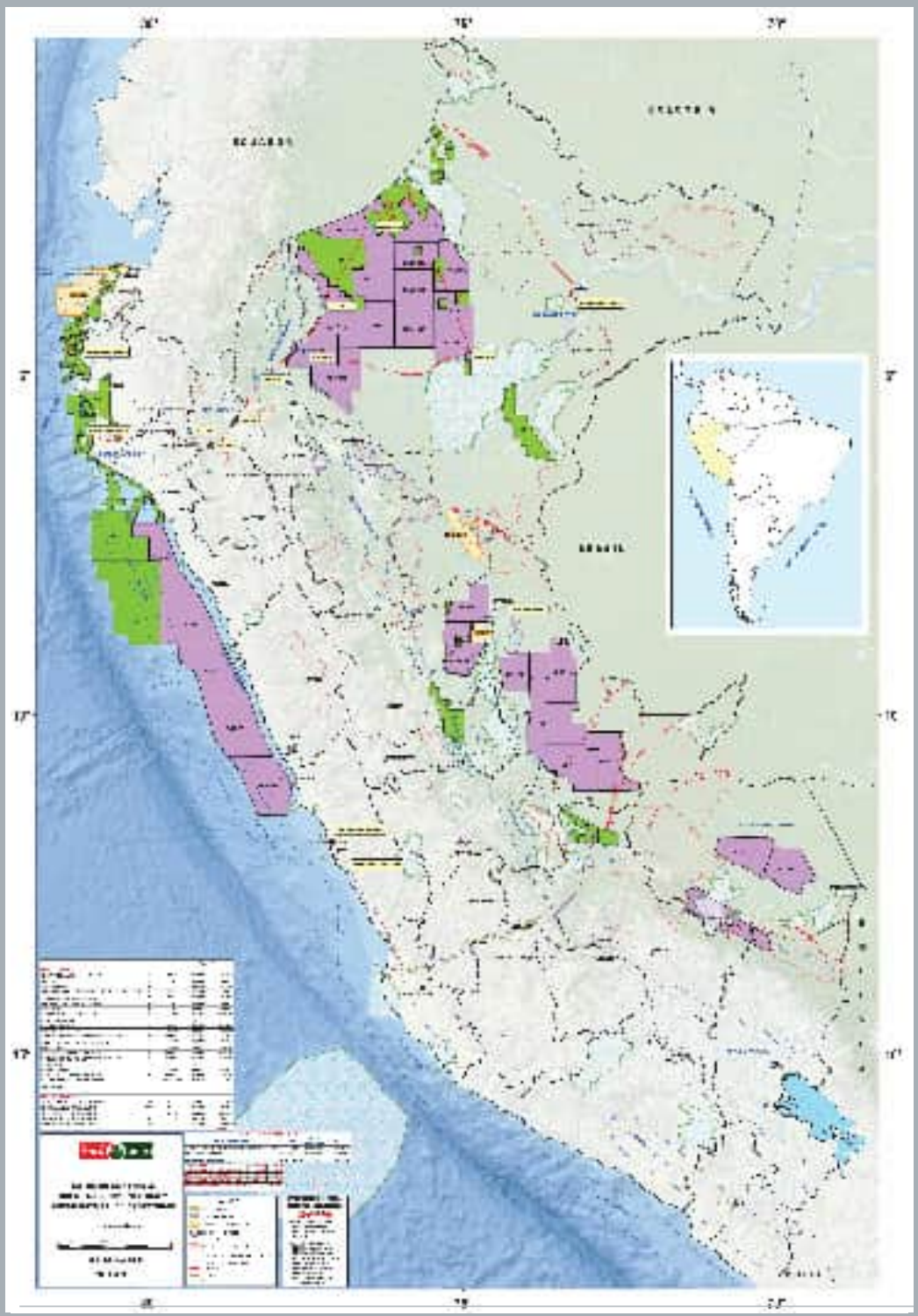


Source: Ministry of Foreign Trade and Tourism (MINCETUR).

Peru's sedimentary Basins Map (2023)

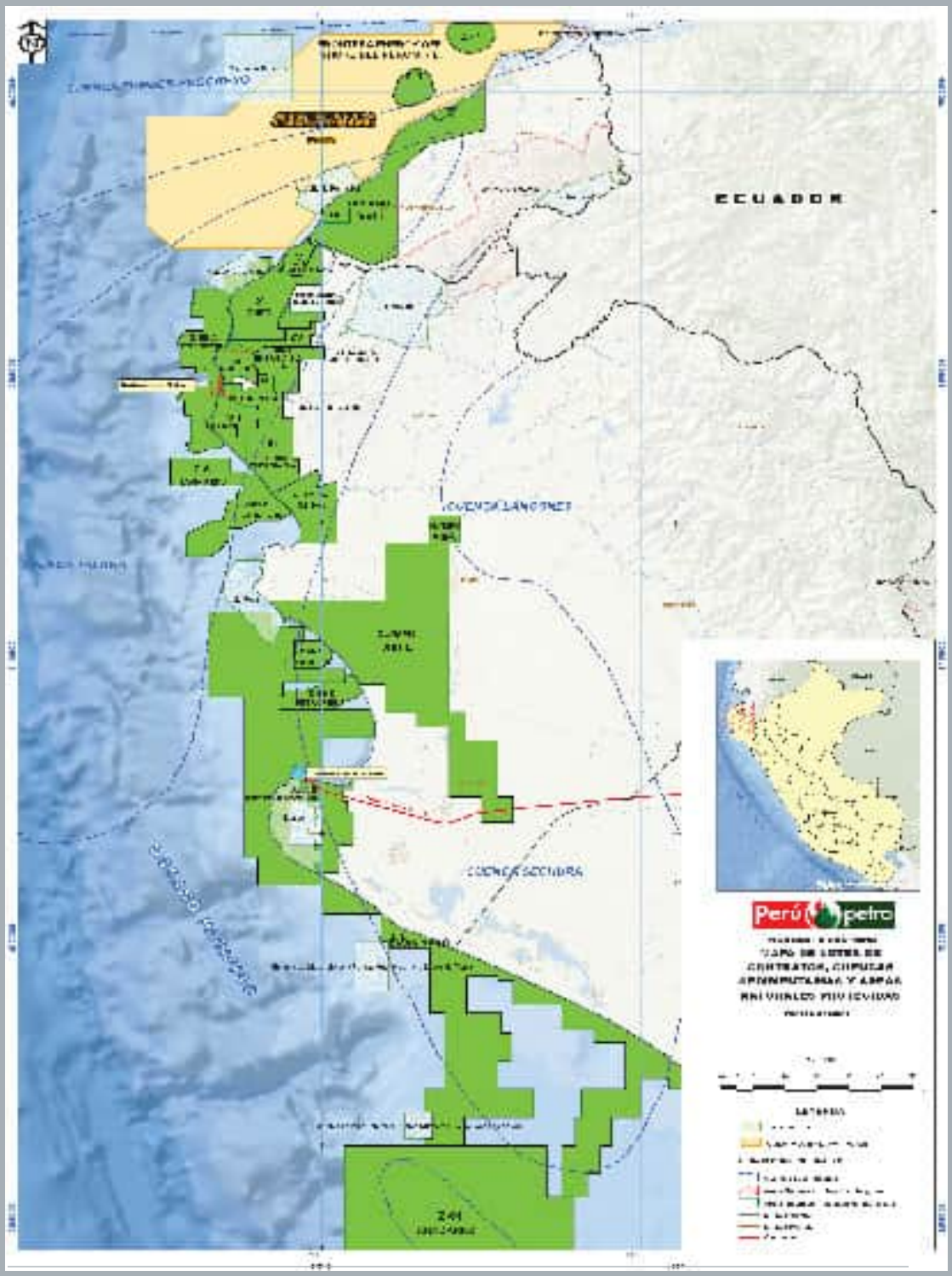
Source: Ministry of Energy and Mines (MINEM).

Peru's Block Map (as of April, 2024)



Source: Perupetro.

Northwestern Peru's Block Map (as of April, 2024)



Source: Perupetro.

Oil contract (as of May, 2024)

Contract	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024*
Exploration	50	44	41	26	20	14	13	12	7	6	6	6
Exploitation	24	24	25	25	26	27	26	26	25	25	26	26
Total	74	68	66	51	46	41	39	38	32	31	32	32

*As of May, 2024.
Source: Ministry of Energy and Mines (MINEM).

Exploitation contracts (as of May, 2024)				
Zone	Operator	Block	Subscription date	Due date
North Rainforest	Perenco	39	9/09/1999	1/02/1944
	Petroperú	64	7/12/1995	14/06/1939
	Perenco	67	13/12/1995	15/12/1934
	Petrotal	95	7/04/2005	30/11/1941
	Altamesa	192	28/02/2023	24/10/1953
Central Rainforest	Aguaytia	31-C	30/03/1994	1/02/2025
	Cepsa	131	21/11/2007	18/01/1938
South Rainforest	Pluspetrol	56	7/09/2004	6/09/1944
	Pluspetrol	88	9/12/2000	8/12/1940
	Repsol	57	27/01/2004	26/01/1944
	CNPC	58	12/07/2005	8/09/1945
North-West	PetroPerú	I	21/10/2023	21/10/2025
	Petromont	II	5/01/1996	4/01/2026
	UNNA	III	31/03/2015	4/04/1945
		IV	31/03/2015	4/04/1945
	Corporación del Sur	V	9/10/2023	9/10/1953
	Petroperú	VI	21/10/2023	21/10/2025
	Olympic	VII	21/10/2023	21/10/1953
	UNIENERGIA ABC	IX	16/06/2015	16/06/1945
	CNPC	X	20/05/1994	19/05/2024
	Olympic	XIII	30/05/1996	29/05/1936
	Petromont	XV	26/05/1998	25/05/2028
	Petromont	XX	19/01/2006	18/01/1936

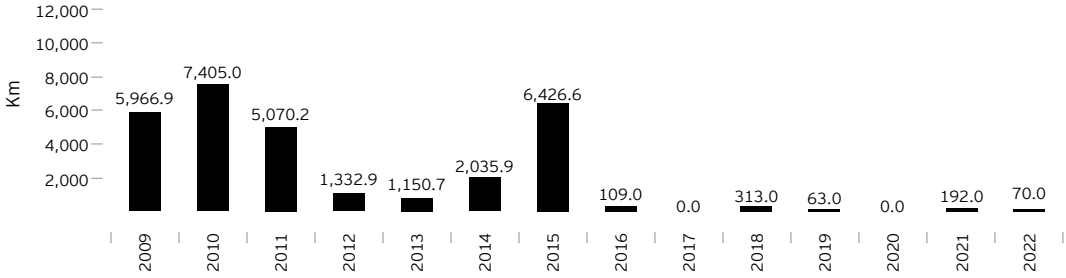
Exploitation contracts (as of May, 2024)				
Zone	Operator	Block	Subscription date	Due date
Continental Shelf	Petroperú	Z-69	16/11/2023	15/11/2025
	Vigo Energy	Z-1	30/11/2001	28/01/1932
	Savia	Z-6	20/03/2002	19/03/1932

Exploration contracts (as of May, 2024)				
Zone	Operator	Block	Subscription date	Due date
Central Rainforest	Petrolifera Petroleum Peru	107	01/09/2005	1/09/2018
North - West	Upland Oil & Gas	XXIII	17/05/2017	17/05/2024
	Petro Bayovar	XXVII	24/11/2017	24/11/2027
Continental Shelf	Anadarko	Z-61	9/10/2017	9/10/2027
	Anadarko	Z-62	9/10/2017	9/10/2027
	Anadarko	Z-63	9/10/2017	9/10/2027

Source: Perupetro, Ministry of Energy and Mines (MINEM).

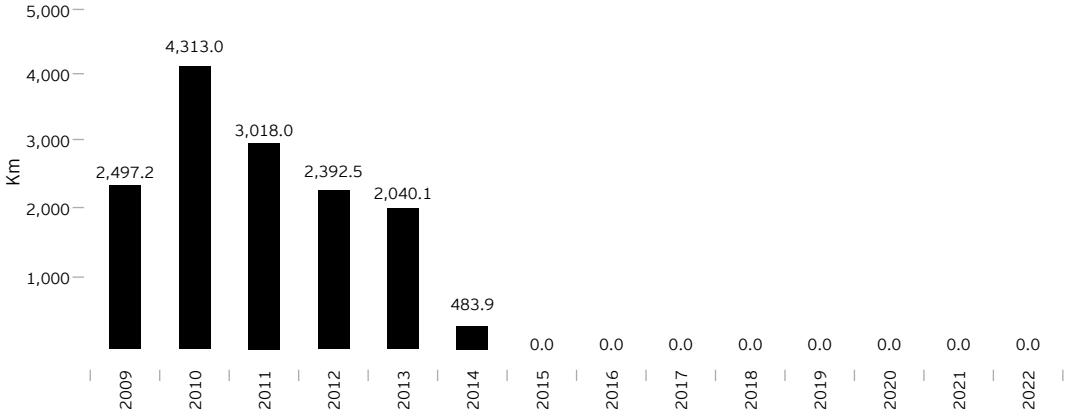
2D and 3D seismic

Registered 2D seismic

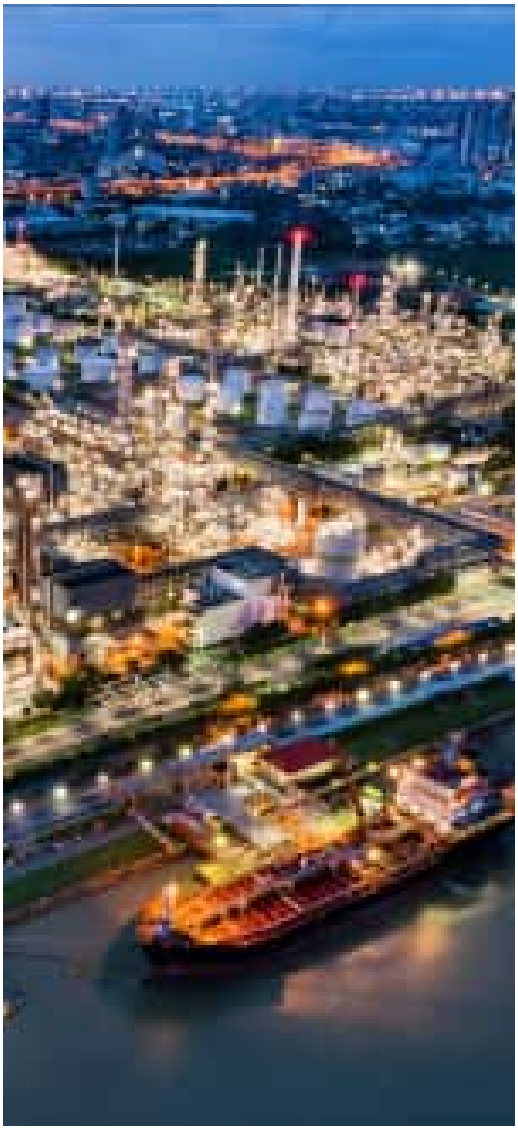


Source: Perupetro.

Registered 3D seismic



Source: Perupetro.



Hydrocarbon's Government take

▸ **OSINERGMIN Contribution**

Oil & gas companies that import or produce fuels, including liquefied petroleum gases and natural gas, or carry out transportation and distribution activities should pay this contribution to the Supervisory Body of Private Investment in Energy and Mines (OSINERGMIN). The rate of this contribution is 0.34 % for 2023 and 0.38 % for 2021-2025 (for import or production activities), and 0.53% for 2023, 0.52% for 2024-2025 (for transport and distribution activities), applied on their monthly billing after deducting VAT.

▸ **OEFA Contribution**

Oil & gas companies that import or produce fuel, including liquefied petroleum gases, or carryout transport and distribution activities should pay this contribution to the Enviromental Audit and Evaluation Agency (OEFA). The rate of this contribution for years 2023-2025 is 0.09% (for import or production activities) and 0.10% for 2023-2025 (for transport and distribution activities) applied on their monthly billing after deducting VAT.

2

Electricity

a. Importance of Peruvian electric sector

Evolution of the Peruvian Regulation of the electrical market

1955
- Law 12378 - Rules to be observed for the exercise of the power industry in the country.

1962
- Law 13979 - National Electric Services Law

1972
- Decree-Law 19521 - Nacionalization of the Electric Sector

1982
- Law 23406 - General Electricity Law

1992
- Law 25844 - Electric Concessions Law

1994
- Supreme Decree 29-94-EM - Regulation of Environmental Protection in Electrical Activities

1996
- Law 26734 - OSINERGMIN's Law (current regulator entity)

1997
- Supreme Decree 020-1997-EM - Technical Standard for the Quality of Electric Services
- Law 26876 - Antitrust Law of the Electric Sector

2000
- Law 27345 - Law for the Promotion of Efficient Energy Use

2001
- Law 27510 - Creation of the Social Energetic Compensation Fund (FOSE)

2004
- Entry into operation of the Camisea Proyect

2006
- Law 28832 - Law to ensure the efficient development of electricity generation
- Law 28749 - Rural Electrification Law

2007
- Supreme Decree 053-2007-EM - Regulation of the Law for the Promotion of Efficient Energy Use

2007
- Directorate Resolution 055-2007-EM-DGE - Technical Standard for the Exchange of Information in Real Time for the Operation of the National Interconnected Electric System

2008
- Supreme Decree 1002-2008 - Promotion of Investment for the Generation of Electricity with the use of Renewable Energies
- Supreme Decree 050-2008 - Regulation for the Generation of Electricity with the use of Renewable Energies

2009
- Supreme Decree 022-2009-EM - Electricity free user's Regulation

2010
- National Energy Policy of Peru 2010-2040

2011
- Supreme Decree 012-2011 - New Regulation for the Generation of Electricity with the use of Renewable Energies

2012
- Law 29852 - Creation of the Social Energetic Inclusion Fund (FISE)
- Law 29970 - Law that strengthens energy security

2012
- Directorate Resolution 243-2012-EM-DGE - New Technical Standard for the Exchange of Information in Real Time for the Operation of the National Interconnected Electric System
- Entry into operation of the first solar power plant "Repartición 20T"

2013
- Ministerial Resolution 203-2013-MEM/DM - Universal Access Plan to energy (2013-2022)
- Supreme Decree 020-2013-EM - Regulation for the promotion of electrical investment in areas non connected to the grid

2014
- National Energy Plan 2014-2025
- Opening of the first wind farm "Marcona"

2015
- Legislative Decree 1221 - Improvement of the Regulation of the distribution of electricity to promote access to electric power
- Legislative Decree 1224 - Framework Law for the promotion of private investment through Public-Private Parnerships and Proyects in Assets

2016
- Law 30468 - Law that creates the compensation mechanism of the Residential Electric Tariff
- Supreme Decree 026-2016-EM - Regulation for the Wholesale Electricity Market
- South Energetic Node

2017
- Supreme Decree 009-2017-EM - Technical Regulation on the labeling of energy efficiency for energy equipment

2018
- Opening of the wind farm "Wayra I" and solar power plant "Ruby"
- Supreme Decree 95-2018-EF - Reduction of the ISC for new vehicles that work with gas, electric and hybrids

2018
- Pre-publication of the Distributed Generation Regulation Project
- Pre-publication of the Project for the modification of the Regulation of the Electricity Concessions Law

2019
- Announcement of the Peru-Chile Electric Interconnection
- Creation of the Multisectoral Commission for the Reform of the Electricity Subsector
- Regulation for Environmental Protection in Electrical Activities

- Emergency Decree 013-2019 - Establishment of the prior control regime for business concentration operations and repeal of the the antitrust Law 26876 of the electricity sector.

2020

- Pre-Publication of the Draft Supreme Decree that approves the Citizen Participation Regulations for the Performance of Electrical Activities.
- Pre-publication of the Project for the New Regulation of Electric Concessions Law, which modifies provisions related to the Electricity Concessions Law, cogeneration, geothermal energy, free users, transmission, etc.
- Provisions on the electric power supply and charging infrastructure for electric mobility

2020

- Supreme Decree 018-2020-EM - New Regulation of the General Rural Electrification Law
- Sale of shares of "Luz de Sur" Electric Company and authorization of INDECOPI. Last operation carried out under the former Electric Antitrust Regime.
- Publication of Reports of the Working Groups of the Electricity Sub-Sector Reform Commission - First Short-Term Stage:

1. Report on the Problem of the Natural Gas Price Declaration Regime
2. Report on the Promotion of Non-conventional Renewable Energies in Isolated Systems
3. Report on Rural Electrification Regulation
4. Report on the Scheme of Improvements in Tenders for the Supply of Electricity
5. Report on the Separation of purchases for the Electric Power and Energy Supply
6. Report on the Scheme for the improvement in the implementation of new Transmission infrastructure
7. Report on Treatment of the purchase of Natural Gas for Electricity Generation

2021

- Supreme Decree 018-2021-EM – which reactivates the execution of electricity transmission projects of the Complementary Transmission System.

2022

- Supreme Decree 154-2022-PCM - which establishes provisions on the Regulation Contribution regime in the electricity and hydrocarbons subsectors of the Supervisory Agency for Investment in Energy and Mining.
- Supreme Decree 157-2022-PCM which establishes provisions on the Contribution by Regulation of the Agency for Environmental Evaluation and Control – OEFA, in charge of companies and entities in the energy sector for the period 2023-2025.
- Law 31429 which modifies articles 1, 2, and 3 and incorporates article 3-A in Law 27510, Law that creates the Electricity Social Compensation Fund.

2023

- Resolution 064-2023-OS/CD - Guidelines and formats to be used by electricity distribution companies for procedural purposes and approval by Osinergmin of the final list of benefited users and settlement of the application of the Electricity Bonus subsidy within the framework of the provisions of Law N° 31688.

The Peruvian electricity history demonstrates that since the first electricity was introduced in Peru around 1886, it has dramatically changed to reach the development level that this sector has nowadays.

In 1955, during the government of president Manuel Odria, the first regulatory framework in the history of the Peruvian electricity sector was published by Law No. 12378. However, this regulation wasn't limited to establishing the rules to be observed for the exercise of the electric industry in the country, but it also pursued the promotion of private investment in the electricity industry, as well as the guidelines for granting concessions, permits, and licenses, necessary for running the industry.

It should be noted that, since 1956, the Peruvian State began to supervise the operations of the electricity sector through the Ministry of Development. But starting in 1996, this work was entrusted to OSINERGMIN, a public institution in charge of regulating and supervising companies in the electricity, hydrocarbon, and mining sectors.

In the 1960s, the expansion of electricity networks in the regions increased, mainly due to improvements in the regulatory framework of the sector. Thus, in 1962, Law No. 13979 was enacted, through which it was authorized to organize the state railways, the Lima potable water service, and the national electricity service as autonomous companies. Likewise, the National Electric Services (SEN) was created with the purpose of exploiting the numerous power plants that depended on the Peruvian State, in such a way that electric service could be supplied to those places where neither private investment nor the municipalities had arrived.

Before 1970, the electrical industry in Peru was developed by the national and foreign private sector, managing to supply 15% of the population that lived, mainly, in the large cities of the country. However, despite the fact that the economic model of the previous two decades generated good macroeconomic results, it was not possible to implement policies that generated redistributive effects, worsening the urban-rural income gap.

In the 1970s, the regulation of the electricity sector underwent significant changes when the military government of Peruvian President Juan Velazco Alvarado came into power and was continued by the military government of the president Francisco Morales Bermúdez.

In 1972, the Government managed to nationalize the electrical industry through Law No. 19521 and created the National Electricity Corporation – Electroperu. As of this, Electroperu took all the electricity sector chain activities (generation, transmission and distribution), becoming the new owner of the total assets that were previously used and operated by the cluster called "Empresas Electricas Associates", but now under the name Electrolima S.A.

Years later, the non-military Government of president Fernando Belaunde Terry came into power. During his regime, in 1982, the Electricity General Law was enacted by Law No. 23406. Through this Law, the electricity public service remained being served by the National Electricity Corporation, this is, Electroperu, and through its regional affiliates.

Under this new scheme, ten regional affiliates were created for the distribution of electricity, with the purpose of covering the electricity needs throughout the Peruvian territory. Electroperu was the leading company, being considered the holding company and in charge of the Mantaro, Cañón del Pato, Carhuaquero, and Carhua hydroelectric power plants; as well as the transmission networks in the central north that were not assigned to the regional affiliates.

Despite the efforts made to enhance the regulation of the electricity sector, in 1990, only 45% of the Peruvian population had access to electricity. In that moment, the electricity supply only covered 74% of the demand, and the distribution losses were equivalent to almost 20% of the electricity.

Later, in 1991, the Government of president Alberto Fujimori initiated the restructuration of the regulatory framework of the electricity sector due to the big social and political crisis, and the poor coverage of the electricity services and infrastructure.

In this regard, as the economic and customs framework had to be modernized, other sectors included modifications to its current regimes to guarantee better investment conditions and to promote corporative competitiveness.
Under this new context, many national corporations were privatized. This was enforced by means of Legislative Decrees No. 662 and No. 674.

As a result, the electricity sector was reformed during the 90s. Currently, the sector is oriented to enhance the supply of electricity through a market open to international trade. Under this new context, Law No. 25844, the Electric Energy Law, was enacted.

Concessions were enacted in order to attract new private investment to activities that were not successfully being assured for te rendering of electrical services and to end the monopoly that covered the sector. In this regard, Law No. 25844 established the conditions under which new agents could participate in the Electricity Sector in each activity of the sector´s chain (generation, transmission, and distribution). The main principles to be applied in the sector were free entry and open access, free prices for generation and commercialization activities, and regulated prices for transmission and distribution activities.

In relation to the above, years later, in 1996 and 1997, specific regulations were enacted for the sector. In 1996, Law No. 26734 created the Supervisory Agency for Private Investment in Energy and Mining (OSINERGMIN), a sector regulator to which the functions of the Ministry of Promotion functions in electrical matters were transferred; and, in 1997, Law No. 26876 was published, which regulates the antitrust rules of the electricity sector.

Today, the government's participation in the electricity sector is very limited compared to the role played by the private sector.

However, according to the data from the Peruvian Government's National Business Financing Fund (FONAFE), the role of the state is more important in cities other than the country's main city (Lima), mainly in the generation and distribution of electricity, as shown in the following map:

Government enterprises under Fonafe's supervision

No.	Company	Region
1	Egasa	Arequipa and Ica
2	Egemsa	Cusco
3	Egesur	Tacna and Ica
4	Electroperu	Huancavelica and Tumbes
5	San Gaban	Puno
6	Adinelsa	Amazonas, Cajamarca, Tumbes, Piura, Lambayeque, La Libertad, Lima provincias, Ica, Huancavelica, Ayacucho, Junin, Pasco, Huanuco, San Martin, Arequipa, Iquitos and Ucayali
7	Electro Oriente	Loreto, San Martin, Amazonas and Cajamarca
8	Electro Puno	Puno
9	Electro Sur Este	Cusco, Apurimac, Madre de Dios, and Ayacucho
10	Electro Ucayali	Ucayali
11	Electro Centro	Cusco, Junín, Lima, Huánuco, Pasco, Huancayo, Huancavelica and Ayacucho
12	Electro Noroeste	Piura and Tumbes
13	Electro Norte	Cajamarca and Lambayeque
14	Electrosur	Tacna and Moquegua
15	Hidrandina	Cajamarca, La libertad and Ancash
16	Seal	Arequipa and Ica

Source: National Fund for the Finance of the Corporate Activity of the Peruvian Government – FONAFE, EY.

Rural electrification is a subject of public relevance in Peru, since the publication of Law No. 28749, General Law of Rural Electrification, the Peruvian Government has declared the national need to supply electricity to rural areas, isolated localities and country borders, especially because it is an essential service for sustainable socioeconomic development, improving the quality of life of the population, combating poverty, and discouraging rural exodus.

Considering this, the government assumes a subsidiary role as an investor in the process of the electrification of the rural areas, and because the implementation of energy projects in these areas is highly expensive.

Notwithstanding the above, private investment has been raising interest in the Peruvian energy sector, mainly due to the legal dispositions that have been enacted to enhance the conditions for the development of the sector, which consider the new global trends and the needs of the Peruvian population.

In order to enhance the supply of energy across the entire area of Peru, the government is concentrating on the implementation of incentives for luring investment in clean energy infrastructure.

Fiscal revenues of the Electricity Sector

The Electricity Sector generates an important amount of fiscal revenues regarding the general applicable taxes to all corporations (Income Tax and Value Added Tax), despite of the special rules applicable to the sector for promoting the investments. The following chart shows the revenues obtained by the Tax Authority for Electricity Generation in the recent years, and the percentage that represents in relation to the total fiscal revenues of a year.

	Fiscal revenues (in PEN Millions)							
	2016	2017	2018	2019	2020	2021	2022	2023
Income Tax	1,339.0	1,191.0	1,247.5	1,498.1	1,295.6	1,536.5	1,842.2	2,345.3
VAT	1,273.6	1,421.4	1,751.9	1,985.4	1,940.5	2,120.0	2,389.5	2,522.3
Total	2,612.6	2,612.4	2,999.4	3,483.5	3,236.1	3,656.5	4,231.7	4,867.6

Source: SUNAT.

	Fiscal revenues (Percentage)							
	2016	2017	2018	2019	2020	2021	2022	2023
Income Tax	8.1%	7.7%	7.2%	8.4%	9.4%	6.8%	6.1%	8.3%
VAT	4.1%	4.4%	5.0%	5.2%	5.9%	5.0%	5.0%	5.2%

Source: SUNAT.

Special contributions

OSINERGMIN Contribution

This contribution is applicable to generation, transmission and distribution concessionaries of the electricity sector, and it should be paid to the Supervisory Body of Private Investment in Energy and Mines (OSINERGMIN). The rate of this contribution is 0.46% for 2023, 0.43% for 2024 and 0.41% for 2025, applied on their monthly billing after deducting VAT.

OEFA Contribution

This contribution is applicable to generation, transmission and distribution concessionaries of the electricity sector, and it should be paid to the Environmental Audit and Evaluation Agency (OEFA). The rate of this contribution for years 2023-2025 is 0.10% applied on their monthly billing after deducting VAT.

Hydroenergetic Canon revenue

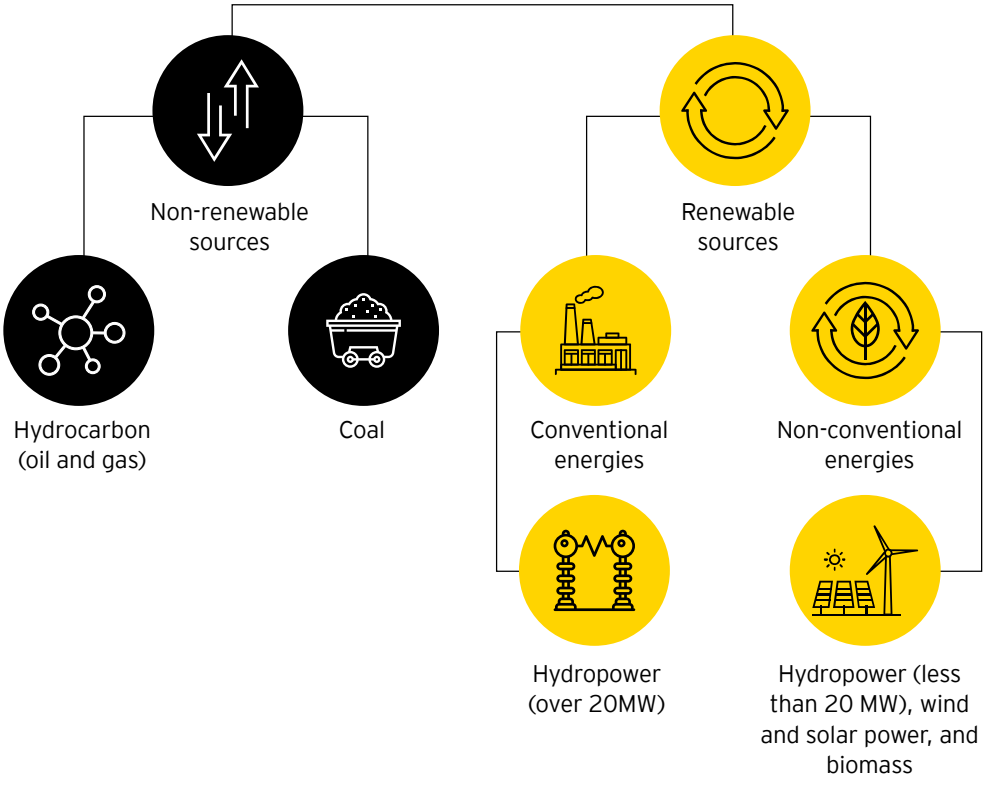
The Hydroenergetic Canon is a portion of the income earned by the Government for the payments made by corporations regarding the utilization of hydric resources in electricity generation activities. The beneficiaries of this Canon are the Local and Regional Governments, and this kind of canon is equivalent to 50% of the Corporate Income.

Tax paid by corporations that are holders of concessions in which hydric resources are used.

b. Electricity production and exports

Electricity supply

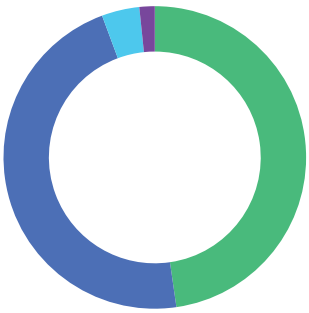
With the development of economy, electricity needs have increased. As this relation between the development of economy and the use of electricity is a direct one, through the years the Government has put effort on trying to connect every area of Peru to a stable source of electricity. In this sense, electricity has become one of the main issues when elaborating National Policies on economy and social issues. Currently, electricity offered by corporations on the electrical business can be classified according to the following:



In the recent years, a new global trend on clean energy has emerged, which makes possible the increase on electrical generation based in renewable sources. However, it is still not the most important source of energy in the Peruvian production of the electrical market. The production of electricity using this new kind of energies is expected to increase in the following years as our energy matrix will tend to become a diversified one.

According to the annual report elaborated by the Economic Operation Committee of the National Interconnected System (COES), the electricity produced during 2019 was mostly based on hydric sources, being followed by energy produced by diesel, gas and coal (Thermoelectric energy). Just little energy has been being produced on wind and solar plants (non- conventional renewable sources).

Production estructure (2023)



Source: Economic Operation Committee for the National Interconnected System (COES SINAC).

Generation Dispatch

Source Type	2020		2021		2022		2023	
	GWh	%	GWh	%	GWh	%	GWh	%
Hydraulic	29,318	60%	30,664	57%	28,486	51%	27,864	47%
Natural Gas	16,918	34%	20,310	38%	24,108	43%	26,028	45%
Coal	13	0%	28	0%	90	0%	0	0%
Biomass	304	1%	356	1%	354	1%	341	1%
Wind	1,803	4%	1,801	3%	1,930	3%	2,353	4%
Solar	778	1%	802	1%	821	1%	956	2%
Residual	9	0%	8	0%	10	0%	0	0%
Diesel	44	0%	21	0%	285	1%	850	1%
Total	49,187	100%	53,990	100%	56,084	100%	58,394	100%

Source: Economic Operation Committee for the National Interconnected System (COES SINAC).

Although that may be, we must emphasize that the promotion of investment in the electric power industry has been established as a national priority in the past years and corporations have introduced new technologies for efficient process, and as a result, the generation of electricity has increased year by year.

As an example of this, in 2013, the electricity produced in Peru reached 39,916 GWh, while years later, in 2023, the electricity produced was about 58,394 GWh.

