THINK TANK & RESEARCH

BRIEFING PAPER

The End of EU Climate Leadership

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GERMANWATCH

Abstract

A number of influential industry lobby organizations in EU countries such as Germany are arguing that the EU should not continue its path as a leader on climate policy as other big emitter countries have not followed its lead. These lobbyists argue that further EU decarbonisation action would endanger the global competitiveness of entire industry sectors. Many Germany and EU based energy-intensive industries are facing structural problems, worsened by the present economic crisis.

However, both the message itself and the assumption behind the argument are wrong. In this briefing paper, we highlight the following:

- In the past, **EU climate action played an important role as it encouraged both OECD and Non-OECD countries around the world to take on more ambitious action themselves**.
- However, **the EU is no longer the leader on climate policies as others have caught up or even outpaced the EU**.
- Eventually, we argue that **it would be beneficial for European competitiveness if the EU were to return to its role as the leader of international climate efforts**. Those energy-intensive industry sectors that are adversely affected by stricter climate regulation clearly need some protection in the short term. However, the EU urgently needs a more comprehensive approach that combines protective elements with a state-backed investment and innovation strategy. Such a comprehensive decarbonisation strategy would be beneficial in the mid and long term both for the climate and the EU economy. It could become the cornerstone of a sustainable economic recovery by spurring job creation, securing future shares in the growing market for low-carbon energy products, enhancing energy security and reducing energy costs.

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Foreword

Several influential industry lobby organizations – in Berlin, Brussels and other European capitals – are arguing that the EU should not continue its path as a leader on international climate policy as other big emitter countries have not followed its lead. They claim that the EU has moved so quickly ahead that other countries have been unable to keep up. This argument is being pushed by German and EU based energy-intensive industries that are facing structural problems and fear that further climate-related regulation will negatively impact their business.

However, both the assumption and the message of this thesis are wrong. In the following, by summarizing a body of studies conducted by independent institutions, we argue that (1) the EU is no longer the sole leader on low-carbon policies as others have caught up or even outpaced the EU; and that (2) it would be beneficial for European competitiveness if the EU were to return to its role as the leader of international climate efforts.

1 The EU is not acting alone

The argument that the EU should not increase its ambition regarding climate policy due to the fact that others did not follow suit is already having repercussions on EU and national decision-making. For example, it has found its way into the reasoning of the European Commission, which in March 2013 in its Green paper "A 2030 framework for climate and energy policies" claimed once more that the conditional 30% emissions reduction target for 2020 has not mobilized adequate pledges and actions if compared to what is needed towards reaching the 2°C global temperature limit.[2] The EU's offer to raise its 20% emissions reduction target to 30% below the 1990 baseline hinges on ambitious action of other big emitters which is meant to encourage them to set higher targets themselves. However, previous EU climate policy did not only encourage climate action around the globe, the EU has now even been surpassed by actions of several OECD and Non-OECD countries which are comparatively doing more than the EU to keep the global temperature rise below 2°C.

a) Ambitious EU climate action did encourage others to follow

Example 1: Emissions Trading

The EU Emissions Trading Scheme (EU ETS), the EU's main policy instrument to reduce GHG emissions and thus the cornerstone of its climate policy, was introduced in 2005. Today, it has been followed by emission trading systems in Switzerland (2007), New Zealand (2008), the Northeast of the U.S. (Regional Greenhouse Gas Initiative 2009), Tokyo (2010), Australia (2012), California, Kazakhstan, Québec, and Shenzhen in China (all 2013). More ET systems are being implemented, for instance in South Korea and in Chinese megacities such as Beijing and Shanghai. Other regions and countries are considering domestic emissions trading systems, amongst them Brazil, China, Mexico, Russia, Turkey, and Ukraine.[3]

In many, if not all of these regions and countries, the EU ETS has served as the role model. The fact that the ETS policy instrument has a spill-over effect for a considerable and rising number of countries all around the world, including the biggest emitter countries, stands in stark contrast to claims that the pioneering role of the EU has not encouraged others to follow.

Against this background, the need for the EU ETS as a functioning role model becomes all the more apparent, as well as the importance of its swift reform. By currently having no impact on investment decisions, the ailing EU ETS weakens the persuasive power of those forces that aim to install domestic trading systems in other countries.[4] Hence, as long as the EU ETS does not provide a clear price signal, its contribution to the global spread of

