

The Climate Change Performance Index

Results 2014



Jan Burck, Franziska Marten, Christoph Bals



Imprint

Germanwatch - Bonn Office

Kaiserstraße 201
D-53113 Bonn, Germany
Ph.: +49 (0) 228 - 60492-0
Fax: +49 (0) 228 - 60492-19

Germanwatch - Berlin Office

Schiffbauerdamm 15
D-10117 Berlin, Germany
Ph.: +49 (0) 30 - 28 88 356-0
Fax: +49 (0) 30 - 28 88 356-1

E-Mail: info@germanwatch.org
www.germanwatch.org



Authors: Jan Burck, Franziska Marten, Christoph Bals

Editing: Birgit Kolboske, Lindy Devarti, Gerold Kier, Daniela Baum

Maps: Laura Krings

Design: Dietmar Putscher, Cologne
www.dietmar-putscher.de

Printed on 100% recycled paper

November 2013

Purchase Order Number: 14-2-03e

ISBN 978-3-943704-15-0

This publication can be downloaded at:
www.germanwatch.org/en/ccpi

With financial support from the Barthel Foundation



CAN

Climate Action Network Europe
Rue d'Edimbourg 26
B-1050 Brussels, Belgium

Ph.: +32 (0) 28 94 46 70
E-Mail: info@can europe.org
www.can europe.org



Contents

Foreword	3
1. Key Developments	4
2. Detailed Results	5
3. About the CCPI	6
4. Overall Results • CCPI 2014	8
4.1 CCPI World Map 2014	10
4.2 Partial Results • Emissions Level	12
4.3 Partial Results • Development of Emissions	14
4.4 Partial Results • Renewable Energies	16
4.5 Partial Results • Efficiency	18
4.6 Partial Results • Climate Policy	20
5. Country Example: Poland	22
6. Climate Change Performance Index by Country Group	24
7. Sources and Further Reading Recommendations	26

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. 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 to address this.

To demonstrate existing measures more accurately and to encourage steps towards effective climate policy, the CCPI methodology was evaluated in 2012 and improvements have since been made. The integration of data on emissions from deforestation was one of the major steps in this process, made possible due to

the data provided by the FAO Global Forest Resource Assessment 2011. 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 250 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 mainly representatives of NGOs working within their respective countries, fighting for the implementation of the climate policy that we so desperately need.

Best regards,



Wendel Trio
(Director of CAN-Europe)



Klaus Milke
(Chairman of the Board, Germanwatch)

1. Key Developments

Our analysis of emissions data provided by the International Energy Agency (IEA) for this year's edition of the Climate Change Performance Index (CCPI) shows a new emission peak. However, unexpectedly, it also draws a cautious picture of hope:

The world's biggest CO₂ emitter **China** improved its performance compared to the previous year and climbed up to rank 46. After a period with extremely high emissions growth rates, recent developments indicate a slower growth of CO₂ emissions and a decoupling of CO₂ growth and GDP growth. Both, its heavy investments in renewable energies and a very critical debate on coal in the highest political circles, resulting from the heavy smog situation in many towns, give hope for a slower emission growth in the future. China's relatively positive ranking in the share and development of renewables is not surprising. Furthermore, recent developments in China indicate a shift from the massive carbon intensive infrastructure development. This positive trend is also reflected in the Index data; China managed to decrease its emission growth in this sector from 54% to 27%. In September 2013 the State Council of the People's Republic presented an air pollution action plan and it can be expected that four important provinces will see coal reduction targets soon. In addition, the first pilot region for national emission trading has already taken up action; a second one might start during COP 19 in Warsaw. Chinese climate experts support the promising trend in their country's climate policy, particularly with their positive evaluation of national climate policy.

Such a change of trend would be crucial, as the IEA data show that there has been an increase in global energy-related CO₂ emissions of nearly 6 Gt in the past ten years, of which four fifths correspond with the amount of China's emissions surplus during that time. It seems as if global CO₂ emissions on average—excluding the emissions surplus of China—are close to a plateau.

New findings of the PBL Netherlands Environmental Assessment Agency¹ give a positive signal towards a slow down in the increase in global CO₂ emissions in their 2012 data.² According to PBL, energy-based emissions grew about two-thirds less than in previous years. Due to the change in China's emissions growth path, for the first time the researchers observed a decoupling of GDP growth from emissions increase. The positive emission data does not necessarily conflict with new WMO data³ which shows that global CO₂ concentration grew even a little more than in the last decade. This could also be due to natural fluctuations. A more active policy to restrict the use of coal cannot only be observed in China, but in the second biggest emitter **USA** as well. Regulating existing power stations is supposed to begin by June 2014. Furthermore, the

USA have announced that they will spend no more public funding on coal power internationally. According to the announcements made by its president Jim Yong Kim in July 2013, the World Bank and various development banks begin to follow this path as well and plan to rethink financing of new coal projects.

With these positive developments in China and the fact that global emissions (except China's) have already almost peaked, it may be possible to see overall emissions after a rapid growth period reaching a plateau around 2020. Additional efforts to fill the pre-2020 ambition gap must therefore be implemented in national politics, and a clear commitment to climate protection from all major emitters has to result in a legally binding agreement in 2015.

Even though—as expected—a new emissions record was measured in 2011, there is a gleam of hope, too. But for a consolidation of these positive trends different factors must play a crucial role: improvements in the competitiveness of renewable energies continue, increased efficiency levels, bold national decisions, effective coalitions of key frontrunner nations and the upcoming international efforts to close the pre-2020 emission gap as well as to hammer out an international climate agreement in 2015.

It is important, however, not to get carried away: We need tipping points regarding energy and climate policy in key countries to prevent dangerous climate change. In no leading country we are there yet. Besides positive trends in the development of renewable energies and energy efficiency, the slowdown in global emission increase due to shale gas or big hydro power leads to other problematic developments. The expanding extraction of shale gas in the USA plays a role in reducing CO₂ emissions. Since the underlying data in the Index as well as in the PBL study measures only atmospheric CO₂, other greenhouse gas emissions that impact the climate (and are released e.g. in the extraction of shale gas) are not taken into account.

It also should be noted that even a plateau of global emissions before 2020 is by far no guarantee for limiting the rise in global mean temperature to below 2°C.⁴ So as to further this probability, fostering pre-2020 ambitions is crucial.

¹ Olivier, J.G.J., Janssens-Maenhout, G., Muntean, M., Peters, J.A.H.W. (2013): Trends in Global CO₂ Emissions: Report 2013. PBL Netherlands Environmental Assessment Agency, The Hague.

² The Climate Change Performance Index only reflects the latest available IEA emissions data until 2011.

³ World Meteorological Organisation (2013): Greenhouse Gas Concentrations in Atmosphere Reach New Record. www.wmo.int/pages/mediacentre/press_releases/pr_980_en.html

⁴ UNEP (2013): The Emissions Gap Report 2013. United Nations Environment Programme (UNEP), Nairobi.

2. Detailed Results

■ **No single country** is yet on track to prevent dangerous climate change. Once again, the first three ranks of the CCPI remain open in this year's edition.

■ **Denmark** clearly defended its fourth place in this year's Index. Its policy evaluation is exceptional; it managed to slightly improve its score in nearly every sector compared to the previous year.

■ With a decrease in emissions of 15% in the last five years and an improvement in its efficiency, the **United Kingdom** replaces Sweden on the fifth rank. The UK profits from a favourable emissions development and an increasing score in the field of renewables. This development was also valued by UK's climate experts, which is expressed in improvements in the policy evaluation.

■ The European states affected most by the economic crisis draw a diverse picture. **Portugal** continued to use the crisis as an opportunity for transformation and improved its overall score in this year's Index. Portugal provides an example of how to deal with economic crisis while strengthening climate policies and reducing resource dependency, but also profits from earlier investments made by its previous government in critical areas such as renewable energies. For now, it improved its position one rank further up to 6. But it looks as if Portugal's new government is taking a less constructive position and has already slowed down some of the beneficial developments. If this trend continues, we expect the country to lose ground next year. **Greece** has almost totally abandoned all climate policies under the effects of the crisis and the Troika's⁵ economic control.

■ In comparison to last year's report, **Morocco** has improved five places and is now in 15th position within the "good" rating category. The kingdom's expansion of renewable energies as well as its still very low emissions level benefited its score. Regarding climate policies, Morocco is a leader within the Arab Group, which is also reflected in the reports of the national climate experts. What is remarkable is that Morocco aims to lead socioeconomic development towards a green economy and has installed all manner of initiatives and programs in this regard such as, for example, the national solar plan or the national action plan against global warming. Still, there remains some room for improvement, especially within the transport sector.

■ For the first time, **Germany** drops out of the top ten. The main reason is a negative policy evaluation by national experts. The experts criticized the drastic

reduction in the ambitions of the German government that led Germany to lose leadership regarding climate protection in Europe. In the past year, it played a less constructive role in the European energy debate and furthermore successfully blocked urgently needed reforms of the European emission trading scheme. The experts also criticized the German government for halting the development of the energy transition process.

■ National experts in **India** downgraded their country, which resulted in a drop of 6 places compared to the previous year. The CO₂ emissions are increasing relatively quickly in India. Its share of renewable energy is still good, but the development could be faster. There also is a need for India to catch up on efficiency developments.

■ The **Netherlands** improved its score significantly and thus gained 18 places. This score demonstrates the sensitivity of the Index regarding changes in single sectors. While slightly losing ground in the emissions data-based sections, which still reflect the destructive policies of the previous Dutch government, this year's policy rankings for the new government have risen from 55 to 14. Hopefully, following the new policies will affect the emissions data in the next CCPI editions.

