# Understanding Carbon

More than the new black





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### Introduction

Since the time of the industrial revolution, carbon has fuelled our economies, providing us with reliable energy, all through the burning of fossil fuels. However, the knock-on effect of this human-caused surplus of carbon in the atmosphere now threatens our planet's climate.

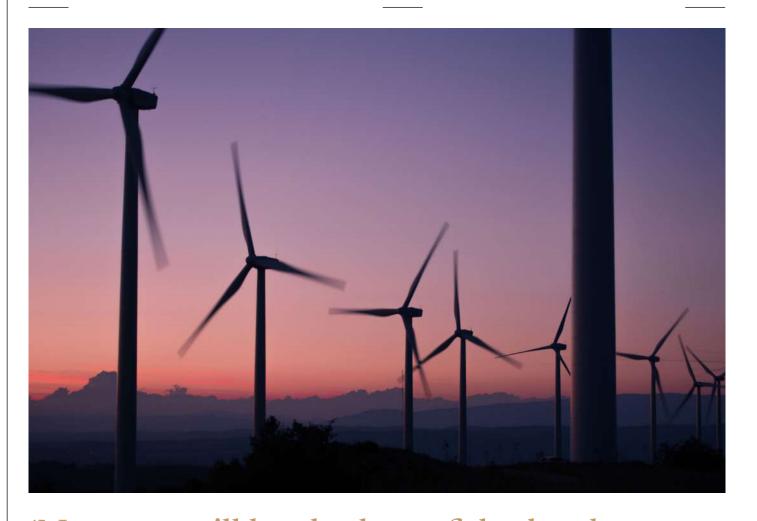
Science tells us that in order to limit the impacts of climate change, we must reach net zero emissions by 2050. Open up any news source and you can be sure to come across terms such as carbon and net zero, yet the language can be confusing, with seemingly endless acronyms.

Carbon is one of life's building blocks. Humans are made up of almost 20% carbon and we need a certain amount of carbon dioxide  $(CO_2)$  in our atmosphere for life on earth.

Net zero is a state where we add no incremental greenhouse gases to the atmosphere, where any emissions are balanced with the removal of carbon from the atmosphere. A business can be net zero, a country can even be net zero. Until we reach net zero globally, temperatures will continue to rise.

This paper aims to demystify terms such as carbon and net zero – all with a view to helping you – business leaders – understand the role you must play in addressing climate change. We will unpack the challenges in measuring your own emissions and what you can do to reduce or remove those emissions, in order to equip leaders with the knowledge you need to build a net zero strategy.





'Net zero will be the law of the land in the major economies sooner rather than later, where this isn't already the case. Waiting to put net zero arrangements in place is putting capital at risk and increasing the chances of being caught out by sharp policy adjustments in key markets.'

- Generation Investment Management

## The Science of Climate Change

### Greenhouse gases

Our atmosphere contains greenhouse gases (GHSs), which are essential to life on earth. They trap heat from the sun, keeping our planet at a balmy temperature, capable of sustaining life. GHGs include carbon dioxide, methane, nitrous oxide and fluorinated gases.1 As carbon dioxide (CO<sub>2</sub>) is the most abundant, it generally gets used as a shorthand for all GHGs in many discussions.

### Framing carbon

Since the industrial revolution, we have been adding more carbon (in the form of CO<sub>2</sub>) to the atmosphere than our natural systems can handle, through extracting fossil fuels and burning them. Industrial processes such as making cement and chemicals, as well as land use changes brought on by the expansion of industrial-scale agriculture, also contribute to rising levels of CO<sub>2</sub> in the atmosphere.