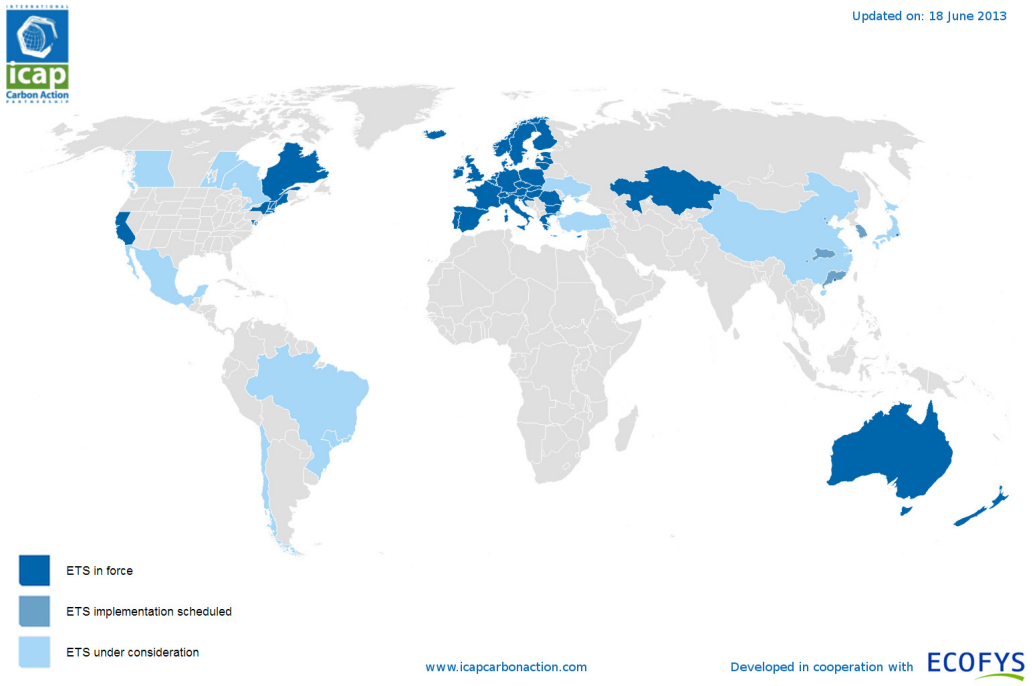
[2] cf. European Commission 2013: Green Paper – A 2030 framework for climate and energy policies, p.11, available at http://ec.europa.eu/energy/consultations/doc/com_2013_0169_green_paper_2030_en.pdf

[3] cf. International Carbon Action Partnership (icap): Interactive ETS Map, available at http://icapcarbonaction.com/index.php?option=com_wrapper&view=wrapper&Itemid=147

[4] Oleg Pluzhnikov (Acting Director of Department, Ministry of Economic Development of the Russian Federation) in a conversation with one of the authors on 31 May 2013.

climate policy instruments remains behind its potential. This situation seriously endangers progress in the international climate negotiations as the readiness of countries for meaningful greenhouse gas mitigation pledges also hinges on the availability of functioning domestic decarbonisation instruments. When it comes to the reform of the EU ETS, the German government in particular has transformed from a climate leader to an anti-progressive force over the past years, as was the case regarding the so-called "backloading" proposal where it delayed progress due to its non-position. Therefore, to a large extent is has been Germany that has stopped the EU from moving forward as a climate leader.[5] However, it might be possible that the newly elected Grand Coalition of Social Democrats and Conservatives will play a more constructive role regarding the ETS re-form.

Interactive Map of global emissions trading systems (icap 2013)[6]



Example 2: Pledges in the UNFCCC context

Shortly after the beginning of the first commitment period (2008-2012) of the Kyoto Protocol, in which the EU-15 agreed to a 8% reduction target – compared to an overall 5% reduction target of the Protocol –, more than 90 countries, covering about 80% of global emissions, made pledges under the voluntary Copenhagen Accord.[7] It is inconceivable that such a great number of countries would have come forward with pledges had the EU,

[5] see, for example, Renewables International 17 April 2013: "Germany helps bring down backloading", available at http://www.renewablesinternational.net/germany-helps-bring-down-backloading/150/537/62018/; The Sydney Morning Herald 17 May 2013: German split may delay EU carbon fix, available at http://www.smh.com.au/business/carbon-economy/german-split-may-delay-eu-carbon-fix-20130517-2jpzs.html

[6] cf. International Carbon Action Partnership (icap): Interactive ETS Map

[7] cf. European Commission – Climate Action: UN negotiations and other international fora, available at http://ec.europa.eu/clima/policies/international/negotiations/index_en.htm

one of the two great historic emitters, not stepped up. This is not to say that the existent pledges are enough to keep global warming below 2°C. Quite the opposite is true, as UNEP pointed out in its emissions gap report.[8] However, the report also showed that it is still economically and technically feasible to close the gap between the current ambition level and what is needed to stay below 2°C if action is taken until 2020. This should motivate the EU – and others – to do more, not less.

Example 3: Further national climate actions

The EU is also not at all far ahead of other nations regarding its domestic climate efforts. If one looks at domestic mitigation action of other countries, it becomes apparent that more is increasingly being done in both other OECD and Non-OECD countries. Several examples are provided below.

In 2012, *Mexico* and the *Dominican Republic* were the second and third countries worldwide after the UK to introduce national climate legislations with legally binding emissions reduction targets. Targets are 30% below business-as-usual by 2020 in Mexico[9] and even 25% below 2010 levels by 2030 in the Dominican Republic.[10]

There are particularly significant examples which imply that *China* is influenced by EU climate action. Aside from starting the aforementioned ETS pilots, China has upped its 12th Five-Year Plan's renewable energy targets several times since its introduction, e.g. its solar power target by 700 percent from the initial target of 5GW to 35 GW by 2015.[11] Thus, it is likely that the country will outperform its Copenhagen pledge of a 15 percent share of non-fossil fuels in primary energy consumption by 2020.[12] Notably, China promotes solar energy through a feed-in tariff based on the model of the German Renewable Energy Act (EEG).[13] China is also emulating EU climate action regarding vehicle emission standards. In March 2013, the municipal government of Beijing, a city with a population of 20 million, introduced the Beijing 5 emission standard that is based on the 2007 Euro 5 norm and bans all vehicles that do not meet that standard from being sold.[14] On the national level, China has set a fuel economy target of 5l/100 km for average passenger cars by 2020, which compares to a 2015 target of about