■ **Brazil** was still unable to recover from last year's drop in the ranking. The country continues its downward trend to reach place 36 this year. With the successful implementation of a new law for forest protection, which was agreed on very recently, we may see a turn in next year's ranking.

■ The **United States** holds its 43rd position from last year. With a decrease in energy-related CO₂ emissions of 8% in the last five years, it shows a relatively good performance in this part of the CCPI.⁶ The USA climbed twelve places in the policy ranking. The government shows more stringency in climate policy than in the last legislative period. Progress in the regulation of transport and coal is an important factor. The country played a proactive role in the discussion about the very climate relevant HFC gases in response to the new IPCC report and is arguing for a pledge-based international agreement within the UNFCCC process.

⁵ EU, IMF and World Bank

⁶ This reduction is not least achieved by the extended use of its shale gas resources. For the interpretation, this means that attention should be drawn to the fact that the climate effect of shale gas is not sufficiently reflected in the underlying data set of the IEA. Only direct CO₂ emissions from the combustion of the gas are accounted for, whereas emissions from the process of conveyance at the borehole are ignored because they cannot yet be measured sufficiently.

- **Poland**, this year's host of COP 19, climbed up one place to 45, which results mainly from a slightly positive trend in the development of emissions and renewable energies. With this rank, Poland's performance remains one of the worst in the EU. We take a closer look at its evaluation in the country example (chapter 5).
- After a government change in **Australia**, the country loses ground again and finds itself now on rank 57. The policy evaluation in particular was much worse than in previous years. One important reason is the turnaround in installing a carbon levy and trade system.
- As in the previous year, **Canada** still shows no intention of moving forward with climate policy and therefore remains the worst performer of all industrialised countries.
- Although **Saudi Arabia's** place remains unchanged compared to 2013, still placing the kingdom last in the

rankings with some distance to Kazakhstan, it must be noted that its national strategy on climate change and energy is changing. With regards to climate policy, the replacement of the country's chief negotiator led to the kingdom's most cooperative role in the pre-COP process since 25 years. Additionally, the world's largest crude oil exporter is planning to move aggressively into renewable energy, with plans to install enormous solar and wind power capacities in the next 20 years.

- The **EU** has given up the leading role in the UNFCCC process as well as its position as a frontrunner in the implementation of ambitious climate protection on the national level. So far, the EU has not yet developed a concept to use the fight against the economic crisis as an opportunity to invest in the rail and grid infrastructure, in energy efficiency programs (for example, in the housing sector) and renewable energies. Some countries have been blocking any meaningful process, most noticeably Poland, who is the current host of the COP.

Table 1: Key Data for the 10 Largest CO₂ Emitters

Country	CCPI Rank 2014	CCPI Rank 2013	Share of Global GDP	Share of World Population	Share of Global CO ₂ Emissions*	Share of Global Primary Energy Supply
Germany	19	8	4.02%	1.18%	2.23%	2.38%
India	30	24	5.66%	17.84%	5.14%	5.72%
Indonesia	34	36	1.41%	3.48%	2.30%	1.59%
Brazil	36	34	2.87%	2.83%	4.12%	2.06%
United States	43	43	18.81%	4.48%	15.50%	16.71%
China	46	48	14.63%	19.42%	22.95%	20.91%
Japan	50	44	5.59%	1.84%	3.54%	3.52%
Korea	53	50	1.95%	0.72%	1.76%	1.99%
Russian Federation	56	55	2.99%	2.04%	4.90%	5.57%
Canada	58	58	1.75%	0.50%	1.58%	1.92%
Total			59.69%	54.32%	64.03%	62.37%

*energy-related emissions and emissions from deforestation

© Germanwatch 2013

Performance ■ Very good ■ Good ■ Moderate ■ Poor ■ Very poor

3. 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% of global energy-related CO₂ emissions. There are other countries with good or even higher climate protection performance, but due to methodological reasons, their inclusion is not possible. As the CCPI is mainly emissions based, countries with extremely low emissions simply cannot be taken into account. However it would be interesting to have a closer look on their climate protection efforts, since some of them are very proactive. After 7 years of publication, the CCPI has been thoroughly evaluated. This evaluation has had two major outcomes. Now, it has been possible to include emissions from deforestation, albeit not with the same quality of data as energy-related emissions.⁷ 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 centered on 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).⁸ The remaining 20% of the CCPI evaluation is based on national and international climate policy assessments by more than 250 experts from the respective countries. An example of the methodology of the CCPI can be found under section 5 "Country Example" and extensive explanations are available in "The Climate Change Performance Index: Background and Methodology".⁹

Similar to last year, 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. 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 not yet be sufficient to prevent dangerous climate change. Hence, again this year, no country was awarded the rank of 1st, 2nd or 3rd.

Since not only the CCPI methodology is in a continuous revision process, but also the underlying data that is provided by the International Energy Agency, it is important to notice there are retrospective changes that influence the comparability of the results between the different Index years. This year the data changes mostly affected Australia, China and Thailand¹⁰.

⁷ 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.

⁸ 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.

⁹ www.germanwatch.org/en/ccpi

¹⁰ For detailed information on the changes in IEA data, see:

IEA (2013): Energy Balances of non-OECD Countries: Documentation for Beyond 2020 Files. <http://wds.iea.org/WDS/tableviewer/document.aspx?FileId=1458> & IEA (2013): World Energy Balances: Documentation for Beyond 2020 Files. <http://wds.iea.org/WDS/tableviewer/document.aspx?FileId=1460>

4. Overall Results • CCPI 2014

Table 2

Rank	Country	Score**	
1*	–	–	
2*	–	–	
3*	–	–	
4	– Denmark	75.23	
5	▲ United Kingdom	69.66	
6	▲ Portugal	68.38	
7	▼ Sweden	68.10	
8	▼ Switzerland	66.17	
9	▲ Malta	66.05	
10	▲ France	65.90	
11	– Hungary	65.17	
12	▼ Ireland	65.01	
13	▲ Iceland	64.89	
14	▼ Belgium	64.65	
15	▲ Morocco	63.99	
16	▲ Romania	63.73	
17	– Slovak Republic	63.17	
18	▲ Italy	62.90	
19	▼ Germany	61.90	
20	▼ Mexico	61.50	
21	▲ Lithuania	60.94	
22	▲ Spain	60.37	
23	▲ Luxembourg	60.27	
24	▲ Norway	59.32	
25	▼ Slovenia	59.19	
26	▲ Egypt	59.00	
27	▲ Latvia	58.73	
28	▼ Cyprus	57.61	
29	▲ Austria	57.19	
30	▼ India	57.16	
31	▲ Netherlands	56.99	

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

** rounded

comparison with previous year

© Germanwatch 2013

Rank	Country	Score**	
32	▲ Finland	56.57	
33	▼ Belarus	56.48	
34	▲ Indonesia	56.24	
35	▼ Ukraine	56.04	
36	▼ Brazil	55.53	
37	▲ Bulgaria	54.87	
38	▼ Thailand	54.51	
39	– South Africa	54.04	
40	▼ Czech Republic	53.93	
41	▲ Argentina	53.60	
42	▼ New Zealand	53.49	
43	– United States	52.93	
44	▼ Croatia	52.79	
45	▲ Poland	52.69	
46	▲ China	52.41	
47	– Greece	51.50	
48	▲ Singapore	50.32	
49	▼ Algeria	49.92	
50	▼ Japan	47.21	
51	▲ Malaysia	47.06	
52	– Chinese Taipei	46.81	
53	▼ Korea	46.66	
54	▲ Turkey	46.47	
55	▼ Estonia	45.52	
56	▼ Russian Federation	43.64	
57	▼ Australia	41.53	
58	– Canada	40.39	
59	▲ Islamic Rep. of Iran	37.81	
60	▼ Kazakhstan	37.64	
61	– Saudi Arabia	25.17	

