



MOMENTA
DIGITAL DELIVERED™

The Digital Industry ESG Imperative

What's Driving Growth in
Responsible Investing?



ESG Gaining Momentum

As the focus on ESG (Environment, Social, and Governance) factors keeps gaining momentum and investors plow money into ESG Funds Momenta explores What's Driving Growth in Responsible Investing? This trend is evidenced by the growing proportion of new funds that include an ESG element. We explore how this influx of investments is driving corporate focus on ESG across various industries and how this is playing out today and into the future.

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ESG: A New North Star for Investing

There's [growing awareness of the importance of ESG](#) (Environment, Social, and Governance) As the focus on ESG (Environment, Social, and Governance) factors when it comes to corporate mission and strategy, and even more importantly from the investment community. Because of growing demand for funds with ESG strategies, there is increasing interest in companies that can exhibit good ESG characteristics or for companies that can articulate a good story of transformation (for instance, in industries such as Oil and Gas that may not rate highly on environmental factors). ESG criteria are becoming critical investment criteria for many investors' decision processes.

Management teams and companies will increasingly be compelled to articulate their ESG strategies for external and internal stakeholders.

A quick refresher on the relevant components of ESG from McKinsey:

The environmental component might focus on a company's environmental impact—for example, its energy use or pollution output. It also might focus on the risks and opportunities associated with the effects of climate change on the company, its business, and its industry.

The social component might focus on the company's relationship with people and society—for example, issues that impact diversity and inclusion, human rights, specific faith-based issues, the health and safety of employees, customers, and consumers locally and/or globally, or whether the company invests in its community, as well as how its supply chain partners address such issues.

The governance component might focus on how the company is run—for example, transparency and reporting, ethics, compliance, shareholder rights, and the composition and role of the board of directors.

What's Driving Growth in Responsible Investing?

One of several critical factors behind the growth of ESG funds is the generational wealth transfer as Boomers retire and downsize. Looking forward, Millennials are increasingly going to be making decisions about where to invest for their retirement, children's college funds, and other goals. Research has repeatedly shown that Millennials prioritize doing good in the world over pure returns.

There has been a significant increase in Assets Under Management (AUM) being allocated to ESG funds, and by 2020 there was already \$51.1 billion channeled into "sustainable" funds. Large investors are leading the way in putting pressure on the management teams of portfolio companies, driving increased focus on ESG criteria.

Investors Are Driving Corporate Focus on ESG

The investment community is becoming a pivotal catalyst to encourage companies to focus on their own ESG strategies. It's not just equities (stocks); there is a lot of momentum from the fixed income sector as well.

From a credit perspective, companies with favorable ESG scores tend to have lower credit risk, systemic risk, and overall governance risk. There is growing awareness of the importance of integrating ESG factors in corporate mission and strategy.

According to research from NASDAQ, ESG-integrated strategic AUM were \$8.2 trillion as of the end of 2020, up 34% from the end of 2018.

The most prominent example is one of the world's largest investment firms, BlackRock, whose CEO Larry Fink [wrote a letter last year to CEOs of companies in BlackRock's investment portfolio](#), stressing the importance of sustainability. They pointed out that BlackRock would look to vote against any management and board directors of companies that didn't make sufficient progress on ESG initiatives. Other investors and private equity firms are making similar public statements.

[Institutional investors are telling private equity firms that they won't provide capital unless ESG requirements are met.](#)

While there is a broad push for ESG focus and investments, there remain skeptics of the long-term practicality of ESG focused strategies given the mixed record of returns. With viable arguments on both sides of the issue, it will take time for consensus to emerge on how deeply embedded ESG principles will persist in the investment community – and across industry.

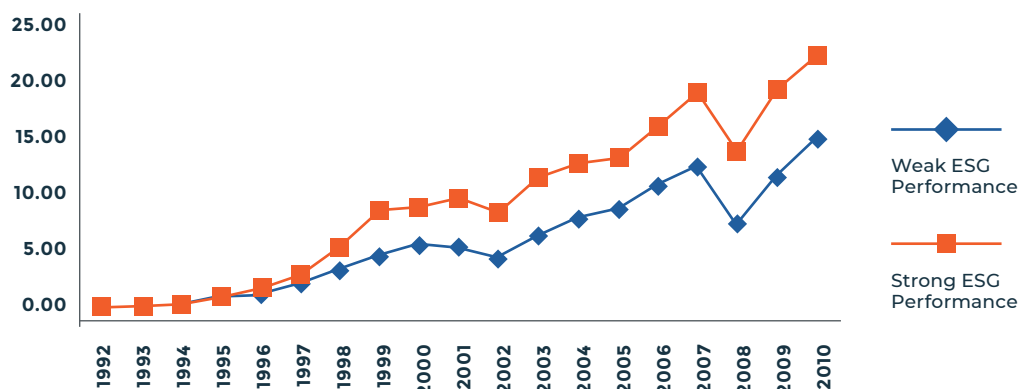
There is a process called “engagement” where investors look at their existing assets and evaluate their ESG profile. If a particular company falls short on key measures, the investor can either sell the assets, stay with them (and lower the ESG score for the portfolio), or work directly with companies to help them improve their ESG scores. **Investors are doing more by encouraging companies in “brown” industries (those seen to more negatively impact the environment e.g. oil and gas) to move in a more sustainable direction.**