[8] cf. UNEP 2012: The Emissions Gap Report 2012, available at http://www.unep.org/pdf/2012gapreport.pdf
[9] cf. Vance, Erik 2012: Mexico passes climate change law, Nature, available at http://www.nature.com/news/mexico-passes-climate-change-law-1.10496
[10] cf. Bloomberg 7 December 2012: "Dominican Republic Sets 25% Emissions Reduction Goal By 2030", available at http://www.bloomberg.com/news/2012-12-07/dominican-republic-sets-25-emission-reduction-goal-by-2030.html
[11] cf. Vorrath, Sophie 2013: Deutsche Bank says China Solar PV may reach 15 GW in 2014, reneweconomy, http://reneweconomy.com.au/2013/deutsche-banks-says-china-solar-pv-may-reach-15gw-in-2014-76861
[12] cf. Ecofys and PBL 2012: Greenhouse gas emission reduction proposals and national climate policies of major economies, p. 11, available at http://www.ecofys.com/files/files/ecofys_pbl_iiasa_2012_analysis_of_domestic_climate_change_policies_new.pdf
[13] cf. Deutsche Energieagentur (dena): Auswirkungen des EEG seit seiner Einführung, http://www.thema-energie.de/energie-im-ueberblick/gesetze-verordnungen/erneuerbare-energien-gesetz/eeg-auswirkungen.html
[14] cf. Fangfang Li 2013: New Beijing Emissions Levels a 'big challenge', China Daily, available at http://www.chinadaily.com.cn/bizchina/motoring/2013-03/01/content_16268135.htm

5l/100 km in the EU.[15] It is again Germany, this time under the influence of the automotive lobby, which is currently blocking more ambitious EU climate action with regards to a stricter 2020 fuel economy target. It is doing so by repeatedly delaying and attempting to water down a decision on a previously set EU compromise for a target of about 4l/100 km.[16]

The "Times of India" reported in April 2013 that *India's* government is readying to take on absolute emissions reduction targets as part of the 2015 international climate treaty and is likely to commission studies to set the stage for this.[17] While this news has not been confirmed by the Indian government and no information has been available so far on the ambition level of targets, this would be a significant development given that the country had consistently declined to agree to binding targets in the past.

To date, several *Least Developed Countries (LDCs)* have introduced concrete mitigation measures. For instance, *Ethiopia* started its "Climate-Resilient Green Economy initiative" in 2011, which aims at helping the country achieve its developmental goals while more than halving 2030 greenhouse gas emissions as compared to business-as-usual projections.[18] In April 2013, the LDC country group at the UN climate negotiations agreed on binding emissions cuts, despite the fact that these countries have contributed the least to climate change.[19]

In 2012, the *United States* adopted the most ambitious vehicle efficiency standards in U.S. history which require automakers to nearly double the fuel efficiency of new cars and light trucks compared to those on the road, with a goal of 54.5 miles per gallon (ca. 4.32 l/100 km) by 2025.[20] It is highly likely that this decision was influenced by the aforementioned EU 2015 target of about 5l/100 km and envisaged 2020 target of about 4l/100 km. In late June 2013, President Barack Obama laid out his long awaited climate action plan which focuses on the reduction of carbon emissions from power plants (responsible for roughly one-third of American greenhouse gas emissions) that hitherto had not been dealt with at the federal level.[21] Considering the stalemate within the U.S. Congress, analysts acknowledged Obama's announcements as a bold and important step towards the admittedly long way the country has to go to live up to its re-

[15] cf. Green Car Congress 2012: China publishes plan to boost fuel-efficient and new energy vehicles and domestic auto industry; targeting 500K PHEVs and EVs in 2015, rising to 2M by 2020, available at http://www.greencarcongress.com/2012/07/china-20120709.html / cf. European Commission – Climate Action: Reducing CO2 emissions from passenger cars, available at http://ec.europa.eu/clima/policies/transport/vehicles/cars/index_en.htm

[16] cf. Spiegel Online Auto 14 October 2013: "Sieg der Autolobby: Bundesregierung verhindert strengere Abgasnormen", http://www.spiegel.de/auto/aktuell/eu-umweltminister-vertagen-streit-um-co2-grenzwerte-a-927663.html

[17] cf. The Times of India 10 April 2013: India readying to take on absolute emission reduction cuts, available at http://articles.timesofindia.indiatimes.com/2013-04-10/developmental-issues/38433488_1_greenhouse-gases-emission-reduction-india

[18] cf. Federal Democratic Republic of Ethiopia: Ethiopia's Climate-Resilient Green Economy, p. III, available at http://www.undp.org/content/dam/ethiopia/docs/Ethiopia%20CRGE.pdf

[19] cf. the guardian 3 April 2013: Least developed countries agree to cut greenhouse gas emissions, available at http://www.guardian.co.uk/environment/2013/apr/03/climate-change-greenhouse-gas-emissions

[20] cf. The White House 2012: Obama Administration Finalizes Historic 54.5 MPG Fuel Efficiency Standards, available at http://www.whitehouse.gov/the-press-office/2012/08/28/obama-administration-finalizes-historic-545-mpg-fuel-efficiency-standard

[21] cf. The White House –Executive Office of the President 2013: The President's Climate Action Plan, p. 6

sponsibility as a superpower and super-emitter.[22] As also depicted in the plan, the U.S. is committed to increasing cooperation with other great emitters, such as China, to combat climate change. The two countries have already sent a strong joint signal earlier in June by agreeing to work together to employ the instruments of the Montreal Protocol to phase down the consumption and production of the Hydrofluorocarbons (HFCs)[23] highly potent greenhouse gases group – a goal the EU has strongly lobbied for during past UN climate negotiations.

