Green Taxonomy Framework for aBi Finance





Acknowledgements

The aBi Green Finance Taxonomy is aimed at identifying the assets and projects needed to contribute towards delivering low carbon economy in accordance with organization Green Growth Strategy and Business Plan for 2019-2023. It has been developed based on the EU Taxonomy Principles (Taxonomy Technical Report) and CBI Climate Bond Taxonomy, latest climate science research from the International Panel on Climate Change (IPCC) and International Energy Agency, as well as UNEP FI Report "Testing the Application of EU Taxonomy to core banking products: High Level Recommendations". Review of country taxonomies for Mongolia, Singapore, South Africa, Sri Lanka has also significantly enriched the information bases and informed the design process.

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Acronyms and Abbreviations

aBiFH aBi Finance Holdings Limited

BDS Business Development Services

CBI Climate Bond Initiative

DNSH Do Not Significant Harm

FI Financial Institution

GG Green Growth (strategy)

GGGI Global Green Growth Institute

IMCA International Capital Market Association

ISIC International Standard Industrial Classification

MSC Makes Significant Contribution

MSS Minimum Social Safeguards

NDC Nationally Determined Contributions

SDG Sustainable Development Goals

UNFCCC United Nations Framework Convention on Climate Change

VC Value Chain

Background and Rationale

Uganda's agriculture sector is highly dependent on natural capital and vulnerable to environmental and climate changes. The sector faces deteriorating natural resources and is also experiencing increased seasonal changes that include higher temperatures, dry spells, and more erratic rainfall patterns. The changes are negatively impacting the well-being of Ugandans, especially the vast majority whose livelihoods are sourced from agriculture and agribusiness sector. Uganda is faced with persistently low resilience to disasters and economic shocks and slow economic growth due to its high dependence on rain-fed agriculture, over-reliance on biomass for household energy, and weak institutional capacity among other challenges. Future challenges relating to greater pressure on natural resources and climate change imply that a "business as usual" growth model is not a viable option.

It is against this background that aBi has developed a Green Growth (GG) strategy to ensure that all its interventions foster a pathway that supports smarter, more sustainable, and equitable growth of Uganda's agricultures and agribusiness sector. The aBi's GG strategy places strong emphasis on the complementarities between the economic, social, and environmental dimensions of sustainable agriculture sector in Uganda. The GG Strategy has set out ambitions informed by a theory of change on how these will be achieved.

aBi's GG model ensures alignment with the organization's current Business Plan (BP 2019- 2023). The choice of GG strategic approach is supported with credible internal and external evidence. The GG strategy intends to explore new ideas/innovations and scale up piloted best practices. There is a renewed resolve to offer transformative opportunities to aBi implementing partners. The ambition is to advance green growth interventions while maximizing co-benefits for agriculture and agribusiness domain. This strategy has aimed at conveying information on GG planning, implementation, monitoring, evaluation and learning needs that are to be addressed by aBi fraternity.

This taxonomy Document has been designed within the framework of support extended by GGGI Uganda office towards implementation of Green Growth Strategy and is aimed at provision of the general operating framework to the client organizations of aBi and ensuring similar reporting requirements that will enable aBi to track the progress with implementation of the GG strategy and allow better reporting to its donors.

The activities identified in this version of the taxonomy will be reviewed every 3-5 years following policy shifts, scientific developments, technological changes, and new industry needs in the green finance space.

Objectives of Green Taxonomy and Scope of its Application

The **6 overall objectives** of the aBiFH's Green Taxonomy is to streamline aBiFH's green finance operations through defining classification framework that is based on international best practices of activities and contributes towards achievement of the following in Uganda:

- Climate change mitigation;
- Climate change adaptation;
- Sustainable use of water resources;
- Pollution prevention;
- Sustainable resources use and circularity;
- Ecosystem protection and restoration;

The **operational objectives** of the aBiFH's Green Taxonomy are to:

- > Scale up green finance flows from various sources including the private sector, international financial institutions, and foreign investors;
- > Support investors' confidence to finance green projects and mitigate the risk of "greenwashing";

- > Track private sector investments in green projects and measure the impact contribution to Uganda's green development and aBiFH's Green Growth Strategy, as well as other climate change related policies and targets;
- ➤ **Provide** financial institutions, businesses, policy makers, and other market players with a common understanding and approach to identify, develop and finance green projects;
- > Inform and help shape national policies and regulations on green finance that will boost the market development of green opportunities.

The aBiFH's Green Taxonomy is designed to be applied to a wide range of financial instruments and applicable to the lending products of aBiFH and Green Challenge Fund including corporate lending, consumer lending, project finance, SME finance, green bonds, equity investment, insurance, credit guarantee, grants, financial advisory and technical assistance, among others.

In addition to its wide scope of application, the taxonomy can also be used by various market players. Below are some of the primary users of the aBiFH's Green Taxonomy and possible applications:

| Actor | Utilization |
|---------------------|---|
| aBiFH | Structure green banking products (such as loans, credits, and guarantees) that corresponds to aBiFH GG strategy; Boost efficiency of disbursement of green banking products through introduction of simplified procedures; Lower transaction costs through faster identification and verification of eligible projects; Availability of well-established and recognized reporting framework for issuance of the green bonds (by aBiFH); Ensure recognition of the aBiFH as Green Financier; |
| Financial regulator | Design regulatory interventions based on the taxonomy to encourage aBiFH and other financiers to lend to eligible green projects; Introduce/enhance new climate- or sustainability-related reporting and disclosure guidelines for financial market actors; Statistical analysis of financial flows toward sustainable development priorities at the asset, portfolio, institutional, and national levels; Preventing "green-washing"; |
| aBiFH clients | Expedient (time efficient and with lower transaction costs) access to the green banking products; Possibility to benefit from policy, regulatory and fiscal incentives to be provided by Regulator, aBiFH and donor/s; |
| Policymakers | Identify intervention frameworks to finance sectors/subsectors prioritized through national strategies and areas of underinvestment and bridge the funding gap; Facilitate the development of a pipeline of green projects in accordance with national priorities for environmentally sustainable development; |

- Provide a reference for policymakers as they develop strategies to achieve national sustainable development commitments, such as those in the country's Nationally Determined Contribution (NDC) targets and Sustainable Development Goal (SDG) agendas, and improve associated systems for tracking and measuring finance flows;
- Adopt national level Green Finance taxonomy based on the lessons learned from implementation of the aBiFH's Green Taxonomy;

Approaches in Developing aBiFH's Green Taxonomy

The green taxonomy framework is developed in adherence to the following 6 principles:

Principle 1: Contribute to national and corporate policies and targets

The taxonomy should contribute to the key environmental targets included in Uganda's green development and climate change related policies, strategies, programs, as well as corporate policies/strategies of aBiFH, including Green Growth Strategy.

Principle 2: Address environmental challenges

Uganda's key environmental challenges should be addressed – i) climate change mitigation and adaptation; ii) pollution; iii) resource conservation iv) livelihood improvement.

Principle 3: Cover high-emitting, key economic sectors

The taxonomy should cover the highest emitting sectors in the economy as well as contribute to the transition of key economic sectors into sustainable ones.

Principle 4: Align with international standards and good practices

In the absence of commonly agreed local standards, the taxonomy should reference international standards and best practices.

Principle 5: Comply with ESG standards

Minimum environmental and social risk management regulations and standards should be applied to all types of activities included in the taxonomy.

