

Periculum™

## IN IT TO WIN IT:

Entering the  
Clean Energy Race

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# WHEN WILL YOU ENTER THE RACE?

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Imagine you're on an early morning, cross-country run. As your feet pound the dirt, you reflect on the shifts you're seeing all around you.

Your firm, like this running path, has been a reliable source of energy for decades. Then came new energy sources – clean energy that hopes to combat climate change – just like that new running track that cropped up near your well-beaten trail. Every day you see a group of runners racing each other, and they've encouraged you to come along, but your trail, like your business strategy, has never failed you. Then one day the rains flood your path, and when the water subsides, it is full of divots and holes. The runners ask if you're ready to enter their race. You pause to assess the risks of changing your routine, the ground you've trusted for so long, and getting involved with other people during your run. The question forms in your mind: if not now, when the path forward is unsure, will you ever enter the race at all?

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# SHIFTING ATTITUDES

With concerns about catastrophic events mounting, more products are being designed to operate on clean energy. More emphasis than ever is on individual and corporate responsibility to address climate change through green practices.

A recent report on the Paris Agreement showed that “not a single one” of the top 10 global carbon emitters is hitting its climate goals.<sup>1</sup> Further, new projections from scientists around the globe are showing disastrous consequences of climate change that have many now wondering if we can do anything to stop or slow it. These daunting projections include:

- Models that state there are just 11 years remaining to limit climate catastrophe.<sup>2</sup>
- UN reports that a widespread collapse of ecosystems will put humanity at risk.<sup>3</sup>
- Antarctic ice melting at a much faster rate than anticipated.<sup>4</sup>
- Global CO2 emissions have now reached a record level.<sup>4</sup>

One of the biggest movements towards clean energy comes from young people, both millennials, who are now firmly rooted in politics and the job market, and Generation Z, who are entering these scenes now. As millennials and Generation Z prepare for greater C-suite and investor involvement, it’s worth

noting that there is a cultural shift away from political allegiance. Instead, they believe air quality, ocean health, and other environmental issues are global concerns requiring attention. EY says in Sustainable Investing:

“Millennial investors are nearly twice as likely to invest in companies or funds that target specific social or environmental outcomes.”



They believe these issues are the responsibility of everyone — politicians and governments, corporations and businesses, communities, and the individual — and they plan to use their future power roles to accelerate change and urge immediate effects.

Social media serves as an impetus for reinforcing and furthering the movement among these generations. Facebook, Twitter, Instagram, Snapchat, and other outlets for disseminating news have increased visibility into the way in which the environment has changed, thus making the damage, and the outcries for new approaches, more evident.

## The Paris Agreement is one stepping-stone that has emerged from the conversation, but it relies on nations to take individual action. Until 55% of nations sign up, the accord will not take full effect.

Hashtags, shares, and retweets are leading to protests (like the Generation Z-led #ClimateStrike, corporate remonstrations, and new entrants into both the energy industry and the political scene. Because governments across the globe are struggling to come to an accord, more emphasis is being placed on individual and corporate responsibility to address the issue.


Corporate responsibility extends beyond the energy firm itself. Traditionally, the known objective of a firm was to maximise shareholder returns, and while that remains a priority, a new set of objectives was released by chief executives of leading firms in the U.S. after the Business Roundtable.<sup>5</sup> They determined that people, suppliers, communities, and the environment should come first as businesses seek to create cleaner ways to generate returns.

As a result, firms that work closely with traditional energy sources are also looking at how they can contribute to change. For example, The U.S.'s largest commercial insurance firm decided to move away from insuring and investing in coal. The firm's new policy states it will not underwrite new coal-fired plants and will stop investing in firms that receive greater than 30 percent of their revenue from coal mining.<sup>6</sup> The move is a first for U.S. insurance firms, but they joined several insurers in Europe and Australia who have started to address corporate responsibility by changing their business policies.

