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Debunking the myths of OECD export credits for coal

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Introduction

The G7 of June 2014 committed to “continued discussions in the OECD on how export credits can contribute to our common goal to address climate change”¹.

In September 2014, the high profile Global Commission on the Economy and Climate co-chaired by Lord Nicholas Stern and the former president of Mexico, Felipe Calderón, released its flagship **New Climate Economy report**² - the ‘Stern 2 Report’.

The report says “**Given the known risks associated with coal, it is time to reverse the “burden of proof”, so coal is no longer assumed to be an economically sound choice by default. Instead, governments should require that new coal construction be preceded by a full assessment showing that other options are infeasible, and the benefits of coal outweigh the full costs**”.

This should apply for governments hosting coal-fired power plants³, but also for governments backing coal plant exports – through their Export Credit Agency.

The OECD Export Credit Group (ECG) has officially started in 2013-2014 to discuss how to foster climate mitigation through Export Credit Agencies (ECAs) acting on behalf of their government. This primarily concerns the controversial support for coal technology exports.

In the last semester or so WWF met many stakeholders on this issue and heard several statements that were factually incorrect or wrong, and often based on outdated information in a global energy market that is transforming itself very quickly.

Discussing the issue of limiting export credits for coal in a sound and effective way requires solid factual evidence, and understanding of recent transformational changes in energy systems and climate policies.

This briefing is intended to debunk some myths by providing latest evidence. It is building on the WWF report *Global Coal: the market has shifted*⁴.

¹ Brussels G7 Summit Declaration, 5 June 2014, paragraph 11,
http://www.consilium.europa.eu/uedocs/cms_Data/docs/pressdata/en/ec/143078.pdf

² Global Commission on the Economy and Climate (2014), *Better Growth, Better climate - The New Climate Economy Report – The Synthesis Report*

³ Hereafter referred to as ‘coal plants’

⁴ WWF (2014), *Global coal: the market has shifted – Literature review 2013-2014*

MYTH 1: “Building new coal plants is compatible with the 2°C climate limit”

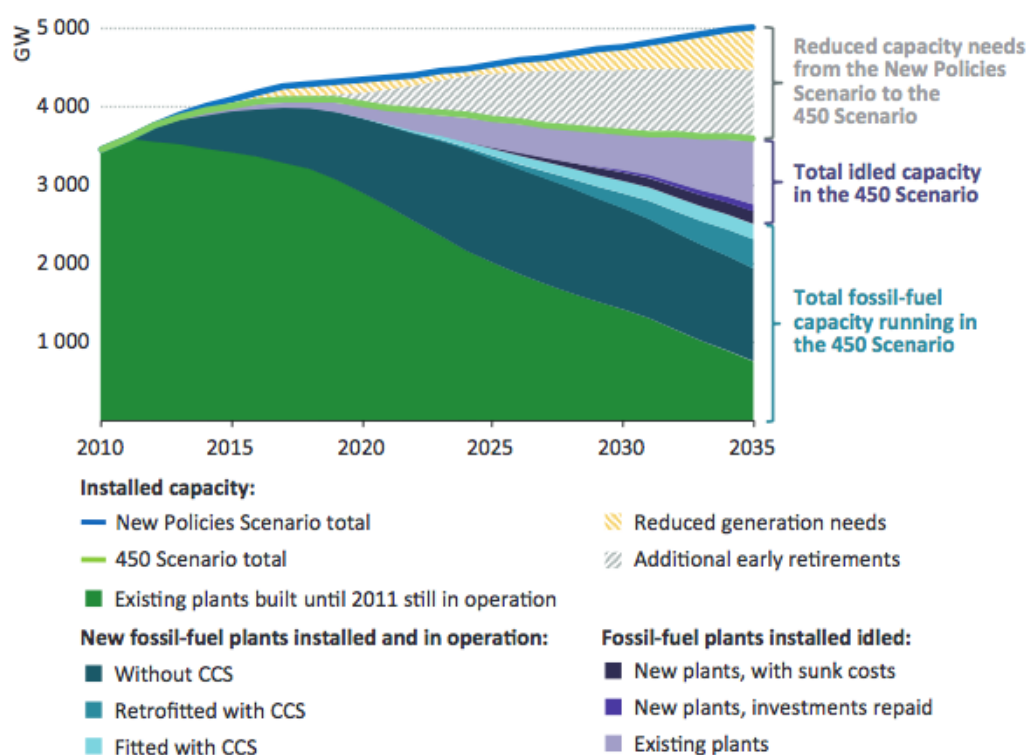
FACT: IEA made clear that building new unabated coal plants is not compatible with agreed climate limits

In its World Energy Outlook 2011, the International Energy Agency stated that to have about a 50% chance of staying within a 2°C global temperature rise, **only zero-carbon utilities and infrastructure should be developed beyond 2017 since 80% of cumulative emissions allowable between 2010 and 2035 are already locked** into existing power plants, factories, buildings and services, unless existing infrastructure is scrapped before the end of its economic lifespan, which is highly unlikely.

