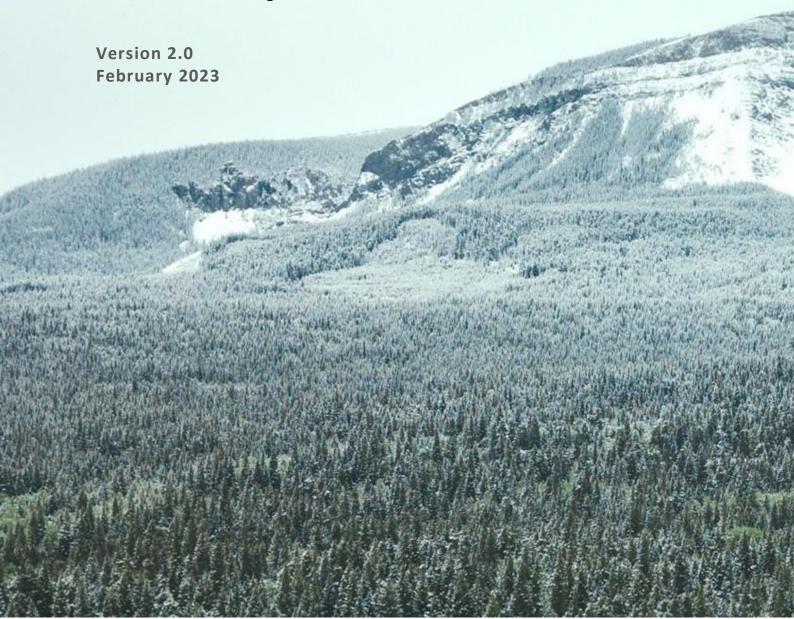




# SMS Environmental Impact Opportunities Thematic Classification

A transparent investment framework for identifying and scoring companies that are developing and applying innovative and impactful solutions to tackle the world's most pressing climatic and environmental challenges.



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#### 1. Introduction

Since 2018, SMS has been leveraging its decades of experience in sustainable investing and climate and environmental policy to develop a proprietary, forward-looking analytical framework that focuses on the impact potential of companies and their role in the "high-care, low-carbon" economy of tomorrow.

In 2020, SMS decided to build upon its extensive analytical work to create a transparent investment framework for identifying and scoring publicly listed companies that are developing and applying innovative and impactful solutions to tackle the world's most pressing climatic and environmental challenges. The result was the creation of the SMS Environmental Impact Opportunities Thematic Classification which launched in April 2021.

#### 2. About Us

SMS Financial Technologies Inc ("Sustainable Market Strategies" or "SMS") is an independent sustainability intelligence firm that provides thematic research and market insights to a global audience of asset owners, investment managers and public policy decision makers.

Our research caters to portfolio managers, sustainability teams and C-suite executives in the investment, regulatory and policy space. Our publications are news and data-driven and provide indepth sustainable investment strategies across all asset classes. We also support our clients through bespoke projects at the nexus of thematic research and investment strategy.

Since its creation in 2018, SMS has published over 200 investment research notes on sustainable investment themes, analysing the technological, strategic and financial potential of over 1,000 public and private companies in order to find the winners of the transition to a more sustainable economy currently underway.

Our world-class team brings together extensive experience in capital markets, investment research, money management, economics, policy, academic research and sustainable investing.

The company is headquartered in Montreal, Canada.



FÉLIX A. BOUDREAULT, M.ENG., MBA
Managing Partner

Sustainability / ESG Research / Quantitative Finance / Policy

Félix-A. Boudreault is an engineer-MBA with close to 20 years of professional experience in energy, environmental policy and sustainable finance. After working in Africa for a few years, Félix joined Environment and Climate Change Canada where he was Director of International Climate Change Negotiation and Chief of Staff to the Deputy Minister. Between 2015 and 2018, Félix worked for think tanks, private companies and international organizations such as the OECD and IFC.



LENKA MARTINEK Managing Partner

Global Macro Research / Investment Strategy

Lenka is an investment strategist with over 20 years of professional experience in research and capital markets. Lenka worked for 15 years as a strategist for BCA Research, the leading provider of independent global macro investment research. She then worked as a portfolio manager in the CIO office of one of Canada's largest pension funds. She holds a bachelor's degree in economics and a master's in management and sustainable development at HEC Montréal.



