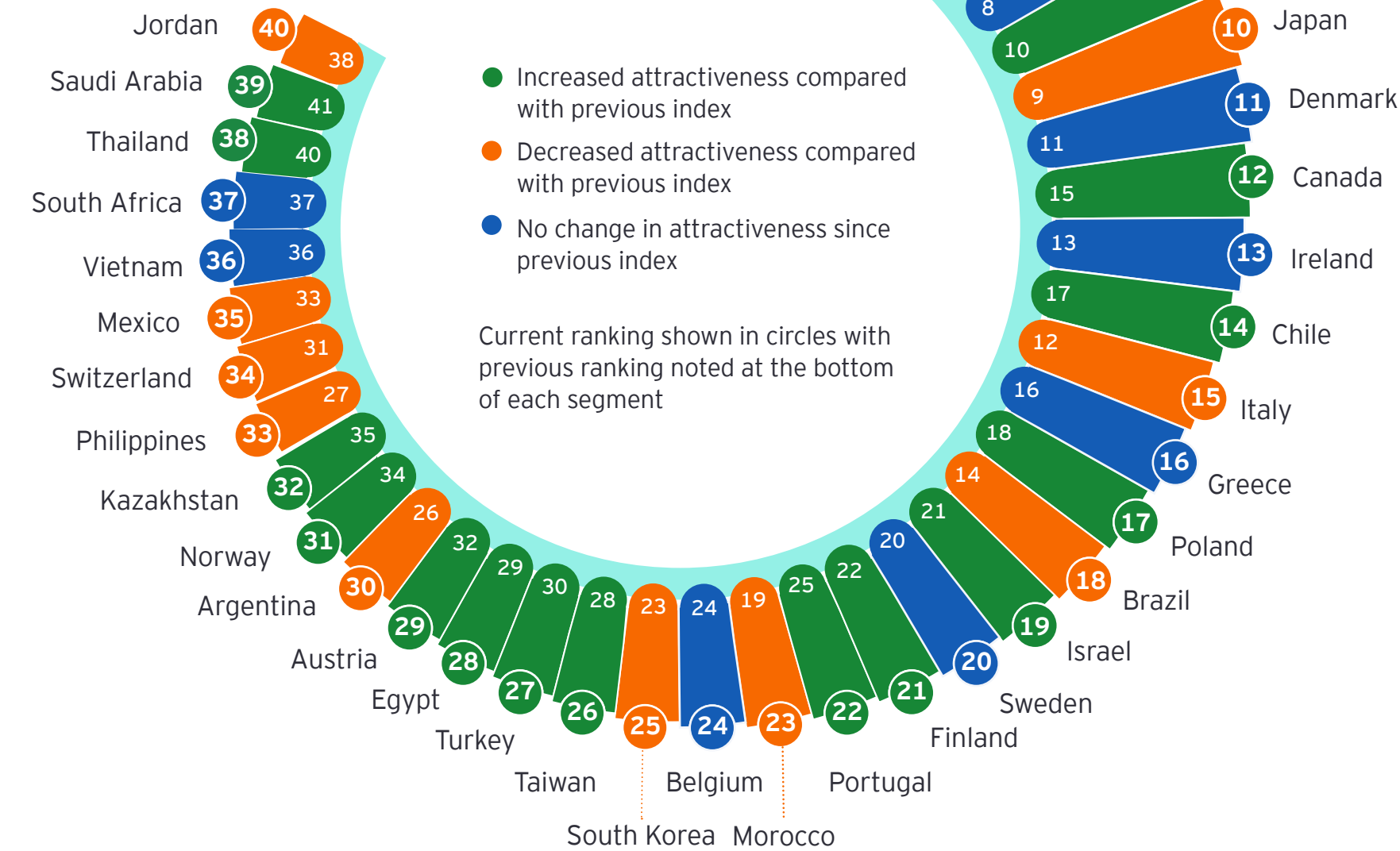


RECAI

Renewable Energy Country Attractiveness Index

Since 2003, the biannual RECAI has ranked the world's top 40 markets on the attractiveness of their renewable energy investment and deployment opportunities. The rankings reflect our assessments of market attractiveness and global market trends.



Recent global trends have had a significant and direct effect on renewable energy markets through both the gas crisis and supply chain concerns. To ensure a more relevant and appropriate reflection of the current investment climate the RECAI team has adjusted the model to be more reflective of the macroeconomic factors driving the attractiveness of individual markets. The model now has an increased weighting for the macro fundamentals pillar, which factors in the economic stability, ease of doing business and investment climate within markets.

+1 Germany

The market is set to continue accelerating expansion of its solar photovoltaic (PV) sector as a core element of its decarbonization strategy, with the government setting targets of 11GW of ground-based and 11GW of rooftop installations per year from 2026. The energy minister has also announced plans to subsidize the decarbonization of energy-intensive industry.

+3 Portugal

The environment minister has stated that the energy industry can expect to see €60b (US\$66b) of investment by 2030, while increasing wind and solar capacity by 3.4GW and 6.4GW respectively. Portugal is also set to launch an auction covering the rights to sell hydrogen to the national grid.