comparison with previous year

© Germanwatch 2013

Index Categories

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

Rating

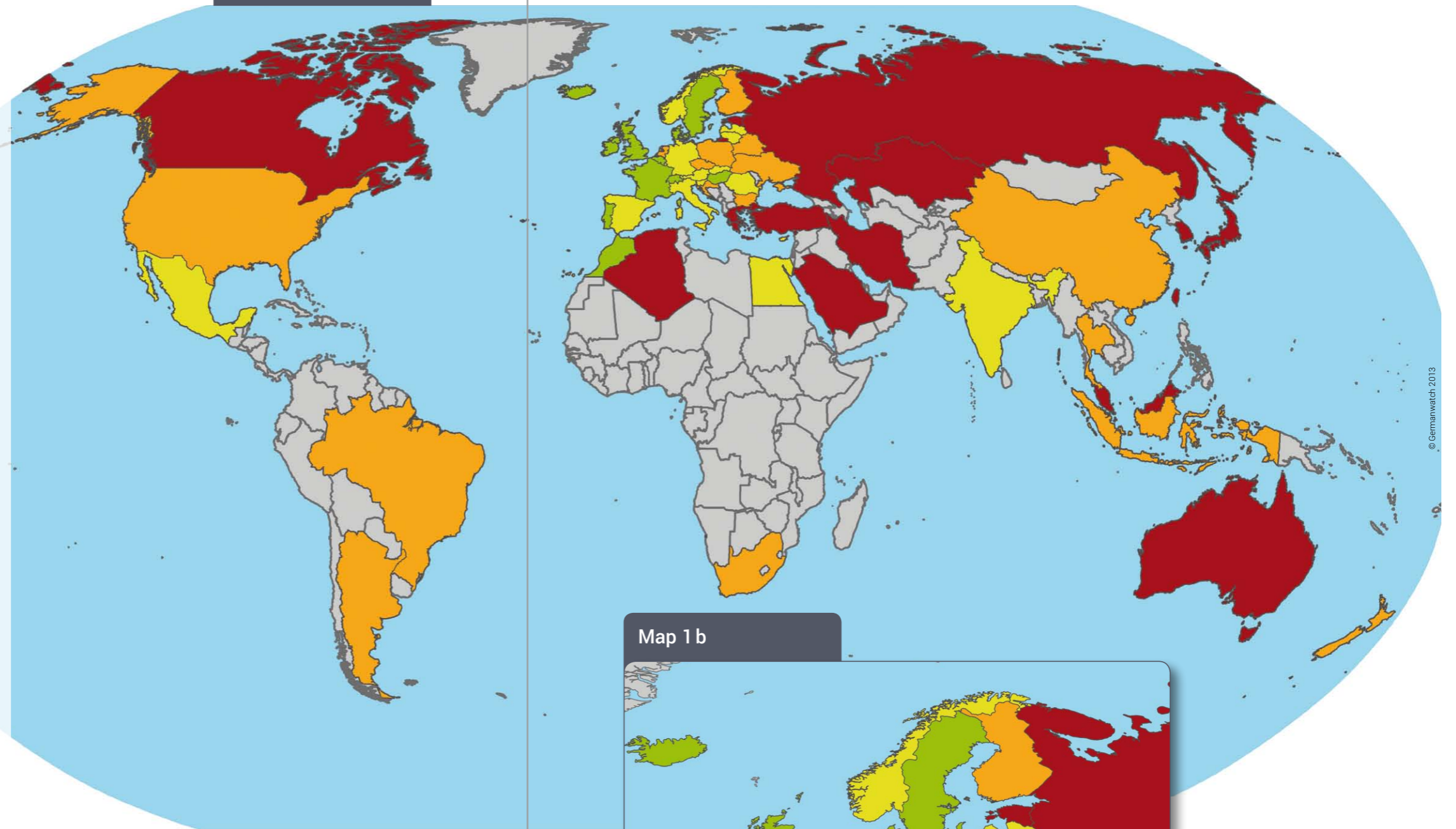
- Very good
- Good
- Moderate
- Poor
- Very poor

4.1 CCPI World Map 2014

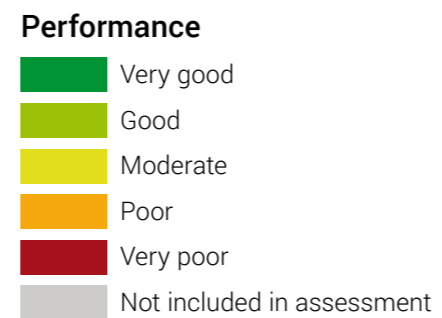
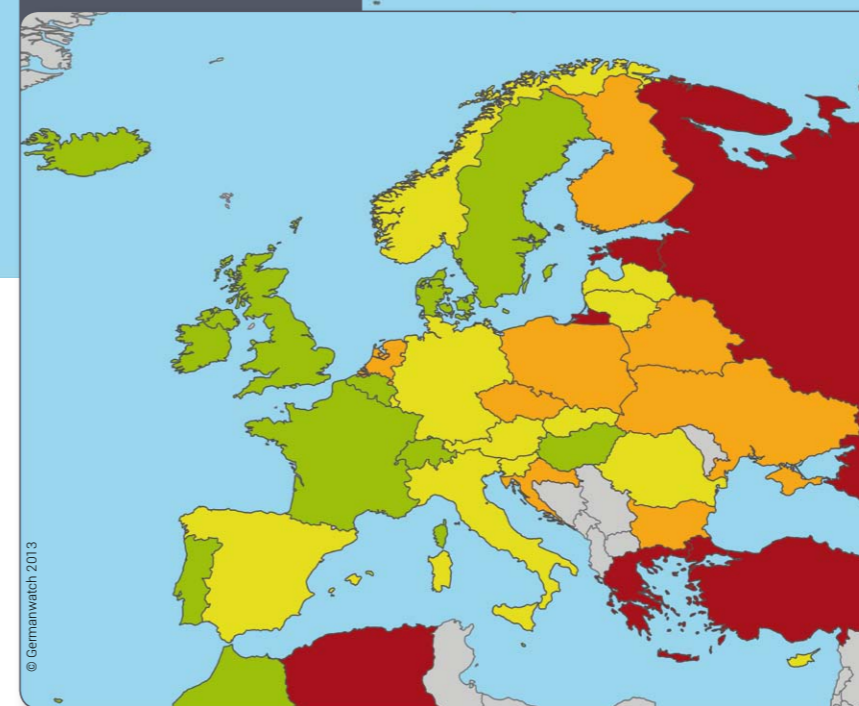
The CCPI 2014 results illustrate the main regional differences in climate protection performance within 58 countries across the world. Although there are lower growth rates of the global CO₂ emissions that give reason to hope for a successful climate protection in the future, for now still no country performed well enough to reach the category “very good” in the CCPI 2014.

Whereas in the recent discussion, several climate experts see the EU losing its leading role regarding climate protection, this year’s ranking still features 10 EU member states on top of the list, led by Denmark, the UK and Portugal. Coming from rank 20 in the last year, Morocco now joins the group of “good” performing countries. Germany for the first time dropped out of the top ten and also Mexico lost ground and left the leading group. These two find themselves in the category “moderate” together with other European states, such as Italy, Spain and Norway, and are joined by Egypt and India. Within the group of “poor” performers, there are some interesting developments. For the first time the USA, China and Poland managed to discard the label “very poor”—nevertheless they still have way to go before qualifying for the next upgrade. This year, the Netherlands reached the threshold, and almost managed to climb up to the “moderate” group, what may well happen next year, if changes in its policy prove to be effective. “Very poor” remain the performances of Algeria and Turkey as well as of some Asian states, such as Japan, and once more Russia, Australia and Canada.

Map 1 a



Map 1 b

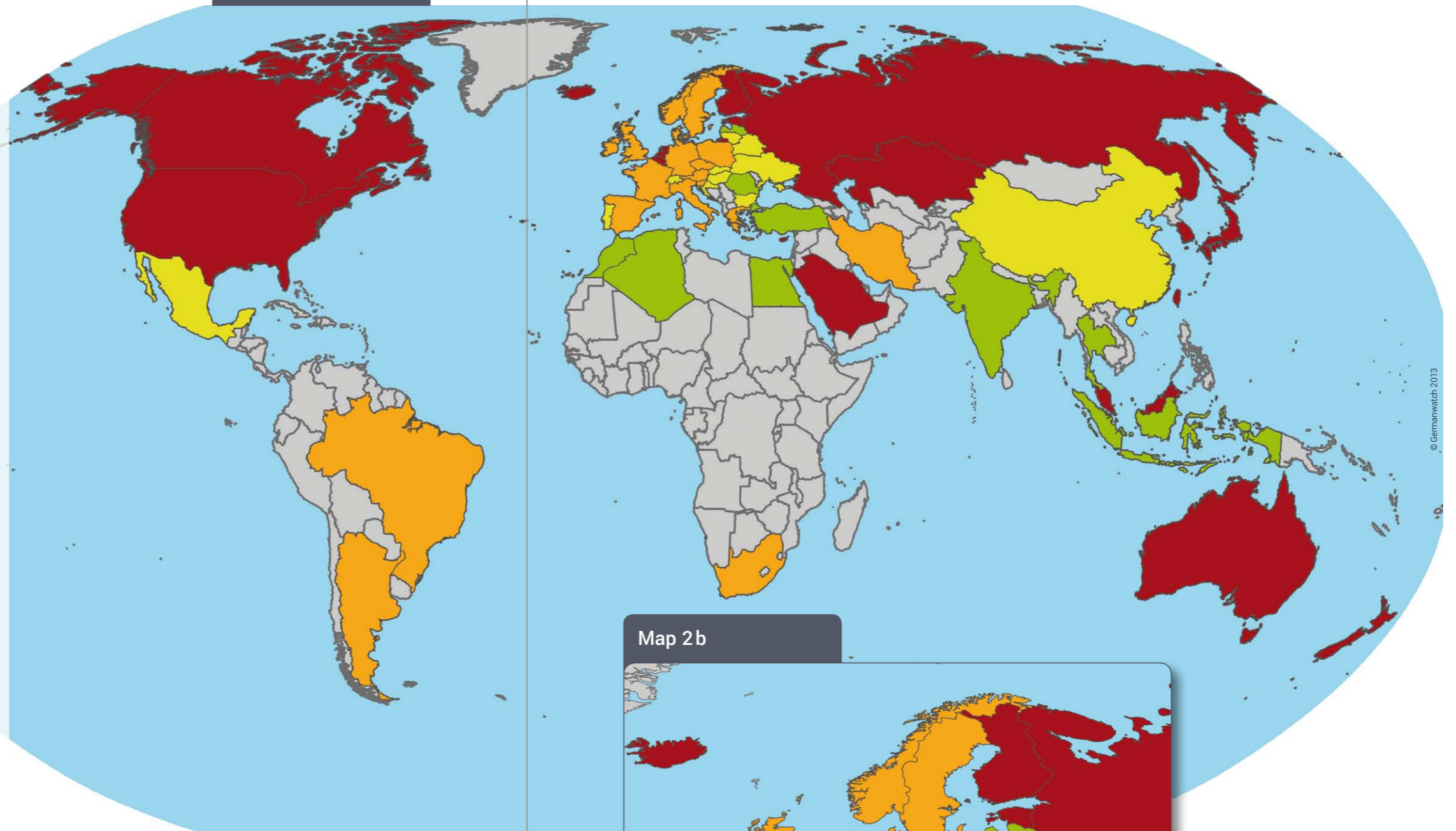


4.2 Partial Results • Emissions Level

Regarding global CO₂ emissions, there is an interesting and diverse debate currently taking place. Whereas a new emissions record was observed in the 2011 data¹¹ as well as a rise in the globally measured CO₂ concentration¹² in 2012, there have also been developments in the past years that raise cautious hopes of not exceeding the 2°C limit. Furthermore, there are indications in the 2012 data of a slowdown in the increase of emissions and, for the first time, a decoupling of GDP growth from the emissions development.¹³ A further expansion of renewable energies and improvements in the efficiency sector remain the most promising strategies to tackle global emissions. Traditionally, relatively low emission levels are found in India, Morocco and Egypt, but overall the frontrunner group remains small.

