urgewald

Coal financing – what the KfW prefers to keep under wraps

In Germany, the KfW banking group is a well-known promoter of energy efficiency and renewable energies. In 2011, approximately one third of its promotional business volume was allocated to this area. Projects such as the "100,000 Roofs Solar Energy Programme" and loans for the ecological rehabilitation of housing serve as models for successful green banking in other countries[1].

However, there are two sides of the coin: Contrary to its green image and regardless of the looming climate catastrophe, KfW grants loans to coal projects and thus contributes to increasing the production and combustion of coal worldwide. Over the last few years, KfW has invested several hundred million Euros in the enlargement of existing plants and the construction of new sites, coal mines, and coal-related infrastructure. This financial volume puts KfW at rank 7 among international financing institutions that invest in the construction of new coal-fired plants[2].

Coal is the fossil fuel most harmful to the climate and coal plants are among the main sources of climate change. Their construction is hard to justify in the light of an increase in global temperature by 0.8°C[3] and other alarming signals: Currently, food prices in the United States are being driven up by an extreme drought[4], the Greenland ice sheet is close to being entirely covered by a melt zone[5] and each summer, the loss of sea ice in the Arctic accelerates at an unprecedented rate. In general, the symptoms of climate change are manifold and range from extreme weather to droughts and sea level rise.

Although all of this is well-known, global CO_2-emissions increase and more and more energy is generated from coal. This promotion of coal is fueled by the great demand for energy worldwide

1 Carrington, Damian, 24/05/12: How a green investment bank really works: http://www.guardian.co.uk/environment/damian-carrington-blog/2012/may/24/green-investment-bank-energyefficiency

2 Rich, Bruce - Environmental Defense Fund- 2009, Foreclosing the Future: http://www.edf.org/sites/default/files/9593_coal-plants-report.pdf

3 Pik Potsdam, Factsheet Climate Change: http://www.pikpotsdam.de/~stefan/Publications/Other/klimawandel_fact_sheet.pdf

4 Spiegel online, 26/07/12: Record heat in the United States: http://www.spiegel.de/wirtschaft/soziales/usa-konsumentendroht-preisschock-durch-extreme-duerre-a-846505.html

5 Focus-online, 25/07/12: Das Eis auf Grönland taut so schnell wie noch nie: http://www.focus.de/wissen/diverses/extreme-schmelze-wegen-erderwaermung-das-eis-auf-groenland-taut-soschnell-wie-noch-nie_aid_787330.html

and the large reserves of coal available for exploitation. Currently, there are plans for constructing almost 1000 new coal plants worldwide. If all of these are brought online, this automatically means dropping the 2°C climate goal. In any case, an increase of global temperature by 2°C already poses a threat to the existence of small island states[6].

In order to slow down climate change, the increase in coal combustion has to be stopped at least in developed and newly industrialized countries. Power generation from coal is a massive obstacle on the way to producing 100% of the energy supply with renewables: due to high capital costs and the long operating times of plants, countries which decide to invest in coal commit to decades of power generation from coal.

The KfW banking group financially supports the construction of at least nine new coal plants in South Africa, Thailand, Chile, India, and Germany. Moreover, it contributes to two coal-related infrastructure projects in Australia and Serbia and plans to finance a new plant in Greece[7][8][9].

KfW justifies its activities in the coal sector by stating that they contribute to poverty reduction and improve energy access. As a matter of fact, however, the coal-fired power plants Medupi and Kusile in South Africa aggravate energy inequality and the fight for water in the region. Supplying the Indian plant Krishnaptanam with coal involves human rights violations and clear-cutting valuable rain forests in Indonesia. Facilities that are supposed to increase the efficiency of lignite capacities in Serbia mean that open pit mining will increase and that Serbia continues its lignite strategy. The enhancement of coal harbors in Australia serves the distribution of enormous amounts of coal throughout the world which not only makes ambitious CO_2 reduction goals impossible, but also endangers the unique Great Barrier Reef. At the moment, KfW considers acquiring interests in the coal-fired plant Ptolemaida V that is to be constructed in Greece.

Ptolemaida V, Greece

The 660 MW coal-fired plant Ptolemaida V is the target of heavy criticism by Greek environmentalists. Apart from negative effects on nature and health in the surroundings of the plants, WWF Greece is particularly worried by the long-term effects this decision might have on the national energy mix. “There are two possible scenarios for 2050 in Greece: Either we achieve a 100% renewable share in the electricity sector and move forward to a clean and competitive future, or we will be stuck with 15% lignite in our energy mix. This seemingly long-term outcome depends on the decisions we make now. If Ptolemaida V goes ahead we will continue ruining our climate and our economy with lignite, the worst and socio-economically most expensive fossil fuel. These investments resemble an economic one-way street for Greece as there is no future for the market for coal-generated electricity”, Achilleas Plitharas, anti-coal

6 Bill McKibben, 19/07/12: Global Warming's Terrifying New Math: http://www.rollingstone.com/politics/news/global-warmings-terrifying-new-math-20120719

7 Answer to enquiry by the Green Party, November 2011 [Drucksache 17/7757]:http://dipbt.bundestag.de/dip21/btd/17/077/1707757.pdf

8 http://investment.contify.com/story/indias-ntpc-to-raise-725-mln-euro-loan-from-germanys-kfw-to-fund-expansion-1538328

9 Ekathimerini, 13/03/12: German funds to go to Ptolemaida V plant: http://www.ekathimerini.com/4dcgi/_w_articles_wsite2_1_13/03/2012_432833

campaigner at WWF Greece, explains. Due to the low degree of efficiency, lignite has the highest CO_2-emissions of all fossil fuels.

