

SECTOR POLICY



THERMAL POWER

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1. INTRODUCTION

Within the framework of its Corporate Social Responsibility policy, Societe Generale (the “Group”) intends to take into account within its group the environmental and social (E&S) issues associated with all its activities, to better control their impact and promote good practices, with an objective of continuous improvement. The Group thus defined E&S General Guidelines which set key standards and parameters for a responsible engagement in all its banking and financial activities. In addition to this general framework, Cross-sectorial Policies dealing with E&S issues common to all sectors are developed, as well as Sector Policies where the Group looks more specifically into certain sectors identified as sensitive and in which it plays an active role. The Thermal Power sector has been identified as one such sector.

Societe Generale provides a range of banking and financial services to the power sector. Societe Generale recognises it has a role to play in the transition to a low-carbon economy and supports governments and private-sector efforts towards diversification of the energy sources and wider use of renewable energy. Therefore, the Group has committed to reduce the banking and financial services it provides to the thermal coal sector in consistency with the Paris Agreement¹. The Group is willing to remain a value-adding partner to its clients in the Power sector, while ensuring that such support is provided in a responsible and considered manner. Societe Generale recognises the importance of the E&S risks and impacts associated with these activities. This is why the Group aims for the highest E&S standards when considering the provision of banking and financial services to the Thermal Power industry.

ENERGY E&S SECTOR POLICIES

Societe Generale’s Energy Sector E&S Sector Policies seek to identify E&S issues throughout the whole value chain in which the Group is active, from retrieval of the energy source; to power and heat production; to transportation, distribution and storage; and end user energy consumption. The Group will identify and develop additional Policies as necessary in the future to assist it in better addressing E&S issues within this value chain. The Energy E&S Sector Policies of Societe Generale and their current status include:

	Energy E&S Sector Policies	Status
Oil and Gas	Oil and Gas Sector Policy	Published
Thermal Energy	Thermal Coal Sector Policy	Published
	Thermal Power Sector Policy	This document
	Civil Nuclear Power Sector Policy	Published
Renewable Energy	Dams and Hydropower Sector Policy	Published

¹ See Thermal Coal sector policy

2. COMMITMENT

Societe Generale is committed to incorporating in its decision-making processes the review of the E&S impacts potentially associated with the activities of its clients. The Group will work with clients who meet or aim at meeting its sustainability standards. Societe Generale will take appropriate measures if these standards are not met, or if the client no longer aims at meeting them.

This Sector Policy may evolve in time, according to legislative or regulatory evolutions and as a result of the discussions between the Group and its various stakeholders.

3. RISK ASSESSMENT

While it is incumbent on the Group's clients to manage the risks associated with their own operations, it is important to Societe Generale to evaluate the consistency of its engagements with clients against the E&S principles of the Group.

Thermal power plants burn fossil fuels or biomass to generate electricity and heat. Contribution to global climate change through emissions of Greenhouse Gases (GHG) and especially CO₂, which closely derive from the fuel and implemented technology, is a key environmental impact of the sector. In addition, there are a number of regional or local E&S risks potentially associated to the development of the different types of thermal power plant.

When evaluating clients' activity and/or transactions in this sector, particular attention is paid to the following aspects:

- Energy efficiency and GHG emissions:
 - Thermal efficiency of the power plant(s), which has a direct influence on both GHG and other air pollutants level of emissions.
 - Applicable regulatory framework regarding GHG emissions in the country or region where the power plant(s) are operated, including existing and reasonably foreseen regulations (emissions trading schemes, taxes, carbon capture and storage, offsets, etc.).
 - Development needs of the country and the feasibility of use of higher energy conversion efficiency technology of the same fuel type/ power plant size than that of the country/region average.
- Air emissions with a local or regional impact, in particular when they affect locations where air quality is already poor, from:
 - Fossil-fuel power at levels depending on the fuel type- including sulphur dioxide (SO₂), nitrogen oxides (NO_x), particulate matter (PM) and carbon monoxide (CO).
 - Waste incineration- including CO, NO_x, SO₂, PM, polychlorinated biphenyls (PCBs), polycyclic aromatic hydrocarbons (PAHs).
- Water use and effluents discharge.
- Waste and hazardous materials management.
- Noise.
- Facility siting and social context.
- Resettlement or economic displacement caused by loss of land or assets.
- Environmental legacy of past operations such as soil contamination in the case of projects involving revamping or repowering, or where projects are being implemented on brown-field sites.