The bottom five countries in emissions levels did not change since last year's edition. Saudi Arabia, Australia, Luxembourg, Canada and the USA still need to make a lot more effort to lower their emissions before an improvement can be seen in their positions. Apart from some countries such as Sweden and Norway, which lost ground slightly, and Ireland, which climbed in its position, the overall results in this section show a stable picture.

Map 2 a



Map 2 b



Performance

- Very good
- Good
- Moderate
- Poor
- Very poor
- Not included in assessment

¹¹ This Index only reflects the latest available International Energy Agency (IEA) emissions data until 2011.

¹² UNEP (2013): The Emissions Gap Report 2013. United Nations Environment Programme (UNEP), Nairobi.

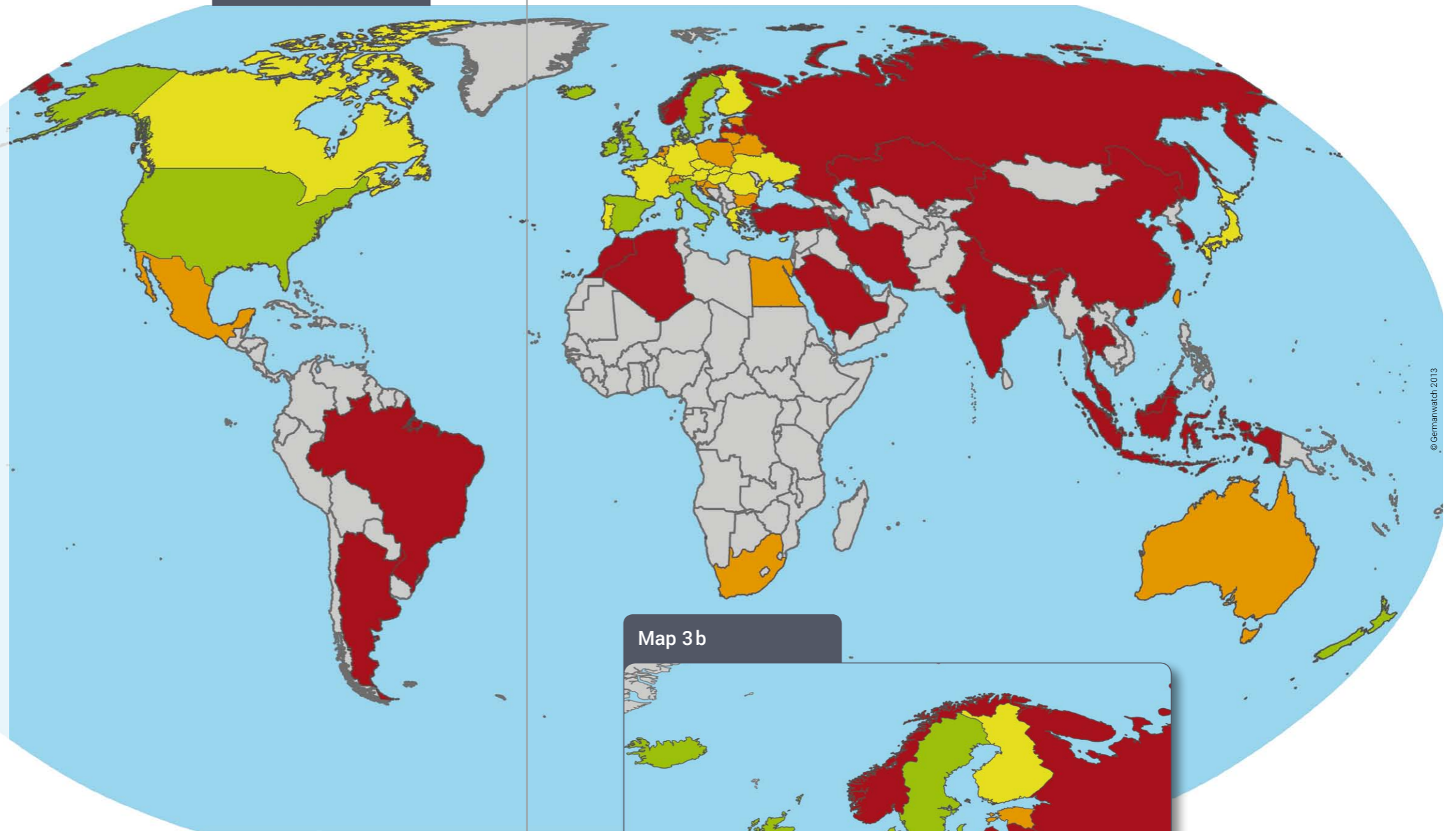
¹³ Olivier, J.G.J., Janssens-Maenhout, G., Muntean, M., Peters, J.A.H.W. (2013): Trends in Global CO₂ Emissions: Report 2013. PBL Netherlands Environmental Assessment Agency, The Hague.

4.3 Partial Results • Development of Emissions

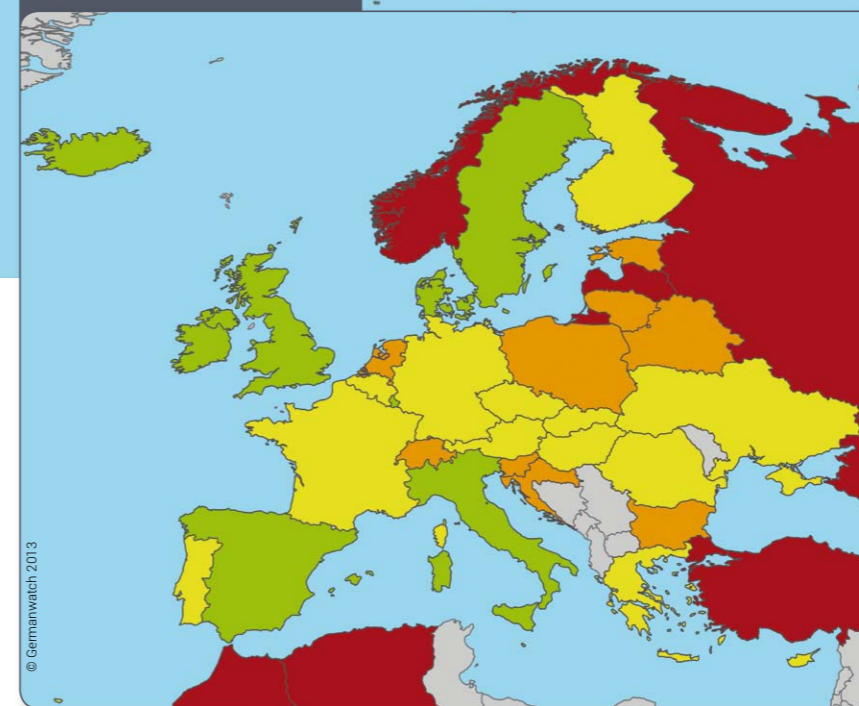
The section measuring the development of emissions remains one of the Index's most relevant indicators, as it is relatively sensitive to effective climate policy measures. Regarding the described emissions development in China, it is not at all surprising that the country is still the worst performing of all 58 Index countries. Equally unchanged, Luxemburg and Ireland remain on top of the list. Besides countries like Denmark and Sweden, which have an overall positive score, the USA, the UK and New Zealand also feature in the group of "good" performing states.

Whereas its emissions level is very high, the development of Australia's emissions is "moderate", as is that of Mexico, Canada and other mainly East European states. In South America, Brazil and Argentina have a poor development of emissions as well as mainly Western European countries, South Africa and Iran. In this year's Index the number of "very poor" performing countries still remains high. According to the BPL data from 2012, some visible changes in this sector may be expected for the assessment period of the next CCPI edition.

Map 3 a



Map 3 b



Performance

- Very good
- Good
- Moderate
- Poor
- Very poor
- Not included in assessment

4.4 Partial Results • Renewable Energies

Together with improving energy efficiency, expanding the use of renewable sources for energy production is one of the key drivers for a low-carbon future. Shifting energy production to renewables is the only way to decouple economic development from increasing emissions, making it indispensable for improvements in both climate protection and social equality.