Currently, the KfW and Greek electricity company Public Power Corporation S.A. (PPC) are negotiating ways to raise capital for the coal-fired plant Ptolemaida V. The plant that is supposed to be brought online in 2018 will combust approx. 8 million tons of lignite per annum. With a share of 56% of total electricity production, lignite is a major factor in the Greek energy mix. Nevertheless, renewables are on the rise and solar energy is considered an increasingly attractive market[10]. Energy supplier PPC, however, decided to turn a blind eye to these developments and continues to rely on coal which currently contributes to its overall energy mix with 55.6%. Obviously, it is PPC's main concern to secure its own shares in lignite mining.

The KfW banking group plans to grant a loan of 200 million Euros for the construction of Ptolemaida V, which would amount to 44% of the total credit. The money provided by KfW is secured by a Hermes[11] export credit guarantee by the German Government. If these plans are put into practice, KfW would be successful in confirming PPC's harmful lignite strategy and securing the future of lignite combustion in Greece – regardless of promising alternatives.

Medupi and Kusile, South Africa

"These plants are indispensable for the further development of the country, improving energy access for the poor, as well as preventing regular interruptions of supply[12]".

The coal-fired power plants Medupi and Kusile are giants among their kind: Each of them has a capacity of 4800 MW. Profits, however, will be mainly allocated to large companies: a special price agreement that dates back to the days of apartheid provides them with electricity at a low price[13]. At the same time, private customers will have to pay more. Since the decision to build the plant Medupi, the price of energy supplies for individual household has increased by 137%[14]. Moreover, the state-owned energy supplier Eskom has already announced that financing the plant Kusile might lead to an increase in prices by 25%. According to Sunita Dubey of the South African organization GroundWork, "poor people will have to carry the financial burden that is connected to the construction of the plant. These plans will aggravate energy inequality: in order to cope, these households will have to restrict their energy consumption or stop using electricity altogether".

By granting loans for the construction of Medupi and Kusile, IPEX – the commercial branch of the KfW banking group – effectively finances climate change. The operator of the two plants, Eskom, generates more than 90% of its electricity from coal. This makes Eskom the fifth largest

10 Ernst & Young:
http://www.ey.com/Publication/vwLUAssets/Renewable_energy_country_attractiveness_indices_-_Issue_33/$FILE/EY_RECAI_issue_33.pdf [17/07/12]
11 Mr. Arthouros Zervos, President and CEO of PPC during his presentation in the Greek Parliament, March 2012
12 Answer to enquiry by the Green Party, November 2011 [Drucksache 17/7757]:http://dipbt.bundestag.de/dip21/btd/17/077/1707757.pdf
13 Groundwork's letter to the World Bank, March 2009
14 http://www.southafricaweb.co.za/article/electricity-price-hike-south-africa

emitter of carbon dioxide among energy companies[15]. Operating the Medupi plant alone will lead to a 7.3% increase in South Africa's CO_2 emissions and requires the exploitation of forty new coal mines. The two sites will exacerbate the already existing water crisis in South Africa, as 71 million liters of water are needed to cool the plant Kusile and drive its turbines each day[16]. Moreover, the coal mines will consume enormous amounts of water and their overburden will pollute the surrounding waters. Operating the mines lowers the groundwater level and, consequently, local wells will dry out. Water scarcity already is a big problem in the region and it is likely to grow with the construction of the plants. Renewables derived from wind, water, and tidal energy would be a way to circumvent these problems. However, as promising as they might be, up until now their potential largely remains unused.

Krishnapatnam, India

Coal mining, at the beginning of the coal cycle is a problem in itself, as the example of mining in Indonesia shows. Krishnapatnam, a coal-fired plant in India financed by the KfW banking group, is supplied with coal by three mines that are located in the South of the Indonesian island of Sumatra. There are plans to import 100% of the coal needed to fire the 4000 MW plant [17]. For the Indian operator Reliance Power, the means of choice for securing its supplies is the acquisition of interests in mining companies[1819].

Large-scale mining in Indonesia comes with massive side effects. Valuable rainforest is destroyed and indigenous people are displaced. Itan Kussaritano of the indigenous Dayak and his team kept track of all events related to mining over the last few years. Kussarito reports: "The government gives away licenses for mining. They don't care to whom the land belongs nor do they care about who lives there. Corruption is very common. All of this leads to displacement and forced relocation". In addition to the reckless destruction of his home land, Kussaritano is worried by the effects mining has on climate change. "Destroying our rainforests will make the temperatures rise. The fact that rainforests are clear-cut and the peat soil is destroyed causes 85% of Indonesia's CO_2 emissions. This amounts to 2 billion tons of CO_2 every year and leads to the fact that the per capita CO_2 emissions of Indonesia are higher than in Germany", says Kussaritano. This shows how CO_2 is emitted and damage to the climate is done long before the fossil fuel actually arrives at the plant.