Annual production of electrical generation power stations of COES

	2017	2018	2019	2020	2021	2022	2023
GWh	49,570	51,293	52,889	49,187	53,990	56,084	58,394

Source: Economic Operation Committee for the National Interconnected System (COES SINAC).

Electricity demand

The demand of the electricity sector is split in three groups: the Interconnected Electrical National System (SEIN), the Isolated Systems, and self-producers. Between this demanding groups, two classes of consumers are identified: free users and regulated users.

Free users are the electricity users who are not subject to pricing regulations in regard of the electricity and power that they use. This category of users has a sub-category of "great users", which consists of the users that have signed contracts to obtain power of 10MW or more. This class of users have negotiation capacity in order to set prices along with their supplier, which can be a distributor or a generation corporation of the SEIN.

On the other hand, the regulated users group consist of users who are subject to pre- established prices (i.e. bar prices) with no negotiation capacity when contracting with electrical suppliers. The Supervisory Body of Private Investment in Energy and Mines (OSINERGMIN) is the entity responsible for setting the prices for this kind of users.

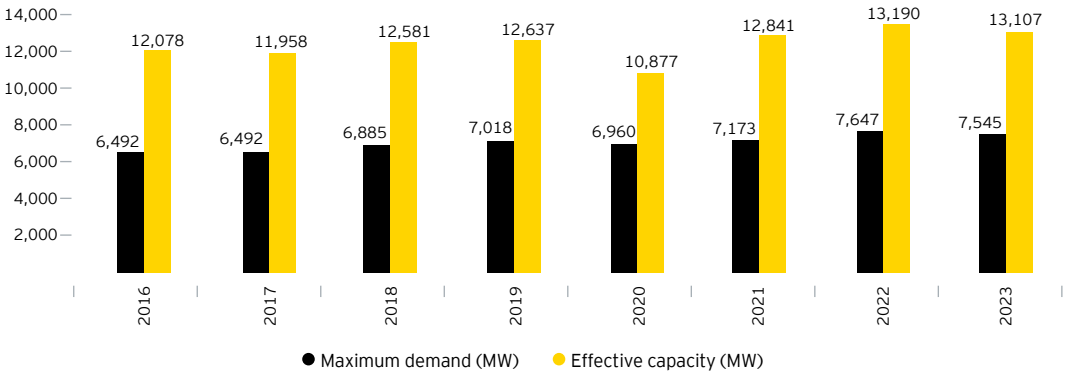
It should be noted that the demand for energy in the Peruvian market has been showing a positive trend month by month, as can be verified through the following data extracted from the reports of maximum demand of the COES:

2023	Maximum demand (Mw)
January	7,294
February	7,397
March	7,583
April	7,606
May	7,343
June	7,315
July	7,280
August	7,290
September	7,374
October	7,354
November	7,489
December	7,545

Source: Economic Operation Committee for the National Interconnected System (COES SINAC).

Nevertheless, despite the constant increase in electrical consumption in Peru, it is said that the local market has an "oversupply of energy", which would be due to the excess of effective capacity with respect to the reported consumption. This is reflected in the fact that the reserve margin of energy has been increased since 2013, reporting an excess of 26%, until 2019, where a margin of 44% was reached.

Electricity Maximum Demand and Effective Capacity (end of year comparatives)



Source: Economic Operation Committee for the National Interconnected System (COES SINAC).

However, it is important to bear in mind that some experts of the industry attribute this "oversupply of energy" to external factors of the Peruvian electric market, not being connected with the real necessity of energy in the country. To this regard, some of the reasons given to explain this "oversupply of energy" are the following:

- Due to the big amount of electric generation projects that have been granted in the past and that today remain under operation, the surplus of generated electricity has not find a way out into the market though the limited capacity of the transmission grids.
- Electric generation companies pointed out that there are lots of electric generators operating in the market, so the need to sale the produced electricity leads to a price war. Because of this, prices offered –most of the time- get so low that they become unsustainable for the costs structure of the generators, distorting the natural electrical market.
- According to other specialists, the sudden suspension of new big projects due to the economic slowdown and political factors, create a jam in the country between investments on electricity projected for big demands, and the growth not realized in electricity demand that remained almost a similar level.
- On the other hand, it is held that an important issue in relation to Peruvian electricity demand is the presence of clandestine users. Such kind of users does not allow a reliable measurement of the electricity demand, as they cannot be monitored in plain sight by regulators.

Moreover, according to other experts, this "oversupply of energy" is logical and common in the systems of electrical generation, as there is always an additional reserve (to face a drought, an incident in the gas pipeline, maintenance or failure of a power plant, among others), since the supply of energy must be continuous and sustained. Therefore, there is always a margin that the Ministry of Energy and Mines (MINEM) estimates.

Countries of the South American Region have reserves, for instance, Chile 90% in its central interconnected system, Ecuador 50%, and Colombia 60%, which confirms that they are required reserves to address the main risks.

Thus, from the point of view of such experts, the energy reserve margin is not an indicator of "oversupply of energy" in an economic and literal sense because the country still maintains an electric need to be covered. External factors of the electrical market contribute to accumulated energy reserves that in the end are a good problem because energy reserves margin shows the high growth market and its externalities.

On the other hand, authorities have highlighted that the reactivation of mining projects and GDP growth might cause the scenario of "oversupply of energy " to be reversed, since according to the Ministry of Energy and Mines, by the year 2019 it estimates an electricity demand of the current mining projects of 90 MW, and for the next years an additional electricity demand of 913 MW is estimated, mainly coming from the mining projects Quellaveco, Mina Justa, the extension of Toromocho and others.

Under this scenario, the experts has estimated that during period 2022-2028 Peru would suffer a "shortage of electricity" if the number of generation plants is not increased soon.

Considering that the mining sector is the main electricity consumer of the country, we have to highlight that this last scenario is coming, since mining is already in the reactivation phase, especially considering the rise in the prices of metals.

Infrastructure of the electric market

Many projects of energy generation and energy transmission grids have been developed in the last decade due to the guarantees and conditions stated in legal dispositions. According to our legal framework, the authorization to develop energy related activities can be awarded by means of the following alternatives:

Award of a ProInversion project

ProInversion is authorized to award pre-designed projects (via concessions related to generation, transmission and distribution of energy. This entity is also entitled to evaluate and award private initiative projects regarding the activities developed in the electricity sector according to the applicable laws.

Grant of a MINEM concession

MINEM is authorized to award definitive and temporal concessions, once the requests of the interested corporations are duly evaluated according to the requirements stated in the Electric Concessions Law. This entity also elaborates the conditions and requirements to be considered in the OSINERGMIN auctions for generation of electricity based on renewable energies.

Authorization through OSINERGMIN auction

This kind of concession award is only applicable to generation of electricity based on renewable energies in the terms of Legislative Decree No. 1002. The auction is on the energy quote to be established by MINEM. For these purposes, interested corporations propose a determined amount of energy (MWh) and its associated price (USD/MWh). The awards are given to the corporations that proposed the lowest prices until covering the energy quote. By the end of 2017, the OSINERGMIN had already hosted four auctions.

Cold Generation Reserve Concession Contracts

These are projects that have a national need and priority execution in Peru, because they have the function of ensuring the availability of power and energy in the country's electrical system in emergency situations in the supply of electricity. They are supervised by the OSINERGMIN (through the Electric Supervision Department).

Long-term Electricity Supply

These are bidding contracts for the supply of electricity between Regulated Users or Free Users and electricity distribution companies, which are regulated and supervised by OSINERGMIN. The purpose of this type of bidding is due to preventive measures on the part of the Peruvian State to achieve the timely supply of electricity to specific users, in a space where free competition is not affected or a risk of dominance is generated. Additionally, free users can sign transport and / or distribution contracts with the concession holders.

During the year 2019, it was reported that 5 power generation plants with a total installed capacity of 49.1 MW entered into commercial operation. Of this group, four were mini-hydropower plants that individually injected power of no more than 20 MW and one biomass power plant with a power of 7.5 MW.

Likewise, the Ministry of Energy and Mines (MINEM) informed that there are currently 4 power plant projects with renewable energies under construction in the country, with an

investment of more than USD841 million, which will add a power of 561.4 megawatts (MW) to the National Interconnected Electric System (SEIN). These plants are coming into operation between 2023 and 2027 in Ica, Moquegua and Puno.

Among the projects, the San Gabán Hydroelectric Power Plant stands out, with a global investment of USD448 million, which will have an installed capacity of 205.8 MW, followed by the San Juan de Marcona Wind Farm, which is being built in Ica, with a global investment of USD164 million, and will have an installed capacity of 131.1 MW, among others.

Electrical generation units - Under operation (as of April, 2024)

No.	Power Plant Name	Concession Holder	Installed Capacity (MW)
1	Aguaytia Thermal Power Plant	TERMOSELVA S.R.L.	192
2	Aricota 1 Hydropower Plant	EMPRESA DE GENERACION ELECTRICA DEL SUR S.A.	24
3	Aricota 2 Hydropower Plant	EMPRESA DE GENERACION ELECTRICA DEL SUR S.A.	12
4	Cahua Hydropower Plant	STATKRAFT PERU S.A.	44
5	Callahuanca Hydropower Plant	ENEL GENERACIÓN PERÚ S.A.A.	86
6	Caña Brava Thermal Power Plant	BIOENERGIA DEL CHIRA S.A.	14
7	Cañon del Pato Hydropower Plant	ORAZUL ENERGY EGENOR	247
8	Carhuaquero Hydropower Plant	ORAZUL ENERGY EGENOR	95
9	Cerro del Aguila Hydropower Plant	KALLPA GENERACION S.A.	10
10	Chaglla Hydropower Plant	EMPRESA DE GENERACION HUALLAGA S.A.	456
11	Charcani I Hydropower Plant	EMPRESA DE GENERACIÓN ELECTRICA DE AREQUIPA S.A.	2
12	Charcani II Hydropower Plant	EMPRESA DE GENERACIÓN ELECTRICA DE AREQUIPA S.A.	1
13	Charcani III Hydropower Plant	EMPRESA DE GENERACIÓN ELECTRICA DE AREQUIPA S.A.	5
14	Charcani IV Hydropower Plant	EMPRESA DE GENERACIÓN ELECTRICA DE AREQUIPA S.A.	14
15	Charcani V Hydropower Plant	EMPRESA DE GENERACIÓN ELECTRICA DE AREQUIPA S.A.	146

No.	Power Plant Name	Concession Holder	Installed Capacity (MW)
16	Charcani VI Hydropower Plant	EMPRESA DE GENERACIÓN ELECTRICA DE AREQUIPA S.A.	9
17	Cheves Hydropower Plant	STATKRAFT PERU S.A.	168
18	Chilca (Combined Cycle - Fenix) Thermal Power Plant	FENIX POWER PERU S.A.	570
19	Chilca 1 (Combined Cycle) Thermal Power Plant	ENGIE ENERGIA PERU S.A.	292
20	Chilca 2 Thermal Power Plant	ENGIE ENERGIA PERU S.A.	113
21	Chilina Thermal Power Plant (Diesel)	EMPRESA DE GENERACIÓN ELECTRICA DE AREQUIPA S.A.	28
22	Chimay Hydropower Plant	CHINANGO S.A.C.	153
23	El Platanal Hydropower Plant	COMPAÑIA ELECTRICA EL PLATANAL S.A.	220
24	Eten Thermal Power Plant	PLANTA DE RESERVA FRIA DE GENERACION ETEN S.A.	230
25	Gallito Ciego Hydropower Plant	STATKRAFT PERU S.A.	34
26	Huachipa Cogeneration Plant	ILLAPU ENERGY S.A.	14
27	Huanchor Hydropower Plant	HIDROELECTRICA HUANCHOR S.A.C.	18
28	Huanza Hydropower Plant	EMPRESA GENERACION HUANZA S.A.	97
29	Huampani Hydropower Plant	ENEL GENERACION PERU S.A.A.	31
30	Huinco Hydropower Plant	ENEL GENERACION PERU S.A.A.	258
31	Huayllacho Hydropower Plant	STATKRAFT PERU S.A.	0
32	Ilo Thermal Power Plant	ENGIE ENERGIA PERU S.A.	564
33	Ilo 4 Thermal Power Plant	ENGIE ENERGIA PERU S.A.	720
34	Independencia Thermal Power Plant	EMPRESA DE GENERACION ELECTRICA DEL SUR S.A.	23
35	Iquitos Nueva Thermal Power Plant	GENRENT DEL PERU S.A.C.	78
36	Kallpa IV (Combined Cycle) Thermal Power Plant	KALLPA GENERACION S.A.	293
37	Las Flores Thermal Power Plant	KALLPA GENERACION S.A.	184
38	MachuPicchu Hydropower Plant	EMPRESA DE GENERACION ELECTRICA DE MACHU PICCHU S.A.	91
39	Machupicchu II Hydropower Plant	EMPRESA DE GENERACION ELECTRICA DE MACHU PICCHU S.A.	102

No.	Power Plant Name	Concession Holder	Installed Capacity (MW)
40	Malacas Thermal Power Plant (TG6)	ENEL GENERACION PIURA S.A.C.	53
41	Malpaso Hydropower Plant	STATKRAFT PERU S.A.	54
42	Mantaro Hydropower Plant	ELECTROPERU S.A.	798
43	Maple Etanol Thermal Power Plant (cogeneration)	AGRO AURORA S.A.C.	38
44	Marañon Hydropower Plant	CELEPSA RENOVABLES SOCIEDAD COMERCIAL DE RESPONSABILIDAD LIMITADA	18
45	Matucana Hydropower Plant	ENEL GENERACION PERU S.A.A.	120
46	Misapuquio Hydropower Plant	STATKRAFT PERU S.A.	4
47	Mollendo Thermal Power Plant (Diesel)	EMPRESA DE GENERACIÓN ELECTRICA DE AREQUIPA S.A.	32
48	Moyopampa Hydropower Plant	ENEL GENERACION PERU S.A.A.	72
49	Oquendo Thermal Power Plant (cogeneration)	SDF ENERGIA S.A.C.	31
50	Oroya Hydropower Plant	STATKRAFT PERU S.A.	9
51	Pachachaca Hydropower Plant	STATKRAFT PERU S.A.	9
52	Pariac Hydropower Plant	STATKRAFT PERU S.A.	5
53	Patapo Hydropower Plant	HYDROPATAPO S.A.C.	1
54	Pucallpa Thermal Power Plant	INFRAESTRUCTURA Y ENERGIA DEL PERU S.A.C.	46
55	Puerto Bravo Thermal Power Plant	SAMAY I S.A.	720
56	Puerto Maldonado Thermal Power Plant	INFRAESTRUCTURA Y ENERGIA DEL PERU S.A.C.	20
57	Quitaracsa I Hydropower Plant	ENGIE ENERGIA PERU S.A.	112
58	Recka Thermal Power Plant	SOCIEDAD MINERA CERRO VERDE S.A.A.	181
59	Restitucion Hydropower Plant	ELECTROPERU S.A.	210
60	San Antonio Hydropower Plant	STATKRAFT PERU S.A.	1
61	San Gaban II Hydropower Plant	EMPRESA DE GENERACION ELECTRICA SAN GABAN S.A.	110
62	San Ignacio Hydropower Plant	STATKRAFT PERU S.A.	1
63	San Jacinto Thermal Power Plant	AGROINDUSTRIAS SAN JACINTO S.A.A.	22
64	San Nicolas Thermal Power Plant	SHOUGANG GENERACION ELECTRICA S.A.A.	69
65	Santa Rosa I Thermal Power Plant	ENEL GENERACION PERU S.A.A.	247
66	Santa Teresa Hydropower Plant	INLAND ENERGY S.A.C	98

No.	Power Plant Name	Concession Holder	Installed Capacity (MW)
67	Santo Domingo de los Olleros Thermal Power Plant (Simple Cycle)	TERMOCHILCA S.A.C.	198
68	Santo Domingo de los Olleros Thermal Power Plant (Combined Cycle)	TERMOCHILCA S.A.C.	100
69	Tablazo Thermal Power Plant	SUDAMERICANA DE ENERGIA DE PIURA S.A.C.	30
70	Talara - Malacas Thermal Power Plant (TG5)	ENEL GENERACION PIURA S.A.C.	200
71	Yanango Hydropower Plant	CHINANGO S.A.C.	43
72	Yaupi Hydropower Plant	STATKRAFT PERU S.A.	108
73	Yuncan Hydropower Plant	ENGIE ENERGIA PERU S.A.	130
74	Ventanilla Thermal Power Plant	ENEL GENERACION PERU S.A.A.	313
75	Hydropower Plants	ENEL GENERACIÓN PERÚ	100
76	Plants	EGENOR	100
77	Malacas Thermal Power Plant	ENEL GENERACIÓN PIURA	108
78	Hydropower Plants	ELECTROANDES	-
79	Ilo 21 Thermal Power Plant	ENGIE	135
80	Ventanilla Thermal Power Plant	ENEL GENERACIÓN PERÚ (ANTES ENDESA)	185
81	Chilca 1 Thermal Power Plant	ENGIE (ANTES ENERSUR)	560
82	Kallpa I, II y III -Thermal Power Plant	KALLPA GENERACIÓN S.A.	560
83	Pisco - 2x35 MW - EGASA - GN Thermal Power Plant	EGASA	70
84	Pias I (Pataz - La Libertad) Hydropower Plants	AGUAS Y ENERGÍA	13
85	Carpapata III Hydropower Plants	UNACEM (ANTES GENERACIÓN ELÉCTRICA ATOCONGO S.A.)	13
86	Cerro del Águila Hydropower Plants	KALLPA GENERACIÓN (ANTES CERRO DEL ÁGUILA S.A.)	525
87	Luren Thermal Power Plant	ELECTRO DUNAS	19
88	Rapaz II Hydropower Plants	EMPRESA COMUNAL HIDROELÉCTRICA SAN CRISTOBAL DE RAPAZ	1
89	Pedregal Thermal Power Plant	ELECTRO DUNAS	18
90	Olpesa Biomass Power Plant	OLEAGINOSAS DEL PERÚ S.A.	2
91	Tallanca Thermal Power Plant	SDE PIURA SAC	18
92	La Vírgen Hydropower Plants	LA VIRGEN S.A.C.	84
93	Las Flores - Thermal Power Plant	KALLPA GENERACIÓN S.A.	115
94	Punta Lomitas	ENGIE ENERGÍA PERÚ	296

Source: OSINERGMIN.

No.	Power Plant Name	Concession Holder	Installed Capacity (MW)
95	Clemesí Solar Power Plant	ENEL GENERACIÓN PERÚ S.A.A.	115
96	Refinery Talara Thermal Power Plant	GM OPERACIONES S.A.C	102

Source: OSINERGMIN.

Non-conventional renewable energy generation units - Under operation (as of April, 2024)

No.	Auction	Power Plant Name	Concession Holder	Installed Capacity (MW)
1		Majes Solar 20T Solar Power Plant	GRUPO T SOLAR GLOBAL S.A.	20
2		Repartición 20T Solar Power Plant	GRUPO T SOLAR GLOBAL S.A.	20
3		Tacna Solar Power Plant	TACNA SOLAR S.A.C.	20
4		Panamericana Solar Power Plant	PANAMERICANA SOLAR S.A.C.	20
5		Marcona Wind Farm	PARQUE EOLICO MARCONA S.R.L.	32
6		Cupisnique Wind Farm	ENERGIA EOLICA S.A.	83
7		Talara Wind Farm	ENERGIA EOLICA S.A.	31
8		Paramonga Biomass Power Plant	AGRO INDUSTRIAL PARAMONGA S.A.A.	23
9		Huaycoloro Biomass Power Plant	PETRAMAS S.A.C.	3
10		Carhuaquero IV Hydropower Plant	ORAZUL ENERGY EGENOR	10
11		Caña Brava Hydropower Plant	ORAZUL ENERGY EGENOR	6
12		Poechos II Hydropower Plant	SINDICATO ENERGETICO S.A.	10
13		Santa Cruz I Hydropower Plant	EMPRESA DE GENERACION ELECTRICA DE JUNIN S.A.C.	6
14	1st	La Joya Hydropower Plant	GENERADORA DE ENERGIA DEL PERU S.A.	10
15		Santa Cruz II Hydropower Plant	GENERADORA DE ENERGIA DEL PERU S.A.	6
16		Roncador Hydropower Plant	MAJA ENERGIA S.A.C.	4
17		Purmacana Hydropower Plant	ATRIA ENERGÍA S.A.C.	2
18		Huasahuasi I Hydropower Plant	EMPRESA DE GENERACION ELECTRICA DE JUNIN S.A.C.	10
19		Nuevo Imperial Hydropower Plant	HIDROCAÑETE S.A.	4
20		Huasahuasi II Hydropower Plant	EMPRESA DE GENERACION ELECTRICA DE JUNIN S.A.C.	10
21		Yanapampa Hydropower Plant	ELECTRICA YANAPAMPA S.A.C.	4
22		Las Pizarras Hydropower Plant	ELECTRICA RIO DOBLE S.A.	18
23		Chancay Hydropower Plant	SINDICATO ENERGETICO S.A.	19
24		Ángel I Hydropower Plant	GENERADORA DE ENERGIA DEL PERU S.A.	20
25		Ángel II Hydropower Plant	GENERADORA DE ENERGIA DEL PERU S.A.	20
26		Ángel III Hydropower Plant	GENERADORA DE ENERGIA DEL PERU S.A.	20

No.	Auction	Power Plant Name	Concession Holder	Installed Capacity (MW)
27	2nd	Moquegua Solar Power Plant	MOQUEGUA FV S.A.C.	16
28		Tres Hermanas Wind Farm	PARQUE EÓLICO TRES HERMANAS S.A.C.	97
29		La Gringa V Biomass Power Plant	PETRAMAS S.A.C.	3
30		Runatullo III Hydropower Plant	EMPRESA DE GENERACION ELECTRICA DE JUNIN S.A.C.	20
31		Canchayllo Hydropower Plant	EMPRESA DE GENERACIÓN DE CANCHAYLLO S.A.C.	5
32		Renovandes H1 Hydropower Plant	EMPRESA DE GENERACION SANTA ANA S.R.L.	20
33		El Carmen Hydropower Plant	GENERACIÓN ANDINA S.A.C.	8
34		8 de Agosto Hydropower Plant	GENERACIÓN ANDINA S.A.C.	19
35		Manta Hydropower Plant	PERUANA DE INVERSIONES DE ENERGIA RENOVABLE S.A.	20
36	3rd	Runatullo II Hydropower Plant	EMPRESA DE GENERACION ELECTRICA DE JUNIN S.A.C.	20
37		Potrero Hydropower Plant	EMPRESA ELECTRICA AGUA AZUL S.A.	20
38		Yarucaya Hydropower Plant	HUAURA POWER GROUP S.A.	18
39		Carhuac Hydropower Plant	ANDEAN POWER S.A.C.	20
40		Zaña 1 Hydropower Plant	ELECTRO ZAÑA S.A.C.	18
41	4th	Rubí Solar Power Plant	ENEL GREEN POWER PERU S.A.	144
42		Intipampa Solar Power Plant	ENGIE ENERGIA PERU S.A.	45
43		Wayra I Wind Farm	ENEL GREEN POWER PERU S.A.	132
44		Doña Catalina Biomass Power Plant	ENERGIA LIMA S.A.C.	2
45		Callao Biomass Power Plant	EMPRESA CONCESIONARIA DE ENERGIA LIMPIA S.A.C.	2
46		Rucuy Hydropower Plant	EMPRESA DE GENERACION ELECTRICA RIO BAÑOS S.A.C.	20
47		Her 1 Hydropower Plant	ENEL GENERACIÓN PERU S.A.A.	1
48		Huambos	GR PAINO S.A.C.	18
49		Duna	GR Taruca S.A.C.	18

Source: OSINERGMIN.

Electrical generation units - Under construction (as of May, 2024)

No.	Power Plant Name	Concession Holder	Installed Capacity (MW)
1	Centauro I y III Hydropower Plant	CORPORACIÓN MINERA PERÚ S.A.	25
2	Molloco Hydropower Plant	GENERADORA ELÉCTRICA MOLLOCO S.A.C.	280
3	Belo Horizonte Hydropower Plant	COMPAÑÍA ENERGÉTICA DEL CENTRO S.A.C.	180
4	Cativen I-II Hydropower Plant	COMPAÑÍA MINERA PODEROSA S.A.	29
5	Tarucani Hydropower Plant	TARUCANI GENERATING COMPANY S.A.	49
6	Pucará Hydropower Plant	COMPAÑÍA HIDROELÉCTRICA PUCARÁ	178
7	Olmos 1 Hydroelectric Plant	SINDICATO ENERGÉTICO S.A. - SINERSA	51
8	Curibamba Hydropower Plant	ENEL GENERACIÓN PERÚ S.A.	195
9	Chadin 2 Hydropower Plant	AC ENERGÍA S.A.	600
10	Veracruz Hydropower Plant	COMPAÑÍA ENERGÉTICA VERACRUZ S.A.C.	730
11	Tulumayo IV Hydropower Plant	EGEJUNÍN TULUMAYO IV S.A.C.	56
12	Tulumayo V Hydropower Plant	EGEJUNÍN TULUMAYO V S.A.C.	83
13	Santa Lorenza I Hydropower Plant	EMPRESA DE GENERACIÓN ELÉCTRICA SANTA LORENZA S.A.C.	19
14	San Gabán III Hydropower Plant	HYDRO GLOBAL PERÚ S.A.C.	209
15	Tingo I Hydropower Plant	ENERGORET S.A.C.	210
16	Tingo II Hydropower Plant	ENERGORET S.A.C.	148
17	Tingo III Hydropower Plant	ENERGORET S.A.C.	48
18	Santa Teresa Hydropower Plant	INLAND ENERGY S.A.C.	40
19	Limacpunco Hydropower Plant	ELECTRO ARAZA S.A.C.	35
20	Ttio Hydropower Plant	ELECTRO ARAZA S.A.C.	80
21	Capiri Hydropower Plant	ELECTRO ARAZA S.A.C.	80
22	Anto Ruiz III Hydropower Plant	NUEVA ESPERANZA HYDRO S.A.	102
23	Anto Ruiz IV Hydropower Plant	NUEVA ESPERANZA HYDRO S.A.	104
24	Charcani VII Hydropower Plant	EMPRESA DE GENERACIÓN ELÉCTRICA DE AREQUIPA S.A.	21
25	Llucllа Hydropower Plant	INLAND ENERGY S.A.C.	288
26	Santa Teresa II Hydropower Plant	INLAND ENERGY S.A.C.	280
27	Huallaga I Hydropower Plant	CENTRAL HIDROELÉCTRICA HUALLAGA HYDRO S.A.	392
28	Chancay 3 Hydropower Plant	GENERACIÓN ELÉCTRICA RÍO BAÑOS S.A.C.	14
29	Chancay 2 Hydropower Plant	GENERACIÓN ELÉCTRICA RÍO BAÑOS S.A.C.	17

No.	Power Plant Name	Concession Holder	Installed Capacity (MW)
30	Tupuri Hydropower Plant	EMPRESA GENERACIÓN ELÉCTRICA SAN GABÁN S.A.	2
31	Milagros Solar Power Plant	PARQUE FOTOVOLTAICO IQUITOS S.A.C.	20
32	Nasca Thermal Power Plant	ELECTRO DUNAS	10

Source: OSINERGMIN.

Renewable energy generation units - Under construction (as of May, 2024)

No.	Power Plant Name	Concession Holder	Installed Capacity (MW)
1	Shima Hydropower Plant	ENERGIA HIDRO S.A.C.	5
2	Huatziroki Hydropower Plant	EMPRESA DE GENERACION HIDRAULICA SELVA S.A.	19
3	Hydrika 1 Hydropower Plant	HYDRIKA 1 S.A.C.	7
4	Hydrika 2 Hydropower Plant	HYDRIKA 2 S.A.C.	4
5	Hydrika 4 Hydropower Plant	HYDRIKA 4 S.A.C.	8
6	Laguna Azul Hydropower Plant	CH MAMACOCHA S.R.L.	20
7	Hydrika 6 Hydropower Plant	HYDRIKA 6 S.A.C.	9
8	Chachani Solar Power Plant	CSF CONTINUA CHACHANI S.A.C.	100
9	Misti Solar Power Plant	CSF CONTINUA MISTI S.A.C.	300
10	Pichu Pichu Solar Power Plant	CSF CONTINUA PICHU PICHU S.A.C.	60
11	Viroc (RaurB3:D30a II) Hydropower Plant	AMAZONAS GENERACIÓN S.A.	13
12	Huallin I Hydropower Plant	ASOCIACIÓN SANTA LUCÍA DE CHACAS	6
13	Cola I Hydropower Plant	HIDROELÉCTRICA COLA S.A.	13
14	Campanayocc Hydropower Plant	MPJ CONSULTING S.A.C.	5
15	Pallca Hydropower Plant	CARBON LATAM PERU S.A.C.	10
16	Alcaparrosa Hydropower Plant	ACQUA ENERGIA S.A.C.	10
17	Casca Hydropower Plant	ACQUA ENERGIA S.A.C.	8
18	Marca Hydropower Plant	ACQUA ENERGIA S.A.C.	9
19	Miraflores Hydropower Plant	ACQUA ENERGIA S.A.C.	10
20	Llaylla Hydropower Plant	ELECTROCENTRO S.A.	2
21	Aricota 3 Hydropower Plant	EGESUR S.A.	10
22	San Juan Hydropower Plant	HYDROPLUS GLOBAL S.A.C.	1
23	Moquegua 1 Hydropower Plant	EGESUR S.A.	15

No.	Power Plant Name	Concession Holder	Installed Capacity (MW)
24	Moquegua 3 Hydropower Plant	EGESUR S.A.	19
25	Calasi Hydropower Plant	HYDROPLUS GLOBAL S.A.C.	1
26	Chacamayo Hydropower Plant	HYDROPLUS GLOBAL S.A.C.	2
27	Anashironi Hydropower Plant	VARI ENERGÍA S.A.C.	20
28	Pachachaca 2 Hydropower Plant	HIDROELÉCTRICA AMÉRICA S.A.C.	20
29	Tingo Hydropower Plant	COMPAÑÍA HIDROELÉCTRICA TINGO	15
30	Marcará II Hydropower Plant	EMPRESA HIDROELÉCTRICA MARCARÁ II	8
31	Wayra Extensión Wind Farm	ENEL GENERACIÓN PERÚ S.A.	177
32	San Juan Wind Park	ENERGÍA RENOVABLE DEL SUR S.A.	136
33	Caravelí Wind Park	IBEREOLICA CARAVELI S.A.C.	220
34	San Martín Solar Solar Power Plant	JOYA SOLAR S.A.C.	252
35	Illa Solar Power Plant	JOYA SOLAR S.A.C.	385
36	Solimana Solar Power Plant	ECORER S.A.C.	250
37	Matarani Solar Power Plant	GR CORTARRAMA S.A.C.	80
38	Sunny Solar Power Plant	KALLPA GENERACIÓN S.A.	204
39	Hanaqpampa Solar Power Plant	ENGIE ENERGÍA PERÚ S.A.	300

Source: OSINERGMIN.

Among the transmission lines that entered into operation in 2019 are two expansions to the Concession Contract for Electric Transmission Systems ETECEN-ETESUR, Expansion No.19 - REP and Expansion No.18 - REP, which together represent an investment of USD18.35 million. Likewise, so far in 2020, the 220 kV Montalvo - Los Heroes Transmission Line began operating, with a length of 128.8 km and representing an investment of USD20.2 million.

Concession contracts and extension of electric transmission lines - Under Construction (as of May, 2024)

No.	Transmission Line Name	Concession Holder	Length (km)
1	T.L. 220 kV Machupicchu - Quencoro - Onocora - Tintaya and Associated Substations	ATN 3 S.A.	354
2	T.L. 500 kV Nueva Yanango - New Huánuco and Associated Substations	CONSORCIO TRANSMANTARO S.A.	184
3	T.L. 500 kV La Niña - Piura, Substations, T.L. and Associated Substations	CONCESIONARIA LINEA DE TRANSMISION LA NIÑA S.A.C.	87
4	T.L. 220 kV Pariñas - Nueva Tumbes, and Associated Substations	CONCESIONARIA LINEA DE TRANSMISION LA NIÑA S.A.C.	158
5	T.L. 220 kV Tingo María - Aguaytía, Associated Substations and Extension.	CONCESIONARIA LINEA DE TRANSMISION LA NIÑA S.A.C.	73
6	T.L. 138 kV Puerto Maldonado - Iberia	PUERTO MALDONADO TRANSMISORA DE ENERGÍA S.A.C.	160
7	T.L. 220 kV Nueva Carhuaquero	CONCESIONARIA TRANSMISORA REQUE TUMBES S.A.C.	79
8	Nueva Tumbes 60 Kv and Extension and Associated Substations	CONCESIONARIA TRANSMISORA REQUE TUMBES S.A.C.	2
9	T.L. 220 kV Ica - Poroma, Extension and Associated Substations	CONCESIONARIA TRANSMISORA ICA-POROMA S.A.C.	141
10	C.T.L. Enlace 220 kV Cáclic - Jaén norte, Extension and Associated Substations	CONCESIONARIA TRANSMISORA ICA-POROMA S.A.C.	137
11	L.T. 500 kV Piura Nueva - Border	PUERTO MALDONADO TRANSMISORA DE ENERGÍA S.A.C.	270
12	Enlace 500 kV San José - Yarabamba	CONSORCIO TRANSMANTARO S.A.	51
13	C.T.L Line of 220 kV Piura Nueva - Colán	CONSORCIO TRANSMANTARO S.A.	74
14	C.T.L Enlace 220 kV Belaunde Terry - Tarapoto Norte	CONSORCIO TRANSMANTARO S.A.	87
15	CTL Lambayeque Norte 220 kV - T.L. Q220 kV Chiclayo Oeste - La Niña/Felam	ALUPAR PERÚ S.A.C.	11
16	Substation Piura Este of 220/60/22,9 kV	ALUPAR PERÚ S.A.C.	7
17	T.L. 500 kV Huánuco - Tocache - Celendín - Trujillo	CONSORCIO ELÉCTRICO YAPAY S.A.	662
18	T.L. 500 kV Celendín - Piura	CONSORCIO ELÉCTRICO YAPAY S.A.	381
19	Extension 1 L.T. Chilca - La Planicie - Carabayllo	CONSORCIO TRANSMANTARO S.A.	90
20	Extension No.21: Substation Combapata, Substation Huanuco, Substation Reque, Substation Tingo Maria and Substation Tocache.	RED DE ENERGÍA DEL PERÚ S.A.	169

No.	Transmission Line Name	Concession Holder	Length (km)
21	T.L. Chilca - Marcona - Montalvo	ATLÁNTICA TRANSMISIÓN SUR S.A.	TBD
22	2 T.L. Chilca - Marcona	ATLÁNTICA TRANSMISIÓN SUR S.A.	TBD

TBD: To be determined.
Source: OSINERGMIN.