There are many more examples of increasingly ambitious climate action around the world. While the cumulative effect of these actions is not yet adequate to ensure a sustainable path for human development, **the climate pioneering role the EU played up until several years ago secured momentum for more climate action elsewhere.** This is strongly suggested both by the timely sequence of political decisions as well as the often similar design of climate change mitigation actions of other countries compared with those taken on previously by the EU. The same applies to Germany, where the Renewable Energy Act (EEG) is probably the most imitated legislation world-wide.[24]

b) The EU does not any longer lead international climate efforts

The assumption that the EU is still leading international climate efforts is wrong. It has been outpaced by others, in both national activities as well as in the UNFCCC[25] negotiations.

Domestic climate change legislation

The EU no longer has a monopoly on significant domestic climate change legislation. In January 2013, the Global Legislators Organisation (GLOBE) released its third GLOBE climate legislation study, in which researchers from the London School of Economics and Political Science (LSE) examined the climate legislation progress of 33 OECD and Non-OECD countries in 2012.[26] Out of 18 scrutinized G20 countries, only seven failed to make positive legislative progress in 2012. Aside from Argentina, Canada and Russia, this group comprised all four EU G20 states: France, Germany, Italy and the UK. Also Poland, the fifth EU member state included in the study, failed to make progress in 2012. Thus, although the EU still received a positive score due to the introduction of the Energy Efficiency Directive, its member states rank low compared to other developing countries, emerging

[22] see, for example, Shuo, Li 26 June 2013: China needs to do better than Obama's US climate plan, available at http://www.chinadialogue.net/blog/6148-China-needs-to-do-better-than-Obama-s-US-climate-plan/en; klimaretter 26 June 2013: Merkel schweigt zu Obamas Klimarede, available at http://www.klimaretter.info/politik/nachricht/13980-merkel-schweigt-zu-obamas-klimarede

[23] cf. The White House 8 June 2013: United States and China Agree to Work Together on Phase-Down of HFCs, available at http://www.whitehouse.gov/the-press-office/2013/06/08/united-states-and-china-agree-work-together-phase-down-hfcs

[24] Around 50 countries, amongst which many EU member states and big emitters such as China and India, have introduced renewable energy funding instruments based on the German EEG model, cf. Deutsche Energieagentur (dena)

[25] UNFCCC: United Framework Convention on Climate Change

[26] cf. GLOBE International 2013: The GLOBE Climate Legislation Study, pp. 7-14, available at http://cdkn.org/wp-content/uploads/2013/01/3rd_GLOBE_Report-1.pdf

economies such as Brazil, China, Mexico and India, and early industrialized countries such as Australia, Japan and the U.S. While this does not reflect previous efforts and the scope of the different climate legislations, it does show that progress in the EU has slowed compared to that of others.

Domestic standards in energy sectors

Following Obama's aforementioned Climate Action Plan, the U.S. Environmental Protection Agency (EPA) laid down a proposal for strict carbon pollution standards[27] for new gas and coal power plants in September 2013 which could come into force within the year.[28] According to the plan, the ceiling for carbon emissions of new coal plants will be limited to 499 g CO_2/kWh (1,100 lb CO_2/mWh). As even the emissions of the currently most modern coal plants are much higher (hard-coal power plants: 730 g CO_2/kWh, lignite power plants: 940 g CO_2/kWh), this essentially means that no new coal power plants can be built in the U.S. – unless they install carbon capture and storage (CCS) technology which captures carbon waste.[29] Presumably, the EPA will take far more ambitious steps in June 2014 when it proposes new carbon pollution standards for *existing* power plants.[30]

The adoption of these standards would put the U.S. significantly ahead of the EU in this regard, considering that the collapsed carbon price has very little remaining influence on investments, and the introduction of so-called emissions performance standards (EPS) for power plants has so far not been realised on this side of the Atlantic. In 2010, when seven energy and environmental directives were combined into the Industrial Emissions Directive, the European Commission rejected calls from Members of the European Parliament to include carbon dioxide standards, arguing that this would undermine the Emissions Trading Scheme (ETS).[31] However, given the desolate state of the EU ETS and if a swift reform will not emerge, ambitious CO_2 pollution standards become a necessity.

