



This week, we identified the key topics of 2022 within sustainability and their respective business implications.



REGULATORY

1. Mandatory ESG due diligence and reporting recorded progress worldwide in 2022. The European Union (EU)'s approval of the corporate sustainability reporting directive (CSRD) in 2022 introduced new mandatory ESG reporting obligations. The CSRD was a major cornerstone of the European green deal by expanding the non-financial reporting directive (NFRD) scope and requiring more companies to report on environmental, human rights, and social impacts. In-scope companies will need to submit reports by 2025 for the financial year of 2024.



- In the U.S., the Securities and Exchange Commission proposed rulemaking on the enhancement and standardization of climate-related disclosures for investors by seeking an ESG disclosure obligation. The country also unveiled the Uyghur forced labour prevention act as an import prohibition. Canada introduced the national instrument 51-107 as an ESG disclosure obligation targeting the report of climate-related matters. Canada also proposed an import prohibition and reporting obligation aimed to tackle child labour in supply chains.
- In Asia, Japan established an ESG disclosure obligation through its corporate governance code with climate disclosures under the country's Financial Services Agency. Hong Kong's Monetary Authority (HKMA) published a supervisory policy manual for climate risk management, providing high-level guidance for financial institutions to build climate resilience by incorporating climate considerations into governance, strategy, risk management, and disclosure. In Oceania, Australia's Government announced it had begun consulting on standardised, internationally aligned requirements for disclosure of climate related financial risks and opportunities in the country.



2. The **UN Framework Convention on Climate Change (COP 27)** reached a milestone for **developing countries seeking financial assistance for loss and damage caused by extreme weather events**. On the 20th of November in Sharm-El-Sheik, Egypt, the UN Conference of Parties took a decision to establish and operationalize a loss and damage fund needed to rescue and rebuild the physical and social infrastructure of countries devastated by extreme climate. A topic which has been under discussion for nearly three decades.

- The 1.5°C path is in the draft text and still alive. Efforts by Climate TRACE, a non-profit coalition, have provided a critical tool to help plug emissions gaps that plague negotiators, climate experts, and scientists alike. Climate TRACE's map of emissions is a new programme demonstrating the actual emissions of major emitters from around the world that represents the world's first comprehensive account of emissions based primarily on direct and independent observation. This is one of the major outcomes of COP 27's two weeks and will significantly contribute to achieving the goals laid out in the Paris Agreement to keep the 1.5°C path alive.
- Initial texts on outing fossil fuels represented more serious language than used at COP26 in Glasgow. However, the final text retained the language of Glasgow-- phase down of coal, which does not discuss any binding language to reduce use and is still only applicable to coal, not oil and gas. The wider commitment to phase out all fossil fuels, led by India, and backed by the US and the EU, was taken out and can be marked as the biggest disappointment of COP27.



3. The **UN Biodiversity Conference (COP 15)** achieved a historical agreement, the **Kunming-Montreal Global Biodiversity Framework (GBF), to halt and reverse biodiversity loss by 2030**. COP 15 took place between 7-19 December 2022 in Montreal, Canada, where governments from around the world came together to agree on a new set of goals and targets to guide global action. The new framework includes 4 long-term 2050 goals such as maintaining, enhancing and restoring the integrity, connectivity and resilience of all ecosystems; increasing the area of natural ecosystems; halting human-induced species extinction; and equitably sharing the benefits from the utilization of genetic resources by 2050. These goals are supported by 23 global 2030 targets such as to halt biodiversity loss and to protect at least 30% of terrestrial, inland water, coastal and marine areas.

- The key 2030 targets include restoring 30% of degraded ecosystems, reducing the loss of areas of high biodiversity importance to near zero, phasing out subsidies that harm biodiversity by at least \$500 billion per year, cutting global food waste in half, and reducing the introduction of invasive alien species by 50%. The agreement also calls for a significant increase in the mobilization of finance for biodiversity to at least \$200 billion per year by 2030, and for developed countries to provide biodiversity-related financial resources, including official development assistance to developing nations of at least \$20 billion per year by 2025 and \$30 billion by 2030.
- Taking a similar approach to the Paris Climate Agreement, the Global Biodiversity Framework sets a clear mandate for private financial flows to align with the 2050 Vision of "Living in harmony with Nature", providing the finance sector with a landmark agreement for biodiversity-related financial-decision making. The agreement has been decisively backed by the finance sector as over 150 financial institutions with more than US\$24 trillion in global assets called for an ambitious framework to halt and reverse biodiversity loss.