Transmission lines in energy generation units - Under construction (as of May, 2024)

No.	Transmission Line Name	Generation Power Plant	Concession Holder	Length (km)
1	T.L. 138 kV Substation Tarucani - Substation Majes	Tarucani Hydropower Plant	TARUCANI GENERATING COMPANY S.A.	57.7
2	T.L. 60 kV Substation Runatullo III - Substation Tulumayo IV	Tulumayo IV Hydropower Plant	EGEJUNÍN TULUMAYO IV S.A.C.	7.5
3	T.L. 220 Kv Substation Tulumayo C- Substation Tulumayo IV	Tulumayo V Hydropower Plant	EGEJUNÍN TULUMAYO V S.A.C.	9.2
4	T.L. 220 kV Substation Belo Horizonte - Substation Tingo María	Belo Horizonte Hydropower Plant	COMPAÑÍA ENERGÉTICA DEL CENTRO S.A.C.	19.5
5	T.L. 220 kV Substation Misti - Substation San José	Misti Solar Power Plant	CSF CONTINUA MISTI S.A.C.	13.2
6	T.L. 138 kV Substation Torata - Substation Moquegua	Moquegua 1 Hydropower Plant	EGESUR S.A.	13.3
7	T.L. 220 kV Substation Chachani - Substation San José	Chachani Solar Power Plant	CSF CONTINUA CHACHANI S.A.C.	3.5
8	T.L. 220 kV Substation Caravelí - Substation Poroma	Caravelí Wind Farm	IBEREOLICA CARAVELI S.A.C.	47.2
9	Extension Flamenco	Wayra Extension	ENEL GENERACIÓN PERÚ S.A.	-
10	T.L. 220 kV Substation San Martín Solar - Substation San José	San Martín Solar Power Plant	JOYA SOLAR S.A.C.	2.3

No.	Transmission Line Name	Generation Power Plant	Concession Holder	Length (km)
11	T.L. 220 KV Pichu Pichu – San Jose y Substation Pichu Pichu	Pichu Pichu Solar Power Plant	CSF CONTINUA PICHU PICHU S.A.C.	4.3
12	T.L. 138 kV Substation Kimiri - Substation Campas	Anashironi Hydropower Plant and Renovandes H1 Hydropower Plant.	VARI ENERGÍA S.A.C.	11.8
13	T.L. 220 KV Substation Hanaqpampa-Interconexión Nuevas Estructuras T68A Y T68B (L-027)	Hanaqpampa Solar Power Plant	ENGIE ENERGÍA PERÚ S.A.	15.9
14	T.L. 220 kV Substation Sunny - S.E. San José	Sunny Solar Power Plant	KALLPA GENERACIÓN S.A.	1.4
15	T.L. 220 kV Substation Jade - Substation San José	Illa Solar Power Plant	ENERGÍA RENOVABLE LA JOYA S.A.	8.7
16	T.L. 60 kV Substation Huallín - T97 (L.T. 60 kV Pomabamba - Huari)	Huallín Hydropower Plant	PARROQUIA DE CHACAS	16.3
17	T.L. 50 kV Substation Marca - Substation Casca - Substation Alcaparrosa II	Hydropower Plant Marca, Hydropower Plant Casca and Hydropower Plant Alcaparrosa	ACQUA ENERGÍA S.A.C.	5.5
18	T.L. 60 kV Substation Milagros - Substation Santa Rosa	Milagros Solar Power Plant	PARQUE FOTOVOLTAICO IQUITOS S.A.C.	13.7
19	T.L. 22,9 kV Substation Llaylla - Substation Chalhuamayo	Llaylla Hydropower Plant	ELECTROCENTRO S.A.	6.5
20	T.L. 60 kV Substation Pongo Caynarachi - Substation Yurimaguas	-	ELECTRO ORIENTE S.A.	52.5
21	T.L. 35 kV Substation Tres Hermanas - Substation Sombrerillo - Substation Pampa de Pongo	-	ERA NOVA DEVELOPMENT S.A.	35.8

No.	Transmission Line Name	Generation Power Plant	Concession Holder	Length (km)
22	T.L. 60 kV Substation Huarangal - Substation Ipen	-	INSTITUTO PERUANO DE ENERGÍA NUCLEAR (IPEN)	6.3
23	T.L. 60 kV Substation Zorritos - Substation Tumbes II Terna	-	ELECTRONOROESTE S.A.	23.6

Source: OSINERGMIN.

Energy export

Regional interconnection is a challenge for a growing market such as the Peruvian electricity market, trying to expand the disputable market to make it more interesting and promote greater investment and more possibilities of choice for the consumers. The generation of significant margins of energy reserves has led to a greater interest in interconnection, to offer surplus energy in other countries.

Peru has an agreement for the exportation of energy with Ecuador under the scope of some Decisions of the Andean Community of Nations (CAN) since 2002.

In 2002, CAN Decision No. 536 established the general rules for the subregional interconnection of the electric systems of Colombia, Ecuador and Peru. This Decision stated the main rules for purposes of the exchange of energy between the signing Countries.
Later in 2009, the aforementioned Decision No. 536 was suspended by means of Decision No. 720. According to Decision No. 757 published in 2011, Decision No. 536 would remain suspended, but a provisional regime for the exchange of energy between Peru and Ecuador would enter into force.

Nowadays, Decision No. 536 is still suspended and the provisional regime is still in force until the new Andean Region Electric Market (MAER) stated in Decision No. 816 is ruled and be published in the Cartagena Gazzette. Once this happens, the MAERC will enter in force in the terms stated in Decision 816 and its ruling. According to the current provisional regime, the exchange of electricity between Peru and Ecuador will be subject to surplus energy and power of the exporter country. By this, Peru and Ecuador compromise to respect the agreements between entities from both countries as they respect the correspondent internal regulations.

Note that Peru has a simple link grid between Zorritos (Peru) and Machala (Ecuador) so the electric interconnection is pretty basic, that is why the amount of energy import and export between them is not so elevated. In addition, the electricity generators cannot celebrate contracts directly with a foreign company or vice versa; it is the Interconnected Electrical National System (SEIN) that exports electricity and that is credited to the Economic Operation Committee of the National Interconnected System (COES). Nevertheless, we must point out that Peru is seeking to increase the exchange of electricity with Ecuador. In this sense, the Ministry of Energy and Mines has commissioned ProInversion to promote the construction of a second interconnection line with Ecuador, in order to allow a greater exchange of electricity between both countries.

Electricity exchange between Peru - Ecuador (GWh)

Exchanges	2022	2023	Variation	
			Energy	%
Import	32.10	12.85	-19	-60%
Export	0.53	24.47	24	4513%

Source: Economic Operation Committee for the National Interconnected System (COES SINAC).

In relation to other countries of the South American Region, it is important to mention that Peru has a Binational Interconnection Agreement with Brazil signed in 2010, but such interconnection is expected to be a project to be developed in long term; likewise,

there is no expectations for a connection between Colombia and Peru grids as they are geographically far, and such connection will require a big investment in infrastructure as such areas are hard to get into.

However, in June 2017 the Ministries of Energy and Mines of Chile and Peru agreed the electric interconnection between both countries, through the construction of the Tacna-Arica transmission line. According with information provided by the regulatory entities of both countries, the electric interconnection could be operational soon, and the transmission line will extend for 53 kilometers with a transport capacity of 200 MW, as well as an investment of USD57 million.

This future interconnection would not be the end of the interconnection between Peru and Chile. According to the Ministry of Energy and Mines of Chile, if this project is successful and the market conditions are favorable, they would extend the interconnection to a second project that is projected from the Camisea area (south of Peru) to Antofagasta (north of Chile). So, Chile could export the renewable energy produced in the northern zone, but also buy cheap electricity produced with natural gas that is exploited in Camisea.

c. Renewal Energy Sources

Renewable energies are crucial in the transition to a more sustainable energy system globally. According to the Renewable Energy Country Attractiveness Index 2024 (RECAI), Peru is the fifth most attractive country to invest in renewable energies in Latin America and ranks 40th worldwide. In this context, plans and policies have been developed to promote the implementation of renewable energies.

National Energy Plan 2014-2025, COP and OECD

The Technical Organism for Strategic Planning of Peru (CEPLAN) developed the 2014 – 2025 National Energy Plan. This document describes the current situation of Peru regarding the use of energy in Peru in the recent years and details what should be expected in regard of energy management matters in the short-term future.

Currently, Peru's energy matrix is dominated by the use of hydric sources and natural gas. Noted that the main resource for the production of natural gas from Camisea Project is still one of the biggest projects developed in the energy sector. Before natural source became the main energy source, the energy matrix depended, basically, on liquid fuels and other hydrocarbons.

According to the abovementioned energy plan, in the following years it is expected that generation of energy will come, mainly, from hydroelectricity and other non-conventional renewable sources. This change is already on its way as the Government is promoting the use of new energy by means of incentives stated in legal dispositions.

Regarding the development of renewable sources, it is worth saying that in years 2020 and 2021, the 1,200Mw of electricity generation awarded in 2014 is in plenty of use, and that non-conventional renewable resources will increase its participation in the national energy matrix to 5%.

The expected change in our energy matrix follows the same orientation as what is happening globally. Nowadays, countries are rushing to modify the structure of their energy matrices and make them dependent on renewable resources for economic, social and environmental reasons (such as Nordic countries, Costa Rica, Uruguay, Mexico and Chile).

Every year, Kyoto signing countries hold the Conference of the Parties (COP), which is an annual meeting in the framework of the United Nations Framework Convention on Climate Change (UNFCCC). This meeting serves to assess progress in dealing with climate change and negotiate the Kyoto Protocol to establish legally binding obligations for developed countries to reduce their greenhouse gas emissions and consider the principles and discuss the main aspects for the implementation of the Paris Agreement.

In 2018, the COP meeting discussion had an approach that includes gender equality and environmental cleanliness, likewise the countries that are signatories to the agreement have committed to reduce greenhouse gas emissions to limit the average increase in global temperature.

In the same sense, the 2022 COP meeting adopted decisions related to long-term climate finance, the development and transfer of climate technology through the Technology

Mechanism, the Glasgow Work Program Action Plan on Action for Climate Empowerment, among other initiatives related to addressing climate change.

By its side, the Organization for Economic Co-operation and Development (OECD) is also a great promoter of the use of clean energies as an international policy. According to the OECD, investment in clean energies needs to be mobilized at pace and scale to contribute to mitigating climate change and achieve the transition to a low carbon energy system. For the OECD the need of global policy for the use of clean energy is a relevant factor for the social and economic development of countries. Regarding this, the OECD has held roundtables in which the main discussion was the need of investment in clean energies globally.

Renewable energy policy

Regulation in Peru on renewable energies is still limited. In year 2000, the first specific Law on an energy issue, Law No. 27345 – Law for the promotion of the efficient use of energy, was enacted. Later, in year 2005, Law No. 28546 – Law for the promotion and use of renewable energy sources in rural, isolated and borderline areas was enacted.

They represented the first attempt of the Peruvian Government to generate renewable source-based energy. Since this, the regulatory framework orientation changed and aimed to promote the development of electricity production by means of the use of big-scale energies (on-grid and off-grid).

Despite there was a general law for geothermal energy –a kind of renewable energy- since 1997, its regulations were just published in 2006 by means of Supreme Decree No. 072-2006-EM. This Supreme Decree established the conditions and other important regulations regarding the development of geothermal concessions in Peruvian Territory, and then was replaced for the new regulations published in 2010 by means of Supreme Decree No. 019-2010-EM.

In 2008, Legislative Decree No. 1002 was enacted. The main purpose of this Legislative Decree was to qualify the promotion of renewable energies as an issue of national interest. In this sense, this Legislative Decree established the main regulations for the auction of renewable source energy and its conditions. As of this, by the end of year 2008, the first renewable source energy auction was hosted by the Supervisory Body of Private Investment in Energy and Mines (OSINERGMIN).

This was the beginning of the Peruvian path on clean energies.

Later, in 2010, the first Energy National Policy was published for period 2010 - 2040. This document set the long-term objectives and principles in energy matters that Peru should reach by 2040. As a way to reach such objectives, a medium-term National Policy was then published for period 2014 - 2025. In this document, the expectations for the future of Peru in Energy regulation and development are described.

This 2014 - 2025 National Energy Plan highlights the importance of the use of clean energies in the future in order to prevent any energy deficit and at the same time promote the regional sustainable development and integration. Also, this Plan foresees that the 800,000 TJ of energy consumption registered in 2014 will increase to 1'321,000 TJ to 1'612,000 TJ in 2025 depending on Peru's GDP in such year.

Despite this great effort to set a path to development in energy matters, it is still pending a specific National Plan for the Development of Clean Energies (Renewable Energies).

d. Potential of Renewable Energy Sources

According to Bloomberg's analysis in Bloomberg's New Energy Outlook 2019 (NEO), the role of coal in the global electricity matrix will fall from 37% today to 12% in 2050, and oil as a source of generation will be virtually eliminated. of energy. Wind and solar power will grow from 7% generation today to 48% in 2050. Contributions from hydroelectric, natural gas and nuclear power will remain roughly level on a percentage basis.

NEO analysts note that by 2030, energy generated or stored and dispatched by solar photovoltaic modules, wind turbines, and lithium-ion batteries will undermine the electricity generated by existing coal and gas plants almost everywhere, maintaining an aggressive cost reduction of 28%, 14% and 18% respectively for each doubling in global installed capacity.

Hydropower

Water is the main renewable energy source in Peru for the generation of electricity, both in the interconnected system and in isolated systems (especially associated with mining companies and some industries). Since many years ago, hydroelectric plants have helped generate electricity, producing less contamination and by this, meaning a big earning of economic sources for users.

In Peru, this kind of energy is possible thanks to three big water sources: the Atlantic basin, the Pacific basin and the Titicaca basin. The Pacific basin is the one with the highest deficiency of surface runoff, and the one with the highest demand for water due to the greater concentration of population, industry and agricultural activities, while the opposite happens on the Atlantic basin, presenting the greatest availability of surface water with minimum demand.

According to the Atlas of the Hydropower Potential of Peru developed by the MINEM in 2011, Peru has an estimated hydropower potential of 69,445 MW.

Usable hydropower potential (MW)

Basin	Usable hydropower potential (MW)
Atlantic	60,627
Pacific	8,731
Titicaca	87
Total	69,445

Source: MINEM (Atlas of the Hydropower Potential of Peru, 2011).

Wind power

This kind of energy consists of the movement of big air masses from high atmospheric pressure areas to low atmospheric pressure areas. Due to the location of Peru on the globe, including areas between the Pacific Ocean and the Andes, winds from the south west lead to great opportunities for the use of wind power energies as they reach speeds greater than 5m/s (this is the minimum speed needed to generate electricity with this source).

According to the Wind Atlas of Peru developed by the MINEM in 2016, Peru has an estimated wind power potential of more than 20,000 MW. The areas with the greatest potential for large capacity wind generation are on the coast. The regions of Piura, Lambayeque and Ica have the highest average annual wind speeds.

Usable wind potential (MW)

Region	Usable Wind Power Potential (MW)
Amazonas	129
Ancash	708
Arequipa	1,020
Cajamarca	891
Ica	2,280
La Libertad	921
Lambayeque	7,017
Lima	429
Piura	7,098
Total	20,493

Source: MINEM (Wind Atlas of Peru, 2016).

Wind power can complement hydropower, because it is precisely during the dry season when the best movement of the winds occur on the Peruvian coast, the same ones that have an energy vocation for their stability and power. Currently, the potential of this kind of energy is almost three times greater than its actual installed capacity.

It should be noted that, in July 2018, a relevant wind farm in Peru was inaugurated. The project called Wayra I is located in Marcona, Ica Region, has an installed capacity of 126 MW and is composed of 42 wind turbines of 3.15 MW (90 meters high each). Likewise, in 2023, the Punta Lomitas largest wind farm was inaugurated in Ica with an installed capacity of 260 MW.

Tidal power

Among the most important maritime energies is tidal energy. This type of energy is harnessed through the movement of the tides formed in the oceans. However, despite its high energy potential, its installation costs are high, added to the visual impact it causes on the landscapes. Currently, three types of technologies are used to harness tidal power: the tidal barrage, the tidal stream generator and the dynamic tidal power.

Although there are still no tidal power plants in Peru, through Legislative Decree No. 1002, the Law for the Promotion of Investment for the Generation of Electricity with the Use of Renewable Energies has been included as renewable energy, among others, that generated through the tidal power.

Geothermal power

This energy is generated and stored in the earth due to its heat. Whenever temperatures cause underground water to reach its boiling point, this can be useful for purposes of using such heat to make turbines work and generate energy. This is known to happen most frequently in volcanic areas.

Scientifically, as we have many volcanic areas in Peru, and we are located in the seismic zone of the well-known Pacific Ocean Ring of Fire, there are numerous thermal sources with temperatures between 40°C (104°F) and 90°C (194°F) that are mostly located in the

Occidental side of the Andean Mountains and the highlands. According to the Master Plan for the Development of Geothermal Energy in Peru, prepared by the Japan International Cooperation Agency (JICA) in the year 2012, the total geothermal potential of Peru was estimated at close to 3,000 MW.

Geothermal Region	Power (MW)
Peru Norte	152.0
Cajamar-La Libertad	193.0
Callejon de Huaylas	236.3
Churin	125.0
Central	32.0
Eje Volcanico Sur	1,597.0
Cusco-Puno	524.1
Total	2,859.4

Source: Japan International Cooperation Agency.

As such, Peru has more than 156 identified geothermal areas, more than 200 hot water runoffs, many vents and some geysers with temperatures near the 100ºC (212ºF). The greatest geothermal potential of Peru is found in six geothermal regions: Cajamarca, Huaraz, Churin (Lima, Pasco y Huanuco), Central Zone (Huancayo, Huancavelica and Ayacucho), Volcanic Zone (Ayacucho, Apurimac, Arequipa, Moquegua and Tacna), and Puno and Cusco.

The geothermal energy generation potential is of special attention to MINEM, therefore the RER Regulation is about to be modified to mitigate the risks inherent to this activity and promote the initiation of investment in this energy source.

Solar power

This kind of energy is, basically, the source of the origin of every other kind of energy. The appropriate utilization of solar power by means of solar panels and other solar collectors lead to the generation of thermal energy that can be used in isolated areas and places where there is no connection to electric grids.

As this energy depends on solar light, it is the easiest to reach in almost every place of Peru. The average annual radiation of Peruvian regions oscillate between 3.3kWh/ m2 and above 6.0kWh/m2 annually, being Ancash, Arequipa, Lambayeque, Moquegua, Puno and Tacna the regions with the highest average, and hence, being the regions with the most potential.

Regarding this kind of energy source, in 2003, the National Service of Meteorology and Hydrology (SENAMHI) elaborated a Solar Power Atlas in which important valuation of this source is detailed. Despite this document has not been updated, there are many other scientific

publications in which the Peruvian solar energy potential is described in detail.

In March 2018, the operations of the largest solar plant in the country began. The Rubi Solar Power Plant, located in the desert of the Moquegua Region, has an installed capacity of 144.48 MW, which is obtained through the installation of 560,880 photovoltaic modules located in a space of 400 hectares.

Biomass power

This kind of energy is more likely to be used in isolated systems where there are no other renewable resources. There are three major regions where biomass presents an interesting potential to be used for medium energy purposes and great power: the northern coast (sugarcane bagasse, rice husk, hydrobiological waste); the high jungle (coffee husks, forest residues); and the low forest (forest residues).

According to the report "Sustainable energy production from biomass waste in Peru "(NAMA proposal November 2015) Biomass potential in Peru is estimated between 450 to 900 MW. In Lambayeque, Lima and Loreto, sugar cane contributes a substantial share to the total waste-to-energy generation potential. In Junin, primary energy is almost exclusively related to cotton, whereas in Amazonas, Puno and Tacna, residues from rice can be an important source of energy.

To this regard, in Lima, in the province of Huarochiri, there are located two biomasses power plants, the Huaycoloro I and the Huaycoloro II, with a joint installed capacity of 6.4 MW. It is worth mentioning that the Huaycoloro I project was carried out within the framework of the first auction for the supply of energy with renewable energy resources, in 2010.

From now on, concerning non-conventional energies (hydropower up to 20MW, solar power, wind power, geothermal power, and biomass power), their promotion via auctions hosted by the Supervisory Body of Private Investment in Energy and Mines (OSINERGMIN) was authorized by Legislative Decree No. 1002 in 2008.

For purposes of these auctions, the Ministry of Energy and Mining (MINEM) states an energy objective to be reached by each kind of energy source. The main incentives for these auctions are that the awarded corporations have priority on the supply and sale of electricity by the Economic Operation Committee of the National Interconnected System (COES), priority on the access to distribution and transmission grids and long-term stable prices determine by auctions.

The conditions for the auctions are established by the MINEM, and the process is hosted by OSINERGMIN. This latter also sets the maximum prices and calculates the applicable premium annually.

In these auctions, awards are granted to offerors who communicate the lowest prices up to the limit of the energy quote applicable to the auction. For these purposes, the interested corporations send offers that detail the desired amount of annual energy (MWh) and its related prices in USD/MWh.

The awarded corporations in these auctions have the right to a minimum income equivalent to the energy and price offered in the auction, but only if their compromised energy amount liability is met. Also, this corporations have the right to additional income based in the energy produced in excess (valued in CMg) and other additional income if reactive energy is generated.

Up to April 2019, a total of 69 projects have been awarded in all four auctions hosted by OSINERGMIN, representing 1,742,164 MW/year of capacity:

RER auctions

In 2008, the development of non-conventional renewable energies began in Peru as a product of a new regulatory framework that includes periodic and competitive auctions. Thus, to date, four RER auction processes have been carried out connected to the National Interconnected Electric System (SEIN) and one for areas not connected to the network.

- **First auction (2009 - 2010)**

  This auction implied two calls. The energy quote established for the first call was 4,380GWh/year between mini hydropower, wind power, biomass power and solar power. In the case of the second call, the energy quote was about 2,500GWh/year between biomass and solar energy.

  The first auction in 2009/2010 led to the signing of 27 contracts, including an 18 MW hydropower project awarded in a second call. The projects, four solar power plants, three wind farms, two biomass plants and 18 hydroelectric facilities, giving a total of 424.1 MW capacity installed.

  The main awarded projects were Cuspinique wind farm (La Libertad) and Marcona wind farm (Ica).

- **Second auction (2011)**

  This auction consisted in one call and the energy quote was 1,981GWh/year between mini-hydropower, wind power, biomass power and solar power.

  The second auction resulted in the signing of 10 contracts in 2011 for the construction of a solar power plant, a wind farm, a biomass power plant and seven hydropower plants, giving a total of 210 MW capacity installed.

  The main projects awarded were Tres Hermanas wind farm (Ica) and Runatullo III hydropower plant (Junin).

- **Third auction (2013)**

  This auction consisted in one call and the energy quote was 320 GWh/year for biomass power, 1,300 GWh/year for hydropower, and 500,000 PV systems for solar power.

  The third auction in Peru in 2013 contracted 192.8 MW of hydropower from 14 projects. Initially, 19 projects were granted, but five were not signed.

  The main projects awarded were Carhuac hydropower plant (Lima) and Laguna Azul hydropower plant (Arequipa).

- **Fourth auction (2016)**

  This is the last auction that was hosted by OSINERGMIN. The projects that secured the contracts were two of biomass power, two of solar power, three of wind power and six hydropower that add up to a total of 430.1 MW to the country's system.

This auction showed substantially lower prices compared to the first auction. Prices of solar power fell to USD48 per MWh, while wind power prices dropped to USD38 per MWh. One company was the main winner getting 326 MW of capacity, including 126 MW of wind power, 180 MW of solar power and 20 MW of hydropower.

The main projects awarded were Wayra I wind farm (Ica) and Rubi solar power plant (Moquegua). All the aforementioned auctions had had great reception between the corporations of the sector and in each one almost 100% of the established energy quote was able to be covered. There is expected to be a fifth auction this year.

- **Off-grid RER auction (2016)**

Within the framework of the national rural electrification policy, in 2013 the first RER auction was carried out for the installation of photovoltaic systems in areas not connected to the SEIN network. Thus, in 2014 the tender was delivered to a company that would be in charge of supplying electricity with photovoltaic systems to 15,000 rural areas throughout the country.

According to the execution schedule, by 2018 450,000 photovoltaic systems were installed to provide electricity to homes, health centers and schools, equivalent to 50 MW of capacity, with an annual remuneration of USD28.5 million per year, covering investment, operating costs and maintenance for a period of 15 years.

3

Trends in Peru's energy industry

a. Oil & Gas

Trends in the hydrocarbons industry

Stabilization of oil prices in addition to cost efficiency plans established, considering that currently the price fluctuates at an average of USD85, has led to a scenario in which it is necessary to implement the necessary incentives to keep growth in investments.

Biofuels

The development of the natural gas industry in Peru is contributing to the creation of new industrial opportunities around this resource, such as in biofuels and in the Petrochemical Industry. This will contribute to reaching the energy matrix diversification objective, so that by 2025 Peru will have reached a diversified and more equilibrated matrix (13.8% oil; 65.7% natural gas and natural gas liquids; and 20.0% renewable resources).

The most recent proposal for stablish more incentives to the biofuels market was presented to congress in 2022 (Draft Law No. 4338).

A sight to Oil Companies qualification regulation

In November of 2023, the Supreme Decree to approve the new regulations for the Qualification of Oil Companies to carry out exploration and exploitation activities was published.

A company will be considered as a Qualified Subject if the company met the following requirements:

- Three years of experience in hydrocarbon exploration and exploitation activities in the last five years.
- Not having infractions classified as serious or very serious in OEFA's Registry of Environmental Infringers.
- Having management, professional and technical employees with more than 10 years of experience.
- Other specific requirements established by Perupetro.

Regarding financial requirements, interested companies must have a minimum average residual net worth according to the area requirements. In the absence of this, they must have a favorable financial solvency report.

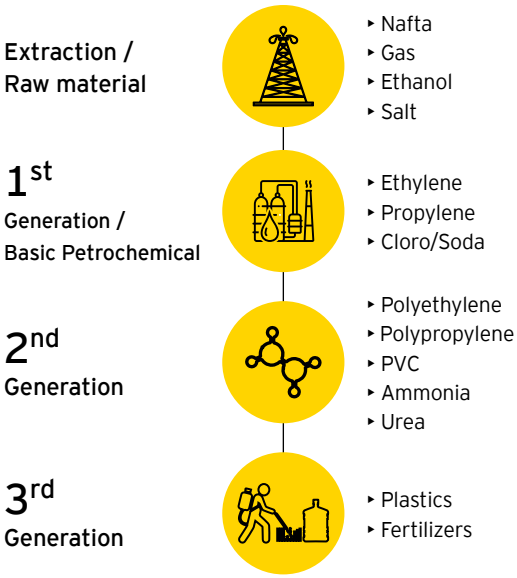
The inclusion in the Qualification Data Base will be indefinitely in force if the requirements are fulfilled. Qualified companies will update its information every two years.

Petrochemical Industry in Peru

The Petrochemical Industry is an important economical segment in many countries, especially in the ones that have available raw material in competitive quantities such as Peru.

In the case of Peru, the vision that needs to be realized is to have a planned petrochemical development for the southern part of the country that will not only supply the country but also create earnings and an export market for its products mainly in the Pacific Coast of Latin America.

Segments of the Petrochemical Industry



Source: EY.

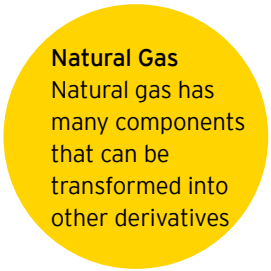
In this sense, the implementation of laws, including the ones affecting energy security and the future of Petrochemical Industry (Laws No. 29163, 29690, and 29970) demonstrate a great opportunity for private companies willing to invest.

Having raw materials (supply) and a developing market (demand) worldwide are some of the variables that make it attractive today to start a competitive Petrochemical Industry in Peru.

Added value and investment opportunities

The arrival of natural gas to the southern part of the country is a unique opportunity for developing investment projects in

petrochemicals, which will add value to the supply chain of natural gas.



- **Propane C_3**
  - Propylene
  - Polypropylene (plastics)
- **Ethane C_2**
  - Ethylene
  - Polyethylene
  - Ox. of ethylene
- **Methane C_1**
  - Ammonia
  - Urea (fertilizers)
  - Ammonia Nitrate (fertilizers, ANFO)
  - Methanol (paints)

Petrochemical Complex

The development of a Peruvian Petrochemical Industry must search for a synergy between the future Southern Peruvian Gas Pipeline, first- and second-generation Industrial Petrochemical Complex and the third generation industrial complex: plastic transformation industry (bags, containers, etc.).

Competitive availability of raw material is the main factor to make this Project feasible. In this case, the existence of a reasonable gas flow at the end of the SPP is very important. This hypothesis will only be possible if a new LNG unit is developed in the region, since it is the only project that can add natural gas demands.

The opportunities explained above are great for investors to visualize how this synergistic interrelationship will benefit them, the government and the population in general.

In this sense, we expect that in the next few years the government should impulse the petrochemical industry considering the supply potential of the Camisea project and the construction of Marcona's Plant.

Benefits for the country

The installation of a petrochemical industrial base in the country will not only increase added value to nonrenewable resources such as natural gas, but with the ensuing decrease of imported petrochemical products (improving the trade balance), it will also contribute to improving national and regional economic growth. This growth will create quality jobs and new road and port infrastructure, among other significant benefits for the country, especially to the southern region. Benefits for the country in respect to taxes will be significant.

Opportunity to join several stakeholders to achieve the desired goals

It is important to consider that the development of a Petrochemical Industry is one of the objectives of the Energy policy of the Peruvian Government. To achieve this goal, it is necessary to establish a Strategic Plan together with the Government, regional and private sectors that will allow this megaproject to be developed in the short term.

Not-with-standing the above, private companies are willing to directly negotiate the terms of supply of natural gas.

On that regard, there are reports of private initiatives looking forwards establishing a petrochemical plant in Marcona.

b. Electricity

Electromobility

There is a public need to reform the transportation system in Peru. As indicated by Lima Como Vamos study, in Metropolitan Lima approximately 68% of citizens are transported by collective transport, 18% by individual transport, and 12% by non-motorized transport. On the other hand, according to Lima's Municipality, 40% of the public transport's fleet is at least 21 years old.

In this sense, the Ministry of Transport and Communications states that through the application of the sustainability approach, the Government would be seeking to mitigate the impact of transport on the environment, and thus, reducing pollution emissions. In this context, electromobility becomes an opportunity for change in order to have technologically more efficient and less polluting vehicles.

To achieve this objective, the Peruvian Government is carrying out actions to adapt the current regulatory framework to guarantee the entry of electric vehicles into the country and its use in the provision of transport services. At the same time, it is implementing the Vehicle Homologation System, to ensure that imported electric vehicles comply with quality, efficiency, safety and environmental protection standards.

Even though a small number of electric vehicles are circulating in the country, the tendency is that their acquisition and use will increase with respect to light vehicles, buses, freight transportation vehicles, and mining vehicles. Even now, in the Latin American Region, many projects involving the use of electric vehicles are being developed.

Finally, bear in mind that in the development of this new trend, the implementation of charging infrastructure for electric vehicles cannot be ignored. In the case of light vehicles, such as cars for personal use or taxis, they could be loadable through slow loading points installed in the homes of the owners; however, the availability of electric stations as fast charging points represents a priority need in the electromobility market.

To this regard, fast charging points are not limited to traditional gas stations, but creates disruptive business opportunities, being possible their adaptation in shopping centers, educational centers (for instance, universities), supermarkets, parking lots, among others.

In this sense, we must highlight the efforts of the Government to promote the use of these technologies. Thus, this year through Supreme Decree No. 022-2020 -DM, the provisions for the charging infrastructure and supply of electric energy for electric mobility were approved. Likewise, the Regulation for the installation and operation of electric mobility charging infrastructure is close to being approved.

Distributed generation

In 2006, Law 28832 - Law to ensure the efficient development of the Electricity Generation was published, in which distributed generation is defined as an electrical generation installation, directly connected to the networks of an electric distribution dealer.

However, the concept of distributed generation has expanded, today, it is understood as distributed generation to a variety of technologies that generate electricity in or near the place where it will be used, so that the use

of transmission networks is reduced. Also, it is characterized as being of small or medium scale, as it does not exceed 10 MW of capacity. Now, distributed generation can be done through three mechanisms, self-consumption, net metering and net billing.

Self-consumption consists in consuming the energy that is produced in real time, so, for billing purposes, it does not generate compensation for surpluses. Net metering considers the surplus produced by the distributed generator, which is injected into the network, and allows obtaining a credit to be used in future consumption.

Net billing allows the generated surpluses to be sold to the electricity distribution companies, that is, to inject them into the energy system.

In this sense, although distributed generation has as a consequence advantages over transmission, the reduction of energy losses, generation through renewable energies and a greater control of the use of energy; it can also represent difficulties regarding the recovery of the costs invested in the generation and transmission of energy. It is the main reason why each country develops its own regulation about distributed generation, in order to adopt a tariff system of injection, balance the investments of the prosumers (domiciliary energy generators) and the traditional companies of distribution, set the conditions for the installation of solar roofs, among others.

During 2018, the Ministry of Energy and Mines published a Draft Law about distributed generation with the aim of creating a new market for the injection of energy into the electricity system, however, to date there have still been no advances regarding its approval.

Despite of it, numerous electric self-generation projects have been carried out in several parts of the country for users connected to the National Interconnected Electric System and isolated, because the use of solar panels represents a financially viable option for the cost savings of electrical services.

Smart grids

They are electrical networks that intelligently integrate the behavior and actions of all agents, in order to provide electric power in a sustainable, safe and economical way. When we talk about smart grids, reference is made to smart meters that calculate production, consumption and tariffs in real time.

To achieve an adequate implementation of smart grids in the electrical system, it is necessary to have a series of devices and technologies, among which are:

- Smart Meters, which are smart electronic meters capable of recording the consumption of electrical energy and transmitting the information collected to a control unit.
- Database management system, whose purpose is to manage and share information in substations and control centers and transmit it to the communication network.
- Intelligent Interfaces to control the distributed resources in order that they can be integrated into the system.
- Control and protection actions are security measures to ensure the reliability of the system.

In Peru, a group of electricity distribution and commercialization companies, had announced the start of a project for the replacement of conventional meters for smart meters. This

project implies an investment of USD18 million and the progressive installation of 2.5 million smart meters in the following 8 years. This new technology will allow electric users to control their energy consumption through a registry of values and fast readings which will provide the required information in real time.

Storage System

The storage system allows the transformation of electrical energy into other types of energy (potential, kinetic, chemical, thermal, among others) making its accumulation possible. Thus, the electrical system works with slight alterations, increases its efficiency levels, facilitates its management and reduces its costs.

It is anticipated that storage systems will play a key role in the future as they are directly related to the development of renewable energy. Indeed, they are a great complement to wind and solar energy as they provide greater control of the energy system and contribute to the carbon reduction process.