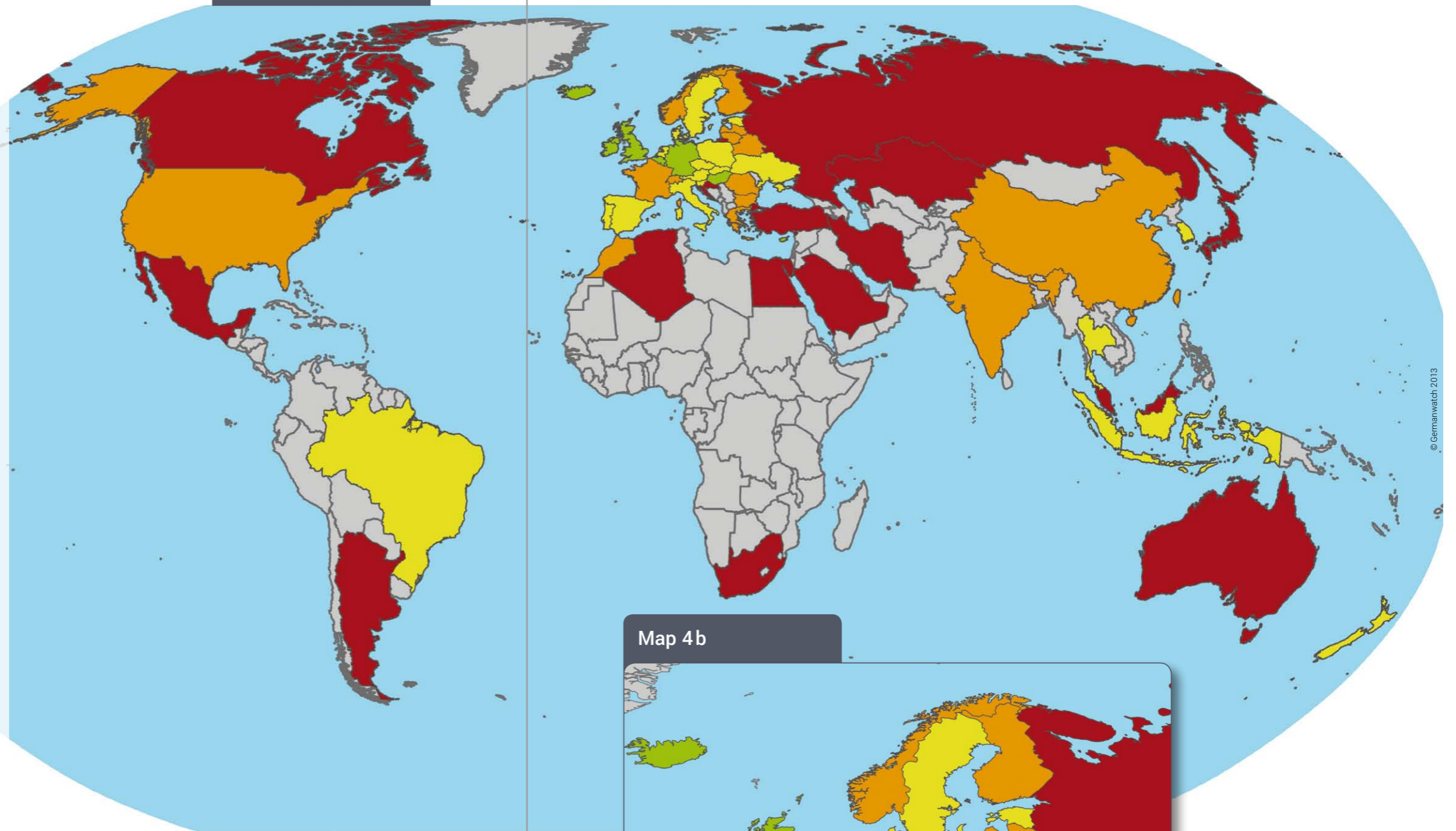
Currently, there are great developments within this sector, not only in developed countries. North African states are investing heavily in renewables. Within this group, Morocco is increasingly becoming a pioneer and role model for its neighbours.

Germany as the country with the highest ambitions in the field of renewables—aiming for a complete transformation of its energy system to clean sources—lost track during the implementation of its “Energiewende”, and has to prove its leadership within the next year. For now, the country loses ground and finds itself on rank 11.

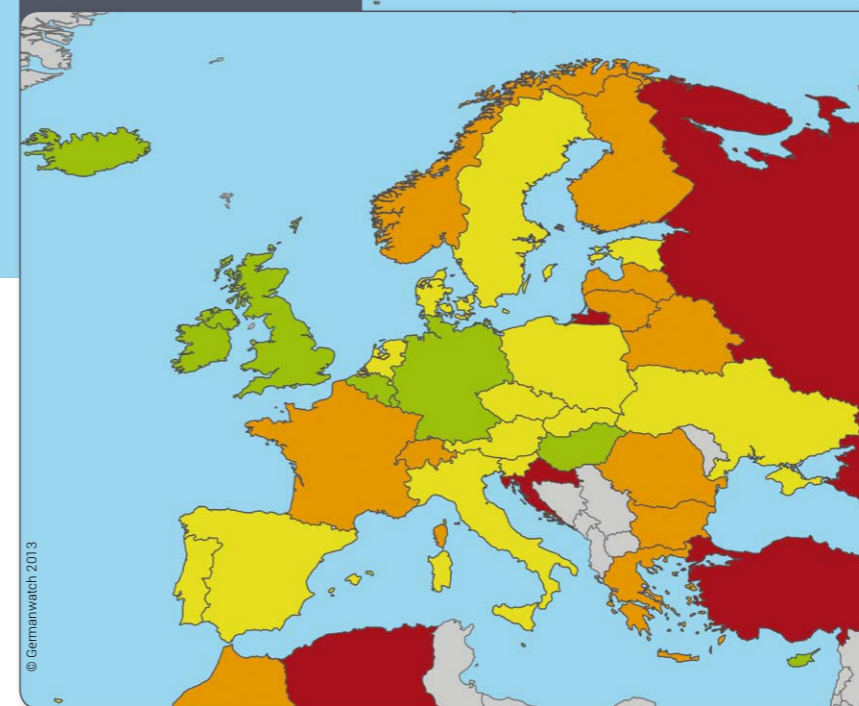
The winners in this category are Malta, Belgium and Ireland. Other countries like Brazil lost some ground, but generally there are no remarkable changes within the ranking compared to last year.

Russia, Iran, Australia 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 is not yet reflected in the data.

Map 4 a



Map 4 b



Performance

- Very good
- Good
- Moderate
- Poor
- Very poor
- Not included in assessment

4.5 Partial Results • Efficiency

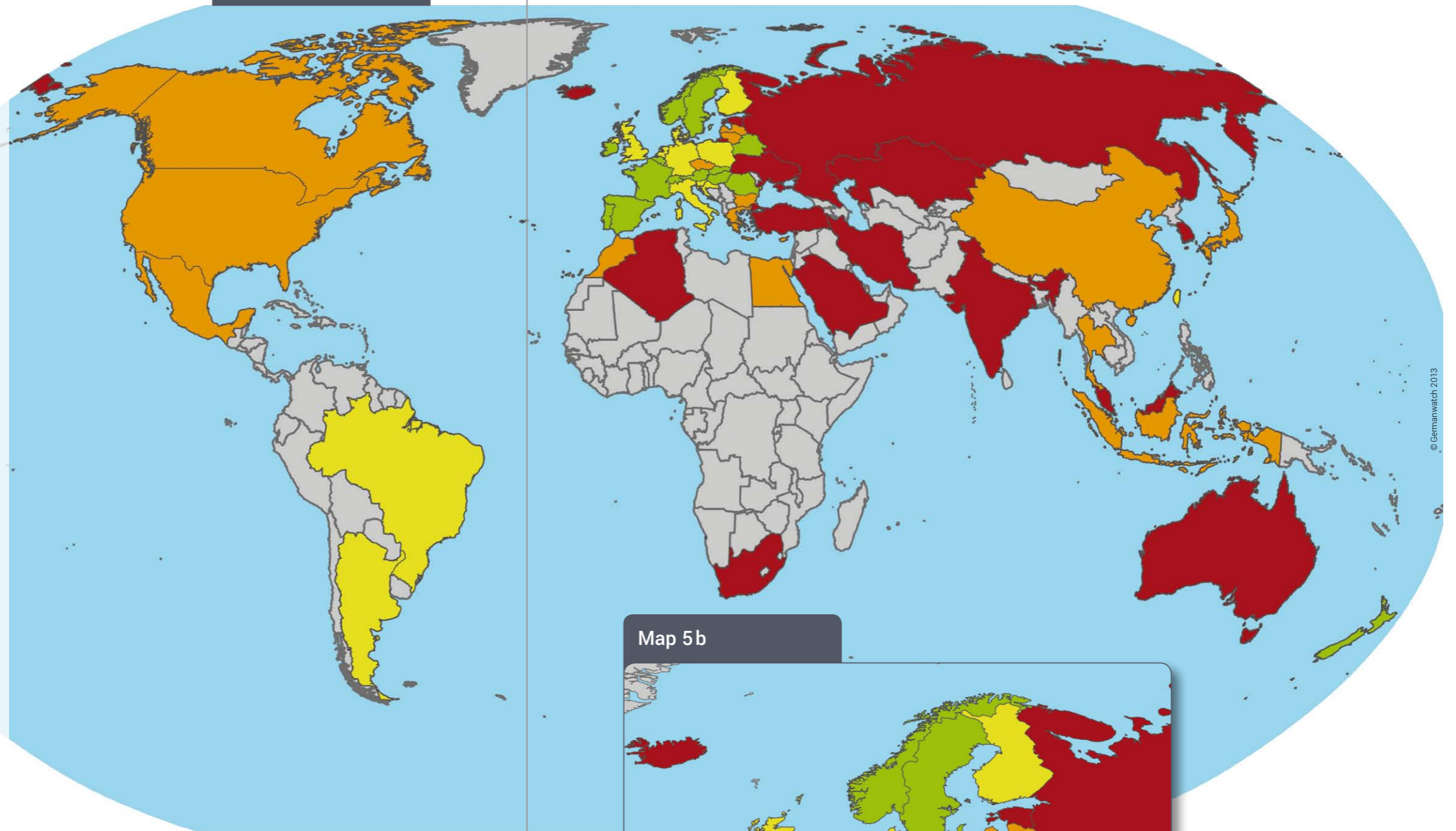
The current level and recent development of the efficiency of the observed countries are assessed in this section of the CCPI. Together with a large-scale deployment of renewable energy, improvements in energy efficiency are crucial for a global reduction of greenhouse gas emissions. Enhancing efficiency levels is closely associated with long-term economic benefits and is therefore one of the major strategies to tackle climate change.