FRANÇOIS BOUTIN-DUFRESNE Managing Partner

Strategy / Macro and ESG Research / Policy

François is an economist and investment strategist with almost 20 years of international experience in policy-making, capital markets, sustainable finance and development finance. He held roles at the International Monetary Fund, the Government of Canada and, most recently, in capital markets. He is currently affiliated with HEC Montréal, where he teaches economics and finance at MBA/Executive levels. A father of four, François is an avid cyclist and outdoorsman.



FRANÇOIS BOURDON, FSA, CFA, PRM Managing Partner

Investment / Risk Management / Alternative Investments

François is an investor and investment team leader with a vast experience in multiple asset classes ranging from fixed income and equities to absolute return and hedge fund strategies. As the former Global CIO of Fiera Capital, Canada's largest independent asset manager, he also developed private and public alternative strategies in real estate, infrastructure, agriculture, commodities and more recently, impact investing.

# 3. The Global Environmental and Climate Crises — Challenges We Can Overcome

Climate change is undoubtedly the biggest environmental challenge of our time. It is happening; temperatures are rising, droughts and wildfires are occurring more frequently, rainfall patterns are shifting, glaciers and sea ice cover are retreating, permafrost is thawing, deserts are advancing, and the global mean sea level is rising. And yet, climate change is not the *only* environmental challenge of our time. Human activity is directly responsible for the continuing destruction, fragmentation and degradation of the Earth's remaining natural resources, habitats and biodiversity which — if allowed to continue — will have a cataclysmic impact on the quality of our air, land/soil and water and therefore our ability to feed and sustain ourselves, let alone preserve the remainder of the Earth's wilderness and vitality.

Thankfully, in recent years, a groundswell of societal awareness has given rise to a wave of conscious consumerism and technological innovation to meet and remediate these challenges. Today, we hold the promise of a greener future — provided we invest now in promising solutions that can bring about meaningful and widespread change.

#### **Climate Change**

On addressing climate change, the clock is ticking faster than ever. According to the Intergovernmental Panel on Climate Change (IPCC), an intergovernmental body of the United Nations (UN) dedicated to providing the world with objective, scientific information on climate change, limiting global warming to 1.5°C would require "rapid and far-reaching" transitions in land, energy, industry, buildings, transport, and cities.¹ To meet that target, global anthropogenic (i.e. human-made) emissions of carbon dioxide (CO₂) would need to fall by about 45% from 2010 levels by 2030, reaching 'Net Zero' in around 2050. While science tells us that climate change is irrefutable, it also tells us that it is not too late to stem the tide. New and efficient technologies can help us reduce emissions and create a cleaner world. Readily available technological solutions already exist for more than 70% of today's emissions² and a raft of exciting new and increasingly efficient technologies are under various stages of development and rollout.

#### **Air and Soil Pollution**

Despite some regional improvements in air and soil pollution — mostly in the developed countries of the world — the issue remains a global problem that needs to be urgently addressed. For instance, air pollution caused by the emissions of particles and toxic gases from combustion engines, fossil fuel power plants, and industrial facilities, is one of the world's leading risk factors for death, attributed to 9% of deaths globally.<sup>3</sup> Soil pollution resulting from the release into the environment of the untreated by-products of industrial activities, livestock effluent, agrochemicals and municipal waste is contaminating soil and threatens food security for at least 3.2 billion people — 40% of the world's population.<sup>4</sup> However, technological solutions that can considerably reduce air and soil pollution already exist and they are increasingly being deployed around the world. Pollution control<sup>5</sup> and circular economy solutions are already multi-billion dollars industries and are expected to grow substantially over the coming decades.<sup>6</sup>

<sup>&</sup>lt;sup>1</sup> Summary for Policymakers of IPCC Special Report. <a href="https://www.ipcc.ch/2018/10/08/summary-for-policymakers-of-ipcc-special-report-on-global-warming-of-1-5c-approved-by-governments/">https://www.ipcc.ch/2018/10/08/summary-for-policymakers-of-ipcc-special-report-on-global-warming-of-1-5c-approved-by-governments/</a>

<sup>&</sup>lt;sup>2</sup> United Nations. <a href="https://www.un.org/en/un75/climate-crisis-race-we-can-win">https://www.un.org/en/un75/climate-crisis-race-we-can-win</a>

