SUSTAINABLE FINANCE AND ESG: THE 2020 PLAYBOOK

14 trends that will gain momentum in 2020



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2020 IS THE YEAR FOR ESG AND SUSTAINABLE FINANCE

"The inescapable direction the world is moving in is de-carbonization. The simple truth is the world will be powered, resourced and fed in a different way in the future. Only firms that have laid the foundations for surviving in this new environment will have any chance of surviving – and this impacts everything from the mission of their businesses and their environmental impact to how they operate or how they invest."

David Craig, CEO of Refinitiv

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At the dawn of a new decade, Environmental and Social Governance (ESG) investing and sustainable finance are no longer niche topics for environmentally conscious investors. They have become mainstream concerns centering on profitability, risk reduction, human capital development, diversity – and creating more sustainable investing strategies.

As Governor of the Bank of England, Mark Carney, warned in the last few days of 2019, investors and financiers need to take action on climate change now.

Speaking to the BBC, he noted that up to 80% of coal assets will be rendered worthless in the face of the carbon budget. This leaves financial institutions, asset managers, insurers and investors to ponder their portfolios and future sustainable investment plans.

But there is optimism in the industry.

In this playbook for 2020, we bring you the perspectives of 12 world-leading ESG investing and sustainable finance experts and consultants. Their insights into the trends to follow will be an invaluable asset for anyone in the business and investment worlds, especially those considering what impact their capital has on society, the environment and human development.

What to expect?

It's time to shift our mindset and understand what good our capital is doing in the world, as Jed Emerson argues in his piece, *Re-connectivity: Big Picture Thinking.* This first trend sets the tone for the whole collection, as we delve into topics including the challenges behind creating a marketplace for the exchange of sustainable value (Alessia Falsarone), how technology will help us scale up sustainable investments (Helene Li) and the power of Donor Advised Funds to direct sustainable investment (Jared Gonsky).

Furthermore, you'll also read an uplifting appraisal of frontier markets in Africa, showing how the continent's untapped potential and unique entrepreneurial spirit will present opportunities for sustainable business in the coming years (Jackie Cureton & Saidah Nash Carter).

Audrey Choi, CMO & Chief Sustainability Officer at Morgan Stanley is also buoyant, referencing the huge growth in sustainable investing and Green Bonds, in her piece, *Plastic waste & the private sector.*

On top of this, we'll also take a look at the importance of human capital development in the face of rapid technological change (Sakis Kotsantonis) and the challenges of urban migration and the exciting opportunities that sustainable smart city investing brings (Julia Wilkinson).

As we look forward to a new year, we hope that we can all become more conscious of our capital and what it is doing for the planet.



A LOW CARBON ECONOMY WILL CHANGE THE WORLD FOR THE BETTER

By Elena Philipova, Global Head of ESG Proposition at Refinitiv

"The time we have to act and evolve is very limited."





Our top takeaways:

- 1. The financial system can significantly influence whether we are moving towards sustainability or undermining progress made against environmental and social goals.
- **2.** Financial prosperity must not come at the expense of social progress, or the market will eventually pay a price.
- **3.** Executive remuneration must be linked to the value they create for all stakeholders, not only investors.

Is it really business as usual in 2020?

In 2020, ESG integration will move from "nice to have" in some markets and "mainstream" in others, to "mandated" by regulators.

But why are regulators stepping in? Future economic growth largely depends on how quickly and effectively we are able to respond to social and environmental challenges, especially those presented to our society by changing current systems, capital allocation processes and consumption behaviors.

Regulators have acknowledged that financial prosperity and social progress must go hand in hand. If not, a big market correction will hurt everyone, at the very best.

The markets and the planet will not allow us to continue in a "business as usual" mode, and the time we have to act and evolve is very limited.

Policy makers are increasingly recognizing that the financial system can significantly influence the real economy in either direction – towards sustainability or undermining progress made against environmental and social goals.



Source: European Commission, DG FISMA

What do the Agenda for Sustainable Development and the Paris Agreement mean for investors?

In 2015, the EU and governments around the world committed to the objective of a more sustainable economy and society when they adopted the UN 2030 Agenda for Sustainable Development and the Paris Agreement on climate change.

Capital market regulation on ESG integration has doubled since then, with Europe accounting for more than 65% of all ESG regulatory proposals.

Exhibit 1: ESG policies and amendments have grown significantly

Cumulative capital market ESG regulations and amendments up to September 2019*



Exhibit 2: Europe accounts for over 65% of current global ESG policies

Number of latest standalone policies, not including amendments



Source: PRL data complied by Goldman Sachs, Global Investment Research

*As of September 5, 2019 Source: PRL data complied by Goldman Sachs, Global Investment Research



For decades, Europe has been a leader in capital market ESG regulation, with greater disclosure and tools to inform investment decisions.

Notable ESG proposals

EU Action Plan for Financing Sustainable Growth

The 2018 plan is the most comprehensive and ambitious agenda to date. It aims to shift capital markets towards sustainability.

• Green Finance Strategy (GFS)

In July 2019, the UK government published the GFS. It aims to 'green' the financial system by aligning private sector financial flows with clean, environmentally sustainable and resilient growth to strengthen the competitiveness of the UK financial sector.

The UK Stewardship Code

Developed in 2010, the UK Stewardship Code is a set of principles aimed at strengthening the quality of engagement between investors and corporates. The 2020 update extends the Code's original seven principles to 12 principles for asset managers and asset owners, and six principles for service providers.

Article 173 of the French Energy Transition Law

The 2016 article strengthened mandatory carbon disclosure requirements for listed companies and introduced carbon reporting for institutional investors.

Australian Sustainable Finance Initiative (ASFI)

In Australia, where sustainable finance remains politically challenging, the Australian Sustainable Finance Initiative (ASFI) was launched in 2019. It was led by the industry and aims to develop a Sustainable Finance Roadmap for Australia. The key Australian financial markets regulatory bodies – APRA, ASIC, RBA and Treasury – will participate as observers.

Asia Pacific policies

ESG regulation and policies in Asia Pacific continue to grow.

Greater adoption of stewardship codes in Asia

Since the adoption of the UK Code in 2010, many Asian economies have also adopted stewardship codes and similar initiatives to encourage more responsible investments by institutional investors. Such countries are Japan, Hong Kong, Singapore, South Korea, Taiwan, Malaysia and Thailand.

Corporate disclosure in Australia and Japan

ESG corporate disclosure is broadly available for Australian and Japanese companies.

ESG disclosure in Singapore

Disclosure in Singapore is growing since the introduction of the "comply or explain" disclosure regulation in 2017.

• 2020 regulatory change

Significant regulation changes are expected in 2020 in Hong Kong and China.

Canada accepts Sustainable Finance Report recommendation

Canada's Expert Panel on Sustainable Finance released its final recommendations in June 2019 and the government has accepted the report.

ESG regulations limited in the U.S.

Federal ESG regulation in the U.S. remain relatively limited. The ESG agenda is increasingly driven at a state level, with ESG integration requirements for public pension funds and the inclusion of ESG in the definition of fiduciary duty.

What forces will shape the market in 2020?

This inflow of new ESG regulation will continue in 2020. It will lead to a fundamental evolution in global capital markets, significantly impacting all market participants and whole industries.

In 2020, the market will be shaped by three main regulatory forces:

1. Transition to a low carbon, sustainable and circular economy

To continue our economic growth, the higher profitability that capitalism has brought to our society has to be shared with all stakeholders. We, as consumers, investors and business leaders, need to get off the profits addiction and channel capital in a different way – towards new business models and new solutions that tackle the social and environmental challenges that threaten our existence.

"Change can be scary and regulators are taking the lead"

New opportunities will emerge across all sectors, creating new jobs. We will see growing investment in research and innovation, which will improve our quality of life while lessening the negative impact our society has on the environment. But change can be scary and regulators are taking a lead, paving the way for all citizens to follow.

Corporate executives are starting to integrate sustainability inside, not just beside the business. More and more companies are outperforming financially because they are elevating the corporate purpose alongside profits and making a genuine, fundamental commitment to all stakeholders.

To effectively identify such leaders in the corporate arena and make more sustainable investment and consumption decisions, we need data.

2. Transparency and disclosure

Investors continue to say their biggest challenge for ESG integration into their investment processes is the lack of availability and quality of ESG data. Regulators seem to have recognized this challenge. As such, they are introducing new policies to improve standards and definitions of disclosure, as well as data availability on ESG metrics – from both corporates and investors.

In June 2019, for instance, the European Commission published new guidelines on reporting climate-related information, supplementing the existing non-binding guidelines on non-financial reporting published in 2017. They are consistent with the requirements of the Non-Financial Reporting Directive.

The guidelines also integrate the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD). They provide guidance for companies on how to report the impact of their business on the climate and the impact of climate change on their business.

In December 2019 at COP25 in Madrid, the European Commission President von der Leyen said, "Only what gets measured gets done."

