

# THE CLIMATE CHANGE PERFORMANCE INDEX

## RESULTS 2010

CLIMATE CHANGE  
PERFORMANCE

index

2010

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## 1. CONCLUSION

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### CLIMATE POLICY – AN “ENDANGERED SPECIES”?

**In this year again, none of the countries ranked in the index achieved the positions one to three; despite the high attention the issue of climate change has reached prior to the climate change summit in Copenhagen. None of the countries analysed is contributing sufficiently on a practical level to the goal to avoid dangerous climate change and keep global warming notably below the 2 degrees limit.**

It should be noted that more emerging economies are among the forerunners than in previous years. In addition to many European countries, Brazil, India and Mexico were able to place themselves in top positions. Yet, there is more to do to earn the best grade - Brazil, Sweden or the United Kingdom also still have a lot of catching-up to do. The index compares countries only with each other, and the first positions solely show that these countries perform better in terms of climate protection than others. No country is yet on the path to contribute adequately to avoiding dangerous climate change. Due to this lack of political will, this year again, positions one to three could not be awarded. So far, the index can only compare countries based on energy-induced emissions, therefore emissions resulting from land-use changes were not included. Brazil made big progress in reducing deforestation within the last months. However, it is not yet clear if this is a result due to a decreased demand of palm oil and soya from the current economic crisis.

In regards to the emissions trend, Australia, China, Saudi Arabia and Austria in particular perform badly. Especially Saudi Arabia's performance in the Climate Change Performance Index contradicts the necessary level of climate protection: on the one hand, they are producing a high emissions level and a poor emissions trend. On the other hand, their representatives consistently obstructed the UN climate negotiations by, e.g., insisting on compensations for lost gains from oil sales, to be delivered through funds originally intended for the support of poor countries for adaptation measures. This led to an extremely negative policy evaluation.

Looking at the emissions level of the ranked countries, the United States, Canada and Russia place very poorly. Even though the USA was able to improve several ranks in comparison to last year's results, the proof still needs to be furnished that the new climate policies of President Obama will also lead to reduced emissions and a leading international position on climate.

The United Kingdom succeeded in passing a national climate policy act. Such a track may – if well done – lead to a constant emissions reduction and may help the UK to perform just as well next year. This is a vital component on the path to remain below the 2 degrees limit.



## 2. INTRODUCTION

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### CLIMATE PROTECTION: WHO IS DOING WHAT?

**The Climate Change Performance Index (CCPI)** is an innovative Instrument that enhances transparency in international climate politics. On the basis of standardised criteria the index evaluates and compares the climate protection performance of the 57 countries that together are responsible for more than 90 percent of global energy-related CO<sub>2</sub> emissions.<sup>1</sup>

Four fifths of the evaluation is based on objective indicators of emissions trend and emissions level. One fifth results from the expert assessment of the national and international climate policy of the respective countries. The aim of the index is to increase the political and social pressure on those countries which hitherto have failed to take the initiative on climate protection or which even still neglect the importance of this issue.

**The overall results** (table 1) clearly show which countries have the longest way to go in order to catch up. But even 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 engaged as the current “forerunners”, efforts already made would still be insufficient to prevent dangerous climate change. Hence, this year again, no country made it in the first three rankings.

Governments that rest on their laurels will have to face a drop in their position in next year’s country ranking. Particularly alarming is the poor performance of most of the ten largest CO<sub>2</sub> emitters (table 2). These countries account for more than 60 percent of global CO<sub>2</sub> emissions. Their future willingness and ability to pursue a sustainable climate policy will therefore be an important requirement to avoid a highly dangerous level of climate change.

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<sup>1</sup> Included are industrialised countries and countries in transition to market economies (Annex I countries of the Framework Convention on Climate Change) and all countries causing more than one percent of the global CO<sub>2</sub> emissions. The methodology and calculation of the Climate Change Performance Index is explained in the booklet “The Climate Change Performance Index - Background and Methodology”. It can be found online at [www.germanwatch.org/ccpi](http://www.germanwatch.org/ccpi)

### 3. OVERALL RESULTS

## CLIMATE CHANGE PERFORMANCE INDEX 2010

Table 1:

Rank Tendency	Country	Score**	Partial Score		
			Trend	Level	Policy
1*	-	-			
2*	-	-			
3*	-	-			
4	↗ Brazil	68.0			
5	↘ Sweden	67.4			
6	↗ United Kingdom	65.3			
7	↘ Germany	65.3			
8	↘ France	63.5			
9	↘ India	63.1			
10	↗ Norway	61.8			
11	↗ Mexico	61.2			
12	↗ Portugal	59.7			
13	↗ Switzerland	59.4			
14	↗ Latvia	57.5			
15	↘ Iceland	57.3			
16	↑ Belgium	57.2			
17	↓ Denmark	57.0			
18	→ Lithuania	55.9			
19	↘ Hungary	55.6			
20	↗ Malta	55.2			

↗ comparison with previous year \*\* rounded © Germanwatch 2009

Rank Tendency	Country	Score**	Partial Score		
			Trend	Level	Policy
21	↗ Algeria	55.1			
22	↘ Ireland	54.9			
23	↗ Indonesia	54.9			
24	↘ Slovakia	54.7			
25	↘ Czech Republic	54.6			
26	↑ Thailand	54.6			
27	↗ Netherlands	54.3			
28	↓ Morocco	53.3			
29	↗ South Africa	52.9			
30	↑ Romania	52.9			
31	↓ Argentina	52.2			
32	↘ Spain	51.8			
33	↗ Belarus	51.4			
34	↘ Estonia	51.3			
35	↑ Japan	50.9			
36	↑ Finland	49.5			
37	↗ Ukraine	49.5			
38	↗ Iran	49.2			
39	↘ Turkey	49.1			
40	↘ Singapore	48.8			

↗ comparison with previous year \*\* rounded © Germanwatch 2009

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

Rank Tendency	Country	Score**	Partial Score		
			Trend	Level	Policy
41 →	Korea, Rep.	48.7			
42 ↑	Austria	48.2			
43 ↘	Slovenia	48.1			
44 →	Italy	48.0			
45 ↑	Russia	48.0			
46 ↓	Bulgaria	47.5			
47 ↓	Taiwan / China	47.5			
48 ↓	Croatia	47.4			
49 ↘	Poland	47.4			
50 ↗	Malaysia	46.9			
51 ↘	Cyprus	46.6			
52 ↘	China	46.6			
53 ↗	United States	46.3			
54 ↗	Greece	46.0			
55 ↓	New Zealand	44.8			
56 ↗	Luxembourg	42.8			
57 ↘	Australia	41.9			
58 ↘	Kazakhstan	41.4			
59 →	Canada	40.7			
60 →	Saudi Arabia	28.7			

