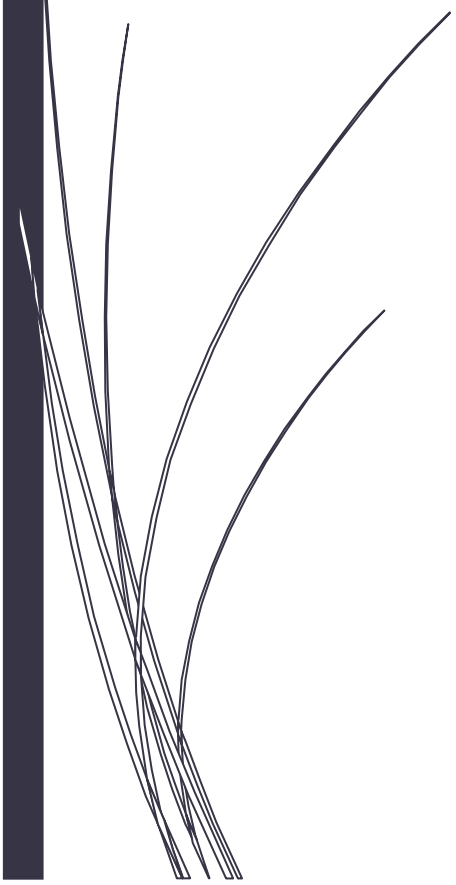
Guidance Notes for SMEs

(Energy Sector)

In answering the due diligence questions for Guiding Principles 3 and 4 for SMEs

Note: This document is developed to assist financial institutions **("FIs")** in supporting small and medium enterprise **("SME")** clients to provide data and input in answering the CCPT Due Diligence Questions **("CCPT DDQ")**. The focus of this document is to provide additional clarifications, practical guidance and simplified approaches where needed, to further facilitate assessment of SME clients.



Introduction to Energy Sector

Term	Impact of the Energy Sector to Climate Change
Pollution	Air Pollution: The combustion of fossil fuels such as coal, oil, and natural gas for electricity and heat generates air pollutants, including sulfur dioxide **("SO2")**, nitrogen oxide **("NO")**, and particulate matter **("PM")**. These pollutants degrade air quality, causing respiratory and cardiovascular diseases in humans and harming wildlife. Water Pollution: Oil spills, coal mining, and hydraulic fracturing (fracking) for natural gas can contaminate water bodies. Chemical runoff and leaks of hazardous materials introduce toxins into rivers, lakes, and oceans, affecting aquatic life and water quality. Contaminants from Fossil Fuel Extraction: The extraction of fossil fuels, particularly coal mining and oil drilling, can introduce heavy metals and hydrocarbons into the soil. These contaminants can degrade soil quality, making it less fertile and more toxic to plants and microorganisms. Pipeline Leaks and Spills: Pipelines used to transport oil and gas can leak, releasing petroleum products into the soil. These substances can persist for long periods, harming soil health, contaminating groundwater, and affecting agricultural productivity.
Ecosystem & Biodiversity	Habitat Destruction: The construction of energy infrastructure, such as dams, pipelines, and wind farms, can lead to habitat destruction, deforestation and encroachment into forest reserves and fragmentation. This disrupts local ecosystems and threatens the survival of various species. Thermal Pollution: Discharge of heated water from power plants into rivers and lakes can alter local temperature regimes, affecting aquatic ecosystems. This thermal pollution can disrupt breeding cycles and reduce the oxygen levels necessary for aquatic life.
Efficient Use of Resources	Resource Depletion: The energy sector's reliance on non-renewable resources such as coal, oil, and natural gas leads to the depletion of these finite resources. This unsustainable extraction can cause long-term environmental degradation and resource scarcity. Energy Efficiency: Improvements in energy efficiency can mitigate some environmental impacts, but the energy sector often lags in adopting efficient technologies. Inefficient energy use leads to greater consumption of fossil fuels, exacerbating greenhouse gas **("GHG")** emissions and environmental pollution.
GHG Emissions	Carbon Dioxide (CO_2) Source: The combustion of fossil fuels (e.g., coal, oil, natural gas) for electricity generation, heating, and transportation. Methane (CH_4) Sources: Methane is emitted during the production and transport of coal, oil, and natural gas. Significant sources include natural gas and petroleum systems, coal mining, and landfill operations. Nitrous Oxide (N_2O) Source: Nitrous oxide emissions in the energy sector are primarily from the combustion of fossil fuels and biomass