It is striking that within the top 17 performers in the efficiency sector, almost all are European countries, apart from New Zealand, which ranks on the 9th position. The two South American countries in the Index are found in the top 25. As in last year's ranking, Sweden is the most efficient country, well ahead of the unchanged 2nd best performer, Romania.

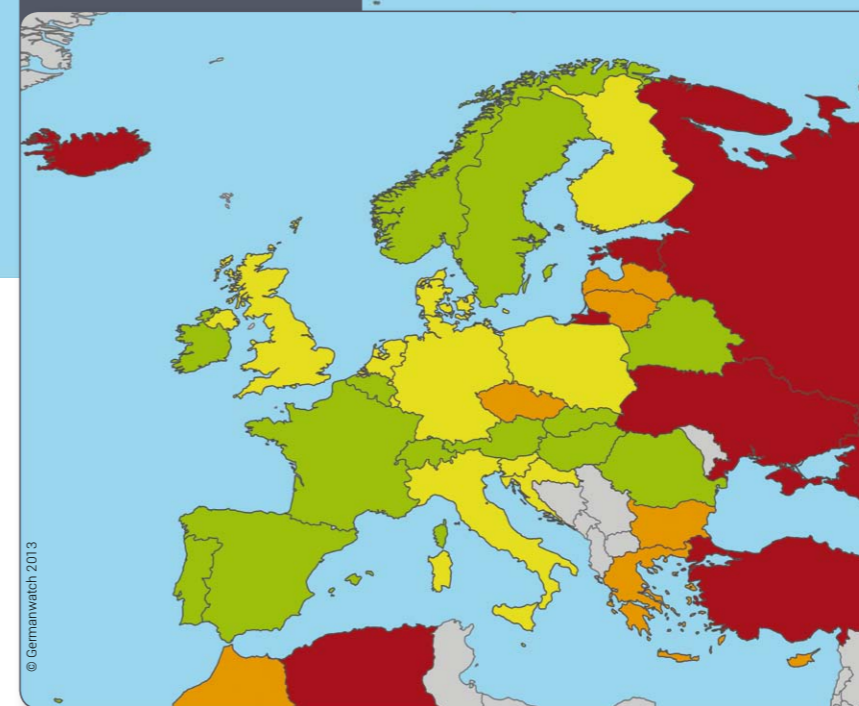
Although Germany is a pioneer in the "energy transition" towards renewable energy, its performance remains below average in the efficiency category, leaving its huge potential for efficiency improvements untapped.

Asian and African countries in particular still have untouched potential for improving their efficiency. Both for global climate protection efforts and for economic reasons, it would be crucial for these countries to compensate economic growth with improvements in efficiency levels. Kazakhstan and Saudi Arabia have the worst performance in this category.

Map 5 a



Map 5 b



Performance

- Very good
- Good
- Moderate
- Poor
- Very poor
- Not included in assessment

4.6 Partial Results • Climate Policy

Reflecting efforts towards an efficient and low-carbon society, this map portrays the evaluation and results of the climate policy of the observed countries. Over 250 experts from non-governmental organisations contributed to the CCPI 2014 with an evaluation of those policies. While all recent underlying data for the other categories is from 2011 and previous years, the expert evaluations reflect up-to-date developments.

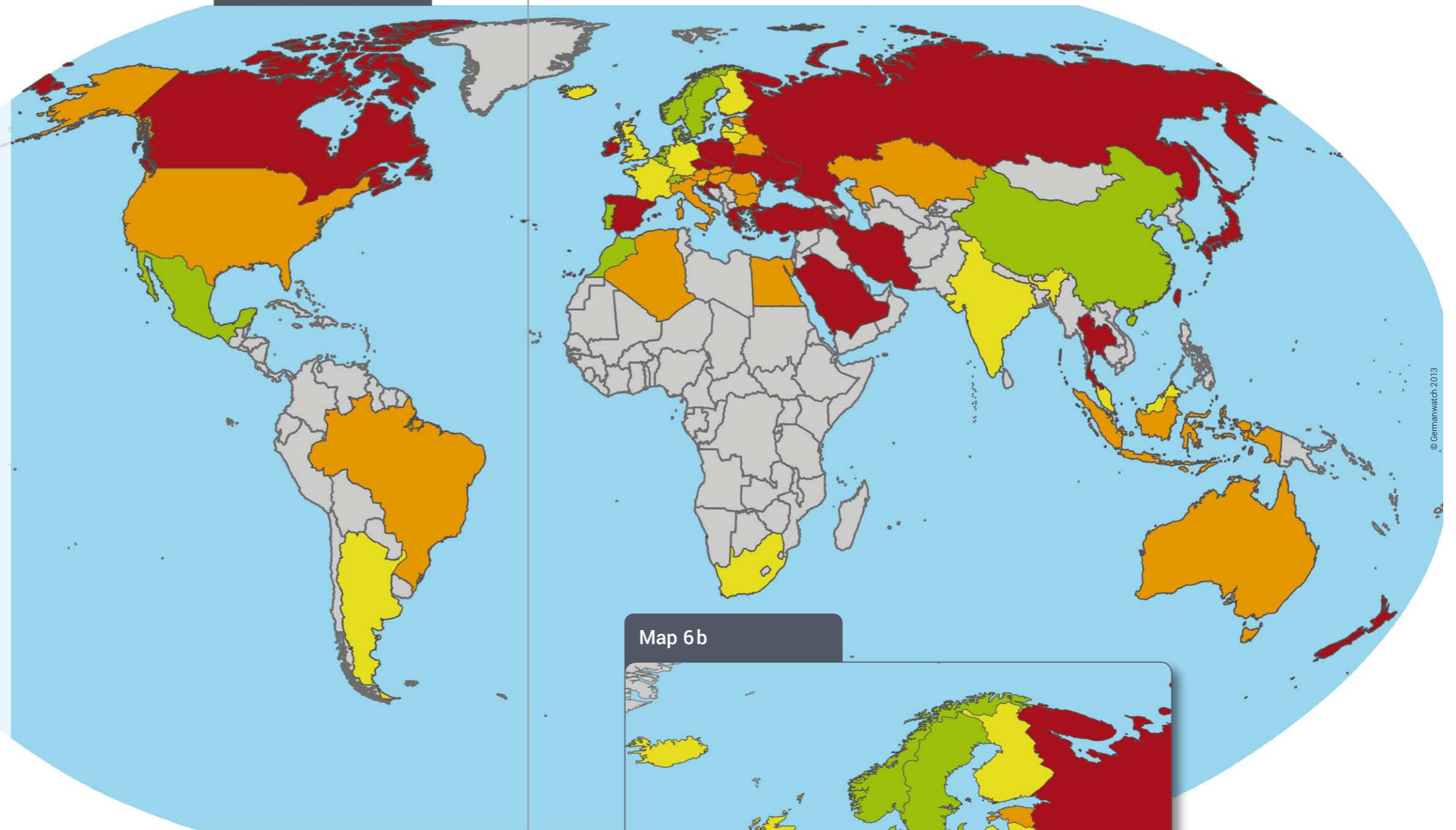
The policy data enables countries with an overall poor performance to be rewarded as soon as a shift in politics is observed (e. g. due to a change of government or of the current government's climate policy). This year, the Netherlands was able to fulfil these conditions. If the trends prove to be correct, however, these countries are expected to improve even more in the next years, and their ambitions should be reflected in the emissions data.

Although Australia was mentioned as an example of those who profited last year from good policy evaluations, the country did not fare so well in the recent Index year. In sum, the data showed a slight improvement in Australia's emissions performance, but in the overall ranking it dropped six places due to a drastic decrease in the policy score. Another country that could have performed better is Germany, which was also unable to maintain its positive evaluations of previous years.

