# COMPARISON STUDY BETWEEN THE COLOMBIAN AND EU TAXONOMIES









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#### **List of abbreviations**

**AFOLU** Agriculture, Forestry and Other Land Use **Climate Bonds** Climate Bonds Initiative **CSDDD** Corporate Sustainability

Due Diligence Directive

**CSRD** Corporate Sustainability Reporting Directive

**DANE** Department of Statistics of Colombia

**DNP** National Planning Department

**DNSH** Do no significant harm

**EU** European Union

**GDP** Gross domestic product

**GHG** Greenhouse Gas

**HLEG** High-Level Expert Group

**IFC** International Finance Corporation

**ILO** International Labour Organisation

**ISIC** International Standard Industrial Classification

**MADS** Ministry of Environment and Sustainable Development

MHCP Ministry of Finance

MRV Measurement, Reporting, and Verification

MS Minimum Safeguards

**NACE** Nomenclature generale des Activites

economiques dans les Communautes Europeennes – Statistical Classification of Economic Activities in the European Community

**OECD** Organisation for Economic Cooperation and Development

**SISCLIMA** National Climate Change System of Colombia

**SFC** Colombian Superintendency of Finance **SFDR** Sustainable Finance Disclosure Regulation **TSC** Technical Screening Criteria

#### Disclaimer

This publication was funded by the European Union. Its contents are the sole responsibility of Climate Bonds Initiative and Ambire Global and do not reflect the views of the European Union. This report presents a technical comparison between the Colombian Green Taxonomy and the EU Taxonomy with no legal effect. The findings do not represent either a common or a single taxonomy, nor do they represent a view of the equivalence between the two initiatives. This report represents the comparison of the current version of each taxonomy as of June 2023 when the report was developed, however, as taxonomies may update their

technical criteria, the report should be updated respectively. The present report does not include the European Commission Environmental Delegated Act adopted on 27 June 2023. The views and findings expressed in the current report are the author's own.

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<sup>\*</sup>Commission Delegated Regulation of 27.6.2023 supplementing Regulation (EU) 2020/852 of the European Parliament and of the Council by establishing the technical screening criteria for determining the conditions under which an economic activity qualifies as contributing substantially to the sustainable use and protection of water and marine resources, to the transition to a circular economy, to pollution prevention and control, or to the protection and restoration of biodiversity and ecosystems and for determining whether that economic activity causes no significant harm to any of the other environmental objectives and amending Delegated Regulation (EU) 2021/2178 as regards specific public disclosures for those economic activities, C(2023) 3851 final.

#### **Report Summary**

The purpose of this report is to provide a comparison between the EU and Colombian Green Taxonomy to bring clarity and transparency to EU and international investors about investments that could be considered green in both jurisdictions. This aims to lower transaction and research costs for international and EU investors, which will facilitate cross-border financial flows between the EU and Colombia to help achieve a green and sustainable transition.

This assessment has benefitted from resources including the Colombian Green Taxonomy Tool published by the Colombian Superintendency of Finance (SFC) and the Ministry of Finance (MHCP), as well as the South African Green Taxonomy comparison report developed by the European Commission and the South Africa National Treasury. This activity is part of the European Union Climate Dialogues Project (FUCDs).1

The review contains a side-by-side comparison of the key taxonomy elements, their development process, and their governance mechanisms. The analysis of technical screening criteria of the economic activities is based on the matching of 51 economic activities from the Colombian Green Taxonomy with 74 economic activities covered by the EU Taxonomy. It also covers an in-depth comparison of the Do No Significant Harm (DNSH) and Minimum Safeguards (MS) criteria.

A key finding from this review is that both taxonomies have a high degree of similarity with some exceptions that mainly relate to the regional context (e.g., the Colombian Green Taxonomy specifically addresses three land use sectors, two of which, agriculture and livestock, are not yet addressed in the EU Taxonomy). Both taxonomies also identify sectors and activities relevant to decarbonisation given its substantial contribution to climate change mitigation.

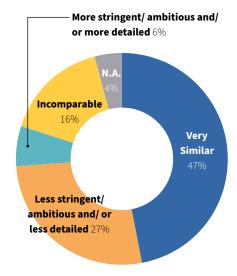
In terms of substantial contribution to climate change adaptation, only the EU Taxonomy addresses this objective, which the Colombian Green Taxonomy is yet to develop. In the Colombian Green Taxonomy, the climate adaptation objective is addressed in two ways. First, as an overall co-dependent objective substantial contribution to climate change objectives for implementing sustainable management and best practices in land use to Do No Significant Harm (DNSH) to other environmental objectives and include requirements for activities to adhere to minimum safeguards (MS).

The overall results show that the Technical Screening Criteria (TSC) defined for the substantial contribution to climate change mitigation are very similar for 47% (24 activities) of all matched economic activities. The sectors with the most similarities include Energy and Manufacturing. For example, in the Energy sector, the TSC are similar for activities such as: electricity generation from solar photovoltaic power, concentrated solar power, wind power, ocean energy, hydroelectric power, and geothermal energy. For the Manufacturing sector, the TSC for manufacture of low-carbon technologies and the components for the manufacturing of cement, aluminium, iron, and steel are also very similar.

Colombia's TSC are less ambitious for 27% (14 activities) of the economic activities assessed: involving six activities in the water and waste sectors, and a total of eight activities within the Energy, Transport, ICT and Construction sectors. Only 6% (3) of the economic activities in the Colombian Green Taxonomy have more ambitious or stringent criteria than those indicated in the EU taxonomy, specifically in the Waste sector: collection and separate transportation of

throughout the principle of DNSH for activities with mitigation. Second, as an independent objective that is integrated with other environmental sectors. At the same time, both taxonomies ensure

Average proportion of categories for the comparison of TSC of climate change mitigation between the Colombian and EU Taxonomies



Source: Climate Bonds Initiative

non-hazardous waste in the segregated fraction at source, composting of organic waste, and recovery of non-hazardous waste material.

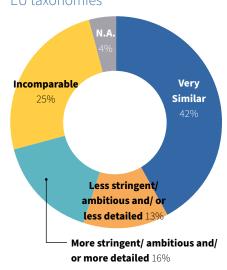
Due to the different approach adopted by each TSC, it is not possible to compare 16% of the matching activities which lie in the Forestry sector, where the Colombian Green Taxonomy uses a best practice focused pathway for their TSC to address the five environmental objectives in a transversal manner. In contrast, the EU Taxonomy focuses on a calculation of carbon stocks and the requirement to include a forest management plan involving some sections that are not required in the Colombian Green Taxonomy (i.e., climate benefit analysis, guarantee of permanence, audit, and group assessment).

Additionally, 4% (two activities) of the Colombian Green Taxonomy were not included in the analysis contained in this document because they are not included in the EU Taxonomy: Energy production from non-recyclable waste fractions or thermal treatments (RC6), and investments for efficient efficient water use (A4). These activities are labelled N/A in the table 1. Likewise, the EU taxonomy has 20 activities that could not be matched. These include new transition activities in the energy sector associated with the use of gaseous fossil fuels for power generation and nuclear energy which are activities not covered in the Colombian Green Taxonomy. Also, the EU Taxonomy addresses more activities in the Manufacturing sector such as carbon black, soda ash, nitric acid, and anhydrous ammonia manufacturing; activities related to low-carbon airport infrastructure and restoration of wetlands; and research, development, and innovation for direct air capture of CO2, which are not yet developed in the Colombian Green Taxonomy.

Sector	Incompa- rable	Less stringent/ ambitious and/or less detailed	More stringent/ ambitious and/or more detailed	Very similar	N/A*	Total activities
Energy	0	4	0	14	0	18
Construction	0	2	0	1	0	3
Waste	0	3	3	1	1	8
Water	0	3	0	0	1	4
Transport	2	1	0	2	0	5
ICT	1	1	0	0	0	2
Manufacturing	1	0	0	6	0	7
Forestry	4	0	0	0	0	4

<sup>\*</sup>Activities that are not covered by both taxonomies are excluded from the analysis.

# Average proportion of categories for the comparison of DNSH of climate change mitigation between the ColombiaN and EU taxonomies



Source: Climate Bonds Initiative

biodiversity

prevention

Circular economy

Pollution control and

Regarding DNHS criteria results, 42% (106 DNSH criteria) are very similar among both taxonomies. The sectors with the most similarities include Energy and Waste. For example, in the Energy sector, DNSH criteria on conservation of ecosystems and biodiversity, on water management, on circular economy and on pollution control and prevention are similar for activities such as: electricity generation from solar photovoltaic power, concentrated solar power, ocean energy, transmission and distribution of electricity from renewable sources and storage of thermal energy. For the Waste sector, DNSH criteria are also similar in activities as sewage sludge treatment, separate collection and transport of non-hazardous waste in the segregated fraction at source, and composting of organic waste, just to mention a few.

Table 2 Overall results by DNSH					
DNSH	Incomparable	Less stringent/ ambitious and/or less detailed	More stringent/ ambitious and/or more detailed	Very similar	N/A*
Climate change adaptation	45	4	0	0	2
Conservation of ecosystems and	6	3	6	34	2

3

4

6

6

6

15

3

25

7

37

14

21

2

2

2

\* DNSH labelled with N/A belong to the activities that are only covered by the Colombian Green Taxonomy.

Colombian Green Taxonomy DNSH are more stringent/ambitious and/or more detailed for 16% (41 DNSH criteria), mainly the one related to circular economy due to the EU Taxonomy currently not including an Appendix or generic criteria for circular economy. However, the EU Taxonomy has specific DNSH criteria on circular economy for certain manufacturing and energy activities. On the other hand, Colombian Green Taxonomy DNSH are less strict/ambitious and/or less detailed for 13% (34 DNSH criteria), especially for the DNSH on pollution control and prevention.

Due to that some DNHS are addressed differently, 25% (64 DNSH criteria) are incomparable, mostly related to climate change adaptation. For example, regarding the specific DNSH on adaptation to climate change, only the activities in the construction sector in the Colombian Green Taxonomy requires to implement measures to increase their resilience to extreme weather events (including floods and flooding) and adaptation to future temperature rises in terms of internal comfort conditions (possible use of artificial air conditioning systems). In other sectors in the Colombian Green Taxonomy only mentions a generic DNSH to climate change adaptation, while the EU Taxonomy goes further on this point and mentions a classification of climate-related hazards so as to not do any harm (criteria set out in Appendix A - Generic criteria for DNSH to climate change adaptation).

Finally, 4% (10 DNSH criteria) are labelled as N/A because these specific requirements correspond to the activities that were also labelled as such.

## 1. Background information

## Overview of development process, governance, and legal structure

#### Colombia

After recognising the imperative of investing in sustainable and low-carbon technologies, services, and infrastructure to achieve



climate change and biodiversity goals, Colombia has made notable strides in creating a conducive environment for sustainable finance through various initiatives, including the SISCLIMA Financial Management Committee, the National Climate Finance Strategy, Green Protocol, the Responsible Investment Task Force, and the creation of the Colombian Green Taxonomy. These frameworks support public and private actors, both domestically and internationally, in making environmentally sustainable investments in the country. By prioritising green investments, Colombia aims to enhance its competitiveness, foster climate-resilient development, achieve low-carbon growth, and fulfil its commitments under international agreements.2

The governance structure for developing the Colombian Green Taxonomy comprised three levels: the Supervisory Committee, coordinators, and technical experts. The Supervisory Committee, consisting of the Colombian Superintendency of Finance (SFC), the Ministry of Finance (MHCP), the National Planning Department (DNP), the Department of Statistics of Colombia (DANE), and the Ministry of Environment and Sustainable Development (MADS), oversaw and guided the entire taxonomy development process. These government institutions collaborated to establish a common language and classification system for green investments in Colombia concerning policies, regulations, international taxonomies, and the investment tracking system.

To coordinate the construction of the Colombian Green Taxonomy, the five entities formed a joint working group called the Institutional Taxonomy Supervisory Committee. This committee identified the country's environmental objectives and priorities in alignment with Colombia's commitments, strategies, and policies in the field. The Colombian financial regulator, SFC, and the Ministry of Finance (MHCP), with support from the coordinators (the World Bank Group and Climate Bonds), took the lead in developing the current version.

The SFC coordinated the taxonomy development for seven economic sectors: Construction, Energy, ICT, Industry, Transport, Water Resources, and Waste while the MHCP was responsible for Agriculture, Forestry and Land Use, referred to as the AFOLU sector. The Supervisory Committee

received assistance from coordinators and consultants throughout the coordination process. In total, 257 technical experts and stakeholders representing 53 entities from the private and public sectors, academia and international organisations participated in the taxonomy process.

The Colombian Green Taxonomy was released by MHCP on 13 April 2022 to provide guidelines for voluntary use and currently lacks a legal status. However, there are regulations in place to support its implementation, although these do not impose specific disclosure obligations. The SFC has issued external circulars (or rules) that encourage the use of the taxonomy for labelling green bonds, ESG portfolio labelling and voluntary labelling for pension funds. Although market participants are not obliged to issue green bonds or label these other products, when they do, these can be aligned with the Colombian Green Taxonomy.

The only official regulatory framework for the adoption of the Colombian Green Taxonomy is the SFC's External Circular 005 of 20223 which provides instructions for adoption. It allows entities supervised by the SFC the option of using the taxonomy for various purposes, including identifying financing and investment opportunities for supporting the transition to a sustainable economy, measuring portfolio alignment with green assets and activities, structuring green products and solutions, and enhancing disclosure and transparency practices. The external circular includes three annexes specifying: the use of the taxonomy for investment portfolios, green bond issuers, and voluntary pension funds.

For green bonds, the circular recommends using the taxonomy for project selection, evaluation, and identifying the use of funds and recipients of proceeds. In the case of voluntary pension funds, if the portfolios are designated with names related to ESG dimensions or sustainability, the pension fund manager must clearly justify such designations using a classification system or a recognised taxonomy. Additionally, the circular suggests classifying portfolio assets based on relevant factors, including alignment with a recognised taxonomy, if ESG strategies and factors are incorporated into the investment policy.

Recently, the SFC introduced Resolution 0586 of 2023<sup>4</sup>, aiming to incentivise the issuance of thematic instruments and promote the utilisation of the Colombian Green Taxonomy. Under this resolution, issuances of green credit instruments can be exempt from offering fees, subject to certain conditions. These conditions include the issuer's compliance with the prospectus requirements and the presence of an external

evaluation that verifies the alignment of the issuer's value with the economic activities or assets with the corresponding eligibility criteria specified in the Colombian Green Taxonomy. Alternatively, compliance with international standards and indicators is acceptable for economic activities or assets not covered by the country's Green Taxonomy.

#### **European Union**

The development of the EU Taxonomy for sustainable activities involved multiple stages and governance structures. The process began with the establishment



of the High-Level Expert Group (HLEG) in 2016, consisting of senior experts from civil society, the finance sector, academia, and observers from European and international institutions. The HLEG provided advice to the European Commission informing the adoption of an "Action Plan on Financing Sustainable Growth" 5, that set out a comprehensive strategy connecting finance with sustainability. In the first action of the 2018 Action Plan, the Commission committed to establish an EU classification system for sustainable activities, the so-called the EU Taxonomy.

Following the HLEG's work, a Technical Expert Group (TEG) was formed in March 2018. The group was comprised of 35 members and observers from civil society, academia, business, and the financial sector. The TEG assisted the Commission in implementing the 2018 Action Plan and developing a series of legislative proposals, including the EU Taxonomy, determining whether an economic activity is environmentally sustainable; an EU Green Bond Standard; methodologies for EU climate benchmarks and disclosures for benchmarks; and guidance to improve corporate disclosure of climate-related information.<sup>6,7</sup>

On June 22, 2020, the EU Taxonomy Regulation was adopted by the European Parliament and Council of the EU, and it entered into force on July 12, 2020. The Taxonomy Regulation establishes a broad framework for the EU Taxonomy, outlining six climate and environmental objectives: (1) mitigating climate change, (2) adapting to climate change, (3) sustainably using and protecting water and marine resources, (4) transitioning to a circular economy, (5) preventing and controlling pollution, and (6) protecting and restoring biodiversity and ecosystems. It also sets out four overarching conditions that an economic activity must meet to qualify as environmentally sustainable: a. contributes substantially to one or more of the environmental objectives; b. does not significantly harm any of the environmental objectives; c. is carried out in compliance with the minimum safeguards; and d. complies with technical screening criteria defined in Commission's Delegated Regulations that complement the Taxonomy Regulation.

To date, under the Taxonomy Regulation, the Commission has adopted a Climate Delegated Act<sup>8</sup> defining technical screening criteria for economic activities substantially contributing to the climate change mitigation and adaptation environmental objectives, which was published in the Official Journal of the EU on 9 December 2021 and is applicable since January 2022. Additionally, in January 2023 a Complementary Climate Delegated Act9 became effective. This was published on July 15, 2022, to incorporate specific nuclear and gas energy activities as transitional activities into the EU taxonomy's list of covered economic activities, under strict conditions. Finally, on June 27, 2023 the Commission officially adopted a Taxonomy Environmental Delegated Act<sup>10</sup>, including a new set of EU taxonomy criteria for economic activities making a substantial contribution to one or more of the non-climate environmental objectives. The Commission has also adopted amendments to the Taxonomy Climate Delegated Act<sup>11</sup>, which expand on economic activities contributing to climate change mitigation and adaptation not included so far, in the manufacturing and transport sectors. The Delegated Acts are currently subject to a scrutiny period by the European Parliament and the Council of the FU.

Guiding principles



Both taxonomies operate in parallel and share similar guiding

principles when defining environmentally sustainable sectors and economic activities. These principles serve as general rules that provide direction and ensure consistency within the established taxonomies or frameworks.<sup>12</sup>

Similary, both taxonomies have a robust and decentralised governance structure that allows for transparency and continuity of all initiatives arising from the development of the taxonomy through the input from appropriate stakeholders. Also, both taxonomies seek interoperability with other taxonomies and frameworks to facilitate cross-border cooperation. The interoperability implies ensuring comparability with other taxonomies by using similar guiding principles and having a similar design of the core taxonomy elements: objectives, classification systems to define sectors and activities, and methodology to define science-based screening criteria using metrics and thresholds with similar approaches.

That said, both taxonomies lean towards generating a substantial contribution to climate change mitigation and address similar environmental objectives that are well defined and which ensure that eligible activities do not cause significant harm. The EU Taxonomy also makes a substantial contribution to climate change adaptation, with the adoption in 2023 of a delegated act approving a new set of EU Taxonomy criteria for economic activities making a substantial contribution to one or more of the non-climate environmental objectives: sustainable use and protection of water and marine resources, transition to a circular economy, pollution prevention and control, protection and restoration of biodiversity and ecosystems. The Colombian Green Taxonomy also addresses five different environmental objectives as a substantial contribution on land use sectors.

In addition, both taxonomies seek to ensure that the technical screening criteria are based on science to ensure a credible transition of the hard-to-abate sectors. The taxonomy development process engaged with technical and sectoral experts and involved multiple stakeholders through a public consultation phase. Finally, both taxonomies indicate the need for periodic review to adapt the document to changes in policies and technologies that point towards best practices available in the market.

Overall, the parallel nature of these taxonomies and their shared guiding principles ensures a consistent approach in defining and promoting environmentally sustainable economic activities.

By adhering to these guiding principles, Colombia and the LAC region aim to develop robust and effective taxonomies that align with global standards, promote sustainability goals, and provide a transparent and accountable framework for sustainable finance.

## 2. Comparison of key taxonomy elements

#### **Objectives**

Both taxonomies address similar climate and environmental objectives that respond to the key national and international environmental/climate commitments and targets (such as those of the Paris Agreements, SDGs and NDCs). The objectives of both taxonomies are described below:

Substantial contribution to climate change mitigation is addressed as the main objective for the selection of seven economy sectors in the Colombian Green Taxonomy, which includes 47 activities/assets (excluding the AFOLU sector); as well as for the selection of nine economic sectors in the EU Taxonomy, which include 94 activities/assets.13

In addition, the Colombian Green Taxonomy also established an innovative way to address five crosscutting environmental objectives as a substantial contribution in three land-use sectors: Forestry, Agriculture and Livestock, throughout the implementation of sustainable management and best practices.14 These three sectors are highly relevant in the Colombian Green Taxonomy and are addressed differentially to the other sectors, given that they contribute to 59% of the country's GHG emissions.

In both taxonomies, the sectors and activities selected under substantial contribution to climate change mitigation must also comply with the assessment of DNSH to other environmental objectives, including adaptation objectives, as well as ensure compliance with the minimum safeguards requirements.15

Illustration 1: Environmental objectives of the EU and Colombian taxonomies

Colombian Green

#### **EU taxonomy objectives** Taxonomy objectives Climate change mitigation Climate change mitigation Climate change adaption Climate change adaption **Ecosystem and biodiversity** Protection and restoration of biodiversity and ecosystems conservation Sustainable use and protection **Water management** of water and marine resources Transition to a circular economy Soil management **Pollution prevention** Circular economy and control **Pollution prevention** and control

Source: author, based on both taxonomies

In terms of substantial contribution to climate change adaptation, the EU Taxonomy addresses the development of this objective for 13

Illustration 2: Linking the mitigation objective to the economic sectors of the EU and Colombian taxonomies

#### **Climate change mitigation Colombian Green Taxonomy EU Taxonomy Construction and real estate** Construction **Energy Energy Transport Transport** Water supply, sewerage, waste management and remediation Water supply and treatment **Waste management and** Manufacturing emission capture **Forestry Manufacturing** Information and communication Information and communication **Environment protection** and restoration activities 47 activities or assets Professional, scientific and technical activities 94 activities or assets

Source: author, based on both taxonomies

economic sectors, while the Colombian Green Taxonomy is yet to develop this objective. The Colombian Green Taxonomy addresses the adaptation objective in two ways. First, as an overall co-dependent objective throughout the principle of DNSH for activities with substantial contribution to climate change mitigation. Second, as an independent objective integrated with other environmental objectives for implementation of sustainable management and best practices in the Agriculture, Forestry, and Livestock sectors.

The sectors and activities selected under substantial contribution to climate change adaptation in the EU Taxonomy must also comply with the assessment of DNSH to the other environmental objectives, including climate change mitigation, as well as ensure compliance with Minimum Safeguards (MS) requirements.

Finally, both the EU and the Colombian government authorities have been working on the development of other environmental objectives. For example, on 27 June 2023, the European Commission adopted a delegated act with TSC for economic activities substantially contributing to the four environmental objectives under the Taxonomy Regulation ("Taxonomy Environmental Delegated Act"10), while the SFC in Colombia has explored the possibility of developing a biodiversity taxonomy. 16,17

<sup>\*</sup>The Colombian Green Taxonomy additionally recognises support activities, called complementary individual measures. Such measures associated with the creation of intangible assets, innovation, research, and development that facilitates compliance with the eligibility criteria in the different economic sectors are eligible.

# Illustration 3: Linking the adaptation objective to the economic sectors of the EU and Colombian taxonomies

#### **Climate change adaptation**

#### **EU Taxonomy**

**Construction and real estate** 

**Energy** 

**Transport** 

Water supply, sewerage, waste management and remediation

Manufacturing

**Forestry** 

Information and communication

**Environment protection and restoration activities** 

#### **Colombian Green Taxonomy**

Not developed/finalised

Professional, scientific and technical activities

Financial and insurance activities
Education

Human health and social work activities

Arts, entertainment and recreation

101 activities or assets

Source: author, based on both taxonomies

#### Scope

Both taxonomies cover economic sectors and activities that are relevant for decarbonisation, with climate change mitigation being one of the primary objectives for defining sectors and activities with substantial contribution.

