2023

CCPI
Climate Change
Performance Index

RESULTS

Monitoring Climate Mitigation Efforts
of 59 Countries plus the EU – covering 92%
of the Global Greenhouse Gas Emissions

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You can find this publication as well as interactive maps and tables at
www.ccpi.org

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Foreword

Informing the process of raising climate ambition

Published annually since 2005, the Climate Change Performance Index (CCPI) is an independent monitoring tool for tracking the climate protection performance of 59 countries and the EU. Every year, the CCPI sets off important public and political debates within the countries assessed. The CCPI aims to enhance transparency in international climate politics and enables comparison of climate protection efforts and progress made by individual countries. The climate protection performance of those countries, which together account for 92% of global greenhouse gas (GHG) emissions, is assessed in four categories: GHG Emissions, Renewable Energy, Energy Use and Climate Policy.

The countries' commitments under the Paris Agreement are still insufficient: to limit global warming to a maximum of 1.5°C a more ambitious climate action is urgently needed.

In this context, the CCPI has gained further relevance as a long-standing and reliable tool to identify leaders and laggards in climate protection.

The impact of the CCPI as a climate protection monitoring and communication tool also depends on whether and how the index is used by different actors. We are glad to see that the CCPI is increasingly used by financial actors to rate sovereign bonds. Given the key role of the financial market in determining whether investments are made in high-emission or low-emission infrastructures and technology developments for shifting the trillions. Therefore, the CCPI is an important tool to promote the reallocation of investments by providing crucial information on climate change for Environmental, Social and Governance (ESG) ratings for finance actors.


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* A full list of contributors to the climate policy evaluation can be found in the Annex of this publication.

1. State of the Climate: Trying to beat the clock

Russia's invasion of Ukraine illustrates that most countries still heavily depend on fossil fuels. This dependency affects countries' ability to function and to provide essential services for their populations.

The COVID-19 recovery has largely been a missed opportunity for climate progress, and we are again at a crossroads. We can use this external shock to improve how we heat, move, and live sustainably, or we can continue supporting our current and dangerous fossil system. This sustainable transformation's importance and urgency have never been clearer – not only to save our climate but for our future society and peace.

Expansion of renewables and energy savings are the backbones of decarbonisation.[1] In 2022, renewable energy (RE) supply grew significantly because of falling costs. The World Energy Investment Report 2022 shows RE comprising the majority of energy sector investments. Investments in fossil fuels, meanwhile, did not rebound to pre-pandemic levels.[2]

These positive developments and trends could trigger an upward spiral supporting a sustainable and just transition. Yet there is a persistent and critical need to use all available opportunities and to halt all support for fossil fuels. Recent developments show that fossil infrastructure is growing in response to the energy crisis. Countries must phase out fossil fuel subsidies and redirect their investments to avoid undermining efforts to increase the low-carbon energy supply. Energy demand reduction in developed countries and energy efficiency improvements in developing countries are also imperative for supporting the energy transition.

Fossil fuel production: The elephant in the room

Fossil fuels account for over 75% of all anthropogenic greenhouse gas (GHG) emissions.[3] Therefore, curbing fossil fuel extraction and production is a vital part of the solution. Countries extracting and profiting from selling fossil fuels to others should be subject to increased scrutiny.

Rather than decreasing fossil fuel production, governments are planning to, by 2030, produce twice the amount of fossil fuels globally than what is consistent with limiting global warming to 1.5°C.[4] The nine largest coal-procuring countries[5] account for 90% of global coal production.[6] While countries such as France, Costa Rica, and Denmark have introduced or scheduled moratoriums on fossil fuel exports, others such as Mexico and Saudi Arabia plan to increase their exporting capacity.[7] Instead of focusing its investments on RE, the G20 nations have added nearly USD300 billion towards fossil fuel activities since the COVID-19 pandemic began.[8] These investments are at risk of becoming stranded assets and locking in additional fossil fuel use.

The CCPI has decided to flag the 17 countries responsible for a large share of fossil fuel production. These countries belong to the top 20 oil and gas producers, top nine global coal producers, and/or plan to increase annual production of fossil fuels by 2030. To keep the Paris Agreement promises in reach, no new permits for fossil fuel extraction should be handed out, and no new fossil fuel infrastructure switched on. Countries must stop investing in fossil fuels and they must expand their investments in RE.

A ship loaded with rotor blades for wind turbines. The expansion of renewables is an important pillar of decarbonisation.

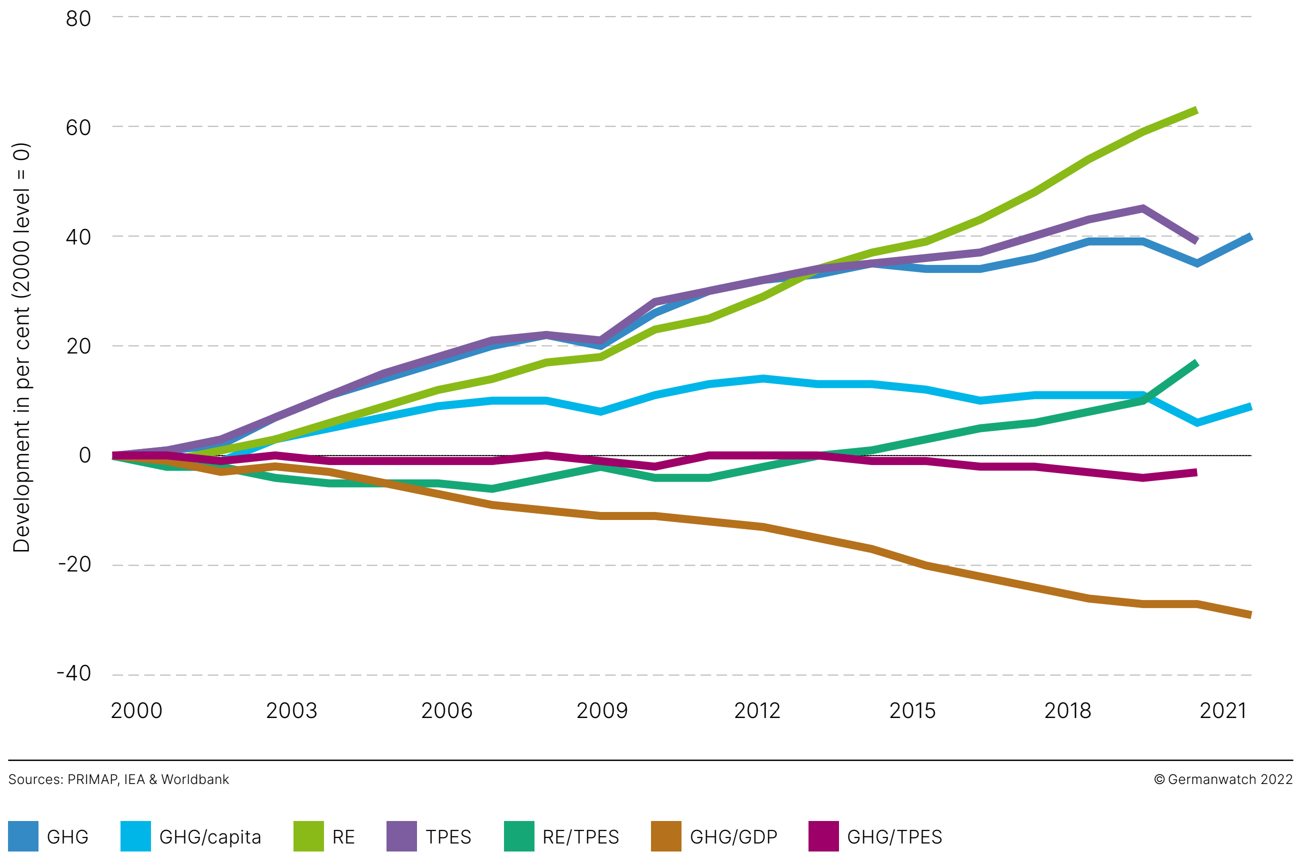
A long road to go, but with little time

In 2021, the countries we assessed in the CCPI accounted for 92% of all GHG emissions. The graph below shows the development of some of the key economic indicators. Some notable findings are:

- Since 2000, **GHG emissions** grew globally by over 40%. After a drop in 2020 due to the pandemic, 2021 saw a rebound.
- **GHG per capita** shows relatively even development over the last 20 years. This is because, together with emissions, population also grew. Countries such as the US (16.6 t per capita) and Canada (17.9 t per capita) are among the countries with the highest per capita emissions, whereas India (2.2 t per capita) and the Philippines (2.3 t per capita) are substantially lower.
- The **growth of renewables** has increased steadily since 2000 which is a good sign. Yet simultaneously, **the energy supply** is also rising, which leads to a current share of barely 17% of **RE in the energy supply**.
- From all indicators shown in the graph, **GHG per GDP** is the only one continuously falling. This means a steady relative decoupling of energy supply from GDP. A decarbonisation trend would be visible only if the **carbon intensity of the energy supply** also decreased – it currently is flat.

To keep 1.5°C within reach and prevent dangerous climate change, countries must halve their emissions by 2030. Only if we use significantly less energy and more renewable sources is this target reachable.

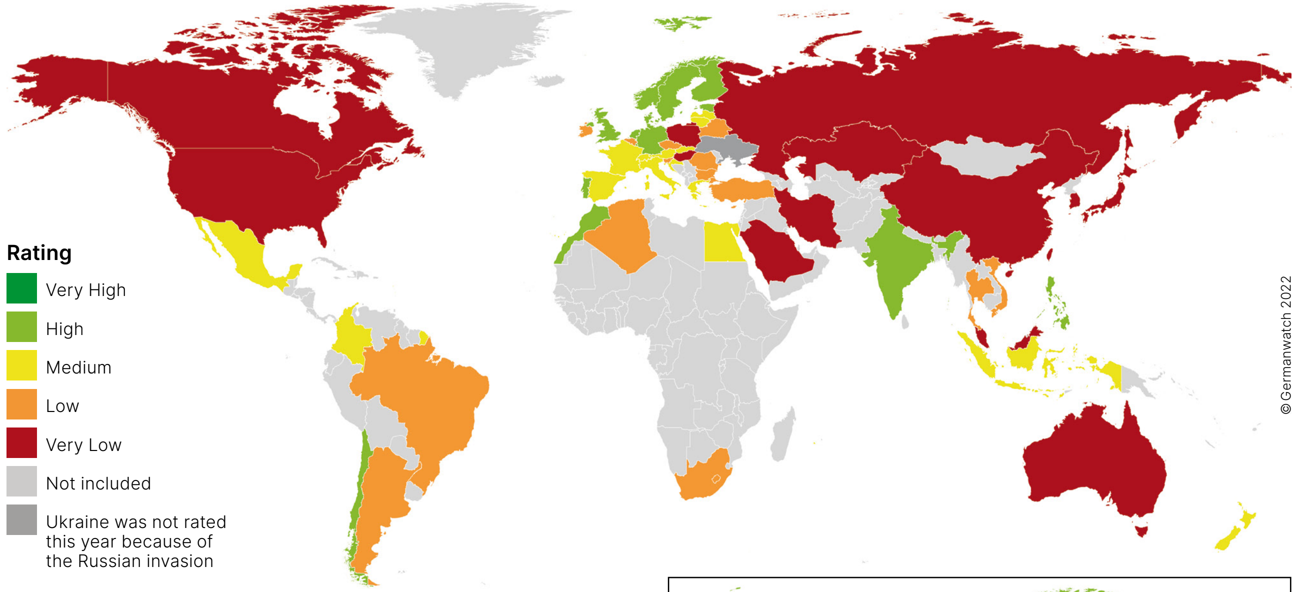
Global development of key indicators

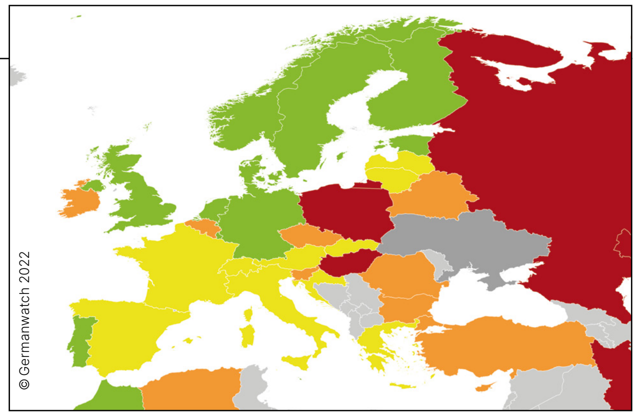


Sources: PRIMAP, IEA & Worldbank

GHG = Greenhouse Gas Emissions
RE = Renewable Energy
TPES = Total Primary Energy Supply
GDP = Gross Domestic Product

2. Overall Results CCPI 2023





Top 3 remain vacant as countries need to speed up implementation

Key results:

The world map shows the aggregated results and overall performance for the countries the CCPI evaluated. The table shows the overall ranking and indicates countries' performance in the four index categories.

- No country was strong enough in all index categories to achieve an overall *very high* rating. Therefore, once again, the top three places remain empty.
- Denmark is again the top-ranked country, as in the previous year's CCPI, but it does not perform well enough to achieve an overall *very high* rating.

G20 performance:

- With India (8th), the United Kingdom (11th), and Germany (16th), only three G20 countries are among the *high* performers in CCPI 2023. Twelve G20 countries receive an overall *low* or *very low*. The G20 has a particular responsibility in climate mitigation, as its members emit more than 75% of the world's greenhouse gas emissions.
- Canada, Russia, South Korea, and Saudi Arabia are the G20's worst-performing countries.