The Paris Agreement urges change "as soon as possible" with orders such as, "In order to achieve the long-term temperature goal...Parties aim to reach global peaking of greenhouse gas emissions as soon as possible, recognising that peaking will take longer for developing country Parties." Energy firms, including their supply chain participants, have an opportunity to secure their place in the rising clean energy production and distribution market. As the renewable energy market is increasingly defined by advancing technologies, new market entrants are capturing opportunities and setting high standards for legacy players.

Many more entrants will drive change, and this will alter how firms and countries deal with the shift. For example, the United Kingdom recently announced they would change their emissions reduction target. Their original goal under the Climate Change Act 2008 was to reduce emissions 80 percent by 2050, but this will now be amended to cut nearly 100 percent of emissions by 2050, with failure to comply leading to monetary consequences. This significant adjustment of the Act means firms now have an even shorter timeframe to push their changes through.

If you're not moving now to address clean energy, you may find decreasing opportunities as early entrants crowd the space, or you may get left behind. This could lead to reputational, strategic, financial, and operational risk. Here, we discuss what that means and how to prepare for the race.



"Energy firms, including supply chain participants, should act now to capture the opportunities of a new market – clean energy production and distribution.

Failure to enter the race now could result in being lapped by entrants already innovating."



# REPUTATIONAL RISK

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The shift to green energy, combined with intergenerational shifts, presents a real reputational risk to future sustainability of incumbent market participants.

Firms in renewable energy and energy efficiency will see expanding markets while producers of fossil fuels will experience increasing pressure to act against the backdrop of shrinking markets. Continuing to operate on environmentally unhealthy or dangerous strategies like unfriendly sources of energy may mean firms will face greater objections from the public.

## Risking Your Reputation for Dying Energy

Reputational risk is not new to energy firms, particularly in regards to oil spills, the collapse of oil prices, and the financial crisis which destroyed demand and toppled crude product pricing. During these times, firms often face liquidity and capital issues that force business model changes (often leading to corporate restructuring) as consumer habits change. Social media elevates this risk as advocates and activists sound off on crises and build a swell of support from the online community.

Archbishop Emeritus of Cape Town and Nobel Peace Laureate Desmond Tutu called for an apartheid-style boycott to save the planet when he said, "We can actively encourage energy firms to spend

more of their resources on the development of sustainable energy products, and we can reward those that do so by using their products."

Once these boycotts gain momentum, market pressure leads large energy consumers to cut ties with traditional brands. This leads to shareholders demanding changes to protect returns on investments, and the firm must work harder to keep loyal consumers and investors on board.

This is evidenced by a recent report from the Task Force on Climate-Related Financial Disclosures (TCFD) that showed more than 340 investors with nearly \$34 trillion in assets have committed to engaging with the world's largest corporate greenhouse gas emitters. The goal is to encourage strengthened climate-related disclosures through TCFD-recommended implementations as part of Climate Action 100+.

This proves that investors are anticipating the shift and are preparing to manage the shift in investment strategies and preferences which means legacy energy suppliers can no longer count on investor support. Wealth and asset managers have seen a significant influx of client funding flowing into



sustainable investments. This strategy has grown 107.4 percent annually since 2012 and currently accounts for 18 percent of the assets under management (AUM) in the wealth and asset management industry.<sup>7</sup> As climate-related risks and opportunities become more evident, there may be shifts in investor sentiment, consumer demand and societal expectations.<sup>8</sup>

The Paris Agreement centres on firms’ governance, strategy and risk management in responding to the financial risks from climate change, including the extent to which boards are strategically considering the distinctive elements of the risks.<sup>9</sup>

**Not anticipating and adhering to regulatory expectations could lead to severe reputational damage and result in loss of partners, investors, or customers.**

# STRATEGIC RISK

**With the prospect of many clean energy opportunities, firms are realising how important it is to diversify their offerings.**

Traditional energy firms are trying to avoid stranded assets – reserves of oil and gas that are listed as part of a firm’s valuation but may not be worth as much as expected. Repositioning, investing or gaining shares in green enterprises, and incorporating new technologies to deliver clean options can help mitigate strategic risk.