4. SECTOR-SPECIFIC STANDARDS AND CRITERIA

Societe Generale being active worldwide, the E&S laws and regulations its clients have to comply with vary from one country to another or one region to another. At a minimum, Societe Generale requests its clients to comply with the E&S laws and regulations of each relevant country, while encouraging them to apply the Group's E&S standards.

A number of institutions and civil society organisations have developed standards and initiatives² addressing the E&S impacts resulting from the Thermal Power sector activities. The standards and initiatives listed below provide guidance for Societe Generale E&S assessment in this sector:

- The UN [Framework Convention on Climate Change \(UNFCCC\)](#), related protocols and agreements.
- The [climate scenarios](#) determined by the International Energy Agency (IEA) through its analysis of energy technology perspectives and published in its annual World Energy Outlook.
- The [World Bank Group Environmental, Health and Safety Guidelines \(EHS\) for Thermal Power Plants](#).
- The [World Bank Group Environmental, Health and Safety Guidelines for Waste Management Facilities](#).
- The EU [Emissions Trading Scheme \(EU ETS\)](#).
- The EU [2010/75/EC Industrial Emissions Directive \(IED\)](#) and [IPPC Bureau BREF documents covering Large Combustion Plants](#) and [Energy Efficiency](#).
- The EU [2008/98/EC Waste Framework Directive \(WFD\)](#).
- The [UNFCCC Modalities and Procedures for CO2 capture and storage in geological formations as clean development mechanism project activities](#) (Appendix B³ criteria as applicable).
- The Global CCS Institute [Carbon Capture Storage Ready Policy](#).
- The [World Resource Institute \(WRI\)](#) and [World Business Council for Sustainable Development \(WBCSD\) Greenhouse Gas Protocol](#).
- The [CDP Climate Change Program](#).
- The WWF [Water Risk Filter](#) and WRI [Aqueduct](#).

Based on the analysis of these initiatives and of best practices of multilaterals, financial institutions and OECD Export Credit Agencies, Societe Generale has defined the following E&S criteria which are incorporated into its decision-making process when considering provision of banking and financial services in the Thermal Power sector:

a. Clients criteria

Clients active in the coal-fuelled power sector are required to apply the Thermal Coal Sector Policy. In addition, clients of the thermal power sector are encouraged to apply the best E&S practices of the sector, and in particular to:

- Develop a strategy for carbon intensity reduction, including quantitative targets, and to publicly disclose the GHG emissions generated by their activities (for instance through participation to the CDP).

² These standards and initiatives may take the form of conventions, directives, standards, recommendations or guidelines...

³ Additional requirements for carbon dioxide capture and storage project activities under the clean development mechanism

- Assess the water risks relative to their operations by using risk assessment tools such as the Water Risk Filter or Aqueduct.

b. Dedicated transactions criteria

When conducting an E&S assessment of a transaction⁴ in this sector, Societe Generale has the following requirements:

