S&P Dow Jones Indices

A Division of S&P Global

Trucost by S&P Dow Jones Indices
ESG Analysis

CONTRIBUTORS

Jessica Taylor
Head of Client Development – Financial Institutions
Trucost
jessica.taylor@spglobal.com

Alex Lake
Senior Research Analyst – Financial Institutions
Trucost
alex.lake@spglobal.com

Narottama Bowden
Client Development Manager – Financial Institutions
Trucost
narottama.bowden@spglobal.com

The Carbon Scorecard

"Increasing transparency makes markets more efficient, and economies more stable and resilient."
–Financial Services Board's Taskforce on Climate Related Financial Disclosures

EXECUTIVE SUMMARY

- There is a recommendation from the Financial Stability Board that asset managers now report on the carbon exposure in their portfolios to manage climate-related risks.
- This report assesses the carbon risks and opportunities of major global equity indices.
- A range of metrics reveals the carbon footprint of each index, alongside exposure to fossil fuels, stranded assets, and renewable energy, as well as the energy mix alignment with 2°C scenarios.
- The benchmark index with the lowest carbon footprint as of Dec. 31, 2016, was the S&P 500® Growth.
- The S&P/ASX All Australian 50 had the highest level of embedded emissions in proven and probable fossil fuel reserves and the greatest percentage of revenues derived from coal-based activities, making it the most exposed index to potential stranded assets.
- The S&P Latin America 40 is potentially best positioned to meet a global 2°C energy mix scenario for 2030 and 2050.

There has been a market inflection with regard to the integration of climate risk and opportunities analysis into investment decisions. At the 21st Conference of the Parties of the UNFCCC[1] in December 2015, 197 member states negotiated an agreement[2] to make "finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development" and to limit the rise in global temperatures to no more than 2°C above pre-industrial levels. When the agreement reached the threshold for entry into force the following year, the trajectory was set for a global low carbon economy.

The investment community has been instrumental in translating these objectives into initiatives. The rhetoric has changed from "how useful are portfolio footprints?" to "how can we do more?" Alongside listed equity, market participants are addressing the carbon risks embedded in other asset classes, from fixed income to real estate and infrastructure. They are stress-testing holdings for the impact of future carbon regulatory scenarios,

setting portfolio energy transition targets, and quantifying revenues from green products and services. The current environment is a hotbed of collaboration, innovation and, crucially, action.

By publishing the carbon footprints of major equity indices across the globe, the S&P Dow Jones Indices Carbon Scorecard stands as a barometer for the carbon efficiency of the markets today and the direction of travel for the economy. The report reflects the market sentiment for transparency and demonstrates the range of metrics that market participants now use to understand carbon risk and opportunities for green growth. It also shows market participants how these metrics can be applied to build climate-resilient portfolios, regardless of style factor or geography.

The S&P Dow Jones Indices Carbon Scorecard stands as a barometer for the carbon efficiency of the markets today and the direction of travel for the economy.

This study includes the S&P Global 1200 and subsets thereof, the S&P United Kingdom, the S&P/IFCI (emerging markets), the S&P 500 Growth, and the S&P 500 Value. The S&P Carbon Efficient, S&P Carbon Efficient Select, and S&P Fossil Fuel Free Indices are introduced later in the report, and their relative carbon footprints are compared with those of their respective benchmark indices.

IDENTIFYING CARBON RISKS AND OPPORTUNITIES

Just as a range of financial metrics is used to understand the financial health and value of a company, so too should a range of metrics be used for climate risk analysis. As seen in the heatmap in Exhibit 1, different metrics isolate risks and opportunities in different areas—their value depends on the question a market participant wants to answer.

We have analyzed carbon and energy risks in five ways:

1. Carbon Footprint: The aggregation of the direct[3] and first-tier indirect greenhouse gas emissions released by each constituent in the index.
2. Fossil Fuel Reserve Emissions: The greenhouse gas emissions that could be generated if the proven and probable fossil fuel reserves owned by index constituents were burned.
3. Coal Revenue Exposure: The percentage of total index weight coming from companies that derive more than 10% of revenues from coal extraction or coal power generation.
4. Energy Transition: The percentage of total energy generated by utilities companies over a 12-month period, apportioned across fossil fuels, renewables, and other power sources. Each index is compared to the International Energy Agency's 2°C scenarios to gauge current alignment with a global transition pathway.
5. Green-Brown Revenue Share: The allocation of revenues from extractive and utility companies, at a business activity level, into one of two categories—climate solutions and climate aggravators.

