A4S ACCOUNTING FOR SUSTAINABILITY

IMPLEMENTING THE TCFD RECOMMENDATIONS

Practical Example: SSE

THE PRINCE OF WALES'S CHARITABLE FUND

sse

TCFD TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES

WHAT IS THE TCFD?

The Financial Stability Board's Task Force on Climate-related Financial Disclosures (TCFD) was set up by the Governor of the Bank of England and former Chair of the Financial Stability Board, Mark Carney, and is chaired by Michael Bloomberg. It was established to develop recommendations to help address the challenges of climate-related disclosure faced by:

- Issuers who generally have an obligation under existing law to disclose material information, but lack a coherent framework to do this for climate-related information.
- Investors, lenders and insurers who need decision-useful, climate-related information to make informed capital allocation and financial decisions.

The recommendations are structured around four thematic areas that represent core elements of how organizations operate: governance, strategy, risk management, metrics and targets.

HOW A4S SUPPORTS THE TCFD

The Prince's Accounting for Sustainability Project (A4S) supports the adoption of the TCFD recommendations. To do this, we work with key stakeholder groups to build awareness and provide access to the skills and knowledge required for implementation. Our activities have included:

- Providing a platform for Chief Financial Officers (CFOs), Pension Fund Chairs and Accounting Body Chief Executive Officers to signal their commitment to support the recommendations and work with their peers to improve disclosure across sectors and regions – see **A4S Statements of Support for the TCFD recommendations**.
- Running a series of global implementation workshops to provide finance teams with practical ways to embed the recommendations within their organizations.
- Publishing a **TCFD Implementation: Top Tips for Finance Teams** booklet, based on the experiences of early adopters.
- Providing insight into how corporates have implemented the TCFD recommendations by publishing **practical examples** (including this one) on the steps taken, challenges faced and barriers overcome.

Recommendations of the TCFD

SSE: OUR WORK ON THE TCFD RECOMMENDATIONS

WHAT?

SSE is a regulated energy company listed on the London Stock Exchange. We are engaged in the provision of energy and related services in the UK and Ireland, and the developing, operating and owning of energy and related infrastructure. Our vision is to be a leading energy provider in a low-carbon world. Our purpose is to provide the energy needed today while building a better world of energy for tomorrow.

In November 2017, we made a public commitment to meet the TCFD recommendations in full by March 2021. These recommendations have provided us with a framework to increase our disclosure of climate-related information, with an emphasis on financial disclosure.

Led by the Finance Director, the work we have done to date includes:

- Developing our scenario analysis
- Quantifying the climate-related risks and opportunities
- Enhancing the governance and management of climate-related issues

We have enhanced the disclosures in our annual report each year to reflect our progress. In 2017, we were reporting on our carbon emissions reduction as a core part of our low-carbon strategy. In 2018, we started reporting on our pathway towards full TCFD disclosure. This included shaping our role in supporting a low-carbon future and setting a new carbon intensity ambition for 2030. In 2019, the transition to a low-carbon electricity system became our overarching strategic focus. Our disclosures respond to each of the four thematic areas of the TCFD recommendations.

We also presented, for the first time, an analysis of the potential financial impact of climate-related effects on our business in our Sustainability Report 2019. We aim to present this information in our annual financial reports in the next reporting cycle.

We have also been responding to the **CDP Climate Change Program**, which for the first time in 2018 addressed the TCFD recommendations. In 2018 and 2019, we were awarded an ‘A-’ for our response.

Annual Report 2019
(Pages 28-31)

Sustainability Report 2019
(Pages 22-25)

WHY?

In 2018/19, we had 1,510MW of coal-fired generation and 5,221MW of gas and oil-fired generation, which together made up 68% of our generation portfolio. The carbon emitted from our electricity generation activities is our most material environmental impact.

We recognize that climate change poses significant risks to society and to our business. We also recognize the need to decarbonize presents significant opportunities in supporting the UK and Ireland to transition to low-carbon electricity systems.

Supported by initiatives such as the TCFD, investors are also recognizing the impact of climate change on their investment portfolios. This means capital is increasingly flowing to assets that are well-positioned to benefit from the low-carbon transition.