- Exclusion of dedicated transactions linked to coal-fuelled power plants and associated infrastructures are excluded (also see the Thermal coal policy).
- Compliance with national and international law (and EU ETS when applicable) regarding GHG emissions in [UNFCCC Annex I countries](#), and national GHG Strategy in other countries.
- For greenfield thermal power plants:
 - Compliance with International environmental standards such as the World Bank Group EHS Guidelines for Thermal Power Plants and Waste Management Facilities as applicable.
 - For greenfield thermal power plants combusting natural gas with a rated thermal input exceeding 100 MW per unit and that is not used as a peaking facility⁵, compliance with a maximum CO₂ emission intensity of 561kg CO₂ eq/net MWh. Societe Generale favours the technological choice of Combined Cycle Gas Turbines (CCGT) power plants, which enables improved overall efficiency and reduced fuel costs.
 - For greenfield thermal power plants combusting waste, an evaluation of the energy efficiency based on international standards⁶ and evidence that an appropriate waste selection has been applied to the power plant's feedstock.
 - For greenfield thermal power plants which are expected to emit more than 100,000 tonnes of CO₂ equivalent annually during the operational phase, an alternatives analysis will be conducted by the client to evaluate less GHG intensive options, and GHG emission levels will be quantified on an annual basis in accordance with internationally recognised methodologies and good practice⁷.
 - For power plants combusting Heavy Fuel Oil (HFO) and Diesel (LFO) the alternatives analysis will confirm application to the project of best appropriate available technology⁸ including fuel choice.
 - Societe Generale encourages the development of combined heat and power (or cogeneration) facilities, where relevant.
 - In countries where a regulatory framework has been or is being developed for Carbon Capture and Storage, demonstration by the client that the power plant(s) is compliant with local regulations and can be considered as "CCS ready", according to the IEA definition⁹.
- For transactions related to the financing of a CCS project or one of its components, an independent third-party assessment will confirm that the project is in line with the UNFCCC

⁴ See Implementation Process in Societe Generale E&S General Guidelines

⁵ Peaking plants are power plants which are operated only at times of higher electricity demand (less than 50% annual load factor).

⁶ For example the EU WFD formula

⁷ Such as the GHG Protocol. In countries where such conditions are regulatory requirements, the analysis and/or reporting will follow the methodology required by the relevant process.

⁸ Best appropriate available technology should be determined by taking into account economically and technically viable conditions in a specific region, by reference to techniques available on a scale which allows implementation in the relevant sector.

⁹ The International Energy Agency's definition of CCS readiness includes that "Developers of capture-ready plants should take responsibility for ensuring that all known factors in their control that would prevent installation and operation of CO₂ capture have been eliminated. This might include: (i) A study of options for CO₂ capture retrofit and potential pre-investments, (ii) Inclusion of sufficient space and access for the additional facilities that would be required, (iii) Identification of reasonable route(s) to storage of CO₂."

Modalities and Procedures for CO₂ capture and storage in geological formations as clean development mechanism project activities (Appendix B criteria as applicable). These criteria are also applicable to CCS developments in the industry sector.

c. Equator Principles

In addition, Societe Generale applies the [Equator Principles](#) and its underlying standards to the transactions falling in the scope of this initiative.

Together with the criteria defined in the E&S General Guidelines and in the Cross-sectorial Policies, these standards provide the E&S framework used by Societe Generale to consider its involvement in transactions in this sector.

5. SCOPE

This Sector Policy applies to all the banking and financial services provided by the Societe Generale Group entities to its clients involved in the development, construction, operation or decommissioning of:

- Gas Fired Power Plants.
- Liquid fuel Fired Power Plants (HFO and LFO).
- Waste-to-energy (WtE) Plants.
- Biomass-firing Power Plants.
- Combined Heat and Power (Cogeneration) Plants.

6. IMPLEMENTATION PROCESS

As established in the E&S General Guidelines, Societe Generale integrates the assessment of potential E&S risks and impacts into its decision-making processes both at the client assessment level and, where necessary, at the transaction assessment level.

The development of these processes will take into consideration risks materiality and may be adapted to countries.

Societe Generale decisions are based on the information made available to the Bank. Societe Generale puts all its reasonable endeavours to ensure the quality and reliability of this information.

7. SCHEDULE – REVISIONS

This Thermal Power Sector Policy is applicable from the date of its publication to all services provided therefrom.

Procedures will be put in place progressively, as necessary, throughout the Bank to ensure full integration of these requirements in the usual decision processes. Review mechanisms will allow for continuous improvement. Societe Generale reserves the right to modify this Sector Policy at any time. This document cannot be interpreted as a contractual commitment.

Updated versions will be posted on [Societe Generale's website](#) where the E&S General Guidelines and all published Cross-sectorial and Sector Policies are also available.

This Sector Policy has been established in French, versions in other languages are free translations.