Media narratives often focus on our 'war' with carbon, yet carbon is in practically everything we use - from building materials to food and clothing. The architect and writer Bill McDonough identifies three categories of carbon<sup>2</sup>:

Living carbon: organic, flowing in biological cycles; something we want to cultivate and grow

Durable carbon: locked in stable forms or recyclable polymers that are used and reused

Fugitive carbon: has ended up somewhere unwanted and can be toxic

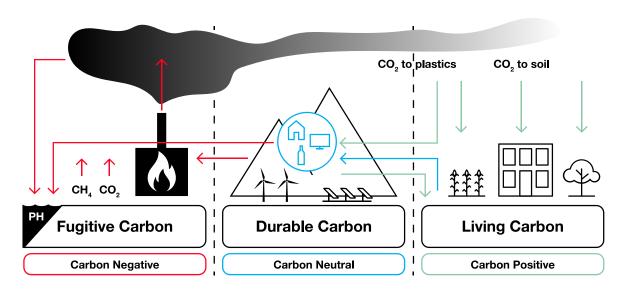


Figure 1: A new language of carbon (mcdonough.com)<sup>3</sup>

<sup>&</sup>lt;sup>1</sup> EPA Overview of greenhouse gases

<sup>&</sup>lt;sup>2</sup> William McDonough A New Language of carbon

<sup>&</sup>lt;sup>3</sup> William McDonough A New Language of carbon

### CO<sub>2</sub> concentration levels and UN reporting on climate change

The problem we currently face is that **CO**<sub>2</sub> levels in our air have increased significantly in concentration (roughly 50% increase since pre-industrial levels).<sup>4</sup> This has led to increasingly dangerous rises in average global temperatures.

In October 2018, the Intergovernmental Panel on Climate Change (IPCC) released a report on limiting global warming to 1.5°C above pre-industrial average temperatures.<sup>5</sup> They are unequivocal about what's needed: By 2050, the global economy must achieve net zero emissions and thereafter go carbon negative – i.e., remove more carbon from the atmosphere than is emitted.

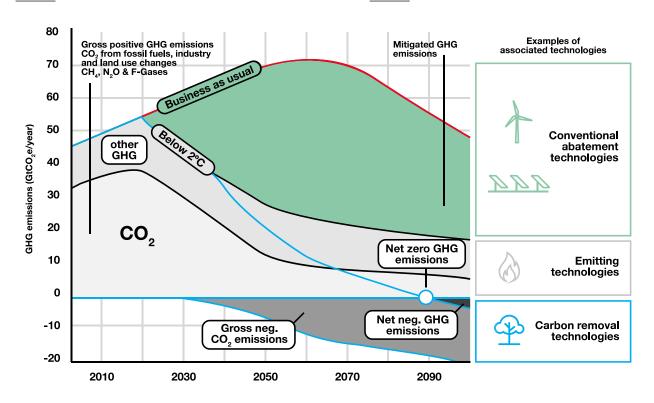


Figure 2: Scenario of a net zero pathway (nap.edu)<sup>6</sup>

'A new era of corporate accountability is upon us and we need to be diligent in taking all steps to mitigate our impacts, including being transparent and responsible for our GHG emissions across our supply chains.'

- Marco Bizzarri, CEO Gucci

<sup>&</sup>lt;sup>4</sup> Met Office 50% increase in atmospheric CO, levels

<sup>&</sup>lt;sup>5</sup> IPCC Global Warming of 1.5°C

<sup>&</sup>lt;sup>6</sup> NAP <u>Negative Emissions Technologies</u>

## How have we responded so far?

### What is COP?

COP stands for Conference of the Parties and is attended annually by member countries that have signed the United Nations Framework Convention on Climate Change (UNFCCC) - a treaty agreed in 1994. Leaders look to forge a response to climate change each year.

Previous agreements include the Kyoto Protocol, which was superseded by The Paris Agreement at COP21. 2021's meeting in Glasgow, UK will be the 26th meeting. Hence the name COP26.

### **The Paris Agreement**

In 2015, world leaders convened for COP21 in France to create and adopt the Paris Agreement. Its **goal is to limit global warming to well below 2°C, preferably to 1.5°C, compared to pre-industrial levels.**<sup>7</sup> This agreement has been signed by 196 countries, all of which are required to produce Nationally Determined Contributions (NCS)<sup>8</sup> outlining how they will reduce their own emissions to help meet the well below 2°C target.

