EY
Building a better working world

Peru's oil & gas investment guide

2019/2020

PERU Ministry of Foreign Affairs

PERU Ministry of Energy and Mines

Perú petro

ProInversión
Private Investment Promotion Agency - Peru

Peru's
oil & gas
investment
guide
2019/2020

ABOUT THIS OIL & GAS INVESTMENT GUIDE

The Oil & Gas industry has an enormous potential in the country. According to the National Oil & Gas Agency (Perupetro), it´s expected to the year 2023, Peru would have the potential and reserves to produce more than 100 thousand barrels per day (bpd) of oil across the country, including both onshore and offshore blocks.

Synergies created between production from the Camisea Project and other industries (transport, mining, industrial, among others), have also contributed to an increase in this potential.

Moreover, the increasing demand of electricity in Peru during the last twenty years due to the development of mining and industrial projects, and the growth of its main cities, has also served to better position primary fossil fuels such as oil & gas in the country's energy structure. However, this situation is going to evolve in the coming years.

The 2014-2025 National Energy Plan highlighted the need to diversify the sources of electricity production due to trends of investment in clean energy in the global market.

In this context, this oil & gas investment guide is structured to help investors broadly evaluate Peru's oil & gas sector investment conditions and provide them a general updated landscape of the industry. In that sense, we have included various aspects usually taken into consideration by investors from around the world before making critical decisions on the development of new oil & gas operations.

Pursuant to the future scenario in which non-conventional sources of energy will take an important place in the national energy matrix, since last year, this guide has included relevant information regarding the electrical industry, for instance, its evolution, supply and demand of electricity, sources of energy, government take, among others. In light of this, an overview of the electrical sector, investment conditions, opportunities and trends are also detailed.

Furthermore, this guide offers a wide range of information, from a macroeconomic perspective (overview of Peru's political structure, business environment and favorable investment promotion conditions) to specific key indicators, regulatory requirements, growth potential and also some information regarding topics currently discussed by experts in the field of oil & gas, and electricity.

Regarding the oil & gas and electrical market, we have included a description of the regulatory terms and applicable fiscal regime, considering major government taxes, royalties and other similar levies, as well as an overview of the customs, labor, environmental, climate change, citizen participation and prior consultation, anti-corruption and accounting regulations that should also be taken into account when starting a business and developing activities in Peru connected with these markets.

Peru's
oil & gas
investment
guide
2019/2020

WHY PERU?

WHAT OIL & GAS INVESTORS SHOULD KNOW

Paulo Pantigoso
Country Managing Partner

> “Building a Better Working World starts by making good decisions. To accomplish it, having the right information at the right time is key

This new edition of the oil and gas guide has as its main objective to serve as a tool for documentation and evaluation of the oil and gas scenario in Peru, in order to offer foreign investors a real and recent view of the Peruvian market to encourage them to know and take advantage of the opportunities offered by our country.

In this way, EY reaffirms its commitment to contribute to the progress of the country and the growth of companies. Our intention is to offer readers a clear, technical and concise overview of the economic performance and business development in Peru.

According to all we have analyzed in this publication, we can see that there is a relationship between the improvement of our economy and the confidence in the investment of the oil and gas sector. Therefore, our challenge has been provided information to enhance their growth.

We invite you to contact us if you have questions and we wish you the best for all the investment opportunities you find in Peru.

Beatriz De La Vega
Energy Leader and Editor

Peru's longstanding tradition as an oil producing country dates back to the end of the 19th century, when the northern region of the country hosted the very first oil well drilling in South America. It should be noted that this region is still producing hydrocarbons. More recently, Camisea, a major project regarding one of the most important natural gas reservoirs in the region, started production in 2004. This project boosted the Peruvian economy in every aspect by providing a reliable source of cheap and eco-friendly energy, diversifying the energy matrix and making of Peru an exporter of liquefied natural gas since 2010.

Peru's economy has been growing at annual rates above other countries in the region, largely supported by the prices of commodities. In times where the international price of crude seems to be entering a period of stabilization, Peru has much to offer to actual and potential investors. For example, not only can investors count on eighteen basins, from which almost fifteen are under-explored, but also on promising Blocks of

nearby successful projects, such as Camisea's and others located offshore. This holds golden opportunities for investors as much of the country is still open to vast exploration. Hence, the Government is trying to crystalize such opportunities by promoting regulatory amendments in the Hydrocarbons Law as well as clarity to environmental permits and social processes.

Moreover, in order to optimize proven reserves of natural gas, efforts to continue and conclude midstream projects are underway by the Peruvian government. The objective is to spread the use of hydrocarbons throughout all Peruvian territory as a part of what is known as the "massification of natural gas".

This macro-project brings opportunities in the development of distribution concessions to residential and industrial users as well as Gas-to-Power projects. Notwithstanding the long-term objectives, such as renewables projects are also a goal to meet in the future.

Peru is compliant with the EITI standard (Extractive Industries Transparency Initiative) since 2007, consolidating during the last ten years its proven leadership in fiscal transparency in extractive industries in Latin America. Currently, Peru is one of 23 EITI compliant countries showing meaningful progress, out of 52 countries in total. Currently, Peru is working in a plan to provide more relevant information regarding the distribution and use of extractive industry revenues by regional and local authorities in order to build trust and dialogue in potential areas of social conflicts. International investors are a crucial part of the growth and success of Peru's oil & gas exploration and production.

Peru welcomes foreign investment with an open and stable regulatory environment.

"

The Government is trying to crystalize such opportunities by promoting regulatory amendments in the Hydrocarbons Law as well as clarity to environmental permits and social processes

> The oil and gas sector has had a positive impact on the Peruvian economy, and it is expected to continue being an important factor which contributes to the Government's objectives of development

Néstor Popolizio
Peruvian Minister of Foreign Affairs
Ministry of Foreign Affairs

I am particularly pleased to present this year's edition of "Peru's Oil & Gas Investment Guide", a very useful tool for foreign and national investors that provides updated and complete data on the current investment climate in the Peruvian hydrocarbons sector, as well as on its open and stable regulatory environment, including fiscal transparency in extractive industries.

In the last decades, Peru has had a strong economy with consistently positive GDP growth, a stable exchange rate, a low inflation rate, compliance with the rule of law, and an open market. As such, and despite the changes taking place in global economic and political conditions, Peru has held its place as a regional leader in terms of economic growth.

PERU Ministry of Foreign Affairs

Against this backdrop, Peru's credibility within the international business community has strengthened thanks to sound macroeconomic management, consistent private investment promotion policies, and continuing efforts to improve public policy and good practice standards, in accordance with the country's aspirations to become a fully-fledged member of the OECD.

Peru's hydrocarbons sector has a great potential for exploration, exploitation, distribution, and commercialization. Although it has 18 sedimentary basins with hydrocarbon exploration potential, only three of them are being exploited. This means that investors can find in this sector numerous business opportunities that will be supported by contracts granted by the Government in order to protect and secure investments.

It is also important to highlight that the oil and gas industry has increased by 8.37%, reaching a total of US$47,708 million in 2018. According to Peru's Central Bank, hydrocarbons investment estimated for the years 2019-2020 are at approximately US$1.3 billion, accounting for 6.7% of total investment, highlighting the importance of the sector to Peru's economy.

The oil and gas sector has had a positive impact on the Peruvian economy, and it is expected to continue being an important factor which contributes to the Government's objectives of development and welfare for its population. For that reason, we invite you to join efforts underway between the public and private sectors and invest in Peru. We hope that with the help of this guide you will be able to find the best opportunities that permit us to work together towards our shared goals.

Thank you.

> “In order to improve the relationship State - communities, MEM had approved a new Public Participation Regulation for oil and gas activities

Eduardo Guevara Dodds
Peruvian Vice Minister of Hydrocarbons
Ministry of Energy and Mines

The Peruvian Government, through the Ministry of Energy and Mines (MEM), supports and promotes the development of the Hydrocarbons sector by promoting responsible, transparent, law-compliant, respectful of individuals and eco-friendly investments.

In 2017, the Peruvian Government created within the MEM the Vice ministry of Hydrocarbons (appointing the first Vice minister in 2018), this demonstrates the view of the Peruvian Government to dedicate efforts in improving the conditions of the oil and gas industry in Peru and having a dedicated team for addressing the major issues of the industry.

During the first year of the Vice ministry of Hydrocarbons it had addressed issues such as (i) the discussions with the Peruvian Congress of amending the Hydrocarbons law; (ii) improving environmental regulations related with the remediation of environmental impacts of the oil and gas industry; (iii) the approval of the new Public Participation regulations for oil and gas activities; and (iv) continuing the projects for the massification of the use of natural gas.

In order to boost hydrocarbon-related activities,

guarantee energy security and make the country more competitive, the MEM has completed the revision of the proposal for the amendment of the Hydrocarbons Law. MEM had reviewed the proposed amendment with entities such as the Ministry of Economy and Finance, the Ministry of Environment and the Ministry of Culture. The mentioned draft proposes new roles for PeruPetro S.A., implements transparency among Hydrocarbons Contracts and extends the term of current Contracts, subject to the commitment of new investment in exploration and production activities. The referred Law is expected to be approved in the second half of the year.

MEM is focusing in attending social and environmental conflicts that had been impacting upstream activities, mainly due to the environmental impacts of old operations, and the non-compliance of the Peruvian Government of commitments with the indigenous communities. In the case of the remediation of environmental impacts MEM had been assigned a budget of S/190 million that will be used for performing remediation activities in Loreto and the North Western operations. In addition MEM is reviewing the regulations applicable to the remediation of impacted areas.

In order to improve the relationship State – communities, MEM had approved a new Public Participation Regulation for oil and gas activities. This new regulation provides specific rules that assure a better communication process with stakeholders of the areas of new upstream projects. The purpose of this regulations is to provide better information to the stakeholders in order to minimize conflicts based on lack of information. In addition to this, the Peruvian Government is working intensively in complying with the commitments made to the indigenous communities in favor of closing social gaps by attending health, education, energy and access to potable water needs of the communities in the area of influence of oil and as projects.

Likewise, the MEM is focused on fostering the massification of Natural Gas, making all the efforts to get the subscription of Concession Contracts to distribute NG in the north of Peru, as well as promoting projects such as the "Massification of Natural Gas – Natural Gas Distribution Through Pipelines in the Apurimac, Ayacucho, Huancavelica, Junin, Cusco, Puno, and Ucayali Regions" project, which is estimated to be awarded in the second half of 2019. With an investment of approximately US$400 million, this project will allow more than 100,000 families from the South-central regions to benefit from natural gas, a cheaper and less polluting fuel.

Moreover, the MEM is promoting the "Integrated Transport System – Southern Peru", through which natural gas will be delivered to southern Peru and will create infrastructure to secure energy supply at the same time, in the interests of society as a whole.

Furthermore, the MEM is promoting a project called "Modernización de la Refineria Talara- PMRT" with an estimated investment of US$5,000 million and in charge of PetroPeru. The Project consists in the construction and extension of facilities aimed towards increasing refining capacity from 65,000 to 95,000 bpd, producing cleaner fuels, reducing imports of such products, and thereby improving Peru's Trade Balance.

In conclusion, as a net oil importer country the need of improving investment conditions in the sector arises, therefore the Government is leading those and other initiatives in order to close poverty and inequality gaps in order to minimize conflicts against upstream activities.

“

We need a deep change in our production and exploration policy, it is urgent to develop projects which guarantee the increase of production and also identify new reserves which are commercially exploited, to guarantee the energy security and the country competitiveness

Seferino Yesquén León
President of Perupetro S.A.

Since we assumed the Presidency of Perupetro, we proposed to give a new order and direction to the way of managing our hydrocarbon resources, assuming important challenges and promoting changes that help to implement a long-term policy for the hydrocarbon sector, because we are convinced that Peru has an important potential not yet developed.

With this purpose, we have defined three strategic axes in which we are currently working: maximize the economic recovery of oil and gas fields in current exploitation, solve existing contingencies to value fields discovered within the last 10 years and replenish reserves through new investments in successful exploration projects.

We have set the goal of increasing oil production to 100,000 barrels by 2023, a challenge that is not in the subsoil, but on the surface, considering that resources are already discovered.

This challenge has led us to initiate an important multisectorial work with the various entities linked to the hydrocarbon sector in the country, in order to align our efforts and wills that will allow us to continue attracting investments and to value our hydrocarbon resources. Part of this effort was recently crystalized with the approval by the Government to enter into a new license agreement with Tullow Oil, an UK entity that demonstrated perseverance in considering Peru as a destination of investment opportunities. This will open the door to other new players in the upstream sector that will see the potential that Peru possesses.

Our Contracting Plan 2019-2020 has identified 69 areas for exploration and exploitation, of which 19 are border areas for the subscription of Technical Evaluation Agreements (TEA) and 49 semi-explored areas for the subscription of TEA- Contracts and Contracts.

Furthermore, in order to make the configuration of the areas more flexible, the investor is given the possibility to redefine the proposed area according to its interests, as well as to delimit and request areas for contracting based on the prospective areas.

Likewise, there is an important effort deployed to modernize the Hydrocarbons Law, in order to achieve: energy security, competitiveness, income generation and sustainable development, guaranteeing the balance between economic growth, care for the environment and social welfare.

We are working hard and determined to achieve a country vision that allows us to reconcile efforts and generate a positive chain of interests, wills, decisions and actions for the reactivation of usptream in Peru, attracting socially responsible investments, with strict respect for the environment and in harmony with the communities in the areas of influence of the operations.

The construction of a new vision will make viable a transversal national commitment on the need to optimize the sustainable use of the potential of our hydrocarbon resources and maximize the generation of value for the welfare of future generations.

> Proinversion has become a key player in the structuring and promotion of the biggest and most relevant infrastructure projects around the country

Alberto Ñecco
Executive Director Proinversion

As Peru's private investment promotion agency, at Proinversion we have identified four strategic pillars to reaffirm our institution as one of the most mature and prestigious in the region.

First, we strive to become a hub of excellence, advising the government in the formulation of Public-Private Partnerships (P3) and asset-based (AP) projects, as well as strengthening the structuring of such projects, consolidating the whole promotion process of P3 and AP. To accomplish this goal it is critical that we can rely on top tier world class advisors (technical, legal, financial), as well as standardized contracts that provide the market with a degree of predictability. We have been increasingly achieving the former and, regarding the latter, recently awarded such an important landmark to an international top legal firm.

Our second major focus is to promote private investment where social and environmental management is a priority. Through the course of our work, we have identified the relevance

ProInversión
Private Investment Promotion Agency - Peru

of an efficient social and environmental management to guarantee sustainable, bankable projects that are beneficial to the whole country, with a focus on supporting decentralized endeavors.

The third pillar is our commercial strategy, were we have been applying an orderly, organized methodology to identify, segment and attract potential investors. Our commercial intelligence is highly specialized to target the more suitable markets and hunt for the right segmented investors for each project, diversifying the platform of potential bidders.

Lastly, we will continue our work at the talent and organizational efficiency level to improve our processes, relying in key performance indicators; hence, ensuring long-term sustainability for all the achieved improvements.

The development of the hydrocarbon sector, with the country's significant gas resources and its history in the oil industry, is essential due to its impact in the national economy considering its contribution to the GDP growth rate, net exports and employment generation (not only within the sector but it can also trigger the creation of new industries in manufacturing). Promotion, therefore, is crucial and as reported by PeruPetro it will translate into investments of over US$4 billion in the next five years and the increment of oil production from 41,000 to 100,000 BPD.

Proinversion has been commissioned by the Ministry of Energy and Mines two hydrocarbon projects of utmost importance. The first one being the Wide Scale use of Natural Gas, which will cover both the central and southern regions of Peru (Ucayali, Junin, Huancavelica, Ayacucho, Apurimac, Cuzco and Puno). This self-financed government initiative has a concession term of 32 years. The objective of the project is to design, finance, build, operate and maintain natural gas distribution pipeline networks in those seven regions of Peru. The second project is the Integrated Transport System of Natural Gas for the southern region of Peru, a midstream project in the process of formulation with a top tier technical advisor. It is under the framework of the energy security policy of the sector, led by the Ministry of Energy and Mines.

Infrastructure is crucial for the country's development. In this direction at Proinversion we have a pipeline of more than US$10 billion for 2019-2021, not including significant mandates particularly in transport as well as water and sanitation, yet to be formally incorporated into the portfolio, which could easily take the pipeline to the US$20 billion landmark. Certainly, hydrocarbons will also continue to be highly regarded in future mandates.

CONTENT

1. BACKGROUND INFORMATION

2. STARTING A BUSINESS IN PERU

3. ENERGY IN PERU

4.

TAX AND LEGAL FRAMEWORK

5.

MISCELLANEOUS MATTERS

6.

APPENDIX


1.

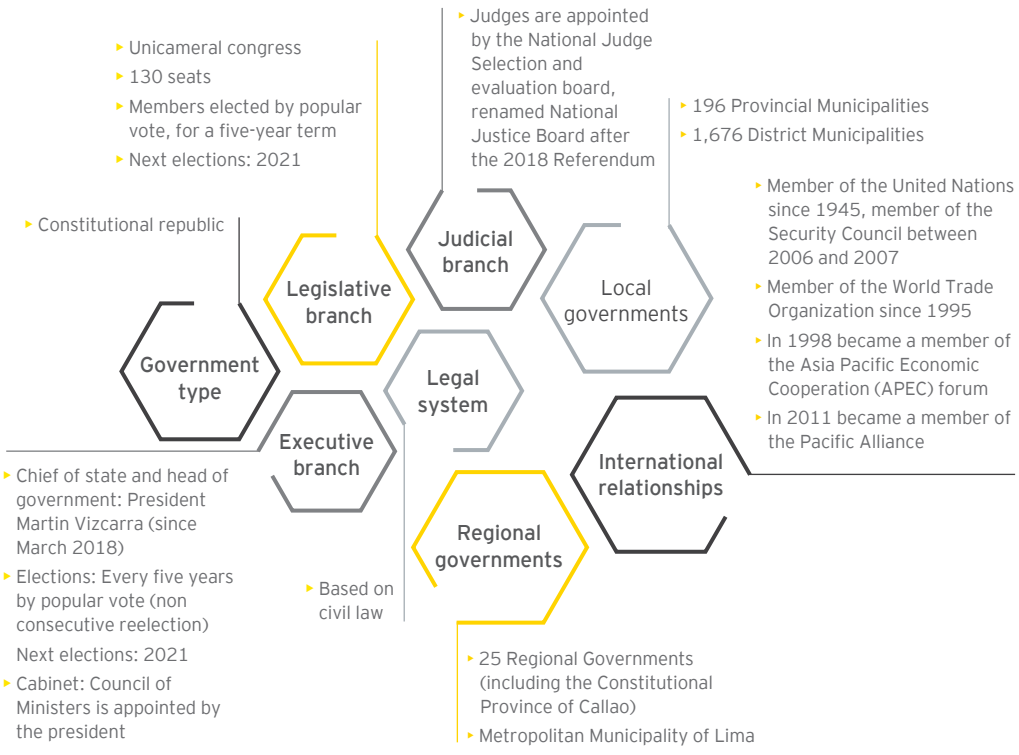
BACK GROUND INFOR MATION

1.
Form of 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 (2018 - 2021) Martin Vizcarra was designated as President. Peru has some of the best macroeconomic indicators of the Americas and expects to grow in terms of the Gross Domestic Product (GDP), at a rate well above the average rate of the region.

Country overview



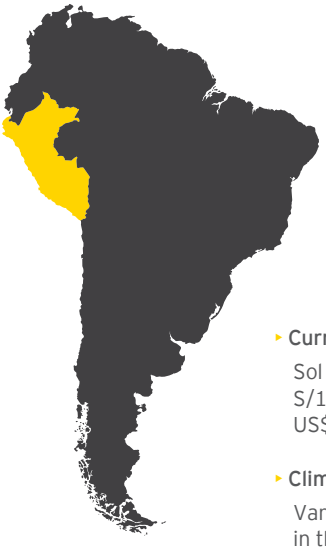
Sources: Peruvian Constitution / CIA - The World Factbook / Ministry of Foreign Affairs / United Nations

2. Geography

Peru, located on the 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 1,285,215.60 km^2, 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 though it contains approximately 18.8 million inhabitants. Lima, the political and economic capital of the country, is located in this region.
- The Highlands (Sierra), which consists of the Andean Mountain Range, covers 27.9% of Peru's territory and contains 9.2 million inhabitants.
- The Amazon Jungle (Selva) is the largest region occupying 60.4% of Peru's territory, in which 4.5 million inhabitants reside. This region is rich in petroleum and forestry resources.

Peru's geographic information



- **Population**
  32.5 million
  Urban 76.7%
  Rural 23.3%
- **Area**
  1,285,215.60 km^2
- **Religion**
  Freedom of religion mostly Roman Catholic
- **Principal languages**
  Spanish / Quechua / Aymara
- **Currency***
  Sol (S/)
  S/1 = US$0.297
  US$1 = S/3.369
- **Climate**
  Varies from tropical in the Amazon region to dry on the Coast to temperate to very cold in the Highlands
- **Natural Resources**
  Gold, copper, silver, zinc, lead, hydrocarbons, fish, phosphates, and agricultural products
- **Timezone**
  GMT-5 (five hours behind Greenwich Mean Time). There is no daylight savings time, and there is only one time zone throughout the entire country.

*Exchange rate as of December 31,2018
Sources: BCRP / INEI / SBS

3. People

The estimated population of Peru for the year 2019 is 32.5 million, of which 10.5 million (approximately 32.2%) reside in Lima, the capital of the country. The labor force is about 23.7 million (2017).

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, 94.1% of the population aged 15 and over can read and write.

People overview

Population	▸ 32.5 million people ▸ 76.7% resides in urban areas
Age structure	▸ 0 - 14 years 26.7% (2018) ▸ 15 - 64 years 66.2% (2018) ▸ 65 years and over 7.1% (2018)
Annual growth rate	▸ 1.1% (2015 - 2018)
Birth rate	▸ 17.7 births/1,000 population (2018)
Death rate	▸ 5.7 deaths/1,000 population (2018)
Sex ratio	▸ At birth 1.03 male/female
Life expectancy at birth	▸ 75.2 years (2018)

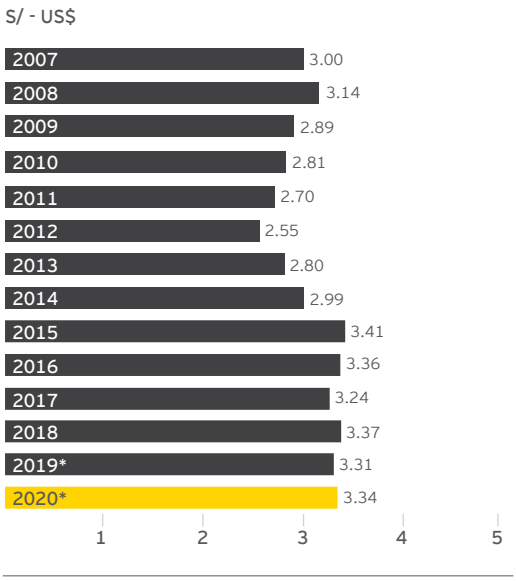
Source: INEI

4. Currency

The official currency of Peru is the Sol (S/). The country has a free-floating exchange rate regime. Banks are currently (April 30,2019) buying US dollars at S/3.306: US$1.00 and selling at US$1.00: S/3.307. 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



*Estimated as of March 2019
Source: BCRP

5. Economic overview

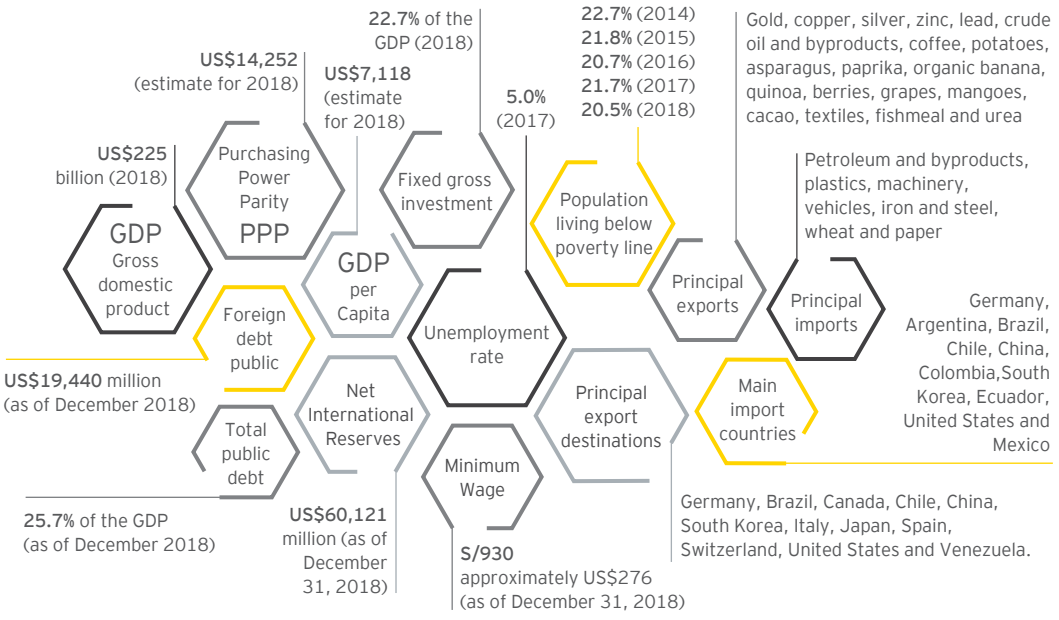
With an estimated population of 32.5 million for 2019, and rich deposits of copper, gold, silver, lead, zinc, natural gas, petroleum and urea, Peru is a very diverse country due to the climatic, natural and cultural variation of its regions.

Peru's economy reflects its varied geography, an arid coastal region, the Andes further inland, and tropical lands bordering Colombia and Brazil. Abundant petroleum resources are found mainly in the Amazon Jungle area.

In recent years, Peru has achieved significant advances in social and development indicators as well as in macroeconomic performance, with very dynamic GDP growth rates, reduction of external debt, a stable exchange rate, and low inflation which in 2018 was 2.2%, inside the Central Bank's annual target range of 1% to 3%.

The country has had continuous economic and political stability since the early 1990's. The Peruvian economy has grown 147.3% between 2000 and 2018. This growth was largely driven by prudent macroeconomic policies, investor- friendly market policies and the government's aggressive trade liberalization strategies.

Peru's economic overview



Sources: BCRP / Ministry of Economy and Finance (MEF) / Apoyo consultoría / International Labor Organization (ILO) / INEI / International Monetary Fund (IMF)

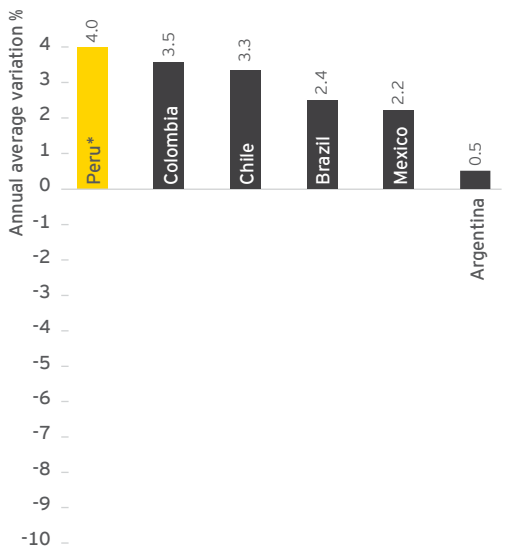
> Peru is one of the fastest growing economies in the region. Since 2000, it achieved an impressive accumulated growth rate of 147.3% GDP

Following a sound 4.0% growth in 2016, the Peruvian economy suffered strong headwinds and its expansion rate slowed down to 2.5% in 2017.

Despite the mentioned slowdown, Peru's economic growth sped up and continue to be one of the strongest among its peers, with a 4.0% growth rate in 2018. It is expected that greater fiscal stimulus for the reconstruction plan and unlocking of the main infrastructure projects will support Peru's economic growth over the next few years. Peru's rapid expansion has helped to reduce the national poverty rate by almost 25 percentage points in the last 10 years, to 20.5% of its total population in 2018.

The country's economic growth has much to do with the monetary and fiscal policies applied over the past two decades, reducing the debt level (from 29.9% of the GDP in 2007 to 25.7% in 2018) and ensuring a prudent fiscal government: overall balance equivalent to -2.5% of GDP in 2016, -3.1% and -2.5% for 2017 and 2018, respectively. All of this has gone hand-in-hand with the liberalization of the goods and labor markets, opening up trade through multiple recent international trade agreements, direct foreign investment, and the maximization of the revenues resulting from its rich natural resources. Peru is also reaping the benefits of the increasing size of its market and domestic consumption, and the development of its financial sector, which can be seen, for example, in the growth of private consumption by 3.8% in 2018 (estimated at 3.8% for 2019). Likewise, as of December 31, 2018, net international reserves stood at approximately 27% of the estimated GDP as of the same date.

Economic Growth Rates Latin America projections: 2019-2020
(Annual average variation %)



*As of January 2019.
Sources: International Monetary Fund (IMF) / For Peru, BCRP

The Peruvian economy for 2019 is expected to be one of the fastest growing in South America. This is driven principally by private investment (6.5% for 2019), private consumption (3.8% for 2019) and improved employment indicators. At the same time, the growth of public investment in 2019 is expected to be situated at 1.0%.

Peru has signed a number of Free Trade Agreements (FTAs). These FTAs have been entered into with the United States, China, Thailand, the European Union, South Korea, Canada, Costa Rica, Chile, Honduras, Mexico, Venezuela, Panama, Singapore, Cuba, Japan and EFTA States (European Free of the Trade Association) which includes Iceland, Kingdom of Norway, Swiss Confederation and the Principality of Liechtenstein. It also has 27 Bilateral Investment Treaties (BITs). Moreover, Peru has negotiated the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP), which includes Australia, Canada, Chile, Japan, New Zealand, and Singapore among others. The afford mentioned CPTPP is currently under ratification process. Negotiations of Commercial Agreements with El Salvador, India and Turkey are in course.

