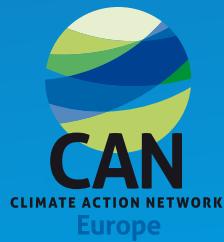


THE CLIMATE CHANGE PERFORMANCE INDEX

RESULTS 2013



index



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Foreword

Dear Reader,

Our world is characterized by fast moving geopolitical and natural changes and the scenarios drawn by climate change specialists are alarming: If we want to avoid dangerous climate change, and its ample consequences for creatures all over the world, it is necessary to take action right now. The awareness of the danger is growing and the Climate Change Performance Index (CCPI) keeps on working to bring it forward. Since 2005, the CCPI has been contributing to a clearer understanding of national and international climate policy. The various initial positions, interests and strategies of the numerous countries make it hard to distinguish their strengths and weaknesses. The CCPI is an important tool for that.

To demonstrate existing measures more accurately and to encourage steps towards effective climate policy, the CCPI methodology has this year been evaluated and improvements have been made. The integration of data on emissions from deforestation was one of the major steps in this process, made pos-

sible due to the arrival of the new FAO Global Forest Resource Assessment 2010. Alongside energy-based emissions, deforestation is another important source of anthropogenic CO₂. By including emissions from deforestation, we can now present a more complete view of man-made impacts on the world's climate.

The following publication is issued by Germanwatch and Climate Action Network Europe. However, only with the help of over 230 energy and climate experts from all over the world, we are able to include a review of each country's national and international policies, with respect to their efforts to avoid climate change. We greatly appreciate these experts, for taking the time and effort to contribute with their knowledge. Experts are representatives of NGOs working within their respective countries, fighting for the implementation of the climate policy that we desperately need.

Best regards,



Wendel Trio
 (Director of CAN-Europe)



Klaus Milke
 (Chairman of the Board, Germanwatch)

1. Key Results

This year's Climate Change Performance Index (CCPI) shows some interesting and worrying results:

- In 2010, the most recent data period for this year's CCPI, the world saw another record breaking increase in global CO₂ emissions. Not only have global emissions risen to another all time high, but this increase has also been the steepest emissions surge in history.
- Not only are emissions rising at the global level. As well at the national level is little good news to tell. Not one of the examined countries has managed to change to a development path that is compatible with limiting global warming substantially below 2 °C. No country's effort is deemed sufficient to prevent dangerous climate change. Therefore, as in the years before, we still cannot award any country with 1st, 2nd or 3rd place.
- The new inclusion of data on emissions from deforestation has a substantial effect on the rankings. Countries like Brazil and Indonesia, which make up a large share of global emissions from deforestation, rank somewhat lower than in the earlier versions of the CCPI. However, the recent global development remains dominated by the increase in fossil fuel consumption.
- Brazil used to be among the highest scoring countries in earlier editions of the CCPI. The reason for Brazil's dramatic drop is not only the inclusion of emissions from deforestation. Alongside a drop in the 'emissions indicator', Brazil scores substantially lower in the national policy evaluation.
- Denmark is this year's best performer and ranks 4th behind the top three empty positions. Their success is based on a positive development in recent emissions and an exceptionally good policy evaluation. A spot of bother remains. In the recent development of energy efficiency Denmark has lost ground on its competitors.
- Sweden, the leader in last year's index, ranks 5th in this year's CCPI edition. Still being the most efficient of the investigated countries, the recent development of emissions has not been as promising as in earlier years.
- Quite a surprise is the promotion of Portugal to the 6th rank. As a result of the global economic crisis, countries like Portugal, Spain, Italy, Ireland and Greece have substantially lowered their emissions in recent years. In contrast to its competitors, Portugal has managed to keep up with its climate policy and therefore deserves its place among the leading countries.
- Italy substantially improves its performance. Not only a decrease in emissions, but also a substantially better policy review in comparison with the old Berlusconi government, are the main reasons for Italy's improved position.
- Germany has lost some ground in this year's edition. German policy experts fear that the German 'Energiewende', the transition of the German energy supply to renewable energies, is starting to lag. However, the development of renewable energies is still promising, even more so than expected a few years ago. In the field of efficiency, however, Germany performs only around average and certainly far below its potential.
- One of the biggest winners of this year's CCPI is the USA. Starting from a poor emissions level, USA has shown a substantial decrease in emissions, both in relative and absolute terms. Two main drivers are accountable. Firstly, the economic crisis of 2008 and the following years made an important impact. Secondly, the United States has seen a major fuel shift from coal to unconventional gas sources. However, the climate effect of so-called 'shale gas' is not sufficiently reflected in the underlying data set of the IEA. Only direct CO₂ emissions from the combustion of shale gas are accounted for. Emissions from the process of conveyance at the borehole are ignored. The scoring of the United States should, therefore, be interpreted with caution.
- China ranks 54th, achieving a small improvement compared to last year. Although their emissions level continues to worsen, some hints of positive development can be observed. In the last year of its 11th 5-year plan, the People's Republic of China has managed to improve its efficiency scoring. Both CO₂ per Primary Energy and Primary Energy per GDP unit decreased slightly. The heavy investment in renewable energies in recent years is, however, not yet reflected in the data.
- India drops six places compared to last year. This is mainly due to increased emissions. The emissions level of India is still relatively low and the policy rating shows relatively good results.
- For the second year in a row the Netherlands drop dramatically in the ranking. However, the Netherlands recently had a change of government. Dutch experts reviewed the climate policy of the old government only and express their hopes that the new government can change this disappointing trend next year.
- Norway has, after Iceland, the 2nd highest share of renewable energies of total primary energy supply. Almost all of its electricity is produced from renewable energy sources. Despite that, Norway has dramatically increased its electricity and heat production from natural gas. The consequence is the 54th rank in the emissions development sub-category. Due to this, and a worsened policy rating, Norway has dropped 11 places and is now ranked 28th.
- In the policy category Australia has gradually improved and now ranks in the top ten. The decision to implement an emissions trading scheme and a positive attitude towards accepting a second commitment period of the Kyoto Protocol are highlighted by Australian policy experts.

■ Canada still shows no intentions to move forward on climate policy and thereby leave its place as the worst performer of all western countries.

■ The bottom three countries are Saudi Arabia, Iran and Kazakhstan. All of them are highly dependent on their oil and gas exports. The distance in terms of scores to the better performing countries remains large and was constant over the previous years. The only gleam of hope is Saudi Arabia's announcement to present a strategy to invest in renewable energies. This positive development is recognized by the CCPI, so that Saudi Arabia for the first time leaves last place in the policy category.

■ An inclusion of Qatar, this year's host of the COP, into the CCPI was not possible due to methodological problems. Qatar features the world's highest per capita emissions. Qatar's performance in the emissions category is even worse than Saudi Arabia's. An inclusion would have distorted the ranking of all other countries.

■ The European Union presents a mixed picture. While the top ten of the CCPI ranking is dominated by European countries, other countries such as the Netherlands and Poland perform considerably below average. Considering that the current EU emission target for 2020 is extremely unambitious, the top-ranking position of EU countries will be at risk during the next few years. Some countries have also 'benefited' from economic crises – which is not the kind of climate policy we want to see.