Furthermore, while not relevant for climate policy per se, it should be noted that both the U.S. and China have significantly stricter air pollution standards in place in their domestic energy sectors than the EU.[32]

[27] cf. EPA 2013: EPA Fact Sheet - Reducing Carbon Pollution from Power Plants - Moving Forward On the Climate Acion Plan, 20 September 2013, http://www2.epa.gov/sites/production/files/2013-09/documents/20130920factsheet.pdf

[28] cf. Goldenberg, Suzanne 2013: EPA outlines first steps to limit US coal plant pollution, 20 September 2013, The Guardian, http://www.theguardian.com/environment/2013/sep/20/epa-limit-us-coal-plant-pollution

[29] cf. Bauchmüller, Michael 2013: Kampf gegen Dreckschleudern, 23 September 2013, Süddeutsche Zeitung / cf. Volcovici, Valerie 2013: U.S. sets first curbs on power plant carbon emissions, 20 September 2013, Reuters, http://www.reuters.com/article/2013/09/20/us-usa-energy-emissions-idUSBRE98J03A20130920

[30] cf. Goldenberg, Suzanne 2013

[31] cf. Global CCS Institute 2013: Europe should set an EPS for power plants, 17 June 2013, http://www.globalccsinstitute.com/institute/news/europe-should-set-eps-power-plants

[32] cf. World Resources Institute (WRI) 2013: China FAQs – China Adopts World-Class Air Pollution Standards for Coal Power Plants, available at http://www.chinafaqs.org/files/chinainfo/China%20FAQs%20Emission%20Standards%20v1.4_0.pdf

EU ambition in the UNFCCC context

The Climate Action Tracker (Ecofys, Climate Analytics, PIK) analysis, which attempts to make countries' pledges in the UNFCCC context transparent, and assesses whether the combined effect of national pledges are compatible with the 2°C global warming limit, clearly shows that the EU is not a frontrunner. While the implementation of its conditional but so far blocked target of a 30% reduction would be rated "medium" by the analysts, its current target of a 20% reduction (both compared to 1990 levels) places the EU in the "inadequate" range. Of 15 examined OECD countries, two were ranked sufficient (Norway with its unconditional minus 30% target, and Japan with its conditional minus 25% target[33] for 2020 – both compared to 1990 levels). The Climate Action Tracker ranks three further OECD countries as "medium" (Iceland, Israel and Switzerland), and thus as better than the EU.[34] Even more countries outperform the EU if one includes Non-OECD countries in the analysis. This is, amongst others, true for Brazil, India and South Africa that were all ranked "medium" by the analysts, while e.g. South Korea and Costa Rica are in the "sufficient" range, and the Maldives are the only "role model".[35]

[33] Note that Japan is considering a revision of its pledge, which would likely lead to a change in the Climate Action Tracker rating from "sufficient" to "inadequate", cf. Vieweg, Marion et al (Climate Analytics, PIK, Ecofys) 2013: Climate Shuffle – Climate Action Tracker Update, available at http://www.ecofys.com/files/files/ecofys-ca-pik-2013-climate-action-tracker-bonn-update.pdf

[34] cf. Climate Action Tracker 2012: All countries, available at http://climateactiontracker.org/countries.html

[35] cf. Climate Action Tracker 2012

Climate Action Tracker 2012:[36]

[36] cf. ibid.

The general conclusion of this assessment is supported by a meta study of the Stockholm Environment Institute (SEI) which examines developed and developing countries' pledges under the Cancún agreements by comparing four studies that apply different assumptions and methodologies.[37] It found that there is broad agreement across the studies that developing country pledges amount to more mitigation, on an absolute basis, than that of developed countries. **This data clearly refutes the assertion that the EU cannot implement its higher 2020 pledge of a 30% reduction due to insufficient mitigation action by others.**

[37] cf. Kartha, Sivan; Erickson, Peter 2011: Comparison of Annex 1 and non-Annex 1 pledges under the Cancún Agreements, in: Stockholm Environment Institute (SEI) working paper 2011-06, http://sei-international.org/mediamanager/documents/Publications/Climate/sei-wp-2011-06-comparison-of-pledges.pdf

2 European climate leadership would boost EU competitiveness

The findings summarised above show that the assumption that the EU is still leading international climate policy efforts and that others did not follow its lead is wrong. However, the assertion of some energy intensive industries that more ambitious EU climate action will stifle European competitiveness is also incorrect. While in the short term certain industry protection measures are appropriate, in the mid and long term the European economy can be strengthened by focusing on an investment and innovation strategy for low-carbon and low-resource growth.

European and German energy-intensive industries currently face structural problems which are mainly related to three factors: [38]

1. Competitive disadvantage due to the maturity of economies

Due to the EU comprising many mature national economies with low growth rates, EU based companies tend to face a competitive disadvantage compared to competitors in emerging economies where rapidly growing populations and high infrastructural needs provide better market opportunities. Companies, therefore, feel inclined to relocate production away from the EU, and closer to emerging markets. This was further aggravated by the EU economic crisis, with shrinking markets and investors adopting a "wait and see" attitude regarding investments in light of an uncertain economic outlook.[39]

2. Lack of access to raw materials

Compared to other geographical regions, the EU has limited direct access to raw materials such as rare earths and fossil fuels that are needed for industrial production. Therefore, industries in EU member states rely on expensive imports. In Germany, this issue was exacerbated in the 1990s when many companies sold their indirect accesses to raw materials during a period of low raw material prices. With respect to natural gas – which is expected to be responsible for most of the projected future increase of EU energy imports[40] – the EU has less proven reserves (about 1%) than each Asia, Africa, North America and Latin America.[41]

[38] cf. Manyika, James et al. 2012: Manufacturing the future - The next era of global growth and innovation. Mc Kinsey Global Institute, November 2012, http://www.mckinsey.com/insights/manufacturing/the_future_of_manufacturing

[39] cf. Bloomberg 21 June 2013: Alstom Chief Says Markets are Tough as Mature Economies Struggle, available at http://www.bloomberg.com/news/2013-06-21/alstom-chief-says-markets-are-tough-as-mature-economies-struggle.html; cf. Center for Clean Air Policy-Europe 2013: The New Deal – An Enlightened Industrial Policy for the EU through Structural EU ETS Reform, available at http://ccap.org/assets/The-New-Deal-An-Enlightened-Industrial-Policy-for-the-EU-through-Structural-EU-ETS-Reform_CCAP-Europe_Feb-2013.pdf; cf.