Exhibit 1: The Carbon Scorecard

INDEX	REGION	CARBON FOOTPRINT	RESERVE EMISSIONS	COAL EXPOSURE	ENERGY TRANSITION	GREEN-BROWN SHARE
S&P 500 Growth	U.S.					
S&P 500	U.S.					
S&P/TSX 60	Canada					
S&P 500 Value	U.S.					
S&P Global 1200	Global					
S&P/ASX All Australian 50	Australia					
S&P United Kingdom	UK					
S&P Asia 50	Asia					
S&P Europe 350	Europe					
S&P/TOPIX 150	Japan					
S&P Latin America 40	Latin America					
S&P/IFCI	Emerging Markets					

Source: S&P Dow Jones Indices LLC and Trucost. Data as of Dec. 31, 2016. Table is provided for illustrative purposes.

Carbon footprinting is a typical starting point for assessing the greenhouse gas emissions associated with a portfolio.

The Carbon Footprint of an Index

Carbon footprinting is a typical starting point for assessing the greenhouse gas emissions associated with a portfolio, as it offers a baseline from which to mitigate risks and drive investments toward lower carbon alternatives. Since the launch of the Montreal Carbon Pledge in September 2014, more than 120 signatory market participants, representing over USD 10 trillion in assets under management (AUM), have committed to measuring and publically reporting their portfolio carbon footprints on an annual basis.

Exhibit 2 shows the carbon footprint of S&P DJI's major global equity indices, capturing approximately 70% of global market cap. The carbon footprint is the aggregation of the direct[4] and first-tier indirect emissions released by each constituent in the index.

Exhibit 2: The Carbon Footprint

INDEX	REGION	CARBON FOOTPRINT (TONNES CO_2E/USD 1 MILLION INVESTED)
S&P 500 Growth	U.S.	61
S&P 500	U.S.	140
S&P/TSX 60	Canada	166
S&P 500 Value	U.S.	196
S&P Global 1200	Global	199
S&P/ASX All Australian 50	Australia	206
S&P United Kingdom	UK	212
S&P Asia 50	Asia	260
S&P Europe 350	Europe	277
S&P/TOPIX 150	Japan	331
S&P Latin America 40	Latin America	466
S&P/IFCI	Emerging Markets	505

Source: S&P Dow Jones Indices LLC and Trucost. Data as of Dec. 31, 2016. Table is provided for illustrative purposes.

It is pragmatic to broaden the analysis to first-tier suppliers.

There is a case for only measuring direct emissions when calculating a carbon footprint. This casts a net around emissions that the investee (and, to a lesser extent, the investor) has a direct sphere of influence over. It also avoids the possibility of double counting at a portfolio level. For example, if both an energy provider and one of its customers were included in the same index, the emissions of the former would be counted twice. However, as risks may be passed on through the supply chain in the form of higher-priced products and services, it is pragmatic to broaden the analysis to first-tier suppliers. This is advocated by Article 173 of the French Energy Transition Law, which requires market participants to analyze both the direct and indirect emissions of their investments.

For relevance to the investment management community, Trucost has conducted this analysis as if it were an investor with USD 1 million tracking each index. Emissions are allocated[5] to the investor using the market cap of each company—thus, owning 1% of Alphabet's shares means also owning 1% of its emissions.

So what can we infer from the results? The first observation is that the S&P 500 Growth offers the lowest ownership of CO_2 emissions. This aligns with the characteristics of the style factor; growth stocks are commonly found in the information technology or service sectors, for which carbon emissions tend to be relatively low. The S&P 500 Value, by comparison, has over three times the carbon footprint of its growth counterpart—value stocks are more typically associated with the utilities, materials, or industrials sectors.

The S&P 500 Growth offers the lowest ownership of CO_2 emissions.

The S&P Latin America 40 is one of the most carbon-intensive indices among those analyzed, again highlighting the relevance of sectoral influence. The index is significantly weighted toward energy, materials, and

utilities companies, which comprise 33% of its total market capitalization.[6] Therefore, funds tracking this index may be highly exposed to carbon-intensive sectors. By contrast, those sectors in the S&P 500 account for 14% of total market cap.

We might imagine that any index allocating such a significant proportion of its total weight to energy, materials, and utilities would have a high carbon footprint. Interestingly, however, the S&P TSX 60 has 33% of its total market cap in these three sectors, but it is the third most carbon-efficient index in this group. The absolute emissions of the constituents within the materials sector are driving this. In the S&P Latin America 40, absolute emissions from materials companies are 7.5 times greater than those in the S&P TSX 60.

Market participants constrained by certain style factors or geographies can still manage their exposure to carbon. Environmental attribution analysis of portfolios or benchmarks shows us that positive or negative carbon choices are possible within sectors through low carbon stock selections. With quantitative, robust, and consistent data at hand, funds can be optimized to favor more carbon-efficient companies, regardless of the investment strategy deployed.

