American Century Investments®

ESG Outlook:
Five Key Trends Are Driving Momentum in 2020

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Notes from the ESG Desk

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"In 2019, commitment to ESG- and impact-themed investing evolved from a question about why it's important to how it can be most efficiently implemented."

Interest in environmental, social and governance (ESG) issues and the U.N. Sustainable Development Goals became increasingly mainstream in 2019. Investors worldwide increased capital allocations to ESG-themed solutions designed to deliver measurable societal and/or environmental impacts and competitive risk-adjusted investment returns.

These products included mutual funds, separate accounts, offshore accounts and ETFs. Investors also more systematically incorporated ESG issues into investment processes, recognizing they could capture upside potential, reduce ESG-related risk and still meet their fiduciary responsibilities.

Sustainable investment assets are climbing globally and exceeded US$30 trillion at the start of 2019, up more than 30% from 2016.[1] Some regions have demonstrated stronger growth than others within their local currencies. For example, as shown in **Figure 1**, sustainably managed assets in Japan grew more than 300% during 2016-2018. In the United States, growth from 2016-2018 was slightly higher than over the previous two years (38% versus 33%). Elsewhere, sustainable assets grew, but more slowly than 2014-2016.

Figure 1 | Growth of Sustainable Investing Assets in Local Currency

				Growth per Period		CAGR
	2014	2016	2018	2014 -2018	2016 -2018	2014 - 2018
Europe	€9,885	€11,045	€12,306	12%	11%	6%
United States	$6,572	$8,723	$11,995	33%	38%	16%
Canada (in CAD)	$1,011	$1,505	$2,132	49%	42%	21%
Australia/New Zealand (in AUD)	$203	$707	$1,033	248%	46%	50%
Japan	¥840	¥57,056	¥231,952	6692%	307%	308%

Assets values are expressed in billions. All data in the table is as of 12/31/2017, except for Japan, whose assets are as of 3/31/2018.
Source: Global Sustainable Investment Review 2018, Global Sustainable Investment Alliance.

Three Questions Raised in 2019

In 2019, commitment to ESG- and impact-themed investing evolved from a question about why it's important to how it can be most efficiently implemented.

Despite these gains in sophistication and demand, investors still have questions about ESG investing. First, they question the amount and complexity of ESG data and methodologies. Multiple data service providers employ a variety of evaluation criteria and reporting methods, so there is still no "one size fits all" solution. Asset managers and asset owners are left reviewing and evaluating companies and securities according to various methodologies. And many times, they add customized reviews to determine a reliable ESG scenario for an investment.

Artificial intelligence (AI) and machine learning offer possible ways to deal with this overload of information. The ability to analyze and process exponentially more information than a human at vastly faster speeds, is AI's core benefit. But investors remain concerned about relying on already confusing and possibly conflicting data—fearing that inserting a machine into a constantly evolving system could exaggerate inherent data "spottiness."

Another investor question focuses on whether ESG investing is a reliable source of alpha. There continues to be no consensus on this issue. While some asset managers are working to reduce the risks of ESG exposure, others are aiming to deliver outperformance through investments in companies sporting high ESG ratings. At American Century, we believe an effective strategy should focus on three primary areas:

- Strong and/or improving fundamentals
- The ability to capture upside from secular themes, which include macro ESG trends
- Strong risk management capabilities (i.e., against *industry-specific* extra-financial issues)

The objective of this strategy is to deliver alpha through investments in quality and attractively valued companies with improving business fundamentals and solid ESG risk management practices. Where possible, the strategy also tilts toward companies that demonstrate acceleration in these ESG growth trends:

- clean technology
- cybersecurity, including privacy
- health care innovation and accessibility
- global data interconnectivity
- demographic changes

A third question concerns companies' ultimate responsibility in making business decisions related to the "triple bottom line (3BL)"—an accounting framework comprising both extra-financial and financial elements. There is also a consensus building in the investment community that the "theory of the firm" needs to evolve within an ESG framework. Investors increasingly believe companies should focus on the overall positive effects of their investments on society and not simply on maximizing shareholder value. Traditionally, such a view would have been counterintuitive to many analysts and investors, and it sparks a debate about the definition and scope of fiduciary responsibility. It's an important issue that rose steadily on the ESG agenda in 2019 and one that will be discussed even more in 2020.