Doing Well By Doing Good

Many seasoned investors started tracking pure “green” investments, but historically the return had been less than stellar (particularly solar investments in the late 2000s). While the goal for investment managers is the best return, the role of ESG is gaining more importance in the process as major fund managers adopt ESG principles into their mission (with Blackrock leading the way), and of course, as more fund families launch ESG funds. **Increasingly, we are seeing ESG principles adopted by Private Equity investors, and there is a growing body of evidence that “doing good” is also good business.**

According to a Harvard Business School study, the focus on ESG by investors is underpinned by not just idealism but also evidence that adherence to ESG principles leads to superior financial returns over the longer term. While the study is from 2011, the findings are relevant today.

Financial Performance of Companies with Weak vs. Strong ESG Performance



Source: Eccles G.R. Ioannou I. Serafeim “The Impact of a Corporate Culture of Sustainability on Corporate Behavior and Performance.” Harvard Business School, November, 2011.

Regulatory Actions Add to Pressures to Adopt ESG Principles

Certain investors are instrumental in the push to ensure greater adherence to ESG principles, but there's also growing pressure from regulators, and participants in the supply chain are taking note. According to Gartner's latest [Emerging Risks Monitor Report](#), their survey data partly reflect a global inflection point as ESG disclosures move from voluntary to required. [ESG regulatory requirements landed in the second position in 2021 after not previously registering in the top five risks in 1Q21](#). [A recent study from KPMG](#) showed that **63% of CEOs interviewed said that their response to the pandemic has caused their focus to shift to the social component of their ESG program.**

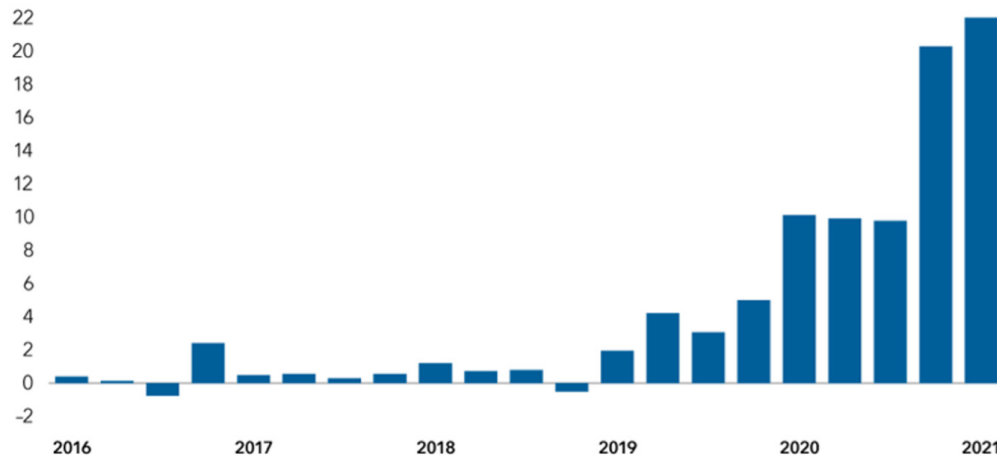
Recently the European Commission submitted a final proposal for a regulation establishing a [European Union Carbon Border Adjustment Mechanism \(CBAM\)](#) Deal. This proposal is intended to regulate greenhouse gas emissions embedded in products including cement, certain iron, steel, and aluminum products imported into the E.U. [In the United States, the U.S. Customs and Border Protection \(CBP\) has increasingly issued "withhold release orders" to exclude merchandise under Section 307 of the Tariff Act of 1930.](#) These release orders prohibit the import of merchandise mined, produced, or manufactured by forced or indentured labor.

ESG funds are attracting record-breaking inflows

Global ESG ETFs have seen impressive inflows of funds, with AUM increasing from \$6 billion in 2015 to \$150 billion in 2020. As of mid-August 2021, roughly 100 new filings were made for ETFs or ETF families since the end of May, and [at least 25 of those have an ESG element](#). These include several funds focused on Climate Change, Ocean Pollution, "Green" Bonds, even "green" metals, and emerging markets funds.

