

ENERGY SECTOR GUIDELINES

1. Objectives

Dexia is a major player in the financing of the energy sector, an activity which is most necessary to economic and social development.

Because of the size of many energy projects, and the potential adverse impact of certain technologies on the environment and society, Dexia has defined a sector policy which aims at meeting the following objectives:

- Support the development of the whole value chain of any particular sub-sector, including energy production, transportation, refining, liquefaction, gasification, storage, distribution, trading and demand management ;
- Promote the « energy transition » consisting of a change¹ in the production, transportation and use of energy which are required so that (i) a maximum level of 450 ppm of CO₂ equivalent concentration in the atmosphere may be reached by 2030², (ii) the price and availability of energy allow for a level of demand consistent with progress of the United Nations' Human Development Index and (iii) populations presently excluded from any access to energy may be less numerous ;
- Minimise the environmental impact of the energy infrastructure which is being financed by Dexia, based on existing technologies ;
- Absence of any infringement on human rights as defined in the Charter of the United Nations ;
- Consistency with all of Dexia's commitments in terms of corporate social responsibility : Equator Principles, Global Compact, UNEP Financial Initiative, UNEP-FI Declaration on Climate Change by the Financial Services Sector.

Dexia does not exclude a priori the provision of financing, advisory or other financial services to any part of the energy sector, to the extent that the above objectives and specific sub-sector

¹ These objectives refers to the World Energy Outlook 2007 of the International Energy Agency and its scenario called "450 stabilisation case" which describes a notional pathway to long-term stabilisation of the concentration of greenhouse gases in the atmosphere at around 450 parts per million, global emissions peak in 2012 and then fall sharply below 2005 levels by 2030. Emissions savings come from improved efficiency in industry, buildings and transport, switching to nuclear power and renewable energies, and the widespread deployment of CO₂ capture and storage (CCS).

² According to the 2007 International Panel on Climate Change report, a level of 450 ppm of CO₂ equivalent concentration (including greenhouse gases and aerosols) by 2030 would limit the increase of temperature to 2.4°C. It would be able to reach such a CO₂ level with an inferior to 3% decrease of GDP compared with the baseline scenario.

guidelines described herein may be met. In case Dexia wishes to consider financing in energy sub-sectors of which it had previously no experience, for instance because of the emergence of new technologies, it will complement to the extent necessary the present set of sector guidelines.

2. Scope

2.1 Financing activity

- Project finance
- Corporate banking where the use of proceeds is known to be project-related
- Financial guaranty where it is known that the proceeds of the underlying debt will be used for project finance³.

2.2 Energy sector

- Oil & gas
 - Production
 - Transportation
 - Storage
 - Distribution
 - Refineries
- Biofuels
- Transformation of fossil fuel
 - Coal to liquids, coal gasification
 - Gas to liquids
- Power or heat generation
 - Thermal power plants
 - Nuclear power plants
 - Renewable energies
- Power transmission and distribution

This scope excludes the extraction of uranium, the transformation and storage of nuclear fuel.

The power or heat generation based on renewable energies includes the following kind of energy: wind, thermal and photovoltaic solar, biomass, geothermal, biogas, hydropower, and wood energy.

³ Guarantying refinancing of existing assets, general utility credits or general government supported entity credits fall outside of the scope of the guidelines.

3. Identification of the main environmental and social issues for the energy sector

	Oil & gas	Biofuels	Transformation of fossil fuel	Thermal power station	Nuclear power station	Renewable energies except hydro power plants	Hydro power plants	Power transmission / distribution
Human rights	++	++	++	++	++	+	++	+
Biodiversity	++	++	+	+	+	+	++	++
Governance	++	++			++		++	
Climate change	++	+	++	++			+	
Resources management	+	++		+	+		++	
Waste management	+			+	++			
Pollution (air, water, soil)	++	+		++	+			+
Risk management	++				++		+	

++: highly sensitive issue

+: moderate sensitive issue

4. Guidelines as regards financing the energy sector

4.1 General principles

The definition of guidelines as regards financing the energy sector is based on the following general principles:

- For each activity sector, the applicable criteria correspond to environmental and social issues identified as highly sensitive ;
- Amongst these issues, Dexia distinguishes:
 - Transverse issues with common criteria for all sub sectors ;
 - Specific issues which are addressed through sub-sector guidelines.

The specific guidelines as regards power or heat generation based on renewable energies covers only the hydro-power sector.