The Free Trade Agreement (FTA) with the United States entered into force on February 1, 2009, opening the way to greater trade and investment between both countries. Likewise, the Free Trade Agreement (FTA) with China and Japan became effective in 2010 and 2012, respectively. Additionally, Peru entered into the Framework Agreement for the Pacific Alliance in April 2011, a trading bloc that it forms part of together with Chile, Colombia, and Mexico, aimed at encouraging regional integration and the greater growth, development, and competitiveness of their economies, as well as achieving the free circulation of goods, services, capital, and people. It should be noted that the 13 FTA have investment chapters in force.

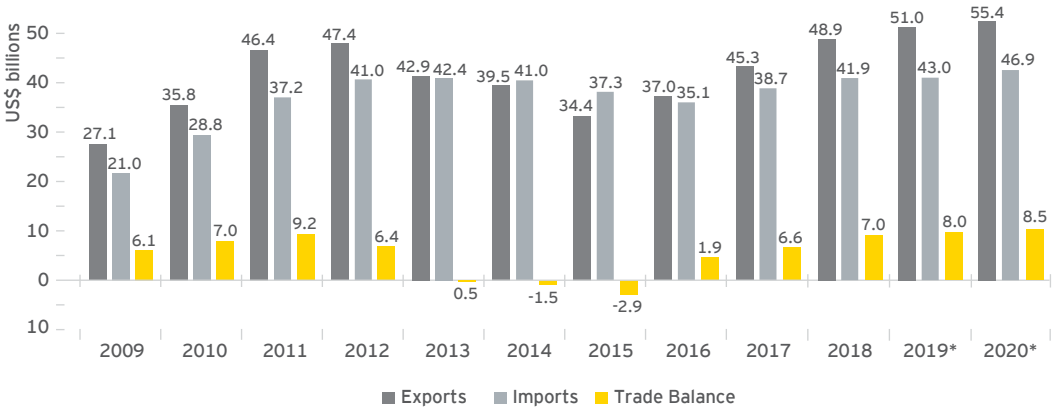
Peru's traditional main exports are gold, copper, petroleum oil, natural gas, zinc, lead, iron, fishmeal, quinoa, grapes, asparagus, mangoes, cacao, berries and coffee, and its principal trading partners are Argentina, Brazil, Canada, Chile, China, Ecuador, Germany, Italy, Japan, Mexico, South Korea, Spain, Switzerland, and the United States.

GDP and GDP per Capita (Measured in Purchasing Power Parity-PPP) of the Principal Economies of Latin America

	2018		2023
Country	GDP in US$ Billions (PPP)	GDP per Capita in US$ (PPP)	GDP per Capita in US$ (PPP)
Chile	481	25,891	31,532
Mexico	2,575	20,645	24,959
Argentina	919	20,610	23,546
Brazil	3,371	16,112	19,205
Colombia	749	15,021	18,802
Peru	458	14,252	18,219
Venezuela	320	10,969	11,556

Source: International Monetary Fund (IMF), October 2018

Trade balance



*Estimated
Source: BCRP

Peru's main economic activities

Peru's main economic activities include agriculture, fishery, mining, the exploitation of petroleum and gas, and the manufacturing 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.

In 2018, Peru ranked as the world's top producer of fishmeal (US$1.562 billion exported); and it is the third-largest exporter of avocado (US$793 million were exported in 2018). It is also an important producer and exporter of fresh asparagus (US$526 million in 2018), fresh grapes (US$815 million in 2018) and natural calcium phosphates (US$231 million in 2018).

In mining, according to the U.S. geological survey, Peru ranked second in the world in 2018 in the production of silver, copper and zinc, third in lead, fourth in molybdenum and tin, and sixth in gold besides having large deposits of iron ore, phosphates, manganese, petroleum, and gas. The principal destinations for Peruvian copper are China and Japan, gold to Switzerland, United States and Canada, zinc to South Korea and silver to the United States.

One of the economic activities that is recently being exploited and which shows great potential is that of forestry resources (cedar, oak, and mahogany, mainly).

Main economic activities by region

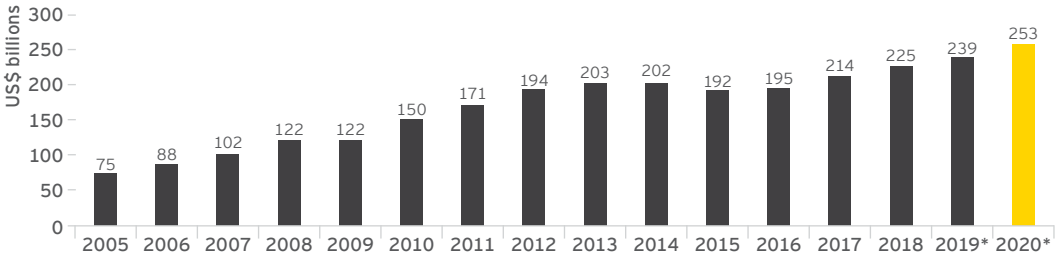
Fishery		Textile industry	
Petroleum		Cement plant	
Oil refinery		Chemical plant	
Sugar refinery		Metal industry	
Fishmeal plant		Smeldering	
Natural gas		Metallurgical industry	
Au	Gold	Zn	Zinc
Ag	Silver	Pb	Lead
Cu	Copper	Fe	Iron

Source: University of Texas - Perry Castaneda Library Map Collection

Gross Domestic Product (GDP) / Trade Balance

The Gross Domestic Product (GDP) in 2018 reached US$225 billion. At the end of 2018, total FOB exports came to US$48.9 billion, while imports totaled US$41.9 billion. The principal exports came from the mining, hydrocarbons, and agricultural and livestock industries.

Peru's GDP



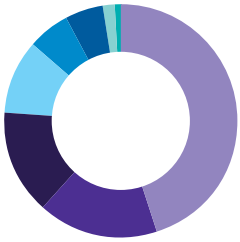
*Estimated
Sources: International Monetary Fund (IMF) / BCRP

Gross Domestic Product (GDP) by Industry - Annual % Change

	2012	2013	2014	2015	2016	2017	2018	2019*	2020*
Agriculture and Livestock	5.9	2.7	1.6	3.5	2.7	2.6	7.5	4.5	4.0
Fisheries	-32.2	24.8	-27.9	15.9	-10.1	4.7	39.7	-4.5	2.0
Mining	2.5	4.3	-2.2	15.7	21.2	4.2	-1.5	3.3	4.3
Hydrocarbons	1.0	7.2	4.0	-11.5	-5.1	-2.4	0.0	3.0	-0.5
Manufacturing	1.5	5.0	-3.6	-1.5	-1.4	-0.3	6.2	2.3	2.5
Electricity and Water	5.8	5.4	4.9	5.9	7.3	1.1	4.4	4.5	4.5
Construction	15.8	9.0	1.9	-5.8	-3.1	2.2	5.4	6.5	7.5
Commerce	7.2	5.9	4.4	3.9	1.8	1.0	2.7	3.4	3.5
Other Services	7.4	6.5	6.0	4.2	4.0	3.4	4.0	4.2	4.0
GDP	6.0	5.8	2.4	3.3	4.0	2.5	4.0	4.0	4.0

*Estimated as of March, 2019
Sources: BCRP / INEI

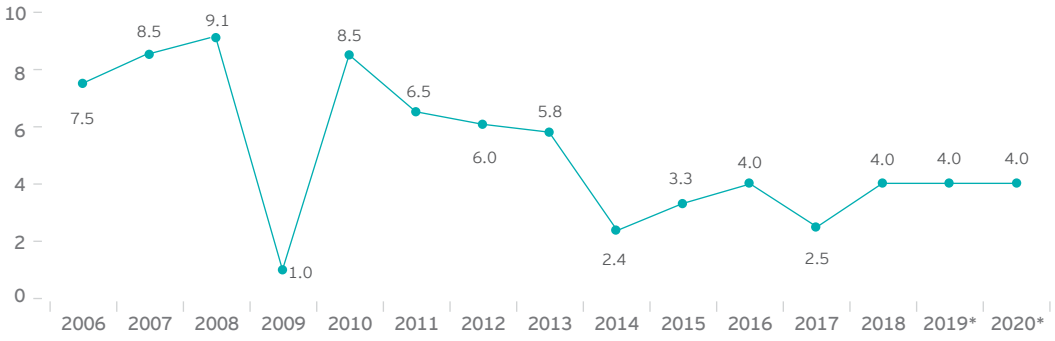
Peru's GDP by productive sector



- **45.4%** Others services
- **16.5%** Manufacturing
- **14.4%** Mining / Oil and gas
- **10.2%** Commerce
- **6.0%** Agriculture Livestock
- **5.1%** Construction
- **1.7%** Electricity and Water
- **0.7%** Fishery

Source: BCRP

GDP variations

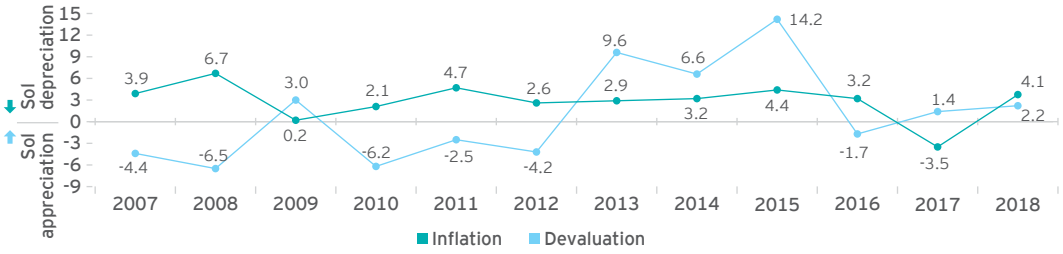


*Estimated as of March, 2019
Source: BCRP

Devaluation and inflation

Exchange rate appreciation: the market value of the Sol fell 4.05% against the US Dollar in 2018.

The annual inflation rate was 2.2% as of December, 2018. Peru's central bank aims to keep the annual inflation rate within a target range of 1% to 3%.



Source: BCRP

Tax Revenues by Economic Sector

	2012	2013	2014	2015	2016	2017	2018	2019*
Agricultural	665.9	760.4	792.7	888.5	990.0	1,041.3	1,222.9	315.8
Fishing	363.9	331.5	359.8	307.9	295.8	365.1	329.0	181.5
Mining	10,633.0	7,180.5	7,429.5	4,349.5	4,307.3	6,989.7	9,834.5	1,650.4
Hydrocarbons	4,444.9	4,369.4	4,394.6	2,516.3	1,704.6	2,148.4	3,034.4	891.8
Primary resource processors	2,753.0	2,654.5	2,083.7	2,245.2	1,907.1	2,064.3	1,733.5	631.9
Non-primary industry	10,170.2	10,872.6	10,852.2	11,066.6	12,036.5	12,237.7	12,748.9	3,153.1
Building trade	4,676.9	5,604.1	6,256.1	6,495.6	6,546.7	5,732.2	6,115.4	1,619.9
Commerce	10,643.1	12,082.3	12,345.9	12,326.6	13,196.0	13,005.9	14,127.2	4,073.9
Others services**	28,112.2	32,827.8	36,589.0	37,074.4	39,363.1	37,639.5	41,772.4	12,000.9
Total	72,463.2	76,683.0	81,103.6	77,270.5	80,347.0	81,224.1	90,918.2	24,519.3

*Estimated as of March 2019.
**Includes Tourism, Hotelery, Transport, Telecommunications and others.
Source: SUNAT

6.
Infrastructure and services

It is expected that Peru will only realize its full economic potential after reducing its infrastructure bottlenecks. Estimates vary, but according to the report of the Economy Committee of the Congress issued in January 2019, the current Peru's infrastructure gap runs into US$159 billion.

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. The generation and transmission of electricity makes necessary big investments in order to provide energy in an efficient way considering the geographical difficulties of the Peruvian territory, and the expansion in the use of renewable energy will demand even more infrastructure investments.

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 Government has announced that 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.

Likewise, Proinversion reported that at the end of 2018 provided support to Regional and Local Governments to mitigate the impact of the elections on public investment. Thus, the goal of awarding works for taxes closed at S/487 million.

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.

To this regard, the 2018 – 2019 portfolio of Proinversion is comprised of 24 PPP projects for an amount more than US$5 billion. Of this total, 8 PPP projects were awarded in 2018 in the amount of US$3.1 billion, 77% of the amount awarded corresponds to the Michiquillay copper project, which will require an investment of US$2,500 million. It is followed by the modernization of the port of Salaverry with US$229 million and six broadband projects in the Arequipa, La Libertad, Ancash, Pasco, Huanuco and San Martin regions for US$358 million.

On the other side, 16 PPP projects are scheduled to be awarded in 2019, in the amount of US$2.5 billion. In the case of the electricity sector, investments up to US$576.81 million during 2019 have been estimated, the same ones that will reinforce the supply of electricity power in the country. In this regard, it is worth mentioning the following projects:

Connection 220 KV Tingo Maria – Aguaytia, Substations, Lines and Associated Extensions; Connection 500 KV La Niña –Piura, Substations, Lines and Associated Extensions and Connection 220 KV Paríñas – NuevaTumbes, Substations, Lines and Associated Extensions

In February 2019, Proinversion called for an international public tender for the concession of three electricity transmission projects that will benefit the population of the regions of Tumbes, Piura, Huánuco and Ucayali.

The 220 KV Transmission Line Tingo María Nueva -Aguaytia (73 km) starts from the future Substation Tingo Maria Nueva in the Rupa-Rupa District, Huanuco and reaches Substation Aguaytia owned by Aguaytia Energy located in Ucayali. The 500 KV La Niña -Piura Transmission Line project will connect the La Niña Substation with the future Piura Nueva Substation with an approximate length of 87 km. The 220 KV Pariñas – Nueva Tumbes Transmission Line (158km) includes the derivation of the Transmission Line in 220 kVL-2280 - Nueva Tumbes, the construction of the Nueva Tumbes Substation and the expansion of a cell in Substation Pariñas for the exit towards Substation Nueva Tumbes.

The three projects were included in the ambitious plan to expand the energy transport capacity launched by the Ministry of Energy and Mines, as an update of the 2017-2026 Transmission Plan. All together require an approximate investment of US$208 million, and are expected to be awarded in the second half of 2019.

Transmission Line 500 KV Piura Nueva – Frontera Substation

This project is one of the biggest projects The Peru-Ecuador Interconnection project includes the construction of a 500 KV transmission line that will connect the Chorrillos Substation in Ecuador with the La Niña Substation in Peru. The latter includes the construction of two new intermediate substations: Substation Pasaje in Ecuador and Substation Piura Nueva in Peru.

Actions have already begun for the execution of the project, among which Presidential meetings and Binational Cabinets with the Republic of Ecuador stand out, in order to guarantee the harmonization of the execution of the project of interconnection between both countries. The project requires an approximate investment of US$144 million, and is expected to be awarded in the second half of 2019.

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 2018, Proinversion had identified 97 potential investment projects for amounts exceeding US$12,000 million, which have been made available to regional and local governments for evaluation.

Granted Infrastructure Concessions

Concessions granted in transport infrastructure

- Airports
- Port facilities
- Tolls
- Weightning station

Railway

- Midcountry railway
- South railway
- South east railway

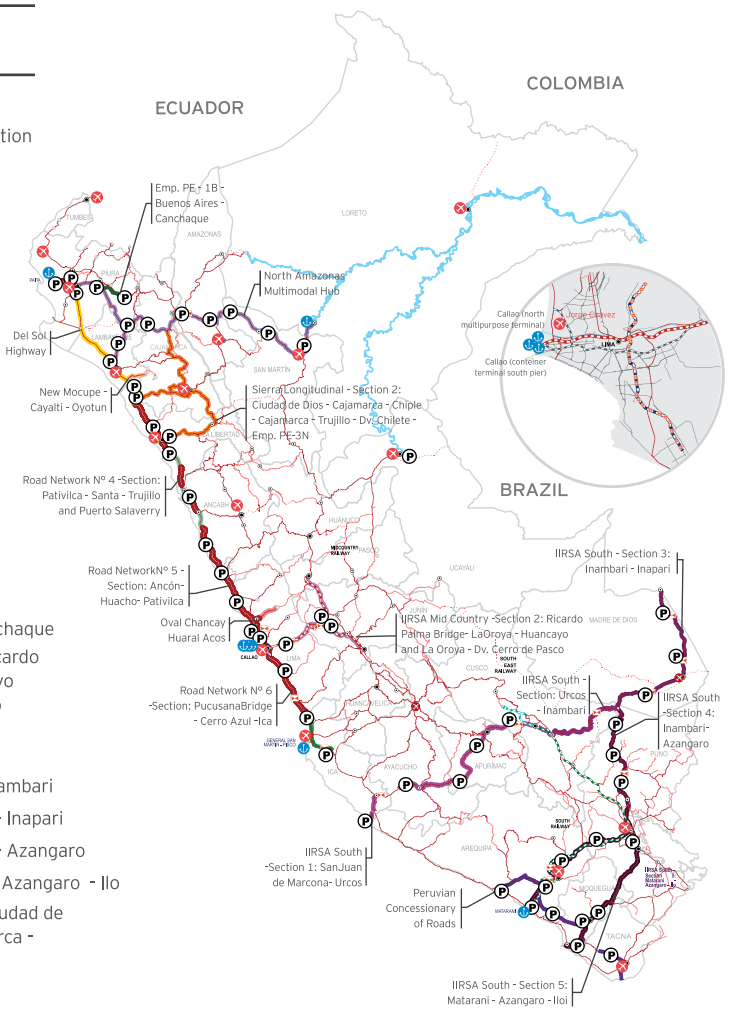
Basic network of the Lima Metro

- Basic network of the Lima Metro - Line 1
- Basic network of the Lima Metro - Line 2 and 4

Waterway

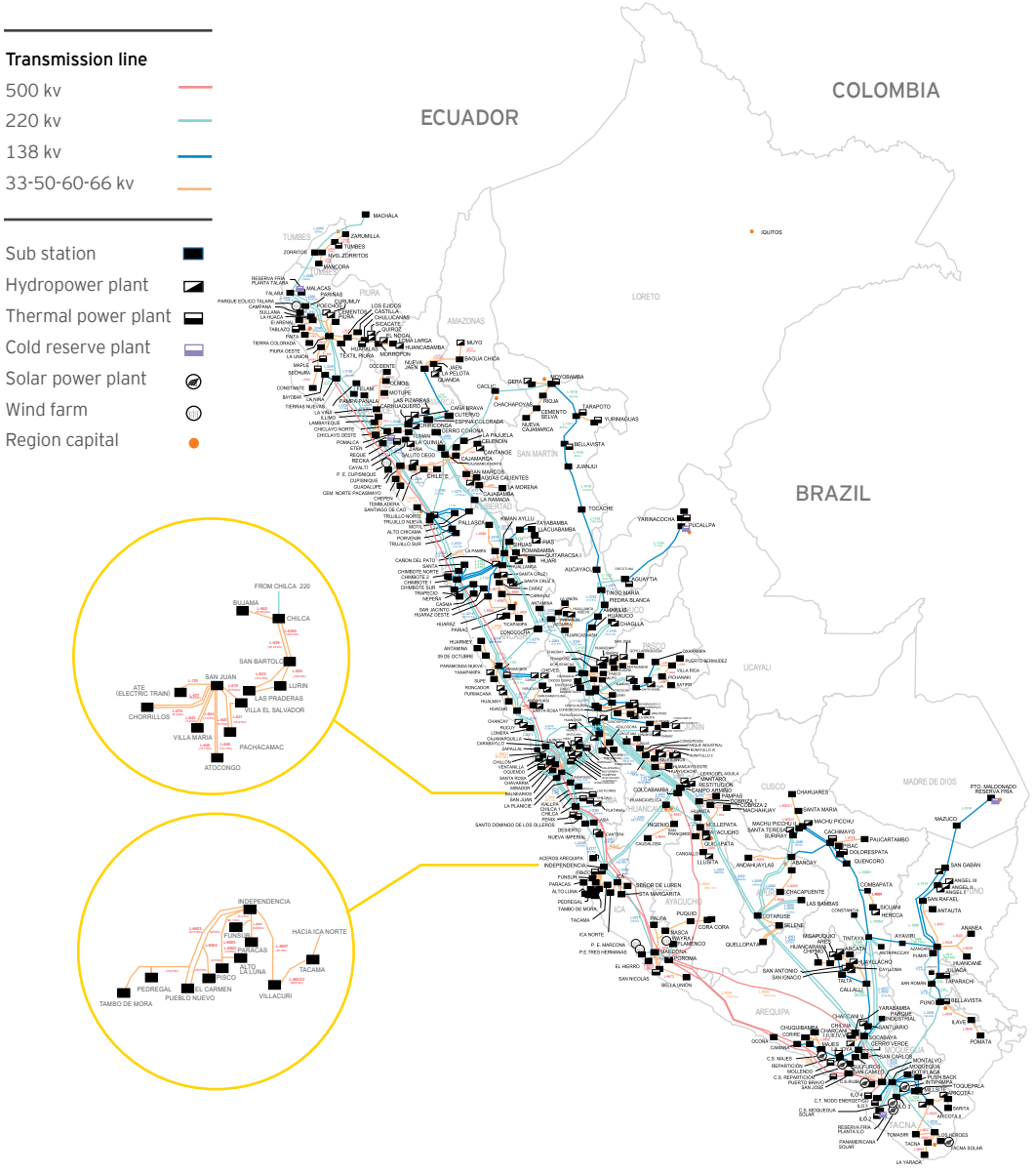
Roads

- Del Sol Highway
- Peruvian Concessionary of Roads
- North Amazonas Multimodal Hub
- Emp. PE - 1B -Buenos Aires - Canchaque
- IIRSA Mid Country - Section 2: Ricardo Palma Bridge - La Oroya - Huancayo and La Oroya - Dv. Cerro de Pasco
- IIRSA South - Section 1: San Juan de Marcona - Urcos
- IIRSA South - Section 2: Urcos - Inambari
- IIRSA South - Section 3: Inambari - Inapari
- IIRSA South - Section 4: Inambari - Azangaro
- IIRSA South - Section 5: Matarani- Azangaro - Ilo
- Sierra Longitudinal - Section 2: Ciudad de Dios - Cajamarca - Chiple - Cajamarca - Trujillo - Dv. Chilete - Emp. PE - 3N
- New Mocupe - Cayalti - Oyotun
- Oval Chanca and Huaral Acos
- Road Network N° 4 - Section: Pativilca -Santa - Trujillo and Puerto Salaverry
- Road Network N° 5 - Section: Ancon - Huacho - Pativilca
- Road Network N° 6 - Section: Pucusana Bridge - Cerro Azul - Ica



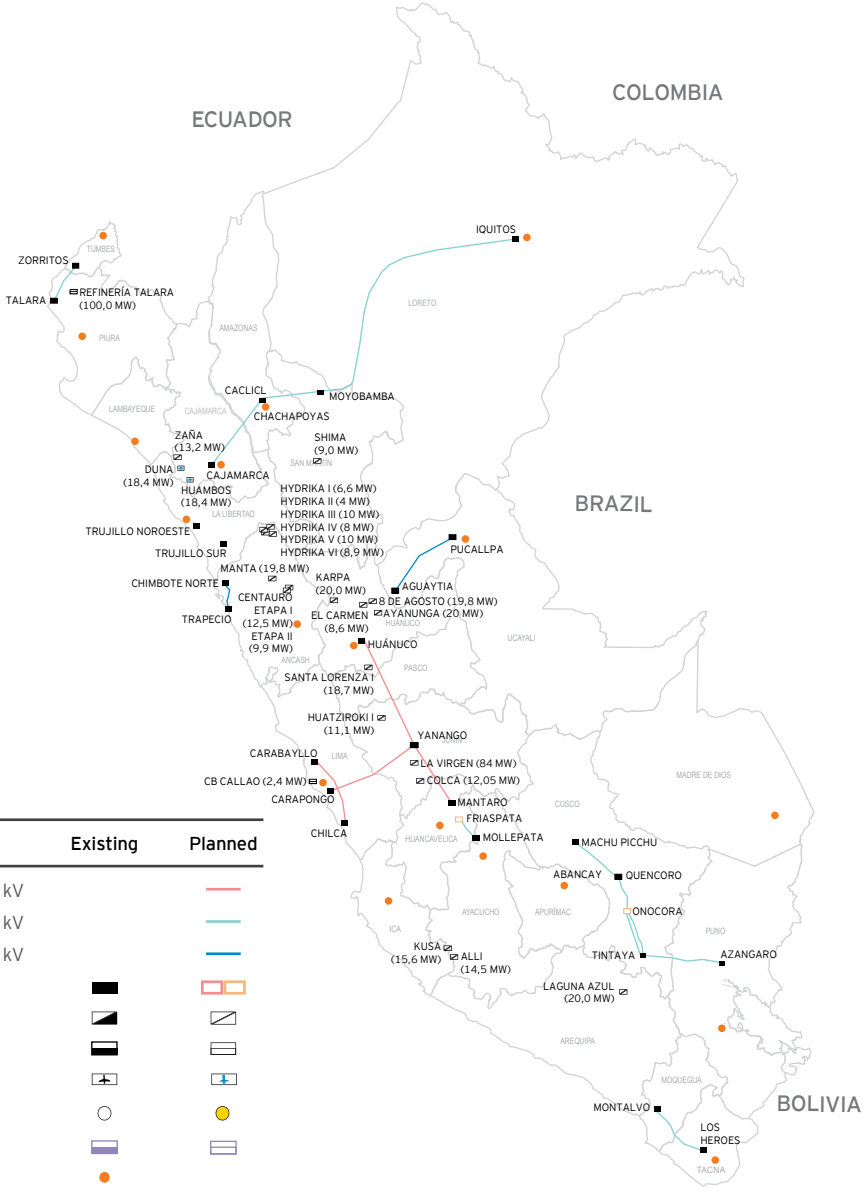
As of December 2018
Source: Ministry of Transport and Communications

Electricity infrastructure map



As of December 2018
Source: COES

2019-2022 Electricity infrastructure projects



Description	Existing	Planned
Transmission line 500 kV		
Transmission line 220 kV		
Transmission line 138 kV		
Sub station		
Hydropower plant		
Thermal power plant		
Wind farm		
Solar power plant		
Cold reserve plant		
Region capital		

As of December 2018
Source: COES

7.
Peru's 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. Sound economic prospects, with GDP growth rates of 4% last year, are a key supporting factor for the investment-grade rating. Peru's robust growth prospects are supported by important investments levels. The upgrade is also

Peru's investment grade rating
(long term debt in foreign currency)

Country	S&P	Fitch	Moody's
Chile	A+	A	A1
Peru	BBB+	BBB+	A3
Mexico	BBB+	BBB+	A3
Colombia	BBB-	BBB	Baa2
Uruguay	BBB	BBB-	Baa2
Paraguay	BB	BB+	Ba1
Brazil	BB-	BB-	Ba2
Bolivia	BB-	BB-	Ba3
Argentina	B	B	B2
Ecuador	B-	B-	B3
Venezuela	SD	RD	C

As of April 2019
Sources: Standard & Poor's / Fitch Ratings / Moody's

Investment grade

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

As of December 2018
Sources: Standard & Poor's / Fitch Ratings / Moody's

supported by the significant decline in Peru's fiscal and external vulnerabilities within a context of high and diversifying sources of growth with low inflation and strengthening macroeconomic fundamentals. It is expected that these trends will remain in place over the medium term despite an increasingly riskier international environment. 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 favorable 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 and should help to boost the stock market and the appreciation of the Peruvian currency, the sol, in the short term. For this reason, nowadays, many multinational corporations look at the country more seriously, as higher private investment is flowing into the country. This should contribute to alleviating a still complex social situation in Peru, by achieving improvements in employment and decreases in poverty.

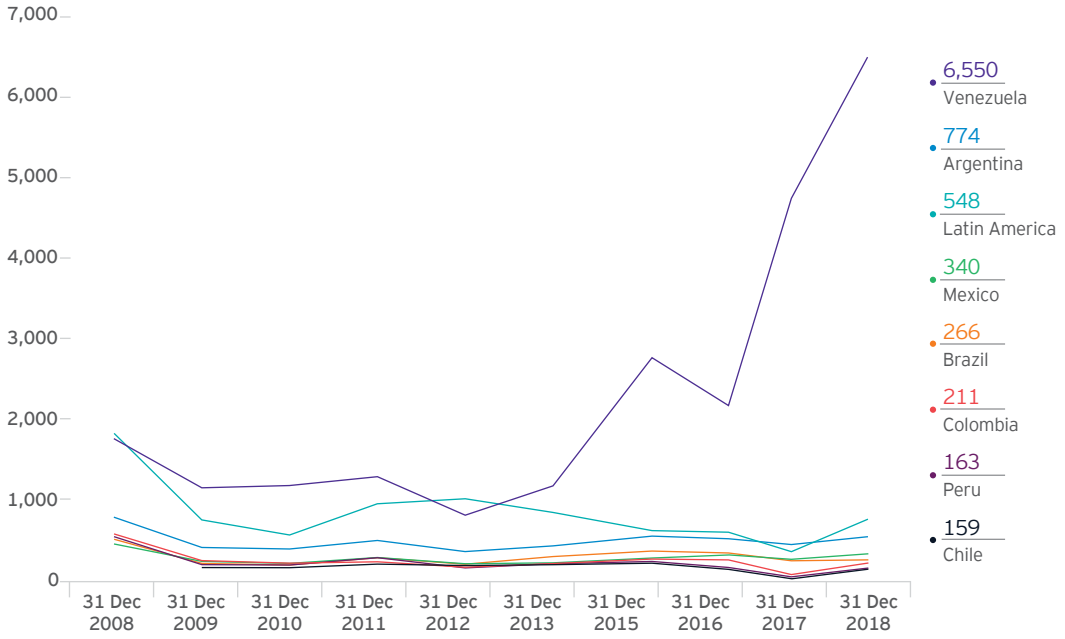
Country risk

As of December 2018, Peru had a country risk of 163 base points, ranking as the second-lowest in Latin America. This score is nearly one-third of the regional average (548 points).

