

## SECTOR POLICY



### CIVIL NUCLEAR POWER

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## 1. INTRODUCTION

Within the framework of its Corporate Social Responsibility policy, Societe Generale (the “Bank”) intends to take into account within its group the environmental and social (E&S) issues associated to all its activities, to better control their impact and promote good practices, with an objective of continuous improvement. The Bank 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 being developed, as well as Sector Policies where the Bank looks more specifically into certain sectors identified as sensitive and in which it plays an active role. The Civil Nuclear Power sector has been identified as one such sector.

Societe Generale provides a range of banking and financial services to the Civil Nuclear Power industry. Meeting the energy needs of both emerging and mature markets is a challenge. A number of countries have identified Civil Nuclear Power as a necessary part of the energy mix to achieve the desired evolution towards a sustainable low carbon economy. The Bank is willing to remain a value-adding partner to its clients in this 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 Bank aims for the highest E&S standards when considering the provision of banking and financial services to the Civil Nuclear Power industry.

### ENERGY E&S SECTOR POLICIES

Societe Generale’s Energy E&S Sector Policies seek to identify E&S issues throughout the whole value chain in which the Bank is active, from retrieval of the energy source; to power and heat production; to transportation, distribution and storage; and end user energy consumption. The Bank 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:

	<b>Energy E&amp;S Sector Policies</b>	<b>Status</b>
<b>Liquid and Gaseous Fuels Production</b>	1. Oil and Gas Sector Policy	Published
	2. Alternative Liquid and Gaseous Fuels Sector Policy	In development
<b>Thermal Energy</b>	3. Coal-Fired Power Sector Policy	Published
	4. Civil Nuclear Power Sector Policy	This document
	5. Thermal Power Sector Policy	Published
<b>Renewable Energy</b>	6. Dams and Hydropower Sector Policy	Published
	7. Renewable Energy Sector Policy	In development
<b>Electricity Transmission &amp; Distribution</b>	<i>integrated to</i> 8. Infrastructure Sector Policy	To be developed

## 2. COMMITMENT

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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 Bank 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 Bank and its various stakeholders.

## 3. RISK ASSESSMENT

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While it is incumbent on the Bank'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 Bank.

When evaluating clients' activity and/or transactions in this sector, particular attention is paid to the following aspects (depending on the type of nuclear power activities):

- Adequacy of the regulatory framework in which the client operates regarding nuclear safety, security and operational safeguards<sup>1</sup>;
- Capacity of involved Major Industrial Parties<sup>1</sup> to manage the nuclear power facility;
- Capacity of relevant parties (e.g., Major Industrial Parties, government bodies) to adequately communicate with local communities and other stakeholders ;
- Adequacy of the siting of the nuclear power facility, including risks arising from natural hazards (e.g. flooding, seismic activity);
- For new and existing nuclear power facilities, support from relevant stakeholders;
- Measures to ensure workers' and local population's protection;
- Resettlement, or economic displacement caused by loss of land or assets;
- Health and environmental impacts of radioactive emissions under normal operation and accidental situations (design-basis and beyond design-basis), including trans-boundary impacts;
- Adequacy of the emergency preparedness and response programmes;
- Impacts of the discharge of significant volumes of cooling water which can affect the natural environment or water users (e.g. fisheries);
- Arrangements in place for the recycling, storage, treatment, transport and disposal of radioactive materials and wastes;
- Existence of long-term planning for the management of high and medium level radioactive waste;
- Where relevant, arrangements for decommissioning and end of life of the nuclear power facility;
- Assurance of no possible direct military use.

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<sup>1</sup> See the Glossary in Appendix for definitions

## 4. SECTOR-SPECIFIC STANDARDS AND CRITERIA

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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 Bank's E&S standards.

Due to the specific risks associated with the Civil Nuclear Power sector, Societe Generale requests in addition that an acceptable regulatory framework covering nuclear safety, security and safeguards, as well as enabling appropriate governance, should be in place in the countries where its clients operate in the Civil Nuclear Power sector.

A number of institutions most notably the [International Atomic Energy Agency](#) (IAEA), and networks of government bodies such as the [Western European Nuclear Regulators' Association](#) (WENRA) or business associations of the nuclear power industry, such as the [World Association of Nuclear Operators](#) (WANO) or exporters committed to the [Nuclear Power Plant Exporters' Principles of Conduct](#) have developed standards and initiatives<sup>2</sup> addressing the E&S impacts resulting from the sector activities.

