

The Sustainability Revolution: What investors should know

Summary

- The world is aggressively seeking sustainability. While the topic has been around for perhaps a decade,
 the "awakening" really hit the public consciousness in 2020 and has now become a mega-theme. It's
 transitioning into a revolution and shepherding an era of conscious capitalism that's playing out right now
 across the investment landscape.
- The approach to using the planet's resources as if they are endless has been damaging to the environment. Fortunately, through technological innovation and sheer force of activism, the tide is shifting. We are making better use of less, while not stopping the constant improvement in quality and affordability. To become more sustainable, there is a necessary change from linear to circular economies, for example, where costly depletion of resources and waste accumulation migrate to recycling and resource replacement with little waste and pollution in the process.
- This is not the traditional socially responsible movement that has historically involved divestment from tobacco, weapons and other so-called 'sin' stocks. This is about driving returns first, while providing social and environmental benefits.
- Alphabet soup and various jargon is getting thrown about, but this is not a fad. All investors, regardless of
 their approach to sustainability, must understand this shift. We are experiencing a generational shift and
 distribution of wealth that is driving the demand of sustainable investing forcing platforms to design suitable
 offerings.
- Although this "awakening" began in earnest sooner, 2020 will be remembered as the year the world finally took steps to address and solve major challenges.

What does sustainability mean?

Some of the world's most pressing challenges have been given newfound attention. The devotion to issues such as the climate change, water scarcity, ocean pollution (plastic) diversity gaps, health and safety, income equality, inclusion, and human rights is the bedrock of the sustainable revolution. These are long-term secular themes and structural changes occurring on a global scale. We are in the early stages of a multi-decade tectonic shift. The consequences of these changes are shifts in how humans make basic decisions, how we consume resources and how we live on the planet. The permanent shift in behavior is also re-shaping the investment landscape.

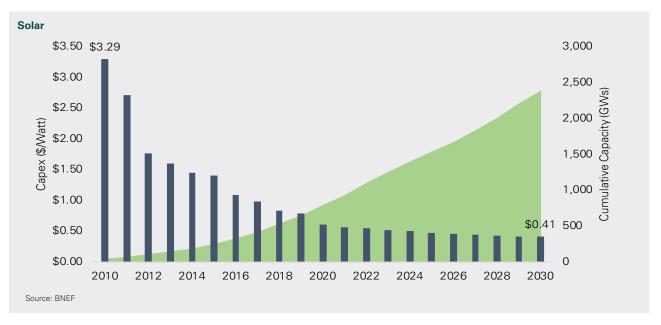
Morningstar found 72% of the U.S. population has at least a moderate interest in sustainable investing; Morgan Stanley found that 85% of all individual investors were interested in sustainable investing (95% of all millennials)



What is driving this revolution?

We see a convergence of 3 forces:

1. Technological innovation: driving cost declines and efficiency improvements



2. Policy shifts: aggressive action by global leaders

• Governments

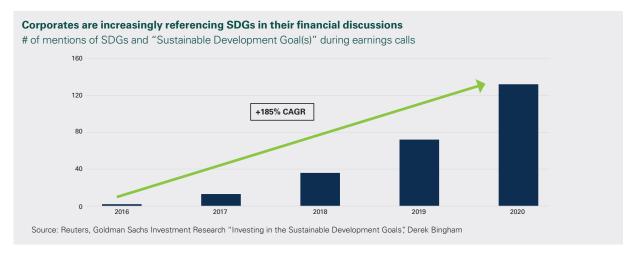
- Most countries have translated their commitments to the Paris Agreement into laws, policy documents and national targets, and these are evolving and pushing further almost constantly.
 - Conference of the Parties (COP)
 - EU Taxonomy for sustainable activities
 - Low-Carbon Fuel Standard (LCFS) program
 - Renewable Portfolio Standards
 - Likelihood of standardization between EU, UK and U.S. as well as a push by the SEC for ESG disclosures and the DoL's recent decision on ESG

Corporates

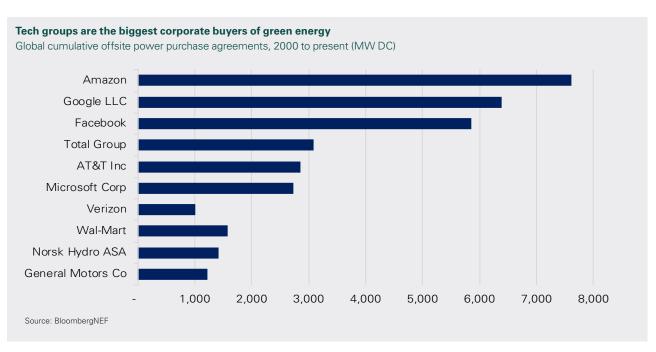
Irrespective of the actions of governments, many companies are developing and implementing strategic
and operational shifts – some directional, some seismic – to make their businesses more sustainable, less
carbon-intensive and more socially focused