### Why 1.5°C?

Scientists say that limiting warming to 1.5°C is associated with less devastating impacts compared to higher temperatures, whilst still being achievable. To be clear, a 1.5°C increase will still have ruinous impacts on the biosphere, and every fractional rise beyond 1.5°C will result in increasingly severe and expensive impacts.

### What's our carbon budget?

The IPCC states that from 2018, our budget (remaining emissions) is  $580~\rm GtCO_2$  if we are to have a 50% chance of limiting warming to  $1.5^{\circ}\rm C.^{10}$  This is our carbon budget. To put this into context, we currently emit between  $40-50\rm GtCO_2$  per year. So that means at the current rate we will run out of 'budget' before 2030 and will no longer be able to prevent disastrous global warming.

### Are we on track to reach our targets?

We need to reduce emissions by 7.6% every year until 2030 if we are to achieve 1.5°C of warming. 11 Based on today's commitments, 2030 emissions are on track to be twice what they should be. COP26 will be a pivotal turning point in addressing this shortfall.



<sup>8</sup> UNFCCC The Paris Agreement

<sup>9</sup> UNFCCC Nationally Determined Contributions

<sup>10</sup> IPCC Impacts of 1.5°C global warming

<sup>11</sup> IPCC Carbon budget

<sup>12</sup> UNFCCC Cut global emissions by 7.6% every year

## What can businesses do?

### A: Shifting trends

### Why is climate change now a business issue?

With consumer sentiment changing and little doubt that more stringent regulation of carbon emissions is coming soon, businesses must look at their own strategy for net zero.

### Consumer preferences are shifting

COVID-19 has been a catalyst for a stronger move towards activism, especially among Millennials and Gen Z consumers. 2020 saw this move accelerate both in challenges and opportunities for luxury businesses. To win over consumers today, luxury companies need to adapt agile innovation and redefine their strategies over price, values and activism to align with the new priorities and spending behaviour in the "new normal".

According to Euromonitor International's Lifestyles Survey (2020), around 60% of young consumers agree that their choices and actions make a difference to the world and they give back to those in need. Meanwhile, around 30% are actively involved in political and social issues.

As we move into 2021 the luxury industry will be under stricter scrutiny. Environmental, Social and Governance (ESG) will play a much bigger role in the boardroom, and Gen Z and Millennials in particular will vote with the money they spend. By 2025, Millennial and Gen Z consumers will be the dominant luxury market demographic, with an estimated 65-70% share of the market.<sup>12</sup>

At the same time, luxury brands will need to demonstrate empathy in the context of newly-emerging emotional concerns and needs, focus on community building and support over profit as a sole purpose.



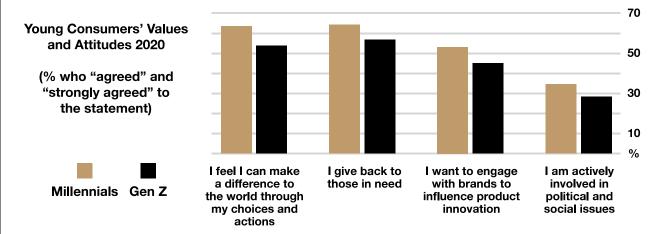


Figure 3: Global Market Overview 2021 – Euromonitor

<sup>12</sup> Bain & Co Luxury Study

Understanding Carbon What can businesses do?

### **Growing investor interest**

A Deutsche Bank report found the amount of assets under management (equities and fixed income) that fall into funds with ESG mandates is quickly growing and currently sits at about one-third of total assets under management. Following current growth projections, this proportion will climb to 95% over the next decade. In July 2020, the EU Taxonomy also entered into force - a robust, science-based transparency tool for companies and investors. It creates a common language that investors can use when investing in projects and economic activities that have a substantial positive impact on the climate and the environment.