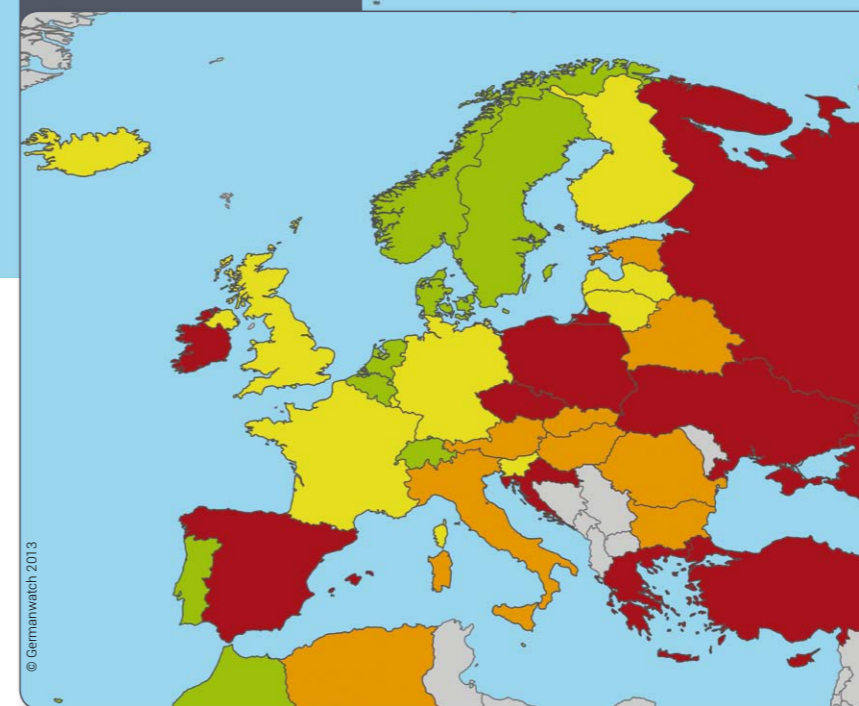
Once again, Denmark, Korea and China are some of the winners in the race for the best national policy evaluation. New Zealand joined the bottom five this year. Whereas Italy managed to improve its score, Spain, Croatia, Greece and Turkey remain with low scores.

In the international policy evaluation a group of six has top scores. The Scandinavian states Denmark and Norway confidently share the first rank, ahead of Switzerland, Belgium, Mexico and Sweden. Hopefully improvements will be observed in the international efforts of New Zealand, Canada and Turkey next year, which currently lag far behind.

Map 6 a



Map 6 b



5. Country Example: Poland

With the COP taking place in Warsaw this year, it is interesting to take a closer look at the hosting country, at developments in the different sectors and recent developments in the country's politics. Discussing Poland's performance in the different sectors also helps to understand the methodology of the CCPI.

Coming from an overall very poor performance in last year's Index, Poland did not improve its performance very much this year: just one place up to rank 45. The emissions level in Poland is relatively high. The high share of coal in the energy mix is responsible for this fact. The emissions trend in Poland shows that the country is not yet on its way to a low carbon economy. The experts claim that high investments in road infrastructure and airports favor individual transport based on fossil resources over more efficient public transport services. The results of this policy are visible in the emission data of the transport section, where Poland's emissions increased by 33% within the last five years. Consequently the country ranks at the 58th position regarding emissions from road traffic and with a 40% increase of emissions from aviation, this year's 55th rank is adequate in this sector. Additionally, Poland also reduced its emissions in the electricity sector by 5%. These developments should be observed but still the country's main energy source to produce electricity is coal with a share of 80%.

Coming from a low share of renewables, there was a pleasant development of its expansion in the last five years with a plus of about 60% up to a share of nearly 8% of the total primary energy supply. This increase mainly can be traced to an extensive promotion of co-firing of solid biomass in Poland's coal-fired power stations. Another trend worth mentioning is the tenfold increase of wind power since 2006. National experts criticise the failed implementation of policies that secure investments in renewable energies.

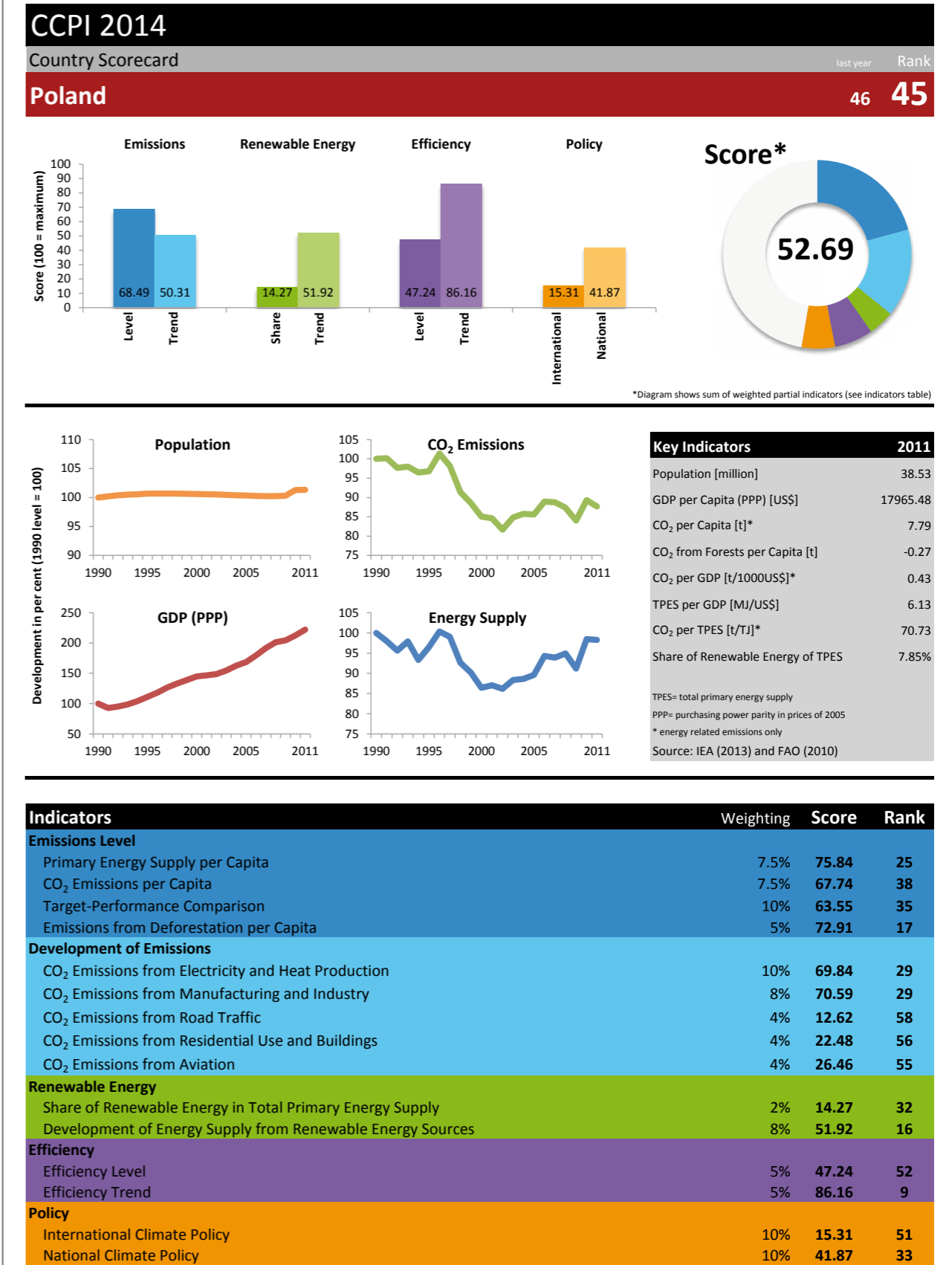
A remarkable development, which already was visible in last year's data, is the trend in energy efficiency, where Poland ranks on the 9th position. The data shows a 15% decrease of emissions in the manufacturing sector; according to the experts, this development could result from the efforts of various industry sectors that in the past years invested in efficiency on their own.

Poland's reforestation programs seem to be effective, since its forests are currently growing. Nonetheless, due to the government's promotion of extending biomass-coal-co-firing technologies, some experts see this development endangered.

Poland achieved to reduce its emissions by 30% compared to 1988 (base year for Poland for the Kyoto Protocol). According to the climate experts from Poland, this reduction achievement is not sufficient as Poland took a base year with very high emissions. Due to the economic breakdown from 1988 to 1990, the emissions decreased in this time by 20%. The expert's main criticism concerns the recent lack of political will to effectively implement existing policies, even though there would be a high potential for further improvements. Not least because of its pro coal policies, Poland remains one of the most carbon intensive economies of Europe. According to the interviewed experts, besides a program for the promotion of solar heat production, which started a small revolution in this sector, there are no effective policies for climate protection or the promotion of a transformative process towards sustainable development.

The policy evaluation from the national climate experts shows a poor performance regarding the national efforts and a very poor performance regarding international climate politics. The country's very poor international performance does partly come from its role in EU climate and energy politics. Regarding EU politics, the experts disapprove Poland's destructive position within the climate debate in the EU, where the government has opposed an effective correction of the policy framework for the European emission trading scheme.