What's Fueling ESG Investing Now?

American Century has identified five key trends to watch during 2020. We believe successfully addressing these trends should not only contribute toward mitigating downside ESG-related risk and increasing the possibility of upside potential, but also help managers adapt to the prevailing shift in mindset toward sustainable investing.

1 *Oikos Nomos*—"It's the Circular Economy, St*pid!"

More investors will demand movement toward a circular economy.

If linguistics can teach investors something, it's that the word "economy" is made up from two Greek words "*oikos*" (house) and "*nomos*" (managing). This concept can be interpreted as "the management of our house." We believe investors will increasingly embrace the notion that the environment and the economy intersect. As such, they are likely to look for ways to align their investments with long-term safeguarding of the planet (which represents the common house) without dialing back returns.

Calls for a circular economy that demonstrates sustainable growth in tandem with positive environmental and societal effects are intensifying. Unlike a linear economy dependent on the "take-make-dispose" approach, this regenerative model includes reusing and renewing raw materials and removing waste in a closed-loop system.

Adoption of a circular economy goes beyond increased use of renewable energy or recycling plastic water bottles. To be successful, it must represent a systemic shift to designing goods to be used again. It must also be adaptable to all types of organizations. Its goal is to replicate the cyclical approach of natural ecosystems.

From an ESG perspective, the implications of transitioning toward a fully circular economy are significant. Company executives must rethink their entire operations to determine if implementing fully circular operations is economically feasible. They must adjust resource consumption, energy usage and manufacturing processes with an aim toward eliminating waste and generating renewable output.

A circular economy represents both upside potential and downside protection for businesses. While companies could reduce operations that rely on finite resources and unsustainable practices, they could also reap the upside potential of innovative business lines that would help fuel the circular economy. Areas where this could be achieved include:

- water stress
- waste management
- sustainable agriculture
- alternative raw materials and composites (e.g., bioplastics and biochemicals)
- wood-based construction
- biomedical applications

Such transformation would be harder for certain industries. Processes for recycling or reusing some materials remain expensive and potentially dangerous—e.g., chemicals used in manufacturing processes, toxic heavy metals contained in various electronic devices. E-waste is the fastest growing component of the world's trash with approximately 50 million metric tons of discarded electronics produced annually—roughly 15 pounds per person—and only 20% of it currently recycled.[2]

Despite these challenges, companies are embracing ways to transition operations toward closed-loop systems. Examples in the fashion, environmental services and electrical power industries include:

- Reebok® is using only plant-based materials in its Floatride GROW high-performance sneakers.
- Veolia Group provides sustainable solutions that enable resources to be reused, such as the production of biogas from water treatment facilities' waste and sludge.
- Tomra Systems' technology-led collection and sorting systems optimize resource recovery and minimize waste in the food, recycling and mining industries.
- Schneider Electric has a platform to help clients with sustainable energy transition and is developing solutions for sustainable cities—integration and optimization of resources at the city level.

2 Beyond Compliance

Unfettered by regulation, ESG momentum will continue as trends become ingrained with economic realities and generational shifts.

We expect interest in ESG to continue gaining momentum beyond political and regulatory developments concerning the definition of ESG investing and how investors and companies should respond. This corresponds with deep shifts in investor mindset and the growing linkage between ESG issues and their economic impacts.

As discussed in our 2019 ESG Outlook, risks originating from extra-financial issues and events can have significant economic reverberations on companies. We don't believe investors will wait for a top-down government definition of ESG to act. For example, while the Paris Agreement has led to tougher environmental regulations, particularly in Europe and China, investors are increasingly focused on energy companies that go beyond regulatory targets to address actual economic risks facing the conventional fossil fuel industry. These risks include negative environmental externalities and stranded assets—the amount of existing fossil fuel reserves that must remain in the ground to meet the Paris Agreement's global temperature targets.[3]

As composition of the investor universe shifts toward a younger, tech-savvier demographic, we expect demand for ESG-focused investment solutions to accelerate, regardless of outcomes in the fall 2020 U.S. elections. The technological innovation shaping the millennial generation's worldview is driving much of this rapid acceleration in adoption. A 2019 American Century Investments study determined that millennials in the U.S. and U.K. displayed heightened interest in impact investing at 65% and 72%, respectively.[4]

Whether it's automated driving in autos, smart grids in utilities, renewables in energy, digitalization in banking and retail, or robotics in industrials, most sectors of the economy are seeing paradigm shifts in the way business is conducted. Millennial investors increasingly perceive innovative companies with the strategic visions to adapt to this "creative destruction" as more likely to outperform, reinforcing their risk-off stance toward more mature, less innovative companies.