Term	Impact of the Energy Sector to Climate Change
	Hydrofluorocarbons (HFCs) Source: HFCs are synthetic gases used in refrigeration, air conditioning, and as solvents and propellants. Although not a direct product of fossil fuel combustion, their production and use are associated with energy consumption.

Due Diligence Questions: GP3 – No Significant Harm to the Environment	
No	**Guidance Notes**
GP3 – General	
1.1 Risk identification (General)	

a)	Use existing internal databases or any other publicly available sources to screen for the Client's related legal/ negative news vis-à-vis climate/ environment related issues (e.g., media publications such as newspapers, specialised climate/environmental news sites, NGO reports).
	
	• The Client is to provide details of the nature of any adverse incident, and whether there is/was any corresponding regulatory action (e.g., enforcement/ prosecution/ quantity of fine/ pending court decision/ pending appeal by the Client), to be backed by documentary evidence; and
	• The FI is recommended to verify the Client's information through the following websites:
	  ○ **https://www.doe.gov.my/en/court-case-list/**; and/or
	  ○ **https://www.doe.gov.my/penguatkuasaan/paparan-kes-mahkamah/**
	
	Indicate if there are any matching records and data in the database(s). Any discrepancies with the Client's statements should be explained by the Client and documented accordingly.

1.2 Risk management (General)	
a)	The Client should list down measures being taken to address any climate/ environmental concerns. This should include obtaining necessary legal approvals and/or permits under the jurisdiction where it operates.
GP3 – Pollution	
2.1 Risk identification (Pollution)	

a)	The Client's business operations may contribute to the pollution should the following are observed:
	• The Client's business activities are using/ releasing hazardous materials listed in EQA 1974*;
	• The Client produces reports to DOE for hazardous substances, waste, or water pollution that resulted from their operations**.
	• The Client is found to be non-compliant with regulatory requirements concerning the management of hazardous chemicals and materials, waste, and/or water within the energy sector.
	• The Client is generating non-recyclable waste within the operations.
	• The Client neglects e-waste management practices specifically within the context of electronic devices used.
	• The Client fails to comply with regulations governing scheduled waste management.
	• Any accidental events reported as follows:
	  ○ Accidental spills of hazardous materials occur within energy facilities.
	  ○ Accidental release of hazardous chemicals, substances, sludge, contaminated wastewater, and stormwater discharge, or acid drainage from energy production or storage facilities to land or groundwater.
	  ○ Accidental events of spills from energy production processes, leaks in tanks or pipes, and improper disposal of waste occur within the energy sector.