■ All in all, the development of renewable energies is promising. Not only Germany but also China and the United States have invested heavily in wind and solar energy over the last few years. As the latest available data on renewable energy production is from 2010, most of these investments are not yet reflected in the CCPI. On the other hand, uncertainty about the future development of renewable energy is even higher than last year.

2. About the CCPI

The Climate Change Performance Index is an instrument designed to enhance transparency in international climate politics. Its aim is to put political and social pressure on those countries which have, up until now, failed to take ambitious action on climate protection. It also aims to highlight those countries with best-practice climate policies.

On the basis of standardised criteria, the index evaluates and compares the climate protection performance of 58 countries that are, together, responsible for more than 90 percent of global energy-related CO₂ emissions. After 7 years of publication, the CCPI has, this year, been thoroughly evaluated. This evaluation has had two major outcomes. Now, for the first time, it has been possible to include emissions from deforestation, albeit not at the same quality of data as energy-related emissions.¹ The second achievement is a new structure and weighting of the individual indicators with a much stronger focus on renewable energy and efficiency as the most prominent mitigation strategies.

The revised methodology is still primarily centred around objective indicators. Thereby, 80% of the evaluation is based on indicators of emissions (30% for emissions levels and 30% for recent development of emissions), efficiency (5% level of efficiency and 5% recent development in efficiency) and renewable energy (8% recent development and 2% share of total primary energy supply).² The remaining 20% of the CCPI evaluation is based on national and international climate policy assessments by more than 230 experts

from the respective countries. An example of the methodology of the CCPI can be found under section 5 "Country Comparison" and extensive explanations are available in "The Climate Change Performance Index: Background and Methodology".³

The average scores for national and international policies are weak. Most experts are not satisfied by far with the efforts of their governments with regard to the 2 °C limit.

The CCPI ranking is qualified in relative terms (better – worse) rather than absolute terms (good – bad). 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 involved as the current front runners, efforts would still be insufficient to prevent dangerous climate change.

Hence, again this year, no country was awarded the rank of 1st, 2nd or 3rd. The poor performance of the majority of the ten largest CO₂ emitters (Table 2) is particularly alarming. These countries account for more than 60 percent of global CO₂ emissions. Therefore, their willingness and ability to pursue sustainable climate policy is prerequisite in avoiding highly dangerous levels of climate change. However, the latest emissions trend data shows that not one of these countries has started sufficiently decoupling growth in CO₂ emissions from GDP growth.⁴

¹ Data used in the CCPI includes only CO₂ emissions from living biomass. Emissions from soils and deadwood are not accounted for. Furthermore, the data from the FAO Global Forest Resources Assessment is only updated every 5 years.

² Regarding the emissions trends, the CCPI 2013 compares the time period between 2005 and 2010. For the emissions level, data from the last three years with available data (2008 to 2010) is taken into account.

³ www.germanwatch.org/en/ccpi

⁴ PWC: Counting the cost of carbon: Low carbon economy index 2011, www.pwc.com/gx/en/low-carbon-economy-index

3.1 Overall Results • Climate Change Performance Index 2013

CLIMATE CHANGE
PERFORMANCE
index
2013

Table 1:

Rank	Country	Score**
1*	-	
2*	-	
3*	-	
4	▲ Denmark	72.61
5	- Sweden	69.37
6	▲ Portugal	67.81
7	▲ Switzerland	67.61
8	▼ Germany	67.54
9	▲ Ireland	67.48
10	▼ United Kingdom	67.33
11	▲ Malta	67.07
12	▲ Hungary	66.41
13	▼ Belgium	65.20
14	▼ Mexico	64.91
15	- France	64.74
16	▼ Slovak Republic	64.64
17	▲ Iceland	64.16
18	▲ Romania	62.67
19	▲ Ukraine	62.22
20	▼ Morocco	62.01
21	▲ Italy	61.26
22	▲ Slovenia	60.98
23	- Cyprus	60.94
24	▼ India	60.77
25	▲ Lithuania	60.23
26	▲ Luxembourg	59.56
27	▲ Spain	59.18
28	▲ Czech Republic	59.13
29	▼ Egypt	59.04
30	▼ Latvia	58.63
31	▼ Norway	58.38

comparison with previous year, using the revised methodology

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Rank	Country	Score**
32	▼ Thailand	58.32
33	▼ Brazil	58.20
34	▼ Austria	58.09
35	▼ Belarus	57.98
36	▼ Indonesia	57.07
37	- South Africa	56.70
38	▼ Finland	56.58
39	▲ Croatia	56.37
40	▲ Australia	55.39
41	- New Zealand	54.48
42	▲ Bulgaria	54.27
43	▲ United States	53.51
44	▲ Poland	52.47
45	▲ Estonia	52.45
46	▼ Algeria	52.34
47	▼ Japan	52.10
48	▼ Greece	52.04
49	▼ Netherlands	50.28
50	▲ Argentina	49.97
51	▼ Korea	49.93
52	▼ Chinese Taipei	49.40
53	- Singapore	49.13
54	▲ China	49.03
55	▲ Malaysia	47.53
56	▼ Russian Federation	46.65
57	▲ Turkey	46.60
58	▼ Canada	45.16
59	- Kazakhstan	39.96
60	- Islamic Rep. of Iran	35.81
61	- Saudi Arabia	26.90

comparison with previous year, using the revised methodology

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Index Categories

- █ Emissions Level (30% weighting)
- █ Emissions Development (30% weighting)
- █ Renewable Energy (10% weighting)
- █ Efficiency (10% weighting)
- █ Policy (20% weighting)