I will add that only what gets measured gets managed.

Refinitiv plays a critical role in influencing and accelerating industry efforts to overcome this challenge and transform ESG data into investment-grade content similar to financials.

3. The shift towards long-termism

Corporate Governance regulation has targeted topics like management, board compensation (Shareholder Rights Directive II), board diversity (SRD II, California State Bill 826, Michigan Senate Bill 115) and greater pressure on boards to manage ESG risks (new UK Stewardship Code).

However, as long as management remuneration remains linked to the quarterly results of the business, we can expect only limited change at the governance and strategic levels of businesses. Executive pay must be clearly linked to the integration of sustainability risks into business strategy and daily decision making processes. Executives must be rewarded for the value they create to all stakeholders, not only the investors.

As we enter 2020 and plan our contribution in reshaping capital markets for the future, I cannot help but ask the following question:

Is sustainable finance policy the Holy Grail for future economic growth?



About the author

Elena Philipova is the Global Head of ESG Proposition at Refinitiv, formerly the Financial and Risk business of Thomson Reuters. She is responsible for the end-to-end management of the ESG business, products and services. Elena is the Rapporteur for the Benchmarks group of the EU Technical Expert Group on Sustainable Finance appointed by the European Commission.

Previously, Elena was Head of Company Content Management at Thomson Reuters, where she led the Global Investing and Advisory Content Management Team. Other previous roles at Thomson Reuters include Content Specialist Manager and Content Proposition Manager. Elena worked as Head Data Quality and Senior ESG Analyst at ASSET4, the ESG data provider acquired by Thomson Reuters in 2009, and started her career as Research Analyst at Morgan Stanley. Elena holds an MBA and BA in Finance and International Business from Stetson University.



TREND 2

RE-CONNECTIVITY WILL CHANGE THE WAY WE THINK ABOUT SUSTAINABLE FINANCE

By Jed Emerson, Senior Advisor to family offices in Asia, the United States and Europe

"We're seeing a fundamental rethink of the foundations of sound economic theory."





Our top takeaways:

- **1.** Sustainable finance is not just another type of investment practice, it's a complete mindset shift.
- 2. Re-connectivity is about recalibrating our perspectives and seeing ourselves as part of one system, rather than as single self-reliant entities.
- **3.** We must become aware of our own position in the world and what our capital is currently doing, before we can take action as individuals.

Is sustainable finance more than just a trend?

We've seen a significant flow of funds moving into the market branded as sustainable, impact and ESG investing in recent years. A number of experts have been driving this trend with helpful suggestions for revised definitions of practice and insightful statements on what is needed to improve the field of sustainable finance.



Their aim?

To make sustainable finance conform more fully to the traditional practices of financial capitalism and market-rate investing. They hope for continued market growth, an increase in assets under management (AUM) and the generation of increased opportunities to "do well by doing good."

What is easy to overlook is the fact that sustainable finance is not simply a new style of investing that fits easily next to one's hedge fund, fixed income or private equity allocations. Instead, it's a fundamental re-think of the foundations of sound economic theory and good financial investing practice.

It is not a process of defining widely agreed upon sustainable investment practices that will receive the approval of existing firms of Wall Street, The City of London and other global financial centers.

It is a shift in how we think about and engage in investing itself.

As a part of this process, we've witnessed various critiques of traditional financial capitalism. They focus on specific deficits such as short-termism, the triumph of shareholder primacy and any number of related areas in need of reconsideration.

However, many miss what is the deeper, long-term trend that is the basis of all current movements to revise, reform or revolutionize our understanding of traditional financial capitalism:

Re-Connectivity.

But what are we reconnecting to?

First, let's take a look at what traditional, financial capitalism is focused on. At its heart it is an understanding of the separation of parts:

- My investment dollar and my return, as opposed to your benefit and your interests
- Value defined as economic versus non-economic
- Investment elements defined as externalities, versus being understood as central considerations of a deal
- Extraction of value, versus management of the Commons
- Self versus Other
- ... and so on

At the heart of traditional financial investing is the belief that what is mine is mine and yours is yours. The central belief is that "my interests are fundamentally in conflict with yours and I must therefore work to protect, wall off and defend those interests at all costs."

"We must re-engage with the reality that we are all One"

Sustainable investing and finance is about reintegration, relating separated parts to new forms of systems thinking. The new finance model is framed upon an understanding of a connected world. It requires a focus on the whole as opposed to parts. At the same time, it demands an understanding of value as an integral blend of environmental, social and economic components.

Naturally, then, there are a number of things we want to achieve:

- · Define the market
- Understand the nature of the value we seek to create
- Structure investment strategies, funds and products
- Or even attempt to discern where this all is headed

But before all that, we must first reject the illusion of separation and, second, re-engage with the reality we are all One.

As a popular climate crisis protest sign states, "There is no Planet B." As such, we must first understand we are all in this together. Your returns cannot come at the expense of my life, future or the larger ecosystem – and visa versa!

The newest trend in sustainable finance is the oldest truth. Growing numbers of investors, assets owners and fiduciaries are realizing that we must first work to reconnect ourselves with each other and the Earth.

Having done that, we may then see more clearly the future we're called to create together and deploy our capital in alignment with this most sustainable understanding of its purpose.

How will we move toward sustainable finance?

How are we to achieve this goal? First, there are no quick fixes or "five points to purpose" one may follow in order to attain the goal we each seek.

Every individual will take a different path – and where you stand depends on where you sit, your perspective and resources. That said, the process may be said to begin with stepping back from one's own worldview to first discern and then later embrace a more holistic worldview – bringing parts to whole. In this way, we will see what is, for each of us, the best path forward.

Concepts such as "beginner's mind," "right action," and systems thinking may all be helpful. As one moves in this direction, understanding more about what your capital is doing in the world is a next step. By understanding what you own, you may see how your financial assets are either advancing or inhibiting the world we seek to create.

Awareness comes first. Action comes second. And a changed world – a world where our capital actually advances a more sustainable and just planet – may then follow.



About the author

Jed Emerson is strategic advisor to family offices and wealth management firms executing diverse approaches to investing for financial returns with social and environmental impact. He is the originator of the concepts of Blended Value and Total Portfolio Management.

Emerson's work has recently expanded to include consideration of not just how to invest for more than money, but also how we might think about the deeper purpose of our wealth and lives – the Why. His latest free ebook, <u>The Purpose</u> <u>of Capital</u> and music video <u>What If</u> are testament to that.



TREND 3

INVESTORS WILL BE CHALLENGED TO CREATE SUSTAINABLE VALUE

By Alessia Falsarone, Managing Director, Head of Sustainable Investing, Senior Portfolio and Risk Strategist, Developed Markets Fixed Income, PineBridge Investments

"In 2020, investors will be challenged with creating a marketplace for the exchange of 'sustainable value."





Our top takeaways:

- **1.** There are a number of key challenges for those developing sustainable capital markets.
- **2.** In order to realize its green leadership ambitions, China will seek to find an equilibrium between economic growth and climate resilience.
- **3.** We will witness the first financial payoffs of debt securities linked to sustainability performance in 2020, which will set the tone for the future of sustainable finance.

How will we deal with regulatory readiness challenges in 2020?

Regulatory readiness will pose as many challenges as it does opportunities for the development of a sustainable investing ecosystem in 2020.

The shift from policy making to the pricing of financially-material risks associated with environmental and social dimensions is waiting to be reflected across global capital markets.

Investors will be challenged as the regulatory push to define and govern sustainable economic activities proliferates a glut of sustainable "labels" – from fund offerings to sustainable securities and impact reporting standards. Investors will be tasked with the challenge of creating a marketplace for the exchange of "sustainable value". ESG risks will need to be properly factored into the risk-reward profile of every asset – whether they're labeled or not.

Under the lens of regulatory readiness, there are three primary levers challenging the development of sustainable capital markets starting in 2020:

- 1. Disjointed planning to address the impact of climate change and foster the environmental and social resilience of communities and businesses.
- 2. Weak access to capital for public-private partnerships to support economic transition to more sustainable living (e.g., a liquid marketplace for sustainability-linked projects).
- 3. A cascade of monetary fines associated with environmental and social laws globally, which will start testing the non-conformant behaviors of market participants.

How will these levers pan out globally?

Europe is likely to retain its leading role in the oversight of financial market stability, as relates to transition risk and environmental protection (thus, exposed to lever #1). However, Asia Pacific countries are positioned to reshape supply chains and pricing of commodities by pushing the boundaries of green taxonomies across sectors.

Not surprisingly, balancing economic growth and climate resilience will be vital to China's green leadership ambitions. More than 115 countries are involved in putting to work \$900BN-plus of infrastructure spending in its Belt and Road Initiative (an example of public-private partnership/lever #2). It will therefore require a new set of incentives towards improving environmental quality.

Let's not be surprised, then, if China, alongside other countries, may find value in promoting a global market for carbon emissions to balance out the inevitable outcomes of environmental adaptation, while promoting economic development.