Principle 6: Continues review and development

The taxonomy will require continues review and update based on policy shifts, scientific developments, technological changes, and new industry needs. In alignment with the above-mentioned principles, the overall categories proposed in the taxonomy framework are:

 $^{^{}m 1}$ China Green Bond Catalogue. Green Finance Committee of China Society of Finance and Banking. 2015

| N | Categories | Policy Targets | | |
|---|--|---|--|--|
| 1 | Sustainable agriculture, land use, forestry, biodiversity conservation & eco-tourism | Pasture: Introduce sustainable pasture management practices to maintain livestock population at appropriate levels according to the pasture carrying capacity. Support the business and economics of herders and herder groups, and small and medium sized farmers. Agriculture: Increase the processing of raw materials through the promotion of sustainable agriculture development, and the development of industrial processing cluster that is export-oriented and based on green technology. Reduce land degradation due to crop production, and improved soil fertility, by introducing agro techniques for soil maintenance and efficient advanced technology for irrigation and establish forest zones. Forest: reduce GHG emissions from deforestation and forest degradation by 5% by 2030. Eco-tourism: Develop eco-tourism regions, products and services, promote Uganda's culture and tourism brand globally, increase revenue from tourism, and increase the number of foreign tourists | | |
| 2 | Sustainable water and waste use | Waste: Reduce GHG emissions from waste by 20% by 2030. Reduce solid waste in landfills by 20% by 2030, by improving proper reduced waste management, increasing waste recycling and processing, and promoting the production of value added products. Water: Increase access of the population to safe drinking Maintain availability of water resources through protection of runoff formation zones and their native ecosystems in river basins Protect water resources, river streams and water sources under special protection and find solutions for sustainable water supply. | | |
| 3 | Renewable energy | Reduce greenhouse gas emissions in the energy sector Increase renewable electricity capacity | | |
| 4 | Energy efficiency | > Improve energy efficiency of designated entities | | |
| 5 | Green buildings | Reduce greenhouse gas emissions in the construction sector Reduce building heat lossIncrease the area of green facilities in urban areas and settlements | | |
| 6 | Low pollution energy, Pollution prevention and control | decrease air pollutants, prohibit the use of unprocessed coal anywhere except for thermal power plants, and reduce air and environmental pollution. | | |
| 7 | Clean transport | Increase the share of private EVs. Shift from liquid fuel to LPG for vehicles in Kampala and other big cities by improving taxation and environmental fee system. Introduce sustainable public transportation systems (e.g BRT). Develop an environmentally sound infrastructure and transportation network with no adverse impacts on nature, human health and biodiversity. | | |

Algorithm for evaluating investment activity as green

The process of assessing whether proposed investment project qualifies as green or not is comprised from the following 6 steps:

Step 1. - Understanding the rationale of the Green Taxonomy

Potential beneficiaries should familiarize themselves with the principles provided in the Green Taxonomy and make sure that investment project under the review is aligned with the following 3 principles:

- Contributes Significantly towards at least one key objectives of the Green Taxonomy;
- Does not significantly harm to any other key objectives of the Green Taxonomy;
- Meets minimum social standards defined by the national legislation;

Step 2. – Checking whether investment activity under consideration is included in the Green Taxonomy

The Taxonomy Compendium of eligible sectors, subsectors and activities (Section 5 of this document) identifies economic macro-sectors and the associated economic activities within those macro-sectors that are needed as part of the future Ugandan green economy.

Using the Taxonomy Compendium, potential beneficiaries will be able to find the macro-sector that the economic activity under consideration would best relate to and then navigate to the economic activity which best matches that specific economic activity.

Step 3. - Evaluating performance against technical screening criteria

After making sure that potential investment project is matched with eligible sector, subsector and activity (Step 2 above), beneficiaries should make sure that technical screening criteria for the substantial contribution towards Green Taxonomy objectives are met.

If the economic activity under consideration meets the metrics and thresholds, this alignment should be reported transparently. If the economic activity under consideration does not meet the metrics and thresholds, the economic activity is not aligned to the Green Taxonomy.

Step 4. - Evaluating performance against Do Not Significantly Harm Approach

Within the Technical Screening Criteria for each economic activity, guidance regarding potential significant harm associated with economic activity is provided together with the criteria related to each objective.

Potential beneficiaries need to assess performance against each of the 5 objective's Do No Significant Harm Criteria (excluding the objective that the economic activity under consideration intends to substantially contribute to) to be Green Taxonomy aligned.

Additionally, recognition of an economic activity as Green Taxonomy-aligned (and being effective in making its significant contribution) requires the activity to demonstrate climate change resilience.

If the economic activity under consideration does not meet the Do No Significant Harm Criteria, the economic activity is not aligned to the Green Taxonomy. If the economic activity under consideration meets the Do No Significant Harm Criteria, this alignment should be transparently disclosed.

Step 5. - Assessing compliance against Minimum Social Safeguards

Potential beneficiaries disclosing against the Green Taxonomy need to assess their compliance with MSS by ensuring implementation of policies, procedures and governance mechanisms that put into effect alignment with Ugandan labour law and the standards in:

- International Labour Organization (ILO) core labour conventions;
- OECD Guidelines on Multinational Enterprises (MNEs); and
- UN Guiding Principles on Business and Human Rights;

Labour relations in the beneficiary company should be compliant with the national legislations:

- Constitution;
- National labour and employment laws;
- Laws and regulations defining employment conditions, including occupational health and safety conditions;
- Compensation, gender and information protection arrangements;

Step 6. - Concluding assessment and disclosing results

If the potential investment project under consideration fully conforms to steps described above, Green Taxonomy alignment can be declared. A declaration should include the final collective result with all supporting assessment results for each assessment as well as relevant supporting details and impact indicators.

ABiFH will adopt and annex to this Green Taxonomy the model reporting template for perusal by the beneficiaries.

Green Taxonomy Compendium

1.1 Mitigation

| Activity | Description | Principle | Metric and Threshold | Do No Significant Harm |
|---------------------|--|---|---|---|
| Macro Sector - 1.1 | Forest and Logging | | | |
| 1.1.1 Afforestation | Establishment of forest through planting, deliberate seeding or natural regeneration on land that, until then, was under a different land use or not used. Afforestation implies a transformation of land use from non-forest to forest, in accordance with the Food and Agriculture Organization of the United Nations (FAO) definition of afforestation, where forest means a land matching the forest definition as set out in national law, or where not available, is in accordance with the FAO definition of forest. Afforestation may cover past afforestation, as long as it takes place in the period between the planting of the trees and the time | Afforestation, rehabilitation and restoration, sustainable forest management shall increase carbon sinks (or at least maintain in the case of SFM) of above and below ground carbon in comparison to a counterfactual with no conversion to forest. Criterion 1: Mandatory application of the Sustainable Forest Management (SFM) Principles. Criterion 2: Establish a verified baseline GHG balance of relevant carbon pools at the beginning of the afforestation/reforestation activity; Criterion 3: Demonstrate continued compliance with the Sustainable Forest Management requirements | Continued compliance with the Sustainable Forest Management (SFM) requirements is demonstrated and disclosed at 10-year intervals through a forest management plan (or equivalent) that shall be reviewed by an independent third-party certifier and/or competent authorities; Verified GHG balance baseline is calculated for above-ground carbon pools, based on growth-yield curves for species per m3/year/ha, carbon convertible. Calculating the GHG balance baseline requires knowledge of the area, the species and number of trees (in case of afforestation and reforestation). Using the | Key environmental aspects span across all five objectives and are summarized as follows: > ability of forests to adapt to a changing climate and ensure the long-term ability of the forests to sequester carbon; > impact on water resources as well as on water quality; > pollution to water, air, and soil, and risks associated from the use of pesticides and fertilizer; > impacts on biodiversity and ecosystems from intensification and conversion of land of high ecological value to forests and illegal logging; The DNSH criteria below should be considered in combination with the |

when the land use is recognized as a forest.