It should be mentioned that Peru is currently in the sights of large foreign investors, mainly due the discover of one of the largest lithium mines in the world. According to the last report of 2019, said reserve would have approximately 4.71 million tons of lithium carbonate. Thus, in the context of renewable energy, lithium becomes a key material for the manufacture of electric energy storage batteries, commonly used in electric vehicles and photovoltaic systems.

c. Green Hydrogen

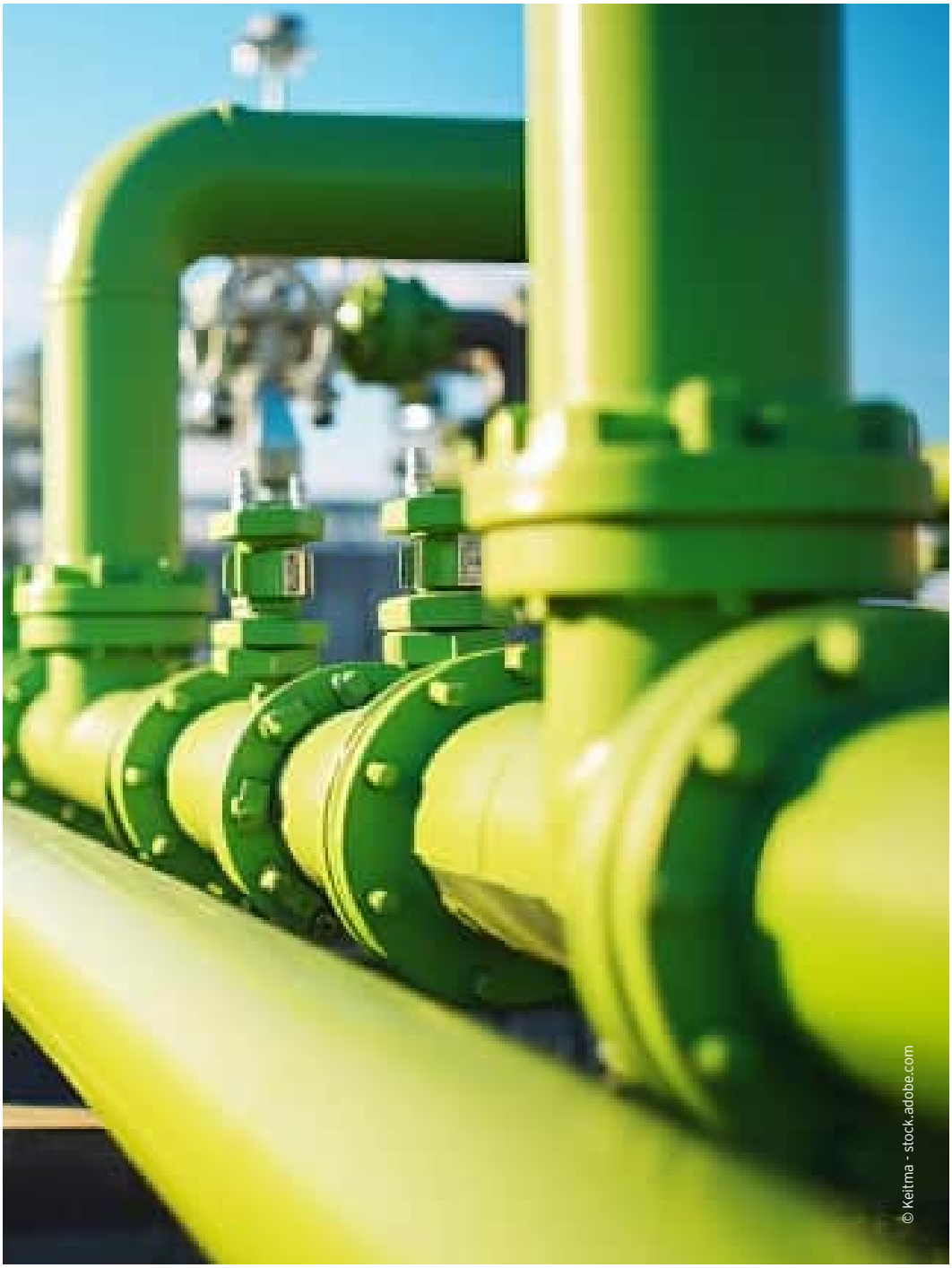
After a lot of efforts of stakeholders in introducing green hydrogen legislation and projects in Peru, in March 2024 the Peruvian Congress finally published Law No. 31992, that promotes green hydrogen, defined in the law as the energy vector produced with low greenhouse gas emission technologies.

This with the intention to promote research, development, production, transformation, storage, conditioning, transportation, distribution, marketing, the export and use of green hydrogen as fuel and as an energy vector, in its different applications, for the exploitation and use in the national energy matrix in order to improve the quality of life of the population as a result of the reduction of greenhouse gas emissions, contributing to compliance with the Peruvian Determined Contribution.

The Ministry of Energy and Mines (MINEM) will promote the generation, production and use of green hydrogen obtained from renewable energies in the Peruvian industry, as fuel and as a product in industrial processes throughout the country to satisfy the energy demand and to export it to international markets, either as hydrogen or as byproducts such as fertilizers, organic liquids, methanol, and others.

The law states that the promotion of the generation, production and use of green hydrogen is carried by the government together with the private sector, generating collaborative work conditions between companies, universities, regional governments and the central government, promoting the diversification of the national energy matrix and prioritizing projects where the benefit is significant in terms of the development of the national industry, the generation of jobs in the area of influence and the recruitment of highly specialized national human resources and technological innovation. As of today, the Regulations of this law have not been issued yet.

The first green hydrogen project has started operations in January 2024 in a solar plant installed to reduce the carbon footprint of a thermic plant using natural gas, both located in Chilca in the south of Lima. In addition, as the south of Peru has been appointed as the new "hot zone" for producing energy with renewable resources, local industries that operate therein and foreign investors have declared their interest for developing green hydrogen projects in said regions, mostly Arequipa and Moquegua.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d. Digital trends

Technology has defined the first decade of this millennium since its very beginning. Not only did we witness the dot-com bubble burst and erase millions of dollars in market capitalization of several firms, but also the recovery of those who survived and are now tech giants, such as Amazon, E-bay, and Google.

The shift from an analog to a digital world has driven humankind to increase the pace of our everyday lives. Nowadays, it seems completely natural to have visual conversations through our mobile devices with any person anywhere in the globe, to store bigger amounts of data and analyze it at incredible speed, to make renewable energy sources economically viable, and so on.

The Oil, Gas and Electricity industries are embracing and harnessing the power of digital disruption in their daily operations and plans for the future.

In this regard, a recent survey by EY has highlighted the importance of investment in digital technologies in the Oil and Gas industry, with 89% of respondents expecting to increase investment over the next two years, and 25% foreseeing a significant jump.

Hereunder, we will provide some examples of how technology is helping companies to bring that future today.

Artificial Intelligence (AI)

These advanced computing techniques based on cognitive computing and self-learning programming methods to optimize and support decision-making will be one of the fastest areas of growth over the next 3-5 years, according to World Economic Forum.

In the case of oil & gas companies, AI could be used together with robotic process automation, generating Intelligent Automation, so that they can employ critical thinking and quality checks among other traditional human processes, which have the potential to automate entire functions and free up time for engineers to focus on engineering tasks.

Moreover, AI could also be used with tools such as big data and analytics to identify the best areas and ways to drill and complete wells at lower costs, decrease unplanned downtime, optimize production, and improve refinery and chemicals operations, among other actions that would add value in the short and/or mid-term.

Certainly, 11% of Oil and Gas industry's executives surveyed by EY have stated that AI and machine learning are technologies they expect to have the greatest positive impact on businesses over the coming five years, with 52% of respondents pointing out that they are currently implementing these technologies.

The Electricity Industry makes a similar use of AI in its activities as the Oil&Gas sector does. Electricity Industry activities also demand the application of AI to simplify processes and reduce the use of some expensive sources. Besides this, AI is also being used for the management of grids that have some level of machine learning and in devices designed to predict failures and outages.

AI has also revolutionized the way engineers and other professionals work whenever emergencies on grids happen, nowadays there are self-healing grids that are able to reroute power around damaged equipment to keep the energy flow. Moreover, AI is also used by consumers that use devices that are able to react to preferences, leading to improved cost control and comfort.

Internet of Things (IoT)

The internet has gone a long way from just being a means to share information through the web. Now, it can bound together several devices in order to share data almost automatically and use it with almost no human interaction. The IoT is on its way to integrate the physical tools we use to produce goods and services, and, thus, to live.

The Industrial IoT is one of IoT's uses that could help oil & gas companies of all three segments to improve their operations even further. In that regard Industrial IoT could connect field assets and equipment by using sensors, integrate transportation and storage facilities, or even expand visibility of the supply chain.

As for the Oil and Gas industry, even though 12% of respondents to a survey stated that IoT technologies could have a positive impact on the business in the mid-term, a significant plurality of them named IoT technologies as the riskiest of any, due to cybersecurity issues. Notwithstanding, 70% of respondents have stated that they were planning to implement IoT in the next five months.

On the side of Electricity Industry, IoT is used in Supervisory Control and Data Acquisition (SCADA), this is, an application that allows centralized monitoring and control of remote systems for the generation and transmission of energy. IoT is used to allow users to access data via HMI interface after it is collected from remote field sensors, actuators, controllers and other communication devices.

IoT is also used for purposes of smart metering. Smart metering is used in smart grid implementations to transform traditional energy infrastructure. The use of IoT in smart metering helps to reduce operating costs by operating metering operations remotely, by improving forecasting and reducing energy theft and loss.

Mobile Devices

Mobile devices have empowered people perhaps beyond what computers did back when the latter became commodities available to almost everyone. They are evolving at a faster pace every year, simulating many, if not all, the functions of a desktop.

Oil, Gas and Electricity companies are aware of this, and they use mobile technology that allows the use of specialized applications in fields such as health, safety and environment (HSE), therefore dramatically reduce the possibilities of harm to their on-field employees in hazardous situations.

In regard with mobile platform technologies, 75% of Oil and Gas executives have expressed to EY that they are currently implementing them, which shows that such technologies are among the top 3 currently being implemented, alongside Cloud and Advanced analytics.

Blockchain

Blockchain technology has proven to be quite useful, for privates and governments alike. Certainly, its use across a wide variety of industries has led Oil and Gas executives to turn their attention to investment in such technology, in order to unleash its full potential, as almost 48% of surveyed executives have expressed that they are planning to implement Blockchain solutions in the next 18 months.

The oil & gas sector is just starting to discover such potential. Due to the inherent security of the blockchain technology, oil & gas companies could establish a better control of data and information and provide consistency – particularly around the accounting of hydrocarbons, supply and demand, and materials movement.

As the sector increasingly leverages sensor technology across upstream and downstream assets, Blockchain can help compress process time and reactivity to an event by connecting assets directly to service providers without the need of human intervention.

Furthermore, its use in smart contracts could also transform the supply chain, allowing for increased process efficiency and compliance.

Additionally, due to Blockchain's very own nature, it could give national oil companies (NOCs) genuine traceability of their goods, which could have an impact beyond financial matters, such as an increase in confidence in the relations with stakeholders of the citizenship (especially, native communities).

In the same way in the Electricity Industry, Blockchain is seen as a useful tool when managing and controlling their production of clean energies. As many corporations control

their production by certificates to differentiate clean energy from fossil fuels-based energy and sometimes such management becomes burdensome when participating in a transaction, Blockchain can be used to keep track of such certificates by means of generating and saving data in a more efficient way. Therefore, the security that Blockchain provides can be utilized by sellers and buyers in order to access such information at a lower transactional cost.

In the Latin American Region, Chile is already one of the beneficiaries of the digital disruption. In April 2019, the Ministry of Economy and Finance of Chile announced that, in partnership with the World Bank, it was developing an initiative to implement the use of modern technologies such as the blockchain for the trade of its emissions. In this regard, they pointed out that this initiative would generate necessary procedures and incentives to upload energy projects to the "Warehouse" platform that generate significant volumes of emissions reduction in the energy sector.

IV. TAX AND LEGAL FRAMEWORK

1 Regulatory terms

a. Oil & Gas

Hydrocarbons agreements

Oil & gas exploration and production activities are conducted under license or service contracts granted by the Government. Under a license contract, the investor pays a royalty, whereas under a service contract, the Government pays remuneration to the contractor.

As stated by the Peruvian Constitution and the Organic Law for Hydrocarbons, a license contract does not imply a transfer or lease of property over the area of exploration or exploitation.

By virtue of the license contract, the contractor acquires the authorization to explore or to exploit hydrocarbons in a determined area, and Perupetro (the entity that holds the Peruvian state interest) transfers the property right in the extracted hydrocarbons to the contractor, who must pay a royalty to the state.

License and service contracts are approved by supreme decree issued by the Peruvian Ministry of Economy and Finance, and the Peruvian Ministry of Energy and Mines, and could only be modified by a written agreement signed by the parties.

Before initiating any negotiation, every oil & gas company must be duly qualified by Perupetro, in order to determine if it fulfills all the requirements needed to develop exploration and production activities under the contract modalities mentioned above.

It must be noted that the terms and conditions under which license contracts are negotiated and subscribed remain the same for onshore and offshore blocks.

On the other hand, contractors will have the right to use water, grit, wood, and other construction materials, and to negotiate permissions, easements and the right to use water and surface rights, that necessarily result in carrying out their activities. If the exercise of such rights generates economic damages, they must be compensated.

Regarding the subscription of contracts, Perupetro has begun revising the scope of the current applicable regulations related to hydrocarbon royalties, qualification requirements for oil & gas companies and the terms of the license contracts to be signed with companies.

Technical evaluation agreements

The Peruvian Organic Hydrocarbons Law empowers Perupetro to enter into technical evaluation agreements with previously qualified oil companies. These agreements were created as a mechanism to promote investment in hydrocarbons, in addition to encouraging and increasing knowledge of the potential of the areas offered for investment.

The technical evaluation agreements are signed in order to carry out comprehensive geological-geophysical work and studies under international quality standards to be carried out in areas that have little information or that require additional work and studies to finally evaluate the subscription of a license contract for the exploration and exploitation of hydrocarbons. The main benefit for the oil company that executed the technical evaluation agreement is the granting of the right of first option to sign a contract for the exploration and exploitation of hydrocarbons in the designated area.

In this context, according to the classification of the area requested by the oil company, it can enter into the following agreement modalities: (i) Technical Evaluation Agreement (CET) and (ii) Technical Evaluation Agreement (CET-CONTRACT). In this way, the CET will be applicable for the areas classified as frontier while the CET-CONTRACT will be applicable for the areas classified as Semi-explored by Perupetro. In addition, it is important to consider that the areas called frontier are those for which insufficient geological knowledge is available to determine their hydrocarbon potential, and the Semi-explored areas are those that have a hydrocarbon potential but this is not well defined and have limitations in access and facilities transport.

However, the process of qualification of an oil company that requests the subscription of a technical evaluation agreement, will be carried out in 10 days counted from the presentation of the request. In said procedure, company's technical, legal, economic and financial capacity will be mainly evaluated.

Upstream, midstream and downstream activities

The activities performed in the hydrocarbon sector are divided into three stages: "upstream", "midstream" and "downstream". The activities included in the "upstream" stage comprise the exploration and exploitation of hydrocarbon deposits, while the "midstream" and "downstream" stages refer to refining, natural gas processing, transportation, distribution and commercialization of oil, gas and by-products.

Upstream Activities (*)

- Exploration phase

  The exploration phase is aimed at discovering areas with oil potential. To reach that objective, oil companies must plan, execute and evaluate every type of geological, geophysical, and geochemical activity and carry out other studies, geophysical activities, drilling exploratory oil wells and other related and necessary activities for oil discoveries.

  This phase will have a maximum duration of 7 years, counted from the effective date of the contract (60 days after the signing date) established on each contract.

  This term can be divided into several periods as agreed to in the contract.

  Notably, the Ministry of Energy and Mines can authorize an extension of three years for this stage, if the contractor has complied with the minimum working program established in the contract, and also commits to fulfill an additional working program that justifies such extension.

  The contractor shall be responsible for providing the technical and economic resources required for the execution of the operations of this phase.

- Exploitation phase

  The exploitation phase is comprised of development and production activities related to oil & gas extraction, in order to transport it to relevant markets. These activities include, among others, drilling of exploitation wells, the construction of pipelines to transport the extracted hydrocarbon production and any other.

  This phase will have a maximum duration of 30 years for crude oil, and 40 years for non-associated natural gas and condensates, both counted from the contract effective date.

Midstream Activities

These activities can be considered as a crucial part of the oil & gas sector activities, as they consist of the transport by pipelines, and storing of hydrocarbons. In order to start activities related to the transportation of hydrocarbons by pipelines, a company must be granted a concession, whilst it will only need to comply with specific requirements according to Peruvian regulations so as to store them.

(*) Peru's oil & gas Investment Guide is mainly focused on upstream activities.

Midstream related activities can also be related to the operation of gas processing plants and gas treatment and conditioning facilities in order to make it transportable, the operation of fuel pipelines systems, maritime transportation by tankers, and operating oil storage terminals.

Investment projects in gas processing facilities can be subject to the benefits granted to upstream projects. In this regard, a contract shall be signed by the investor and government, and it can only be modified by mutual agreement.

Downstream Activities

- Refining

  This activity involves the construction of industrial facilities, in which crude oil, natural gasoline or other hydrocarbon sources are transformed into fuel products, such as liquefied petroleum gas (LPG), gasoline, diesel and industrial fuels. Contractors must obtain an authorization from the General Hydrocarbons Bureau for executing such construction.

Distribution and commercialization

Liquid fuels and other hydrocarbon byproducts obtained as a consequence of the activity of refinery are distributed to wholesalers, who in turn, dispatch them to oil stations, to retailers and/or direct consumers, etc. In the case of liquid hydrocarbon and similar hydrocarbon byproducts, contractors must obtain an authorization from the Ministry of Energy and Mines (MEM). In the case of natural gas, distribution must be granted by a concession.

Government policies on the sale of natural gas

Contractors must consider that the authorization to explore or to exploit proven natural gas reserves requires them to guarantee the supply of the national market, for a specific period stated in the contract.

Assignment of an oil interest

The contractor can partially or totally transfer its interest or associate with any other qualified investor, provided that the operation is approved by the Ministry of Energy and Mines (MEM).

The transfer of the contractor's interest will lead to the maintenance of the same responsibilities regarding the guarantees and obligations assumed by the contractor. In this sense, the stabilized tax regime applicable to the contractor will also apply to the transferee.

b. Electricity

Electricity power

It is the amount of energy that can be delivered or distributed to a system in a simple unit of time. Power is registered in Watts, the active power unit of the International System of Units. 1 Watt is equivalent to 1 Joule (international unit of energy or work) per second (time unit). As such, power indicates the amount of energy that can be delivered each second for the consumption of electric systems (as the SEIN).

The electric appliances' power is set in Watts if they are low-powered, but if they have medium or high power, this is set in KiloWatts (kW), which is equivalent to 1,000 Watts or MegaWatts (mW), equivalent to 1'000,000 Watts.

Electric systems

- Interconnected Electrical National System - SEIN

  Group of transmission lines and sub-stations that are interconnected itself and connected with generation plants to allow the delivery of electric energy between two or more generation systems.

- Isolated System

  Electric system that is not connected to the SEIN.

Energy Matrix

The Energy Matrix is a unique market model that shows the new circumstances of the energetic system. Each country and/or region develops an Energy Matrix depending on its own policies, challenges and objectives.

Renewable Energy Source - RER

Renewable Energy Sources are biomass, wind power, solar power, geothermal sources and tidal energy. In the case of hydraulic energy, said sources shall be considered as RER provided the installed capacity is less than 20MW.

Geothermal source and by-products

Geothermal sources refer to energy that comes from underground and includes geothermal fluids at high and low temperatures. These products refer to non-solution minerals and other products that can be obtained from natural thermal fluids, brines, gases and fumes located underground. These by-products do not include hydrocarbons.

Electricity industry activities

Generation

Production of electricity by means of the transformation of a primary source like water or a thermic source such as natural gas, petroleum, carbon, diesel, among others.

Renewable sources like wind, geothermal heat, solar radiation, and biomass, are also used for the production of electricity. According to Peruvian regulations, this activity does not qualify as a public service; nor a natural monopoly. Generators could be considered as energy traders.

Transmission

Activity that consists of the transport of energy from generation plants to consumption centers. This activity uses high-voltage grids (30V. and 60,000V.) and extra high-voltage grids (138,000V. and 220,000V.).

According to the Electric Concessions Law, there are two kinds of transmission system:

- Primary system, which is paid by all the users of the electric system regardless the actual use of the system; and the
- Secondary system, which is paid only by the effective users of the system, which are consumers and generators.

Law No. 28832, added two kinds of additional transmission systems:

- Guaranteed system, which is subject to bidding depending on the Transmission Plan approved by the Ministry of Energy and Mining, and the
- Complementary system, which is developed under the lead of one or more agents like complement of the Transmission Plan.

Distribution

Activity that consists of the transformation of high or extra high voltage energy to lower voltage of 30,000V or less in order to distribute such energy to final users. According to Peruvian regulations, the distribution activity comprises the grids operation and the commercialization of energy to regulated users and free users.

Granting rights in the electric sector

Definitive concession

This title is required for the use of public goods and for having the right of way for construction and operation of generation plants, sub-stations, transmission lines and grids for the serving of electricity to the public.

According to the Electric Concessions Law, the granting of the definitive concession is required for the development of the following activities:

- Generation of electric energy from hydraulic sources whenever the installed capacity exceeds 500Kw.
- Transmission of electric energy when its facilities could affect State property and/or require a right of way.
- Distribution of electric energy to be provided as a public service when the demand exceeds 500Kw.
- Generation of energy with energetic renewable sources when installed capacity exceeds 500Kw.

Authorizations

Permission required for the development of thermoelectric generation activities whenever the installed capacity of the plan exceeds 500KW.

Temporary concession

This title grants the right to use public goods and the temporary right of way. The owner of this kind of concession is responsible for the execution of feasibility studies on generation plants and sub-stations or transmission lines; also, the owner has a preferential right when requesting the correspondent definitive concession.

Award of a ProInversion project

ProInversion is authorized to award pre- designed projects (through granting concessions) related to generation, transmission and distribution of energy. This entity is also entitled to evaluate and award private initiative projects regarding the activities developed in the electricity sector according to the applicable laws.

Long-term Electricity Supply

These are bidding contracts for the supply of electricity between Regulated Users or Free Users and electricity distribution companies, which are under the supervision of OSINERGMIN. The Peruvian State has implemented this bidding process as a preventive measure to ensure the timely supply of electricity to specific users. This process allows for free competition without the risk of dominance.

Cold Generation Reserve Concession Contracts

These projects holds high national priority due to their role in maintaining the availability of power and energy in emergency situations within the country's electrical system. These projects are overseen by OSINERGMIN.

Free and Regulated Users

As per the Electricity Regulation, electrical users are classified as either free or regulated. Users with a consumption of 200 KW or more can access the free user classification, giving them the opportunity to negotiate their electricity rates with generating companies. On the other hand, users with a consumption of less than 200 KW are classified as regulated users and are subject to tariff schedules approved by OSINERGMIN. However, if they are commercial or industrial consumers, they can

opt for a medium voltage rate that is lower than the low voltage tariff applicable to residential consumers.

Granting rights for electric generation with renewable energy (RER)

RER generation auctions

Auction

Public tender process conducted by the OSINERGMIN to assign the adjudication rate to projects of RER generation up to the limit of the required energy. This process follows the document prepared and approved by the MINEM and ends in the closing date.

Required energy

Total annual amount of energy (MWh) subject to the auction. The MINEM determines the necessary amount for each type of RER based on the projected national consumption for the year.

Adjudication rate

The adjudication rate is the offer (USD/MWh) made by interested corporations during the Auction. This rate ensures that every awarded corporation receives net energy injections up to the limit of the energy offered and adjudicated. Offered rates are not modifiable and are valid only from the start date of commercial operation until the due date of the contract, subject to the correction factor and the update formula agreed in the Auction terms.

Closing date

Closing date is the date in which all the requirements for signing of the Contract are met according to the Auction conditions. On this date, the Auction ends.

Contract for the supply of renewable energy

The contract signed by awarded corporations once the Auction is ended, that establishes the liabilities and conditions related to the construction, operation, energy supply and rates regime applicable to RER generation plants. This document includes the Auction terms. This Contract starts on the closing date and is valid until its due date.

Commercial Operation Phase

Actual date of entry into commercial operation of each RER generation plant, certified by the Economic Operation Committee of the National Interconnected System (COES) in accordance with its procedures.

Policies for the commercialization of energy and power generated by RER Electricity has priority in the daily deliver of energy made by the Economic Operation Committee of the National Interconnected System (COES). As awarded corporations have guaranteed transmission lines according to its offer, in the case of extra capacity in the transmission or distribution systems of the SEIN, such corporations will have preferential access to them.

In order to sell the production of RER electricity, this energy must be placed in the short-term market subject to its price. This price ought to be complemented with a premium to be determined by OSINERGMIN in case the marginal cost is lower than the estimated price. Regarding the aforementioned price and premium, OSINERGMIN is the entity that will determine such amounts according to each kind of energetic source.

Granting geothermal rights

Geothermal sources authorization

This authorization allows the execution of exploration activities in a specific area of the Peruvian territory in order to search for geothermal sources. The holder of this authorization has a preferential right to be granted a concession. This authorization is valid for 3 years and can be extended for 2 additional years. The request for a concession in the explored area can be placed at any moment of this term.

Geothermal sources concession

The MINEM grants this kind of concessions in order to allow the execution of exploitation activities in a specific area where sources have been discovered during the exploration phase. These concessions are valid for 30 years from the publication of the correspondent Contract in El Peruano (state official newspaper). In certain circumstances, it is possible to extend the term of these concessions.

Climate change actions framework Law

The diversification of the energy matrix guided by a greater use of clean energy (RER) requires a joint action of all sectors of the country, therefore, in April 2018 the Framework Law on Climate Change was approved. The purpose of this Law is to establish the principles, approaches and general provisions to coordinate, articulate, design, execute, report, monitor, evaluate and diffuse public policies for the comprehensive, participatory and transparent management of climate change adaptation and mitigation measures, in order to reduce the country's vulnerability to climate change, take advantage of the opportunities of low-carbon growth and comply with the international commitments assumed by the State before the United Nations Framework. In this regard, we list some useful concepts below:

Climate change

Changes in the climate due to direct and indirect human actions that produce changes in the composition of the atmosphere, increasing the natural variability of the climate.

Nationally Determined Contributions (NDC)

These are the contributions collected by the Government to face climate change, following the Paris Agreement, which was ratified by the Peruvian Government in 2016.

For these purposes, Goals for prevention and reduction are developed, with participation from all sectors and members of society, working towards shared objectives for the sustainability of the country.

Adaptation to climate change

The process of adapting to both present and anticipated climate conditions, as well as their impact on environmental and human systems, with the goal of minimizing or preventing negative consequences and potentially leveraging any positive effects.

Mitigation of climate change

Human intervention to reduce the sources of greenhouse effect emissions or to enhance sinks (processes, mechanisms and activities that eliminate gases in the atmosphere) in order to limit the effects of climate change.

Resilience

Capacity of social, economic and environmental systems to face a dangerous situation, trend or alteration by reorganizing or giving an answer in such way that its characteristics, structure, identity or special functions are maintained, and its capacity of adaptation, learning and transformation are preserved.

Nationally Appropriate Mitigation Actions (NAMA)

These are actions carried out by developing countries that aim to reduce significant amounts of greenhouse gas (GHG) emissions and that are prepared under national government initiatives. Which could be actions or policies aimed at transformational change within an economic sector, or actions in all sectors for a broader national approach.

Energy efficiency

In 2000, the Law No. 27345, Law for the Promotion of Efficient Energy Use, stated that it is in the national interest to promote the efficient use of energy to ensure the supply of energy, protect the consumer, promote the competitiveness of the national economy and reduce the negative environmental impact of the use and consumption of energy. Later, in 2017, with the enacted of the Supreme Decree No. 009-2017-EM, it is specified that the concept "Energy Efficiency" is the ratio between the energy used and the total energy used in any process of the energy chain.

Energy Storage Systems (ESS)

The advancement of technology has allowed electrical energy to be transformed into other types of energy, facilitating its storage in situations where production is greater than consumption. Likewise, it facilitates the operation of the electrical system, increasing levels of efficiency, management and cost reduction, even being able to replace an emergency power plant, with a faster response time than that of the commissioning of a generating unit and at a cost minor installation.

Distributed Generation

According to Law No. 28832 - Law to ensure the efficient development of the Electricity Generation was published, in which distributed generation is defined as an electrical generation installation directly connected to the networks of an electric distribution dealer.

Energy Efficiency Labeling (EEL)

Through Supreme Decree No. 009-2017-EM was approved the Technical Regulation on the Labeling of Energy Efficiency for Energy Equipment, the EEL is defined as the information regarding the energy consumption and the energy efficiency range of the energy equipment, which must be contained in a label and located on the container, packaging, advertising or body of the energy equipment in a visible place to the consumer. It can be printed or attached to the device and must not be removed from the product until after it have been purchased by the consumer.

Electromobility

Referred to land transport that makes use of one or more electric motors to generate locomotion, composed of Electric Vehicles, Plug-in Hybrid Vehicles and Electric Vehicles with Extended Autonomy or other land transport vehicles that obtain all or part of their electrical energy from a system rechargeable energy storage.

Charging infrastructure

Station installed to provide battery charging for electric mobility.

Interoperability in electric mobility

It refers to the ability to interact and exchange data and information between the different components of the electric mobility system (charging infrastructure, vehicles and the electricity grid) using standardized and widely recognized protocols. In electric mobility, the capacity makes it possible to facilitate compatibility and integration between charging infrastructures and, in turn, an adequate management of the charging system.

2 Peruvian General Fiscal Terms

The economic appeal of a country is strongly influenced by the tax regime that applies to oil (especially upstream), gas and energy activities. If properly structured, such rules are able to achieve the ultimate government' objective of collecting an adequate amount of income generated by these industries, while maintaining a high level of investment in the related activities.

Keeping in mind the above and considering that the investment required for those industries involves a great associated risk in the early stage of the projects, Peru has established a fiscal framework that promotes private initiatives and includes special tax benefits to reduce the tax impact of oil, gas and energy activities.

Basic aspects

Resident companies (meaning, those incorporated in Peru) are subject to income tax on their worldwide taxable income. Branches and permanent establishments of foreign companies based in Peru and nonresident entities are taxed on Peruvian source income only. A permanent establishment of a nonresident entity exists in Peru in the following cases:

1. Fixed place of business where the nonresident entity performs its activities, totally or partially. For example: place of management, branches, agencies, offices, factories, workshops, warehouses, mines, oil and gas wells, quarries or any other place relating to the exploration or exploitation of natural resources.
2. A building site or construction or installation project, as well as the supervisory activities related to them, for more than 183 days within any 12-month period.

3. The services, when are rendered in Peruvian territory for the same project or related projects, for a period or periods aggregating more than 183 days within any 12-month period.
4. When a person acts in Peru on behalf of a nonresident entity and has and habitually exercises an authority to: (i) enter into contracts on behalf of the nonresident entity; (ii) transfer property or the use of goods/ assets owned by the nonresident entity; or (iii) enter into contracts for the rendering of services by the nonresident entity.

Taxable income is generally determined by reducing the gross revenue by cost of goods sold and all the expenses necessary to produce the income or maintain its source. Certain types of revenue, however, must be determined by following specific terms and there are expenses for which deductions are limited or forbidden for tax purposes, according to the income tax law.

Business transactions must be recorded in legally authorized accounting books, which should be in full compliance with the International Accounting Standards (IAS). Contractors (Peruvian corporations and branches) –as an exception- are entitled to keep their accounting records in foreign currency as long as they receive and/or make foreign direct investment in foreign currency, according to the requirements established by Supreme Decree No. 151-2002-EF and other specific rules for industries as mining, hydrocarbons and geothermal resources, but taxes must be paid in Peruvian Soles (PEN).

Income and expenses are recognized on an accrual basis for tax purposes. The scope of the "accrual basis" criteria was first legally developed in the Legislative Decree No. 1425, which entered into force on January 1, 2019.

As per the general concept of accrual introduced by the decree, revenues accrue when the substantial events for their generation have occurred, provided that the right to obtain them is not subject to condition, regardless the opportunity they are charged or collected.

Notwithstanding the above, the decree set special rules for the accrual of revenues regarding the sales of goods, services, lease of goods, among others.

The general corporate income tax rate for fiscal year 2017 (onwards) is 29.5%. In addition to this, a Dividend Tax at a rate of 5% is applicable over profits distributed by resident companies and by branches, permanent establishments, and agencies of foreign companies to nonresidents and individuals.

This tax is generally paid through a withholding made by the distributing entity. However, under certain circumstances, the distributing entity must pay the tax directly.

The mandatory closing date for business enterprises is December 31st. Tax returns must be filed between March and April, according to the schedule established by the Tax Administration. Taxes and related penalties not paid by the due dates are subject to interest charges, which are not deductible for corporate income tax purposes.

Advanced payments

Companies and branches must make monthly advance payments of their annual corporate income tax. Advanced payments will be equal to the greater amount that results from comparing the quotas obtained from the application of the following methods:

- **Percentage method: by applying 1.5% to the total net revenue of the month.**
- **Ratio method: by dividing the tax calculated in the previous year by the total accrued net revenue of the same year and applying the ratio to the net accrued revenue.**

Income Tax advanced payments apply as credit against the annual income tax obligation, or they are refunded at the end of the fiscal year (once the tax return is filed), if requested by the taxpayer.

Capital gains

Capital gains are treated as ordinary income. Under this consideration, capital gains determined by resident entities are subject to a 29.5% tax rate. A tax exemption was applied to the sale of certain securities on the stock exchange supervised by the SMV until December 31, 2023, provided the sale comply with specific requirements. The securities included were the following:

- Common shares and investment shares.
- American Depositary Receipts (ADR) and Global Depositary Receipts (GDR).
- Exchange Trade Fund (ETF) units with shares and/or debt securities as underlying.
- Debt securities.
- Mutual funds of investment certificates.
- Real Estate Rental Investment Funds (FIRBI) and Securitization Trusts for Real Estate Rental Investment (FIBRA) certificates.
- Negotiable invoices.

Capital allowances

Trade or business expenses

In general terms, all corporate expenses related to the generation of taxable income or the maintenance of its source are deductible for corporate income tax purposes. This rule is subject to certain exceptions and limitations expressly provided in the Income Tax Law.

In addition, by virtue of Legislative Decree No. 1532 and Supreme Decree No. 319-2023- EF, it has been established that expenses incurred with entities and individuals that qualify as "Subjects without operational capacity" are not deductible. The object of such qualification

implies that the subject with which the operations (expenses) are made does not have the economic, financial, material, human and/or other resources, or these are not suitable to carry them out.

As of January 1, 2019, costs or expenses for services rendered by nonresident companies (related parties or not) must be paid prior to the submission of the annual tax return to be considered deductible.

Tax havens and preferential tax regimes

In Peru, resident entities cannot deduct the expenses derived from transactions with individuals or entities that:

1. Qualify as residents of non-cooperative countries or territories with low or no taxation;
2. Qualify as Permanent establishments located or established in non-cooperative countries or territories with low or no taxation; or
3. Obtain income or profits through a non-cooperative country or territory with low or no taxation; or subject to a preferential tax

A jurisdiction is considered a tax haven or non-cooperative jurisdiction, provided one or more of the following requirements is met:

- No transparency at a legal, regulatory or administrative level.
- No exchange of information, as well as the existence of legal provisions or administrative practices limiting the exchange of information.
- No requirement of a substantive local presence, real activities or economic substance.
- Low or no taxation.

Additionally, on December 2018, the Ministry of Economy and Finance issued the Supreme Decree 340-2018-EF (SD 340-2018-EF), which contains regulations that include Peru's blacklist of countries and jurisdictions that are considered tax havens or non-cooperative jurisdictions, as well as conditions for being added or removed from the list.

Tax depreciation

Depreciation rates apply to the acquisition cost of fixed assets. The following are some of the maximum annual depreciation rates allowed by Law:

Data processing equipment	25%
Machinery and equipment for construction, mining and oil activities	20%
Vehicles	20%
Machinery and equipment for other activities	10%
Buildings and constructions*	5%*
Other fixed assets	10%

*This is a fixed rate rather than a maximum rate.

Taxpayers may apply any depreciation method for their fixed assets other than buildings and constructions, if the resulting depreciation rate does not exceed the maximum rates stated above. In general, except for buildings and constructions, tax depreciation must match financial depreciation.