+2 Saudi Arabia

The market has launched the development of the world's largest solar PV plant, at around 2GW by the end of 2025, as part of plans to install 27.5GW of new solar capacity by 2030. The Kingdom is also due to launch its greenhouse gas certificates market this year, while launching renewables capacity tenders backed by the Public Investment Fund.

+1 Netherlands

A new target of 3GW of offshore floating solar capacity has been announced as part of a €28b (US\$30.7b) package to achieve 2030 climate targets. The market has also reached its 6GW onshore wind target, with a further 800MW due to come online during 2023.

-4 Argentina

Argentina is committed to growing renewables, but its energy grid is thought to be insufficient to support a further significant rollout of renewables capacity, with recent investment in generating capacity not matched by infrastructure. Given the potential of solar in the north of the market and wind in the south, grid capacity in these areas is a key issue.

+3 Canada

Plans to lease plots for 5GW of offshore wind projects by 2026 have been set in motion in the province of Nova Scotia, with the projects targeted for operation by the end of the decade. The government has also introduced refundable tax credits for capital costs on new-build renewables projects.

+3 Turkey

The government has issued new 10-year feed-in tariffs for renewable energy projects installed between 2021 and 2030, with an extra five years for solar projects using components produced in Turkey. This supports plans to decarbonize the energy mix to 65% renewable sources by 2030, requiring 53GW of solar PV by 2035.

-1 Australia

Despite 2022 being a record year for renewable energy project commitments, Australia is currently not on pace to reach the federal government target of 82% renewable generation by 2030, with deployment rates required to at least double to achieve this.

See page 4 for RECAI methodology.

RECAI 61 scores

Ranking	Market	Previous ranking	Movement vs. previous	Score	Technology-specific scores							
					Onshore wind	Offshore wind	Solar PV	Solar CSP	Biomass	Geothermal	Hydro	Marine
1	United States	1	●	72.9	58.3	50.7	58.5	46.5	40.4	46.8	39.5	20.6
2	Germany	3	▲	72.3	56.4	43.2	57.2	32.3	50.4	37.1	41.6	21.1
3	China Mainland	2	▼	70.7	53.3	45.2	61.6	55.2	49.6	24.3	50.9	17.9
4	United Kingdom	4	●	69.8	58.3	52.5	49.8	15.7	54.9	36.3	39.9	35.4
5	France	5	●	69.6	55.4	44.1	54.9	24.0	46.4	39.0	42.1	38.6
6	India	7	▲	69.1	53.9	24.5	62.9	34.5	43.4	22.0	48.1	20.1
7	Australia	6	▼	68.7	53.5	33.4	56.9	46.7	41.1	15.5	26.9	25.4
8	Spain	8	●	66.0	52.8	27.1	53.6	29.4	40.0	15.7	23.4	23.3
9	Netherlands	10	▲	64.0	53.6	38.8	46.9	15.8	51.1	24.7	27.6	16.6
10	Japan	9	▼	63.9	50.0	42.0	48.8	19.3	56.0	44.8	38.0	23.3
11	Denmark	11	●	63.8	53.5	42.0	46.3	16.8	44.3	15.8	21.7	21.5
12	Canada	15	▲	63.8	56.8	38.5	46.8	19.3	35.5	25.8	47.4	26.4
13	Ireland	13	●	62.7	50.1	35.9	46.2	19.9	36.2	18.1	22.1	24.9
14	Chile	17	▲	62.4	51.9	22.6	48.3	55.0	42.4	46.1	45.2	28.1
15	Italy	12	▼	62.3	47.2	34.0	50.8	31.1	41.8	32.3	45.7	18.4
16	Greece	16	●	62.2	49.5	33.3	49.1	35.8	43.4	25.5	41.6	15.1
17	Poland	18	▲	62.0	48.9	41.6	49.2	13.7	45.7	19.9	36.2	14.5
18	Brazil	14	▼	60.7	51.3	31.8	52.0	24.6	49.6	12.7	47.6	18.4
19	Israel	21	▲	60.6	40.1	15.8	55.3	36.9	29.2	15.3	18.3	15.5
20	Sweden	20	●	59.5	49.1	31.9	42.4	15.9	43.5	18.4	36.2	27.4