↳ comparison with previous year \*\* rounded © Germanwatch 2009

Table 2:  
Index ranking of the 10 largest CO<sub>2</sub> Emitters

Country	Share of Global CO <sub>2</sub> Emissions*	CCPI Rank	
		2010	(2009)
United Kingdom	1.81 %	6	(9)
Germany	2.76 %	7	(5)
India	4.57 %	9	(7)
Japan	4.27 %	35	(43)
Iran	1.61 %	38	(39)
Korea, Rep.	1.69 %	41	(41)
Russia	5.48 %	45	(54)
China	20.96 %	52	(49)
United States	19.92 %	53	(58)
Canada	1.98 %	59	(59)

\* energy related

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### Index Categories

 Emissions Trend (50% weighting)

 Emissions Level (30% weighting)

 Climate Policy (20% weighting)

### Rating

 Very good

 Good

 Moderate

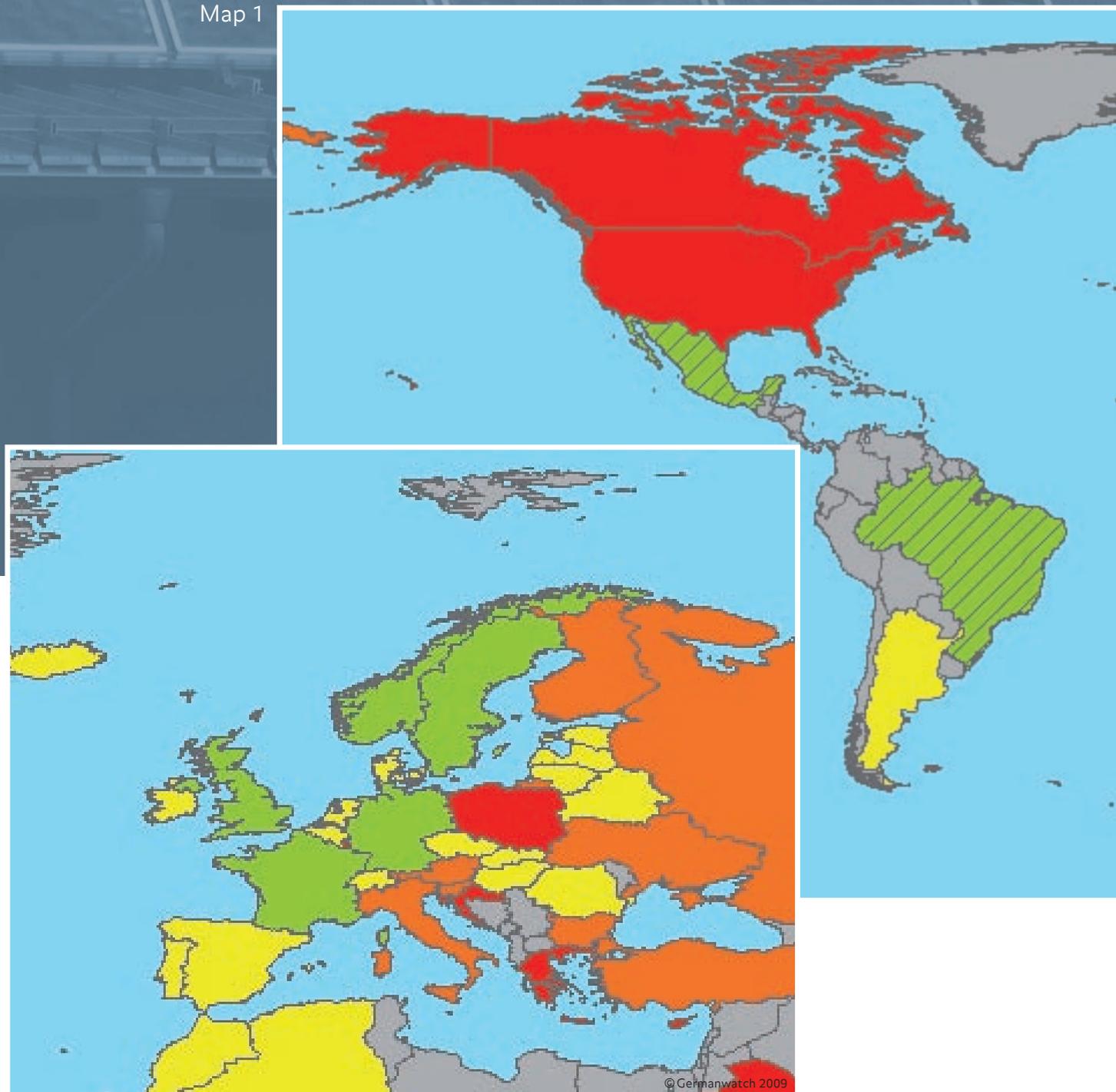
 Poor

 Very poor

### 3. OVERALL RESULTS

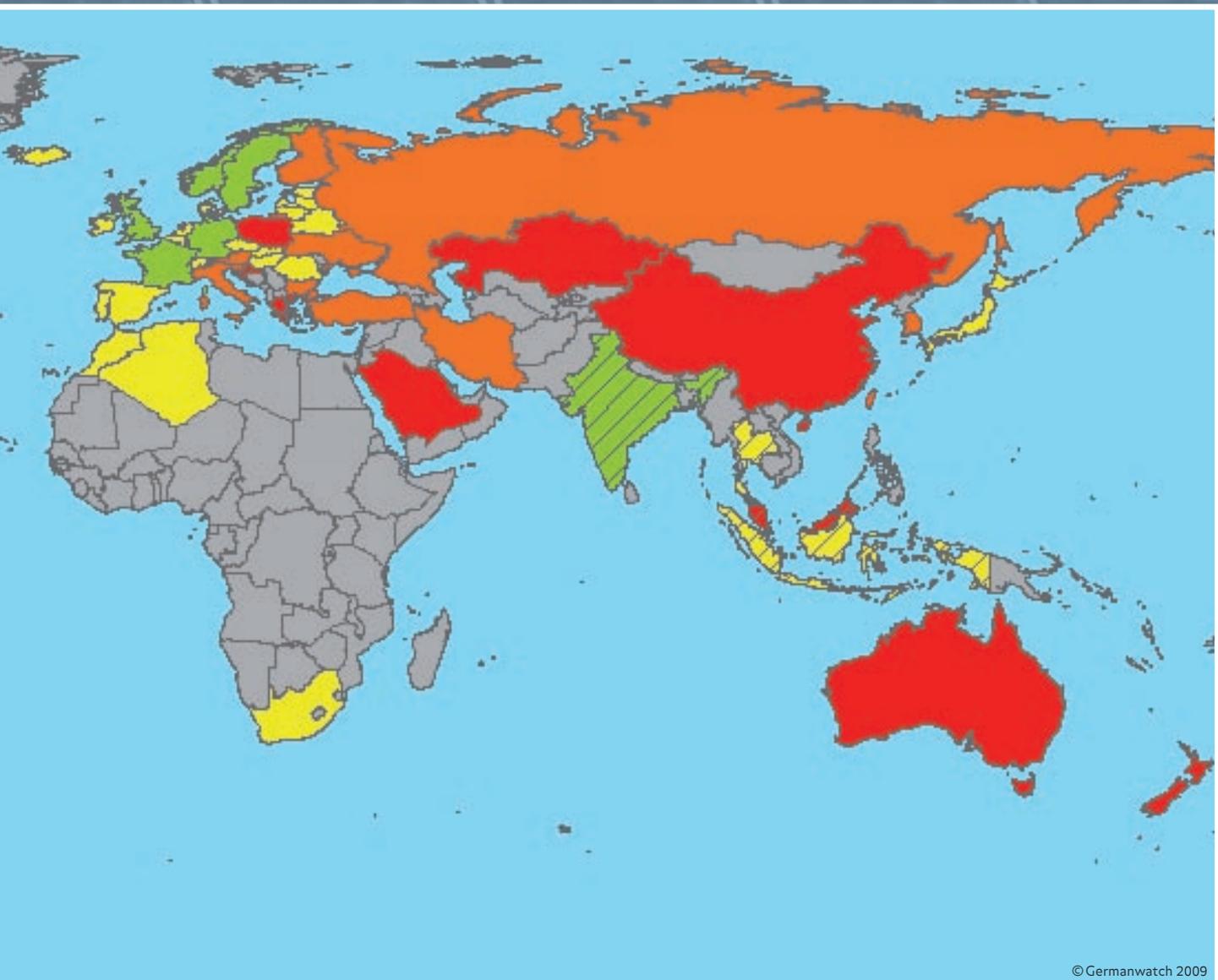
## CCPI WORLD MAP

Map 1



The world map shows that the leaders in climate protection in the field of energy-induced emissions are no longer only to be found in Europe, but also include countries like Brazil, India and Mexico. None of these, however, earned the highest score, since all their efforts are insufficient to ensuring that we avert dangerous climate change. And they are still refusing an international review of their data.