By implementing the TCFD recommendations, we can respond effectively to all of the above. It also gives us the opportunity to engage with investors and other stakeholders to ensure that our business is resilient to policy and market changes. This is particularly important in view of the UK Government's commitment to achieving net zero emissions by 2050. As the UK Government decides on the need for further legislation, a growing sense of urgency to tackle climate change has also piqued stakeholder interest in the action we are taking. We also respond to this through our TCFD disclosures.

"I signed SSE up to fulfil each one of the TCFD recommendations. I did that for what I believe to be an obvious reason. SSE is – above all – a long-term company. We have energy assets over 40 years old and we are building new assets that will last another 40. Our shareholders – and our wider stakeholders – demand to understand how we are managing the risks of climate change. And the opportunities that arise from climate change – the transition to a lower carbon energy mix – represent the most exciting growth opportunities for SSE in the future. To facilitate this, SSE aims to reduce the carbon intensity of its electricity production by a further 50% by 2030, based on 2017/18 levels. This means that SSE's electricity generation carbon emissions are now forecast to be around 150gCO_2e/kWh by 2030."

Gregor Alexander, Finance Director, SSE

HOW?

DEVELOPING OUR SCENARIO ANALYSIS

In 2016, we stress tested our business against three core climate scenarios for the first time. The first is a 2°C increase above pre-industrial levels ('Gone Green'), the second a 1.5°C increase ('Super Green'), and the third a 3-4°C increase ('No Progress'). We then reported on how our business model is resilient to each of these scenarios in our '**Post-Paris**' report. This work underpins the progress we have made towards meeting the TCFD recommendations so far. It is also our response to requests from institutional investors for additional disclosure relating to climate-related risks and opportunities.

Main aims of the scenario analysis:

- Stress test our business against different climate scenarios.
- Describe how our existing business model is resilient to each of the scenarios.
- Provide a basis for ongoing stakeholder feedback.

In developing our scenario analysis, we used internal data sets and assumptions made in our existing business models. We considered the views of departments across the business to better understand risks and time horizons. We also took the time to consider impacts and dependencies. This helped us to report on the risks and opportunities that are most material to our organization.

We involved experts in a steering group to test processes and review disclosures. We also documented the methodologies, parameters and assumptions used to support the comparability and consistency of disclosures.

Post-Paris report

DEVELOPING OUR SCENARIO ANALYSIS (CONTINUED)

In light of our low-carbon business model, our investors are especially keen to understand the role our gas businesses will play in the future. At our Annual General Meeting in 2019, the Institution Investor Group on Climate Change asked the following question, "Will the company explore options for re-issuing its 2016 scenario analysis work, particularly examining how its capex plans stack in a 1.5˚C/high ambition world?"

Our '**Transition to Net Zero: The Role of Gas**' report, published shortly afterwards, did exactly that. It provided detailed disclosure on the resilience of our gas businesses to different climate scenarios. The focus was on our material gas-related business activities in the UK and Ireland that are most impacted by market and policy changes. We considered the medium (2023 to 2030) and long (2031 to 2050) time horizons in our analysis.

Main conclusion:

- We are in a good position to adapt our portfolio to the different scenarios.
- We are ready to respond to innovative low-carbon technology developments in the transition to a net zero world.

Transition to Net Zero report

QUANTIFYING THE CLIMATE-RELATED RISKS AND OPPORTUNITIES

Within SSE, the consideration of climate-related risks are:

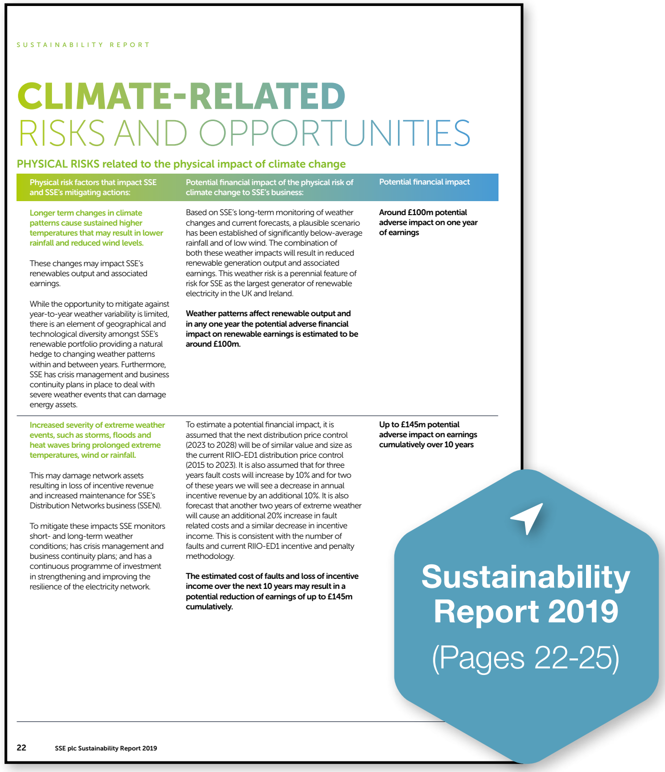
- Integrated into our Group Risk Management Framework which continuously assesses the 10 Group Principal Risks, the majority of which are influenced to varying degrees by climate change.
- Specifically identified and assessed in a focused medium-term risk assessment process, which is governed by a steering group.

The in-depth assessment helps us to understand the impact of climate-related risks and opportunities on our business, including the potential financial impact.

In line with our approach to help stakeholders properly assess our performance, we have increased transparency of how we are managing our most material climate-related risks and low-carbon opportunities. More detailed disclosure and analysis can be found in our Sustainability Report 2019.

The analysis presents the potential financial impact of climate change on our business. The analysis does not constitute forward-looking guidance, rather it explores uncertain yet plausible outcomes.

This supports the aim of providing consistent, comparable and clear climate-related financial information. The outcomes are presented as high-level estimates and are likely to change and evolve in the future as our thinking matures. All this information helps to outline the next step of our journey to meet the TCFD recommendations.



SUSTAINABILITY REPORT

CLIMATE-RELATED RISKS AND OPPORTUNITIES

PHYSICAL RISKS related to the physical impact of climate change

Physical risk factors that impact SSE and SSE's mitigating actions:	Potential financial impact of the physical risk of climate change to SSE's business:	Potential financial impact
Longer term changes in climate patterns cause sustained higher temperatures that may result in lower rainfall and reduced wind levels. These changes may impact SSE's renewables output and associated earnings. While the opportunity to mitigate against year-to-year weather variability is limited, there is an element of geographical and technological diversity amongst SSE's renewable portfolio providing a natural hedge to changing weather patterns within and between years. Furthermore, SSE has crisis management and business continuity plans in place to deal with severe weather events that can damage energy assets.	Based on SSE's long-term monitoring of weather changes and current forecasts, a plausible scenario has been established of significantly below-average rainfall and of low wind. The combination of both these weather impacts will result in reduced renewable generation output and associated earnings. This weather risk is a perennial feature of risk for SSE as the largest generator of renewable electricity in the UK and Ireland. **Weather patterns affect renewable output and in any one year the potential adverse financial impact on renewable earnings is estimated to be around £100m.**	**Around £100m potential adverse impact on one year of earnings**
Increased severity of extreme weather events, such as storms, floods and heat waves bring prolonged extreme temperatures, wind or rainfall. This may damage network assets resulting in loss of incentive revenue and increased maintenance for SSE's Distribution Networks business (SSEN). To mitigate these impacts SSE monitors short- and long-term weather conditions; has crisis management and business continuity plans; and has a continuous programme of investment in strengthening and improving the resilience of the electricity network.	To estimate a potential financial impact, it is assumed that the next distribution price control (2023 to 2028) will be of similar value and size as the current RIIO-ED1 distribution price control (2015 to 2023). It is also assumed that for three years fault costs will increase by 10% and for two of these years we will see a decrease in annual incentive revenue by an additional 10%. It is also forecast that another two years of extreme weather will cause an additional 20% increase in fault related costs and a similar decrease in incentive income. This is consistent with the number of faults and current RIIO-ED1 incentive and penalty methodology. **The estimated cost of faults and loss of incentive income over the next 10 years may result in a potential reduction of earnings of up to £145m cumulatively.**	**Up to £145m potential adverse impact on earnings cumulatively over 10 years**

22 SSE plc Sustainability Report 2019

Sustainability Report 2019 (Pages 22-25)

ENHANCING THE GOVERNANCE AND MANAGEMENT OF CLIMATE-RELATED ISSUES

While our Finance Director leads the way for SSE to fulfil each of the TCFD recommendations, we have full support from executive management to carry out the work.