<sup>&</sup>lt;sup>3</sup> Air Pollution. https://ourworldindata.org/air-pollution

<sup>&</sup>lt;sup>4</sup> Soil pollution a risk to our health and food security. https://www.unep.org/news-and-stories/story/soil-pollution-risk-our-health-and-food-security

<sup>&</sup>lt;sup>5</sup> Air Pollution Control Market Growth 2021 CAGR Value. https://www.marketwatch.com/press-release/air-pollution-control-market-growth-2021-cagr-value-analysis-by-size-share-top-key-players-latest-trends-and-forecast-to-2024-2021-02-19

waste Management Market Expected to Reach \$2,339.8 Billion by 2027. https://www.alliedmarketresearch.com/press-release/waste-management-market.html

#### Water Quality and Availability

Like the air and soil pollution issue, substantial progress has been made in improving water quality and availability worldwide, especially in developed and emerging countries. However, the UN estimates that one in three people do not have access to safe drinking water. According to the Organisation for Economic Cooperation and Development (OECD), the blue economy, which also includes economic opportunities linked to the oceans, is projected to double, and reach USD 3 trillion by 2030. The investment required to make the blue economy more sustainable is indeed even larger than that required for land-based initiatives. Quantified in terms of the 17 UN Sustainable Development Goals (SDGs), water-related initiatives have attracted the lowest share of investment to date (3.5%). With greater acknowledgement that more needs to be done to ensure the sustainability of water resources and marine life and health, the growth opportunities for investors continues to look attractive over the medium to long term.

#### **Loss of Natural Habitat and Biodiversity**

Finally, the most visible challenge that even the greatest cynics of climate change cannot ignore: the loss of the earth's natural habitat and biodiversity. The damage to some of the most biodiverse regions on earth, including some of our most celebrated forests (e.g., the Amazon, the Congo, and the Taiga) can now be viewed and tracked from space with the assistance of satellites. However, whilst the scars left in the landscape are obvious, the consequential decline in wildlife and biodiversity is less so. We are all aware of the highly publicised plight of the large "celebrity species" such as the tiger, elephant, and polar bear. But what about the millions of species of small mammals, birds, reptiles, amphibians, and fish that continue to quietly decline at unprecedented rates? Between 1970 and 2016, we witnessed a 68% decrease in the populations of monitored vertebrate species. The loss in natural habitat and wilderness is primarily caused by land-use change (i.e., the conversion of natural habitat such as forests or grassland into agricultural, urban, or industrial land). However, climate change, pollution, and the over-exploitation by humans of natural resources such as timber are also large contributors to the damage.

A recent report commissioned by the UK government estimated that, between 1992 and 2014, produced capital per person doubled but the stock of natural capital per person declined by nearly 40%. At this pace, we would require 1.6 Earths to maintain the world's current living standards. Many scientists think a sixth mass extinction of life is under way and accelerating. 12

In recent years, governments, businesses, and investors have started to take notice of these environmental risks. In its 16<sup>th</sup> Global Risks Report, the World Economic Forum noted that if environmental risks are not addressed, "environmental degradation will intersect with societal fragmentation" to bring about dire consequences.<sup>13</sup> Moreover, the two major international conferences in 2021 — the 15<sup>th</sup> Conference of the Parties to the Convention on Biological Diversity (COP15) and the 26<sup>th</sup> Conference of the Parties to the UN Framework Convention on Climate Change (COP26) — provide important opportunities to set a new, ambitious direction for the coming decade. Combined with the explosion in publicity and awareness driven by broadcasters such as the BBC and Netflix, we believe that environmentally friendly and nature-based solutions will be one of the most promising investment areas of the future as eco-conscious investing continues to gather pace globally.

<sup>&</sup>lt;sup>7</sup> Goal 6: Ensure access to water and sanitation for all. https://www.un.org/sustainabledevelopment/water-and-sanitation/

<sup>&</sup>lt;sup>8</sup> OECD work in support of a sustainable ocean. <a href="https://www.oecd.org/ocean/OECD-work-in-support-of-a-sustainable-ocean.pdf">https://www.oecd.org/ocean/OECD-work-in-support-of-a-sustainable-ocean.pdf</a>

<sup>9</sup> ESG investors slow to make waves in the \$2.5tn ocean economy. https://www.reutersevents.com/sustainability/esg-investors-slow-make-waves-25tn-ocean-economy