1.1.2
Rehabilitation and restoration of forests, including reforestation and natural forest regeneration after an extreme event

Rehabilitation and restoration of forests as defined by national law. Where national law does not contain such a definition, rehabilitation and restoration corresponds to a definition with broad agreement in peer-reviewed scientific the literature for specific countries or a definition in line with the FAO concept of forest restoration or a definition in line with one of the definitions of ecological restoration applied to forest, or forest rehabilitation under the Convention on Biological Diversity. economic activities in this category also include forest activities in line with the FAO definition of "reforestation" and "naturally regenerating forest" after extreme event, where extreme event is defined by national law, and where national law does not contain such a definition, is in line with the IPCC definition of extreme weather event; or after a wildfire, where wildfire is defined by national law, and where national law does not contain such a definition, as defined in the European Glossary for

and increase of carbon sinks from above and below-ground carbon over time, supported by and disclosed through a forest management plan (or equivalent) at 10-year intervals, that shall be reviewed by an independent third-party certifier and/or competent authorities.

growth-vield curves, information will be given on the annual increment in m3/year/ha, which can be used for the basis of the GHG balance. The methodology is consistent with the approach in Revised 1996 **IPCC** Guidelines for National Greenhouse Gas Inventories (IPCC Guidelines), it recommends recalculation of the amount of carbon sequestered; 1 ton of biomass representing approximately 0.5 ton of carbon. Further one ton of carbon equals 44/12 = 3.67 tons of carbon dioxide:

Above ground Carbon stocks shall increase above carbon baseline over a period of 20 vears. Changes in carbon stocks should be disclosed based on growth yield curves in 10 year intervals through a forest management plan (or equivalent instrument) that shall be reviewed by an independent third-party certifier and/or competent authorities;

SFM requirements of the forest mitigation Taxonomy (Criterion 1). The criteria can be informed by applying forest certification using independent third-party schemes that are regularly audited. Compliance shall be reported through a forest management plan (or equivalent) as per criterion 3 of the forest mitigation Taxonomy.

Adaptation

Refer to the screening criteria for DNSH for climate change adaptation Annex I;

Water

- ➤ Identify and manage risks related to water quality and/or water consumption at the appropriate level. Ensure that water use/conservation management plans, developed in consultation with relevant stakeholders, have been developed and implemented;
- Ensure legal compliance by fulfilling the requirements of Ugandan water legislation Identify and manage risks related to water quality and/or water consumption at the appropriate level and in

| | wildfires and forest fires. The |
|--------------------|--|
| | economic activities in this category |
| | imply no change of land use and |
| | occurs on degraded land matching |
| | the forest definition as set out in |
| | national law, or where not available, in accordance with the FAO |
| | definition of forest. |
| | |
| | Forest management as defined by |
| nanagement | national law. Where national law |
| | does not contain such a definition, |
| | forest management corresponds to |
| | any economic activity resulting from |
| | a system applicable to a forest that |
| | influences the ecological, economic or social functions of the forest. |
| | Forest management assumes no |
| | change in land use and occurs on |
| | land matching the definition of |
| | forest as set out in national law, or |
| | where not available, in accordance |
| | with the FAO definition of forest. |
| 1.1.4 Conservation | Forest management activities with |
| forestry | the objective of preserving one or |
| lorestry | more habitats or species. |
| | Conservation forestry assumes no |
| | change in land category and occurs |
| | on land matching the forest |
| | definition as set out in national law, |
| | or where not available, in |
| | accordance with the FAO definition |
| | of forest. |

| | | Prevent pollution of water and soil in the forest concerned and undertake clean up measures when it does happen; |
|--|--|---|
| | | <u>Ecosystems</u> |
| | | Ecosystems Take measures to ensure sustained or improved long term conservation status at the landscape level; In designated conservation areas, actions should be demonstrated to be in line with the conservation objectives for those areas. No conversion of habitats specifically sensitive to biodiversity loss or of high conservation value such as grasslands and any high carbon stock area (e.g. peat lands and wetlands), and areas set aside for the restoration of such habitats in line with national legislation; Develop a forest management plan (or equivalent) that includes provisions for maintaining biodiversity. |
| | | Evaluate the ecosystem service provision with the aim to not |
| | | decrease the amount and |

| | | | | quality of ecosystem services provided; Forests are monitored and protected to prevent illegal logging, in compliance with national laws; Promote close-to-nature forestry or similar concepts depending on the local requirements and limitations; Select native species or species, varieties, ecotypes and provenance of trees that adequately provide the necessary resilience to climate change, natural disasters and the biotic, pedologic and hydrologic condition of the area concerned, as well as the potential invasive character of the species under local conditions, current and projected climate change. |
|--------------------------------------|--|---|--|---|
| Macro Sector - 1.2 | Agriculture | | | |
| 1.2.1 Certified agriculture projects | Agriculture projects utilising international certification schemes which have climate change mitigation components | Both of the principles set out here must be fulfilled: Principle 1: Demonstrate substantial avoidance or reduction of GHG emissions from production and related practices; and | include:Climate Bonds certification (bond certification); | Key environmental aspects to be considered for investments in Agriculture span across all other five objectives and are summarized as follows: ability of farming systems to adapt to a changing climate; |

| 1.2.2 Management of soil and biomass for net carbon sequestration | Transition from temporary crops or pastures to agroforestry systems (e.g., cocoa, fruit trees or forestry) and agrosilvopastoral system. Change land use towards systems with greater carbon sequestration (such as agroforestry systems), which have better soil protection and are consistent with their vocation. Conserve water resources. | A A A A A A | Bonsucro (sugar); Better Cotton Initiative; Roundtable on Sustainable Biomaterials Project length of at least five years; Reduced tillage; Avoided erosion; No open burning; Evidence that soil carbon sequestration is likely to be maintained for 20 years or more (secure land rights, low threat of conversion, contractual commitments) or demonstrate 50% higher level of sequestration | impact on water quantity, water quality and water ecosystems; impacts on air quality; inefficiencies in the production system including nutrient management; pollutant and nutrient run-off and leaching; impacts on habitats and species, e.g. through conversion of areas, intensification of existing arable land, and invasive alien species. Note that areas of environmental risk are highly |
|---|--|-------------|--|--|
| 1.2.3 Other agricultural practices: Introduction of polycultures or associated crops in permanent crops 1.2.4 Other agricultural practices: Implementation of clean energy and energy efficiency measure | Introducing polycultures or crops associated with compatible species (preferably native timber or fruit trees) protects the soil, increases carbon and nitrogen fixation, diversifies production and increases resilience to climate variability. Install equipment to save energy and take advantage of its renewable sources, including methane gas and solar energy. Equipment maintenance and improving fuel saving routines. | Dir | rect eligibility rect eligibility for renewable energy d methane gas. Fuel saving subject % criteria. | geographically variable. Guidance should be sought from the relevant competent national or regional authority to identify areas or issues of importance and relevance within the area or project concerned; Adaptation Refer to the screening criteria for DNSH for climate change adaptation Annex I; Water |