Fossil Fuel Reserve Emissions

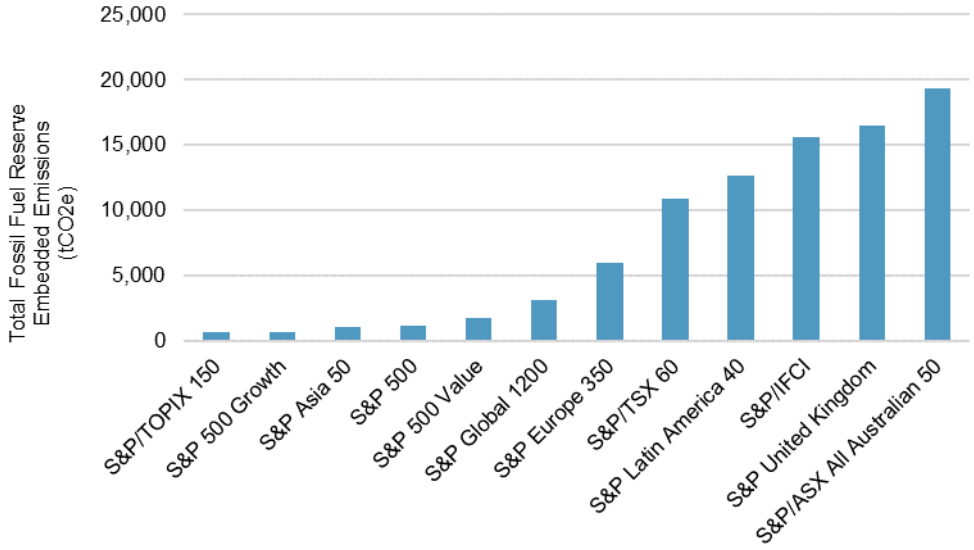
As carbon metrics have evolved, market participants have started to look beyond the current carbon footprint of their holdings to the future emissions embedded in "owned" fossil fuel reserves. The difference here is that the carbon footprint metric above does not look at the potential future contribution to CO_2e emissions via a company's activities in creating new stockpiles of fossil fuels.

Climate scientists have suggested that, in order to limit global warming below a 2°C increase, between two-thirds and four-fifths of fossil fuels need to remain in the ground.

Climate scientists have suggested that, in order to limit global warming below a 2°C increase, between two-thirds and four-fifths of fossil fuels need to remain in the ground. If we are to meet the international agreement on climate change, fossil fuel extraction may eventually become unviable, potentially exposing long-term investors to stranded assets.

Trucost has calculated the carbon emissions associated with proven and probable reserves[7] for any company in this set of indices involved in the extraction of fossil fuels. Emissions have been allocated to each index based on our hypothetical USD 1 million investment and market-cap-weighted ownership.

Exhibit 3: The Fossil Fuel Reserve Emissions



Source: S&P Dow Jones Indices LLC and Trucost. Data as of Dec. 31, 2016. Chart is provided for illustrative purposes.

The S&P/ASX All Australian 50 has the highest embedded carbon in this group, with almost 20,000 tonnes of emissions in owned reserves. This equates to roughly 40,000 barrels of fuel oil[8] being burned for every USD 1 million invested in the portfolio of stocks tracked by the index. This large investment in reserves might suggest that the Australian economy is tying itself to a fossil fuel future. However, it is important to note that this analysis is only looking at listed and not state-owned companies, so it does not present the full picture of the local economy. It is also necessary to consider forward-looking metrics such as capex and research & developed in conjunction with carbon data, so as not to overlook companies that are starting to redirect capital toward alternative cleaner-fuel solutions.

Many indices represent the companies listed on the country's main exchange—companies that may not be physically based there.

The S&P TOPIX 150 is the least exposed, with just 655 tonnes of apportioned emissions embedded in its constituents' fossil fuel reserves. Energy companies[9] in the index make up less than 1% of total market cap, so we would expect the embedded emissions to be low.

In contrast, the S&P United Kingdom has the second-highest emissions from owned reserves. This reminds us that many indices represent the companies listed on the country's main exchange—companies that may not be physically based there. A large number of foreign companies are dual-listed on the London Stock Exchange, such as the Australian mining companies Rio Tinto and BHP Billiton and the Dutch oil and gas company, Royal Dutch Shell. These make a significant contribution to the embedded emissions and, by extension, have implications for those market participants that use such indices for the basis of their investments.