More recently, Maria van der Hoeven, executive director of the International Energy Agency (IEA), said in a foreword to its Medium-Term Coal Market Report on 16 December 2013⁵ that **coal in its current form is “unsustainable,” even assuming that more efficient heat and power plants will be built**, as it will contribute to pushing global temperatures above the agreed target of a long-term increase of by 2°C degrees.

The IEA report *Redrawing the energy-climate map*⁶ from June 2013 already made this clear, as shown by the figure below:

Figure 3.10 > World installed fossil-fuel power generation capacity in the 450 Scenario relative to the New Policies Scenario



⁵ <http://www.bloomberg.com/news/2013-12-16/coal-demand-growth-to-slow-in-next-five-years-on-china-iea-says.html>

⁶ <http://www.worldenergyoutlook.org/media/weowebiste/2013/energyclimatemap/RedrawingEnergyClimateMap.pdf>

Note: In the IEA World Energy Outlook:

- The *New Policies Scenario* is a scenario that takes account of broad policy commitments and plans that have been announced by countries, including national pledges to reduce greenhouse gas emissions and plans to phase out fossil energy subsidies, even if the measures to implement these commitments have yet to be identified or announced. This broadly serves as the IEA *baseline* scenario;
- The 450 Scenario is a scenario that sets out an energy pathway consistent with the goal of limiting the global increase in temperature to 2°C by limiting concentration of greenhouse gases in the atmosphere to around 450 parts per million of CO₂⁷.

Source: IEA (2013), *Redrawing the energy-climate map*

What the figure above shows is that it is not possible to stay within 2°C without very rapid closure of existing fossil fuel plants from about 3600 GW in 2010 to about 800 GW in 2035. Meantime new fossil fuel plants (including gas) could comprise about 1000 GW maximum in the IEA scenario: this means every new GW that comes on line *must* be accompanied by about 3 GW of closure. If it is not, it is not compatible with the IEA scenario.

As a result, the only way to accommodate any further new fossil fuel plant would be to dramatically accelerate the closure of existing plants, and/or to idle even more new capacity. But for OECD ECAs there is no credible and verifiable way to ensure that backing 1 GW of new coal plant capacity is directly related to 3 GW of existing capacity being closed. Refurbishment/life extension also appears to be a highly risky option given how quickly coal plants must be shut down in the IEA scenario.

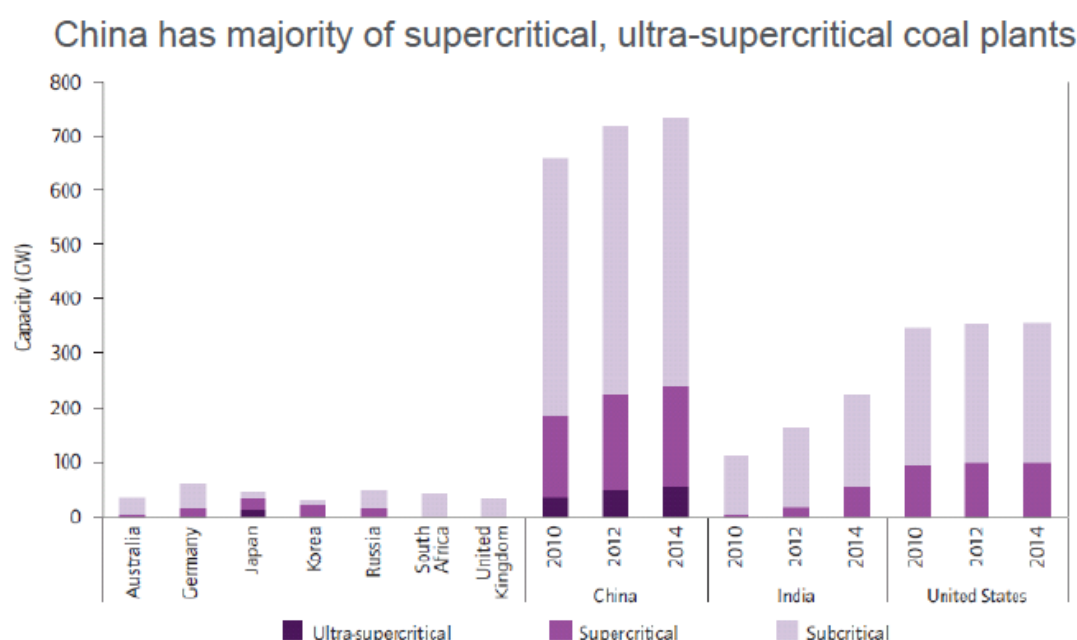
⁷ <http://www.iea.org/publications/scenariosandprojections/>

MYTH 2: “OECD-made coal plants are more efficient than Chinese ones thus more climate friendly”

FACT: China already builds ultra-supercritical coal plants as efficient as OECD plants

The assertion that China’s coal plant technology is less efficient than that of other countries is ten years out of date. China is now mainly building ultra-supercritical coal plants, as show in the figure below from a Citigroup research from September 2013⁸.