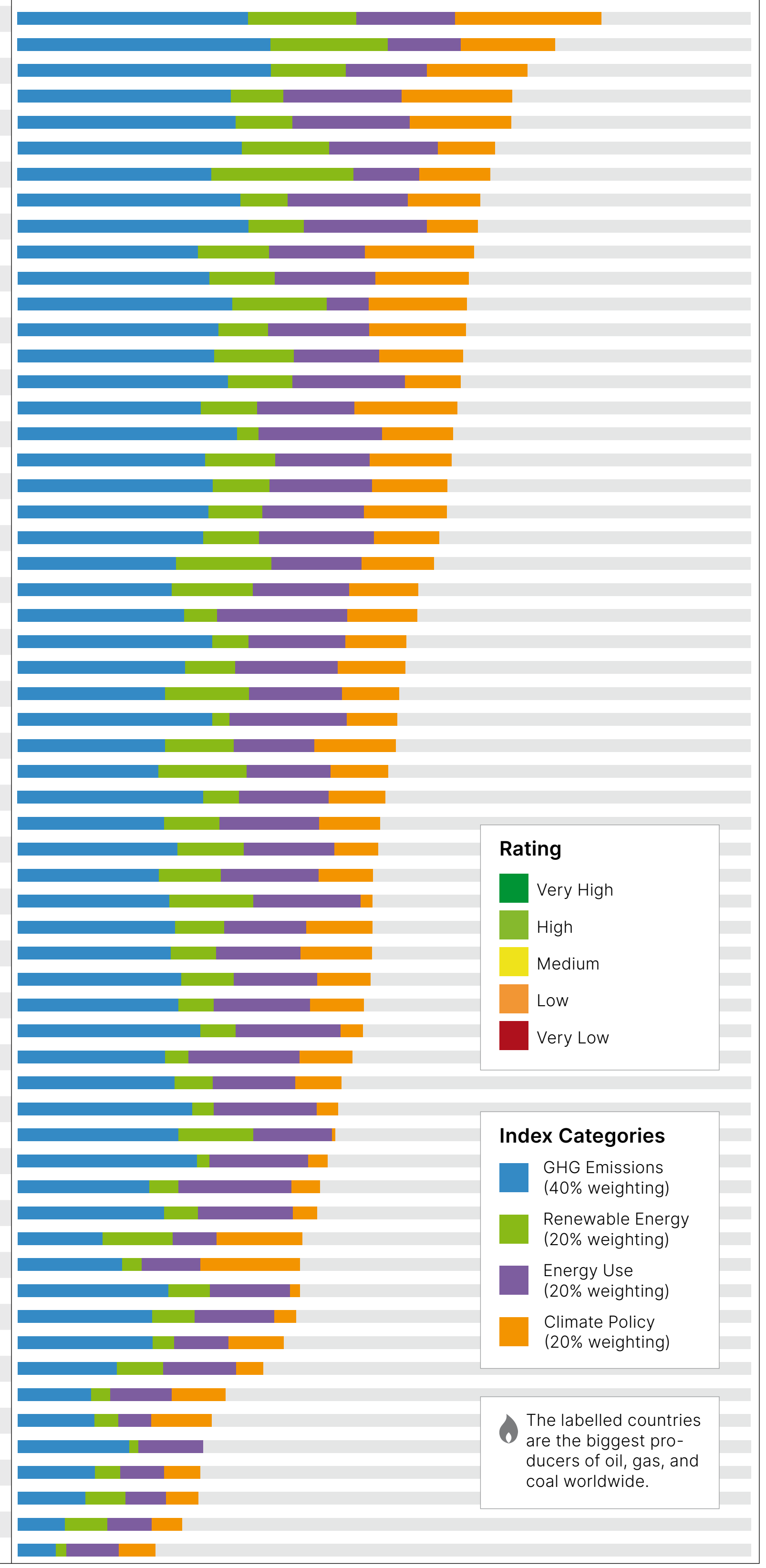
EU performance:

- Overall, the EU rises three spots from the previous year, to 19th, and just barely misses *high* classification.
- Nine EU countries are among the *high* and *medium* performers, with Denmark (4th) and Sweden (5th) leading the overall CCPI ranking.
- Spain improves its performance in all four CCPI categories, vaulting it 11 spots to 23rd, though still performing at a *medium* level. France, in contrast, drops 11 ranks to 28th, mainly due to its poorer placement in the Climate Policy category compared with the previous year.
- Hungary (53rd) and Poland (54th) are the remaining EU countries receiving a *very low* rating.

The following sections look into the results for the index categories: GHG Emissions (2.1), Renewable Energy (2.2), Energy Use (2.3), and Climate Policy (2.4).

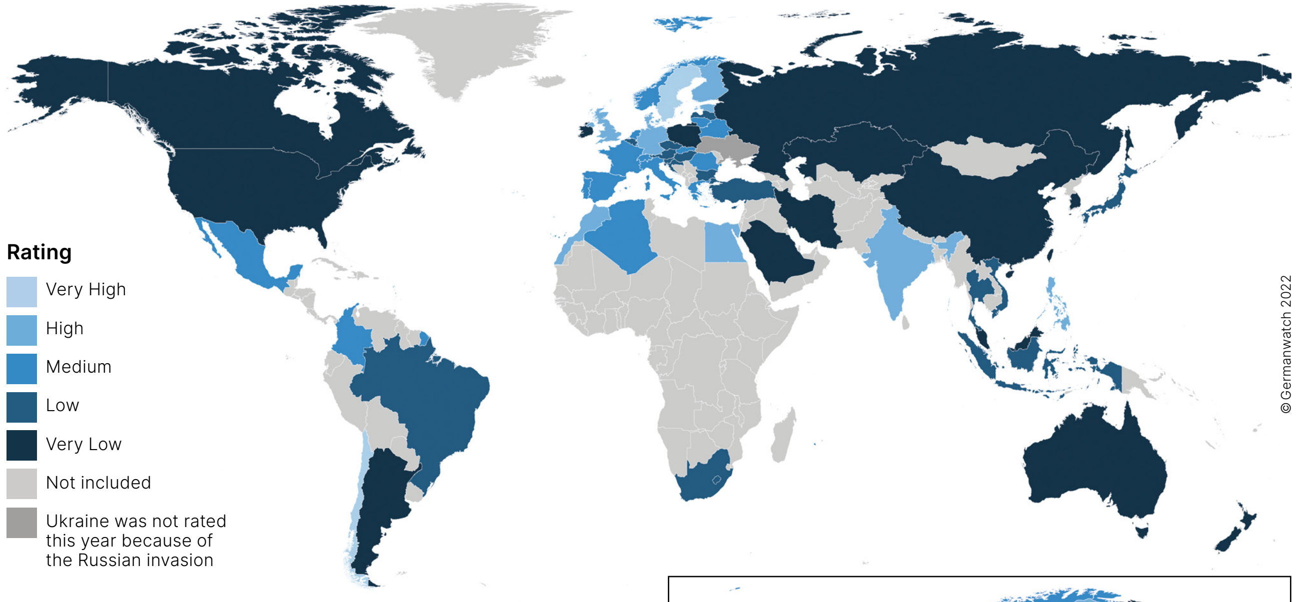
Climate Change Performance Index 2023 – Rating table

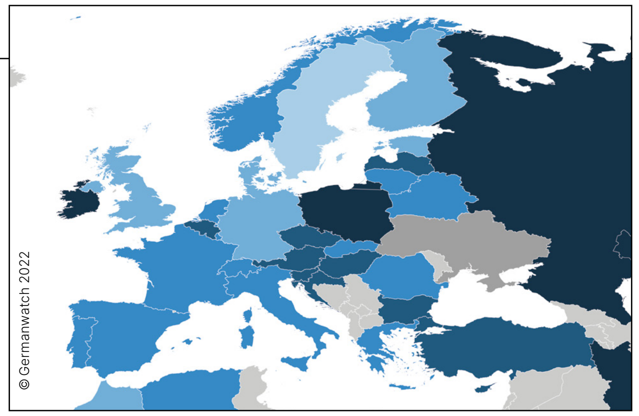
Rank	Rank change	Country	Score**	Categories
1.*	–	–	–	
2.	–	–	–	
3.	–	–	–	
4.	0 –	Denmark	79.61	
5.	0 –	Sweden	73.28	
6.	3 ▲	Chile	69.54	
7.	1 ▲	Morocco	67.44	
8.	2 ▲	India 🔥	67.35	
9.	23 ▲	Estonia	65.14	
10.	-4 ▼	Norway 🔥	64.47	
11.	-4 ▼	United Kingdom 🔥	63.07	
12.	11 ▲	Philippines	62.75	
13.	6 ▲	Netherlands	62.24	
14.	2 ▲	Portugal	61.55	
15.	-1 ▼	Finland	61.24	
16.	-3 ▼	Germany 🔥	61.11	
17.	1 ▲	Luxembourg	60.76	
18.	-6 ▼	Malta	60.42	
19.	3 ▲	European Union (27)	59.96	
20.	1 ▲	Egypt	59.37	
21.	-10 ▼	Lithuania	59.21	
22.	-7 ▼	Switzerland	58.61	
23.	11 ▲	Spain	58.59	
24.	0 –	Greece	57.52	
25.	1 ▲	Latvia	56.81	
26.	1 ▲	Indonesia 🔥	54.59	
27.	-2 ▼	Colombia	54.50	
28.	-11 ▼	France	52.97	
29.	1 ▲	Italy	52.90	
30.	-1 ▼	Croatia	52.04	
31.	-3 ▼	Mexico 🔥	51.77	
32.	5 ▲	Austria	51.56	
33.	2 ▲	New Zealand	50.55	
34.	6 ▲	Slovak Republic	50.12	
35.	7 ▲	Cyprus	49.39	
36.	8 ▲	Bulgaria	49.15	
37.	9 ▲	Ireland	48.47	
38.	-5 ▼	Brazil 🔥	48.39	
39.	10 ▲	Belgium	48.38	
40.	3 ▲	Vietnam	48.31	
41.	9 ▲	Slovenia	48.16	
42.	-11 ▼	Thailand	47.23	
43.	-7 ▼	Romania	47.09	
44.	-5 ▼	South Africa 🔥	45.69	
45.	6 ▲	Czech Republic	44.16	
46.	2 ▲	Belarus	43.69	
47.	-6 ▼	Turkey	43.32	
48.	6 ▲	Algeria	42.26	
49.	-2 ▼	Argentina	41.19	
50.	-5 ▼	Japan	40.85	
51.	-13 ▼	China 🔥	38.80	
52.	3 ▲	United States 🔥	38.53	
53.	0 –	Hungary	38.51	
54.	-2 ▼	Poland 🔥	37.94	
55.	4 ▲	Australia 🔥	36.26	
56.	1 ▲	Malaysia	33.51	
57.	1 ▲	Chinese Taipei	28.35	
58.	3 ▲	Canada 🔥	26.47	
59.	-3 ▼	Russian Federation 🔥	25.28	
60.	0 –	Korea	24.91	
61.	3 ▲	Kazakhstan 🔥	24.61	
62.	1 ▲	Saudi Arabia 🔥	22.41	
63.	-1 ▼	Islamic Republic of Iran 🔥	18.77	



*None of the countries achieved positions one to three. No country is doing enough to prevent dangerous climate change.
** rounded

2.1 Category Results – GHG* Emissions





CCPI countries must halve their emissions by 2030 to prevent dangerous climate change

Key developments:

After the sharp 5.2% drop in CO_2 emissions in 2020, due to the COVID-19 pandemic, energy-related CO_2 emissions in 2021 rebounded, increasing by 6% and reaching a record high.[9] The CCPI results reflect this.

The current IPCC report indicates global emissions must be halved by 2030 (compared with 2020 levels) to keep global warming within the 1.5°C reach.[10]

A strong rebound effect was expected, but now the countries need to intensify their efforts. Collectively, the countries the CCPI covered are responsible for more than 92% of all GHG emissions.

Key results:

The table on the right details the performance of all countries included in the CCPI in the four indicators comprising the GHG Emissions category.

- Chile and Sweden are at the top, receiving a *very high* rating in this category.

G20 performance:

- Only three G20 countries – the United Kingdom, India, and Germany – receive an overall *high* rating.
- Eight G20 countries are among the *very low* performers, including China, South Korea, Canada, and the United States. Most G20 countries show worse performance than in the previous year.
- As in the previous years, Saudi Arabia remains the worst-performing G20 country.

EU performance:

- As in previous years, the EU rates *medium* for its overall performance, but this year it drops one rank to 24.
- The best-performing EU country is Sweden at 3rd, though Denmark, Estonia, Finland, Malta, and Germany rate *high* in this category.
- Ireland and Poland are the only EU countries to receive a *very low*.

* Greenhouse Gas Emissions

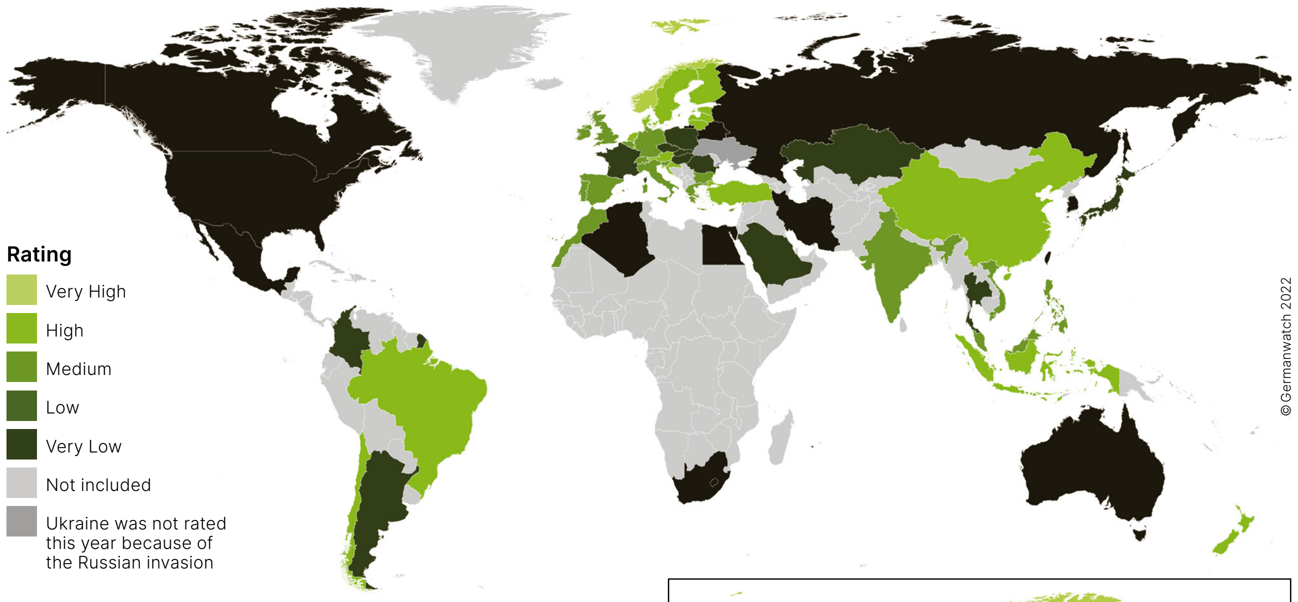
CCPI • Results 2023 CCPI Germanwatch, NewClimate Institute & Climate Action Network