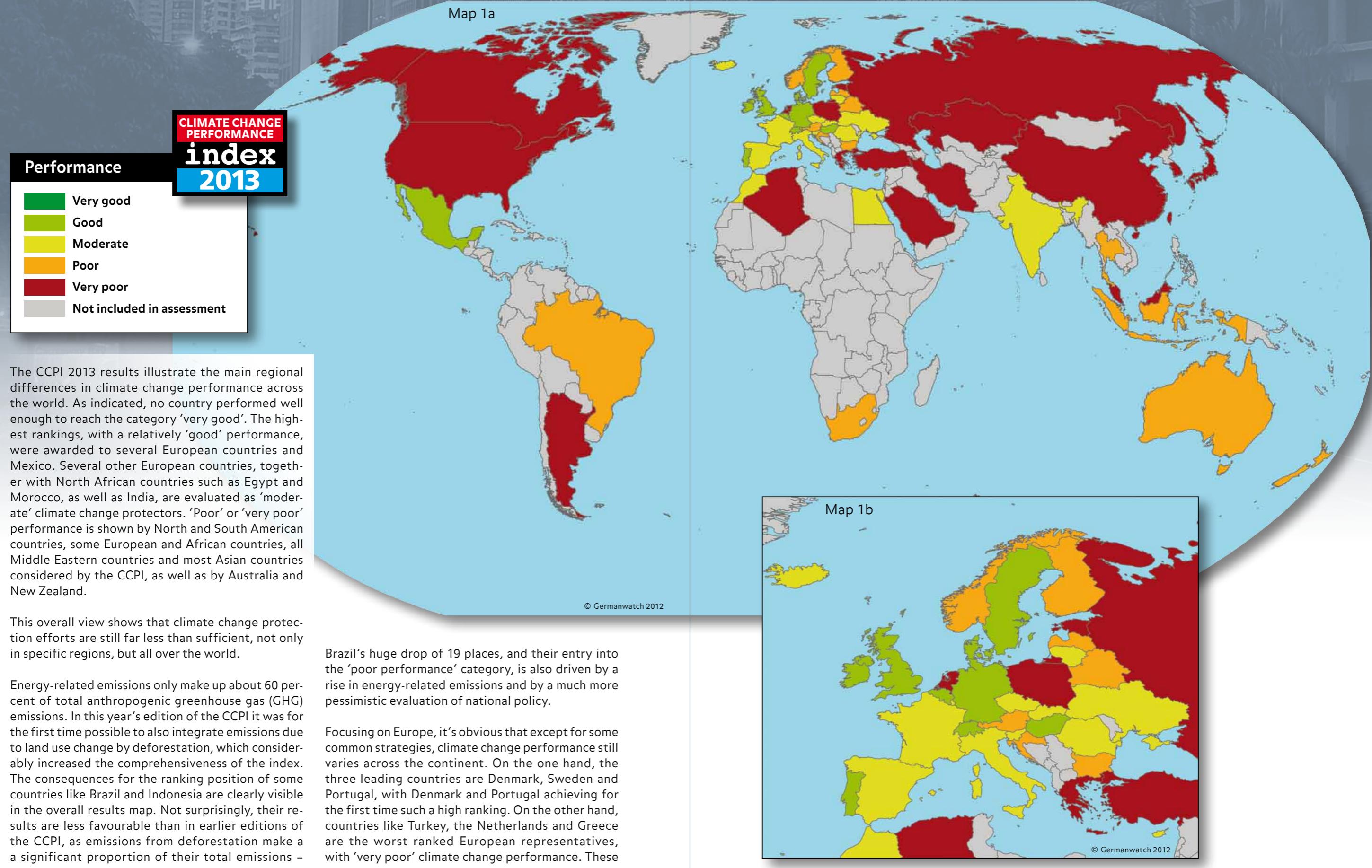
Rating

- █ Very good
- █ Good
- █ Moderate
- █ Poor
- █ Very poor

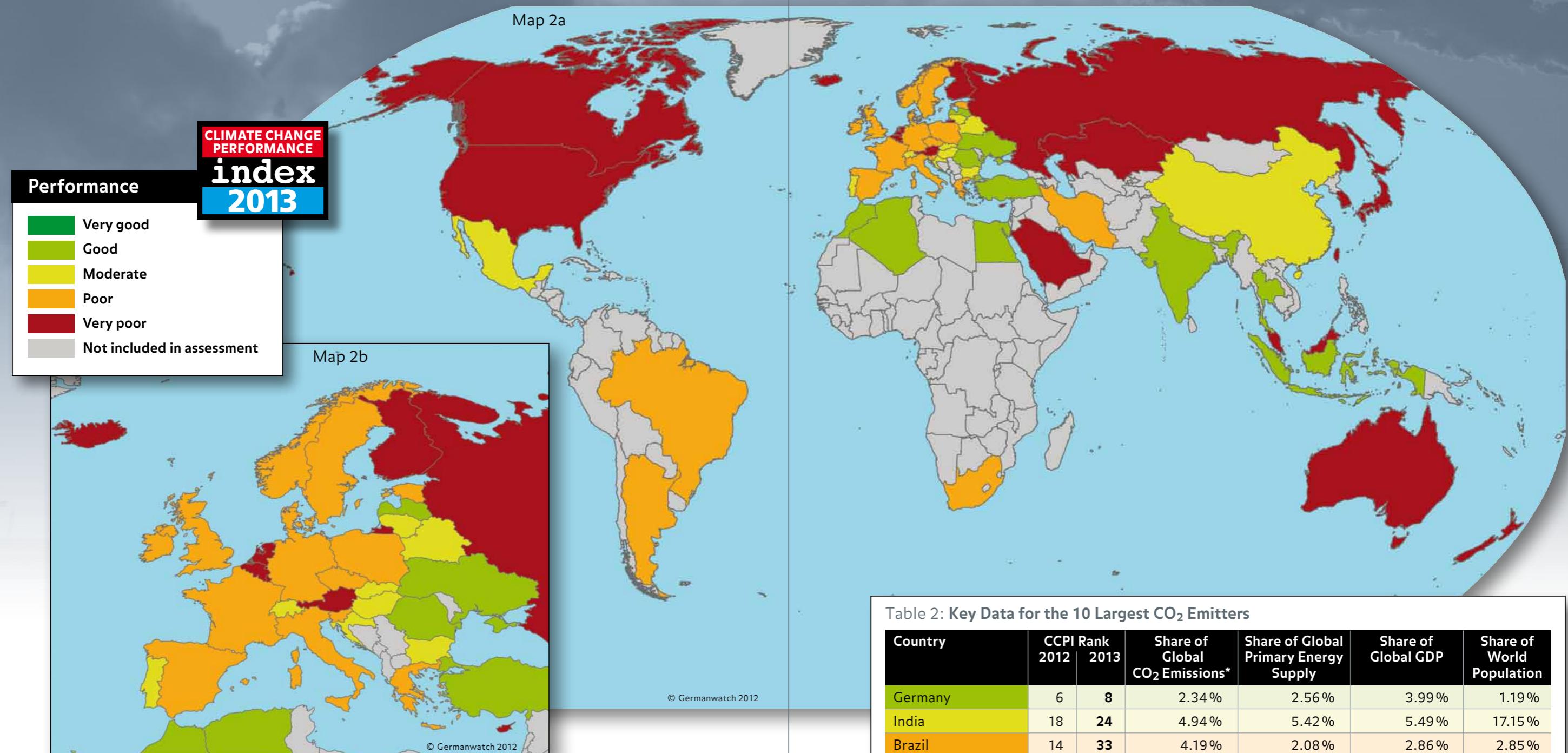
* None of the countries achieved positions one to three.
No country is doing enough to prevent dangerous climate change.

** rounded

3.2 Overall Results • CCPI World Map



4.1 Partial Results • Emissions Level



After the short break in rising global emissions due to the economic and financial crisis, the most recent data shows once again record breaking global emissions. Countries' performance is still by far inadequate to meet the 2° limit. Energy efficiency and the implementation of renewable energy has not increased enough to counter the rising level of emissions.

The map clearly indicates the world's worst climate polluters: Saudi Arabia, Australia, Canada and the United States rank last, just as in previous editions.

The inclusion of emissions from deforestation has shifted the position of those countries with a relevant share of these emissions. Brazil is now placed a good deal worse and is marked as a 'poor performer' on the map.

But also many other countries, including most European countries, show a worse level of emissions this year. Countries with a still lower emission level are e.g. India and Indonesia.