Peru has achieved the position of the third most globalized country in Latin America, according to the Globalization Index established by EY. Five elements are considered within this index: openness to foreiqn trade, capital flows, exchange of technology and ideas, international movement of workers, and cultural integration. Additionally, in early 2018 Bloomberg Markets positioned Peru as the ninth emerging market with the greatest international projection, based on the country's advantages, such as low share prices and their possible increase in the future.

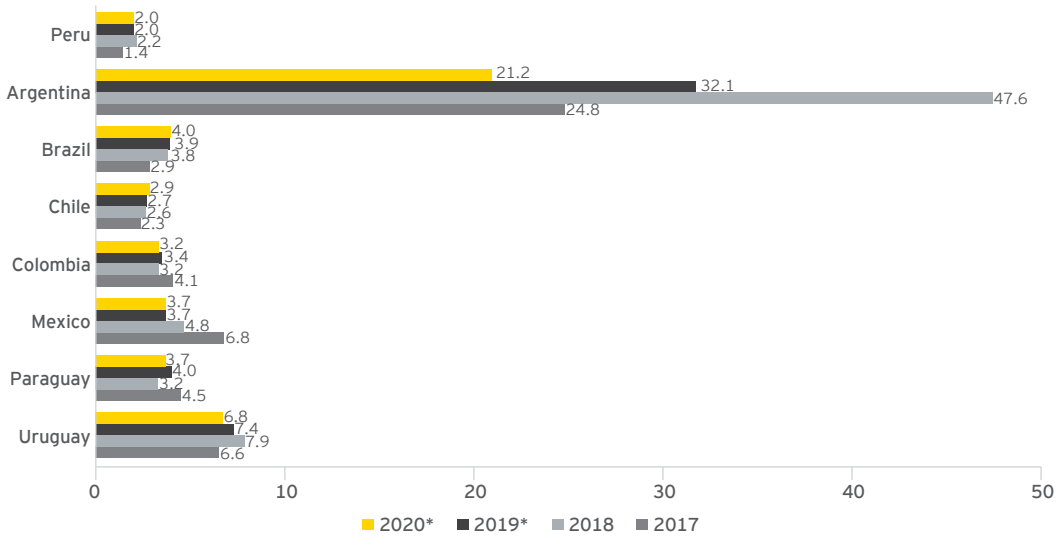
As may be seen in the following charts, Peru's level of inflation is one of the lowest in Latin America, with a rate of 2.2% in 2018, and an estimated range of 2.0% for 2019. In addition, over 2000 - 2018, the Peruvian economy had the second lowest average annual inflation rate in Latin America, at 2.1% above Ecuador (1.5%) and below that of Chile (3.1%) and Colombia (3.6%).

Country risk indicator



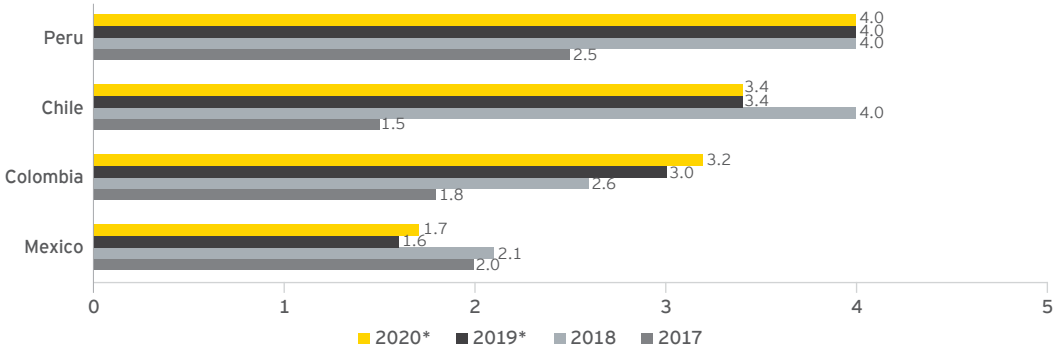
Source: BCRP

Estimated inflation rates in Latin America



*Estimated
Sources: Latin America Concensus Forecast (March 2019) / BCRP

Estimated Gross Domestic Product (GDP) growth percentage rates (Pacific Alliance and Latin America)



*Estimated
Sources: Latin America Concensus Forecast (March 2019) / BCRP

8.
Investment promotion conditions

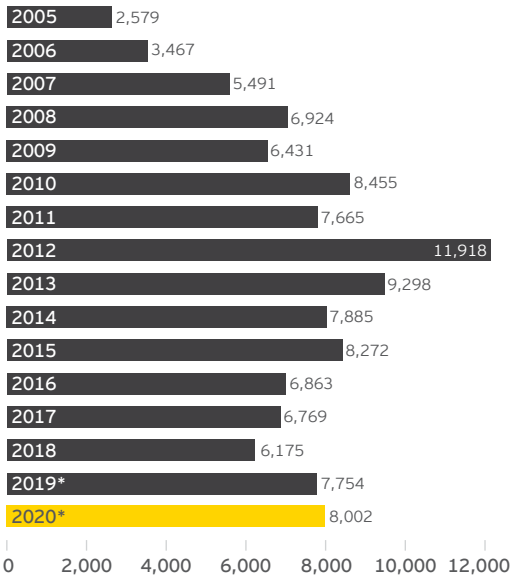
Foreign investment legislation and trends in Peru

The Peruvian government is committed to the pursuit of 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.

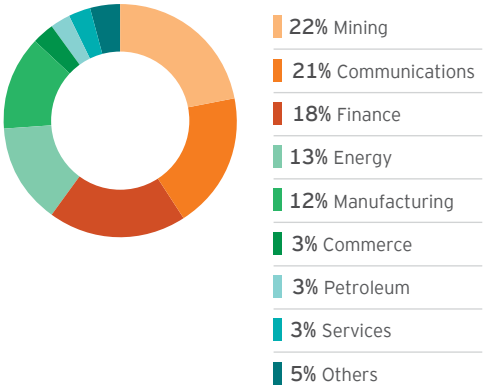
Peru's Central Bank reported that the foreign direct investment (FDI) inflow is expected to reach US$7.7 billion in 2019. FDI is concentrated in mining, communications, finance, manufacturing and energy.

Foreign direct investment inflows
(US$ billions)



*Estimated as of March, 2019
Source: BCRP

Foreign direct investment stock by sector (2018)



Source: Proinversion

The Peruvian government 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 Peru, in a two-year term, at least US$10 million in the hydrocarbon and/or mining sectors; US$5 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 as long as the operator is in compliance with the relevant Peruvian tax legislation.

Elimination of bureaucratic barriers

Due to the last tax reform, many modifications were introduced regarding the regulation of the activities carried out by public administration entities. Because of this, Legislative Decree No. 1256 declared the elimination of illegal and unreasonable bureaucratical barriers that may have been hindering the access or permanence of economic agents into the Peruvian market or that may have contravened laws or principles related to the bureaucratic simplification process.

The aforementioned Legislative Decree aims at public administration entities and all public employees and encourages them to its compliance to improve the use of public resources and to promote the efficiency in the functioning of public administration entities.

Merger control rules in the electric sector

Regarding the electricity sector, the Peruvian Institute for the Protection of the Consumer and Copyright (INDECOPI) has established special regulations on horizontal and vertical mergers which involve entities that develop electrical energy generation, transmission and distribution activities. These rules aim to avoid cases of clusters that may damage, distort or diminish the free market and free concurrence principles of the sector.

For these purposes, a previous authorization for mergers must be requested to INDECOPI's Defense of Free Market Commission by entities who, jointly or separately, own 15% of the market in the case of horizontal concentration (develop one electrical activity), and 5% in the case of vertical concentration (develop two or more electrical activities), before or after the merger. This authorization must be duly supported with documentation.

Once this authorization is requested, the Technical Secretariat of the aforementioned Commission must evaluate if the support documentation is enough for purposes of the requested authorization´s evaluation. If not, the Commission and its Technical Secretariat are allowed to request further information.

When the information is complete, the Commission has 30 business days in order to evaluate the request. The term for the authorization evaluation may be extended if it is necessary. While this proceeding is in course, the Commission is allowed to suggest modifications to the merger scope and limitations in order to make it free of negative effects on the market of generation, transmission and distribution of electrical energy.

If the authorization is denied, an appeal may be presented before the Defense of the Competence Tribunal No. 1. This Tribunal will reconsider the authorization request and issue a final decision within the next 30 business days.

Notice that in case the vertical or horizontal concentration results from a Proinversion approved promotion project, the aforementioned authorization proceeding may differ.

In spite of the aforementioned, bear in mind that that during April 2019, the Draft Law that establishes the procedure for the prior evaluation of business concentration operations was approved by the Congress Consumer Protection Commission and is expected to be submitted for approval by the majority of the Congress for its entry into force in the current year. If this Law is approved, all sectors -including the electric sector- would have to adapt to this new regulation and INDECOPI would be responsible for providing the authorizations.

Green bonds

Within the framework of the Paris Agreement, Peru has committed to reduce by 30% its emissions of carbon dioxide (CO2), methane (CH4) and nitrous oxide (N20) by 2030.

Thus, at the end of 2017, through an alliance between the Stock Exchange of Lima and the embassy of the United Kingdom and Mexico CO2 (platform of environmental markets of the Mexican Stock Exchange), the first green bond market in South America was implemented in Peru.

Green bonds are instruments representing debt greater than one year, whose resources are applied exclusively to the financing or refinancing, in part or in its entirety, of new and / or existing projects that generate positive environmental impacts.

To obtain the classification of "green project", a certification must be obtained from an independent auditor that verifies that the resources collected comply with the Green Bonds Principles; this is the biggest difficulty for companies to issue green bonds, since the demand for these is high. Likewise, the green bonds allow obtaining a financing of sustainable projects with a lower interest rate with respect to regular bonds.

The Green Bonds Guide designed for Peru identifies some eligible projects by sector to be financed by these bonds, such as renewable energy production, energy efficiency, waste treatment, clean transport, sustainable land use, biofuels, adaptation and conservation forestry and preservation.

The first public offer of a green bond in Peru was made on October 2018 by a company of cleaning products, for a value of S/100 million. The issuance will serve to refinance sustainable projects focused on improving energy efficiency and water treatment.

As indicated by the consultant A2G, in a climate finance conference in Peru held by the Embassy of United Kingdom in March 2019, considering the investment made only through Proinversion portfolio projects, the potential of green bond projects in Peru could reach US$489.74 million dollars, this amount can be significantly exceeded in 2020-2021.

Green Climate Fund (GCF)

There are several international funds that finance actions against climate change, being the developing countries the target recipients. One of them, the Green Climate Fund (GCF) aims to be the main global financial mechanism for mitigation and adaptation to climate change.

GFC is an operating entity of the financial mechanism of the United Nations Framework Convention on Climate Change (UNFCCC), created to support projects, programs, policies and other activities that contribute to low carbon development and climate resilience in developing countries. Peru being one of the first countries to receive funds from this entity in 2015 and to have a national designated authority (NDA).

Since 2016, the Ministry of Economy and Finance (MEF) is the NDA before the GCF to approve any project or program that wants to be presented to this fund. To benefit from the fund, investors must have a letter of no objection issued by the MEF, through which the latter expresses its no objection and that the financing proposal is aligned with national policies, plans and strategies, as well as the international commitments assumed by the country in the context of climate change.

On the other hand, to distribute its resources, the GCF works through a series of institutions (national, regional or international) to finance programs and projects. Previously, these institutions go through an accreditation process whose objective is to determine if they meet the standards required by the GCF, in terms of financial resources management, compliance with environmental, social and gender safeguards, and capacity for the correct management of programs and projects.

Currently, the Fund for the Promotion of Protected Natural Areas of Peru (Profonanpe), a private non-profit entity specialized in the collection and administration of financial resources, is the only institution accredited by the GCF in Peru as a National Implementation Entity, and is the first Latin American fund accredited by the GCF. Mainly, they allocate resources to the execution of programs and projects that contribute to the conservation of biodiversity, mitigation and adaptation of climate change.

Real estate investment promotion rules

On August, 2015, by means of Legislative Decree No. 1188, Peru enacted special rules with tax incentives to promote Real State Investment Trusts (REITs) in Peru, called in Spanish as Fondos de Inversión en Bienes Inmobiliarios (FIRBI's).Under these rules, companies who provide real state to the said funds from January 1st, 2016 until December 31st, 2019, shall consider that such alienation took place in the date in which the FIRBI transfers real state to a third party or to another participant; or when the company transfers its participation certificates issued by the FIRBI as a consequence of its contribution. The mentioned Legislative Decree also includes certain provisions with tax incentives on municipal taxes (Property Transfer Tax). This regulation has been effective since January 1st, 2016.

Recognition of favorable investment climate

According to the World Economic Forum 2017-2018, Peru is among the top countries in Latin America in terms of macroeconomic environment, market size, financial market development, labor market efficiency, goods market efficiency, and technological preparation, among others.

Exemption of capital gains in the Stock Exchange

On December 10th, 2016, Peru enacted Legislative Decree No. 1261 on the Official Gazette, which made several changes to the Peruvian capital gain temporary exemption.

This exemption was already in force due to Law No. 30341, but was only applicable on capital gains performed in the Stock Exchange that were derived from stocks and securities representative of stocks. Due to Legislative Decree No. 1262, the exemption was extended to the following securities:

- Debt securities.
- Mutual Funds quotes.
- Trading invoices.
- Certificates from Funds in Immovable Property (FIRBIs shares).
- Certificates from Trusts in Immovable Property (FIBRAs shares).

In order to apply for the exemption on the aforementioned securities, certain requirements must be observed, as established by Legislative Decree No. 1262.

Global competitiveness index

	2018	
	Ranking	Score
Peru Total	63/140	61.3
Components		
Enabling enviroment	64	64.1
Institutions	90	50.2
Infrastructure	85	62.4
ICT adoption	94	43.9
Macroeconomic stability	1	100.0
Human Capital	43	75.5
Health	32	93.3
Skills	83	58.6
Markets	48	60.1
Product market	50	59.5
Labour market	72	58.8
Financial system	63	60.5
Market size	49	61.6
Innovation ecosystem	93	43.2
Business dynamism	92	54.5
Innovation capability	89	31.9

Source: World Economic Forum 2018

Ease of Doing Business in Peru

According to Doing Business 2019, Peru ranks 68th out of 190 countries in terms of ease of starting a company and doing business, and ranks third in South America.

Doing Business
(presenting Latin America countries)

Position	Country
54	Mexico
56	Chile
64	Puerto Rico (United States)
65	Colombia
67	Costa Rica
68	**Peru**
79	Panama
85	El Salvador
97	Uruguay
98	Guatemala
102	Dominican Republic

Source: World Bank (WB) - Doing Business 2019

Forbes
(presenting Latin America countries)

Position	Country
33	Chile
48	Costa Rica
54	Mexico
58	Uruguay
64	**Peru**
67	Colombia
73	Brazil
75	Panama
76	Argentina
91	Dominican Republic
97	Guatemala

Source: Forbes 2018

Summary of doing business indicators

	Indicators	Peru DB 2018	Peru DB 2019	DB 2018	DB 2019
Starting a business	▸ Number of procedures	7.0	8.0	8.4	8.2
	▸ Time (days)	26.5	24.5	31.7	28.5
	▸ Cost (% of income per capita)	10.0	9.9	37.5	37.8
	▸ Registration of minimum capital paid up (% of income per capita)	0.0	0.0	2.1	1.5
Construction permits	▸ Number of procedures	15.0	15.0	15.7	15.4
	▸ Time (days)	188.0	187.0	191.8	199.0
	▸ Cost (% of warehouse valvue)	1.1	1.2	3.2	3.2
Property registration	▸ Number of procedures	5.0	5.0	7.2	7.2
	▸ Time (days)	7.5	7.5	63.3	63.3
	▸ Cost (% of property value)	3.3	3.3	5.8	5.8
Getting electricity	▸ Number of procedures	5.0	5.0	5.5	5.5
	▸ Time (days)	67.0	67.0	66.0	65.5
	▸ Cost (% of income per capita)	349.6	348.4	927.4	946.3
Access to credit	▸ Strength of legal rights index (0-12)	8.0	7.0	5.3	5.4
	▸ Depth of credit information index (0-8)	8.0	8.0	4.8	4.9
	▸ Credit registry coverage (% of adults)	37.4	38.2	14.0	14.6
	▸ Credit bureau coverage (% of adults)	100.0	100.0	43.1	44.5
Protecting minority investors	▸ Extent of shareholder rights index (0-10)	8.0	8.0	-	5.4
	▸ Extent of ownership and control index (0-10)	3.0	3.0	-	3.2
Paying taxes	▸ Number of payments per year	9.0	9.0	28.0	27.1
	▸ Time (hours per year)	260.0	260.0	332.1	330.0
	▸ Total tax and contribution rate (% of profit)	35.6	36.8	46.6	46.7
Trading across borders	▸ Time to export – Documentary compliance (hours)	48.0	48.0	62.5	52.5
	▸ Cost to export – Documentary compliance (US$)	50.0	50.0	-	110.4
	▸ Time to export – Border compliance (hours)	48.0	48.0	-	61.9
	▸ Cost to export – Border compliance (US$)	460.0	630.0	526.5	529.8
Enforcing contracts	▸ Time (days)	426.0	426.0	767.1	768.5
	▸ Cost (% of claim)	35.7	35.7	31.4	31.4
	▸ Quality of judicial processes (0-18)	8.5	8.5	8.4	8.5
Resolving bankruptcy	▸ Time (years)	3,1	3.1	2.9	2.9
	▸ Cost (% of estate)	7.0	7.0	16.8	16.8
	▸ Recovery rate (cents on the dollar)	29.7	29.8	30.8	30.9

Source: World Bank (WB) - Doing Business 2018 and 2019

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 (ICSID) as an alternative to settle disputes arising between investors and the government. In addition, Peru has signed 26 Bilateral Reciprocal Investment Promotion and Protection Agreements (BRIPPAs) and 12 Free Trade Agreements (FTAs) which include a chapter related to investment.

Pacific Alliance

The Pacific Alliance is a mechanism for in-depth integration, established by the Declaration of Lima, signed by Peru, Chile, Colombia and Mexico on April 28, 2011. Its founding instrument is the Pacific Alliance Framework Agreement, signed on June 6, 2012 in Antofagasta Chile. Its profile is predominantly economic and commercial, and its fundamental purpose is to become an area that fosters greater growth, development and competitiveness of its economies with a view to improving its projection to the world and contributing to an economic rise with social inclusion.

The Pacific Alliance's Framework Agreement determines that, as a fundamental part of the plan to achieve its objectives, efforts should be directed towards the free trade of goods and services, the free movement of people and capitals, and the development of cooperation mechanisms to encourage investment, as well as the sustainable quality of life for its populations.

As part of this, the Pacific Alliance member countries are completing their legal framework in order to promote the achievement of their objectives, basing their actions on four main issues:

- **Trade and integration**

  The Alliance has focused on the fostering of negotiations that translate into measures that will facilitate trade and customs cooperation between members. Efforts are focused towards eliminating tariff barriers, the cumulation of origin with regard to products that contain materials originating in one of the member countries, provided that the customs tariff is 0% everywhere, the reduction of technical obstacles to trade and the alignment with health and phytosanitary measures.

- **Capitals and services**

  Within the scope of capitals and services, the Pacific Alliance's actions are directed towards cooperation in investment, cross-border trade of services, financial services, telecommunications, air transport and maritime transport. It also seeks to strengthen the integration of the stock exchanges of the member countries.

- **Integrated Latin American Market – MILA**

  The Lima Stock Exchange – BVL (Peru), the Santiago Stock Exchange – BCS (Chile), the Colombia Stock Exchange – BVC (Colombia) and, since, 2014, the Mexican Stock Exchange – BMV (Mexico) together with the central securities registers of each country have integrated their variable income market (shares) by establishing the Integrated Latin American Market (MILA)

with which it intends to diversify, expand and make more attractive the negotiation of this type of securities in the four country members, as much for local as for foreign investors.

This integration seeks to develop the capital markets of the member countries, in order to provide investors with a greater offer of securities and issuers with wider sources of financing. It is hoped that the unified market of these countries will become the leader in the region in a number of issuers.

Movement of people

The free movement of people is one of the central pillars of the Pacific Alliance. This workgroup is focused on developing issues such as facilitating migratory transit, free movement of people, consular cooperation, student and labor cooperation, and the exchange of information on migration flows.

Cooperation

The Pacific Alliance seeks to encourage cooperation on aspects that significantly impact the comprehensive development of the population of member countries and the strengthening of technology of their industries. To achieve this, the main purposes of the cooperation work group are to consolidate a platform of student and academic movement, the structure of a scientific research network on climate change, the identification and use of synergies to increase competitiveness of medium, small and micro business, the execution of physical interconnection projects, and the creation of a cooperation fund.

You can easily find more information in the EY's Pacific Alliance Business Guide at **ey.com/pe/EYPeruLibrary.**

Electrical Regional Market of the Andes

By means of the Decision No. 757 of the Andean Community of Nations, a special temporal regime for the regulation of international transactions on electricity was established between: (i) Peru and Ecuador, and (ii) Colombia and Ecuador.

According to this regime, transactions between Peru and Ecuador are subjected- among others- to the following main rules:

- Electricity exchanges will be subject to power and energy excess of the export country.
- Electricity exchanges will be made under the scope of bilateral supply contracts between the entities to be designated by Peru and Ecuador, up to the limit of the transmission capacity that may be determined by the electrical system operators.
- The importer must assume the applicable regulatory charges in its country.

For these purposes, Peru and Ecuador have compromised to adapt its internal regulations if it is necessary, authorize operative agreements between the electric system operators, and promote special projects and the exchange of technical information required for the operation of the system.

This special temporal regime will be in force until the regulations (operational, commercial and coordination) of Decision No. 816 – that creates the new Electrical Regional Market of the Andes (MAER) – will be published in the Official Gazette of Cartagena. Once such regulations will be published, the MAER will enter in force.

Stabilization fund for prices of oil's fuel derivatives

The Stabilization Fund for Prices of Oil's Fuel Derivatives is an intangible fund created in 2004. It aims too sooth the high volatility of international oil prices, taking into consideration that Peru is a net oil importer. In so doing, the fund establishes maximum and minimum limits (price bands), in order not to let high volatility affect its consumers. It is important to mention that there are price bands for fuels such as:

1. Fuel oil
2. Liquified Petroleum Gas Packing
3. Gasoline 84 and 90 RON
4. Gasohol 84 and 90 RON
5. Diesel BX (mix of Diesel Nº 2 and Biodiesel B100, wherein X is the percentage of B100 in the mix)

Products mentioned in items 3, 4, and 5 above are excluded from fund regulations to the extent that they are used in the exploration and production of natural resources, processing of hydrobiological resources,and cement manufacture.

The fund enables the government to compensate producers and importers, so that they do not charge consumers above of the maximum limit whenever oil prices surpass it.

The payments made by the government ("compensation factor") are the result of comparing import parity pricing with the maximum limit. Therefore:

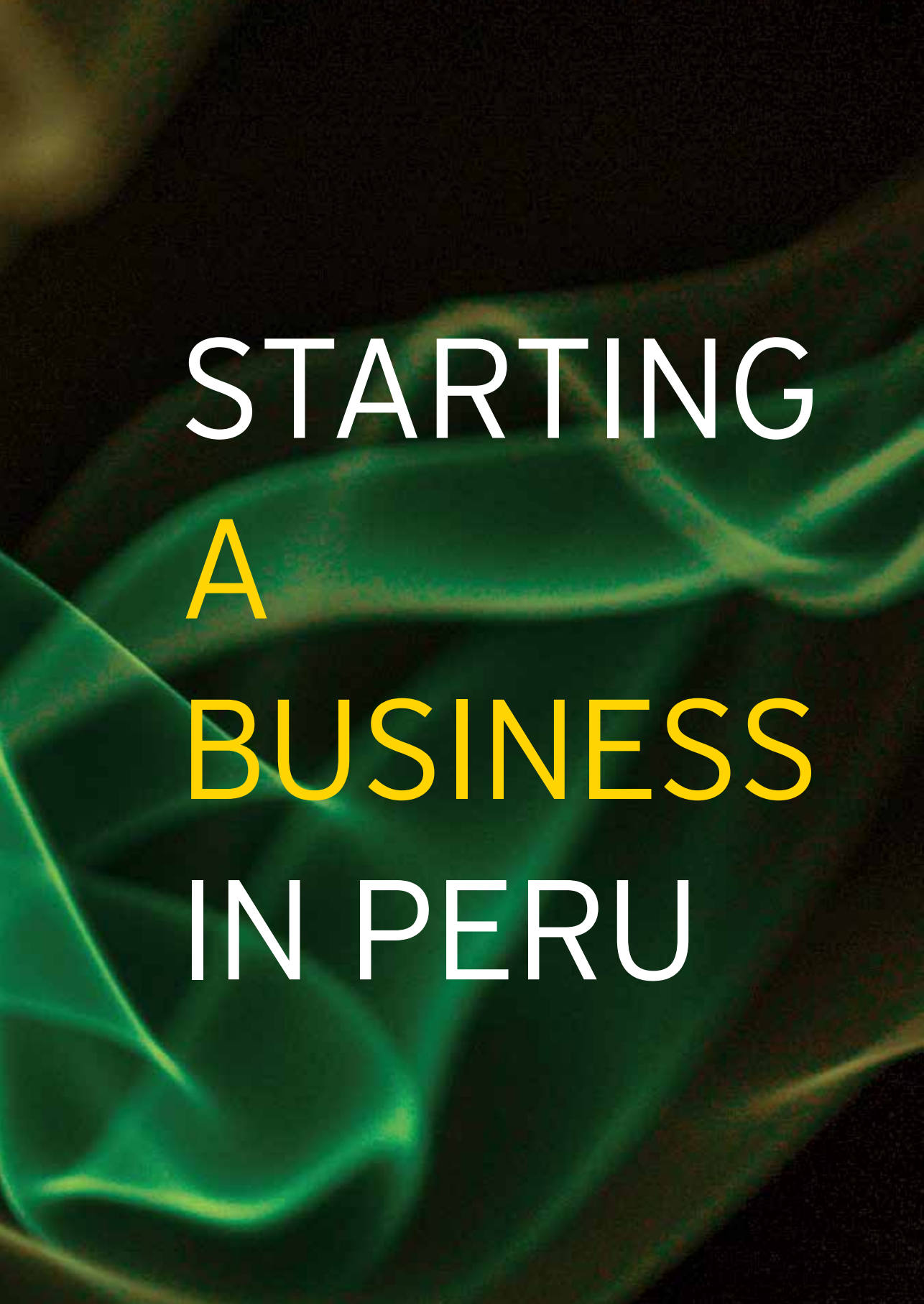
CompF = IPP – MaxLim

Likewise, when oil prices fall below the minimum limit, producers and importers charge consumers with the minimum limit, and make payments to the fund ("contribution factor"), which are equal to the difference between the minimum limit and import parity pricing. Thus:

ContF = MinLim – IPP

The General Bureau of Hydrocarbons (DGH, in Spanish) manages the fund, whilst the Supervisory Body of Private Investment in Energy and Mines (OSINERGMIN, in Spanish) updates the price bands from time to time.


2.


STARTING
A
BUSINESS
IN PERU

1.
Requirements for foreign investors

Foreign investors shall be able to sign licenses and service contracts and therefore, carry out oil & gas exploration and production activities if they establish a subsidiary or a branch in Peru. Additionally, the investors shall appoint a representative, in the case of foreigners with a foreigner ID.

The most common types of legal entities used by foreign investors for doing business in Peru are a corporation (Sociedad Anónima - S.A.) and a limited-liability company (Sociedad Comercial de Responsabilidad Limitada - S.R.L.). However, besides the regular corporation, the Peruvian Corporation Law also establishes two different types of corporations. The closely held corporation (Sociedad Anónima Cerrada) and the open stock company (Sociedad Anónima Abierta).

In these cases, the legal, technical, economic and financial capacity for carrying out oil & gas exploration and production activities, evaluated by Perupetro, will lay in the parent company, who will be jointly and severally responsible for the capacity of their Peruvian branches and/or corporations. If there is no parent company, the qualification process must be followed by the applicant company.

Associative agreements, such as joint ventures, are also allowed.

*The obligation to submit audited financial statements to the securities commission, stated for legal entities with annual sales or total assets equal or above 5,000 tax units (not listed in the Stock Exchange), was declared as unconstitutional by the Constitutional Court on April 4th, 2016. Such obligation was in force as from June 2011.

2.
Establishing a Peruvian corporation

Corporation

A corporation (Sociedad Anónima - S.A.) is composed of shareholders whose liability is limited to the value of their shares. The board of directors and one or more managers manage the S.A. To incorporate an S.A., investors (i.e. the shareholders) shall sign a public deed of incorporation before a notary public and file it before the Public Registry of Legal Entities.

To this purpose, first, investors shall grant powers to a representative in Peru to execute said instrument. Also, investors shall request to the Tax Authority (SUNAT) the registration of the company as taxpayer in order to obtain the tax identification number (Registro Único de Contribuyente - RUC). The bureaucratic and legal steps that an investor must complete to incorporate and register a standard S.A. normally take between 15-30 days once the necessary documents arrive to Peru.

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.); and (e) the capital structure (the shares of nominal value and the total number of shares), classes of shares and details of individual initial capital contributions (whether in cash or kind).

Sufficient proof that a minimum of 25% of the capital stock has been paid into a Peruvian Financial Entity before the execution of the public deed of incorporations must also be shown.