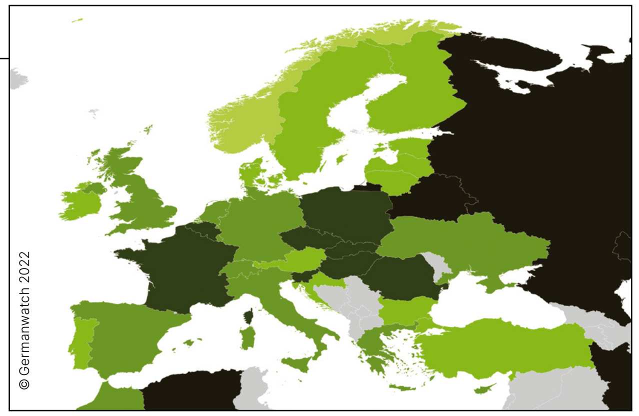
Greenhouse Gas Emissions – Rating table

Rank	Country	Score**	Overall Rating	GHG per Capita – current level (including LULUCF)***	GHG per Capita – current trend (excluding LULUCF)***	GHG per Capita – compared to a well-below-2°C benchmark	GHG 2030 Target – compared to a well-below-2°C benchmark
1.*	–	–	Very High	–	–	–	–
2.	Chile	34.50	Very High	Very high	High	Very high	Very high
3.	Sweden	34.48	Very High	Very high	Very High	High	High
4.	Philippines	31.45	High	Very high	Low	Very high	Very high
5.	Denmark	31.42	High	Medium	Very high	Medium	Very high
6.	Estonia	30.55	High	Low	Very High	High	Medium
7.	United Kingdom	30.38	High	Medium	High	High	Very high
8.	Egypt	29.88	High	High	High	High	High
9.	India	29.69	High	Very high	Low	Very high	Very high
10.	Finland	29.23	High	High	Very High	High	Medium
11.	Morocco	29.04	High	High	Very Low	Very high	Very high
12.	Malta	28.67	High	High	High	High	Medium
13.	Germany	27.36	High	Low	Very High	Medium	High
14.	Luxembourg	26.76	Medium	Very Low	High	High	High
15.	Switzerland	26.60	Medium	High	High	Medium	Medium
16.	Mexico	26.52	Medium	High	High	Medium	Medium
17.	France	26.52	Medium	Medium	High	Medium	Medium
18.	Norway	26.42	Medium	Medium	High	Medium	High
19.	Portugal	26.14	Medium	Medium	High	Low	Medium
20.	Spain	25.97	Medium	High	High	Low	Medium
21.	Lithuania	25.57	Medium	High	Low	High	High
22.	Slovak Republic	25.31	Medium	Medium	Medium	Medium	Medium
23.	Greece	25.30	Medium	Medium	Very High	Medium	Very Low
24.	European Union (27)	24.94	Medium	Medium	High	Medium	Medium
25.	Romania	24.87	Medium	High	Medium	High	Medium
26.	Netherlands	24.60	Medium	Low	High	Low	Medium
27.	Algeria	24.46	Medium	Medium	Medium	High	Medium
28.	Belarus	23.77	Medium	High	Low	High	Medium
29.	Italy	22.81	Medium	Medium	High	Medium	Low
30.	Colombia	22.67	Medium	High	Medium	Medium	Low
31.	Slovenia	22.29	Low	Medium	High	Low	Very Low
32.	Thailand	21.89	Low	Medium	Medium	Medium	Low
33.	Turkey	21.89	Low	High	Medium	High	Very Low
34.	Bulgaria	21.78	Low	Medium	High	Low	Low
35.	Latvia	21.56	Low	High	Medium	Low	Medium
36.	Belgium	21.44	Low	Low	High	Low	Medium
37.	Czech Republic	21.40	Low	Low	High	Low	Low
38.	Indonesia	20.97	Low	Medium	Low	Medium	Medium
39.	Vietnam	20.87	Low	High	Very Low	High	Low
40.	Brazil	20.63	Low	Medium	Medium	Low	Low
41.	Hungary	20.54	Low	Medium	Low	Medium	Low
42.	South Africa	20.09	Low	Low	High	Low	Low
43.	Austria	20.07	Low	Low	High	Very Low	Low
44.	Croatia	20.06	Low	High	Low	Low	Low
45.	Japan	19.92	Low	Low	High	Very Low	Low
46.	Cyprus	19.92	Low	Medium	Medium	Low	Medium
47.	Ireland	19.22	Very Low	Very Low	High	Very Low	Medium
48.	New Zealand	19.15	Very Low	Low	High	Low	Low
49.	Australia	18.39	Very Low	Very Low	High	Low	High
50.	Poland	18.33	Very Low	Low	Medium	Low	Low
51.	Argentina	17.90	Very Low	Low	High	Very Low	Very Low
52.	Russian Federation	15.17	Very Low	Low	Low	Medium	Very Low
53.	United States	14.24	Very Low	Very Low	High	Very Low	Low
54.	Malaysia	13.47	Very Low	Very Low	Medium	Very Low	Low
55.	China	11.56	Very Low	Low	Very Low	Very Low	Very Low
56.	Korea	10.51	Very Low	Very Low	Medium	Very Low	Very Low
57.	Canada	10.45	Very Low	Very Low	High	Very Low	Very Low
58.	Chinese Taipei	9.98	Very Low	Very Low	Medium	Very Low	Very Low
59.	Kazakhstan	9.23	Very Low	Very Low	High	Very Low	Very Low
60.	Saudi Arabia	6.43	Very Low	Very Low	High	Very Low	Very Low
61.	Islamic Republic of Iran	5.16	Very Low	Very Low	Very Low	Very Low	Very Low

* Only two countries achieve a very high rating in this category. The first position in the ranking therefore remains empty.
** weighted and rounded   *** Land Use, Land-Use Change and Forestry

2.2 Category Results – Renewable Energy





Renewable energy growth continues

Key developments:

Renewable energy capacity continues to expand at a high pace amidst the economic recovery after the first phase of the COVID-19 pandemic. This comes despite supply chain challenges. In 2021, 257 GW of capacity was installed globally.[11]

Nonetheless, the energy system worldwide is still heavily dependent on fossil fuels.[12] This is despite the fact wind and solar power generation are the cheapest sources of new electricity generation in most of the world.[13]

Key results:

The table details the performance of all countries included in the CCPI in the four indicators comprising the Renewable Energy category.

The energy sector greatly contributes to a country's GHG emissions. Therefore, the results of the Renewable Energy rating indicate substantial room for improvement in mitigating emissions by accelerating deployment of renewable energy.

- For the second year running, Norway receives a *very high* in this category.
- Algeria, Iran, and Russia are at the bottom.

G20-performance:

- Eleven G20 countries rank *low* or *very low*, with the United States, Mexico, and Russia among them.
- Brazil, Indonesia, Turkey, and China are the only G20 members receiving a *high*.

EU performance:

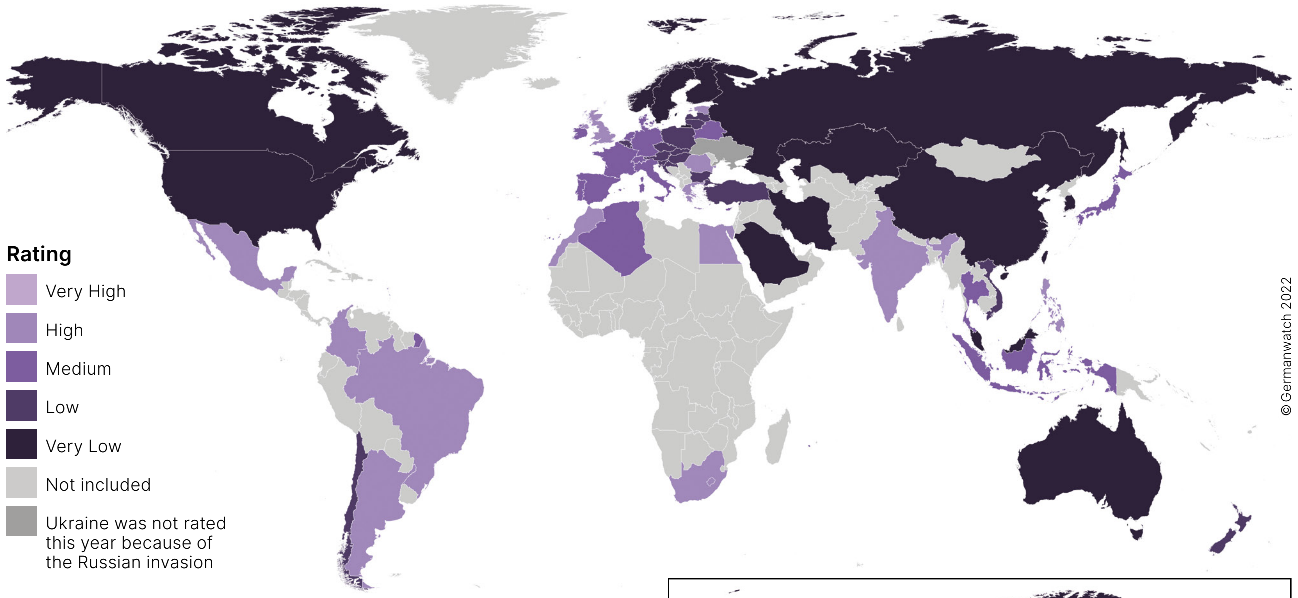
- The EU's performance shows no improvement from that in last year's CCPI, as it rates *medium*.
- Ten EU countries receive a *high*, including Sweden, Denmark, the Netherlands, and Austria.
- As in previous years, no EU country performs *very low*. Poland, Hungary, Czech Republic, France, Slovak Republic and Romania are the worst-performing EU countries.

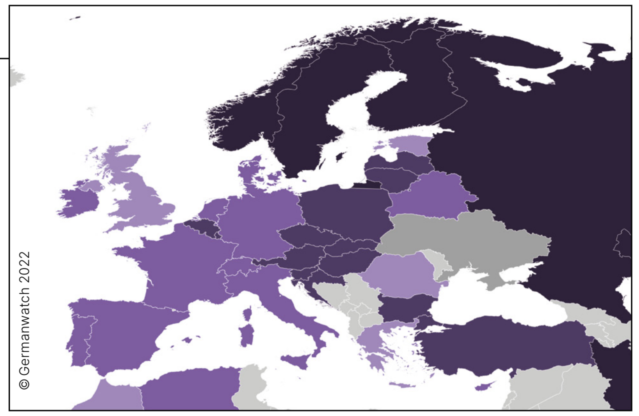
Renewable Energy (RE) – Rating table

Rank	Country	Score**	Overall Rating	Share of RE in Energy Use (TPES)*** – current level (incl. hydro)	RE current trend (excl. hydro)	Share of RE in Energy Use (TPES) (incl. hydro) – compared to a well-below-2°C benchmark	RE 2030 Target (incl. hydro) – compared to a well-below-2°C benchmark
1.*	–	–	Very High	–	–	–	–
2.	–	–	Very High	–	–	–	–
3.	Norway	19.35	Very High	Very high	Very high	Very High	Very High
4.	Sweden	15.96	High	Very high	Medium	High	High
5.	Denmark	14.76	High	High	High	High	High
6.	Latvia	13.07	High	High	Medium	High	High
7.	Finland	12.89	High	High	Medium	High	High
8.	New Zealand	12.09	High	Very high	Very Low	Medium	Medium
9.	Estonia	11.91	High	High	High	High	Medium
10.	Croatia	11.49	High	Medium	Very high	Low	Medium
11.	Brazil	11.46	High	Very high	Medium	Medium	Medium
12.	Indonesia	11.09	High	High	Very high	Medium	Medium
13.	Luxembourg	10.88	High	Medium	Very high	Low	Medium
14.	Chile	10.25	High	High	Medium	High	Medium
15.	Turkey	10.25	High	Medium	Very high	Medium	Low
16.	Netherlands	9.69	High	Medium	Very high	Low	Medium
17.	China	9.59	High	Low	Very high	Very Low	Medium
18.	Lithuania	9.56	High	Medium	Medium	Medium	Medium
19.	Austria	9.42	High	High	Very Low	Medium	Medium
20.	Bulgaria	9.07	Medium	Low	Very high	Very Low	Medium
21.	Portugal	8.91	Medium	High	Low	Low	Medium
22.	Malta	8.82	Medium	Low	Very high	Very Low	Medium
23.	Ireland	8.49	Medium	Medium	High	Low	Medium
24.	India	7.77	Medium	Medium	High	Very Low	Medium
25.	Switzerland	7.73	Medium	High	Medium	Low	Low
26.	European Union (27)	7.69	Medium	Medium	Medium	Low	Medium
27.	Philippines	7.60	Medium	High	Very Low	Very Low	Medium
28.	Greece	7.57	Medium	Medium	High	Low	Medium
29.	Cyprus	7.55	Medium	Medium	High	Very Low	Medium
30.	Spain	7.39	Medium	Medium	Medium	Low	Medium
31.	Morocco	7.20	Medium	Very Low	Very high	Very Low	Low
32.	Slovenia	7.17	Medium	Medium	High	Very Low	Medium
33.	Italy	6.87	Medium	Medium	Low	Low	Medium
34.	Germany	6.82	Medium	Medium	Medium	Low	Low
35.	Belgium	6.71	Medium	Low	High	Very Low	Medium
36.	United Kingdom	6.44	Medium	Medium	High	Medium	Very Low
37.	Malaysia	6.34	Medium	Very Low	Very high	Very Low	Very Low
38.	Vietnam	6.20	Medium	Medium	High	Very Low	Low
39.	Saudi Arabia	5.81	Low	Very Low	Very high	Very Low	Very Low
40.	Poland	5.78	Low	Low	Medium	Very Low	Medium
41.	Hungary	5.69	Low	Low	High	Very Low	Medium
42.	Kazakhstan	5.43	Low	Very Low	Very high	Very Low	Very Low
43.	Czech Republic	5.16	Low	Low	Low	Very Low	Medium
44.	France	4.97	Low	Low	High	Very Low	Low
45.	Slovak Republic	4.86	Low	Low	Very Low	Very Low	Medium
46.	Romania	4.86	Low	Low	Very Low	Very Low	Medium
47.	Thailand	4.85	Low	High	Very Low	Very Low	Low
48.	Japan	4.62	Low	Low	High	Very Low	Very Low
49.	Colombia	4.52	Low	Medium	Very Low	Very Low	Low
50.	Argentina	4.00	Low	Low	High	Very Low	Very Low
51.	Korea	3.49	Very Low	Very Low	High	Very Low	Very Low
52.	Canada	3.30	Very Low	Medium	Low	Very Low	Very Low
53.	South Africa	3.17	Very Low	Very Low	Medium	Very Low	Low
54.	Belarus	2.98	Very Low	Low	High	Very Low	Very Low
55.	Egypt	2.98	Very Low	Low	Medium	Very Low	Very Low
56.	Australia	2.94	Very Low	Low	High	Very Low	Very Low
57.	Chinese Taipei	2.65	Very Low	Very Low	High	Very Low	Very Low
58.	United States	2.65	Very Low	Low	Medium	Very Low	Very Low
59.	Mexico	2.38	Very Low	Low	Medium	Very Low	Very Low
60.	Algeria	1.65	Very Low	Very Low	High	Very Low	Very Low
61.	Islamic Republic of Iran	1.46	Very Low	Very Low	High	Very Low	Very Low
62.	Russian Federation	1.27	Very Low	Very Low	Low	Very Low	Very Low