[40] cf. European Commission – Directorate General for Energy 2009: EU energy trends to 2030 – update 2009, available at+ http://ec.europa.eu/energy/observatory/trends_2030/doc/trends_to_2030_update_2009.pdf

[41] Author's calculations based on data from Europe's Energy Portal: Natural gas reserves by country by the end of 2011, available at http://www.energy.eu/

3. Higher energy prices

High EU dependency on fossil fuel energy imports, and thus on rising global energy prices, contributes to traditionally high energy prices in the EU. This trend is further being amplified as energy demand from giants such as China, Brazil and India is growing. As of May 2013, electricity prices in the EU were 37% above those in the U.S.,[42] with roughly 50% of the EU's electricity being produced from fossil fuels.[43] This is often portrayed as a threat to the EU's industrial competitiveness. However, it should be noted that energy costs rather than energy prices are the determining factor for competitiveness. Therefore, as long as energy savings through improved energy efficiency outweigh high energy prices, an industry can be more competitive even in light of higher energy prices.

In brief, it is undoubted that European energy intensive industries are facing structural problems due to the EU's mature economies and a lack of access to markets and resources. Furthermore, there is a risk of comparatively higher electricity prices – especially if different exemptions for energy-intensive industries in the EU come under attack and mounting energy prices outweigh cost savings due to improved energy efficiency.

Because of these structural problems, German and EU energy-intensive industries fear a further deterioration of their competitiveness through stricter climate change regulation. Indeed, there is a need to protect a small, though very relevant group of companies in the short term. However, creating a protective fence around certain industries instead of letting them face new challenges and thereby enhance their innovative ability and competitiveness is not a viable long term strategy. This means that a continued protection strategy (e.g. a carbon leakage list for really affected companies) needs to be combined with a comprehensive decarbonisation strategy to push energy and resource efficiency, which would rest on two pillars:

First, it should involve an intelligent state-backed investment strategy in energy efficient buildings, renewable energy as well as electricity and low-carbon transport infrastructure. This includes strong European and national policies on grids, transportation infrastructure, renewable energy (especially wind), and a comprehensive programme for energy efficiency of buildings. This would create new jobs and perspectives for people in EU crisis countries, while simultaneously creating new demand and thus increased access to markets within the EU for these relevant sectors.

Second, it should combine the necessary and ambitious EU climate targets (such as a 50-55% EU-wide target for greenhouse gas emissions reduction until 2030) as well as the structural reform of the EU ETS with an industry research program aimed at developing break-through technologies and solutions in order to create a low-carbon and low-resource society. A part of the EU ETS auctioning revenues should be used to co-finance these research activities.

Such a comprehensive decarbonisation strategy would enhance energy and raw material security and bring down energy and resource costs, while at the same time mitigating climate change. It would address all three structural problems and therefore be conducive to European competitiveness.

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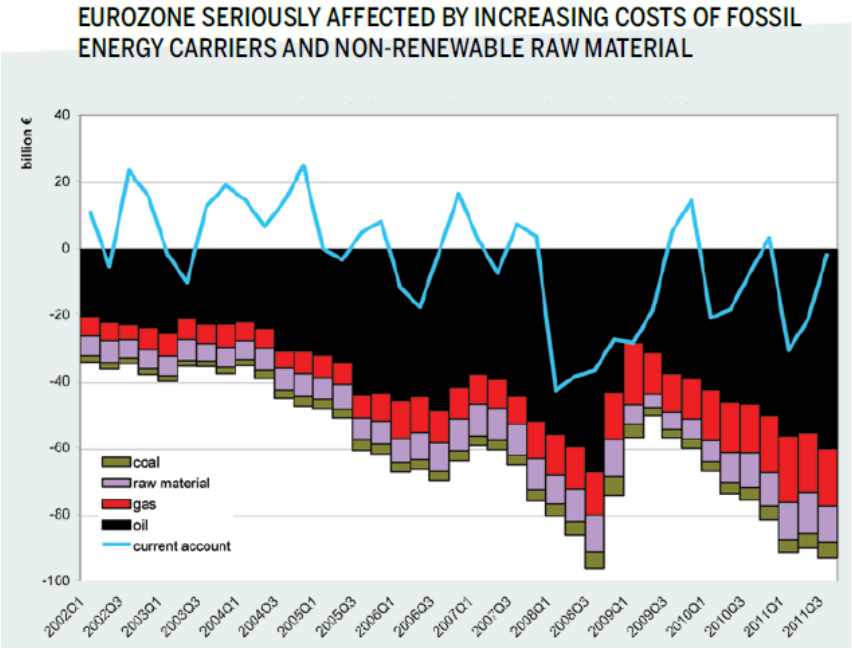
[42] cf. Chaffin, Joshua (Financial Times) 21 May 2013: High energy prices occupy officials at EU Summit, available at http://www.ft.com/cms/s/0/4370d5c0-c22d-11e2-ab66-00144feab7de.html#axzz2YAnTlY4U