Limited Liability Company

The Limited Liability Company or S.R.L. (Peruvian acronym for Sociedad de Responsabilidad Limitada) is subject to registration procedures, reporting and accounting requirements similar to those for the S.A. The minimum number of partners is two and 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.

Although to incorporate a S.R.L no minimum capital is specified, entities of the national financial system request a minimum deposit of approximately US$300 for the account opening.

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.

The partner's general meeting shall entrust the company's management to one or more managers who are not required to be partners in the S.R.L. or Peruvian citizens. Decisions are determined by the 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.

Closely Held Corporation

Provisions applicable to the S.A are applicable to the closely held corporation subject to certain specific provisions. 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). Also, the Closely Held Corporation may not have board of director.

Open Stock Corporation

A corporation will be considered "open stock" when either (i) it has undertaken an initial public offering (OPP) or stock market launch to sell its stock to the public; (ii) it has more than 750 shareholders; (iii) at least 35% of its shares are held by at least 175 shareholders; (iv) it is incorporated as an open stock corporation; or (v) all the shareholders with voting rights agree unanimously to subject the company to the legal regime applicable to open stock corporations. This form of corporation is subject to the Securities Market Law as well as to certain specific regulation on minority shareholders protection, public disclosure, among others.

3.
Establishing a branch

Branches are another type of investment vehicle that foreign investors can establish for carrying out oil & gas exploration and production activities. The branch does not have legal independence or legal personality distinct from its parent company, except for tax purposes. Therefore, the branch will be regulated by the parent company's bylaws and its activities must be within the parent company's corporate purpose, and the parent company will be liable for its branch's activities.

In the case of branches, the capital assigned by the parent company does not have any limitation, but it shall be deposited or wire transferred in a Peruvian financial institution. However there is no obligation to credit the transfer for registry purposes. The parent company remains fully liable for the obligations assumed by the branch.

The branch operates through its legal permanent representatives with sufficient powers.

Procedures for organizing a branch in Peru are similar to the procedures applicable for organizing corporations or limited liability companies. It takes between two to three weeks to register a branch once the necessary documents, such as the certificate of existence of the parent company and the apostille documents, among others, have been submitted to the Peruvian notary public.

These documents include copies of the parent company'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. All these documents must be duly apostilled.

> "Procedures for organizing a branch in Peru are similar to the procedures applicable to organizing corporations or limited liability companies

4. Associative agreements

Associative agreements are another type of investment vehicle that allow different companies (and individuals) to participate and integrate into certain businesses or enterprises for reaching a common purpose. This type of investment vehicle is very common in the hydrocarbon sector because of the great risk involved in carrying out this type of activity. This makes sense due to the large amount of investment normally incurred in the exploration and production phase.

Unlike the other types of investment vehicles, an associative agreement does not create a corporation or legal entity different from its associates. Indeed, even though they have a common purpose in developing a business activity together; associative agreements do not create legal entities, therefore, each of the parties keep their legal personality and patrimonial independence.

According to the Peruvian Corporations Law, there are two different associative agreements: a) partnership agreements; and, b) consortium agreements. Although the joint venture agreement is not regulated by the Peruvian Corporations Law, it is commonly used by investors. Resources assigned to the aforementioned contracts will be considered as foreign investment provided these contracts grant foreign investors a participation in the production capacity, which does not qualify as a capital contribution. Also, these investment vehicles should correspond to contractual commercial transactions through which a foreign investor provides goods or services, obtaining a participation in the physical production, the global sales amount or the net profits of the company that receives the investment.

To carry out hydrocarbon activities, each of the parties should be qualified as a contractor by Perupetro. To have such qualification, they should be legally, technically, economically and financially qualified to engage in obligations, regulations and investments required for developing the hydrocarbon activity. One of the parties must be assigned as the operator responsible for conducting the activities; however, all of the parties will be jointly and severally liable before Perupetro for the assumed contractual obligation.


3.


ENERGY
IN
PERU

“

Peruvian territory has a privileged location that offers a myriad of possibilities to all sorts of investment

Energy in Peru

According to the Multiannual Sector Energy Plan - PESEM 2016-2021 of the Peruvian Ministry of Energy and Mines, Peru is a safe country for investments, since it offers not only great investment opportunities, but also has a legal framework and focused policies in respect of the environment and social inclusion.

Likewise, it is pointed out that energy activity not only represents one of the fundamental engines for the development of the national economy, but also represents an essential factor for the development of the population, the eradication of poverty, the increase of productivity and the economic competitiveness improves.

In that sense, Peru aspires to be recognized internationally as a country characterized by having a highly competitive energy sector, which promotes efficient development and satisfies the needs of the population, preserving the environment; respecting the culture of the Peruvian population and contributing significantly to the reduction of poverty.

To achieve the vision proposed by the PESEM 2016-2021, the Peruvian Government aims to increase the economic development of the country by increasing the competitiveness of the Peruvian energy sector, positioning itself as an energy hub in South America, with a diversified energy matrix and counting on a sufficient energy supply for the demand of electric power in the country.

To this regard, the Camisea project and their surroundings assure to supply to even more gas-to-power projects, especially in the southern regions, and more project using clean source as wind and solar for generating electricity are developing. Also, Peru is seeking to integrate energy efficiency measures, and there is great concern for social and environmental issues, access to the use of energy and an increase in energy demand.

For this reason, the energy projects come along with the need to adopt preventive and corrective measures to reduce the impact on the environment of the operations, as well as continue to increase efforts to reduce greenhouse gas emissions generated by oil & gas, and electricity industries.

In addition, in the social and governmental sphere, the energy projects seek to ensure the social inclusion of energy for the entire population, contributing to human development and strengthening the governance and modernization of the energy sector, leading to a better interaction in the relations of the sector's stakeholders.

Finally, other issue raised by the energy projects is that Peru is in the sights of incorporating the main trends and future energy events to the national sector. Regarding the main changes that are presented by future events in the energy sector, the integration of energy and development of information technology is being considered; the use of WiTricity (wireless power energy); the capture, use and storage of carbon; the exploitation of hydrogen energy; mass migration to electric transport vehicles; transformation of the supply chain with blockchain techonology for oil & gas; and development of shale gas.

Secc A: Oil and Gas

National Energy Programme 2014-2025

On November 2014, the Ministry of Energy and Mines presented the National Energy Programme 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, 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 in order to reach those expectations, as well as onshore and offshore exploration and exploitations projects.

Another relevant topic regarding demand of hydrocarbons is that of 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 1900MMscfd to 2400MMscfd by 2025, making it necessary to develop a national pipeline system for its supply.

> “
>
> It is expected that during 2018 new biddings will be launched on new Blocks around the country

In order to achieve this goal, minimum annual goals will be established, so that oil production can increase from the current 43 Mbpd to 153 Mbpd by 2025. 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 regard, it is expected that during 2019 new biddings will be launched on new blocks. Among the blocks that will be launched, the first is located in Pucallpa (Ucayali Region) previously was block 126; while the other two blocks are located in Tumbes region. It is expected that the bidding process will be carried out soon.

To the extent that new exploration projects achieve commercially viable exploitation operations, and pipeline infrastructure is developed to reduce transportation costs, natural gas and liquefied petroleum gas might increase their participation in the final consumption of energy in the country. 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.

These documents include copies of the parent company'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. All these documents must be duly apostilled.

Perupetro's Strategic Plan 2019-2023

Perupetro has engaged into the Strategic Plan 2019-2023 (the Plan), 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 100mbpd, and that of natural gas to 1,500MMCFD. In order to do so, Perupetro looks forward working on these strategic objectives:

- Maximizing oil and gas recovery in producing Blocks.
- Solving contingencies to increase value in recently discovered fields.
- Reposition of reserves by successful exploration projects.

The objectives of the Plan are also included as part of the Draft Oil & Gas Law Amendments, which we will expose in the following chapter 4 of this Guide. In summary, there are legal and management initiatives to enhance Perupetro's role as a more active participant not only during negotiations and subscription of the Contracts, but also during operations.

1.
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 late1980s and early 1990s. The combination of a state-dominated turn in Peru's energy sector in the 1960s (political interference such as policies that changed from government to government, refusal by various governments 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, 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. Nevertheless, their management did not result in an improvement of the sector as revenues, and reserves and production started declining. For this reason, 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 faculties to negotiate and subscribe license and service contracts with investors (see more detail about Petroperu in page 77).

As a result, Peru's oil & gas sector became more competitive. From 1990 to 1997, investment in the sector increased from $20 million to $4.3 billion. Areas under operation hiked from 1 million to 23 million hectares in the same period. 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. This situation boosted the oil & gas sector, as well as the oil & gas 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.

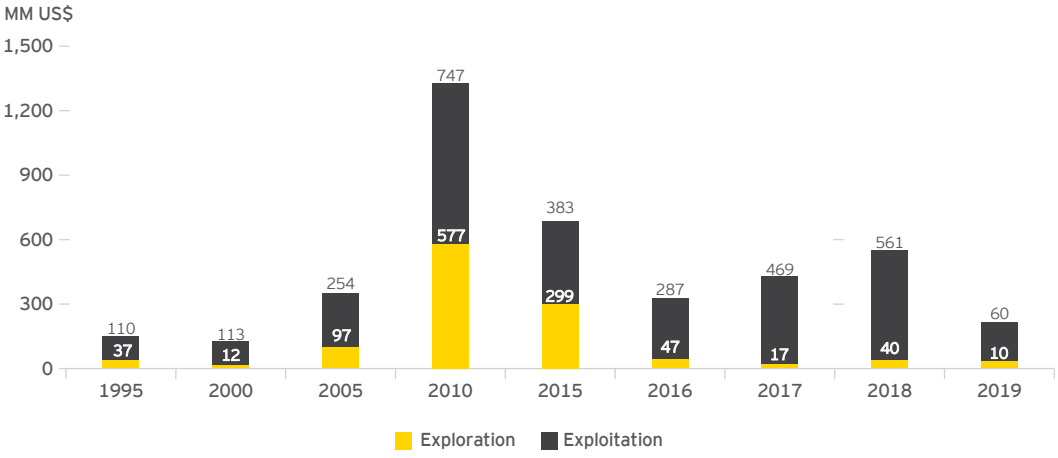
[1] The Camisea Project was discovered in 1989

Hydrocarbon Investment
(2012-2019 exploration and exploitation phase in millions of US$)

	2012	2013	2014	2015	2016	2017	2018	2019
Exploration	785.080	438.04	501.70	299.40	46.95	17.07	40.75	10.98
Exploitation	731.102	812.49	688.01	382.87	287.65	469.79	561.17	60.83
Total	1,516.18	1,250.53	1,189.77	682.28	334.60	486.86	601.92	71.82

*The numbers shown for year 2019 include instruments performed on February 2019.
Source: Perupetro

Oil exploration and exploitation investments evolution (1995-2019)



*The numbers shown for year 2019 include instruments performed on February 2019.
Source: Perupetro

Estimated investment by sector percentage (2019-2020)*

Sector	2019 - 2020
Mining	49.5%
Infrastructure	19.9%
Oil & gas	7.1%
Electricity	5.1%
Industry	2.0%
Other sectors	16.8%
Total	100.00%

*Estimated as of March, 2019
Source: BCRP

According to Peru's Central Bank, 7.1% of the investments to be made in 2019-2020 will be related to oil & gas activities.

Some of the investments that are going to take place in 2019 correspond to ongoing projects that may lead to new opportunities.

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 Southern Peruvian Pipeline concession might have a new international bidding as soon as the Goverment finds the best way to transfer assets of the project to the winner of the new bidding. The new Southern Peruvian Pipeline will raise particular interest due to raising natural gas demand in the southern regions of the country. In addition, Petroperu (National Oil Company) has stated that studies regarding design and costs of enhancing the Nothern Peruvian Pipeline will be ready by the end of 2019, so that by 2022 the pipeline is totally enhanced.

Downstream activities have also renewed investors' and Government's interest. Certainly, while the Talara Refinery Modernization Project shows a total advance of approximately 73% (expecting to start low sulfur fuels production by the end of 2020), and 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, it is likely that Proinversion will award a new natural gas distribution concession in 2019, which will comprise at least seven regions (Apurímac, Ayacucho, Cusco, Huancavelica, Junín, Puno and Ucayali).

In 2012, Peru ranked 98th out of 147 countries in a survey done by Fraser Institute, which focused on the attractiveness for global oil & gas investment. In 2014, it ranked 79th out of 156 countries; in 2015, 89th out of 126; and in 2016 it ranked 64th out of 96 countries. In that regard, Peru achieved its best position ever in 2017, when it ranked 58th out of 97 countries.

The aforementioned achievements have encouraged both Government and Congress to work on a Draft Oil & Gas Law Amendment, in order to boost investment in exploration. To achieve such goal, as we will note in the following chapter, the Draft Oil & Gas Law Amendment includes provisions regarding extensions of the Contracts' terms, promotional royalty rates, recognition of investments from different Blocks, among others.

2017 Resource Governance Index

Rank	Country	Resource Measured	Composite	Value Realization	Revenue Management	Enabling Enviroment
1	Norway	Oil & gas	86	77	84	97
2	Chile	Mining	81	74	81	90
4	Canada (Alberta)	Oil & gas	75	69	59	97
5	United States (Gulf of México)	Oil & gas	74	66	63	93
6	Brazil	Oil & gas	71	62	78	72
7	Colombia	Oil & gas	71	59	85	67
8	Australia (Western Australia)	Mining	71	65	51	96
9	India	Oil & gas	70	75	66	69
14	Trinidad and Tobago	Oil & gas	64	64	57	71
16	Peru	Mining	62	68	57	62
17	Mexico	Oil & gas	61	64	54	65

Source: Natural Resource Governance Institute

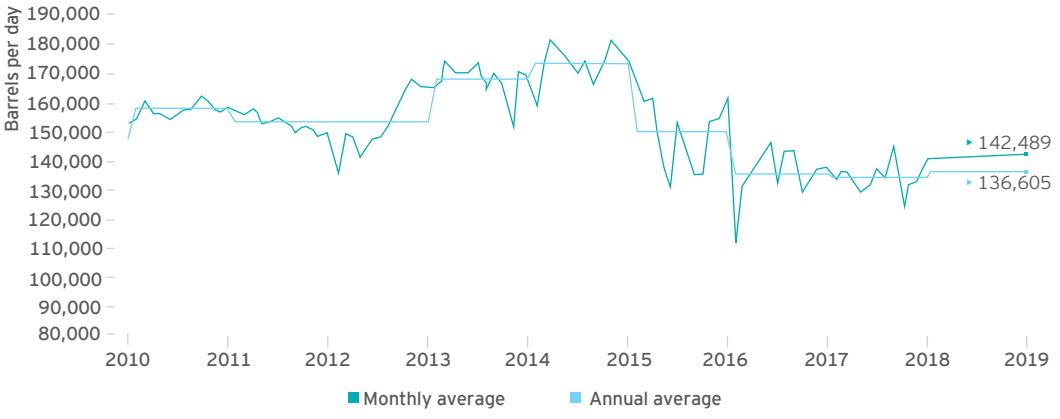
Global Petroleum Survey 2018

Ranking of countries made according to the scope of investment barriers (based on the composite index score of Fraser Institute).

Countries	2013	2014	2015	2016	2017	2018
Argentina - Mendoza	150	108	103	74	56	38
Argentina - Neuquen	142	99	91	59	45	30
Argentina – Santa Cruz	143	140	107	86	71	N/A
Bolivia	145	153	117	93	96	72
Brazil – Onshore CC	154	87	66	82	41	33
Brazil – Offshore CC	114	69	47	65	53	47
Brazil – Offshore presalt arena	113	102	68	81	65	36
Colombia	31	59	60	53	47	54
Ecuador	74	155	121	89	93	74
Mexico	87	126	82	68	77	52
Peru	115	79	89	64	58	63
Venezuela	157	156	125	96	97	80

Notes: CC: Concession Contract, PSC: Profit Sharing Contracts
Source: Fraser Institute

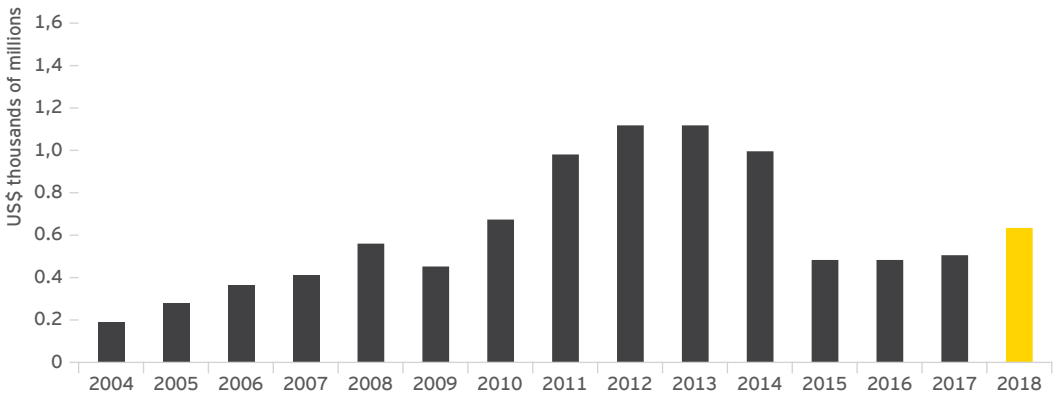
Oil and liquid hydrocarbons average audited production* (2010-2019**)



*Includes petroleum and natural gas liquids.
**As of February, 2019.
Source: Ministry of Energy and Mines Ministry of Energy and Mines

Oil & gas canon revenues

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 2003.



Source: Perupetro

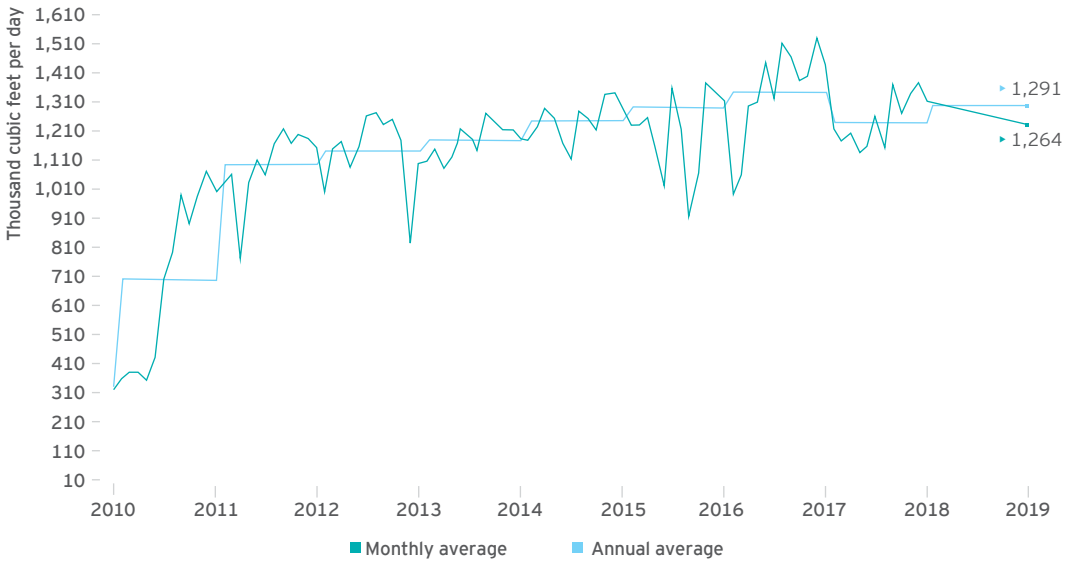
Fiscal revenues (2012-2019 in billions of US$)

The oil & gas industry represents one of the main sources of fiscal revenues, and comes not only from the activities carried out in the Camisea Project (Blocks 56 and 88), but also from the activities executed in other blocks.

	2012	2013	2014	2015	2016	2017	2018	2019*
License contracts	1,894.75	1,932.66	1,608.19	728.98	627.39	792.06	1,030.35	210.38
Service contracts	105.03	88.27	85.01	39.96	32.86	36.78	59.71	9.25
Total	1,999.78	2,020.93	1,693.21	768.94	660.25	828.84	1,090.07	219.64

*Estimated as of February, 2019
Source: Perupetro

Average natural gas audited production (2010-2019*)



*As of February, 2019.
Source: Ministry of Energy and Mines

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.

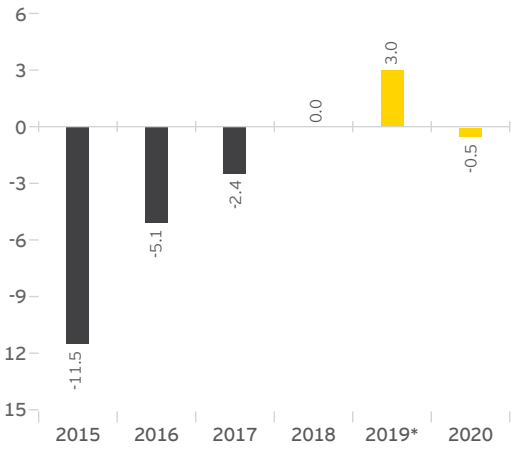
Peru joined EITI as a full member in 2005, given the importance of oil & gas, and mining activities in the national income, and its meaningfulness in the Latin American and global production. Thus, Peru became the first Latin American country to join the initiative and show meaningful progress towards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

2.
Hydrocarbon production and exports

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 hydrocarbon investment for years 2019- 2020 is estimated at approximately US$1.4 billion and the growth of the sector is estimated to be 3% for 2019, after difficult years marked by low oil prices. This growth will rely on the investment portfolio and Peru's geological potential, which already has the attention of investors interested in offshore Blocks.

Estimated GDP Hydrocarbon growth until 2019



*Estimated as of March, 2019
Source: BCRP

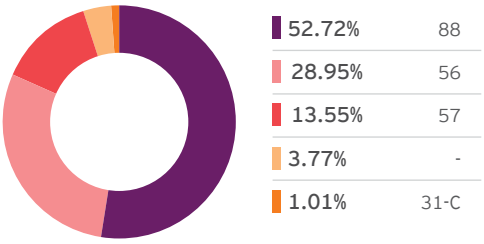
Hydrocarbons audited production (2011-2018)*

	2011	2012	2013	2014	2015	2016	2017	2018
Petroleum (MBLS)	25,387	23,984	22,956	25,296	21,173	14,773	15,900	17,837
NGL (MBLS)	20,354	31,596	38,187	37,751	33,360	34,671	33,134	31,198
Natural Gas (MMCF)	401,169	418,795	430,559	456,407	441,244	494,930	457,050	449,244

*Accumulated production
NGL: Natural Gas Liquids
Source: Perupetro

Natural gas audited production by oil well (2018)

	Block	Accumulated (MMCF)*	%
Pluspetrol	88	236,835	52.72
Pluspetrol	56	130,059	28.95
Repsol	57	60,877	13.55
Northern area	-	16,930	3.77
Aguaytía	31 - C	4,538	1.01
Total		449,244	100.00



*MFC: Thousands Cubic Feet
Source: Perupetro

Oil & Gas Projects in the mid and long-term

International oil prices have, over the last couple of years, stabilized around US$50. This situation has reflected in the peruvian Oil & Gas sector by new investments in upstream, especially in off-shore Blocks.

Hereunder, we provide an outlook of investments related to upstream, midstream, and downstream segments, which will be carried out in the mid and long-term.

Main investment projects

The value of private investment projects is worth approximately US$19,6 million. On that regard, hydrocarbon projects comprise almost 7.5% of that amount, considering the development of, among others, the following projects:

- Massification of natural gas consumption by natural gas distribution concessions.
- Exploration of off-shore Block Z-38.
- Exploration of off-shore Blocks Z-61, Z-62, and Z-63.
- Development of Block 95.
- Development of Block 64.

Projects stated above show a clear interest by investor in off-shore projects. Certainly, in addition to those projects, which are underway, there are also at least four off-shore Blocks' Technical Evaluation Agreements in force.

Moreover, though Tullow Oil has stated intentions to renegotiate off-shore Contracts, it has kept efforts to participate in off-shore operations in the country by acquiring participation in Block Z-38. This acquisition has recently been approved by the Government.

On the other hand, continental exploration and exploitation investment continues, with expected investment in Block 95, in order to boost production to 5,000 bpd.Likewise, Block 64 awaits Environmental Impact Study Approval, which might lead to an investment in 2019.

While upstream projects might gain momentum of a context in which international oil prices are stabilizing above US$50, it is worth mentioning that the midstream segment in Peru poses an extraordinary opportunity to investors.

Indeed, pipeline infrastructure in Peru is entering a phase of increasing demands by consumers and producers alike.

Firstly, the Petroperu (National Oil Company) is not only undergoing works to keep the Northern Peruvian Pipeline operating, but has also stated that, in the short term, it will finish the design and cost studies to begin the modernization of the pipeline. This project is crucial, due to the importance of the pipeline for northeastern Blocks, some of the highest producing of the country.

Furthermore, growth of the southern Regions' economy might push Government to hasten the reformulation of the Southern Peruvian Pipeline Project's international bid. Such project could have a value of over US$2 billion.

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.

As noted in the foregoing paragraphs, investment 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, without a doubt, is that of the Modernization of Talara's Refinery, with a budget of US$5 billion, and 73% advancement as of the first quarter of 2019. Once completed, refining capacity will increase from 65,000 bdp to 95,000 bpd. Plus, the refinery will be able to produce low sulfur fuels, as required by Peruvian regulations.

On the other hand, the Government is looking forward consolidating success in its plan to make the use of natural gas massive.

Regarding the above, 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 will award another gas distribution concession in 2019, which comprises seven Regions (Apurimac, Ayacucho, Huancavelica, Junin, Cusco, Puno, and Ucayali). Three bidders are already confirmed."

The Southern Peruvian Gas Pipeline Proyect, which was first tendered to the Brazilian company Odebrecht (Kuntur), was not favorable to the negotiations carried out by them to transfer the concession to another company and, finally, the project was reverted to the Peruvian State.

Consequently, the evaluation of the possible alternatives for the reactivation of the Southern Peruvian Gas Pipeline Proyect is in charge of the Peruvian Investment Agency (Proinversion) and the Ministry of Energy and Mines.

The gas project that would provide Camisea gas to the southern regions of the country is scheduled to be tendered in 2020.

3.
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 energetics. 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. So by the time Camisea's potential is fully developed (Blocks 57, 58, among others), Peru will be energetically integrated into all corners.

Camisea Project

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 continue reducing the cost of electricity and national fuel in the mid-term.

Natural gas: the fuel of the future

Camisea has contributed greatly to Peru's development by providing a steady and increasing flow of a clean energy source. However, Camisea's gas is far from just being a hydrocarbon used directly in the industrial and housing sectors, as well as for exports: arguably, its biggest contribution is the provision of the necessary raw material to generate electricity.

Camisea's gas impact on savings in power generation were estimated around US$22.4 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. Fenix Power, Engie, Kallpa, and Termochilca 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 the aforementioned 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. Engie 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.

The major part of the reserves are located in two main gas fields, San Martín and Cashiriari, located in opposite banks of the Camisea River. Blocks 88 and 56 are known as the Blocks of the Camisea project.

Three main actors are involved in the management of the natural gas industry in the Camisea project, at different stages. The production stage was granted by the government to the Consortium integrated by Pluspetrol (operator) - Hunt Oil - SK Innovation - Repsol Exploración Perú - Sonatrach Peru Corporation - Tecpetrol. The transportation and distribution stages have been granted to Transportadora de Gas del Perú S.A and to Gas Natural de Lima y Callao S.A (Calidda), respectively.

Camisea's gas is also currently available in Ica, 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 await Proinversion's bidding in the short term. As can be noted, natural gas is on its way to becoming the standard energy source for Peruvian society.

> "In the future, Peru intends to generate a matrix based not only on petroleum, but equally on renewable energy and natural gas

4.
Growth potential

Peru has 18 sedimentary basins with hydrocarbon exploration potential. 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 the Chinese company CNPC acquired Petrobras' assets in the country, therefore comprising an investment of US$1.4 billion in exploration activities in block 58, near Camisea fields. It was estimated at up to 8 trillion cubic feet of natural gas. Recently, they announced that Block 58 exploratory efforts were successful, granting almost 4 TCF in reserves.

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 by the time they commercialize.

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. The acquisition of 25% interest in Block 64's License Contract might be complemented with the acquisition of significant interest in Block 192's License Contract in the short term. Block 192 was the highest producing block in the country during the last decade, and could be an ideal opportunity for Petroperu in its return to upstream operations.

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.

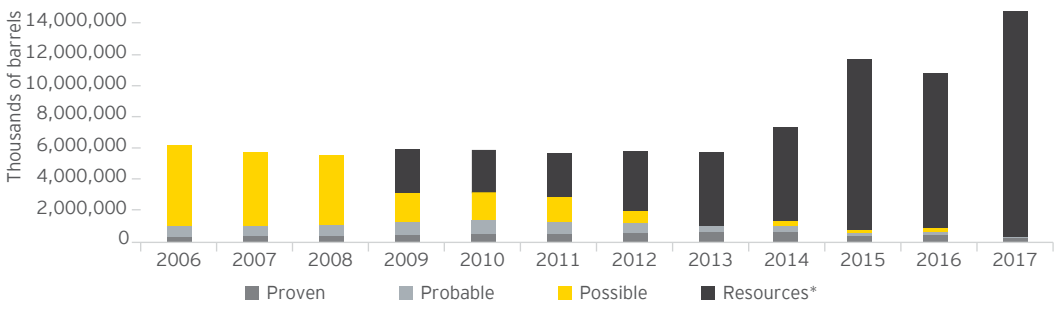
Also, Petroperu has been authorized to contract third parties by means of joint venture, services contracts, among other forms, regarding the management and operation of its current projects and the

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.

