

STUCK IN THE PAST?

The European Investment Bank (EIB) is now deciding its future energy policy, steering a sector that receives roughly 20 percent of the EUR 60 to 70 billion that the bank lends every year. This publication describes 15 EIB energy projects in Europe with both positive and negative impacts on the economy and the environment.

These are just some examples of the types of projects in the EIB's energy portfolio and highlight what sorts of energy investments the bank both promotes and permits within its current policy. While the bank is making strides with clear energy finance, the progress the bank has made is undermined by its financing for fossil fuels.

EIB investments in coal power generation, profitable gas extraction, transmission and storage have reached EUR 19 billion since 2007 when its energy policy was put in place. Not only does fossil fuel financing dwarf the EUR 5 billion for energy efficiency measures, these projects have a high carbon 'lock-in effect' and dubious economic benefits, as evidenced by the Sostanj lignite plant in Slovenia.

Such environmentally damaging projects are also taking their toll on people's health, with the health costs of coal-fired power stations in Europe adding a financial burden of EUR 42.8 billion every year.



FACING THE FUTURE?

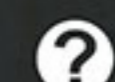
The positive examples here show that the EIB is most successful in meeting European goals like creating jobs, increasing resource efficiency and competitiveness and reducing emissions and energy consumption when it finances targeted renewables and energy efficiency projects, like those in Bucharest or Brandenburg. Here the EIB is supporting the development of innovative and less-mature technologies that will ultimately lead to a cleaner environment.


It is the responsibility of the EIB to focus future investments on projects and programmes that can deliver 'win-win-win' solutions for the EU in terms of economic, social and environmental benefits. From this perspective, any replacement in energy generation after 2013 for coal and 2014 for gas should be turned down by the EIB on the basis of climate science and economic assessment of external costs of fossil fuel projects.


Reviewing the EIB's energy portfolio did prove especially difficult given the limited information provided by the bank about its projects and their expected results and impacts, especially with regards to EU objectives and targets on climate change. Without such information, it is impossible to wholly assess the quality of EIB-financed projects and its project appraisal system. Further field and desk research was thus conducted to assess the selected projects.

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RIVNE-KYIV HIGH VOLTAGE TRANSMISSION LINE


 This 350 kilometre transmission line will connect two nuclear power plants at Rivne and Khmelnytsk with the Kiev region. The project is a major electricity backbone linking Kiev to western Ukraine and further afield with the Trans-European Energy Networks, effectively transporting nuclear energy to the European market.

 While the project aims to use generating capacities more economically by reducing losses and to facilitate lower carbon emissions, it will do so only if the life of Ukraine's outdated nuclear plants are prolonged. Financing the nuclear sector also crowds out investments in the development of renewable energy sources and small generation units.

 EIB financing: EUR 150 m; total project costs: up to EUR 425 m


750KV ZAPORIZHZHIA-KAKHOVSKA LINE


 This 190 kilometre transmission line will connect the Zaporizhka nuclear power plant with the new Kakhovska substation and auxiliary facilities in southern Ukraine.


 Constructing this line will enable the nuclear plant to work at full capacity that at present is limited due to a lack of transmission lines. With expanded transmission capacities, a new nuclear unit will increase the plant's capacity from 5300 to 6000 MW. The project forms part of the interconnection between the Ukrainian and European electricity grids, enabling the export of power from dirty sources including coal into the EU.

 EIB financing: EUR 175 m; total project costs: EUR 350 m


COAL POWER PLANT KARLSRUHE


 This project involves the construction of a new 910 MW coal power plant designed for the cogeneration of heat and power using hard coal in Karlsruhe, Germany.


 In burning the dirtiest of fossil fuels, the project will emit 5.1 million tonnes of CO2 every year for the next four decades.

 EIB financing: EUR 500 m; total project costs: EUR 1 bn


DUISBURG-WALSUM COAL POWER PLANT


 This project involves the construction of a new 750 MW coal power plant designed to generate electricity from hard coal in North-Rhine Westphalia


 The project will emit 4.4 m tonnes of CO2 every year for the next four decades.

 EIB financing up to 50% of the total project costs of EUR 820 m


PAROSEN POWER PLANT ROMANIA


 The project aims to improve the environmental performance at the coal-fired Paroseni combined heat and power plant in the southern Carpathian region. Four hard-coal mines will provide coal for two plants at Paroseni and Mintia.


 While the project states that it will support the economic development of an EU 'convergence' region and contribute to environmental protection and EU energy objectives, it also directly supports coal energy and the lifetime extension of unit four at the Paroseni plant. Support for coal projects delays necessary investments in energy efficiency and renewable energy sources.

 EIB financing: EUR 33 m; total project costs: EUR 65 m

TES6 THERMAL POWER PLANT SOSTANJ SLOVENIA


 This project involves the construction of a 600 MW lignite power plant designed for the cogeneration of heat and power.


 This lignite power plant will emit 3.2 million tonnes of CO2 annually, nearly swallowing all of Slovenia's carbon budget by 2050, if the country is to meet targets set by the EU. The project is currently subject to investigation by the EU's Anti-Fraud Office and the EIB's own Complaint Mechanism.