The sectors and the number of activities covered by both the Colombian and EU Taxonomies for climate change mitigation are presented below:

Both taxonomies cover a similar range of economic activities across sectors for climate change mitigation, with some exceptions. The EU Taxonomy covers 94 economic activities from nine economic sectors. In comparison, the Colombian Green Taxonomy covers 47 economic activities from seven economic sectors

for climate change mitigation and 11 further activities from three land use sectors, in which environmental objectives other than climate change mitigation were also covered. Hence, the Colombian Green Taxonomy covers a total of ten sectors with 58 economic activities.

Differences in the total number of activities and sectors measured by the two taxonomies result from the consolidation of some activities and sectors. To give an example, the urban public transportation activity in the Colombian Green Taxonomy consolidates five activities, which are listed individually within the EU Taxonomy, according to transport mode. Additionally, the activity of energy production from non-recyclable waste fractions (thermal treatment) and the agriculture and livestock sectors are not yet covered.

Table 2. Number of economic activities by sector in both taxonomies

Colombian Green Taxonomy		EU Taxonomy	
Sector	Number of economic activities	Sector	Number of economic activities
Energy	18	Energy	31
Construction	3	Construction and real estate	7
Waste management and	8	Water supply, sewerage,	12
emissions capture		waste management and	
Water supply and treatment	4	remediation	
Transport	5	Transport	17
ICT	2	ICT	2
Manufacturing	7	Manufacturing	17
Forestry	5	Forestry	4
Agriculture	5	Environmental protection and restoration activities	1
Livestock	1	Professional, scientific and technical activities	3

by the EU Taxonomy. Similarly, some activities contained in the EU Taxonomy are not included in the Colombian Green Taxonomy such as:

- Generation of electricity from nuclear energy and fossil fuels.
- Electricity generation, production of heat/ cool, cogeneration of heat/cool and power from renewable and low-carbon gases and liquid fuels, including the transmission and distribution networks for renewable and lowcarbon gases and liquid fuels.
- Restoration of wetlands, and activities in the professional, scientific, and technical activities sector. Colombia's Taxonomy does not specifically establish a sector for professional, scientific, and technical activities; however, it is covered transversally. Some complementary measures associated with the creation of intangible assets, innovation, research and development, which facilitate compliance with the eligibility criteria in the different economic sectors are considered eligible. Nevertheless, the Colombian Green Taxonomy lacks the specific eligibility criteria provided by the EU Taxonomy, which includes three activities in this sector:
- Manufacturing of carbon black, soda ash, nitric acid and anhydrous and ammonia,
- Low carbon airport infrastructure,
- Research, development, and innovation for direct air capture of CO<sub>2</sub>.

Finally, both taxonomies have a similar screening approaches:

# 1. Substantial contribution to one of the objectives defined in the taxonomy. Activities

that make a substantial contribution define their eligibility based on TSC, which include qualitative or quantitative metrics and thresholds. For example, in both taxonomies, the hydrogen production activity must meet a quantitative threshold based on the  $CO_2$ e intensity of the activity, while the eligibility of activities such as composting is determined according to a list of requirements that ensure the effectiveness of the process.

## 2. Compliance requirements for DNSH to other environmental objectives. Furthermore,

activities must comply with the DNSH requirements for other environmental objectives defined in the taxonomies. Both taxonomies have generic DNSH requirements for all activities and specific requirements for certain activities. When an activity does not have specific requirements then generic DNSH requirements must be followed.

**3. Avoid negative social impact.** Both taxonomies require that the activity with substantial contribution does not generate a negative social impact through minimum safeguards (MS) criteria.

Additionally, the Colombian Green Taxonomy has certain requirements associated with the country's minimum enabling regulations and the inclusion of an environmental land management plan. Furthermore, general and sectoral eligibility criteria must be met to deem the activity eligible for land use sectors.

# Activities covered and prioritisation of sectors

Industrial codes were used in both taxonomies to map sectors and activities (ISIC code for the Colombian Green Taxonomy and NACE for the EU Taxonomy). The Colombian Green Taxonomy also evaluated other taxonomies and frameworks from the EU and Climate Bonds, and compared them with the national Measurement, Reporting, and Verification (MRV) system to identify the list of sectors and activities.

After identification, both taxonomies prioritised sectors with high climate change mitigation need and potential, based on the assessment of quantitative data. The selection of sectors under the EU Taxonomy for climate change mitigation objective was based on emissions data, where the contribution of GHG emissions per sector and their potential to reduce emissions was analysed.

Additionally, the Colombian Green Taxonomy integrated both GHG emissions data and economic parameters such as the GDP contribution of each sector, use of proceeds, and capital flows to validate the sector prioritisation.

Both taxonomies also included enabling sectors that are necessary to achieve decarbonisation (e.g., activity of data-driven climate solutions under the ICT sector).

Furthermore, both taxonomies address activities that have a viable transition pathway to achieve the taxonomy ambition over a defined period. These activities have a potential technological pathway for significantly improving their performance with an urgent transition to prevent and avoid negative damage, which is the case for activities in the manufacturing sector such as cement and aluminium manufacturing.

# 3. Comparison of Technical Screening Criteria, Do No Significant Harm, and Minimum Safeguards

#### Methodology

The comparison of TSC, DNSH, and MS was made by matching the economic activities of the Colombian Green Taxonomy with the corresponding activities in the EU Taxonomy for each of the sectors. Within each matched sector, similar activities based on their names and descriptions were identified in both the taxonomies. Certain activities had more than one match that was considered for comparison.

The TSC comparison was carried out for both qualitative and quantitative thresholds of the two taxonomies. Both specific requirements (wherever applicable) and generic requirements were used for DNSH comparisons, while assessment of the requirements for both taxonomies was carried out for MS.

Both taxonomies refer to specific regulations in respective jurisdictions, however, a detailed comparison of related laws is outside the scope of this study. The assessment focuses on the climate change mitigation objective because the Colombian Green Taxonomy still does not address climate change adaptation as a substantial contribution. The comparison exercise mapped the analysis into the following scenarios:

#### **Analysis by sector**

#### **Energy:**

**TSC assessment**: In general, all 18 energy sector activities within the Colombian Green Taxonomy can be mapped to the 21 activities within the EU



Taxonomy. For approximately 78% of the matched economic activities (14 out of 18), the criteria of both taxonomies are very similar, while 22% (4 out of 18) of the Colombian Green Taxonomy criteria are less stringent/ambitious and/or less detailed compared to the EU Taxonomy. However, the EU Taxonomy has included specific nuclear and gas energy activities in the list of economic activities that are not included in the Colombian Green Taxonomy. The EU activities related to renewable non-fossil gaseous and liquid fuels (4.7 Electricity generation from renewable non-fossil gaseous and liquid fuels, 4.19 Cogeneration of heat/cool and power from renewable non-fossil gaseous and liquid fuels, and 4.23 Production of heat/cool from renewable non-fossil gaseous and liquid fuels) were not considered in the analysis because they do not include electricity generation from the exclusive use of biogas and bioliquid fuels.

**DNSH assessment**: For all activities, the DNSH criteria on climate change adaptation is incomparable due to the different approaches adopted by each taxonomy. The Colombian Green Taxonomy does not address the adaptation objective while the EU Taxonomy covers a classification of climate-related hazards to economic activities. For the conservation of ecosystems and biodiversity DNSH, 78% of the activities have very similar criteria, while 22% of those in the Colombian Green Taxonomy are more ambitious. For water management, 84% are very similar and 16% are less stringent/ ambitious and/or less detailed. In circular economy, 50% are very similar and the other half are more stringent/ambitious and/or more detailed because the Colombian Green Taxonomy has specific requirements. In pollution control and prevention, 61% are similar and 39% are less stringent/ambitious and/or less detailed. Finally, for the one incomparable activity, all criteria were incomparable.

#### **Construction:**

**TSC assessment**: All three construction sector activities within the Colombian Green Taxonomy can be matched with the seven construction



activities and one energy sector activity in the EU Taxonomy (4.16 Installation and operation of electric heat pumps). Only one economic activity has very similar criteria, while the remaining two are less strict/environmental and/or less detailed. This is a consequence of an EU requirement for an official energy performance certificate and the fact that the EU taxonomy is based on near-zero energy building (NZEB) requirements.

The Colombian Green Taxonomy considers optional, complementary individual measures that contribute to achieving the eligibility criteria for activities involving the construction and renovation of new buildings at the building level. Although the EU Taxonomy has individual activities that cover similar aspects, the Colombian Green Taxonomy is more stringent/environmental and/or detailed because it provides more individual measures.

DNSH assessment: All activities in the Colombian Green Taxonomy relating to adaptation to climate change are less stringent, ambitious, or less detailed. The DNSH criteria are incomparable for conservation of ecosystems and biodiversity. The first two activities in Colombia's taxonomy have criteria relating to water management, circular economy, and pollution control and prevention that are less stringent, ambitious, or less detailed. However, the criteria relating to both circular economy

# Figure 1: Levels of comparison between the Colombian and EU taxonomies



#### INCOMPARABLE

Neither of the two taxonomies has any similar number of requirements or thresholds in common



# LESS STRINGENT/ AMBITIOUS AND/ OR LESS DETAILED

Colombian Green
Taxonomy criteria
are less stringent/
ambitious and/
or less detailed as
demonstrated by
fewer or less detailed
requirements and/or
thresholds



#### MORE STRINGENT/ AMBITIOUS AND/ OR MORE DETAILED

Colombian Green
Taxonomy criteria
are more stringent/
ambitious and/or
more detailed as
demonstrated by
a higher number
or more detailed
requirements and/or
higher thresholds



#### **VERY SIMILAR**

Both taxonomies have a similar number of requirements and similar thresholds



Source: author, based on both taxonomies

and pollution for the third activity, acquisition and ownership of buildings, are more stringent, ambitious, or detailed . This results from specific requirements contained in the Colombian Green Taxonomy pertaining to the recovery of a percentage of the construction materials and compliance with prerequisites established for the construction and renovation of buildings. Although the additional analysis on individual complementary measures presents variations, the criteria are generally very similar, with the exception of the DNSH of climate change adaptation, which is incomparable because of the different approaches adopted by both taxonomies

Waste management and emissions capture:

**TSC assessment**: All but one of the eight activities in the

waste sector of the Colombian Green Taxonomy can be matched with the eight activities in the EU Taxonomy. For approximately 37.5% of the matched economic activities, Colombia's criteria are more stringent/environmental and/ or detailed because there are more requirements relating to activities that facilitate the use and utilisation of biogas, such as dehydration, compression or similar. In contrast, for another 37.5 % of the activities, the Colombian Green Taxonomy criteria are less stringent/ambitious and/or less detailed compared to the EU Taxonomy, which does not allow biogas flaring. The Colombian Green Taxonomy activity relating to artificial capture, transport, and storage or use of GHGs (RC8) is very similar, while activity relating to energy production from non-recyclable waste fractions (thermal treatments RC6) was not considered in the assessment because it is an additional activity for this taxonomy.

**DNSH assessment**: For all activities, the DNSH criteria for climate change adaptation are incomparable as these are addressed differently. Relating to conservation of ecosystems and biodiversity, 86% of the Colombian Green Taxonomy DNSH criteria are very similar while 13% are more stringent/ambitious and/or more detailed. For water management, 100% are very similar. Only one similarity was identified for the circular economy objective, and 86% of the Colombian criteria were more stringent/ ambitious and/or more detailed. On pollution control and prevention, 57% of the activities were assessed as very similar, 29% as more ambitious and/or more detailed and 14% as less stringent/ambitious and/or less detailed compared to the EU Taxonomy.

# Water supply and treatment:

**TSC assessment**: All activities in the water sector of the Colombian Green



Taxonomy are less stringent/ambitious and/ or less detailed compared with four activities within the EU Taxonomy. The Colombian Green Taxonomy activity relating to investments for efficient water use (A4) was not considered in the assessment because it is an additional activity for this taxonomy.

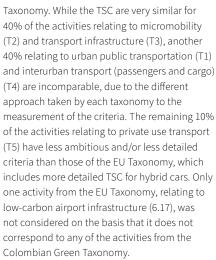
Although in some activities the taxonomies define eligibility criteria for new or existing systems, there are no major similarities. The EU Taxonomy criteria consider average net energy consumption per cubic metre of water supply produced, as well as verification of GHG reductions. In contrast, the EU taxonomy does not differentiate for sewerage systems, while Colombia does and implements qualitative criteria relating to sanitary and combined sewerage systems (A2).

**DNSH assessment**: For all activities, the DNSH criteria on climate change adaptation are incomparable as these are addressed differently. The DNSH criteria relating to conservation of ecosystems and biodiversity, and water management are very similar for three activities. However, the criteria relating to circular economy for three activities were more stringent/ambitious and/or more detailed in the Colombian Green Taxonomy, which has specific requirements related to an appropriate management plan for the disposal and treatment of sludge and waste. The DNSH criteria for pollution control and prevention are quite variable across activities: one is very similar and two are less stringent than the EU Taxonomy.

#### **Transportation:**

TSC assessment: The

Colombian Green Taxonomy has 5 activities for this sector that have equivalence with 16 activities from the EU



**DNSH assessment**: For all the activities, the DNSH criteria of both water management and circular economy are very similar. However, the DNHS criteria in 60% of the activities are incomparable

for pollution control and prevention since both taxonomies have different requirements for the activities related to water transport. For conservation of ecosystems and biodiversity, the DNHS criteria are variable across activities.

#### ICT:

**TSC assessment**: There are two matched activities in this sector for both taxonomies.



The activity relating to data processing, hosting, and related activities (TIC1) can be classified as incomparable since both taxonomies approach the measurement of the TSC differently. The criteria defined by the Colombian Green Taxonomy for the activity relating to data-driven solutions for GHG emissions reductions (TIC2) is less ambitious and/or less detailed than those of the EU Taxonomy, which include a more detailed TSC with recommended guidelines for ICT solutions that calculate life-cycle GHG emissions and net emissions.

**DNSH assessment**: For both activities, the DNSH criteria in the Colombian Green Taxonomy defined for circular economy are less ambitious, or less detailed than the EU Taxonomy, since the Colombian Green Taxonomy addresses these requirements from the generic DNSH. However, the DNSH criteria for pollution control and prevention are more ambitious or more detailed given that the Colombian Green Taxonomy has specific requirements not included in the EU Taxonomy. In both taxonomies, the DNSH criteria for water management and conservation of ecosystems and biodiversity are very similar.

#### **Manufacturing:**

**TSC assessment**: The Colombian Green Taxonomy has seven activities in this sector which can be mapped with 10 activities in the EU

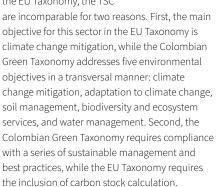


Taxonomy. The TSC for approximately 86% of the Colombian Green Taxonomy activities are very similar to the ones proposed by the EU Taxonomy. The remaining 14% of activities relating to components for the manufacture of organic basic chemicals (M6) have incomparable criteria because the EU taxonomy includes the manufacturing of certain chemicals that are not relevant for Colombia's economy such as HVC, styrene, and aromatics. Furthermore, there are six activities in the EU Taxonomy that do not correspond to any of the activities in the Colombian Green Taxonomy for this sector, which include the manufacture of batteries, other low-carbon technologies, carbon black, soda ash, anhydrous ammonia, and nitric acid.

**DNSH assessment**: The DNSH criteria in the Colombian Green Taxonomy for water management and conservation of ecosystems and biodiversity are very similar for 86% of the activities defined for this sector. However, for circular economy, the DNSH criteria are more ambitious and/or more detailed for 86% of the activities. In contrast, the Colombian Green Taxonomy DNSH criteria for pollution control and prevention are less ambitious, or less detailed for 57% of the activities because they lack the specific requirements contained in the EU Taxonomy.

#### **Forestry:**

**TSC assessment**: Although the four activities in the Colombian Green Taxonomy match the four activities from the EU Taxonomy, the TSC



DNSH assessment: The DNSH criteria for climate change adaptation and pollution control and prevention are less ambitious, or less detailed in the Colombian Green Taxonomy as the EU Taxonomy requires more assessments and controls. However, the DNSH criteria are more ambitious, or more detailed for water management since the Colombian Green Taxonomy requires implementation of practices oriented towards water-use efficiency and water bodies restoration. Although the DNSH criteria are incomparable for circular economy due to the different approaches taken by each taxonomy, they are similar for conservation of ecosystems and biodiversity.

# Minimum Safeguards assessment:

This analysis is general for all sectors and activities since the MS in the taxonomies are addressed in a cross-cutting approach. Although both taxonomies address the MS, Colombia focuses on compliance with six IFC performance standards, without mentioning or adding any relevant regulatory framework or policy in this regard. In contrast, the EU Taxonomy integrates four core topics that are aligned with the standards referenced in Article 18 of the Taxonomy Regulation, 18 which renders the Colombian Green Taxonomy less strict, ambitious, or less detailed.

Both taxonomies adhere to international standards and guidelines for the MS requirements. The Colombian Green Taxonomy considers the IFC Performance Standards while the EU Taxonomy refers to the OECD MNE Guidelines, the UN Guiding Principles on Business and Human Rights (UNGPs) which include the principles and rights set out in the eight fundamental conventions identified in the Declaration of the International Labour Organisation on Fundamental Principles and Rights at Work, and the International Bill of Human Rights. 19,20,21 In addition, the EU Taxonomy is linked to the Sustainable Finance Disclosure Regulation (SFDR)<sup>22</sup>, the Corporate Sustainability Reporting Directive (CSRD)23, and the Corporate Sustainability Due Diligence Directive (CSDDD).24

Both taxonomies assess performance criteria against different topics. The Colombian Green Taxonomy addresses: i. Assessment and management of environmental and social risks and impacts, ii. Labour and working conditions, iii. Community health and safety, iv. Land acquisition and involuntary resettlement, v. Indigenous peoples, and vi. Cultural heritage. While the EU Taxonomy covers: i. Human rights, including workers' rights, ii. Bribery/corruption, iii. Taxation, and iv. Fair competition.

The MS in Colombia are assessed at the economic activity or asset level while the EU applies MS at the economic-activity level, and compliance might be partially assessed at the company level to explain the observance of safeguards at the activity level.

# For more details on the TSCs and DNHSs of each taxonomy, click on the following links:



Colombian: https://www.taxonomiaverde.gov.co/webcenter/ShowProperty?nodeld=/ConexionContent/WCC\_CLUSTER-191401



EU: https://ec.europa.eu/sustainablefinance-taxonomy/taxonomy-compass/ the-compass

## 4. Application and disclosure requirements

#### Colombia

The current implementation of the Colombian Green Taxonomy does not mandate disclosure obligations for corporates



or financial market participants regarding the alignment of their activities and investments with the taxonomy. The guidelines set forth by the financial regulator (SFC) primarily promote the voluntary use of the taxonomy for purposes such as labelling green bonds, identifying potential financing opportunities, assessing portfolio alignment, and improving entity disclosure and transparency practices.

The financial regulator (SFC) issued External Circulars 005 and 008 in 2022, through which (i) the Colombian Green Taxonomy was adopted, and (ii) the minimum information requirements for the issuance of bonds linked to sustainable performance were standardised, establishing the Colombian Green Taxonomy as a nationally recognised classification system.

Colombia's Taxonomy has different potential users such as companies, investors, financial institutions, public and private entities, financial consumers, among other actors. The applications are as follows:

- To facilitate the classification of green activities in financial instruments such as bonds, credit/leasing portfolios, titles derived from securitisation processes, investment funds, investment portfolios and stock market indices, among others.
- To identify risk differentials between green and non-green financial products.
- To manage risks and opportunities that may arise from climate change, for the management of fiduciary business and/or investment portfolios.
- To structure green insurance products that support the adaptation of different sectors to climate change.
- To support the monitoring and tracking of green investments and green public spending that target environmental sustainability goals, as well as the identification of activities with potential and gaps for resource targeting.

Finally, as the adoption of the taxonomy progresses, it will be important to implement the necessary measures to facilitate its application in the financial system and to monitor the development of disclosure requirements for environmental information by entities operating in the country.

#### **European Union**

In the EU, both financial market participants and large companies (including financial and non-financial undertakings)



are required to disclose sustainability aspects on their activities and investments. Article 8 of the Taxonomy Regulation requires companies falling under the scope of the Corporate Sustainability Reporting Directive (CSRD) to disclose the proportion of economic activities that align with the EU Taxonomy. More specifically, large undertakings that are required to publish non-financial information pursuant to the Non-Financial Reporting Directive (NFRD) (amended by the CSRD) shall disclose information to the public on how and to what extent their activities are associated with economic activities that qualify as environmentally sustainable.

The Disclosures Delegated Act, <sup>25</sup> applicable since January 2022, supplements Article 8 of the Taxonomy Regulation specifying the content and presentation of information to be disclosed by financial and non-financial undertakings concerning economic activities under the EU Taxonomy, and further specify the methodology to comply with that disclosure obligation.

In addition, according to Articles 5 and 6 of the Taxonomy Regulation, financial market participants have to disclose how their underlying assets are aligned with the EU Taxonomy if their financial product falls under the disclosure requirements of Article 8 and 9 of the Sustainable Finance Disclosure Regulation (SFDR)

The EU Taxonomy also mandates the use of the criteria when Member States and the Union set out EU or national labels and standards for financial products and corporate bonds, which are then made available to investors as "environmentally sustainable". In this context, the EU Taxonomy is a reference for climate transition and Paris-aligned benchmarks and for the European Green Bond Standard (EUGBS).

More specifically on the EUGBS, the proposal for a Regulation that will create a voluntary high-quality standard for green bonds provides that the standard will be open to companies and public entities seeking to raise capital on financial markets for their green projects while adhering to strict sustainability criteria. To qualify for EUGBS, bond issuers will have to ensure that at least 85% of the raised funds are allocated to economic activities that align with the Taxonomy Regulation.<sup>26</sup>

Finally, the EU Commission has adopted a Sustainable Finance package in June 2023 to strengthen and expand the foundations of the EU sustainable finance framework. The package aims to support companies and the financial sector by promoting private funding for transition projects and technologies and facilitating sustainable investments. It includes additions to the EU Taxonomy and proposed regulations for ESG rating providers to enhance transparency in the market. The objective is to make the framework more accessible for companies investing in sustainability and to contribute to the goals of the European Green Deal.<sup>27</sup>

# Annex 1: Comparison tables by activity

The following tables provide a summary of the assessment for TSC and DNSH criteria for each economic activity. Please note that the climate change adaptation objective was not included in is this assessment.

#### **Energy:**

Colombian activity	EGE1. Electricit	y generation from photovoltaic solar energy	
EU activity	4.1 Electricity generation using solar photovoltaic technology		
TSC comparison			
Summary	VERY SIMILAR	<ul> <li>Both taxonomies have similar requirements and eligibility criteria:</li> <li>Both taxonomies propose direct eligibility for power generation from solar energy and currently, they do not require a PCF or GHG lifecycle assessment to be performed.</li> <li>In both taxonomies, this activity is subject to a periodic review according to the current threshold for energy generation (100gCO<sub>2</sub>e/kWh).</li> <li>The Colombian Green Taxonomy considers the activity of purchasing renewable energy</li> </ul>	
		to be eligible if it has a Power Purchase Agreement (PPA) and has a Renewable Energy Certificate (REC).	
Do No Significant Harn	1		
Climate change adaptation	INCOMPARABLE	The Colombian Green Taxonomy still does not address the adaptation objective. It only mentions a generic DNSH to climate change adaptation, while the EU Taxonomy goes further on this point and mentions a classification of climate-related hazards to not do any harm.	
Conservation of ecosystems and biodiversity	VERY SIMILAR	Both taxonomies have similar requirements:     Please refer to the comparison of the generic DNSH criteria on this.	
Water management	VERY SIMILAR	Both taxonomies have similar requirements:  • Please refer to the comparison of the generic DNSH criteria on this.	
Circular economy	VERY SIMILAR	Both taxonomies have similar requirements:  Both have the same criteria: The activity assesses availability of and, where feasible, uses equipment and components of high durability and recyclability, which are easy to dismantle and refurbish.  Note: The Colombian Green Taxonomy includes the requirements set out in the generic DNSH, while the EU Taxonomy makes use of specific requirements.	
Pollution control and prevention	VERY SIMILAR	Both taxonomies have similar requirements:     Please refer to the comparison of the generic DNSH criteria on this.	