RESEARCH

1. Green finance had a rough start of 2022 but ended on a positive note. The green bond market hit a milestone of USD2 trillion at end of Q3 2022. The amount includes self-labelled bonds issued globally and only counts bond issuance demonstrating climate ambition aligned with the Paris Agreement. The USD2 trillion green milestone arrives in a tough year for global bond market. Though 2022 has seen a decrease in global bond volumes, the share of GSS+ issuance has remained unchanged from the 2021 contribution.



- The green milestone unites with the rising crop of sustainable bond labels such as social, sustainability, sustainability-linked and transition bonds, to reach a combined lifetime USD3.5 trillion volume at end of the Q3. The news comes as Climate Bonds calls for the market to scale labelled issuance to a volume of USD5 trillion per year by 2025 to fight climate collapse, which looms large after years of inaction.
- The total green, social, sustainability, sustainability-linked (SLB) and transition bond (GSS+) volumes reached USD152.3 billion in Q3 2022, a decline of 35% compared to Q2 2022, and 45% compared to Q3 2021. Year-to-date volumes of GSS+ debt had reached USD635.7 billion by the end of Q3. More than half of the total (52%, USD332.5 billion) came from green bonds. Sustainability bonds supplied 22.4% (USD142.1 billion), social 14.8% (USD94.2 billion), SLBs 10% (USD63.6 billion), and transition comprised the smallest share at 0.5% (USD3.4 billion).



2. The litigation toll of greenwashing became harsher this year. Concerns about greenwashing have risen up the agenda for politicians and regulators in 2022, following a growth of sustainability pledges, promises and advertisements by companies across all industries, globally. In May, German police raided asset manager DWS as part of an investigation into potential greenwashing. In July, the U.K.'s Competition and Markets Authority (CMA) launched investigations into the sustainability claims of three fashion brands, Asos, Boohoo and Asda's George. The CMA also probed the supermarket group Tesco over claims it made about the environmental credentials of meat-free foods.

- The UK's advertising watchdog banned in October a series of HSBC's advertisements for being misleading about its green credentials by not mentioning the bank's financing of fossil fuel projects and links to deforestation. The ruling set a precedent for the financial sector, marking the first time the regulator has barred ads by a bank on greenwashing grounds. Similar ads for Barclays and Standard Chartered were also reported by a campaign group, which led the HSBC complaint. However, those cases were closed.
- Also in October, the Canadian Competition Bureau was investigating whether Royal Bank of Canada had misled consumers about its commitment to climate action. Leading Canadian banks, including RBC, more than doubled their financing of the highly polluting extraction of oil from tar sands to \$16.8 billion in 2021 while ramping up sustainability commitments.



3. A mass-adoption of renewable energy paved way for green technologies such as solar power, electric cars, grid-scale batteries or heat pumps. The International Energy Agency (IEA) reported that fossil fuel use in the power sector has likely peaked, while wind and solar are adding more capacity to the grid annually than natural gas has in any previous year. Renewables as a source of energy will pass coal by 2025, and total fossil fuel use across the economy will peak in the 2030s. More than 70 countries have already set targets to cut their greenhouse gas pollution to zero, including China, the US, and the Europe Union. Those three biggest polluters and the others aimed at net zero together account for more than 75% of global emissions.

- Wind and solar are technologies, not fuels, so as more panels and turbines are deployed, the higher efficiency its production can achieve. Every time the global supply of solar doubles, the cost of adding more installations declines by almost 30%, according to BloombergNEF. As more countries tipped into mass adoption, wind and solar became the cheapest sources of new electricity capacity worldwide. The electric heat pump became cheaper and even more efficient in

recent years, a tool which can reduce energy consumption from heating and cooling by as much as 70%. Heat pumps have already replaced about 20% of boilers in Europe, saving consumers more than \$100 billion a year.

- Transportation is responsible for a quarter of the world's energy consumption. As with heat pumps, the fuel savings for EVs often makes the total cost of ownership less than their fossil-fuel alternatives. EVs of all types are already displacing 1.5 million barrels per day of oil usage. Bloomberg NEF flags EVs as currently meeting the equivalent to about 3% of total road fuel demand. There are now almost 20 million passenger EVs on the road, 1.3 million commercial EVs, including buses, delivery vans and trucks, and over 280 million electric mopeds, scooters, motorcycles and three wheelers. By 2025 there will be 77 million passenger EVs on the road, representing 6% of the fleet.