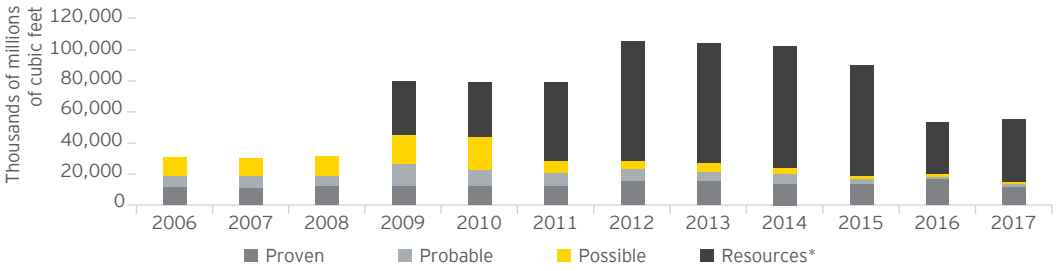
> “
>
> Oil & gas companies must fulfill all the requirements needed to develop exploration and production activities under a license or service contract

Oil reserves (2006-2017)



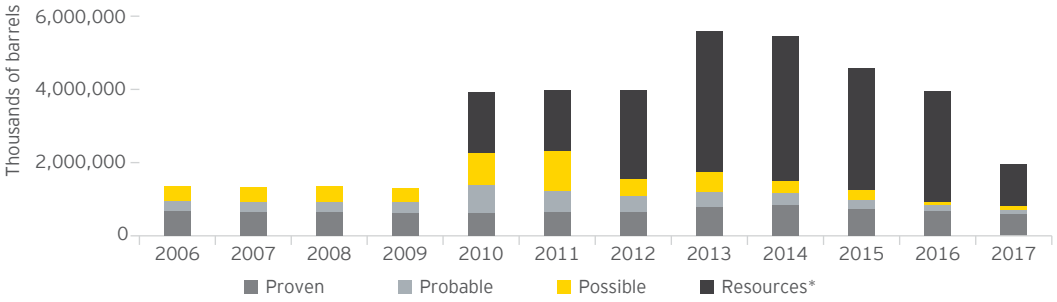
*Includes contingent and prospective resources. Data updated up to December, 2017.
The resources come principally from a reclasification of possible reserves to resources as of 2009
Source: Ministry of Energy and Mines

Natural gas reserves (2006-2017)



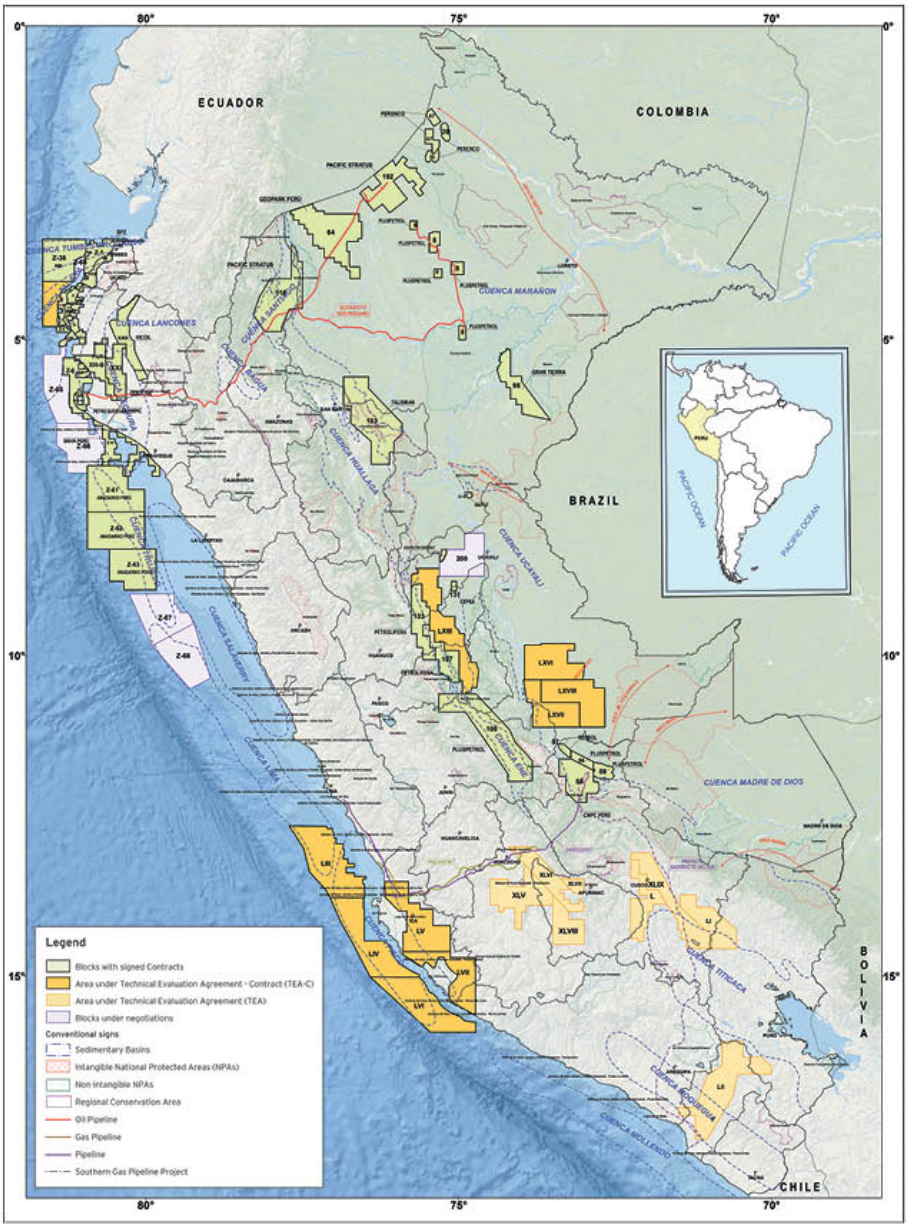
*Includes contingent and prospective resources. Data updated up to December, 2017.
The resources come principally from a reclasification of possible reserves to resources as of 2009
Source: Ministry of Energy and Mine

Natural gas liquids reserves (2006-2017)

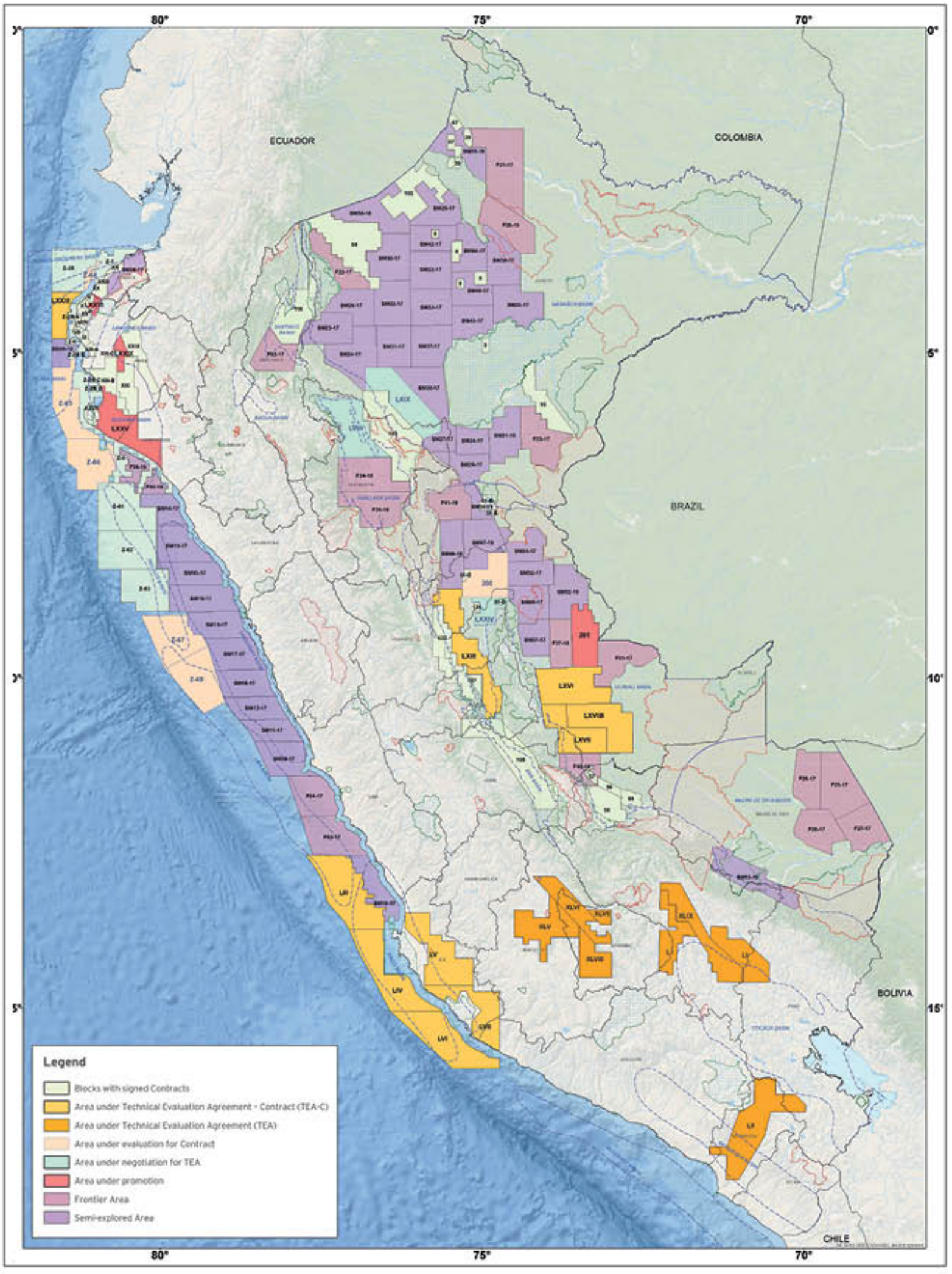


*Includes contingent and prospective resources. Data updated up to December, 2017.
The resources come principally from a reclasification of possible reserves to resources as of 2009
Source: Ministry of Energy and Mines

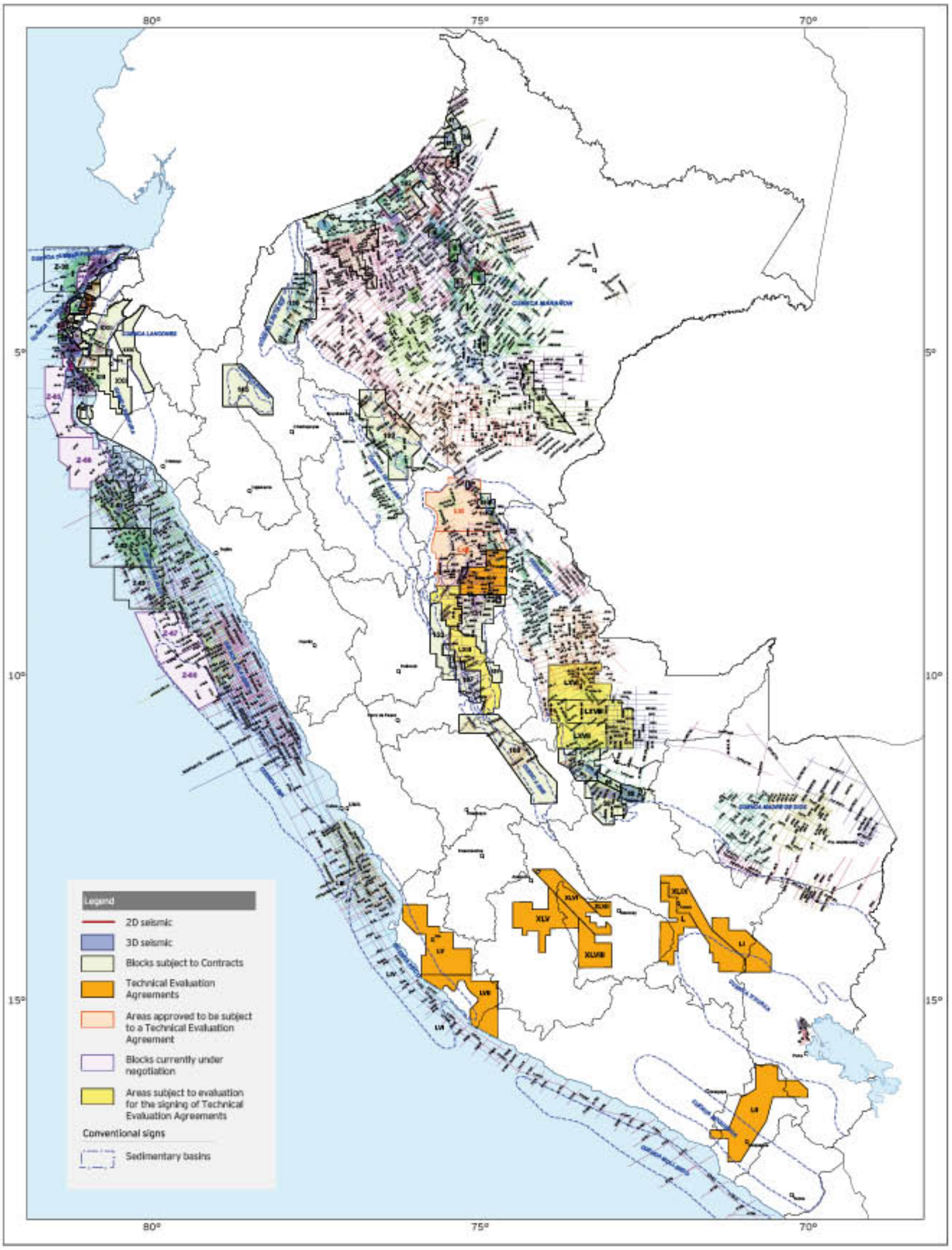
Peru's block map



Blocks and áreas open to investment



Peru's 2D seismic map



Exploitation and exploration contracts (2019)

	Subscribed	Inforce	Investment (US$millions)*
Exploitation	0	26	561.17
Exploration	-	14	40.75
Total	0	40	601.92

*Investment made up to December, 2018

Exploitation contracts						
Zone	Operator	Block	Basin	subscription date	Lot area / ha	Effective work area / ha
North Rainforest	Pacific Stratus Energy	192	Marañon	30-Aug-15	512,347.241	2,037.00
	Pluspetrol Norte	8	Marañon	20-May-94	182,348.210	541.00
	Geopark Peru S.A.	64	Marañon	07-Dec-95	761,501.001	66.00
	Perenco	67	Marañon	13-Dec-95	101,931.686	378.00
	Petrotal	95	Marañon	07Aabr-05	345,281.667	7,509.00
Central Rainforest	Aguaytia	31-C	Ucayali	30-Mar-94	16,630.000	18.00
	Maple	31-E	Ucayali	06-Mar-01	10,418.934	9.00
	Cepsa	131	Ucayali	21-Nov-07	15,483.733	90.00
South Rainforest	Pluspetrol	56	Ucayali	07-Set-04	58,500.000	64.00
	Pluspetrol	88	Ucayali	09-Dec-00	82,803.521	129.00
	Repsol	57	Ucayali	27-Jan-04	28,028.750	12.00
	CNPC	58	Ucayali	12-Jul-05	340,133.717	65.00
North-West	GMP	I	Talara	27-Dec-91	6,943.250	339.00
	Petrolera Monterrico	II	Talara	05-Jan-96	7,691.420	136.00
	Graña y Montero Petrolera	III	Talara	31-Mar-15	35,799.305	227.00
		IV	Talara	31-Mar-15	29,521.990	181.00
	GMP	V	Talara	08-Oct-93	9,026.032	42.00
	SAPET	VI/VII	Talara	01-May-93	32,434.113	2,513.00

Exploitation contracts						
Zone	Operator	Block	Basin	subscription date	Lot area / ha	Effective work area / ha
North-West	UNIPETRO ABC	IX	Talara	16-Jun-15	2,754.133	52.00
	CNPC	X	Talara	20-May-94	46,952.342	2,252.00
	Olympic	XIII	Sechura	30-May-96	263,357.845	29.00
	Petrolera Monterrico	XV	Talara	26-May-98	9,498.904	10.00
	Petrolera Moneterrico	XX	Talara	19-Jan-06	6,124.207	131.00
Continental Shelf	Savia	Z-2B	Talara	16-Nov-93	130,315.659	318.00
	Pacific Off Shore	Z-1	Tumbes, Talara	30-Nov-01	178,961.384	30,077.00
	Savia	Z-6	Talara, Sechura	20-Mar-02	528,116.614	15,552.00

Exploration contracts						
Zone	Operator	Block	Basin	subscription date	Lot area / ha	Effective work area / ha
North Rainforest	Perenco Peru Limited	39	Marañon	09-Sep-99	79,164.497	119.00
	Pacific Stratus Energy	116	Santiago	12-Dec-06	658,879.677	128.00
Central Rainforest	Talisman	103	Marañon, Huallaga	09-Aug-04	870,896.168	120.00
	Petrolifera Petroleum Peru	107	Ucayali	01-Sep-05	252,232.329	114.00
	Petrolifera Petroleum Peru	133	Huallaga, Ucayali	16-Apr-09	309,309.197	47.00
South Rainforest	Pluspetrol	108	ENE	13-Dec-05	869,105.835	36.00
North-West	Gold Oil Peru	XXI	Sechura	04-May-06	240,755.063	44.00
	Upland oil & gas	XXIII	Talara	21-Nov-07	93,198.956	543.00
	Petro Bayovar	XXVII	Sechura	16-Apr-09	49,821.139	144.00
	Ricoil S.A.	XXIX	Lancones	18-Set-15	303,802.343	000.00

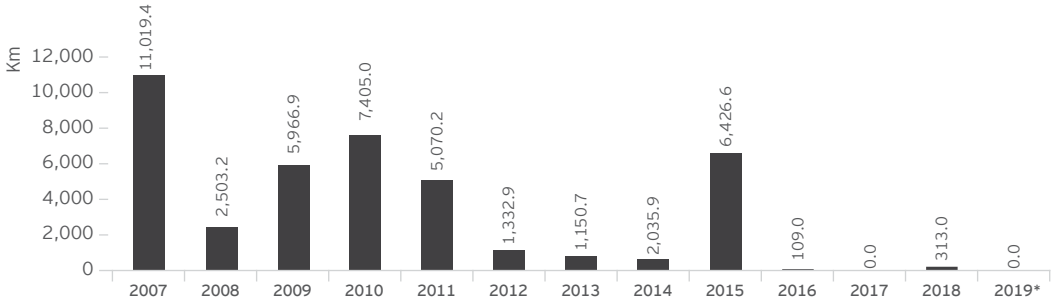
...

Exploration contracts						
Zone	Operator	Block	Basin	subscription date	Lot area / ha	Effective work area / ha
Continental Shelf	KEI Peru	Z-38	Tumbes, Talara	12-Apr-17	487.545.511	112,555.00
	Anadarko	Z-61	Trujillo	09-Oct-17	680,519.430	170.00
	Anadarko	Z-62	Trujillo	09-Oct-17	656,356.153	154.00
	Anadarko	Z-63	Trujillo	09-Oct-17	548,049.976	129.00

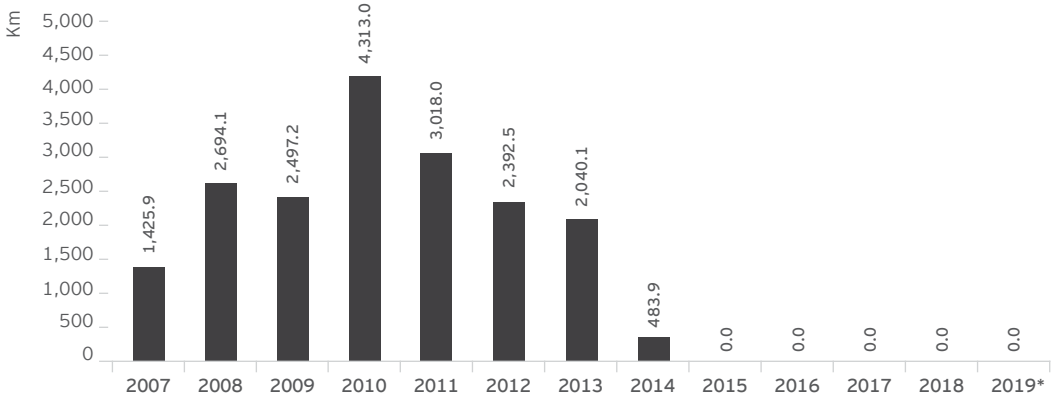
*Investment made up to December, 2018

2D and 3D seismic

Registered 2D seismic, (2007-2019)



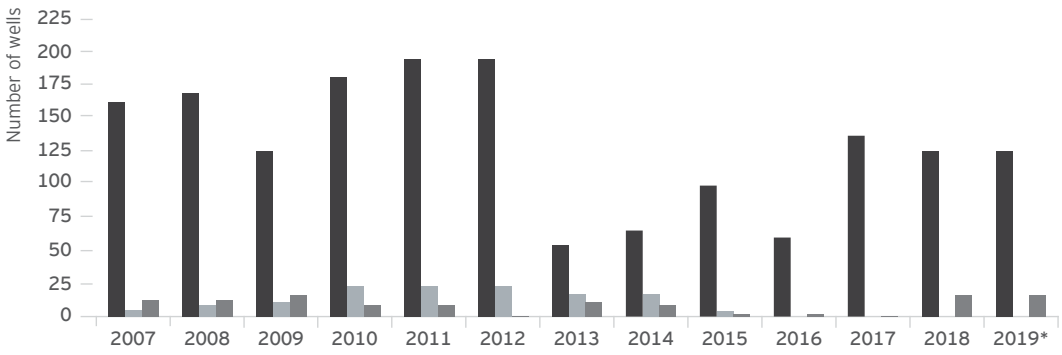
Registered 3D seismic, (2007-2019)



*As of February, 2019
Source: Perupetro

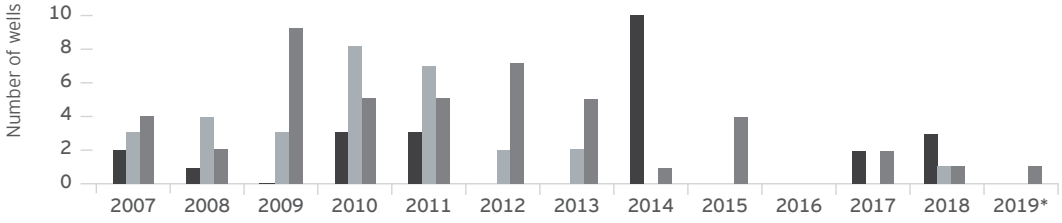
Drilling activities

Development drilling (2007-2019)



	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019*
Northwest	165	170	128	185	197	177	55	70	76	42	135	169	35
Plinth	3	6	7	22	23	19	20	23	3	0	0	0	0
Jungle	9	9	12	7	7	1	10	8	2	2	0	1	0
Total	**177**	**185**	**147**	**214**	**227**	**197**	**85**	**101**	**81**	**44**	**135**	**170**	**35**

Exploratory drilling (2007-2019)



	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019*
Northwest	2	1	0	3	3	0	0	11	0	0	2	3	0
Plinth	3	4	3	1	7	2	2	0	0	0	0	1	0
Jungle	4	2	9	5	5	7	5	1	4	0	2	1	1
Total	**9**	**7**	**12**	**9**	**15**	**9**	**7**	**12**	**4**	**0**	**4**	**5**	**1**

*As of February, 2019
Source: Perupetro

Hydrocarbon's Government take

Hydrocarbons Tax Revenues (Millions of soles)

	2012	2013	2014	2015	2016	2017	2018	2019*
Corporate Tax**	1,779.4	1,907.9	1,903.3	913.3	393.9	723.4	1,022.3	239.3
VAT	1,487.0	1,520.0	1,511.9	921.3	727.3	851.4	1,291.3	432.4
Total	3,266.4	3,427.9	3,415.2	1,834.6	1,121.2	1,574.8	2,313.6	671.7

*Estimated as of March 2019
**Includes down-payment

Hydrocarbons Royalties (Millions of dollars)

	2013	2014	2015	2016	2017	2018
Natural Gas*	1,365,064	1,122,837	556,701	535,391	653,012	802,184
Oil	571,641	507,264	172,696	93,321	139,997	228,167
Total	1,936,705	1,630,101	729,397	628,712	793,009	1,030,351

*Includes condensates and natural gas liquids

Secc B: Electricity

1. Importance of Peru's electric power 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
- 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
- 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
- Pre-publication of the Distributed Generation Regulation Project
- Pre-publication of the Project for the modification of the Regulation of the Electricity Concessions Law
- Pre-publication of the Project of the New Regulation of Environmental Protection in Electrical Activities

2019

- Announcement of the Peru-Chile Electric Interconnection

Source: EY

The Peruvian electricity history demonstrates that since the first time 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 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 establish the rules to be observed for the exercise of the electric industry in the country, it also had as objectives the promotion of private investment in the electricity industry, as well as the guidelines for granting concessions, permits and licenses, necessary for the development of 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, as we will also see later on, 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 generate redistributive effects, worsening the urban-rural income gap.

In the seventies, the electricity sector regulation changed radically as the military government of the Peruvian president Juan Velazco Alvarado entered into force, and was continued by the government of the military government of the Peruvian president Francisco Morales Bermudez.

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 Asociadas", but now under the name Electrolima S.A.

Years later, the non-military Government of Fernando Belaunde Terry entered into force. 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 in order to distribute electricity, aiming to cover the supply needs in the Peruvian territory. Electroperu was the main corporation, being considered as the holding corporation and the one in charge of the hydropower plants of Mantaro, Pato Canyon, Carhuaquero and Carhua; and also of the north-center transmission grids 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 Alberto Fujimori initiated the restructuration of the regulatory framework of the electricity sector due to the big social and political crisis, and the low scope 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 in order 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 electric sector was reformed during the 90s. At this time, the sector was oriented to enhance the supply of electricity through an open market to international commerce. Under this new context, Law No. 25844, Law of Electrical Concessions was enacted in order to attract new private investment to activities that were not successfully being assured for the rendering of electrical services and to end the monopoly that covered the sector.

In this regard, Law No. 25844 stated the conditions in which new agents could participate in the Electrical Sector in each activity of the electrical sector chain (generation, transmission and distribution). The main principles to be applied in the sector were the free entrance and the open access, considering pricing freedom for the generation and commercialization activities, and regulated prices for transmission and distribution activities.

In connection to the abovementioned, years later, in 1996 and 1997 specific regulatory Laws for the sector were enacted. In 1996, Law No. 26734 created the Supervisory Body of Private Investment in Energy and Mines (OSINERGMIN), the regulator entity of the sector to which the Ministry of Promotion functions in electrical matter were transferred; and, in 1997, the Law No. 26876, which regulates the antitrust rules of the electric sector was published.

Nowadays, the Government's participation in the energy sector is very limited compared to the role that the private sector has been developing.

However, according to the data from the National Fund for the Finance of the Corporate Activity of the Peruvian Government (FONAFE), the state presence becomes more important outside of Lima, principally, in the generation and distribution of electricity, as it is shown in the map below:

Government enterprises under Fonafe's supervision

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

Sources: 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 with 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.

It is in this context that the Government assumes a subsidiary role as an investor in the process of the electrification of the rural areas, and also because the execution of energy projects in these areas is highly expensive.

Notwithstanding the above, the 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 this sense, the Government is focusing in the introduction of incentives for attracting investment in clean energies infrastructure in order to increase the offer of energy all around the Peruvian territory.

Investments in the electrical market

According to Peru's Central Bank, 5.18% of the investment to be made in 2018-2019 will be related to electrical activities. As of December 31, 2018, the projects to be developed or continue to be developed consist of the construction of generation plants and transmission grids all along the Peruvian territory. The main projects that have been announced are Mantaro Nueva Yanango grid, held by Interconexión Eléctrica S.A; and Hydropower Plant Santa Teresa 2, held by Luz del Sur.

Other useful indicator that show our attractiveness for investments in the electrical power sector is the Renewable Energy Country Attractiveness Index (RECAI) elaborated by EY on the basis of the evaluation of factors that drive market attractiveness in a world where renewable energy has gone beyond decarbonization and reliance on subsidies. This index shows that Peru is the 33th attractive country for investments in renewable energy in relation to a ranking of 47 countries.

As of October, 2018

				Technology index scores (out of 100)							
Overall Rank	Previous Rank	Economy	RECAI Score	Onshore wind	Offshore wind	Solar PV	Solar CSP	Biomass	Geothermall	Small hydro	Marine
1	1	China	65.7	51	55	53	33	45	21	52	19
2	2	United States	63.8	50	53	49	32	39	39	35	31
3	4	India	63.8	50	20	57	34	44	25	45	21
4	3	Germany	62.7	46	50	49	17	44	34	35	20
5	6	France	62.5	50	51	48	22	48	33	31	36
6	5	Australia	62.3	47	30	54	35	24	21	39	31
7	8	Japan	59.2	43	44	47	18	51	48	36	23
8	7	United Kingdom	58.6	47	57	41	14	47	27	32	33
9	9	Netherlands	58.6	44	48	45	15	33	23	24	15
10	13	Argentina	56.8	45	21	50	30	37	32	37	20
11	11	Chile	56.7	43	20	47	32	37	31	41	28
12	15	Morocco	56.6	42	17	51	31	16	15	20	14
13	12	Mexico	56.3	43	19	50	25	45	43	34	19
14	10	Denmark	55.7	44	48	39	15	44	17	22	24
15	20	Egypt	54.9	45	14	52	36	13	12	27	12
16	14	Canada	54.9	46	26	42	19	35	19	44	25
17	24	Spain	54.7	42	26	44	25	33	17	27	22
18	17	Turkey	54.6	43	20	48	24	43	41	42	14
10	16	Italy	54.5	41	30	44	27	44	36	40	20
20	18	Brazil	54.5	44	21	48	21	48	15	46	18
21	19	Belgium	53.1	42	42	38	17	39	20	25	14
22	26	Pakistan	52.6	40	13	49	22	18	19	43	17
23	24	Ireland	52.6	44	25	40	16	21	22	28	26
24	21	Philippines	52.5	38	16	46	19	41	42	43	22
25	22	Portugal	52.3	38	25	42	24	38	21	38	24
26	28	Israel	52.2	29	14	51	29	24	15	35	17
27	31	China Taipei	51.9	36	42	44	17	21	22	23	19
26	34	Greece	51.8	41	23	42	26	38	22	41	13

•••

...