* Only one country achieves a very high rating in this category. The first and second position in the ranking therefore remain empty.
** weighted and rounded   *** Total Primary Energy Supply

2.3 Category Results – Energy Use*





Energy demand returns to pre-pandemic levels

Key developments:

The COVID-19 pandemic and subsequent slowdown of economic activity led to a 4% decrease in energy demand in 2020. However, a strong rebound was expected for 2021, as economic activity increased. The IEA estimated the global energy demand to rebound after its drop, increasing 4% in 2021 and returning to pre-pandemic levels.[14]

Key results:

The table details the performance of all countries included in the CCPI in the four indicators comprising the Energy Use category.

- No country receives a *very high*; with Colombia, Egypt, and the Philippines, three countries from the Global South, leading this category.
- Finland, Kazakhstan, and Canada, like last year, bring up the rear.

G20-performance:

- Of the G20 countries, seven perform *very low*.
- The United Kingdom, India, Mexico, Argentina, South Africa, and Brazil receive a *high*. All other G20 members are ranked *medium* (except for Turkey, which is a *low*).

EU performance:

- As in previous years, the EU ranks *medium* in this category.
- Four EU countries, including Greece and Romania, perform *high*; while Sweden, Norway, and Finland are *very low*.

* Increases in energy efficiency are, strictly speaking, complex to measure and would require a sector-by-sector approach. As no comparable data sources across all countries are available, the CCPI evaluates a country's per-capita energy use to measure improvements in this category.

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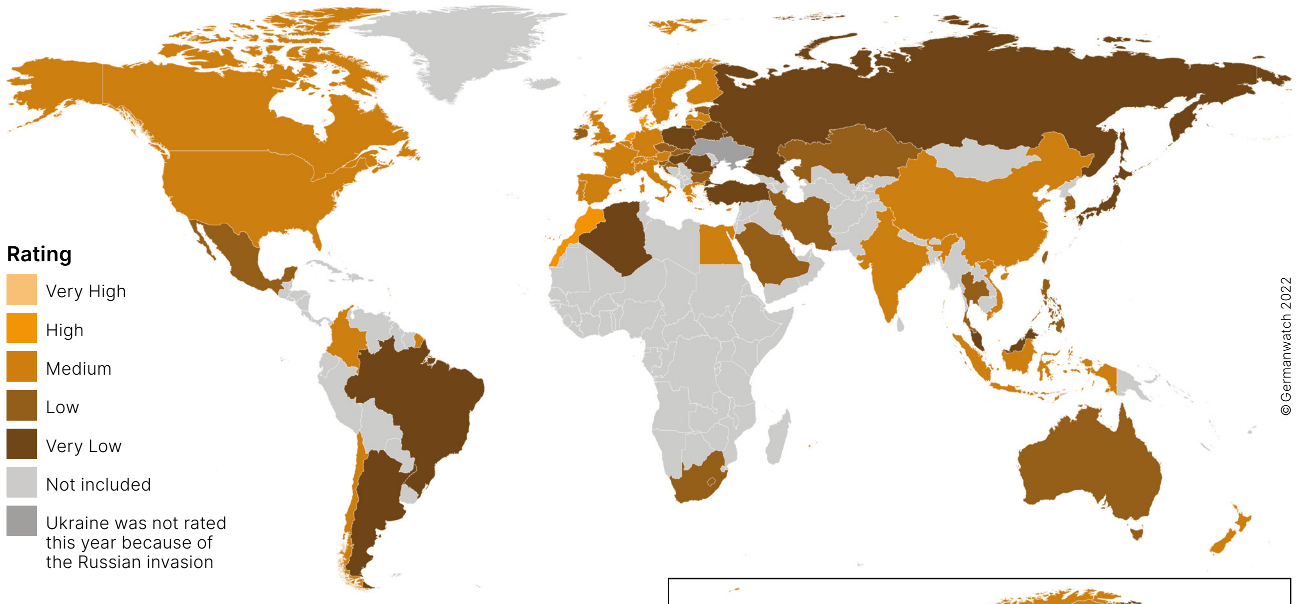
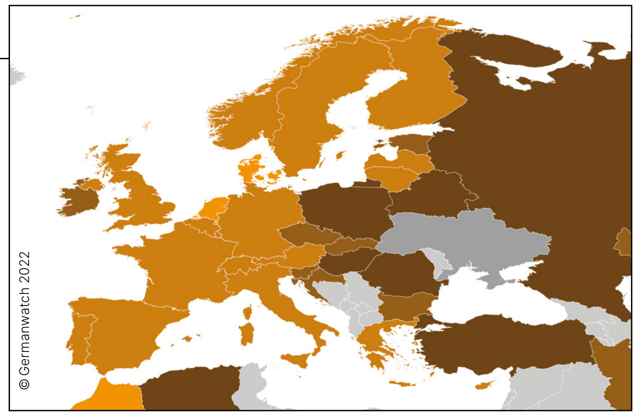
Energy Use – Rating table

Rank	Country	Score*	Overall Rating	Energy Use (TPES)** per Capita – current level	Energy Use (TPES) per Capita – current trend	Energy Use (TPES) per Capita – compared to a well-below-2°C benchmark	Energy Use 2030 Target – compared to a well-below-2°C benchmark
1.	–	–	Very High	–	–	–	–
2.	–	–	Very High	–	–	–	–
3.	–	–	Very High	–	–	–	–
4.	Colombia	17.71	High	Very high	High	High	High
5.	Egypt	16.80	High	Very high	Medium	High	High
6.	Philippines	16.75	High	Very high	Low	Very high	High
7.	United Kingdom	16.37	High	Medium	Very high	High	Medium
8.	Morocco	16.11	High	Very high	Low	Very high	High
9.	India	16.03	High	Very high	Low	Very high	High
10.	Mexico	15.97	High	Very high	High	High	Medium
11.	Greece	15.71	High	High	High	Medium	Low
12.	Argentina	15.43	High	High	High	Low	Low
13.	Malta	15.31	High	Very high	Medium	High	Low
14.	South Africa	15.16	High	Medium	High	Medium	Medium
15.	Estonia	14.88	High	Low	Very High	High	Very Low
16.	Brazil	14.66	High	Very high	Medium	Low	Low
17.	Romania	14.31	High	High	Low	High	High
18.	Belarus	14.01	Medium	Medium	Low	High	High
19.	Switzerland	13.99	Medium	Low	Medium	Medium	Medium
20.	Italy	13.93	Medium	Medium	High	Low	Low
21.	Spain	13.84	Medium	Medium	High	Low	Low
22.	Germany	13.76	Medium	Low	High	Low	Low
23.	Portugal	13.73	Medium	High	Medium	Low	Low
24.	Cyprus	13.65	Medium	High	Low	Medium	Low
25.	Algeria	13.53	Medium	Very high	Low	Low	Low
26.	Denmark	13.43	Medium	Medium	High	Medium	Low
27.	European Union (27)	13.30	Medium	Low	High	Low	Low
28.	Ireland	13.29	Medium	Medium	High	Low	Low
29.	Indonesia	13.16	Medium	Very high	Very Low	High	Low
30.	France	13.15	Medium	Low	High	Low	Very Low
31.	Thailand	13.11	Medium	High	Medium	Very Low	Low
32.	Netherlands	13.07	Medium	Low	High	Low	Low
33.	Japan	12.98	Medium	Low	High	Low	Low
34.	Lithuania	12.86	Low	Medium	Very Low	High	High
35.	Croatia	12.63	Low	High	Low	Low	Low
36.	Bulgaria	12.34	Low	Medium	Low	Medium	Low
37.	Latvia	12.24	Low	Medium	Low	Medium	Low
38.	Slovak Republic	12.21	Low	Low	Low	Medium	Low
39.	Luxembourg	11.68	Low	Very Low	High	Medium	Low
40.	Vietnam	11.46	Low	Very high	Very Low	Low	Low
41.	New Zealand	11.41	Low	Very Low	High	Very Low	Very Low
42.	Slovenia	11.36	Low	Low	Medium	Very Low	Very Low
43.	Czech Republic	11.27	Low	Low	Medium	Low	Very Low
44.	Belgium	11.22	Low	Very Low	High	Low	Very Low
45.	Chile	11.05	Low	Medium	Low	Very Low	Very Low
46.	Austria	10.99	Low	Low	High	Very Low	Very Low
47.	Poland	10.88	Low	Medium	Low	Low	Low
48.	Hungary	10.87	Low	Medium	Low	Low	Very Low
49.	Turkey	10.70	Low	High	Low	Very Low	Very Low
50.	Malaysia	10.00	Very Low	Medium	Medium	Very Low	Very Low
51.	Sweden	9.97	Very Low	Very Low	Medium	Low	Very Low
52.	Norway	8.98	Very Low	Very Low	High	Very Low	Very Low
53.	Russian Federation	8.85	Very Low	Very Low	Low	Very Low	Low
54.	Chinese Taipei	8.38	Very Low	Low	Medium	Very Low	Very Low
55.	United States	8.00	Very Low	Very Low	High	Very Low	Very Low
56.	Australia	7.43	Very Low	Very Low	Medium	Very Low	Very Low
57.	Islamic Republic of Iran	7.14	Very Low	Low	Low	Very Low	Very Low
58.	Saudi Arabia	6.01	Very Low	Very Low	High	Very Low	Very Low
59.	China	5.95	Very Low	Medium	Very Low	Very Low	Very Low
60.	Korea	5.93	Very Low	Very Low	Medium	Very Low	Very Low
61.	Finland	5.75	Very Low	Very Low	Medium	Very Low	Very Low
62.	Kazakhstan	5.55	Very Low	Low	Very Low	Low	Very Low
63.	Canada	4.45	Very Low	Very Low	Medium	Very Low	Very Low

* weighted and rounded ** Total Primary Energy Supply

2.4 Category Results – Climate Policy





Countries must implement their climate targets

Key developments:

In light of the energy crisis, initiated by Russia's aggressive war against Ukraine, climate policy fades into the background this year. Australia submitted a stronger National Determined Contribution (NDC) in 2022 and is, thus, the only G20 country to increase its ambition. Brazil and India did not increase their targets with their new NDCs.[15] The UN United in Science Report states that the progress in NDC improvement is insufficient for keeping 1.5°C in reach.[16]

In the Climate Policy indicators in CCPI 2023, not only are national emissions targets assessed, but also sectoral targets and their specific implementation.

Key results:

The table on the right details the performance of all countries included in the CCPI in the two indicators comprising the Climate Policy category.

- Only four countries receive a *high* for overall performance: Denmark, Morocco, the Netherlands, and the EU.

G20-performance:

- The EU is the only G20 member with a *high* in this category.
- Ten of the G20 countries rate *low* or *very low*, with Brazil, Turkey, and Russia as the worst performers.

EU performance:

- Denmark, an EU country, leads the Climate Policy ranking, owing to its national and international climate performance. The Netherlands is the only other EU country with a *high* rating.
- Eleven EU countries receive a *low* or *very low*, with Poland and Hungary as the worst performers.