#### Colombian EGE2. Electricity generation from concentrated solar power activity **EU** activity 4.2 Electricity generation using concentrated solar power (CSP) technology **TSC comparison Summary VERY SIMILAR** Both taxonomies have similar requirements and thresholds: • Both taxonomies propose direct eligibility for power generation from solar energy and the activity is currently derogated from performing a PCF or GHG lifecycle assessment, subject to regular review in accordance with the declining threshold. • The Colombian Green Taxonomy considers the activity of purchasing renewable energy to be eligible if it has a Power Purchase Agreement (PPA) and has a Renewable Energy Certificate (REC). **Do No Significant Harm Climate change** INCOMPARABLE Both taxonomies address DNSH on CC adaptation differently: adaptation • The Colombian Green Taxonomy still does not address the adaptation objective. It only mentions a generic DNSH to climate change adaptation, while the EU Taxonomy goes further on this point and mentions a classification of climate-related hazards to not do any harm. **Conservation of VERY SIMILAR** Both taxonomies have similar requirements: ecosystems and • Both taxonomies have similar generic DNSH. biodiversity • Both taxonomies have a specific requirement to ensure impacts to birdlife from the high temperatures generated by the plant is avoided. **Water management VERY SIMILAR Both taxonomies have similar requirements:** • Both have the same criteria: The activity assesses availability of and, where feasible, uses equipment and components of high durability and recyclability, which are easy to dismantle and refurbish. • Note: The Colombian Green Taxonomy includes the requirements set out in the generic DNSH, while the EU Taxonomy makes use of specific requirements. Circular economy **VERY SIMILAR** Both taxonomies have similar requirements: • Both have the same criteria: The activity assesses availability of and, where feasible, uses equipment and components of high durability and recyclability, which are easy to Note: the Colombian Green Taxonomy includes the requirements set out in the generic DNSH, while the EU Taxonomy makes use of specific requirements. **Pollution control VERY SIMILAR** Both taxonomies have similar requirements: and prevention • Please refer to the comparison of the generic DNSH criteria on this.

Colombian activity	EGE3. Electricity	y generation from wind power	
EU activity	4.3 Electricity generation from wind power		
TSC comparison			
Summary	VERY SIMILAR	Both taxonomies have similar requirements and thresholds:  Both taxonomies propose direct eligibility for power generation from wind energy and the activity is currently derogated from performing a PCF or GHG lifecycle assessment subject to regular review in accordance with the declining threshold.  The Colombian Green Taxonomy considers the activity of purchasing renewable energy eligible	
		if it has a Power Purchase Agreement (PPA) and has a Renewable Energy Certificate (REC).	
Do No Significant Harm	1		
Climate change adaptation	INCOMPARABLE	Both taxonomies address DNSH on CC adaptation differently:     The Colombian Green Taxonomy still does not address the adaptation objective. It only mentions a generic DNSH to climate change adaptation, while the EU Taxonomy goes further on this point and mentions a classification of climate-related hazards to not do any harm.	
Conservation of ecosystems and biodiversity	LESS STRINGENT/ AMBITIOUS AND/ OR LESS DETAILED	<ul> <li>The EU Taxonomy has more detailed requirements:</li> <li>Both taxonomies have similar generic DNSH.</li> <li>Both taxonomies have a specific requirement to ensure the possible disturbance, displacement, or collision of birds by the construction and operation of wind farms is avoided. The EU Taxonomy includes bats.</li> <li>Both taxonomies have a specific requirement to ensure the possible visual impacts created by landscape change by the installation of wind turbines is avoided.</li> </ul>	
		The EU Taxonomy requires taking appropriate measures to prevent or mitigate impacts in relation to seafloor integrity.	
Water management	VERY SIMILAR	Both taxonomies have similar requirements:  Both taxonomies contain the requirement to avoid underwater noise created during the installation of bottom-fixed offshore wind turbines. This requirement is addressed in the DNSH on pollution in the Colombian Green Taxonomy.	
Circular economy	MORE STRINGENT/ AMBITIOUS AND/ OR MORE DETAILED	<ul> <li>The Colombian Green Taxonomy has more requirements:</li> <li>Both taxonomies assess availability of and, where feasible, use equipment and components of high durability and recyclability, which are easy to dismantle and refurbish.</li> <li>Both taxonomies have a requirement to avoid waste generated by wind turbine blades at the end of their lifetime.</li> <li>The Colombian Green Taxonomy additionally requires an appropriate disposal of lubricants and coolants used by wind power systems.</li> </ul>	
Pollution control and prevention	VERY SIMILAR	Both taxonomies have similar requirements:  Both taxonomies have a requirement to avoid underwater noise created during the installation of bottom-fixed offshore wind turbines. This requirement is addressed in the DNSH on water for the EU Taxonomy.	

Colombian activity	EGE4. Electricity generation from ocean power		
EU activity	4.4 Electricity generation from ocean energy technologies		
TSC comparison			
Summary	VERY SIMILAR	Both taxonomies have similar requirements and thresholds:  Both taxonomies propose direct eligibility for power generation from ocean energy and the activity is currently derogated from performing a PCF or GHG lifecycle assessment subject to regular review in accordance with the declining threshold.  The Colombian Green Taxonomy considers the activity of purchasing renewable energy to be	
Do No Significant Harm	INCOMPARABLE	eligible if it has a Power Purchase Agreement (PPA) and a Renewable Energy Certificate (REC).  Both taxonomies address DNSH on CC adaptation differently:	
adaptation		The Colombian Green Taxonomy still does not address the adaptation objective. It only mentions a generic DNSH to climate change adaptation, while the EU Taxonomy goes further on this point and mentions a classification of climate-related hazards to not do any harm.	
Conservation of ecosystems and biodiversity	VERY SIMILAR	Both taxonomies have similar requirements:  Both taxonomies have similar generic DNSH.  Both taxonomies have the requirement to avoid possible negative impacts on marine ecosystems and biodiversity.	
Water management	LESS STRINGENT/ AMBITIOUS AND/OR LESS DETAILED	<ul> <li>The EU Taxonomy has specific requirements:</li> <li>The EU Taxonomy requires appropriate measures to prevent or mitigate impacts in relation to the introduction of energy, including underwater noise, to levels that do not adversely affect the marine environment.</li> </ul>	
Circular economy	VERY SIMILAR	Both taxonomies have similar requirements:  Both have the same criteria: The activity assesses availability of and, where feasible, uses equipment and components of high durability and recyclability, which are easy to dismantle and refurbish.  Note: The Colombian Green Taxonomy includes the requirements set out in the generic DNSH, while the EU Taxonomy makes use of specific requirements.	
Pollution control and prevention	VERY SIMILAR	Both taxonomies have similar requirements:  Both have measures in place to avoid possible contamination by anti-fouling paint. The Colombian Green Taxonomy also mentions lubricants while the EU Taxonomy mentions biocides.	

# Colombian activity **EU** activity

#### EGE5. Electricity generation from hydropower



#### 4.5 Electricity generation from hydropower

#### **TSC** comparison

#### **Summary**

#### **VERY SIMILAR**



#### Both taxonomies have similar requirements and thresholds:

- Both taxonomies select hydropower facilities with a power density above 5Wm<sup>2</sup>..
- For both taxonomies, facilities operating at life cycle emissions lower than 100g CO₂e/kWh are eligible.
- The acceptable methodologies are ISO 14067 G-res tool and the IEA Hydro Framework.
- · The criteria also apply to pumped-storage facilities.
- The EU Taxonomy includes a declining threshold to net-0gCO<sub>2</sub>e/kWh by 2050 that will be reduced every five years. For activities which go beyond 2050, it must be technically feasible to reach netzero emissions.
- The Colombian Green Taxonomy includes alignment with the parameters established by local authorities to be eligible, specifically for run-of-river hydroelectric power plants.

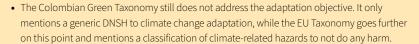
#### **Do No Significant Harm**

#### **Climate change** adaptation

#### INCOMPARABLE



#### Both taxonomies address DNSH on CC adaptation differently:



#### **Conservation of** ecosystems and biodiversity

#### **VERY SIMILAR**



#### Both taxonomies have similar requirements:

- Both taxonomies have similar generic DNSH.
- Both taxonomies have a requirement to avoid impacts on biodiversity associated with fragmentation of ecosystems and changes to habitat, hydrological and hydrogeological regimes, water chemistry, and interference with species migration pathways because of the establishment and operation of the installation.

#### **Water management**

#### LESS STRINGENT/ **AMBITIOUS AND/ OR LESS DETAILED**



#### The Colombian Green Taxonomy has some general requirements while the EU Taxonomy has more detailed requirements for this activity:

- Both taxonomies have a requirement to ensure implementation of a River Basin Management Plan according to applicable regulations.
- For both taxonomies, the operation of the hydro power plant must adhere to the principles of the UNECE Convention on the Protection and Use of Transboundary, Watercourses and International Lakes.
- The EU Taxonomy defines requirements for existing operations\* and new projects\*\*. \*For operation of existing hydropower plants, including refurbishment activities to enhance renewable energy or energy storage potential, all necessary mitigation measures should be implemented to reach good ecological status or potential, in particular regarding ecological continuity and ecological flow. The Colombian Green Taxonomy considers this requirement. \*\*For new projects, prior to construction, an impact assessment must be carried out to assess all potential impacts on the status of water bodies.
- For the EU Taxonomy, construction of new hydropower should not lead to increased fragmentation of rivers, consequently refurbishment of existing hydropower plant and rehabilitation of existing barriers should be prioritised. Construction of small hydropower (<10MW) should be avoided.

#### **Circular economy**

#### MORE STRINGENT/ AMBITIOUS AND/ OR MORE DETAILED

#### The Colombian Green Taxonomy has generic requirements while the EU Taxonomy does not have generic DNSH on circular economy:

• Please refer to the comparison of the generic DNSH criteria on this.

#### **Pollution control** and prevention





#### **Both taxonomies have similar requirements:**

• Both taxonomies have a requirement to avoid emissions to water and generation of waste during construction.

#### EGE6. Electricity generation from geothermal power Colombian activity 4.6 Electricity generation from geothermal energy **EU** activity **TSC** comparison **VERY SIMILAR Summary** Both taxonomies have similar requirements and thresholds: • Both taxonomies propose a threshold below 100gCO₂e/kWh for electricity generation from geothermal energy, through compliance with ISO 14067 or a GHG protocol product such as the PCE • The EU Taxonomy includes a declining threshold to net-0gCO<sub>2</sub>e/kWh by 2050 that will be reduced every 5 years. For activities which go beyond 2050, it must be technically feasible to reach net-zero emissions. • For both taxonomies, combined heat and power is covered under construction and operation of a facility used for cogeneration of heat/cooling and power threshold. **Do No Significant Harm** INCOMPARABLE Both taxonomies address DNSH on CC adaptation differently: **Climate change** adaptation • The Colombian Green Taxonomy still does not address the adaptation objective. It only mentions a generic DNSH to climate change adaptation, while the EU Taxonomy goes further on this point and mentions a classification of climate-related hazards to not do any harm. **VERY SIMILAR Conservation of Both taxonomies have similar requirements:** ecosystems and • Please refer to the comparison of the generic DNSH criteria on this. biodiversity **VERY SIMILAR** Both taxonomies have similar requirements: **Water management** • Please refer to the comparison of the generic DNSH criteria on this. Circular economy MORE STRINGENT/ The Colombian Green Taxonomy has generic requirements while the EU Taxonomy AMBITIOUS AND/ does not have generic DNSH on circular economy: **OR MORE DETAILED** • Please refer to the comparison of the generic DNSH criteria on this. **VERY SIMILAR Pollution control Both taxonomies have similar requirements:** and prevention • Both taxonomies require control and prevention of emissions of non-condensable geothermal gases with specific environmental threats, such as H<sub>2</sub>S, CO<sub>2</sub>, and CH<sub>4</sub>, which are often released from flash-steam and dry-steam power plants. • For both taxonomies the binary plants ideally represent closed systems and no steam is emitted. • Both taxonomies require avoiding possible emissions to surface and underground water. • Both taxonomies require the prevention of thermal anomalies associated with the discharge of waste heat, which should not exceed 3°K for groundwater environments or 1.5°K for surface water environments, respectively.

# Colombian activity

#### EGE7. Biomass, biofuel and biogas-based electricity generation

#### **EU** activity

#### 4.8 Electricity generation from bioenergy



#### **TSC comparison**

#### **Summary**

#### LESS STRINGENT/ AMBITIOUS AND/ OR LESS DETAILED



#### The EU Taxonomy has more detailed requirements and thresholds:

- The Colombian Green Taxonomy proposes a threshold below 100gCO<sub>2</sub>e/kWh through compliance with ISO 14067 or a GHG protocol product such as the PCF.
- The EU Taxonomy includes the criteria for biomass from agriculture set out in Article 29 of Directive (EU) 2018/2001.
- The EU Taxonomy also provides rules for calculating the greenhouse gas impact of biomass fuels and their fossil fuel comparators (at least 80 % in relation to the GHG saving methodology).
- Where the installations rely on anaerobic digestion of organic material, the production of the digestate must meet the criteria in the anaerobic digestion of bio-waste activity.
- For electricity generation installations with a total rated thermal input from 50 to 100 MW, the
  activity applies high-efficiency cogeneration technology, or, for electricity-only installations,
  the activity meets an energy efficiency level associated with the best available techniques
  (BAT-AEL) ranges set out in the latest relevant techniques (BAT) conclusions.
- For electricity generation installations with a total rated thermal input above 100 MW, the
  activity must comply with one of the criteria defined on a list established in the taxonomy.

#### **Do No Significant Harm**

# Climate change adaptation

#### **INCOMPARABLE**



#### Both taxonomies address DNSH on CC adaptation differently:

The Colombian Green Taxonomy still does not address the adaptation objective. It only
mentions a generic DNSH to climate change adaptation, while the EU Taxonomy goes further
on this point and mentions a classification of climate-related hazards to not do any harm.

# Conservation of ecosystems and biodiversity

#### MORE STRINGENT/ AMBITIOUS AND/ OR MORE DETAILED



#### The Colombian Green Taxonomy has specific requirements:

Colombia includes requirements for raw material such as biomass (excluding industrial and municipal biowaste). It requires that:

- Full traceability of the supply through the relevant chain of custody management system must be established. Additionally, adherence to general as well as AFOLU sector-specific compliance requirements must be demonstrated through appropriate verification systems.
- All forest biomass used in the process must comply with the forestry regulatory framework and the criteria established in the forestry sector.
- The biomass used should conform to the requirements defined in the national biomass and biofuels regulations, and to those requirements defined in the forestry section of the Taxonomy.

#### **Water management**

#### **VERY SIMILAR**



#### Both taxonomies have similar requirements:

• Please refer to the comparison of the generic DNSH criteria on this.

#### Circular economy

#### MORE STRINGENT/ AMBITIOUS AND/ OR MORE DETAILED



#### The Colombian Green Taxonomy has specific requirements:

Colombia includes requirements for raw material such as industrial biowaste (including food industry waste) or municipal biowaste. It requires that:

- Solid biowaste should emerge from source-separated waste streams and be collected separately.
- Biowaste must comply with the waste regulatory framework and with national, regional, and local waste management plans.
- Where municipal biowaste is used as feedstock, the project is complementary to and does not compete with the existing municipal biowaste management infrastructure.
- If the raw material is biogas, it must meet the eligibility criteria and compliance requirements set in waste management and emissions capture.

#### Colombian activity

#### EGE7. Biomass, biofuel and biogas-based electricity generation

#### **EU** activity

#### 4.8 Electricity generation from bioenergy



#### **Do No Significant Harm**

#### **Pollution control** and prevention

#### LESS STRINGENT/ AMBITIOUS AND/ **OR LESS DETAILED**

#### The EU Taxonomy has specific requirements:

- For installations falling within the scope of Directive 2010/75/EU of the European Parliament and of the Council, emissions are within or lower than the emission levels associated with the best available techniques (BAT-AEL) ranges.
- For combustion plants with thermal input greater than 1 MW but which are below the thresholds that would cause the BAT conclusions for large combustion plants to apply, emissions are below the emission limit values set out in Directive (EU) 2015/2193.
- For plants in zones or parts of zones not complying with the air quality limit values laid down in Directive 2008/50/EC, measures are implemented to reduce emission levels.
- For anaerobic digestion of organic material, where the produced digestate is used as fertiliser or soil improver, either directly or after composting or any other treatment, it meets the requirements for fertilising materials set out in Component Material Categories (CMC) 4 and 5 in Annex II to Regulation (EU) 2019/1009 or national rules on fertilisers or soil improvers for agricultural use.
- For anaerobic digestion plants treating over 100 tonnes per day, emissions to air and water are within or lower than the emission levels associated with the best available technique (BAT-AEL) ranges set for anaerobic treatment of waste in the latest relevant best available technique (BAT) conclusions.

Colombian activity	EP8. Low-carbon hydrogen production		
EU activity	3.10 Manufacture of hydrogen		
TSC comparison	LESS STRINGENT/AMB	ITIOUS AND/OR LESS DETAILED	
Summary	LESS STRINGENT/ AMBITIOUS AND/ OR LESS DETAILED	<ul> <li>The EU Taxonomy has more detailed requirements and thresholds:</li> <li>Both taxonomies propose the same threshold of GHG emissions lower than 3tCO<sub>2</sub>e/tH<sub>2</sub> (for Colombia the threshold will be reviewed once the corresponding regulation is issued). The EU Taxonomy also refers to the threshold in terms of the life-cycle GHG emissions savings requirement of 73.4% for hydrogen.</li> <li>For the EU Taxonomy, the activity also complies with the life-cycle GHG emissions savings requirement of 70% for hydrogen-based synthetic fuels relative to a fossil fuel comparator of 94gCO<sub>2</sub>e/MJ.</li> <li>For Colombia, hydrogen produced from fossil fuels or natural gas is not eligible.</li> <li>The EU Taxonomy proposes to calculate the life-cycle GHG emissions savings using the methodology referred to in Directive (EU) 2018/2001 or, alternatively, using ISO 14067:2018 or ISO 14064-1:2018.</li> <li>Where the CO<sub>2</sub> that would otherwise be emitted from the manufacturing process is captured for the purpose of underground storage, the CO<sub>2</sub> is transported and stored underground, in</li> </ul>	
Do No Significant Harm Climate change adaptation	INCOMPARABLE	accordance with the technical screening criteria set out in Sections 5.11 and 5.12, respectively, of (EU) 2021/2139.  Both taxonomies address DNSH on CC adaptation differently:  The Colombian Green Taxonomy still does not address the adaptation objective. It only mentions a generic DNSH to climate change adaptation, while the EU Taxonomy goes further on this point and mentions a classification of climate-related hazards to not do any harm.	
Conservation of ecosystems and biodiversity	VERY SIMILAR	Both taxonomies have similar requirements:  • Please refer to the comparison of the generic DNSH criteria on this.	
Water management	VERY SIMILAR	Both taxonomies have similar requirements:  Please refer to the comparison of the generic DNSH criteria on this.	
Circular economy	MORE STRINGENT/ AMBITIOUS AND/OR MORE DETAILED	<ul> <li>The Colombian Green Taxonomy has specific requirements:</li> <li>The Colombian Green Taxonomy indicates that waste and by-products from the manufacturing process should be treated according to the waste hierarchy, and ideally recycled in the same process (closed loop).</li> </ul>	
Pollution control and prevention	LESS STRINGENT/ AMBITIOUS AND/OR LESS DETAILED	<ul> <li>The EU Taxonomy has more requirements:</li> <li>The EU requires compliance with the criteria set out in Appendix C.</li> <li>The EU Taxonomy requires that emissions are within or lower than the emission levels associated with the best available techniques (BAT-AEL) ranges set out in the latest relevant best available techniques (BAT) conclusions.</li> </ul>	

# Colombian activity **EU** activity **TSC comparison VERY SIMILAR Summary Do No Significant Harm** INCOMPARABLE **Climate change** adaptation **Conservation of VERY SIMILAR** ecosystems and biodiversity

# ETD9. Transmission and distribution of electricity from renewable sources

# \_ 7

#### 4.9 Transmission and distribution of electricity

#### Both taxonomies have similar requirements and thresholds:

Both taxonomies propose:

All electricity transmission and distribution infrastructure or equipment in systems which
are on a trajectory to full decarbonisation\* are eligible, except for infrastructure that is
dedicated for creating a direct connection, or expanding an existing direct connection
between a power production plant that is more CO<sub>2</sub> intensive than 100gCO<sub>2</sub>e/kWh,
measured on a life-cycle energy (LCE) basis, and a substation or network.

\*The conditions for considering a system on a decarbonisation trajectory are the same. The EU Taxonomy adds a region specification (interconnected European system).

- Transmission/distribution infrastructure that supports the consolidation of microgrids in non-interconnected areas is eligible.
- All activities related to the transmission and distribution network are similar.

#### Both taxonomies address DNSH on CC adaptation differently:

The Colombian Green Taxonomy still does not address the adaptation objective. It only mentions a generic DNSH to climate change adaptation, while the EU Taxonomy goes further on this point and mentions a classification of climate-related hazards to not do any harm.

#### **Both taxonomies have similar requirements:**

- Both taxonomies have similar generic DNSH.
- Both taxonomies have the requirement to avoid possible negative impacts of underground power lines on marine and terrestrial ecosystems (proven by an environmental impact study). Additionally, to avoid routes with strong associated negative environmental impacts.
- The Colombian Green Taxonomy respects applicable rules and regulations to limit the
  impact of electromagnetic radiation on human health, particularly those established by
  the International Commission for Protection against Non-Ionizing Radiation, in the case of
  high-voltage overhead lines. This requirement is addressed in the DNSH on pollution for
  the EU Taxonomy.

#### Water management

#### VERY SIMILAR

#### **Both taxonomies have similar requirements:**



#### Circular economy

#### **VERY SIMILAR**

#### Both taxonomies have similar requirements:

Both taxonomies require that a waste management plan is in place and ensures maximal
reuse or recycling at end-of-life in accordance with the waste hierarchy, including
through contractual agreements with waste management partners, reflected in financial
projections or official project documentation. The Colombian Green Taxonomy includes
the requirements set out in the generic DNSH, while the EU Taxonomy makes use of specific
requirements.

# Pollution control and prevention

#### VERY SIMILAR

#### **Both taxonomies have similar requirements:**

- For both taxonomies, the activities must respect applicable norms and regulations to limit the impact of electromagnetic radiation on human health. This requirement is addressed in the DNSH to conservation for the Colombian Green Taxonomy.
- Both have a requirement not to use equipment, such as transformers or generators that contain electrical fluid based on polychlorinated biphenyls (PCBs).