This means that these institutional funds will be seeking for and assessing investments based on ESG criteria. The need to grow their companies is pushing asset managers' interest on ESG.

Quarterly net asset flows (billions, USD)



Sources: Capital Group, Morningstar. As of 3/31/21. Includes U.S. mutual funds and ETFs but excludes fund of funds.

Measuring and valuing ESG factors remains more of an art than a science, as [major investment fund managers have been focusing on the methodologies and research](#) needed to make better-informed decisions and how to support ESG-oriented strategies. Much of the momentum in the investment community is coming out of Europe, with [new disclosure regulations](#) compelling fund managers across the globe to focus on ESG components in their analysis.

Demand for ESG Investments Outstrips Supply – For Now

There is an imbalance of companies and investments with good ESG characteristics and the demand from investors, and for now, this works to the benefit of companies that “check the box.” In industries like tech and internet, which are already “green” investment friendly, frothy valuations reflect crowded holdings, making it more difficult for funds to deliver outperformance.

Investors will be looking for new opportunities, such as in “dirty” industries, to make the case that they focus on sustainability or ESG factors, such as metallurgical coal miners that produce the materials needed for clean energy and technology uses or steelmakers that help produce wind turbines. Companies with a good ESG story to tell will fare better in raising capital.



Energy Sector Sees Investors Pushing Businesses to Adopt ESG Principles

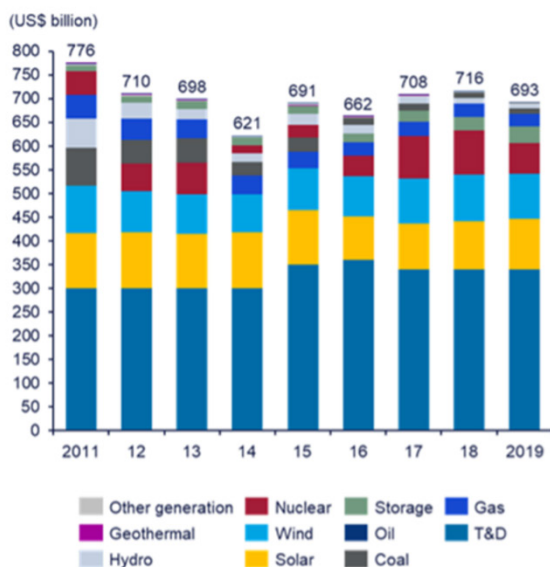
Growing capital inflows are moving companies to elevate their ESG stories and characteristics to appeal to institutional investors. In no sector is ESG considered more impactful than energy. Traditional Oil and Gas companies are widely considered “brown” investments, with a perception that they reside at the bottom of the pack in terms of their environmental impact.

With a shortage of “green” and investable companies, ESG funds are casting a wider lens for businesses that offer both solid fundamentals, and the ability to articulate stories of transformation and/or evolution. Traditional investment research providers like Morningstar and other brokers are increasingly [highlighting ESG factors in their reports, even highlighting how midstream Oil and Gas companies can fit within an ESG investment framework](#). There is a [growing cohort of Exchange Traded Funds focused specifically on the energy industry](#), but there are limitations to the size and scope of such funds.

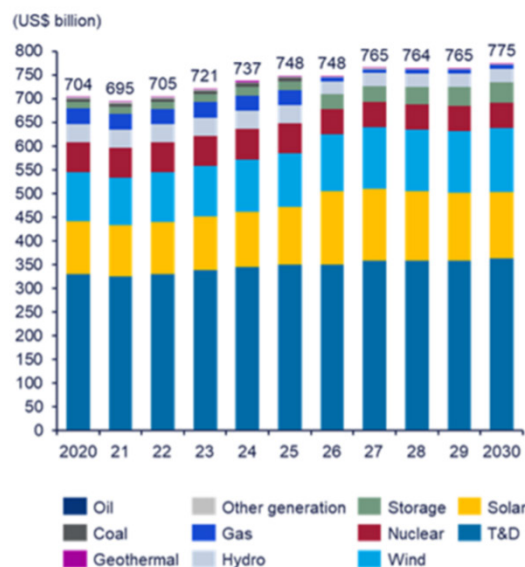
There is also a clear secular shift toward investing in clean energy, which is a multi-decade trend. While investments in wind and solar have tended to look flat at around US\$200-250 billion a year, this spending masks the growing capacity of installations, as cost per kWh continues to decline. [According to Wood MacKenzie, capital allocators should consider the cumulative installed base rather than the annual installed base.](#)