It should be added that even the most efficient unabated coal technologies are at least twice as polluting as modern gas power plants (750 g CO₂/kWh vs 350 g) (see Annex). Climate mitigation requires to support the lowest-carbon technology available to a particular situation.



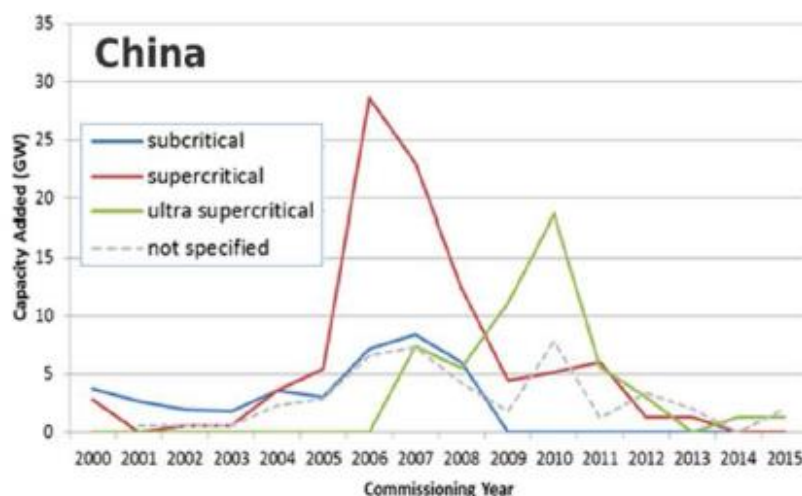
Source: Citi Research, IEA, CEC

Another report from the Stockholm Environment Institute already found in 2011 that China is building among the **world’s most efficient new coal fired power plants**⁹, as shown below:

⁸ Citigroup (2013), *The unimaginable - peak coal in China*

⁹ Stockholm Environment Institute (2011), *Coal Power in the CDM: Issues and Options*, page 3

China's large coal plants operating, under construction, and planned by commissioning date



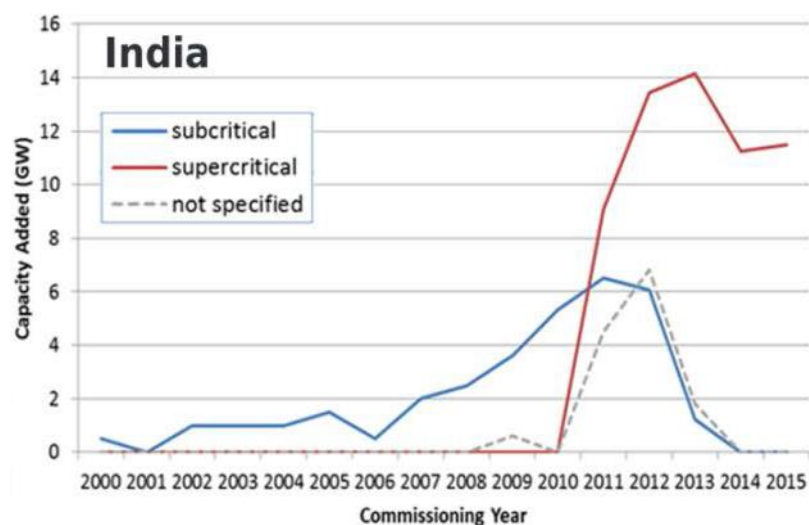
Source: Stockholm Environment Institute, *Coal Power in the CDM: Issues and Options*, November 2011

This graph shows that:

- China stopped building subcritical coal plants in 2009;
- It stopped building supercritical coal plants in 2013;
- Only (a few) ultra-supercritical coal plants remain in the pipeline afterwards.

It is interesting to add a graph from the same Stockholm Environment Institute report focusing on coal plants built in India, showing that **even in India supercritical coal plants are now business as usual, as subcritical coal plants are not built anymore since 2013**. This is confirmed by the fact that the Ultra Mega Power Projects (UMPP) plan from the government is entirely based on supercritical technology¹⁰.

India's large coal plants operating, under construction, and planned by commissioning date



Source: Stockholm Environment Institute, *Coal Power in the CDM: Issues and Options*, November 2011

¹⁰ http://articles.economictimes.indiatimes.com/2014-08-24/news/53166640_1_two-umpps-jindal-power-sterlite-infraventures

MYTH 3: “Standing in the way of coal stands in the way of poverty eradication and energy access in poor countries”

FACT: ECAs never assess this assertion, that is rebutted by ample recent evidence

ECAs do *not* have a development mandate: they cannot claim that the coal projects they support significantly contribute to poverty alleviation or energy access, as they do not assess these issues and make no such requirements for projects - and are not seeking to do so.