In 2020, sustainable capital markets are also set to witness the first financial payoffs of debt securities linked to sustainability performance, which have been issued in recent years. Their ability to maintain financial outcomes aligned with sustainability targets will be key in setting the tone for new issue markets globally, to make room for sustainable financing and fend off the potential loss of trust should the challenge of lever #3 materialize.



About the author

Alessia Falsarone, SASB FSA, is a Managing Director in the Global Fixed Income team at PineBridge Investments in New York, a private, global asset manager focused on active, high conviction investing. As Head of Sustainable Investing and Chair of the firm's Corporate Responsibility Steering Committee, she brings an integrated portfolio management lens to the investigation of the Environmental, Social and Governance practices of global organizations that access developed credit markets. In recognition of her innovative vision for business and society, Alessia received the 2019 Honoree Award from the Women's Venture Fund.

Explore the podcast interview with Alessia where we discussed climate risk through the lens of institutional investors.





SUSTAINABLE FINANCE WILL FIND ITS MOMENTUM

By Helene Li, CEO & Co-Founder, Golmpact

"With the exponential growth of technologies... we are in a much better position than ever before to scale up sustainable investments."





Our top takeaways:

- **1.** Sustainable finance has become a niche area that needs to be opened up to the mainstream.
- **2.** More data is needed to to drive scalable investment.
- **3.** Regulation will positively influence corporate sustainable finance policy.

Sustainable finance – and the ensuing set of acronyms practitioners have coined in the past decade or so – is fast gaining traction. From keynote speeches to power corridor discussions in large financial institutions, it is a frequent agenda item.

However, is this a false dawn or true momentum? Are we, as a group of dedicated practitioners and advocates, able to move beyond the talk (of which there is no lack) to real action? And can we move this critical agenda from the sidelines and onto the main stage?

Three main gaps to plug:

Of the myriad issues hampering the development of sustainable finance, there are three major gaps that we need to plug, in order to speed up and scale up.

1. Understanding gap

- The tendency to preach to the converted, in a language filled with jargon and acronyms, only contributes to the walling in of sustainable finance as an alternative practice, rather than part of the mainstream.
- Metrics are developed by various practitioners. But the perceived challenge of not having common benchmarks for investors to relate to is often magnified to the point that it becomes a showstopper.

2. Data gap

• Data is much needed to drive scalable actions. However, it is fragmented and hence, not readily accessible in a relevant and orderly manner as investors (particularly institutional investors and ultra-high net worth private capital owners) rightly expect.

3. Collaboration gap

- Rapid market traction of this agenda often stays at the superficial level of theatrics and publicity. However, we've recently seen market and regulatory demands that drive it to a more substantial level.
- To accelerate and scale sustainable investments, we need enablers and platforms that connect the disjointed stakeholder groups. They also need to simplify and clarify the investment universe and advocate in a practical action-driven manner. This means we have to step away from the annual gatherings of the converted preaching the same mantra and lamenting the same problems to a similar audience. After all, this only results in sponsorship revenues for the organizers and does not truly move the needle.

How will government regulation affect sustainable investment opportunities?

In the past few years, ESG focus in Asia has received a huge boost on the back of government and regulator initiatives. Mandatory ESG disclosure and clearer guidelines for ESG reporting are working to improve corporate transparency. Stock exchanges in a number of countries, including Hong Kong and Thailand, have made it compulsory for listed companies to disclose their sustainability information. China is following suit, with all listed companies there having to report on ESG risks and related disclosures by 2020.

Such top-down focus is expected to further drive improved corporate governance that will positively influence sustainable investment opportunities.

With the exponential growth of technologies and their adoption by capital markets, such as Blockchain and Artificial Intelligence, we are in a much better position than ever before to scale up sustainable investments.

Indeed, "capital for good" and "tech for good" are the twin engines to achieve the 2030 Plan for Sustainable Development Goals (SDGs), the excellent backdrop that the United Nations has provided as a blueprint for a better livelihood and a better planet.

Just as the distinction between online and bricks-and-mortar retail will increasingly blur in the next decade, so will the distinction between impact and mainstream investing.

Surely, the ultimate goal for sustainable investment is to make this term redundant – a time when every investment is a sustainable impact investment.



About the Author

Helene Li, CEO & Co-Founder, Golmpact

Helene is a management consultant by training and a seasoned finance industry professional with long tenures in strategic planning and marketing roles at global financial institutions such as J.P. Morgan, Lombard Odier and BNP Paribas. She is a firm believer in applying market-based solutions to fast track social and environmental impact and a passionate advocate for Sustainable Finance.

Having worked in the ultra-high net worth space for most of her career, she is committed to leveraging the financial power and heart of the 1% to accelerate the impact in helping the 99%. It is in this spirit that she co-founded Golmpact as an action-driven ecosystem to connect stakeholders in accelerating impact momentum. She has been spearheading and curating industry recognized and highly rated Next Generation Family Business programs, and is a regular contributor to impact and entrepreneurship research throughout her banking and consulting career.

FINANCIAL MARKET PARTICIPANTS WILL INCENTIVIZE AND PROMOTE A SUSTAINABLE FUTURE

By Julia Walker

This is an abridged extract from the book *Sustainable Development Goals; Harnessing business to achieve the SDG's through Finance, Technology and Law Reform* by Julia Walker, Alma Pekmezovic and Gordon Walker.

"Sustainable Development Goals offer investors the opportunity to use a different lens through which to filter future investment decisions."





Our top takeaways:

- **1.** Many investors are confused about how to quantify social and environmental impact.
- **2.** Sustainable development financial markets should be rationalized, industrialised and democratized.
- **3.** Transparency is a key foundation to any solution around the SDGs.

The United Nations Sustainable Development Goals (SDGs) are a wish list of ambitious goals and targets. The 17 goals, 169 targets and 231 indicators call upon the international community to eradicate poverty, end hunger, achieve universal access to health and education, tackle inequality and solve the problem of environmental degradation and global warming. Indeed a stretch goal, and a reflection that the challenges that the global community faces are enormous.

The SDGs will require substantial increases in development finance. It is estimated that countries will need to deploy up to \$4.5 trillion per year between 2015 and 2030 to meet the SDGs. Other estimates place the investments required to meet the SDGs at US\$5-7 trillion per annum, representing 7-10% of global GDP, and 25-40% of global investment.

The world we have

The world is now four years into the historic agreement, but no nation is on track to fulfil these goals. World hunger has been increasing for the last three years, affecting one in nine people on Earth. Forced displacement is on the rise and inequality has risen within some of the world's most populous countries. Biodiversity loss is accelerating, with one million species at risk of extinction. An urgent response is needed. The ambitious SDG agenda necessitates profound changes that go beyond business as usual.

The international community cannot just drift on knowing that by 2030 hundreds of millions of people will still be deeply impoverished, hungry, without access to basic services and exposed to a world heading towards a temperature rise of three-plus degrees unless much greater efforts are made.





How investors can help achieve the SDGs

The SDGs offer investors the opportunity to use a different lens through which to filter future investment decisions.

In 2015, researchers from ShareAction interviewed 52 institutional investors, based in every region of the world, on their attitudes and intentions in relation to the SDGs and found that:

- 95% of respondents plan to engage with investee companies about issues covered by the SDGs
- 84% will allocate capital to investments supporting the SDGs
- 89% will support regulatory reforms that promote the SDGs

Readiness and the ability to support sustainable development are high. However, supply-side inefficiencies prevent more meaningful flows of money into purposeful investments. For example:

1. Sustainable finance markets require rationalization

Many investors are confused about how to quantify social and environmental impact. A rational sustainable development finance market should measure social and environmental outcomes with the same consistency that corporate financial metrics apply to financial outcomes.

2. Sustainable development finance markets need industrialization

They still lack efficient matching between buyers and sellers. Appropriate networks could overcome this problem, connecting willing investors to those with impactful processes.

3. Sustainable development financial markets should be democratized and open to all

To deliver systemic policy change and transition to sustainability, the core role and underlying purposes of the financial system will need to be re-framed, and new sustainability rules and practices developed. The latter can be incorporated into both hard and soft law instruments, including corporate governance codes, core indices, accounting standards and credit ratings.

How technology can help to reduce poverty

Vast sums of money in developing countries are lost to corruption, tax evasion, erosion of the tax base, theft and mismanagement. By providing innovative technological solutions and fiscal policy options, these funds can be better allocated towards the achievement of the SDGs such as economic development and poverty reduction.

One billion of the \$8 billion donated to Afghanistan in recent years has been lost to corruption, showing how progress towards SDGs is hindered despite money being available. India was able to save \$9 billion by digitizing social protection payments, where previously this was lost through leakage to corruption and false claims. Digitization of payments can help reduce this corruption.

The importance of transparency

Transparency is a key foundation to any solution for the SDGs. Companies will need to embrace the growth potential of responsible environmental and societal policies and drive sustainable business practices through the value chain. The ILO states that around 152 million children between the ages of five and 17 are engaged in child labor in various supply chains. The true cost of modern slavery is buried deep within global supply chains.