	Note: ** Information regarding the use/ release of materials listed in EQA 1974 can be obtained from the EHS Officer.* *** Companies involved in the use and release of hazardous chemicals or materials typically fall under the purview of the DOE.*
2.2 Risk management (Pollution)	
a)	The following can be the mitigation measures undertaken by the Client in addressing the identified pollution in 2.1(a): • The Client has existing standard operating procedures **("SOPs")**, policies or other control measures in place to manage the risks identified in 2.1(a). Documentary evidence of the SOP /policy/ control measure documents should be provided*; • The Client has established SOP/ policy/ control measure documents (e.g., OSH SOP, ISO related certificates); • The Client has obtained approval documents obtained for relevant authorities**. • The Client has obtained relevant certifications**. • The Client has adopted technologies /machines/ appliances green/ new technologies/ machine/ appliances; • The vehicles used for the Client's transportation and distribution activities are using low energy consumption vehicles; • Implement comprehensive waste management practices to minimise the generation of hazardous waste and ensure proper handling, storage, transportation, treatment, and disposal of waste materials generated during energy production processes; and • Consult with local authorities on emissions, discharges, and solid waste disposal in regard to local communities. *Note:* ** The SOPs/ policies/ control measures provided by the Client should address the risks relating to the Client's management of hazardous chemicals and materials, waste and water, and may include the following processes:* • *Waste management policy and procedure;* • *Scheduled waste disposal and collection tracker;* • *Standard procedures for safe handling, storage and disposal of waste; and* • *Emergency response plan for spillages and/or leakages of waste, and related SOPs.* *** Please refer to the listed acts and regulations that are relevant to the energy sector as references.*
GP3 – Ecosystem & Biodiversity	
3.1 Risk identification (Ecosystem & Biodiversity)	
a)	Environmentally sensitive areas **("ESAs")** or key biodiversity areas **("KBAs")** typically refer to geographic regions or locations that are recognised for their high ecological significance and the presence of diverse and often unique species of flora and fauna. Such areas are considered important for the conservation of biodiversity due to the richness and variety of life forms they support. To identify whether the Client's operations located in or near ESAs and KBAs**,** FIs can make use of tools such as **Integrated Biodiversity Assessment Tool ("IBAT")** and **Global Forest Watch**. Maps of ESAs can be referred to those published in the **National Physical Plan 3 and 4 (page 94)**.

	Alternatively, FIs may conduct any online (e.g., Google Earth Pro) and offline map search to determine if the following example types of ESAs or KBAs are near the Client's business location(s) (e.g., within a 10 kilometre radius): - • Marine and coastal biodiversity • Mangrove forests • Coral reefs • Marine parks • Critical coastal erosion areas • Turtle landing sites • Highlands and forested wetlands • Economic and ecological significance In addition to the above, FIs may refer to Reference List of Protected Areas (**https://www.mybis.gov.my/one/pamaps.php**) to identify whether the Client's business operations has impacted the ESAs and KBAs.
b)	Examples of tools and sources that can be used to assess whether the Client's operations have negative impacts on biodiversity and the surrounding ecosystem include: • Exploring Natural Capital Opportunities, Risks and Exposure Tool **("ENCORE")** (**url: https://encorenature.org/en)*** • WWF's Biodiversity Risk Filter **(url: https://riskfilter.org/biodiversity/home)** • High Conservation Value **("HCV")** assessment • High Carbon Stock **("HCS")** assessment • International Union for Conservation of Nature **("IUCN")** red list species • On-site/desktop biodiversity assessment • Environmental Impact Assessment **("EIA")** report • Erosion and Sedimentation Control Plan **("ESCP")** • Strategic Environmental Assessment **("SEA")** and Cumulative Effects Assessments • Guidance Document for Fuel Burning Equipment and Air Pollution Control Systems DOE ** Please note that when using the tools (a) above, please select the 'Impacts' (alludes to the ways in which the Client's activities impact ecosystem services and natural capital) option as opposed to the 'Dependencies' option (used for GP4.1 & GP4.2).*
3.2 Risk management (Ecosystem & Biodiversity)	

a)	The Client may put in place the internal measures, which may include any one or more of the following (non-exhaustive): -
	• Produce and expand production exclusively on lands that were deforested or converted prior to a specified/ stipulated cut-off date.
	• Rehabilitate degraded land and preserve ecosystem services through responsible production practices on already converted land via the following: -
	  ○ planting native vegetation/ wildflowers/ grasses
	  ○ restoring agricultural lands into uplands/ wetlands
	  ○ reintroducing species
	• Adopt No Deforestation, Peat and Exploitation **("NDPE")** Policy.
	• Ecosystem restoration initiatives including but not limited to these:
	  ○ planting native trees/ wildflowers/ grasses
	  ○ planting/ replanting the trees