Overall Rank	Previous Rank	Economy	RECAI Score	Technology index scores (out of 100)							
				Onshore wind	Offshore wind	Solar PV	Solar CSP	Biomass	Geothermall	Small hydro	Marine
29	28	Jordan	51.7	39	14	46	28	18	13	23	13
30	34	South Africa	51.1	41	18	44	33	31	14	21	21
31	26	South Korea	51.0	26	26	49	18	30	17	23	32
32	22	Sweden	50.0	43	27	35	14	42	19	37	26
33	31	Peru	49.8	38	14	43	23	33	20	38	18
34	30	Thailand	49.6	37	15	42	21	39	16	17	18
3S	40	Kazakhstan	49.3	39	13	44	17	14	16	33	12
36	38	Indonesia	48.9	35	18	44	17	36	55	46	20
37	-	Uruguay	48.7	37	17	42	18	33	14	22	18
38	36	Poland	48.3	38	21	39	12	38	21	30	12
39	-	Saudi Arabia	48.0	37	12	46	23	13	12	13	11
40	39	Kenya	47.6	35	14	42	20	26	47	31	12

Source: EY

The results are quite encouraging considering that it was not until 2008 that the promotion of a regulatory policy on renewable energies began in Peru.

Government take in the electrical market

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 2007 - 2018 (in millions of Soles)							
	2011	2012	2013	2014	2015	2016	2017	2018
Income Tax	701	949	1,039	1,113	1,281	1,339	1,191	1247.5
VAT	795.3	964.1	947.1	1016.2	1217.2	1273.6	1421.4	1751.9
Total	1,497	1,914	1,986	2,129	2,498	2,613	2,612	2999.4

Sources: SUNAT / EY

	Level of participation in the total fiscal revenues 2007 - 2018 (in percentage)							
	2011	2012	2013	2014	2015	2016	2017	2018
Income Tax	3.6%	4.6%	5.3%	6.0%	7.6%	8.1%	7.7%	7.2%
VAT	3.6%	3.9%	3.5%	3.5%	4.0%	4.1%	4.4%	5.0%

Sources: SUNAT / EY

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 0.52% for 2017, 0.51% for 2018 and 0.50% for 2019, applied on their monthly billing after deducting VAT.

	2015 (S/)	2016 (S/)	2017 (S/)	2018 (S/)
OSINERGMIN Contribution paid by corporations of the electricity sector	102,650,080	121,522,316	121,951,581	123,538,278
Total OSINERGMIN Contribution (Mining, hydrocarbons and electricity companies)	307,408,959	331,412,821	368,314,166	331,412,821

Source: OSINERGMIN

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 2017-2019 is 0.11 % applied on their monthly billing after deducting VAT.

	2014 (S/)	2015 (S/)	2016 (S/)	2017 (S/)
OEFA Contribution paid by corporations of the electricity sector	17'686,596	22'376,732	24'789,071	25'518,251
Total OEFA Contribution	109'605,747	118'661,293	133'041,398	142'090,247

Source: OEFA

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.

The following chart shows the amount of revenues obtained by Hydroenergetic Canon that is distributed to Local and Regional Governments:

	2015 (S/)	2016 (S/)	2017 (S/)	2018* (S/)
Transfers to Regional Governments	54,435,507	51,075,503	51,500,188	41,358,778
Transfers to Local Governments	163,302,496	153,208,597	154,522,504	124,076,332

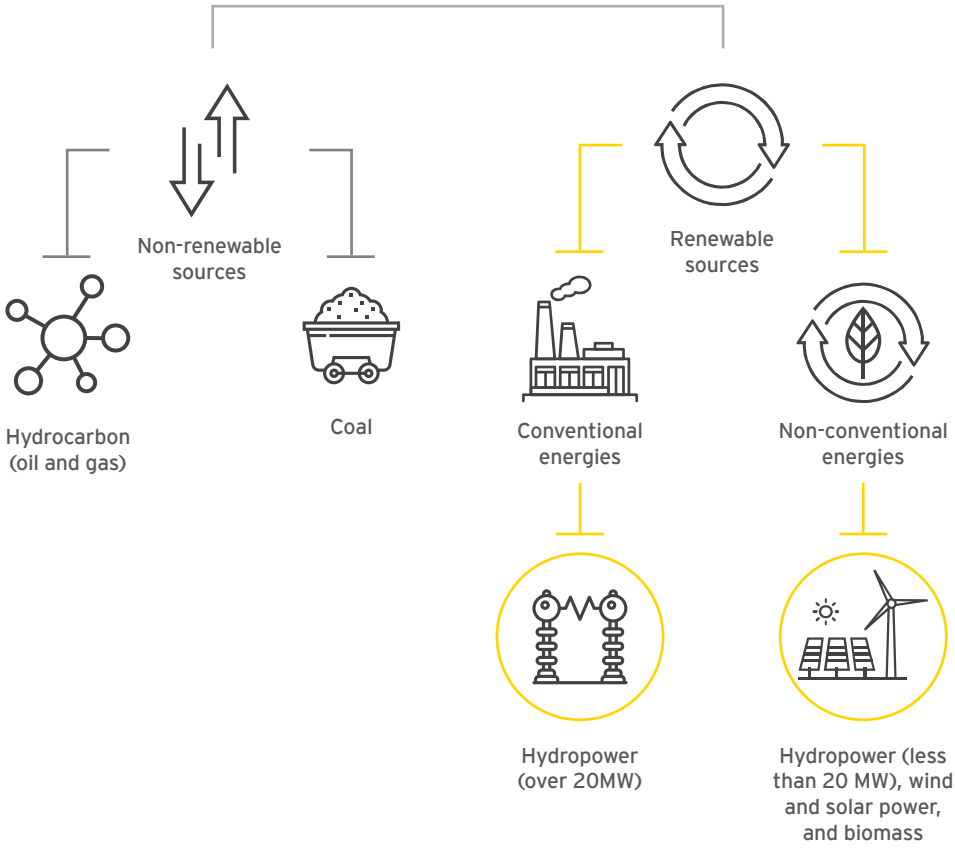
*As of November, 2018
Source: Consultation of transfers to the National, Regional and Local Governments - MEF

2.
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.

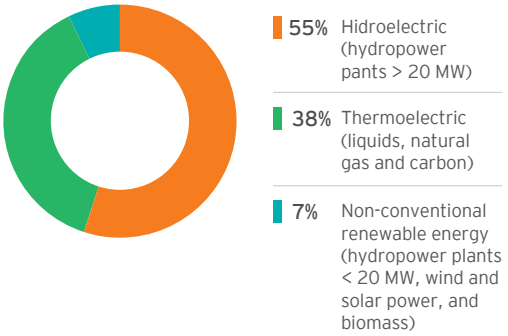
Currently, electricity offered by corporations on the electrical business can be classified according to the following:



In the recent years, a new global trend on clean energy have 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 2018 was mostly based on hydric sources, being followed by energy produced by diesel, gas and carbon (thermoelectric energy). Just little energy has been being produced on wind and solar plants (non- conventional renewable sources).

Production estructure (2018)



Sources: COES / EY

Annual production of electrical generation power stations of COES (GWh), accumulated to decemeber 2018

Plants	2018	2017	Variation	
			Energy	%
Thermoelectric (Liquids, natural gas and carbon)	19,075.64	19,774.81	-699.17	-4%
Hydroelectric (Hydropower plants > 20 MW)	28,067.01	26,739.54	1,327.47	5%
Non-convetional renewable energy (Hydropower plants < 20 MW, wind and solar power, and biomass)	3,674.11	2,478.91	1,195.20	33%
Total	50,816.76	48,993.26		

Source: COES

Despite of that fact, we must point out 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 39'916,919.92 MWh, while years later, in 2018, the electricity produced was about 51,292,914.70 MWh.

Annual production of electrical generation power stations of COES (GWh), accumulated to december 2018

	2014	2015	2016	2017	2018
MWh	42,050,518.80	44,786,562.16	48'587,387.77	49,570,266.34	51,292,914.70

Sources: COES / EY

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.

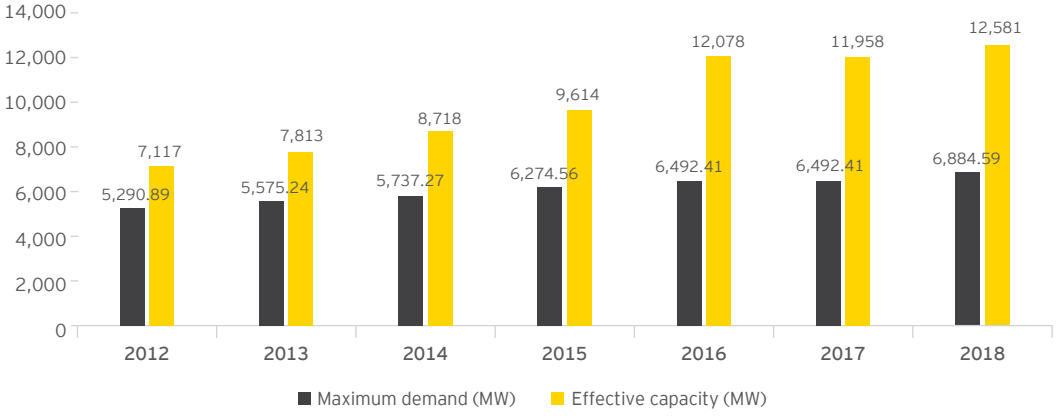
On the other hand, the regulated users group consist of users who are subject to pre-established prices (i.e. bar prices) with no negotiation capacity when contracting with electrical suppliers. The Supervisory Body of Private Investment in Energy and Mines (OSINERGMIN) is the entity responsible for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

	Minimum demand (Mw)	Average demand (Mw)	Maximum demand (Mw)
February 2019	5,108.415	6,957.151	6,949.997
January 2019	5,252.198	7,006.350	6,876.292
December 2018	5,198.374	6,861.663	6,884.591
November 2018	5,315.717	6,630.768	6,785.792
October 2018	5,214.971	6,505.956	6,657.624

Sources: COES / EY

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 2012, reporting an excess of 26%, until 2018, where a margin of 45% was reached.



Sources: COES / EY

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 bottlenecks 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.
- Others argue as an important issue regarding the Peruvian demand of electricity, the presence of clandestine users. Such kind of users does not allow for a reliable measurement of the electricity demand as they cannot be supervised 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 years 2020 to 2022 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, this expert has estimated that in 2025 Peru would suffer a "shortage of electricity", if the number of generation plants is not increased soon.

"

The energy reserve margin is not an indicator of "oversupply of energy" in an economic and literal sense because the country still has an energy need to be covered

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 zawarded by means of the following alternatives:

Award of a Proinversion project

Proinversion (Promotion Agency of Private Investment of Peru) 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

This entity (Ministry of Energy and Mines - 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 Supervisory Body of Private Investment in Energy and Mines (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 the Ministry of Energy and Mines (MINEM). For this 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 Supervisory Body of Private Investment in Energy and Mines (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 (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.

During the year 2018, it was reported that eleven power generation plants with a total installed capacity of 519.54 MW entered into commercial operation and that they represented a total investment of US$735.4 MM. Of this group, six were mini-hydropower plants that individually injected power of no more than 20 MW and together represented an investment of US$173.8 MM; a biomass power plant with a power of 2.40 MW that represented an investment of US$2.6 MM; a wind farm with a capacity of 132.30 MW that represented an investment of US$165.8 MM; and two solar power plants with a joint power of 184.48 MW that represented a total investment of US$217.4 MM.

Under such context, the investment in projects that entered into commercial operation during 2018 was led by projects based on non-conventional renewable energy sources, since they represented a total of US$559.6 MM (more than triple the amount of investment registered during the year 2017). The biggest participation was represented by the solar power projects.

Electrical generation units - Under operation

No.	Power Plant Name	Concession Holder	Granted by	Installed Capacity (MW)
1	Tingo Hydropower Plant	Compañia Hidroelectrica Tingo S.A.C.	MINEM (concession)	8.8
2	Iquitos Nueva Thermal Power Plant	Genrent del Peru S.A.C.	Cold generation reserve	70
3	Chilca 1 (Combined Cycle) Thermal Power Plant	Engie Energia Peru S.A.	MINEM (authorization)	862.2
4	Ilo Thermal Power Plant	Engie Energia Peru S.A.	Cold generation reserve	564
5	Ilo Thermal Power Plant	Engie Energia Peru S.A.	Proinversion (south energy node)	735
6	Quitaracsa Hydropower Plant	Engie Energia Peru S.A.	Long-Term Electricity Supply	112
7	La Gringa VI Thermal Power Plant	Progenere S.A.C.	MINEM (authorization)	12
8	Guayabal Thermal Power Plant	Pacific Stratus Energy del Peru S.A.	MINEM (authorization)	20.2
9	Huayuri Thermal Power Plant	Pacific Stratus Energy del Peru S.A.	MINEM (authorization)	42
10	Aricota 1 Hydropower Plant	Empresa de Generacion Electrica del Sur	Public Company	23.8
11	Aricota 2 Hydropower Plant	Empresa de Generacion Electrica del Sur	Public Company	11.9

•••

...

No.	Power Plant Name	Concession Holder	Granted by	Installed Capacity (MW)
12	Aricota 3 Hydropower Plant	Empresa de Generacion Electrica del Sur	Public Company	9.6
13	Independencia Thermal Power Plant	Empresa de Generacion Electrica del Sur	Public Company	22.9
14	Marañon Hydropower Plant	Hidroelectrica Marañon S.C.R.L.	MINEM (concession)	88.3
15	Cheves Hydropower Plant	Statkraft Peru S.A.	Proinversion	168.2
16	Puerto Bravo Thermal Power Plant	Samay I S.A.	Proinversion (south energy node)	720
17	Puerto Maldonado Thermal Power Plant	Infraestructura y Energia del Peru S.A.C.	Cold generation reserve	20.1
18	Santo Domingo de los Olleros Thermal Power Plant	Termochilca S.A.C.	MINEM (authorization)	99.6
19	Santo Domingo de los Olleros Thermal Power Plant	Termochilca S.A.C.	Long-Term Electricity Supply	197.6
20	Pucallpa Thermal Power Plant	Infraestructura y Energia del Peru S.A.C.	Cold generation reserve	45.7
21	Chaglla Hydropower Plant	Empresa de Generacion Huallaga S.a.	Proinversion	406
22	Puerto Callao Thermal Power Plant	APM Terminals Callao S.A.	MINEM (authorization)	13
23	Nueva Esperanza Thermal Power Plant	Empresa Electrica Nueva Esperanza S.R.L.	MINEM (authorization)	135
24	Complejo Industrial Palmawasi Biomass Power Plant	Industrias Del Espino S.A.	MINEM (concession)	1.9
25	CT No. 2 Thermal Power Plant	Kimberly Clark Peru S.R.L.	MINEM (authorization)	2.5
26	CT No. 1 Thermal Power Plant	Kimberly Clark Peru S.R.L.	MINEM (authorization)	2
27	Coelvihidro II Hydropower Plant	Consorcio Electrico de Villacuri S.A.C.	MINEM (concession)	15
28	La Pampilla Thermal Power Plant	Refineria la Pampilla S.A.A.	MINEM (authorization)	4.5
29	Pias 1 Hydropower Plant	Consorcio Minero Horizonte S.A.	MINEM (concession)	11
30	Malacas Thermal Power Plant (TG6)	Enel Generacion Piura S.A.C.	MINEM (authorization)	51.4
31	Malacas Thermal Power Plant (TG5)	Enel Generacion Piura S.A.C.	Cold generation reserve	200

...

...

No.	Power Plant Name	Concession Holder	Granted by	Installed Capacity (MW)
32	Maple Etanol Thermal Power Plant (cogeneration)	Agro Aurora S.A.C.	MINEM (concession)	37.52
33	Campamento San Gabriel Thermal Power Plant	Compañias de Minas Buenaventura S.A.A.	MINEM (authorization)	2.6
34	Planta Thermal Power Plant	Repsol Exploracion Peru S.A.	MINEM (authorization)	6
35	Carpapata III Hydropower Plant	Union Andina De Cementos S.A.A.	MINEM (concession)	12.8
36	Planta Pesquera Exalmar Thermal Power Plant	Exalmar S.A.A.	MINEM (authorization)	2,768
37	Pesquera Diamante Thermal Power Plant	Pesquera Diamante S.A.	MINEM (authorization)	2,625
38	El Platanal Hydropower Plant	Compañia Electrica El Platanal S.A.	MINEM (concession)	220
39	Chilca (Combined Cycle - Fenix) Thermal Power Plant	Fenix Power Peru	Long-Term Electricity Supply	534.3
40	Laguna Norte Thermal Power Plant	Minera Barrick Misquichilca S.A.	MINEM (authorization)	12.78
41	Tablazo Thermal Power Plant	Sudamericana de Energia de Piura	MINEM (authorization)	30
42	Kallpa IV (Combined Cycle) Thermal Power Plant	Kallpa Generacion S.A.	MINEM (authorization)	873.9
43	Huachipa Cogeneration Plant	Illapu Energy S.A.	MINEM (authorization)	13.6
44	Machupicchu II Hydropower Plant	Egemsa	MINEM (concession)	102
45	Huanza Hydropower Plant	Empresa Generacion Huanza S.A.	MINEM (concession)	90.6
46	Chilca 2 Thermal Power Plant	Engie Energia Peru S.A.	MINEM (authorization)	112.8
47	Recka Thermal Power Plant	Sociedad Minera Cerro Verde S.A.A.	MINEM (authorization)	181.3
48	Planta Eten Thermal Power Plant	Planta De Reserva Fria de Generacion Eten S.A.	Cold generation reserve	240.5
49	Aje Thermal Power Plant	Ajeper S.A.	MINEM (authorization)	6.5
50	Tingo I, II y III Hydropower Plant	Energoret S.A.C.	MINEM (concession)	406
51	Cerro Verde Thermal Power Plant	Sociedad Minera Cerro Verde S.A.A.	MINEM (authorization)	21.9

...

...

No.	Power Plant Name	Concession Holder	Granted by	Installed Capacity (MW)
52	Cerro del Aguila Hydropower Plant	Cerro Del Aguila S.A.	Proinversion	525
53	Santa Teresa Hydropower Plant	Luz Del Sur S.A.A.	Proinversion	98
54	Surpack Thermal Power Plant	Surpack S.A.	MINEM (authorization)	2.6
55	Marca Hydropower Plant	Acqua Energia S.R.L	MINEM (concession)	7.5
56	Miraflores Hydropower Plant	Acqua Energia S.R.L	MINEM (concession)	9.4
57	Casca Hydropower Plant	Acqua Energia S.R.L	MINEM (concession)	6.8
58	Alcaparrosa Hydropower Plant	Acqua Energia S.R.L	MINEM (concession)	7.9
59	Limacpunco, Ttio y Capiri Hydropower Plant	Araza S.A.C.	MINEM (concession)	195
60	Solpack Thermal Power Plant	Solpack S.A.C.	MINEM (authorization)	4.2
61	Chimay Hydropower Plant	Chinango S.A.C.	MINEM (concession)	150.9
62	Yanango Hydropower Plant	Chinango S.A.C.	MINEM (concession)	42.6
63	Charcani I Hydropower Plant	EGASA	Public Company	1.8
64	Charcani II Hydropower Plant	EGASA	Public Company	0.6
65	Charcani III Hydropower Plant	EGASA	Public Company	5
66	Charcani IV Hydropower Plant	EGASA	Public Company	15
67	Charcani V Hydropower Plant	EGASA	Public Company	135
68	Charcani VI Hydropower Plant	EGASA	Public Company	9
69	Chilina Thermal Power Plant (Diesel)	EGASA	Public Company	48
70	Mollendo Thermal Power Plant (Diesel)	EGASA	Public Company	31.5
71	Pisco Thermal Power Plant	EGASA	Public Company	74.8
72	Mantaro Hydropower Plant	Electroperu	Public Company	1,008
73	Restitucion Hydropower Plant	Electroperu	MINEM (concession)	210
74	Tumbes Thermal Power Plant	Electroperu	MINEM (concession)	18
75	Huampani Hydropower Plant	Enel Generacion Peru S.A.A.	MINEM (concession)	30
76	Huinco Hydropower Plant	Enel Generacion Peru S.A.A.	MINEM (concession)	270
77	Matucana Hydropower Plant	Enel Generacion Peru S.A.A.	MINEM (concession)	140

...

...

No.	Power Plant Name	Concession Holder	Granted by	Installed Capacity (MW)
78	Moyopampa Hydropower Plant	Enel Generacion Peru S.A.A.	MINEM (concession)	69.15
79	Santa Rosa Thermal Power Plant	Enel Generacion Peru S.A.A.	MINEM (authorization)	420
80	Ventanilla Thermal Power Plant	Enel Generacion Peru S.A.A.	MINEM (authorization)	485
81	Huanchor Hydropower Plant	Hidroelectrica Huanchor S.A.C.	MINEM (concession)	20
82	Las Flores Thermal Power Plant	Kallpa Generacion S.A.	MINEM (authorization)	193
83	Cañon del Pato Hydropower Plant	Orazul Energy Egenor	MINEM (concession)	256.55
84	Cahua Hydropower Plant	Statkraft Peru S.A.	MINEM (concession)	43
85	Gallito Ciego Hydropower Plant	Statkraft Peru S.A.	MINEM (concession)	37.4
86	Huayllacho Hydropower Plant	Statkraft Peru S.A.	MINEM (concession)	0.29
87	Malpaso Hydropower Plant	Statkraft Peru S.A.	MINEM (concession)	54.4
88	Misapuquio Hydropower Plant	Statkraft Peru S.A.	MINEM (concession)	3.68
89	Pachachaca Hydropower Plant	Statkraft Peru S.A.	MINEM (concession)	9
90	Pariac Hydropower Plant	Statkraft Peru S.A.	MINEM (concession)	5.1
91	San Antonio Hydropower Plant	Statkraft Peru S.A.	MINEM (concession)	0.62
92	San Ignacio Hydropower Plant	Statkraft Peru S.A.	MINEM (concession)	0.52
93	Yaupi Hydropower Plant	Statkraft Peru S.A.	MINEM (concession)	108
94	Oquendo Thermal Power Plant (cogeneration)	Sdf Energia	MINEM (concession)	30
95	Aguaytia Thermal Power Plant	Termoselva	MINEM (authorization)	156

Sources: OSINERGMIN / COES / EY

Non-conventional renewable energy generation units - Under operation

No.	Auction	Power Plant Name	Concession Holder	Installed Capacity (MW)
1	1st	Paramonga Biomass Power Plant	AIPSA	23
2		Huaycoloro Biomass Power Plant	Petramas S.A.C.	4
3		Panamericana Solar Power Plant	Panamericana Solar S.A.C.	20
4		Majes 20T Solar Power Plant	Grupo T Solar Global S.A.	20
5		Reparticion 20T Solar Power Plant	Grupo T Solar Global S.A.	20
6		Tacna Solar Power Plant	Grupo T Solar Global S.A.	20
7		Cuspinique Wind Farm	Energia Eolica S.A.	80
8		Talara Wind Farm	Energia Eolica S.A.	30
9		Marcona Wind Farm	Parque Eolico Marcona S.R.L.	32
10		Angel III Hydropower Plant	Generadora de Energia Del Peru S.A.	19.9
11		Angel II Hydropower Plant	Generadora de Energia Del Peru S.A.	19.9
12		Angel I Hydropower Plant	Generadora de Energia Del Peru S.A.	19.9
13		Chancay Hydropower Plant	Sindicato Energetico S.A.	19.2
14		Las Pizarras Hydropower Plant	Electrica Rio Doble S.A.	18
15		Yanapampa Hydropower Plant	Electrica Yanapampa S.A.C.	4.13
16		Huasahuasi II Hydropower Plant	Hidroelectrica Santa Cruz	10
17		Huasahuasi I Hydropower Plant	Hidroelectrica Santa Cruz	10
18		Nuevo Imperial Hydropower Plant	Hidrocañete S.A.	3.97
19		Purmacana Hydropower Plant	Electrica Santa Rosa	1.8
20		Roncador Hydropower Plant	Maja Energia S.A.C.	3.8
21		Santa Cruz II Hydropower Plant	Hidroelectrica Santa Cruz	6
22		Santa Cruz I Hydropower Plant	Hidroelectrica Santa Cruz	6
23		La Joya Hydropower Plant	Generadora de Energia Del Peru S.A.C.	10.46
24		Poechos II Hydropower Plant	Sindicato Energetico S.A.	10
25		Caña Brava Hydropower Plant	Orazul Energy Egenor	6
26		Carhuaquero IV Hydropower Plant	Orazul Energy Egenor	10

•••

...

No.	Auction	Power Plant Name	Concession Holder	Installed Capacity (MW)
27	2nd	Renovandes H1 Hydropower Plant	Empresa de Generacion Santa Ana S.R.L.	20
28		Canchayllo Hydropower Plant	Empresa de Generacion Canchayllo S.A.C.	5.26
29		Runatullo III Hydropower Plant	Empresa de Generacion Electrica de Junin S.A.C.	20
30		Tres Hermanas Wind Farm	Parque Eolico Tres Hermanas S.A.C.	90
31		La Gringa V Biomass Power Plant	Energia Limpia S.A.C.	3.2
32		Moquegua Solar Power Plant	Moquegua FV S.A.C.	16
33	3rd	Carhuac Hydropower Plant	Andean Power S.A.C.	20
34		Potrero Hydropower Plant	Empresa Electrica Agua Azul S.A.	19.9
35		Yarucaya Hydropower Plant	Huaura Power Group S.A.	16.5
36		Runatullo II Hydropower Plant	Empresa de Generacion Electrica de Junin S.A.C.	19.1
37	4th	Doña Catalina Biomass Power Plant	Petramas S.A.C.	2.4
38		Wayra I Wind Farm	Enel Green Power Peru S.A.	160
39		Rubi Solar Power Plant	Enel Green Power Peru S.A.	144.5
40		Intipampa Solar Power Plant	Engie Energia Peru S.A.	40
41		Rucuy Hydropower Plant	Empresa De Generacion Electrica Rio Baños S.A.C.	20
42		Her 1 Hydropower Plant	Enel Generacion Peru S.A.A.	0.7

Source: MINEM

Electrical generation units - Under construction

No.	Power Plant Name	Concession Holder	Granted by	Installed Capacity (MW)
1	La Virgen Hydropower Plant	La Virgen S.A.C.	MINEM (concession)	84
2	Rapaz II Hydropower Plant	Empresa Comunal Hidroelectrica San Cristobal de Rapaz	MINEM (concession)	1.25
3	Centauro I y III Hydropower Plant	Corporacion Minera Peru S.A.	MINEM (concession)	25
4	Tulumayo IV Hydropower Plant	Egejunin Tulumayo IV S.A.C.	MINEM (concession)	56.2
5	Tulumayo V Hydropower Plant	Egejunin Tulumayo V S.A.C.	MINEM (concession)	83.2
6	Veracruz Hydropower Plant	Compania Energetica Veracruz S.A.C.	MINEM (concession)	635
7	Cola I Hydropower Plant	Hidroelectrica Cola S.A.	MINEM (concession)	13.1
8	Viroc (Raura II) Hydropower Plant	Amazonas Generacion S.A.	MINEM (concession)	13
9	Nueva Esperanza Hydropower Plant	Nueva Esperanza Energy S.A.C.	MINEM (concession)	9.16
10	Pallca Hydropower Plant	Carbon Latam Peru S.A.C.	MINEM (concession)	10.1
11	Olmos 1 Hydroelectric Power Plant	Sindicato Energetico S.A.	MINEM (concession)	51
12	Curibamba Hydropower Plant	Enel Generacion Peru S.A.	MINEM (concession)	195
13	Cativen I-II Hydropower Plant	Compañia Minera Poderosa S.A.	MINEM (concession)	30
14	Belo Horizonte Hydropower Plant	Odebrecht S.A.C.	MINEM (concession)	180
15	San Gaban III Hydropower Plant	Hydro Global Peru	MINEM (concession)	205.8
16	Chadin II Hydropower Plant	Ac Energia S.A.	MINEM (concession)	600
17	Patapo Hydropower Plant	Hydro Patapo S.A.C.	MINEM (concession)	1

•••

No.	Power Plant Name	Concession Holder	Granted by	Installed Capacity (MW)
18	Tarucani Hydropower Plant	Tarucani Generating Company S.A.	MINEM (concession)	49
19	San Jacinto Biomass Power Plant	Agroindustrias San Jacinto S.A.A.	MINEM (concession)	21
20	Aje Thermal Power Plant	AJEPER	MINEM (authorization)	6.53
21	Pedregal Thermal Power Plant	Electro Dunas	MINEM (authorization)	18
22	Olpesa Thermal Power Plant	Oleaginosas del Peru S.A.	MINEM (concession)	2.25
23	Pucara Hydropower Plant	Empresa De Generacion Hidroelectrica del Cusco S.A.	Proinversion	178
24	Molloco Hydropower Plant	Generadora Electrica Molloco S.A.C.	Proinversion	280

Sources: OSINERGMIN / EY

Non-conventional renewable energy generation units - Under construction

No.	Auction	Power Plant Name	Concession Holder	Installed Capacity (MW)
1	1st	Shima Hydropower Plant	Energia Hidro S.A.C.	5
2	2nd	El Carmen Hydropower Plant	Generacion Andina S.A.C.	8.4
3		8 de Agosto Hydropower Plant	Generacion Andina S.A.C.	19
4		Huatziroki Hydropower Plant	Empresa de Generacion Hidraulica Selva S.A.	19.2
5		Manta Hydropower Plant	Peruana de Inversiones en Energia Renovable S.A.	19.8
6	3rd	Santa Lorenza I Hydropower Plant	Empresa de Generacion Electrica Santa Lorenza	18.7
7		Karpa Hydroelectric Hydropower Plant	Hidroelectrica Karpa S.A.C.	19
8		Laguna Azul Hydropower Plant	Mamacocha S.R.L.	20
9		Colca Hydropower Plant	Empresa de Generacion Electrica Colca S.A.C.	12.1
10		Zaña 1 Hydropower Plant	Electro Zaña S.A.C.	13.2
11		Hydrika 1 Hydropower Plant	Hydrika 1 S.A.C.	6.6

...