## A New Paradigm

Recently, a multinational British oil firm bought a \$200 million stake in Europe’s largest solar developer. Their strategy to diversify their business portfolio aimed to capture a part of the clean energy market. They are not the only oil and gas firm seeking new programmes, either:

- A Dutch oil firm pursued electric car charging firms<sup>10</sup>
- A Norwegian state-owned oil firm deployed “the world’s first floating windfarm”<sup>11</sup>
- A major energy operator in France took a 23% stake in Eren, a renewable energy firm<sup>12</sup>

As these examples illustrate, including clean energy markets in your strategy could prevent a financial spiral when liquidity in the antiquated oil market results in sales of assets. Further, the impact of the transition on

## Responding to reputational risk



Shareholders, investors, and consumers should see that your firm is making an effort to ‘go green’.



Anticipate and adapt to new regulatory requirements quickly.



Create goodwill by drafting and releasing a ‘clean energy’ policy.



Open dialogue with consumers on your plans, when you will execute the plan, and how they can help.



carbon-intensive sectors could affect energy and commodity prices, corporate bonds, equities, and certain derivatives contracts.

The new paradigm could also mean shrinking oil, gas, and coal markets and decreasing demand that will deflate prices and send revenues plummeting. Players in this market need to find alternative sources of income by expanding to more sustainable markets and products.

Repositioning early will yield, among other benefits:

- A unique appeal to more investors and firms who deal solely with renewable energy sources
- Support from regulatory authorities which can increase competitive advantage

The Financial Conduct Authority is eager to accelerate the shift to green energy and currently offers better circumstances for the shift, including first-mover advantages. These benefits may not be present in the future when firms need to catch up to renewable energy competition. Moving towards green energy early, then, is a competitive advantage that cannot be ignored.

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## Mitigating Strategic Risk



Look at the long term by shifting strategy to sustainable models over a decade or more, not just for the coming years, including:

- Identifying and describing the climate-related risks and opportunities the organisation has identified over the short, medium, and long term.
- Describing the impact of climate-related risks and opportunities on the organisation's businesses, strategy, and financial planning.



Consider different climate-related scenarios, including a 2°C or lower scenario, and how that will impact the resilience of the business strategy.



Anticipate regulations that require complete reliance on renewable energy.



Invest in new solutions, new sources of energy, and new technologies and methods of producing clean energy.



Build resilience with a larger cap and trade positions which may save costs in the future during the transition to renewable energy.



Identify how transitioning to clean energy sources may require strategic and operational adjustments including those along the supply chain.



Evaluate the composition and expertise of the Board to determine if you need to bring on clean energy subject matter expertise to support the strategic transition to clean energy and provide experience and insight to facilitate the transformation of operations.



# FINANCIAL RISK

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As Green Finance (defined by the G20's Sustainable Finance Study Group as the "financing of investments that provide environmental benefits in the broader context of environmentally sustainable development" shifts from oil money to clean energy money, firms that do not address the shift may face a lack of funding by investors from newer generations more so than traditional investors.

Fifteen percent of millennials would exit an investment due to objectionable firm activity compared with 7 percent of non-millennial investors.<sup>13</sup> Investments are moving. The Paris Agreement states countries should make, "finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development."

Similarly, the energy sector is considered one of the higher risk sectors of financial risk, particularly if the transition to a low-carbon economy occurs late and is fragmented. For example, a number of banks specifically identified the potential for significant disruption and financial risks related to the coal industry.<sup>14</sup>

## Reinforcing Financial Control

Financial stability is at risk if firms do not address the shift in the energy industry and look to alternative strategies that will sustain the firm into the future. Funds are being transitioned to firms that lead by example in addressing climate risk, particularly those in the fuel market, and 17 percent of millennials indicate they seek to invest in companies that use high quality ESG practices, compared with 9 percent of non-millennial investors.<sup>15</sup> This instability may lead investors to pass energy firms because they are not as attractive an investment. The C-Suite should revise forecasts to include assumptions that understand the transition and financial consequences borne through strategic transition and those related to the speed of transition to renewable energy sources. By narrowing in on external and internal environments related to the transition, the C-Suite can effectively deliver methods to capitalise on the transition and reassure investors.