Due to the lack of data for some of the relevant countries, the index excludes emissions from deforestation and land use. Countries in which deforestation and land use account for more than 10 percent of their total emissions (hatched countries on the map) have a special responsibility to make additional reductions in that sector. Especially countries like Brazil (80 percent of emissions come from deforestation) and Indonesia (45 percent) have to increase their ef-



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forts and need to be supported by the international community. Encouraging is the fact that Brazil was able to cut its deforestation rate by 50 percent in the last year. It remains unclear, however, to what extent this development has been influenced by the decreasing demand (e.g., concerning soy and palm oil) due to the economic crisis. In any case, the fact that these emissions are largely driven by consumption patterns of industrialised and newly industrialised nations needs to be taken into account.

Furthermore, the map shows that in large parts of the world, including Canada, the USA and Russia, but also many states of the EU such as Austria, Italy and Poland, appropriate climate protection is contradicted by policy and emission trends.

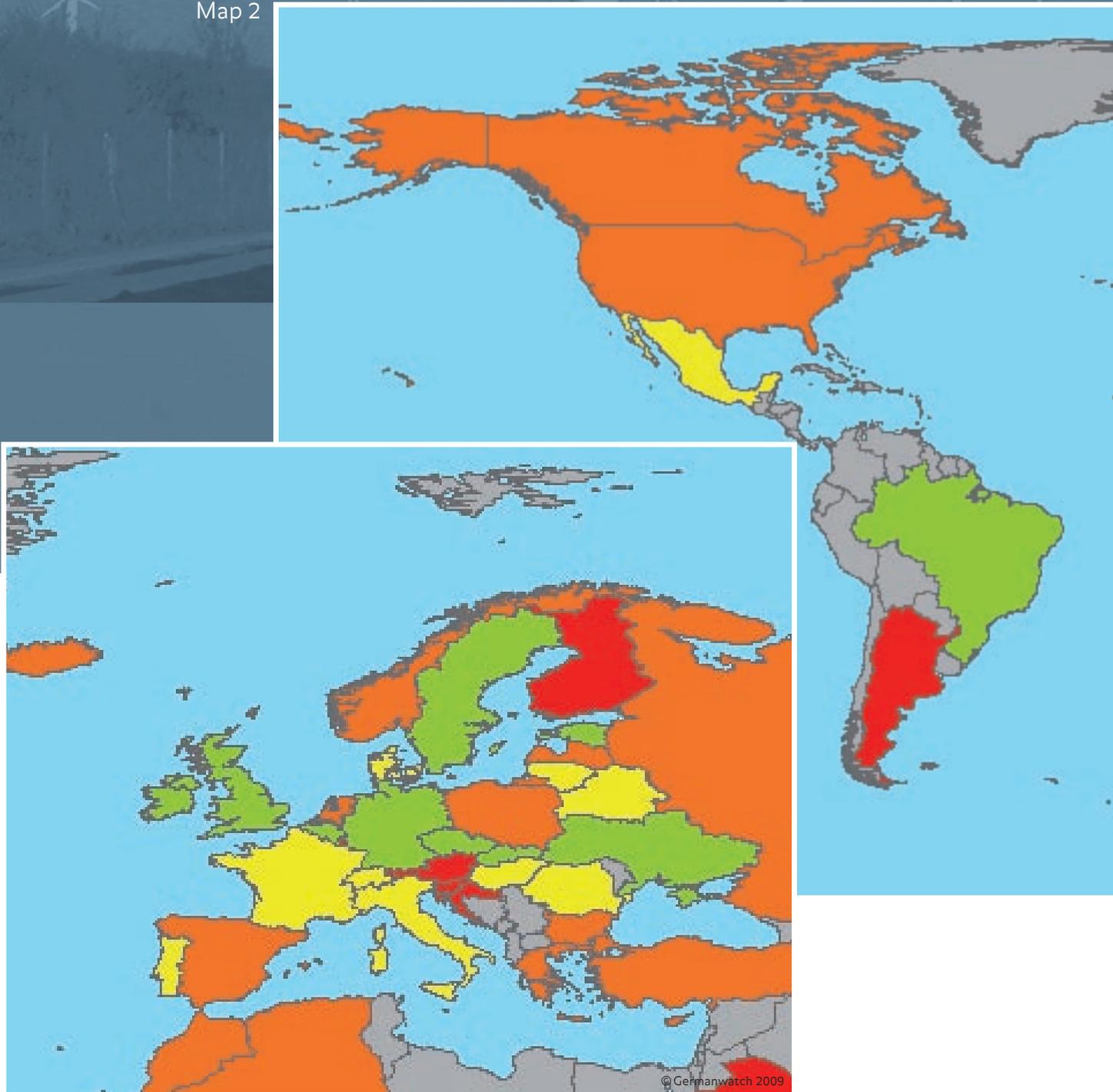
### Performance

- Very good
- Good
- Moderate
- Poor
- Very poor
- Not included in assessment
- More than 10% of total emissions from land use changes. They are not included in the index calculations.