RECAI 61 scores

Ranking	Market	Previous ranking	Movement vs. previous	Score	Technology-specific scores							
					Onshore wind	Offshore wind	Solar PV	Solar CSP	Biomass	Geothermal	Hydro	Marine
21	Finland	22	▲	59.0	59.8	28.0	36.1	15.7	45.0	15.7	23.0	15.7
22	Portugal	25	▲	58.6	43.6	19.6	47.7	25.4	40.4	23.3	37.0	24.0
23	Morocco	19	▼	58.6	46.2	17.2	50.6	50.2	25.0	13.8	33.9	13.8
24	Belgium	24	●	58.5	51.1	29.1	41.9	18.4	41.1	22.7	25.6	18.0
25	South Korea	23	▼	58.0	39.3	32.7	49.0	18.7	48.6	17.1	29.8	32.9
26	Taiwan	28	▲	57.8	42.6	38.7	45.7	18.7	29.6	23.9	33.4	27.7
27	Turkey	30	▲	57.3	49.3	21.3	48.8	23.9	41.3	41.9	45.6	19.8
28	Egypt	29	▲	56.7	45.7	15.3	54.2	35.2	24.9	11.9	23.4	11.9
29	Austria	32	▲	56.6	46.0	21.0	43.4	14.1	41.9	17.5	39.8	21.2
30	Argentina	26	▼	56.5	50.8	22.1	48.5	31.5	36.0	18.0	34.4	17.6
31	Norway	34	▲	56.5	48.9	33.5	39.0	14.9	32.8	17.4	46.0	32.8
32	Kazakhstan	35	▲	56.2	48.5	16.4	45.6	18.1	34.8	16.3	41.5	13.8
33	Philippines	27	▼	56.1	41.9	20.8	47.4	20.0	40.0	43.1	41.8	20.2
34	Switzerland	31	▼	55.7	41.3	17.9	44.3	18.4	35.9	22.8	38.8	15.3
35	Mexico	33	▼	55.3	42.2	21.4	47.6	24.5	34.5	39.7	35.1	19.1
36	Vietnam	36	●	54.4	44.6	34.1	43.4	17.5	38.8	13.0	46.5	18.6
37	South Africa	37	●	54.4	47.2	18.3	44.9	47.1	31.4	12.6	19.8	20.7
38	Thailand	40	▲	52.9	38.9	15.4	44.3	21.6	41.3	16.6	31.7	18.6
39	Saudi Arabia	41	▲	52.9	45.3	16.1	44.8	28.1	25.9	15.8	12.1	11.8
40	Jordan	38	▼	52.9	43.6	16.3	44.2	30.3	23.2	13.2	15.4	13.2

RECAI 61 methodology

The index rankings reflect our assessment of the factors driving market attractiveness in a world where renewable energy has gone beyond decarbonization and reliance on subsidies.

We have defined the questions being asked, based on what we see as global market trends affecting investment and deployment priorities, and the challenges and success factors impacting EY clients:

- ▶ Is there a long-term need for additional or replacement energy supply? If so, is there a strong case for energy from renewable resources in particular?
- ▶ Is policy hindering or helping the ability to exploit renewables opportunities?
- ▶ Are essential components in place to ensure project delivery, such as long-term contracts, grid infrastructure (including storage) and availability of finance?
- ▶ What does the strength of natural resource, track record and project pipeline reveal about the outlook for particular renewable technologies?
- ▶ Even if all other elements are in place, does the macro stability and investment climate enable or impede the ease of doing business?

These index pillars therefore put emphasis on fundamentals such as energy imperative, policy stability, project delivery (including capital availability) and diversity of natural resource – factors that will increasingly become key market differentiators as markets move toward grid parity, and “artificial” motivations, such as government targets or the ring-fencing of technologies, become less critical.

Determining the rankings

Each parameter within the five pillars comprises a series of data sets that are converted into a score, from one to five, and weighted to generate parameter scores. These are weighted again to produce pillar scores, then an overall RECAI score and ranking. Weightings are based on the EY assessment of the relative importance of each data set, parameter and pillar in driving investment and deployment decisions. Each technology is also allocated a weighting based on its share of historical and projected investment levels.

Separate from the main index, EY technology-specific indices rankings reflect a weighted average score across the technology-specific parameters, and a combined score covering our other macro and energy market parameters. This is because some markets may be highly attractive for specific technologies but face other major barriers to entry.

Data sets are based on publicly available or purchased data, EY analysis or adjustments to third-party data. We are unable to publicly disclose the underlying data sets or weightings used to produce the indices.

If you would like to discuss how EY RECAI analysis could help your business decisions or transactions, please contact the RECAI advisor [Lavaanya Rekhi](#).

EY | Building a better working world

EY exists to build a better working world, helping to create long-term value for clients, people and society and build trust in the capital markets.

Enabled by data and technology, diverse EY teams in over 150 countries provide trust through assurance and help clients grow, transform and operate.

Working across assurance, consulting, law, strategy, tax and transactions, EY teams ask better questions to find new answers for the complex issues facing our world today.

EY refers to the global organization, and may refer to one or more, of the member firms of Ernst & Young Global Limited, each of which is a separate legal entity. Ernst & Young Global Limited, a UK company limited by guarantee, does not provide services to clients. Information about how EY collects and uses personal data and a description of the rights individuals have under data protection legislation are available via [ey.com/privacy](https://www.ey.com/privacy). EY member firms do not practice law where prohibited by local laws. For more information about our organization, please visit [ey.com](https://www.ey.com).

© 2023 EYGM Limited.

All Rights Reserved.

EYG no. 005518-23Gbl

BMC Agency
GA 174030779

ED None



In line with EY's commitment to minimize its impact on the environment, this document has been printed on paper with a high recycled content.

This material has been prepared for general informational purposes only and is not intended to be relied upon as accounting, tax, legal or other professional advice. Please refer to your advisors for specific advice.

The views of third parties set out in this publication are not necessarily the views of the global EY organization or its member firms. Moreover, they should be seen in the context of the time they were made.

[ey.com](https://www.ey.com)