Colombian activity	EA10. Storage of electricity		
EU activity	4.10 Storage of electricity		
TSC comparison			
Summary	VERY SIMILAR	Both taxonomies have similar requirements and thresholds:  All electricity storage activities are eligible and are subject to regular review. Pumped hydro storage is also included. For the Colombian Green Taxonomy, the criteria for the activity of generating electricity from hydroelectric energy must be met.  Eligibility criteria for demand side management (load shedding and load shifting) activities are available under the transmission and distribution of electricity criteria.	
Do No Significant Harm	1	are available under the danishission and distribution of electricity criteria.	
Climate change adaptation	INCOMPARABLE	Both taxonomies address DNSH on CC adaptation differently:     The Colombian Green Taxonomy still does not address the adaptation objective. It only mentions a generic DNSH to climate change adaptation, while the EU Taxonomy goes further on this point and mentions a classification of climate-related hazards to not do any harm.	
Conservation of ecosystems and biodiversity	VERY SIMILAR	Both taxonomies have similar requirements:     Please refer to the comparison of the generic DNSH criteria on this.	
Water management	LESS STRINGENT/ AMBITIOUS AND/OR LESS DETAILED	<ul> <li>The EU Taxonomy has specific requirements:</li> <li>In the case of pumped hydropower storage not connected to a river body, the activity complies with the criteria set out in Appendix B.</li> <li>In the case of pumped hydropower storage connected to a river body, the activity complies with the criteria for DNSH to sustainable use and protection of water and marine resources specified in electricity production from hydropower.</li> </ul>	
Circular economy	VERY SIMILAR	Both taxonomies have similar requirements:  Both have the same criteria: The activity assesses availability of and, where feasible, uses equipment and components of high durability and recyclability, which are easy to dismantle and refurbish.  Note: The Colombian Green Taxonomy includes the requirements set out in the generic DNSH, while the EU Taxonomy makes use of specific requirements.	
Pollution control and prevention	VERY SIMILAR	Both taxonomies have similar requirements:     Please refer to the comparison of the generic DNSH criteria on this.	

Colombian activity	EA11. Storage of thermal energy		
EU activity	4.11 Storage of thermal energy		
TSC comparison			
Summary	VERY SIMILAR	Both taxonomies have similar requirements and thresholds:	
	•	<ul> <li>All thermal energy storage is eligible under the Taxonomy including Underground Thermal Energy Storage (UTES) or Aquifer Thermal Energy Storage (ATES), subject to regular review.</li> </ul>	
Do No Significant Harn	n		
Climate change adaptation	INCOMPARABLE	The Colombian Green Taxonomy still does not address the adaptation objective. It only mentions a generic DNSH to climate change adaptation, while the EU Taxonomy goes further on this point and mentions a classification of climate-related hazards to not do any harm.	
Conservation of ecosystems and biodiversity	VERY SIMILAR	Both taxonomies have similar requirements:     Please refer to the comparison of the generic DNSH criteria on this.	
Water management	VERY SIMILAR	Both taxonomies have similar requirements:  • Please refer to the comparison of the generic DNSH criteria on this.	
Circular economy	VERY SIMILAR	Both taxonomies have similar requirements:  Both have the same criteria: The activity assesses availability of and, where feasible, uses equipment and components of high durability and recyclability, which are easy to dismantle and refurbish.  Note: The Colombian Green Taxonomy includes the requirements set out in the generic DNSH, while the EU Taxonomy makes use of specific requirements.	
Pollution control and prevention	VERY SIMILAR	Both taxonomies have similar requirements:  • Please refer to the comparison of the generic DNSH criteria on this.	

Colombian activity	EA12. Low-carbo	on hydrogen storage	
EU activity	4.12 Storage of hydrogen		
TSC comparison			
Summary	VERY SIMILAR	Both taxonomies have similar requirements and thresholds:	
		<ul> <li>Both taxonomies cover construction of hydrogen storage assets. The EU Taxonomy considers specifics on conversion of existing underground gas storage facilities into storage facilities dedicated to hydrogen storage; and operation of hydrogen storage facilities where the hydrogen stored in the facility meets the criteria for the manufacture of hydrogen.</li> </ul>	
Do No Significant Harm	1		
Climate change	INCOMPARABLE	Both taxonomies address DNSH on CC adaptation differently:	
adaptation		<ul> <li>The Colombian Green Taxonomy still does not address the adaptation objective. It only mentions a generic DNSH to climate change adaptation, while the EU Taxonomy goes further on this point and mentions a classification of climate-related hazards to not do any harm.</li> </ul>	
Conservation of	VERY SIMILAR	Both taxonomies have similar requirements:	
ecosystems and biodiversity		Please refer to the comparison of the generic DNSH criteria on this.	
Water management	VERY SIMILAR	Both taxonomies have similar requirements:	
		Please refer to the comparison of the generic DNSH criteria on this.	
Circular economy	VERY SIMILAR	Both taxonomies have similar requirements:	
		<ul> <li>Both have the same criteria: The activity assesses availability of and, where feasible, uses equipment and components of high durability and recyclability, which are easy to dismantle and refurbish.</li> </ul>	
		Note: The Colombian Green Taxonomy includes the requirements set out in the generic DNSH, while the EU Taxonomy makes use of specific requirements.	
Pollution control	LESS STRINGENT/	The EU Taxonomy has specific requirements:	
and prevention	AMBITIOUS AND/OR LESS DETAILED	<ul> <li>In the case of storage above five tonnes, the activity complies with Directive 2012/18/EU.     There are no specific requirements for pollution control and prevention in the Colombian     Green Taxonomy.</li> </ul>	

## Colombian activity

#### EM13. Manufacture of biomass, biofuels and biogas



#### **EU** activity

#### 4.13 Manufacture of biogas and biofuels for use in transport and of bioliquids

#### **TSC comparison**

#### **Summary**

## LESS STRINGENT/ AMBITIOUS AND/



#### The EU Taxonomy has more detailed requirements and thresholds:

- Although the activities have different uses, both are aimed at the manufacture of biomass, biofuels, and biogas.
- The Colombian Green Taxonomy indicates that raw material must meet the eligibility criteria established for the Waste Management and Emissions Capture sector and AFOLU sector. While the EU Taxonomy provides specific requirements for this feedstock according to its origin. It also includes some thresholds related to the reduction of GHG emissions (at least 65% in relation to the GHG saving methodology and the relative fossil fuel comparator set out in Annex V to Directive (EU) 2018/2001) and criteria for the production of biodigestate when the biogas produced is based on anaerobic digestion.

#### **Do No Significant Harm**

#### **Climate change** adaptation



#### Both taxonomies address DNSH on CC adaptation differently:

• The Colombian Green Taxonomy still does not address the adaptation objective. It only mentions a generic DNSH to climate change adaptation, while the EU Taxonomy goes further on this point and mentions a classification of climate-related hazards not to do any harm.

#### **Conservation of** ecosystems and biodiversity

#### MORE STRINGENT/ **AMBITIOUS AND/OR MORE DETAILED**

#### The Colombian Green Taxonomy has specific requirements:

- Colombia includes requirements for raw material such as is biomass (excluding industrial and municipal biowaste). It requires that:
- Full traceability of the supply through the relevant chain of custody management system must be established and adherence to general as well as AFOLU sector-specific compliance requirements must be demonstrated through appropriate verification systems.
- All forest biomass used in the process must comply with the forestry regulatory framework and the criteria established in the forestry sector.
- The biomass used should conform to the requirements defined in the national biomass and biofuels regulations, and to those requirements defined in the forestry section of the Taxonomy.

#### Water management





#### Both taxonomies have similar requirements:

• Please refer to the comparison of the generic DNSH criteria on this.

#### Circular economy

#### LESS STRINGENT/ AMBITIOUS AND/OR **LESS DETAILED**



#### The Colombian Green Taxonomy has specific requirements:

Colombia includes requirements for raw material such as industrial biowaste (including food industry waste) or municipal biowaste. It requires that:

- Solid biowaste should emerge from source-separated waste streams and be collected separately.
- Biowaste must comply with the waste regulatory framework and with national, regional, and local waste management plans.
- Where municipal biowaste is used as feedstock, the project is complementary to and does not compete with the existing municipal biowaste management infrastructure.
- If the raw material is biogas, it must meet the eligibility criteria and compliance requirements set in waste management and emissions capture.

#### **Pollution control** and prevention

#### LESS STRINGENT/ **AMBITIOUS AND/OR LESS DETAILED**



#### The EU Taxonomy has specific requirements:

- For biogas production, a gas-tight cover on the digestate storage is applied.
- For anaerobic digestion plants treating over 100 tonnes per day, emissions to air and water are within or lower than the emission levels associated with the best available techniques (BAT-AEL) ranges set for anaerobic treatment of waste in the latest relevant best available techniques (BAT) conclusions.
- For anaerobic digestion of organic material, where the produced digestate is used as fertiliser or soil improver, either directly or after composting or any other treatment, it meets the requirements for fertilising materials set out in Component Material Categories (CMC) 4 and 5 in Annex II to Regulation (EU) 2019/1009 or national rules on fertilisers or soil improvers for agricultural use.

Colombian activity	EC14. Cogeneration of heat/cooling and power from concentrated solar energy		
EU activity	4.17 Cogenera	tion of heat/cool and power from solar energy	
	4.21 Productio	on of heat/cool from solar thermal heating	
TSC comparison			
Summary	VERY SIMILAR	Both taxonomies have similar requirements and thresholds:	
		• For both taxonomies this activity is directly eligible and is exempted from performing a life cycle assessment.	
Do No Significant Harm	1		
Climate change	INCOMPARABLE	Both taxonomies address DNSH on CC adaptation differently:	
adaptation		<ul> <li>The Colombian Green Taxonomy still does not address the adaptation objective. It only mentions a generic DNSH to climate change adaptation, while the EU Taxonomy goes further on this point and mentions a classification of climate-related hazards so as not to do any harm.</li> </ul>	
Conservation of	VERY SIMILAR	Both taxonomies have similar requirements:	
ecosystems and biodiversity		<ul> <li>Please refer to the comparison of the generic DNSH criteria on this. The Colombian Green Taxonomy specifies avoiding impact to birdlife from the high temperatures generated by the plant.</li> </ul>	
Water management	VERY SIMILAR	Both taxonomies have similar requirements:	
		Both taxonomies have similar generic DNSH. The Colombian Green Taxonomy specifies avoiding impact from the cooling system on water resources.	
Circular economy	VERY SIMILAR	Both taxonomies have similar requirements:	
		<ul> <li>Both have the same criteria: The activity assesses availability of and, where feasible, uses equipment and components of high durability and recyclability, which are easy to dismantle and refurbish.</li> </ul>	
		Note: The Colombian Green Taxonomy includes the requirements set out in the generic DNSH, while the EU Taxonomy makes use of specific requirements.	
Pollution control	VERY SIMILAR	Both taxonomies have similar requirements:	
and prevention		Please refer to the comparison of the generic DNSH criteria on this.	

Colombian activity	EC15. Cogeneration of heat/cooling and power from geothermal energy		
EU activity	4.18 Cogeneration of heat/cool and power from geothermal energy		
	4.22 Production	of heat/cool from geothermal energy	
TSC comparison			
Summary	VERY SIMILAR	<ul> <li>For both taxonomies any cogeneration technology can be included if it can be demonstrated, using an ISO 14067 or a GHG Protocol Product Lifecycle Standard-compliant Product Carbon Footprint (PCF) assessment, that the life cycle impacts for producing 1 kWh of heat/cool and power are below the declining threshold. The full PCF assessment shall be subjected to review.</li> <li>The EU Taxonomy includes a declining threshold to net-0gCO<sub>2</sub>e/kWh by 2050 that will be reduced every five years. For activities which go beyond 2050, it must be technically feasible</li> </ul>	
		to reach net-zero emissions. Note: The Cogeneration threshold is the combined heat/cool and power threshold of $100 g CO_2 e/kWh$ .	
Do No Significant Harn	1		
Climate change adaptation	INCOMPARABLE	**Both taxonomies address DNSH on CC adaptation differently:     **The Colombian Green Taxonomy still does not address the adaptation objective. It only mentions a generic DNSH to climate change adaptation, while the EU Taxonomy goes further on this point and mentions a classification of climate-related hazards to not do any harm.	
Conservation of ecosystems and biodiversity	VERY SIMILAR	Both taxonomies have similar requirements:  • Please refer to the comparison of the generic DNSH criteria on this.	
Water management	VERY SIMILAR	Both taxonomies have similar requirements:  • Please refer to the comparison of the generic DNSH criteria on this.	
Circular economy	MORE STRINGENT/ AMBITIOUS AND/OR MORE DETAILED	The Colombian Green Taxonomy has generic requirements while the EU Taxonomy does not have generic DNSH on circular economy:  • Please refer to the comparison of the generic DNSH criteria on this.	
Pollution control and prevention	VERY SIMILAR	<ul> <li>Both taxonomies have similar requirements:</li> <li>Both taxonomies require control and prevent emissions of non-condensable geothermal gases with specific environmental threats, such as H<sub>2</sub>S, CO<sub>2</sub>, and CH<sub>4</sub>, which are often released from flash-steam and dry-steam power plants.</li> <li>For both taxonomies the binary plants ideally represent closed systems, and no steam is emitted.</li> <li>Both require avoiding possible emissions to surface and underground water.</li> <li>Both require the prevention of thermal anomalies associated with the discharge of waste heat, which should not exceed 3°K for groundwater environments or 1.5°K for surface water environments, respectively.</li> </ul>	

Colombian activity	EC16. Cogeneration of heat/cold and energy from biomass, biofuels and biogas		
EU activity	4.20 Cogeneration of heat/cool and power from bioenergy 4.24 Production of heat/cool from bioenergy		
TSC comparison			
Summary	LESS STRINGENT/ AMBITIOUS AND/ OR LESS DETAILED	<ul> <li>The EU Taxonomy has more detailed requirements and thresholds:</li> <li>The Colombian Green Taxonomy proposes a threshold below the current threshold (100gCO<sub>2</sub>e/kWh) to produce 1 kWh of heat/cool and electricity through compliance with ISO 14067 or a GHG protocol product such as the PCF.</li> <li>The EU Taxonomy includes the criteria for biomass from agriculture set out in Article 29 of Directive (EU) 2018/2001.</li> <li>The EU Taxonomy also provides rules for calculating the greenhouse gas impact of biomass fuels and their fossil fuel comparators (at least 80% in relation to the GHG saving methodology).</li> <li>Where the cogeneration installations rely on anaerobic digestion of organic material, the production of the digestate must meet the criteria relating to anaerobic digestion of biowaste activity. These points do not apply to heat generation installations with a total rated thermal input below 2MW and using gaseous biomass fuels.</li> </ul>	
Do No Significant Harm			
Climate change adaptation	INCOMPARABLE	Both taxonomies address DNSH on CC adaptation differently:     The Colombian Green Taxonomy still does not address the adaptation objective. It only mentions a generic DNSH to climate change adaptation, while the EU Taxonomy goes further on this point and mentions a classification of climate-related hazards to not do any harm.	
Conservation of ecosystems and biodiversity	MORE STRINGENT/ AMBITIOUS AND/ OR MORE DETAILED	<ul> <li>The Colombian Green Taxonomy has specific requirements:</li> <li>Colombia includes requirements for raw material such as is biomass (excluding industrial and municipal biowaste). It requires that:</li> <li>Full traceability of the supply through the relevant chain of custody management system must be established as well as adherence to general compliance requirements and AFOLU sector-specific compliance requirements, which must be demonstrated through appropriate verification systems.</li> <li>All forest biomass used in the process must comply with the forestry regulatory framework and the criteria established in the forestry sector.</li> <li>The biomass used should conform to the requirements defined in the national biomass and biofuels regulations, and to those requirements defined in the forestry section of the Taxonomy.</li> </ul>	
Water management	VERY SIMILAR  MORE STRINGENT/ AMBITIOUS AND/ OR MORE DETAILED	Both taxonomies have similar requirements:	
eil		Please refer to the comparison of the generic DNSH criteria on this.  The Colombian County Transport of the generic DNSH criteria on this.	
Circular economy		<ul> <li>The Colombian Green Taxonomy has specific requirements:</li> <li>Colombia includes requirements for raw material such as industrial biowaste (including food industry waste) or municipal biowaste. It requires that:</li> <li>Solid biowaste should emerge from source-separated waste streams and be collected separately.</li> <li>Biowaste must comply with the waste regulatory framework and with national, regional, and local waste management plans.</li> <li>Where municipal biowaste is used as feedstock, the project is complementary to and does not compete with the existing municipal biowaste management infrastructure.</li> </ul>	
		If the raw material is biogas, it must meet the eligibility criteria and compliance requirements set out in waste management and emissions capture.	

Colombian	
activity	

# EC16. Cogeneration of heat/cold and energy from biomass, biofuels and biogas

#### **EU** activity

#### 4.20 Cogeneration of heat/cool and power from bioenergy



#### 4.24 Production of heat/cool from bioenergy

**Do No Significant Harm** 

# Pollution control and prevention

LESS STRINGENT/ AMBITIOUS AND/OR LESS DETAILED



#### The EU Taxonomy has specific requirements:

- For installations falling within the scope of Directive 2010/75/EU of the European Parliament and of the Council, emissions are within or lower than the emission levels associated with the best available techniques (BAT-AEL) ranges.
- For combustion plants with thermal input greater than 1 MW but which are below the thresholds that would cause the BAT conclusions for large combustion plants to apply, emissions are below the emission limit values set out in Directive (EU) 2015/2193.
- For plants in zones or parts of zones not complying with the air quality limit values laid down in Directive 2008/50/EC, measures are implemented to reduce emission levels.
- For anaerobic digestion of organic material, where the produced digestate is used as
  fertiliser or soil improver, either directly or after composting or any other treatment, it
  meets the requirements for fertilising materials set out in Component Material Categories
  (CMC) 4 and 5 in Annex II to Regulation (EU) 2019/1009 or national rules on fertilisers or soil
  improvers for agricultural use.
- For anaerobic digestion plants treating over 100 tonnes per day, emissions to air and water
  are within or lower than the emission levels associated with the best available techniques
  (BAT-AEL) ranges set for anaerobic treatment of waste in the latest relevant best available
  techniques (BAT) conclusions.

Colombian activity	EP17. Production of heat/cold and energy using waste heat				
EU activity	4.25 Production of heat/cool using waste heat				
TSC comparison					
Summary	VERY SIMILAR	Both taxonomies have similar requirements and eligibility criteria:  • All recovery of waste heat is eligible.			
Do No Significant Harm					
Climate change adaptation	INCOMPARABLE	Both taxonomies address DNSH on CC adaptation differently:  The Colombian Green Taxonomy still does not address the adaptation objective. It only			
		mentions a generic DNSH to climate change adaptation, while the EU Taxonomy goes further on this point and mentions a classification of climate-related hazards to not do any harm.			
Conservation of	VERY SIMILAR	Both taxonomies have similar requirements:			
ecosystems and biodiversity		Please refer to the comparison of the generic DNSH criteria on this.			
Water management VE	VERY SIMILAR	Both taxonomies have similar requirements:			
C'	VERY SIMILAR	Please refer to the comparison of the generic DNSH criteria on this.  Public triangles of the comparison of the generic DNSH criteria on this.			
Circular economy		Both taxonomies have similar requirements:  Both have the same criteria: The activity assesses availability of and, where feasible, uses equipment and components of high durability and recyclability, which are easy to dismantle and refurbish.			
		Note: The Colombian Green Taxonomy includes the requirements set out in the generic DNSH, while the EU Taxonomy makes use of specific requirements.			
Pollution control and prevention	LESS STRINGENT/ AMBITIOUS AND/OR LESS DETAILED	The EU Taxonomy has specific requirements:			
		The specific requirements depend on the activity:			
		<ul> <li>from geothermal: For the operation of high-enthalpy geothermal energy systems, adequate abatement systems are in place to reduce emission levels in order not to hamper the achievement of air quality limit values set out in Directives 2004/107/EC and 2008/50/EC.</li> </ul>			
		<ul> <li>from bioenergy: Emissions are within or lower than the emission levels associated with the best available techniques (BAT-AEL) ranges set out in the latest relevant best available techniques (BAT) conclusions. This includes the best available techniques (BAT) conclusions for large combustion plants, ensuring that no significant cross-media effects occur. Anaerobic digestion of organic material follows the requirements set out in Component Material Categories (CMC).</li> </ul>			

# Colombian activity **EU** activity TSC comparison **Summary**

#### **EDT18. Thermal districts**



#### 4.15 District heating/cooling distribution

ummary	VERY SIMILAR



#### Both taxonomies have similar requirements and thresholds:

- For both taxonomies construction and operation of pipelines and associated infrastructure for distributing heating and cooling is eligible if the system complies with current regulations regarding energy efficiency.
- The following activities are always eligible:

\*Modifications to lower temperature regimes

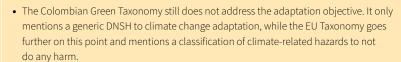
\*Advanced control and energy management systems (e.g., Internet of Things, automated measurement)

#### **Do No Significant Harm**

#### Climate change adaptation

#### INCOMPARABLE

#### Both taxonomies address DNSH on CC adaptation differently:



#### **Conservation of** ecosystems and biodiversity

#### VERY SIMILAR

#### **Both taxonomies have similar requirements:**

• Please refer to the comparison of the generic DNSH criteria on this.

## **Water management**



#### **Both taxonomies have similar requirements:**

• Please refer to the comparison of the generic DNSH criteria on this.

#### **Circular economy**

#### MORE STRINGENT/ AMBITIOUS AND/ OR MORE DETAILED



#### The Colombian Green Taxonomy has generic DNSH requirements on circular economy while the EU Taxonomy does not:

• Please refer to the comparison of the generic DNSH criteria on this.

#### **Pollution control** and prevention

#### LESS STRINGENT/ AMBITIOUS AND/ **OR LESS DETAILED**



#### The EU taxonomy has specific requirements:

• Fans, compressors, pumps, and other equipment, which is covered by the Ecodesign Directive must comply, where relevant, with the top class requirements of the energy label. In all other ways it must comply with the latest implementing measures of the Ecodesign Directive and represent the best available technology.

#### Construction

# Colombian activity

#### C1. Construction of new buildings

#### **EU activity**

#### 7.1 Construction of new buildings



#### TSC comparison

#### Summary

#### LESS STRINGENT/ AMBITIOUS AND/ OR LESS DETAILED

#### The EU Taxonomy has more detailed requirements:

- Both taxonomies use metrics associated with energy efficiency, given in kWh/m² year with reduction percentages.
- The threshold for the Colombian Green Taxonomy has been expressed with respect to the
  guidelines given by the Sustainable Construction Resolution 0549 of 2015. The threshold for
  the EU Taxonomy is based on 'near-zero energy building' (NZEB) requirements, which are
  defined in national regulations implementing the EPBD and are mandatory from 2021.
- Both taxonomies have to comply with the directives and regulations related to the context
  of each jurisdiction however the EU Taxonomy requires the Energy Performance Certificate
  (EPC) where the near-zero consumption is endorsed, while the Colombian Green Taxonomy
  indicates that the builder can certify the savings in energy consumption by the method
  established in the Resolution.
- In Colombia, if the project has a sustainable construction certification with percentage savings in energy consumption criteria equal to or greater than the eligibility criteria measured against the baseline of the Sustainable Construction Resolution, the building is considered eligible.
- The EU Taxonomy requires that any deviation in the levels of performance set out at the design stage or defects in the building envelope are disclosed to investors and clients. This requirement is for buildings larger than 5,000m<sup>2</sup>.
- In the EU Taxonomy, for buildings larger than 5,000m², the life-cycle Global Warming Potential (GWP) of the building resulting from its construction is calculated for each stage in the life cycle. This can be disclosed to investors and clients on demand.