Climate Policy – Rating table

Rank	Country	Score*	Overall Rating	National Climate Policy Performance	International Climate Policy Performance
1.	–	–	Very High	–	–
2.	–	–	Very High	–	–
3.	–	–	Very High	–	–
4.	Denmark	20.00	High	High	Very High
5.	Morocco	15.09	High	Medium	High
6.	Netherlands	14.87	High	Medium	High
7.	European Union (27)	14.03	High	Medium	High
8.	India	13.85	Medium	Medium	Medium
9.	Chile	13.74	Medium	Medium	Medium
10.	United States	13.64	Medium	Medium	High
11.	Finland	13.38	Medium	Medium	Medium
12.	Germany	13.17	Medium	Medium	High
13.	Sweden	12.89	Medium	Medium	Medium
14.	Portugal	12.77	Medium	Medium	Medium
15.	China	11.70	Medium	Medium	Medium
16.	Luxembourg	11.44	Medium	Medium	Medium
17.	Spain	11.38	Medium	Low	Medium
18.	Lithuania	11.21	Medium	Medium	Medium
19.	Austria	11.08	Medium	Medium	Medium
20.	Switzerland	10.28	Medium	Low	Medium
21.	Latvia	9.95	Medium	Medium	Medium
22.	United Kingdom	9.88	Medium	Low	Medium
23.	Vietnam	9.78	Medium	Low	Medium
24.	Norway	9.72	Medium	Low	Medium
25.	Egypt	9.70	Medium	Low	Medium
26.	Colombia	9.60	Medium	Medium	Medium
27.	Indonesia	9.37	Medium	Low	Medium
28.	Italy	9.29	Medium	Low	Medium
29.	Belgium	9.01	Medium	Low	Medium
30.	Greece	8.93	Medium	Low	Medium
31.	France	8.33	Medium	Low	Medium
32.	Cyprus	8.27	Medium	Low	Medium
33.	Canada	8.26	Medium	Low	Medium
34.	New Zealand	7.90	Medium	Low	Low
35.	Croatia	7.85	Low	Low	Low
36.	Estonia	7.80	Low	Low	Low
37.	Slovak Republic	7.75	Low	Low	Medium
38.	Malta	7.62	Low	Low	Medium
39.	Australia	7.51	Low	Low	Medium
40.	Ireland	7.46	Low	Low	Medium
41.	Thailand	7.38	Low	Low	Low
42.	Chinese Taipei	7.33	Low	Low	Medium
43.	Slovenia	7.33	Low	Low	Low
44.	South Africa	7.27	Low	Low	Medium
45.	Philippines	6.95	Low	Low	Low
46.	Mexico	6.90	Low	Low	Low
47.	Czech Republic	6.33	Low	Low	Low
48.	Bulgaria	5.96	Low	Low	Low
49.	Islamic Republic of Iran	5.02	Low	Low	Very Low
50.	Korea	4.98	Low	Very Low	Low
51.	Kazakhstan	4.40	Low	Low	Low
52.	Saudi Arabia	4.17	Low	Low	Low
53.	Argentina	3.87	Very Low	Very Low	Low
54.	Malaysia	3.70	Very Low	Low	Very Low
55.	Japan	3.33	Very Low	Low	Very Low
56.	Romania	3.05	Very Low	Low	Very Low
57.	Poland	2.95	Very Low	Low	Very Low
58.	Belarus	2.93	Very Low	Low	Very Low
59.	Algeria	2.61	Very Low	Low	Very Low
60.	Brazil	1.65	Very Low	Low	Very Low
61.	Hungary	1.41	Very Low	Very Low	Very Low
62.	Turkey	0.48	Very Low	Very Low	Very Low
63.	Russian Federation	0.00	Very Low	Very Low	Very Low

* weighted and rounded

3. Key Country Results

The following overview provides a brief summary on the performance of 27 selected countries and the EU. The coloured boxes indicate a country's rank in this year's CCPI, while the grey boxes refer to its rank last year. When directly comparing the ranks between the CCPI 2022 and 2023 editions, please note that ranks from last year are unadjusted throughout the publication.

Denmark

4 4

Denmark ranks 4th in this year's CCPI and is again the frontrunner.

Overall, Denmark receives a *high* rating, but was unable to achieve an overall *very high* rating necessary to enter the, still vacant, top three. Despite its relatively strong showing, Denmark's performance remains unaligned with limiting global warming to 1.5°C.

As in the previous year's CCPI, Denmark receives *high ratings* in the GHG Emissions, Renewable Energy, and Climate Policy categories. However, it ranks 26th in Energy Use, earning only a *medium* in that category.

Denmark has committed to, by 2030, achieving a 70% emissions reduction compared with 1990 levels, and aims at climate neutrality by 2050. The independent Danish Council on Climate Change (DCCC), under the Danish Climate Act, is charged with assessing whether governmental policies sufficiently match the target. After two years with the 70% target, the DCCC concluded there has been significant progress but the efforts are not yet sufficient to meet the target. The reduction gap from 2030 has been lowered by 10 million tonnes CO$_2$.

The CCPI experts criticise that the government focuses too much on carbon capture and storage, with plans to spend €5 billion in support of it until 2030.

Denmark adopted a new CO2 tax in June 2022. While this tax does not cover the entire economy, the CCPI experts deem it a good start.

Denmark is a progressive player in climate policy, ranked 4th both in international and national climate policy. Partnering with Costa Rica, Denmark launched the Beyond Oil and Gas Alliance last year, aimed at moving more countries away from extracting fossil fuel. Domestically, the CCPI experts feel Denmark's climate neutrality goal should be brought forward from the current 2050 to reach neutrality by 2040. They note that Denmark is currently not on track to meeting its 2025 target of a 50% emissions reduction compared with 1990.

Sweden

5 5

Sweden holds its ranking of 5th in this year's CCPI, receiving an overall *high* rating.

While Sweden performs *very high* in the GHG Emissions category, with its low per capita emissions of 0.47 tCO$_2$eq (including LULUCF), and receives a *high* in Renewable Energy, its performance is considerably worse in Climate Policy and Energy Use, with a *medium* and *very low*, respectively.

The CCPI experts welcome Sweden's small share of gas and coal in electricity generation complemented by a high Share of Renewable Energy in Energy Use of 47.71%. Although the country has a credible plan to phase out coal in the iron ore and steel industry, emissions from waste incineration and the transport sector remain excessive.

Another major point of criticism the experts note is Sweden's reliance on nuclear energy and on forest biomass with carbon capture and storage, as well as its promotion of forest biomass. There are also very low ambitions and very few incentives for energy efficiency, as this is not recognised as necessary. Moreover, the influence of the forestry industry along with increased use of biomass and subsequent forest loss are concerning because of detrimental effects on biodiversity and forests becoming carbon sources rather than carbon sinks.

To become aligned with a well-below-2°C trajectory, Sweden needs to improve its transport, reduce waste incineration, and improve energy efficiency for buildings.

A new government is set to take office following the 2022 Swedish general election. The experts expect and fear lower climate ambitions as well as steps backwards that would lead to a drop off in the next CCPI ranking. One of the first governmental activity was the dissolution of the environmental ministry, which is heavily criticised by experts.

Chile

6 9

Chile rises three ranks in this year's CCPI to 6th, remaining among the high-performing countries.

Chile only receives a *low* rating in the Energy Use category and a *medium* rating in Climate Policy, but respectively a *high* and *very high* in Renewable Energy and GHG Emissions.

The strong performance in GHG Emissions owes to relatively low per capita emissions of 2.24 tCO$_2$eq (including LULUCF). It receives a *very high* rating for that indicator and for the GHG per capita compared with a well-below-2°C benchmark and GHG 2030 target indicators.

In June 2022, Chile adopted a Climate Change Framework Law that includes a commitment to reach net zero by 2050, and policies to achieve this target. Chile also submitted a long-term low GHG emissions strategy. The CCPI experts welcome this move. They further note an increase in the share of renewable energy, leading to a *high* rating in this indicator as well as in the renewable energy current trend indicator. Progress has also been made on a biodiversity services law.

Despite these significant advancements and developments, which the experts recognise and welcome, the experts criticise the country's lack of mitigation and adaptation strategies regarding water scarcity.

To become aligned with a well-below-2°C trajectory, Chile must reduce its emissions from the energy and transport sectors and reduce destruction of the valuable ecosystem serving as a carbon sink. Chile must therefore limit peat extraction and macro algae extraction. There is also a need to implement Nationally Determined Contribution (NDC) commitments on forestry, protected areas, and native forests.

Morocco

7 8

Morocco rises one spot to 7th – a top 10, high-performing country in this year's CCPI.

As in the previous two years, Morocco rates *high* in three main CCPI categories: GHG Emissions, Energy Use, and Climate Policy. And while the trend in renewable energy rates *very high*, the country receives a *very low* rating for its share of renewable energy and a *low* for its 2030 targets. This results in Morocco's overall *medium* for Renewable Energy.

If Morocco maintains its positive trend in renewable energy, it should improve in the other two indicators as well. Despite this positive development, the CCPI experts note that Morocco lacks the will to decentralise renewable energy and encourage citizens to produce their own renewable energy.

Morocco has been at the forefront of reducing its GHG Emissions and it strengthened this effort after COP22. The government has established a framework to reduce emissions and adhere to the Paris accords.

Morocco has committed to a target of planting 600,000 hectares of forest by 2030. The CCPI experts welcome the positive developments the country has made over the past years. Still, they criticise current laws for lacking implementing force and lacking the industrial sector's adherence to them.

The experts welcome the positive changes the new government has undertaken to further improve the country's climate performance. Yet they note that the global COVID-19 pandemic, water stress, and the geopolitical and economic crisis induced by the aggressive Russian war against Ukraine are brakes on ambitions.

India

8 10

India rises two spots to rank 8th in this year's CCPI.

The country is among the high performing countries in the index. India earns a *high* rating in the GHG Emissions and Energy Use categories, with a *medium* for Climate Policy and Renewable Energy. The country is on track to meet its 2030 emissions targets (compatible with a well-below-2°C scenario). However, the renewable energy pathway is not on track for the 2030 target.

Since the last CCPI, India has updated its Nationally Determined Contribution (NDC) and announced a net-zero target for 2070.

The country experts welcome the new targets and the political signals towards climate action. Despite India's *medium* in the Renewable Energy category, the country has included renewables targets in its updated NDC. Yet the experts cite missing roadmaps and concrete action plans for achieving the targets.

The experts stress the importance of a just and inclusive energy transition, as well as the need for decentralised renewable energy and capacities for rooftop photovoltaics. A carbon pricing mechanism, the need for more capacities at the subnational level, and concrete action plans for achieving the targets are key demands. India is among the nine countries responsible for 90% of global coal production. It also plans to increase its oil, gas, and oil production by over 5% by 2030. This is incompatible with the 1.5°C target.

Norway

10 6

Norway falls four ranks to 10th in this year's CCPI, still receiving an overall *high* rating.

Norway rates *very high* in the Renewable Energy category, with its share of over 50% renewables in energy supply. Nevertheless, the country earns a *medium* for GHG Emissions and Climate Policy and *very low* for Energy Use.

The CCPI country experts recognise the country's ambitious and effective climate policies. Norway has a very high share of renewables, mostly through hydropower. There is a high carbon tax for multiple sectors and support for electric vehicles. The experts also acknowledge the role Norway plays in international climate policy. It is a frontrunner in climate negotiations and relatively supportive in climate finance.

However, the experts criticise other areas of Norway's climate politics. There is a lack of long-term strategies for specific policies and of long-term targets. Strategies to meet energy efficiency targets are missing and the country lags in decarbonising the industry sector. While other industries have cut emissions by 40% since 1990, the petroleum industry has increased to current levels almost 50% above those in 1990.

The experts' strongest criticism regards Norway's oil and gas exploration and exports. The country continues to expand oil and gas extraction, including in the Arctic. There is no phase-out plan for oil and gas extraction.

The experts demand a just transition away from oil and gas extraction in Norway. Despite the country's *high* ranking in the CCPI, Norway is among the 20 countries with the largest developed oil and gas reserves. It also plans to increase its gas production by over 5% by 2030. This is incompatible with the 1.5°C target.

An additional topic the experts raised is a Norwegian Supreme Court rule that decided two wind power fields built in the Trøndelag region violate the indigenous rights of the Sámi people and the livelihoods of the local reindeer herders. Mining waste dumping in fjords is also affecting Sámi rights.

United Kingdom

11 | 7

The United Kingdom falls four spots but still ranks 11th in this year's CCPI edition, placing it among the *high* performers.

The UK earns a *medium* in the Renewable Energy and Climate Policy categories and *high* ratings in GHG Emissions and Energy Use.

The UK government is committing to phasing out coal power by 2024. The country plans to double its use of renewables within 15 years. There is also a mandate to end the sale of new petrol- and diesel-powered vehicles by 2030. The CCPI experts see these commitments as key climate policy strengths. The experts, however, criticise the UK for its lack of a policy framework to phase out oil and gas extraction. The government continues to use fossil fuel subsidies, despite the call in the COP27 Glasgow Climate Pact to phase them out for their inefficiency.

After Norway, the UK is Europe's second-largest oil and gas producer. The main demands the experts express were to end fossil fuel extraction, push for more energy efficiency in buildings, electrify heating and transport, and scale-up renewables.

The UK has taken the lead in international climate policy in some areas and helped launch many international pledges as president at COP27. The experts welcome the lead the country has taken. However, they note that there has been little follow up regarding these pledges. The country's commitment to reach net zero by 2050 has been criticised and the experts suggested 2045 or earlier for a new net-zero target (Scotland has committed to 2045).

Philippines

12 | 23

The Philippines rises 11 places to 12th in this year's CCPI and is now among the high-performing countries.

The country's performance is mixed across the four main CCPI categories: a *high* rating in GHG Emissions and Energy Use, *medium* in Renewable Energy, and *low* in Climate Policy. The Philippines performs very well in the current level indicators of the GHG Emissions and Energy Use categories, with relatively low per capita emissions of 2.29 tCO_2eq, receiving a *very high* rating.

While the Philippines rated *very low* in the trend indicators in the GHG Emissions and Energy Use categories in last year's edition, this year saw a slight improvement to *low*.

The Philippines receives a *low* rating in the national climate policy indicator, while the CCPI experts note numerous policies for emissions reduction in place, such as the Renewable Energy Act and Energy Efficiency and Conservation Act. In its Nationally Determined Contribution (NDC) submitted in April 2021, the Philippines also committed to reducing GHG emissions by 75% by 2030 compared with 2010 levels. However, the experts criticise inconsistency among existing policies along with a lack of implementation. Though there is a moratorium on coal plant development, already approved coal plants are still being built.

The new government under President Ferdinand "Bongbong" R. Marcos, Jr. plans to expand natural gas and encourages a shift to fossil gas. The experts therefore demand stronger implementation of the abovementioned policies to reduce GHG emissions, as well as a clear net-zero target.

The Philippines also must commit to a genuine just energy transition with a strict coal phase-out, eliminate natural gas expansion, and expand renewable energy. Additionally, policies encouraging fossil fuel divestment and increased ambition in renewable energy targets are needed.

Netherlands

13 | 19

The Netherlands' CCPI ranking continues to rise, now up six places to 13th.

This puts it among the high-performing countries. While the Netherlands receives a *high* rating in the Renewable Energy and Climate Policy categories, its performance in GHG Emissions and Energy Use earn a *medium*.

The Netherlands generally performs well in the trend indicators, and this time receives a *very high* rating in the renewable energy current trend indicator as well as a *high* in the GHG emissions current trend indicator.