	○ reintroduce native species ○ remove invasive species ○ restore agriculture/ mining land into wetlands or forest ○ restoring forest to open grassland ○ removing dams for river connectivity ○ clean up trash along rivers and coasts
GP3 – Efficient Use of Resources	
4.1 Risk identification (Efficient Use of Resources)	
a)	Clients with high dependencies on water/ energy/ other natural resources must show good resource management within their business to ensure sustainability of the natural resources. Sectoral data/ trends can be used as a benchmark or basis in assessing the significance of water/ energy/ other natural resource consumption within the Client's business operations. The tools below can be used to identify and assess the Client's dependence on specific natural capitals based on its sector as well as geographic location: - • Exploring Natural Capital Opportunities, Risks and Exposure Tool ("ENCORE", url: **https://encorenature.org/en**); and • WWF's Biodiversity Risk Filter (url: **https://riskfilter.org/biodiversity/home**) *Please note that, when using the tools above, please select the 'Dependencies' (alludes to the ways and extent to which the Client's activities rely on certain resources/ natural capital) option as opposed to the 'Impacts' option (used for GP3.1 & GP3.2).* *Note: Resource efficiency refers to sustainable use of natural resources such as land, minerals, water, fuels, timber, fertile soil, clean air and biodiversity. Common use in overall industry context is the use of fuel (energy) and water. Where possible, the Client should measure and compare the use of essential resources against an appropriate benchmark (e.g., a recognised local or international standard or industry best practice).* *For more information pertaining to green certifications that are relevant to SMEs, please refer to: **https://www.jc3malaysia.com/esg-jumpstart-for-smes**.* The following examples are the non-exhaustive indicators that the Client's business operations lack or adopt non-efficient use of resources: - • The Client's business does not practice 3R concept in the business activities (i.e., REDUCE, REUSE, RECYCLE). • Increase of cost of raw materials used against finished products which leads to lower productivity and higher waste. • The business/ finished goods require use of non-renewable and non-sustainable materials. • The business activities involve with resource intensive that requires large amounts of energy such as heating and cooling. • The Client's production processes resulting in high waste production. The following are the energy sectors that require extensive use of resources: - • The energy sector's reliance on non-renewable resources like coal, oil, and natural gas leads to the depletion of these finite resources. • Improvements in energy efficiency can mitigate some environmental impacts, but the energy sector often lags in adopting efficient technologies. Inefficient energy use leads to greater consumption of fossil fuels, exacerbating GHG emissions and environmental pollution.

4.2 Risk management (Efficient Use of Resources)	
a)	The measures which can be undertaken by the Client to mitigate the risks identified in 4.1(a), may include but not limited to: - • Improvements to Business Processes: - o Procure/ use/ adopt machines/ appliances with the latest technology adoption to improve efficiency. o Mechanisms to minimise the amount of materials required to produce a unit of product. o Reduce the use of scarce materials/ resources by replacing them with alternative materials or resources that are more abundant. • Incorporate Elements of Circularity (Circular Economy): - o Put in place an arrangement to collect used products from customers/ consumers. o Use highly recyclable materials in the products. o Increase the use of recycled content in products. o Reuse the least contaminated water from the final wash for the next-to-last wash. o Reduce or minimise the amount of materials required to produce a unit of product. • Improvement to the product quality: - o Use improved/ better materials to prolong the lifespan of products. • The Client adopts other innovative or feasible resource conservation measures as following (not limited to these): - o Harvest rainwater to meet water requirements. o Minimise the use of water for processing by reusing and recycling it in two or more successive stages. o Reuse/ recycle of rejected/ defected end products. o Practice recycle/ reuse of material. • The purchase of raw material is sourced from the sustainable supplier to avoid over-exploitation and resource depletion. For example, for those business that make use of a large amount of wood/ timber, to purchase from suppliers that produce timber sustainably. • The Client has considered for obtaining relevant certifications such as ISO 14001: Environmental Management System **("EMS")**, SIRIM Eco-Labelling Scheme, ISO14067 Product Carbon Footprint Certification Scheme etc.
GP3 – GHG Emissions	
5.1 Risk identification (GHG Emissions)	
a)	All the activities listed are related to the energy sector and contribute to GHG emissions in various ways such as: - • Burning fossil fuels (e.g., coal, natural gas, oil) in power plants releases carbon dioxide. • Mining coal releases methane, and burning it produces carbon dioxide. • Energy losses during transmission indirectly increase emissions from energy production. • Moving coal, oil, and gas by ships, trucks, and rail emits carbon dioxide. • Building energy infrastructure such as power plants, pipelines, and renewable energy facilities emits carbon dioxide from construction activities and materials. • Processing natural gas to remove impurities emits carbon dioxide and methane. • Maintaining and upgrading energy infrastructure causes indirect emissions from transportation, equipment uses, and materials.