The unfortunate truth is that slaves from around the world are involved in every part of our lives, making the clothes we wear and the food we eat. In a 2018 survey by Refinitiv on businesses, 41% of survey respondents reported that they had never screened or done appropriate due diligence on their third-party vendors, suppliers or partners. This is concerning, as a lack of transparency and information on these actors can allow illicit acts to continue in corporate supply chains. The 'business as usual' scenario would leave 121 million children in child labour in 2025.



Looking to the future

Looking forward we see continued growth for SDG-aligned investing. We envisage increased effort and coordination among financial market participants to measure and incentivize corporate behavior that promotes a sustainable future. Corporate reporting on the SDGs will improve.

Investors need to continue to push for improved corporate disclosure and action that promotes the attainment of the SDGs, and focus on building their own capabilities to challenge investments appropriately towards alignment with the SDGs. Companies should consider the opportunities embedded in the SDGs for their own strategic growth plan and value proposition over the long term.



About the Author

Julia Walker is Head of Government and Industry Affairs focusing on Sustainability, Risk and MENA issues and previously Head of Market Development for the Risk business in Asia for Refinitiv. She has 20 years of Capital Markets and Investment Banking experience in Fixed Income, FX and OTC derivatives, Prime Brokerage and Post Trade Transparency with UBS, RBS and AMP Capital Investors.

Julia is also the Author/Editor of 'Sustainable Development Goals; Harnessing business to achieve the SDGs through Finance, Technology and Law Reform' published by Wiley UK, 2019.

Discover the podcast interview with Julia, where we explored the role of business and financial institutions in achieving the SDGs.

TREND 6

SUSTAINABLE BUSINESSES WILL GROW FASTER IN FRONTIER MARKETS

By Jackie Cureton & Saidah Nash Carter

"We see opportunity in tapping into the tech-savviness and entrepreneurial spirit of the youth and the unique resiliency and resourcefulness of African women."





Our top takeaways:

- **1.** Africa has six of the 10 fastest growing economies in the world.
- **2.** A lack of digital infrastructure in many African countries means there are opportunities for sustainable innovation.
- **3.** There is a huge amount of untapped talent in Africa. Inclusive businesses that invest in human innovation will thrive.

There's a huge opportunity for sustainable business in Africa

Our thesis is that Africa and other frontier markets present an unparalleled opportunity to build sustainable business with positive impact, leveraging innovation and inclusion. We'll start off by establishing our definition of the key terms:

- Innovation a fundamental change to the way things are done
- Inclusion creating spaces that are open and accepting of differences so that individuals can bring their whole selves to work
- Impact a positive effect on business, society and/or the environment

Why Africa? Besides having six of the 10 fastest growing economies according to a recent World Economic Forum (WEF) report, it is the youngest continent, with half of the population under the age of 20, in contrast to the aging concerns of the more developed nations.

There is a lack of legacy infrastructure, which provides an opportunity for innovative solutions and digital platforms. Mobile phones are ubiquitous across the continent, opening up opportunity to connect and engage with customers. Sub-Saharan African is the fastest growing region when it comes to mobile phone penetration and will see an additional 167 million subscribers by 2025 (GSMA).

In addition to these trends, there is an inherent entrepreneurial energy and a fast-growing ecosystem which at last count boasted 615 innovation labs incubators and accelerators, supporting young entrepreneurs on their journey. This also creates a great opportunity for ESG investments.

How will developing an inclusive business culture leverage Africa's talent?

We also believe that Africa's talent is its most underutilized resource. All sustainable businesses need to pay heed to the fact that fewer efforts contribute to success more than its people. Any strategy should have a talent strategy – or to be clear, any business strategy without a talent strategy is a failed strategy. This includes an intentional focus on inclusion.

An inclusive culture leads to increased employee engagement and improved performance, in addition to promoting new ways of thinking by embracing new voices and experiences. These are all ingredients for impactful innovation and sustainability.

We see opportunity in tapping into the tech-savviness and entrepreneurial spirit of the youth and the unique resiliency and resourcefulness of African women. A successful culture starts at the top with leadership that holds itself and others accountable, operates with integrity and exhibits emotional intelligence and commitment to a sustainable plan. Businesses that invest in human innovation and are thoughtful about future of work needs will unleash potential and creativity.

Despite some known challenges, Africa presents in equal measure opportunities to leverage its uniqueness to build the sustainable businesses of the future. Doing well while doing good.


About the Authors

Jackie Cureton is co-founder and Principal Consultant at Bright Insights Global (B.I.G), a boutique women-owned consultancy formed out of a passion to build better business in Africa using the prism of inclusion, innovation and impact with a focus on forward-thinking, purpose driven organizations. B.I.G services include talent and inclusion strategies, innovation initiatives, organizational effectiveness, business leadership, executive training and coaching as well as special projects. She has a background in Human Capital Management and Business Operations.



Saidah Nash Carter is a digital business native with a passion for value creation and the use of technology to create new opportunities for business and for humanity. She began her career with Reuters NewMedia during a period of transformative digital innovation and went on to build and launch some of the first online news services for early internet sensations like Yahoo! and AOL. She thrives when pushing the boundaries of corporate thinking and business development through emerging technology, co-creation and a focus on sustainability. As SVP- Africa Innovation, she launched the Thomson Reuters data science and innovation lab in Cape Town, one of seven innovation labs globally and the only one in an emerging market.

Most recent awards and recognition include: 2017 Inspiring 50 Women in Tech, 2018 Voices of African Mothers Innovation Award, League of Intrapreneurs Global Fellow – 2019.

Listen to the podcast interview where Jackie and Saidah discuss sustainability in Africa and key opportunities for responsible investors.



DONOR-ADVISED FUNDS WILL DRIVE IMPACT INVESTING

By Jared Gonsky

"DAFs are an ideal initial impact investment tool because they are completely risk free."





Our top takeaways:

- **1.** Donor-Advised Funds (DAFs) have become viable tools for investment in the social and environmental impact sectors.
- **2.** DAFs are becoming increasingly popular, with the number of funds growing 55% between 2017 and 2018.
- **3.** DAFs can provide capital to use for early stage or higher risk impact investments.

Donor-Advised Funds are skyrocketing in popularity

Donor-Advised Funds (DAFs) are philanthropic and social impact investment tools that allow donors (individuals, families, corporations, etc.) to fund special accounts through DAF "sponsor" organizations. Donors receive immediate U.S. income tax deductions and maintain allocation privileges over the fund's distribution. While adoption of DAFs started slowly, capital is aggregating quickly, and DAFs have become a leading tool for donation and investment in the social and environmental impact sectors.

According to the 2019 Donor-Advised Fund Report of the National Philanthropic Trust (NPT), assets in DAFs now total over \$121 billion, with over \$37 billion in new DAF contributions in 2018 alone.





Source: 2019 Donor-Advised Fund Report, National Philanthropic Trust

Total Value of Contributions to Donor-Advised Funds (\$B)



Notably, there are now over 728,000 individual DAFs across the U.S., and the number of DAFs grew an astonishing 55% from 2017 to 2018. Contributions to DAFs have also continued to increase as a percent of total individual giving over the last decade.



Total Assets in Donor-Advised Funds (\$B)

Source: 2019 Donor-Advised Fund Report, National Philanthropic Trust

Contributions to Donor-Advised Funds Expressed as % of total individual giving



What effect can DAFs have on impact investing?

DAFs have typically been used for charitable donations and philanthropic grant-making. However, astute donors have started to recognize that by directly investing DAF capital in for-profit companies or funds, they can become extraordinary vehicles for achieving meaningful social and environmental impact.

In fact, if managed correctly, DAFs can become impact investing venture capital funds for donors. They can either servce as their first steps into the impact investing world or enhance the work they have already been doing with their traditional portfolios.

DAFs are an ideal initial impact investment tool because they are completely risk free – the funds have already been donated, so no financial returns to the donor are expected. However, investments from a DAF that generate financial returns can flow back into the DAF. That means the capital is then available for the donor to direct towards the next socially or environmentally impactful venture (as with a traditional investment portfolio).

There are a variety of ways in which the capital held in DAFs can be invested to further one's impact goals. For example, they can be the ideal capital to use for early stage or higher risk investments (that may not align well with the donor's main portfolio). Similarly, corporate DAFs provide a simple mechanism for making strategic investments in missionaligned companies that complement the corporation's business model or further a stated impact goal.

Currently, most DAF sponsors do not allow DAFs to be used as (for-profit) impact investing mechanisms, and those that do often offer only a limited selection of investment options for donors.

However, some DAF sponsors are showing greater flexibility, and DAFs can typically be transferred to other sponsors that better support donors' impact investing goals. Notably, DAF funds can even be used to pay advisors to help transfer DAFs (when needed), analyze investment opportunities and deploy DAF capital as effectively as possible towards the causes that the donor is most passionate about.