Climate policy and regulation is coming. An example already in force is the EU Emissions Trading System (ETS), which creates a financial incentive for the biggest emitters to cut back by putting a cap on the amount of GHGs they can emit each year.<sup>15</sup>

Green bonds binding net zero pledges In September 2020, luxury designer, Chanel became the latest fashion house to issue a \$700 million bond linked to the achievement of its net zero goals, meaning, if they are not met, Chanel will have to pay a penalty.<sup>14</sup>



<sup>&</sup>lt;sup>13</sup> Deutsche Bank Climate change and corporates

<sup>14</sup> Forbes Chanel green bonds

<sup>&</sup>lt;sup>15</sup> European Commission ETS



### B: Identify, reduce, remove

A net zero strategy in essence consists of three steps:

- **1) Identify emissions** This can be done by using The Greenhouse Gas Protocol around Scope 1, 2 and 3 emissions (see figure 4.)
- 2) Create a plan to **reduce emissions** and commit to a science-based target (SBT)<sup>16</sup>. This will require a combination of short- and long-term changes. Often, reducing emissions results in reducing costs but beyond savings, we see that the process of identifying and working out how to reduce emissions can act as a springboard for innovation and a new opportunity to deepen engagement with suppliers, customers and employees. Setting a target is a great way of galvanising employees and attracting new customers.
- 3) Lastly, the emissions you cannot immediately reduce need to be **offset** by removing carbon from the atmosphere to balance out the carbon you emit.

### Science based targets (SBTs)

Companies' targets to reduce GHG emissions are considered science-based if they are aligned with the latest climate science deemed necessary to meet the goals of the Paris Agreement.

<sup>&</sup>lt;sup>16</sup> Science Based Targets <u>Definition</u>

**Understanding Carbon** What can businesses do?

### C: Scope 1, 2 and 3 emissions

It is becoming increasingly clear that in order to stay competitive, net zero must be on the agenda of company Boards and C-Suites. But where to start?

### Step 1 - How to identify your emissions

The first step to measuring your emissions is identifying them in the first place. According to the GHG Protocol (the comprehensive global standardisation framework to measure and manage GHG emissions), there are 3 emissions categories - Scopes 1, 2 and 3.17

Scopes 1 and 2 are relatively straightforward to identify. Scope 3, however, is more challenging, but is also often where the biggest opportunities for impact lie. Scope 3 emissions sit within a business's value chain and can be both upstream and downstream.

Upstream means emissions associated with purchased goods and services, employee commutes, etc.

Downstream can be transportation and distribution of goods, endof-life treatment, etc.

More often than not, Scope 3 emissions represent the lion's share of a business's carbon footprint.



17 GHG Protocol Scope 1, 2 and 3 emissions

Scope 1 – Direct emissions that occur from sources that are owned or controlled by your company i.e., burning fossil fuels to heat buildings or to power company vehicles.

Scope 2 - Indirect emissions from electricity and steam generated elsewhere but used by your company.

Scope 3 – Indirect emissions from sources outside of your company's control, including the production of raw materials used to make your products, customer use of your products and end of life treatment.

## 'You cannot reduce it without first measuring it.

### Anon

### Investing in renewables

In 2019, luxury beauty company, Estée Lauder signed a virtual power purchase agreement (VPPA) for a wind farm in the US. The wind farm covers more than half of the company's global electricity footprint and helped them achieve 100% renewable energy for their scope 1 emissions by 2020.18

<sup>18</sup> Climate Action Estée Lauder

Understanding Carbon What can businesses do?

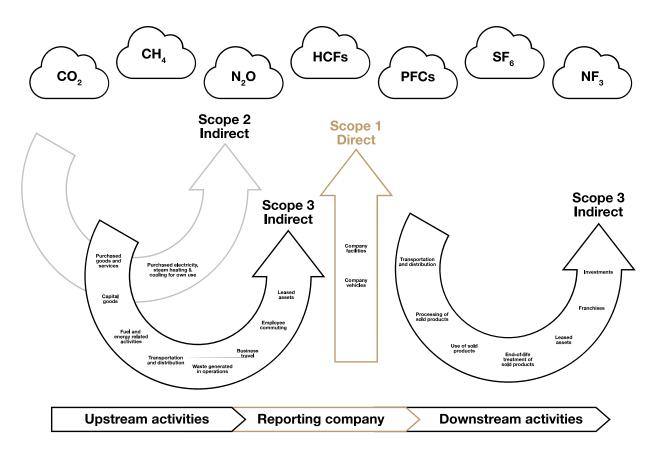


Figure 4: Overview of scopes and emissions across the value chain (ghgprotocol.org)<sup>19</sup>

### Step 2 - Calculating your emissions

Once you have identified where your emissions lie, the process of calculating them can begin. There are myriad online tools to help from the GHG Protocol.