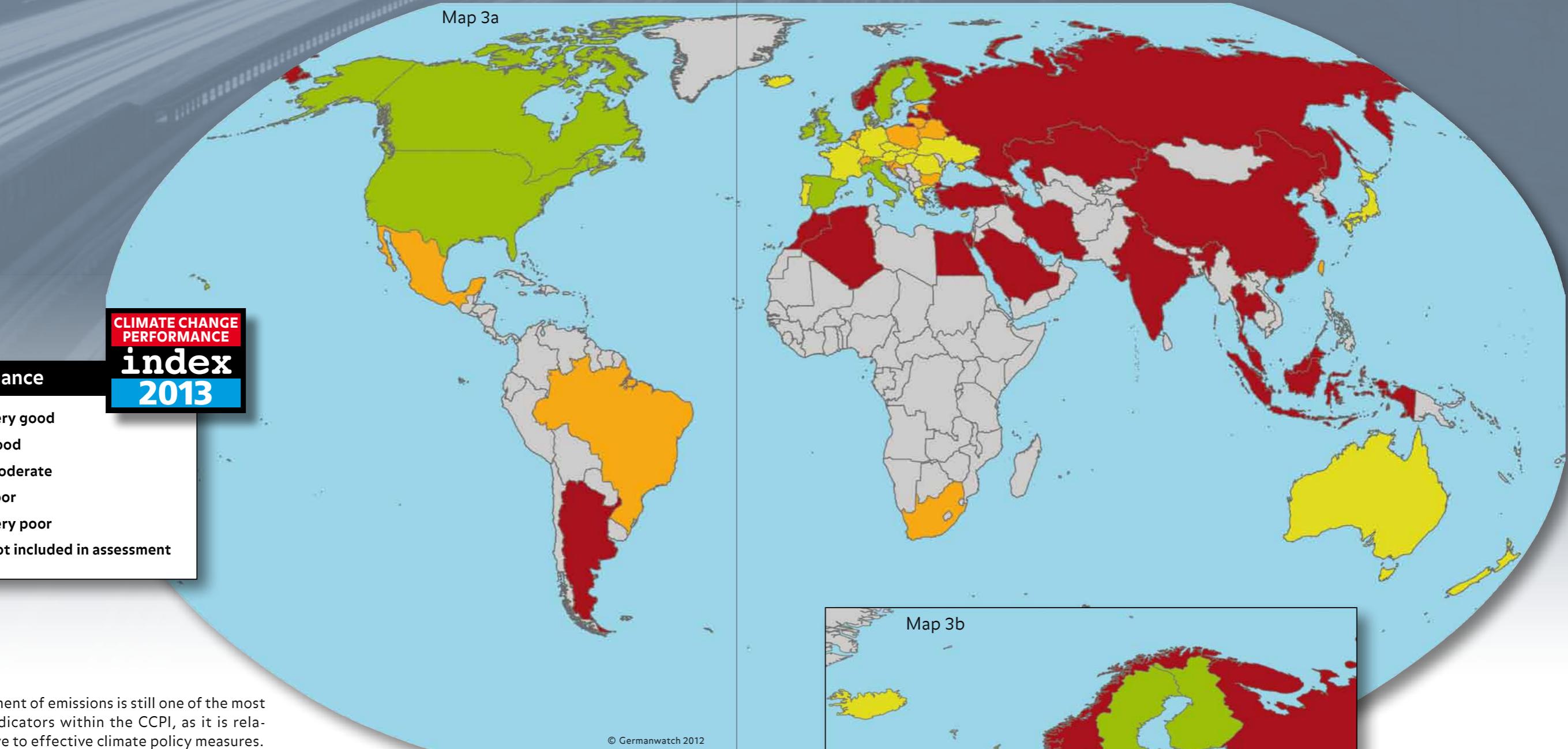
Table 2: Key Data for the 10 Largest CO₂ Emitters

Country	CCPI Rank 2012	CCPI Rank 2013	Share of Global CO ₂ Emissions*	Share of Global Primary Energy Supply	Share of Global GDP	Share of World Population
Germany	6	8	2.34 %	2.56 %	3.99 %	1.19 %
India	18	24	4.94 %	5.42 %	5.49 %	17.15 %
Brazil	14	33	4.19 %	2.08 %	2.86 %	2.85 %
Indonesia	32	36	2.33 %	1.62 %	1.36 %	3.51 %
United States	50	43	16.26 %	17.36 %	19.02 %	4.54 %
Japan	42	47	3.52 %	3.89 %	5.69 %	1.86 %
Korea	44	51	1.73 %	1.95 %	1.93 %	0.71 %
China	55	54	21.42 %	19.34 %	13.76 %	19.71 %
Russian Federation	54	56	4.84 %	5.49 %	2.93 %	2.07 %
Canada	57	58	1.65 %	1.97 %	1.75 %	0.50 %
Total			63.26 %	61.73 %	58.82 %	54.14 %

*energy-related emissions and emissions from deforestation

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4.2 Partial Results • Development of Emissions



The development of emissions is still one of the most important indicators within the CCPI, as it is relatively sensitive to effective climate policy measures. This year's results are surprising concerning the positive North American development. But these results need to be regarded with caution. Especially in the United States a clear trend is visible to substitute coal with shale gas. In the underlying statistics this leads to decreased emissions, because of the lower specific CO₂ emissions of natural gas compared to coal. However, the IEA statistics do not cover GHG emissions that occur due to leakage at the borehole. Recent studies suggest that if all emissions are included, and not only emissions from combustion, shale gas has no climate protection advantage over coal.⁵ This, however, is not reflected in the CCPI due to lack of data.

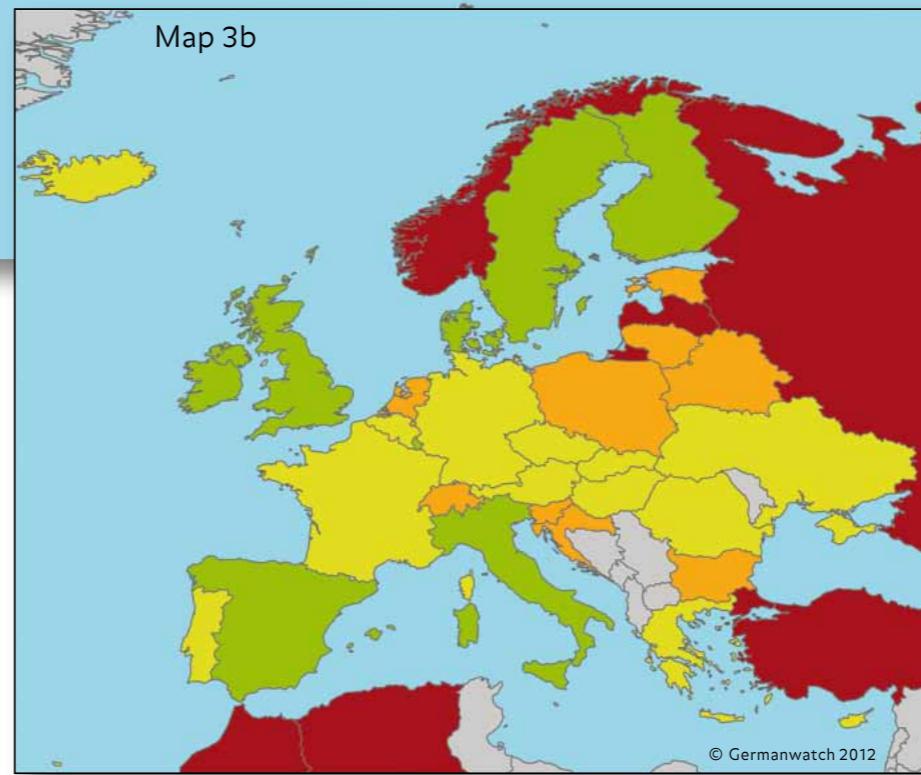
At the same time, the evaluated countries in Middle and South America, Africa and Asia all show very alarming results: CO₂ emissions from most sectors

are increasing, which shows that measures to reduce emissions in these countries, if they exist, are still far from being sufficient. Even countries that have shown a good policy performance lag behind, as the effects of such policy decisions usually take some time to show up in the CCPI.