About the Author

Jared Gonsky is a partner at LOHAS Advisors, where he bridges the gap between investors and advisors that want to make a meaningful impact, and the innovative social enterprises and funds that address today's most pressing challenges. He is an expert in impact investing and leads the firm's support for intergenerational wealth transfer.

Jared started his career in venture during the late 90s where he evaluated direct private investment in tech-based firms. He then pursued his passion towards sustainability. He began his impact-focused journey at ERM, where he helped set up the company's Energy, Climate Change and Sustainability practice, and helped Fortune 500 firms collect ESG data, measure and manage impact before investors understood their importance. From there he went on to lead project financing and commercial activities for a variety of leading clean technology ventures in the areas of energy, waste conversion and infrastructure.



HUMAN CAPITAL WILL BE A KEY CONSIDERATION FOR INVESTORS

By Sakis Kotsantonis, Managing Partner, KKS Advisors

"While technological advancement is not a new phenomenon, the current pace at which technology spreads and disrupts industries is incomparable to previous waves of automation."





Our top takeaways:

- **1.** Human capital development (HCD) manifests in society as better health outcomes and improved general well-being.
- 2. Despite the positives technological advances bring, people are concerned about unequal access to opportunities when it comes to jobs of the future.
- **3.** Investors need to focus on HCD, investing in companies that train employees in ways that improve their earnings potential and livelihoods.

Why is human capital becoming a focus now?

Human capital has always been a key consideration for businesses, but investors have only recently begun to pay attention to it. This is thanks to the emergence of ESG investment frameworks and impact investing activities, which together have cemented human capital's position in investment analysis, both from a financial and a social impact perspective.

Human capital is now recognized as one of the most important drivers of competitiveness, value creation and sustainable competitive advantage. Moreover, human capital development (HCD) through strong workplace practices is linked to positive societal impacts as manifested by better health outcomes and well-being.

Its significance is magnified in an environment of rapid technological change, where the future of work is uncertain:

- How are organizations investing to develop their human capital to adapt to these changes?
- Are those investments effective?
- Will technological-driven automation of job tasks bring prosperity, and if so, how quickly and to whom?
- Or will it negatively impact workforces and have profound and adverse effects on society?

Will technological advances have a positive or negative impact on the workforce?

Advances in Artificial Intelligence (AI), machine learning and big data will likely have a significant impact on the workforce. Together, these technologies have the potential to reduce physical strain on employees, improve safety in the workplace, increase productivity and ultimately lead to more meaningful work that results in higher rates of job satisfaction.

Nevertheless, the new capabilities that these technologies bring also evokes widespread fear. People are concerned about diminishing worker rights, mass job losses and unequal access to opportunities due to the lack of relevant skills and education needed for the jobs of the future.

While technological advancement is not a new phenomenon, the current pace at which technology spreads and disrupts industries is incomparable to previous waves of automation.

A recent report from the OECD highlights the impact of automation by estimating the share of workers in occupations at high risk of automation by income class. The difference in the percentage of occupations at high risk of automation between upper income and lower income workers was about 10% in OECD countries. The Institute for Women's Policy found that in the U.S., women are more at risk from automation than their male counterparts.

Disruption arising from new technologies has the potential to polarize workforces and society at large. It will be particularly important to manage the development and dissemination of automation and AI in the workplace carefully. This will ensure disadvantaged populations and minorities are not disproportionately affected in the transition.

What can we do to address these challenges?

In this evolving technological landscape, existing frameworks to measure and evaluate HCD might not be fit for purpose. For example, many metrics that represent proxies for HCD measure inputs, such as dollars spent in training, rather than outcomes, such as improved wages over time. Moreover, they do not yet incorporate the profound and increasingly visible effects of automation on human capital issues.

To address some of these challenges, investors need to focus on HCD metrics that try to capture the long-term benefits of investments. For example, this can be done by accounting for employee wage changes, training dollars spent and employee turnover.

When these three components are combined, they reflect the ability of a company to train employees on tasks that improve their earnings potential and livelihoods. At the same time, they create a work environment where employees want to stay.

Ideally, the relationship between these three components and productivity metrics (such as revenue and earnings productivity) should be explored, so that the data can be relevant to business valuation and investment analyses.

Moreover, investors need to better understand the potential impact of automation across sub-industries with respect to HCD. This will allow them to prioritize and frame their engagement efforts accordingly.

Two high level recommendations are:

- Examine the risk-return case of better understanding how different businesses identify the skills that will become more important than others as AI and automation are adopted (re-skilling and upskilling current employees, changing recruitment practices for future employees).
- 2. Develop the impact case of supporting a transition to more automated tasks through a process that does not have a destabilizing systemic impact on society.



About the Author

Sakis Kotsantonis is the managing partner and co-founder of KKS Advisors. He specializes in sustainable investing and ESG integration. He supervises the company's global strategic plans and heads up a team of advisors in London who consult for large corporations, investors, foundations and non-profit organizations. Sakis is a research partner at the High Meadows Institute, assisting with the Future of Capital Markets project, which explores the role of business leadership in contributing to a framework for a sustainable capital markets system. He has also served as a strategic advisor to the Rockefeller Foundation's Revalue Ecosystems initiative.



SMART, SUSTAINABLE CITIES WILL PRESENT MORE INVESTMENT OPPORTUNITIES

By Julia Wilkinson, CEO of imvest

"We have only scratched the surface on the myriad exciting opportunities to invest in smart, sustainable cities."





Our top takeaways:

- **1.** As global populations migrate towards cities, we have no choice but to innovate and make them better places to live.
- **2.** A huge range of actors are now investing in urban innovation.
- **3.** Now is the ideal time to invest in smart, renewable cities.

The challenges of rapid urbanization

Urbanization continues to grow rapidly. By 2050, it's estimated that seven billion people will live in cities. While urban environments often offer greater economic opportunity, there are also plenty of downsides.

Cities consume two-thirds of the world's energy and produce 70% of global CO² emissions, thanks to a combination of urban lifestyles, transportation and commerce. Many new inhabitants also end up living in slum-like conditions.

What's more, since most municipalities (90%) are near the coastline, they are vulnerable to climate change-related extreme weather. The economic damage to businesses and cities caused by hurricanes, floods and droughts can be devastating.

Nevertheless, along with urban challenges come great opportunities for investment. As a case in point, analysts suggest the smart city market will reach \$240 billion by 2025.



Where are the smart city investment opportunities?

1. The Internet of Things

The advent of 5G, the Internet of Things (IoT) and big data imply cities are already becoming smarter and more interconnected. Fortune Business Insights reported global investment in IoT reached more than \$190 billion in 2018 and projected a \$1.1 trillion market by 2026.

Globally, we'll see more dynamic and automated management of energy, traffic, safety, waste, air quality, disease control, e-mobility charging and data-driven urban planning. Smart energy management systems in buildings that include motion sensors for lighting reduce energy costs and emissions dramatically, for example.

2. Greater distribution of renewable energy

Renewable energy is now cheaper to produce at scale than coal and nuclear power. It is also increasingly distributed, meaning it can be generated and stored throughout cities, reducing the need for expensive transmission lines. Microgrids and battery banks will complement other power sources, enabling cities to be more resilient to climate-related disruptions.

Navigant reported the global market size of distributed energy generation (DEG) is currently \$150B. It is expected to grow at 15.9% CAGR, generating revenues of \$500B and \$58B in energy efficiency savings by 2028.

3. The rise of electric mobility

The rapid adoption of electric mobility will reduce emissions and noise pollution, and improve air quality. The global e-mobility market size was \$150B in 2018 and is set to grow by at least 20% year-on-year for the next decade – with mass adoption led by mobility as a service (MaaS). Eventually, discharging car batteries at peak energy demand times will also play a key role in distributed energy management.

4. Technology is reducing construction costs

Rapid urbanization continues to outpace the availability of resilient, affordable and workforce housing. Advances in 3D printing for modular homes, robotics and property technology are reducing construction costs. Many local governments are planning transit-oriented developments, and are reducing urban sprawl through tax and permitting incentives that maximize density, all with the help of big data. Green and affordable housing developers are increasingly able to access capital at a lower cost and improved financing terms over traditional peers, translating to greater returns for investors.

The future is bright for smart cities

We have only scratched the surface on the myriad exciting opportunities to invest in smart, sustainable cities. Supranationals, municipalities, established technology companies, pension funds and venture capitalists are investing in urban innovation.

Start-ups around the globe are building creative solutions to challenges, some in partnership with larger corporations. Constructing a diversified smart city portfolio across asset classes, including early to later stage companies, can be achieved.

In an era demanding unprecedented collaboration to build the future, there is no better or more urgent time than NOW to intentionally invest in smart, sustainable cities.