<sup>&</sup>lt;sup>10</sup> The Living Planet Report 2020: WWF: https://f.hubspotusercontent20.net/hubfs/4783129/LPR/PDFs/ENGLISH-FULL.pdf

<sup>11</sup> The Economics of Biodiversity: The Dasgupta Review. https://www.gov.uk/government/publications/final-report-the-economics-of-biodiversity-the-dasgupta-review

<sup>12</sup> The sixth mass extinction. https://www.pnas.org/content/117/24/13596

<sup>&</sup>lt;sup>13</sup> The Global Risks Report 2021. <u>https://www.weforum.org/reports/the-global-risks-report-2021</u>

Investment opportunities relevant to this theme include nature-based habitat rehabilitation, water filtration, erosion and flood control systems, amongst many others.

# 4. The Role of Finance and the EU Taxonomy for Sustainable Activities

Financial markets, through the deployment and reallocation of capital, can play a significant role in addressing today's environmental challenges. Many market participants now acknowledge that environmental risks *are* financial risks. Using the theory of efficient allocation of resources, this should lead to significant inflows into sustainability-focused businesses in the years ahead.

Yet, the capital required — both from public and private sources — to holistically address the environmental challenges that we face is immense. According to the OECD, an amount as high as USD 6.9 trillion per year is going to be needed to meet the Paris Agreement goals by 2030.<sup>14</sup> A large share of this investment will come from sustainability-themed investment vehicles. Such investment vehicles, according to recent estimates from Morningstar, achieved record inflows in 2020, totalling USD 1.65 trillion, an increase of nearly 65% versus 2019 figures.<sup>15</sup>

Accounting for nearly 80% of that, Europe is a clear leader in sustainable investing. So much so, that the European Union, on 22 June 2020, rolled out a new regulatory framework for encouraging and facilitating environmentally-sustainable investments and to implement the European Green Deal (the "EU Taxonomy for Sustainable Activities" or "EU Taxonomy"). By providing appropriate definitions to companies, investors and policymakers on which economic activities can be considered environmentally sustainable, it is expected that the new EU Taxonomy will create security for investors, protect private investors from greenwashing, help companies to plan the transition, mitigate market fragmentation and eventually help shift investments where they are most needed. 17

The EU Taxonomy is the unified classification system for sustainable activities at the core of the EU action plan on financing sustainable growth. The regulation requires asset managers to gather reliable, consistent, and comparable sustainability-related indicators from in-scope investee companies and incorporate this data into their investment decisions and risk management processes to fulfil disclosure duties under the SFDR.

In March 2021, the EU followed up with the implementation of the Sustainable Finance Disclosure Regulation which imposes a series of sustainability disclosure obligations for manufacturers of financial products and financial advisers toward end-investors (the "SFDR").<sup>18</sup>

We believe that both the EU Taxonomy and the SFDR are positive for the financial services sector. Combined, these two regulations will accelerate our transition towards a low-carbon economy by promoting transparency and accountability, boosting green investment, and reducing 'greenwashing'.

 $<sup>^{14} \</sup> Investing \ in \ Climate, \ Investing \ in \ Growth. \ \underline{https://www.oecd.org/env/investing-in-climate-investing-in-growth-9789264273528-en.htm}$ 

<sup>15</sup> Global Sustainable Fund Flows. https://www.morningstar.com/lp/global-esg-flows

<sup>&</sup>lt;sup>16</sup> European Commission: https://ec.europa.eu/info/law/sustainable-finance-taxonomy-regulation-eu-2020-852\_en