In the national climate policy indicator, the country receives a *medium* rating. The CCPI experts note the presence of strong policies to increase deployment of renewable energy, primarily of offshore wind (in the North Sea region). An increase in the share of renewable energy in energy use is expected thanks to policies promoting offshore wind.

While natural gas extraction in the Groningen gas field was halted because of a risk of induced earthquakes, the Netherlands still supports offshore oil and gas production and plans to replace domestically produced fossil gas with imports.

As a large agricultural product producer, the Netherlands needs policies to reduce agricultural sector emissions, primarily policies to reduce livestock.

Germany

16 | 13

Germany remains a relatively *high* performer in this year's CCPI, despite a three-spot drop from last year, to 16th.

In contrast with last year, Germany receives a *high* rating in the GHG Emissions category. In Renewable Energy, Energy Use, and Climate Policy, it receives a *medium*. The slowed expansion of renewables until 2020 and the high rebound of emissions in the transport sector in 2021 are the main reasons for the overall lower ranking. At the same time, Germany rises seven ranks in the Climate Policy category caused by the improvements the new government has implemented over the past year, getting Germany back on track. The CCPI experts welcome the new laws under the "Easter Package" that the federal government adopted in spring 2022.

The newly elected government has been in place for about a year and has implemented some positive climate policy measures. Notably, expansion of renewable energy can again pick up speed. Germany has specific yearly reduction targets for its GHG emissions, but the CCPI experts criticise that the recent energy crisis has shown these policies are not robust enough as Germany has plans to invest in alternative fossil fuel sources and new LNG infrastructure to compensate the lack of Russian gas.

The experts criticise Germany's reaction to the energy crisis by turning to countries such as Senegal to develop new gas reserves and Colombia to mine additional coal. The experts demand government policies to phase out all fossil fuels faster, stop fossil fuel subsidies and push more towards implementing renewable energy. Germany has adopted a legislated coal phase-out by 2038 and the new government announced in the coalition agreement its intention to bring forward the coal phase-out to 2030. Yet it remains among the nine countries responsible for 90% of global coal production. This is incompatible with the 1.5°C target.

In agriculture, animal production and farming on peat soils are the main emitters. The government recently released a strategy to re-wet peatland currently used as grassland and arable land. The CCPI experts note that, at the same time, there is no plan in place to reduce the high animal numbers and those current actions to re-wet peatlands are not yet sufficient. The common agriculture policy was under revision, but the CCPI experts criticise the lack of significant progress.

Transportation is still the sector with the least emissions reduction in Germany. The experts demand stronger regulations, the phase-out of fossil fuel cars, highway speed limits, and more support for the public transportation system.

Germany is a progressive player in climate negotiations, and it receives a *high* rating in the international climate policy indicator. Still, the CCPI experts wish the country would take an even more ambitious role in climate policy and establish the climate foreign policy concept promised by the new foreign minister.

EU

19 | 22

The European Union rises three places to 19th in this year's CCPI, achieving an overall *medium* rating and landing within the top 20.

The EU receives a *medium* rating in the GHG Emissions, Renewable Energy, and Energy Use categories. In Climate Policy, it receives a *high*, reflecting the progress the supranational union has made in this category since a year before.

The EU is updating its 2030 climate and energy policy framework considering its Nationally Determined Contributions (NDCs) to reach a 55% net emissions reduction by 2030 and climate neutrality by 2050. Negotiations between European Council and European Parliament are underway within the "Fit For 55 package" and are expected to conclude in late 2022 or early 2023.

The CCPI experts noted that foreseen ambition levels remain inconsistent with the 1.5°C goal of the Paris Agreement. Also, to contribute a fair share to achieving the Paris Agreement objectives, the EU should cut emissions by at least 65% by 2030 and become climate-neutral by 2040.

During the recent energy crisis resulting from factors such as drastically reducing Russian natural gas imports because of the invasion of Ukraine, the EU has looked inter alia towards Africa and other areas for securing new fossil gas supplies and developing new gas/hydrogen infrastructure (pipelines, LNG).

The CCPI experts highlight that the EU's diversification strategy towards new gas supplies and infrastructure should by no means be financed by public funding sources in order to not lock in additional emissions for decades to come. Such sources need to be channelled only to deployment of renewable energy and energy savings. The experts demand that the EU ensure that current emergency measures and diversification strategy do not hamper the long-term decarbonisation targets.

Egypt

20 21

Egypt rises one spot to 20th in this year's CCPI, with an overall *medium* rating.

The country receives mixed ratings in the four main CCPI categories. It rates *high* in GHG Emissions and Energy Use, and *medium* in Climate Policy, but *very low* in Renewable Energy.

Egypt submitted its first Nationally Determined Contribution (NDC) update in July 2022. According to the Climate Action Tracker, however, the new NDC only includes emissions reduction targets for the electricity, transport, oil, and gas sectors. These account for 42% of Egypt's emissions (as of 2015). The CCPI experts also condemn the NDC update's lack of transparency. As Egypt did not communicate its business-as-usual pathway, the overall emissions level resulting from the NDC is unclear and difficult to quantify.

Egypt plans to expand fossil gas operations. It is encouraging expansion of gas in Egypt and in other African countries and striving to become a gas hub (risking locking-in of emissions). The CCPI experts, however, note that Egypt is open to dialogue on increasing ambition in a clean energy transition and willing to increase efforts upon receiving adequate climate finance.

The experts welcome green energy and green hydrogen projects that are ready to receive finance. They also welcome the emerging partnership between the European Union and Egypt on renewable energy, green hydrogen, energy efficiency, and – for a limited period – fossil gas, emphasising that less economically developed countries' demands can be met without threatening the Paris Agreement.

Egypt is the host of COP27, prioritising climate finance and climate adaptation. The CCPI experts welcome the increase in overall awareness of environmental and climate issues owing to COP27's taking place in Egypt. Yet civil society participation is noted to be difficult (with human rights organisations reporting repression and harassment of environmental activists and groups working in Egypt).[17,18]

Spain

23 34

Spain rises 11 spots to 23rd in this year's CCPI edition, and is an overall medium performer.

Spain receives *medium* ratings across all four main CCPI categories: Climate Policy, Renewable Energy, Energy Use, and GHG Emissions.

In 2021, Spain adopted the Climate Change and Energy Transition Law, which commits the country to, by 2030, cutting emissions by 23% compared with 1990 levels. The law includes the target of increasing the share of renewables in energy end-use by 42% by 2030.

The CCPI country experts criticise the absence of a governmental commitment to phasing out fossil fuel subsidies. The experts demand that Spain include civil society participation in renewable energy projects for a just energy transition in the country.

Indonesia

26 27

Indonesia rises one rank to 26th in this year's CCPI, receiving an overall *medium* rating.

The country earns a *high* in the Renewable Energy category, *medium* in Energy Use and Climate Policy, and *low* in GHG Emissions.

Indonesia submitted an updated Nationally Determined Contribution (NDC) in September 2022. However, the CCPI experts criticise its lack of ambition and note that the Indonesian government stated the NDC update is only provisional until the next NDC update in 2024.

Presidential Regulation 112 on renewable energy, covering the topic of energy transition, was also enacted in September 2022. This includes a commitment to stop building new coal-fired power plants, except for projects approved before 2022. It also includes a roadmap for speeding up coal retirement and a coal phase-out by 2050. The regulation could serve as much-needed legal basis for future acceleration of energy transformation.

The CCPI experts welcome the plans to phase out coal, along with a new target aiming to achieve 23% renewable energy use by 2025. Yet the experts also note there is no detailed plan for the coal phase-out, and criticise a gap between regulations and their implementation. Indonesia is among the nine countries responsible for 90% of global coal production. This is incompatible with the 1.5°C target.

Moreover, there is a new forestry and other land use target that aims to achieve net carbon sequestration through the forestry and land use sector by 2030. A cut in the annual deforestation quota, however, is needed.

Indonesia needs to enhance its currently insufficient NDC to make it 1.5°C-compatible. Regulations to incentivise renewable energy and a clear roadmap to achieve the targets are also needed.

Colombia

27 25

Colombia ranks 27th in this year's CCPI, dropping two places from the previous year.

Colombia shows a mixed performance across the CCPI categories, with a *high* in Energy Use, *medium* for GHG Emissions and Climate Policy, and *low* for Renewable Energy. All these ratings are the same as last year.

While Colombia generally performs well in the indicators measuring the current levels, with a *high* for the GHG per Capita indicator (and a *very high* for the Energy Use per Capita indicator), the country performs considerably worse in the indicators for future targets.

Gustavo Petro was elected as Colombia's new president in May 2022. Petro said he wanted to end new fossil fuel exploration, phase out fossil fuel use, and protect the Amazon rainforest. In his manifesto, he promised a shift from an extractive, fossil-based economy to a diversified economy based on renewable energy.

Colombia is the country with the most deaths of environmental defenders (according to Global Witness), and environmental activists hope for greater safety after the change of government, considering the new vice president Francia Marquez is an environmental activist.

The CCPI experts welcome the increased political interest in climate change after the government change, as well as new regulations, but they criticise inefficiency in the information, monitoring, and evaluation system.

France

28 17

France plunged 11 spots in this year's CCPI, ranking 28th and with an overall *medium* rating.

The country receives mixed ratings in the four main CCPI categories. Its performance in GHG Emissions, Energy Use, and Climate Policy rate a *medium*. However, it receives a *low* for Renewable Energy, with a *very low* rating in the share of renewable energy compared with a well-below-2°C trajectory (and only a 9.67% share of renewable energy).

The CCPI experts note improvement in the transport sector, with investment in climate-friendly mobility (cycling and rail). However, they criticise continued subsidies for aviation and insufficient investment in public transport. Moreover, in the renewable energy sector, the CCPI experts condemn the lack of implementation, owing to a strong dependence on nuclear energy. The French government defends nuclear energy instead of supporting renewables. It already has a low target for renewable energy, which is worsened by slow implementation with a lack of political will.

While the share of renewables has grown in recent years (with the 5-year trend for its share in energy supply rated high), the experts argued that more could be done to support them. Thus, France receives its *low* in the Renewable Energy category.

The experts welcome the recent commitment to stop funding new oil and coal projects, but note the absence of commitments regarding gas funding.

France continues to play an important role in international climate policy (rated *medium* this year for that indicator). At the EU level, France pushes for nuclear energy. France also blocks international climate finance, predominantly regarding loss and damage.

To become aligned with a well-below-2°C trajectory, France needs to increase the share of renewable energy, doing more to support it. More investment in public transport and a stop of subsidies for aviation are also needed. France should push for support of ecological agriculture at the EU level and increase climate finance for adaptation and loss and damage.

New Zealand

33 35

New Zealand rises two places in this year's CCPI to 33rd, putting it among the medium-performing countries.

The country shows a mixed performance across the CCPI categories, with a *low* rating in Energy Use, *very low* in GHG Emissions, *medium* in Climate Policy, and *high* in Renewable Energy.

New Zealand has a legislated Zero Carbon Act, which includes a commitment to the 1.5°C target as well as a net-zero emissions target and yearly emissions budgets. There is also an accompanying Emissions Reduction Plan and an Emissions Trading Scheme (ETS).

Despite the above, the CCPI experts criticise that these pieces of legislation are not 1.5°C-compatible (despite the commitment to the 1.5°C target) and lack important details. And although agricultural sector emissions (including methane and nitrogen dioxide [NO_2]) account for 50% of New Zealand's overall GHG emissions, the agricultural sector is not included in the ETS and does not face any regulations. This exclusion is another major point of criticism from the experts.

The experts welcome a ban on new offshore oil and gas exploration, as well as a target of 100% renewable electricity by 2035 (with already a relatively high 43% share of renewables in energy use), but they note that coal mining and onshore oil and gas exploration remain unrestricted. They also criticise a lack of policies to incentivise deployment of new renewables, noting that the high share of renewables mainly owes to hydroelectric power plants, which were built in the last century and dominate the electricity sector.

Additionally, the experts emphasise that electricity only makes up 4% of New Zealand's overall GHG emissions, leading to the 100% renewable electricity commitment only having limited effects on overall emissions.

To become aligned with a well-below-2°C trajectory, New Zealand needs to include the agricultural sector in the ETS and implement policies to reduce agricultural emissions, along with banning synthetic nitrogen fertiliser.

Brazil

38 33

Brazil ranks 38th this year's CCPI, dropping five places from last year's CCPI and from an overall *medium* to a low rating.

The country shows a mixed performance across the CCPI categories, with a *high* rating for Renewable Energy and Energy Use but *low* for GHG Emissions and *very low* for Climate Policy.

Institutions that play a major role in environmental policy have suffered attacks and funding cuts from the federal government since the president entered office in 2019. The CCPI experts are worried about current trends to expand Brazil's fossil fuel use, which has intensified since the energy crisis emerged, caused by the aggressive Russian war against Ukraine. Brazil is among the 20 countries with the largest developed oil reserves. It also plans to increase its gas and coal production by over 5% by 2030. This is incompatible with the 1.5°C target.

While Brazil has a goal of zero illegal deforestation by 2028, deforestation has, in fact, risen to a record high since 2006, along with wildfires in the Amazon and tropical savanna (Cerrado) biomes, under the current federal government. Existing policies in the country are often underfunded and poorly enforced. The CCPI experts criticise the current government's reversal of achievements in environmental laws and regulation.

Brazil was able to increase its share of renewables, such as by rapid growth of wind energy, as well as solar energy, though at a slower pace. The CCPI experts note that this outcome has actually come with human rights violations against local people and Indigenous groups. Brazil is also highly reliant on hydro power, which is vulnerable to droughts and the risk of increased use of fossil electricity. This happened in 2021 through the beginning of 2022 due to a 91-year record-breaking drought in the country's central-western and south-eastern regions.

It is expected that the newly elected President Lula will increase the country's climate policy ambition. Protecting the Amazon and phasing out fossil fuel production are key measures in this respect.

South Africa

44 39

South Africa falls five spots to 44th in this year's CCPI, with an overall *low* rating.

The country receives mixed ratings across the four main CCPI categories: *very low* in Renewable Energy, *low* in GHG Emissions and Climate Policy, but *high* in Energy Use.

A Just Energy Transition Partnership (JETP) was announced at COP26 held in Glasgow in 2021. This partnership between South Africa, the United States, United Kingdom, France, Germany, and the European Union aims to decommission coal-fired power plants in South Africa. The partnership has USD8.5 billion in funding.

