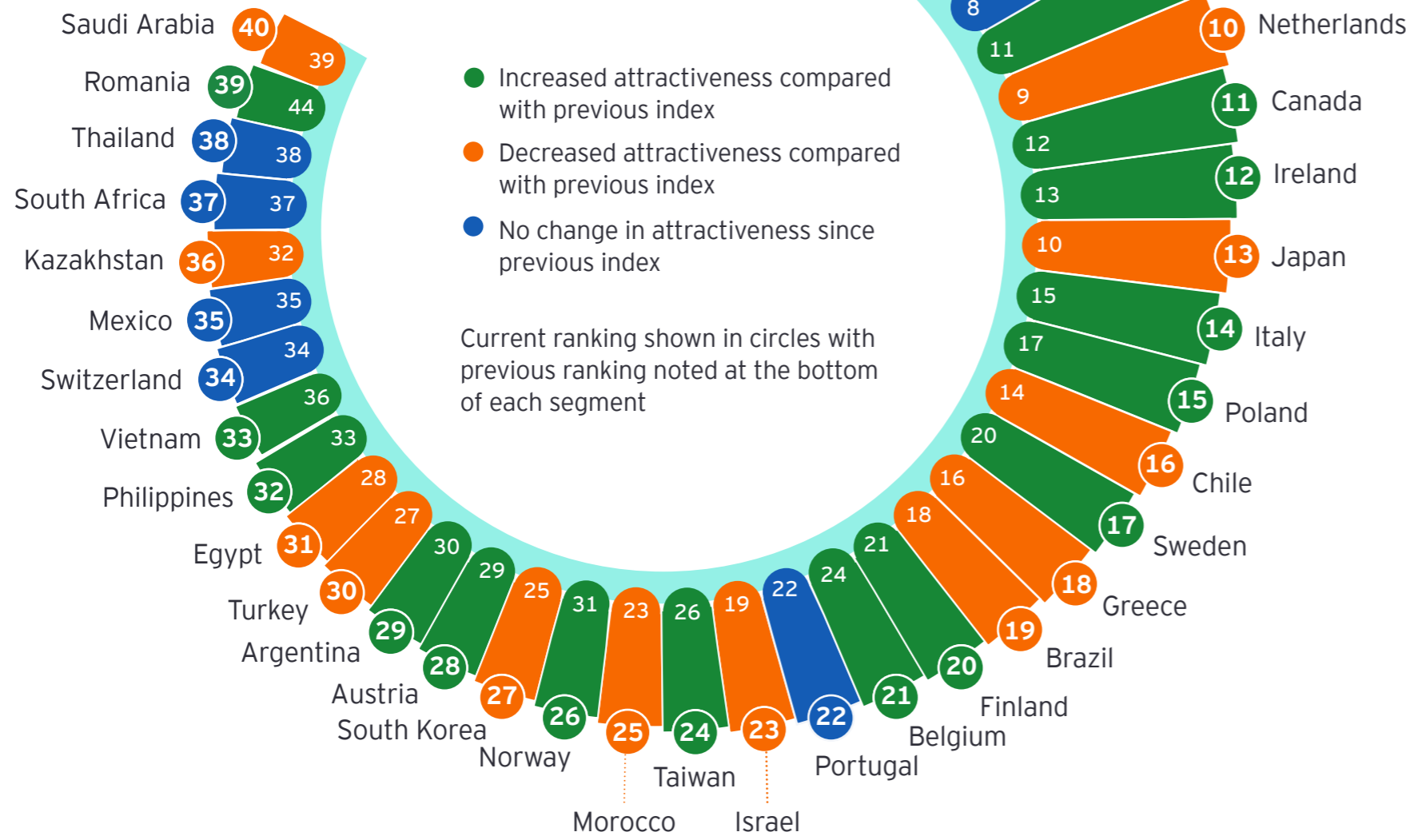


RECAI

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.



The RECAI model's energy imperative pillar has been slightly adjusted to ensure that markets with a strong and demonstrable commitment to deploying green energy are scored positively.

0 US
 The US retains the top spot amid significant solar growth driven by Inflation Reduction Act incentives. Market players are putting pressure on the government regarding offshore wind requirements.

+2 Denmark
 A policy allowing issuance of guarantees of origin for green hydrogen supports Denmark's role in the energy transition and is a key decarbonization factor for hard-to-abate sectors.

0 Germany
 There has been significant growth in Germany's onshore wind sector, with the volume of new capacity installed by the end of September exceeding the total installed in 2022.

+1 Italy
 Italy aims to increase the amount of renewables in its energy mix to 65% by 2030. New renewable capacity in H1 2023 of 2.5GW represents a 120% increase on 2022's rate.

-3 UK
 The failure of Contracts for Difference (CfD) Round 5 to attract new offshore wind capacity, plus the diminishing of green policies, has left investors with reduced confidence in UK renewables.

-2 Chile
 Despite lofty new battery storage targets, Chile continues to struggle with intermittency issues driven by solar curtailment throughout the country.

-3 Japan
 Despite significant natural resources and a commitment to reduce fossil fuels, Japan is falling behind other leading economies in terms of solar and wind deployment.

+5 Romania
 Romania is set to tender 1GW of onshore wind and 1GW of solar as the first steps in its multiyear plan to award 20GW of CfD-backed capacity.