| 1.2.5 Other agricultural practices: biodigesters | Incorporate biodigesters (organic fertilizer and methane). Biogas can be used as fuel in kitchens, for heating and lighting, or to power an engine that generates electricity. There is also the fertilizer called biol. | Direct eligibility | ➤ Identify and manage risks related to water quality and/or water consumption at the appropriate level. Ensure that water use/conservation management plans, developed in consultation with relevant stakeholders, have been developed and implemented; ➤ Ensure legal compliance by fulfilling the requirements of Ugandan water legislation. Identify and manage risks related to water quality and/or water consumption at the appropriate level and in alignment with the national strategies. Where water use/conservation management plans are required by Ugandan legislation, these plans are to be developed in consultation with relevant stakeholders; |
|--|--|--------------------|--|
| | | | Circular economy and waste prevention and recycling ➤ Activities should minimize raw material use per unit of output, including energy through increased resource use efficiency; |

| | Activities should minimize the |
|--|------------------------------------|
| | loss of nutrients (in particula |
| | nitrogen and phosphate |
| | leaching out from the |
| | production system into the |
| | environment. |
| | Activities should use residues |
| | and by-products the production |
| | or harvesting of crops to reduce |
| | demand for primary resources |
| | in line with good agricultura |
| | practice; |
| | <u>Pollution</u> |
| | ➤ Activities ensure that nutrients |
| | (fertilizers) and plant protection |
| | products (e.g. pesticides and |
| | herbicides) are targeted in thei |
| | application (in time and area |
| | treated) and are delivered a |
| | appropriate levels (with |
| | preference to sustainable |
| | biological, physical or othe |
| | non-chemical methods i |
| | possible) and with appropriate |
| | equipment and techniques to |
| | reduce risk and impacts o |
| | pesticide use on human health |
| | and the environment (e.g. wate |
| | and air pollution) and the loss o |
| | excess nutrients; |
| | The use only of plant protection |
| | products with active |

| | substances that ensure high |
|--|------------------------------------|
| | protection of human and anima |
| | health and the environment; |
| | |
| | <u>Ecosystems</u> |
| | Activities ensure the protection |
| | of soils, particularly over winter |
| | to prevent erosion and run-of |
| | into water courses/bodies and |
| | to maintain soil organic matter; |
| | ➤ Activities do not lead to the |
| | conversion, fragmentation of |
| | unsustainable intensification of |
| | high-nature-value land |
| | wetlands, forests, or other |
| | areas of high-biodiversity value |
| | This includes highly biodiverse |
| | grassland spanning more than |
| | one hectare that is: i) natural |
| | namely grassland that would |
| | remain grassland in the absence |
| | of human intervention and that |
| | maintains the natural species |
| | composition and ecologica |
| | characteristics and processes |
| | or ii) non-natural, namely |
| | grassland that would cease to |
| | be grassland in the absence of |
| | human intervention and that is |
| | species-rich and not degraded |
| | and has been identified as being |

| | | | | highly biodiverse by the relevant competent authority; Activities should not result in a decrease in the diversity or abundance of species and habitats of conservation importance or concern and contravene existing management plans or conservation objectives; Where activities involve the production of novel non-native or invasive alien species, their cultivation should be subject to an initial risk assessment and on-going monitoring in order to ensure that sufficient safeguards are in place to prevent escape to the environment; |
|---|---|--|---|--|
| Macro Sector - 1.3 | Manufacturing | | | |
| 1.3.1 Production of biomass energy utilization equipment | Manufacture of collection, crushing, transportation, and storage equipment for agricultural byproducts such as straw and rice husk; Manufacture of biomasspower generators and heating equipment, marsh gas and biogas production equipment, biomass solid and liquid fuel production | The manufacture of low carbon technologies that result in substantial GHG emission reductions in other sectors of the economy; | Directly eligible, provided that product related emissions are at least the level of best available techniques (i.e. utilisation of green energy technologies by company itself). | The main potential significant harm to other environmental objectives from the manufacture of low carbon technologies is associated with: > the (potential) use of toxic substances and generation of toxic wastes (both at the manufacturing stage as well as at other stages of the |

| equipment, and other equipment making use of biomass energy. | product/equipment lifecycle); and |
|--|---|
| making ase of sigmass onergy. | ➤ the potential for polluting emissions to air, water and soil from the manufacturing process; |
| | <u>Adaptation</u> |
| | Refer to the screening criteria for DNSH for climate change adaptation Annex I; |
| | <u>Water</u> |
| | Identify and manage risks related to water quality and/or water consumption at the appropriate level. Ensure that water use/conservation management plans, developed in consultation with relevant stakeholders, have been developed and implemented; Circular Economy Embodied carbon emissions should represent less than 50% of the total carbon emissions saved by the use of the energy efficient equipment. |
| | Pollution |
| | > Compliance with national legislation on air pollution; |
| | <u>Ecosystems</u> |