 EIB financing: EUR 550 m; total project costs: EUR 1.2 bn


SOUTH POLAND COMBINED HEAT AND POWER COAL-FIRED PLANT


 This project replaces the existing unit of the Bielsko-Biala combined heat and power coal-fired plant with a new 50MWe and 180MWt coal-fired combined heat and power plant operated by Tauron S.A.

 The new coal-fired plant will emit over 3.5 million tonnes of CO2 during its first 15 years. Studies for the project omitted any analysis of alternative fuel scenarios and the climate impacts of the project.

 EIB financing: EUR 76 m; total project costs: EUR 143 m


PHOTOVOLTAIC POWER PLANT BRANDENBURG

 The project includes the installation and operation of a 52 – 54 MW photovoltaic plant in the Brandenburg area of eastern Germany. The project is located in a former military exercise area contaminated with explosives and chemicals that requires remediation.

 In addition to feeding renewable energy into the grid, the project will pay a rental fee that will be used partly to finance the decontamination of the project site.

 EIB financing: EUR 75 m; total project costs: EUR 150 m


BUCHAREST SECTORS 1 AND 2 THERMAL REHABILITATION


 These two projects will provide for the thermal rehabilitation of family housing in two different parts of Bucharest. Sector 1 includes 525 multi-story residences with 25000 apartments, and sector 2 includes 245 buildings of about 15000 apartments. The energy efficiency improvements will focus on the building envelope, including wall insulation, windows, roof and cellar insulation.

 Part of Romania's National Energy Efficiency Action Plan, these projects will reduce energy losses in multi-family buildings, thus reducing energy consumption as the use of air conditioning decreases. The rehabilitation works will also create more jobs, while placing less pressure to rely on heat and power plants like ELCCN in Bucharest.

 Sector 1: EIB financing of up to EUR 125 m; total project costs: EUR 220 m
Sector 2: EIB financing of up to EUR 60 m; total project costs: EUR 80 m

WIENER WOHNEN ENERGIEEFFIZIENZ


 The project has significantly contributed to the improvement of the urban environment by rehabilitating and upgrading Vienna's rental social housing stock.

 From 2011-2014, extensive energy efficiency measures will reduce the housing stock's energy consumption and improve the living conditions for residents by modernising the house's internal installations, refurbishing houses and reducing costs of electricity and heating bills.

 EIB financing: EUR 150 m; total project costs: EUR 550 m

ENERGY EFFICIENCY AND RENEWABLES BARCELONA


 Two credit lines are funding the Provincial Council of Barcelona's energy and climate change programme, designed to partly finance small and medium-scale solar power and energy efficiency projects in and around Barcelona.


 The programme aims to install photovoltaic and other types of renewable energy equipment, mainly in municipal buildings, and to improve the energy efficiency of public buildings and street and traffic lighting.

 EIB financing: EUR 250 m; total project costs: unknown

THFC GREENER SOCIAL HOUSING

 This programme will support housing associations to retrofit and construct new energy efficient buildings. The eligibility requirements vis à vis energy efficiency are set to the highest industry standards.


 By increasing energy efficiency, the project will reduce energy consumption and CO2 emissions, while at the same time alleviating the current shortages in the social housing supply.

 EIB financing: EUR 480 m; total project costs: EUR 959 m

ENVIRONMENTAL PROTECTION AND WATER MANAGEMENT GREEN INVESTMENT SCHEME


 The Polish National Fund for Environmental Protection and Water Management (NFOSIGW) received a EUR 50 m loan to support its Green Investment Programme for financing projects including biomass-fired power plants, biogas plants producing heat and electricity and the energy efficient-refurbishment of public buildings.

 The project increased electricity production and heat generation from biomass and biogas-fired plants, while improving energy efficiency through the refurbishment of public buildings in Poland. This has contributed to the implementation of greening plans developed by NFOSIGW in conjunction with the Green Investment Schemes that Poland signed with Spain and Ireland, facilitated by the EIB's Multilateral Carbon Credit Fund.

 EIB financing: EUR 50 m; total project costs: EUR 150 m


HORNÍ LODENICE WINDFARM


 The Horní Lodenice wind farm in eastern Czech Republic is the second largest of its kind in the country with nine turbines providing an output of up to 18 MW.

 The annual production of the wind park is estimated at 43 GWh of electric energy, enough to meet the demand of 12 300 Czech homes. Over its operating lifetime, the park will generate the same amount of energy as burning one million tonnes of coal, which would emit in the process 2.7 million tonnes of CO2, 2000 tonnes sulfur dioxide, 1800 tonnes NOx, and 65 tonnes of fine particles.

 EIB financing: EUR 25 m; total project costs: information not available

RBHU GREEN ENERGY LOAN FOR SMES

 The majority of projects supported under this facility so far concern the renovation of housing blocks by housing associations. At least 70 percent of the loan is to be allocated to energy efficiency and renewable power generation projects in Hungary.

 One local housing association that the project supported renovated buildings with measures like replacing windows and hot water systems, leading to a 63 percent savings in energy consumption. Three months after works were completed, the residents noted the benefits of energy efficiency, particularly the lower energy bills and the higher quality of living in well-insulated buildings.

 EIB financing: EUR 100 m; total project costs: information not available

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