Historical and forecast annual spend in the energy sector

Historical annual spend, 2010-2020



Forecast annual spend, 2010-2020



Source: Wood Mackenzie, IEA

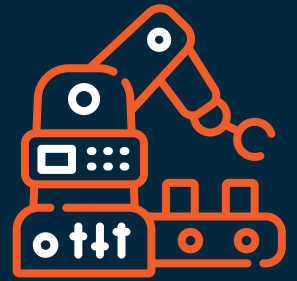


Shifting Messaging to Appeal to ESG Investors

We're seeing leading Oil and Gas companies articulating a shift in focus away from pure carbon-based fuels to broader-based "energy companies" – and this is apparent in messaging. A Bloomberg analysis of quarterly earnings calls and other conference calls related to the 23 members of the S&P 500 Energy Index showed mention of ESG. Other sustainability-related terms soared in the first quarter of 2021 (compared to the same quarter last year). [The use of ESG-related terms among oil and gas companies jumped from 36 in the first quarter of 2020 to almost 300 in the first quarter of this year.](#)

The industry is working to address challenges. Several trade organizations, including the [American Petroleum Institute](#), the [Petroleum Equipment Services Association](#), and others, provide resources for members to implement and report on ESG initiatives. Currently, most companies use [SASB](#) ([Sustainability Accounting Standards Board](#)) standards, which are helpful because they are industry-specific and investor-focused.

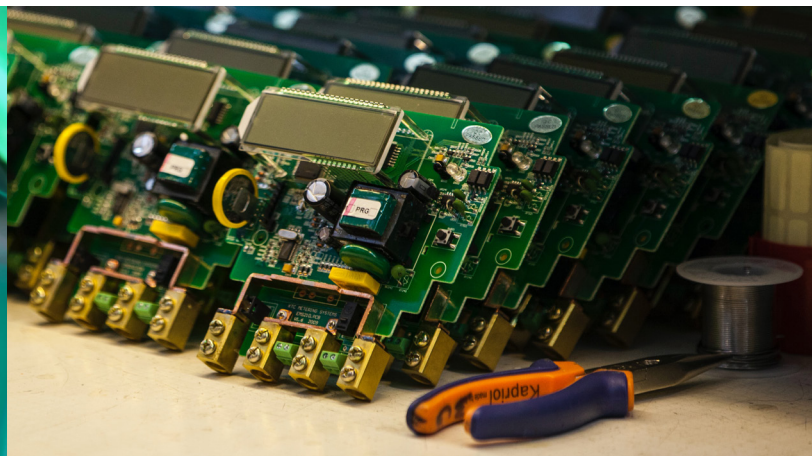
Private Equity firms are also getting involved in trying to help companies better fit in investor's ESG frameworks. Kimmeridge, a private equity firm focused on the upstream oil and gas sector, [published a whitepaper outlining five specific principles they believe should be adopted by their portfolio companies](#). Those five principles included eliminating flaring, reducing and monitoring methane GHG emissions, and ESG reporting. The organization [OGEL](#) (Oil, Gas & Energy Law Intelligence) has also published [extensive research on the dynamics of ESG considerations in Oil and Gas deals](#).



Manufacturing Gets Smarter About ESG

Manufacturing Spans a Broad Scope

The Manufacturing sector encompasses a broad array of sectors, specialties, geographic scope, and firm size – ranging from automobile makers to electronic component manufacturers to makers of heavy equipment, medical devices, tools, clothing, toys – even agriculture and food processing. Compared to sectors like energy, which must reckon with predisposed investor skepticism when it comes to ESG-related perceptions, manufacturers span a broad range of “dirty” and “green” characteristics depending on the type of business.



The Environmental Impact of Manufacturing

One of the core areas of ESG focus centers on the environmental impact, and this encompasses several different areas, including sources of energy (whether clean or carbon-based), the type of materials used in manufacturing (whether they can be recycled or not), the type of waste products generated by manufacturing (and how they are disposed of), as well as other ways that the manufacturing process affects the air, water, and soil. In particular, [the electronics manufacturing industry has been addressing the challenges of e-waste](#). Of the \$206 billion spent on consumer electronics in the U.S. in 2012, only 29 percent of the resulting e-waste generated was recycled.

Steel production is notoriously “dirty,” [producing air pollution, toxic wastewater, and significant greenhouse gas emissions](#). The manufacture of [clothing also involves the use of multiple types of chemicals, many of them toxic](#), along with the [manufacture of cosmetics and skincare](#). Food production is also a [notable contributor to greenhouse gasses](#).