| Ensure an Environmental Impact Assessment (EIA) has been completed in accordance with the national legislation or international standards (e.g. IFC Performance Standard 1: Assessment and Management of Environmental and Social Risks) and any required mitigation measures for protecting biodiversity/ecosystems, in particular UNESCO World Heritage and Key Biodiversity Areas (KBAs), have been implemented. For sites/operations located in or near to biodiversity-sensitive areas (including the Natura 2000 network of protected areas as well as other protected areas, as sure that an appropriate assessment has been conducted in compliance with the provisions of the national provisions or international standards (e.g. IFC Performance Standard 6). For sites/operations, ensure that a site-level biodiversity management plan exists and is implemented in alignment with the IFC Performance Standard 6). | | 1 | 1 | |
|---|--|---|---|---------------------------------------|
| been completed in accordance with the national legislation or international standards (e.g. IFC Performance Standard 1: Assessment and Management of Environmental and Social Risks) and any required mitigation measures for protecting biodiversity/ecosystems, in particular UNESCO World Heritage and Key Biodiversity Areas (KBAs), have been implemented. For sites/operations located in or near to biodiversity-sensitive areas (including the Natura 2000 network of protected areas as well as other protected areas as well as other protected areas, ensure that an appropriate assessment has been conducted in compliance with the provisions of the national provisions or international standards (e.g. IFC Performance Standard 6). For sites/operations, ensure that a site-level biodiversity management plan exists and is implemented in alignment with | | | | Ensure an Environmental |
| with the national legislation or international standards (e.g., IFC Performance Standard 1: Assessment and Management of Environmental and Social Risks) and any required mitigation measures for protecting biodiversity/ecosystems, in particular UNESCO World Heritage and Key Biodiversity Areas (KBAs), have been implemented. For sites/operations located in or near to biodiversity-sensitive areas (including the Natura 2000 network of protected areas as well as other protected areas; measure that an appropriate assessment has been conducted in compliance with the provisions of the national provisions or international standards (e.g., IFC Performance Standard 6). For sites/operations, ensure that a site-level biodiversity management plan exists and is implemented in alignment with | | | | Impact Assessment (EIA) has |
| with the national legislation or international standards (e.g., IFC Performance Standard 1: Assessment and Management of Environmental and Social Risks) and any required mitigation measures for protecting biodiversity/ecosystems, in particular UNESCO World Heritage and Key Biodiversity Areas (KBAs), have been implemented. For sites/operations located in or near to biodiversity-sensitive areas (including the Natura 2000 network of protected areas as well as other protected areas; measure that an appropriate assessment has been conducted in compliance with the provisions of the national provisions or international standards (e.g., IFC Performance Standard 6). For sites/operations, ensure that a site-level biodiversity management plan exists and is implemented in alignment with | | | | been completed in accordance |
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| protecting biodiversity/eco- systems, in particular UNESCO World Heritage and Key Biodiversity Areas (KBAs), have been implemented. For sites/operations located in or near to biodiversity-sensitive areas (including the Natura 2000 network of protected areas as well as other protected areas), ensure that an appropriate assessment has been conducted in compliance with the provisions of the national provisions or international standards (e.g. IFC Performance Standard 6). For sites/operations, ensure that a site-level biodiversity management plan exists and is implemented in alignment with | | | | |
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| areas (including the Natura 2000 network of protected areas as well as other protected areas), ensure that an appropriate assessment has been conducted in compliance with the provisions of the national provisions or international standards (e.g. IFC Performance Standard 6). For sites/operations, ensure that a site-level biodiversity management plan exists and is implemented in alignment with | | | | - |
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| areas as well as other protected areas), ensure that an appropriate assessment has been conducted in compliance with the provisions of the national provisions or international standards (e.g. IFC Performance Standard 6). For sites/operations, ensure that a site-level biodiversity management plan exists and is implemented in alignment with | | | | |
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| appropriate assessment has been conducted in compliance with the provisions of the national provisions or international standards (e.g. IFC Performance Standard 6). For sites/operations, ensure that a site-level biodiversity management plan exists and is implemented in alignment with | | | | - |
| been conducted in compliance with the provisions of the national provisions or international standards (e.g. IFC Performance Standard 6). For sites/operations, ensure that a site-level biodiversity management plan exists and is implemented in alignment with | | | | ** |
| with the provisions of the national provisions or international standards (e.g. IFC Performance Standard 6). For sites/operations, ensure that a site-level biodiversity management plan exists and is implemented in alignment with | | | | |
| national provisions or international standards (e.g. IFC Performance Standard 6). For sites/operations, ensure that a site-level biodiversity management plan exists and is implemented in alignment with | | | | - |
| international standards (e.g. IFC Performance Standard 6). For sites/operations, ensure that a site-level biodiversity management plan exists and is implemented in alignment with | | | | with the provisions of the |
| Performance Standard 6). For sites/operations, ensure that a site-level biodiversity management plan exists and is implemented in alignment with | | | | national provisions or |
| sites/operations, ensure that a site-level biodiversity management plan exists and is implemented in alignment with | | | | international standards (e.g. IFC |
| site-level biodiversity management plan exists and is implemented in alignment with | | | | Performance Standard 6). For |
| management plan exists and is implemented in alignment with | | | | sites/operations, ensure that a |
| implemented in alignment with | | | | site-level biodiversity |
| implemented in alignment with | | | | management plan exists and is |
| | | | | |
| | | | | the IFC Performance Standard |

| Macro Sector – 1.4 | Electric power generation, transmission o | and distribution | | 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources all necessary mitigation measures are in place to reduce the impacts on species and habitats; and a robust, appropriately designed and long-term biodiversity monitoring and evaluation programme exists and is implemented; |
|---|--|--|--|---|
| 1.4.1 Electricity generation using solar photovoltaic technology 1.4.2 Electricity generation using concentrated solar power (CSP) technology 1.4.3 Electricity generation using wind power | Construction or operation of electricity generation facilities that produce electricity using solar photovoltaic (PV) technology. Construction and operation of facilities using solar thermal power to generate electricity. Construction and operation of electricity generation facilities that produce electricity from Wind | Support a transition to a net-zero emissions economy; Avoidance of lock-in to technologies which do not support the transition to a net-zero emissions economy; Ensure that economic activities meet best practice standards; Ensure equal comparability within an economic activity with regards to achieving net-zero emissions economy target; | Facilities shall have no more than 15% of electricity generated from non-renewable sources | The main potential significant harm to other environmental objectives from the installation and operation of photovoltaic (PV) panels relate to: 1) The PV installation siting: impacts on ecosystems and biodiversity if built in a designated conservation area or other areas with important ecosystem and biodiversity value; 2) The impacts from the |
| 1.4.4 Electricity generation from bio-energy | Power Construction and operation of electricity generation installations that produce electricity exclusively from biomass, biogas or bioliquids | Where necessary, incorporating technology-specific considerations into secondary metrics and thresholds | 80% GHG emission reduction compared to fossil fuel baseline | production and end-of-life management of the PV systems and its component/materials: potentially significant environmental impacts are associated with the |

| wastes, excluding electricity | sourcing/production of |
|--------------------------------|-----------------------------------|
| generation from blending of | materials and components of |
| renewable fuels with biogas or | PV systems; |
| bioliquids. | ➤ The main potential significant |
| | harm to other environmental |
| | objectives from CSP is |
| | associated with: 1) the |
| | construction of the installation |
| | and the substantial land-take |
| | associated with the installation; |
| | 2) impacts to birdlife from the |
| | high temperatures generated |
| | by the plant; 3) impacts of the |
| | cooling system on water |
| | resources; |
| | ➤ In spite of the crucial |
| | contribution of wind energy to |
| | mitigating climate change, |
| | there may be conflicts arising |
| | between its deployment and |
| | nature conservation at a local |
| | level. The main environmental |
| | exposures to be considered as a |
| | Do No Significant Harm |
| | (DNSH) criteria, in the most |
| | stringent sense, include: 1) |
| | Underwater noise created in |
| | the installation of bottom-fixed |
| | offshore wind turbines; 2) The |
| | composite waste generated |
| | from both on- and offshore |
| | wind turbine blades at the end |

| Macro Sector - 1.5 | Water supply, sewerage and waste mana | gement | | of their lifetime The possible disturbance, displacement or collision of birds and bats by the construction and operation of wind farms; 3) The possible deterioration of water ecosystem associated to the construction of offshore wind farms; 4) The possible visual impacts created by landscape change in the installation of wind turbines; |
|---|---|---|---|---|
| 1.5.1 Sewage sludge treatment – anaerobic digestion | Construction and operation of facilities for the treatment of sewage sludge by anaerobic digestion with the resulting production and utilisation of biogas. | Net GHG emission reduction from sewage sludge treatment through the capture and utilization of the generated biogas in various forms and applications, often displacing fossil fuels. | Anaerobic digestion of sewage sludge treatment is eligible provided that (cumulative): Important methane leakage from relevant facilities (e.g. for biogas production and storage, energy generation, digestate storage) is controlled by a monitoring plan; In the produced biogas is used directly for the generation of electricity and/or heat, or upgraded to bio-methane for injection in the natural gas grid, or used as vehicle fuel (e.g. as bio CNG) or as feedstock in chemical industry (e.g. for production of H2 and NH3). | The main potential significant harm linked to this activity is related to: may lead to emissions of pollutants that have significant impacts on human respiratory systems and on ecosystems through acidification and/or eutrophication. The most relevant emissions are resulting from the sludge storage as well as from the subsequent combustion of biogas, such as Sulphur dioxide, nitrous oxide and particulates; |