Special depreciation regime

According to Law No. 31652 published in December 2022 and which entered effect in January 2023, special depreciation regimes are established on an exceptional and temporary basis so that taxpayers of the general income tax regime and the MYPE tax regime may depreciate certain assets at an accelerated rate, in order to promote private investment and provide greater liquidity in the current economic situation.

The referred regime provides for a maximum depreciation rate of 33.33% applicable to buildings and constructions that are intended exclusively for business development, provided that the construction has been started as from January 1, 2023 and until December 31, 2024 the work is at least 80% completed.

Likewise, a maximum depreciation rate of 50% is established for hybrid or electric land transportation vehicles used in the production of taxable income and which are acquired in fiscal years 2023 and 2024.

It should be noted that the regime is not applicable to investments that are included in tax stability agreements.

Valuation of inventory

Inventory is valued for tax purposes at the acquisition or production cost. Financial charges are not allowed to be part of the cost. Taxpayers may choose any of the following methods to calculate annual inventory for tax purposes, provided that the method is consistently used: first-in, first-out (FIFO); daily, monthly or annual average; specific identification, detailed inventory; and basic inventory.

Pre-operative expenses

Pre-operative expenses may either be deducted in the year the production commences or may be amortized for up to ten years starting from the first year of production.

Early recovery VAT system

The early recovery VAT system allows the recovery of the VAT paid on the acquisition of goods, services, construction contracts, importations, etc. during the preoperative phase of an investment project; provided such operations were executed for carrying out taxable operations or exports.

VAT is reimbursed through negotiable credit notes (which are redeemable in exchange for a check). This system eliminates the need to wait for investors to recover payment, including VAT, for goods, services, or construction contracts.

In other words, this regime represent a key relief for financial costs of projects with a significant pre-operating stage and for those in which no advance invoice can be issued periodically to achieve transferring the VAT burden.

The law provides a general and a specific early recovery system; each one with its own scope and requirements:

- **General early recovery VAT system: This regime applies to companies in a preoperative stage, allowing them to recover the VAT paid on the acquisition of capital goods. It does not require companies to sign an investment contract or a specific amount of investment.**

- **Specific early recovery VAT system: This regime applies to companies in a preoperative stage that meet the following conditions: (i) To enter into an investment contract with Peruvian government to invest in economic Industry; and (ii) To make a minimum investment commitment of USD5 million for projects with a preoperative phase of at least 2 years.**

If the previous conditions are met, companies will be able to recover VAT paid on the acquisition or imports of capital or intermediate goods, provision of services, and construction contracts.

The application for either of the systems does not preclude the possibility of applying for the other, as they cover different items (goods/ services).

By the amendment introduced by Legislative Decree 1423, new investment projects that intend to benefit from the Special Early Recovery System will not subscribe an Investment Agreement. Instead, they must submit to Proinversion a declaration under the affidavit with the information of the Project.

Finally, the special system authorizing microenterprises engaged in production activities to enjoy the refund of the tax credit paid on imports and/or local purchases of new capital goods not exhausted within the three (3) consecutive months following the date of registration of the respective payment receipt in the Purchase Journal.

Definitive recovery VAT system

Under this regime, VAT paid on the acquisition of goods and services used directly in oil & gas exploration activities can be recovered without having to wait until a commercial discovery takes place or production begins. This regime will be applicable from the contract signing date until the end of the term of the exploration phase.

Goods and services included in the regime should be incorporated in a list and approved by the Ministry of Energy and Mines. The validity of this regime has been extended until December 31, 2027.

Amazon promotion investment regime

- VAT and ISC exemption on the sale of hydrocarbon products: oil & gas companies (principally those dedicated to oil refining and storage activities) located in the regions of Loreto, Ucayali and Madre de Dios will be VAT and ISC exempted when selling oil, natural gas and by- products to retailers or to direct consumers. For this purpose, it is required that retailers must also be located in the regions of Loreto, Ucayali and Madre de Dios, and should perceive third category income mainly from commercializing oil, natural gas and/or its byproducts. Direct consumers include corporations and individuals located in the regions of Loreto, Ucayali and Madre de Dios, that perceive third category income due to activities different from hydrocarbon commercialization.

- The law also states that retailers will only be allowed to sell the exempted hydrocarbon product to the public, or for its own consumption; and that the direct consumer will also be limited to use the exempted

hydrocarbon product only for the activities carried out in the regions of Loreto, Ucayali and Madre de Dios.

Withholding taxes

Dividends

Dividend tax at a rate of 5% applies to profits distributed to nonresidents and individuals by Peruvian companies, Peruvian branches, permanent establishments and agencies from foreign companies. Under the Peruvian Income Tax Law, there are several transactions that qualify as profit distributions and are subject to the dividend tax. These include the distribution of cash or assets, reducing the company's capital, or liquidating the company, under specific circumstances.

Additionally, as an ant avoidance rule, it will be considered a dividend, the expenses paid by resident company or branch, permanent establishment or agency that are not subject to tax control or does not report any income, the amount of the payment or income will be subject to dividend tax (i.e. it will be treated as a deemed dividend distribution).

It should be noted that the effect of the reduction of the dividend tax rate combined with the increase of the corporate tax rate results in a total tax burden of 33.03% (approximately).

Interest

Interest paid to nonresidents is generally subject to a withholding tax rate of 30%. For interest paid to non-related foreign lenders, the rate is reduced to 4.99% if all the following conditions are fulfilled:

- Loans must be in cash and the proceeds of the loan are brought into Peru as foreign currency through local banks or are used to finance the import of goods.
- The proceeds of the loan are used for business purposes in Peru.
- The participation of the foreign bank is not primarily intended to avoid the tax treatment applicable to transactions between related parties (i.e. the use of back-to-back loans is consequently precluded).

Technical Assistance Services

Payments for technical assistance services used within Peru are subject to withholding tax at an effective rate of 15%, regardless of the country the services are rendered. To ensure the application of the 15% rate, the local service recipient must obtain and present to the Tax Authorities upon request a report issued by an audit firm certifying that the technical assistance was effectively provided. However, this is only required when the fees under the corresponding agreement for the technical assistance exceed 140 Tax Units (equivalent to PEN693,000 or USD188,300).

Royalties

Peruvian source royalties paid for the use of intangible property are subject to withholding tax at an effective rate of 30%.

Indirect transfer of shares

Law No. 29757, which amended Law No. 29663 introduced a new category of Peruvian sourced income that may lead to a scenario

under which a nonresident will be levied with income tax. Broadly, Law No. 29663 provides that 30% income tax is imposed on any capital gain realized upon the transfer of the shares of a company located outside Peru that, directly or indirectly, holds shares (or participation interests) in one or more Peruvian subsidiaries (i.e. an "indirect transfer") on one of the following situations:

- Where 50% or more of the fair market value of the nonresident holding company's shares is derived from the shares or participations representing the equity capital of one or more Peruvian subsidiaries at any time within the 12 months preceding the disposition.
- The overseas holding company is located in a tax haven or low- tax jurisdiction, unless it can be adequately demonstrated that the scenario described above did not exist.

Law No. 29757 clarifies that the transaction described in the preceding paragraph will only be taxable where shares or participation interests representing 10% or more of the nonresident holding company's equity capital are transferred within the 12-month period. This means that the transfer of shares (or participations) representing less than 10% of the nonresident holding company's equity capital are not subject to taxation in Peru even when 50% or more of the fair market value of those shares is derived from the shares (or participations) representing the equity capital of one or more Peruvian subsidiaries at any time within the 12 months preceding the dispositions.

Likewise, regulations have been established for specific cases involving the indirect disposal of shares, such as: i) the presumption of indirect disposal via dilution of shareholders in nonresident companies and distribution of dividends by nonresident companies; ii) when the total amount of the shares or ownership interests in legal entities resident in the country is equal to or greater than forty thousand (40,000) Tax Units (PEN198 million or approximately USD50 million); iii) if the shares or ownership interests being disposed of, or the new shares or ownership interests issued as result of a capital stock increase in a non-cooperative jurisdiction or tax haven, among other cases.

Under certain circumstances, the Peruvian issuer shall be held jointly and severally liable, unless the nonresident seller established a branch in the country.

Supreme Decree No. 088-2015-EF incorporated a new rule that applies to transactions with related and unrelated parties, which states that the fair market value of unlisted shares is considered to be (i)The value determined under the Discounted Cash Flow method, when future cash flows can be foreseeable, including those produced by licensing or intangibles; and (ii) If the requirements of the first one are not met, the Equity Value is considered, if the audited financial statements are mandatory, the equity value is determined considering the last audited balance sheet. Otherwise, the last unaudited balance sheet is required. In both cases, the rules provided by law and regulations shall be complied with.

Controlled Foreign Corporation Rules (CFC Rules)

The "International Fiscal Transparency Regime" is applicable to all Peruvian residents who own a "controlled foreign corporation" (CFC). Under these rules, passive income earned by CFC's in other jurisdictions, must be included and recognized in the taxable income of resident taxpayers in Peru, even though there has been no effective distribution.

A non-resident subsidiary company will constitute a CFC of a Peruvian company if:

- The Peruvian company owns more than 50 percent of the subsidiary's equity, economic value or the voting rights.
- The non-resident entity must be a resident of either: i) a tax haven jurisdiction; or, ii) a country in which passive income is either not subject to CIT or is subject to a CIT that is equal or less than 75% of the CIT that would have been applicable in Peru.

For the application of this Regime, the Law has established an exhaustive list of items that qualify as passive income (i.e. dividends,interest, royalties, capital gains from the sale of properties and securities, etc.).

Tax treaties

Peru has entered a multilateral tax treaty with the Andean Community countries (Bolivia, Colombia and Ecuador), which calls for exclusive taxation at source, and double tax treaties with Brazil, Chile, Canada, Mexico, South Korea, Portugal, Switzerland and Japan.

Some existing treaties are still under renegotiation and others are in various stages of negotiation with countries such as France, Italy, Thailand, Sweden, Singapore and the UK.

Except for the Andean Community double tax treaty, tax treaties entered by Peru generally follow the OECD Model, although they incorporate provisions from the UN Model, to give more weight to the source principle than does the OECD Model.

Peru executed the Multilateral Convention to Implement Tax Treaty Related Measures to Prevent Base Erosion and Profit Shifting, negotiated within the framework of OECD G20 BEPS Project, which is into force from January 1st, 2022 onwards.

Tax Credit due to Taxes Paid Abroad

Taxes effectively paid abroad may be offset against Peruvian income tax, even if there is no double taxation treaty, provided that the amount resulting from the application of an average rate for income obtained abroad is not exceeded.

The credit not applied in a fiscal year cannot be offset during subsequent or prior fiscal years, nor may it me refunded.

Starting on January 1, 2019, under certain conditions, credits may be deducted not only in the case of income tax paid abroad, as levied on the distribution of dividends (direct credit), but also the tax levied on the business activities of said subsidiary (first-tier indirect credit) and even that levied on the business activities of the latter's subsidiaries (second-tier indirect credit).

The indirect credit may only be claimed if certain requirements are met, such as an ownership interest of at least ten percent (10%) in the respective subsidiary over the course of at least twelve (12) months. Additionally, the

second-tier subsidiary must: (i) be a resident of or domiciled in a country with which Peru has entered into an information exchange agreement; or (ii) be a resident of or domiciled in the same country as the corporation that distributes dividends to the Peruvian corporation.

The application of the indirect credit shall not include the income tax paid abroad by corporations residing in non-cooperative countries or territories or countries or territories with little or no taxation, or rent, income or earnings subject to a preferential income regime.

Financing considerations

From fiscal year 2021 onwards, the deduction of financial interest (whether from related or unrelated parties) shall only be allowed for an amount of up to 30% of the EBITDA for the previous fiscal year. This concept has a specific definition for the purposes of this law (adjusted net income). Nondeductible interest may be carried forwards for the next four (4) taxable fiscal years.

The foregoing rule shall not apply to financial and insurance companies; taxpayers whose income does not exceed of 2,500 Tax Units (approximately USD3,437,500); taxpayers developing infrastructure, public utility, and other projects through public-private partnerships or projects in assets; as well as debt from the issuing of nominative securities via initial public offering in Peru, provided they meet certain conditions (public offering, etc.).

Indirect taxes

A 18% Value Added Tax (VAT) applies to the following transactions:

- Sale of goods within Peru.
- Services performed or used within Peru.
- Construction contracts performed within Peru.
- First sale of real estate by the builder.
- Importation of goods from outside Peru, regardless of the status of the importer.
- VAT paid upon acquisition of goods or services can be deducted from VAT related to the sale of finished products or services.

Exporters are reimbursed for any VAT paid on the acquisition of goods and services. Also, exporters can apply such reimbursement as a credit to offset VAT or income tax liabilities.

Excise Tax (or "Impuesto Selectivo al Consumo" in Spanish)

The Excise tax (ISC) applies to luxury goods as well as goods which use deems to be prejudicial or ment to be unpromoted such as jewelry, cars, cigars, cigarettes, liquor, soft drinks, fuel, etc. ISC rates range from 10% to 100%, generally based on the CIF (imports) or sale value, depending on the goods. However, for certain goods, such as soft drinks and fuel, the ISC is calculated on a specific basis depending on the amount of goods sold or imported.

ISC applies to producers and economically related enterprises engaged in domestic sales of listed goods, importers of listed goods,

importers and economically related enterprises engaged in domestic sales of listed goods and organizers of gambling activities.

Liability to ISC arises under the same rules that apply to VAT.

To avoid double taxation, a credit is granted for the ISC paid on imports and in other specific cases.

Worker's profit sharing

Employers are required to distribute a share of their profits among their employees. The rate depends on the company's activity, as follows:

- Fishing - 10%
- Telecom - 10%
- Industry - 10%
- Mining - 8%, including exploitation of coal mines; production of petroleum and natural gas; and extraction of iron, uranium, thorium, iron-free minerals, construction stone, clay, talc, sand and gravel, feldspar and salt.
- Commerce and restaurants - 8%
- Other - 5%, including farming, stockbreeding and forestry; production and distribution of electricity; production of gas; transportation services and services related to air transportation (such as travel agencies, storage and deposit); financial services of insurance and real estate; legal, audit and accounting activities; business consulting, consulting related to informatics and data processing; and advertising, health and medical services, and education.

Many oil & gas companies calculate this employee benefit using the 5% rate that applies to the "other" group of activities. This has been a matter of discussion at the judiciary level. Profit sharing is calculated on income before taxation, and the amount is deductible as an expense for determining income tax.

General Anti-Avoidance Rule (GAAR)

As of May 7, 2019, the GAAR has entry into force. This rule was introduced in the Peruvian Tax Code to assist the Tax Administration in responding to situations of tax avoidance and simulated transactions.

Thus, when facing tax avoidance situations, the Tax Administration can coercively request the corresponding tax debt, reduce tax credits, tax losses or eliminate a tax benefit (including the restitution of the taxes unduly refunded).

To exercise powers under the GAAR, Tax Administration must determine that the taxpayer has:

a) performed artificial or improper acts to achieve a specific tax result - whether individual or jointly with others; and,
b) the use of such artificial or improper acts creates legal or economic results different than regular tax savings obtained from the routine or proper acts.

Among other regulations, legal representatives are deemed to be considered jointly liable for the unpaid tax, the losses unduly taken, the tax credits unduly offset, among others, when GAAR is applied to an operation, provided that such representatives were involved in the structuring. Likewise, corporate directors shall comply with the obligation to review and approve operations structuring under GAAR considerations.

To determine the application of the GAAR within tax audits, Peruvian Tax Authority must follow a special procedure that requires the tax auditor to prepare a report with the arguments for applying GAAR to be sent to the Tax Authority Revision Committee, who is the only entitled to determine GAAR application and whose conclusion is mandatory for the Tax Authority.

Other tax issues

Tax Unit (UIT)

The UIT is the reference value considered for tax purposes to determine the taxable income, deductions and penalties, among others. This value is modified every year. For 2024, the Tax Units amount to PEN5,150.00 (USD1,375 aprox. at a PEN3.75 exchange rate).

Temporary net assets tax

The Temporary Net Assets Tax (ITAN) is equivalent to 0.40% of the value of total assets determined as of December 31st of the previous year over PEN1,000,000. The amount paid constitutes credit against the Corporate Income Tax and other tax obligations, or subject to refund.

Pre-operative entities are exempt from of this tax, during their first year of operations, but will be subject to the tax the following year.

Tax on financial transactions

A 0.005% tax is generally imposed on debits and credits in Peruvian bank accounts.

- Stamp tax
  Not applicable.

- Exchange controls
  Not applicable.

Transfer pricing

Peru has adopted transfer pricing guidelines, based on the arm's- length principle. The accepted methods are the comparable uncontrolled price (CUP) method, the resale price method, the cost plus method and the transactional net margin, as well as other related methods based on margins. The OECD guidelines can be used as a complementary source of interpretation. Advance Pricing Agreements (APA)may be negotiated with the tax authorities.

In Peru, these rules apply to transactions between local and international related parties, and to transactions with entities residents in tax havens. Note that adjustments to the value agreed between the related parties would apply only in the case where the value agreed between the parties would lead to an underpayment of taxes.

One or more legal entities are related parties if one of them participates directly or indirectly in the management, control or equity of the other entity, or whenever the same person participates directly or indirectly in the direction, control or equity of diverse related entities.

On 31 December 2016, Peru published Legislative Decree No. 1312 amending the Peruvian transfer pricing (TP) reporting requirements by implementing the changes proposed by the OECD under BEPS Action 13 final report. The bill expands the TP documentation requirements by introducing an obligation to submit both a local file (2017) and a master file (2018), as well as the implementation of country- by-country reporting (CbCR)(2018), provided that certain revenue thresholds are reached. Failure to comply could result in penalties.

Regulations were enacted in November 2017 for the preparation and submission of the TP formal requirements. To a great extent, the contents of the local file, master file and the CbCR adopted in Peru are largely in line with the recommendations specified in Action 13 of the BEPS Action Plan. These three documents, taken together, will require taxpayers to articulate consistent TP positions and will provide SUNAT with useful information to assess TP risks. They will also help the Peruvian Tax Authorities in determining where audit resources can most effectively be deployed, and, in event audits are called for, provide information to commence target audit inquiries. This marks a new era of TP documentation and disclosure requirements in Peru that is much more comprehensive, more detailed and more thorough than those required before, in terms of both depth and breadth.

In 2018, the second phase of the tax reform in Peru was carried out with relevant changes, which affected transfer-pricing matters. It is specific in terms of services between companies and the price of commodities.

For its part, Legislative Decree No. 1381 has modified, as of January 1, 2019, the transfer pricing method applicable to the determination of the price of commodities, in this sense, it indicates that the market value will be the contribution value that has been agreed upon by the taxpayer, provided that:

(i) It has been communicated to the SUNAT, 15 days before the shipment or disembarkation of the goods, attaching the contract or detail of the transaction; and

(ii) The foregoing is in accordance with the agreement of independent parties on equal or similar terms.

On the other hand, through Legislative Decree No. 1369 (DL 1369), it has been specified that as of January 1, 2019, the "benefit test", understood as the economic sustenance of why a company requires a service, will be applicable to support the deductibility of the expense in all the service operations between related parties, excluding the services provided by companies located in tax havens. It is necessary to specify the regulatory way, through Supreme Decree No. 337-2018-EF, the documentation and information has been established with which it must be counted in order to prove that a service provided meets this test.

Another issue addressed by DL 1369 is related to the guidelines imposed to quantify the remuneration for services between related parties, for deducting the consideration of said as cost or expense, the resident entity must:

(i) satisfy the benefit test (i.e., demonstrate that the intragroup services provided an actual commercial or economic benefit); and

(ii) have supporting documentation, providing the nature of the services and proof that: (a) the services were rendered; (b) there was a real need for the services; and (c) the service provider incurred costs and expenses.

International Free Trade Agreements and other commercial agreements

The main agreements executed by the Peruvian government in order to gain access to international markets are the following:

Andean Community (CAN):

Peru fully enjoys the benefits from the free trade zone established by this agreement for all its member countries (Bolivia, Colombia, Peru and Ecuador). Since Venezuela is no longer a member of the CAN, Peru has celebrated a Bilateral Agreement with Venezuela, which has been in force since August, 2013. Also, Peru, as member of the Andean Community, has other obligations and commitments regarding other topics besides the free trade zone.

Southern Common Market (Mercosur):

Partial agreements executed by the Peruvian government with each of the member countries (Brazil, Argentina, Paraguay and Uruguay) are in force. By means of the aforementioned agreements, Peru and Mercosur member countries have reciprocally granted each other preferential customs duty rates.

Pacific Alliance:

Peru, Mexico, Colombia and Chile are members of the Pacific Alliance which supports a deeper integration towards free circulation of goods by preferential tariff treatment (complying with origin conditions and direct expedition), services, capitals and people among member countries.

Bilateral Free Trade Agreements

Bilateral Free Trade Agreements with the United States, Australia, Canada, China, Chile EFTA States (Iceland, the Principality of Liechtenstein, the Kingdom of Norway and the Swiss Confederation), Mexico, Japan, Singapore, Thailand, Republic of Korea, Panama, European Union, Costa Rica and Honduras are already in force. In addition, Peru has celebrated the Partial Agreement with Cuba (ACE 50).

On May 2019, Peru along with Colombia and Ecuador (Andean countries); have signed a Trade Agreement, with the UK (United Kingdom of Great Britain and Northern Ireland).

In the meanwhile, Peru and the UK, have made temporary arrangements to continue preferential trade benefits until the UK-Andean Trade Agreement comes into effect.
In order to apply any of this preferential treatment, goods must meet, certain requirements including origin and direct expedition requirements.

Peru has concluded Free Trade Agreement negotiations with Brazil and Guatemala; as well as the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) along with Australia, Brunei Darussalam, Canada, Chile, Japan, Malaysia, Mexico, Nueva Zeeland, Singapore and Vietnam, which incorporates the provisions of the Trans-Pacific Partnership Agreement and suspends the application of some of those provisions (which already had negotiations concluded but not in force yet), such as intellectual property) set out in the Annex to the text of the Agreement.

Furthermore, Peru maintains negotiations with Turkey, El Salvador and India in order to subscribe free trade agreements. Finally, it is important to mention that Peru is a founding member of the World Trade Organization (WTO). Therefore, the WTO's regulations regarding antidumping practices, subsidies, countervailing duties and service market liberalization, among others, are applicable in Peru.

3 Special Fiscal Rule

a. Oil & Gas

At a glance

The fiscal regime that applies to the oil & gas industry in Peru consists of a combination of corporate income tax, royalties, and other levies.

Hereunder, we provide a brief char on this matter:

Income Tax rate	29.50%(1) (2)
Hydrocarbon Royalties	Different type of royalties depending on the License Contract
Capital allowances	Ring-fence rules and preoperative investment amortization
Investment incentives	Tax losses can be carried forward for 4 years or indefinitely; stabilization agreements; VAT recovery; VAT exemptions on imports of goods for exploration activities

(1) Oil & gas companies with license or service agreements are subject to a 2% premium. These 2 points should be added to the current Income Corporate Tax rate, resulting in an Income Tax rate of 31.5%.
(2) In addition, they must pay a 5% employee profit sharing.

In general terms, oil & gas companies are subject to the general corporate income tax regime; nevertheless, there are certain special tax provisions for the oil & gas sector.

Special rules for investments in hydrocarbon activities

Hydrocarbon law provides that exploration and development expenditures, including the investment contractors may make up to the production date (when the commercial extraction of hydrocarbon starts) can be accumulated in an account. At the contractor's option and regarding each contract, the amount is amortized using either of the methods below:

- On the basis of the production unit.
- Through linear amortization, deducting the expenditures in equal portions during a period of no less than five fiscal years.

Any investments in a contract area that did not reach the commercial extraction stage and that were totally released, can be accumulated with the same type of investments made in another contract that is in the process of commercial extraction. These investments are amortized in accordance with the amortization method chosen in the letter contract.

If the contractor has entered into a single contract, the accumulated investments are charged as a loss against the results of the contract for the year of total release of the area for any contract that did not reach the commercial extraction stage, with the exception of investments consisting of buildings, power installations, camps, means of communication, equipment and other goods that the contractor keeps or recovers to use in the same operations or in other operations of a different nature.

Once commercial extraction starts, all amounts corresponding to disbursements with no recovery value are deducted as expenses for the fiscal year. Expenses with no recovery value occur at the start of commercial extraction for the following purposes:

- Investments for drilling, completing or producing start-up wells of any nature, including stratigraphic ones, and excluding acquisition costs of surface equipment.
- Exploration investments, including those related to geophysics, geochemistry, field geology, gravimetry, aerophotographic survey and seismic surveying, processing and interpreting.

The Manual of Accounting Procedures to be filed before Perupetro must detail the accounts considered as expenditures without any recovery value.

Ring-fence rules for oil & gas contracts

The contractor determines the tax base and the amount of the tax, separately and for each contract. If the contractor carries out related activities (i.e., activities related to oil & gas, but not carried out under the terms of the contract) or other activities (i.e., activities not related to oil & gas), the contractor is obligated to determine the tax base and the amount of tax separately and for each activity.

The corresponding tax is determined based on the income tax provisions that apply in each case (subject to the tax stability provisions for contract activities and based on the regular regime for the related activities or other activities).

The total income tax amount that the contractor must pay is the sum of the amounts calculated for each contract, for both the related activities

and for the other activities. The forms to be used for tax statements and payments are determined by the tax administration.

If the contractor has more than one contract, it may offset the tax losses generated by one or more contracts against the profits resulting from other contracts or related activities. Likewise, the tax losses resulting from related activities may be offset against the profits from one or more contracts.

It is possible to choose the allocation of tax losses to one or more of the contracts or related activities that have generated the profits, provided that the losses are depleted or are compensated to the limit of the profits available. This means that if there is another contract or related activity, the taxpayer can continue compensating tax losses until they are totally used.

A contractor with tax losses from one or more contracts or related activities may not offset them against profits generated by the other activities. Furthermore, in no case may tax losses generated by the other activities be offset against the profits resulting from the contracts or from the related activities.

Hydrocarbon Royalty

As mentioned before, oil & gas exploration and production activities are conducted under license or service contracts granted by the Government. Under a license contract, the investor pays a royalty, while under a service contract, the Government pays remuneration to the contractor.

In both cases, however, the distribution of the economic rent (royalty or remuneration) between the Government and the investor is determined based on the following methodologies:

- Production scales

  This methodology establishes a percentage of royalty (or brackets of royalties starting at 5) over certain scales of production (volume of barrels per calendar day) for the fiscalized liquid hydrocarbons and the fiscalized natural gas liquids, and other royalty percentages for the fiscalized natural gas for each valuation period.

  Note that the fiscalized hydrocarbons (i.e. liquid hydrocarbons, natural gas, etc.) means those produced and measured in a specific fiscalized production point set between the investor and the Government in order to establish the quality and volume of hydrocarbons, according to API (American Petroleum Institute) and ASTM (American Society for Testing and Materials) regulations.

  Based on the scales of production, the percentage of royalty is:

Scales of production (per barrels per calendar day)	Percentage of royalty
< 5	5%
5-100	5% to 20%
> 100	20%

- **Economic results (RRE)**

  According to this methodology, the royalty percentage is the result of adding the fixed royalty percentage of 5% to the variable royalty percentage. The variable royalty percentage is calculated once the ratio between revenues and expenditures, as of the previous year, is at least 1.15. The variable

royalty will be applicable in a range between 5% and 20%.

- **Other Methodologies**

"R" Factor and Cumulative Production per Oil Field with price adjustments are alternative methodologies. In the case of "R" Factor, the royalty is calculated by applying a ratio between revenues and expenditures within a certain period established in the contract. For these purposes, the minimal percentage of royalty is:

"R" Factor	Percentage of royalty
From 0.0 < 1.0	15%
From 1.0 < 1.5	20%
From 1.5 > 2.0	25%
From 2.0 or more	35%

The definitive percentages will be negotiated and established in each Contract.

On the other hand, in the case of Cumulative Production per Oil Field with price adjustments, the royalty is calculated based on a specific percentage per Oil Field of a Contract. The royalty is adjusted based on two factors: the cumulative production of each Oil Field and the average price per barrel of such production.

Hydrocarbon royalties paid by oil & gas companies shall be considered a deductible expense for income tax purposes companies shall be considered a deductible expense for income tax purposes.

Incentives

- **Relief for losses (consolidation of losses on hydrocarbon activities):**

Tax losses can be carried forward and offset against net income derived in future fiscal years.

The provisions currently in force require the taxpayer to elect one of the following procedures to offset the tax losses:

- Offset the total net tax losses from Peruvian sources incurred in a tax year against net income derived in the four fiscal years following its generation. The amount of losses not offset after this term is cancelled.

- Offset the total net tax losses from Peruvian sources obtained in the tax year against 50% of the net income obtained in the following years, without limitation.

The election should be made when the annual income tax return is filed and it cannot be changed until the accumulated losses are fully utilized.

Loss carrybacks are not allowed.

- **Special incentives for hydrocarbon investors: Stability regime**

The Organic Law for Hydrocarbons and the related tax regulations foresee that the signing of an oil & gas agreement implies the guarantee that the tax regime in effect at the date of signature will not be changed during the life of

the contract. This is intended to preserve the economy of the contract so that no further tax costs are created for the contractors.

The signing of an agreement for the exploration or exploitation of a block "freezes" the tax regime in force at the date in which the contract is signed for the entire contract applicable term. Taxes covered by this provision are the taxes in which the responsibility rests on the contractor as a taxpayer.

Specifically, tax stability covers the following:

- Income Tax, but an additional two percentage points must be applicable to the rate in force at the signing date (i.e. current Income Tax rate of 29.5% plus 2%). Taxes that affect profit distributions arising from the contract activities (i.e., dividend tax or branch profits tax) are also covered by the tax stability.
- Indirect taxes (Value Added Tax, Municipal Promotion Tax, and Selective Consumption Tax), but only as to its transferable nature.
- Tax exemptions and other tax benefits, but subject to the term and conditions established in the provision that contain such benefits.
- Tax recovery regimes, temporal admission regimes, export regimes and other related.

It is important to note that tax stability is, in essence, granted for the contract activities and not directly for the entities that signed the contract. Therefore, changes in the contractor's ownership will not affect the tax stability. The tax stability only covers the contract activities (i.e., the exploration and exploitation of hydrocarbons) and no other related or distinct activities that may be performed by the legal entity (e.g., downstream activities). Revenues obtained from the sale or exports of the extracted hydrocarbon are included in the activities covered with tax stability.

- **Special custom duties:**

VAT exemptions on import of goods for the exploration phase

The import of goods and supplies required for carrying out exploration activities in the exploration phase is exempted from all taxes. The list of goods to which this exemption applies is published by the Ministry of Economy and Finances (MEF).

This exemption will not be applicable if the imported goods are used in other activities rather than exploration or if they are sold to third parties, unless:

- They are sold or delivered to third parties for use in exploration activities.
- They are re-exported with the previous authorization of Perupetro.
- They are used in exploration activities during the exploration phase of another hydrocarbon contract for the same contractor.
- They are sold or delivered to a company authorized to imports those goods free from all taxes. It is important to mention that this must be communicated to the Customs Administration.

Temporary importation

Goods required for the execution of hydrocarbon contracts may be brought into Peru on a temporary basis for a period of 2 years without the payment of duty or taxes and re-exported afterwards in the same state as they were at import. This term can be extended for a one-year period, up to two times.

There are conditions placed on temporary imports. The most important condition is that you export the goods within the time limits approved. In addition, a guarantee needs to be filed at the time of import.

The guarantee is an amount equal to the duty and taxes that would have been payable at import, plus compensatory interests. If the goods are not exported within the time limit you will have to pay an amount equal to the duty and taxes that would have been payable when you first imported the goods, as if the goods had not been treated as temporary imports, plus interests.

Selective Consumption Tax (ISC)

On May 9, 2018, Supreme Decrees approved by the Ministry of Economy and Finance were published, by means of which modifications have been introduced regarding the goods affected by the Selective Consumption Tax –among them fuels- and the applicable tax rates. These modifications became effective the day after they were published.

In the case of fuels, the modifications were approved taking into account the Index of Noxiousness of Fuels prepared by the Ministry of Environment, in order to discourage the consumption of fuels that pollute the most and encourage the substitution of less polluting ones, and the use of cleaner technologies. Users must pay more taxes for using one fuel more polluting than another.

- **Reimbursement on oil products acquisitions:**

  Oil & gas companies located in the region of Madre de Dios can obtain a reimbursement on the ISC that levied their oil products acquisitions.

  In both cases, oil & gas companies should be located in the mentioned regions, be registered in the Public Registry of such location, and must have more than 70% of its shares and/or activities in the Amazon region. These requirements do not apply to oil & gas extractor and refining companies.

▸ **FISE Contribution**

The Energetic Social Inclusion Fund (FISE) is a fund established by the Peruvian State, which originally worked as a mechanism to promote the inclusion of the population in need to the supply of energy, with the following objectives:

1. To massify natural gas for housing and vehicle purposes
2. Extend the energy frontier by the use of renewable energy
3. Generate access to LPG to vulnerable sectors of the population
4. Work as a compensation mechanism related to residential electricity

Its financing sources come from the great electricity consumers (mining and industry, mainly), natural gas transport service through pipelines (Camisea), and production and imports of fuels. The hydrocarbon and electricity companies, which carry out these activities, are responsible for collecting these contributions and transferring them to the Supervisory Body of Private Investment in Energy and Mines (OSINERGMIN).

OSINERGMIN is the entity in charge of managing these contributions. The FISE contribution can be executed in any of the aforementioned goal through a myriad of diverse energy projects established by the Energy and Mines Ministry.

b. Electricity

In general terms, electricity companies are subject to the general corporate income tax regime described previously; nevertheless, there are certain special tax provisions for the electricity generation with water resources and other renewable resources. In addition, certain benefits have been approved for holders of geothermal resources concessions.

All these special rules have been approved in the framework of the energy matrix diversification policy, articulating the instruments of environmental management with the promotion and development of a low carbon economy, promoting relations and coherence between the regulatory policy of clean energy use in development of any private initiative and the tax policy.

Accelerated depreciation benefit

The generation of electricity with renewable resources such as hydroelectricity is characterized by low production costs (operating stage) but very high investment costs (construction stage), compared to other types of technologies for energy generation. Certainly, the large hydroelectric plants have a construction period that on average is 4 to 5 years and an investment cost per MW of installed power quite expensive, between USD1.2 to 1.4 million, compared with other technologies such as the natural gas thermoelectric plants that have a construction period between one year and a year and a half and average investment cost of USD0.4 million per MW, which makes the hydroelectric plants a long-term business.

On average, a large hydroelectric plant operates only in the sixth year in order to obtain profits from the sale of electricity, however, gas thermal power plants begin to make their business profitable in two years from the beginning of the investment. Thus, a hydroelectric power station has a construction time and an investment cost three times greater than that of thermal power plants. This situation required the promotion of fiscal incentives to guide investment in the construction of hydroelectric power plants, instead of thermal power plants.

Considering that investors make decisions evaluating lower costs and shorter periods of investment recovery, the benefit of accelerated depreciation was approved in 2008 for projects that use renewable energy as source for generating electricity.

Legislative Decree No. 1058 provides that accelerated depreciation shall be applicable to the machinery, equipment and civil works necessary for the installation and operation of the plant, which are acquired and / or constructed. For these purposes, the annual depreciation rate will be no greater than 20% as annual global rate, and the rate may be changed annually by the holder of the generation concession prior communication to SUNAT.

This benefit will be valid until December 31, 2025.

Guarantees of investment promotion in geothermal resources

The only renewable resource that has a special promotion law is geothermal energy. Law No. 26848 and its Regulations establish special rules for holders of geothermal resources concessions, which are pretty similar to the fiscal rules provided for oil operations described above.