Our Chief Executive has lead responsibility for climate-related issues, including at the board level. Our Finance Director and Divisional Finance Directors have played a key role in assessing the financial implications under different scenarios. In addition, we appointed our first Chief Sustainability Officer, reporting directly to the Chief Executive – one of only a small number of FTSE 100 firms to do so. With the role effective as of 1 April 2019, the Chief Sustainability Officer advises the Board, Executive Committee and business units on climate-related matters and provides support in the implementation of relevant initiatives.

With the right structures and responsibilities in place to govern and manage climate-related issues, teams can work together under a clear vision from the Finance Director to enhance disclosures. As a result, we made significant progress in 2018/19 and established a clear TCFD path for 2019/20 and beyond.

NEXT STEPS

For financial markets and the wider economy to properly recognize the cost of climate change, the enhancement and disclosure of quality climate-related data is of vital importance. We will therefore continue to improve our TCFD disclosures and respond to the CDP Climate Change Program.

Our finance team is now undertaking another round of discussions with internal stakeholder teams to further refine our 2018/19 assumptions. We want to ensure that our TCFD disclosures include all available information, and our scenario analysis takes account of policy and regulatory developments.

We will work with the Finance Director, investor relations team and corporate sustainability team to ensure external feedback is addressed in our 2019/20 TCFD disclosures.

In conjunction with our risk teams, we will also seek to ensure that climate-related factors are further embedded into our central risk management processes.

Finally, we will watch closely the work done by other companies in this area and continue to listen to our stakeholders to further develop our approach to disclosing climate-related information.

SSE'S TOP TIPS

1 Use internal resources

Use the scenario analysis already performed in the normal course of strategic planning and the assumptions made in your existing business models. This will help you to get internal buy in for making climate-related disclosures.

2 Consider impacts and dependencies

Take time to consider a wider scope of impacts and dependencies. This will help you to articulate the actual scope that is relevant to your business and report on the risks and opportunities that are most material to your organization.

3 Document and disclose

Document the methodologies, parameters and assumptions used. This will provide clarity over what is being measured and reported, and serves as a useful reference as the methodology evolves over time. Clear disclosure of your methodologies will also support the comparability and consistency of TCFD disclosures in subsequent years.

4 Engage the business

Consider the views of other departments (eg sustainability, risk, business operations, procurement, legal, investor relations) on risks and time horizons. Long term may not mean the same thing to different parts of the business.

5 Involve experts

Involve experts in a steering group to test processes and review disclosures. Ensure that it runs under appropriate governance. This should include the CFO and finance team, as well as senior executives involved in the annual reporting process.

6 Start now

Start to measure and manage the long-term risks and opportunities of climate change now. Mandatory disclosure requirements are looking increasingly likely, so it's best to be prepared.

THE A4S CFO ESSENTIAL GUIDE SERIES

LEAD THE WAY

Developing a strategic response to macro sustainability trends

- Managing Future Uncertainty
- Engaging the Board and Executive Management*
- Finance Culture
- Incentivizing Action*

TRANSFORM YOUR DECISIONS

Integrating material sustainability factors into decision making

- Strategic Planning, Budgeting and Forecasting
- Management Information
- Capex

MEASURE WHAT MATTERS

Developing measurement and valuation tools

- Natural and Social Capital Accounting
- Social and Human Capital Accounting
- Embedding Climate Risk into Valuations*

ACCESS FINANCE

Engaging with finance providers on the drivers of sustainable value

- Enhancing Investor Engagement
- Debt Finance
- Implementing the TCFD Recommendations
- Implementing a Sustainable Finance Framework

*coming soon

www.accountingforsustainability.org/guides

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