 A circular economy will promote more sustainable activities and favor more durable business models. In turn, strong sustainability credentials will positively impact business growth and performance. Therefore, companies which take a stakeholder view of their business as opposed to a purely shareholder view are more likely to deliver sustainable wealth creation and align their business behavior with the long-term interests of investors.



- Sustainability requires looking throughout a business and beyond to assess its impact and footprint on the environment, on society as a whole and in communities
 - Net Zero Carbon commitments
 - UN Global Compact
 - Business Roundtable





NEW YORKER

RACIAL INJUSTICE IN AMERICA

Coverage of Black Lives Matter, police brutality, and the long history of racism in America.

3. Demand for positive societal changes: from consumers and corporates

- Front-page news on everything from climate change to racial injustice and income inequality
- Global pandemic in combination with social media spotlighting problems and forcing accelerated change
- Multi-generational shift in behavior and lifestyle preferences (e.g., what to buy, who to support, where to live, how to commute)
- Investors and employees are seeing corporations as people and through stakeholder activism compelling them to seek purpose and profits to survive and win



'Extreme inequality was the preexisting condition': How COVID-19 widened America's wealth gap

As 45 million Americans lost their jobs, U.S. billionaires made \$584 billion.

By Catherine Thorbecke and Arielle Mitropoulos June 28, 2020, 10:42 AM • 12 min read



January 14, 2021

2020 Tied for Warmest Year on Record, NASA Analysis Shows

Earth's global average surface temperature in 2020 tied with 2016 as the warmest year on record, according to an analysis by NASA.

The UN PRI provides a framework for sustainable investing

The UN SDGs gives the best summary of the challenges being addressed. The 17 sustainable development goals (SDGs) are the most widely used investor framework for setting, measuring and reporting on impact. This includes major challenges including poverty, gender equality, health of oceans, sustainable communities and more. The SDGs build on decades of work by countries and the UN.





Looking at the most frequently applied SDGs, we believe the following are the major issues that are most important to investors:

Climate change and climate action

 Clean & affordable energy, reducing emissions, expanding recycling and re-use, improved resource management, efficient transportation, water scarcity and sanitation

Social impact

• Education, healthcare, affordable living, sustainable communities

What really matters to investors is that we are undergoing a re-imagining of the role and views of success for companies, countries, technologies and leaders. The sustainable capital movement has now joined with employee and consumer activism in holding companies accountable for their impact on society and the environment, and to reward sustainable business practices.

How does this translate into portfolio performance?

After decades of debate and procrastination, it is now clear these forces of change are irreversible and here to stay, strengthened by demands from multiple generations. The power of these forces makes sustainable investing a GARP-like strategy (Growth At a Reasonable Price), and in some cases, tech-like, in which companies' growth potential and valuations are misunderstood. They have aggressive growth prospects where value is not appreciated. The "greenness" and/or "social-ness" is not properly valued.

Why is that? A number of reasons starting with the main fact that addressing societal and environmental challenges can be a highly profitable business. This is part of the conscious capitalism philosophy that businesses should operate ethically while they pursue profits. Many companies are growing their top and bottom lines and benefitting from rapidly improving growth prospects, multiple expansion and lower cost of debt. Moreover, the expanding pool of ESG capital is bringing greater awareness and receptivity to their stocks. In addition, these companies will have better access to talent, be less exposed to certain regulatory risks and the risks posed by environmental and social variables.

The companies that are dedicated to sustainable practices - and providing transparency - are attracting lower costs of capital and experiencing the early stages of a "sustainability premium". As some have said, you cannot put a multiple on a revolution.



Capturing the returns of the sustainability revolution

Our primary goal at Ecofin is to provide strong risk-adjusted returns for our clients while tackling some of the planet's biggest challenges by investing in companies earning solid returns and doing business in ethical and responsible ways. Here are some examples of global mega-themes, the impact they are having on the world and Ecofin strategies focused on these challenges and solutions.