[43] cf. Blok, Kornelius; Molenbroek, Edit (Ecofys) 2012: Saving Energy: Bringing down Europe's energy prices, available at http://www.ecofys.com/files/files/ecofys_can_foe_2012_saving_energy.pdf

There is no long-term solution to the economic crisis without tackling the climate crisis. The World Economic Forum's Global Risk Report 2013, which analyses 50 global risks to the world economy based on a survey of more than 1000 experts from industry, government, and academia lists climate change as one of the top three risks, preceded only by increasing income disparity and unsustainable government debt: "Following a year scarred by extreme weather, from drought in Texas to Hurricane Sandy and flooding in China, respondents rated rising greenhouse gas emissions as the third most likely global risk overall"[44]. The EU as the second largest and highly interdependent world economy will be strongly affected by any disturbance of the global economy due to climate change impacts. This is especially true for Germany, one of the world's top three exporting nations. Importantly, the Global Risk Report also stresses that economic recovery and the climate crisis cannot be dealt with separately: "A sudden and massive collapse on one front is certain to doom the other's chance of developing an effective, long-term solution"[45]. The big challenge for policy makers is to create a political framework that allows for moral and macroeconomic necessities to be incorporated into effective business models for today's world.

With respect to the EU, this means that **a strategy that tackles the financial and economic crisis while simultaneously fighting climate change is necessary.** There are strong arguments that a new growth strategy for the Eurozone can only be successful if it reduces the dependency on fossils fuels and other non-renewable raw materials, as a substantial part of the Eurozone's current account deficit can be attributed to their import.[46]

Current account of Eurozone strongly depends on fossil fuel and other non-renewable raw material imports (2002-2011) [47]



[44] World Economic Forum 2013: Global Risks 2013 – Eight Edition, available at http://www.weforum.org/reports/global-risks-2013-eighth-edition

[45] World Economic Forum 2013: Global Risk Report 2013 – Executive Summary, available at http://www3.weforum.org/docs/WEF_GlobalRisks_ExecutiveSummary_2013.pdf

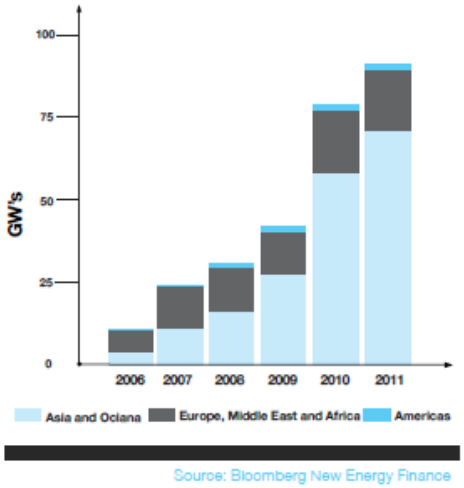
[46] cf. Giegold, Sven; Mack, Sebastian M. 2011: No stabilization of the Euro without a Green New Deal, Group of Greens in the European Parliament, http://www.sven-giegold.de/wp-content/uploads/2012/05/120418-eurokrise-ENG-final03_webversion.pdf

The argument that a green investment surge is needed to overcome the EU crisis and advance the needed transformation in relevant sectors such as buildings, energy, and transportation, while at the same time reducing income disparities and unemployment, is supported by an international group of economists in a study commissioned by the German Ministry for Environment, Nature Conservancy and Nuclear Safety in 2011.[48] These economists found that raising the EU's 2020 emissions reduction target from 20% to 30% and thereby shifting the European economy into a low-carbon growth path can increase the growth rate of the European economy by up to 0.6% per year, create up to 6 million jobs EU-wide, boost European investments from 18% to up to 22% of GDP and increase the EU's GDP by as much as 6% by 2020.[49] Notably, investments in the buildings sector have the largest job creation potential. These economic benefits would be available independently of an international climate regime. If major economies were to adopt more ambitious goals in the future, the positive impacts on Europe would be even greater.[50]

However, in the absence of such strategies, the current situation looks bleak: The Climate Institute's Global Climate Leadership Review 2013 reveals that since 2007 the EU has been losing its competitiveness in the low-carbon sector to Asia which in turn is on track to replace Europe as the largest clean energy investment region.[51] The European slowdown in the climate policy area can thus be interpreted as an invitation to others – mainly in the U.S. and Asia – to take on a leading role in the global economy of the future. More than one third of the world's clean energy investments in 2012 were made in Asia, which now hosts 60% of global wind turbine manufacturing and 90% of global solar photovoltaic (PV) manufacturing. China alone now earns as many export dollars from solar products as it does from shoes,[52] and Deutsche Bank expects China and Japan to together account for almost half of the estimated global 45GW PV installation shipments in 2014.[53] The fact that EU industries are losing ground in the low-carbon energy products market, which is estimated to be worth at least $500 billion p.a. by 2050 and is one of the most dynamic growth sectors,[54] reiterates the economic benefits a comprehensive decarbonisation strategy would have for the EU.