#### **Do No Significant Harm**

# Climate change adaptation

#### LESS STRINGENT/ AMBITIOUS AND/ OR LESS DETAILED



#### The EU Taxonomy has specific requirements:

- From the generic DNSH, the Colombian Green Taxonomy still does not address the adaptation objective. While it mentions it in a general way, the EU Taxonomy has gone deeper on this point and mentions a classification of climate-related hazards to not do significant harm.
   The classification includes hazards that are temperature-related, wind-related, water-related, and solid mass-related (the list of climate-related hazards provided is non-exhaustive, and constitutes only an indicative list of the most widespread hazards that are to be taken into account as a minimum in the climate risk and vulnerability assessment).
- From specific DNSH, the Colombian Green Taxonomy requires the implementation of
  measures to increase resilience to extreme weather events (including floods and flooding)
  and adaptation to future temperature rises in terms of internal comfort conditions
  (including the use of artificial air conditioning systems).

#### Conservation of ecosystems and biodiversity

#### INCOMPARABLE



#### Both taxonomies address DNSH on conservation of ecosystems and biodiversity differently:

- Both taxonomies have similar generic DNSH but specific criteria are different for both taxonomies.
- The Colombian Green Taxonomy requires at least 15% of all wood products used in new
  construction for structures, cladding and finishes must have been recycled or reused, or
  sourced from sustainably managed forests, as certified by third party audits conducted by
  accredited certification bodies. It must ensure that there is no deforestation or significant
  indirect damage to forest ecosystems at the source of timber products.
- $\bullet\,$  The EU taxonomy indicates that new construction cannot be built on:

i. arable land and crop land with a moderate to high level of soil fertility and below ground biodiversity;

ii. greenfield land of recognised high biodiversity value and land that serves as habitat of endangered species; and

iii. land matching the definition of forest as set out in national law used in the national greenhouse gas inventory, or where not available, in accordance with the FAO definition of forest.

# Colombian activity

#### **C1. Construction of new buildings**



#### **EU** activity

#### 7.1 Construction of new buildings

#### **Do No Significant Harm**

#### **Water management**

#### LESS STRINGENT/ AMBITIOUS AND/ OR LESS DETAILED



#### The EU Taxonomy has specific requirements:

 Both taxonomies require relevant water appliances (shower solutions, mixer showers, shower outlets, taps, WC suites, WC bowls and flushing cisterns, urinal bowls and flushing cisterns, and bathtubs). In Colombia, the water savings established in Resolution 0549 of 2015 must be guaranteed, while the EU requires a building certification or an existing EU product label, in accordance with the technical specifications laid down in Appendix E.

Note: This excludes installations in residential building units.

- The EU Taxonomy mentions thresholds for wash hand basin taps and kitchen taps, showers, WCs, suites, bowls, flushing cisterns and urinals.
- The EU Taxonomy complies with the criteria set out in Appendix B to avoid impact from the construction site.

#### **Circular economy**

#### LESS STRINGENT/ AMBITIOUS AND/ OR LESS DETAILED



#### The EU taxonomy has specific requirements:

- Colombia mentions the recovery of a percentage of the construction materials and
  prioritises the use of recycled/recyclable materials. However, the EU Taxonomy requires
  the reuse, recycling, and recovery of other materials of at least 70% (by weight) of the
  non-hazardous construction and demolition waste generated on site, including backfilling
  operations that use waste to substitute other materials.
- The EU requires building designs and construction techniques that support circularity and demonstrate, with reference to ISO 20887 or other standards for assessing the disassembly or adaptability of buildings, how they are designed to be more resource-efficient, adaptable, flexible, and able to be dismantled to enable reuse and recycling.

## Pollution control and prevention

#### LESS STRINGENT/ AMBITIOUS AND/ OR LESS DETAILED



#### The EU Taxonomy has more detailed requirements:

- Both require ensuring that building components and materials do not contain asbestos or substances of very high concern as identified on the basis of the Authorisation List of the REACH Regulation. Colombia cites national regulation (Ley 1968 de 2019).
- Both taxonomies require that all materials, including waste and reused materials, must
  be fit for purpose and ensure no significant adverse impacts on human health or the
  environment. The EU Taxonomy specifies content of less than 0.06 mg of formaldehyde
  per m³ of material or component and less than 0.001 mg of other categories of 1A and 1B
  carcinogenic volatile organic compounds per m³ of material or component.
- Where the new construction is located on a potentially contaminated site (brownfield site) or the site has been subject to an investigation for potential contaminants, the EU Taxonomy suggests using standard ISO 18400.
- The EU Taxonomy requires measures to reduce noise, dust and pollutant emissions during construction or maintenance works.
- The EU Taxonomy requires compliance with the criteria set out in Appendix C for building components and materials used in construction.

# Colombian activity

#### **C2.** Renovation of existing buildings

#### **EU** activity

#### 7.2 Renovation of existing buildings



#### TSC comparison

#### Summary

#### LESS STRINGENT/ AMBITIOUS AND/ OR LESS DETAILED



#### The EU Taxonomy has more detailed requirements:

- Both taxonomies use metrics associated with energy efficiency, given in kWh/m² year with reduction percentages.
- In both taxonomies the project must demonstrate that once the renovation is completed, the percentage of savings in energy consumption will meet the threshold that applies according to the eligibility criteria relating to the construction of new buildings.
- The Colombian Green Taxonomy requires verification that the installation of renewable
  energy generation systems allows a percentage of savings in final energy consumption
  equivalent to 10% with respect to the Resolution. However, the EU Taxonomy requires
  verification that the renovation achieves savings in net Primary Energy Demand of at least
  30% in comparison to the baseline performance of the building before the renovation.

#### Do No Significant Harm

# Climate change adaptation

#### LESS STRINGENT/ AMBITIOUS AND/OR LESS DETAILED



#### **EU Taxonomy has specific requirements:**

- From the generic DNSH, the Colombian Green Taxonomy still does not address the adaptation objective. While it mentions it in a general way, the EU Taxonomy has gone deeper on this point and mentions a classification of climate-related hazards to not do significant harm.

  The classification includes hazards that are temperature-related, wind-related, water-related, and solid mass-related (the list of climate-related hazards provided is non-exhaustive, and constitutes only an indicative list of the most widespread hazards that are to be taken into account as a minimum in the climate risk and vulnerability assessment).
- From the specific DNSH, the Colombian Green Taxonomy requires implementation of
  measures to increase resilience to extreme weather events (including floods and flooding)
  and adaptation to future temperature rises in terms of internal comfort conditions
  (including use of artificial air conditioning systems).

#### Conservation of ecosystems and biodiversity

#### INCOMPARABLE



#### Both taxonomies address DNSH on conservation of ecosystems and biodiversity differently:

- Both taxonomies have similar generic DNSH but specific criteria are different for both taxonomies.
- The Colombian Green Taxonomy requires at least 15% of all wood products used in new
  construction for structures, cladding and finishes must have been recycled or reused, or
  sourced from sustainably managed forests, as certified by third party audits conducted
  by accredited certification bodies. It requires that there is no deforestation or significant
  indirect damage to forest ecosystems at the source of timber products.
- The EU Taxonomy indicates that new construction cannot be built on:

i. arable land and crop land with a moderate to high level of soil fertility and below ground biodiversity;

ii. greenfield land of recognised high biodiversity value and land that serves as habitat of endangered species; and

iii. land matching the definition of forest as set out in national law used in the national greenhouse gas inventory, or where not available, is in accordance with the FAO definition of forest.

#### Water management

#### LESS STRINGENT/ AMBITIOUS AND/OR LESS DETAILED



#### The EU Taxonomy has specific requirements:

 Both taxonomies require relevant water appliances (shower solutions, mixer showers, shower outlets, taps, WC suites, WC bowls and flushing cisterns, urinal bowls and flushing cisterns, and bathtubs). In Colombia, the water savings established in Resolution 0549 of 2015 must be guaranteed, while the EU requires a building certification or an existing EU product label in accordance with the technical specifications laid down in Appendix E.

Note: Except for renovation works in residential building units.

- The EU Taxonomy mentions thresholds for wash hand basin taps and kitchen taps, showers, WCs, including suites, bowls and flushing cisterns, and urinals.
- The EU Taxonomy includes complies with the criteria set out in Appendix B to avoid impact from the construction site.

# Colombian activity

## C2. Renovation of existing buildings

#### **EU** activity

## 7.2 Renovation of existing buildings



#### Do No Significant Harm

#### Circular economy

#### LESS STRINGENT/ AMBITIOUS AND/ OR LESS DETAILED



#### The EU Taxonomy has specific requirements:

- Colombia mentions the recovery of a percentage of the construction materials and
  prioritises the use of recycled/recyclable materials. However, the EU Taxonomy requires
  the reuse, recycling, and recovery of other materials of at least 70% (by weight) of
  the non-hazardous construction and demolition waste generated on site, including
  backfilling operations that use waste to substitute other materials.
- The EU requires building designs and construction techniques that support circularity and demonstrate, with reference to ISO 20887 or other standards for assessing the disassembly or adaptability of buildings, how they are designed to be more resource efficient, adaptable, flexible and able to be dismantled to enable reuse and recycling.

# Pollution control and prevention

#### MORE STRINGENT/ AMBITIOUS AND/OR MORE DETAILED



#### The Colombian Green Taxonomy has more requirements:

- Both require ensuring that building components and materials do not contain asbestos nor substances of very high concern as identified on the basis of the "Authorization List" of the REACH Regulation. Colombia suggests national regulation (Ley 1968 de 2019).
- Both taxonomies require that all materials, including waste and reused materials, must be fit
  for purpose and ensure no significant adverse impacts on human health or the environment.
   The EU Taxonomy specifies levels less than 0.06 mg of formaldehyde per m³ of material or
  component and less than 0.001 mg of other categories 1A and 1B carcinogenic volatile organic
  compounds per m³ of material or component.
- The EU Taxonomy requires measures to reduce noise, dust, and pollutant emissions during construction or maintenance works.
- The EU Taxonomy requires compliance with the criteria set out in Appendix C for building components and materials used in the construction.
- Colombia requires a building inspection in accordance with national legislation, performed by
  a specialist trained in asbestos surveys and in the identification of other materials containing
  substances of concern.
- Colombia specifies that any removal of cladding that contains or may contain asbestos (such as
  removal or modification of insulation boards, shingles and other asbestos-containing materials)
  must be carried out by trained personnel, with sanitary surveillance before, during and after the
  work, and in accordance with applicable regulations.

# Colombian activity

## C3. Acquisition and ownership of buildings

#### **EU** activity

## 7.7 Acquisition and ownership of buildings



#### TSC comparison

#### Summary

#### **VERY SIMILAR**



#### Both taxonomies have similar requirements and eligibility criteria:

For both taxonomies, the acquisition or ownership of buildings may be eligible in three cases, as follows:

- 1. For buildings built after 31 December 2020, the building meets the criteria specified in 'Construction of new buildings' that are relevant at the time of the acquisition. For the EU Taxonomy, large non-residential buildings must meet an additional requirement: efficient building operations must be ensured through dedicated energy management.
- 2. For buildings built before 31 December 2020 (Colombia considers between 31 December 2015 and 31 December 2020), the building or real estate property must have a percentage of savings in energy consumption that is 15% higher. For the Colombian Green Taxonomy this must be with respect to the consumption defined in the energy consumption baseline of the Resolution, while in the EU Taxonomy the building has at least an Energy Performance Certificate (EPC) class A.
- 3. The Colombian Green Taxonomy requires that for buildings constructed before 31 December 2015, the savings obtained with respect to energy consumption must be demonstrated according to the constructive characteristics of the reference building, as defined in Annex 1 of the Resolution. For the EU Taxonomy where the building is a large non-residential building it should be efficiently operated through energy performance monitoring and assessment

#### **Do No Significant Harm**

# Climate change adaptation

#### LESS STRINGENT/ AMBITIOUS AND/OR LESS DETAILED



#### The EU Taxonomy has specific requirements:

- From the generic DNSH, the Colombian Green Taxonomy still does not address the adaptation objective. While it mentions it in a general way, the EU Taxonomy has gone deeper on this point and mentions a classification of climate-related hazards to not do significant harm. The classification includes temperature-related; wind-related; water-related; and solid mass-related (the list of climate-related hazards provided is non-exhaustive, and constitutes only an indicative list of most widespread hazards that are to be taken into account as a minimum in the climate risk and vulnerability assessment).
- From specific DNSH the Colombian Green Taxonomy requires implementation of measures
  to increase resilience to extreme weather events (including floods and flooding) and
  adaptation to future temperature rises in terms of internal comfort conditions (including
  use of artificial air conditioning systems).

#### Conservation of ecosystems and biodiversity

#### INCOMPARABLE



#### Both taxonomies address DNSH on conservation of ecosystems and biodiversity differently:

- Both taxonomies have similar generic DNSH but specific criteria are different for both taxonomies.
- The Colombian Green Taxonomy requires at least 15% of all wood products used in new
  construction for structures, cladding and finishes must have been recycled or reused, or
  sourced from sustainably managed forests, as certified by third party audits conducted
  by accredited certification bodies. It requires that there is no deforestation or significant
  indirect damage to forest ecosystems at the source of timber products
- The EU Taxonomy indicates that new construction cannot be built on:
- i. arable land and crop land with a moderate to high level of soil fertility and below ground biodiversity;
- ii. greenfield land of recognised high biodiversity value and land that serves as habitat of endangered species; and
- iii. land matching the definition of forest as set out in national law used in the national greenhouse gas inventory, or where not available, is in accordance with the FAO definition of forest.

# Colombian activity **EU** activity

## C3. Acquisition and ownership of buildings



## 7.7 Acquisition and ownership of buildings

Do N	- 6	and it	ii aa m	t Harm

#### LESS STRINGENT/ AMBITIOUS AND/ **OR LESS DETAILED**



#### The EU Taxonomy has specific requirements:

• Both taxonomies require relevant water appliances (shower solutions, mixer showers, shower outlets, taps, WC suites, WC bowls and flushing cisterns, urinal bowls and flushing cisterns, and bathtubs). In Colombia, the water savings established in Resolution 0549 of 2015 must be guaranteed, while the EU requires a building certification or an existing EU product label, in accordance with the technical specifications laid down in Appendix E.

Note: This excludes installations in residential building units.

- The EU Taxonomy mentions thresholds for wash hand basin taps and kitchen taps, showers, WCs, suites, bowls, flushing cisterns, and urinals.
- The EU Taxonomy complies with the criteria set out in Appendix B to avoid impact from the construction site.

#### MORE STRINGENT/ AMBITIOUS AND/ OR MORE DETAILED



#### MORE STRINGENT/ AMBITIOUS AND/ OR MORE DETAILED



#### The Colombian Green Taxonomy has specific requirements

• Colombia mentions the recovery of a percentage of the construction materials and prioritises the use of recycled/recyclable materials. However, the EU Taxonomy does not have specific DNSH on circular economy.

#### The Colombian Green Taxonomy has specific requirements:

• For Colombia the acquisition and ownership of low-carbon and efficient buildings is subject to meeting the compliance requirements established for the construction and renovation of buildings. However, the EU Taxonomy does not have specific DNSH on pollution control and prevention.

Colombian activity	C1-C2. Complementary individual measures		
EU activity	7.3 Installation, maintenance and repair of energy efficiency equipment		
		maintenance and repair of charging stations for electric lings (and parking spaces attached to buildings)	
		maintenance and repair of instruments and devices for Ilation and controlling energy performance of buildings	
	7.6 Installation,	maintenance and repair of renewable energy technologies	
	4.16 Installation	and operation of electric heat pumps	
	9.3 Professional	services related to energy performance of buildings	
TSC comparison			
Summary	MORE STRINGENT/ AMBITIOUS AND/ OR MORE DETAILED	The Colombian Green Taxonomy has more requirements:  Colombia considers optional complementary individual measures that contribute to achieving the eligibility criteria for the activities relating to the construction of new buildings and renovation of buildings at the building level. The EU Taxonomy has individual activities that cover similar aspects.	
		<ul> <li>Within the individual measures, both taxonomies include measures to reduce energy consumption and emissions during the operational phase of buildings, as well as professional services related to technical consultations linked to individual measures, accredited energy audits and building performance assessments.</li> </ul>	
		The Colombian Green Taxonomy provides individual measures to building level and city, municipality or locality level, and specifies which require evidence of reduction and which do not.	
		The Colombian Green Taxonomy provides more individual measurements, some of which are also related to the ICT sector.	
Do No Significant Harm			
Climate change	INCOMPARABLE	Both taxonomies address DNSH on CC adaptation differently:	
adaptation		<ul> <li>The Colombian Green Taxonomy still does not address the adaptation objective and it only mentions a generic DNSH to climate change adaptation. However, the EU Taxonomy goes further on this point and mentions a classification of climate-related hazards so as to do no significant harm.</li> </ul>	
Conservation of	VERY SIMILAR	Both taxonomies have similar requirements:	
ecosystems and biodiversity		Please refer to the comparison of the generic DNSH criteria on this.	
Water management	VERY SIMILAR	Both taxonomies have similar requirements:	
		Please refer to the comparison of the generic DNSH criteria on this.	
Circular economy	MORE STRINGENT/	The Colombian Green Taxonomy has DNSH generic requirements on circular economy	
	AMBITIOUS AND/OR MORE DETAILED	<ul> <li>while the EU Taxonomy does not:</li> <li>Please refer to the comparison of the generic DNSH criteria on this.</li> </ul>	
Pollution control	VERY SIMILAR	Both taxonomies have similar requirements:	
and prevention		Please refer to the comparison of the generic DNSH criteria on this.	

## Waste

Colombian activity	RC1. Sewage sludge treatment  5.6 Anaerobic digestion of sewage sludge	
EU activity		
TSC comparison		
Summary	LESS STRINGENT/ AMBITIOUS AND/ OR MORE DETAILED	<ul> <li>Although the taxonomies have similar thresholds on several points, the Colombian Green Taxonomy adds that in cases where the systems include only biogas flaring, they must have a transition program to other types of use in the medium term (less than three years). In contrast, the EU Taxonomy does not allow biogas flaring.</li> <li>Both taxonomies consider facilities for the treatment of sewage sludge by anaerobic</li> </ul>
		<ul> <li>digestion with the resulting production and utilisation of biogas or chemicals.</li> <li>For both taxonomies, the treatment of sludge with anaerobic digestion systems should include a monitoring and contingency plan in order to minimise methane leakage at the facility.</li> </ul>
		<ul> <li>For both taxonomies, the biogas produced must be used for electricity or heat generation, or transformed into biomethane for injection into the natural gas grid. It can also be used as fuel for vehicles or as a raw material in the chemical industry.</li> </ul>
		The Colombian Green Taxonomy requires that digestate produced is used as fertilizer.
		• In Colombia, activities that facilitate the use and utilisation of biogas, such as dehydration, compression or similar, are also eligible.
Do No Significant Harm	1	
Climate change adaptation	INCOMPARABLE	The Colombian Green Taxonomy still does not address the adaptation objective. It only mentions a generic DNSH to climate change adaptation, while the EU Taxonomy goes further on this point and mentions a classification of climate-related hazards to not do any harm.
Conservation of	VERY SIMILAR	Both taxonomies have similar requirements:
ecosystems and biodiversity		Please refer to the comparison of the generic DNSH criteria on this.
Water management	VERY SIMILAR	Both taxonomies have similar requirements:
		Please refer to the comparison of the generic DNSH criteria on this.
Circular economy	MORE STRINGENT/ AMBITIOUS AND/	The Colombian Green Taxonomy has generic DNSH requirements on circular economy while the EU Taxonomy does not:
	OR MORE DETAILED	Please refer to the comparison of the generic DNSH criteria on this.
Pollution control	VERY SIMILAR	Both taxonomies have similar requirements:
and prevention		<ul> <li>Both taxonomies require emissions within or below the ranges established according to the regulations of each country or region. Colombia considers Law 142 of 1994 and Decree 1287 of 2014 while the EU considers the best available techniques (BAT-AEL) ranges set for anaerobic treatment of waste in the latest relevant best available techniques (BAT) conclusions.</li> </ul>
		<ul> <li>The Colombian Green Taxonomy requires that air emissions (such as SOx, NOx, and particulate matter) generated by biogas combustion are controlled and reduced (when necessary), within the limits established by regulations.</li> </ul>
		<ul> <li>For both taxonomies, the digestate resulting from this activity, which is used as a fertilizer or soil improver, must meet the standards of each country or region. The EU Taxonomy requires this to be communicated to the buyer or the entity in charge of collecting the digestate.</li> </ul>

Colombia activity
EU activit
TSC comparis
Summary

# RC2. Separate collection and transport of non-hazardous waste in the segregated fraction at source



activity	5.5. Collection and transport of non-hazardous waste in source segregated fractions		
EU activity			
TSC comparison			
Summary	MORE STRINGENT/ AMBITIOUS AND/	The Colombian Green Taxonomy has detailed requirements:	
	OR MORE DETAILED	<ul> <li>Both taxonomies consider all non-hazardous waste collected and transported separately that is separated at source and destined for preparation for reuse or recycling operations.</li> </ul>	
		The Colombian Green Taxonomy requires:	
		Facilities that optimise transportation, such as transfer stations, are included.	
		<ul> <li>Investments are made in compaction, shredding and other activities that improve logistical capacity in transportation.</li> </ul>	
Do No Significant Harm			
Climate change	INCOMPARABLE	Both taxonomies address DNSH on CC adaptation differently:	
adaptation		<ul> <li>The Colombian Green Taxonomy still does not address the adaptation objective. It only mentions a generic DNSH to climate change adaptation, while the EU Taxonomy goes further on this point and mentions a classification of climate-related hazards to not do any harm.</li> </ul>	
Conservation of	Y SIMILAR	Both taxonomies have similar requirements:	
ecosystems and biodiversity		Please refer to the comparison of the generic DNSH criteria on this.	
Water management	Y SIMILAR	Both taxonomies have similar requirements:	
		Please refer to the comparison of the generic DNSH criteria on this.	
Circular economy	Y SIMILAR	Both taxonomies have similar requirements:	
		<ul> <li>Both taxonomies avoid mixing separately collected waste fractions so that they are not mixed at the waste storage and transfer facilities with other waste or materials with different properties.</li> </ul>	
Pollution control and prevention	MORE STRINGENT/	The Colombian Green Taxonomy has specific requirements:	
	AMBITIOUS AND/ MORE DETAILED	The Colombian Green Taxonomy requires compliance with regulations related to the proper handling of leachate during the separate transportation of waste.	

#### Colombi<u>an</u> activity

#### RC3. Anaerobic digestion of organic waste with methane capture or use

#### **EU** activity

#### 5.7. Anaerobic digestion of biowaste



#### TSC comparison

#### LESS STRINGENT/ AMBITIOUS AND/ **OR MORE DETAILED**



#### The EU Taxonomy is more stringent:

- Although the taxonomies have similar thresholds on several points, the Colombian Green Taxonomy adds that in cases where the systems include only biogas flaring, they must have a transition program to other types of use in the medium term (less than three years). In contrast, the EU Taxonomy does not allow biogas flaring.
- For both taxonomies, the biowaste that is used for anaerobic digestion is source segregated and collected separately.
- Both taxonomies require a monitoring and contingency plan is in place in order to minimise methane leakage at the facility.
- For both taxonomies, the biogas produced should be used directly for the generation of electricity or heat, or upgraded to biomethane for injection in the natural gas grid. Additionally, it can be used as vehicle fuel or as feedstock in the chemical industry.
- For both taxonomies, the digestate produced is used as fertiliser or soil improver, either directly or after composting or any other treatment.
- In Colombia, activities that facilitate the use and utilisation of biogas, such as dehydration, compression or similar, are also eligible.
- In the dedicated biowaste treatment plants, organic waste constitutes an important part of the input feedstock. Co-digestion is eligible with a minor share of advanced bioenergy feedstock (up to 30% of the input feedstock in Colombia, while in the EU it is 10%). Colombia considers the eligibility criteria for the agricultural sector.

