



UNIVERSITY OF
CAMBRIDGE
INSTITUTE FOR
SUSTAINABILITY LEADERSHIP

The Paris Climate Agreement: Implications for banks, institutional investors, private equity and insurers

February 2016



In brief

- The Paris Agreement delivered consensus that, to address climate change, significant economic transition is both needed and underway, most notably the energy transition.
- For internationally operating financial institutions, the commercial drivers making this a strategic issue (risk, regulatory, investor sentiment and market opportunity) have therefore been amplified.
- A response framework on three levels is suggested:
 - i. Diagnose alignment with countries' energy transition plans and the implications of any gaps
 - ii. Implement coherent internal programmes to both manage risk and seek new opportunities to support clients
 - iii. Engage in collaborative efforts that seek to reduce residual uncertainty by ensuring countries' energy transition goals are supported by comprehensive financing strategies

Introduction

The international agreement at the Paris climate change summit strengthens the prospect of significant transitions across a wide range of sectors in all economies over the next decade and beyond. Of particular significance is the **energy transition** that the Paris Agreement signals. The momentum that it will give to national emission reduction plans and targets, and the related actions of international, sub-national and private sector organisations, will generate significant risks and opportunities for the financial services sector, some in the near term.

This is reflected in the Financial Stability Board Task Force on Disclosure of Climate-Related Financial Risks, referred to later in the paper.

CEOs of financial institutions need a practical way forward to navigate the risks and opportunities and play an appropriate role as responsible corporate citizens, against a current backdrop of acute short-term pressures from shareholders and regulators.

This briefing paper summarises the key issues and sets out some thoughts about a potential pragmatic response which strikes the necessary balance between the short and longer term.

The Paris Agreement

The Agreement forged at COP21 in Paris is the culmination of six years of international negotiations. For the first time, it provides:

- a framework to drive forward national action on climate change in all of the world's major economies;
- a robust and transparent process to monitor the implementation of those national actions;
- a timetable for nations to review their actions and raise their level of ambition;
- international mechanisms to promote climate-friendly finance, carbon trading, technology transfer and adaptation to climate change impacts.

National emissions reduction plans – the INDCs

In advance of the COP21 negotiations, all countries were asked to submit their national plans and targets for limiting greenhouse gas (GHG) emissions and adapting to the effects of climate change. These are known as Intended Nationally Determined Contributions, or INDCs.

- The developed economies have typically set absolute targets (e.g. the EU has committed to a 40 per cent reduction in emissions by 2030; the USA target is a 26–28 per cent reduction by 2025).
- The large developing economies have typically set

GHG emission intensity targets per unit of GDP, so as not to constrain development (e.g. China will lower emissions per unit of GDP by 60–65 per cent, and India by 33–35 per cent, both by 2030).

- Large middle income economies such as South Korea and Mexico and South Africa have typically set significant reduction targets against 'Business As Usual (BAU)' scenarios.

The INDCs, which document the targets and plans that countries are willing to deliver as part of a global process, and in many cases are likely to be overachieved, show that all of the world's major economies are planning to significantly transition away from 'Business As Usual' emissions between now and 2030. This will be achieved through a patchwork of policy and regulatory measures which will impact on business practices and investment for years to come, with a particular focus on the energy sector, both in production of energy and its consumption, with the consequent CO² emissions.

If fully implemented and built upon, the INDCs set the world on a path to an expected temperature rise of 2.7°C. The stated ambition of the Paris Agreement is to hold temperature rise to between 1.5 and 2°C. The process to review national plans (with an initial review in the early 2020s) will provide the opportunity to further increase the pace of emission reduction towards the pathway demanded by the scientific community. Countries are also actively discussing how to increase the pace of carbon reductions before 2020, although there the focus is on efforts led by non-state actors.

The emerging energy sector transition

Significant opportunities and risks will emerge for the financial sector as the energy transition gains pace. The transition is unlikely to be smooth. Policies of individual governments will inevitably wax and wane in the face of short-term political and economic pressures, and unpredictable changes in the costs of alternative energy sources. Nevertheless, the momentum behind this transition is becoming clearer following the Paris Agreement, driven by:

- a ramping up of investment in renewable energy

technologies, and associated smart grids and energy storage, which will further reduce the cost and improve the economics of solar and wind technologies;

- a commitment to mobilise \$100bn/annum of climate finance, with public money where possible being used to leverage in private sector finance;
- pressure on governments to reduce and remove fossil fuel subsidies;
- introduction of, and increases in, carbon price signals in the major economies. These are being introduced both directly (e.g. through trading schemes as in the EU, numerous North American States, Korea and China; and/or through taxation as proposed in South Africa) and indirectly (e.g. through power plant performance standards as in the US Clean Power Plan).