Table 3: Country Scorecard Poland



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	75.23	17	Slovak Republic	63.17	40	Czech Republic	53.93
5	United Kingdom	69.66	18	Italy	62.90	42	New Zealand	53.49
6	Portugal	68.38	19	Germany	61.90	43	United States	52.93
7	Sweden	68.10	20	Mexico	61.50	45	Poland	52.69
8	Switzerland	66.17	22	Spain	60.37	47	Greece	51.50
10	France	65.90	23	Luxembourg	60.27	50	Japan	47.21
11	Hungary	65.17	24	Norway	59.32	53	Korea	46.66
12	Ireland	65.01	29	Austria	57.19	54	Turkey	46.47
13	Iceland	64.89	31	Netherlands	56.99	57	Australia	41.53
14	Belgium	64.65	32	Finland	56.57	58	Canada	40.39

© Germanwatch 2013

Table 5: Climate Change Performance Index for EU Member Countries

Rank	Country	Score	Rank	Country	Score	Rank	Country	Score
4	Denmark	75.23	17	Slovak Republic	63.17	31	Netherlands	56.99
5	United Kingdom	69.66	18	Italy	62.90	32	Finland	56.57
6	Portugal	68.38	19	Germany	61.90	37	Bulgaria	54.87
7	Sweden	68.10	21	Lithuania	60.94	40	Czech Republic	53.93
9	Malta	66.05	22	Spain	60.37	44	Croatia	52.79
10	France	65.90	23	Luxembourg	60.27	45	Poland	52.69
11	Hungary	65.17	25	Slovenia	59.19	47	Greece	51.50
12	Ireland	65.01	27	Latvia	58.73	55	Estonia	45.52
14	Belgium	64.65	28	Cyprus	57.61			
16	Romania	63.73	29	Austria	57.19			

© Germanwatch 2013

Table 6: Climate Change Performance Index for G8 Countries

Rank	Country	Score	Rank	Country	Score	Rank	Country	Score
5	United Kingdom	69.66	19	Germany	61.90	56	Russian Fed.	43.64
10	France	65.90	43	United States	52.93	58	Canada	40.39
18	Italy	62.90	50	Japan	47.21			

© Germanwatch 2013

Table 7: Climate Change Performance Index for G20 Countries*

Rank	Country	Score	Rank	Country	Score	Rank	Country	Score
5	United Kingdom	69.66	36	Brazil	55.53	54	Turkey	46.47
10	France	65.90	39	South Africa	54.04	56	Russian Fed.	43.64
18	Italy	62.90	41	Argentina	53.60	57	Australia	41.53
19	Germany	61.90	43	United States	52.93	58	Canada	40.39
20	Mexico	61.50	46	China	52.41	61	Saudi Arabia	25.17
30	India	57.16	50	Japan	47.21			
34	Indonesia	56.24	53	Korea	46.66			

* Not included: European Union (The European Union is part of the G20 Countries.)
© Germanwatch 2013

Table 8: Climate Change Performance Index for Countries in Transition

Rank	Country	Score	Rank	Country	Score	Rank	Country	Score
11	Hungary	65.17	27	Latvia	58.73	44	Croatia	52.79
16	Romania	63.73	33	Belarus	56.48	45	Poland	52.69
17	Slovak Republic	63.17	35	Ukraine	56.04	55	Estonia	45.52
21	Lithuania	60.94	37	Bulgaria	54.87	56	Russian Fed.	43.64
25	Slovenia	59.19	40	Czech Republic	53.93	60	Kazakhstan	37.64

© Germanwatch 2013

Table 9: Climate Change Performance Index for Newly Industrialised Countries

Rank	Country	Score	Rank	Country	Score	Rank	Country	Score
15	Morocco	63.99	36	Brazil	55.53	48	Singapore	50.32
20	Mexico	61.50	38	Thailand	54.51	49	Algeria	49.92
26	Egypt	59.00	39	South Africa	54.04	51	Malaysia	47.06
30	India	57.16	41	Argentina	53.60	52	Chinese Taipei	46.81
34	Indonesia	56.24	46	China	52.41	54	Turkey	46.47

© Germanwatch 2013

Table 10: Climate Change Performance Index for ASEAN Member Countries plus India, China, Japan and Korea

Rank	Country	Score	Rank	Country	Score	Rank	Country	Score
30	India	57.16	46	China	52.41	51	Malaysia	47.06
34	Indonesia	56.24	48	Singapore	50.32	52	Chinese Taipei	46.81
38	Thailand	54.51	50	Japan	47.21	53	Korea	46.66

© Germanwatch 2013

7. Sources and Further Reading Recommendations

- Burck; Hermwille; Bals (2013): 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 (2013a): CO₂ Emissions from Fuel Combustion. Paris.
- IEA (2013b): Renewables Information. Paris.
- IPCC (1997): Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories. www.ipcc-nggip.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.
- Olivier, J.G.J., Janssens-Maenhout, G., Muntean, M., Peters, J.A.H.W. (2013): Trends in Global CO₂ Emissions: Report 2013. PBL Netherlands Environmental Assessment Agency, The Hague.
- PWC (2013): Low Carbon Economy Index 2013 | Busting the carbon budget. www.pwc.co.uk/sustainability-climate-change/publications/low-carbon-economy-index.jhtml
- UNEP (2013): The Emissions Gap Report 2013. United Nations Environment Programme (UNEP), Nairobi.
- World Meteorological Organisation (2013): Greenhouse Gas Concentrations in Atmosphere Reach New Record. http://www.wmo.int/pages/mediacentre/press_releases/pr_980_en.html

Annex: Key data for all countries covered by the CCPI

Country	CCPI Rank* 2014	CCPI Rank* 2013	Share of Global GDP	Share of World Population	Share of Global CO ₂ Emissions**	Share of Global Primary Energy Supply
Denmark	4	4	0.26%	0.08%	0.12%	0.14%
United Kingdom	5	10	2.93%	0.90%	1.32%	1.43%
Portugal	6	7	0.32%	0.15%	0.14%	0.18%
Sweden	7	5	0.47%	0.14%	0.13%	0.37%
Switzerland	8	6	0.44%	0.11%	0.11%	0.19%
Malta	9	12	0.01%	0.01%	0.01%	0.01%
France	10	15	2.79%	0.94%	0.94%	1.93%
Hungary	11	11	0.25%	0.14%	0.13%	0.19%
Ireland	12	9	0.24%	0.07%	0.10%	0.10%
Iceland	13	16	0.02%	0.00%	0.01%	0.04%
Belgium	14	13	0.52%	0.16%	0.32%	0.45%
Morocco	15	20	0.20%	0.46%	0.14%	0.13%
Romania	16	18	0.33%	0.31%	0.21%	0.27%
Slovak Republic	17	17	0.16%	0.08%	0.10%	0.13%
Italy	18	21	2.34%	0.87%	1.12%	1.28%
Germany	19	8	4.02%	1.18%	2.23%	2.38%
Mexico	20	14	2.08%	1.57%	1.34%	1.42%
Lithuania	21	25	0.08%	0.05%	0.03%	0.06%
Spain	22	28	1.77%	0.66%	0.76%	0.96%
Luxembourg	23	27	0.05%	0.01%	0.03%	0.03%
Norway	24	33	0.33%	0.07%	0.08%	0.21%
Slovenia	25	22	0.07%	0.03%	0.04%	0.06%
Egypt	26	30	0.65%	1.19%	0.56%	0.59%
Latvia	27	31	0.04%	0.03%	0.01%	0.03%
Cyprus	28	23	0.03%	0.01%	0.02%	0.02%
Austria	29	35	0.43%	0.12%	0.20%	0.25%
India	30	24	5.66%	17.84%	5.14%	5.72%
Netherlands	31	49	0.88%	0.24%	0.52%	0.59%
Finland	32	37	0.25%	0.08%	0.17%	0.26%
Belarus	33	32	0.18%	0.14%	0.17%	0.22%
Indonesia	34	36	1.41%	3.48%	2.30%	1.59%
Ukraine	35	19	0.41%	0.66%	0.83%	0.96%
Brazil	36	34	2.87%	2.83%	4.12%	2.06%
Bulgaria	37	41	0.13%	0.11%	0.12%	0.15%
Thailand	38	26	0.75%	1.00%	0.72%	0.91%
South Africa	39	39	0.70%	0.73%	1.10%	1.08%
Czech Republic	40	29	0.36%	0.15%	0.33%	0.33%
Argentina	41	53	0.90%	0.59%	0.82%	0.61%
New Zealand	42	40	0.16%	0.06%	0.10%	0.14%
United States	43	43	18.81%	4.48%	15.50%	16.71%
Croatia	44	38	0.10%	0.06%	0.05%	0.06%
Poland	45	46	0.98%	0.55%	0.86%	0.77%
China	46	48	14.63%	19.42%	22.95%	20.91%
Greece	47	47	0.36%	0.16%	0.24%	0.20%
Singapore	48	54	0.40%	0.07%	0.19%	0.26%
Algeria	49	42	0.39%	0.52%	0.31%	0.32%
Japan	50	44	5.59%	1.84%	3.54%	3.52%
Malaysia	51	56	0.58%	0.41%	0.73%	0.58%
Chinese Taipei	52	52	1.11%	0.34%	0.79%	0.83%
Korea	53	50	1.95%	0.72%	1.76%	1.99%
Turkey	54	57	1.41%	1.06%	0.76%	0.86%
Estonia	55	45	0.03%	0.02%	0.06%	0.04%
Russian Federation	56	55	2.99%	2.04%	4.90%	5.57%
Australia	57	51	1.21%	0.33%	1.18%	0.94%
Canada	58	58	1.75%	0.50%	1.58%	1.92%
Islamic Republic of Iran	59	60	1.18%	1.08%	1.55%	1.62%
Kazakhstan	60	59	0.27%	0.24%	0.70%	0.60%
Saudi Arabia	61	61	0.86%	0.40%	1.36%	1.43%
Total			90.10%	71.47%	85.71%	86.61%

* The underlying data that is provided by the International Energy Agency has been changed retrospectively. That influences the comparability of the results between the different Index years. This year the data changes mostly affected Australia, China and Thailand.

** energy-related emissions and emissions from deforestation

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 and 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 attempt to approach our goals by advocating for the prevention of dangerous climate change, food security and compliance of companies with human rights.

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

You can also help achieve the goals of Germanwatch by becoming a member or by donating to:

Bank fuer Sozialwirtschaft AG

BIC/Swift: BFSWDE33BER

IBAN: DE33 1002 0500 0003 212300

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.

