

Federal Government report on the financing of international coal-related projects for the Economic Committee of the Bundestag

Climate change poses a fundamental danger to safety, personal well-being and sustainable economic activity. In order to ensure that the effects and the risks of global climate change for people and the environment remain manageable, the international community has committed itself to the goal of restricting global warming to a maximum of 2C.

The Fifth Assessment Report by the IPCC confirms that, when it comes to the changes that need to be made, the energy sector has a special role to play in restricting global warming to a maximum 2C. The experience and expertise acquired in Germany can make an important contribution towards this sort of energy transition. There are opportunities here for German firms, which are ranked amongst the world leaders in terms of developing and using low-emission power-plant technologies and expanding renewable energy in the context of Germany's own energy reforms.

Government assistance programmes and state-backed funding are making an important contribution towards this global energy transition. They are creating incentives to transform energy systems from fossil to renewable energy, and to cut the carbon emissions caused by power stations.

In recent years, the KfW has made an important contribution towards the global energy transition, and has focused its international funding for energy-related projects on the financing of measures to protect the environment and to combat climate change. It is one of the largest providers of funding in this sector worldwide. Between 2006 and 2013, it provided approx. €173bn in funding for environmental and climate mitigation measures. At the same time, the KfW has funded coal-related projects worldwide; since 2006, it has provided a total of approx. €3.3bn for this. The KfW has already been applying strict efficiency criteria and high standards for environmental and social compatibility audits to the financing of such projects, and these serve as a starting point for the position taken by the German government on this issue.

1. German institutions providing state funding for coal abroad

The financing of international coal-related projects by state institutions affects three policy areas in Germany which have so far pursued differing goals and taken differing approaches to assessment:

Export and investment financing by der KfW-IPEX

Like other commercial banks in Germany, IPEX, a legally independent subsidiary of the KfW, backs the export and investment activities of German and European firms by providing finance at normal market conditions, and is thus a reliable financial partner for the export industry throughout the economic cycle. With regard to the financing of coal-related projects, this support generally goes to the major plant manufacturers which are based or are manufacturing in Germany. As a rule, IPEX provides funding in a consortium with commercial banks, who greatly value IPEX as a partner in their consortia. In many cases in which IPEX serves as the project leader, German bidders would not have a chance to win contracts without the support from IPEX, and the project would still be implemented – but with technology from other providers. German plant manufacturers can only survive in the face of competition if they can offer competitive financing. For this reason, IPEX's services are crucial for German firms.

Development financing from the KfW

As part of development funding, KfW Development Bank also provides funding for power-plant projects in developing and emerging economies on behalf of the Federal Government. Various instruments of financial cooperation are used; with the exception of the promotional loans, these always include money from the budget of the Federal Ministry for Economic Cooperation and Development. Development loans and promotional loans are generally backed by federal guarantees. It is not normally necessary for the contract to be awarded to German firms; rather, there is an international bidding procedure run by the recipient of the loan. The examination (of the project) is undertaken on behalf of the Federal Ministry for Economic Cooperation and Development and in the context of the Federal Government's development policy.

Export credit guarantees

As a rule, there are large amounts of money involved in power plant construction; also, in view of the long lifetimes of the facilities, the financing takes place on a long-term basis. Without collateral, it is normally impossible to finance deliveries and work on power plant projects. When power station construction is financed by commercial banks, they generally draw on Germany's Hermes export credit insurance system, and occasionally on guarantees from other state export credit insurers. Risk premiums must be paid for export credit guarantees backed by the Federal Government. The instrument of export credit guarantees is designed to cover its costs on a long-term basis and is thus not a subsidy. At the same time, the Federal Government is operating in an international context, since the standards applied to the provision of export credit guarantees are set in the framework of the OECD. So far, there have not been any restrictions within the OECD on the provision of export credit guarantees in terms of the technical yardsticks applied to the greenhouse gas emissions of fossil-fuel power stations. A discussion is currently underway on ways to use OECD rules on export credit guarantees to cut greenhouse gas emissions in the context of the building of new coal-fired power stations.

2. Criteria and future position of the German government

Against the background of the challenges in the field of energy, climate and development policy, the Federal Government has once again reviewed its position on the financing or support of low-carbon technologies in coal-fired power generation, and is presenting revised financing criteria in this report.

The main aim of the Federal Government is to arrive at uniform international criteria which ensure the deployment of the most modern, efficient and climate-friendly technologies whilst also establishing a level playing field. For this reason, there are graduations in the nature of the financing.