In addition, **energy access for the poor is not as easy as adding baseload generation to the grid** – a grid that does not reach many poor people, or which provides energy many of them are unable to afford. The ‘coal=energy access’ equation is a fundamentally flawed misrepresentation of on-the-ground realities:

- The decision of the World Bank, a leading global voice for development, to end coal support is a clear signal that there are other, better ways to contribute to poverty eradication and energy access in developing countries;
- The International Energy Agency said in its World Energy Outlook 2011 ¹¹ that to achieve the goal of universal energy access by 2030, 70% of those without access in rural areas would be served by off-grid and mini-grid systems – not large-scale, grid-tied power. Large coal plant projects are not the most effective way to achieve energy access for the poor;
- More recently the latest International Energy Agency *Technology Roadmap*¹² found that by 2030, around 500 million people with no access to electricity could enjoy the equivalent of 200W of solar photovoltaic capacity - entirely in mini-grid and off-grid situations. It says that “Off-grid systems of several MW are now economically and technically feasible”;
- The Goldman Sachs report *The thermal coal paradox* from May 2014¹³ also expressed doubts about the coal industry's claim that coal is a key component in the fight to reduce energy poverty worldwide, given its huge air pollution and carbon costs (hitting primarily the poor) and the quick development from renewable energies in the last three years.

¹¹ International Energy Agency (2011), *World Energy Outlook 2011 - Energy for all, Financing energy access for the poor*

¹² International Energy Agency, *IEA Technology Roadmap: Solar Photovoltaic Energy - 2014 edition*, 29 September 2014

¹³ Goldman Sachs (2014), *The thermal coal paradox - Low prices unlikely to create new demand*

MYTH 4: “Replacing existing coal plants with new most efficient ones is the best climate option”

FACT: OECD ECA support for coal doesn’t incentivise coal plant replacement at all

Japan made its argument clear in July 2014, as a reaction to the increasingly important OECD discussions on the end of ECA support for coal: Takafumi Kakudo, coal director at the Ministry of Economy, Trade and Industry, said: "In theory, replacing all coal power capacity in China, India and the US with the Japanese up-to-date technology would bring about a cut of 1.5 billion tons a year of CO₂ emissions, more than Japan's total". It added: "Encouraging the adoption of the most efficient coal technology as possible is a realistic way to cut CO₂," said the policy statement.¹⁴

This assessment contradicts the IEA analysis (see Myth 1) and is also factually flawed:

- **First, there is no reason why countries would replace their existing coal capacity, and the current ECA support to any coal plant doesn’t provide any incentive to do so.** It must be added that even incentivising *only* ultra-supercritical coal plants while ending ECA support for all other coal plant technologies will still provide no incentive to close existing coal plants. The Japanese calculation is thus unrealistic and meaningless. **The only way to accelerate the closure of old inefficient coal plants is to pass national climate and/or air pollution regulations.** This is starting to partly happen in the EU, the US and China, but not yet in India and other developing countries. In order to mitigate climate change, it would be far more effective that OECD countries incentivise developing countries to implement such climate and/or air pollution regulations, instead of supporting coal export projects through their ECAs.
- **Second, to our knowledge ECAs almost never support the refurbishment of existing coal plants and never require the closure of an old coal plant when they back a new one.** According to the NRDC database, in 2007-2013 only one guaranty from OECD ECAs out of 49 for coal plant projects was explicitly focused on improving the energy efficiency of an existing coal plant. Interestingly, the approach of requiring to shut down an old inefficient coal plant of equivalent capacity when supporting a new one was a condition of the 2007 energy policy of the European Investment Bank¹⁵, but the Bank came to the evidence that its concrete implementation was far too complex and difficult to ensure, and finally ended its coal support through its new Energy Policy in July 2013¹⁶.
- **Third, evidence shows that in the three major regions where climate and air pollution regulations accelerate closure of old inefficient coal plants (EU, US and China)¹⁷, the bulk is replaced by wind, solar, gas and more efficiency, not by new coal capacity** (see Myth 5).

¹⁴ 23 July 2014, <http://online.wsj.com/articles/japan-to-step-up-support-for-overseas-use-of-coal-1406114037?tesla=y&mg=reno64-wsj&url=http://online.wsj.com/article/SB10001424052702304521404580046901641700596.html>

¹⁵ European Investment Bank (2007), *Clean energy for Europe: a reinforced EIB contribution*

¹⁶ European Investment Bank (2013), *EIB and Energy: Delivering Growth, Security and Sustainability - EIB's Screening and Assessment Criteria for Energy Projects*

¹⁷ In China, the Action Plan for Air Pollution Prevention and Control; in the US, Environmental Protection Agency's Mercury and Air Toxics Standards (MATS); in the EU, the Large Combustion Plants Directive (LCPD) and the Industrial Emissions Directive (IED)

MYTH 5: “There is a huge pipeline of new coal plant projects in many countries that will be built anyway”

FACT: A growing number of projects are unlikely to be built, OECD ECAs should not send the wrong signal

Conservative stakeholders often make the argument that a huge number of new coal plants is going to be built in any case and it would therefore be better that they are built with the most efficient OECD technology (see Myth 2). However, latest reports show a radically different picture as the global coal market has shifted around 2012 and is now bearish:

Hostile environment for new coal plants, competing renewables

- According to the **Goldman Sachs** research *The thermal coal paradox* from May 2014¹⁸, since 2012-2013 a hostile environment to coal means that low prices are unlikely to create new demand: *"The outlook for thermal coal demand remains challenged by structural headwinds that show no sign of abating."* It cites increasing competition from renewables and natural gas and new regulations to reduce emissions and coal use, that act as a significant disincentive for new projects. The report adds ***"Rather than enjoying a broadbased increase in coal-fired generation, we believe that future demand growth will be increasingly concentrated in just a handful of countries: India, Korea, Taiwan and Japan"***.
- A **Citigroup** research from October 2013¹⁹ provides a cost curve showing eroding cost competitiveness of coal versus other fuels in power generation. It shows that decreasing costs for wind make it already competitive with coal in some locations in 2013. By 2020 it will be competitive with coal in most locations.
- The **Deutsche Bank** report *Let's start the second gold rush* from January 2014²⁰ finds that the growing competitiveness of solar photovoltaic is the main reason for its development. **Deutsche Bank says there are already 19 regional markets around the world that have achieved "grid parity", meaning that PV solar panels can match or undercut local electricity prices without subsidy:** California, Chile, Australia, Turkey, Israel, Germany, Japan, Italy, Spain and Greece, for residential power, as well as Mexico and China for industrial power.
- In a major report from July 2014, the *2030 Market Outlook*²¹, research company Bloomberg New Energy Finance expects \$7.7 trillion to be invested in new power generating capacity by 2030 globally. **Renewable energy should reap as much as two-thirds (\$5.1 trillion) as declining costs make it more competitive with fossil fuels.** Globally, around 4,000 gigawatts of renewable power capacity will be added by 2030.

About half of the renewable investment (\$2,5 trillion) will be in Asia. The share of overall investment to go to renewables is expected to be 72% in

¹⁸ Goldman Sachs (2014), *'The thermal coal paradox' - low prices unlikely to create new demand*

¹⁹ Citigroup (2013), *Energy Darwinism - The evolution of the energy industry*

²⁰ Deutsche Bank (2014), *Let's start the second gold rush*

²¹ Bloomberg New Energy Finance (2014), *2030 Market Outlook - Bloomberg New Energy Finance long term view of the power sector 2030*, <http://about.bnef.com/press-releases/european-renewable-energy-investment-set-surge-2030-back-nearly-1-trillion-investment/>

China, 63% in India and 93% in Japan. Solar capacity will expand the most in Asia, where new solar sites will exceed gas and coal combined.

Far fewer coal plants will be built than planned

As a result of the increasingly challenging context for new coal plants, many projects are already being delayed or cancelled, notably in the four major coal markets in the world - China, US, EU and India - but also likely in Indonesia and South Africa:

- **In China**, according to the China Electricity Council over 80 GW of coal plants were closed between 2001 and 2010 and another 20 GW of closure is planned. Meanwhile, 2011 investment in new coal plants weren't even half the level they were in 2005, and one-third of new coal plant projects approved in the country were stalled.

In addition, a Bernstein Research study from June 2013 said “We expect that China will start aggressively decommissioning coal-fired power stations and replacing them with nuclear or renewables by the second half of this decade”. **“We believe that coal-fired power generation capacity will fall from ~800 GW of installed capacity today to 650 GW by the end of the decade** as inefficient, small, old power stations are decommissioned”²². China would therefore see an absolute decrease of its coal power capacity by almost 20% by 2020. The Bernstein Research study adds “Solar and wind become the primary near-term sources of power generation and coal substitution that the government can boost”.

- **In India**, the IEEFA²³ finds that the required wholesale power price for imported coal is prohibitive relative to renewable energy, while domestic coal production failed to meet production target for six years in a row. **The proposed new coal generation plan is showing signs of significant financial stress and is likely to deliver far lower than expected levels of new supply over the next five years.**

Wind, solar and hydro facilities can be built faster than coal plants. Additionally, the use of renewable energy incorporates a zero fuel cost, such that there is an inbuilt deflationary driver (zero indexation) – favoured by the Reserve Bank of India (RBI) that prioritises the sustained reduction in inflation. On the opposite, imported coal has an annual 4% inflation cost.

The cost of solar electricity generation in India has fallen 65% over the last three years alone. For solar farms commissioned in 2018 it is fair to expect a cost of electricity 30% below the required cost of imported-coal fired power generation.

- **In the US**, the coal industry and the federal government launched an initiative in 2005 to build a new huge wave of coal plants to replace the nation’s aging fleet. However **since November 2008, one single coal plant (a specific CCS demonstration project²⁴) has broken ground and in total, 182 proposed new coal plant projects, valued at \$273 billion, have been canceled** at various stages of development²⁵.