Implications for financial institutions

The momentum established by the Paris Agreement will ensure that opportunities for financing low carbon projects – in renewable energy and, in the medium- to longer term, smart grids and energy storage – will multiply.

Investment in renewable energy has already increased by a factor of six over the last ten years, from \$45bn to \$270bn/year, such that increases in renewable power capacity accounted for 48 per cent of total capacity increase in the power sector in 2014. However, to meet a 2°C target, Bank of America Merrill Lynch estimates that investment in renewables will need to grow to \$900bn/year by 2030.

The Paris Agreement envisages climate finance – at a level of \$100bn/year – being mobilised, including through entities that are accredited by the recently formed Green Climate Fund (the GCF). A recent example of pro-active action is Deutsche Bank which, alongside several of the multilateral development entities, has become the first private company to become an accredited entity. Allowing it to add GCF co-financing options to their range of project finance tools.

This momentum, based on a growing consensus

around the need to deliver a low carbon transition, is reinforced by other factors driving change in the energy sector, such as concerns about air quality, and technology shifts such as digitisation and the cost reductions in renewable energy, which make alternative to fossil fuels more attractive and affordable.

Alongside the opportunities, risks will abound. Mark Carney stated earlier this year that investors face “potentially huge” losses from climate change action that could make vast reserves of oil, coal and gas “literally unburnable”. He went on to comment “the challenges currently posed by climate change pale in significance compared with what might come. Once climate change becomes a defining issue for financial stability, it may already be too late.”

In response to a request by the G20, Carney has established, under the Financial Stability Board (FSB), a Task Force on Disclosure of Climate-Related Financial Risks. This will be industry-led, under the chairmanship of Michael Bloomberg, and will work through 2016. Its mandate is to consider the impact of:

- Physical risks: impacts that may arise from climate- and weather-related events, such as floods and storms;
- Liability risks: impacts (potentially long tail) related to claims against those who have failed to mitigate or adapt to climate change or disclose material risks;
- Transition risks: the financial risks which could result from the process of adjustment towards a low carbon economy, including disorderly changes in investor sentiment and policy shifts.

The statement establishing the Task Force notes that changes in policy, technology and physical risks could prompt a reassessment of the value of a large range of assets as costs and opportunities become apparent. The abruptness with which such re-pricing occurs could influence financial stability.

Besides this initiative of the FSB, national and international financial regulators are expected to continue to deploy various initiatives impacting the financial sector with the aim of mitigating risks and supporting the energy transition in line with the Paris Agreement. One example is the Banque de France’s plans to publish in 2016 a report on the

implementation of a climate risk stress test scenario for banks.

A pragmatic response

COP21 has determined that there will be no business as usual in the energy sector. Whilst further tightening of carbon reductions is anticipated, those set out in the INDCs (which will be ratified in the year ahead) will themselves transform the energy mix in many economies.

The transition presents revenue risk and opportunity, as capital investment shifts from high to low carbon energy infrastructure and solutions, with implications throughout the energy value chain and to related industries.

Financial regulators are already concerned by the potential implications for financial stability. Commentators have suggested some financial institutions are over weight in exposure to long life carbon intensive assets, for which the economics are now compromised.

Other stakeholders including investors, governments, non-governmental organisations (NGOs), and as the media shifts its position, citizens and customers will be increasingly asking questions of financial institutions, presenting reputation risk and opportunity.

Some financial institutions have evaluated their portfolio against the INDCs, determined implications for risk and opportunity and taken action. The majority have not.

There is a strong case for CEOs to be pushing forward programmes which enable their companies to understand the key risks and opportunities associated with the FSB Task Force focus areas: physical risks; liability risks; and transition risks. We consider the physical and transition risks to be worthy of most immediate consideration; the transition risks presenting corresponding opportunities.