Coal Exposure

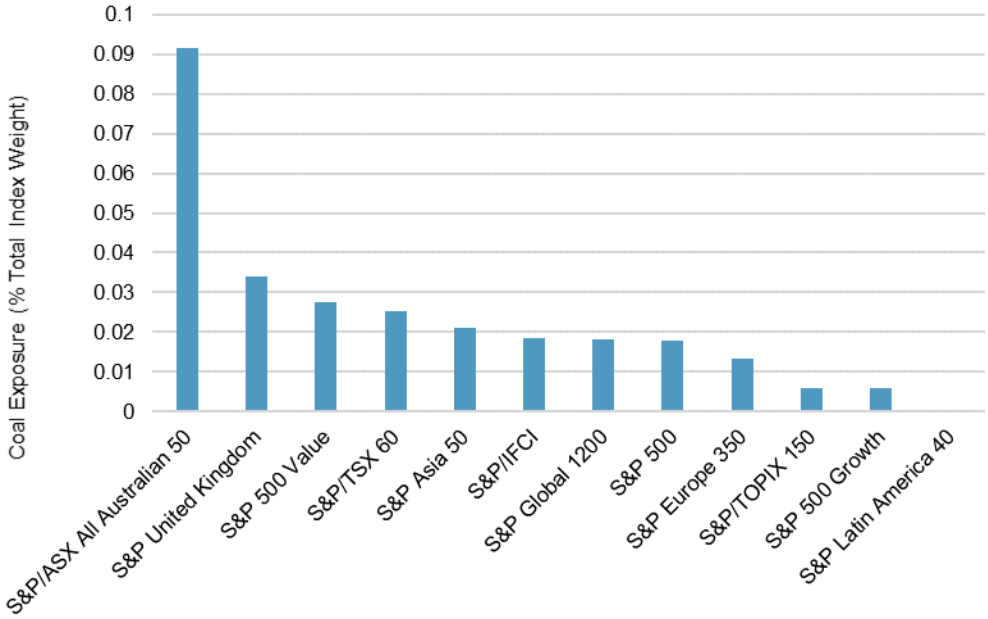
The coal exposure metric looks across the investment universe or index for any companies that derive more than 10% of their revenue from coal mining or coal power generation. The combined weight of these companies is used to calculate the proportion of an index's total value that is derived from companies associated with coal-based activities.

So why does this matter? Considering low carbon policy signals, changing consumer preferences, and the rapidly decreasing price of renewables, coal's attractiveness as an investment may already be in decline. Forward-thinking market participants have started to respond. The Portfolio Decarbonization Coalition, an investor initiative, oversees the decarbonization of USD 600 billion in AUM by 27 investors. According to the campaign group, Go Fossil Free, the value of assets committed to full or partial divestment from fossil fuels and tar sands is now over USD 5 trillion.[10]

The growing commitment from pension funds to divest from coal reflects the fiduciary risks associated with holding fossil fuels following the Paris Agreement. In 2015, California became the first U.S. state to bring in fossil fuel divestment legislation for its two largest pension plans, CalPERS and CalSTRS. However, divestment is as much an economic decision as an environmental one. In recent years, almost one-half of the coal plants in the U.S. have announced that they will close or switch to cleaner fuel alternatives.[11] Two coal plants in Southern Ohio recently announced that they would close, as they are no longer economically viable.[12]

Understanding the preparedness of fossil fuel companies to adapt to a lower-carbon economy is important.

Exhibit 4: The Coal Exposure



Source: S&P Dow Jones Indices LLC and Trucost. Data as of Dec. 31, 2016. Chart is provided for illustrative purposes.

So what does this mean for market participants tracking the S&P/ASX All Australian 50, the S&P United Kingdom, and the S&P IFCI (covering emerging markets), which are the three indices in this group most aligned with coal-based activities? Understanding the preparedness of fossil fuel companies to adapt to a lower-carbon economy is important. So is anticipating climate policy.

In order to fulfill the objectives set out by the Paris Agreement, countries have submitted Intended Nationally Determined Contributions (INDCs) stating the post-2020 climate actions they plan to take to keep global warming below a 2°C temperature rise. Australia will implement an economy-wide target to reduce greenhouse gas emissions by 26%-28% below 2005 levels by 2030. The energy sector is an obvious target.[13]

As governments start to turn their intended climate actions into policies, market participants will need to think about which benchmarks are most suited to their future economy.