	Oil & gas	Biofuels	Transformation of fossil fuel	Thermal power station	Nuclear power station	Renewable energies except hydro power plants	Hydro power plants	Power transmission / distribution	
Human rights	++	++	++	++	++	+	++	+	Transverse issues
Biodiversity	++	++	+	+	+	+	++	++	
Governance	++	++			++		++		Sub-sector guidelines addressing highly priority specific issues
Climate change	++	+	++	++			+		
Resources management	+	++		+	+		++		
Waste management	+			+	++				
Pollution (air, water, soil)	++	+		++	+			+	
Risk management	++				++		+		

4.2 Transverse guidelines

4.2.1 Human rights

Dexia's respect for human rights and the integration of human rights principles into its own operations are guided by the international regulations and the UN Global Compact.

As regards project finance, Dexia applies the Equator Principles and therefore analyses the compliance of any project with the International Finance Corporation (IFC) Performance Standards which includes labour and working conditions, land acquisition and involuntary resettlement and indigenous people standards.

4.2.2 Biodiversity

Dexia will not provide financing or advisory to any energy project located in:

- UNESCO World Heritage Sites⁴;
- UNESCO Man and Biosphere Reserves;
- Areas registered by the Ramsar Convention (Register of Wetlands of International Importance of the Ramsar Convention on Wetlands);
- Protected areas covered by the International Union for Conservation of Nature (IUCN) I-IV categories⁵.

Dexia will also not provide financing or advisory to any energy project substantially impacting the population level of species identified on the IUCN Red List⁶.

⁴ 25 Tropical Moist Forest Protected Areas are included in those UNESCO World Heritage Sites.

⁵ IUCN has defined a series of six protected area management categories, based on primary management objective. The I-IV categories correspond to areas where projects should be set aside for conservation purpose.

⁶ The IUCN Red List of Threatened Species is recognized as the most authoritative guide to the status of biological diversity. It uses a set of criteria to evaluate the extinction risk of thousands of species and subspecies.

4.3 Sub-sector guidelines

4.3.1 Oil & gas

4.3.1.1 Oil production

Dexia will not provide financing or advisory to any project which, beyond the above-mentioned cross-sector guidelines, have one or more of the following characteristics:

- Projects situated in a war zone ;
- Projects which would be implemented within the geographical boundaries of the current Treaty on Antarctica⁷, should this treaty be amended so as to allow the implementation of such projects;
- Projects related to oil sands or oil shales which adversely impact, in a non-reversible manner, critical natural habitats or freshwater resources used for supply for drinking water;
- Offshore projects which do not include an oil spill response plan;
- Projects with continuous venting of associated gas to the atmosphere;
- Projects which have not developed an environmental action plan addressing all the issues raised by the environmental impact assessment;
- Projects which are developed by an entity which has caused, or allowed to cause out of negligence, a major environmental accident within the previous five years, unless such entity can demonstrate that policies and processes have been implemented so as to reduce the probability of such accidents to be repeated in the future.

Dexia will review its position on financing oil production on a regular basis but no less frequently than every five years.

4.3.1.2 Oil transportation, storage and distribution

Dexia will not provide financing or advisory to any project which, beyond the above-mentioned cross-sector guidelines, have one or more of the following characteristics:

- Projects situated in a war zone;
- Projects which would be implemented within the geographical boundaries of the current Treaty on Antarctica, should this treaty be amended so as to allow the implementation of such projects;
- Projects which have not developed an environmental action plan addressing all the issues raised by the environmental impact assessment;
- Projects which are developed by an entity which has caused, or allowed to cause out of negligence, a major environmental accident within the previous five years, unless such entity can demonstrate that policies and processes have been implemented so as to reduce the probability of such accidents to be repeated in the future.

⁷ The Antarctic Treaty and related agreements, collectively called the Antarctic Treaty System, regulate international relations with respect to Antarctica.

4.3.1.3 Gas production

Dexia will not provide financing or advisory to any project which, beyond the above-mentioned cross-sector guidelines, have one or more of the following characteristics:

- Projects situated in a war zone;
- Projects which would be implemented within the geographical boundaries of the current Treaty on Antarctica, should this treaty be amended so as to allow the implementation of such projects;
- Projects which have not developed an environmental action plan addressing all the issues raised by the environmental impact assessment.

Dexia will review its position on financing gas production on a regular basis but no less frequently than every five years.

4.3.1.4 Gas transportation, storage and distribution

Considering the importance of gas supplies for energy security, the fact that gas is the lowest CO₂ emitting fossil fuel, and the limited scope for severe damage to the environment of gas transportation, storage and distribution, Dexia will consider for financing any project which complies with the Equator Principles and applicable laws.