## 4. PARTIAL RESULTS

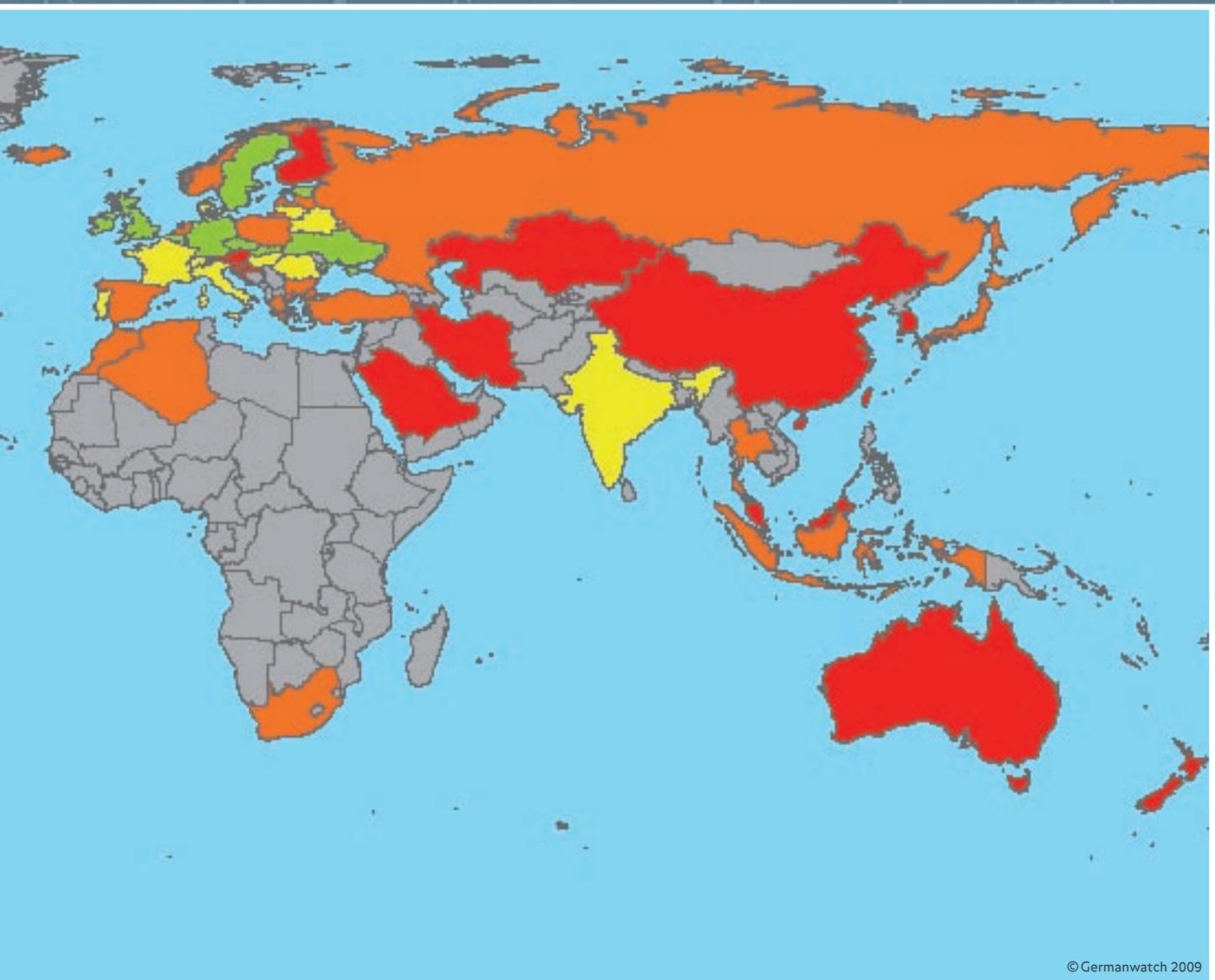
### 4.1 EMISSIONS TREND

Map 2



The analysis of the trend indicators shows that not one country has reduced its emissions sufficiently to stop dangerous climate change. The emissions trends in Australia, China and Saudi Arabia are especially worrisome. However, some countries show promis-

ing approaches as they are increasing the share of renewable energies, for instance. With regard to the latter, especially the Czech Republic, Germany and Belgium can be highlighted.