Asset owners and managers should adapt to this global investment mentality shift given that a widely observed study recently found that younger generations stand to inherit more than US$15 trillion in assets by 2030.[5]

3 Less Tolerance for ESG Washing

Companies and investment managers will face increased scrutiny.

Greenwashing is deceptive marketing in which a company, product or business practice is falsely or excessively promoted as environmentally friendly. Impact washing, on the other hand, is the touting of a company's positive impact on society while it engages in other non-impact-promoting practices. Examples include:

- oil companies penalized for pollution abuses whose ad campaigns feature beautiful landscapes filled with wildlife
- tobacco companies that tout sustainable sourcing practices (e.g., upstream farming) and positive impacts on local communities even though the companies' products are widely acknowledged as harmful to public health

We expect ESG-conscious consumers to grow increasingly impatient with companies that make misleading, or even wholly false, claims about their ESG practices. The internet makes fact-checking easier, and social media enables swift condemnation. On the investment side, investors will increasing require clear, verifiable evidence that ESG considerations are formally integrated into a manager's investment process and support of such claims by stock selection, reporting and portfolio construction.

On impact washing, specifically, investors will likely increase their focus on disciplined, bottom-up ESG risk evaluation to complement impact assessments by helping mitigate the potential downside risk from ESG issues. For example, while one company may clearly meet an investor's impact criteria from an environmental perspective, that investor should also determine whether the company aligns with the other two pillars of ESG risk assessment.

4 Climate Change: Decarbonize or Get Out?

Investors will favor a clean-tech thematic and engagement approach over full-fledged divestment

While several key issues related to ESG themes are important to investors, climate change remains at the forefront.[6] In a recent *Nature* article, researchers reported the impact of a warming Arctic on the global economy could be as much as US$60 trillion, an amount comparable to the entire global economy in 2012.[7]

In addition to having enormous financial consequences, climate change poses threats to each aspect of ESG investing. Its well-documented effects on the environment gather the bulk of headlines, but the social and governance implications of climate change are also noteworthy. Rising seas worldwide threaten coastal regions containing large concentrations of people. Nearly 40% of the U.S. population lives in coastal communities, for example, according to the National Oceanographic and Atmospheric Association. So, hurricanes and tsunamis tend to have outsized effects in terms of physical damage and endangered human lives. The social risks of new pandemics are also obvious.

Climate change is also compelling investors to engage with corporate boards to influence transformation. And the risks of ignoring their concerns are significant—e.g., reputational damage, customer defections, divestitures and shareholder actions.

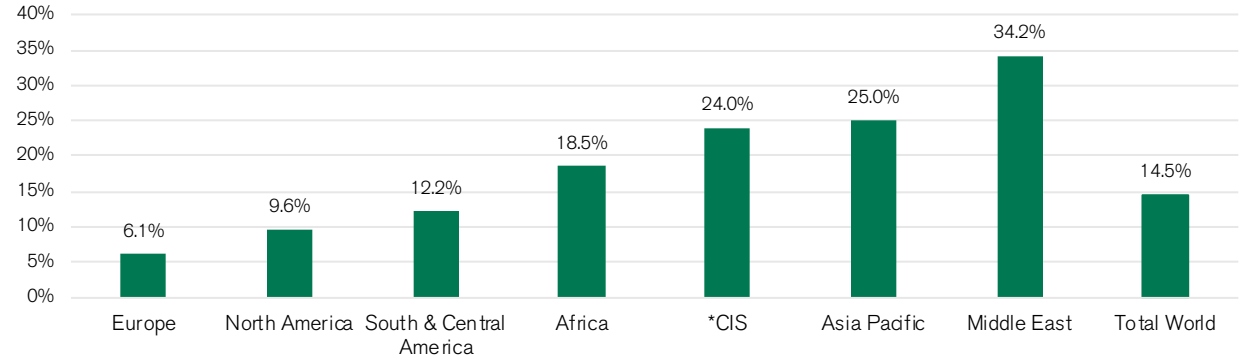
We expect asset owners to increasingly take the position that climate change poses risks to the global economy, financial systems and their portfolios. Accordingly, asset managers will need to demonstrate how they assess and integrate the impacts of climate change physical risks[8] and those arising from the transition risks[9] of shifting to a low-carbon economy in their investment processes. Further, while fossil fuel divestment will continue to be an option to reduce climate change-related risk, we expect an increased focus toward *decarbonization* rather than full-fledged divestment.