Theme: Renewables 3.0

Impact: Climate action, affordable and clean energy

- We are in year 1 of a new 15+ year shift
 - 2000 was beginning of the industry with explicit subsidies for clean electricity (low volumes) with new technologies in wind and solar
 - 2015 was a transition of the renewables industry into mainstream; huge progress in technology scale, emergence of economically competitive substitution, and begging of a faster path in penetration in electric grids
 - 2020 was the very beginning of renewable electricity transmitting into non-electricity markets and end products:
 - Transportation: decade of the rise of EVs
 - Plastics
 - Liquid fuel alternatives
 - Industrial heat
 - Has potential for greater pricing power and margins than the volume growth of 2.0



Theme: Rise of electric transportation

Impact: Climate action, affordable and clean energy

 Sales of EV units expands rapidly – best investment theme is riding unit sales growth in EVs themselves, all the components inside an EV car experience explosive growth. Semiconductors and materials, electrical components, batteries.





Theme: Rise of 'electricity at home' as a larger growth industry

Impact: Climate action, affordable and clean energy

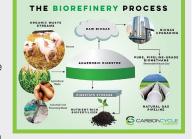
- Power is being decentralized such that most can begin to generate power and capture energy efficiency benefits at home
- Growth in retail consumption as digitisation and 'work from anywhere' become more structural.
- Home solar and battery storage products expand rapidly. Nobody can handle 'being down' from electric service anymore
- Heat pumps replacing gas/oil boilers for home heating (and A/C) (operating cost and emissions savings; big policy push by governments also)



Theme: Sustainable project finance is rapidly evolving and growing

Impact: Climate action, pollution reduction, clean energy

- Waste-to-Energy
 - Bioenergy and biofuel is nearly comparable in size at 44% of U.S. renewable energy consumption, versus 55% for wind, solar, and hydro combined
 - RNG production facilities operating in the U.S. at year-end increased to 157, up 78% in 2019 with 76 new projects under construction and another 79 projects in planning, suggesting continued strong growth in RNG production into 2021.
- Waste-to-Value
 - 2020 was a promising year for plastic and food-waste recycling, including targeted corporate sustainability goals, the formation of new recycling alliances, and the development of new technologies for commercial scale-up.
 - Several new projects involving the anaerobic digestion of food waste are under construction or planned for 2021, typically produce RNG and other value-added co-products, while diverting methane-producing organics from landfills, thereby reducing greenhouse gas emissions.



Sources: 2019 Dairy-Derived Biogas Guide, 2019 AGA Natural Gas Facts. 2017 Renewable Diesel Report by Gladstein, Biomass Magazine, EIA



Theme: Access to clean water

Impact: Clean water and sanitation

- We are at the outset of a long-term secular growth cycle propelled by increased investment directed at solving the intensifying global water crisis
 - At the current investment pace, water demand is expected to exceed supply by 40% by 2030, with climate change exacerbating local water balances
- Technology advancements are transforming the sector and providing attractive investment opportunities by accelerating growth and expanding margins.
 - Adoption growth of digital technologies, is reducing water loss, while filtration, treatment, and testing technologies are enabling increased use of alternative sources of water, including water reuse and desalination
 - Growth in water efficient products, point-of-use of treatment, and outsourced water operations is driving reduced water footprints and improved water quality for end-users of water, including the agriculture, industrial, commercial, and residential end markets.
 Source: Water Resources Group



Theme: Social impact, access and income inequality

Impact: School choice, affordable housing, healthcare for elderly

- Public sentiment towards school choice is growing alongside enrolment in nontraditional school options, especially for those in impoverished communities where the system is blatantly failing the children
- While the U.S. population ages rapidly towards 65 and older, units under construction are slowing, creating a future supply / demand imbalance that needs to be addressed
- As buildable options in major metropolitan market and suburbs become more scarce and more expensive, creating affordable housing for essential workers, low-income households, and young professionals is absolutely essential



Concluding thoughts

The case for a return-oriented approach to sustainable investing has become clear. The impact of addressing sustainable issues, from climate change to racial and social justice, has become a compelling investment case and, just as important, not factoring these issues represents an investment risk. Societies need to accelerate the transformation to greener, decarbonized and more sustainable economies. These powerful and secular forces can generate substantial wealth creation and compelling risk-adjusted investment opportunities for both companies and investors for the many decades to come. Companies, governments, central banks, investors and ordinary citizens are leading the sustainable revolution and 2020 will be remembered as the year when the ripple became a wave. At Ecofin, our various products for retail and institutional clients invest in the above themes and other sustainable opportunities.

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