Social Impact of the Labor Force

Manufacturing in some industries is highly labor-intensive, particularly electronics and apparel, **where there are large operations in developing countries where labor regulations are less stringent.**

The Social concerns around sweatshops have been a significant issue for the fashion industry, where there is a growing emphasis on ethical treatment of workers in the supply chain.

In particular, there is much focus on labor conditions in China, where there are widespread allegations of forced labor and harrowing working conditions. Nike has faced criticism for its operations and has worked for many years to improve its transparency and commitments to upholding labor standards across its outsourcing partners, particularly in South Asia.



A Growing Focus on Sustainability

There are efforts underway to advance principles of Sustainable Manufacturing, particularly in emerging economies. **The challenge is to balance the need for growth and jobs with managing pollution and environmental degradation.** The Environmental Protection Agency in the U.S. is working to provide manufacturers with ways to improve their sustainability efforts. In addition, the U.N.'s Sustainable Manufacturing and Environmental Pollution (SMEP) initiative is working on ways to help reduce the environmental, health, and socio-economic impacts of the manufacturing sector, along with reducing the impact of plastic waste.

According to Yasmine Zarabi of Parsable, ESG contributes to corporate cash flow in five ways by

1. Facilitating top-line growth
2. Reducing costs
3. Minimizing regulatory and legal interventions and fines
4. Increasing employee productivity
5. Optimizing investment and capital expenditures.

In her view, “accelerating environmental and social improvements have a clear impact on profitability in manufacturing. **Profitability and productivity can be achieved in parallel with the reduction of waste, a smaller carbon footprint, and a safer workplace.**”

Using Technology to Advance ESG Objectives

Achieving ESG objectives for manufacturers, according to Zarabi, requires visibility, traceability, and data analytics – the capabilities and information that executives need to make the best long- and short-term decisions. Technology enables all three:

Visibility - how well a company can track its operations,

Traceability - how well a company can follow the path and process of inputs,

Data Analytics - how to understand data and leverage insights.

Combining Operational Technology and Information Technology (OT/IT) has been a core principle of Digital Industry driving efficacy and financial benefits – but increasingly provides the means to achieve sustainability goals that are critical for manufacturers to deliver on ESG objectives.



ESG And Smart Spaces

With the trend of increasing urbanization expected to continue (there are already 33 megacities worldwide with over 10 million inhabitants), the focus on sustainability, reduction of pollution, and energy efficiency will continue to be a priority – and the growing focus of investors on ESG will drive innovation and investment for years to come.

Investor Focus on ESG for Smart Spaces

The Real Estate sector broadly encompasses residential, commercial, industrial, and public spaces, touching nearly every aspect of life and work. The growing investment focus on ESG extends to Real Estate as an asset class. There is a growing range of investment products that are focused on sustainability and smart cities. Blackrock, the global asset manager, launched the iShares Smart City Infrastructure ETF, which aims to capitalize on the opportunities presented by the new generation of smart megacities offering sustainable ways of living in the wake of the global migration from the countryside to cities. MSCI, the global Index provider, created the ACWI Smart Cities Filtered Index, which aims to represent the performance of companies that are expected to derive significant revenues from smart solutions for urban infrastructure – and fund provider Lyxor has launched an ETF based on this index.

According to Deloitte, sustainability has become increasingly vital to real estate investors. The European Association for Investors in Non-Listed Real Estate Vehicles has developed Sustainability guidelines to help align investments with ESG criteria.

The 2020 GRESB real estate assessment (an investor-driven global ESG benchmark and reporting framework for listed property companies, private property funds, developers, and real estate investors) sees increased participation (up 22% from 2019). This is evidence of growing interest in ESG criteria and commitment to sustainability within the real estate sector.

There is increasing relevance in Smart Spaces (including Smart Cities, Smart Building, and other real estate-related areas). Additionally, real estate investors are increasingly interested in the ESG components of different real estate sectors, most notably to the extent that “smart” or “green” technologies can address energy efficiency and strengthen the Environmental aspects of a particular investment.

Significant Investment into Smart Buildings

Historically, commercial and residential buildings have accounted for ~40% of total energy consumption in the U.S., and real estate companies have focused ESG efforts on reducing energy usage and associated emissions. [Companies with ESG frameworks are expanding focus toward broader operational impact](#) (and the requisite financial benefits), tracking metrics around water consumption, greenhouse gas emissions, indoor air quality, safety, and waste management. Frameworks like ENERGY STAR, LEED, and GRESB help the real estate sector track and prioritize relevant metrics, monitor, evaluate and report ESG performance.