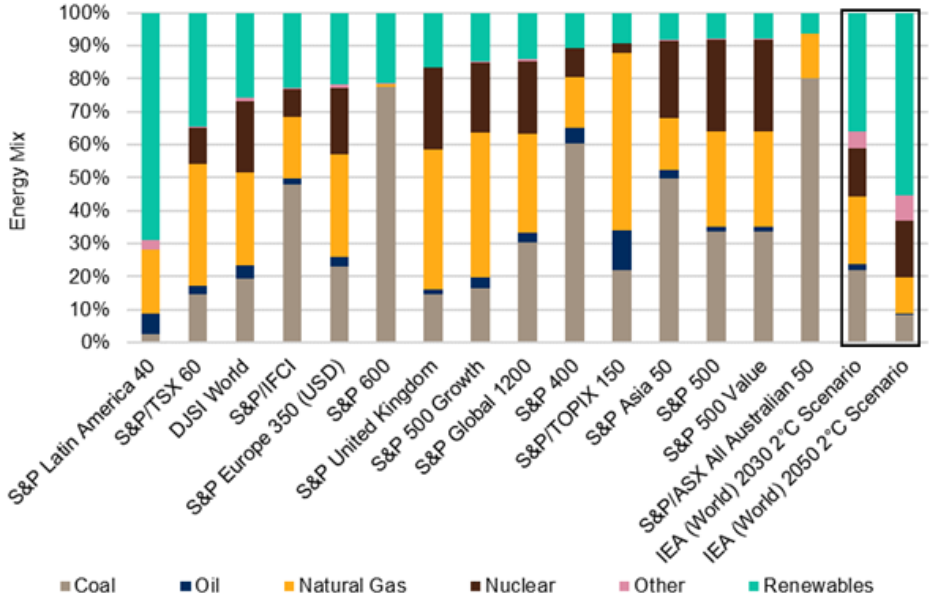
Market participants are being challenged to increase their investments in climate solutions, such as renewable energy and green infrastructure.

TRANSITIONING TO A LOW CARBON ECONOMY

Through the rhetoric of climate policy, climate science, and consumer demand, market participants are being challenged to increase their investments in climate solutions, such as renewable energy and green infrastructure. This section looks at the metrics market participants can use to understand how their current portfolio energy investments align with 2°C scenarios and how they are supporting the transition to a low carbon economy through their green investment choices.

Energy Transition

Exhibit 5: The Energy Transition



Source: S&P Dow Jones Indices LLC and Trucost. Data as of Dec. 31, 2016. Chart is provided for illustrative purposes.

Given the amount of money required to shift the world to a low carbon economy, the financial community will be instrumental in driving technological development and innovation. It is estimated that a USD 90 trillion investment in infrastructure will be needed over the next 15 years in order to attain the 2°C global warming limit set by the Paris Agreement. Almost 30% of that will need to be directed toward the energy sector.[14]

The International Energy Agency (IEA) has set energy generation mix targets for 2030 and 2050 that would keep the world on a 2°C warming pathway. Exhibit 5 shows the percentage of total energy generated by utilities over a 12-month period, divided between fossil fuels, renewables, and other power sources. Each index is compared to the International Energy Agency's 2°C scenarios to gauge current alignment with a global transition pathway.

The S&P Latin America 40 is potentially the best positioned index for the low carbon economy. It is already closely aligned with the IEA's 2050 global target for energy generation, due to its low exposure to coal power generation and its large hydroelectric power generation share. The S&P/ASX All Australian 50 has the furthest to go to decarbonize its generation mix due to its current coal exposure. However, we are seeing encouraging actions taken by local government to respond. The City of Melbourne, for example, has collaborated with others to source its energy from renewable sources, sending a signal to market participants to capitalize more renewable infrastructure in the area.[15] Under Australia's Renewable Energy Target scheme, over 23% of Australia's electricity will come from renewable sources by 2020.

The green-brown share revenue metric can help market participants increase their exposure to companies that are contributing to the economic shift from high to low carbon.

Stress-testing indices and portfolios for different regulatory scenarios can help to prioritize risks for portfolios benchmarked against multinational indices such as the S&P Global 1200.