Once you have a number on your business' annual emissions, you can then work towards a net zero strategy.



<sup>19</sup> GHG Protocol Overview of scopes

**Understanding Carbon** What can businesses do?

### D: Offsetting and Carbon Credits

Once you have identified your emissions and have a strategy for reducing the ones that you are able to eliminate immediately, you can look to pay for others to remove carbon from the atmosphere on your behalf. This is known as offsetting or carbon credits. Some offsets are billed as 'avoidance offsets' meaning you pay someone to avoid future emissions. Avoidance offsets do not contribute to net zero. We are going to focus on removal credits.

### What is a carbon credit and how much is it 'worth'?

A 'carbon credit' represents a removal of greenhouse gases. It is issued by a carbon crediting programme: be aware not all carbon credits are created equal.

Generally, 1 credit equals 1 tonne of CO, removed.20

### Carbon removal credits

If you purchase a credit through a removal project, you are removing CO<sub>2</sub> from the atmosphere. Projects generally fall into two categories - natural/nature-based and technical/engineered. (Cost -£10–£100+ per credit)

Example projects include:

- Reforestation or afforestation
- Direct Air Capture
- Soil carbon sequestration

### **Marketplaces**

The carbon removal market is developing at a rapid pace. As a result, there are a plethora of marketplaces and supporting platforms where you can purchase certified removal and avoidance credits. Certification body - Gold Standard is a good resource for verifying various carbon credits.

## certifications guaranteeing effectiveness and permanence are continuing to be developed.

Offset projects in the past have come

moral hazard and impermanence. In

under scrutiny for several reasons such as improper tracking and measuring,

today's marketplaces, clear standards and

### Regenerative practice

Premium outdoor lifestyle brand, Timberland has pledged to go beyond net zero by 2030, by giving back more than it takes. The brand is turning to nature for inspiration, driving innovation through circular design and regenerative agriculture - farming practices that promote soil carbon sequestration, acting as carbon sinks.<sup>21</sup>



<sup>&</sup>lt;sup>20</sup> Gold Standard Carbon pricing

<sup>&</sup>lt;sup>21</sup> Business Wire <u>Timberland net positive</u>

Understanding Carbon What can businesses do?

### **Leading Carbon Removal Solutions**

### Natural

Storage in plants and soils



**Forestry** 

- Afforestation
- Reforestation
  - Wetlands



**Agriculture** 

- Agroforestry
  - Biochar
- Farm management aimed at increasing soil carbon stocks

**Technological**Storage in rocks and materials



**Energy & Industry** 

- Bioenergy with CCS (BECCS)
- Direct air capture + storage
  - · CO<sub>2</sub> mineralisation

Less costly — More costly

Figure 5: Leading carbon removal solutions (climateworks.org)<sup>22</sup>



<sup>&</sup>lt;sup>22</sup> ClimateWorks <u>leading carbon removal solutions</u>

### E: Net zero in action in the luxury industry

### Mulberry

In April 2021, Mulberry announced their 'Made to Last'<sup>23</sup> commitment, setting a 2035 net zero target. To achieve these targets, they have also committed to pioneering 'hyper-local, hyper-transparent' supply chains as well as developing 'the world's lowest-carbon leather'. Mulberry is following up their commitment by calculating their Scope 1, 2 and 3 emissions, identifying emissions hotspots and developing specific targets to seek approval from the Science-Based Targets Initiative (SBTi).<sup>24</sup>

Mulberry expects upstream Scope 3 emissions to account for the majority of the firm's overall annual footprint. Acknowledging offsetting will need to happen across farms, transport and tanneries.