When these holders are branches of companies incorporated abroad, the income tax will only be collected on their taxable income from a Peruvian source.

Stability regime

The State guarantees to the holders of geothermal rights that the tax regime in force at the moment that the authorizations are granted or the contracts for the geothermal resources concession are signed, will remain unchanged during their validity period. As in the oil industry, taxes covered by this provision are the taxes in which the responsibility rests on the contractor as a taxpayer.

Ring fence rules for activities of exploration or exploitation of geothermal resources

The holders of authorizations and concessions that carry out activities of exploration or exploitation of geothermal resources, in more than one concession contract and that also develop other activities related to geothermal resources and related energy activities, will determine the results of each exercise independently by each contract and for each activity for the purpose of calculating the income tax.

If one or more concession contracts or activities generate carryover losses, these may be offset with the profit generated by another or other concession contracts or related activities, at the option of the concessionaire. This means that after offsetting losses with the profit of the project, the concessionaire can continue offsetting tax losses of another contract or related activity until they are fully compensated.

The corresponding tax is determined based on the income tax provisions that apply in each case (subject to the tax stability provisions for contract activities and based on the regular regime for the related activities or other activities).

Investments amortization

Exploration expenses, as well as the investments made by concession holders until the date on which the commercial exploitation of the geothermal resources begins, including the cost of the wells, will be accumulated in an account which amount, at the option of the owner and for each contract, will be amortized based on the production unit; or by linear amortization, deducting them in equal portions, for a period of not less than five years.

The concession contract must specify the amortization method used by the owner, which cannot be varied. In the case of opting for the lineal amortization method, the period in which the amortization will be made must be agreed in the same contract. The depreciation made by the holders must be communicated to the Tax Administration (SUNAT).

Once commercial exploitation starts, all items corresponding to expenses that have no recovery value will be deducted as an expense of the year. The use of depreciable assets will be compensated through the deduction of the write-offs that will be computed annually, according to the common system of income tax, on the date of subscription of each contract. The expenses for services rendered by non-resident entities shall be deductible from income tax, subject to compliance with the requirements established in the respective regulations.

Note that the investments made in a concession contract, in which the commercial exploitation stage has not been reached, can be accumulated to the same type of investments made in another contract in which this stage has been reached and the total will be amortized in accordance with the amortization method chosen in the contract.

Special custom duties: Import

The import of goods and supplies required by the holders of geothermal resources authorizations for exploration activities, are exempt from all taxes, including those that require express mention, for the duration of such authorization, according to the list of goods to be approved by Supreme Decree.

Holders of geothermal rights may not export the goods entered under the exemption regime described before, nor may they be used for other purposes, except as provided in the General Customs Law and its regulations.

Special Contributions

Osinergmin Contribution

Electricity companies that are holders of generation, transmission and distribution concessions of electric power, as well as of the entities that exclusively develop generation activities through authorization, should pay this contribution to OSINERGMIN. The rate of this contribution is 0.46% for 2023, 0.43% for 2024 and 0.41% for 2025, applied on their monthly billing after deducting VAT.

OEFA Contribution

Electricity companies that are holders of generation, transmission and distribution concessions of electric power, as well as of the entities that exclusively develop generation activities through authorization, should pay this contribution to the OEFA. The rate of this contribution for years 2023-2025 is 0.10% applied on their monthly billing after deducting VAT.

FISE Contribution

As we described for the oil industry, FISE is a national fund for promoting the inclusion of the population in need to the supply of energy, whose financial incomes come from the surcharge on the monthly billing of the great electricity consumers (mining and industry, mainly). Thus, the companies that provide electricity to this group of consumers are responsible for collecting these contributions and transferring them to OSINERGMIN.

FOSE Contribution

The Electric Social Compensation Fund (FOSE) is aimed of allowing access and permanence of electricity service to all residential users of the public electricity service whose monthly consumption is less than 100 kilowatt hours per month included in the BT5 tariff, residential tariff or the one that later replaces it.

Its financing source comes from a surcharge on the monthly billing of power, energy and fixed monthly charges invoiced to public electricity service users of the interconnected systems not included in the scope of FOSE beneficiaries. This surcharge will be established based on a percentage that will be determined by the OSINERGMIN based on the sales projection of the following period. OSINERGMIN is the entity in charge of managing these contributions.

The electricity distribution companies must present to OSINERGMIN a detailed monthly settlement of the surcharge for FOSE transferred to energy consumers because they are the responsible for collecting these contributions and transferring them to OSINERGMIN.

4 Labor legislation

Hiring personnel

Indefinite term contracts are the legal default scheme for hiring in Peru, although as an exception, fixed term contracts can also be signed. The fixed term contracts require an objective cause established by the law to enter into this type of contracts (for example, startup of a new business, works or specific services, substitution, etc.) and its validity is subject to compliance with certain formal requirements. These contracts provide employees with all the rights and benefits granted to employees hired for an indefinite term.

There are also other types of hiring schemes that grant different benefits, such as labor training modalities, part-time employees, among others.

The trial period is counted from the first day of the labor relationship and must have a maximum term of:

Once this period is completed, the employees are regarded as permanent and can only be dismissed under circumstances concerned with their behavior at work or their ability to carry out their duties.

Termination of employment contract

In accordance with the Peruvian Legislation, employees are protected against arbitrary dismissal.

In the event of unjustified dismissal, an employee may claim a severance payment equivalent to one and a half months salary per year of service (under an indefinite term working contract); or, one and a half months salary per pending month (under a fixed term work contract).The maximum severance payment is twelve salaries. Alternatively, the employee can claim the restitution to the same job previously occupied. In the case of managerial or confidence personnel, they are not entitled to restitution, and according to the last criterion established by the Court, they will be entitled to the severance payment only in some cases. The law allows collective dismissals under certain circumstances such as acts of God or force majeure, financial or technical streamlining, dissolution, bankruptcy or operating downsizing, without having to pay the severance payment.

Employees' benefits

Employers are required to provide the following benefits for employees:

Family allowance
Monthly payment equivalent to 10% of the Minimum salary (PEN102.50 since May, 2022)

Vacation
Equivalent to 30 calendar days of paid rest.

Legal Bonuses
2 bonuses per year, one paid in July and one in December, each one equivalent to one monthly salary approx. Additional Extraordinary Bonus equal to 9% or 6.75% of the legal bonus must be paid, depending if the employee is affiliated or not to the EPS.

Compensation for Time of Services (CTS)
Equivalent to approximately 1.16 monthly salary per year. 50% has to be deposited in May and the remaining 50% in November, in the bank elected by the employee.

Profit Sharing
The amount to be distributed ranges between 5% and 10% of the taxable income, depending on the activity of the employer. This benefit is applicable for companies employing more than 20 individuals.

All these benefits are deductible for corporate income tax purposes.

Employers can negotiate a total annual compensation that includes all the benefits described above, except for the profit sharing, in a fixed monthly installment, as long as the employees earn a monthly salary higher than 2 tax units (PEN9,900 during 2023, approximately USD2,669).

Social contributions

Health Care Contribution
This contribution is paid by the employer and its purpose is to finance the social health system (named EsSalud in Peru), which provides health care services and pay subsidies in case of employee' disability. It is collected by the Peruvian Tax Administration (SUNAT). The amount contributed is equal to 9% of the employees' remuneration. If the company provides health coverage to its employees using its own resources or through an EPS (in Spanish, the acronym means Entidad Prestadora de Salud) it can request a credit of up to 25% of the Health Care contribution, subject to certain limits established by law.

Pension System Contribution
The employee can alternatively join the Government Pension System (GPS) or the Private Pension System (PPS). In the GPS, the employee must make contributions equal to 13% of his remuneration. In the PPS, the employee has to make contributions equal to an average of 13% of his monthly remuneration paid in cash. Regardless of the system chosen by the employee (GPS or PPS), the employer is responsible to withhold employees' contributions from their salaries.

Mandatory Life Insurance
This is a mandatory insurance paid for employees from the first day of services. The premium depends on the number of insured employees, the risk of the work they carry out, and in general, on the terms agreed with the insurance company.

High Risk Labor Insurance (SCTR)
This is a mandatory insurance to be paid by companies whose activities have a certain level of risk, such as fishing, construction, air transport, manufacturing, among others described in Appendix 5 of Supreme Decree No. 009-97-SA and provides additional coverage for health and pension plans. The contract for health services may be entered with EsSALUD or with a Private Health Care Provider (EPS); a contract for the pension coverage can be entered with the Government Agency for Pension Fund (ONP, due to its acronym in Spanish) or with a private insurance company. The rates depend on the type of activity and/or the terms agreed on with the insurance entity.

Other contributions
Additional contributions are applicable based on the company's activities, such as the Complementary Retirement Fund, which applies to mining, metal and steel companies; among other contributions.

Expatriates

Foreign individuals that enter into Peru to perform dependent activities for a local employer need to submit their work contract for approval to the Labor Authorities and obtain their work visa. These employees have the right to receive the same labor benefits as Peruvian employees and are subject to the same taxes and contributions. As a general rule, foreign employees should not exceed 20% of total personnel. Additionally, wages paid to foreign employees should not exceed 30% of total payroll cost. Such limits can be waived for professionals and specialized technicians or management personnel of a new entrepreneurial activity or in case of a business reconversion, among others.

Also, despite the certificate of labor and professional degree is no longer submitted in original before the labor authority, as proof of the foreigner's specialization, is necessary for the employer to hold it in their own registry in case of an eventual inspection.

No restrictions apply to foreign individuals working in Peru with Peruvian immigrant visa, individuals married to Peruvians or having Peruvian children, parents or siblings and foreign investors with a permanent investment in Peru of at least USD151,060 (PEN500,000.00). Bear in mind that foreigner cannot support investment through share transfer. This also applies to Spanish citizens and countries members of the CAN, which is a regional organization that aims Andean Integration of their members such as Bolivia, Ecuador, Colombia and Peru and citizens of Mercosur members or associates.

It is important to note that Peruvian legislation has stablished some labor benefits in favor of Venezuelan citizens.

Immigration

Foreigners can enter Peru under the following migratory qualifications, among others:

Visa	Rate	Tax Bases
Tourist	▼	This visa does not allow the holder to perform paid activities
Business	▼	This visa does not allow the holder to perform paid activities
Work	▲▼	This visa allows the holder to word in Peru (as dependent or independent). In case or work contract with a Peruvian company, it should be duly registered/or automatically approved by the labor ministry*
Designated employee	▲▼	This is a visa that applies to an employee of a foreign company. The service agreement and assignment letter must be submitted to the migratory authority. Those documents must be legalized by the Peruvian consulate and the Peruvian foreign ministry/apostilled. In order to obtain the Designated resident visa, the documents will need to be granted for an assignment of a minimum of 1 year.

▲ Resident ▼ Temporal ▲ Permanent

*Despite this, the work contract has to be presented before the authority.

Also, the following migratory qualifications are currently available, among others

Visa	Rate	Tax Bases
Training	▲▼	This visa allows the holder to study in Peruvian institutions or to be an intern in a Peruvian Company in activities related to his career
Investor	▲	This visa allowds the holder to establish, develop or manage investments according to Peruvian law.
Investigation	▲▼	This visa is for foreigner with knowledge and experience in science and technology fiels, that comes to Peru through the National Authority in Science and Technology. They are allowed to work.
International Agreement (Ex Mercosur	▲	This visa is for foreigners from countries that have international treaties and areements with Peru on inmigration matters. With the possibility to appy to a permanent visa 90 days prior the expiration of the residency
Permanent	▲	This visa is for foreigners who had been residents for a period or three years with economic support by their own or a family member (Peruvian or foreigner resident).

▲ Resident ▼ Temporal ▲ Permanent

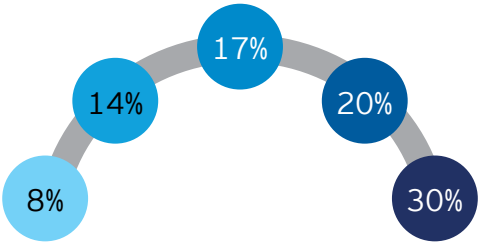
Individual taxes

According to the Peruvian Income Tax Law, the compensation received for services rendered within Peruvian territory will be considered as Peruvian Source Income regardless of the location of the entity or individual that is paying the income. Hence, the salary received by the employees or the expatriate for services rendered in Peru will be the taxable basis for Peruvian Income Tax.

It must be noted that the employers will be liable to withhold and remit to the Tax Authorities the employee's income tax. For such purpose, it must determine the employee's income tax debt and withhold the appropriate amount monthly, and pay the income tax to the Tax Authorities, based on the tax resident condition of the individuals and procedure established by law.

In case the employee is considered as non-resident for tax purposes, a fixed tax rate of 30% will be applicable over the salary received for his work in Peru, as of the first day of service, regardless of where is paid.

In the case of tax residents, a five-bracket accumulative income tax rate is applicable:



Note that the tax unit used in fiscal year 2023 was PEN4,950.

- 0 – PEN24,750
- PEN24,750-PEN99,000
- PEN99,000-PEN173,250
- PEN173,250-PEN222,750
- PEN222,750-more

In addition to the 7 tax units deduction to be applied on the residents gross income, as of year 2017, an additional 3 Tax Units can be deduced, subject to specific limits and requirements, expenses in hotels, restaurants and bar, professional fees for doctors and dentist, payments for services rendered that qualify as self-employed retribution (fourth category income) for specific professionals and payments made to EsSalud in favor of domestic workers, if reported through an Annual Income Tax Return.

It is important to mention that all the expenses mentioned above have to be paid through payment methods approved by Tax Administration if the amounts paid exceed PEN2,000.00, that is to say, through the financial system in bank transfers, credit and/or debit cards payments (not cash).

In the case of taxing non-resident individuals entering the country temporarily to perform the following activities, they would not be taxed for revenues obtained in their home country, since they are not considered as Peruvian source income:

- Acts that precede a foreign investment or any other business.
- Supervision or control of an investment or business (i.e. gathering data or information, meeting public or private sector personnel, etc.)
- Hiring local personnel.
- Signing agreements or similar documents.

If foreigners come from countries that have agreements with Peru in order to avoid double taxation (Chile, Canada, Brazil, Mexico, South Korea, Switzerland, Japan and Portugal) or countries from the Andean Community (Ecuador, Colombia and Bolivia) other tax regulations may apply.

Finally, notice that domiciled individuals will be liable to file a tax return, provided they receive income other than employment income and the law establishes such obligation (i.e. a domiciled individual who receives remuneration and interest from a bank account abroad). Hence, there is no obligation to file a tax return if domiciled individuals receive only employment income.

V. ESG APPROACH IN PERU

1 ESG Reporting

a. Context

According to the latest Global Risks Report 2023 elaborated by the World Economic Forum, eight out of ten short-term (2-year) and long-term (10-year) risks will have a direct connection to environmental or social issues, which poses challenges and opportunities for sustainability and social responsibility in the coming years. In this context, organizations are faced with the need to adopt more robust ESG (Environmental, Social and Governance) strategies to manage the risks that have been accentuated with the return to global economic activity.

Companies that set ESG priorities gain a significant advantage in generating long-term value and are optimally positioned throughout their value chain. To this end, the EY Climate Change and Sustainability Services (CCaSS) team elaborated the report ESG Overview of Latin American Companies, which collects through interviews with directors of more than 400 companies from 19 industries in Mexico, Colombia, Costa Rica, Panama, El Salvador, Guatemala, Dominican Republic, Nicaragua,

Peru, Venezuela, Bolivia, and Ecuador; the level of progress in the implementation of strategies with ESG criteria based on a maturity scale.

Grouping priority themes into eight ESG pillars; the survey revealed that companies in the region are still at a first level of maturity. In addition, Colombia, Mexico, and Costa Rica are the most advanced countries in the region due to international policies and commitments they have acquired. In terms of results, 77% of leaders surveyed consider it important that the ESG strategy is aligned with the organization's vision and purpose. In addition, 58% of companies value the relationship with stakeholders, however, a smaller percentage consider the relevance of their perspectives in the definition of material issues.

Of leaders consider it reasonable to address ESG issues with customers and suppliers, and only 43% of companies extend their ESG policies to their value chain.

Consider climate change issues a current concert for your organization.

Source: ESG Overview of Latin American Companies, EY.

In Peru, the prioritization of the eight strategic pillars according to the companies surveyed is led by Leadership and Strategy (61%), Stakeholder Relations (51%), Materiality and Risk (44%), and Culture and Capabilities (41%); while in the last four positions are the pillars of Climate Change (37%), Governance, Disclosure and Assurance (36%), Value Chain (34%) and Systems and Technologies (30%).

b. Progress and Challenges in Corporate Climate Disclosure

While non-financial reporting plays a critical role in the decarbonization process, and it is crucial that companies adopt greater ambition in their approach in line with international standards and political regulation; it is important to recognize that concrete action is required beyond data disclosure. Several countries in Central and South America have set a goal of "Net Zero" by 2050, including Argentina, Colombia, Costa Rica, and Brazil; The latter whose central bank has published new rules on social, environmental and climate disclosures, which came into force in December 2022.

According to the Global Climate Risk Disclosure Barometer, a comprehensive study based on public statements from more than 1,500 companies in 47 countries on the adoption of the Task Force on Climate-related Financial Disclosures (TCFD); companies continue to improve the extent and quality of their climate reporting. However, they may not yet be comprehensively addressing the associated physical and transition risks, or the opportunities that could arise around these risks. In addition, the study highlights that companies are not adequately disclosing the financial impact of climate change in their financial statements.

The identified gap between coverage (84%) and quality of corporate reporting (44%) suggests that while more companies are reporting on climate risk, they are struggling to provide meaningful information about the challenges they face.

In addition, companies using the Climate Disclosure Project (CDP) disclosure system were found to be more likely to achieve higher coverage and quality of TCFD recommendations. Following the trend of previous Barometers, the sectors most exposed to transition risk generally performed better in 2022, both in terms of quality and coverage.

Sectors with the most significant exposure to transition risk continue to score higher

Sector	Quality 2021	Quality 2022	Coverage 2021	Coverage 2022
Banks	46%	39% ↓	77%	77% ↑
Financial asset owners and managers	25%	35% ↑	48%	72% ↑
Insurance	38%	51% ↑	57%	90% ↑
Other financial institutions	NA	46%	NA	86%
Agriculture, food and forest products	35%	37% ↑	65%	76% ↑
Energy	48%	51% ↑	78%	93% ↑
Materials and bulling	NA	46%	NA	87%
Mining	38%	42% ↑	68%	85% ↑
Real estate	36%	40% ↑	67%	83% ↑
Transportation	50%	46% ↓	77%	84% ↑
Retail, health and consumer goods	42%	44% ↑	67%	86% ↑
Telecomunications and technology	50%	46% ↓	79%	87% ↑

Source: Global Climate Risk Disclosure Barometer, EY CCaSS.

c. Disconnect between investors and financial leaders on ESG

With the adoption of new strategies that respond to the decarbonization of various sectors, companies globally are investing more time, resources, and leadership efforts in ESG, yet there remains a significant disconnection between the respective expectations and goals of companies and their investors when it comes to business and sustainability outcomes.

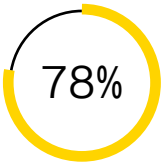
In this context, the latest edition of EY Climate Change and Sustainability Services (CCaSS) 2022 Institutional Investor Survey reveals that, for both companies and investors, the long-term vision is inseparable from sustainability considerations. However, when it comes to the trade-off between short-term profits and long-term value creation, there is a discrepancy between the perspectives of investors and financial leaders.

In addition, the survey indicates that there is a fundamental gap between companies and stakeholders when it comes to sustainability performance and corporate reporting, with companies focusing more on short-term pressures from certain investors, while investors say they do not receive solid information about the company's long-term growth strategy.

In Latin America, there are multiple reasons why investors are willing to make long-term, sustainable investments over immediate profits. Of the 76% of willing respondents, these reasons focus on improving long-term growth potential and building their brand reputation.

In addition, nearly three-quarters (73%) of investors surveyed reportedly say that "organizations have largely failed to create integrated information that encompasses both financial and ESG information, which is critical to our decision-making."

What investors think



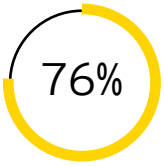
More than three quarters of investors surveyed thik companies should made investments that address ESG issues relevant to their business even if it reduce profits in the short term.

What companies think

But only just over half of finance leaders surveyed believe their company should address ESG issues relevant to the business, even if doing so reduces short-term financial performance and profitability.

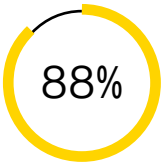
What investors think

Concern over cherry-picking



Three-quarters of inventors surveyed say "companies are highly selective in what information they provide to investors, raising concerns about greenwashing."

Skepticism about transparency commitment

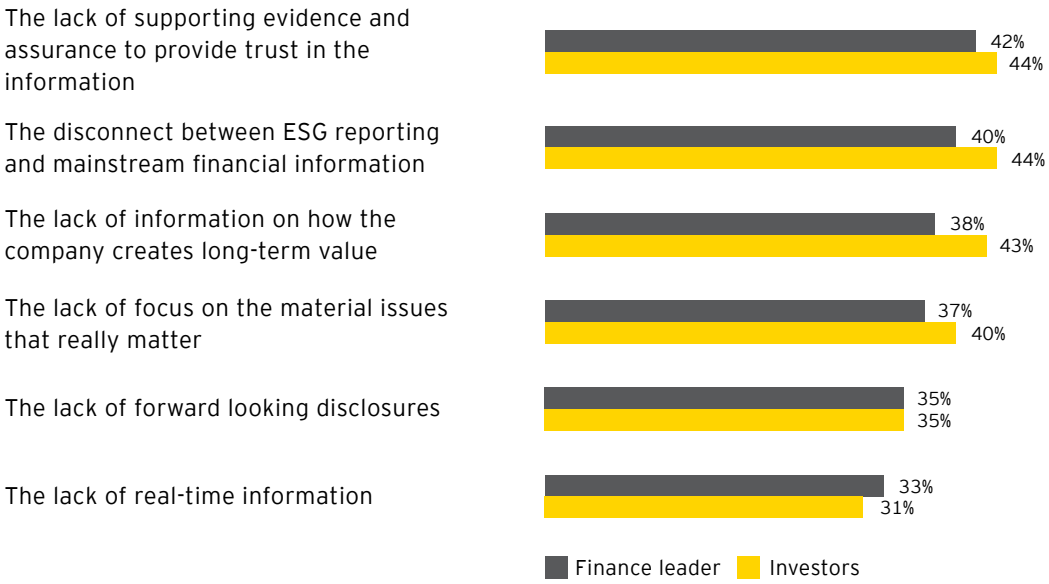


More than three-quarters of investors say "unless there is a regulatory requirement to do so, most company provided us with only limited decision-useful ESG disclosures.

Source: 2022 EY Global Institutional Investor Survey.

Question: Both investors and companies were to say if any of the following aspect are challenges to the usefulness and effectiveness of companies´ sustainability disclosures.

Challenges to the usefulness and effectiveness of today´s corporate ESG reporting



Source: 2022 EY Global Institutional Investor Survey.

Based on these statistics, the survey highlights two specific challenges that companies need to address in order to close the identified gap and create greater long-term value:

- Gain a better understanding of investors' expectations for sustainability and how information can address important ESG issues and gain the trust of stakeholders.
- Build trust in ESG information, which can be affected by ongoing concerns about the transparency and quality of corporate reporting and the sustainability reporting requirement for investors.

d. Corporate Sustainability Reports for issuers of the Lima Stock Exchange (BVL)

The Superintendency of the Securities Market (SMV), in order to obtain information on the policies, standards and actions that issuers have been implementing to ensure their sustainability, creating long-term value and providing information about their activities and management of risks inherent to economic, environmental and social development; makes available to investors and the general public, information of 174 issuers with securities registered in the Public Registry of the Securities Market (as of April 29, 2024) that submitted the Corporate Sustainability Report for the year 2023, approved by Superintendent's Resolution No. 018-2020-SMV/02.

The 26 questions evaluated by the Corporate Sustainability Report format are classified based on the following dimensions and components:

Environment and Climate Change
Environmental Policy (2 questions)
Greenhouse Gas Emissions (2 questions)
Water (4 questions)
Energy (2 questions)
Solid Waste (2 questions)

Social
Stakeholders (3 questions)
Labor rights (7 questions)
Human rights (2 questions)

Additional information
International Certification (1 question)
Other Sustainability Report (1 question)

Source: Corporate Sustainability Report - RSUP N° 018-2020.

Of the 174 companies from different economic sectors that presented the Corporate Sustainability Report, 54.6% recorded annual revenues of up to PEN350 million. On a holistic level, the social dimension is the one that shows the highest degree of progress with an average of 76.8%.

At the component level, the best implemented aspects are related to Labor Rights (79.0%) and Environmental Policy (78.2%); Likewise, at the question level, the greatest progress in implementation refers to the absence of social controversies with stakeholders (96.0%), while the least progress corresponds to the measurement of the water footprint (14.4%).

Other main results include:

- Progress of 49.4% is reported in the implementation of standards and actions in the field of the environment and climate change.
- Of the 80 companies that claim to measure their Greenhouse Gas (GHG) emissions, 70 have carbon footprint certification or reporting, with 11 of these companies being members of the S&P/BVL ESG.
- 46.0% of companies measure their GHG emissions, but only 37.4% have targets or targets to reduce them. Likewise, of the 65 companies that do have targets, only 27 have board approval for the establishment of these goals.
- In the social dimension, the aspects of labor rights (79.0%) and interest groups (74.3%) stand out.
- 54.0% of companies report including ESG aspects in their purchasing criteria and/or selection of suppliers of goods and/or services. Of the total of these, about 62.8% are companies whose annual revenues are above PEN350 million.
- 21.3% of the companies have international certifications in Corporate Sustainability, and of these, 12 have ISO certifications related to environmental management (certification 14001).

e. International Sustainability Reporting Frameworks

1. Sponsored by the FSB and more than 30 central banks, TCFD framework was formed to develop voluntary and consistent climate-related financial disclosure that would be useful to investors, lenders, and insurance underwriters in understanding material risk.

2. The TCFD recommendation approached climate-related financial disclosure through the lens of financial materiality and focus on the financial impact of climate-related risk and opportunities on an organization, rather than the impact of an organization the environment,

6. Organizations would now be able to provide globally consistent disclosures that focus on how sustainability topics affect the enterprise value linking then with the financial statements.

3. The TCFD recommendations largely helped organization streamline their climate-related disclosure but were limited towards climate change only.

5. As part of the proposals, companies would report on all relevant sustainability topics and not just on climate-related risk across four content areas that are in line with TCFD -i.e. governance, strategy, risk management, and metrics & targets.

4. The IFRS Foundation thus understanding the need announced the creating of its new International Sustainability Standard Board (ISSB) tasked with developing and comprehensive global baseline of high-quality sustainability disclosure standards to meet investor needs and generate quality information.

Below is a summary of the status and progress of sustainability and climate change reporting frameworks at the regulatory and policy level under the Financial Reporting Standards (IFRS), European Sustainability Reporting Standards (ESRS) and Securities and Exchange Commission (SEC).

Norm/ Standard	Context	Description	Update
International Financial Reporting Standards (IFRS)	International Financial Reporting Standards (IFRS) established the International Sustainability Standards Board (ISSB) as responsible for developing a global baseline of sustainability disclosures. Two standards were established that result in a comprehensive, high-quality global benchmark focused on the needs of investors and financial markets: IFRS S1 (General Requirements for Disclosure of Sustainability-related Financial Information) and IFRS S2 (Climate-related Disclosures).	It seeks to require an entity to disclose information about its risks and opportunities through a standard that sets out general sustainability-related disclosure requirements, and another that specifies climate-related disclosure requirements, to provide investors and other market participants with information about sustainability-related risks and opportunities to assist them in decision-making.	▸ At the end of June 2023, the ISSB published the final version of its inaugural standards, IFRS S1 and IFRS S2. Just weeks after the publication of the standards, a growing number of countries have indicated that they plan to adopt the standards within their jurisdictions, including Colombia, Canada, Australia, the United Kingdom, and others. ▸ Considering the effective reporting period starting from 2024, mandatory enforcement depends on each country's approval or regulatory process. ▸ Shortly after the publication of IFRS S1 and IFRS S2, ISSB announced that it would take over TCFD monitoring, further consolidating the long-standing availability of issuers of voluntary sustainability disclosure standards. ▸ ISSB has two open consultations for public comment related to its 2024-2026 work plan and the international applicability of the Sustainability Accounting Standards Board (SASB).

Norm/ Standard	Context	Description	Update
European Sustainability Reporting Standards (ESRS)	After the European Commission adopted the legislative proposal for the Corporate Sustainability Reporting Directive (CSRD) in 2021, companies included in the scope would have to report from 2024, the year it comes into force, according to the European Sustainability Reporting Standards (ESRS). This first set of ESRS, comprising 12 cross-cutting and thematic standards, follows the CSRD proposal and covers environmental, social and governance issues.	It seeks to provide a wide variety of stakeholders with relevant, comparable, and reliable information about a company's sustainability-related impacts, risks, and opportunities.	▸ The European Commission completed its final public consultation on the first set of European Sustainability Reporting Standards (ESRS) ahead of their initial implementation from January 2024. ▸ The Commission is expected to make some limited revisions to the rules based on the comments received and adopt the rules by 28 July 2023. ▸ Additional updates were made to the latest draft standards, most aimed at reducing the regulatory burden on companies, including that all requirements will be subject to a materiality assessment with the exception of "ESRS 2 General Disclosures"; more requirements will be added over time; certain disclosures will be voluntary, including biodiversity transition plans; and greater flexibility will be allowed for certain disclosures, including the methodology for the materiality assessment process.
Securities and Exchange Commission (SEC)	In March 2022, the Securities and Exchange Commission (SEC) proposed new rules to improve and standardize the disclosures registered entities make about climate-related risks, their climate-related goals and objectives, their greenhouse gas (GHG) emissions, and how their boards of directors and management oversee climate-related risks.	The proposal would require registered entities to quantify the effects of certain climate-related events and transition activities in their audited financial statements.	▸ The timing of the release of the SEC's final climate disclosure and proposed human capital management rule remains uncertain. The Commission is taking prudent time to carefully deliberate on a final rule as it seeks to incorporate public comments and reach internal consensus. ▸ According to the SEC's regulatory agenda, both regulations appear to be scheduled for publication sometime in the coming months. ▸ Some of the issues that have received significant attention are the inclusion of Scope 3 GHG reporting requirements, proposed disclosures related to the financial impacts of climate change based on items of financial statements, and the provision to insure Scope 1 and 2 GHG emissions. ▸ ISSB standards, among others, align closely with the SEC's climate proposal, so there is an optimistic backdrop for interoperability and convergence.

2 Accounting Standards

The Peruvian Business Corporations Act (LGS) establishes that the financial statements of companies incorporated in Peru must follow the general accounting principles accepted in Peru and other applicable legal provisions.

The Peruvian Accounting Standards Board (CNC) has established that the general accounting principles are basically the standards issued by the International Financial Reporting Standards Board (IFRSB) including the International Financial Reporting Standards (IFRS), the IFRS Interpretation Committee (IFRIC), and the Standing Interpretations Committee (SIC), and the specific provisions approved for particular businesses (banks, insurance companies, etc.). Likewise, on a supplementary basis, the U.S. Generally Accepted Accounting Principles (GAAPs) are applied.

The Peruvian Accounting Standards Board (CNC) is responsible for issuing the General Chart of Accounts for companies and methodologies that apply to both private business and government entities.

The CNC adheres to the standards approved by the International Financial Reporting Standards Board (IFRSB), which are explicitly approved by the CNC and published in "El Peruano" Official Gazette, indicating their date of approval, which may differ from the internationally approved date.

Companies that issue debt or shares in the capital market are subject to the regulations of the Peruvian Securities and Exchange Superintendency (SMV). Companies supervised by the SMV are obliged to issue their financial statements in accordance with IFRS, as issued in accordance with the International Financial Reporting Standards Board.

According to the most recent regulations in force, companies that obtained an income in excess of 2,300 UITs (PEN11,845,000) are required to submit financial statements in accordance with the IFRSs. Small and medium-sized enterprises that obtained an income higher than 150 UITs (PEN772,500) and lower than 2,300 UITs (PEN11,845,000) are required to issue their financial statements in accordance with the IFRS for SMEs. The IFRS for SMEs is a simplified set of rules designed specifically for small and medium-sized non-financial enterprises.

The annual financial information of companies supervised by the Peruvian Securities and Exchange Superintendency (SMV) must be audited and include the previous year for comparative purposes. Quarterly information does not need to be audited. This audit must be performed in accordance with the International Standards on Auditing issued by the International Federation of Accountants (IFAC). Starting in 2016, companies not listed in the Public Stock Exchange Registry are not required to submit audited financial statements.

In June 2023, the International Sustainability Standards Board (ISSB) presented its first IFRS (ESG) standards, IFRS S1 and IFRS S2, marking a major milestone for the Peruvian capital market and opening doors to a new era of sustainability disclosure. These standards will help boost trust in companies when disclosing sustainability information, providing a solid foundation on which to base investment decisions.

Both IFRS S1 and IFRS S2 will enter into force for annual periods starting on January 1, 2024. The compulsory application of the IFRS sustainability disclosure standards will depend on the regulatory or approval processes of each local jurisdiction. The application of the IFRS sustainability disclosure standards is not tied to the application of IFRS accounting standards. Thus, an entity that applies the IFRS accounting standards for financial reporting purposes is not currently also required to apply the IFRS sustainability disclosure standards, and vice versa.

3 Sustainability Commitments

Although to date there are no specific regulations in Peru regarding ESG aspects, there are obligations and commitments that derive from both international instruments and local regulations that must be considered in the business agenda, particularly in the environmental and social aspects. Among others, there are the following:

a. Paris Agreement: Nationally Determined Contributions (NDC)

Peru is a party to the United Nations Framework Convention on Climate Change (UNFCCC) since 1993. As such, it shares the Conventions ultimate objective to "achieve the stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous interference with the climate system". Peru also ratified the Kyoto Protocol and promptly submitted its overall mitigation offer via its intended nationally determined contributions (NDC) in September 2015 and took part in the efforts to achieve the Paris Agreement.

The Paris Agreement is a historic international agreement that was signed in December 2015 during the United Nations Framework Convention on Climate Changes (UNFCCC) 21st Conference of Parties (COP21) in Paris. Its central aim is to strengthen the global response to the threat of climate change, to ensure sustainable development and efforts to eradicate poverty, by keeping a global temperature rise this century well below 2°C above preindustrial levels and pursuing efforts to limit the temperature increase even further to 1.5°C. The Agreement also aims to

increase countries capacities for adaptation and resilience and guarantee finance flows consistent with low greenhouse gas emissions and climate-resilient pathway.

In July 2016, Peru became the first country in Hispanic America to ratify the Paris Agreement. To date, 189 of 197 States-Parties that belong to the Convention have ratified the Agreement. Peru had the chance to contribute to this multilateral agreement and global policy decision-making during the negotiation process, as a developing country and president of the COP20 held in Lima. It made three significant contributions to reaching the Paris Agreement:

a) During the COP20, it resolved the issue of differentiating between develop and developing countries through equity and the principle of shared but differentiating responsibilities and respective capabilities, in light of the Parties different national circumstances (made explicit in Article 2 and throughout the Agreement).
b) It explicitly articulated the balance between adaptation, as consequences of climate change, and mitigation of greenhouse gas (GHG) emissions, as causes of climate change.
c) The Lima – Paris Action Agenda, which allowed for the participation of key non-state stakeholders in 2015, such the private sector, civil society, academia, indigenous peoples, collectives, and the public for rapport-building and dialogue. As a result, the different stakeholders assumed responsibility for solving the problem of climate change on the part of society and not just governments.

b. Peruvian NDC

NDC are at the heart of the Paris Agreement and the achievement of its long-term goals. NDC embody efforts by each country to reduce national anthropogenic emissions and adapt to the impacts of climate change.