See page 4 for RECAI methodology.

RECAI 62 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	US	1	●	73.9	58.4	59.5	58.3	46.8	40.8	47.4	39.6	20.7
2	Germany	2	●	71.4	53.4	52.3	56.1	32.4	50.7	38.1	41.4	20.9
3	China Mainland	3	●	71.4	52.5	55.7	61.5	55.0	49.3	24.8	51.0	17.9
4	France	5	▲	70.6	56.2	52.3	54.8	23.9	46.9	39.8	42.1	38.5
5	Australia	7	▲	70.2	53.5	42.4	57.2	47.2	41.8	15.8	27.1	25.7
6	India	6	●	69.2	53.7	28.7	62.7	34.3	43.6	24.8	48.9	20.0
7	UK	4	▼	68.3	57.6	57.6	48.0	15.1	54.8	36.8	39.3	34.8
8	Spain	8	●	67.1	54.0	35.6	54.0	29.2	40.0	15.4	23.2	23.0
9	Denmark	11	▲	66.3	54.1	51.5	47.0	17.4	45.4	16.4	22.3	22.1
10	Netherlands	9	▼	66.1	53.5	48.3	48.8	16.0	51.7	24.8	27.7	16.8
11	Canada	12	▲	65.1	55.8	39.5	48.2	19.9	36.4	26.3	47.9	26.9
12	Ireland	13	▲	63.4	49.6	47.3	46.4	19.7	36.2	17.9	21.9	24.7
13	Japan	10	▼	63.3	48.4	50.7	49.1	18.5	56.6	44.3	37.3	22.6
14	Italy	15	▲	63.2	47.2	40.9	51.1	31.1	42.1	32.3	45.7	18.4
15	Poland	17	▲	62.4	49.1	41.1	49.2	14.0	46.3	20.1	36.4	14.7
16	Chile	14	▼	61.9	51.5	22.4	48.0	55.3	42.7	47.0	45.1	28.0
17	Sweden	20	▲	61.4	49.0	42.6	42.6	16.3	44.3	18.8	36.6	27.8
18	Greece	16	▼	61.1	49.0	30.9	47.9	36.0	43.6	25.5	39.0	15.1
19	Brazil	18	▼	60.8	50.0	31.9	52.5	24.8	49.4	12.9	45.0	18.5
20	Finland	21	▲	60.0	60.1	30.2	37.0	15.7	45.3	15.7	23.1	15.7

RECAI 62 scores

					Technology-specific scores							
Ranking	Market	Previous ranking	Movement vs. previous	Score	Onshore wind	Offshore wind	Solar PV	Solar CSP	Biomass	Geothermal	Hydro	Marine
21	Belgium	24	▲	59.9	51.2	39.5	42.0	18.5	41.5	22.8	25.7	18.1
22	Portugal	22	●	59.7	43.6	24.0	49.3	25.3	40.5	23.2	36.9	23.9
23	Israel	19	▼	59.7	41.8	15.3	54.1	36.4	28.7	14.7	17.7	15.0
24	Taiwan	26	▲	59.1	42.0	47.2	45.9	19.0	29.9	27.2	33.8	29.2
25	Morocco	23	▼	58.8	45.1	17.4	51.1	50.7	25.2	13.9	34.0	13.9
26	Norway	31	▲	58.2	46.1	43.2	39.9	15.8	33.8	18.2	46.7	33.6
27	South Korea	25	▼	57.3	38.3	40.8	48.1	18.2	48.5	16.7	29.3	32.4
28	Austria	29	▲	57.3	46.0	22.5	43.5	14.4	42.5	17.8	42.5	21.5
29	Argentina	30	▲	56.9	50.4	22.1	49.0	31.6	36.7	18.1	35.5	17.7
30	Turkey	27	▼	56.7	48.9	20.6	48.4	23.8	41.6	42.5	45.4	19.6
31	Egypt	28	▼	56.5	47.2	15.8	53.8	36.6	24.6	11.5	23.0	11.5
32	Philippines	33	▲	56.1	42.6	20.5	47.4	19.9	40.2	44.0	41.7	21.2
33	Vietnam	36	▲	56.0	45.4	42.0	44.3	17.6	39.3	13.1	46.6	18.7
34	Switzerland	34	●	55.9	41.3	17.8	44.2	18.5	36.2	25.3	39.0	15.5
35	Mexico	35	●	55.5	42.1	21.3	48.0	24.5	34.9	40.2	35.1	19.1
36	Kazakhstan	32	▼	55.4	49.8	16.2	43.2	18.1	35.0	16.3	41.4	13.8
37	South Africa	37	●	54.3	46.9	20.0	44.7	47.4	31.6	12.5	19.8	20.7
38	Thailand	38	●	54.2	42.7	16.2	44.2	21.6	41.8	16.6	31.7	18.6
39	Romania	44	▲	53.9	41.4	17.2	43.6	13.7	34.6	16.3	34.5	13.7
40	Saudi Arabia	39	▼	53.7	45.1	17.9	46.5	28.1	23.6	15.8	12.1	11.8

RECAI 62 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 the market actively seeking to reduce reliance on fossil fuels?
- ▶ 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 [Phil Dominy](#).

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EYG no. 010558-23Gbl

BMC Agency
GA 19318140

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