Based on the analysis of these initiatives and of best practices of multilaterals and financial institutions, 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 to the Civil Nuclear Power sector.

### a. Host country criteria

Societe Generale provides banking or financial services to Civil Nuclear Power activities when the host country meets the following criteria:

- IAEA membership;
- Signatory of the Nuclear Non-Proliferation Treaty (NPT) and of Comprehensive Safeguards Agreements with the IAEA - Societe Generale may consider as equivalent a bi-lateral agreement with a Reference Nuclear Country. National compliance with the Comprehensive Safeguard Agreements will be evaluated based on the IAEA safeguard reports and reviews;
- Existence of a regulatory body (Nuclear Safety Agency or Authority – NSA) which:
  - Has the mandate and independently performs authorisations, reviews and inspections of the nuclear power facilities that may lead to sanctions, and develops national regulations and guidance;
  - Has been provided with adequate human (skills, experience) and financial resources to perform its duties;
  - Communicates with the public, neighbouring countries and international bodies such as IAEA.

Societe Generale has a preference for host countries whose regulatory bodies undergo IAEA Integrated Regulatory Review Service (IRRS) missions and implement subsequent recommendations<sup>3</sup>, and will use in particular IAEA information to evaluate the above points.

- Satisfactory political risk assessment by the Bank.

And, in so far as they are relevant for the Civil Nuclear Power activities related to the transaction or client considered by the Bank:

- Observance of IAEA conventions by the host country;

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

<sup>3</sup> When financing a Nuclear Power Plant (NPP), Societe Generale requests access to the latest reports available for its review.

- Existence of a legal and regulatory regime defining security and safety standards consistent with the IAEA standards and covering:
  - The design, siting, construction, operation and decommissioning (including adequate financial provisions) of nuclear power installations;
  - The protection of workers and population;
  - The management of nuclear fuel and waste;
  - The nuclear accidents (including emergency preparedness and response, and information disclosure) and third party liability;
  - The disclosure of relevant information to the public regarding the nuclear power programme and facilities' operation.
- Signatory of the Convention on Early Notification of a Nuclear Accident and participation in the IAEA Incident Reporting System;

Societe Generale is ready to consider providing financial advisory services in countries that comply with the IAEA and NPT criteria of this Sector Policy but where a legal and regulatory regime governing the nuclear power sector, or an acceptable NSA are not yet fully in place, provided the host country:

- is working towards the implementation of such a regime in cooperation with IAEA (as demonstrated in particular by a willingness to be subject to an IRRS as soon as technically pertinent, and to implement subsequent recommendations);
- is progressing on the implementation of such requirements at a rate consistent with the development of the nuclear power project benefiting from the advisory service.

#### **b. Client criteria**

Societe Generale provides banking or financial services to Civil Nuclear Power activities when the client meets to its satisfaction the following criteria:

- The client has the capacity to manage safety and security aspects in an adequate and transparent way, as demonstrated in particular by his track record.
- For clients involved in the construction of Nuclear Power Plants (NPP), the client only builds new NPPs whose reactor designs are:
  - Similar to, or with improved safety features compared to, reactors currently operated in a Reference Nuclear Country, or
  - Approved by the NSA of a Reference Nuclear Country.
- Clients who own or operate NPPs whose reactor designs do not fulfil at least one of the two criteria above implement improved safety measures in these NPPs, based on IAEA standards and on lessons learned from their operation.
- For clients operating NPPs, the client cooperates with its peers through WANO and has an independent chain of control in place to monitor the safety of its NPPs.

#### **c. Dedicated transactions criteria**

Moreover, when conducting an E&S assessment of a transaction<sup>4</sup> in this sector, Societe Generale has the following requirements:

- Major Industrial Parties involved have adequate competence (scientific and engineering), training and experience in activities relevant to their role, including in managing subcontractors, and have established adequate emergency plans and procedures and an appropriate nuclear

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<sup>4</sup> See Implementation process in Societe Generale E&S General Guidelines

safety and security culture. This will be evaluated through an assessment of the companies' experience and track records regarding environmental management and nuclear safety.