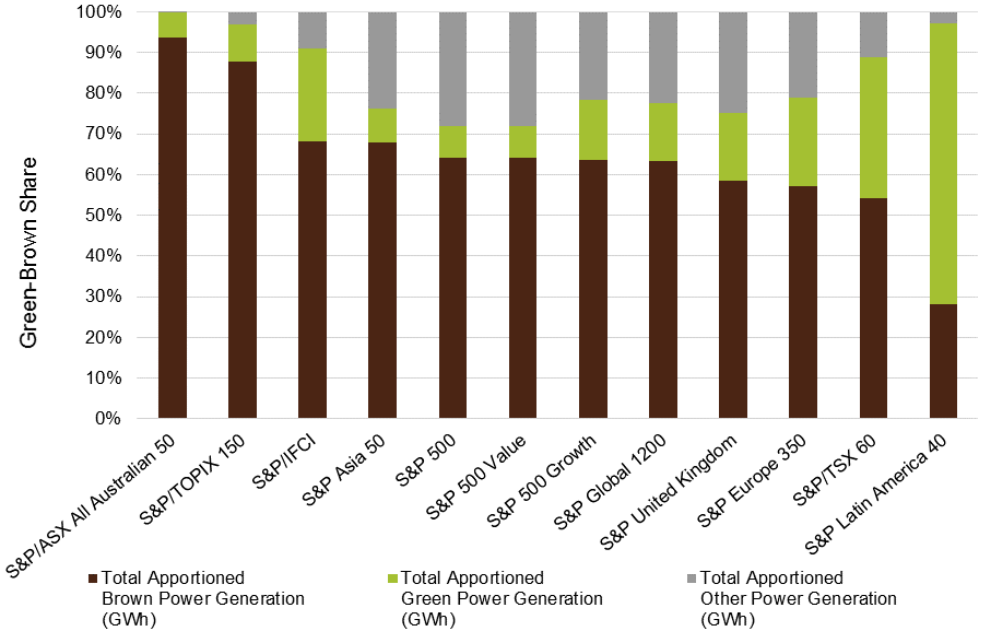
Green-Brown Revenue Share

While carbon footprints identify the most efficient companies in an overall index or portfolio, they do not recognize those companies that are contributing positively to the low carbon economy by offering climate-mitigation or adaptation solutions.

One approach to do this is to quantify the percentage of constituent revenues in an index deriving from climate solutions ("green") versus climate aggravators ("brown"). A manufacturer of electric vehicles versus fossil fuel-run internal combustion vehicles is one example. Some sectors are easier to classify than others, and market participants may disagree on how they would define a product, company, or sector as "green." However, with an appropriate taxonomy and comprehensive data disclosure, this metric can help market participants increase their exposure to companies

that are positively contributing to the economic shift from high to low carbon.

Exhibit 6: The Green-Brown Revenue Share



Source: S&P Dow Jones Indices LLC and Trucost. Data as of Dec. 31, 2016. Chart is provided for illustrated purposes.

Trucost has applied a green-brown taxonomy to index constituents in the utilities sector, looking at the total electricity generated across fossil fuel, renewable, and other fuel sources.

The green-brown share can either be expressed as a percentage of financial metrics, such as revenue or capex, or as a percentage of physical metrics, such as energy generation. Trucost has applied a green-brown taxonomy to index constituents in the utilities sector, looking at the total electricity generated across fossil fuel, renewable, and other fuel sources.[16]

Exhibit 6 shows the exposure of the benchmarks to green and brown activities at a point in time and their potential resilience in the face of growing carbon policy. The S&P Latin America 40, S&P TSX 60, and S&P Europe 350 rank well against index peers with regard to the "high green/low brown" division of energy sources by their utilities constituents. Forward-looking metrics, such as planned energy capacity or capex, can be applied to understand future exposure to green or brown activities and the speed at which a market is transitioning.

Both the Financial Service Board's (FSB) taskforce and Article 173 of the French Energy Transition Law for Green Growth recommend reporting on the positive contribution of portfolios to the low carbon economy. Over time, this disclosure will show which markets are pulling away from fossil fuels and fossil fuel-derived products. However, while green-brown share metrics can isolate those constituents that are offering climate solutions, market participants will need to take an additional step in order to quantify avoided emissions. Improved disclosure of climate-related opportunities by