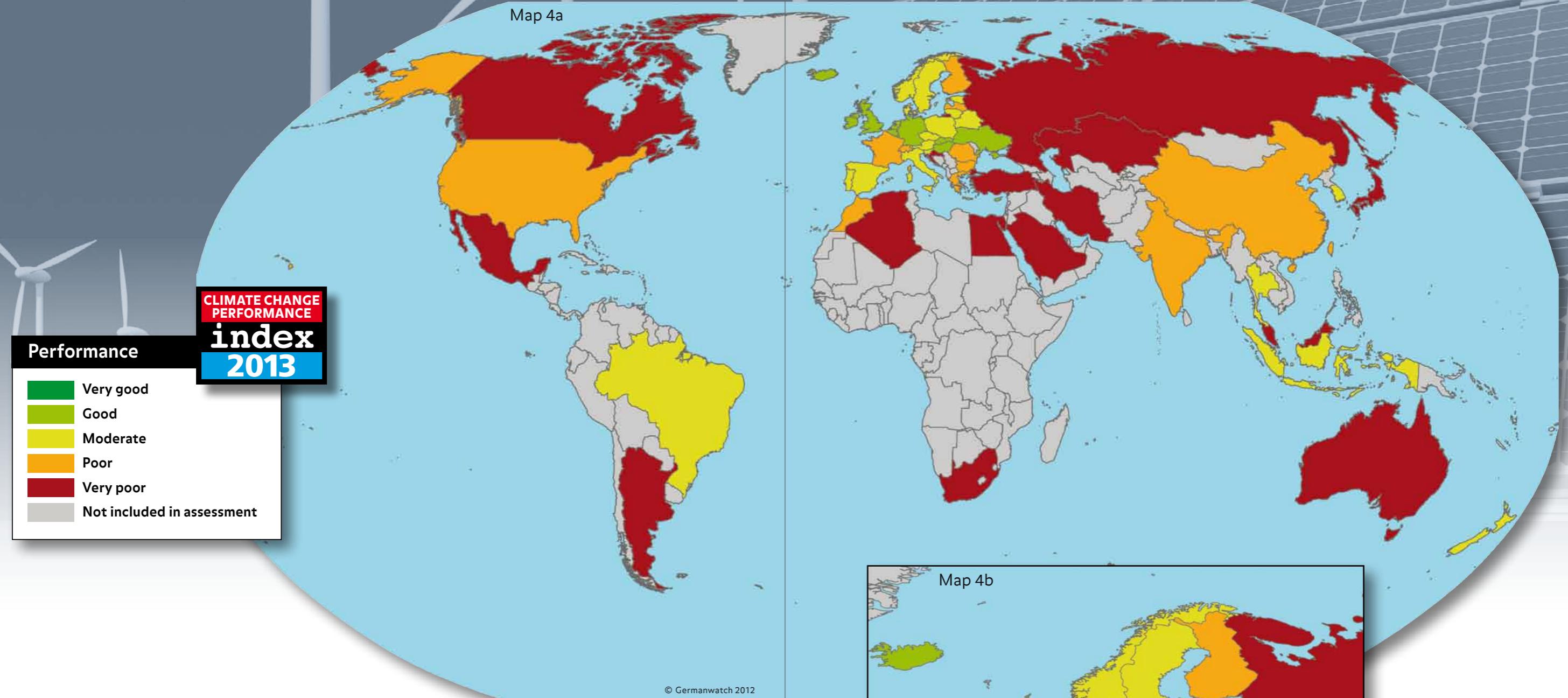
All in all, even countries with a good ranking are not on track to stay below the 2 °C limit, especially as emission reductions in many countries (e.g. the Southern European nations) can be attributed primarily to the economic crisis and not to political efforts.

Leading countries in the emissions trend category are Luxembourg, the United States and Spain, whilst Korea, Iran and China show worst results.

⁵ Howarth et al. (2011)