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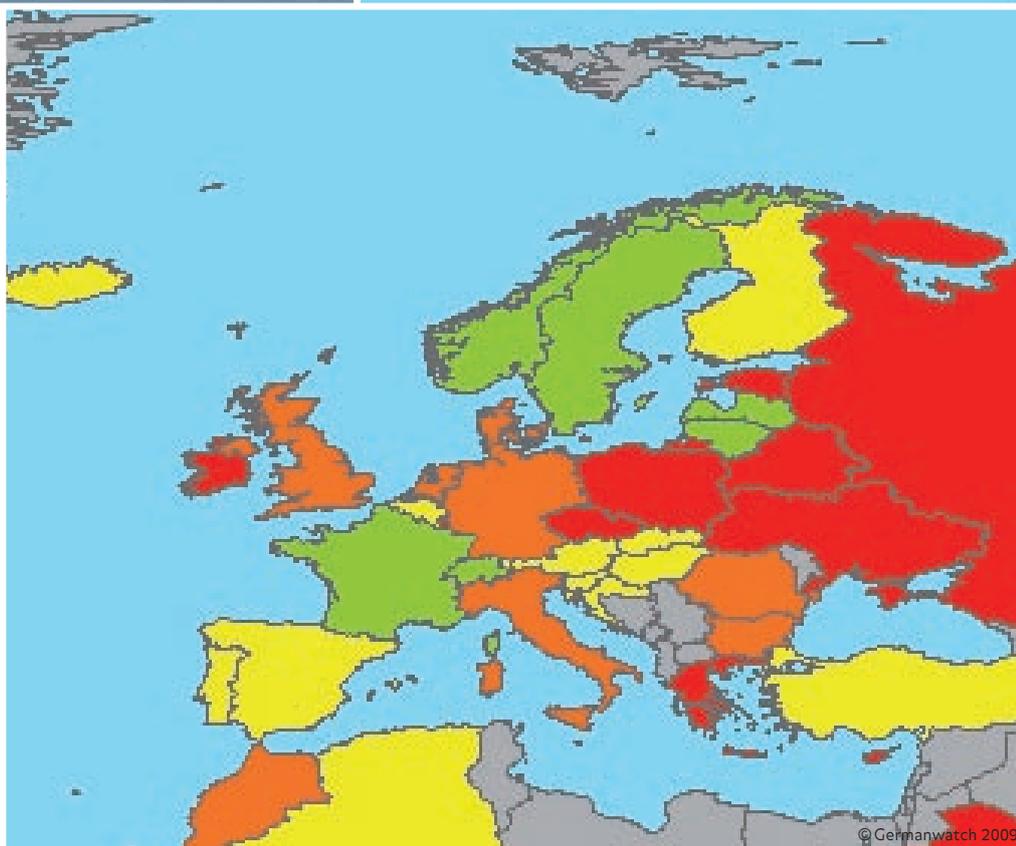
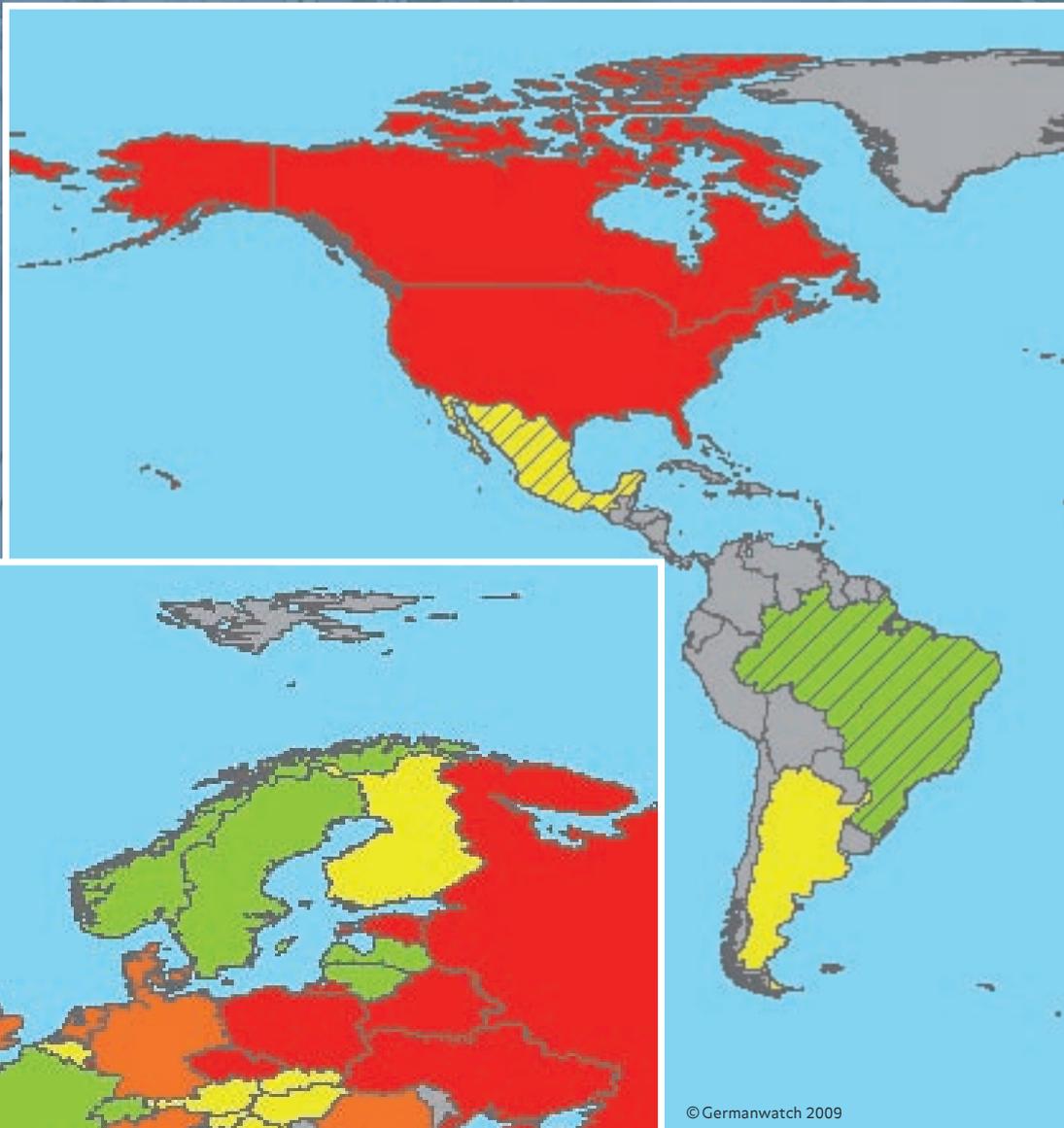
**Performance**

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

## 4. PARTIAL RESULTS

### 4.2 EMISSIONS LEVEL

Map 3



#### Performance

-  Very good
-  Good
-  Moderate
-  Poor
-  Very poor
-  Not included in assessment
-  More than 10% of total emissions from land use changes. They are not included in the index calculations.

Those countries marked red have the greatest need to catch up based upon the emissions level indicators. They need to reduce their emissions drastically. Negative examples are especially the USA, Canada and Australia. These coun-

tries have a particularly large responsibility and a large potential to reduce their emissions. Countries in which land use change accounts for more than 10 percent of overall emissions are hatched.