'Working with a trusted group of very close partners to assess emissions beyond the tanneries, back to the farms, is going to be a key part of how we achieve net zero,' explains Mulberry's CEO Thierry Andretta.<sup>26</sup>

Mulberry sources from European tanneries only and is aiming to help all partner tanneries achieve certification through the Leather Working Group this year. The next step will be working with selected tanneries in Scotland to pilot a 'kilometre zero' approach, whereby transport miles are reduced and sustainability data collection is enhanced at every stage, including farm level.

At the farm level, there will be opportunities to implement regenerative agriculture techniques to help farms sequester more carbon than they emit. In this way, Mulberry can inset emissions on the road to net zero.<sup>27</sup>

McKinsey research shows that the fashion sector was responsible for about 4 percent of the global total GHG emissions in 2018. Put into context, that is the same quantity of GHG emissions per year as the entire economies of France, Germany, and the United Kingdom combined.<sup>25</sup>



'It is not the strongest species that survives, nor the most intelligent, but the one most responsive to change.'

- Charles Darwin

<sup>&</sup>lt;sup>23</sup> Mulberry Made To Last Manifesto

<sup>&</sup>lt;sup>24</sup> Mulberry <u>net zero</u>

<sup>&</sup>lt;sup>25</sup> McKinsey <u>Fashion on climate</u>

<sup>&</sup>lt;sup>26</sup> Edie Inside Mulberry's new sustainability strategy

<sup>&</sup>lt;sup>27</sup> Edie Inside <u>Mulberry's new sustainability strategy</u>

Understanding Carbon Conclusion

## Conclusion

Carbon is more than just the new black. Businesses must transform to a more regenerative way of working if they are to thrive in a world of rapidly changing consumer and investor sentiments, policy and regulation.

Investors, businesses, and policymakers are busy setting net zero targets – and a rising generation of citizens and consumers are demanding they go further and faster. It is imperative that businesses set interim targets for 2030 consistent with a fair share of the 50% global reduction in  $\rm CO_2$  identified as a requirement in the IPCC special report on global warming of 1.5°C – and put in place credible action plans to meet these targets. How can business leaders do this?

- Identify, measure, and reduce your Scope 1, 2 and 3 emissions. More often than not, Scope 3 emissions represent the lion's share of a business's carbon footprint, resulting in the biggest opportunity for impact
- Invest in long-term carbon removal credits where there aren't technologically and/or financially viable alternatives to eliminate emissions

Financial markets are now adjusting to the reality that a net zero future is inevitable – and the process will only accelerate from here as new investment products are created and money increasingly flows towards climate solutions.

The language of carbon has moved from sustainability and supply chain practitioners to shareholders and investors. Everyone must learn the language of carbon and reading this paper is a good start.



## Carbon Glossary

### Carbon avoidance

Any activity that avoids an amount of  $\mathrm{CO}_2$  being emitted in the future. For example, new renewable energy capacity can contribute to carbon avoidance if it displaces fossil fuel power sources. Carbon avoidance can be hard to quantify however as it requires a comparison with a baseline scenario built on assumptions about what might have happened in the absence of a given intervention. For this reason, efforts to account for avoided emissions remain controversial.

### Carbon budget

An amount of carbon dioxide that a country, company, or organization has agreed is the largest it will produce in a particular period of time.<sup>28</sup>

### Carbon credit

The token received for the purchase of an offset activity. Generally, 1 carbon credit is equivalent to 1 tonne of CO<sub>2</sub>.

### Carbon dioxide

A naturally occurring gas,  $\mathrm{CO}_2$  is also a by-product of burning fossil fuels (such as oil, gas and coal), of burning biomass, of land-use changes (LUC) and of industrial processes (e.g., cement production). It is the principal anthropogenic greenhouse gas (GHG) that affects the Earth's radiative balance. It is the reference gas against which other GHGs are measured and therefore has a global warming potential.<sup>29</sup>

### **Carbon footprint**

A carbon footprint measures the total greenhouse gas emissions caused directly and indirectly by a person, organisation, event or product.<sup>30</sup>

### **Carbon offsets**

Projects or policy regimes in which companies or individuals pay for activities that result in emissions reductions or carbon removal.<sup>31</sup>