The CCPI country experts welcome JETP and other ongoing projects in South Africa, but they criticise that sparse details are made publicly available. The experts demand that JETP be implemented in a just way, without leaving anyone behind.

The experts also welcome the Presidential Climate Commission. South Africa's President Cyril Ramaphosa established the Commission in September 2020 to oversee and facilitate a just and equitable transition towards a low-emission, climate-resilient economy.

Though the experts note the new policies in place to accelerate climate action, they criticise the government's fossil fuel subsidies and support for fossil fuel. South Africa is among the nine countries responsible for 90% of global coal production. This is incompatible with the 1.5°C target. Overall, the experts demand a clear fossil fuel phase-out plan, more climate finance, and a just energy transition.

Japan

50 45

Japan falls five places to 50th in this year's CCPI, giving it a *low* overall rating.

Japan receives a *very low* in the GHG Emissions and Renewable Energy categories, but a *medium* for Energy Use. All three ratings are the same as last year's, but the country falls to a *very low* in Climate Policy.

Japan is aiming for carbon neutrality by 2050 and a 46% emissions reduction by 2030. While the CCPI expert welcome this development, they criticise that the absence of a clear plan for delivering these goals is an issue, with few concrete policies in place for meeting either target.

Overall, the CCPI experts see Japan's targets as insufficient. Japan lacks a phase-out for coal power production, lacks effective carbon pricing and a robust renewable energy development plan.

Japan's international climate policy rates *very low*. The CCPI experts note that Japan has blocked discussions over decarbonised power systems and decarbonised transport in the G7 process. Similarly, Japan's national climate policy receives only a *low* rating and the CCPI experts note the need to improve climate-related policies.

China

51 38

China falls 13 places to 51st in this year's CCPI and receives an overall *very low* rating.

In the GHG Emissions and Energy Use categories, the country ranks *very low*. However, because of its strong renewable energy development over the past years, China

rates *high* in the Renewable Energy category. For Climate Policy, it receives a *medium*.

China has committed to its carbon emissions peaking by 2030 and the country's achieving carbon neutrality by 2060. The CCPI experts note that the government's strategies are focused on the medium-term goal of peaking carbon and its long-term policies are not concrete enough. Still, current China's GHG per capita and 2030 target are not aligned with a well-below-2°C trajectory.

China has shown strong development in renewable energy on the one hand, but invested in new coal power plants on the other. It is among the 20 countries with the largest developed oil and gas reserves. It is also among the nine countries responsible for 90% of global coal production. Additionally, China plans to increase its gas and coal production by over 5% by 2030 (compared with 2019 levels). This is incompatible with the 1.5°C target. The CCPI experts criticise this reliance on coal and other fossil fuels and demand that the country focus on decarbonising the power sector.

China's international climate policy rates a *medium*, as the country will ban overseas coal projects. Yet at the same time, its planning of new domestic coal plants undermines this policy.

Engagement between China and the United States remain crucial for the success of the COP, and the complex trade and geopolitical relationships of the countries endanger effective progress in tackling the climate crisis.

United States

52 55

The United States rises three ranks to 52nd, still an overall *very low*, in the latest CCPI.

The US receives a *very low* in the GHG Emissions, Renewable Energy, and Energy Use categories, though rates a *medium* in Climate Policy.

The US under the Biden administration has announced many new targets and policies for climate action. As part of the Infrastructure Investment and Jobs Act, $90 billion will be spent on public transport, $21 billion on environmental projects, $7.5 billion on electric vehicles, and $65 billion on power infrastructure, including the electrical grid's adjustment to renewable energy.

The US has a net-zero target for 2050 and plans to phase out unabated coal plants by 2035. President Biden announced a new target of, by 2030, achieving a 50–52% emissions reduction from 2005 levels in GHG pollution. And the administration plans to plant 2.5 billion trees.

Overall, the CCPI country experts welcome the US government's new commitments. They note the obstructing role the Republican opposition plays in climate politics. However, the experts criticise that some policies lack a mandatory character, and implementation will not be quick enough. The main shortcoming described is that the US will not halt domestic fossil fuel extraction, and there are still fossil fuel subsidies in place.

The US is among the 20 countries with the largest developed oil and gas reserves. It is also among the nine countries responsible for 90% of global coal production. Additionally, the US plans to increase its gas and coal production by more than 5% by 2030. This is not compatible with the 1.5°C target.

The main demands the experts expressed are to phase out fossil fuel subsidies and extraction quickly and to increase renewable energy.

In international climate policy, the US is playing an important role in launching and supporting important international climate partnerships (such as the Global Methane Pledge and Just Energy Transition Partnership).

Poland

54 52

Poland ranks 54th in this year's CCPI down two spots and is an overall *very low* performer.

In the GHG Emissions and Climate Policy categories, Poland receives a *very low* and in the Renewable Energy and Energy Use categories a *low* rating.

Poland has no climate neutrality goal and is lacking policy instruments, which would effectively reduce GHG emissions in transport and buildings. Rather than being driven by Poland's own proactive initiative, European Union policies drive Poland's GHG reductions.

Poland plans to exit coal power production by 2049. The CCPI experts say this needs to be sooner to keep global warming within 2°C. Poland is among the nine countries responsible for 90% of global coal production. The war in Ukraine has also affected Poland's gas supply, as Poland has relied heavily on Russian gas. At the same time, Poland opened its Baltic pipe in September. The CCPI experts express concern about Poland's plans to increase reliance on fossil gas, often described in the official documents as low-emission fuel.

Energy security issues – first energy security then climate policy – currently determine political and public discussion in Poland. Although the Polish government has approved a draft law on onshore wind energy to amend the 10H Act, this is not yet discussed in the Parliament. Also, a new renewable energy target and an update of the Polish Energy Policy for 2040 were announced, but neither has been published as an official document.

The CCPI experts criticise that all current measures and policy to tackle the energy crisis have a strong focus on fossil fuels rather than renewable energy sources and energy efficiency. They also criticise that Poland is blocking the Fit for 55 package within the European Union. This is reflected in the *very low* rating Poland receives for its international climate policy.

Australia

55 59

Australia's ranking improves in this year's CCPI – up four places to 55th.

Despite the rise, it remains among the *very low* performing countries and trails many other developed economies. Australia's overall performance rates *very low*, as well as in the GHG Emissions, Renewable Energy, and Energy Use categories, and *low* for Climate Policy.

Australia's climate policies and performance have fluctuated in the wake of its federal election in May 2022. The Australian Labor Party took over the majority and its government promised more ambitious climate action. The Australian Parliament recently passed the country's Climate Change Bill 2022, legislating to, by 2030, reduce GHG emissions by 43% vs 2005 levels (up from the previous 26–28%) and to reach net zero by 2050.

Australia has also formally strengthened its Nationally Determined Contribution (NDC) with these targets. While the CCPI experts acknowledge the improvement and welcome the updated NDC, they criticise the target's relative weakness. They note movement on measures for implementation related to industrial emissions, electric vehicle incentives, and energy use, as well as increased government consultation. However, much of this action is at an early stage, and the experts note that the final measures' effectiveness is still unclear. In addition, despite the lack of electric vehicle and energy efficiency programs, these are under discussion.

The Safeguard Mechanism, intended to play a key role in Australia's GHG emissions targets, is criticised as insufficient and covering only a small part of Australia's emissions.

The CCPI experts express concerns about continued fossil fuel exploration and extraction, and about continued subsidies for fossil fuel infrastructure and projects. As one of the world's largest LNG and coal exporters, Australia heavily subsidises the fossil fuel industry and has refused to limit fossil fuel production. It also has no policies or national plan on phasing out coal and gas mining. However, additional investment has been committed to support the growth of renewable energy and storage, including new transmission infrastructure.

Australia's developed gas reserves rank it among the world's top 20. The country is also among the nine countries responsible for 90% of global coal production and plans to increase coal and gas production by over 5% by 2030. The increase is not compatible with the global 1.5°C target.

Despite the above, Australia's international climate policy rating of *medium* has improved substantially compared with last year's *very low*. The CCPI experts note a commitment to improving engagement in international processes, including a bid to host a COP. The experts also emphasise that Australia is still not a member of climate initiatives such as the Global Methane Pledge or Powering Past Coal Alliance. Australia has failed to contribute its fair share of climate finance or even re-join the Green Climate Fund.

To align with a well-below-2°C trajectory, Australia must halt gas and coal mining for both domestic use and export, end fossil fuel subsidies, take further action to reduce GHG emissions from transport, and further increase its NDC ambition.

Canada

58 61

Canada rises three ranks in this year's CCPI to 58th and remains among the *very low* performers.

The country's performance rates *very low* overall, with *very low* in the GHG Emissions, Renewable Energy, and Energy Use categories, and *medium* for Climate Policy.

In March 2022, the Minister of Environment and Climate Change published the 2030 Emissions Reduction Plan. This is a policy roadmap for reducing GHG emissions by 40% by 2030 and reaching net zero by 2050. It covers all sectors of the economy. A regulation to cap emissions from oil and gas is also being developed.

While the CCPI experts welcome the Emissions Reduction Plan, they emphasise that the Plan and Canada's current Nationally Determined Contribution (NDC) were not 1.5°C-compatible and must be considerably strengthened.

Canada is among the 20 countries with the largest developed oil and gas reserves. It also plans to increase its gas and coal production by more than 5% by 2030. This is not compatible with the 1.5°C target. The CCPI experts criticise Canada's continuing fossil fuel subsidies and fossil fuel extraction. Despite commitments to eliminate fossil fuel subsidies, these subsidies continue because of a lack of implementation and a focus on insufficient/false solutions such as carbon capture and storage, as well as fossil-based hydrogen.

Moreover, while Canada is working to phase out coal, this commitment to phase out fossil fuel production and export does not extend to oil and gas. Yet oil and gas production continue at high levels.

To become aligned with a well-below-2°C trajectory, Canada must enhance its NDC and strengthen the Emissions Reduction Plan. In doing so, it should outline deadlines for most measures and strategies and provide a clearly defined pathway to achieve net zero by 2050.

The cap on all oil and gas sector emissions also must include an ambitious trajectory and be implemented swiftly. And fossil fuel production must decline significantly.

Russian Federation

59 56

Russia falls another three spots and is near the bottom of this year's CCPI at 59th – *very low* performance.

As in the last two years' CCPI, Russia receives a *very low* rating in the GHG Emissions, Renewable Energy, and Climate Policy categories. It also falls to a *very low* in Energy Use, down from last year's *low* rating.

Russia submitted its goal of, by 2030, reducing emissions to 25–30% of its 1990 levels. The CCPI experts note that since the start of the aggressive Russian war against Ukraine, it has become difficult to verify Russia's climate actions.

In 2020, Russia only received 3.06% of its energy from renewable sources, which is far less than most countries evaluated in this year's CCPI. The experts demand that Russia focus on real low-carbon development based on fossil fuel phase-out, ambitious renewable energy development, and energy efficiency measures, as well as a circular economy, sustainable forestry, and effective wildfire management.

Russia is among the 20 countries with the largest developed oil and gas reserves. It is also among the nine countries responsible for 90% of global coal production. Additionally, Russia plans to increase its gas and oil production by above 5% by 2030. This is incompatible with the 1.5°C target.

The CCPI experts criticise the Russian government's focus on replacing coal with gas instead of developing renewable energy, and that it ignores the urgency of the climate crisis.

Russia receives a *very low* for its international and national policy. In its war against Ukraine, Russia has undermined the global struggle to limit global warming to 1.5°C. The war has led to massive mobilisation of weapons, jets, tanks, and trucks by Russia and Ukraine, expelling large amounts of GHG emissions in the process. The energy crisis resulting from the war has weakened climate action worldwide, as countries are looking for new fossil fuel sources instead of pursuing climate action.

Korea

60 60

In this year's CCPI, the Republic of Korea (ROK; South Korea) remains at 60th place and remains a *very low* performer.

South Korea receives *very low* ratings across the GHG Emissions, Renewable Energy, and Energy Use categories and a *low* rating in Climate Policy.

In December 2021, South Korea submitted its updated Nationally Determined Contribution (NDC) target for 2030, aiming to reduce emissions by 40% below 2018 levels and achieve carbon neutrality by 2050.

The CCPI experts welcome this increase of GHG emission targets from 26.3% to 40%, but they criticise the government's plans to reduce the renewable energy target from 30% to only 21.5% by 2030. CCPI experts stress that South Korea must raise its climate ambitions by enhancing its 2030 renewable energy target to above 30% and phase out coal by 2030.

The CCPI experts note that complicated permit schemes and grid access challenges are already hindering the necessary expansion of renewable energy in South Korea. They also highlight that the current power market is structured to favour fossil fuels over renewable energy and enable the majority state-owned utility company KEPCO to continue fossil fuel subsidies. The CCPI experts stress that South Korea needs to not only return to its former target of 30% renewable energy by 2030 but also to increase its commitment. In its updated NDC, South Korea also included sections on improving sustainable forest management and maintaining forests. The CCPI experts note that environmental groups in the country have condemned the South Korea Forest Service's plans to log older trees and replant with new trees to increase carbon absorption.

South Korea's natural gas subsidies and overseas gas field projects are expected to increase, at least over the short term, as the country has set aside funds for a new offshore gas project in Barossa, Australia in May 2022. Considering the need to eliminate fossil fuel reliance as soon as possible, the CCPI experts criticise this move by their government and demand that it discontinues its subsidies of national gas and overseas gas field projects.

Iran

63 62

The Islamic Republic of Iran falls one spot from 62nd to 63rd, placing it last in this year's CCPI rankings.

Iran receives a *very low* in the GHG Emissions, Renewable Energy, and Energy Use categories, and a *low* in Climate Policy. Collectively, this makes Iran's overall performance *very low*. Compared with the previous year, Iran was able to improve its development of renewable energy, where it already rated a *medium* last year and now receives a *high*. Still, this is the only indicator for which the country was rated higher than a *low*, which suggest the wide range of areas in need of improvement.

Iran is one of the world's few countries that has not yet ratified the Paris Agreement. This contributes to the *very low* rating it receives for its international climate policy. The CCPI experts urge ratification, along with the formulation of a more ambitious Nationally Determined Contribution (NDC) than the current one.