Indeed, as asset owners seek to reduce unrewarded climate risk in their portfolios, they will likely ask asset managers to be more selective in their allocations of capital, particularly with respect to carbon-intensive companies. Asset managers could overweight energy players seeking carbon neutrality and making solutions-driven investments in clean tech (e.g., negative-emissions technologies and bioenergy) to combat climate change. They could also dialogue with players that still have room for improvement. This combination of a clean-tech thematic and engagement approach will increasingly inform investment decisions relating to those companies and the relative attractiveness of the energy sector over time.

Figure 2 shows that while growth rates of renewable energy usage are on the upswing in most regions of the world, carbon-emissions growth remains positive everywhere except Europe and South and Central America.

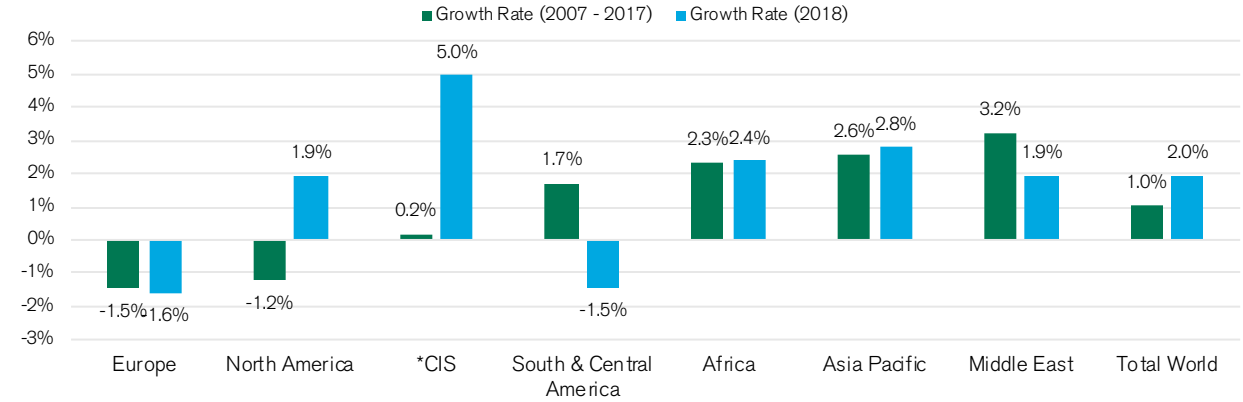
Figure 2 | Carbon Emissions and Climate Change Are Top ESG Issues

Renewable Energy Growth Rate by Region



*CIS: Commonwealth of Independent States. Data from 1/1/2017 to 12/31/2018. Source: BP Statistical Review of World Energy 2019 | 68th edition.

Carbon Emissions Growth Rate by Region



*CIS: Commonwealth of Independent States. Data from 1/1/2007 to 12/31/2018. Source: BP Statistical Review of World Energy 2019 | 68th edition.

5 "Hey, Big Data, Protect My Data and Privacy!"

Consumers will continue to adopt IoT way of life, but not at the expense of data and privacy protection.

The explosion of e-commerce and ubiquity of social media have transformed how we consume goods, services and information. Cybersecurity and data privacy are hot-button topics with investors and consumers concerned about big data, the growing connectivity of devices and the enormous amounts of personal data available online. Recent high-profile data breaches have spotlighted this risk.