### Carbon removal

Any human activity that removes  $\mathrm{CO}_2$  from the atmosphere and durably stores it in geological, terrestrial, or ocean reservoirs, or in products. This excludes natural  $\mathrm{CO}_2$  uptake not directly caused by human activities.<sup>32</sup>



<sup>28</sup> Cambridge Dictionary carbon budget

<sup>29</sup> IPCC carbon dioxide

<sup>30</sup> Carbon Trust carbon footprint

<sup>31</sup> CDR Primer carbon offsets

<sup>32</sup> CDR Primer carbon removal

Understanding Carbon Carbon Glossary

### Climate risk (including Transition risk and Physical risk)

Refers to the set of potential risks that may result from climate change and that could potentially impact the safety and soundness of individual financial institutions and have broader financial stability implications for the banking system.<sup>33</sup>

### COP

The COP is the supreme decision-making body of the Convention. All States that are Parties to the Convention are represented at the COP, at which they review the implementation of the Convention and any other legal instruments that the COP adopts and take decisions necessary to promote the effective implementation of the Convention, including institutional and administrative arrangements.<sup>34</sup>

### COP26

The UK will host the 26th UN Climate Change Conference of the Parties (COP26) at the Scottish Event Campus (SEC) in Glasgow on 1 – 12 November 2021.<sup>35</sup>

### Drawdown

Drawdown is the future point in time when levels of greenhouse gases in the atmosphere stop climbing and start to steadily decline. This is the point when we begin the process of stopping further climate change and averting potentially catastrophic warming. It is a critical turning point for life on Earth.<sup>36</sup>

### **ESG**

Environmental, social, and governance (ESG) criteria are a set of standards for a company's operations that socially conscious investors use to screen potential investments. Environmental criteria consider how a company performs as a steward of nature. Social criteria examine how it manages relationships with employees, suppliers, customers, and the communities where it operates. Governance deals with a company's leadership, executive pay, audits, internal controls, and shareholder rights.<sup>37</sup>

### **EU Emissions Trading System (ETS)**

The EU ETS works on the 'cap and trade' principle. A cap is set on the total amount of certain greenhouse gases that can be emitted by the installations covered by the system. The cap is reduced over time so that total emissions fall. Within the cap, installations buy or receive emissions allowances, which they can trade with one another as needed. The limit on the total number of allowances available ensures that they have a value.<sup>38</sup>





<sup>33</sup> Bank for International Settlements climate risk

<sup>34</sup> UNFCCC COP

<sup>35</sup> GOV COP26

<sup>&</sup>lt;sup>36</sup> Project Drawdown drawdown

<sup>37</sup> Investopedia ESG

<sup>38</sup> European Union ETS

Understanding Carbon Carbon Glossary

### **EU Taxonomy**

The EU taxonomy is a classification system, establishing a list of environmentally sustainable economic activities. The EU taxonomy is an important enabler to scale up sustainable investment and to implement the European Green Deal. Notably, by providing appropriate definitions to companies, investors and policymakers on which economic activities can be considered environmentally sustainable, it is expected to 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.<sup>39</sup>

### Fossil fuels

Carbon-based fuels from fossil hydrocarbon deposits, including coal, oil, and natural gas.<sup>40</sup>

### Green bonds

A type of fixed income instrument representing a loan between an investor and a borrower, specially used to finance or re-finance climate and environmental projects.<sup>41</sup>

### Greenhouse gases

Greenhouse gases are those gaseous constituents of the atmosphere, both natural and anthropogenic, that absorb and emit radiation at specific wavelengths within the spectrum of terrestrial radiation emitted by the Earth's surface, the atmosphere itself and by clouds. This property causes the greenhouse effect.<sup>42</sup>

### **IPCC**

The Intergovernmental Panel on Climate Change (IPCC) is the United Nations body for assessing the science related to climate change.<sup>43</sup>

### **NDCs**

Embody efforts by each country to reduce national emissions and adapt to the impacts of climate change.<sup>44</sup>