According to Article 4 of the Paris Agreement, each Party must prepare, communicate, and maintain successive NDC that it adopts, reflecting the greatest possible ambition and considering its domestic circumstances and capabilities.

Peru has committed to reducing 30% of its predicted GHG emissions by 2030, equivalent to 89.4 MtCO2eq compared to the base year of 2010, based on a "Business-as-Usual" (BAU) scenario of increased emissions, divided as follows:

a) Unconditional Reduction: 20% reduction via the implementation of investments and expenditures with national public and private resources.
b) Conditional Reduction: 10% reduction, conditional upon the availability of international external financing and favorable conditions, without public, debt.

The NDC mitigation components are aimed at reducing GHC emissions and conserving carbon sinks for emissions management, with 62 mitigation measures distributed among the following six GHC emissions sectors in Peru:

(i) Power-Stationary Combustion: 23 measures
(ii) Power-Mobile Combustion: 14 measures
(iii) Industrial Processes and Use of Goods: 2 measures

(iv) Agriculture: 6 measures

(v) Land Use, Land-Use Change, and Forestry: 8 measures

(vi) Waste: 9 measures

The NDC adaptation components establish goals and targets to reduce levels of exposure and vulnerability to hazards associated with climate change in 91 adaptation measures divided into five prioritized thematic areas:

(i) Agriculture: 17 measures

(ii) Forests: 12 measures

(iii) Fisheries and Aquaculture: 18 measures

(iv) Health: 6 measures

(v) Water: 31 measures

These include cross-cutting approaches for disaster risk management, resilient public infrastructure, poverty and vulnerable populations, gender and interculturality, and private investment promotion.

In keeping with the foregoing, in January 2022, the Government announced the approval of Executive Order 003-2022-MINAM, declaring the climate emergency to be of national interest. The purpose of this order is to urgently implement climate action measures as established in the nationally determined contributions through 2030.

According to this emergency climate statement, the priorities are the following:

(i) Climate governance:
It proposes the involvement of regional and local governments, as well as non-state actors, academia, professional guilds, women, indigenous and native peoples, the Afro-Peruvian community, other collectives, and private sector, with the strengthening of existing mechanisms for participation provided by the Ministry of the Environment (MINAM).

(ii) Education on climate change:
Promotion in the educational system at every stage, level, educational model, cycles, and programs, of the development of competencies with emphasis on the environment, human rights and other cross-sectional perspectives.

(iii) Monitoring and follow-up:
It proposes to encourage investment and operation of hydrometeorological services, health monitoring systems, satellite monitoring mechanisms for statistical compilation of data, as well as the implementation of Early Warning Systems.

(iv) Climate financing:
The Ministry of Economy and Finance (MEF) promotes the incorporation of concerns over that expected impact of climate change into the processes of evaluation of investments in the financial system, assesses budgetary programs to strengthen the mechanisms that contribute to emission reductions and the inclusion of carbon pricing in the framework of economic policies.

(v) Human Rights and Climate Justice:
It seeks to mitigate the social impact of climate change on populations that are vulnerable because of the loss of ecosystems that are a source of subsistence and development. Likewise, to promote actions and accompany the Committees of Community Watch and Control of Forests and Wildlife in strategic locations with greater illegal activity.

These government actions seek to generate a change in energy production, in investments, in forestry conservation, as well in transport, agriculture and health.

The sense of urgency and ambition in Perus commitment continues to be crucial. As a result, in December 2020, Peru increased the climate change adaptation areas from five to six (adding transport and tourism) and aims to reduce GHG emissions by 40% by 2030. It also aims to achieve decarbonization by 2050. The National Adaptation Plan establishes a route to reduce the risks associated with the danger of climate change. It also relies on scientific information for making decisions in the territory, especially taking into consideration the ancestral knowledge of the indigenous people.

In matters of mitigation, the national commitment is to limit our emissions to the equivalent of 179 million tons of CO2 with actions in the sectors of agriculture, industrial processes, energy, transport, waste and use of soil, change of the use of soil and forestry.

c. National Climate Change Strategy (ENCC)

According to the ENCC, the main challenge associated with climate change in Peru is to reduce risks and foreseeable impacts, building capacities to address them based on an integrated management among the three levels of government to reduce vulnerabilities and take advantage of opportunities.

The First ENCC was approved by Executive Order 086-2003-PCM. It included 108 targets, of which only 12% were achieved in the first six years, with progress made on 49% of all targets, including initiatives, programs, and projects underway. This Plan was then updated by Executive Order 011-2015-MINAM, including the 2021 vision. This version, which is currently in force, identified two strategic objectives that clearly link climate change response actions to the national development process.

Currently, a new update process is currently underway to draft the National Climate Change Strategy through 2050 (ENCC 2050), which will be the primary instrument for the comprehensive management of climate change, guiding and facilitating the States long-term actions on climate change at the national, regional, and local levels.

The ENCC will include a vision through 2050 to achieve carbon neutrality and ensure the resilience of our population, ecosystems, livelihoods, and production and infrastructure systems, complying with the commitments we have assumed under the United Nations Framework Convention on Climate Change and the Paris Agreement, specifically the establishment of a long-term strategy.

d. Framework Act on Climate Change

A turning point in climate change management in Peru came with the passage of the Framework Act on Climate Change 30754, on April 17, 2018, with the goal of establishing the principles, approaches, and general provisions for the comprehensive, participatory, transparent management of the climate change adaptation and mitigation measures, so as to reduce the countrys vulnerability to climate change, take advantage of low-carbon growth opportunities, and comply with the international commitments assumed by the State with the UNFCCC. On December 31, 2019, the Regulations on the Framework Act on Climate Change were approved. The application of these regulations seeks to guarantee sustainable low-carbon growth and reduce economic losses through the adequate management of climate risks.

This law ensures that the country will be better prepared to tackle climate events and create the conditions for the growth of clean and sustainable industries. It is aligned with the countries commitment to the United Nations Sustainable Development Goals (SDG) and the recommendations that must be addressed for the countrys admission into the Organization for Economic Cooperation and Development (OECD).

The Framework Act on Climate Change allows the government to increase public spending efficiency, representing savings for the country and a key investment for avoiding costs and taking advantage of opportunities for all the countrys stakeholders: the public and private sectors, civil society organizations, academia, indigenous peoples, and others.

The principal components included in this Law area as follows:

a) Articulation with the international context:

The purpose of this Law is to comply with the international commitments assumed by the Peruvian state with the UNFCCC, which will enable it to support worldwide efforts to prevent the global temperature from rising more than 1.5°C above preindustrial levels.

b) Inclusion of the climate change into national development planning:

All sector authorities, regional governments, and local governments must include climate risk and vulnerability, as well as the identification of mitigation and adaptation measures, when formulating and updating their development, budget, and spending planning policies, strategies, and instruments.

c) Increase in institutional strength for addressing climate change:

With the goal of complying with the periodic updating of our NDC, the Law mandates the establishment of a High-Level Climate Change Commission for the purpose of proposing the adaptation and mitigation measures that will form part of the NDC. This multisectoral space, chaired by the Prime Minister, allows for ongoing articulation and coordination among state actors with the objective of defining and updating the NDC to be submitted to the UNFCCC.

d) Increase in the competitiveness of investment and the national public budget:

The goal is to ensure the sustainability of government investment and budgeting. For such purpose, the MEF must incorporate climate risk and vulnerability analysis, as well as the identification of climate change mitigation and adaptation measures, when preparing and implementing public investment projects, as well as economic instruments that channel the public budget. This will help obtain positive returns by reducing costs for restoration, reconstruction, and repair.

e) Support for science and technology:

According to the Law, all public institutions with the mission of scientific research and technological development must prepare research and technology transfer studies, projects, and programs with the purpose of improving and increasing the adaptive capabilities of the population, ecosystems, infrastructure, and production systems; and contributing to the reduction of GHG emissions and the increase and conservation of carbon reserves.

e. National Greenhouse Gas Inventory

National Greenhouse Gas Inventories (INGEI) are prepared in accordance with the Framework Act on Climate Change and the INFOCARBONO (Executive Order 013-2014-MINAM), based on which the MINAM is responsible for periodically preparing inventories through joint work with other government institutions.

The INGEI is the result of implementing the provisions of the INFOCARBONO. It is part of Perus Adaptation and Mitigation Measure Monitoring System, which represents our enhanced transparency framework under the Paris Agreement.

The inventory is prepared based on the guidelines of the Intergovernmental Panel on Climate Change (IPCC), the leading international body on the matter, which develops and updates the methodologies. The inventory thus helps decision-making on how to move forward with the implementation of our climate challenges. The information generated allows different governmental bodies to develop policies, plans, projects, and programs to reduce our emissions and put us on the path to a carbon-neutral future.

To date, Peru has prepared National Greenhouse Gas Inventories in 2016, 2014, 2012, 2010, 2005, 2000, and 1994, which have allowed the country to identify sectors with the highest emissions and promote national emissions management efforts.

f. Peru's Carbon Footprint

The mitigation measures for achieving Peru's NDC aim to monitor and reduce GHG emissions. As part of these efforts, the public and private sectors have been involved. In November 2019, the MINAM-as the national authority on matters of climate change-introduced the "Peruvian Carbon Footprint" online platform. This innovative tool is the first of its kind to be made freely available nationwide for public and private organizations to manage their GHG emissions via four components:

a) Emissions calculator:

Free calculator to measure GHG emissions based on international standard ISO 14064-1.

b) Recognition system:

Incremental system for recognizing organizations through four levels of stars:

(i) 1 star: Measurement of emissions.
(ii) 2 stars: Verification of footprint calculation results by an accredited third party.
(iii) 3 stars: Emissions reduction.
(iv) 4 stars: Recently updated to Reduction+, this final level is associated with the reduction of said emissions, sustained over time; the strengthening of GHG management in the organizations supply chain; or emissions neutralization.

c) Registry:

Public registry of participating organizations indicating the degree of ambition of their GHG emissions management.

d) Neutralization Information:

List of national projects that offer emissions reductions to neutralize carbon footprints through the purchase of carbon credits.

e) List of verifiers:

To verify the carbon footprint, the organization shall hire accredited management system certification firms.

f) Statistics:

According to the MINAM, as of February 2020, 706 organizations are registered in the HC-Perú, of which 327 organizations have already reported their GHG (GHG) emissions, with around 80% belonging to the private sector.

According to preliminary estimates and results of the Technical Study toward Long-Term Carbon Neutrality in Peru being prepared by the MINAM, the progressive process for the reduction of GHG emissions generated primarily by deforestation, intensive agriculture, and fossil fuel consumption in production, trade, and industrial activities may offer a net economic benefit for the country of USD98 billion by 2050.

g. Circular Economy

The current linear economy is based on a "take-make-waste" production and consumption model, in which goods are manufactured using raw materials that are then sold, used, and ultimately discarded as waste. While it is true that important steps have been taken toward efficiency, the linear system is based on consumption instead of the restorative use of resources, which involves significant losses throughout the value chain.

A circular economy, on the other hand, is internationally restorative and regenerative, so that goods, components, and materials always conserve their usefulness and maximum value, distinguishing between technical and biological cycles. This continuous positive development cycle preserves and improves natural capital (worldwide stocks of assets that include natural resources, ecosystems, and living beings), optimizes resource yield, and minimizes system risks by managing finite reserves and renewable flows.

In February 2020, Executive Order 003-2020-PRODUCE approved the Roadmap to a Circular Economy in the Industrial Sector, an initiative jointly prepared by MINAM and PRODUCE with the goal of promoting inclusive and sustainable economic growth and industrial development.

This law is based on four approaches, six lines of action, and sub-actions with short-term (one year), medium-term (three years) and long-term (five years) goals with the participation of the public sector, the private sector (in the form of industry trade groups), academia, research, and innovation centers, among others, to identify and develop actions to promote and facilitate competitiveness and productivity, with a circular economy approach.

a) Approach 1: Sustainable Industrial Production

(i) Line of action: Incentivize industrial production through a circular economy approach.
(ii) Line of action: Manage information tied to circular production.

b) Approach 2: Sustainable Consumption

(i) Line of action: Foster sustainable consumption habits in the public and private sectors and among the general public.

c) Approach 3: Use of Discarded Materials and Industrial Waste Management

(i) Line of action: Promote the use of discarded materials and the valorization of industrial waste.

d) Approach 4: Innovation and Financing

(i) Line of action: Incentivize innovation and the use of clean and sustainable technologies.
(ii) Line of action: Design mechanisms and incentives to promote innovative initiatives and clean technologies.

4

Environmental obligations and climate change

Environmental obligations

According to the regulation of the Environmental Impact Assessment System (SEIA), all public, private or mixed capital investment projects that involve activities, constructions, works and other commercial and service activities that may cause significant negative environmental impacts must necessarily have an environmental certification, prior to their execution. These projects cannot be initiated, and no national, regional or local authority can approve, authorize, allow, grant or enable them if they do not previously have an environmental certification, being within the scope of this regulation the activities related to hydrocarbons and electricity projects.

In this sense, specific rules were approved for the hydrocarbon's activities (Supreme Decree No. 039-2014-EM) and electrical activities (Supreme Decree No. 014-2019-EM). In the case of the hydrocarbon sector, the investors must fill an Environmental Impact Assessment (EIA) before executing exploration and exploitation activities. In the case of the electricity sector, the investors must present an EIA when requesting a definitive concession, that is when they are dealing with electric generation activities that use hydraulic resources with an installed power greater than 500 Kw; transmission of electrical energy, when the facilities affect state property and / or require the imposition of right of way; distribution of electricity as a public electricity service, when the demand exceeds 500 Kw; and the generation of electrical energy with renewable energy resources with installed power greater than 500 Kw.

If any of the aforementioned activities resulted in an extension of their scope after the EIA was already approved, the environmental obligations of the investor vary according to the

environmental significance of the proposed modification. In the case of the hydrocarbon sector, the EIA approved should be subject to a modification process that requires fulfilling more or less the same steps for a new EIA; however, with the publication of the Supreme Decree No. 054-2013-PCM the Sustainability Technical Reports was created as an expeditious mechanism for the approval of minor changes to the activity granted in concession.

In the case of the electricity sector, the approval of a new EIA is required if the change in the activity granted in concession implies an expansion of its facilities in more than fifty percent of its installed capacity and / or an increase in twenty-five percent of its current level of emissions and / or involving the use of new areas.

The EIA is a crucial document that incorporates technical, environmental and important social matters that contribute to the evaluation and determination of the necessary mechanisms for preventing, minimizing, mitigating and remediation of the possible negative environmental impacts that the hydrocarbon or electrical activities will trigger.

That is why a relevant aspect of this is participation of the population that inhabits the area of influence of the project, which may be affected by the impacts that could occur in its context that can produce a variation of their living conditions. This participation must occur effectively through informative workshops in non-technical language where the main aspects of the project are detailed, and through a public hearing where agreements are established between the investors and the members that represent the communities in order to reconcile interests.

Bear in mind that depending on the magnitude of the impact that the hydrocarbon or electrical activity will produce in the environment, the investor could develop the following types of EIA:

- Environmental Impact Statement (EIS): If the negative environmental impact is qualified as not significant, a sworn statement is presented, and its approval is almost immediate.
- Semi detailed Environmental Impact Assessment (EIA-sd): If the negative environmental impact is qualified as moderate and liable to be eliminated or minimized by adopting easily applicable measures, a study should be present subject to a period of evaluation by the competent authority.
- Detailed Environmental Impact Assessment (EIA-d): If the negative environmental impact is qualified as significant due to the characteristics, size and / or relocation that the project can produce, a study is required that involves in-depth analysis to review its impacts and propose the management strategy. The study should be present subject to a period of evaluation by the competent authority.

For a long time, the competent authority to evaluate the EIA was MINEM. However, for increasing the trust of the population in the evaluation of the EIA, the more complex studies are evaluated by the Environmental Certification National Service for Sustainable Investment (SENACE). This means that EIS and EIA-sd are still evaluated by the MINEM, and EIA-d are evaluated by SENACE.

The principal advantages of the creation of SENACE is that a lot of environmental authorization could be obtained in one single process when the EIA is presented (global certification process), manage a National Registry of Environmental Consultant that can help the investor and whose work is documented, and qualified people in social matters and with more technical understanding guide the evaluation process of the EIA presented.

Note that according to the evaluations of the environmental performance of Peru in 2016, the OECD recommended continuing with the process of strengthening and implementing SENACE, to facilitate efficient and independent environmental management and be the technical reference of environmental impact studies.

In that sense, in September 2018, Legislative Decree No. 1393 was approved with the purpose of strengthening the functioning of the competent authorities in the environmental impact assessment process within the framework of the Environmental Impact Assessment System, as well as with the objective of modernizing, improving and ensuring a timely, effective and efficient environmental assessment of environmental management instruments, through clarifications of their competencies, regulations and functions.

Among the changes introduced in the evaluation of EIA-d by SENACE, the same ones that comprise the hydrocarbon and electricity sectors, emphasize the standardization of processes and the term of environmental certification to provide greater predictability

and legal security to investors. Currently, SENACE introduced a digital platform for the environmental certification's one-stop window and a virtual Documents Filing Desk, through which various procedures can be carried out.

Likewise, it has been arranged to modernize the articulation and interinstitutional collaboration, and to specify the accompaniment of SENACE in the elaboration of EIA-d. Other aspects at the level of the Environmental Impact Assessment System that the reform addresses are establishing maximum evaluation periods, for instance, an EIA- sd must be evaluated within 90 days, and an EIA-d should be evaluated maximum in 120 days. In addition, it was determined that the environmental certification loses its validity when, within a maximum period of five years, the owner does not initiate the execution of the investment project.

Finally, it is worth mentioning that in July 2019, the new Regulation for environmental protection in electricity Activities has been approved. The old Regulation of Environmental Protection in Electric Activities, approved by Supreme Decree No. 29-94-EM, has been outdated, not adjusting to current environmental legislation. Thus, this new standard will allow: (i) reducing uncertainty in investments, guaranteeing legal certainty in electrical activities; (ii) reduce costs and promote sustainable private investments in the subsector; (iii) facilitate compliance with environmental regulations and the processing of environmental assessment procedures, through fluid and efficient communication between the Competent Environmental Authority and the Holder of the Electric Concession.

Climate Change

Since Peru ratified the United Nations Framework Convention on Climate Change in 1993, different processes have been carried out to provide an adequate institutional and legal framework for the management of climate change in the country. The challenges presented by the national climate change agenda make it essential to have public and private institutions, informed and able to plan and implement actions to address this problem, with ongoing processes, in order to lay the foundations for sustainable development, inclusive, low carbon and climate resilient.

The period between December 2014 and September 2015 was a significant stage for the management of climate change in the country, in a context marked by the performance of Peru as Chair of the COP20 (Conference of the Parties). In this period, the new National Strategy for Climate Change (ENCC) was approved; the Nationally Determined Contributions (NDC) was formulated; the First Biennial Update Report was prepared; regulations such as the Provisions for the elaboration of the National Inventory of Greenhouse Gases (Infocarbon), the Regulations of the Forestry and Wildlife Law and the Law of Mechanisms for Compensation for Ecosystem Services were approved; National Institute of Glacier and Mountain Ecosystem Research was created; among other complementary measures, but no less relevant. These are important milestones that demonstratePeru's commitment to promote governance, institutionalism and normative aspects of climate change, with a view to building a climate-responsible country that adapts to adverse effects and takes advantage of the opportunities imposed by this global phenomenon.

In this context, on December 12, 2015, the Paris Agreement was signed, and was ratified by Peru on July 22, 2016, through Supreme Decree No. 058-2016-RE. The Paris Agreement entered into force on November 4, 2016, 30 days after the date on which more than 55 Parties to the Convention, which account for more than 55% of global greenhouse gas emissions, deposited their instruments of ratification. This international agreement determines that all the Party countries communicate their Nationally Determined Contributions every five years in order to have increasingly ambitious commitments.

Also, the Paris Agreement provides for the establishment of a reinforced transparency framework, in order to have periodic and increasingly accurate information on emissions / removals and mitigation and adaptation efforts carried out by countries. In addition, it invites the Parties to the Convention to formulate and present Long Term Low Carbon Development Strategies by 2050. This instrument invites the Party countries to constantly renew their level of national ambition expressed in their NDC. In this way, the global community adds efforts to achieve the goal set.

In compliance with the Paris Agreement, during 2016, Peru addresses climate change by formalizing the long-term adaptation and mitigation goals expressed in the NDC. They involve all sectors and actors in society around common objectives for the country's sustainability.

In this way, Nationally Determined Contributions is expected to generate social, environmental and economic benefits, expressed in improvement of air quality, generation of work including rural areas, improvement in energy security, stabilization of ecosystems, conservation of biodiversity, among others.

On one hand, Adaptation NDCs establish objectives and goals to reduce vulnerability to the dangers associated with climate change in five priority thematic areas: agriculture, forests, fisheries and aquaculture, health and water; concentrating on the incorporation of cross-cutting approaches to disaster risk management, resilient public infrastructure, poverty and vulnerable populations, gender and interculturality, and promotion of private investment.

On the other hand, Mitigation NDCs aim to achieve the goal of reducing Greenhouse Gas (GHG) emissions by 20% with respect to the Business as Usual scenario in the year 2030, which will be implemented through of public and private resources. There is also the ambition to add a 10% reduction, subject to the availability of international external financing and favorable conditions. It is precisely in the fulfillment of this mitigation goals that the energy sector is committed.

In this sense, Peruvian Government has been developing Nationally Appropriate Mitigation Actions (NAMA) in different economic sectors, in order to reduce greenhouse gas emissions. At the energy level, MINEM has been developing and implementing four NAMAs linked to energy efficiency, renewable energy, universal access to sustainable energy and electric ground transportation.

Regarding the first energy NAMA, the MINEM's work, through the General Directorate of Energy Efficiency, consists of supporting the design and implementation of strategies that articulate different energy efficiency initiatives at the national level.

For its part, the NAMA of renewable energy seeks the promotion of a greater contribution of renewable energy in the interconnected electrical system in Peru.

At the same time, the NAMA for Universal Access to Sustainable Energy aims to support the state in the design and implementation of strategies that articulate the different initiatives linked to the implementation of rural electrification with renewable energy resources, mainly in rural areas that are not connected to the electricity grid, as well as the use ofclean kitchens.

Finally, the NAMA of electric transport, seeks to support the state in the preparation of the energy sector for a transformation towards clean transport, both in the public and private sectors.

In parallel to all this effort from the energy sector, we must emphasize that the general framework to address climate change from various industries has also evolved. Thus, on April 18, 2018 the Framework on Climate Change Law was published, which purpose is to establish the principles, approaches and general provisions to coordinate, articulate, design, execute, report, monitor, evaluate and disseminate public policies for integral, participatory and transparent management of adaptation and mitigation measures to climate change.

The purpose of this Law is to reduce the country's vulnerability to climate change, take advantage of low carbon growth opportunities and comply with the international commitments with an intergenerational approach.

Finally, it should be mentioned that in January 2020, the Ministry of Environment approved the Regulation of the Framework Law on Climate Change. Thus, this standard is intended to regulate the provisions for planning, articulation, execution, monitoring, evaluation, reporting and dissemination of public policies for the comprehensive management of climate change, aimed at serving the public, seeking to reduce the vulnerability of the face the effects of climate change, take advantage of low-carbon development opportunities and comply with the international commitments assumed by the State before the United Nations Framework Convention on Climate Change. It is worth mentioning that among its most important provisions is the obligation to include adaptation and / or mitigation of the effects of climate change in investment projects of public-private partnerships.

5 Prior consultation and citizen participation

Prior consultation

In order to start an investment project which may require the utilization of natural resources, the investor must evaluate if the area of the future project will be located between lands of an indigenous community, or near to these lands, because special regulations exist in our country in order to protect the rights of the indigenous community.

In the 90s, Peru endorsed Convention No. 169 of the International Labor Organization, through which the recognition of indigenous community as a vulnerable group makes it an internal regulation of the country to integrate a special right to be consulted in favor of these communities. Indigenous people have the right to be consulted about any legislative or administrative measure that can disturb their life conditions in connection with the use of their lands.

Moreover, Law No. 29785, Law of the Indigenous and Native Peoples Right to Prior Consultation, and its Regulations approved by Supreme Decree No. 001-2012- 2012-MC, recognize this special right of indigenous people that is different than the regular citizen participation. The Government as an obligation and/or the community as a right may require following a process of consultation for integrating the considerations of the community if –for example- concessions granted could impact their life in a negative way.

This process is meant not only to protect the rights of the indigenous people, but also, to prevent eventual social conflicts in the investment projects that may affect them directly. Hence, this legal instrument's goal is aimed towards achieving consensus between

the promoting entities, such as the Presidency of the Cabinet, Ministries or Administrative Organisms, and the indigenous or native peoples' representatives.

In the case of hydrocarbon and energy projects, the General Bureau of Energetic Environmental Affairs of the Ministry of Energy and Mines has been chosen as the authority responsible to conduct the administrative proceedings that are part of the Prior Consultation. In the case of hydrocarbons, the timing to develop this process by the competent authority is prior to the issuance of the Supreme Decree approving the subscription of Contracts for Exploration and Exploitation (Ministerial Resolution No. 209-2015-MEM/DM), however, it could be considered an early stage for informing the community about the real magnitude of the project because it is before the grant of the concession.

In the case of electricity, there is no special rule but the process is usually carried out before the concession is granted and in parallel with the elaboration of the Environmental Impact Assessment, in order to integrate all the opinions and observations of the community in the study and the investor will be in a better position to inform about all the impacts analyzed in connection with the project.

Now, the prior consultation process has seven stages, which are:

(i) Identification of the legislative or administrative mean matter of consultation.
(ii) Identification of the indigenous peoples and their representative organizations.
(iii) Publicity of the legislative or administrative mean matter of consultation.
(iv) Information.
(v) Internal evaluation by the indigenous peoples.
(vi) Dialogue between the Government and indigenous peoples.
(vii) Decision.

It must be noted that if a consensus is not met in the last stage of the process, the promoting entities will do their best effort in order to adapt the legislative or administrative means so that it guarantees the indigenous peoples' rights and the improvement of their living conditions. Thus, the lack of consensus does not imply a veto right in favor of the latter. The decision must take into consideration the following aspects:

(i) Be in accordance to the promoting entity's competences.
(ii) Respect the Constitutional and legal frame.
(iii) Comply with the environmental legislation.
(iv) Preserve the survival of the indigenous peoples and their collective rights.
(v) Guarantee communal property and land rights of the indigenous peoples.

Once a decision is reached, a report of the process is submitted to the Interculture Viceministry, which is the public entity in charge of supervising the full process. As of July, 2020, 58 prior consultation processes have taken place. More than ten of them are directly related to the hydrocarbons industry, and the other three are related to the electricity industry:

Stage	Project on Prior Consultation	Tax bases
3	Block 200	Hydrocarbons
4	Block 192 (2019)	Hydrocarbons
6	Block 198	Hydrocarbons
	Block 197	Hydrocarbons
	Block 190	Hydrocarbons
	Block 191	Hydrocarbons
	Block 165	Hydrocarbons
7	Anto Ruiz III y IV Hydroelectric Power Plant	Electricity
	La Herradura - El Gallo Hydroelectric Power Plant	Electricity
	Hydroelectric Power Plant Rio Araza	Electricity
	Block 192 (2015)	Hydrocarbons
	Block 195	Hydrocarbons
	Block 164	Hydrocarbons
	Block 189	Hydrocarbons
	Block 175	Hydrocarbons
	Block 169	Hydrocarbons

Source: Ministry of Culture.

Citizen participation

Citizen participation is a fundamental right recognized by Peruvian Constitution and international agreements. This right involves that the civil society participate in publics decisions, or influence in them, looking forward that those decisions represent their interests, either as particulars or as a social group.

In the same way, citizen participation involves all communication mechanisms between government representatives, investors and communities located in the area of influence (direct and indirect) of investment projects, whose objective is not only to inform the community about all the activities and impacts of the project, but also to make them participate in the development of the project by formulating observations and opinions that should be evaluated in order to choose whether or not to include them in the final structure of the project.

At this point, it is important to note that citizen participation will be governed by special rules depending on the industry to which the investment projects belong since the level of sensitivity and social trust reaches different levels in each industry. Moreover, since citizen participation in investment projects is bound to environmental matters, as a general framework there is the Regulation of the Law on Transparency, Access to Information and Citizen Participation of the Environment Sector with respect to which specific regulation in each industry is based.

Regarding citizen participation in hydrocarbons activities, in January 2019, the Ministry of Energy and Mines (MINEM) published the new Regulation on Citizen Participation for

the realization of Hydrocarbon Activities, approved by Supreme Decree No. 002-2019-EM, in order to strengthen access rights to information and citizen participation, provide information to entities competent in socio-environmental management and strengthen relations between communities, the State and oil companies. Thus, the old regulation of 2008 on the subject was demarcated, in order to incorporate improvements in the mechanisms of citizen participation within the processes of oil contracting. Currently, the procedure of citizen participation on hydrocarbons activities is divided in two stages:

(i) negotiation or render and subscription of the Exploration and/or Exploitation Agreements; and
(ii) Environment Impact evaluation.

The first stage is carried out by Perupetro S.A. making the procedures previous to the process of negotiation or tender with interested companies until the moment of presentation of the Contractor of the blocks and then the subscription of the Exploration and/or Exploitation agreement.

In this stage, face-to-face events and communication and information mechanisms are realized through which they communicate and spread the projects activities and actions that are being made for the negotiation or tender, as the official introduction of the new contractor to the community when the agreement is subscribed.

This stage is subdivided in the following three phases: before the beginning of the process of negotiation or tender; before the consignment of the project of the agreement to the MINEM; and after subscription of the agreement.

At the end of those procedures, Perupetro must emit:

i) a report containing the detail and analysis of the process of citizen participation developed during the first and second phase that will be remitted to Hydrocarbons General Direction (HGD) of MINEM to be considered in the process of approbation of the exploration and/or exploitation agreement; and,
ii) a report containing the detail and analysis of the process of citizen participation developed in the third phase that will be remitted to Environment Authority (SENACE) and Environment General Direction (DGAAH) to be considered during the procedure of the respective environment impact evaluation.

Likewise, those reports will be published by Perupetro in its institutional portal and will be remitted to the regionals and locals authorities that participated in the face-to-face events in order to disseminate it to the population.

This second stage is carried out by investors before the presentation of the environmental impact study, and during the environmental impact study evaluation. During the first one, the owner will present the citizen participation in front of the competent environmental authority; and during the second one, the owner accompanied by the competent environment authority will inform to the population about the possible environmental and social impacts that can generate the project and the measures to be executed for avoid them.

Also, in the second one, the investor will present an executive summary that will sum up all the most relevant aspects of the environmental

impact study through texts or audiovisuals aids that facilitate the comprehension of the communities, the same that will be sent to the provincial and district municipality of the area of the influence of the project and to the indigenous populations, natives and/or rural communities, if applicable.

Regarding citizen participation in electrical activities, there is the Ministerial Resolution No. 223-2010-MEMDM, which approves the Guidelines for Citizen Participation in Electric Activities. The investors must present a Citizen Participation Plan for the stages before, during the elaboration of the environmental impact study and after it is presented, with a round of information workshops for each stage.

The updating of the regulations in this sector is necessary, because the institutions of the environmental sector in terms of certification have evolved. Since the process of citizen participation in the electrical industry is linked to the presentation and approval of the environmental impact studies, it is advisable to check if the existence of SENACE as responsible for environmental certification and the implementation of advanced social measures represent an opportunity to restructure the process of citizen participation to achieve greater effectiveness in bringing the investor and the government closer to the impacted population.

In that sense, the Supreme Decree No.016-2023-EM was published in 2023, which approves the Regulation of Citizen Participation for Electric Activities. This regulation contains improvements and incorporates new mechanisms for citizen participation applicable to Environmental Studies and Complementary Environmental Management Instruments, which are intended to disseminate information and generate spaces for the formulation of opinions and suggestions from the population, protecting their Right to the participation of the communities in the area of influence of the electrical projects.

Among the new mechanisms for citizen participation proposed, the informative meeting, the distribution of informative materials, participatory dissemination and digital publication stand out. Also, the procedure for the evaluation and modification of the Citizen Participation Plan corresponding to semi-detailed and detailed environmental impact studies is proposed.

In addition to this, it is contemplated that the conduction of all the participatory workshops of the environmental studies, is in charge of the Competent Environmental Authority, in order that the State has a presence from the beginning of citizen participation in the larger projects.

6 Diversity, inclusion, and equality

a. Related regulations

The laws related to diversity, inclusion and equality in the energy and hydrocarbons sector are made up of the following regulations.

a.1. Law N° 30709 prohibiting wage discrimination

Law N° 30709 provides for equal remuneration between men and women, through categories, functions, and salaries.

The regulations of the Equal Pay Law (Law N° 30709) aim to avoid possible situations of wage discrimination based on gender or other reasons, through the design of salary bands based on the level of contribution of each position to the achievement of the company's objectives.

Failure to comply with the regulations is linked to infractions classified as very serious, and the amount of the corresponding fines is calculated based on the number of employees affected.

Main equal pay obligations

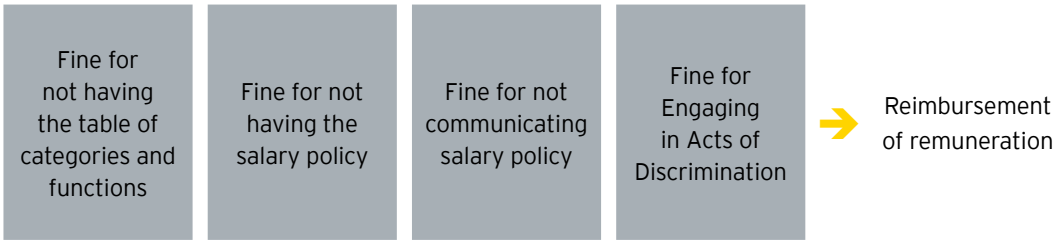
The main responsibilities related to equal pay are categorized as follows:

	Determine remuneration without discrimination through a job valuation process.
	Have an internally equitable pay structure.
	Communicate the salary policy to all staff.
	Have a table of categories and functions.
	Have a salary policy.
	Have an objective basis of wage differentials.

Source: EY (2023).

Obligations and Fines for Non-Compliance Regulations of the General Labor Inspection Law (Supreme Decree N° 019-2006-TR)

Obligations for non-compliance are conducted by the competent Inspection Authority, which intervenes ex officio and upon complaint by one or more workers, as applicable, as well as the following fines:



Labor fines are calculated based on the number of workers affected and the severity of the infringement, as shown in the table below:

Non middle size enterprise (Value in tax unit)										
Severity of the Infringement	Number of workers affected									
	1 to 10	11 to 25	26 to 50	51 to 100	101 to 200	201 to 300	301 to 400	401 to 500	501 to 999	1000 and above
Minor	0.26	0.89	1.26	2.33	3.10	3.73	5.39	7.61	10.87	15.52
Serious	1.57	3.92	5.22	6.63	7.83	10.45	13.06	18.28	20.89	26.12
Very Serious	2.63	5.25	7.88	11.56	14.18	18.39	23.64	31.52	42.03	52.53

In the case of very serious infractions, the fine is from PEN13,018.50 to PEN260,023.50. But in terms of equal pay, it is the totality of workers plus a 50% surcharge.