COMMERCIAL

1. The UAE geared up on the road to net zero. As part of its participation in the 27th UN Climate Change Conference (COP27), in Sharm El Sheikh from November 6 to 18, the UAE launched the National Net Zero by 2050 Pathway, which sets the timeframe and identifies the mechanisms of implementing the UAE Net Zero by 2050 Strategic Initiative, introduced in October 2021. The pathway defined the country's climate ambition with an absolute emission reduction target of 18% compared to the UAE's updated second Nationally Determined Contribution (NDC) under the Paris Agreement by 2030, 60% by 2040, and 100% by 2050, compared to 2019.



- The pathway is projected to boost the national GDP by 1.8 to 3.2% by 2050, amounting to a total increase between AED610 billion and AED1,080 billion, compared to 2019. It will also create and sustain an average of 200,000 jobs annually. The move will contribute to a significant improvement in air quality due to a reduction in pollution. It specifically targets sectors such as construction, industry, energy, waste and transportation.
- The UAE Cabinet had approved on September 12th an updated version of the UAE's second Nationally Determined Contribution (NDC) which was published in 2020, in line with the Paris Agreement. The country's first NDC was announced back in 2015. The country positively answered the call of the 26th UN Climate Change Conference (COP26) for countries to strengthen the ambition of their NDCs by end-2022. The update had introduced direct implications for the UAE emission targets such as the improvement of the greenhouse gas emissions reduction target from 23.5% to 31% by 2030; A new reduction target translates into an absolute emission avoidance of 93.2 million metric tonnes of carbon dioxide; And an identification of 5 five priority sectors like electricity, transport, industry, waste management, and CCUS, to achieve that target.

2. Corporate climate disclosures increased this year. Companies worth half of the total global market capitalisation are now disclosing environmental data after a 42% year-on-year rise in the number of firms reporting, according to CDP. The non-profit environmental disclosure platform stated that more than 18,700 companies or the highest yet since CDP's launch in 2000, worth a combined \$60.8 trillion, disclosed data on climate change, deforestation and water security in 2022.

- However, three in five firms out of more than 29,500 companies failed to respond to requests in 2022 for disclosure. Despite more companies disclosing environmental data in 2022, few are providing sufficient information. Only 1% of companies which submit climate change-related data provide investors with the information they need to assess whether they have a credible plan for the transition to a low-carbon economy.
- Climate change disclosures are vital for money managers wanting to pick the winners and losers from a shift to a lower-carbon economy, and CDP's standardised data gives investors information to let them compare corporate performance. The data is also crucial for climate negotiators such as the United Nations climate summit (Conference of Parties) to assess progress and spot laggards. The United States, China, Japan, Britain and Brazil topped the list of countries for corporate disclosures in 2022, according to CDP data. The top disclosing industry was manufacturing, followed by services and materials, respectively.



3. Sustainable Aviation Fuel (SAF) picked up great tail winds in 2022. The International Air Transport Association (IATA) estimates that SAF production will reach at least 300 million liters this year, representing a 200% increase on 2021 production of 100 million liters. More optimistic calculations estimate total production in 2022 could reach 450 million liters. Both scenarios position the SAF industry on the verge of an exponential capacity and production ramp-up toward an identified tipping point of 30 billion liters by 2030, with the right supporting policies.



- Airlines are committed to achieve net zero emissions by 2050 and see SAF as a key contributor. Current estimates expect SAF to account for 65% of the mitigation needed for this, requiring a production capacity of 450 billion liters annually in 2050. To date, over 450,000 commercial flights have been operated using SAF, and the growing number of airlines signing offtake agreements with producers sends a clear signal to the markets that SAF is needed in larger quantities. So far in 2022, around 40 offtake agreements have been announced.
- Until commercialized options for alternative power sources such as hydrogen are available, all of aviation's SAF supply will be derived from biofuel refineries. These refineries produce renewable biodiesel, biogas, as well as SAF and their refining capacity is set to grow by over 400% by 2025 compared to 2022. The challenge for aviation is to secure its supply of SAF from this capacity. And to do that successfully governments need to put in place SAF production incentives similar to what is already in place for biogas and biodiesel.