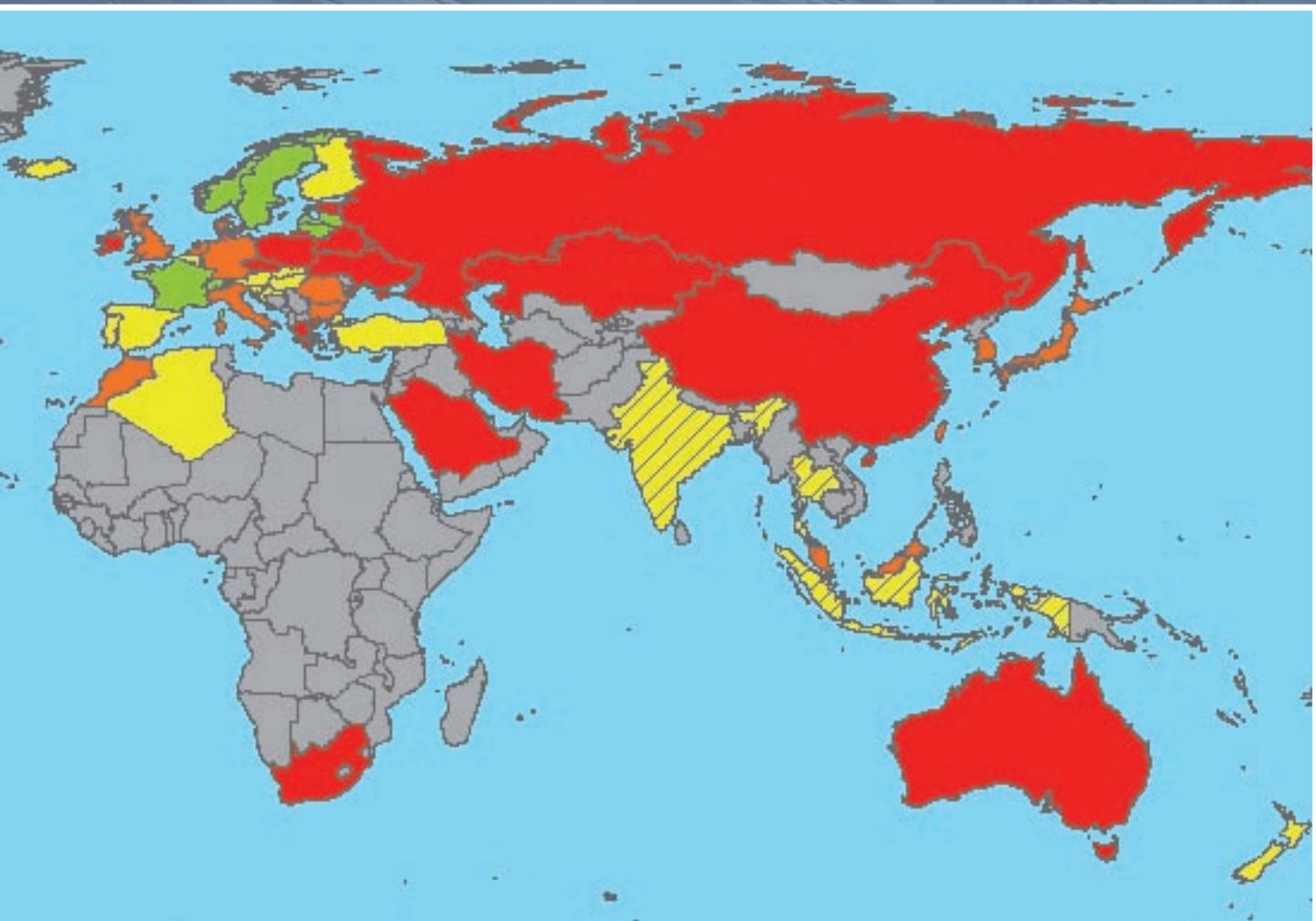


Table 3: Key Data for the 10 Largest CO<sub>2</sub> Emitters

Country	CCPI Rank 2010	(2009)	Share of Global CO <sub>2</sub> Emissions*	Share of Global Primary Energy Supply	Share of Global GDP	Share of Global Population
United Kingdom	6	(9)	1.81%	1.76%	2.98%	0.92%
Germany	7	(5)	2.76%	2.75%	3.77%	1.24%
India	9	(7)	4.57%	4.95%	6.55%	17.00%
Japan	35	(43)	4.27%	4.27%	5.89%	1.93%
Iran	38	(39)	1.61%	1.54%	0.90%	1.07%
Korea, Rep.	41	(41)	1.69%	1.85%	1.73%	0.73%
Russia	45	(54)	5.48%	5.59%	2.61%	2.14%
China	52	(49)	20.96%	16.37%	16.53%	20.08%
United States	53	(58)	19.92%	19.45%	18.67%	4.57%
Canada	59	(59)	1.98%	2.24%	1.70%	0.50%
Total			65.05%	60.77%	61.35%	50.19%