In addition to **individual, internal** programmes that international financial institutions may undertake, a strategic risk management strategy would arguably also acknowledge that significant uncertainty remains over the precise pace and nature of the energy transition, country by country. India, just as one

example, plans to more than quadruple its renewable energy capacity in just six years. Whether this goal will be delivered or not requires, amongst other things, an estimated \$300 billion of capital.

Therefore, to reduce the uncertainty over the energy transition and become masters of their own destiny, international financial institutions should consider **collaborative** efforts (including pre-competitive actions that bring multiple corporations together) to help key countries mobilise the necessary capital to deliver their INDCs.

Next steps to consider

Key work streams to consider include:

1. Assess how the policy, regulatory and technology scenarios out to 2020–2030 (including the stretch target of limiting warming to 1.5°C) will generate risks and opportunities to clients, assets and projects in different segments of the energy sector and in different countries around the world;
2. Assess the impact of technology change (particularly related to further falls in the cost of renewable energy and to patterns of energy use);
3. Develop appropriate risk mitigation measures (e.g. criteria and requirements for investing, lending,

insuring and client engagement);

4. Identify growth opportunities that can be pursued unilaterally and objectives to realise those opportunities;
5. Identify opportunities to further reduce policy uncertainty through multilateral action to enable the delivery of key countries' INDCs. Ensuring that the needs of stakeholders with long time horizons (such as sovereign wealth funds) and key government/market-making agencies responsible for financing the energy transition are well connected will be key;
6. Ensure appropriate governance structures are in place to deliver a coherent strategy and knowledge flow between group business units that are exposed positively and negatively to the energy transition.

The issues explored in this paper will be of interest to the following departments and management functions within financial institutions:

- The CEO office;
- Energy sector and related industry teams;
- Regulatory compliance;
- Risk management;
- Governance;
- An effective response for a bank will be one that is holistic and addresses the needs of each of these functions.

The University of Cambridge Institute for Sustainability Leadership

For 800 years, the University of Cambridge has fostered leadership, ideas and innovations that have benefited and transformed societies.

The University now has a critical role to play to help the world respond to a singular challenge: how to provide for as many as nine billion people by 2050 within a finite envelope of land, water and natural resources, whilst adapting to a warmer, less predictable climate.

The University of Cambridge Institute for Sustainability Leadership (CISL) empowers business and policy leaders to tackle critical global challenges. By bringing together multidisciplinary researchers with influential business and policy practitioners across the globe, we foster an exchange of ideas across traditional boundaries to generate new, solutions-oriented thinking. www.cisl.cam.ac.uk

Publication details

Copyright © 2016 University of Cambridge Institute for Sustainability Leadership (CISL) and Environmental Resources Management (ERM). The material featured in this publication is licensed and may only be used under the terms defined in the Creative Commons Attribution-Non Commercial-Share Alike License.

The details of this license may be viewed in full at: <http://creativecommons.org/licenses/by-nc-sa/4.0/legalcode>

Environmental Resources Management (ERM)

Environmental Resources Management (ERM) is a leading global provider of environmental, health, safety, risk, social consulting services and sustainability related services.

We have more than 160 offices in over 40 countries and territories employing more than 5,000 people who work on projects around the world. ERM is committed to providing a service that is consistent, professional and of the highest quality to create value for our clients.

Over the past three years we have worked for more than 50 per cent of the Global Fortune 500 delivering innovative solutions for business and selected government clients to help them understand and manage the sustainability challenges that the world is increasingly facing. www.erm.com

Author and acknowledgements

This report was authored by: Andrew Voysey, Eliot Whittington, and Thomas Verhagen at the Cambridge Institute for Sustainability Leadership and James Stacey and Charles Allison at Environmental Resources Management.

Disclaimer

The opinions expressed in this report are the authors' own and do not represent an official position of the University of Cambridge, CISL, the BEI or any of its individual members.

This report is not, and should not be

construed as, financial advice.

Contact

To obtain more information on the report, please contact

Andrew Voysey
E: Andrew.Voysey@cisl.cam.ac.uk
T: +44 20 7332 6872

James Stacey
E: James.Stacey@erm.com
T: +44 20 3206 5291

Charles Allison
E: Charles.Allison@erm.com
T: +44 1865 384802