While the risk of a sudden and significant system-wide adjustment may not be immediate, the financial risk from an abrupt transition to a low-carbon economy can increase if, over the coming years, portfolios are not aligned with expected climate pathways.<sup>16</sup>



The Financial Conduct Authority has listed steps they are taking to enforce Green Finance, including<sup>17</sup>:

01	02	03	04
Addressing the recommendations of the Law Commission's report on Pension Funds and Social Investment.	Boosting innovation in specialist green products and ensuring these markets work well and deliver good outcomes for all consumers.	Exploring whether greater encouragement is needed to ensure issuers of securities admitted to trading on a regulated market give investors appropriate information, and whether issuers require further clarity over what is expected of them.	Seeking views on introducing a new requirement for financial services firms to report publicly on how they manage reputational and operational climate risks. This may make it more difficult for energy firms to gain access to funds, as banks will not want to risk their reputation by being associated with firms harming the environment.

## Mitigating Financial Risk



Deliver complete transparency to the board on best case and worst case future financial performance linked to the existing production of energy and scenarios linked to the transition to clean energy.



Perform scenario analysis to assess the readiness of the firm to manage financial risk based on sudden changes in the regulatory regime or because of activists casting doubt on your reputation.



Determine the firm's ability to fund the transition to renewable energy sources.



Assess whether your firm is capable of financing a transformation, and if not, how to raise the capital to begin changing.



Present your shareholders with a plan showing how you are actively adapting towards renewable energy, to maintain their confidence and encourage continued investment.



Engage new sources of capital investments to support the transition to new energy products and services, providing higher returns.

COMPLIANCE

REGULATIONS

# REGULATORY RISK

Regulation risk refers to government action prompted by climate change.

Regulation risk can take many forms, including rules that add costs or impede specific business activities, subsidies in support of a competitor, or withdrawal of subsidies. In many industries, government plays a crucial role in setting the rules of the game; with climate change in mind, many of those rules are changing. One example includes the continued tightening of emission standard regulation on the automotive industry in which you must have fewer emissions in an ever-expanding group of pollutants.

## Help Shape the Future

Governments are devising new policies to advocate clean energy supply. As competition evolves with new market entrants, greater regulation will occur covering the entire value chain from production to consumer delivery. Early entrants to this change have an opportunity to influence and shape regulations. Further, you could develop an internal strategy on climate change to put the firm in a position to proactively anticipate regulations and policy changes. In addition, you can work with external stakeholders, such as regulators and industry groups, to get their perspectives thereby anticipating potential regulations.

That shift in regulation is already occurring, particularly in the U.S., where tougher policies have surfaced around extraction of oil and the delivery of energy to end users. Some of the shift is led by increasing energy demands. One United Kingdom crisis management paper indicated if electricity were lost, there would be three days before the UK saw public disorder on the street. Energy is a critical society function, that is linked to public order and the survival of economic critical activities such as transplant transportation, hospital functioning, and food preservation, so ensuring its continuity is a priority for regulators.

In the long term, timely preparation and knowledge of regulatory changes could reward the firm by giving the Board and C-suite time to adjust business models and strategies to align with regulations, thus decreasing the potential for fines and missed deadlines when the regulation takes hold.

Transitioning to clean energy is not an overnight transition — it is a multi-generational effort that will continue to see greater regulation. Getting prepared now can set your firm up for the future.

## Mitigating Regulatory Risk



Investigate political movements and proposed regulation globally and in your region that set a new standard for the future of regulation of the energy industry.