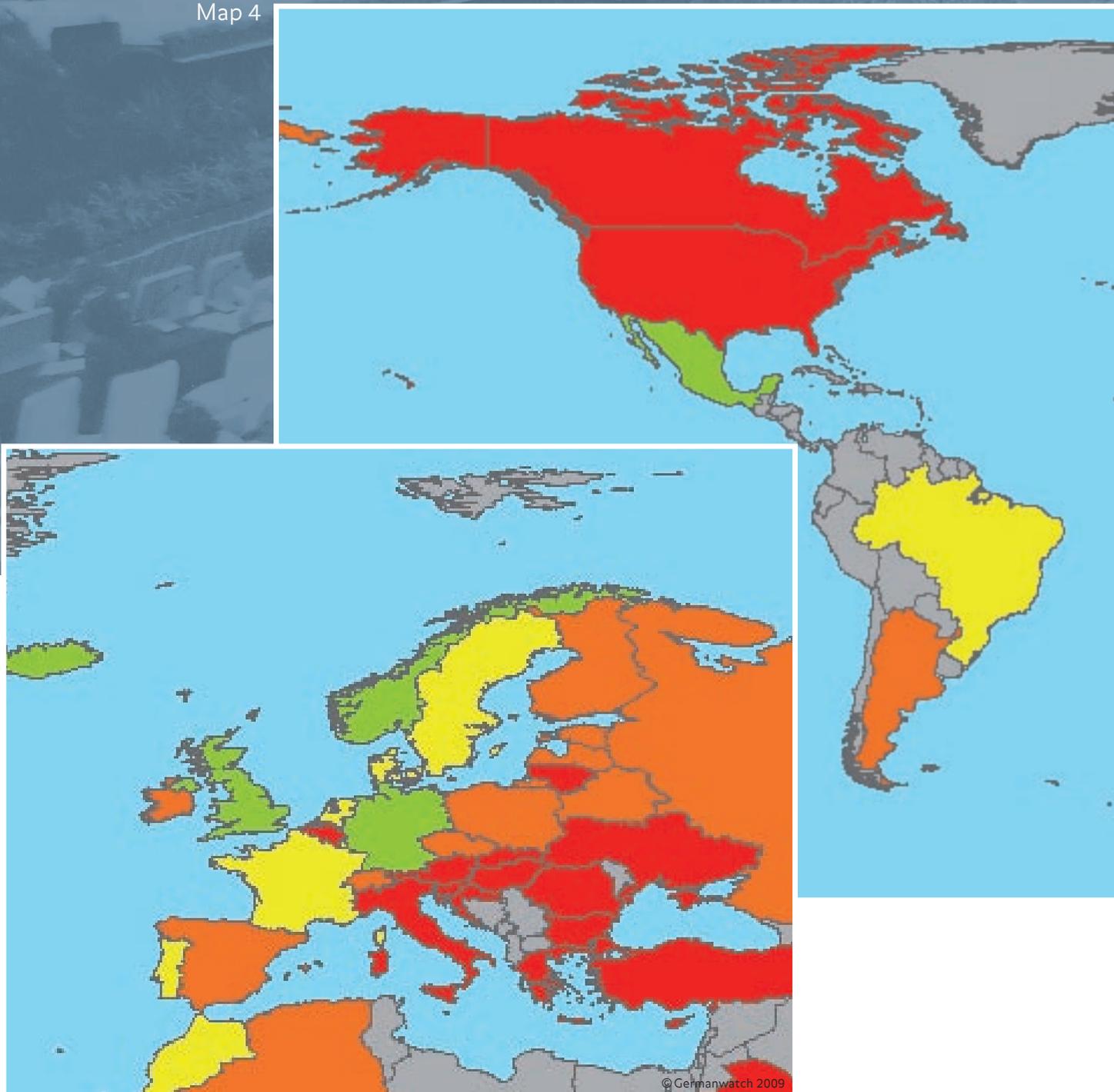
\*energy related

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## 4. PARTIAL RESULTS

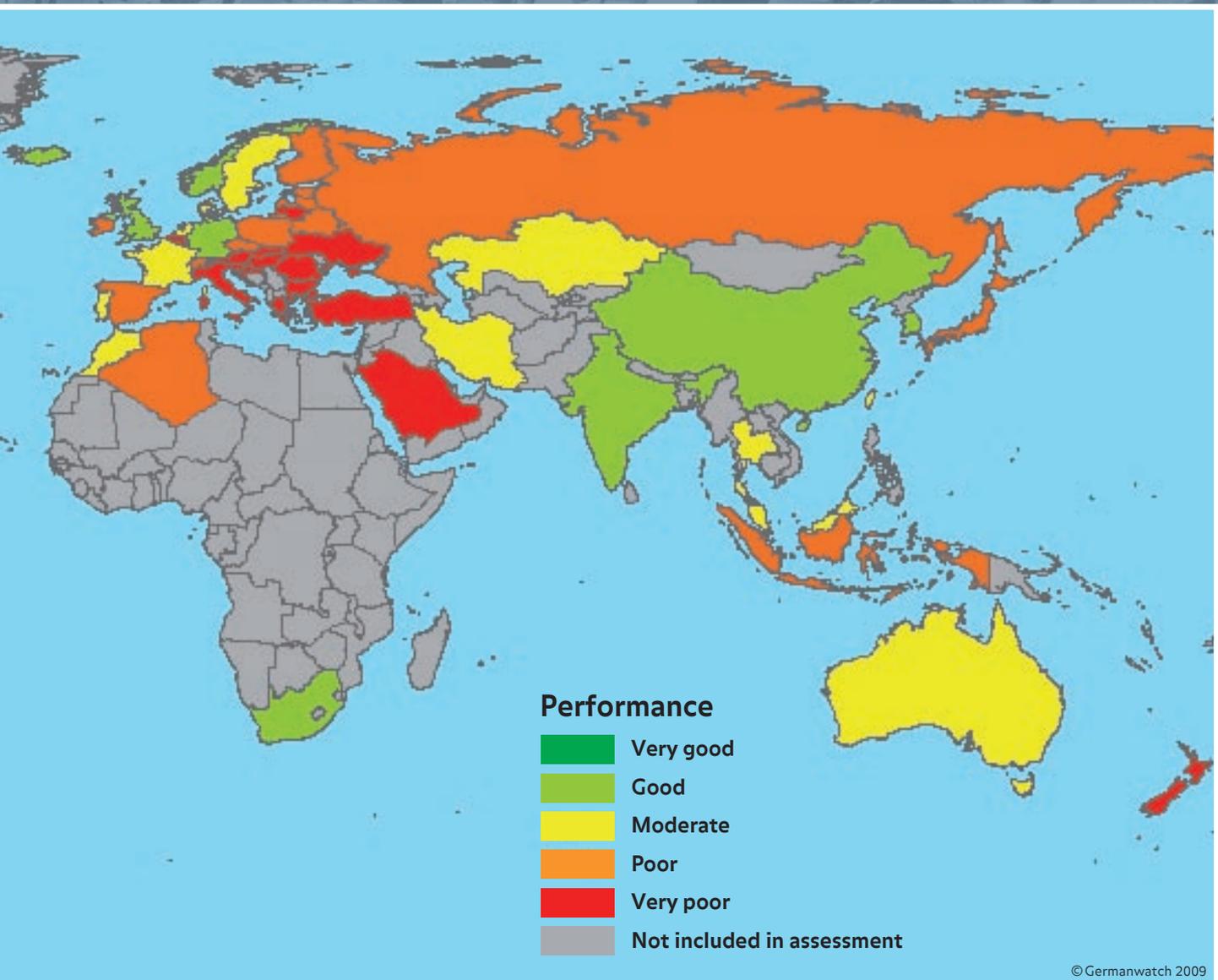
### 4.3 CLIMATE POLICY

Map 4



More than 130 NGO experts contributed to the preparation of the index and rated the national and international climate policies of their own countries. The results are illustrated on map 4. This year, the increased commitment in climate politics of the big newly industrialising countries India, Mexico, South Africa and China is particularly remarkable – Brazil

also caught up in this category. Some of these states played an increasingly constructive role at the UN climate change negotiations. However, time will tell to what extent these announcements are going to be implemented in the future. Thereby it is necessary to better integrate these countries into the international context and to provide enough sup-



port for their future additional activities. No country achieved a “very good” in their climate policy – just like no country received “very good” for their emissions trends and levels. The only country by now that is regulating long-term climate protection by law is the United Kingdom. In 2008, after intensive national discussion, it has been agreed upon the Climate Change Act that includes an extensive package of measures which aim to enable the UK to reduce its CO<sub>2</sub> emissions by 80 percent by 2050. More of these measures are desirable but the map shows something different: the political ambitions of the world’s biggest CO<sub>2</sub> emitters Canada and the USA are still disillusioning.

Comprehensive climate legislation has been initiated in the USA. However, it is not as ambitious as it should be, nor has it been enacted yet. Internationally, in comparison to the last year, the USA is taking a more constructive position concerning climate issues but this alone is not able to reduce the emissions.

## 5. COUNTRY COMPARISON

### BRAZIL AND CANADA AS AN EXAMPLE

Table 4: Brazil

Indicator		Score*	Rank**	Weight	Rank**	
Emissions Levels		CO <sub>2</sub> per Primary Energy Unit	64.2	8	15.0%	5
		Primary Energy per GDP Unit	86.2	22	7.5%	
		Primary Energy per Capita	94.4	8	7.5%	
Sectoral Emissions Trends	Energy	Electricity	80.3	21	8.0%	6
		Renewables	25.4	19	8.0%	
	Transport	International Aviation	72.1	49	4.0%	
		Road Traffic	78.1	17	4.0%	
	Residential	Private Households	64.8	16	4.0%	
Industry	Manufacturing and Construction	68.9	31	7.0%		
Target Performance Comparison since 1990		73.2	10	15.0%		
Climate Policies		International	74.3	11	10.0%	19
		National	44.8	32	10.0%	
Total		66.7		100%	4	

\*Minimum: 0, maximum: 100

\*\* (4-60) None of the countries achieved positions one to three.

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The following country comparison gives an example of a differentiated analysis of the 12 partial indicators.

The weighted sum of each country's scores in the separate indicators makes up the country's overall score which determines the country's position on the index list. However, the latter does not state how much its performance differed from those ranked closest to it. To see how much better or worse the individual country results were, one must examine the scores. Very high or low scores in one or two separate categories can have a profound influence on the overall score. Quite often we thus see large deviations between the position in individual rankings and the overall ranking. Brazil is one example: this year, Brazil has achieved the comparatively highest score and thus ends up ranked 4<sup>th</sup> – since no country placed on the first to third rank. However, it has by no means been a leader in all areas, as the section "International Aviation" indicates (72.1 points, 49<sup>th</sup> rank).

Canada ranks on the second last position, thus it did not change in comparison to the last year's results.

Let us have a closer look at Brazil's and Canada's individual indicators which shed some light on interesting aspects of the index:

A substantial distinctive feature of the two countries consists in their current emissions. Canada's **emissions level** is very high due to its energy intensive economy and due to a very high energy consumption per capita in comparison to the other index countries. Canada is performing relatively badly in the category primary energy use per unit of GDP – it is placed 52<sup>nd</sup> and thus much worse than Brazil which ranks 22<sup>nd</sup>. The difference is much more pronounced in the category primary energy per capita: here Brazil is among the forerunners (Rank 8) whereas Canada is on the lower margin of the list (Rank 58). Overall, Canada ranks 45<sup>th</sup> in the emissions level, Brazil ranks 5<sup>th</sup>. It should be noted that only energy-induced emissions data are used for this index. Emissions resulting from land-use changes cannot be considered so far due to the insufficient data available. This is especially relevant for Brazil's emissions level, since approximately 75 percent of its emissions can be traced back to this sector.