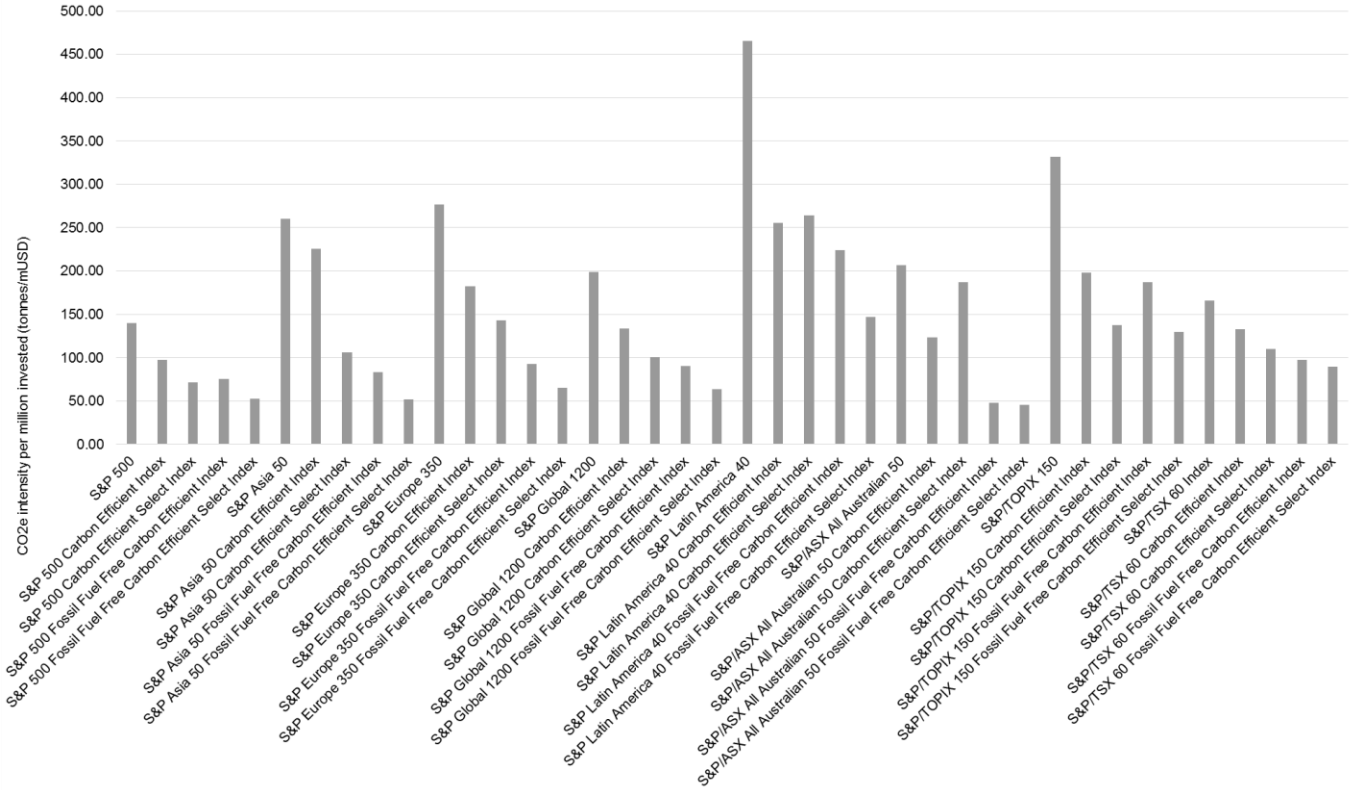
companies will provide the financial community with decision-useful information to allocate capital more efficiently.

DECARBONIZATION STRATEGIES

Another approach to minimizing climate risk exposure is to decarbonize portfolios. In France, the reporting requirements set out by Article 173 have not only created a significant shift in transparency but are also stimulating a change in the allocation of capital away from fossil fuel activities. This can be achieved through a number of strategies, including divestment, engagement, and optimization.

Carbon Optimization

Exhibit 7: Carbon Optimization



Source: S&P Dow Jones Indices LLC and Trucost. Data as of Dec. 31, 2016. Chart is provided for illustrated purposes.

Low carbon benchmarks and funds continue to grow on the back of investor-led demand. Signatories to the UN-supported Principles for Responsible Investment (PRI) represented USD 62 trillion in AUM as of April 2016. This means that a significant portion (87%) of global AUM[17] is committed to incorporating ESG factors into portfolio screening, engagement, optimization, and new products. As long-term asset owners often invest broadly across sectors, geographies, and asset classes, pension funds could be more exposed to climate risks than most. Carbon optimization provides an opportunity for asset owners to mitigate their risk.

The S&P 500 offers a clear example of this. By optimizing the index and excluding thermal coal, the S&P 500 Fossil Fuel Free Carbon Efficient Index offers a 46% reduction in carbon emissions.

For each of the benchmark indices included in this report, S&P DJI produces a family of lower carbon alternatives, some of which have been running since 2009. The S&P Carbon Efficient Indices most closely replicate the respective benchmarks. Index constituents are rebalanced to favor more carbon efficient companies and, as can be seen in Exhibit 7, these carbon efficient indices can reduce the carbon emissions apportioned to an investor substantially, without significant changes to returns.[18]

CONCLUSIONS

The Carbon Scorecard acts as a barometer for the carbon efficiency of the markets today and demonstrates that there is no single metric that can capture all climate risks and opportunities in a portfolio or index. A range of metrics will offer different perspectives and inform different decisions.

With the range of metrics that is currently available, we are already seeing a significant shift in transparency and changes in the allocation of capital. Decarbonizing portfolios is a growing trend that is helping market participants build resilience against transition risks as we move toward a lower carbon economy.

The pathway to a low carbon future is becoming easier to follow.