About the Author

Julia Wilkinson is founder and CEO of imvest, committed to building a sustainable future through ESG and impact investing. Her clients include funds, family offices, foundations, endowments and entrepreneurs that aim to integrate impact into their models and investments. At imvest she aligns asset owners and their financial intermediaries with their social and environmental values.

With these values, stakeholders design a roadmap to merge profit, purpose and environmental impact across all financial and investment decisions. Julia and her team work closely with financial intermediaries and investors to implement and benchmark client strategies.

Check out the podcast interview Julia, where she provides actionable insights on adopting the Impact Investing approach.

TREND 10

THE CIRCULAR ECONOMY WILL SHIFT INVESTOR MINDSETS

By Nikita Singhal, Co-Head of Sustainable Investment & ESG at Lazard Asset Management

"The circular economy is not just the latest sustainability trend but a top-down strategic initiative."





Our top takeaways:

- **1.** Climate change and increased consumption are forcing business leaders to reimagine the "take-make-dispose" mindset.
- **2.** Reusable packaging, recycling and greener production methods are appealing to sustainably-minded consumers.
- **3.** The circular economy about more than just reuse, it is a top-down business strategy forcing business leaders to rethink production, supply chain and business models.

Decoupling economic growth from resource constraints

The circular economy is a term that was perhaps not as well-known a few years ago, but it is gaining significant momentum. It is a result of the confluence of various factors, including global structural changes such as climate change and a concern about our dwindling and deteriorating natural resources. At the heart of the concept of a circular economy is an effort to decouple economic growth and resource constraints.

What are the issues?

1. Climate change

Climate change is one of the largest systemic risks that we face today. Governments, international regulators, business leaders, institutional investors and civil society are voicing concern and taking action to minimize its harmful effects. But despite various commitments from these stakeholders, we are woefully short of the carbon reduction targets needed to limit global warming to a 2° mean temperature rise since the industrial revolution.

Limiting global warming to science-based targets is expected to substantially reduce the probability of extreme drought, precipitation deficits and risks associated with water availability.

Carbon reduction efforts have largely focused on the energy system (transition and efficiency). However, with a significant proportion of greenhouse gas (GHG) emissions arising from the production of goods, there is an increasing focus on efforts to build a circular economy.

2. Greater levels of consumption

According to the WEF, we expect three billion more middle-class consumers by 2030. The current economic system that relies on inputs of 'cheap and available' resources to help serve this growing consumer base are at risk. This calls into question our current business models that are largely linear – "take-make-dispose".

Understanding complex societal and environmental mechanisms

As active bottom-up fundamental investors at Lazard Asset Management, we have a deep understanding of the complex relationships and increasing feedback loops between business, industry, society and the environment. We are keenly observing the evolution of companies as they rethink product design, use innovative materials and improve upon materials recovery methods, in addition to testing 'as-a-service' business models.

Conscious production methods

The textile industry, for example, uses vast quantities of water and chemicals, which results in the production of significant amounts of toxic waste. Apparel and furniture (upholstery) companies are partnering with innovative technology companies to reduce the use of water and chemicals in their color dyeing processes.

This not only enables them to cater to an increasingly sustainability-conscious consumer base, but also helps them mitigate operational risks arising from water scarcity and waste disposal.

Improved reusable and recyclable packaging

In a similar vein, leading consumer packaged goods companies have been active supporters of the Loop global circular shopping platform. This enables consumer products companies and retailers to shift from a disposable supply chain to refillable, durable packaging. The concept is very similar to the old time milk jar delivery where the container is collected, refilled and can be reused. One such company is participating with almost all of its product categories and has developed innovative product designs for the platform.

A consumer beverage company is targeting to use 100% recyclable packaging and to collect and recycle 100% of its products by 2030. In order to create a circular economy the used packaging has to be brought back into the system. In addition to working with governments and other beverage companies, the company is investing to expand its bottle-to-bottle approach. This is transforming recycled PET bottles back into usable food grade containers. It operates the largest food grade recycling plant in the world in Mexico and is expanding this investment into other countries. The initiative also makes good business sense, as the recycled resin is 20% cheaper than new PET on the market, and with PET representing one of the larger input costs, the savings move the needle.

Innovative marketing

Consumer companies are also leveraging their marketing spend to encourage recycling. One example is "reverse vending machines" that were installed in the U.S. When the consumer recycled, she/he was able to donate five cents per bottle to a charity of choice. Another recent campaign included the use of outdoor signs and billboards in combination with new recycling trash bins that the company provided to the cities.

Sustainability-focused product design

An industrial engineering equipment company's commitment to a circular economy has won them awards. They embed sustainability into their product design with minimal use of primary raw materials, circular value propositions and a circular supply chain in addition to corporate governance around four circular economy indicators that impacts remuneration of thousands of the company's managers.

As can be seen, the circular economy is not just the latest sustainability trend but a topdown strategic initiative at many companies as they rethink their product design, business models and the supply chain. We anticipate that these activities will likely be reflected in securities' valuations and may impact their performance over time.



About the Author

Nikita Singhal is the Co-Head of Sustainable Investment & ESG at Lazard Asset Management. Nikita oversees the firm's ESG integration strategy. She works closely with analysts and portfolio managers to enhance their investment processes and on launching new strategies. She co-chairs the firm's ESG Steering Group and sits on the firm's Proxy Voting Committee.

She also leads client engagement and thought leadership on ESG topics. Prior to Lazard Asset Management, Nikita spent 11 years focused on sustainable investing, most recently at the Sustainability Leaders Fund at ClearBridge Investments, covering renewable energy and other high sustainability companies, while also helping execute on the firm's overall ESG strategy.

Get a deeper understanding of ESG and the role of asset management firms – discover the podcast interview with Nikita.



PEOPLE WILL DRIVE ESG PROGRESS

By Keesa Schreane, Global Partner Director at Refinitiv

"Some of the most influential changemakers aren't even old enough to vote."





Our top takeaways:

- We can follow the example of inspiring change-makers like Greta Thunberg and challenge business leaders on their sustainability practices.
- **2.** Courageous employees are standing up and demanding compassionate, inclusive and equitable career experiences.
- **3.** It's key to remember that it's people who amplify the ESG and sustainability story and highlight its importance.

Impact investing

As we continue the conversation around ESG, impact investing and all things in the social impact realm, one theme resonates through it all: people drive progress.

While Institutional and Wealth Management firms are credited with delivering innovative solutions to ESG investing, it's really the individuals behind investment firms – the researchers and managers – who drive the decision to dive into ESG investing. Investors, too, are of course looking for more impactful investments and using their assets to create social change.

When I spoke to Bridget Realmuto LaPerla, Head of ESG Research at State Street Associates, she explained how her firm is acting on the evidence and incorporating ESG issues into its business strategy.

She concludes that investing in climate change now drives alpha, when it was once considered risky. In fact, State Street's findings show the most aggressive carbon strategies generate the strongest profitability. You can read more about State Street Associates' decarbonization investment strategies and listen to an interview with Bridget on our blog.

I also spoke to Nikita Singhal, Co-Head of Sustainable Investment & ESG at Lazard Asset Management – a firm that considers ESG a central part of its investment philosophy and manages more than \$200 billion.

Nikita argues that climate change and rising inequality have become financial issues, when they were once seen as off-market externalities. She says that investors who fail to take these issues into consideration are not doing their jobs. She also argues that financial institutions must take ESG investing seriously and incorporate it into their business processes. You can read more about the takeaways from the interview on the <u>Refinitiv blog</u>.

Sustainability

Companies like Unilever are creating products that are not only sustainable, but also drive revenue. In 2018, the organization's <u>Sustainable Living Brands grew 69% faster</u> than the rest of the business, compared to 46% in 2017.

Refinitiv is also embracing being a sustainable brand by efforts including achieving carbon neutral status and being 100% powered by renewable energy in January 2020 and, reducing annual carbon emissions by an average of 10% over the next five years.

Behind the companies are the people

There are many people behind businesses focus on sustainability. There are, for example, an increasing number of Chief Sustainability Officers (CSO) and a plethora of innovation-focused roles.

Yet, some of the most influential changemakers aren't even old enough to vote.

Time's Person of the Year, Greta Thunberg, for example, is a teenager who has built a platform to challenge businesses and leaders on their sustainability practices. That's one person making a huge difference.

Employee engagement and equity

Refinitiv's <u>Diversity & Inclusion index</u> incorporates over 7,000 companies and lists the top 100 enterprises, based on 24 metrics covering diversity, inclusion and people development.

Our data shows that companies that track these measures and score highly have a significantly <u>better performance over time</u> than organizations that score poorly (or don't track these measures).

Accenture, Diageo and the Royal Bank of Canada occupy the top three positions in our index for 2019, scoring very highly in terms of employee engagement equity and opportunities for professional development.

Behind the companies are the people

Employees who are fed up with poor treatment and lack of equality are leveraging their voices.

This is illustrated by 2018's "Google Walk Out", which protested the way the company handled sexual harassment. More recently, The New York Times reported on discrimination accusations by those in the financial services industry against employees and clients. These employees exhibit courage and an expectation that we as corporate citizens can do a better job of delivering compassionate, inclusive and equitable career experiences.