| | | | No threshold applies. | the subsequent use of the resulting digestate as fertilizer/soil improver which may also result in soil and water pollution due to contaminants in the digestate. Compliance with relevant EU and respective national law as well as consistency with national, regional or local wastewater management strategies and plans is a minimum requirement. |
|--|---|--|---|--|
| 1.5.2 Collection and transport of non-hazardous waste in source segregated fractions | Separate collection and transport of non-hazardous waste in single or comingled fractions aimed at preparing for reuse or recycling. | Net GHG emission reductions through reuse and high quality recycling of waste, which are enabled by the separate collection and transport of source-segregated non-hazardous waste fractions. Reuse and recycling activities reduce GHG emissions by displacing alternative waste management options (e.g. landfilling and incineration) and alternative raw material sourcing options with higher GHG emission intensity. | Separate collection and transport of non-hazardous waste is eligible provided that: > source segregated waste (in single or co-mingled fractions) is separately collected with the aim of preparing for reuse and/or recycling. No threshold applies. | The main potential significant harm linked to this activity is related to: • emissions of collection vehicles that cause harm to human health and the environment; • mixing source segregated waste fractions that could impair subsequent material recovery and recycling. |
| 1.5.3 Composting of agricultural bio- waste | Construction and operation of dedicated facilities for the treatment of separately collected bio- waste through composting (aerobic digestion) with the resulting | Net GHG emission reduction through avoidance of GHG emissions compared to alternative options for bio-waste management and from the production of compost that can be used as fertiliser/soil improver | Composting of bio-waste is eligible provided that (cumulative): > the bio-waste is source segregated and collected separately; | The main potential significant harm linked to this activity is related to: makes emissions to air, soil and water from the operation of the composting plant; |

| Macro Sector - 1.0 | production and utilisation of compost. | displacing synthetic fertilisers and peat (e.g. in horticulture). | anaerobic digestion is not a technically and economically viable alternative; the compost produced is used as fertilizer/soil improver. No threshold applies. | the use of the resulting compost as fertilizer/soil improver which may also result in soil and water pollution due to contaminants in the compost. |
|--|---|---|--|--|
| 1.6.1 Renovation of existing buildings | Energy-saving renovation of existing buildings and energy-use systems of buildings. | The renovation of existing buildings to improve their energy performance makes a substantial contribution to climate change mitigation by reducing energy consumption and GHG emissions for the remaining operational phase of the buildings, and by avoiding emissions that would be associated with the construction of new buildings. Condition for non-eligibility: to avoid lock-in and undermining the climate mitigation objective, the renovation of buildings occupied for the purpose of extraction, storage, transportation or manufacture of fossil fuels is not eligible. Use of alternative schemes as proxies: outside EU Member States, established schemes such as "green building" certifications or building regulations and standards may be used as alternative proof of | The building renovation leads to a reduction of primary energy demand (PED)/energy consumption/ GHG emissions of at least 30%. | The main potential for significant harm to the other environmental objectives associated with the renovation of existing buildings is determined by: > Lack of resistance to extreme weather events (including flooding), and lack of resilience of to future temperature increases in terms of internal comfort conditions (only for large buildings): > Excessive water consumption due to inefficient water appliances; > Landfill and/or incineration of construction and demolition waste that could be otherwise recycled/reused; > Presence of asbestos and/or substances of very high concern in the building materials; |

| | | eligibility, provided that this is verified by the Sustainable Finance Platform. The organisation responsible for the scheme will be able to apply for official recognition of its scheme by presenting evidence that a specific level of certification/regulation can be considered equivalent (or superior) to the taxonomy mitigation and DNSH threshold for the relevant climatic zone and building type. The Sustainable Finance Platform will assess the evidence and approve or reject the application. | | The unprotected handling of building components that are likely to contain substances of concern (e.g. asbestos containing materials) and of any hazardous construction and demolition waste arising from the building renovation; Indirect damage to forest ecosystems due to the use of timber products originating form forests that are not sustainably managed (only for large buildings). |
|-------------------------------------|-------------------------------|---|---|--|
| 1.6.2 Construction of new buildings | Construction of new buildings | The construction of new buildings designed to minimise energy use and carbon emissions throughout the lifecycle can make a substantial contribution to climate change mitigation by saving large part of the energy and carbon emissions that would be associated with conventionally designed buildings. Condition for non-eligibility: to avoid lock-in and undermining the climate mitigation objective, the construction of new buildings designed for the purpose of extraction, storage, transportation or manufacture of fossil fuels is not eligible. | Demand (PED) of the building resulting from the construction, is at least 10 % lower than the threshold | |

| | Use of alternative schemes as | |
|--|---|--|
| | proxies: outside EU Member States, | |
| | established schemes such as 'green | |
| | building' certifications or building | |
| | regulations and standards may be | |
| | used as alternative proof of | |
| | eligibility, provided that this is | |
| | verified by the Sustainable Finance | |
| | Platform. The organisation | |
| | responsible for the scheme will be | |
| | able to apply for official recognition | |
| | of its scheme by presenting evidence | |
| | that a specific level of | |
| | certification/regulation can be | |
| | considered equivalent (or superior) | |
| | to the taxonomy mitigation and | |
| | DNSH threshold for the relevant | |
| | climatic zone and building type. The | |
| | Sustainable Finance Platform will | |
| | assess the evidence and approve or | |
| | reject the application. | |
| | | |

1.2 Adaptation

| Activity | Description | Principle | Metric and Threshold | Do No Significant Harm |
|--------------------|--|--------------------------------------|---|---|
| Macro Sector - 2.1 | Agriculture | | | |
| | Installation and operation of high- efficiency irrigation measure (e.g. drip irrigation), rain water collection facilities, water recycling and | Principle 1: Demonstrate substantial | Drip irrigation;Rain water collection; | Key environmental aspects to be considered for investments in Agriculture span across all other |

| | | | | c: 1: 1: 1: 1 |
|---------------------|---|--------------------------------------|--|---|
| | treatment facilities for agriculture | emissions from production and | Flood proof warehousing; | five objectives and are summarized |
| Ŭ | land in the fresh water stressed districts. | related practices; and | Sustainable drainage systems; | as follows: |
| stressed districts | uistricts. | Principle 2: Maintain existing sinks | | > ability of farming systems to |
| | | and increase sequestration (up to | | adapt to a changing climate; |
| | Construction and operation of | saturation point) in above- and | Directly eligible - warning systems, | > impact on water quantity, |
| | information management and | below-ground carbon stocks. | monitoring, expansion of disaster | water quality and water |
| | communication infrastructure for | | warning systems from city to farms. | ecosystems; |
| | early warning of climate-related | | | impacts on air quality; |
| | disasters (such as drought, flooding, | | | inefficiencies in the production |
| 9. | hurricane, etc.) that will reduce the | | | system including nutrient |
| | agricultural outputs. | | | management; pollutant and nutrient run-off |
| agricultural | | | | and leaching; |
| productivity | | | | impacts on habitats and |
| • | Monitoring and treatment services | | Eligible measures - research and | species, e.g. through |
| | to prevent, monitor and treat the | | development of seeds and crops that | conversion of areas, |
| | presence of pathogens and diseases. | | are resilient to drought, heat, flood, | intensification of existing arable |
| monitor and treat | | | pests or soil with increased salinity. | land, and invasive alien species. |
| the climate-related | | | | Note that areas of |
| pathogens and | | | | environmental risk are highly |
| diseases | | | | geographically variable. |
| · · | Research, development and | | Meet local climate-resilient standards | Guidance should be sought |
| · · | dissemination of seeds and crops | | | from the relevant competent |
| | that are resilient to drought, heat, | | | national or regional authority to |
| | flood, pests, disease or soil increased | | | identify areas or issues of |
| | salinity. | | | importance and relevance |
| | Construction and operation of smart | | Meet local climate-resilient standards | within the area or project |
| | agriculture systems (e.g. precision | | or certification scheme which have | concerned; |
| _ | agriculture, sensor controlled pivot | | climate adaptation components | <u>Adaptation</u> |
| | "fertigation" and similar) up to local | | | Refer to the screening criteria for |
| | climate resilience standards. | | | DNSH for climate change |
| resilience of | | | | adaptation Annex I; |