Climate policy is increasing and evolving at a rapid rate, driving changes that could affect future asset value. Just as policy is developing, there is a market evolution of climate-related disclosures and concepts as to how more granular, robust, and comparable data can be used. As the topic evolves further, market participants will be able to triangulate data in different ways using asset-level data, production data, and forward-looking metrics, for example. Methodological uncertainties persist around calculating and allocating portfolio carbon emissions. However, far from seeing this as a barrier to entry, the financial community is engaging in the debate, driving forward not only discussion, but also the development of new, more sophisticated tools that address multiple asset classes. In 2017, we should see the first market participants report against Article 173 requirements, the finalization of the FSB Taskforce for Climate-related Financial Disclosure's reporting recommendations, and the EU's Sustainable Finance High Level Expert Group publish a responsible investment policy roadmap.

The pathway to a low carbon future is becoming easier to follow.

[1] United Nations Framework Convention on Climate Change, http://newsroom.unfccc.int/

[2] Often referred to as the Paris Agreement.

[3] Direct emissions are the greenhouse gases emitted by the reporting entity (equivalent to the Greenhouse Gas Protocol's scope 1 emissions). First-tier indirect emissions are the greenhouse gases emitted by an entity's first-tier suppliers. This will include scope 2 and some upstream scope 3 emissions.

[4] Direct emissions are the greenhouse gases emitted by the reporting entity (equivalent to the Greenhouse Gas Protocol's scope 1 emissions). First-tier indirect emissions are the greenhouse gases emitted by an entity's first-tier suppliers. This will include scope 2 and some upstream scope 3 emissions.

[5] For an equity portfolio, market cap is the most appropriate apportioning metric when calculating an investor's "ownership" of emissions. However, when it comes to a fixed income portfolio, a balanced fund, or even an aggregated footprint across asset classes, enterprise value, net debt, gross debt, or total invested capital might all be considered.

Having allocated emissions to an investor on the basis of ownership, there are two commonly accepted approaches to calculating a portfolio's carbon footprint.

1. AUM method: dividing the ownership-apportioned carbon emissions[5] by the value of the holdings to give carbon emissions per USD 1 million invested.
2. Revenue method: dividing the apportioned carbon emissions by the apportioned revenues of the holdings to give carbon emissions per USD 1 million revenue generated.

Each approach has its benefits and limitations. The AUM method is perhaps the most immediately intuitive, but it is sensitive to swings in market cap making it difficult to compare year-over-year results. The revenue method indicates how operationally efficient the portfolio companies are in terms of carbon emitted per unit of "output" and identifies which companies have improved their efficiency over time. However, it is sensitive to market dynamics, commodity production yields, and currency exchange rates.

There is a third approach that does not apportion emissions to the investor.

Weighted average footprint: the carbon intensity of each constituent regardless of ownership (tCO_2e per USD 1 million) multiplied by its weight in the portfolio. As yet, there is no agreed global standard for calculating a portfolio carbon footprint, although in some countries we are starting to see a drive for standardization. The Swedish Pension Fund Authority, for example, issued a guidance document in 2016 for footprinting equity portfolios that will enable all Swedish funds to be compared on a like-for-like basis, even down to the reporting period.

[6] As of the Dec. 31, 2016.

[7] Proven fossil fuel reserves have a greater than 90% certainty of being recovered while still economically viable to do so, while probable reserves have a level of certainty between 50% and 90%.

[8] https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2016

[9] Energy companies are classified by the GICS® energy sector. This comprises companies engaged in exploration & production, refining & marketing, and storage & transportation of oil & gas and coal & consumable fuels, as well as companies offering oil & gas equipment and services.

[10] https://gofossilfree.org/commitments/

[11] https://www.nytimes.com/2017/03/31/opinion/climate-progress-with-or-without-trump.html?_r=0

[12] https://www.nytimes.com/2017/03/31/opinion/climate-progress-with-or-without-trump.html?_r=0

[13] "Australia's Intended Nationally Determined Contribution to a new Climate Change Agreement," August 2015.

[14] https://www.theclimategroup.org/news/new-climate-economy-report-shows-unprecedented-opportunity-clean-sustainable-infrastructure

[15] https://www.theguardian.com/sustainable-business/2016/dec/13/fossil-fuel-divestment-is-worth-7tn-globally-yet-australia-still-clings-to-coal

[16] Other power sources includes nuclear, biomass, and gas from landfill.

[17] The Boston Consulting Group put global AUM at USD 71 trillion in 2016: https://www.bcg.com/d/press/11July2016-Global-Asset-Management-2016-Doubling-Down-Data-38787

[18] S&P 500 Carbon Efficient Index

GENERAL DISCLAIMER