The US Energy Information Administration increased its short-term closure of coal plants by 2016 from 27 GW to 60 GW²⁶. In 2010, 1.4 GW of coal capacity retired, increasing to 2.5 GW in 2011 and skyrocketing to 10.2 GW in 2012. This corresponds

²² Bernstein Research, *Asian Coal & Power: Less, Less, Less... The Beginning of the End of Coal*, June 2013

²³ Institute for Energy Economics and Financial Analysis (IEEFA) (2014), *Indian Power Prices*

²⁴ The Kemper IGCC (Integrated Gasification Combined Cycle) demonstration project in Mississippi, projected to cost \$2.8 billion but that is now over \$5.4 billion

²⁵ Institute for Energy Economics and Financial Analysis, *NYC and NYS pension funds should divest coal stocks: A shrinking industry, weak upside, and wrong on climate change*, 8 May 2014

²⁶ <http://www.eia.gov/forecasts/aeo/er/index.cfm>

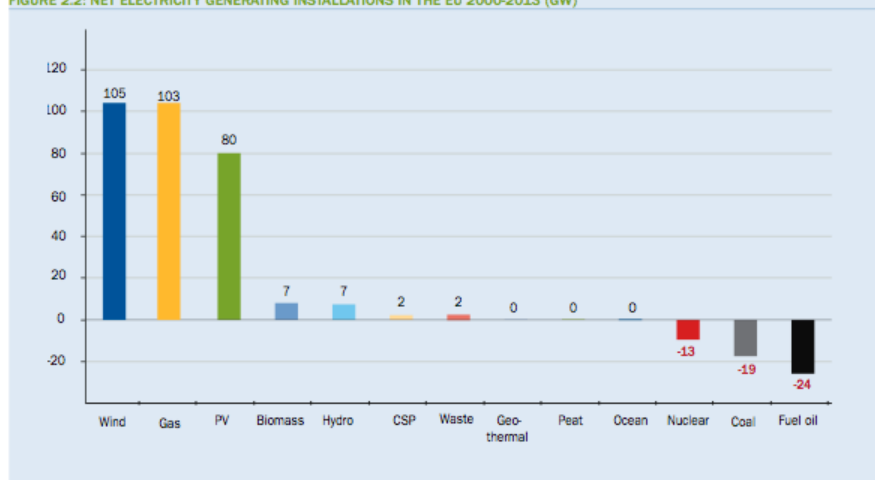
to 179 coal plants closed in 2011-2013 and plans to retire another 177 soon according to the Union of Concerned Scientists.

- **In the EU, a wave of 112 coal plant projects was announced by 2008-09. End 2012 only 3 have broken ground and 67% have been definitely cancelled²⁷.**

The period 2000-2013 saw a net closure of 19 GW of coal power plants in the EU (11% of the 2013 EU coal fleet). In 2013, the 1.9 GW of new coal capacity was dwarfed by the 7.7 GW decommissioned coal capacity, leading to a net closure of 5.8GW of coal. According to Bloomberg New Energy Finance it is expected that 20 GW would close between 2013 and end 2015 and coal-fired in the EU capacity will shrink from 195GW today to 125GW in 2030 (- 36%)²⁸.

In the EU, 72% of new power capacity added in 2013 came from renewables²⁹. In the period 2000-2013, net capacity came exclusively from renewables and gas at the expense of coal, oil and nuclear: see the graph below:

FIGURE 2.2: NET ELECTRICITY GENERATING INSTALLATIONS IN THE EU 2000-2013 (GW)



- **In Indonesia**, Adaro Energy said its joint venture firm BPI had declared force majeure on the construction of the 2 GW coal-fired Central Java Power Plant due to land acquisition problems and fierce opposition of Batang communities leading to high instability³⁰;
- **In South Africa**, expected solar and wind energy costs are now expected to be lower than what utility Eskom will charge on its Medupi and Kusile new coal plant projects when completed: according to Mergence Eskom tariffs are expected to increase to an average cost of about R0.97/kWh for both plants, while the latest round of the bidding programme has culminated in an average wind energy tariff of R0.65/kilowatt hour (kWh) and an average solar energy tariff of R0.80/kWh³¹.

For more elements, see WWF report *Global Coal: the market has shifted*³².

As a result, OECD ECAs should not send the wrong signal through their support to keep a sunset and polluting industry as the coal industry artificially alive: they should refocus their support on sunrise clean industries.

²⁷ European Climate Foundation, *Recent developments in EU coal use – is there a coal renaissance?*, July 2013

²⁸ Bloomberg New Energy Finance, *European Power – Research Note: Industrial Emissions Directive, game over for coal?*, 18 October 2013

²⁹ European Wind Energy Association (2014), *Wind in Power - 2013 European statistics*

³⁰ <http://www.adaro.com/publication/view/announcement-declaration-force-majeure-bpi-2/>

³¹ Business Day Live, *Eskom in an unenviable bind, says coal expert*, 7 March 2014,

<http://www.bdlive.co.za/business/energy/2014/03/07/eskom-in-an-unenviable-bind-says-coal-expert>

³² WWF (2014), *Global coal: the market has shifted –Literature review 2013-2014*

MYTH 6: “With Carbon Capture and Storage (CCS) ‘clean coal’ will soon be available”

FACT: OECD countries don’t provide a proper framework for CCS to be developed and exported

CCS developments in the limbo

According to the 2013 report on the global status of CCS from the Global CCS Institute³³, **CCS has been installed in only 12 industrial facilities worldwide but none of them in power stations.** In addition, these 12 projects have a total capacity to capture 25 million tonnes of CO₂ a year – less than the single new Medupi coal plant in South Africa that will emit 32 Mt CO₂ a year according to its Environmental Impact Assessment.