The formal obligations and fines for non-compliance include the following "very serious" infractions with the respective amount for each:

Article	Very Serious Infraction	Fine (*)
25.22	Not having a Table of Categories and Functions	PEN65,228.00
25.22	Not having a Salary Policy	PEN65,228.00
25.23	Failure to inform workers about the company´s Wage	PEN65,228.00
Total		PEN195,684.00

* Example of a non middle size enterprise with 101 to 200 affected workers.

Source: EY (2023).

As for the substantial obligations and fines for non-compliance, these include the following "very serious" infractions with the respective amount for each:

Article	Very Serious Infraction	Fine (*)
25.17	Discrimination against workers, directly or indirectly, in matters of employment or occupation, such as those referring to remuneration for reasons of any kind.	PEN65,228.00
48.1-C	The total number of workers in the company is considered to be affected and a surcharge of 50% is applied.	PEN32,614.00
Total		PEN97,842.00

* Example of a non middle size enterprise with 101 to 200 affected workers.

a.2. Law N° 28983 on Equal Opportunities for Women and Men

The Peruvian State enacted Law 28983, the Law on Equal Opportunities between Men and Women, which aims to guarantee the full exercise of citizens, regardless of their gender. This is also supported by the National Plan for Gender Equality promoted by the Ministry of Women and Vulnerable Populations.

Peruvian legislation sets out exemplary penalties for companies found guilty of promoting or exercising gender-discriminatory practices, ranging from administrative to criminal sanctions depending on the seriousness of the crime.

There is still a need for more institutions to join the fight against gender discrimination, taking into account the most concrete measures and actions. The proper training of workers in anti-harassment practices, as well as giving effective sanctions against those who commit this type of acts, are part of what private companies can do to combat this problem.

a.3. General Law on Persons with Disabilities Law No. 29973, Article 49

It establishes two employment quotas according to the sector: quota for private employers (not less than 3% of the total staff) and quota for public employers (not less than 5% of the total staff).

Its purpose is to generate equal opportunities in access to employment, due to the multiple barriers, negative attitudes, and prejudices that limit incorporation into the labor market and productive activity in the country. Penalties for non-compliance with the employment quota for people with disabilities are earmarked to finance job training and updating programs, as well as placement and employment programs for individuals with disabilities.

The Ministry of Labor and Employment Promotion of Peru is responsible for monitoring the private sector and the National Civil Service Authority, in coordination with the National Council for the Integration of Persons with Disabilities (CONADIS), in the public sector.

Obligations and Penalties

Obligations and penalties are grouped into two economic sectors:

Private sector: Private entities with more than 50 employees must hire people with disabilities in a proportion of not less than 3% of their total staff. In the private sector, fines of between 12 UIT and 15 UIT may be applied.

Public sector: Public entities are obliged to hire persons with disabilities in a proportion of not less than 5% of their total staff. In the public sector, fines of between 12 UIT and 15 UIT may be applied.

b. Current landscape

Diversity and Inclusion Management, according to the Ministry of Labor and Employment Promotion of Peru (2023), includes the following groups of people:

- People with disabilities
- LGBTIQ+ people
- Elderly
- Women excluded due to gender-based violence
- People excluded because of religious beliefs or skin color
- People from Andean/Indigenous communities
- Foreigners

Key Considerations

Some key facts to keep in mind in this context are as follows:

- The report "Mercado Laboral para Personas con Discapacidad en el Perú 2019-2022" by the Ministry of Labor, indicates that four out of ten people with disabilities are part of the Economically Active Population.
- Between 2021 and 2022, SUNAFIL submitted 839 inspection orders to companies for employment discrimination based on sex and gender, remuneration, etc.
- According to IPSOS Peru's "Día del Orgullo 2022" report, 47% of Peruvians said they were willing to hire a gay person if they had a company.

According to information provided by PageGroup Peru, among the more than 60 hires made through the consulting firm for the energy sector during 2019 and 2020, only 30% were women.

Only **24%** of management porsitions in the energy sector are held by women.

Women make up **24%** of the workforce in the energy sector in Latin América.

22% of management porsitions are held by women.

Source: BID (2022).

b.1. Female Workforce in the Hydrocarbons Sector

According to the "Índice de Mujeres en Energía- EY" (2019), women's participation in the hydrocarbons sector is one of the lowest compared to other industries:

- 22% of the female workforce is in the Oil & Gas sector.
- 32% of the female workforce is in the Renewable Energy sector.
- The global female workforce accounts for 48%.

c. Best Practices

c.1. Advancing Beyond Diversity and Inclusion

To harness the power of a diverse workforce, it is vital that leaders go beyond striving for diversity and inclusion alone. Instead, seek and invest in a radical restructuring of your practices to create a system and environment that promotes equity, values more the difference a diverse workforce brings, and helps everyone feel like they belong.

It is important to note that fairness is different from equality. Equality, while intentional, provides opportunities regardless of an individual's unique needs and thus ignores what is accessible to an individual.

To illustrate, being part of an organization requires everyone to be united to achieve a common purpose. Equality is taking everyone on this journey and providing everyone with the same pair of shoes of the same size. For some, the shoes will fit, but for others they will be an obstacle, making the journey strenuous or impossible. But everyone is expected to move in the same direction, toward the same goal, and at the same pace. Fairness is ensuring that everyone is equipped with the right pair of shoes that will allow them to reach that goal without conflict.

c.2. Embracing Diversity and Cultivating Belonging

Human beings strive to satisfy two basic needs such as uniqueness and belonging.
Human beings are social beings by nature. Therefore, allowing people to feel like they belong and that their individuality is an asset, is crucial for a high-performing workplace. Fostering belonging for all your employees helps harness the power of diversity, as it allows people to challenge each other, share controversial ideas, and collaborate to deliver the best results.

c.3. Executing a Successful Diversity, Equity, and Inclusion (DEI) Strategy

A successful strategy follows these two best practice principles:

Integrated into the Core Business Strategy:

It is critical that DEI transformation is integrated into the core business strategy. Studies show that the challenges of leveraging diversity as a talking point or sitting outside of the organization's core values does more harm than good and is also a huge waste of resources. True progress is only achieved through the transformation of beliefs, behaviors, and relationships within the organization.

To achieve this change, leaders, teams, and individuals will have to challenge themselves to interrogate their practices, privileges, identity, and value system. This will require reviewing systems, processes, and policies to ensure that these changes are seen in day-to-day practices and lived across the organization.

Promotion-Centric Approach

An "advocacy-focused" approach to D, E&I is one that strives to create an environment that values difference, creates belonging, and supports everyone to reach their potential. This is opposed to a "prevention-focused" approach, where effort and goals are focused on reducing or minimizing problems.

For example, the goal of reducing instances of exclusion by managing micro-inequalities and micro-aggressions is a prevention-focused approach. Whereas, with the goal of achieving equity in the workplace in five years by intentionally training new talent pipelines and transforming the organization's culture, that's a promotion-focused approach.

d. Most common measures in the sector

The most common measures in Diversity, Inclusion and Equity in the Energy & Hydrocarbons sector comprises the following application proportions:

Promoting Diverse Talent

The promotion of diverse talent in an organization allows the development of inclusion programs for people with different abilities, with the aim of promoting independence, improving quality of life, and facilitating integration.

Diversity & Inclusion Committees

The formation of Diversity and Inclusion Committees promotes equal opportunities, respect, and zero tolerance for harassment and bullying, through policies, guidelines, and corrective measures in the organization.

Circle of experiences to encourage learning and recognition

Implementing spaces where men, women, LGBTQ+ groups, people with disabilities, and others come together to share different experiences through circles allows for the collective learning and support of an organization.

Recognition of people with different abilities

To respond to the needs of disabled people in an organization with the aim of encouraging their participation in the workplace, as well as recognizing the effort and self-improvement to improve their autonomy and promote inclusion.

Scholarships and programs in STEM careers for women as a fundamental pillar of society

The insertion of scholarships and programs in STEM careers (an acronym formed by the initials in English for the fields of Science, Technology, Engineering and Mathematics) for women makes it possible to promote the participation and inclusion of young women in the energy sector through the financing of university studies, technical studies, and certified training courses.

7

Anti-corruption regulation

Anti-corruption regulations

Since 2016, Peru has the specific Law No. 30424 that regulates the administrative responsibility of corporations in case of corruption crimes stated in the Criminal Law. This Law establishes the scope of the responsibility of corporations for actions that its partners, directors, managers and other empowered related subjects may have done on its behalf or for its benefit.

In case of guilt, according to this Law, corporations are subject to fines, become disqualified entities when contracting with the Government, or are subject to the cancellation of specific licenses and authorizations.

In this regard it is important to mention that Law No. 30424 also states that corporations that may have developed a "Compliance Program" according to its activity, needs and risks in order to prevent the commission of corruption crimes will be exempted from administrative responsibility.

Due to the recent corruption acts detected in the infrastructure sector during 2017, the Government introduced measures to assure the continuity of investments in the country. In January of 2017, Legislative Decree No. 1341

established in its Fifth Final Complementary Provision that certain impediments regulated in the State Contracting Law would be applicable to the processes for entering into Public-Private Partnership contracts. This type of contract could not be celebrated by persons convicted, in the country or abroad, or who, directly or through their representatives, had admitted the commission of corruption crimes, the same limitation being applicable to legal persons whose legal representatives or related persons would have been convicted or had admitted the commission of corruption offenses.

In addition, Emergency Decree No. 003-2017 was enacted in February of 2017 for a one year term. The purpose of this regulation was to approve measures that prevent the paralysis of the execution of public works or public-private partnerships and the breakdown of the chain of payments that put the economic performance of the country at serious risk, as a consequence of acts of corruption carried out by or through of the concessionary companies or contractors, or of their partners or parts of the consortium, that have been condemned or have admitted the commission of crimes against the public administration or money laundering, in order to contribute to economic sustainability and to protect the interests of the State.

A month later, in March of 2017 the Supreme Decree No. 068-2017-EF was approved with the objective of obligatorily establishing that Public-Private Partnership contracts should include an anti-corruption clause, under sanction of nullity. Being that when the contract ends due to causes attributable to the investor derived from the application of the anti-corruption clause established in the respective contract, no compensation would be paid in favor of the investor, for damages.

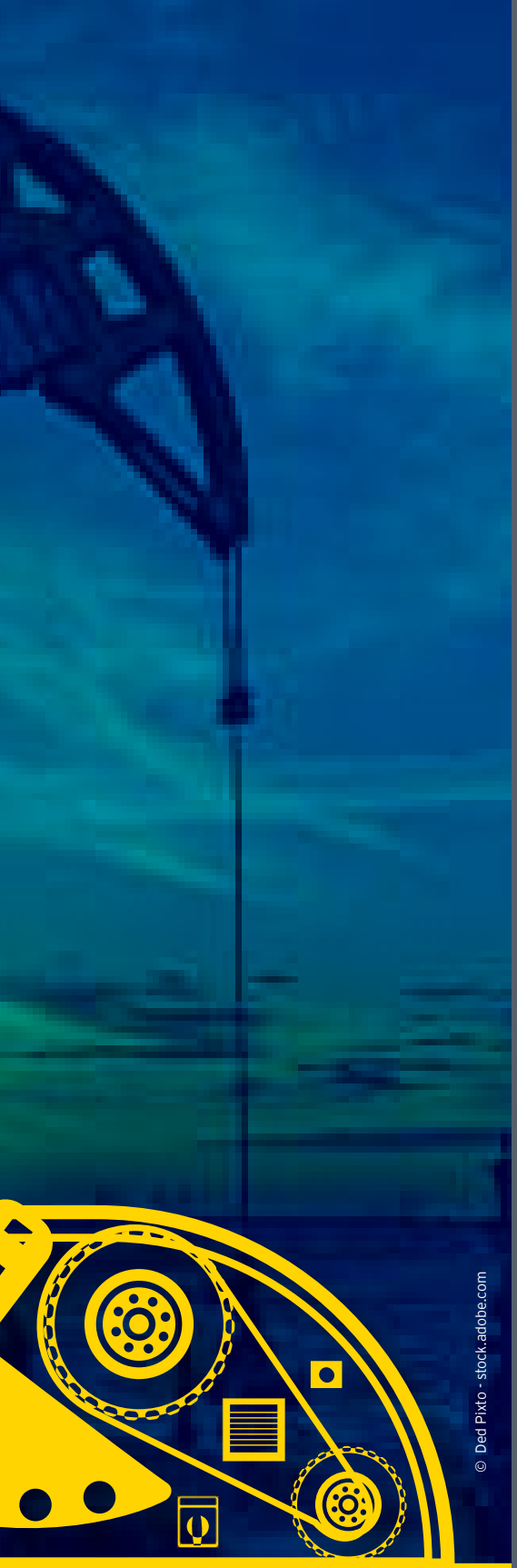
All these anti-corruption regulations were approved as a reaction to the Lava Jato scandal and its implications in our country. This explains why the application of the aforementioned temporal Emergency Decree was extended by means Emergency Decree No. 003-2018 for one month, during March 12, 2018. After this, in March 13, 2018, a proper Law to avoid collateral negative effects was enacted.

This recently enacted regulation is Law No. 30737 and its purpose was to introduce new measures and liabilities for corporations related (as partners, joint-parties or any other form stated in the Corporate Act) to other corporations that are subject to judicial processes for corruption breaches according to

Law No. 30424. Another relevant consideration of the Decree consists in the liability and responsibility of related corporations to create "Compliance Programs" according to each corporation's needs, risks and characteristics to prevent the commission of violations and corruption crimes in the terms and conditions stated in Law No. 30424. This Compliance Program also entails responsibility to hand in information to Authorities periodically regarding the development of the business and its financial status.

Likewise, another substantial change consists in the introduction of incentives for effective collaboration, the thirteenth final supplementary provision of Law No. 30737 allows the Public Prosecutor's Office to conclude Effective Collaboration Agreements with legal entities or legal entities that decide to collaborate effectively in investigations under the Public Ministry, provided that it allows the identification of those involved in the investigation of criminal acts, and the information reached would be effective, corroborable and timely. The approval of the Effective Collaboration Agreement by the judicial bodies, at the discretion of the Public Ministry, may exempt, suspend or reduce the legal entity from the legal consequences derived from the crime; without implying waiver of the corresponding civil compensation.

VI. APPENDIX



REGULATORS AND STAKEHOLDERS

1. Ministry of Foreign Affairs: Executive Office for Economic Promotion - DPE

The Executive Office for Economic Promotion (DPE) is the institution of the Ministry of Foreign Affairs (MRE) responsible for coordinating with Peruvian missions abroad in an effort to promote Peru as a country capable of providing goods and services in international markets, as well as positioning it as a world-renowned tourist destination, and a country with interesting business and investment opportunities in different economic sectors.

It should be noted that the DPE has a Quality Management System certified with ISO 9001:2008 International Standards, governed under the values of equality, social commitment, honesty, transparency, and teamwork, thus ensuring that the needs of its national and international users are met.

(www.gob.pe/rree)

2. Ministry of Energy and Mines - MINEM

This is the central and governing body for the Energy, Hydrocarbons and Mining Sector, a part of the Executive Branch. Its purpose is to formulate and assess national policy in matters of sustainable development in mining-hydrocarbon-power activities. It is the governing authority in environmental matters in reference to hydrocarbons-mining-energy activities.

(www.minem.gob.pe)

3. Ministry of Economy and Finance – MEF

The Ministry of Economy and Finance is an entity of the Executive Branch responsible for planning, directing, and controlling matters related to the budget, treasury, debt, accounting, fiscal policy, public spending, and economic and social policies. It also designs, establishes, performs, and supervises national and sector policies under its competence, assuming a guiding role therein.

(www.gob.pe/mef)

4. Peruvian Private Investment Promotion Agency - ProInversion

ProInversion is the Peruvian investment agency in charge of the promotion of business opportunities with high growth and profitability expectation in Peru. Its purpose is to promote investment unrelated to the Peruvian government by private parties in order to boost Peru's competitivity and development and to improve the well-being of the population. Likewise, its vision is to be considered by investors and by the public as an efficient and strategic option for the development of investments in Peru.

ProInversion provides information to potential investors regarding the incorporation of a legal entity, identifying investment by industries and investment projects (granted and pending), among other topics.

(www.investinperu.pe)

5. Presidency of the Cabinet – PCM

This is the technical-administrative body covered by the Executive Law; its highest authority is the President of the Cabinet. It coordinates and conducts a follow-up on the Executive's multi-sector policies and programs, coordinates actions with Congress and independent constitutional bodies, among other roles.

(www.gob.pe/pcm)

6. Ministry of Environment – MINAM

This is the nation's environmental authority, the overseeing entity of the National Environmental Management System (SNGA), and a part of the Executive Branch. Its main functions are focused in promoting environmental sustainability by preserving, protecting, recovering and securing the environment, ecosystems and natural resources.

(www.gob.pe/minam)

7. Ministry of Labor and Employment Promotion - MTPE

This is the body governing labor in Peru, with all powers necessary to lead the implementation of policies and programs for generating and improving employment, and also responsible for enforcement of legislation for labor matters.

(www.gob.pe/mtpe)

8. National Superintendency of Tax Administration - SUNAT

A decentralized public entity in the Economy and Finance Sector that enjoys economic, administrative, functional, technical and financial autonomy. It is the main tax-collecting agency in the Peruvian economy.

(www.sunat.gob.pe)

9. National Fund for the Finance of the Corporate Activity of the Peruvian Government - FONAFE

A Public Law company attached to the Economy and Finance Sector created by Law No. 27170 in 1999, responsible for regulating and directing the State's business activity.

(www.fonafe.gob.pe)

10. Supervisory Body of Private Investment in Energy and Mines - OSINERGMIN

This is the regulatory, supervisory body that regulates, enforces and oversees the activities undertaken by internal public-or-private-law legal entities and individuals in the electricity, hydrocarbons and mining sub-sectors.

(www.gob.pe/osinergmin)

11. Economic Operation Committee of the National Interconnected System - COES

Private entity conformed by all generators, transmitters, distributors and free users of electricity, whose facilities are interconnected. Purpose of the COES is to coordinate the operation of the Interconnected Electrical National System (SEIN) at the lowest cost and give safety and quality to the supply of electricity to the country.

(www.coes.org.pe/portal)

12. Environmental Assessment and Supervisory Board – OEFA

The OEFA is the guiding entity of the National Environmental Assessment and Supervisory System (SINEFA) and is responsible as such for the evaluation, supervision, and auditing of the compliance with environmental laws nationwide, integrating the efforts of the State and society in a coordinated and transparent manner to ensure the effective management and protection of the environment.

(www.oefa.gob.pe)

13. General Bureau of Environmental Health - DIGESA

This is the technical-regulator body in aspects related to basic sanitation, occupational health, hygienic food, zoonosis and environmental protection. It issues regulations and assesses environmental health processes in the sector. It is an entity under the Ministry of Health.

(www.digesa.minsa.gob.pe)

14. National Forest and Wildlife Service - SERFOR

National Forestry and Wildlife Authority of Peru and the governing body of the National Forestry and Wildlife Management System (SINAFOR). Started functions in 2014 with the aim of promoting the sustainable and participatory management of forest and wildlife resources, and the use of their ecosystem services.

(www.gob.pe/serfor)

15. National Environmental Certification Service for Sustainable Investment – SENACE

The SENACE is a public specialized entity in charge of the review and approval of the detailed Environmental Impact Studies (EIA-d) related to nationwide public, private or mixed capital investment projects which contemplate activities, constructions, building sites and other commercial activities or services that may cause significant environmental impacts. This entity is under the Ministry of Environment.

(www.gob.pe/senace)

16. National Service for Natural Areas under State Protection – SERNANP

This is a public specialized entity responsible for directing and establishing the technical and management criteria for the preservation of Protected Natural Areas (ANPs), and overseeing the conservation of biological diversity. It is an entity under the Ministry of Environment.

(www.gob.pe/sernanp)

17. National Water Authority – ANA

This is the nation's water authority. Itspurpose is the conservation and development of the hydric resources within a hydrographic river basin.

(www.ana.gob.pe)

18. National Council of Science, Technology and Technological Innovation- CONCYTEC

Leading institution of the National System of Science and Technology and Technological Innovation (SINACYT), integrated by the Academy, the State Research Institutes, business organizations, communities and civil society. Its purpose is to regulate, direct, guide, encourage, coordinate, monitor and evaluate the actions of the State in the field of Science, Technology and Technological Innovation and to promote developments through concerted and complementarity action between the programs and projects of the public, academic, business, social organizations and individuals.

(www.gob.pe/concytec)

19. Perupetro

Perupetro is the state-owned company that promotes, negotiates, signs and supervises exploration and production contracts, on behalf of the Peruvian State.

(www.perupetro.com.pe)

20. Petroperu

Petroperu is a state-owned companyof private law that carries outexploration, exploitation, transport,and refining activities.

(www.petroperu.com.pe)

21. National Confederation of Private Business Institutions - CONFIEP

The National Confederation of Private Business Institutions (CONFIEP) brings together and represents private business activities within Peru and abroad. Its principal objective is to contribute to the process of sustained economic growth, based on investment and job creation from the perspective of individual effort and initiative, and the promotion of entrepreneurship and private property.

(www.confiep.org.pe)

22. National Society of Mining, Petroleum and Energy - SNMPE

This is a nonprofit organization, which groups the companies related to the mining, oil & gas and energy related activities in the country.

(www.snmpe.org.pe)

23. National Society of Industries – SNI

The SNI is a non-profit private organization created to promote the development of manufacturing industry in Peru, guaranteeing the freedom and responsibility required to perform business activities according to Peruvian market economy assurance.

(www.sni.org.pe)

24. Peruvian Hydrocarbons Society – SPH

The SPH is the main hydrocarbons guild in Peru. Founded in 2013, it groups the main companies dedicated to exploration and exploitation activities in the country.

(www.sphidrocarburos.com)

25. Peruvian Renewable Energies Society - SPR

Non-profit civil association composed of companies and organizations that are committed to the development of non-conventional renewable energies.

(spr.org.pe)

26. Peruvian Chamber of Renewable Energies - CPER

National organization of civil society whose purpose is to support the fight against climate change through the promotion of renewable energies, and support the process of transition from fossil energy investments to renewable energies investments.

(www.camaraperuanadeenergiasrenovables.org.pe)

27. Peruvian Association of Solar Energy - APES

Non-profit institution, created in 1981 with the purpose of promoting, disseminating, and encouraging training, research, development and applications of renewable energy, the rational use of energy, and respect for the environment in Peru.

(www.perusolar.org/)

28. Peruvian Chamber of Vehicular Natural Gas - CPGNV

The CPGNV, founded in 2004, is a private nonprofit institution that promotes the development and use of natural gas for vehicles in Peru, providing facilities to companies dedicated to the production, transportation, distribution, supply and marketing of the vehicular natural gas and related products.

(www.cpgnv.org.pe)

29. COMEXPERU

COMEXPERU is the private association that comprises the leading companies involved in foreign trade in Peru. Its main purpose is to contribute to the improvement of competitive conditions within a free market, which will make Peru an attractive destination for private investment.

(www.comexperu.org.pe)

30. Lima Chamber of Commerce – CCL

The CCL, founded in 1888, is a private entity that promotes free enterprise and business development by enforcing its legitimate rights, facilitating new business opportunities, providing assistance and services and improving their competitiveness. It is one of the most representative business associations that has more than 13,500 associated companies.

(www.camaralima.org.pe)

31. American Chamber of Commerce of Peru - AMCHAM

The American Chamber of Commerce of Peru (AmCham Peru) is and independent and non- profit organization, founded onJanuary 17, 1968, that represents Peruvian, American and foreign companies. It has about 3,000 members representing more than 580 associated companies.

(www.amcham.org.pe)

32. Canadian-Peruvian Chamber of Commerce - CCCP

The Canadian-Peruvian Chamber of Commerce is a non-profit institution, whose objective is to become a reliable and informative partner in the promotion and development of close commercial relations between Canada and Peru.

(www.canadaperu.org)

33. Peruvian-Chinese Chamber of Commerce - CAPECHI

CAPECHI is a private institution founded on August 23, 2001 to encourage commercial exchange between Peru and China, assisting companies from both countries in promoting business. CAPECHI is recognized by the embassy of the Republic of China as the only official binational chamber of commerce in Peru.

(www.capechi.org.pe)

34. Peruvian-French Chamber of Commerce and Industry - CCIPF

Founded in 1945, the CCIPF is a non-profit civil association. The CCIPF belongs to the first private global network of business relationships and contacts in the world: the Union of French Chambers of Commerce and Industry Abroad. CCI France International brings together 126 French Chambers of Commerce and Industries spread over 95 countries and has 35,000 affiliated companies.

(www.ccipf.com)

35. Australia-Peru Chamber of Commerce - APCCI

APCCI is non-profit organization that aims to build quality relationships to promote trade and investments between Australia and Peru. APCCI plays a vital and active role in assisting Australian and Peruvian individuals and companies to expand their business.

(www.apcci.org)

How can EY help?

EY Peru has a global focus on Energy, hydrocarbons and electricity, with over 2,400 global professionals including engineers, accountants, economists, administrators and lawyers. Our global team is closely networked and shares industry and technical knowledge to provide our clients with seamless global service. Some of our specialist hydrocarbon and electricity-based services include:

Environment and sustainability

Providing an extensive range of services in areas such as sustainability reporting and assurance, sustainability strategy, reputation issues, environmental risk management, greenhouse gas emissions advisory, renewable energy and emissions trading.

Hydrocarbons and electricity advisory

Improving supply chain responsiveness to demand volatility; delivering core business re-engineering (e.g., merging a number of blocks mines into one management structure), and delivering projects aimed at reducing costs or increasing production.

Mergers and acquisitions advisory

Mergers and acquisitions, at either the holding company or asset level, require specific knowledge and skills in order to complete transactions. The knowledge and skills required relate to the regulatory environment, including the rules and regulations of each country's stock exchange, accounting, legal, structuring and taxation disciplines, in addition to an understanding of transaction value-drivers.

Valuation and business modeling (V&BM)

Providing a range of services to companies in the hydrocarbon sector including valuations for purchase price allocation / acquisition accounting, tax planning, finance and stamp duty purposes and containing specialists with extensive skills ranging from valuations of businesses and intangible assets to specialized oil & gas capital equipment and real estate. Further V&BM has deep expertise in model building and review and is able to construct or review life of mine cash flow models as part of an acquisition strategy.

Project finance advisory

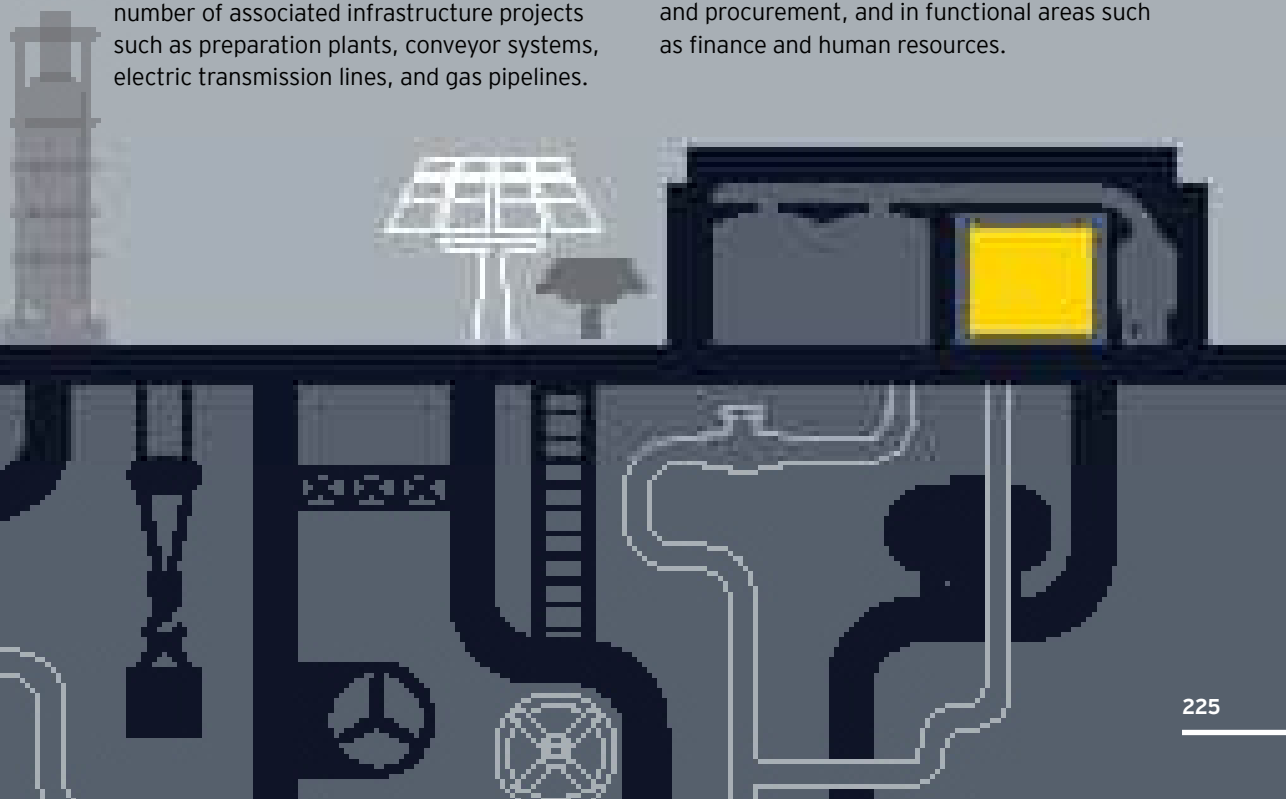
Advising on the development, optimization and implementation of finance plans covering the full range of project financing options for resources projects, non and limited recourse debt and tax effective leasing, as well as a number of associated infrastructure projects such as preparation plants, conveyor systems, electric transmission lines, and gas pipelines.

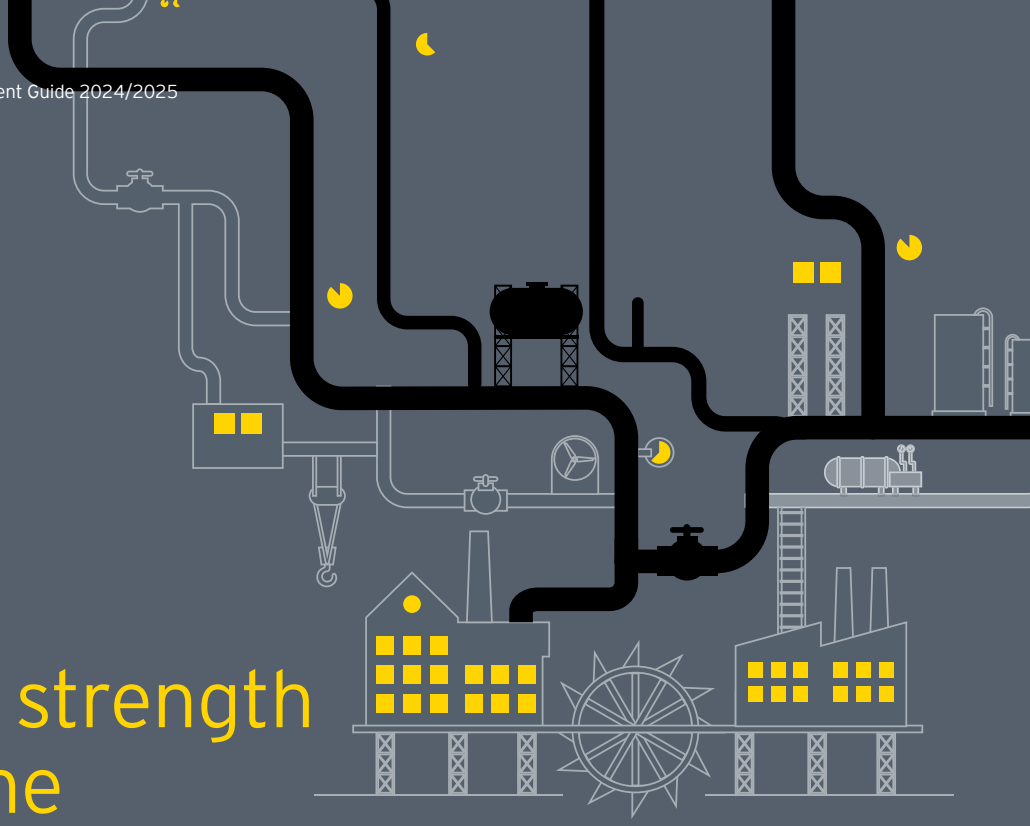
Transactions advisory

Our global transaction capability covers over 80 countries and comprises over 7,000 professionals. These transaction professionals work across many elements of the transaction life cycle dealing with critical areas of financial due diligence, tax due diligence and structuring, valuation and business modeling and transaction integration.

Transaction integration

Providing commercial and operational due diligence, integration planning and methodology development, synergy assessment, and integration program management, corporate strategy advice on market opportunities and areas to exploit along the companies value chain, as well as practical operational advice in areas such as overhead and capital expenditure cost reduction, process efficiency, supply chain and procurement, and in functional areas such as finance and human resources.





Our strength in the hydrocarbon and electricity sector

EY's Energy and electricity professionals combine technical capabilities with a thorough understanding of the industry's operating processes, strategic and operating risks, growth drivers, regulatory considerations, and market dynamics.

We use our wide experience of working with the world's largest hydrocarbon and electricity companies to help you address your key business issues. This might involve helping you to overcome current sector issues such as rising costs where we can help you streamline operational and business processes and improve productivity on key profit drivers. In this environment of increased sector consolidation, we can assist you with your divestment strategies, to ensure that you realize your full value upon exit. If you are looking to expand your operations to new regions, you can draw on our deep understanding of how to manage operational risks – both political and otherwise.

EY has a number of multi-service line solutions to help our clients meet these challenges.

EY thought leadership

Discover our latest insights and studies. Visit our website www.ey.com/pe and stay updated.

TOP 10 BUSINESS RISKS AND OPPORTUNITIES FOR MINING AND METALS IN 2024

In 2024, miners will face growing pressure to do more to address climate change, tackle a growing list of ESG issues and build a healthier, more attractive workforce culture. Companies that adopt a mix of strategies, increase engagement with communities and investors, and take an end-to-end view of issues can find the upside of these risks and sustain growth in volatile times.

THREE WAYS TO MOVE ENERGY CONSUMERS FROM INTEREST TO ACTION

The build-out of renewables is booming. Now we need to direct equal attention to the consumers' role in our changing energy system. EY research shows there is an opportunity to bridge the gap between consumers' interest in sustainable energy and their willingness to take tangible action. Energy providers that focus on three priority areas can engage, activate and inspire consumers to play a pivotal role in accelerating our collective journey to a clean energy future.

TOP 10 GEOPOLITICAL DEVELOPMENTS FOR 2024

The late 2010s and early 2020s have been characterized by rising geopolitical tensions and significant policy shifts in key markets. Heading into the middle of the decade, the global environment will remain volatile and unstable. As executives seek to anticipate and plan for geopolitical disruptions, two key themes will be important to keep in mind in 2024.

WILL GROWING VOLATILY SEE BATTERY INVESTMENT CHARGE AHEAD OR POWER DOWN?

As renewables proliferate and electrification grows, we will face growing challenges to system adequacy, grid management and price volatility. Battery energy storage systems (BESS) can form part of the solution, and investment in BESS is increasing.

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