Technological advances, increased news coverage and data are all important elements in the ESG/sustainability story. But behind these drivers and these amplifiers that support our growth are our courageous truth-tellers who lead and support our businesses every day.



About the Author

Keesa Schreane is Global Partner Director at Refinitiv. She's host and executive producer of Refinitiv Sustainability Perspectives, a show exploring the role of responsible leadership and innovation across diverse industries. We interview industry leaders in ESG investing, sustainability and social impact to discuss the latest trends and discover best practices. She is also a featured columnist in publications such as Essence, Latina and Black Enterprise Magazines and an on-air contributor with NASDAQ and other television news outlets.

TREND 12

ESG WILL SPARK A DATA REVOLUTION

By Jeff Gitterman, co-founding partner of Gitterman Wealth Management

"It is imperative that advisors come to terms with how climate risk will affect portfolio management."





Our top takeaways:

- **1.** The year 2019 saw the first climate crisis-related bankruptcy, underscoring the need for sustainable investment.
- **2.** In the face of rising weather-related insurance claims, financial companies are recruiting climate scientists to their diligence teams.
- **3.** Climate change presents foreseeable risk that we must take into account when considering client portfolios.

My deeper journey into the world of sustainable investing began with my involvement as an Associate Producer on the movie Planetary, which was released on Earth Day in 2015. It was also at this time that Morningstar first released its globe ratings, giving advisors our very first tool to search for more sustainable fund choices.

Things have evolved greatly since then, in many ways making 2015 the first year that sustainable investing actually became viable. Over the past four or five years, the number of new sustainable, impact and ESG funds, related conferences, and news and media attention has skyrocketed.

At the very first Barron's Sustainable Investing Summit, Sterling Shea, Global Head of Wealth & Asset Management at Dow Jones, remarked that "sustainable investing will be the biggest trend in the financial industry over the next 10 years."



The increasing impact of climate change

It's no surprise that sustainable finance is on an upward trajectory. In 2019, <u>the collapse of PG&E</u> marked the first bankruptcy by a public utility attributed to climate change. Moreover, insurance claims in the U.S. have been the <u>highest ever recorded</u> over the last three years, due to weather.

Large financial companies are now also recruiting climate scientists to their diligence teams, while ratings companies are acquiring physical risk data providers like Four Twenty Seven and Carbon Delta, respectively.

Once the rating agencies start using their newly acquired climate risk data to rate companies on physical climate preparedness, the cost of capital for those companies will increase. This will very likely begin to happen in 2020, so don't say you didn't see it coming!

In addition, voluntary compliance with the Task Force on Climate-Related Financial Disclosures (TCFD), currently chaired by Michael Bloomberg, is increasing: 785 organizations, responsible for 118 trillion dollars, now support TCFD.

The importance of data

Our firm has been using in depth ESG data in constructing our portfolios and helping to navigate strategies for several years. We have built portfolios that we feel stand the test of true ESG integration.

We strive to help advisors see ESG for what it truly is: a data revolution that allows us to see beyond just financial reporting alone and incorporate additional relevant information on the companies we invest in. We know now that non-financial data and intangible risks make up 85% of the S&P market valuation, compared to only <u>15% just 25 years ago</u>. We strongly believe that the next year will begin a decade when climate change, and more significantly climate risk, will dominate how we talk about sustainable investing.

As financial advisors, clients often hope or expect us to have a crystal ball, but it is actually very rare when we can see new risks coming. This time, things may be different, as climate change and its associated risks are now very foreseeable realities, and we as fiduciaries must begin to embrace these coming realities and work to protect our clients' portfolios.

It is imperative that advisors come to terms with how climate risk will affect portfolio management. We need to help our clients understand the issues affecting their portfolios, move away from the worst offenders of CO² emissions and help marshal capital towards credible and effective solutions. We need to act now, to help people see the dangers we face, and come together to solve them. Oxford dictionary named "climate emergency" <u>as</u> the word of the year for 2019. Let's make "climate solutions" the word of the year for 2020.



About the author

Jeff Gitterman is a co-founding partner of <u>Gitterman Wealth</u> <u>Management, LLC</u> and a thought leader in the field of Sustainable, Impact, and ESG Investing. He is the creator of his firm's SMART (Sustainability Metrics Applied to Risk Tolerance)[®] Investing Services, which offer investment opportunities for individual clients, as well as research and investing services for other financial professionals in the Sustainable, ESG and Impact arenas.

Discover the podcast episode where Jeff provides insightful analysis of pricing climate risk and the key implications for investors.



ESG trends are, above all, relevant for mining and processing companies, whose activities have a negative impact on the environment.

A growing number of institutions are publishing reports in compliance with GRI standards, which are gradually becoming mandatory. Investment funds also regard compliance with ESG criteria as one of the favorable factors for long-term investments.

While previous efforts associated with environmental considerations and ensuring compliance with corporate governance principles primarily affected brand image, the above factors (impact on investment attractiveness, government programs, introduction of new regulatory requirements, etc.) have led to investments in ESG already becoming an essential element of corporate strategies to boost economic attractiveness over the long term. The role of ESG factors in companies' operations will grow steadily as they affect corporate investment performance. However, the significance of a given component of the ESG initiative depends on the business segment: for example, mining and processing businesses focus on the environmental component, while financial institutions prioritize corporate governance.

Companies are already increasingly factoring in ESG criteria when it comes to their performance in the long run. For example, European and American countries have introduced legislative regulation of environmental impacts.

In Russia, the government has drafted a federal law on state regulation of greenhouse gas emissions, which could lead to the introduction of an emission charge, either as a tax on carbon dioxide emissions or as a traded emission instrument. Thus, it is safe to assume that ESG is especially relevant for mining and processing companies, which will soon have to reconsider and overhaul their operations as well as oversee a shift to new business models."

By Nikita Pavlov, Proposition Sales Manager, I&A, CEE CIS

THE PRIVATE SECTOR WILL INCREASE ITS IMPACT ON PLASTIC WASTE

By Audrey Choi, CMO & Chief Sustainability Officer at Morgan Stanley

"Plastic waste and climate change have shifted from niche concerns to ones being openly discussed and debated in corporate boardrooms, among shareholders and across investor classes."





Our top takeaways:

- **1.** Climate change and plastic waste are no longer niche concerns: more than \$30 trillion has been invested sustainably in recent years.
- **2.** Investors have come to believe that their choices can make a real difference in the world.
- **3.** With the total value of green bonds now over \$200 billion, the future looks positive for sustainable finance.

In 2020, I expect to see even greater activity from the private sector as we continue to confront the problems of plastic waste. In April 2019, Morgan Stanley announced our own Plastic Waste Resolution to prevent, reduce and remove 50 million metric tons of plastic waste from rivers, oceans and the environment by 2030.

As a proof of concept we underwrote a \$10 million blue bond for the World Bank focused on marine health. Just six months later we worked with PepsiCo on a \$1 billion green bond which included a 35% reduction in the virgin plastic content across its beverage portfolio by 2025.

Since Morgan Stanley began our firmwide focus on sustainable investing a decade ago, plastic waste and climate change have shifted from niche concerns to ones being openly discussed and debated in corporate boardrooms, among shareholders and across investor classes.

Sustainable investing has also experienced rapid growth in recent years, with one in every three dollars invested globally – more than \$30 trillion – invested sustainably. Because our own polling tells us that sustainable investors are most passionate about tackling the problems of plastic waste and climate change, from a pure business perspective it makes no sense to continue on the current path, where up to \$120 billion annually is disappearing from the economy through the disposal of single-use plastics.

I have also seen the green bond market grow from \$2.6 billion in 2012, to well over \$200 billion in 2019. As polling shows, investors in great numbers believe that their choices have the power to make a difference in the world. That's why I am optimistic that in 2020, we will see greater opportunities for businesses and investors as the private sector continues to recognize and confront the problems of plastic waste.



Audrey Choi is Morgan Stanley's Chief Marketing Officer and the firm's first Chief Sustainability Officer. She serves on the Firm's Management Committee and is the founding CEO of Morgan Stanley's industry-leading Institute for Sustainable Investing.

As Chief Sustainability Officer, Audrey oversees Morgan Stanley's global efforts to promote sustainability through the capital markets. Prior to joining Morgan Stanley, Audrey held senior policymaking positions in the Clinton Administration, including serving as Janet Yellen's Chief of Staff at the Council of Economic Advisers and Domestic Policy Advisor to Vice President Gore.

Listen to podcast interview with Audrey and discover the primary myths and truths about ESG.

ESG WILL ACCELERATE SUSTAINABLE ECOSYSTEMS IN DEVELOPING COUNTRIES

By Dr. Wilhelm 'Wil' Bielert and Klaus Naderer

"Innovators struggle to create value while they are still hindered by corruption, instability, financial resources and a lack of standards and transparency."