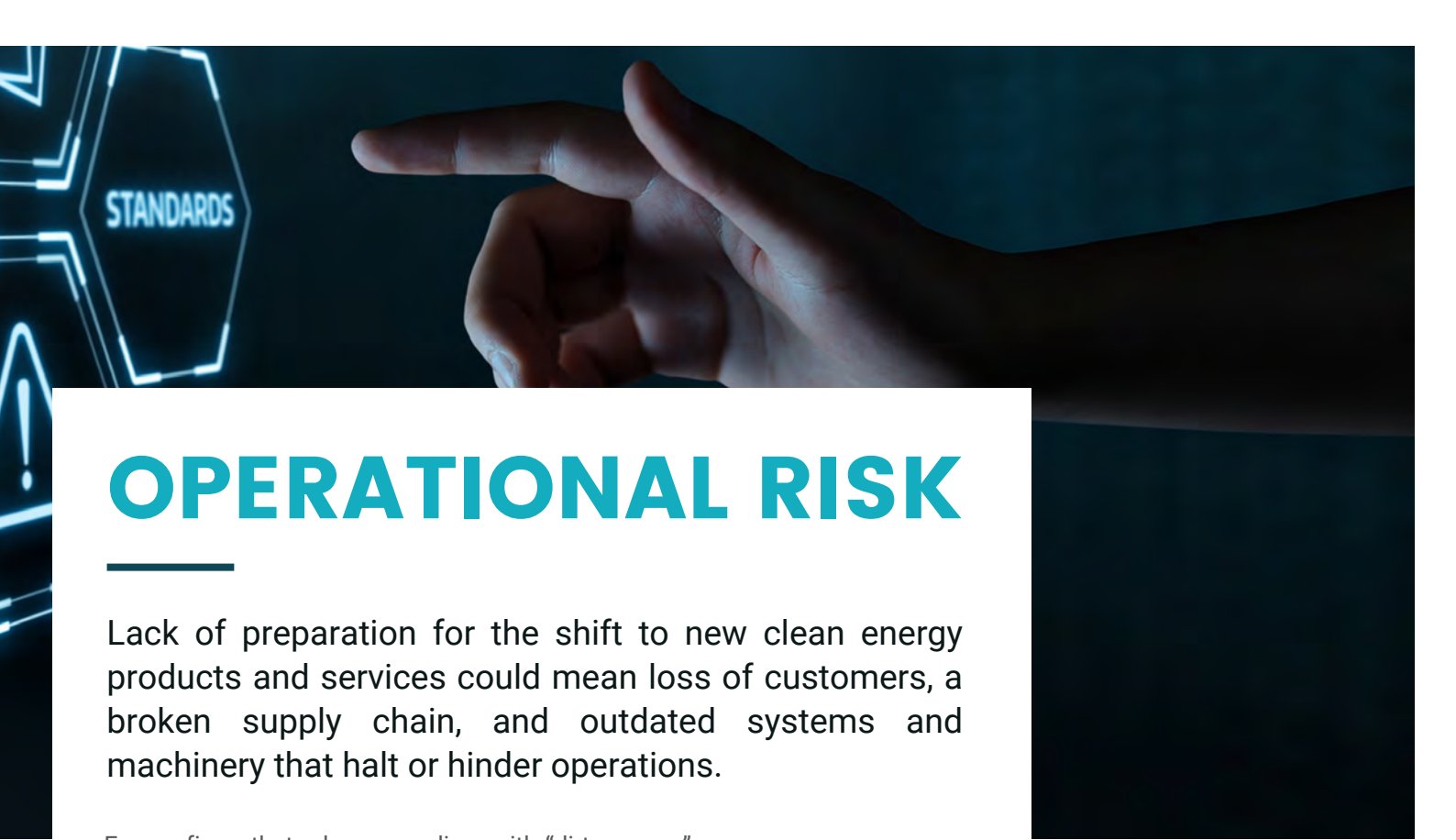
Perform scenario analysis on the potential effects of regulation to operations and strategy.