Iran is among the world's 20 countries with the largest developed oil and gas reserves. This reality is not compatible with the 1.5°C target.

➔ More country texts can be found at:
www.ccpi.org/countries

4. About the CCPI

Country coverage: covering more than 90% of global GHG emissions

On the basis of standardised criteria, the CCPI currently evaluates and compares the climate protection performance of 59 countries and of the European Union (EU), which are together responsible for more than 90% of global greenhouse gas (GHG) emissions.

Methodological approach and data sources

The CCPI assesses countries' performance in four categories:

"GHG Emissions" (40% of overall score),

"Renewable Energy" (20% of overall score),

"Energy Use" (20% of overall score) and

"Climate Policy" (20% of overall score).

Aiming to provide a comprehensive and balanced evaluation of the diverse countries evaluated, a total of 14 indicators are taken into account (see figure below). Around 80% of the assessment of countries' performance is based on quantitative data taken from the International Energy Agency (IEA), PRIMAP, the Food and Agriculture Organization (FAO) and the national GHG inventories (submitted to the UNFCCC). The categories "GHG Emissions", "Renewable Energy" and "Energy Use" are each defined by four indicators: (1) Current Level; (2) Past Trend;[19] (3) well-below 2°C Compatibility of the Current Level; and (4) well-below 2°C Compatibility of the Countries' 2030 Target. The remaining 20% of the assessment is based on the globally unique climate policy section of the CCPI. The index category "Climate Policy" considers the fact that climate protection measures taken by governments often take several years to have an effect on the emissions, renewable energy and energy use indicators. This category thereby covers the most recent developments in national climate policy frameworks, which are otherwise not projected in the quantitative data. This category's indicators are (1) National Climate Policy and (2) International Climate Policy, and the qualitative data for these is assessed annually in a comprehensive research study. Its basis is the performance rating provided by climate and energy policy experts from non-governmental organisations (NGOs), universities and think tanks within the countries that are evaluated.[20]

Compatibility of countries' performance with well-below-2°C pathway and NDC analysis

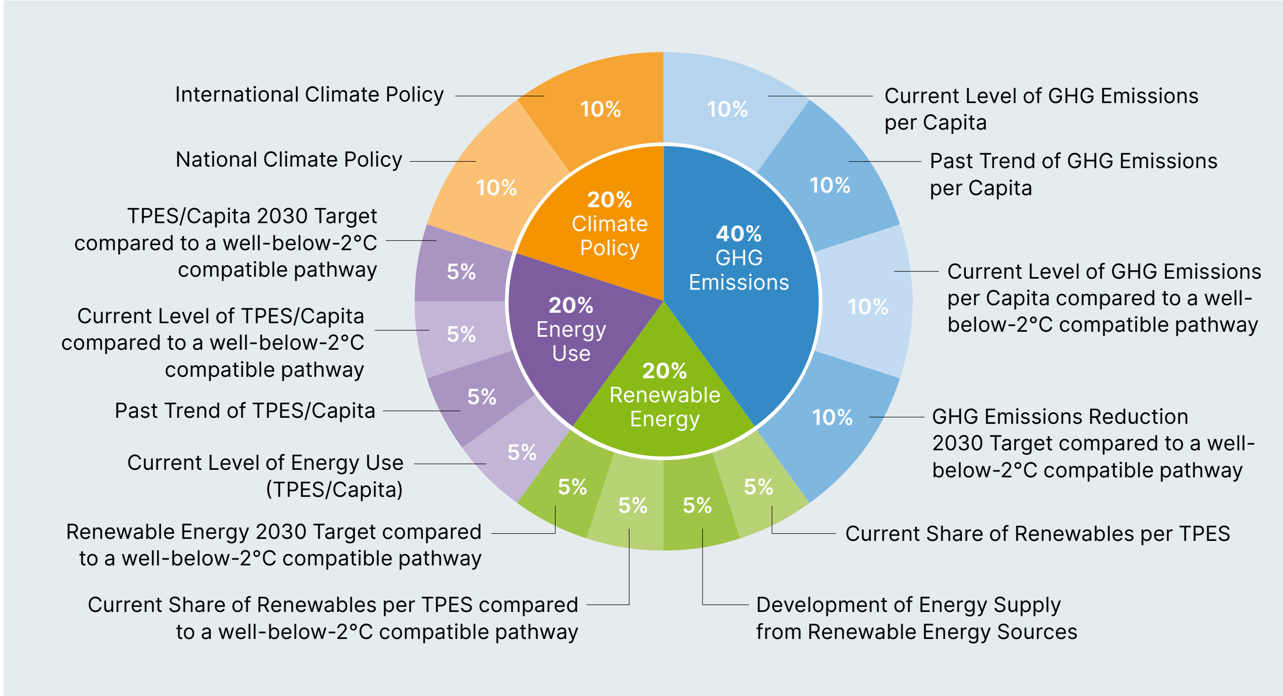
In 2017, the methodology of the CCPI was revised to fully incorporate the 2015 Paris Agreement, a milestone in international climate negotiations with the goal to limit global warming to well below 2°C or even to 1.5°C. Since then, the CCPI includes an assessment of the well-below 2°C compatibility of countries' current performances and their own targets (as formulated in their Nationally Determined Contributions, or NDCs). Within the quantitative index categories – "GHG Emissions", "Renewable Energy" and "Energy Use" – current performance and the respective 2030 target are evaluated in relation to their country-specific well-below-2°C pathway. For the well-below-2°C pathways, ambitious benchmarks are set for each category, guided by the long-term goals of the Paris Agreement. The three benchmarks are: nearly zero GHG emissions (taking into account country-specific pathways, which give developing countries more time to reach this goal); *100% energy from renewable sources*; and keeping to *today's average global energy use per capita levels and not increasing beyond*. The CCPI compares where countries actually are today with where they should be to meet the ambitious benchmarks. Following a similar logic, the CCPI evaluates the countries' own 2030 targets by comparing these to the same benchmarks.

Interpretation of results

In interpreting the results, it is important to note that the CCPI is calculated using production-based emissions only. Thereby the CCPI follows the currently prevailing method of accounting for national emissions and the logic that the nation producing the emissions is also the one held accountable for them. Further, it is important to note that more than half of the CCPI ranking indicators are qualified in relative terms (better/worse) rather than absolute. Therefore even those countries with high rankings have no reason to sit back and relax. On the contrary, the results illustrate that even if all countries were as committed as the current frontrunners, efforts would still not be sufficient to prevent dangerous climate change.

➔ More detailed information on the CCPI methodology and its calculation can be found in the "Background and Methodology" brochure, available for download at: **www.ccpi.org/methodology**

Components of the CCPI



GHG = Greenhouse Gases | TPES = Total Primary Energy Supply

Disclaimer on comparability to previous CCPI editions

The CCPI 2023 (for 59 selected countries and the EU) is based on the methodological design introduced in 2017 covering all greenhouse gas (GHG) emissions* and evaluates the 2030 targets and the well-below-2°C compatibility of countries' current levels and targets in the categories "GHG Emissions", "Renewable Energies" and "Energy Use". Therefore, there is only limited comparability between this year's results and versions of the index prior to the CCPI 2018. However, this year's results are comparable to the CCPI G20 Edition as well as to the CCPI 2018 to CCPI 2022. Please note that there have been slight methodological changes compared to the CCPI 2021. In the categories "GHG emissions" and "Energy Use" the 2030 target indicators are now calculated using an absolute difference to the 2°C-pathway rather than a relative difference.

Disclaimer on maps

The depictions of territorial boundaries on maps displayed in the CCPI do not imply a political opinion or judgement on the legal status of any state territory.
The state boundaries shown are aligned with the official stance of the United Nations (UN) on said matter. We apologise if any names used/borders depicted are in conflict with your national identity or your general beliefs. We would like to point out that the CCPI, focusing solely on the global goal of climate protection, in no way intends to spark geopolitical controversy.

Disclaimer on data

Due to data availabilty, past CCPI editions were calculated using data recorded two years prior. However, CCPI 2023 uses GHG Emissions data for 2021 (relying on numerical methods and linear extrapolation) in order to avoid 2020 COVID-19 related effects on emissions and to include rebounding emissions in 2021. The Renewable Energy and Energy Use categories are calculated with data recorded in 2020, as this is the most recent data available. Thus, CCPI 2023 is still heavily influenced by COVID-19.

Disclaimer on Ukraine

In this year's CCPI, Ukraine's climate performance was not assessed. This decision was due to the far-reaching impact of Russia's aggressive war against the country. The war has caused massive damage and destruction in the energy, industry, transport and construction sectors.

* All Kyoto gases (CO_2, CH_4, N_2O, HFKW, PFKW and SF_6) including the emissions coming from Land Use, Land Use Change and Forestry (LULUCF).

5. Endnotes

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19 The CCPI takes into account a five-year linear trend (for CCPI 2023, the period 2016–2021).

20 The survey for the CCPI 2023 was carried out between September and October 2022. The results therefore cover recent policy developments until mid of October.

Annex

List of contributors to the climate policy evaluation

About 450 climate and energy experts contributed to this year's edition of the Climate Change Performance Index with their evaluation of national climate policies and international climate policy performance. The following national experts agreed to be mentioned as contributors to the policy evaluation of this year's CCPI:

Country	Name	Organisation
Argentina	Roque Pedace	CANLA
Australia	Monica Richter	WWF
	Richie Merzian & Alia Armistead	The Australia Institute
	Dr John Iser & Dr Graeme McLeay	Doctors for the Environment Australia
	Andrew Petersen	Sustainable Business Australia
Austria		Forum Wissenschaft & Umwelt
	Karl Schellmann	WWF Austria
		Greenpeace Austria
Belarus	Dr Maria Falaleeva	EVRESCO
Belgium	Yelter Bollen	Bond Beter Leefmilieu
	Carine Thibaut	Greenpeace
	Koen Stuyck	WWF
Brazil	Marcio Astrini, Claudio Angelo & Stela Herschmann	Climate Observatory Executive Secretary
	Shigueo Watanabe Jr	Instituto Climainfo
	Carlos Nobre	University of Sao Paulo's Institute for Advanced Studies
	Tercio Ambrizzi	University of São Paulo
Bulgaria		Greenpeace CEE – Bulgaria
	Radostina Slavkova & Todor Todorov	Za Zemiata's
Canada	Mitchell Beer	The Energy Mix
	Teika Newton, Eddy Pérez & Caroline Brouillette	Climate Action Network - Réseau action climat Canada
	Stephen Thomas	David Suzuki Foundation
	Nate Wallace & Julia Levin	Environmental Defence Canada
	Michael Polanyi	Nature Canada
	André Bélisle	AQLPA
Chile	Sam Leiva	Fundación Territorios Colectivos
China	Wilson TANG	WWF China office
Chinese Taipei	Robin Winkler	Wild at Heart Legal Defense Association
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Croatia		Society for sustainable development design
Czech Republic	Karel Polanecký	Hnutí DUHA - Friends of the Earth Czech Republic
Denmark		Green Transition

Country	Name	Organisation
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	Dr Monica Hanna	The American University in Cairo
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	Oldag Caspar	Germanwatch
Finland		Finnish Innovation Fund Sitra
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	Manfred Treber & Kai Bergmann	Germanwatch
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	Nikos Mantzaris & Tassos Chatzieleftheriou	The Green Tank
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	Adam Harmat	WWF Hungary
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	Fabby Tumiwa	Institute for Essential Services Reform
	Satrio Swandiko Prillianto	
Italy	Mauro Albrizio	Legambiente
	Gianni Silvestrini	Kyoto Club
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	Yuri Okubo	Renewable Energy Institute
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	Jieon Lee	Korea Federation for Environmental Move-ments
Latvia	Lilija Apine & Janis Brizga	Green Liberty
Lithuania	Domantas Tracevičius	VšĮ 'Žiedinė ekonomik
Malaysia	Zelina Z. Ibrahim	Centre for Environment, Technology and Development
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	Dr Yossef Ben-Meir	High Atlas Foundation
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	Barradi Touria	Professor, expert & consultant

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	Nick Henry	Advocacy Coordinator, Oxfam Aotearoa & Member NZCAN
	Alva Feldmeier	350 Aotearoa
	David Tong	Oil Change International
		Greenpeace Aotearoa
	Simon Terry	Sustainability Council
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	Johan Hermstad Reinertsen & Embla Husby Jørgensen	The Future in our Hands (FIOH)
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	Laura Carvalho	Quercus ANCN
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Slovenia		Umanotera - The Slovenian Foundation for Sustainable Development
	Barbara Kvac	Focus Association for Sustainable Develop-ment
South Africa	Tina Schubert	Project 90 by 2030
	James Reeler, Prabhat Upadhyaya & Nokwethaba Makhanya	WWF South Africa
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Switzerland	Georg Klingler Heiligtag	Greenpeace Schweiz
Thailand	Tara Buakamsri - Country Director	Greenpeace Thailand
	Boonrod Yaowapruek	Creagy
Turkey	Özgür Gürbüz	Ekosfer Association
	Önder Algedik	Climate, Energy and Environment Reasearch Association
United Kingdom		CF Energy Research & Consulting UG
United States		CF Energy Research & Consulting UG
Vietnam	Lars Blume	GIZ Bangladesh

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Following the motto of *Observing. Analysing. Acting.* Germanwatch has been actively promoting global equity and livelihood preservation since 1991. We focus on the politics and economics of the Global North and their worldwide consequences. The situation of marginalised people in the Global South is the starting point for our work. Together with our members and supporters, and with other actors in civil society, we strive to serve as a strong lobbying force for sustainable development. We aim at our goals by advocating for prevention of dangerous climate change and its negative impacts, for guaranteeing food security, and for corporate compliance with human rights standards.

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www.newclimate.org

Climate Action Network

CAN members work to achieve this goal through information exchange and the coordinated development of NGO strategy on international, regional, and national climate issues. CAN has regional network hubs that coordinate these efforts around the world.

CAN members place a high priority on both a healthy environment and development that "meets the needs of the present without compromising the ability of future generations to meet their own needs" (Brundtland Commission). CAN's vision is to protect the atmosphere while allowing for sustainable and equitable development worldwide.

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