| and and bound | |
|--------------------------------------|--|
| agricultural | <u>Water</u> |
| production and post-harvest handling | ▶ Identify and manage risks related to water quality and/or water consumption at the appropriate level. Ensure that water use/conservation management plans, developed in consultation with relevant stakeholders, have been developed and implemented; ▶ Ensure legal compliance by fulfilling the requirements of Ugandan water legislation. Identify and manage risks related to water quality and/or water consumption at the appropriate level and in alignment with the national strategies. Where water use/conservation management plans are required by Ugandan legislation, these plans are to be |
| | developed in consultation with relevant stakeholders; |
| | Circular economy and waste prevention and recycling ➤ Activities should minimize raw material use per unit of output, including energy through increased resource use efficiency; |

| | Activities should minimize th |
|--|-----------------------------------|
| | loss of nutrients (in particula |
| | nitrogen and phosphate |
| | leaching out from th |
| | production system into th |
| | environment. |
| | Activities should use residue |
| | and by-products the productio |
| | or harvesting of crops to reduc |
| | demand for primary resource |
| | in line with good agricultura |
| | practice; |
| | <u>Pollution</u> |
| | > Activities ensure that nutrient |
| | (fertilizers) and plant protectio |
| | products (e.g. pesticides an |
| | herbicides) are targeted in the |
| | application (in time and are |
| | treated) and are delivered a |
| | appropriate levels (wit |
| | preference to sustainabl |
| | biological, physical or other |
| | non-chemical methods |
| | possible) and with appropriat |
| | equipment and techniques t |
| | reduce risk and impacts o |
| | pesticide use on human healt |
| | and the environment (e.g. wate |
| | and air pollution) and the loss o |
| | excess nutrients; |
| | ➤ The use only of plant protectio |
| | products with activ |

| | substances that ensure high |
|--|--|
| | protection of human and animal |
| | health and the environment; |
| | |
| | <u>Ecosystems</u> |
| | Activities ensure the protection |
| | of soils, particularly over winter |
| | to prevent erosion and run-off |
| | into water courses/bodies and |
| | to maintain soil organic matter; |
| | Activities do not lead to the |
| | conversion, fragmentation or |
| | unsustainable intensification of |
| | high-nature-value land |
| | wetlands, forests, or other |
| | areas of high-biodiversity value |
| | This includes highly biodiverse |
| | grassland spanning more than |
| | one hectare that is: i) natural |
| | namely grassland that would |
| | remain grassland in the absence |
| | of human intervention and that |
| | maintains the natural species |
| | composition and ecologica |
| | characteristics and processes |
| | or ii) non-natural, namely |
| | grassland that would cease to |
| | be grassland in the absence of |
| | human intervention and that is |
| | species-rich and not degraded |
| | and has been identified as being |

| 2.1.6 Research, development and dissemination of | Research, development and dissemination of climate resilient livestock breeds | ➤ Demonstrate substantial avoidance or reduction of GHG emissions from livestock | (including those from inputs used on the farm) through the | highly biodiverse by the relevant competent authority; Activities should not result in a decrease in the diversity or abundance of species and habitats of conservation importance or concern and contravene existing management plans or conservation objectives; Where activities involve the production of novel non-native or invasive alien species, their cultivation should be subject to an initial risk assessment and on-going monitoring in order to ensure that sufficient safeguards are in place to prevent escape to the environment; The activity livestock production captures a distinct set of subactivities that would include intensive and extensive forms of |
|--|---|---|--|--|
| climate resilient livestock breeds | | production (including animal management, storage and processing of manure and slurry, and management of permanent grasslands); Maintain existing sinks and increase sequestration (up to saturation point) of carbon in permanent grassland. | application of appropriate management practices; Maintain and increase existing carbon stocks for a period equal to or greater than 20 years through the application of appropriate management practices; | intensive and extensive forms of livestock rearing, as well as the management of permanent grassland. These come with different key environmental aspects that need to be considered for investments in this sector, summarised as follows: |

| | | | | > ability of farming systems to |
|--|---|---|-------------------|--|
| Macro Sector - 2.2 | Financial Services | Where livestock production does not include permanent grassland, only principle 1 applies. Permanent grassland is land used to grow grasses or other herbaceous forage, either naturally (self-seeded including 'rough grazing') or through cultivation (sown), and which is more than five years old. | | ability of farming systems to adapt to a changing climate; impact on water quantity, water quality and water ecosystems, incl. waste water treatment from intensive rearing; manure treatment; Emissions of pollutants (such as methane, ammonia, dust, odour, noise) to air, water and soil, in particular in the case of intensive rearing; impact on habitats and species. To note that areas of environmental risk are highly geographically variable. Guidance should be sought from the relevant competent national or regional authority to identify areas or issues of importance and relevance within the area or project concerned. |
| | | Such incurance represents an | Directly eligible | The specific activity or activities |
| 2.2.1 Providing affordable insurance products | Providing affordable insurance products to increase climate resilience: weather insurance | Such insurance represents an important element for climate change adaptation since it does not | Directly eligible | The specific activity or activities being insured must meet the DNSH criteria for those activities. |
| to increase climate resilience of agricultural activities | products to protect against flooding or extreme weather events; agricultural crop insurance to protect against drought, flood; | only support risk sharing but is also working throughout the risk management cycle (identify, analyse, plan, implement and evaluate) and | | That is, the non-life insurer (i.e. the primary insurance product provider) is required to validate that the activity and/or asset being insured |

| Macro Sector - 2.3 | agricultural asset insurance; livestock insurance; aquaculture production insurance; tourism safety insurance. Construction | the disaster management cycle (prevent and protect, prepare, respond and recover). | | is compliant with the relevant DNSH thresholds for the activity under cover. |
|--|--|--|--|---|
| 2.3.1 Construction of climate-resilient warehouse and storage systems for agricultural buffer stocks as a measure to improve disaster risk preparedness and management | Construction and operation flood- proof warehouses and storage systems for agricultural buffer stocks. The warehouse and storage system should be up to local climate resilience standards. | General principles related to the construction of new buildings applies | Meet local climate-resilient standards | The main potential for significant harm to the other environmental objectives associated with the construction of new buildings is determined by: > Excessive energy consumption and operational carbon emissions; > Excessive water consumption due to inefficient water appliances; > Landfill and/or incineration of construction and demolition waste that could be otherwise recycled/reused; > Presence of asbestos and/or substances of very high concern in the building materials; > Presence of hazardous contaminants in the soil of the building site; > Inappropriate building location: impacts on ecosystems if built on greenfield and especially if in |
| 2.3.2 Construct physical structures and install equipment to protect the livestock against climate stress | Construct physical structures and install equipment to protect the livestock against heat stress (e.g. adequate cooling, air flow, evaporative systems, water misting and ventilation); elevated livestock shelters (e.g. raised foundations); protection of livestock against heat stress (e.g. shade screens or shade cloth structures). | | Directly eligible | |
| 2.3.3 Construction and maintenance of flood and management measures for | Construction and maintenance of flood and coastal erosion management measures for existing tourism and agricultural facilities. (e.g. install flood defences, increase | | Directly eligible | |

| existing | drainage capacity, diversion of flood | a conservation area or high |
|--------------|---------------------------------------|------------------------------|
| agricultural | flows away from areas at risk, flood | biodiversity value area; |
| facilities | resilient building materials, | Indirect damage to forest |
| | sustainable drainage systems, raise | ecosystems due to the use of |
| | level of structures). | timber products originating |
| | | from forests that are not |
| | | sustainably managed. |