Our top takeaways:

- 1. Innovation exists in developing countries, but it is not supported sufficiently by local governments or investment and therefore cannot scale.
- **2.** ESG has the potential to provide the support and measures needed to attract investors from developed regions to enable innovations to scale.
- **3.** Innovation at scale will take us closer to achieving the UN's ambitious Sustainable Development Goals, create attractive returns for investors and increase the quality of living conditions significantly.



The challenge to create sustainable ecosystems in developing countries

Sustainable ecosystems are designed to create value for the people who live within them. They will provide better living conditions for those who lack food and water and do not have access to education or health services. They are especially important in developing countries in regions such as Asia and Africa.

In order to create this value, these ecosystems must connect different stakeholders to one another. However, a number of key challenges exist before a truly sustainable ecosystem can be created.

The first challenge relates to financing at scale, which is often hampered by a lack of business support or infrastructure in developing countries. In spite of the commercial opportunity that exists in these economies, off-grid services in developing countries tend to operate in a challenging environment. Where the most need lies, the investment budgets of the responsible governments and state suppliers are very limited.

On top of this, consumer purchasing power for services like electricity and drinking water is low compared to that of other more developed countries. At the same time, the service price (e.g. Kilowatt-hour for electricity) is higher compared to developed countries.

If financial resources are made accessible alongside transparency, stability and low (or no) corruption, these systems can begin to offer attractive opportunities to investors. They can then also start to align with the UN's ambitious Sustainable Development Goals (SDGs).

These goals are designed to improve the quality of life for everyone. Each one is lofty, however. For example, SDG six demands that we must "ensure availability and sustainable management of water and sanitation for all".

This requires significant effort: today, at least two billion people globally use a drinking water source contaminated with faeces.

It's clear that innovators will struggle to create value while they are still hindered by corruption, instability and a lack of standards and transparency.

Case Study – Power&Life Container: empirical evidence of the need for ESG

A decade ago, we developed the Power&Life Container (PLC) as a solution for an off-grid electricity supply based on renewable energy. In essence, it is a mini powerplant that harnesses solar, wind and other power-generating technologies to provide basic services, such as electricity, drinking water, energy storage and controlled distribution.

There are a number of use cases. It can:

- Be used as a dedicated back-up
- Provide support in disaster management scenarios
- Create a nucleus in rural regions for basic water and energy supply
- Supply power for health services and communication base stations

While the product is mature from a technical perspective, it could not be implemented at scale because of the following shortcomings:

- a. In our work in countries such as Ghana, Nigeria, the Philippines, India, the Caribbean islands and Kenya, we have been restricted financially. While community members are ready to pay and payment methods exist, it is not possible to finance the set-up, which relies on a proof of concept and ongoing operations.
- b. Local Investors do not have the financial capability or willingness to finance proof of concepts and operations.
- c. Investors from Western countries do have the financial capabilities, but do not see developing regions as attractive geographical regions for an investment.

ESG can connect stakeholders

ESG can help to overcome this situation by connecting professional investors with investment opportunities for the creation of a sustainable ecosystem. This can be done by establishing standards, creating transparency and applying FinTech innovations (e.g. Blockchain) to instil transparency. For example, it could show "true data" in many forms such as for electricity produced, delivered and paid for.

To tackle the funding issue, we have developed an operator model for the telecommunication industry, to supply electricity to power base stations in a mobile network in developing regions.

We hope to engage with a bankable client such as a tower company, mobile network operator or other industrial company in good standing. We will then:

- Conclude a power purchase agreement (PPA)
- Manufacture and operate PLCs that generate significantly larger amounts of energy than the tower or the mobile network requires
- Sell electricity as stipulated in the PPA to the tower company
- Sell the excess electricity at affordable, prepaid tariffs, potentially with partial government subsidies, to the surrounding village population

This model will create value add to any of the parties involved and supports the described SDGs.

By developing proprietary control and management software, we can actively manage our installations 24/7 and analyze customer behavior, detect deviations/abnormalities and obtain data, generating an unprecedented level of transparency. This can be used as data for FinTech innovations (e.g. Blockchain) to create a "true" link between operations and investors from developed regions.

ESG is needed to support Sustainable Development Goals

Innovation can make these SDGs a reality. ESG has the potential to fill in the gaps and provide financial models supported by measures to attract investors from developed regions.

This is the key to unlocking the opportunities where ESG and the companies providing ESG-related data and services can really contribute to bring the UN SDGs to life. Such contributions will fuel the sustainability revolution.



About the authors

Dr. Wilhelm 'Wil' Bielert, international executive in the field of digital transformation, has more than 30 years of experience in responsible positions in technology companies (Capgemini, Premier Tech, etc.). He has worked in Europe, Africa, Asia and North America and is the co-founder of SolidGround Group.



Klaus Naderer is an industry expert with more than 30 years of experience in financial services (Citibank, Deutsche Bank, GE Capital) and renewable energy. He is the co-founder and Chairman of SolidGround Group and Managing Director of TomEnSo, the group's renewable energy business.

Discover the podcast episode where Will and Matteo Carbone discuss the role of data in mitigation climate risk in the insurance sector.

A GENERATIONAL GAP: ESG, DATA AND PROFITABILITY

ESG is a serious investment practice. Today, one in four dollars of the \$46.6 trillion in U.S. assets under management is now invested sustainably, according to Lisa Woll, CEO of US SIF.

Investors in ESG initiatives aim to generate long-term competitive financial returns. The data backs them up, indicating that companies with serious green policies actually do <u>better in the</u> <u>stock market</u>. At the same time, sustainable finance brings a positive social impact through the careful consideration of the impact of capital on the environment, society and corporations.

"I think that the biggest myth about sustainable investing is that it means that you are a soft-hearted investor who cares about the environment more than returns and that if you're going to do it, that it means that you're willing to accept some sort of discount in exchange for being virtuous," says Audrey Choi, CMO at Morgan Stanley.

"What we've seen from our studies, is that not only does sustainable investing not require a discount, but it can actually also help reduce risks."

As a movement, it makes sense: we are in a transition period – moving from fossil fuels to alternative energy. As strict new emissions standards and other environmental legislation come into play, we'll see the risks of investing unsustainably rocket. After all, what good is an unsustainable investment portfolio, when none of the coal can be burned?

"More and more data points to the fact that investing with ESG and impact frameworks can actually de-risk a portfolio and outperform the market in the long run," says Julia Wilkinson founder and CEO of imvest.

"So if you're a fiduciary whose responsibility is to both manage assets towards maximizing return and also reduce risk... as the Business Roundtable (which happened in August of 2019) recently pointed out, engaging all the stakeholders along the value chain, then your responsibility is to integrate ESG, especially as more and more information points to its role in outperformance."

While sustainable finance sounds like a win-win, there is a noticeable generational gap when it comes to ESG investment. According to TD Ameritrade, which surveyed 1,056 American adults with at least \$250,000 to invest, 60% of millennials believe it's important to make socially responsible investments, compared to 36% of baby boomers.

The key to turning this trend around for future investors is <u>access to insightful</u>, <u>objective data</u> – without it, no decisions can be made and sustainable finance will remain a niche interest.

CONCLUDING THOUGHTS

An optimistic 2020 with ESG challenges to act on.

If there's one key message to take away from this playbook, it's that sustainable finance and ESG are the future. Investors are quickly coming to see it as an increasingly lower risk investment that outperforms the market.

There is certainly a renewed rigor for ESG initiatives. We see this in legislation, in the rise in popularity of DAFs and the huge growth in Green Bonds. As ESG investment grows, top-down regulation is implemented, and the returns on sustainable finance become more and more apparent, corporations, investors, asset managers and other stakeholders will no doubt be spurred into action.

Refinitiv is supporting these initiatives and facilitating ESG research by providing in <u>depth</u>, <u>objective and quality-controlled data</u> for all your investment needs.

Society, the environment and human development will be the focus in 2020. It's time to build on the momentum we have now and make the planet something we can all invest in. By the end of the decade, sustainability initiatives will form an integral part of all corporate governance – and both investors and the planet will be better for it.



Get a deeper understanding of ESG and learn from the key sustainability leaders – discover the Refinitiv Sustainability Perspectives Podcast.

Explore ESG data by Refinitiv

Designed to help you make sound, sustainable investment decisions, our ESG data in Eikon covers nearly 70% of global market cap and over 400 metrics.

Our methodology seeks to focus on an objective and transparent assessment of disclosed company ESG data.

Asses the risks – and opportunities – posed by companies' performance in critical areas such as climate change, executive remuneration, and diversity and inclusion.

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Refinitiv is one of the world's largest providers of financial markets data and infrastructure, serving over 40,000 institutions in approximately 190 countries. It provides leading data and insights, trading platforms, and open data and technology platforms that connect a thriving global financial markets community – driving performance in trading, investment, wealth management, regulatory compliance, market data management, enterprise risk and fighting financial crime.







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