<sup>&</sup>lt;sup>17</sup> European Commission: <a href="https://ec.europa.eu/info/business-economy-euro/banking-and-finance/sustainable-finance/eu-taxonomy-sustainable-activities\_en\_18" European Commission. <a href="https://ec.europa.eu/info/business-economy-euro/banking-and-finance/sustainable-finance/eu-taxonomy-sustainable-activities\_en\_2">https://ec.europa.eu/info/business-economy-euro/banking-and-finance/sustainable-finance/eu-taxonomy-sustainable-activities\_en\_2">https://ec.europa.eu/info/business-economy-euro/banking-and-finance/sustainable-finance/eu-taxonomy-sustainable-activities\_en\_2">https://ec.europa.eu/info/business-economy-euro/banking-and-finance/sustainable-finance/eu-taxonomy-sustainable-activities\_en\_2">https://ec.europa.eu/info/business-economy-euro/banking-and-finance/sustainable-finance/eu-taxonomy-sustainable-activities\_en\_2">https://ec.europa.eu/info/business-economy-euro/banking-and-finance/sustainable-finance/eu-taxonomy-sustainable-activities\_en\_2">https://ec.europa.eu/info/business-economy-euro/banking-and-finance/sustainable-finance/eu-taxonomy-sustainable-activities\_en\_2">https://ec.europa.eu/info/business-economy-euro/banking-and-finance/sustainable-finance/eu-taxonomy-sustainable-activities\_en\_2">https://ec.europa.eu/info/business-economy-euro/banking-and-finance/sustainable-finance/eu-taxonomy-sustainable-activities\_en\_2">https://ec.europa.eu/info/business-economy-euro/banking-and-finance/sustainable-finance/eu-taxonomy-sustainable-activities\_en\_2">https://ec.europa.eu/info/business-economy-euro/banking-and-finance/sustainable-finance/eu-taxonomy-sustainable-activities\_en\_2">https://ec.europa.eu/info/business-economy-euro/banking-and-finance/sustainable-finance/sustainable-finance/eu-taxonomy-sustainable-activities\_en\_2">https://ec.europa.eu/info/business-economy-eu-o/banking-and-finance/sustainable-finance/sustainable-finance/eu-taxonomy-sustainable-activities\_en\_2">https://ec.eu-o/banking-au-taxonomy-eu-o/banking-au-taxonomy-eu-o/banking-au-taxonomy-eu-o/banking-au-taxonomy-eu-o/banking-au-taxonom

#### The EU Taxonomy for Sustainable Activities

The EU Taxonomy sets out an EU-wide classification system that establishes a list of environmentally sustainable economic activities. The EU Taxonomy is an important enabler of the European Green Deal. By providing appropriate definitions to companies, investors, and policymakers alike, the taxonomy is expected to (a) reorient capital flows towards sustainable investment to achieve sustainable and inclusive growth; (b) manage financial risks stemming from climate change, environmental degradation, and social issues; and (c) foster transparency and long-termism in financial and economic activity.

The EU Taxonomy lays out the types of economic activities that can be considered environmentally sustainable.

The six environmental objectives identified for the purposes of the EU Taxonomy are:

- 1. CLIMATE CHANGE MITIGATION
- 2. CLIMATE CHANGE ADAPTATION
- 3. THE SUSTAINABLE USE AND PROTECTION OF WATER AND MARINE RESOURCES
- 4. THE TRANSITION TO A CIRCULAR ECONOMY
- 5. POLLUTION PREVENTION AND CONTROL
- 6. THE PROTECTION AND RESTORATION OF BIODIVERSITY AND ECOSYSTEMS

For an economic activity to be considered EU Taxonomy-compliant, it must:

- contribute substantially to one or more of the six environmental objectives above;
- do no significant harm to any of the other environmental objectives;
- comply with minimum social safeguards including the OECD Guidelines for Multinational Enterprises, the UN Guiding Principles on Business and Human Rights, the International Labour Organisation's (ILO) declaration on Fundamental Rights and Principles at Work, the eight ILO core conventions, and the International Bill of Human Rights; and
- comply with certain technical screening criteria developed by the EU Commission's Technical Expert Group (TEG) in the form of delegated acts, applicable from 1 January 2022 for climaterelated objectives and from 1 January 2023 for the other environmental objectives.

#### 5. SMS Environmental Impact Opportunities Thematic Classification

The SMS Environmental Impact Opportunities Thematic Classification (the "Thematic Classification") is a transparent and forward-looking classification framework which has been designed to identify and score publicly listed companies that are developing and applying innovative and impactful solutions to tackle the world's most pressing climatic and environmental challenges. These are companies that are making a substantial contribution to one or more of the six environmental objectives of the EU Taxonomy: (1) Climate Change Mitigation; (2) Climate Change Adaptation; (3) The Sustainable Use and Protection of Water and Marine Resources; (4) The Transition to A Circular Economy; (5) Pollution Prevention and Control; and (6) The Protection and Restoration of Biodiversity and Ecosystems.