In the category **emissions trend**, first of all, the difference concerning the energy sector will be highlighted: within the period of time<sup>2</sup> considered, Brazil performed very well on the further development of its renewable energies (a rise of 35 percent). Compared to last year, there is no increase in the position which can be explained by the fact that other countries also expanded the use of renewable energies. On

<sup>2</sup> Average of 2000-2002 compared with the average of 2005-2007.

Table 5: Canada

Indicator		Score*	Rank**	Weight	Rank**	
<b>Emissions Levels</b>		CO <sub>2</sub> per Primary Energy Unit	42.9	18	15.0%	<b>45</b>
		Primary Energy per GDP Unit	60.2	52	7.5%	
		Primary Energy per Capita	41.2	58	7.5%	
<b>Sectoral Emissions Trends</b>	Energy	Electricity	85.7	13	8.0%	<b>43</b>
		Renewables	7.0	47	8.0%	
	Transport	International Aviation	100.0	4	4.0%	
		Road Traffic	80.0	14	4.0%	
	Residential	Private Households	61.1	22	4.0%	
	Industry	Manufacturing and Construction	66.6	33	7.0%	
Target Performance Comparison since 1990		21.0	56	15.0%		
<b>Climate Policies</b>		International	0	59	10.0%	<b>59</b>
		National	17.2	56	10.0%	
<b>Total</b>		40.7		<b>100%</b>	<b>59</b>	

\*Minimum: 0, maximum: 100

\*\* (4-60) None of the countries achieved positions one to three.

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the contrary, Canada only accomplished an increase of 4.3 percent of renewable energies and thus does not make anywhere near optimal use of its potential in this field. Further, regarding the category electricity, both countries score relatively well, being slightly above the average. In the category transport, the indicator international aviation stands out: in the reference period, Canada was able to reduce its emissions by 30 percent and is thus the forerunner in comparison to the other index countries. Here, Brazil had 38 percent more emissions in the same period and thus performs less well - however, this increase started from a very low level. Both in terms of the road traffic and in the sector residential and industry the two countries are relatively average.

Brazil is, especially in comparison to Canada, not that remote from a path consistent with the 2 degrees limit. The relatively good target performance comparison since 1990 is a proof for this. Even though Canada committed itself to a greenhouse gas emissions reduction of six percent by the period 2008-2012 in comparison to 1990, the country was already 34 percent above the binding Kyoto target in 2007, so that it scores quite badly (rank 56) in relation to the other states.

In terms of the **national climate policies**, Brazil is average, although it improved by the use of new forest protection measures. This is reflected in the

index: national climate experts and representatives of non-governmental organisations consistently rated the country better and thus honoured the national and international efforts of their government. This year, Brazil announced a reduction in its greenhouse gas emissions by 36.1 to 38.9 percent by 2020 compared to a business as usual scenario. This intention is even more ambitious than the 15 to 30 percent reductions which are necessary for developing countries when considering the results of the IPCC report.

Climate experts in Canada this year again evaluate the national climate policy as "very poor". The country must commit itself to a emission reduction plan by 2020 and in doing so acknowledge its historical responsibility as an industrialised country. Parliament members have voted against an act calling on the government to implement measures to reach the Kyoto target.

Brazil, along with India, moved a lot in **international climate diplomacy**; one can be still curious about their performance after Copenhagen. On the contrary, Canada's current government still has not recognised the basic necessity to take climate policy seriously - domestically and on an international level.

## 6. CLIMATE CHANGE PERFORMANCE INDEX

### BY COUNTRY GROUP

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

Table 6: Climate Change Performance Index for OECD Member Countries

Rank	Country	Score	Rank	Country	Score	Rank	Country	Score
5	Sweden	67.4	17	Denmark	57.0	41	Korea, Rep.	48.7
6	United Kingdom	65.3	19	Hungary	55.6	42	Austria	48.2
7	Germany	65.3	22	Ireland	54.9	44	Italy	48.0
8	France	63.5	24	Slovakia	54.7	49	Poland	47.4
10	Norway	61.8	25	Czech Republic	54.6	53	United States	46.3
11	Mexico	61.2	27	Netherlands	54.3	54	Greece	46.0
12	Portugal	59.7	32	Spain	51.8	55	New Zealand	44.8
13	Switzerland	59.4	35	Japan	50.9	56	Luxembourg	42.8
15	Iceland	57.3	36	Finland	49.5	57	Australia	41.9
16	Belgium	57.2	39	Turkey	49.1	59	Canada	40.7

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Table 7: Climate Change Performance Index for EU Member Countries

Rank	Country	Score	Rank	Country	Score	Rank	Country	Score
5	Sweden	67.4	19	Hungary	55.6	36	Finland	49.5
6	United Kingdom	65.3	20	Malta	55.2	42	Austria	48.2
7	Germany	65.3	22	Ireland	54.9	43	Slovenia	48.1
8	France	63.5	24	Slovakia	54.7	44	Italy	48.0
12	Portugal	59.7	25	Czech Republic	54.6	46	Bulgaria	47.5
14	Latvia	57.5	27	Netherlands	54.3	49	Poland	47.4
16	Belgium	57.2	30	Romania	52.9	51	Cyprus	46.6
17	Denmark	57.0	32	Spain	51.8	54	Greece	46.0
18	Lithuania	55.9	34	Estonia	51.3	56	Luxembourg	42.8

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Table 8: Climate Change Performance Index for Countries in Transition

Rank	Country	Score	Rank	Country	Score	Rank	Country	Score
14	Latvia	57.5	30	Romania	52.9	45	Russia	48.0
18	Lithuania	55.9	33	Belarus	51.4	46	Bulgaria	47.5
19	Hungary	55.6	34	Estonia	51.3	48	Croatia	47.4
24	Slovakia	54.7	37	Ukraine	49.5	49	Poland	47.4
25	Czech Republic	54.6	43	Slovenia	48.1	58	Kazakhstan	41.4

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Table 9: Climate Change Performance Index for Newly Industrialising Countries

Rank	Country	Score	Rank	Country	Score	Rank	Country	Score
4	Brazil	68.0	26	Thailand	54.6	40	Singapore	48.8
9	India	63.1	28	Morocco	53.3	47	Taiwan/China	47.5
11	Mexico	61.2	29	South Africa	52.9	50	Malaysia	46.9
21	Algeria	55.1	31	Argentina	52.2	52	China	46.6
23	Indonesia	54.9	38	Iran	49.2			

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

Rank	Country	Score	Rank	Country	Score	Rank	Country	Score
9	India	63.1	35	Japan	50.9	47	Taiwan/China	47.5
23	Indonesia	54.9	40	Singapore	48.8	50	Malaysia	46.9
26	Thailand	54.6	41	Korea, Rep.	48.7	52	China	46.6

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## 7. ADDITIONAL LITERATURE AND DATA SOURCES

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## GERMANWATCH

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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 the prevention of dangerous climate change, fair trade relations, responsible financial markets and compliance with human rights.

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

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**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 365 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.