- Major Industrial Parties involved have safety, security and E&S management policies consistent with IAEA standards.
- For new transactions related to new or existing NPPs :
  - An independent assessment covering all relevant safety (including those addressed in the assessment methodologies developed following the Fukushima accident, e.g. "stress tests" as performed in a Reference Nuclear Country) and E&S aspects of the construction and operation phases of the NPP has been performed by a reputable consultant acceptable to Societe Generale and demonstrates compliance with the relevant IAEA standards;
  - For new NPPs, the technology is similar to, or has improved safety features compared to, reactors currently operated in a Reference Nuclear Country, or it has been approved by the NSA of a Reference Nuclear Country;
  - For existing NPPs, the independent assessment has taken into account the safety and E&S track record of the plant;
  - In case of export to supply a NPP, the exporter complies with the Nuclear Power Plant Exporters' Principles of Conduct.

Societe Generale has a preference for NPPs whose developers and/or operators and host country regulatory bodies demonstrate their willingness to comply with IAEA standards by requesting, as relevant, pre-OSART (Operational Safety Review Team) or OSART reviews, and by implementing subsequent recommendations. Societe Generale will request access to this information for its review of the facility.

#### **d. Equator Principles**

Societe Generale applies the [Equator Principles](#) and its underlying standards<sup>5</sup>, 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 criteria provide the E&S framework used by Societe Generale to consider its involvement in transactions in this sector.

## **5. SCOPE**

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This Sector Policy applies to all the banking and financial services provided by the Societe Generale Group entities to its clients involved in the Civil Nuclear Power sector, including:

- Uranium mining<sup>6</sup>, milling (yellow cake production) and shipping;
- Chemistry, enrichment and the production and supply of fuel rods;
- Nuclear waste management and reprocessing;
- Long-term storage of nuclear waste;

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<sup>5</sup> IFC Performance Standards and World Bank Group Environmental, Health and Safety Guidelines. The World Bank Group has not developed specific EHS Guidelines for the Nuclear Power sector, but the General EHS Guidelines remain applicable, together with the Mining EHS Guidelines in the case of uranium mining projects. In addition, IFC Performance Standards define E&S management principles applicable to all projects.

<sup>6</sup> Aspects of mining activity not specific to the management of radioactive substance are covered by Societe Generale Mining and Metals Sector Policy.

- Development of NPPs (construction, operation, refurbishment and decommissioning);
- Supply of key components, equipment, materials and services; and
- Development of nuclear research reactors, including reactors or accelerators used to produce radioisotopes for medical and other uses.

## 6. IMPLEMENTATION PROCESS

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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.

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

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This Civil Nuclear 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.

## APPENDIX: GLOSSARY

**Design-basis accident:** A postulated accident that a nuclear facility must be designed and built to withstand without loss to the systems, structures, and components necessary to ensure public health and safety.

**Beyond design-basis accident:** This term is used in technical discussions over accident sequences that are possible but were not fully considered in the design process because they were judged too unlikely (in that sense, they are considered beyond the scope of design-basis accidents that a nuclear facility must be designed and built to withstand.)

**Major Industrial Parties:** Industrial companies involved in a particular development and playing an important part in so far as safety, security or E&S aspects are concerned. Major Industrial Parties will be defined on a case by case basis. For a Nuclear Power Plant project, they would typically include the companies in charge of the design, supply, and construction of the nuclear island, as well as the owner and operator of the power plant.

**Nuclear Reference Country:** Top-tier experienced High Income OECD country in Nuclear Power Plants operation (assessed by the number of operating year-reactors without material accident or off-site risk as evidenced by its track-record reported on the basis of the INES scale)<sup>7</sup>. The [European Utility Requirements for LWR Nuclear Power Plants](#) can also be used as a benchmark for Nuclear Reference Country criteria.

**Nuclear safeguards:** Measures put in place to guarantee the peaceful use of civil nuclear materials, including accountancy, containment and surveillance.

**Nuclear safety:** Covers protection of people and the environment against radiation risks associated to nuclear installations, radioactive sources, radioactive materials transport and management of radioactive waste.

**Nuclear security:** Linked to prevention, detection and response to terrorist or other malicious acts including sabotage of nuclear installations, and illegal possession, use and traffic of radioactive materials.

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<sup>7</sup> At issuance date, this includes: United States, France, United Kingdom, Germany, Canada, Sweden and the Republic of Korea.