Kolubara, Serbia

In Serbia, the Kfw banking group has staked 74 million Euros in a cooperation aimed at introducing a modern system for lignite quality management in the mines of Kolubara[20]. While the efficiency of coal is increased, it is part of Serbian energy supplier EPS' plan to enlarge the coal mine and keep Serbia on a lignite track.

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15 CARMA Database: http://carma.org/company

16 Groenewald, Yolandi (Greenpeace), June 2012: Coal's hidden water cost to South Africa: http://www.greenpeace.org/africa/Global/africa/publications/coal/CoalsHiddenWaterCost.pdf

17 Website Reliance Power: http://www.reliancepower.co.in/business_areas/power_projects/coal_based_projects/krishnapatnam.htm

18 Website Reliance Power: http://www.reliancepower.co.in/business_areas/fuel_business/coal_mines_in_indonesia.htm

19 At the moment, the construction on the site is on halt, since an increase in prices of Indonesian coal endangers the profitability of the project for Reliance Power.

20 http://www.ebrd.com/english/pages/workingwithus/procurement/notices/project/120529a.shtml

70% of the electricity consumed in the country is generated in coal-fired plants that belong to the Serbian state and are operated by EPS – just like the coal mines. In the eyes of Serbian environmental organizations, EPS is the main obstacle on the way towards a renewables based future. The company uses lobby events and closely linked political networks to promote its own agenda and keep the success of renewables limited. This strategy has proven to be successful: The national energy strategy until 2015 clearly shows traces of EPS' influence[21]. "The investments in the coal quality management of the Kolubara mine can not be de-linked from the Serbian plans to expand burning lignite", Zvezdan Kalmar, climate campaigner with Serbian NGO CEKOR, points out. To him it is clear that the investments leave no room for ambitious climate goals, but will eventually lead to enhancing the standing of coal. This is why he sent a letter to KfW, asking them to reconsider their activities and stop supporting the investments in this project so harmful to the climate[22].

Wiggins Island and Newcastle coal harbors, Australia

Australian coal is booming and coal harbors are being enlarged to keep up with this trend. KfW IPEX supports these developments by financing German and other European companies that are involved in enhancing the Australian harbor Wiggins Island[2324]. According to Greenpeace Australia, these plans constitute a massive threat to the famous Great Barrier Reef, a unique coral reef and a World Heritage Site.

The exploitation of several new mega mines in the Galilee Basin in Queensland is the reason for enlarging the harbors. Therefore, the capacities of the harbors located at the coast of Queensland are to be increased sixfold, from 156 to 944 million tons of coal per year. The harbors in questions are lined up like a string of pearls along the coast from Gladstone to Cape York in close vicinity to the Great Barrier Reef. It is not only the enlargement itself that causes problems for this diverse eco-system. The almost 10,000 ships which are needed per year to ship away the extracted coal are going to cause the biggest threat. This poses severe risks to the reef, such as accidents, introduction of alien species and water pollution. For the reef that already suffers from climate change and ocean acidification, this is likely to be too much to cope with. According to statistics of the last years, each year two ships in every 2000 had an accident. The prediction is straightforward: The more traffic, the more accidents there will be[25].

There is another Australian harbor enlargement in Newcastle that is financed by IPEX. By enlarging the third terminal on Kooragang in Newcastle the capacity of the harbor will increase by 66 million tons per annum. By financing the enlargement of harbors, KfW provides the

21 Briefing Bankwatch June 2011: The European Bank for Reconstruction and Development and the Serbian coal sector: http://bankwatch.org/sites/default/files/Briefing-KolubaraLignite-20Jun2011.pdf

22 http://www.cekor.org/pdf1/CEKOR%20Letter%20Kolubara%20,%20kfW%2030.3.2012.pdf

23 IPEX Activity Report 2011, p. 20: http://www.kfw-ipex-bank.de/ipex/de/I/Download_Center/2012-05-14_KfW_IPEX-Bank_GB11_DT_barrierefrei.pdf

24 Website IPEX Singapur; http://www.kfw-ipexbank.de/ipex/de/Unternehmen/Standorte/Singapur/index.jsp

25 Greenpeace Australia: Boom- Goes the reef: http://www.greenpeace.org/australia/Global/australia/reports/Boom_goes_the_Reef_Report_4MB.pdf

infrastructure necessary for a coal boom that makes a mockery of all efforts to reduce CO_2 emissions.

Conclusion

With its worldwide involvement in coal projects, KfW undermines Germany´s climate change goals. It is high time for KfW to finally live up to its own mission statement that prominently features "sustainability and responsibility". This requires putting an end to investments in projects that involve exploitation, transportation and combustion of coal. Refusing financial support for the construction of the new coal-fired plant Ptolemaida V in Greece would be a credible, yet necessary first step to rid their portfolio of coal.

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