Dexia will however not support projects which would be implemented within the geographical boundaries of the current Treaty on Antarctica, should this treaty be amended so as to allow the implementation of such projects.

4.3.2 Biofuels

As a general rule, Dexia considers that biofuels should be produced from non-edible parts of plants, and should not impose any significant constraint on the food supply, lead to the degradation of natural habitats, or tap scarce water resources. Dexia acknowledges that time is required in order to develop and safely implement second-generation biofuels⁸, and that some projects may legitimately be developed and financed until such technologies become widely available.

Dexia will not provide financing or advisory to any project which, beyond the above-mentioned cross-sector guidelines, have one or more of the following characteristics:

- Projects which use as biomass the edible part of a plant, or a plant which could be substituted by a food crop on the same acreage, to the extent that this acreage is situated in a country which is a net importer of grain or oilseeds;
- Projects which contribute to the degradation of soils with respect to their previous usage;
- Projects which increase the taking of water with respect to the previous usage of the area from which biomass originates, to the extent that such location is in a water stressed area;

⁸ Second-generation biofuels refers to biomass-to-liquid technologies which are intended to use lignocellulosic biomass.

- Projects which do not clearly identify the source of the biomass they use, unless such biomass only consists of the non-edible portion of a plant which would otherwise be burnt or disposed of.

As regards financing second-generation biofuels projects, Dexia will set-out its financing guidelines, with the assistance of a competent external advisor, when such biofuels will be safely developed and available.

4.3.3 Coal to liquids, coal gasification, and gas to liquids

Dexia will consider financing coal to liquids, coal gasification, and gas to liquids projects, to the extent that (i) the carbon emissions associated with the production of the resulting gas or liquids is less than that of any competing gas or liquid of similar characteristics which could be purchased on the market at a comparable or lower price, and (ii) these gas and liquids could not be reasonably substituted in the short term by a product from a renewable source which can be produced in similar quantities and in a manner consistent with the present sector guidelines.

4.3.4 Power or heat generation

4.3.4.1 General criteria

The lending and investment policy of Dexia in the energy sector rests on the medium term objective of implementing an energy transition from the current energy mix to one that is consistent with a stabilisation of CO₂ at 450 ppm by 2030.

The following parts of Dexia's guidelines as regards power or heat generation are based on the International Energy Agency (IEA) Outlook 2007 and its 450 ppm stabilisation case scenario.

According to the IEA Outlook 2007, the CO₂ intensity of electricity generation was of approximately 0.6 tons of CO₂/MWh in 2005.

In order for the 450 ppm stabilisation case scenario to be effective, the share of energy generation plants which do not emit CO₂ during their operation must increase to approximately 40% by 2030. Dexia intends to remain at the forefront of this effort through its energy lending and investment policy.

So as to be consistent with a 450ppm stabilisation case, it is necessary that the CO₂ intensity of the portfolio of power generation assets debt in excess of to USD 10 million and financed in any given year is less than 0.6 tons of CO₂/MWh reducing by 3.5%⁹ per year from 2005.

It is Dexia policy to remain 30% below the above-stated intensity target of its portfolio of power generation assets. Dexia will thus evaluate on a regular basis the CO₂ intensity¹⁰ of its portfolio so as to insure the respect of this target.

⁹ It allows for generation built in 2020 to emit only 0.35t/MWh on average (i.e. less than a CCGT today), and by 2030 to emit only 0.25t/MWh on average.

Moreover, Dexia will monitor and disclose on an annual basis the part of the cumulated amount of its financing¹¹ of energy generation plants which do not emit CO₂ during their operation and investments made to reduce CO₂ intensity.

Dexia includes in such category:

- Nuclear power plants;
- Power or heat generation projects based on renewable energies;
- A retrofitting which results in the reduction of the CO₂ intensity of an existing facility prior to the end of its operating life;
- Thermal power plants with Carbon Capture and Storage technology.

4.3.4.2 Power or heat generation – Thermal power plants

In the current context of “energy transition”, Dexia will not disregard financing thermal power plants. However, Dexia will only provide financing to thermal power plants in accordance with the above general criteria (see section 4.3.4.1). Aware that thermal power plants constitute power generation assets with the highest CO₂ intensity, Dexia will review its position on financing thermal power plants on a regular basis but no less frequently than every five years.