The Global CCS Institute report identified 13% less CSS projects in 2013 than in 2012. In Europe for example, where there have been considerable policy initiatives and large subsidies provided to large scale CCS demonstration projects³⁴, no new large-scale CCS project has entered operation since 2008.

Michael Grubb, chair of the Cambridge Centre for Climate Change Mitigation Research at the University of Cambridge, finds that a carbon price of \$69 per ton is required to make CCS economic³⁵. Currently, allowances trade at about \$7 on the EU emissions trading system, the world’s biggest – around ten times less. Carbon prices alone do not and will not ensure CCS developments.

This makes CCS development very unlikely. Reliance on CCS to decarbonise coal plants therefore carries significant non-delivery risks. As a result, **counting on CCS without taking due account of the slow real-world pace of development unrealistically increases the risk of unabated coal plants emissions.** Research highlights the risk of new investments locking in generating plants to locations unsuitable for CCS and increasing the future costs of decarbonisation.

Christoph Frei, Secretary-General of the World Energy Council, said in a recent interview with Energy Post that CCS “has simply flown off the map. People don’t see it happening. Not even in North America”³⁶; and CCS seems to have been removed quietly from the carbon strategies of companies in Europe.

A Goldman Sachs report from May 2014, citing ongoing challenges with commercializing CCS, says "The potential for coal to become a clean energy source via technological innovation is looking ever more remote"³⁷.

In addition CCS is an infrastructure rather than an incremental add-on: it requires CO₂ transport and geological storage. But current ‘capture readiness’ requirements are weak even in Europe³⁸ and are completely missing in developing countries.

CCS proponents should come to the fact that incentivizing CCS has been a failure: requiring it remains its last chance.

³³ Global CCS Institute (2014), *The global status of CCS in 2013*

³⁴ Through the NER 300 European funding mechanism

³⁵ <http://www.bloomberg.com/news/2014-04-13/renewables-nuclear-must-triple-to-save-climate-un-says.html>

³⁶ Energy Post, *A future for CCS? Set emission performance standards*, 24 October 2013, <http://www.energypost.eu/how-to-create-a-future-for-ccs/>

³⁷ Goldman Sachs (2014), *The thermal coal paradox - Low prices unlikely to create new demand*

³⁸ Requirements come from the Directive 2009/31/EC on the geological storage of carbon dioxide (“CCS Directive”)

An Emission Performance Standard: last chance for CCS proponents?³⁹

It would be logical that CCS proponents strongly support a stringent plant-based Emission Performance Standard (EPS), that would provide clear signals on needed technology and investment, foster low carbon innovation, rule out unabated coal plant technology and bring certainty for investors in new power plants or plant refurbishment on which to base their investment decisions. **CCS has been recently required by the US, UK, Canada and European Investment Bank for new power plants:** for example the US Environmental Protection Agency (EPA) introduced standards in September 2013 limiting any new coal plants to an emissions standard of 500 CO₂ g/kWh⁴⁰, and the European Investment Bank requires an EPS of 550 g CO₂/kWh since July 2013⁴¹.

As shown in the Annex, it can be considered that low carbon energy is below 200 g CO₂/kWh, and CCS-equipped coal plants can theoretically deliver 45-180 g CO₂/kWh assuming a carbon capture efficiency of 75-95%. Therefore, an EPS of 500 g CO₂/kWh or more is inappropriate as it does not ensure low carbon power and is still far higher than modern gas plants that stand at 350 g CO₂/kWh.

OECD countries decided to offer the most favourable financial terms to CCS technology under ECA support – but CCS developments lag so far behind plans that this incentive was not used once. If OECD countries want to be serious about CCS developments, they should logically require an Emission Performance Standard of 200 g CO₂/kWh through ECA support for new coal plants and refurbishment of existing plants.

³⁹ WWF does not support CCS in the energy sector, for the high risks above mentioned that such a decarbonisation option fails. Renewable energy and energy savings developments are the safest option in the energy sector

⁴⁰ <http://www2.epa.gov/sites/production/files/2013-09/documents/20130920factsheet.pdf>

⁴¹ http://www.eib.org/attachments/strategies/eib_energy_lending_criteria_en.pdf

MYTH 7: “China neglects climate change so why should OECD countries make efforts on coal?”

FACT: China is now taking concrete and rapid action to mitigate climate change and declared a ‘war on pollution’

China is quickly acting at domestic level, but also engaged in high level discussions with the US on global coal.

China’s State Council released its Action Plan for Air Pollution Prevention and Control on 12 September 2013. In response to the Action Plan, 12 of China’s 34 provinces, representing 44% of China’s coal consumption, have pledged to implement coal control measures.

