

ENVIRONMENTAL AND SOCIAL IMPACT MANAGEMENT

The proper management of significant environmental and social aspects and of the impacts deriving from them is increasingly becoming a hallmark of Saipem activities and projects in challenging contexts.

ENVIRONMENTAL IMPACTS

In 2017, Saipem achieved an important milestone when its ISO 14001:2015 certificate was extended thus demonstrating the integration of environmental management in all Saipem realities. Previously each company had its own certification.

As a result of the wealth of experience it has acquired over many years, Saipem has developed an awareness of the environmental impacts it can potentially generate and is scrupulous in managing its activities to mitigate them.

ENVIRONMENTAL ASPECTS	SPILL CONTINGENCIES	ENERGY CONSUMPTION	WATER WITHDRAWAL/ DISCHARGE	AIR/DUST EMISSIONS	WASTE PRODUCTION	NOISE & VIBRATION GENERATION
MAIN ENVIRONMENTAL IMPACTS	Soil, groundwater and water pollution. Degradation and loss of natural habitats and ecosystems. Flora/fauna disturbance. Biodiversity depletion. Damage to public safety.	GHG emissions. Global warming. All other direct and indirect impacts connected with energy generation and transportation (e.g. air and water pollution, damage to public health, wildlife and habitat loss, water use, land use).	Water/ groundwater pollution. Degradation and loss of aquatic habitats and ecosystems. Flora/fauna disturbance. Biodiversity depletion. Overuse and depletion of water table. Damage to public safety.	Air pollution. Degradation and loss of natural habitats and ecosystems. Flora/fauna disturbance. Biodiversity depletion. Damage to public safety.	Soil overuse. Decreased landfill space. Modification of landscape. Damage to public safety. All other direct and indirect impacts connected with improper waste management (e.g. in the air, water, groundwater, soil, habitats, ecosystems, biodiversity).	Human/wildlife disturbance. Degradation and reduction of natural habitats and ecosystems. Biodiversity depletion. Damage to public safety.
POTENTIAL MITIGATION MEASURES	Spill management hierarchy: <ul style="list-style-type: none"> • prevention, • preparedness, • response. Suitable storage areas for oils and chemicals. Hazardous substances inventory. Spill mapping and Risk Assessment. Spill kit availability. Use of environmentally friendly substances. Training and drills.	Energy saving and efficiency practices. Use of renewable sources. Energy assessments on critical assets. Periodic maintenance and replacement of equipment and machines. Use of less pollutant fuels.	Water reuse and saving practices. Efficient treatment plants. Periodic maintenance.	Periodic maintenance and replacement of equipment and machines. Dust control programmes. Exhaust abatement systems. Use of less pollutant fuels. Energy saving and efficiency practices.	Waste management hierarchy: <ul style="list-style-type: none"> • reuse, • reduce, • recycle. Waste valorisation practices. Recycling programmes. Suitable waste storage areas. Efficient waste management equipment. Training of waste management personnel.	Periodic maintenance and replacement of equipment and machines. Enclosing noise sources. Noise barriers/ screens. Proper planning of noisy activities. Use of quieter working methods/ technologies.

SOCIAL IMPACTS

Saipem uses social-economic impact evaluations and studies supplied by its clients or, if necessary, produced in-house. The operations in which Saipem has direct responsibility for the impacts generated at local level concern the fabrication yards or proprietary logistic bases. In these cases, Saipem identifies and assesses the potential effects of its activities and actions in order to

ensure that they are managed appropriately, as well as any specific activities and projects aimed at developing the local socio-economic context. Typically, the instrument used is a Socio-Economic Impact Assessment (SIA) or the ESIA (Environmental Social Impact Assessment). As a result of this study, Saipem collaborates with the stakeholders involved in order to prepare an Action Plan which defines the actions necessary for managing the impacts on local communities.

SOCIAL ASPECTS	CULTURE & LIFESTYLE	DEMOGRAPHIC	WELFARE & SOCIAL INFRASTRUCTURES	ECONOMIC IMPACT
MAIN SOCIAL IMPACTS	Erosion of traditional values and customs. Increase in social problems. Discrimination and marginalisation of indigenous people. Increase in dependency. Risk of conflict.	Immigration due to the attractiveness of the geographical area of the site. Emigration/relocation due to the traditional use of natural resources competing or conflicting with project activities.	Effect on local facilities and public health. Effect on traffic and road safety. Nature and access to social infrastructures.	Increase in direct and indirect employment. Increase in wage levels. Increase in prices of goods and inflation rate. Purchasing of local supplies and boost in general local economy. Short and long term changes in economic structure.
POTENTIAL MITIGATION MEASURES	Cultural Heritage protection plan. Proper selection of security providers. Drug and alcohol testing of the workforce. Cultural awareness sessions and human rights training programmes for employees.	Transparent recruitment strategy. Management of local expectations.	Health promotion initiatives. Safe driving awareness sessions.	Transparent recruitment and sourcing strategy.
TOOLS	Stakeholder consultation, community grievance mechanism and community relations plan			

THE PROCESS

ANALYSIS OF THE CONTEXT	IDENTIFICATION AND ASSESSMENT OF POTENTIAL IMPACT	IDENTIFICATION AND IMPLEMENTATION OF MITIGATION MEASURES
Analysis of the socio-political, cultural and economic conditions of the area interested by the project.	The identification and the following evaluation of impacts shall consider effects occurring during the entire life of the project. The impacts can be classified as <ul style="list-style-type: none"> • direct impacts: that are a direct result of project activities. • indirect impacts: that result from other developments or activities that would only occur as a result of the Project. 	The purpose of adopting mitigation measures is to remove, minimise and/or compensate residual adverse effects to a reasonably feasible extent. Mitigation measures could consist of the integration of proposed actions into the design of the project, changing or adding technical or managerial aspects. Mitigation actions could include activities to be implemented both within the project site and in neighbourhood areas.
STAKEHOLDER ENGAGEMENT PROCESS		