The result of the classification process is the **SMS Environmental Impact Opportunities Stock Universe** (the "**Stock Universe**") which includes publicly listed companies that have been thematically categorised by Sustainable Market Strategies across the various Sub-Sectors of the Thematic Classification as outlined at Section 5.1 below.

Each company is assessed for its economic exposure (i.e. relevance) to the various Sub-Sectors of the Thematic Classification. This is determined by reference to the proportion of its revenue that is attributable to the relevant Sub-Sectors, for which it receives a "**Green Revenue Score**".

Each company is then assessed for its potential environmental impact. This is determined using a proprietary framework comprised of quantitative and qualitative indicators and in respect of which it receives an "Environmental Impact Score".

Companies must have a minimum free-float market capitalisation of USD 200 million to be eligible for consideration in the Stock Universe.

#### 5.1 Sub-Sectors

The Sub-Sectors below represent key identified areas of sustainable innovation in the environmental sector that are expected to grow exponentially over the coming decade. The Sub-Sectors have been extrapolated by Sustainable Market Strategies out of the six environmental objectives of the EU Taxonomy. Each company in the Stock Universe is allocated to one of the Sub-Sectors.

The objective of the Sub-Sectors is to bring greater granularity to the EU Taxonomy's six environmental objectives. Accordingly, the Sub-Sectors deconstruct the EU's high-level objectives into thematic investment areas where long-term secular growth is anticipated.

Each company's Sub-Sector is determined by reference to the Sub-Sector that it derives its revenue from. Where a company derives revenue from more than one Sub-Sector, it will be classified within the Sub-Sector from which it derives the largest proportion of its revenue.

Our society is only just beginning to transition to a more sustainable economy. Accordingly, as global focus on solving the world's climatic and environmental challenges intensifies, we expect that more and more innovative and impactful Sub-Sectors and companies will emerge and the priority afforded to existing Sub-Sectors may shift as the projected impact of Sub-Sectors is re-assessed in line with the EU's own evolving environmental objectives. Accordingly, the Sub-Sectors below may evolve over time as needed to reflect the dynamic nature of the transition.

#### **SMS Environmental Impact Opportunities Thematic Classification**

# Six Environmental Objectives of the EU Taxonomy

#### **Sub-Sectors**

#### 1. Climate Change Mitigation

Economic activities that contribute substantially to the stabilisation of greenhouse gas emissions by avoiding or reducing them or by enhancing greenhouse gas removals.

#### **Renewable Energy Generation**

Companies in this Sub-Sector are engaged in the generation and distribution of electricity produced from renewable energy sources, including solar, wind, hydro, geothermal, tidal and other sources deemed "renewable" by the International Renewable Energy Agency (<a href="https://www.irena.org">www.irena.org</a>). Excluded from this Sub-Sector are companies engaged in nuclear power and the generation of electricity derived from fossil fuels (including coal, oil and natural gas) and palm oil.

#### **Renewable Energy Equipment**

Companies in this Sub-Sector design, manufacture, produce and maintain renewable power generation equipment such as solar panels, solar inverters and converters, wind turbines, water turbines and other equipment necessary for the development of renewable energy projects.

#### **Hydrogen and Alternative Fuels**

Companies in this Sub-Sector are engaged in the development, processing, production and/or distribution of alternative energy sources such as hydrogen (e.g., fuel cell and distribution solutions) and biofuels (e.g., ethanol and biodiesel). Only companies deemed to be well positioned in the *most sustainable* alternative fuel production methods are included in the universe (e.g., second-generation biofuels, blue/green hydrogen produced from renewable energy and/or with carbon capture technologies).

#### **Energy Efficiency Solutions**

Companies in this Sub-Sector enable more efficient methods of energy usage and management in residential, commercial and/or industrial buildings. These include, but are not limited to, smart grid solutions, smart meters, high efficiency HVAC systems, LED and CFL lighting, advanced insulation solutions and/or other activities highlighted in the European Energy Efficiency Directive

(https://ec.europa.eu/energy/topics/energy-efficiency).

#### **Electric Vehicles and Green Transport**

Companies in this Sub-Sector design, develop and/or manufacture sustainable transport alternatives. Included in this Sub-Sector are companies operating along the full value-chain of electric vehicles (battery technology providers, manufacturers of power train parts, car companies themselves, etc.) and green public transportation options (public transit systems and train/subway/bus manufacturers and operators offering environmentally-friendly options beyond regular mass transit companies).

