

Sustainable Investing Perspectives

Sustainable investing

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- With fossil fuels representing over 80% of global energy consumption currently, the transition to net zero will be complex and require changes in both energy supply and demand.
- Recent public offerings of sustainable food companies are underlining the demand shift for plant-based food alternatives and digital marketplaces.
- Cybersecurity threats are on the rise, and companies appear underprepared. Those that focus on safety and security in general seem positioned for opportunities. In addition to cyberattacks, threats to air, water, soil quality and the global food chain create demand for solutions.



Net zero: the formidable (but possible) challenge

The International Energy Agency (IEA) recently issued a [Net Zero 2050 Roadmap](#) with the conclusion that, while difficult, the collective target to reach net zero carbon emissions by 2050 remains possible to achieve. The report outlines in detail over 400 milestones, leading to both intermediate (by 2030) as well as the long-term goal (by 2050). Key highlights include:

- No funding for new fossil fuel projects as an immediate priority;
- Renewable capacity additions to increase 4x in the coming decade;
- Energy efficiency improvement at three times the average rate achieved over the past two decades;
- Carbon pricing across all regions in the immediate future; average price to reach USD 130/t by 2030 and

USD 250/t by 2050. (Note that EU ETS carbon prices just reached EUR 50, or USD 61/t);

- Investing in longer-term technologies such as hydrogen (implied growth of 5x), biofuels (2x) and carbon capture utilization and storage (which has to cover over a fifth of total emission reduction).

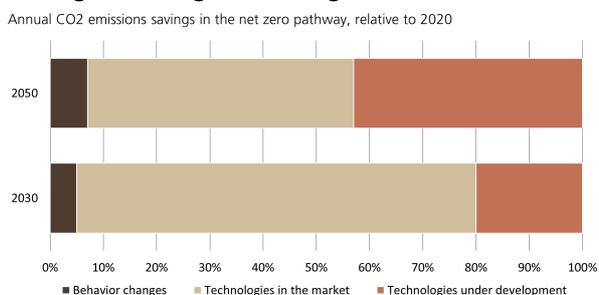
Perhaps the most important conclusion in the report is that intermediate 2030 goals can potentially be achieved through existing technologies and behavioral change (Fig 1). This is encouraging but includes some very challenging recommendations. Regardless, the report could sharpen government focus on policies to durably support the goal of net zero by 2050, especially ahead of the upcoming COP26. Current policies remain some way from net zero 2050 goals (Fig 2).

Responses to the report have so far been mixed. Japan and Australia have rejected the immediate policy suggestion

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to defund fossil fuels, citing energy security priorities. Meanwhile, Indonesia, despite natural coal resources, has committed to the cause, as well as guiding to renewable energy initiatives and a priority to introduce carbon taxes and a carbon emissions trading system. While the implementation pathway to these goals is unclear, the announcements were nonetheless noteworthy from an emerging market with accelerating energy needs.

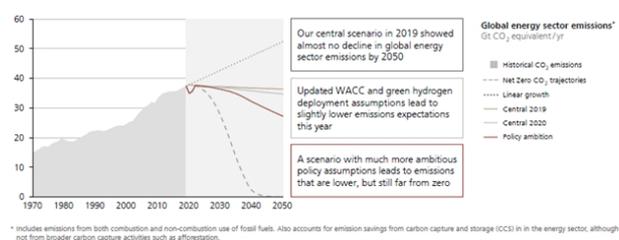
Figure 1: 2030 goals could largely be achieved through existing technologies



Source: EIA, Net Zero by 2050, May 2021

With fossil fuels representing over 80% of global energy consumption currently, the transition to net zero will be complex and require changes in both energy supply and demand. Reducing fossil fuel demand will remain a critical focus. To that end, we note the landmark events over the past two weeks, in which we saw a climate-focused activist hedge fund gain three of the four nominated Board seats at ExxonMobil, shareholders approve a proposal to potentially set emission limits from Chevron's sales of fossil fuels, and Royal Dutch Shell ordered by a Dutch court to accelerate emission reductions (although the decision will likely be appealed).

Figure 2: Current policy assumptions fall far short of Net Zero targets (UBS)



Source: UBS, 2021

Such market developments are additional indications that stakeholders are not only increasingly focused on changing corporate goals and behaviors in the battle to contain climate change, but they are also becoming more adept at deploying all tools available to influence these goals and behaviors. With stakeholders making progress, we hope government policy development and implementation will accelerate to further encourage corporate behavior

that could result in actionable and binding commitments towards net zero by 2050.

Investor takeaways:

- The outlook for key existing green technologies, such as renewable energy and electric vehicles, remain promising, and we see opportunities aligned with Greentech.
- Sweeping changes remain necessary to develop deeper and faster funding channels, underpinning further growth potential for sustainable finance development, including for example the issuance of green bonds.
- Ongoing government policy initiatives need to accelerate, including the use of broad tools such as carbon pricing. Companies that are already managing environmental risks better compared with their peers (and are ESG leaders) should be well positioned for potential risks and reward. In addition to ESG leaders, we see opportunities within energy companies that are contributing to the climate transition.