No.	Auction	Power Plant Name	Concession Holder	Installed Capacity (MW)
12	3rd	Hydrika 2 Hydropower Plant	Hydrika 2 S.A.C.	4
13		Hydrika 3 Hydropower Plant	Hydrika 3 S.A.C.	10
14		Hydrika 4 Hydropower Plant	Hydrika 4 S.A.C.	8
15		Hydrika 5 Hydropower Plant	Hydrika 5 S.A.C.	10
16	4th	Callao Biomass Power Plant	Empresa Concesionaria De Energia Limpia S.A.C.	2.4
17		Ayanunga Hydropower Plant	Energetica Monzon	20
18		Duna Wind Farm	Gr Taruca S.A.C.	18.4
19		Huambos Wind Farm	Gr Paino S.A.C.	18.4
20		Hydrika 6 Hydropower Plant	Hydrika 6 S.A.C.	8.9
21		Alli Hydropower Plant	Concesionaria Hidroelectrica Sur Medio S.A.	14.5
22		Kusa Hydropower Plant	Concesionaria Hidroelectrica Sur Medio S.A.	15.6

Sources: OSINERGMIN / EY

During the year 2018, it was reported that two transmission lines, one electrical substation and one reinforcement concession contract entered into commercial operation and that they represented a total investment of US$112.06 MM. Of this group, 220 kV Friaspata – Mollepata and 20 kV Azangaro – Juliaca – Puno transmission lines represented an investment of US$62.79 MM; Carapongo 500/220 kV substation represented an investment of US$42.7 MM; and the reinforcement in La Niña substation represented a total investment of US$6.57 MM.

The concession contracts and extensions of the electric transmission lines under construction represent an investment of 1,210 MM, and the electric transmission lines of power generation plants under construction represent an investment of 648.5 MM. These projects will come into operation in the coming years.

Concession contracts and extension of electric transmission lines - Under construction

No.	Transmission Line Name	Concession Holder	Transmission Capacity (MVA)	Length (km)
1	T.L. 220 kV Machupicchu - Quencoro - Onocora - Tintaya and Associated Substations	ATN 3 S.A.	300	354
2	T.L. 220 kV Moyobamba - Iquitos	Lineas de Transmision Peruanas S.A.C.	150	596
3	T.L. 220 kV Montalvo - Los Heroes	Transmisora Electrica del Sur 3 S.A.C.	250	128.8
4	T.L. 138 kV Aguaytia - Pucallpa (second circuit)	Terna Peru S.A.C.	80	132
5	Mantaro 500 kV connection - New Yanango - Carapongo and Associated Substations	Consorcio Transmantaro	1400	390
6	Connection 500 kV Nueva Yanango - Nueva Huanuco and Associated Substations	Consorcio Transmantaro	1400	184
7	T.L. 220 kV Tintaya - Azangaro	Red Electrica del Sur S.A.	150	138
8	Extension N ° 18: Capacitor bank of 20 MVAR, 60 kV in the Zorritos Substation. Transformation extension 220/60 / 22.9 kV, 50/65 MVA in Substation Zorritos. Sectioning of T.L. 220 kV Piura - Chiclayo and link with La Niña Substation 220 kV. Change of configuration in 60 kV of simple bar of Guadalupe Substation.	REP-ISA	-	-
9	Extension N ° 19: Provisional installation of a power transformer in the Piura Oeste Substation. Installation of a 100 MVA transformer, 220/60/10 kV and connection cells in the Piura Oeste Substation.	REP-ISA	-	-
10	Expansion of Puno Substation 220 kV	REDESUR	-	-
11	Extension N ° 20: Installation of a 30/20/20 MVA transformer in the Combapata Substation, installation of a 50/30/20 MVA transformer in the Huanuco Substation, installation of a 50/50/30 MVA transformer in the Reque Substation (Chiclayo Sur), installation of a 30/10/20 MVA transformer in the Tingo Maria Substation and installation of a 20/20/7 MVA transformer in the Tocache Substation.	REP-ISA	-	-

Sources: OSINERGMIN / EY

Electric transmission lines of power generation plants - Under construction

No.	Transmission Line Name	Generation Power Plant	Concession Holder	Transmission Capacity (MVA)	Length (km)
1	T.L. 138 kV Santa Lorenza Substation - T.L. Paragsha 2 - Amarilis	Santa Lorenza	Empresa de Generacion Santa Lorenza S.A.C.	138	7.10
2	T.L. 138 kV 8 de Agosto Substation - Tingo Maria Substation	8 de Agosto	Generacion Andina S.A.C.	138	58.70
3	T.L. 138 kV La Virgen Substation - Caripa Substation	La Virgen	La Virgen S.A.C.	138	63.50
4	T.L. 60 kV S.E. Huatziroki - Substation Yurinaki	Huatziroki I	Empresa de Generacion hidraulica Selva S.A.	60	30.70
5	T.L. 220 kV Substation Tulumayo IV - T8	Tulumayo IV	Egejunin Tulumayo IV S.A.C.	220	8.20
6	T.L. 60 kV Substation Runatullo III - Substation Tulumayo IV	Tulumayo IV	Egejunin Tulumayo IV S.A.C.	60	7.50
7	T.L. 60 kV Substation Zaña - Substation Cayalti	Zaña	Electro Zaña S.A.C.	60	50.70
8	T.L. 220 kV Substation Llatica - Soro - Substation Huambo	Molloco	Consorcio Cee	220	27.50
9	T.L. 220 kV Substation Belo Horizonte - Substation Tingo Maria	Belo Horizonte	Odebrecht S.A.C.	220	19.50
10	T.L. 220 kV Substation Tulumayo V - Substation Tulumayo IV	Tulumayo V	Egejunin Tulumayo V S.A.C.	220	9.20
11	T.L. 66 kV Substation Manta - Substation La Pampa	Manta	Peruana de Inversion de Energias Renovables S.A.C.	66	2.70
12	T.L. 220 kV Substation Pucara (Pampa Hanza) - Substation Onocora	Pucara	Empresa de Generacion Hidroelectrica Del Cusco S.A.	220	1.40
13	T.L. 138 kV Substation Acco - Substation Pucara (Pampa Hanza)	Acco	Empresa de Generacion Hidroelectrica del Cusco S.A.	138	10.20
14	T.L. 138 kV Substation Tarucani - Substation Majes	Tarucani	Tarucani Generating Company S.A.	138	57.70

Sources: OSINERGMIN / EY

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), accumulated to december 2018

Exchanges	2018	2017	Variation	
			Energy	%
Import	21.2	16.6	4.6	22%
Export	0	0	0	0%

Sources: COES / EY

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; and there is no expectations for a connection between Colombia and Peru grids as they are geographically far, and such connection will necessitate 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 before 2020, and the transmission line will extend for 50 kilometers and will have a transport capacity of about 200 MW.

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.

3.
Renewable energy sources

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 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 will be 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.

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.

> “
>
> This 2014 - 2025 National Energy Plan highlights the importance of the use of clean energy in the future in order to prevent any future energy deficit

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 was 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 800,000TJ of energy consumption registered in 2014 will increase to 1'321,000TJ to 1'612,000TJ 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).

4.
Potential of Renewable Energy Sources

According Bloomberg reports, by 2050 it is expected that the worldwide electricity production from burning fossil fuels will descend from 63% to 29%. Peru has great potential for the development of clean energies, in this sense, investments should be oriented in the following energies:

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) in Peru

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) in Peru (100 m)

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 (Win 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, the largest 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).

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.

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 100°C (212°F). 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.

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 leads 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 oscillates 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 biomass 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 determined 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 this auctions, awards are granted to offerors who communicate the lowest prices up to the limit of the energy quote applicable to the auction. For this 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 64 projects have been awarded in all four auctions hosted by OSINERGMIN, representing 1257 MW of capacity:

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 320GWh/year for biomass power, 1300GWh/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 USD 48 per MWh, while wind power prices dropped to USD 38 per MWh. Enel 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.

Secc C: Trends in the Oil & Gas and the electrical industries in Peru

1. Oil & gas

Trends in the hydrocarbons industry

Stabilization of oil prices above US$50, in addition to cost efficiency plans established during the period when it slugged at US$40, has led to a scenario in which it is necessary to implement the necessary incentives to keep growth in investments.

As previously mentioned in Section A of this Chapter, the Government and Congress are working towards a Draft Oil & Gas Law Amendment (the Draft), which has goal of crystalizing incentives for exploration and exploitations.

On that regard, incentives are just a part of what the Draft has to offer: it will also include dispositions to enhance Perupetro's role in the industry.

In this regard, Perupetro has revised and identified hydrocarbon regulations topics that could be changed in the short-term.

To the extent that the provisions regarding the enhancement of Perupetro's role in the industry are passed via the Draft by Congress, it is likely that the aforementioned agency will have the adequate tools to carry on a reform of the sector, alongside the Ministry of Energy and Mines.

In particular, Perupetro's reform will focus on three pillars or main topics, which are:

1) Regulatory framework

2) Reinforcement and redefinition of Perupetro's role

3) National Plan

The first pillar aims toward developing a more competitive framework with worldwide tendencies that allows it to attract new sustainable investments, with wide entrepreneurial, technological, social, and environmental support. This means, among other aspects, a revision of contractual terms, a regulatory update of norms and regulations, and attainment of a socio-environmental license.

The second pillar is focused on remaking Perupetro into an active investment promoter, leading the interaction and development of sector policies, with full capacity and autonomy. This will include the institutional and organizational strengthening of Perupetro, a redefinition of its promotion process, contractor's support, hydrocarbons production and reservoir management.

The third pillar will aim towards the development of a National Hydrocarbons E&P Plan, by establishing medium and long term production, reserves and goals.

Perupetro is also planning to carry out oil bidding rounds on several onshore and offshore blocks during the coming years and thereby promoting investment in the peruvian oil & gas sector.

The opportunity opening for Peru is important, even more so if we consider that the majority of the oil sedimentary basins have not been explored yet. Also, there are large natural gas reserves not only in the area surrounding the Camisea project, but also in other locations, such as Piura and Tumbes.

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).

In this context, biofuels are a clean and renewable alternative against the contaminating oil industry, especially for its contribution to the diversification of the availability of liquid fuels for transport.

In Peru, there are efforts to establish more incentives to the biofuels market. Indeed, Draft Law No. 3325 looks forward modifying the current Biofuels Market's Promotional Law, by means of prioritizing national supply of this product.

Peru has some advantages related to biofuel production, due to the great potential to develop several oil crops, and by obtaining fats and oils from animal byproducts. The existing potential crops show high production yields.

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.

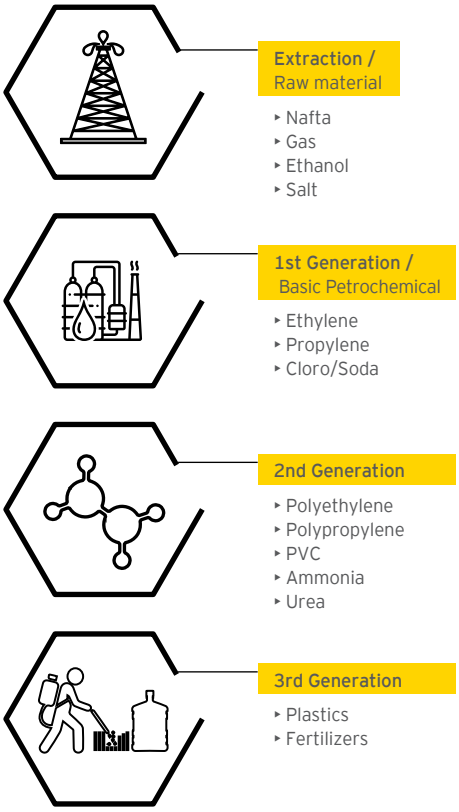
The Petrochemical Industry is divided into three segments:

- First generation basic industry (for example: synthesis gas, ethylene)
- Second generation industry (for example: ammonia, urea, polyethylene, and polypropylene)
- Transformation industry or third generation (for example: fertilizers NPK, MAP, plastics)

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.

Nevertheless, Petrochemical Industrial Planning in a country such as Peru, in which investment is linked to decisions of private companies, requires an important agreement between sector authorities of the Government and potential investors.

Competitive integration



Source: EY

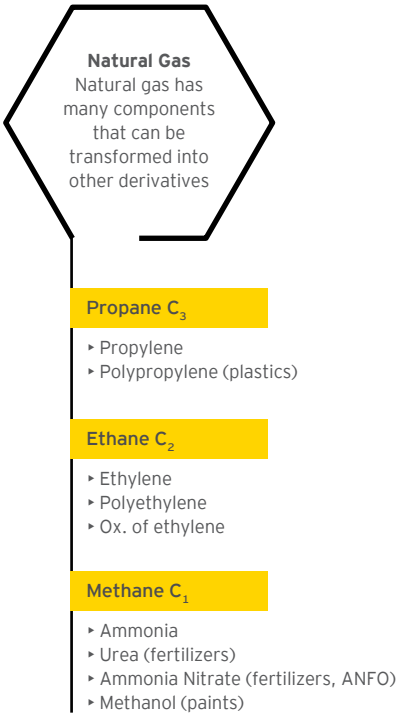
> “Governments will have to step up in order to prevent negative consequences in economies which rely heavily on oil

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.



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 planning of a petrochemical complex involves a number of other important decisions. Not only the ones that guarantee raw material supply, but also factor in location, access to transportation (highways, sea ports and airports), supplies such as water and electricity, and of course human resources.

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

A list of integrated units in a petrochemical complex, with their respective investment estimations, demonstrates that they all could be more than US$15 billion:

Project	Investment US$ billion
LNG	5
Ethylene Polyethylene	5
Ammonia Urea	1.8
Methanol	1.5
Infrastructure and services	1
Energy	1

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 (Contugas, Pluspetrol, and a fertilizers producer) looking forwards establishing a petrochemical plant in Marcona.

2.
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 Municipality of Lima, 40% of the fleet of public transport vehicles in Lima is at least 21 years old.

As a consequence, the main problems generated by urban transport are manifested mainly in health (pollution and traffic accidents), in competitiveness (loss of time), and in the limited capacity of road corridors.

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 in order 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 the electric vehicles that will be imported comply with quality, efficiency, safety and environmental protection standards.

Despite the fact that a small number of electric vehicles are circulating in the country, the tendency is that their acquisition and use increases 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.

From the public transportation perspective, for instance, taxi apps such as Cabify and Uber have implemented electric vehicles in their fleet as part of their commercial policies, and also electric taxi projects has been implemented in the capital of Mexico, Chile and Colombia (Dorado Airport). Likewise, the projects Transmilenio in Colombia and Transantiago in Chile are looking for the integration of electric buses in their public transportation systems.

In the capital of Peru, the municipalities of San Isidro and San Borja had incorporated in their respective jurisdictions, the free transportation service using electric buses, with the aim of reducing pollution and traffic congestion. Also, the Peruvian Government, through the Ministries of Energy and Mines, Environment, Transport and Communications, signed an agreement with private companies to prepare the Lima E-Bus Project, which consists of integrating an electric bus into the Javier Prado-Faucett Corridor in 2019, with the purpose of evaluating the feasibility of using such vehicles massively in the public transport of the country.

From the private sphere, companies from different sectors have also announced the implementation of electric vehicles in their operational activities. For example, DHL have been conducting tests to incorporate electric vehicle, mining companies as Anglo American in Chile evaluates the use of electric vehicles to transport its workers in the field, and Chile's National Copper Corporation, better known as Codelco, is promoting a pilot electromobility plan for the transportation of its workers and elements.

In Peru, Cruz del Sur, a local company dedicated to the transport of passengers and heavy cargo, has announced at the beginning of 2019 that it is within its plans to renew its fleet of buses with electric vehicles, and, in May 2019, the first electric bus pilot will be started to transfer the workers of the Cerro Corona mining unit, an asset of Gold Fields, expecting the same to happen with other mining projects since headquarters are demanding the development of sustainable practices in their operations around the world.

Notwithstanding the above, it should be noticed that the electric technology in mining industry is not limited to the transport of workers, it also reaches the machinery, for example, the implementation of the electric scoop battery for hard rock has meant benefits not only for the environment, but also for the health of its workers, due to the lower impact of pollution. In countries as Canada and Australia is a reality, and probably in a short-term it will be in the Latin American Region.

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.

> “
>
> The shift from an analog to a digital world has driven humankind to the pace of our everyday lives

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 10MW 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, the electricity distribution companies in Lima and the provinces have begun the development of pilot programs for the installation of smart meters, and the remote management of some street lighting networks, it is expected that in the following years these initiatives will expand in a sustained plan since the smart grids represents the saving of certain network management costs and generates greater satisfaction to the users.

3.
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 every day 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 theses 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 IIoT 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.

Hopefully, Peru will be one of the next countries to enjoy the benefits of the digital revolution. As such, for this purpose not only does the Peruvian regulatory regime need to change and match the new trends but corporations should also revaluate how they operate, decide whether or not they will fit and feel comfortable in the market once their business model changes, and finally begin the process of change by aligning with new trends at the pace that fits them and its stakeholders the best.

"

Peruvian energy trends also aim towards goals with significant social impact, such as transportation


4.

TAX AND LEGAL FRAME WORK

Secc A: Regulatory terms

1. 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 mining, 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.

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 activity for extracting hydrocarbon.

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.

Draft O&G Law Amendments

Draft Law Amendment No. 2145 (the Draft Law) proposes changes to the Hydrocarbons Law in force, which was last amended in 2004.

Currently, the aforementioned Draft Law is under review by Congress' Committees and Government authorities, in order to pass a Final Draft to Congress for discussion and balloting.

The Draft Law proposes, among others, the following changes:

- Validity term of oil contracts extended from 30 to 40 years.
- Extension of exploration phase from 7 to 10 years.
- Term of the contracts could be extended up to 20 additional years after termination.
- Promotional royalties for investments in unexplored basins.

Notwithstanding the changes stated above, the Draft Law also includes provisions regarding the reinforcement of PERUPETRO's role, making it more active not only at the negotiation stage, but also during the term of the Contracts. Thus, PERUPETRO will acquire management faculties within the industry, which will include the faculty to draft standard and custom Contracts, as well as the power to perform a greater promotional and social role.

Likewise, in March 2019, the substitute text of the hydrocarbons law in force that had been presented on November 17, 2017, was re-entered into Peruvian Congress.

2. Electricity

Keywords

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 power electric appliances is set in Watts if they are low powered, but if they have medium or high powered, their power 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 between them and with generation plants to allow the transference 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

Consists of energy sources such as biomass, wind power, solar power, geothermal sources and tidal energy. In the case of hydraulic energy, such source shall be considered as RER if its installed capacity is less than 20MW.

Geothermal source and by-products

Geothermal sources refers to energy that comes from underground and includes geothermal fluids of high and low temperatures. By-products of this kind of energy refer to minerals in solution 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

Activity that consists in the production of electricity by means of the transformation of a primary source like water or a thermic one 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 is it a natural monopoly. Generators could be considered as energy traders.

Transmission

Activity that consists in 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, which is paid by all the users of the electric system despite the active or inactive use of the system, and the
- Secondary, which is paid only by the effective users of the system, that is 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 utilization of public goods and for the owning of the right of way for the 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, its granting is required for the development of the following activities:

- Generation of electric energy that is based on 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

Consists in the permission that should be requested 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 viability 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 (Promotion Agency of Private Investment of Peru) 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.

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.

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 (Electric Supervision Department).

Granting rights for electric generation with renewable energy (RER)

RER generation auctions

Auction

Public tender process hosted by the Supervisory Body of Private Investment in Energy and Mines (OSINERGMIN) to assign the adjudication rate to projects of RER generation up to the limit of the required energy. This process is conducted according to the document prepared and approved by the Ministry of Energy and Mining (MINEM), and ends in the closing date.

Required energy

This is the total amount of annual energy in MWh that is being auctioned. The required energy amount is established by the MINEM for each kind of RER on the basis of the estimated national consumption for the year.

Adjudication rate

Consists of the offer made in US$/MWh by interested corporations during the Auction. This rate guarantees each awarded corporation net energy injections up to the limit of the offered and adjudicated energy. Offered rates are not modifiable and are valid only during the date in which commercial operations start until the due date of the contract, being adjustable by the correction factor and the update formula agreed in the conditions of the Auction.

Closing date

The day in which all the requirements for the signing of the Contract are met according to the conditions stated in the conditions of the Auction. On this date, the Auction also ends.

Contract for the supply of renewable energy

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

Policies for the commercialization of energy and power generated by RER

Electricity generated by RER 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. Holders of this authorization has preferential right for the granting of 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 newspaper). Under some specific conditions, the term of this kind of concessions can be extended.

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 of 2018 the Climate change actions framework Law was approved. The purpose of this Law is to establish principles, approaches and general provisions to coordinate, articulate, design, execute, evaluate and disseminate public policies in order to reduce the country's vulnerability to climate change, taking advantage of opportunities for low carbon growth. In this regard, we list some useful concepts below:

Climate change

Changes in the climate due to direct and indirect action of human beings, causing changes in the composition of the atmosphere, increasing the natural variability of the climate.

Nationally Determined Contributions (NDC)

These are the contributions taken by the Government to deal with climate change, in the framework of the Paris Agreement, ratified by the Peruvian Government in 2016. For these purposes, adaptation and mitigation goals are formulated, involving all sectors and actors of society around common objectives for the country's sustainability.

Adaptation to climate change

Process of adjustment to the current and foreseen climate and to its effects on environmental and human systems in order to moderate or avoid consequential damages or, in some cases, take advantage of its 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.

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 has been purchased by the consumer.

Electromobility

The Peruvian Government is carrying out actions to adapt the current regulatory framework in order 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 compliance with quality, efficiency, safety and environmental protection standards.

Secc B: Peruvian general fiscal terms

The economic attractiveness of a country is strongly influenced by the fiscal system that applies to oil (especially upstream), gas and energy activities. If tailored properly, fiscal terms are able to achieve the overall objective of collecting an adequate share of the economic benefit for the government generated by these indutries, while maintaining high levels of investments in the activities related to them.

Keeping in mind those objectives and considering that the levels of investment required in the early stages of those industries in itself involves a great associated risk, Peru has established a fiscal framework that promotes all types of private initiatives, and in parallel special tax incentives in order to reduce the tax impact of oil, gas and energy activities.

Basic aspects

Resident companies (incorporated in Peru), are subject to income tax on their worldwide taxable income. Branches and permanent establishments of foreign companies that are located in Peru and nonresident entities are taxed on income from Peruvian sources 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 computed by reducing the gross revenue by cost of goods sold and all expenses necessary to produce the income or maintain its source. Certain types of revenue, however, must be computed as specified in the tax law and some expenses are not fully deductible for tax purposes. Business transactions must be recorded in legally authorized acounting books that must 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 the requirements established by Supreme Decree No. 151-2002-EF and other rules for specific industries as mining, hydrocarbons and geothermal resources, but taxes must be paid in Peruvian Soles (S/).

In addition, income and expenses are recognized on an accrual basis, concept that was developed through Legislative Decree No. 1425, which entered into force on January 1, 2019.

According to 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 of when they ae collected.

Notwithstanding the above, special rules will apply for the accrual of revenues regarding certain transactions (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, Dividend Tax at a rate of 5% is imposed on distributions of profits to non residents and individuals by resident companies and by branches, permanent establishments and agencies of foreign companies.

This tax is generally withheld at its source. However, under certain circumstances, the company 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. Advance 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 of the month. This ratio must be multiplied by a factor of 1,0536 to determine advance payments in 2017 and January-February 2018.

Income Tax prepayments 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.

Starting from January 1, 2016, capital gains derived from the sale of shares and other securities representing shares (i.e. ADR, GDR, and ETF) carried out through the Lima Stock Exchange are Income Tax exempt. To claim the exemption, the taxpayer and its related parties must not transfer more than 10% of the shares or "securities that represent shares" issued by the company whose shares are sold.

Shares should meet a liquidity threshold: 180 working days prior to their sale, they should have been traded at least in 27 days (not necessarily consecutive) for a daily fee of US$5,123 (equivalent to 4 Tax Units).

Under the latest Tax Reform, effective since January, 2017, the aforementioned exemption was extended to December 31, 2019.

Also, by means of this amendment other securities (bonds, participation certificates in Mutual Investment Funds, Real Estate Investment Trusts (REITs), Securitization Trusts for the Investment in Income of Real State, and Negotiable Invoices) have been included in the scope of this exemption, provided that they are listed and traded on the LSE, and (depending on each case) fulfill the other requirements states in Law No. 30341 and its regulations.

Capital allowances

Trade or business expenses

In general terms, all corporate expenses incurred in the generation of taxable income or the maintenence 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.

It should be noted that starting in fiscal year 2019, costs or expenses for services received from non-domiciled companies (whether related or not) must be made prior to the submission of the tax return to be considered deductible

Tax havens and preferential tax regimes

In Peru, resident entities cannot deduct, for income tax purposes, the expenses derived from transactions performed with individuals or entities that qualify as:

1. Residents of non-cooperative countries or territories with low or no taxation;
2. Permanent establishments located or established in non-cooperative countries or territories with low or no taxation; or
3. That obtain income or profits through a non-cooperative country or territory with low or no taxation; or subject to a preferential tax regime for said operations.

Nevertheless, in August 2018, the Legislative Decree No. 1381 (LD 1381) amended the definition of tax havens and preferential tax regimes for Peruvian tax purposes.

Thereupon, as of January 1st, 2019, a jurisdiction qualifies as a tax haven or non-cooperative jurisdiction, if at least one 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 black list 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.

Conditions for inclusion of the black list	Conditions for exclusion of the black list
A country or jurisdiction may be included on the list, if one of the following requirements is met:	A country or jurisdiction may be excluded from the list, if one of the following requirements is met:
▸ There is no information exchange agreement or double tax treaty containing a clause for the exchange of information in force with Peru. ▸ There is no transparency at a legal, regulatory or administrative level. ▸ The corporate income tax (CIT) rate is zero or lower than 17.7% (60% of the current CIT rate in Peru, which is 29.5%).	▸ The country is a member of the Organization for Economic Cooperation and Development (OECD). ▸ There is a double tax treaty in force with Peru that includes a clause for the exchange of information. ▸ The country effectively exchanges information with Peru without limitation based on domestic legislation or administrative practice.

Note that, inclusions or exclusions will apply as of 1st January of the year following the inclusion/exclusion qualification.
Regarding the preferential tax regimes, the LD 1381, stated that a jurisdiction is a preferential tax regime if at least one 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 substantive local presence, real activities or economic substance.
- Low or no taxation.
- Tax benefits available for non-residents, but not residents.
- Territorial or domestic taxation on an exclusive basis.

Moreover, the SD 340-2018-EF stablished a second filter in order to consider a jurisdiction as a preferential tax regime, in this sense, it will have to satisfy at least two of the following requirements:

- An information exchange agreement or double tax treaty containing a clause for the exchange of information is not in force with Peru.
- There is no transparency at a legal, regulatory or administrative level.
- The CIT rate is zero or lower than 17.7% (60% of the current CIT rate in Peru, which is 29.5%).

- Tax benefits are available for non-residents, but not residents.
- The OECD considers the jurisdiction to be a harmful jurisdiction due to the lack of a requirement that there be a substantive local presence, real activities or economic substance.

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, as long as 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.

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 expensed in the year production commences, or may be amortized over a period of up to ten years from the year in which production commences.

Early recovery VAT system

The early recovery VAT system allows obtaining an early recovery of the VAT paid on the acquisition of goods, services, construction contracts, importations, etc.; 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 prevents waiting to recover such amount from a client when the invoice, including VAT, for the sales of goods, services or construction contracts is issued to the client.

In other words, this regime provides relief of from financial costs (cost of money) for projects with a significant pre-operating stage and for which no advance invoice (transferring the VAT burden) can be issued periodically to the client.

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 that are in a preoperative stage, allowing them to recovery the VAT paid on the acquisition of capital goods. This regime does not require companies to sign an investment contract, nor specific amount of investment.
- Specific early recover VAT system: This regime applies to companies that are in a preoperative stage, and that also meet the following conditions: (i) they enter into investment contracts with Peruvian government, to invest in economic Industry; and (ii) they make a minimum investment commitment of US$5 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, services, and construction contracts. The use of one system does not preclude the possibility of using the other, as they have a different scope (items).

By virtue of the most recent amendment made to the regime by virtue of Legislative Order 1423, which enters into force on the first day of the month following the publication date of the Executive Order amending the regulatory provisions, new investment projects seeking to make use of Special Early Recovery System will not enter into an Investment Agreement. Instead, they must file an affidavit with Proinversion containing the information on the Project.

Finally, the new 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 voucher 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 Enery and Mines. The validity of this regime has been extended until December 31, 2018.

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

A dividend tax at a rate of 5% applies to profits distributed to nonresidents and individuals. The dividend tax applies to distributions by Peruvian companies, as well as to distributions made by Peruvian branches, permanent establishments and agencies from foreign companies. Peruvian Income Tax Law specifies various transactions that are considered as profit distributions for the purposes of the application of the dividend tax, including the distribution of cash or assets, the reduction of the capital of the company or the liquidation of the company.