In future, the following criteria will apply:

a. Export / investment financing

- Projects will only be pursued in countries which have a national climate mitigation policy and strategy which is supported by a targeted policy to expand renewables and/or to enhance energy efficiency. The projects must be compatible with this climate mitigation policy.
- The best available technologies must be deployed in line with the current version of the European Industrial Emissions Directive (2010/75/EU).
- Financing for new coal-fired power plants is only possible if
 - in the case of facilities with unit sizes > 500 MW_{el} , at least technologies with a planned electrical efficiency of 43% (lignite)¹ and 44% (hard coal)² are used, or if
 - facilities with unit sizes < 500 MW_{el} achieve a relative improvement of efficiency compared with the regional average and rank amongst the best 25% of the regional power plant portfolio in this size category,
 - and the technical and spatial preconditions are examined with a view to possible subsequent CCS.
- In the case of new coal-fired facilities which cogenerate heat and power or generate heat, a planned fuel efficiency of at least 75% must be attained³,
- In the case of improvements or modernisations of existing coal-fired power plants, the measures funded must result in a substantial improvement in the environmental footprint of the power plant.
- In the case of all the projects, the national rules on preventing and minimising any negative environmental and social effects and risks must also be strictly complied with.
- Financing in countries which are not EU or OECD members must also be subjected to an environmental and social audit which in addition to the relevant national rules must at least be oriented to the internationally recognised standards (e.g. of the World Bank group or the EU).

Applies to facility with unit sizes above 500 MW_{el}, (net, at the guarantee point, lower calorific value, Rhineland lignite, wet cooling tower, fluegas desulphurisation facility without recirculation, pure power generation, ambient factors: water temperature 12C, 60% air humidity, local air pressure 1 bar, air temperature 15C). Values based on German site conditions. To be adjusted according to differing local conditions.

² Applies to facility with unit sizes above 500 MW_{el} (net, at the guarantee point, lower calorific value, calorific value > 27 MJ/kg, wet cooling tower, flue-gas desulphurisation facility without recirculation, pure power generation, ambient factors: water temperature 12C, 60% air humidity, local air pressure 1 bar, air temperature 15C). Values based on German site conditions. To be adjusted according to differing local conditions.

³ Applies to all unit sizes at the same conditions as for the electrical efficiency for new power plants (footnotes 2 and 3).

These criteria will be reviewed after four years.

b. Development financing

- In the field of development financing, the emphasis in terms of climate mitigation policy should be on expanding renewables and boosting energy efficiency.
- In order to further strengthen the transformational nature of energy projects in German development cooperation, development policy will cease to promote the new construction of coal-fired power stations and the modernisation of decommissioned coal-fired power stations in partner countries.
- In the context of development cooperation, projects to modernise power-plant technology will only be funded in line with the following, cumulative criteria:
 - Projects will only be pursued in countries which have a national climate mitigation policy and strategy which
 is supported by a targeted policy to expand renewables and/or to enhance energy efficiency. The projects
 must be compatible with this climate mitigation policy.
 - The best available technology, defined in line with the EU Industrial Emissions Directive (2010/75/EU), will be used. Here, the technical and spatial preconditions must be examined with a view to possible subsequent CCS.
 - No adequate alternatives in the field of renewable energy are available in the partner country which ensure
 a secure energy supply and whose higher costs can be covered by additional national or international funding.
 - In the case of coal-fired facilities with CHP to generate heat, fuel efficiency of at least 75% is required. The facilities must also be some of the lowest-emission facilities in the respective country and must use the best available technologies pursuant to the EU Industrial Emissions Directive.
 - The project must make a significant contribution towards improving the country's energy security and must be shown to improve access to energy for poorer sections of the population.
 - The project must be subject to an environmental and social audit oriented to international standards (e.g. World Bank, IFC or EU) and the respective national rules.

c. Export credit guarantees

The rules which apply to Germany are drawn up in the OECD and apply only to OECD countries. The German government supports the efforts at OECD level to agree on uniform standards for export credits and export credit guarantees for coal-fired power plants which are compatible with the goal of limiting global climate change. For this reason, the German government will advocate the introduction of ambitious criteria on the basis of the above-mentioned criteria for export financing in the OECD. The German government will also call for a corresponding approach with regard to non-OECD countries.

3. Conclusion

The position taken here by the German government sends out a signal for an ambitious energy and climate policy and ensures that the use of the latest and most efficient technology in international coal-related project financing meets the needs of climate policy, development policy and industrial policy around the world. This means that the German government is playing a pioneering role in the global arena.