1.3 Other Green Objectives

| Activity Macro Sector - 3.1 | Description Agriculture | Principle | Metric and Threshold | Do No Significant Harm |
|---|---|--|-------------------------------------|------------------------|
| 3.1.1 Replacement of synthetic fertilizers, including organic or green | Replace synthetic fertilizers with | Therefore, reducing the emissions from the manufacturing activity itself | Replacement of synthetic fertilizer | - |
| Macro Sector - 3.2 | Manufacturing | | | |
| 3.2.1 Plastic recycling, remanufacturing and repurpose | Establishment and operation of plastic collection and recycling facilities that reuse, remanufacture and repurpose the plastics up to local industrial and environmental standards. | Mechanical recycling activities only. | Directly eligible | - |

| <u>Macro Sector</u> - 3.3 \ | Macro Sector – 3.3 Water supply, sewerage and waste management | | | | | |
|---|--|---|---|--|--|--|
| 3.3.1 Retrofit of existing water supply infrastructure | Retrofit of existing water supply infrastructure that reaches at least 20% water savings per unit of service compared to a documented local baseline. | - | At least 20% water savings per unit of measure compared to baseline | - | | |
| 3.3.2 Wastewater treatment of major industries | Construction and operation of wastewater treatment facilities for major water polluting industries, such as papermaking, coking, nitrogen fertilizers, non-ferrous metals, printing and dyeing, agricultural and side-line food processing, raw pharmaceutical ingredient manufacturing, tanning, pesticides, electroplating;. For example, the treatment of phosphate ore, phosphorus chemical industry, phosphogypsum storages, and comprehensive utilization and trading of phosphogypsum, construction and operation of wastewater facilities in industries containing phosphorus pesticides, etc. emphasise agricultural production (e.g. coffee) | Net GHG emission reduction through centralization of wastewater treatment thus substituting decentralized sanitation systems with higher GHG emissions. | Meet local wastewater treatment standards | The main potential significant harm linked to this activity is related to: - emissions to water from wastewater treatment; - combined sewer overflow in case of heavy rainfall; - sewage sludge treatment; - possible detrimental effects to ecosystems | | |
| <u>Macro Sector</u> – 3.4 l | СТ | | | | | |
| 3.5.1 Application of information systems, technology, and | Application of information systems, technology, and instruments deployed for measuring, tracking, and reporting physical and chemical | - | Directly eligible | Activities falling in this category are mostly based on small-scale data processing and storage, with negligible physical impacts. | | |

| instruments | indicators of the water body to |
|----------------------|---|
| deployed for | achieve sustainable fishery and |
| measuring, | aquaculture management, water- |
| tracking, and | related ecosystem restoration, and |
| reporting physical | disaster resilience. This could include |
| and chemical | systems with drones, autonomous |
| indicators of the | sailing vessels, autonomous |
| water body to | underwater vehicles, and ocean |
| achieve | buoys, among other technologies. |
| sustainable fishery | Smart systems for agriculture |
| and aquaculture | (sensors, drones, etc) |
| management, | · · · · · · |
| water-related | |
| ecosystem | |
| restoration, and | |
| disaster resilience. | |

Annex - Screening criteria for DNSH for climate change adaptation

I. Criteria

New activity and/or activity upgrading or altering existing assets or processes The physical climate risks that are material to the activity have been identified from those listed in the table in II Classification of climate-related hazards of this Appendix by performing a robust climate risk and vulnerability assessment. The assessment is proportionate to the scale of the activity and its expected lifespan, such that:

a) for investments into activities with an expected lifespan of less than 10 years, the assessment is performed, at least by using downscaling of climate projections;

b) for all other activities, the assessment is performed using high resolution, state-of-the-art climate projections across a range of future scenarios consistent with the expected lifetime of the activity, including, at least, 10 to 30 years climate projections scenarios for major investments.

The economic operator has developed a plan to implement adaptation solutions to reduce material physical climate risks to the activity. Those adaptation solutions do not adversely affect the adaptation efforts or the level of resilience to physical climate risks of other people, of nature, of assets and of other economic activities and are consistent with local, sectoral, regional or national adaptation efforts.

For activity upgrading or altering existing assets or processes, the adaptation solutions identified need to be implemented within five years from the start of the activity.

II. Classification of climate-related hazards

The climate-related hazards considered are limited to the potential occurrence of a weather and climate-related natural physical event or trend. The climate-related hazard classification comprises four major hazard groups, with hazards related to water, temperature, wind, and mass-movements. Climate risk hazards under different climate scenarios and for different areas can be identified using the risk tool within the Council for Scientific and Industrial Research's GreenBook. All groups include acute (extreme) and chronic (slow-onset) hazards, as adaptation must account for both rapid as well as gradual changes in the weather and climate to take the appropriate adaptation measures and avoid maladaptation.

This analysis focusses on the most important or significant hazards and is designed to guide the user to consider the most salient physical risks when mapping the sensitivities of a given sector.

All secondary hazards resulting from climate-related hazards (including but not limited to chemical, biological, ecological and epidemiological hazards) are excluded. It is however advisable to assess the risk of such secondary hazards and consider measures to address them for each economic activity.

| Climate Related | Temperature | Wind-related | Water-related | Solid mass- |
|-----------------|-------------|--------------|---------------|-------------|
| Hazard Type | Related | | | related |

| | Changing temperature (air, water) | Changing wind patterns | Changing precipitation patterns and types (rain, hail, snow/ice) | Coastal erosion |
|---------|---|--|--|------------------|
| Chronic | Heat stress | | Precipitation and/or hydrological variability | Soil degradation |
| | Temperature variability | | Ocean acidification | Soil erosion |
| | | | Saline intrusion | Solifluction |
| | | | Sea level rise | |
| | | | Water stress | |
| | Heat wave | Cyclone, hurricane, typhoon | Drought | Avalanche |
| Acute | Cold wave/frost | Storm (including blizzards, dust and sandstorms) | Heavy precipitation (rain, hail, snow/ice) | Landslide |
| | Wildfire/veldfire | Tornado | Flood (coastal, fluvial, ground water) | Subsidence |
| | | | Glacial lake outburst | |



ABOUT THE GLOBAL GREEN GROWTH INSTITUTE

The Global Green Growth Institute was founded to support and promote a model of economic growth known as "green growth", which targets key aspects of economic performance such as poverty reduction, job creation, social inclusion, and environmental sustainability.



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