This law also provides that if a resident company or branch, permanent establishment or agency, pays expenses that are not subject to further 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 non-residents is generally subject to a withholding tax at a rate of 30%. For interest paid to unaffiliated foreign lenders, the rate is reduced to 4.99% if all the following conditions are satisfied:

- For loans in cash, 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).
- The interest rate does not exceed LIBOR plus 7 points.

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 (each tax until is equivalent to S/4,050 or approximately US$1,242).

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.

New Law No. 29757, which amends Law No. 29663, 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 non-domiciled companies and distribution of dividends by non-domiciled companies; ii) when the total amount of the shares or ownership interests in legal entities domiciled in the country is equal to or greater than forty thousand (40,000) Tax Units (UITs) (S/166 million or approximately US$50 million); iii) if the shares or ownership interests being disposed of, or the new shares or ownership interests issued as a 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 non-domiciled seller established a branch in the country.

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 do not only apply to transactions between local and international related parties, but also to transactions with entities that reside 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 Nº1312 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 (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.

Note that, in the case of services that qualify as low-value-added services, the deduction of the cost or expense for the service received is determined based on the sum of the costs and expenses incurred by the service provider as well as their profit margin, which cannot exceed five percent (5%) of such costs and expenses.

Low value-adding intra-group services for the purposes of this approach are services performed by one member or more than one member of an MNE group on behalf of one or more other group members which

- Are of a supportive nature
- Are not part of the core business of the MNE group
- Do not require the use of unique and valuable intangibles and do not lead to the creation of unique and valuable intangibles, and
- Do not involve the assumption or control of substantial risk by the service provider and do not give rise to the creation of significant risk for the service provider.

The tax regulations will provide examples of services that would likely meet the definition of low value-added services.

Controlled Foreign Corporation Rules (CFC Rules)

As of January 1, 2013, 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 into 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 and Switzerland.

The principal purpose of this double tax treaty network is to prevent taxes from interfering with the free flow of international trade and investment by mitigating international double taxation with respect to certain income items.

This, however, is not a static list. 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 double tax treaty with the other Andean Community countries, tax treaties entered into 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.

Each of the treaties currently in force between Peru and other countries deals with the same matters. Many of the treaties contain common provisions addressing the same issue. It should, however, be noted that Peru's tax treaties show a remarkable degree of individuality, considering that almost every treaty is different in at least some respects. For that reason, it is essential to analyze the specific treaty that may apply to a particular tax issue.

On June 27, 2018, 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 pending ratification.

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 taxpayer 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

Thin capitalization rules

Interest paid by domiciled taxpayers to related or associated companies is not income tax deductible in the portion that exceeds the result of applying a coefficient (debt/net equity ratio) of "3/1" at the close of the immediately preceding fiscal year.

For fiscal years 2019 and 2020, the foregoing rule has been amended to likewise limit deductibility of interest on financing by unrelated parties. The foregoing shall not apply to credits acquired or renewed before September 14, 2018.

Starting fiscal year 2021, the deduction of interest on financing (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 rules shall not apply to financial and insurance companies; taxpayers whose income does not exceed of 2,500 Tax Units (approximately US$3,000,000); 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.

Selective Consumption Tax (i.e. Luxury Tax or "Impuesto Selectivo al Consumo")

The selective consumption tax (ISC) applies to luxury goods 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.

Taxable persons for ISC purchases are 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.

Custom Duties

▸ Rates and Tax bases

The applicable customs duties and taxes are summarized below:

Tax	Rate	Tax bases
Custom Duties*	0%, 6% and 11%	CIF Value**
VAT	18%	CIF Value + Customs Duties + Excise Tax (if applicable)

*Customs Duties rates depend on the kind of items imported. Capital goods are generally subject to a 0% rate.
**World Trade Organization (WTO) rules are applicable to arrive to customs value.

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, 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).

In order to apply these preferential treatment, goods must meet, certain requirements including origin and direct expedition requirements.

Peru has concluded Free Trade Agreement negotiations with Australia, Brazil and Guatemala; as well as the Comprehensive and Progressive Agreement for Trans-Pacific Partnership along with Australia, Brunei, Darussalam, Canada, Chile, Japan, Malaysia, Mexico, Nueva Zeeland, Singapore y 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.

Worker's profit

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 pretax income, and the amount is deductible as an expense for determining income tax. An example of the combined-effect calculation using a 5% profit- sharing rate is as follows:

- Net income: 100
- Profit sharing: 5
- Net income for CIT purposes: 95
- Income tax (31.5* of 95): 29.9
- Combined effect: 29.9 + 5 = 34.9 (34.9% of net income)

*Tax Rate plus 2% premium applicable to upstream oil & gas and mining activities.

The amount paid is allowed as a tax deduction for corporate tax purposes. Not all foreign governments recognize this as a creditable tax and as such double taxation can occur.

General Anti-Avoidance Rule (GAAR)

As of July 19, 2012, an anti-avoidance rule was introduced in the Peruvian Tax Code to assist the Tax Administration in responding to situations of tax avoidance and simulated transactions.

Indeed, when facing tax avoidance situations, the Tax Administration will be able to 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.

Despite of the aforementioned, since July 2014, the Government suspended the application of the GAAR. Such suspension was established as indefinite for acts, events and situations produced prior to July 19, 2012, and temporary for acts, events and situations that occurred after July 19, 2012.

It is worth mentioning that the temporary suspension was to be maintained until the Government established the parameters of substance and form within the scope of application of the GAAR; nevertheless, the first and last paragraph remained in force with respect to both suspensions.

In this context, on September 14, 2018, entered into force the Legislative Decree No. 1422, pursuant to which various regulatory provisions were issued for the application of the GAAR, however, the temporal suspension is maintained. The main provisions regulates that this Anti-Avoidance Rule will apply to the final inspection procedures in which acts, facts and situations produced since July 19, 2012 are reviewed, joint liability was attributed to the legal representatives, and obligations were attributed to the directors.

Regarding the joint liability of legal representatives, fraud, gross negligence or abuse of powers, unless proven otherwise, is presumed when the tax debtor is subject to the application of GAAR. Thus, joint and several liability is attributed to legal representatives provided they have collaborated with the design or approval or execution of acts, situations or economic relationships regulated in the GAAR.

In relation to the board of directors (for entities having one) is responsible for the approval of acts, situations or economic relations to be carried out within the framework of tax planning implemented up to 14 September 2018. The period for ratifying or modifying the tax plan ended on 29 march 2019. This obligation cannot be delegated.

In order for the Peruvian Tax Authority to apply the GAAR in tax audits, must follow a special procedure that requires the auditor to send the case to the Revision Committee, which will notify the taxpayer of a hearing and issue its opinion 30 days after the hearing, which is binding for the Peruvian Tax Authority and taxpayers.

Finally, this year is expected to be enacted the parameters of substance and form required for the application of the GAAR, although the Legislative Decree No. 1422 dictates measures for the correct application of this rule, it has not specified yet the definitions contained in said rule.

Other tax issues

Tax Unit (UIT)

The UIT is the reference value employed for tax purposes to determine the taxable income, deductions and penalties, between others. This value is modified every year. For the year 2018, the UIT amounts to S/4,150.00 (US$1,273 aprox.)

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 S/1,000,000. The amount paid is usable as credit against the Corporate Income Tax, 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.

Secc C: Special fiscal rules

1. 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	5% imposed on the value of the hydrocarbons produced in certain block
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 typeof 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.

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.

> Peru's tax system has included certain specific rules for oil & gas companies (ring fence rules, expense amortization, etc.)

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.

Selective Consumption Tax on fuels

Tariff heading	Products	S/ per gallon	US$ per gallon*
2701.11.00.00	Anthacites for energetic use	51.72 (per ton)	170.99
2701.12.00.00- 2701.19.00.00	Bituminous coal for energetic use, and other coals	55.19 (per ton)	182.46
2710.12.13.10 2710.12.19.00 2710.12.20.00 2710.20.00.90	Gasoline for motors with Research Octane Number (RON) less than 84	1.27	0.38
2710.12.13.21 2710.12.19.00 2710.12.20.00 2710.20.00.90	Gasoline for engines with RON equal or over 84, but less than 90, and with 7.8% volume of fuel alcohol	1.22	0.37
2710.12.13.29 2710.12.19.00 2710.12.20.00 2710.20.00.90	Gasoline with RON equal or over 84, but less than 90	1.27	0.38
2710.12.13.31 2710.12.19.00 2710.12.20.00 2710.20.00.90	Gasoline for engines with RON equal or over 90, but less than 95, and with 7.8% volume of fuel alcohol	1.16	0.35
2710.12.13.39 2710.12.19.00 2710.12.20.00 2710.20.00.90	Other fuels with RON over or equal to 90 but less than 95	1.21	0.37
2710.12.13.41 2710.12.19.00 2710.11.20.00 2710.20.00.90	Gasoline for engines with RON equal or above 95, but less than 97, and with 7.8% volume of fuel alcohol	1.13	0.34
2710.12.13.49 2710.12.19.00 2710.12.20.00 2710.20.00.90	Other fuels with RON over or equal to 95 but less than 97	1.17	0.35
2710.12.13.51 2710.12.19.00 2710.1.20.00 2710.20.00.90	Gasoline with RON equal or above 97 and engines with 7.8% volume of fuel alcohol	1.13	0.34
2710.12.13.59 2710.12.19.00 2710.12.20.00 2710.20.00.90	Other fuels with RON equal or above 97	1.17	0.35
2710.19.14.00 / 2710.19.15.90	Kerosene and Jet Fuels (Turbo A1), except certain sales in the country or imports for airships.	1.93	0.58

•••

•••

Tariff heading	Products	S/ per gallon	US$ per gallon*
2710.19.15.90	Kerosene and Jet Fuels (Turbo A1), only for: - Aircraft exploiters, according to Law No. 27261. - Holders of certificates to operate airships issued by the General Bureau of Civil Aeronautics. - Aviation fuel traders that hold a valid certificate of registry issued by the General Bureau of Civil Aeronautics.	0.26	0.08
2710.19.21.10 / 2710.19.21.90	Gasoils, except Diesel B2	1.47	0.44
2710.19.21.11 / 2710.19.21.99	Gasoils	1.58	0.48
2710.19.21.11 / 2710.19.21.99	Rest of gasoils, except Diesel B2 and Diesel B5	1.26	0.38
2710.19.21.20	Diesel B2	1.44	0.44
2710.19.21.21	Diesel B2 with sulfur content equal or below 50 ppm	1.04	0.31
2710.19.21.29	Rest of Diesel B2	1.24	0.38
2710.19.21.31	Diesel B5 with sulfur content equal or below 50 ppm	1.01	0.31
2710.19.21.39	Rest of Diesel B5	1.20	0.36
2710.19.22.10	Residual 6, except sales in the country or imports by certified seacraft fuel marketers.	0.92	0.28
2710.19.22.90	Other fuels	1.00	0.30
2710.20.00.11	Diesel B2 with sulfur content equal or below 50 ppm	1.70	0.51
2710.20.00.12 / 2710.20.00.13	Diesel B5 and Diesel B20 with sulfur content equal or below 50 ppm	1.49	0.45
2710.20.00.19	Other mixes of Diesel B2 with Biodiesel B 100	1.70	0.51
2711.12.00.00 / 2711.19.00.00	Liquefied Oil Gas	0.00	0.00

*US$1 = S/3.306

▸ 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.

Special Contributions

- 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 0.36 % for 2017, 0.35 % for 2018 and 0.34% for 2019 (for import or production activities) and 0.57% for 2017, 0.56% for 2018 and 0.55% for 2019 (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 carry

out transport and distribution activities should pay this contribution to the Enviromental Audit and Evaluation Agency (OEFA). The rate of this contribution for years 2017-2019 is 0.09% (for import or production activities) and 0.11% (for transport and distribution activities) applied on their monthly billing after deducting VAT.

- 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).

OSINERGIM 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.

Recently, the Government issued Legislative Decree No. 1331, by means of which it added dispositions in order to expand the application of FISE goals.

Certainly, with the implementation of those dispositions, funds from FISE could now be used to finance connections to the gas supply that may be available by new distribution concessions.

In this way, natural gas distribution concessions through pipelines could benefit from FISE by the promotion of gas connections subsidized with funds from the latter.

2. 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. 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 US$1.2 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 US$0.4 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 creation 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 the Tax Administration (SUNAT).

This benefit will be valid until December 31, 2025.

> The benefit of accelerated depreciation was approved for renewable energy projects

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 the validity of the same for the purposes of each authorization or concession contract. 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 compensated with the profit generated by another or other concession contracts or related activities, at the option of the concessionaire. This means that if there is another contract or related activity, the taxpayer can continue compensating tax losses until they are totally used.

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 whose 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 per year.

The concession contract must specify the amortization method used by the owner, which can not be varied. In the case of opting for the linear 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 for the year. The wear that suffered depreciable assets will be compensated through the deduction of penalties 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-domiciled 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: Importation

The importation 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 the Supervisory Body of Private Investment in Energy and Mines (OSINERGMIN). The rate of this contribution is 0.52 % for 2017, 0.51% for 2018 and 0.50% for 2019, 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 Enviromental Audit and Evaluation Agency (OEFA). The rate of this contribution for years 2017-2019 Is 0.11 % 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 the Supervisory Body of Private Investment in Energy and Mines (OSINERGMIN).

FOSE Contribution

The Electric Social Compensation Fund (FOSE) is aimed at 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 Supervisory Body of Private Investment in Energy and Mines (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.

Other Taxes

Regarding the ISC, as part of the tax reform 2018, the rate applicable to gas, electric and hybrid vehicles was modified from 10% to 0% in the import and sale within the country, the goal is to promote the importation of less polluting vehicles.

Regarding custom duties, photovoltaic cells have an import tariff of zero.

However, both types of goods (vehicles and cells) are taxed with the VAT (18%) in the import and sale.

5.


MISCE
LLA
NEOUS
MA
TTERS

1.
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, start up 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 or the Law that Promotes Youth Access to the Labor Market and Social Protection, among others.

The trial period is counted from the first day of the labor relationship and must have a maximum term of: i) three months for all employees in general; ii) six months for qualified or confident personnel, and iii) 12 months for management personnel.

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 he had. 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 grant the severance payment.

Employees' benefits

Employers are required to provide the following benefits for employees:

- Family allowance: equivalent to 10% of the Minimum salary (S/93 since March, 2018).
- 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% of the legal bonus must be paid.
- Compensation for Time of Services (CTS): equivalent to approximately 1.16 months' 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 does not apply to companies employing less 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 (S/8,400 during 2019, approximately US$2,545).

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 12% 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 with four years of services with the same employer. It is also possible for it to be granted by the employer on a voluntary basis to employees that have three months of service. 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 not 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 US$151,060 (S/500,000.00). 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	Temporal	This visa does not allow the holder to perform paid activities.
Business	Temporal	This visa allows the holder to perform business activities, technical assistance or similar. This visa allows the expatriate to sign contracts.
Work	Resident or Temporal	This visa allows the holder to work in Peru (as dependent or independent). In case of a work contract with a Peruvian company, it should be duly registered / or automatically approved by the labor ministry.*
Designated employee	Resident or Temporal	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.

*Despite this, the work contract has to be presented before the authority.

Also, the following migratory qualifications are currently available, among others:

Visa	Type	Activities
Training	Resident or Temporary	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	Resident	This visa allows the holder to establish, develop or manage investments according to Peruvian law.
Investigation	Resident or Temporary	This visa is for foreigners with knowledge and experience in science and technology fields, that comes to Peru through the National Authority in Science and Technology. They are allowed to work.
International Agreements (Ex. Mercosur)	Resident	This visa is for foreigners from countries that have international treaties and agreements with Peru on immigration matters. With the possibility to apply to a permanent visa 90 days prior the expiration of the residency.
Permanent	Permanent	This visa is for foreigners who had been residents for a period of three years with economic support by their own or a family member (Peruvian or foreigner resident).

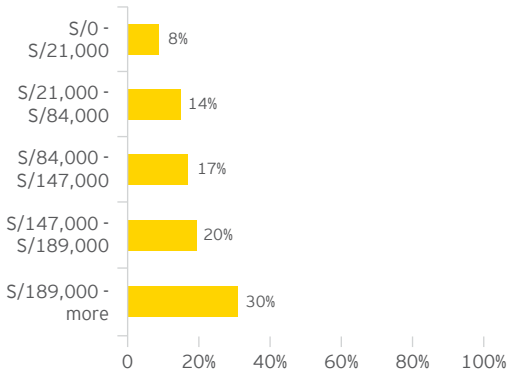
Individual taxes

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 on a monthly basis, 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 it is paid.

In the case of tax residents, apply a five bracket accumulative income tax rate:



Note that the tax unit used in fiscal year 2019 is S/4,200.

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, for expenses incurred due to lease/sublease contracts, 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 S/3,500.00, 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 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.

2.
Accounting standards

The Peruvian Business Corporation 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 the standards issued by the International Accounting Standards Board (IASB) and the specific provisions approved for particular businesses (banks, insurance companies, etc.). Likewise, on a supplementary basis, the U.S. - General Accounting Principles (GAAPs) are applicable.

The Peruvian Accounting Standards Board (CNC) is responsible for issuing the accounting standards and methodologies that apply to both private business and government entities. The CNC adheres to the standards approved by the IASB, which are explicitly approved by the CNC and published in the official gazette El Peruano, indicating their date of approval.

Companies that issue debt or shares in the capital market are subject to regulation by the Stock Exchange Superintendency (SMV).

Companies supervised by this institution must issue their financial statements in accordance with the International Financial Reporting Standards (IFRS), issued by IASB; they are as effective in Peru as they are worldwide.

The annual financial information given by companies supervised by the SMV must be audited and include the previous year for comparative purposes. Quarterly reports do not need to be audited. The audit must be conducted according to regulations of the International Auditing and Assurance Standards issued by the International Federation of Accountants (IFAC).

3. 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 can not 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 hydrocarbons activities (Supreme Decree No. 039-2014-EM) and electrical activities (Supreme Decree No. 029-94-EM). In the case of the hydrocarbon sector, the investors must present an Environmental Impact Assessment (EIA) before executing exploration and exploitation activities. In the case of the electricity sector, the investors must present a 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 the Ministry of Energy and Mines (MINEM). However, for increasing the trust of the population in the evaluation of the EIA, the more complex studies are evaluated for the Environmental Certification National Service for Sustainable Investment (SENACE) since December of 2015. 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.

Now then, in addition to the mentioned, note that according to the evaluations of the environmental performance of Peru in 2016, the Organization for Economic Cooperation and Development (OECD) recommended continuing with the process of strengthening and implementing SENACE, in order 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, in this respect a special device will be approved in the following months. 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 EIS must be evaluated within 30 days, 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, another change that has been announced for the following months is the approval of a new Regulation for Environmental Protection in Electricity Activities since the current one dates from 1994 and numerous changes in environmental matters have occurred up to the present, being that such regulation practically does not allows an adequate environmental control of electrical activities.

4. 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 demonstrate

Peru'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 of clean 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.

It should be noted that, to date, the Ministry of the Environment is working on the preparation of the Regulations of the Framework Law on Climate Change.

5.
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 after 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 December 31, 2017, 34 prior consultation processes have taken place. More than ten of them are directly related to the hydrocarbons industry, and just two of them are related to the electricity industry.

6. 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 only Ministerial Resolution No. 223-2010-MEMDM, which approves the Guidelines for Citizen Participation in Electric Activities, it means that there is no updated regulation as in the hydrocarbons industry. 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.

In this sense, 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 represents 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.

7.
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 responsibiliy 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.

In March 2019, the Public Prosecutor's Office in charge of the Lava Jato case delivered to the Judicial Court the Effective Collaboration Agreement signed with the Brazilian company Odebrecht, in order to submit it to the control of legality.

6.

APPENDIX

Regulators and stakeholders

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)

British Embassy Lima

The British Embassy in Lima represents the British government and manages various aspects of the relations between the United Kingdom and Peru. It works in close collaboration on important issues for our two countries, including climate change, security (drugs and organized crime), development sustainable and defense. Commercial relations (the United Kingdom is the second foreign investor in Peru), are a priority in the work of the embassy.

(www.gov.uk/world/organisations/british-embassy-peru)

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.

(portal.concytec.gob.pe)

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)

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.cofiep.org.pe)

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)

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)

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)

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)

Ministry of Agriculture - MINAGRI

This is the entity that promotes the development of organized agrarian producers in productive chains, in order to achieve an agriculture that is fully developed in terms of economic, social and environmental sustainability.

(www.minagri.gob.pe)

Ministry of Culture

This is the nation's cultural authority in charge of the establishment, execution and supervision national policies related to cultural matters. It is also in charge of the arrangement and coordination of the national policy of the prior consultation right.

(www.cultura.gob.pe)

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.mef.gob.pe)

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)

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.minam.gob.pe)

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.rree.gob.pe)

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.mintra.gob.pe)

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.senace.gob.pe)

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.serfor.gob.pe)

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)

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 de Ministry of Environment.

(www.sernanp.gob.pe)

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)

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)

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)

National Water Authority – ANA

This is the nation's water authority. Its purpose is the conservation and development of the hydric resources within a hydrographic river basin.

(www.ana.gob.pe)

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/)

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.camaraperuanade energiasrenovables.org.pe)

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)

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)

Petroperu

Petroperu is a state-owned company of private law that carries out exploration, exploitation, transport, and refining activities.

(www.petroperu.com.pe)

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)

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)

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.pcm.gob.pe)

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.proinversion.gob.pe)

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.osinergmin.gob.pe)

How can EY help?

EY Peru has a global focus on hydrocarbons and electricity, with over 1,700 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.

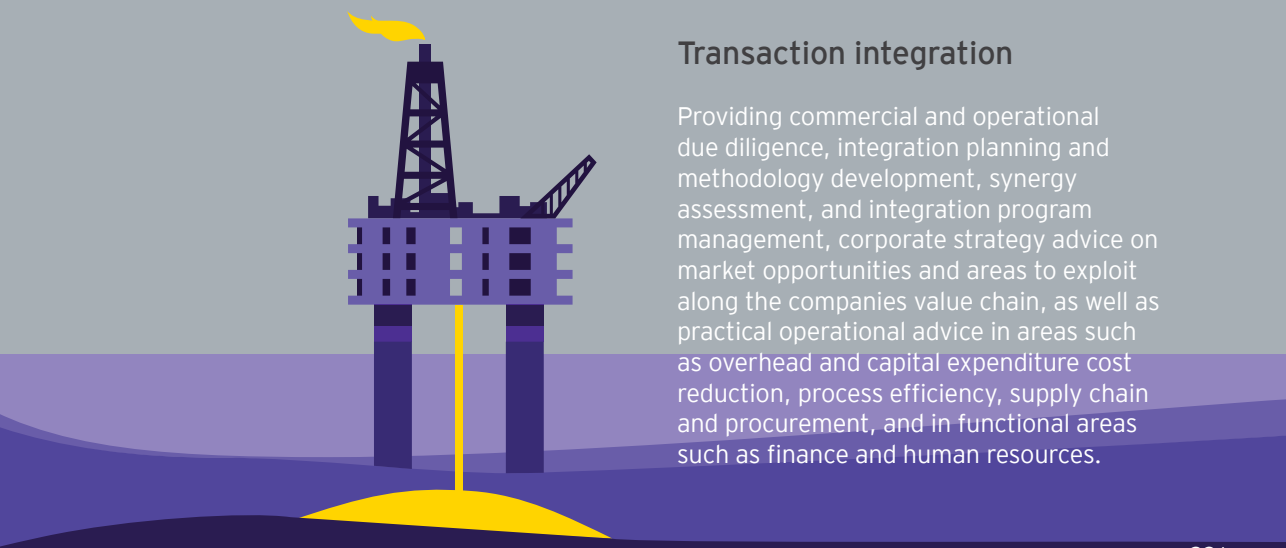
Mergers and acquisitions advisory

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 hydrocarbon 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

In this Transformative Age, do you compete or collaborate?

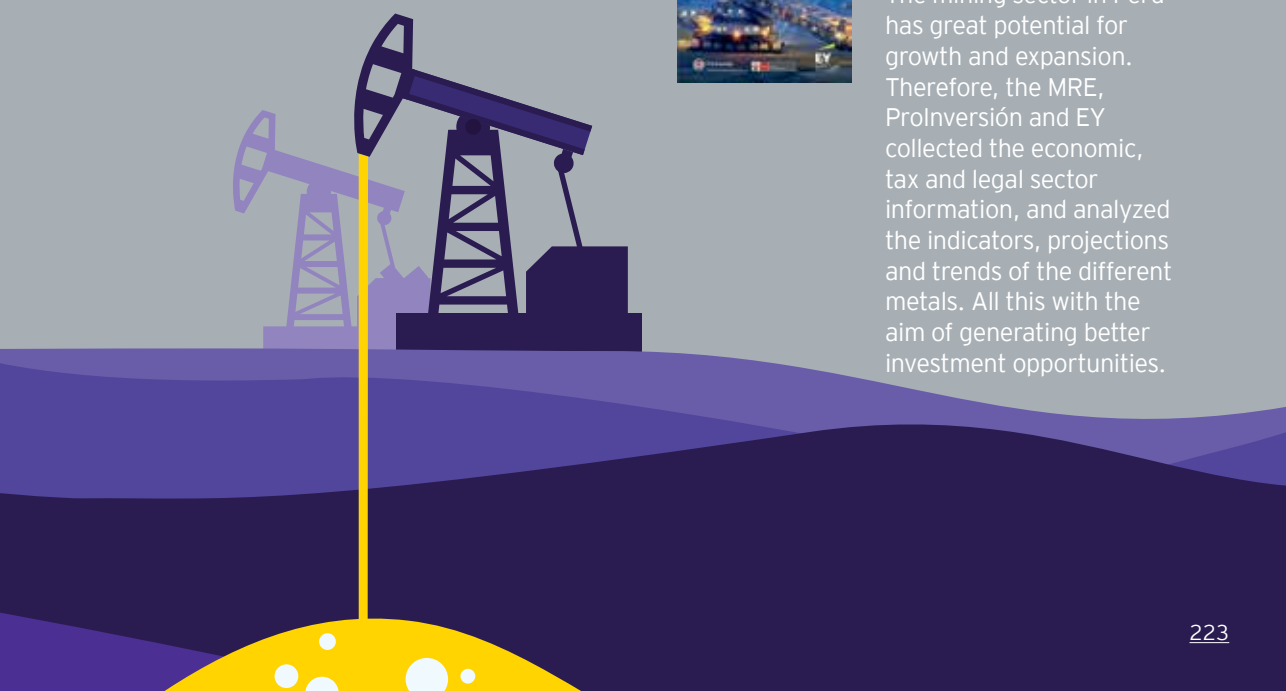
This Global Oil & Gas transactions review proves that midstream and downstream drive transaction total value higher in 2018, while expectations for 2019 deals remain positive.

Peru's Business and Investement Guide 2018-2019

This Business and Investment Guide, provides information on the country's current economic situation and the principal tax, legal, and labor issues, as well as on how to invest and do business in the Peru.

Peru's mining & metals Investement Guide 2018-2019

The mining sector in Peru has great potential for growth and expansion. Therefore, the MRE, ProInversión and EY collected the economic, tax and legal sector information, and analyzed the indicators, projections and trends of the different metals. All this with the aim of generating better investment opportunities.




CON
TACTS
EY

Beatriz De La Vega
Energy Leader
Partner in Peru
beatriz.de-la-vega@pe.ey.com

Deborah Byers
Americas Industry Leader
and US Energy Market
Segment Leader Partner
deborah.byers@ey.com

Alfredo Alvarez
Energy Leader
Partner Latam North
alfredo.alvarez@mx.ey.com

Héctor Rocha
Deputy Energy Leader
Partner Latam North
hector.e.rocha@mx.ey.com

Lima

Av. Víctor Andrés Belaúnde 171,
San Isidro - Lima 27, Peru

Av. Jorge Basadre 330,
San Isidro - Lima 27, Peru

Tel: +51 1 411 4444

www.ey.com/pe

Arequipa

Av. Bolognesi 407,
Yanahuara, Arequipa

Tel:+51 54 484 470

Chiclayo

Av. Federico Villareal 115 - Salón
Cinto Chiclayo 140, Lambayeque

Tel: +51 74 227 424
+51 74 227 421

Trujillo

Av. El Golf 591 - Salón Puémape,
Trujillo, La Libertad

Tel: +51 44 608 830

ACKNOWLEDGEMENTS

INVESTMENT GUIDE

Editor
Beatriz De La Vega

Co-editors
Paulo Pantigoso
Andrés Reyes
Geraldine Izaguirre

Design and layout
Carlos Aspiros // carlosaspiros@gmail.com

Additional collaborators
Javier Aguirre
Martín Aliaga
Claudia Alva
Alejandra Alvarado
Dionis Arvanitakis
Gabriela Ávila
Antonio Benites
Victor Bohorquez
Jose Ignacio Castro
Frank Ccoa
Flavia Dyer
Giuseppe Galluccio
Fabiola Jiménez
Miya Mishima
Silvana Olcese
Claudia Perea
Brando Reyes
Giancarlo Riva
Maria Gracia Zapata
Ministry of Foreign Affairs
Perupetro S.A.
Proinversion
MINEM

Declaration

EY | Advisory | Assurance | Tax | Transactions & Corporate Finance

About EY
EY is the global leader in assurance, tax, transaction and advisory services. The insights and quality services we deliver help build trust and confidence in the capital markets and in economies the world over. We develop outstanding leaders who team to deliver on our promises to all of our stakeholders. In so doing, we play a critical role in building a better working world for our people, for our clients and for our communities.

For more information, please visit:
www.ey.com/PE

Scan and downloand
Peru's oil & gas
investment guide
2019 / 2020

/EYPeru
@EYPeru
/company/ernstandyoung
@ey_peru
/EYPeru
perspectivasperu.ey.com
ey.com/pe