#### 2. Climate Change Adaptation

Economic activities that contribute substantially to reducing or preventing the adverse impact of the current or expected future climate, or the risks of such adverse impact.

#### **Climate Resilience Solutions**

Companies in this Sub-Sector provide solutions that aim to make us more resilient to the physical effects of climate change. Areas of focus include solutions such as irrigation technologies that secure and manage water supply for agriculture in regions suffering from increasingly erratic and/or reduced overall rainfall resulting from changing weather systems. This Sub-Sector also includes companies that provide technological knowhow or solutions and/or engineering and planning services to build more resilient infrastructures.

#### 3. The Sustainable Use and Protection of Water and Marine Resources

Economic activities that contribute substantially to achieving the good status of bodies of water, including surface, groundwater, and marine waters.

#### Clean Water

Companies in this Sub-Sector design, develop and/or manufacture products and services that enhance clean water quality and availability infrastructure systems, such as treatment and purification systems, water efficiency technologies, and installation, maintenance, and renovation of water distribution networks. Water utilities are included provided that they operate in a marginally high-impact region (e.g., in developing countries where water infrastructure requires substantial investment).

### 4. The Transition to a Circular Economy

Economic activities that increase the durability, reparability, upgradability, and reusability of products and/or which seek to develop 'product-as-a-service' business models with circular value-chains.

#### **Circular Economy Solutions**

Companies in this Sub-Sector support the transition to a circular economy. Included are companies engaged in the development, manufacture, installation and/or operation of equipment and services for the collection, management, triaging, and recycling of waste. Companies engaged in the development of waste-to-energy solutions (e.g., methane capture at landfills) are also included within this Sub-Sector.

### 5. Pollution Prevention and Control

Economic activities that contribute substantially to the prevention or reduction of pollutant emissions into air, water, or land (other than greenhouse gases).

#### **Pollution Control**

Companies in this Sub-Sector address pollution prevention and control at the primary source of emission. For the most part, these are engineering, and tech firms engaged in the design of processes that minimise pollution impacts from normal, day-to-day business operations.

## 6. The Protection and Restoration of Biodiversity and Ecosystems

Economic activities that lead to nature and biodiversity conservation.

#### **Nature-Based Solutions**

Companies in this Sub-Sector are engaged in the development of nature-based solutions for tackling environmental challenges. Typically, these are companies involved in economic activities such as managed forestry, reforestation and afforestation, natural infrastructure management, wetlands management, and other biodiversity protection activities.

#### 5.2 Scoring Methodology

The scores are rankings assigned to the companies in the Stock Universe and are based on the proportion of each company's green revenue (i.e. revenue derived from one or more of the prescribed Sub-Sectors) and an assessment of each company's potential environmental impact.

#### **Green Revenue Score**

In the EU Taxonomy, for an economic activity to be considered taxonomy-compliant, it must satisfy a first condition, which is that the company must contribute substantially to one or more of the six environmental objectives of the EU Taxonomy. Therefore, we use a company's revenue exposure to products and/or services linked to the six environmental objectives and the underlying Sub-Sectors as a proxy to determine the significance of a company's contribution to one or more of the environmental objectives. Green revenue exposure is quantified as a percentage and is assigned to each company in the Stock Universe in the form of a **Green Revenue Score**.

Where companies do not segment/report their revenue to the level of granularity needed to allow an objective mapping to the environmental objectives purely by reference to their public disclosures, a combination of tools is used to arrive at the best estimate for the company. These tools include Refinitiv Eikon's Financial and ESG modules and Bloomberg's Financial Analysis, Company Classification Browser, and EU Taxonomy modules. In addition, any estimation of a company's green revenue is compared with those published by environmental NGOs and think tanks such as Corporate Knights and As You Sow, amongst others. Finally, we may also directly engage with companies where necessary to clarify ambiguous statements in their public disclosures.

We expect that our toolkit for determining companies' green revenue will evolve and grow over time as the availability of specific green revenue data becomes more widespread, enabled by the companies themselves who will be under pressure from investors, ESG data vendors and new accounting standards and regulation alike to segment their green revenue more explicitly.

#### **Environmental Impact Score**

Each company is assessed for its potential environmental impact. This is determined using a proprietary framework comprised of quantitative and qualitative indicators and in respect of which each company receives an **Environmental Impact Score**. The assessment is forward-looking and incorporates the extensive proprietary research carried out by Sustainable Market Strategies on all ten environmental Sub-Sectors described in section 5.1 above, which to date has involved the analysis of over a thousand companies.