Changing preferences creating opportunities to rethink the food system

In recent years a number of plant-based protein alternatives have come to market, tapping into demand driven by younger consumers. The initial public offering of Oatly this May marked the latest development, and is another reminder of the innovative ways companies are transforming the food industry. Plant-based alternatives have risen to prominence as consumers' tastes shift towards more environmentally conscious options. According to a survey by Impossible Foods, roughly half of millennials in the US consume plant-based meat at least once a month, versus just 20% of baby boomers.¹ We expect shifting consumer preferences to continue driving change within the food industry – from plant-based alternatives to mobile delivery. At the same time, in order to meet growing caloric demands we expect the agriculture industry to harness the power of technology to optimize farming methods.

In addition to younger consumers' emerging preference for sustainable products, millennials and Gen-Z are also digital natives. These two cohorts make up a growing portion of the consumer economy, and should support demand for digital marketplaces such as food delivery. The food delivery market is fragmented and competitive, but we expect growth to continue nonetheless. In the near term, mobile delivery could face headwinds as consumers embrace the economic reopening and return to on-premise dining. That said, we don't expect this to derail the thesis overall as consumers have grown accustomed to the convenience. We estimate the markets for plant-based protein and food-hailing to grow by 28% and 16% a year, respectively, on average over the next decade.

Companies are capitalizing on the demand for more climate friendly diet options, but plant-based alternatives aren't the only way to reduce emissions in the food supply chain. In fact, we expect global meat consumption to increase as incomes and populations rise over time in developing markets. A plethora of tools will be needed to meet this demand. Precision agriculture and irrigation technology can improve farmers' decision-making capabilities and reduce inefficiencies throughout the production process. A combination of drones, sensors, satellites, robotics, and big data analytics are all likely to be deployed in the years ahead to make traditional farming more efficient and less resource-intensive.

Investor takeaways:

- Consumers are driving demand for plant-based food alternatives and digital marketplaces. At the same time, rising caloric demands will likely spur demand for technological tools that can increase the efficiency of food production.
- Investment opportunities span across three key areas: land use monitoring and supply chain validation; smart agriculture; and sustainable production and consumption.
- Overall we estimate these three market segments to be worth at least USD 700bn by 2030, up from about USD 135bn in 2018.

What do pipelines, the MTA and meat processing have in common? Most recently, data breaches

Reports of data breaches and cyberattacks are on the rise, bringing attention to a critical, but often overlooked, sustainability topic: cybersecurity and data protection. The high profile breach on the Colonial Pipeline system, one of the most critical fuel distribution systems serving the Eastern Seaboard of the United States, exposed a critical weak point in the economic system. And it also was not an isolated event. Just weeks after, JBS—the largest meat processing company in the world—shut down its operations in North America and Australia following another ransomware attack. According to reporting by The New York Times, the New York MTA, the largest transit network in North America, also was subject to an attack by hackers in April.

Companies are under prepared for increasing cyber-threats, and risks may carry a high price-tag. The cost to the US economy of cyberattacks was estimated to range between USD 57 billion to USD 109 billion in 2016 (according to a 2018 report to the US Council of Economic Advisers).² These numbers have likely trended up in recent years as the frequency of breaches has increased in tandem with remote work. The IBM Cost of a Data Breach Report of 2020 estimated the average global cost of a data breach for

companies to be USD 3.86 million, and USD 8.64 million in the US.³ Data security and protection are a financially material issues across sectors, and therefore important for investors to include in their due diligence frameworks.

Beyond being financially material, these are sustainability issues as well. ESG frameworks capture company preparedness on data protection, data governance and consumer privacy as part of the "S" pillar. In fact, the Global Reporting Initiative, a standard setting organization which helps companies and organizations report on their sustainability risks and preparedness, requires specific disclosures on these topics. Consumer data privacy and protection is rising up in importance, with the European Union having recognized privacy as a right in its General Data Protection Regulation (GDPR). Beyond the individual level impact, cybersecurity is an important part of achieving the UN Sustainable Development Goal (SDG) number 9.1, which focuses on the development of quality and resilient infrastructure.

Investor takeaways:

- The growing prevalence of data breaches is driving demand for solutions, and companies that focus on security and safety are benefiting from a set of structural trends globally. The addressable security and safety market is expected to reach USD 737 bn by 2022, climbing from around USD 664 bn last year. We recommend diversification to gain exposure to the theme's value chain worldwide.
- More broadly, companies that focus on safety and security in general are positioned for opportunities. In addition to cyberattacks, threats to air, water, soil quality and the global food chain create demand for solutions.
- While important, data protection and safety is sometimes overlooked. Considering the full spectrum of ESG topics, looking for companies that are better prepared for our changing world may provide long-term investment opportunities.

¹ Impossible Foods 2019, "Kids in the Kitchen: Accelerating the shift to a sustainable food system," <https://impossiblefoods.com/blog/generational-trends-kids-in-the-kitchen>

² US Council of Economic Advisors 2019, "The cost of malicious cyber activity to the U.S. Economy".

³ IBM, 2020, "Cost of a data breach report".

Appendix

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