#### **Do No Significant Harm**

# Climate change

#### INCOMPARABLE

#### Both taxonomies address DNSH on CC adaptation differently:

• The Colombian Green Taxonomy still does not address the adaptation objective. It only mentions a generic DNSH to climate change adaptation, while the EU Taxonomy goes further on this point and mentions a classification of climate-related hazards to not do any harm.

# **Conservation of**

#### MORE STRINGENT/ AMBITIOUS AND/ **OR MORE DETAILED**

## The Colombian Green Taxonomy has specific requirements:

• The Colombian Green Taxonomy requires that the origin of inputs coming from agricultural/agro-industrial activity must comply with the eligibility criteria established in the AFOLU sector.

The Colombian Green Taxonomy has generic requirements while the EU Taxonomy

#### **Water management**

#### **VERY SIMILAR**



#### Both taxonomies have similar requirements:

• Please refer to the comparison of the generic DNSH criteria on this.

#### Circular economy

#### MORE STRINGENT/ AMBITIOUS AND/ OR MORE DETAILED

• Please refer to the comparison of the generic DNSH criteria on this.



# **Pollution control**

#### **VERY SIMILAR**



#### Both taxonomies have similar requirements:

does not have generic DNSH on circular economy:

- Both taxonomies require emissions within or below the ranges established according to the regulations of each country or region. Colombia considers Law 142 of 1994 and Decree 1287 of 2014 while the EU considers the best available techniques (BAT-AEL) ranges set for anaerobic treatment of waste in the latest relevant best available techniques (BAT) conclusions.
- The Colombian Green Taxonomy requires that air emissions (such as SOx, NOx and particulate matter) generated by biogas combustion are controlled and reduced (when necessary), within the limits established by regulations.
- For both taxonomies, the digestate resulting from this activity, which is used as a fertilizer or soil improver, must meet the standards of each country or region. The EU Taxonomy requires this to be communicated to the buyer or the entity in charge of collecting the digestate.

Colombian activity	RC4. Composting of organic waste		
EU activity	5.8. Composting of biowaste		
TSC comparison			
Summary	MORE STRINGENT/ AMBITIOUS AND/ OR MORE DETAILED	<ul> <li>The Colombian Green Taxonomy has more requirements:</li> <li>For both taxonomies, the facilities for the treatment of separately collected biowaste through composting (aerobic digestion) with the resulting production and utilisation of compost is eligible if:</li> <li>The organic waste is segregated and collected separately.</li> <li>The compost produced is used as fertiliser or soil improver and meets the requirements for fertilising materials set out in the specific regulations.</li> </ul>	
Do No Significant Harn		The Colombian Green Taxonomy includes minimising methane losses in the composting process.	
Climate change adaptation	INCOMPARABLE	Both taxonomies address DNSH on CC adaptation differently:     The Colombian Green Taxonomy still does not address the adaptation objective. It only mentions a generic DNSH to climate change adaptation, while the EU Taxonomy goes further on this point and mentions a classification of climate-related hazards to not do any harm.	
Conservation of ecosystems and biodiversity	VERY SIMILAR	Both taxonomies have similar requirements:  • Please refer to the comparison of the generic DNSH criteria on this.	
Water management	VERY SIMILAR	Both taxonomies have similar requirements:  • Please refer to the comparison of the generic DNSH criteria on this.	
Circular economy	MORE STRINGENT/ AMBITIOUS AND/ OR MORE DETAILED	The Colombian Green Taxonomy has generic requirements while the EU Taxonomy does not have generic DNSH on circular economy:  • Please refer to the comparison of the generic DNSH criteria on this.	
Pollution control and prevention	VERY SIMILAR	Both taxonomies have similar requirements:  Both taxonomies require a management plan to be in place or that emissions to air and water for composting plants treating over 75 tonnes per day are within or lower than the emission levels associated with the best available techniques (BAT-AEL).	

materials set out in the regulations.

Both taxonomies require a system in place that prevents leachate reaching groundwater.
For both taxonomies, the compost produced must meet the requirements for fertilising

Colombian activity	RC5. Use of non-hazardous waste material		
EU activity	5.9. Material recovery from non-hazardous waste		
TSC comparison			
Summary	MORE STRINGENT/ AMBITIOUS AND/ OR MORE DETAILED	<ul> <li>The Colombian Green Taxonomy has more requirements:</li> <li>Both taxonomies consider facilities for the sorting and processing of separately collected non-hazardous waste and conversion into secondary raw materials involving mechanical reprocessing. This activity is eligible if:</li> </ul>	
		• it produces secondary raw materials suitable for the substitution of virgin materials in production processes.	
		• The activity converts at least 50%, in terms of weight, of the processed separately collected non-hazardous waste into secondary raw materials.	
		The Colombian Green Taxonomy includes assets for mechanised separation and transformation activities, which increase the value and usability of the material.	
Do No Significant Harr	n		
Climate change adaptation	INCOMPARABLE	The Colombian Green Taxonomy still does not address the adaptation objective. It only mentions a generic DNSH to climate change adaptation, while the EU Taxonomy goes further on this point and mentions a classification of climate-related hazards to not do any harm.	
Conservation of	VERY SIMILAR	Both taxonomies have similar requirements:	
ecosystems and biodiversity		Please refer to the comparison of the generic DNSH criteria on this.	
Water management	VERY SIMILAR	Both taxonomies have similar requirements:	
		Please refer to the comparison of the generic DNSH criteria on this.	
Circular economy	MORE STRINGENT/ AMBITIOUS AND/ OR MORE DETAILED	The Colombian Green Taxonomy has generic requirements while the EU Taxonomy does not have generic DNSH on circular economy:  • Please refer to the comparison of the generic DNSH criteria on this.	
Pollution control	VERY SIMILAR	Both taxonomies have similar requirements:	
and prevention		Please refer to the comparison of the generic DNSH criteria on this.	
Colombian activity	RC6. Energy pro fractions (therm	duction from non-recyclable waste nal treatment)	
EU activity	N/A		

Colombian activity	RC6. Energy production from non-recyclable waste fractions (thermal treatment)	
EU activity	N/A	
TSC comparison		
Summary	N/A	This is an additional activity contained only within the Colombian Green Taxonomy and is therefore not taken into account in the analysis.

#### Colombian activity

## RC7. Capture and utilisation of landfill gas



#### **EU** activity

#### 5.10. Landfill gas capture and utilisation

#### TSC comparison

#### LESS STRINGENT/ **AMBITIOUS AND/ OR MORE DETAILED**



#### The EU Taxonomy is more stringent:

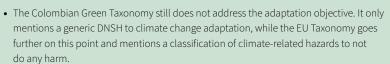
- Although the taxonomies have similar thresholds on several points, the Colombian Green Taxonomy adds that in cases where the systems include only biogas flaring, they must have a transition program to other types of use in the medium term (less than 3 years). In contrast, the EU taxonomy does not allow biogas flaring.
- For both taxonomies, capture and utilisation of landfill gas are directly eligible if:
- The landfill is permanently closed.
- The landfill where the gas capture system is newly installed, extended, or retrofitted is permanently closed and is not taking in further waste.
- The produced landfill gas is used for the generation of electricity or heat as biogas, or upgraded to biomethane for injection in the natural gas grid. Additionally, it can be used as vehicle fuel or as feedstock in chemical industry.
- Methane emissions from the landfill and leakages from the landfill gas collection and utilisation facilities are subject to control and monitoring procedures.

#### **Do No Significant Harm**

#### Climate change adaptation

#### **INCOMPARABLE**

#### Both taxonomies address DNSH on CC adaptation differently:



# biodiversity

#### **VERY SIMILAR**



## **Both taxonomies have similar requirements:**

• Please refer to the comparison of the generic DNSH criteria on this.

## **VERY SIMILAR**

#### **Both taxonomies have similar requirements:**

• Please refer to the comparison of the generic DNSH criteria on this.

#### Circular economy

#### MORE STRINGENT/ **AMBITIOUS AND/OR MORE DETAILED**



#### The Colombian Green Taxonomy has generic requirements while the EU Taxonomy does not have generic DNSH on circular economy:

• Please refer to the comparison of the generic DNSH criteria on this.

# **Pollution control**

#### LESS STRINGENT/ **AMBITIOUS AND/OR LESS DETAILED**



#### The EU Taxonomy has more detailed requirements:

- The Colombian Green Taxonomy contains a specific requirement related to controlling emissions of SOx, NxOy and particulate matter, reducing them (when necessary), and monitoring them within the limits established by current regulations.
- The EU Taxonomy specifies requirements for the permanent closure and remediation as well as the after-care of old landfills, where the landfill gas capture system is installed. This must be carried out in accordance with the Directive 1999/31/EC (Annex I and II).

Colombian activity	RC8. Artificial ca	apture, transport and storage/use of GHGs	
EU activity	5.11 Transport of CO <sub>2</sub>		
	5.12. Undergroເ	and permanent geological storage of CO <sub>2</sub>	
TSC comparison			
Summary	VERY SIMILAR	The Colombian Green Taxonomy has more requirements:	
	•	Both taxonomies consider requirements for the transport, storage, and use of captured GHG. Colombia also has specific requirements to capture it while the EU does not.	
		* For capture (only The Colombian Green Taxonomy):	
		All activities related to capture of GHGs from the atmosphere to reduce global atmospheric GHG concentration levels are eligible, subject to periodic review.	
		<ul> <li>Activities related to carbon sequestration in GHG emitting facilities, as long as they ensure the capture of at least 90% of the GHG emissions generated, are eligible if they are part of the carbon neutrality pathway defined in the GCCP. This criterion is subject to periodic review.</li> </ul>	
		* For transport (both taxonomies):	
		• The $CO_2$ transported from the installation where it is captured to the injection point does not lead to $CO_2$ leakages above 0.5% of the mass of $CO_2$ transported.	
		The activity may include the installation of assets that increase the flexibility and improve the management of an existing network.	
		<ul> <li>Appropriate leak detection systems are applied and a monitoring plan is in place, with the report verified by an independent third party.</li> </ul>	
		* For storage (both taxonomies):	
		• The operation of a permanent $CO_2$ storage facility is directly eligible if the facility complies with ISO 27914 criteria.	
		The EU Taxonomy includes a characterisation and assessment of the potential storage complex and surrounding area.	
		The Colombian Green Taxonomy defines that activities that use captured GHG as feedstock to generate new products or materials are directly eligible.	
Do No Significant Harn			
Climate change adaptation	INCOMPARABLE	Both taxonomies address DNSH on CC adaptation differently:	
		<ul> <li>The Colombian Green Taxonomy still does not address the adaptation objective. It only mentions a generic DNSH to climate change adaptation, while the EU Taxonomy goes further on this point and mentions a classification of climate-related hazards to not do any harm.</li> </ul>	
Conservation of	VERY SIMILAR	Both taxonomies have similar requirements:	
ecosystems and biodiversity		Please refer to the comparison of the generic DNSH criteria on this.	
Water management	MORE STRINGENT/	The Colombian Green Taxonomy has specific requirements:	
	AMBITIOUS AND/OR MORE DETAILED	The Colombian Green Taxonomy requires capture to decrease additional abstraction requirements for capture plants in order to avoid reductions in waterbody flows.	
		For storage, it requires avoidance of water pollution from spills from earthworks, accidental spills, wastewater discharges, etc.	
		<ul> <li>For storage, it requires protection of groundwater hydrology and aquatic ecology during plant construction and operation of the catchment plants.</li> </ul>	
Circular economy	MORE STRINGENT/	The Colombian Green Taxonomy has specific requirements:	
	AMBITIOUS AND/OR MORE DETAILED	The Colombian Green Taxonomy requires:	
		Selection of equipment based on environmental impact criteria and performing a chemical risk assessment.  Avaidance of the hazardous solvent waste amine and carbon use.	
		<ul> <li>Avoidance of the hazardous solvent waste amine and carbon use.</li> <li>Compliance with current regulations regarding the use of carbon.</li> </ul>	

Colombian activity	RC8. Artificial capture, transport and storage/use of GHGs		
EU activity	5.11 Transport of CO <sub>2</sub>		
	5.12. Underground permanent geological storage of CO <sub>2</sub>		
Do No Significant Harm			
Pollution control and prevention	MORE STRINGENT/ AMBITIOUS AND/OR MORE DETAILED	<ul> <li>The Colombian Green Taxonomy has specific requirements:</li> <li>The Colombian Green Taxonomy requires:</li> <li>Prevention of the release of GHG emissions during operation by implementing detection systems.</li> <li>Prevention of the loss of ammonia during operation.</li> <li>Minimising the formation of secondary aerosols and tropospheric ozone production.</li> <li>To have fans, compressors, pumps and other equipment used for the used for CO<sub>2</sub> transport that are as efficient as possible in the consumption of electricity required for their operation.</li> </ul>	

#### Water

Colombian activity	A1. Aqueduct systems		
EU activity	<ul><li>5.1 Construction, extension and operation of water collection, treatment and supply systems</li><li>5.2 Renewal of water collection, treatment and supply systems</li></ul>		
TSC comparison			
Summary	LESS STRINGENT/	The EU Taxonomy is more stringent and detailed:	
	AMBITIOUS AND/ OR LESS DETAILED	<ul> <li>Both taxonomies have requirements for new and existing systems, however, requirements for new systems are different and for existing system have some similarities.</li> </ul>	
		*For new systems:	
		• The Colombian Green Taxonomy thresholds are based on the average carbon intensity of energy (equal to or less than 100 gCO <sub>2</sub> / kWh), and also mention leakage limitation and maintenance measures taking into account local regulations (Reglamento de Agua y Saneamiento Básico (RAS)). The EU Taxonomy bases its thresholds on the average net energy consumption (0.5 kWh) per cubic metre of water supply produced and provides for additional reduction measures in source control and energy generation. For leakage, it provides a methodology calculation (ILI) and thresholds that must be applied to the entirextent of the supply network.	
		*For existing systems:	
		<ul> <li>Both taxonomies require the decrease of the net average energy consumption of the system by at least 20%, measured in kWh per cubic metre of produced water supply. They also aim to reduce leakage levels, however, the Colombian Green Taxonomy refers to an index included in its regulation (IPUF), while the EU suggests the Infrastructure Leakage Index ILI. Colombia adds a requirement to increase the coverage of existing systems that already meet target value leakage according to the IPUF.</li> </ul>	
Do No Significant Harn	1		
Climate change	INCOMPARABLE	Both taxonomies address DNSH on CC adaptation differently:	
adaptation		<ul> <li>The Colombian Green Taxonomy still does not address the adaptation objective. It only mentions a generic DNSH to climate change adaptation, while the EU Taxonomy goes further on this point and mentions a classification of climate-related hazards to not do any harm.</li> </ul>	
Conservation of	VERY SIMILAR	Both taxonomies have similar requirements:	
ecosystems and biodiversity		Please refer to the comparison of the generic DNSH criteria on this.	
Water management	VERY SIMILAR	Both taxonomies have similar requirements:	
		Please refer to the comparison of the generic DNSH criteria on this.	
Circular economy	MORE STRINGENT/ AMBITIOUS AND/OR	The Colombian Green Taxonomy has generic DNSH requirements on circular econor while the EU Taxonomy does not:	
	MORE DETAILED	Please refer to the comparison of the generic DNSH criteria on this.	
Pollution control	VERY SIMILAR	Both taxonomies have similar requirements:	
and prevention		Please refer to the comparison of the generic DNSH criteria on this.	

• Please refer to the comparison of the generic DNSH criteria on this.

Colombian activity	A2. Sanitary and	d combined sewage systems	
EU activity	5.3 Construction, extension and operation of waste water collection and treatment  5.4. Renewal of waste water collection and treatment		
TSC comparison			
Summary	LESS STRINGENT/ AMBITIOUS AND/ OR LESS DETAILED	• In activity 5.3 within the EU Taxonomy, specifically for wastewater collection systems (sewerage), it states that for the construction and extension of a wastewater treatment plant with a collection system, a verification of GHG reduction is required. Likewise, activity 5.4 in the EU Taxonomy states that for the renovation of a collection system, energy efficiency improvement must be demonstrated by decreasing an average energy consumption by 20%.	
		• The Colombian Green Taxonomy does not indicate quantitative compliance thresholds for this activity, basing its eligibility on a list of requirements to ensure process efficiency.	
		Therefore, the eligibility criteria associated with wastewater collection systems (sewerage) are less stringent in the Colombian Green Taxonomy as they do not require the GHG verification and energy efficiency improvement requested by the EU.	
Do No Significant Harn	n		
Climate change	INCOMPARABLE	Both taxonomies address DNSH on CC adaptation differently:	
adaptation	•	<ul> <li>The Colombian Green Taxonomy still does not address the adaptation objective. It only mentions a generic DNSH to climate change adaptation, while the EU Taxonomy goes further on this point and mentions a classification of climate-related hazards to not do any harm.</li> </ul>	
Conservation of	VERY SIMILAR	Both taxonomies have similar requirements:	
ecosystems and biodiversity		Please refer to the comparison of the generic DNSH criteria on this.	
Water management	VERY SIMILAR	Both taxonomies have similar requirements:	
		Please refer to the comparison of the generic DNSH criteria on this.	
Circular economy	MORE STRINGENT/ AMBITIOUS AND/OR MORE DETAILED	The Colombian Green Taxonomy has specific requirements:	
		The Colombian Green Taxonomy requires an appropriate management plan for the disposal and treatment of sludge and waste.	
Pollution control	LESS STRINGENT/	The EU Taxonomy has more specific requirements:	
and prevention	AMBITIOUS AND/ OR LESS DETAILED	<ul> <li>The Colombian Green Taxonomy requires an appropriate management plan for the disposal and treatment of used oils and lubricants while the EU Taxonomy establishes requirements for discharges into waterways.</li> </ul>	
		<ul> <li>The EU Taxonomy includes a requirement to implement measures to prevent and mitigate excessive storm water overflows from the wastewater collection system,</li> </ul>	

holding tanks, and first flush treatment.

on land.

which may include nature-based solutions, separate storm water collection systems,

• In the EU Taxonomy the sewage sludge should be used in accordance with Council Directive 86/278/EEC or with the provisions of national legislation concerning the spreading of sludge

# Colombian activity

## A3. Wastewater treatment systems



#### **EU** activity

# 5.3 Construction, extension and operation of wastewater collection and treatment

## 5.4. Renewal of wastewater collection and treatment

#### **TSC** comparison

#### Summary

#### LESS STRINGENT/ AMBITIOUS AND/ OR LESS DETAILED



#### The EU Taxonomy is more stringent and detailed:

Both taxonomies have requirements for new and existing systems, however, requirements for both are different. The Colombian Green Taxonomy also includes anaerobic systems and focuses on two types of systems: centralised wastewater treatment, and alternative or individual wastewater treatment. However, the EU Taxonomy focuses on just one: centralised wastewater treatment, which it proposes specific criteria for.

#### \*For new systems:

Both taxonomies refer to the substitution of emission-intensive systems, while the EU defines
additional thresholds based on net energy consumption depending on the treatment plant capacity.

#### \*For existing systems:

The Colombian Green Taxonomy focuses on investments that increase the treated flow
capacity and reduce energy consumption or favour the use of renewable sources. The EU
Taxonomy requires that the renovation improves energy efficiency and for this purpose,
establishes reduction thresholds with respect to its own performance reference. The net
energy consumption of the system is calculated in kWh per population equivalent per
annum of the wastewater collected or effluent treated.

#### \* Anaerobic systems:

 The Colombian Green Taxonomy defines additional criteria such as monitoring plans for methane leakage and the use of biogas for electricity generation. Additionally, it includes feedstock in the chemical industry and activities that facilitate the use or exploitation of biogas.

#### **Do No Significant Harm**

# Climate change adaptation

#### INCOMPARABLE



#### Both taxonomies address DNSH on CC adaptation differently:

The Colombian Green Taxonomy still does not address the adaptation objective. It only
mentions a generic DNSH to climate change adaptation, while the EU Taxonomy goes
further on this point and mentions a classification of climate-related hazards to not
do any harm.

# Conservation of ecosystems and biodiversity

#### VERY SIMILAR



## Both taxonomies have similar requirements:

• Please refer to the comparison of the generic DNSH criteria on this.

#### Water management

#### **VERY SIMILAR**



#### Both taxonomies have similar requirements:

• Please refer to the comparison of the generic DNSH criteria on this.

#### Circular economy

#### MORE STRINGENT/ AMBITIOUS AND/OR MORE DETAILED



#### The Colombian Green Taxonomy has specific requirements:

• The Colombian Green Taxonomy requires an appropriate management plan for the disposal and treatment of sludge and waste.

# Pollution control and prevention

#### LESS STRINGENT/ AMBITIOUS AND/OR LESS DETAILED



#### The EU Taxonomy has more specific requirements:

- The Colombian Green Taxonomy requires an appropriate management plan for the disposal and treatment of used oils and lubricants while the EU Taxonomy establishes requirements for discharges to waterways.
- The EU Taxonomy includes a requirement to implement measures to prevent and mitigate
  excessive storm water overflows from the wastewater collection system,
  which may include nature-based solutions, separating storm water collection systems,
  holding tanks, and first flush treatment.
- In the EU Taxonomy, the sewage sludge should be used in accordance with Council
  Directive 86/278/EEC or with the provisions of national legislation concerning the spreading
  of sludge on land.

#### Comparision Study between the Colombian and EU Taxonomies Climate Bonds Initiative

Colombian activity	A4. Investments for efficient water use	
EU activity	N/A	
TSC comparison		
Summary	N/A	This is an additional activity included in only the Colombian Green Taxonomy and is therefore not taken into account in the analysis.

## **Transport**

Colombian activity	T1. Urban Publi	c Transportation
EU activity	6.3. Urban and suburban transport, road passenger transport	
	6.7. Inland pass	enger water transport
	6.9. Retrofitting	of inland water passenger and freight transport
		astal passenger water transport
	6.12. Retrofittin	g of sea and coastal freight and passenger
TSC comparison		
Summary	INCOMPARABLE	Both Taxonomies address this activity differently.
		Both taxonomies consider zero direct emission transport as directly eligible.
		• For retrofitting, the Colombian Green Taxonomy expresses the screening criteria in gCO <sub>2</sub> e/pkm, while the EU Taxonomy expresses most of the thresholds in % of fuel savings.
Do No Significant Harm		
Climate change	INCOMPARABLE	Both taxonomies address DNSH on CC adaptation differently:
adaptation		<ul> <li>The Colombian Green Taxonomy still does not address the adaptation objective. It only mentions a generic DNSH to climate change adaptation, while the EU Taxonomy goes further on this point and mentions a classification of climate-related hazards to not do any harm.</li> </ul>
Conservation of	LESS STRINGENT/	The Colombian Green Taxonomy does not have specific DNSH requirements on
ecosystems and biodiversity	AMBITIOUS AND/OR LESS DETAILED	<ul> <li>circular economy while the EU Taxonomy does:</li> <li>The EU Taxonomy has a requirement to follow the Directive 2008/56/EC (Marine Strategy Framework Directive), requiring that the appropriate measures are taken to prevent or mitigate impacts in relation to that Directive's descriptors 1 (biodiversity), 2 (non-indigenous species), 6 (seabed integrity), 8 (contaminants), 10 (marine litter), and 11 (Noise/Energy)</li> </ul>
Water management	VERY SIMILAR	Both taxonomies have similar requirements:
		Please refer to the comparison of the generic DNSH criteria on this.
Circular economy	VERY SIMILAR	The Colombian Green Taxonomy addresses these requirements from the generic DNSH while EU Taxonomy makes use of the specific requirements on circular economy for this activity:
		<ul> <li>In both taxonomies, measures are in place to manage waste, in accordance with the waste hierarchy, both in the use phase (maintenance) and the end-of-life, including through reuse and recycling of batteries and electronics (in particular, those containing critical raw materials).</li> </ul>
Pollution control	INCOMPARABLE	Both taxonomies have different requirements in pollution control and prevention
and prevention		for this activity:
		Both taxonomies have requirements related to noise and atmospheric contamination.
		The Colombian Green Taxonomy also has requirements regarding a management plan for hazardous waste.
		The EU Taxonomy includes requirements for wastewater discharge from ships and also for control of harmful anti-fouling systems on ships.