The Internet of Things (IoT), the vast web of interconnected devices, is expected to triple from about 26 billion devices in 2019 to more than 76 billion by 2025.[10] At that point, smart homes, smart cars and smart cities could be connected to a consumer's phone, tablet, watch/activity tracker, digital assistant/smart speaker and computer. Virtually every data point about consumers will be stored in this web, including what they search for and purchase online, where and how they drive, how much they exercise, and what social media content they "like" and comment on. While appreciative of this connectivity, consumers are demanding increased privacy protection and data security.

Cybersecurity concerns have not only resulted in the European Union's General Data Protection Regulation (GDPR), they are leading a shift in businesses' focus from data collection and mining ("know your customer" [KYC]) to data security ("protect your customer" [PYC]). As a result, cybersecurity risk management and compliance will continue to grow in importance as part of a company's overall ESG performance.

Note Facebook's recent $5-billion penalty following the Cambridge Analytica scandal. Since then, Facebook has improved its cybersecurity controls, but this improvement didn't come without a financial impact, as evidenced by its 2019 earnings results. Compared to 2018, the company saw a 51% rise in expenses largely related to privacy and security improvements. We expect the migration to more customer-centric data protection programs to accelerate in 2020.

Our ESG Framework Focuses on Clients' Evolving Needs

Aligning fiduciary duty with investors' increasing focus on ESG risks and opportunities will continue to drive the ESG space. There is a growing consensus that investors don't need to make a binary distinction between ESG and returns.

The global significance of the trends we're monitoring combined with the growing impact of millennial investors are raising the profile of more holistic materiality-focused ESG and thematically-styled impact strategies. Against this backdrop, American Century has strengthened its ESG capabilities to deliver solutions designed to meet clients' evolving needs.

We believe integrating ESG factors in our investment process allows us to make better long-term investments decisions. We view ESG factors as an important input into fundamental analysis that can help minimize downside risk associated with, and measure issuer performance against, non-financial dynamics not captured by traditional financial analysis. We designed our ESG framework to complement our time-tested investment process to continue delivering competitive long-term financial returns.

Endnotes

[1] Global Sustainable Investment Alliance. *2018 Global Sustainable Investment Review.*

[2] Baldé, Cornelis P., Vanessa Forti, Vanessa Gray, Ruediger Kuehr, and Paul Stegmann. 2017. *The Global E-waste Monitor 2017: Quantities, Flows and Resources*, (Bonn, Geneva, and Vienna: United Nations University, International Telecommunication Union, and International Solid Waste Association).

[3] According to the Grantham Research Institute on Climate Change and the Environment, one-third of oil reserves, one-half of gas reserves and more than 80% of coal reserves should remain unused to limit climate change to less than 2 degrees Celsius of warming. Matikainen, Sini. 2018. "What are stranded assets?" (Jan. 23). http://www.lse.ac.uk/GranthamInstitute/faqs/what-are-stranded-assets/

[4] American Century Investments. 2019. "The Growing Appeal of Impact Investing Contrasting U.S. and U.K. Attitudes." (October). https://corporate.americancentury.com/content/corporate/en/newsroom/press/press-center/study-shows-broad-appeal-of-impact-investing.html

[5] Wealth-X. *A Generational Shift: Family Wealth Transfer Report 2019.*

[6] Reynolds, Fiona. 2019. "Climate change tops the list of ESG concerns for investors in 2019." Principles for Responsible Investment (PRI) Blog. (March 5). https://www.unpri.org/pri/pri-blog/climate-change-tops-the-list-of-esg-concerns-for-investors-in-2019

[7] Whiteman, Gail, Chris Hope, and Peter Wadhams. 2013. "Vast costs of Arctic change." *Nature* 499, (July 24): 401-403. https://www.nature.com/articles/499401a

[8] Defined as risks from events linked to human-driven climate change that impact society directly and have the potential to affect the economy. Bank of England. *Climate change: what are the risks to financial stability?* https://www.bankofengland.co.uk/knowledgebank/climate-change-what-are-the-risks-to-financial-stability

[9] Defined as risks of moving toward a less polluting, greener economy where some sectors of the economy face shifts in asset values and/or higher costs of doing business. Bank of England. *Climate change: what are the risks to financial stability?* https://www.bankofengland.co.uk/knowledgebank/climate-change-what-are-the-risks-to-financial-stability

[10] IoT World Today, 2019.

Past performance is no guarantee of future results.

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