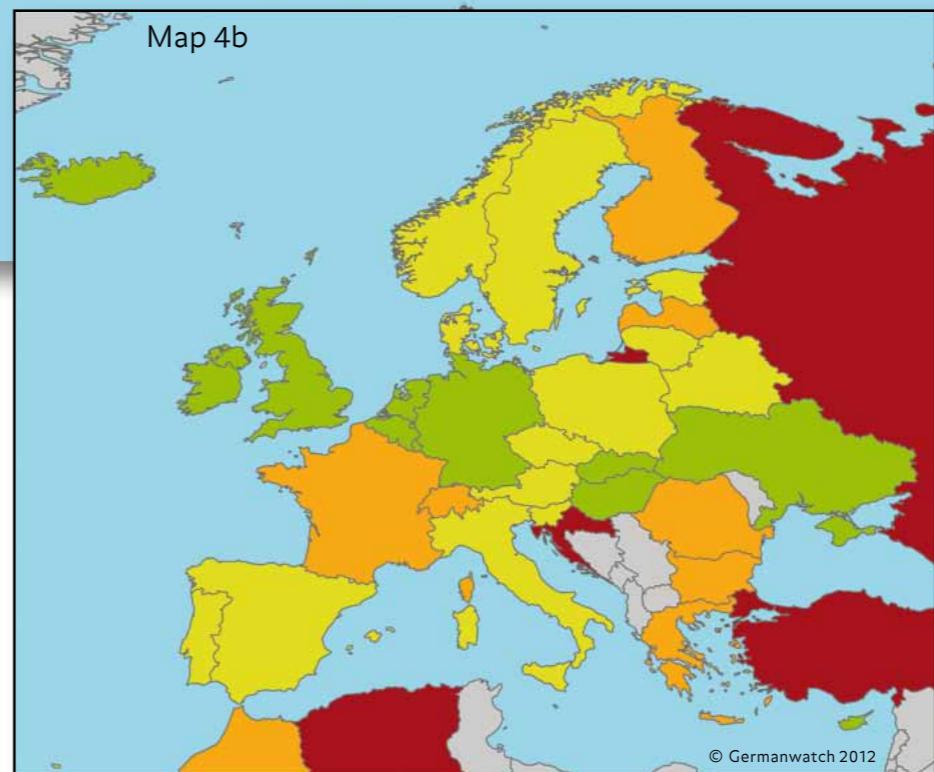


4.3 Partial Results • Renewable Energies

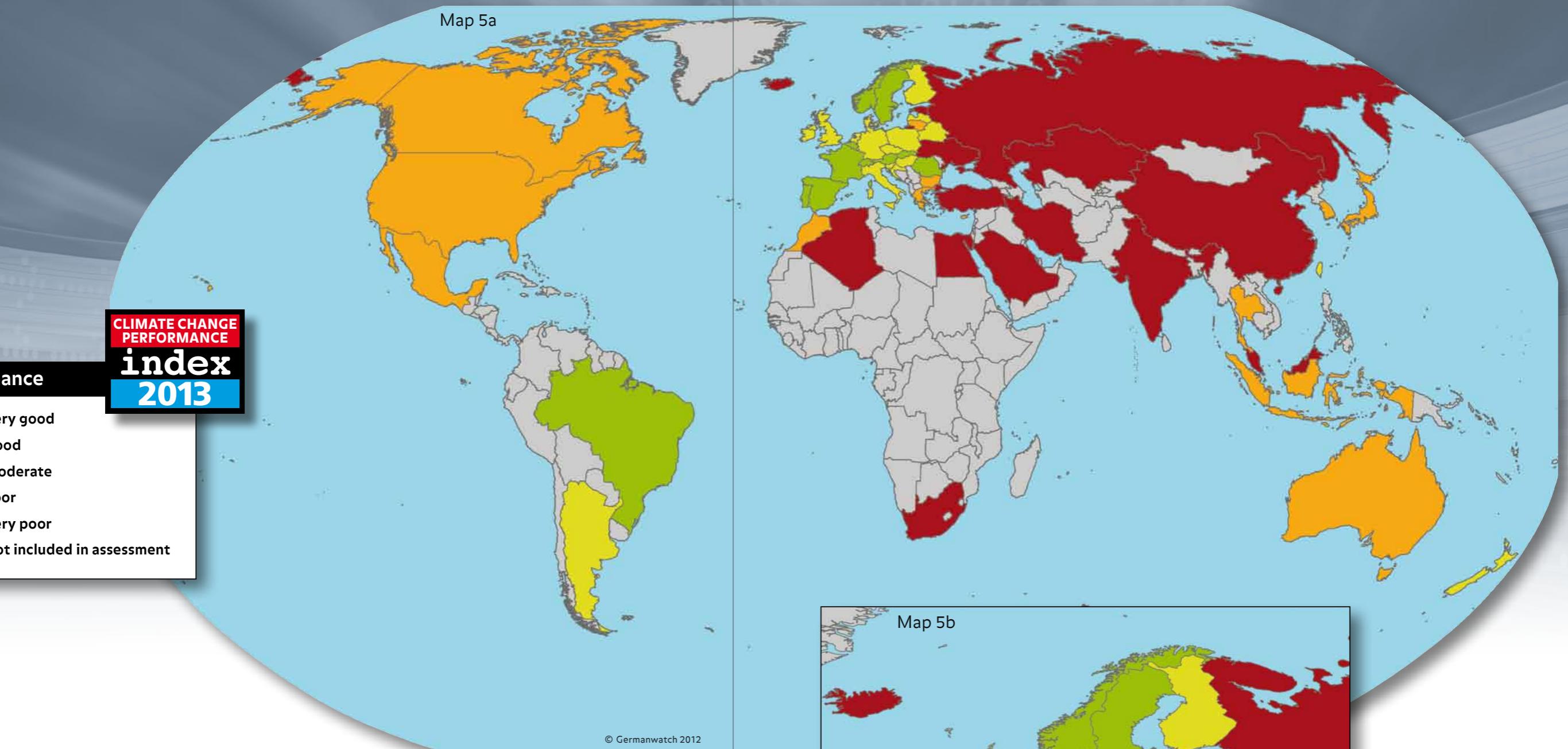


Comparing countries' share of renewable energy in their energy supply, the map shows that European countries rank best in using low-carbon resources for their energy production. Germany's "energy transition" could prove to be a role model for other countries to reduce their fossil fuel consumption. However, the way to a 100% renewable energy system is still long. The relatively positive impression that the map gives, must not be over-interpreted, as the index shows relative rather than absolute results.

Alongside Germany, other positive examples of countries with promising development in low-carbon energy are Brazil and some South-East Asian countries. Russia, Kazakhstan, Japan and Algeria have the worst scores in the renewable energy ranking. USA and China are marked as 'poor' performers in this field. Both countries have seen massive investments in renewable energy in recent years, but the effect of these investments cannot yet be observed in the data.



4.4 Partial Results • Efficiency



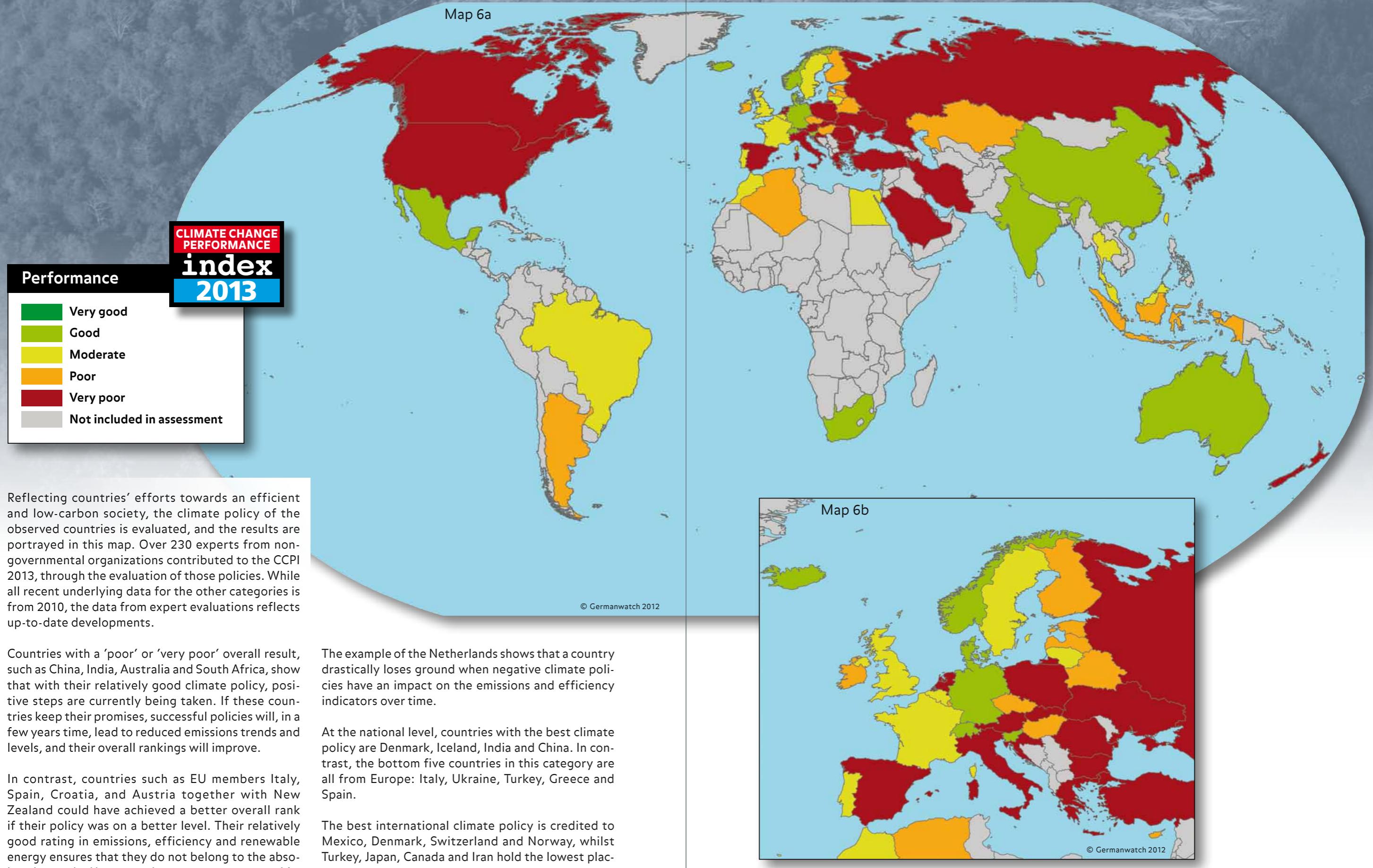
For the first time, carbon and energy efficiency is considered in the CCPI as a separate category. The current level as well as the recent development of countries' efficiency is thereby assessed. Together with large-scale deployment of renewable energy, the improvement of efficiency is an important strategy for the reduction of GHG emissions.