Colombian activity	T2. Micromobility	
EU activity	6.4. Operation of personal mobility devices, cycle logistics	
TSC comparison		
Summary	VERY SIMILAR	Both taxonomies have similar requirements and thresholds:     The propulsion of personal mobility devices comes from the physical activity of the user, from a zero-emissions motor, or a mix of zero-emissions motor and physical activity.
Do No Significant Harn	n	
Climate change adaptation	INCOMPARABLE	Both taxonomies address DNSH on CC adaptation differently:     The Colombian Green Taxonomy still does not address the adaptation objective. It only mentions a generic DNSH to climate change adaptation, while the EU Taxonomy goes further on this point and mentions a classification of climate-related hazards to not do any harm.
Conservation of ecosystems and biodiversity	VERY SIMILAR	<ul> <li>Both taxonomies have similar requirements:</li> <li>Please refer to the comparison of the generic DNSH criteria on this.</li> </ul>
Water management	VERY SIMILAR	Both taxonomies have similar requirements:     Please refer to the comparison of the generic DNSH criteria on this.
Circular economy	VERY SIMILAR	The Colombian Green Taxonomy addresses these requirements from the generic DNSH while the EU Taxonomy makes use of the specific requirements on circular economy for this activity:  In both taxonomies, measures are in place to manage waste in accordance with the waste hierarchy, both in the use phase (maintenance) and the end-of-life, including through reuse and recycling of batteries and electronics (in particular those containing critical raw materials).
Pollution control and prevention	VERY SIMILAR	Both taxonomies have similar requirements:  • Please refer to the comparison of the generic DNSH criteria on this.

Colombian activity	T3. Transport In	frastructure	
EU activity	6.13. Infrastruct	6.13. Infrastructure for personal mobility, cycle logistics	
	6.14. Infrastruct	ture for rail transport	
	6.15. Infrastruct	ture enabling low-carbon road transport and public transport	
	6.16. Infrastruct	ture enabling low-carbon water transport	
TSC comparison			
Summary	VERY SIMILAR	Both taxonomies have similar requirements and thresholds:	
		Both taxonomies consider the infrastructure for the mobilisation of the types of transport stated in the other activities from this sector.	
Do No Significant Harn	n		
Climate change	INCOMPARABLE	Both taxonomies address DNSH on CC adaptation differently:	
adaptation	•	<ul> <li>The Colombian Green Taxonomy still does not address the adaptation objective. It only mentions a generic DNSH to climate change adaptation, while the EU Taxonomy goes further on this point and mentions a classification of climate-related hazards to not do any harm.</li> </ul>	
Conservation of	MORE STRINGENT/	The Colombian Green Taxonomy has more requirements:	
ecosystems and biodiversity	AMBITIOUS AND/OR MORE DETAILED	Both taxonomies require mitigation measures to avoid wildlife collisions.	
	•	<ul> <li>The Colombian Green Taxonomy also requires measures to avoid the fragmentation and degradation of ecosystems as well as the natural and urban landscape. Additionally, it states that possible negative impacts on aquatic ecosystems caused by tunnels that cause changes and degradation of the hydromorphological conditions of water masses must be avoided.</li> </ul>	
Water management	VERY SIMILAR	Both taxonomies have similar requirements:	
		Please refer to the comparison of the generic DNSH criteria on this.	
Circular economy	VERY SIMILAR	Both taxonomies have similar requirements:	
		<ul> <li>Both taxonomies state that the non-hazardous construction and demolition waste generated on the construction site is prepared for reuse, recycling, and other material recovery (the EU Taxonomy states that it must be at least 70%).</li> </ul>	
		The Colombian Green Taxonomy also has a requirement to reuse parts and use recycled material during the renovation, improvement and construction of the infrastructure.	
Pollution control	VERY SIMILAR	Both taxonomies have similar requirements:	
and prevention	•	Measures are taken to reduce noise, dust and pollutant emissions during construction or maintenance works.	

Colombian activity	T4. Interurban t	ransport (passengers and cargo)	
EU activity	6.1. Passenger interurban rail transport		
	6.2. Freight rail transport		
	6.6. Freight transport services by road		
		enger water transport	
	6.8. Inland freig	ht water transport	
		astal freight water transport, vessels for port auxiliary activities	
	6.11. Sea and co	astal passenger water transport	
TSC comparison			
Summary	VERY SIMILAR	Both taxonomies address this activity differently:	
	•	$ \bullet \   The Colombian Green Taxonomy expresses the screening criteria in gCO$_2$e/pkm or gCO$_2$/ \\ tkm, while the EU Taxonomy expresses most of them in % of fuel saving. $	
		The Colombian Green Taxonomy allows the use of biofuel, while the EU Taxonomy does not.	
		Both taxonomies state that the transportation of fossil fuel is a non-eligible activity.	
		Both taxonomies consider zero direct emission transport as directly eligible.	
Do No Significant Harn Climate change	INCOMPARABLE	Both taxonomies address DNSH on CC adaptation differently:	
adaptation	INCOMPARABLE	The Colombian Green Taxonomy still does not address the adaptation objective. It only	
		mentions a generic DNSH to climate change adaptation, while the EU Taxonomy goes further on this point and mentions a classification of climate-related hazards to not do any harm.	
Conservation of ecosystems and	LESS STRINGENT/ AMBITIOUS AND/OR	The Colombian Green Taxonomy does not have specific DNSH requirements while the EU Taxonomy does on conservation of ecosystems and biodiversity:	
biodiversity	LESS DETAILED	The EU Taxonomy has a requirement to follow Directive 2008/56/EC (Marine Strategy Framework Directive), requiring that the appropriate measures are taken to prevent or	
		mitigate impacts in relation to that Directive's descriptors 1 (biodiversity), 2 (non-indigenous species), 6 (seabed integrity), 8 (contaminants), 10 (marine litter), and 11 (Noise/Energy).	
Water management	VERY SIMILAR	Both taxonomies have similar requirements:	
		Please refer to the comparison of the generic DNSH criteria on this.	
Circular economy	VERY SIMILAR	The Colombian Green Taxonomy addresses this requirement from the generic DNSH while EU Taxonomy makes use of the specific requirements on circular economy for this activity:	
		<ul> <li>In both taxonomies, measures are in place to manage waste in accordance with the waste hierarchy, both in the use phase (maintenance) and the end-of-life, including through reuse and recycling of batteries and electronics (in particular those containing critical raw materials).</li> </ul>	
Pollution control	INCOMPARABLE	Both taxonomies have different requirements in pollution control and prevention	
and prevention		for this activity:  - Poth tayonamics have requirements related to noise and atmospheric contamination	
		Both taxonomies have requirements related to noise and atmospheric contamination.      The Colombian Groon Taxonomy also has requirements regarding a management plan for	
		<ul> <li>The Colombian Green Taxonomy also has requirements regarding a management plan for hazardous waste.</li> </ul>	
		The EU Taxonomy includes a requirement for wastewater discharge from ships and also for control of harmful anti-fouling systems on ships.	

Colombian activity	T5. Private use transport	
EU activity	6.5. Transport by motorbikes, passenger cars and light commercial vehicles	
TSC comparison		
Summary	LESS STRINGENT/ AMBITIOUS AND/ OR LESS DETAILED	<ul> <li>The Colombian Green Taxonomy has less detailed TSC:</li> <li>The EU Taxonomy is more detailed in the thresholds allowed for hybrid vehicles.</li> <li>The Colombian Green Taxonomy states that hybrid vehicles are only eligible up to 2025.</li> </ul>
Do No Significant Harm	1	
Climate change adaptation	INCOMPARABLE	Both taxonomies address DNSH on CC adaptation different-ly:     The Colombian Green Taxonomy still does not address the adaptation objective. It mentions it in a general way to do no significant harm in this respect, while the EU Taxonomy has gone deeper on this point and mentions a classification of climate-related hazards to not do significant harm.
Conservation of ecosystems and biodiversity	VERY SIMILAR	Both Taxonomies have similar requirements     Please refer to the comparison of the generic DNSH criteria on this
Water management	VERY SIMILAR	Both taxonomies have similar requirements:     Please refer to the comparison of the generic DNSH criteria on this
Circular economy	LESS STRINGENT/ AMBITIOUS AND/ OR LESS DETAILED	<ul> <li>The EU Taxonomy has more specific DNSH on circular economy for this activity:</li> <li>The EU Taxonomy states that vehicles of categories M1 and N1 are both of the following:</li> <li>i. reusable or recyclable to a minimum of 85% by weight;</li> <li>ii. reusable or recoverable to a minimum of 95% by weight.</li> <li>The Colombian Green Taxonomy addresses these requirements from the generic DNSH while EU Taxonomy makes use of the specific requirements on circular economy for this activity:</li> </ul>
Pollution control and prevention	VERY SIMILAR	Both taxonomies have similar requirements:  • The requirements in both taxonomies seek to prevent atmospheric and noise pollution.

Colombian activity	TIC1. Data proce	essing, hosting, and related activities	
EU activity	8.1. Data proces	.1. Data processing, hosting, and related activities	
TSC comparison			
Summary	INCOMPARABLE	<ul> <li>Both Taxonomies address this activity differently:</li> <li>Both criteria seek to have energy efficient data centres.</li> <li>The Colombian Green Taxonomy has a specific threshold (the highest rate on any energy efficiency certification as well as its energy efficiency use of less than 1.5 PUE).</li> <li>The EU Taxonomy refers to its best practice standard (European Code of Conduct on Data Centre Energy Efficiency or other equivalent sources) that has to be validated through an independent third-party and audited at least every three years. The EU taxonomy also has an additional requirement for the refrigerants used in the data centre cooling system to not a second contract of the properties.</li> </ul>	
		exceed 675 Global Warming Potential (GWP).	
Do No Significant Harm Climate change	INCOMPARABLE	Poth tayonomics address DNSU on CC adaptation differently.	
adaptation	INCOMPARABLE	The Colombian Green Taxonomy still does not address the adaptation objective. It only mentions a generic DNSH to climate change adaptation, while the EU Taxonomy goes further on this point and mentions a classification of climate-related hazards to not do any harm.	
Conservation of	VERY SIMILAR	Both taxonomies have similar requirements:	
ecosystems and biodiversity		Please refer to the comparison of the generic DNSH criteria on this.	
	VERY SIMILAR	Both taxonomies have similar requirements:  Please refer to the comparison of the generic DNSH criteria on this.	
Circular economy	LESS STRINGENT/ AMBITIOUS AND/ OR LESS DETAILED	<ul> <li>The Colombian Green Taxonomy does not have specific DNSH requirements while E Taxonomy does on circular economy for this activity:</li> <li>For servers and data storage products, the equipment should meet the requirements in accordance with Directive 2009/125/EC (the framework for the setting of eco-design requirements for energy-related products).</li> <li>The equipment used must not contain or does not exceed the concentration of restricted substances listed in Annex II to Directive 2011/65/EU (restriction of the use of certain hazardous substances in electrical and electronic equipment) such as lead, mercury,</li> </ul>	
		<ul> <li>A waste management plan is in place and ensures maximal recycling at end-of-life of electrical and electronic equipment.</li> <li>At its end-of-life, the equipment undergoes preparation for reuse, recovery or recycling operations; or proper treatment, including the removal of all fluids; and a selective treatment in accordance with Annex VII to Directive 2012/19/EU (waste electrical and electronic equipment - WEEE).</li> </ul>	
Pollution control and prevention	MORE STRINGENT/ AMBITIOUS AND/ OR MORE DETAILED	<ul> <li>The Colombian GreenTaxonomy has specific requirements while the EU Taxonomy does not have DNSH on pollution control and prevention for this activity:</li> <li>The refrigerants used in the data centre cooling system must comply with national regulations for fluorinated gases.</li> <li>The Colombian Green Taxonomy requires that every data-driven solution for GHG emission reductions must comply with national regulations regarding the management of waste electrical and electronic equipment (WEEE) and comply with extended producer responsibility standards.</li> </ul>	

# Colombian activity **EU** activity

#### TIC2. Data-driven solutions for GHG emission reductions



#### 8.2. Data-driven solutions for GHG emission reductions

#### The Colombian Green Taxonomy has less detailed TSC:

- The Colombian Green Taxonomy considers eligible any activity, app, equipment or integrated system aimed at the provision of data and analytics enabling GHG emission reductions or the in-crease of resilience and adaptation.
- The EU Taxonomy includes more detailed TSC such as recommended guidelines for ICT solutions that calculate life-cycle GHG emissions and net emissions, such as Recommendation 2013/179/EU, ETSI ES 203 199, ISO 14067:2018 or ISO 14064-2:2019. The EU Taxonomy also states that quantified lifecycle GHG emission reductions should be verified by an independent third party.

#### INCOMPARABLE

LESS STRINGENT/

AMBITIOUS AND/

**OR LESS DETAILED** 



#### Both taxonomies address DNSH on CC adaptation differently:

• The Colombian Green Taxonomy still does not address the adaptation objective. It only mentions a generic DNSH to climate change adaptation, while the EU Taxonomy goes further on this point and mentions a classification of climate-related hazards to not do anv harm.

#### **VERY SIMILAR**



#### Both taxonomies have similar requirements:

• Please refer to the comparison of the generic DNSH criteria on this.



#### Both taxonomies have similar requirements:

• Please refer to the comparison of the generic DNSH criteria on this.

#### LESS STRINGENT/ AMBITIOUS AND/ OR LESS DETAILED



#### The Colombian Green Taxonomy does not have specific DNSH requirements while EU Taxonomy does on circular economy for this activity:

- For servers and data storage products, the equipment should meet the requirements in accordance with Directive 2009/125/EC (the framework for the setting of eco-design requirements for energy-related products).
- The equipment used must not contain or does not exceed the concentration of restricted substances listed in Annex II to Directive 2011/65/EU (restriction of the use of certain hazardous substances in electrical and electronic equipment) such as lead, mercury, cadmium, hexavalent chromium, PBB and PBDE).
- A waste management plan is in place and ensures maximal recycling at end-of-life of electrical and electronic equipment.
- At its end-of-life, the equipment undergoes preparation for reuse, recovery or recycling operations; or proper treatment, including the removal of all fluids; and a selective treatment in accordance with Annex VII to Directive 2012/19/EU (waste electrical and electronic equipment - WEEE).

#### MORE STRINGENT/ **AMBITIOUS AND/OR** MORE DETAILED



#### The Colombian Green Taxonomy has specific requirements on pollution control and prevention for this activity while the EU Taxonomy does not:

• The Colombian Green Taxonomy requires that every data-driven solution for GHG emission reduction must comply with national regulations regarding the management of waste electrical and electronic equipment (WEEE) and comply with extended producer responsibility standards.

## Manufacturing

Colombian activity	M1. Manufactur	e of low-carbon technologies
EU activity	3.1. Manufactur	e of renewable energy technologies
	3.2. Manufactur	e of equipment for the production and use of hydrogen
	3.3. Manufactur	e of low-carbon technologies for transport
	3.5. Manufactur	e of energy efficiency equipment for buildings
TSC comparison		
Summary	VERY SIMILAR	Both taxonomies have similar activities, requirements, and thresholds:
	w .	The Colombian Green Taxonomy addresses similar activities for the manufacturing of:
		<ul> <li>i. renewable energy technologies (e.g., manufacturing of solar panels).</li> <li>ii. sustainable transport (e.g., manufacturing of zero direct emission transport).</li> <li>iii. green buildings (e.g., manufacturing of building management systems for the control and moni-toring of temperature, energy use and water).</li> </ul>
Do No Significant Harn		Poth townswing address DNCU on CC adoutation differently.
Climate change adaptation	INCOMPARABLE	Both taxonomies address DNSH on CC adaptation differently:
		<ul> <li>The Colombian Green Taxonomy still does not address the adaptation objective. It only mentions a generic DNSH to climate change adaptation, while the EU Taxonomy goes further on this point and mentions a classification of climate-related hazards to not do any harm.</li> </ul>
Conservation of	MORE STRINGENT/	The Colombian GreenTaxonomy has specific DNSH requirements on conservation of
ecosystems and biodiversity	AMBITIOUS AND/OR MORE DETAILED	ecosystems and biodiversity for this activity while the EU Taxonomy does:
biodiversity	()	<ul> <li>The Colombian Green Taxonomy has a requirement to manage the demand and chain of custody for certain metals and materials that are in limited supply; in particular, those that are extracted from strategic ecosystems, avoiding significant negative environmental impacts and the loss of biodiversity.</li> </ul>
Water management	VERY SIMILAR	Both taxonomies have similar requirements:
		Please refer to the comparison of the generic DNSH criteria on this.
Circular economy	LESS STRINGENT/ AMBITIOUS AND/OR LESS DETAILED	The Colombian Green Taxonomy addresses these requirements from the generic DNSH while EU Taxonomy makes use of the specific requirements on circular economy for this activity:  The activity assesses the availability of and, where feasible, adopts techniques that support:
		Reuse and use of secondary raw materials and re-used components in products manufactured
		<ul> <li>Design for high durability, recyclability, easy disassembly and adaptability of products manufactured;</li> </ul>
		Waste management that prioritises recycling over disposal, in the manufacturing process;
		<ul> <li>Information on and traceability of substances of concern throughout the life cycle of the manufactured products (The Colombian Green Taxonomy addresses this from the DNSH to ecosystem protection and restoration).</li> </ul>
Pollution control and prevention	INCOMPARABLE	Both Taxonomies have very different criteria on pollution control and prevention for this activity:
		The Colombian Green Taxonomy requires compliance with the requirements contained in REACH7 or equivalent (e.g. responsible care) for the manufactured projects.
		<ul> <li>In the EU Taxonomy, regarding low-carbon technologies for transport, where applicable, vehicles do not contain lead, mercury, hexavalent chromium and cadmium, in accordance with Directive 2000/53/EC of the European Parliament and of the Council.</li> </ul>

Colombian activity	M2. Component	s for the manufacturing of cement	
EU activity	3.7. Manufacture of cement		
TSC comparison			
Summary	VERY SIMILAR	<ul> <li>For grey cement clinker where the specific GHG emissions are lower than: 0.8 (Colombian Green Taxonomy) or 0.722 (EU Taxonomy) tCO<sub>2</sub>e per tonne of grey cement clinker.</li> <li>For cement from grey clinker or alternative hydraulic binder, where the specific GHG emissions from the clinker and cement or alternative binder production are lower than: 0.6 (Colombian Green Taxonomy) or 0.469 (EU Taxonomy) tCO<sub>2</sub>e per tonne of cement or alternative binder manu-factured.</li> </ul>	
Do No Significant Harr	n	dicinative sincer mana factored.	
Climate change adaptation	INCOMPARABLE	Both taxonomies address DNSH on CC adaptation differently:     The Colombian Green Taxonomy still does not address the adaptation objective. It only mentions a generic DNSH to climate change adaptation, while the EU Taxonomy goes further on this point and mentions a classification of climate-related hazards to not do any harm.	
Conservation of ecosystems and biodiversity	VERY SIMILAR	Both taxonomies have similar requirements:     Please refer to the comparison of the generic DNSH criteria on this.	
Water management	VERY SIMILAR	Both taxonomies have similar requirements:     Please refer to the comparison of the generic DNSH criteria on this.	
Circular economy	MORE STRINGENT/ AMBITIOUS AND/OR MORE DETAILED	The Colombian Green Taxonomy has generic requirements while the EU Taxonomy does not have generic DNSH on circular economy:  • Please refer to the comparison of the generic DNSH criteria on this.	
Pollution control and prevention	LESS STRINGENT/ AMBITIOUS AND/OR LESS DETAILED	<ul> <li>The EU taxonomy has more detailed requirements:</li> <li>Both taxonomies state that for manufacture of cement employing hazardous wastes as alternative fuels, measures are in place to ensure the safe handling of waste.</li> <li>The EU Taxonomy also states that:</li> <li>Emissions are within or lower than the emission levels associated with the best available techniques (BAT-AEL) ranges set out in the latest relevant best available techniques (BAT) conclusions for the production of cement, lime and magnesium oxide. Additionally, no significant cross-media effects should occur.</li> </ul>	

Colombian activity	M3. Components for the manufacturing of aluminium		
EU activity	3.8. Manufacture of aluminium		
TSC comparison			
Summary	VERY SIMILAR	Both taxonomies have similar requirements and thresholds:	
		The activity manufactures one of the following:	
		a. Primary aluminium where the economic activity complies with two of the following criteria until 2025 (year restriction only for the EU Taxonomy) and with all of the following criteria after 2025:	
		i. the GHG emissions do not exceed 1.5 (Colombian Green Taxonomy) or 1.484 (EU Taxonomy) tCO $_2$ e per ton of aluminium manufactured; ii. the average carbon intensity for the indirect GHG emissions does not exceed 100g CO $_2$ e/kWh; iii. the electricity consumption for the manufacturing process does not exceed 15.3 (Colombian Green Taxonomy) or 15.5 (EU Taxonomy) MWh/t Al.	
		b. Secondary aluminium.	
Do No Significant Harn	n		
Climate change adaptation	INCOMPARABLE	Both taxonomies address DNSH on CC adaptation differently:     The Colombian Green Taxonomy still does not address the adaptation objective. It only mentions a generic DNSH to climate change adaptation, while the EU Taxonomy goes further on this point and mentions a classification of climate-related hazards to not do any harm.	
Conservation of	VERY SIMILAR	Both taxonomies have similar requirements:	
ecosystems and biodiversity		Please refer to the comparison of the generic DNSH criteria on this.	
Water management	VERY SIMILAR	Both taxonomies have similar requirements:	
		Please refer to the comparison of the generic DNSH criteria on this.	
Circular economy	MORE STRINGENT/ AMBITIOUS AND/OR MORE DETAILED	The Colombian Green Taxonomy has generic requirements while the EU Taxonomy does not have generic DNSH on circular economy:  • Please refer to the comparison of the generic DNSH criteria on this.	
Pollution control	VERY SIMILAR	Both taxonomies have similar requirements:	
and prevention		The requirements on both taxonomies seek to control the level of emissions in air and water.	