Look at other regional regulations and forecast where your strategies should be before planning them.



Work with special interest groups, regulators, and other subject matter experts to analyse your transition plans and ensure that current and future regulations are incorporated into the transition of your strategy. Tighten up areas that may fall out of line with current or future regulations.



# OPERATIONAL RISK

Lack of preparation for the shift to new clean energy products and services could mean loss of customers, a broken supply chain, and outdated systems and machinery that halt or hinder operations.

Energy firms that rely on suppliers with “dirty energy” practices may need to consider where they get their supplies, and long-term, whether the relationship is viable.

## Looking into operation risk through the lens of supplier adjustments

The suppliers who work with you, like fabricators of steel for pipelines or chemical producers, are part of your extended business. They pose an often underestimated risk to your firm. You will want to understand how they are preparing for the changing business environment, what increases or decreases in pricing will result from the transition to renewable energy, and what will happen to their ability to supply your needs. Anticipating suppliers’ adjustments will help you maintain operational ability and build resilience in case a supplier no longer aligns with your operational requirements. For more information on building resiliency in the supply chain, read our free publication. [Here Today, Gone Tomorrow: Pre-empting Supply Chain Disruptions](#).

If operations suffer because of delayed product, being out priced, or the supplier losing money, you need to be prepared with additional options. Communication and transparency along the supply chain at this point is critical. The more you know, the more you can mitigate risk should a supplier not be able to fulfill their contract.

## Mitigating Supply Risk



Demand regular updates on how suppliers are shifting to clean energy.



If you are not comfortable with the speed or effort your suppliers are putting into the shift, raise the issue with leadership, and, if nothing changes, it is time to re-examine the relationship.



Look for cheaper options if your current suppliers are going to raise prices or negotiate and update the pricing in your contracts. Remember that many times, suppliers that already operate on clean energy will have more stable prices and are already prepared for the future.



Keep an eye on your suppliers’ financial situation, and create a plan B, C, and D.





# PREPARE FOR THE FUTURE, NOW

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Based on the significance of the transition, here's what we suggest firms could do to prepare for the race to new energy:

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Engage the Board and C-suite in preparation of strategic changes.

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Review or adopt an ESG (Environmental, Social and Governance) policy in preparation of “the race” (i.e. a policy centered around environmental, corporate, and social responsibility).

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Develop a short- and long-term business plan to allow for smooth transitioning towards renewable energy (including adapting your own operations towards a more friendly way of producing, and investing in renewable energy).

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Assess the risks of your current energy portfolio and the risks of transitioning to a clean energy source.

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Engage the leadership team in the formation and construction of the business strategy and the transition and role of corporate responsibility in defining and delivering the future strategy.

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Enhance/increase Corporate Social Responsibility (CSR) and public relations activities and help customers understand the plan and how it's going to benefit them in the future. Attract positive media to create a strong reputation.

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Review third-party risk assessments to identify which suppliers are failing to adapt.

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Continuously monitor changing demands regarding the transition, and the firm's efforts to mitigate risk.

# THE RACE GOES ON...

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You're back on the track — and you've entered the race. It's a long run, and your energy is low. You look beside you to see no one is slowing down. They are not going to let you win, so you've got to make a decision — push harder or give up. You're not a quitter. You wanted to be in this race, so you decide you're in it to win it.





<sup>1</sup><https://www.axios.com/paris-agreement-countries-meeting-pledges-1261f497-3ec7-4192-ba21-83ae339762be.html>

<sup>2</sup>Reported: 28 March 2019. <https://www.un.org/press/en/2019/ga12131.doc.htm>

<sup>3</sup>Reported: 6 May 2019. <https://www.un.org/sustainabledevelopment/blog/2019/05/nature-decline-unprecedented-report>

<sup>4</sup>Reported: 4 April 2019. <https://www.smithsonianmag.com/smart-news/warming-temperatures-could-transform-antarctica-plant-filled-land-green-180971880/>

<sup>5</sup>"Business Roundtable is an association of chief executive officers of America's leading companies working to promote a thriving U.S. economy and expanded opportunity for all Americans through sound public policy."