These coal control measures mean a reduction in coal consumption of approximately 350 million tons by 2017 and 655 million by 2020, compared with business-as-usual growth. By comparison the total coal consumption of the third biggest coal consumer globally, India, amounted to 595 Mt in 2012. Further reductions in coal consumption covering most of China’s coal use can be expected if more provinces put forward their coal control plans⁴².

In addition, the Chinese energy intensity in 2013 decreased by an enormous 9.25% from that of 2010, and is therefore on track to achieve the 16% energy saving goal prescribed by the China’s Twelfth Five-Year Plan⁴³. Finally, China is now considering plans to set an absolute cap on its carbon dioxide emissions from 2016, a top government adviser said in July 2014⁴⁴.

The International Energy Agency finds that “Remarkably, the projected decrease in electricity intensity of GDP leads to a reduction of coal consumption equal to the aggregated annual German and British coal consumption”⁴⁵.

China in high level discussion with US on global coal

According to excerpt from the most recent high level US-China Strategic and Economic Dialogue, China and the US have started a discussion around limiting international support for coal projects, stating officially **“The United States and China are to share views on the important role that official financing support policies can play to accelerate the transition to a global energy economy that is more energy efficient and less carbon intensive”**⁴⁶.

⁴² Greenovation Hub Annual Policy Briefing (2014), *A Review of China’s Climate Policies and Actions in 2013*

⁴³ Ibid

⁴⁴ <http://www.theguardian.com/environment/2014/jun/03/china-pledges-limit-carbon-emissions>

⁴⁵ International Energy Agency (2013), *Medium-Term Coal Market Report*

⁴⁶ 11 July 2014, <http://www.treasury.gov/press-center/press-releases/Pages/il2561.aspx>

MYTH 8: “Ending OECD ECA support for coal will mean major lost opportunities for OECD industries”

FACT: 25 ECG countries did not use ECA support for coal projects in the last 7 years

The National Resource Defense Council (NRDC) database⁴⁷ did not find evidence of ECA support for coal projects in 2007-2014 in 25 member countries of the OECD Export Credit Group (ECG) out of 33, making it unlikely that they will do so in the future while the coal market is now bearish⁴⁸. In the EU, 24 out of 28 Member States did not use ECA support for coal projects in 2007-2013.

For three quarter of ECG countries, ending ECA support for coal would therefore not impact national industries and create potential competitive disadvantage compared to other countries’ companies, as their business does simply not sue this ECA opportunity.

Only 8 ECG countries have provided ECA support for coal projects in the period 2007-2013: Japan mainly, the US, Germany, South Korea, France, and to a much lesser extent Italy, Canada and UK.

It must be questioned in the OECD whether the commercial interests of industries in only eight countries can reasonably block the entire OECD ECG from scaling up climate mitigation ambition only one year before the critical COP21 of December 2015.

Conclusion

The only *realistic* and *low risk* option to ensure timely climate mitigation through OECD ECAs is to end support for coal plant technology exports.

OECD countries should immediately and publicly commit to end all forms of ECA support for high carbon projects, including coal plants, mines and associated infrastructure.

To ensure common consistent action of developed countries, they should also support a multilateral OECD agreement to effectively prevent any support for high carbon projects, including coal plants, mines and associated infrastructure from OECD ECAs.

⁴⁷ See the analysis done by WWF on this basis: WWF (2014), *European countries talk climate ... but finance coal*

⁴⁸ See WWF (2014), *Global coal: The market has shifted*

ANNEX: Emissions factors for power stations globally

	Emissions factor at combustion (g CO ₂ / kWh)	Technology deployment
Low carbon	0	Wind, solar, hydropower
	40-70	Gas-fired plants with CCS
	45-180	Various coal-fired plants with CCS (assumption: carbon capture efficiency of 95% - 75%)
< 200		
High carbon	300	New (most efficient) gas-fired plants fitted with CHP (Combined Heat and Power)
	320-380	New (most efficient) gas-fired plants
	350-550	Existing gas-fired plants
	550	New (most efficient) oil-fired plants
	620-670	Existing oil-fired plants
	730	New (most efficient) hard coal-fired plants with powder coal injection
	760	New (most efficient) hard coal-fired plants with gasification
	800	New (most efficient) lignite-fired plants with gasification
	850	Existing hard coal-fired plants
	1000	Existing lignite-fired plants

Note: All numbers are average for technology globally

Sources:

IEA (2013), CO₂ emissions from fossil fuels

ECOFYS (2011), International comparison of fossil power efficiency and CO₂ intensity

IPCC Special Report (2008), Carbon dioxide capture and storage SPM

**For further
information:**

Sebastien Godinot

Economist
WWF European Policy Office
Email: sgodinot@wwf.eu
Mobile +32 489 461 314

Jason Anderson

Head of EU Climate and
Energy Policy
WWF European Policy Office
Email: janderson@wwf.eu
Mobile +32 474 837 603



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