Underpinning Smart Cities-focused funds strategies is the multi-year investment wave in Smart Buildings, which leverage multiple themes including Cloud Computing, SaaS, Internet of Things, and ESG. One of the major issues at hand is that North American buildings waste up to 30% of their energy they consume due to a lack of intelligence and technology.

The way to address this is to reduce waste, improve efficiency and carbon emissions by using technology to monitor, track, and optimize energy usage. There is a significant multi-billion-dollar opportunity around Smart Buildings, illustrated by several market forecasts. Fortune Business Insights forecasts the Smart Building market is growing at a 12.6% CAGR from US\$43.7 billion in 2018 to \$109 billion by 2026. Acumen Research and Consulting estimate the global smart building markets are growing at a 15.3% CAGR from 2019 to over \$160 billion by 2026, while Zion Market Research estimates the market will reach \$62 billion by 2024.

Smart Buildings Help To Meet ESG Goals

Buildings have a precise carbon footprint that can be directly measurable, an advantage when determining levels of sustainability. In the U.S., there are nearly 600 commercial buildings that have a net-zero energy certification, according to the [Zero Energy Project](#). [There is growing interest in ESG among real estate investors](#), but it's not always straightforward to disaggregate the components of costs and other factors, particularly in complex commercial buildings.

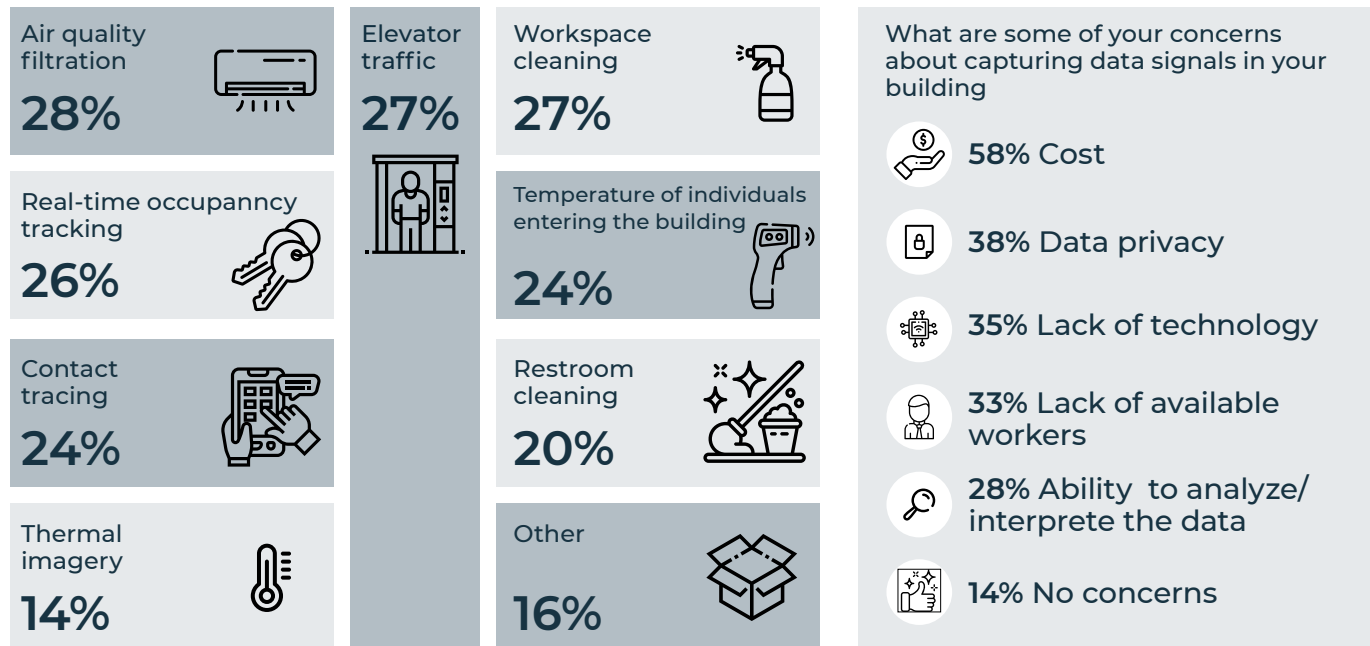


Smart Buildings are comprised of a digitized infrastructure of integrated devices and applications connected locally, remotely and to the cloud are critical to facilitate the promotion of real estate ESG initiatives. The disruption created by the pandemic has created the need for many commercial buildings to re-invent themselves.

Due to changes in demand or traffic (think urban office buildings, shopping malls, movie theaters, etc.), these commercial buildings now rely on new technologies to either upgrade and/or retrofit for safety and more efficient uses. According to [ResearchAndMarkets.com](#), **over 78% of new construction is expected to involve at least one facet of technologies related to smart buildings over the next five years**, suggesting continuing investment in tools, technologies, and solutions to enable digital smart facilities.