In order to encourage best practice and a progressive reduction of CO₂, SO_x and NO_x emissions Dexia’s financing of coal-fired power plants will only include:

- Greenfield coal-fired power plant, including brown coal, which are consistent with the emission performance of best currently available technology for each fuel type ;
- Revamping of coal-fired power plant, including brown coal, which leads to substantial improvement of its emission performance.

To this effect, Dexia will require that the assessment of the performance of each project compared with best current available technologies is included in the scope of work of the lender’s independent technical or environmental consultant.

Dexia will not exclude financing of brownfield power plants to the extent that the above-mentioned criteria as regards its project portfolio carbon intensity are met.

When no sufficient information is available, or it is not possible to determine the emissions level of a thermal power plant, Dexia will refrain from providing finance.

Dexia will not provide financing or advisory to any coal-fired power plant with a capacity superior to 100MW which have not developed an environmental action plan addressing all the issues raised by the environmental impact assessment.

Moreover, Dexia will not provide financing or advisory to any heavy fuel fired power plant, unless no other option for power generation is possible.

¹⁰ This amount will be calculated based on Dexia’s final take in the projects. Reference year for the assessment of the CO₂ intensity of Dexia’s portfolio of power generation assets debt is 2007.

¹¹ This amount will be calculated based on Dexia’s final take in the projects. Reference year for its assessment is 2007.

4.3.4.3 Power or heat generation – Hydro-power plants

Dexia will not provide financing or advisory to any project which, beyond the above-mentioned cross-sector guidelines, have one or more of the following characteristics:

- Hydro-power plants which do not comply with the World Commission on Dams (WCD) Framework;
- Hydro-power plants which do not comply with international conventions such as the Ramsar Convention on Wetlands or the European Union Water Framework Directive.

4.3.4.4 Power or heat generation – Nuclear plants

Dexia acknowledges that nuclear power is likely to be, within the next 25 or 30 years, a necessary element of the world energy mix which is required to stabilise CO₂ concentration in the atmosphere at a level which does not threaten the stability of societies and the sustainability of human life. Considering the specific risks which are associated with poor maintenance or safety standards of nuclear power plants, and nuclear fuel processing, transportation and storage, Dexia will take particular care in the analysis of nuclear plant projects, and in particular in the social context and institutional framework within which such projects are developed. Moreover, Dexia will review its position on financing nuclear power plants on a regular basis but no less frequently than every five years.

Dexia will only consider financing nuclear power plants in those countries which fulfil the following criteria:

- having signed the Non Proliferation Treaty (NPT) and abide by its obligations (or equivalent arrangements which would replace the NPT);
- being a party to the nuclear safety conventions listed in Dexia's future Nuclear Financing Policy, as updated from time to time, especially the Convention on Nuclear Safety adopted in Vienna in 1994 and possessing a credible nuclear safety authority, and regulations covering the full spectrum of nuclear-related activities taking place on their territory;
- possessing technical resources and a body of qualified engineers which may be deemed sufficient to safely operate nuclear power plants and transport or store nuclear fuel;
- having designed an effective policy for the relief of civil populations in the event of industrial disaster, however unlikely, and set up adequate instruments to implement such policy.

Dexia will also pay a particular attention to the way radioactive waste is managed in those countries.

To this effect, Dexia will review periodically, with the assistance of a competent external advisor, the safety policy and capabilities of countries where it may consider financing nuclear power plants. As a first step, Dexia will only consider financing such projects in the European Union, Norway, Switzerland, Canada, the United States, Australia, New Zealand, China and Japan.

Dexia will only finance, directly or indirectly:

- nuclear power plants which are of a design already tested and implemented in the above-mentioned group of countries, with the exception for this purpose alone of countries which have joined the European Union since 2003, or which represent safety improvements thereof, and fulfils all the safety standards defined by the International Atomic Energy Agency and the 1994 Convention on Nuclear Safety;
- nuclear power plants located in an area with no significant risk of major hazards (for instance highly seismic area or flood risks).

Dexia will ensure that nuclear power plants are built by or under the control of one or several companies which have a satisfactory experience in terms of building nuclear power plants.

The financing of a company which owns or operates nuclear power plants will be considered only if it fulfils the same criteria.

4.3.5 Power transmission and distribution

Dexia intends to finance the construction of additional power lines, which increase energy security, reduce the need for generation capacity, and facilitate the interconnection of intermittent renewable sources or distributed generation.

In the framework of the application of the Equator Principles, Dexia will pay a particular attention to the fact that power lines are appropriately integrated into landscape and natural environment.