	For a comprehensive assessment on whether the Client's core activities produce GHG emissions, please apply the below tools: • Exploring Natural Capital Opportunities, Risks and Exposure Tool **("ENCORE")**. *Please note that, when using the tools (a) above, please select the 'Impacts' (alludes to the ways in which a Client's activities impact ecosystem services and natural capital) option as opposed to the 'Dependencies' option (used for GP5.1 & GP5.2).* ** For the implementation of CCPT classification and 2024 CCPT reporting requirement for SMEs, FIs must prioritise the identified 6 high carbon emitting sectors, namely agriculture, construction, manufacturing, energy, transport & waste management.*
5.2 Risk management (GHG Emissions)	

a)	The measures which can be undertaken by the Client to reduce GHG emissions or as part of its decarbonisation strategy in mitigating the identified impact of GHG emissions in 5.1(a), may include but not limited to: -
	• The Client uses the latest technology (e.g. electrification, carbon capture, hydrogen fuel).
	• The Client adopts energy efficiency practices (i.e. reduce GHG emissions by managing methane leaks, venting and flaring and adopting lower or no emission fuels such as liquefied petroleum gas, natural gas, hydrogen, e-fuels/ synthetic fuels, biofuels and ammonia).
	• The Client adopts renewable energy in its operations such as the following: -
	  ○ Solar
	  ○ Wind
	  ○ Geothermal
	  ○ Hydropower
	  ○ Biomass

Due Diligence Questions: GP4 – Remedial Measures	
No	**Guidance Notes**
Plans undertaken for remediation of significant harm to the environment	
b)	In assessing whether the Client has clearly defined remedial measures and realistic timeline for completion to address the harm identified in GP3, FIs may enquire the following questions (non-exhaustive): - • Any time-bound targets set and specific steps to achieve the planned remedial measures. • The suitability of the remedial measures with the Client's business activities and strategy. • Sufficient resources (e.g., cash flow, expertise, data, technology) to execute the planned remedial measures in accordance with the timeline.
c)	In assessing whether the Client has proper tracking mechanism on the effectiveness of the planned remedial measures, the Client needs to provide timely progress updates on its milestones for achieving the targets set and to report any deviations during the execution of the remedial measures.

The following are the primary and relevant acts & regulations and standards for the Energy Sector (non-exhaustive): -

Relevant Act and Regulations	Applicable Standards
• Electricity Supply Act 1990 (ESA); • the Renewable Energy Act 2011 (REA); • Environmental Quality Act 1974; • Gas Supply Act 1993 (GSA); • Occupational Safety and Health Act 1994; • Petroleum and Electricity Control of Supplies Act 1974; • Petroleum Development Act 1974; • Petroleum (Safety Measures) Act 1984; and • Factories and Machinery Act 1967.	• MS ISO 14001: 2015 – Environmental Management Systems • MS 1722:2011 and OHSAS 18001 – Occupational Safety and Health Management Systems