By applying technology to track and monitor data from buildings, insights from data can provide the basis for a broad range of optimization capabilities and enhanced services that not only save energy and reduce costs but can provide a better experience for tenants – potentially driving enhanced value creation through increased customer satisfaction while addressing ESG goals as well. The KPMG 2020 Data strategy survey identified a number of ways that respondents look to create value through building data collection:

What are some of the data signals that your organization is considering in your buildings?



Source: <https://advisory.kpmg.us/articles/2020/kpmg-data-strategy-survey-key-findings.html>

Smart Cities Embrace ESG as Foundational

Another area where we see ESG's impact on real estate and infrastructure is through Smart Cities initiatives, where technology is applied in innovative ways to improve how city infrastructure is managed and organized more efficiently.

There will be an expected 2.5 billion people living in urban areas by 2050, and there will be strains to city resources and current infrastructure without updates and enhancements.

From the standpoint of carbon emissions, cities consume roughly 2/3 of the world's energy and produce approximately 70% of greenhouse gas emissions. Additionally, 90% of urban areas are coastal cities, vulnerable to the effects of climate change. According to a study by the Coalition for Urban Transitions, there is the potential to reduce carbon emissions by 90% by 2050 by making infrastructure more efficient, incorporating renewable energy into buildings, using different materials to build infrastructure, and improving transportation. The study also makes an investment case for Smart City initiatives, estimating that achieving target carbon emissions would require an investment of \$1.8 trillion per year but would generate expected returns of \$2.8 trillion per year starting in 2030.

Smart Cities address ESG goals in managing physical assets, community services and resources, public transportation and traffic management, optimized energy consumption, water supply, waste management, and public safety.

Cities can manage and optimize energy consumption through intelligent electricity meters, dynamic electricity prices, automatic street lighting, and instruments for observing and changing human behavior in response to external risks. According to Chordant, Smart Cities can generate \$20 trillion in economic benefits by 2026.

Smart Cities initiatives are a global trend. Cities like Dallas are passing climate action plans, which include reducing emissions from buildings. Dallas has set a goal for all new construction to be carbon neutral by 2030. South Korea is one of the world's leading countries using Smart City technology and has used the Smart City Data Hub contact tracing system to fight the coronavirus outbreak.

Smart Cities has been a popular investable theme for several years, and newer investment projects look to benchmark or track the [MSCI ACWIIMI Smart Cities Index](#) launched in 2019. This index is a valuable proxy for the breadth of smart cities, as its component is selected based on high exposure to the following activities including Smart Connectivity (IoT), Smart Infrastructure, Smart Buildings, Smart Homes, Smart Safety & Security, Smart Mobility, Smart Waste and Water Management, Smart Energy and Grids.

With the growing interest in operational efficiencies, energy management, and other benefits that come from digitalizing real estate and cities, ESG-oriented real estate and the ecosystems around Smart Cities are growing attractive to more investors. With the growing interest in operational efficiencies, energy management, and other benefits that come from digitalizing real estate and cities, ESG-oriented real estate and the ecosystems around Smart Cities are growing attractive to more investors. [ESG-oriented real estate and the ecosystems around Smart Cities are growing attractive to more investors.](#)



Making ESG A Priority In Moving People and Goods

The Role of Supply Chains is Essential to Global Commerce

Some of the most critical areas of ESG focus include global supply chains, which touch on multiple aspects of ESG (particularly environmental but also social in emerging markets). The role of the Supply Chain is essential to global commerce. An estimated 95% of the environmental impact of a company comes through its supply chain in critical industries. [Investors have been focusing increasingly on the potential ESG risk in the supply chain](#), such as natural resource depletion, human rights abuses, and corruption, which could harm reputations, operations, and financial performance of businesses or assets owned by investors, as well as investors' reputations and investment performance.

Supply Chain design is at the heart of an enterprise's ESG Mandate

37% of people worldwide are employed in jobs related to supply chain activity.

Source1: US Department of Labor Statistics 2019
Source2: Ilo report, 2019



95% of environmental impact of a company is through its supply chain for Retail, Telecommunications, Automotive, Foods, Household & Personal Care Products, Media.

Source: MSCI Supply Chain ESG Report 2019

\$500 billion of market value was wiped out in top US companies due to Supply Chain related ESG governance issues.