As the map shows, South America and Europe seem to have best methods for promoting efficiency. They feature a relatively efficient structure for energy conversion and a low-carbon fuel mix. Furthermore, the general economic system of these countries is relatively efficient and/or efficiency is improv-

ing. The most efficient country is Sweden. North America, East Asia and Australia have average efficiency, while all African and many Asian countries evaluated in the index do not have efficient energy generation and economic systems. This is partly due to their development constraints. Nevertheless it is important that these countries complement economic development with efficiency improvements.

Germany, for example, although being a pioneer in the "energy transition" towards renewable energy, still performs below average in the efficiency category, leaving its huge potential for efficiency improvements untapped.

4.5 Partial Results • Climate Policy



5. Country Example – Brazil

The weighted sum of each country's scores in all partial indicators makes up the overall score, which determines a country's position in the index. However, the overall ranking does not state how much and in which regard one country's performance differs from the others. To compare the individual country results, one must examine the scores of the various partial indicators.

In this year's edition we compare Brazil's 2013 rank with that which Brazil would have scored in 2012, by using the revised methodology of the CCPI 2013. This helps to better understand the new methodology and at the same time allows the remarkable changes in Brazil's ranking to be tracked.

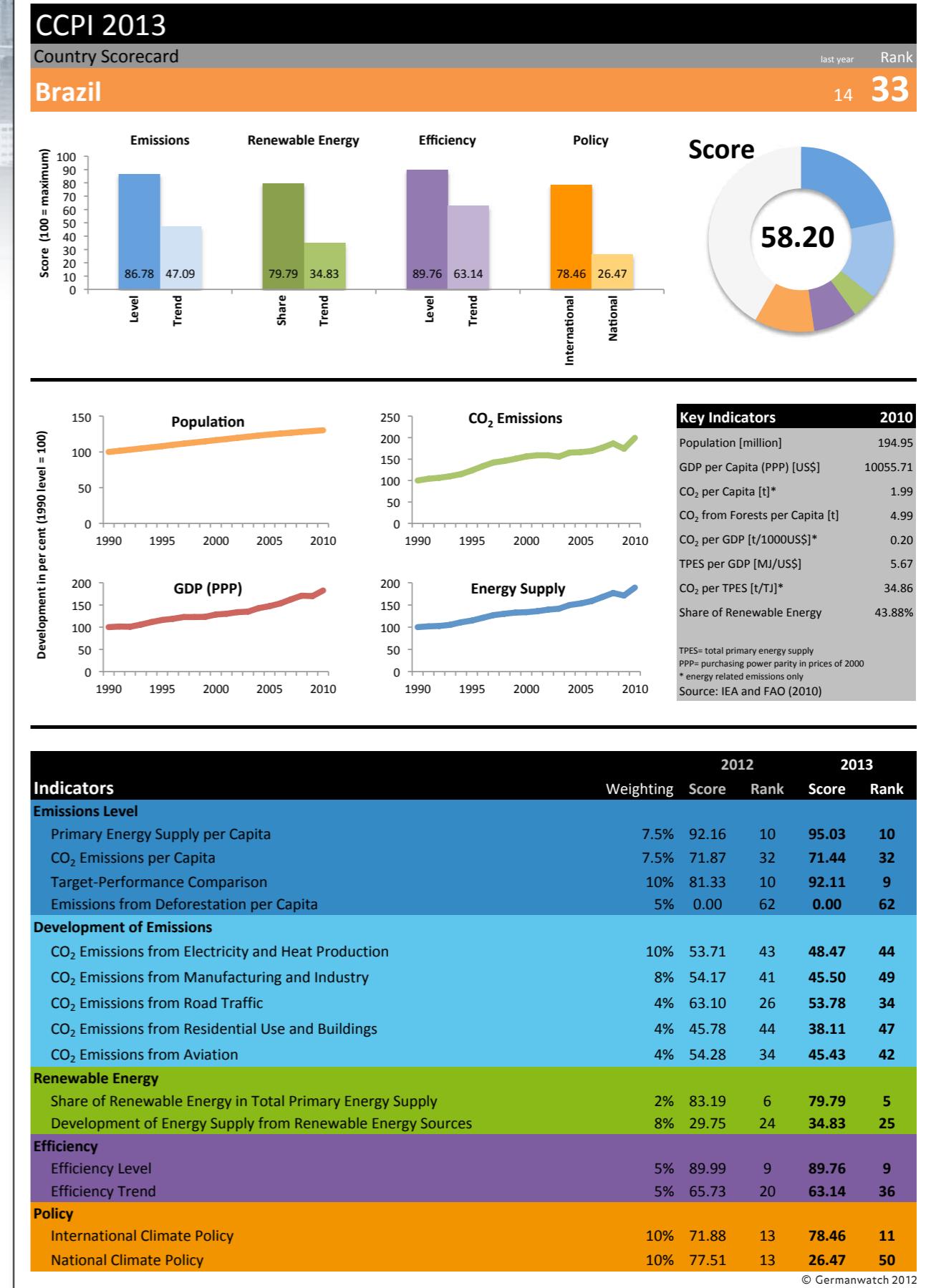
First we would like to explore the differences that arise from the newly implemented methodology and the inclusion of data on emissions from deforestation. In last year's edition of the CCPI, using the old methodology, Brazil was among the top performing countries and was awarded an overall 7th place. If last year's CCPI had used the revised methodology, then Brazil would have ranked 14th. This drop in ranking would mainly be due to the inclusion of emissions from deforestation. Brazil is by far the largest source of such emissions. With nearly 5 tonnes CO₂ per capita, Brazil's emissions from deforestation are more than double that of their per-capita emissions from fossil energy.

In CCPI 2013, however, Brazil dramatically drops to 33rd place. A look at the country's scorecard reveals the reasons for this development. Only in the indicators for 'level of emissions' and 'renewable energies' does their ranking remain stable. In every other category Brazil loses ground on its competitors. Particularly dramatic is the shift in Brazil's national policy ranking. From a comparatively well-rated policy in CCPI 2012, Brazil has fallen to a devastating 50th place.

Experts have criticised, for example, that two thirds of all planned investments in the electricity sector between 2011 and 2020 are supposed to fund fossil fuel or unsustainable large hydropower projects. Another important issue is the discussion of the national forest code. It was supposed to support and protect the biodiversity and ecosystem services of forests. However, according to our experts, the draft forest code has been substantially watered down in the legislative process, and was finally vetoed by Brazilian President Dilma Rousseff.