<sup>6</sup><https://grist.org/article/first-major-u-s-insurance-company-moves-away-from-coal/>

<sup>7</sup>EY. (2017). Sustainable investing: The Millennial investor. [https://www.ey.com/Publication/vwLUAssets/ey-sustainable-investing-the-millennial-investor-gl/\\$FILE/ey-sustainable-investing-the-millennial-investor.pdf](https://www.ey.com/Publication/vwLUAssets/ey-sustainable-investing-the-millennial-investor-gl/$FILE/ey-sustainable-investing-the-millennial-investor.pdf)

<sup>8</sup>Prudential Regulation Authority. April 2019. Supervisory statement: "Enhancing banks' and insurers' approaches to managing the financial risks from climate change", pg. 19. <https://www.bankofengland.co.uk/-/media/boe/files/prudential-regulation/supervisory-statement/2019/ss319.pdf>

<sup>9</sup>Prudential Regulation Authority. April 2019. Supervisory statement: "Enhancing banks' and insurers' approaches to managing the financial risks from climate change", pg. 11. <https://www.bankofengland.co.uk/-/media/boe/files/prudential-regulation/supervisory-statement/2019/ss319.pdf>

<sup>10</sup><https://uk.reuters.com/article/uk-newmotion-m-a-shell/shell-buys-newmotion-charging-network-in-first-electric-vehicle-deal-idUKKBN1CH1R5>

<sup>11</sup><https://www.theguardian.com/business/2017/jun/27/hywind-project-scotland-worlds-first-floating-windfarm-norway>

<sup>12</sup><https://www.total.com/en/media/news/press-releases/total-partners-eren-renewable-energy-expand-its-renewable-business>

<sup>13</sup>EY. (2017). Sustainable investing: The Millennial investor. [https://www.ey.com/Publication/vwLUAssets/ey-sustainable-investing-the-millennial-investor-gl/\\$FILE/ey-sustainable-investing-the-millennial-investor.pdf](https://www.ey.com/Publication/vwLUAssets/ey-sustainable-investing-the-millennial-investor-gl/$FILE/ey-sustainable-investing-the-millennial-investor.pdf)

<sup>14</sup>Prudential Regulation Authority. April 2019. Supervisory statement: "Enhancing banks' and insurers' approaches to managing the financial risks from climate change", pg. 23. <https://www.bankofengland.co.uk/-/media/boe/files/prudential-regulation/supervisory-statement/2019/ss319.pdf>

<sup>15</sup>EY. (2017). Sustainable investing: The Millennial investor. [https://www.ey.com/Publication/vwLUAssets/ey-sustainable-investing-the-millennial-investor-gl/\\$FILE/ey-sustainable-investing-the-millennial-investor.pdf](https://www.ey.com/Publication/vwLUAssets/ey-sustainable-investing-the-millennial-investor-gl/$FILE/ey-sustainable-investing-the-millennial-investor.pdf)

<sup>16</sup><https://www.fca.org.uk/publication/feedback/fs19-6.pdf>

<sup>17</sup>Prudential Regulation Authority. April 2019. Supervisory statement: "Enhancing banks' and insurers' approaches to managing the financial risks from climate change", pg. 8. <https://www.bankofengland.co.uk/-/media/boe/files/prudential-regulation/supervisory-statement/2019/ss319.pdf>



# About Periculum

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Periculum Associates is a leading global risk management company providing tailored forward-thinking solutions to clients across industries bringing agility, creativity and authenticity to every client engagement. We help transform risk management into competitive advantage by assisting our clients in innovating and growing, affecting change, putting data to better use and managing risk more effectively to future proof their businesses.

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