Source: Financial Time, 2019

Source: [ESG8 \(2020\)](#) | Supply Chain design is at the heart of an enterprise's ESG Mandate

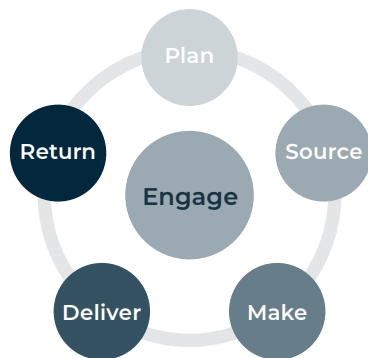
Additionally, transportation, which is deeply entwined with fossil fuel consumption, is undergoing a massive secular transformation toward electric power, advancing economic and sustainability goals.

Supply Chains Link Everything Together

There are multiple dimensions of ESG's impact on the supply chain. Some of the environmental impact factors include Climate Change (carbon emissions), Natural Resources (such as water supplies, degradation of land, and conservation of resources), Pollution and Waste, and the adoption of clean technologies. There are also Social and Governance factors at play as well.

Supply Chain Design Elements

Each element of the supply chain designs needs to embed ESG principles at its core, and design the specific functional element around this core.



Supply Chain ESG Impact Factors



Environment



Social



Governance



Climate Change



Natural Resource



Pollution & Waste



Environmental Opportunities



Human Capital



Product Library



Stakeholder Management



Social Opportunities



Data Security & Transparency



Performance Metrics



Risk Management



Ownership Considerations

Source: [Graphic — ESG8](#) | ESG impact factors. Source: Impact Factors — MSCI ESG Index

There are simple principles that [businesses can follow to improve ESG compliance](#). The goal of reducing waste can be directly tied to suppliers' sustainable land and water usage practices or reducing excessive packaging, or packaging too heavily reliant on environmentally unfriendly materials such as plastics. Material choices in product design, for instance, can have a significant impact on carbon footprint – moving from virgin poly to recycled or to a bio-based material can reduce substantial amounts of carbon from a single choice. Increasing supplier transparency is also critical when it comes to improving ESG scores. Businesses like consumer electronics need to be mindful of rare earth essential materials in smartphones and other devices. [Cobalt mining has a history of human rights abuses as an essential element in technology products](#), with geopolitical rivalries between China and the West increasingly at issue.



Electrification of Transportation Accelerates ESG Adherence

Transportation has been the most significant contributor to carbon emissions across the global supply chain and economy. **The growing electrification of autos, trucks and other modes of transport is accelerating.** According to Canalys, [global sales of electric vehicles increased by 160% over the prior year to 2.6 million units in the first half of 2021](#). E.V. sales growth outpaced the 26% growth of the total global car market as auto demand rebounded following the pandemic. [While there remain concerns over the availability of sourcing rare metals required for EVs](#), in addition to challenges in scaling infrastructure for charging, the declining cost of batteries (down 89% from 2010 to 2020) continues to pave the way for cleaner vehicles across the global economy. This trend towards EVs remains today the most significant secular shift embracing ESG principles.



Technology Is the Key to Embracing ESG

For Industrial Firms in Energy, Manufacturing, Transportation and Smart Spaces, it's clear that technology is key to realizing ESG goals.

Industrial companies have been using technologies including artificial intelligence (AI), machine learning (ML), cloud, advanced analytics, the internet of things (IoT), big data, digital twins, drones, and wearables in their operations for uses like tracking and managing emissions, choosing the right portfolio of assets, and identifying renewable energy technologies that can provide sustainable growth.

Software applications can also help address Social and Governance factors through better hiring, retaining, and/or training employees. To continue to evolve (and to appeal to the increasingly important ESG focused capital), companies must embrace transformation and *advance* technology innovation towards global sustainability.

Doing well by doing good is a winning formula. In today's global economy, it is important that we, as a global community, work together to address challenges that will arise in the future. Climate change catastrophes, recurring cyber breaches, and social inequity are all signs of the need for long-term, effective ESG policies. Improved environmental, social, and governance standards would benefit everyone - it is a difficult challenge, but one that must be taken on.



MOMENTA
DIGITAL DELIVERED™

Momenta delivers digital transformation innovation, growth and leadership across energy, manufacturing, smart spaces and supply chain.

About Momenta

Since 2012, we've been deeply embedded at the intersection of corporates and startups, helping Industrial companies accelerate their digital potential.

Led by deep industry practitioners, our global presence and sector focus provides our clients with innovation, strategy and accelerated growth.

Momenta encompasses leading Strategic Advisory, Talent, and Ventures practices with over 200 IoT leadership placements, 125 industry clients and 40+ young IoT disruptors in our portfolio.

Ready to transform your business?

Schedule a free consultation to learn more about our Digital Industry practice. Learn more about our team, capabilities, and experience at www.momenta.one

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