Colombian activity	M4. Components for the manufacturing of iron and steel  3.9. Manufacture of iron and steel	
EU activity		
TSC comparison		
Summary	VERY SIMILAR	Both taxonomies have similar requirement and thresholds:
		The activity manufactures one of the following:  a. Iron and steel where GHG emissions do not exceed the following values applied to the different manufacturing process steps:
		i. hot metal = 1.328 (Colombian Green Taxonomy) or 1.331 (EU Taxonomy) tCO $_2$ e/t product; ii. sintered ore = 0.171 (Colombian Green Taxonomy) or 0.163 (EU Taxonomy) tCO $_2$ e/t product; iii. coke (excluding lignite coke) = 0.287 (Colombian Green Taxonomy) or 0.144 (EU Taxonomy) tCO $_2$ e/t product; iv. iron casting = 0.325 (Colombian Green Taxonomy) or 0.299 (EU Taxonomy) tCO $_2$ e/t product; v. electric arc furnace (EAF) high alloy steel = 0.352 (Colombian Green Taxonomy) or 0.266 (EU Taxonomy) tCO $_2$ e/t product; vi. electric arc furnace (EAF) carbon steel = 0.283 (Colombian Green Taxonomy) or 0.209 (EU Tax-onomy) tCO $_2$ e/t product;
		b. steel in electric arc furnaces producing EAF carbon steel or EAF high alloy steel where the steel scrap input relative to product output is not lower than:
		i. 70% for the production of high alloy steel (only for the EU Taxonomy); ii. 90% for the production of carbon steel (both taxonomies).
Do No Significant Harn	n	
Climate change adaptation	INCOMPARABLE	Both taxonomies address DNSH on CC adaptation differently:     The Colombian Green Taxonomy still does not address the adaptation objective. It only mentions a generic DNSH to climate change adaptation, while the EU Taxonomy goes further on this point and mentions a classification of climate-related hazards to not do any harm.
Conservation of	VERY SIMILAR	Both taxonomies have similar requirements:
ecosystems and biodiversity	•	Please refer to the comparison of the generic DNSH criteria on this.
Water management	MORE STRINGENT/ AMBITIOUS AND/OR MORE DETAILED	The Colombian Green Taxonomy has specific requirements while the EU Taxonomy does not have specific DNSH on water management:  The Colombian Green Taxonomy requires the assessment of emissions of hydrocarbons and suspended solids into water, as well as for the control of waste and products from coke and smelting operations, including tar and benzol.
Circular economy	MORE STRINGENT/ AMBITIOUS AND/OR MORE DETAILED	The Colombian Green Taxonomy has generic requirements while the EU Taxonomy does not have generic DNSH on circular economy:  • Please refer to the comparison of the generic DNSH criteria on this.
Pollution control and prevention	VERY SIMILAR	Both taxonomies have similar requirements:  The requirements on both taxonomies seek to control the level of emissions in air.

Colombian activity	M5. Manufactur	e of chlorine
EU activity	3.13. Manufacture of chlorine	
TSC comparison		
Summary	VERY SIMILAR	<ul> <li>Both taxonomies have similar requirement and thresholds:</li> <li>Electricity consumption for electrolysis and chlorine treatment is equal or lower than 2.5 (Colombian Green Taxonomy) or 2.45 MWh (EU Taxonomy) per tonne of chlorine.</li> <li>Average life-cycle GHG emissions of the electricity used for chlorine production are at or lower than 100gCO<sub>2</sub>e/kWh (both taxonomies).</li> <li>The EU Taxonomy suggests different methodologies to calculate the lifecycle GHG emissions, and also states that quantified life-cycle GHG emissions are verified by an independent third party.</li> </ul>
Do No Significant Harr	n	The second of the grant of the
Climate change adaptation	INCOMPARABLE	Both taxonomies address DNSH on CC adaptation differently:     The Colombian Green Taxonomy still does not address the adaptation objective. It only mentions a generic DNSH to climate change adaptation, while the EU Taxonomy goes further on this point and mentions a classification of climate-related hazards to not do any harm.
Conservation of ecosystems and biodiversity	VERY SIMILAR	Both taxonomies have similar requirements:     Please refer to the comparison of the generic DNSH criteria on this.
Water management	VERY SIMILAR	Both taxonomies have similar requirements:  Please refer to the comparison of the generic DNSH criteria on this.
Circular economy	MORE STRINGENT/ AMBITIOUS AND/OR MORE DETAILED	The Colombian Green Taxonomy has generic requirements while the EU Taxonomy does not have generic DNSH on circular economy:  • Please refer to the comparison of the generic DNSH criteria on this.
Pollution control and prevention	LESS STRINGENT/ AMBITIOUS AND/OR LESS DETAILED	The Colombian Green Taxonomy does not have specific DNSH requirements on pollution control and prevention while the EU Taxonomy does:  Emissions are within or lower than the emission levels associated with the best available techniques (BAT-AEL) ranges set out in the latest relevant best available techniques (BAT) conclusions for the production of chlor-alkali, and for common wastewater and waste gas treatment/management systems in the chemical sector. Additionally, no significant crossmedia effects should occur.

Colombian activity	M6. Components for the manufacture of organic basic chemicals  3.14. Manufacture of organic basic chemicals	
EU activity		
TSC comparison		
Summary	INCOMPARABLE	<ul> <li>Both taxonomies address this activity differently:</li> <li>The screening criteria in the Colombian Green Taxonomy are mainly focused on the production of organic chemicals produced from biomass; while the EU Taxonomy, in addition to addressing these criteria, also states the maximum of GHG emissions for the production of: HVC, aromatics, vinyl chloride, styrene, ethylene oxide/ethylene glycols and adipic acid. The Colombian Green Taxonomy does not address the manufacturing of these chemicals since they are not relevant for the country's economy.</li> <li>Both taxonomies recommend methodologies to calculate life-cycle GHG emissions (the ISC 14067:2018 is recommended in both taxonomies and Recommendation 2013/179/EU or alternatively ISO 14064-1:2018 is only recommended in the EU Taxonomy).</li> </ul>
Do No Significant Har	m	atternatively 130 1400+ 1.2010 is only recommended in the EO Taxonomy).
Climate change adaptation	INCOMPARABLE	**Both taxonomies address DNSH on CC adaptation differently: - The Colombian Green Taxonomy still does not address the adaptation objective. It only mentions a generic DNSH to climate change adaptation, while the EU Taxonomy goes further on this point and mentions a classification of climate-related hazards to not do any harm.
Conservation of ecosystems and biodiversity	VERY SIMILAR	Both taxonomies have similar requirements:     Please refer to the comparison of the generic DNSH criteria on this.
Water management	VERY SIMILAR	The Colombian Green Taxonomy has generic requirements while the EU Taxonomy does not have generic DNSH on circular economy:  • Please refer to the comparison of the generic DNSH criteria on this.
Circular economy	MORE STRINGENT/ AMBITIOUS AND/OR MORE DETAILED	The Colombian Green Taxonomy has generic requirements while the EU Taxonomy does not have generic DNSH on circular economy:  • Please refer to the comparison of the generic DNSH criteria on this.
Pollution control and prevention	LESS STRINGENT/ AMBITIOUS AND/OR LESS DETAILED	The Colombian Green Taxonomy does not have specific DNSH requirements on pollution control and prevention while the EU Taxonomy does:  Emissions are within or lower than the emission levels associated with the best available techniques (BAT-AEL) ranges set out in the latest relevant best available techniques (BAT) conclusions for the production of large volumes of organic chemicals, and for common waste water and waste gas treatment/management systems in the chemical sector. Additionally, no significant cross-media effects should occur.

Colombian activity	M7. Components involved in the manufacture of plastics in primary form  3.17. Manufacture of plastics in primary form	
EU activity		
TSC comparison		
Summary	VERY SIMILAR	Both taxonomies have similar requirement and thresholds:
		Plastic in primary form is fully manufactured by mechanical recycling of plastic waste.
		<ul> <li>If mechanical recycling is not possible, the plastic in primary form is fully manufactured by chemical recycling of plastic waste and the life-cycle GHG emissions of the manufactured plastic are lower than the life-cycle GHG emissions of the equivalent plastic in primary form manufactured from fossil fuel feedstock.</li> </ul>
		Both taxonomies propose guidelines to calculate the life-cycle GHG emissions, where ISO 14067:2018 is suggested in both taxonomies.
		Both taxonomies state criteria for agricultural biomass used for the manufacture of plastic in its primary form.
Do No Significant Har		
Climate change	INCOMPARABLE	Both taxonomies address DNSH on CC adaptation differently:
adaptation	"	<ul> <li>The Colombian Green Taxonomy still does not address the adaptation objective. It only mentions a generic DNSH to climate change adaptation, while the EU Taxonomy goes further on this point and mentions a classification of climate-related hazards to not do any harm.</li> </ul>
Conservation of	VERY SIMILAR	Both taxonomies have similar requirements:
ecosystems and biodiversity	•	Please refer to the comparison of the generic DNSH criteria on this.
Water management	VERY SIMILAR	The Colombian Green Taxonomy has generic requirements while the EU Taxonomy
		does not have generic DNSH on circular economy:
		Please refer to the comparison of the generic DNSH criteria on this.
Circular economy	MORE STRINGENT/ AMBITIOUS AND/OR	The Colombian Green Taxonomy has generic requirements while the EU Taxonomy does not have generic DNSH on circular economy:
	MORE DETAILED	Please refer to the comparison of the generic DNSH criteria on this.
Pollution control	LESS STRINGENT/ AMBITIOUS AND/OR LESS DETAILED	The Colombian Green Taxonomy does not have specific requirements while the EU
and prevention		Taxonomy does have specific DNSH on pollution control and prevention:
		<ul> <li>Emissions are within or lower than the emission levels associated with the best available techniques (BAT-AEL) ranges set out in the latest relevant best available techniques (BAT) conclusions, including:</li> </ul>
		i. the Best Available Techniques Reference Document (BREF) for the Production of Polymers;
		ii. the best available techniques (BAT) conclusions for common wastewater and waste gas treatment/management systems in the chemical sector.
		Additionally, no significant cross-media effects should occur.

## **Forestry**

Colombian activity  EU activity	Investments to strengthen the sustainable forestry sector:  Reduction of deforestation, degradation of natural forests and other forestry risk  Technological development, technical assistance and basic infrastructure  1.3. Forest management	
TSC comparison		
Summary	INCOMPARABLE	<ul> <li>In the EU Taxonomy, the main objective is mitigation, while the Colombian Green Taxonomy addresses five environmental objectives in a transversal manner: a) climate change mitigation, b) adaptation to climate change, c) soil management, d) biodiversity and ecosystem services, and e) water management.</li> <li>Both taxonomies require a forest management plan or an equivalent instrument. The EU Taxonomy has a requirement for several sections within the plan that are not required in the Colombian Green Taxonomy (climate benefit analysis, guarantee of permanence, audit and group assessment).</li> <li>The Colombian Green Taxonomy stipulates different levels of practices or technologies (basic, intermediate, and advanced) aimed at ensuring the sustainability of the activity in relation to the five environmental objectives.</li> </ul>

Colombian activity	Restoration of degraded forest soils	
EU activity	1.2. Rehabilitation and restoration of forests, including reforestation and natural forest regeneration after an extreme event	
TSC comparison		
Summary	INCOMPARABLE	<ul> <li>Both taxonomies address this sector differently:</li> <li>In the EU Taxonomy, the main objective is mitigation, while the Colombian Green Taxonomy addresses five environmental objectives in a transversal manner: a) climate change mitigation, b) adaptation to climate change, c) soil management, d) biodiversity and ecosystem services, and e) water management.</li> <li>Both taxonomies require a forest management plan or an equivalent instrument. The EU Taxonomy has a requirement for several sections within the plan that are not required in the Colombian Green Taxonomy (climate benefit analysis, guarantee of permanence, audit and group assessment).</li> <li>The Colombian Green Taxonomy states different levels of practices or technologies (basic, intermediate and advanced) aimed at ensuring the sustainability of the activity relating to the five environmental objectives.</li> </ul>

Colombian activity	Conservation, management and leverage of natural forests  1.4. Conservation forestry	
EU activity		
TSC comparison		
Summary	INCOMPARABLE	<ul> <li>Both taxonomies address this sector differently:</li> <li>In the EU taxonomy, the main objective is mitigation, while the Colombian Green Taxonomy addresses five environmental objectives in a transversal manner: a) climate change mitigation, b) adaptation to climate change, c) soil management, d) biodiversity and ecosystem services, and e) water management.</li> <li>Both taxonomies require a forest management plan or an equivalent instrument. The EU Taxonomy has a requirement to include several sections within the plan that are not required in the Colombian Green Taxonomy (climate benefit analysis, guarantee of permanence, audit and group assessment).</li> <li>The Colombian Green Taxonomy states different levels of practices or technologies (basic, iintermediate and advanced) aimed at ensuring the sustainability of the activity in relation to the five environmental objectives.</li> </ul>

Colombian activity	Reforestation with commercial purposes  1.1. Afforestation	
EU activity		
TSC comparison		
Summary	INCOMPARABLE	Both taxonomies address this sector differently:
		In the EU Taxonomy, the main objective is mitigation, while the Colombian Green Taxonomy addresses five environmental objectives in a transversal manner: a) climate change mitigation, b) adaptation to climate change, c) soil management, d) biodiversity and ecosystem services, and e) water management.
		<ul> <li>Both taxonomies require a forest management plan or an equivalent instrument. The EU Taxonomy has a requirement to include several sections within the plan that are not required in the Colombian Green Taxonomy (climate benefit analysis, guarantee of permanence, audit and group assessment).</li> </ul>
		<ul> <li>The Colombian Green Taxonomy states different levels of practices or technologies (basic, intermediate and advanced) aimed at ensuring the sustainability of the activity in relation to the five environmental objectives.</li> </ul>
Do No Significant Harn	n	
Climate change adaptation	LESS STRINGENT/ AMBITIOUS AND/OR	The Colombian Green Taxonomy has some general DNSH requirements on water while the EU Taxonomy does not:
	LESS DETAILED	Both taxonomies require the implementation of practices to reduce the physical risks associated with the activity.
		The EU Taxonomy require a climate risk and vulnerability assessment which is proportionate to the scale of the activity and its expected lifespan.
Conservation of	VERY SIMILAR	Both taxonomies have similar requirements:
ecosystems and biodiversity	•	<ul> <li>In areas designated by the national competent authority for conservation or in habitats that are protected, the activity is in accordance with the conservation objectives for those areas (addressed as a normative requirement in the Colombian Green Taxonomy).</li> </ul>
		<ul> <li>Provisions for maintaining and possibly enhancing biodiversity in accordance with national and local provisions (addressed as generic requirements for AFOLU sector in the Colombian Green Taxonomy), for example:</li> </ul>
		i. Ensuring the good conservation status of habitat and species.
		ii. The exclusion of the use of non-native species unless it leads to favourable and appropriate ecosystem conditions.
		iii. Ensuring the maintenance and improvement of the physical, chemical, and biological quality of the soil.
		iv. Promoting biodiversity-friendly practices that enhance forests' natural processes.
		v. The exclusion of the conversion of high-biodiverse ecosystems into less biodiverse ones.
		vi. Ensuring the diversity of associated habitats and species linked to the forest (addressed from sectorial practices in the Colombian Green Taxonomy).
		vii. Ensuring the diversity of stand structures and maintenance, or enhancing of mature stage stands and dead wood.
Water management	MORE STRINGENT/ AMBITIOUS AND/OR	The Colombian Green Taxonomy has more detailed requirements on water for this activity:
	MORE DETAILED	Both taxonomies require the implementation of water use/conservation management plans, in accordance with the applicable normative.
		The Colombian Green Taxonomy requires the implementation of practices that enhance water-use efficiency.
		The Colombian Green Taxonomy requires the implementation of practices to restore water bodies.

Colombian activity	Reforestation with commercial purposes	
EU activity	1.1. Afforestation	
Do No Significant Har	n	
Circular economy	INCOMPARABLE	<ul> <li>Both taxonomies approach circular economy in forestry differently:</li> <li>The Colombian Green Taxonomy in relation to sectorial practices proposes the generation of biofuel and fertilizers from organic waste.</li> <li>The EU Taxonomy in the specific DNSH requires that the silvicultural change induced by the activity on the area covered by the activity is not likely to result in a significant reduction of sustainable supply of primary forest biomass suitable for the manufacturing of wood-based products with long-term circularity potential.</li> </ul>
Pollution control and prevention	LESS STRINGENT/ AMBITIOUS AND/OR LESS DETAILED	<ul> <li>The EU Taxonomy has more detailed requirements on pollution control and prevention in forestry:</li> <li>Both taxonomies mandate that the pollution of water and soil is prevented; however, the EU Taxonomy also requires that cleaning up measures are undertaken when pollution occurs.</li> <li>Both taxonomies require that the use of pesticides and fertilizers is reduced.</li> <li>The EU Taxonomy also prohibits the use of manure and provides guidance on forbidden chemicals in pesticides.</li> </ul>

# Annex 2: Comparison tables by activity (with full criteria)

The content of Annex 2 can be found in the following link: Comparison tables by activity with full criteria. This annex provides the full TSC and DNSH criteria for each economic activity. The TSC in both the taxonomies, are supplemented by detailed footnotes, which for the sake of simplicity have not been included in this document. The Annexes referred to in the comparison tables refer to the Annexes in the EU Climate Delegated Act. Please note that when an activity does not have specific DNSHs, the generic DNSHs are parsed instead.

Annex 2\_English

#### **Endnotes**

- 1. The EU Climate Dialogues (EUCDs) project aims to support the EU's bilateral relations with external partners on climate-related policies and to promote the effective implementation of the Paris Agreement. Its objective is to foster ambitious climate policies and investment in economies outside the EU, and avail EU expertise and policy experience in the area of climate-related economic activity. Additionally, the project works on reinforcing climate-related bilateral trade, investment, and innovation while enhancing public awareness, including the business community.

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- 7. Register expert groups website: https://ec.europa.eu/transparency/expert-groups-register/screen/expert-groups/consult?

lang=en&do=groupDetail.groupDetail&groupID=3588

- 8. Commission Delegated Regulation (EU) 2021/2139 of 4 June 2021 supplementing Regulation (EU) 2020/852 of the European Parliament and of the Council by establishing the technical screening criteria for determining the conditions under which an economic activity qualifies as contributing substantially to climate change mitigation or climate change adaptation and for determining whether that economic activity causes no significant harm to any of the other environmental objectives, OJ L 442, pp. 1–349.

  9. Commission Delegated Regulation (EU) 2022/1214 of 9 March 2022
- Commission Delegated Regulation (EU) 2022/1214 of 9 March 2022 amending Delegated Regulation (EU) 2021/2139 as regards economic activities in certain energy sectors and Delegated Regulation (EU) 2021/2178 as regards specific public disclosures for those economic activities, OJ L 188, pp. 1–45.

10. Commission Delegated Regulation of 27.6.2023 supplementing Regulation (EU) 2020/852 of the European Parliament and of the Council by establishing the technical screening criteria for determining the conditions under which an economic activity qualifies as contributing substantially to the sustainable use and protection of water and marine resources, to the transition to a circular economy, to pollution prevention and control, or to the protection and restoration of biodiversity and ecosystems and for determining whether that economic activity causes no significant harm to any of the other environmental objectives and amending Delegated Regulation (EU) 2021/2178 as regards specific public disclosures for those economic activities, C/2023) 3851 final. 11. Commission Delegated Regulation (EU) 2021/2139 establishing additional technical screening criteria for determining the conditions under which certain economic activities qualify as contributing substantially to climate change mitigation or climate change adaptation and for determining whether those activities cause no significant harm to any of the other environmental objectives, C(2023) 3850 final.

- 12. Both, the LAC Common Framework principles and the G20 guiding principles which were considered, follow the same guiding principles of the EU and Colombian Taxonomies.
- 13. Including the six transitional activities in the energy sector added by the Complementary Climate Delegated Actre-commercial stages of advanced technologies to produce energy from nuclear processes with minimal waste from the fuel cycle; Construction and safe operation of new nuclear power plants, for the generation of electricity and/or heat, including for hydrogen production, using best-available technologies; Electricity generation from nuclear energy in existing installations; Electricity generation from fossil gaseous fuels; High-efficiency co-generation of heat/cool and power from fossil gaseous fuels; and Production of heat/cool from fossil gaseous fuels in an efficient district heating and cooling system.

  14. Climate change mitigation, Climate change adaptation, Soil management, Water management, Ecosystem, and biodiversity conservation.
- 15. Social objectives have not yet been developed in both taxonomies, but mainly social objectives are included through minimum safeguards.
- 16. The Sustainable Finance for Biodiversity in Brazil and Colombia SF4B (2021-2023) project, led by Fondo Acción, established the need to promote the involvement of the financial sector in biodiversity management in the country, highlighting the prioritisation of the following actions: developing an online course on biodiversity finance and green taxonomies; and pilots to apply a taxonomy proposal for biodiversity.
- taxonomy proposal for biodiversity.
  17. Moncaleano, A. M., Rodriguez, A., Rojas, F., Valenzuela, E. May 2022. Panorama nacional de las finanzas para la biodiversidad: Estado actual y retos en Colombia. Fondo Acción.

- 18. The minimum safeguards are part of the Taxonomy Regulation (TR) and are based on the recommendation from the Technical Expert Group (TEG) expressed in its report published in March 2020. This ensures that entities which are carrying out environmentally sustainable activities, meet certain minimum governance standards and do not violate social norms, as laid out in Article 18.
- 19. The OECD MNE guidelines recommend that enterprises apply good governance practices as set out in the Principles of Corporate Governance. Available at: https://www.nexd.org/corporate/mps/pros.htm.
- Available at: https://www.oecd.org/corporate/mne/ncps.htm
  20. Pillar two of the UNGPs specifies a standard of conduct for business entities to implement respect for human rights. In terms of defining human rights, the UNGPs refer to the International Bill of Human Rights (IBHR) and the ILO Declaration of Fundamental Principles and Rights at Work.
- Available at: https://www.ilo.org/declaration/lang-en/index.htm 21. Set of human rights instruments proclaimed by the United Nations (Universal Declaration of Human Rights (1948), International Covenant on Civil and Political Rights (1966), International Covenant on Economic, Social and Cultural Rights (1966)) Available at: https://www.ohchr.org/en/what-are-human-rights/international-bill-human-rights.
- 22. European Union. (2019). Regulation (EU) 2019/2088 of the European Parliament and of the Council of 27 November 2019 on sustainability-related disclosures in the financial services sector. Official Journal of the European Union, L 317, pp. 1-20.
- 23. Directive (EU) 2022/2464 of the European Parliament and of the Council of 14 December 2022 amending Regulation (EU) No 537/2014, Directive 2004/109/EC, Directive 2006/43/EC and Directive 2013/34/EU, as regards corporate sustainability reporting. Official Journal of the European Union, L 322, pp. 15–80.
- 24. Proposal for a Directive of the European Parliament and of the Council on Corporate Sustainability Due Diligence and amending Directive (EU) 2019/1937, COM/2022/71 final, 23.2.2022
  25. Commission Delegated Regulation (EU) 2021/2178 of 6 July 2021
- 25. Commission Delegated Regulation (EU) 2021/2178 of 6 July 2021 supplementing Regulation (EU) 2020/852 of the European Parliament and of the Council by specifying the content and presentation of information to be disclosed by undertakings subject to Articles 19a or 29a of Directive 2013/34/EU concerning environmentally sustainable economic activities, and specifying the methodology to comply with that disclosure obligation, OJ L 443, pp. 9–67.
- 26. European Commission website. 2023. Sustainable Finance: Commission welcomes political agreement on European green bond standard. https://

ec.europa.eu/commission/presscorner/detail/en/mex\_23\_1301

27. European Commission website. 2023. Sustainable Finance Package. https://

finance.ec.europa.eu/publications/sustainable-finance-package-2023\_en







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