By utilising the "Five Dimensions of Impact" framework from the Impact Management Project<sup>19</sup>, the impact assessment becomes more quantifiable and comparable across different sectors. Furthermore, the assessment only considers companies that have the potential to make meaningful contributions towards environmental solutions.

The assessment takes into consideration a number of quantitative and qualitative factors at both the Sub-Sector and individual company level, including, but not limited to:

<sup>&</sup>lt;sup>19</sup> The Five Dimensions of Impact: <a href="https://impactfrontiers.org/norms/five-dimensions-of-impact/">https://impactfrontiers.org/norms/five-dimensions-of-impact/</a>

- 1. The impact potential of the Sub-Sector in solving key environmental challenges and contributing in the transition towards a more sustainable economy (this assessment takes into account both quantitative and qualitative factors);
- 2. The potential success of the Sub-Sector taking into account technological and financial considerations such as technological efficacy and commercial viability and scalability (this assessment is mostly qualitative); and
- 3. The individual company's positioning within its Sub-Sector and its potential to emerge as a leader in the coming years based on its strategic positioning and commitments in research and development and capital expenditure (this assessment is mostly quantitative).

The Environmental Impact Score is designed to be a substantial enhancement on traditional ESG assessments which are typically backward- and/or inward-looking and do not assist in ascertaining the likely *future impact* of a company's products and/or services on the environment.

As we prioritise forward-looking analysis over backward-looking reporting, we also directly engage with companies where necessary to clarify ambiguous statements and/or commitments.

Our impact scoring methodology will continue to evolve over time as company-specific data and insights become more and more sophisticated.

The full list of resulting Environmental Impact Scores for all the constituents of the universe is publicly available at the following section of the SMS website:

www.sustainablemarketstrategies.com/en/thematic/

#### 6. Data Sources

To conduct our own research, we leverage both public sources and subscription-based datasets. Public sources consist of datasets provided by companies through their periodic reports (annual, semi-annual and quarterly reports), company presentations or official earnings conference call transcripts. We also engage directly with companies where clarification is needed with respect to publicly available disclosures. We also regularly consult with several environmental non-governmental organisations' websites including Corporate Knights' Global 100 ranking<sup>20</sup> and As You Sow's Carbon Clean 200 ranking<sup>21</sup>.

Our subscription-based datasets include:

- FactSet's RBICS revenue categorisation module
- Refinitiv Eikon's Financial and ESG Modules
- CSRHub's ESG database
- Bloomberg's Financial, ESG and EU Taxonomy modules

It should be noted that our list of subscription-based datasets is not static. We expect this list to evolve and grow as newer and more specialised datasets become available.

#### 7. Review Frequency

<sup>&</sup>lt;sup>20</sup> Corporate Knights, 2022. Available at: <a href="https://www.corporateknights.com/rankings/global-100-rankings/2022-global-100-rankings/">https://www.corporateknights.com/rankings/global-100-rankings/2022-global-100-rankings/</a>

<sup>&</sup>lt;sup>21</sup> As You Sow, 2022. Available at: <a href="https://www.asyousow.org/report-page/2022-clean200">https://www.asyousow.org/report-page/2022-clean200</a>

The Stock Universe is reviewed and updated on a semi-annual basis in June and December of each year. During each semi-annual review session, new companies and existing companies are reviewed, classified and scored in accordance with the methodology described in this document.

#### 8. Governance

The Thematic Classification is maintained by Sustainable Market Strategies.

Please note that we do not accept payments from companies or other third parties to include their companies in the Stock Universe.

If a company or prospective company (or professional advisor acting on behalf of the company) wishes to challenge its inclusion status, classification or score, supporting evidence must be sent to <a href="mailto:thematic@sustainablemarketstrategies.com">thematic@sustainablemarketstrategies.com</a>. The reason for proposing the change to the company's inclusion status, classification or score must be stated and documentary evidence supporting the claim must be provided. In considering the claim, SMS reserves the right to only take into account publicly available information.

Any adjustments resulting from a change in a company's inclusion status, classification or score will be effective in line with the next scheduled semi-annual review. Under certain circumstances, SMS reserves the right to use discretion to effect the change sooner.