Another peculiarity of the CCPI can be observed in the 'share of renewable energy' indicator. Although scoring a higher number last year, Brazil ranks one place higher in the current edition. This is due to the fact that the CCPI is a relative index. The score does not represent absolute values but only the relative position of the country's performance. It is determined mainly by the performance of the best and worst competitors. A comparison of a country's score across different editions of the CCPI is thus sometimes misleading.

Country Scorecard Brazil



6. Climate Change Performance Index by Country Group

The following tables show countries categorised by groups which enables a comparison of emitters with more or less similar basic conditions.

Table 4: Climate Change Performance Index for OECD Member Countries

Rank	Country	Score	Rank	Country	Score	Rank	Country	Score
4	Denmark	72.61	15	France	64.74	40	Australia	55.39
5	Sweden	69.37	16	Slovak Republic	64.64	41	New Zealand	54.48
6	Portugal	67.81	17	Iceland	64.16	43	United States	53.51
7	Switzerland	67.61	21	Italy	61.26	44	Poland	52.47
8	Germany	67.54	26	Luxembourg	59.56	47	Japan	52.10
9	Ireland	67.48	27	Spain	59.18	48	Greece	52.04
10	United Kingdom	67.33	28	Czech Republic	59.13	49	Netherlands	50.28
12	Hungary	66.41	31	Norway	58.38	51	Korea	49.93
13	Belgium	65.20	34	Austria	58.09	57	Turkey	46.60
14	Mexico	64.91	38	Finland	56.58	58	Canada	45.16

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Table 5: Climate Change Performance Index for EU Member Countries

Rank	Country	Score	Rank	Country	Score	Rank	Country	Score
4	Denmark	72.61	15	France	64.74	28	Czech Republic	59.13
5	Sweden	69.37	16	Slovak Republic	64.64	30	Latvia	58.63
6	Portugal	67.81	18	Romania	62.67	34	Austria	58.09
8	Germany	67.54	21	Italy	61.26	38	Finland	56.58
9	Ireland	67.48	22	Slovenia	60.98	42	Bulgaria	54.27
10	United Kingdom	67.33	23	Cyprus	60.94	44	Poland	52.47
11	Malta	67.07	25	Lithuania	60.23	45	Estonia	52.45
12	Hungary	66.41	26	Luxembourg	59.56	48	Greece	52.04
13	Belgium	65.20	27	Spain	59.18	49	Netherlands	50.28

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Table 6: Climate Change Performance Index for Countries in Transition

Rank	Country	Score	Rank	Country	Score	Rank	Country	Score
12	Hungary	66.41	25	Lithuania	60.23	42	Bulgaria	54.27
16	Slovak Republic	64.64	28	Czech Republic	59.13	44	Poland	52.47
18	Romania	62.67	30	Latvia	58.63	45	Estonia	52.45
19	Ukraine	62.22	35	Belarus	57.98	56	Russian Federation	46.65
22	Slovenia	60.98	39	Croatia	56.37	59	Kazakhstan	39.96

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Table 7: Climate Change Performance Index for Newly Industrialised Countries

Rank	Country	Score	Rank	Country	Score	Rank	Country	Score
14	Mexico	64.91	33	Brazil	58.20	52	Chinese Taipei	49.40
20	Morocco	62.01	36	Indonesia	57.07	53	Singapore	49.13
24	India	60.77	37	South Africa	56.70	54	China	49.03
29	Egypt	59.04	46	Algeria	52.34	55	Malaysia	47.53
32	Thailand	58.32	50	Argentina	49.97	57	Turkey	46.60

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Table 8: Climate Change Performance Index for ASEAN Member Countries plus India, China, Japan and Korean Republic

Rank	Country	Score	Rank	Country	Score	Rank	Country	Score
24	India	60.77	47	Japan	52.10	53	Singapore	49.13
32	Thailand	58.32	51	Korea	49.93	54	China	49.03
36	Indonesia	57.07	52	Chinese Taipei	49.40	55	Malaysia	47.53

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7. Sources and Further Reading Recommendations

- Burck; Hermwille; Bals (2012): The Climate Change Performance Index: Background and Methodology. www.germanwatch.org/en/ccpi_bame
- FAO (2010): Global Forest Resource Assessment 2010 – Main Report. Rome. www.fao.org/forestry/fra/fra2010/en/
- Freudenberg (2003): Composite Indicators of Country Performance: A Critical Assessment. STI Working Paper 2003/16. Paris.
- Howarth; Santoro; Ingraffea (2011): Methane and the Greenhouse-Gas Footprint of Natural Gas from Shale Formations. In: Climatic Change, 106/4, p. 679–690.
- IEA (2012a): CO₂ Emissions from Fuel Combustion. Paris.
- IEA (2012b): Renewables Information. Paris.
- IPCC (1997): Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories. www.ipcc-nccc.iges.or.jp/public/gl/invs1.html
- Meinshausen (2005): On the risk of Overshooting 2 °C. Paper presented at Scientific Symposium “Avoiding Dangerous Climate Change”, MetOffice, Exeter, 1-3 February 2005. www.pik-potsdam.de/~mmalte/sim-cap/publications/meinshausenm_risk_of_overshooting_final_webversion.pdf
- Meinshausen et al. (2009). Greenhouse-gas emission targets for limiting global warming to 2 °C. Nature 458(7242): 1158.
- PWC (2012): Counting the cost of carbon: Low carbon economy index 2012 www.pwc.co.uk/sustainability-climate-change/publications/low-carbon-economy-index.jhtml

Germanwatch

Following the motto "Observing, Analysing, Acting", Germanwatch has been actively promoting global equity and the preservation of livelihoods since 1991. In doing so, we focus on the politics and economics of the North with their worldwide consequences. The situation of marginalised people in the South is the starting point of our work. Together with our members and supporters as well as with other actors in civil society, we intend to represent a strong lobby for sustainable development. We endeavour to approach our aims by advocating food security, responsible financial markets, compliance with human rights, and the prevention of dangerous climate change.

Germanwatch is funded by membership fees, donations, grants from the "Stiftung Zukunftsfähigkeit" (Foundation for Sustainability), and by grants from a number of other public and private donors.

You can also help to achieve the goals of Germanwatch and become a member or support our work with your donation:

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CAN Europe

Climate Action Network Europe (CAN-E) is recognised as Europe's leading network working on climate and energy issues. With over 100 members in 25 european countries, CAN-E unites to work to prevent dangerous climate change and promote sustainable energy and environment policy in Europe.

The Climate Action Network (CAN) is a worldwide network of over 700 Non-Governmental Organizations (NGOs) working to promote government, private sector and individual action to limit human-induced climate change to ecologically sustainable levels.

The vision of CAN is a world striving actively towards and achieving the protection of the global climate in a manner that promotes equity and social justice between peoples, sustainable development of all communities, and protection of the global environment. CAN unites to work towards this vision.

CAN's mission is to support and empower civil society organisations to influence the design and development of an effective global strategy to reduce greenhouse gas emissions and ensure its implementation at international, national and local levels in the promotion of equity and sustainable development.