### Net zero/Net zero emissions

Net zero emissions are achieved when anthropogenic (human activity) emissions of greenhouse gases to the atmosphere are balanced by anthropogenic removals over a specified period.<sup>45</sup>

### Regenerative

We define a regenerative economy as one in which economic activity works in the service of a just and inclusive society while restoring and protecting ecosystems.<sup>46</sup>



<sup>39</sup> European Commission EU Taxonomy

<sup>&</sup>lt;sup>40</sup> IPCC <u>fossil fuels</u>

<sup>31</sup> ICMA green bonds

<sup>32</sup> IPCC greenhouse gases

<sup>43</sup> IPCC IPCC

<sup>44</sup> UNFCCC NDCs

Understanding Carbon Carbon Glossary

### Science Based Targets (SBT)

Emissions reductions targets adopted by companies to reduce GHG emissions are considered "science-based" if they are in line with the level of decarbonization required to keep global temperature increase below 2°C compared to pre-industrial temperatures, as described by the Intergovernmental Panel on Climate Change (IPCC).<sup>47</sup>

### Scopes 1, 2 & 3 emissions

All greenhouse gas emissions across a value chain.48

### Sink

A reservoir (natural or human, in soil, ocean, and plants) where a greenhouse gas, an aerosol or a precursor of a greenhouse gas is stored.<sup>49</sup>

### **TCFD**

The Task Force on Climate-Related Financial Disclosures (TCFD) is an organization that was established in December of 2015 with the goal of developing a set of voluntary climate-related financial risk disclosures which can be adopted by companies so that those companies can inform investors and other members of the public about the risks they face related to climate change.<sup>50</sup>

### The Greenhouse Gas Protocol

GHG Protocol establishes comprehensive global standardized frameworks to measure and manage greenhouse gas (GHG) emissions from private and public sector operations, value chains and mitigation actions.<sup>51</sup>

### The Paris Agreement

The Paris Agreement is a legally binding international treaty on climate change. It was adopted by 196 Parties at COP 21 in Paris, on 12 December 2015 and entered into force on 4 November 2016. Its goal is to limit global warming to well below 2, preferably to 1.5 degrees Celsius, compared to pre-industrial levels.<sup>52</sup>

### **UNFCCC**

The United Nations Framework Convention on Climate Change (UNFCCC) entered into force on 21 March 1994. Today, it has near-universal membership. The 197 countries that have ratified the Convention are called Parties to the Convention. Preventing "dangerous" human interference with the climate system is the ultimate aim of the UNFCCC.<sup>53</sup>

### Virtual power purchase agreement (VPPA)

The VPPA is a financial transaction, exchanging a fixed-price cash flow for a variable-priced cash flow and renewable energy certificates.<sup>54</sup>





<sup>&</sup>lt;sup>47</sup> Science based targets <u>SBT</u>

<sup>48</sup> GHG Protocol scope emissions

<sup>49</sup> IPCC Sink

<sup>&</sup>lt;sup>50</sup> UNEPFI <u>TCFD</u>

<sup>&</sup>lt;sup>51</sup> GHG Protocol GHG Protocol

<sup>52</sup> UNFCCC The Paris Agreement

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Volans is a think-tank and advisory firm operating at the leading edge of sustainability and innovation to catalyse systemic change. Volans helps business leaders make sense of the emergent future to unlock the potential of their organisation and create opportunities in the face of exponential planetary challenges. Volans ranks top 20 in the 2021 FT Management Consultant Ratings for sustainability.

Founder John Elkington is a current member of Positive Luxury's Sustainability Council, the governing body which includes experts from industry, academia, NGO, technology and key opinion leaders in the field of sustainability.

Positive Luxury was founded in 2011 to help luxury brands achieve their sustainability goals. We offer the luxury industry's leading independent sustainability certification with The Butterfly Mark – highlighting luxury brands that are genuinely committed to having a positive impact on nature and society – alongside data benchmarking, expert advice, and industry-leading reports. We work collaboratively with clients across the luxury sector including fashion, jewellery, beauty, premium drinks, retail, travel and leisure – helping companies embed sustainability practices at every level of their organisation.



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POSITIVE LUXURY

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