[47] cf. ibid, p. 11; note: units are quarters.
[48] cf. Jaeger, Carlo et al 2011: A New Growth Path for Europe – Generating Prosperity and Jobs in the Low-Carbon Economy, commissioned by the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety, available at http://www.newgrowthpath.eu/wp-content/uploads/2011/06/A_New_Growth_Path_for_Europe__Final_Report.pdf
[49] cf. ibid., pp. 5-6
[50] cf. ibid., p. 6
[51] cf. The Climate Institute 2013: Global Climate Leadership Review, p. 14, available at http://www.climateinstitute.org.au/verve/_resources/TCI_GlobalClimateLeadershipReview2013.pdf
[52] cf. ibid.
[53] cf. Vorrath, Sophie 2013
[54] cf. Stern, Nicholas 2006: The Stern Review – The Economics of Climate Change. Executive Summary, p. xvi, available at http://www.wwf.se/source.php/1169157/Stern%20Report_Exec%20Summary.pdf

Global photovoltaic and wind manufacturing capacity by region (2006-2011)[55]



Lastly, a more ambitious EU climate policy would not only yield economic benefits, it would also enhance the EU's energy security. However, under current conditions, the trend points in a different direction: EU energy dependency increased from less than 40% of gross energy consumption in the 1980s to 54.1% in 2010, and is projected to increase greatly in the future.[56] As aforementioned, this also contributes to higher energy prices in the EU and substantially adds to the current account deficits of EU crisis countries such as Greece, Italy and Spain.[57] In 2011, the EU paid €573 billion for imported fossil fuels.[58]

This argument is supported by the European Commission which states in its "Energy Roadmap 2050" (2011) that "decarbonisation […] helps in reducing [the EU's] import dependency and exposure to the volatility of fossil fuel prices"[59]. In its "Roadmap for moving to a competitive low-carbon economy in 2050" (2011) the Commission estimates that "without action the oil and gas import bill could […] double compared to today […], [rising up to] the equivalent of 3% of today's GDP"[60]. Moving towards a circular low-carbon society is thus a win-win-win strategy since it is advantageous for the climate, European energy security, and the EU's competitiveness.

Particularly concerning energy and resource efficiency, the scale of benefits is often underestimated. [61] The EU is well advised to take on a leadership role in this regard. Raising energy efficiency would enable it to sell innovative products (e.g. in the chemical and engineering sectors), as well as gain a competitive advantage through energy costs.

[55] cf. The Climate Institute 2013, p. 14
[56] cf. Eurostat 2012: Energy production and imports, available at http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Energy_production_and_imports
[57] cf. Giegold, Sven; Mack, Sebastian M. 2011
[58] cf. European Commission 2012: Connie Hedegaard: Energy efficiency deal is an important step forward in our climate efforts, available at http://ec.europa.eu/commission_2010-2014/hedegaard/headlines/news/2012-06-14_01_en.htm
[59] European Commission 2011: Energy Roadmap 2050, p.9., available at http://ec.europa.eu/energy/energy2020/roadmap/doc/com_2011_8852_en.pdf
[60] European Commission 2011: A Roadmap for moving to a competitive low-carbon economy in 2050, available at http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2011:0112:FIN:EN:PDF
[61] cf. Blok, Kornelius; Molenbroek, Edit (Ecofys) 2012: Saving Energy: Bringing down Europe's energy prices, available at http://www.ecofys.com/files/files/ecofys_can_foe_2012_saving_energy.pdf

3 Conclusion

The former EU climate leadership role did in fact encourage nations around the world to take on more ambitious climate change action themselves. In some cases, EU leadership resulted in other nations even copying EU policies, as regarding the EU ETS and the German Renewable Energy Act (EEG). Currently however, it looks like the EU has given up this leadership role: it has been outpaced by a number of countries that set comparatively higher climate targets or relatively more ambitious policies, notably some other major emitters and a number of Non-OECD countries.

Industrial lobby organizations base their EU climate policy blockade on the argument that others have failed to take sufficient climate action. It would be helpful if the numbers behind these claims could be presented to allow for an open, facts-based debate.

Furthermore, the idea that European industries should be "spared" from more climate regulation since this would further impede their competitiveness is misleading. No doubt, we need a strategy to protect energy-intensive industries in the short term due to the structural problems they face – but only those sectors that are under pressure from international competition. It is essential that the definition of which sectors would actually be affected be based on facts and hard data. In the long-term, the EU needs a comprehensive decarbonisation strategy that comprises investment and innovation elements in order to spur growth and create jobs, while at the same benefitting the climate. By reducing dependency on fossil fuel imports and bringing down energy costs, such a strategy would additionally enhance EU energy security. Staying ahead of other countries and regions with regard to clean-tech and low-carbon energy products would also enable the EU to secure future market shares in an important and continuously growing market.[62] Lastly, an intelligent low-carbon strategy can be a cornerstone of a strategy that provides people in the EU with future prospects and new hope, especially young people in regions hit by extremely high unemployment rates.

[62] For example, by 2015 clean-tech will already rival the size of the oil and gas equipment market, cf. WWF Netherlands and Roland Berger Consulting 2012: Clean economy, living planet, available at http://www.rolandberger.com/media/pdf/Roland_Berger_WWF_Clean_Economy_20120606.pdf

Germanwatch

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