

Understanding Global Landscape of TCFD Adoption

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Approach for Global Assessment

Assessment Methodology

- TCFD was set up in response to the G20's request to the Financial Stability Board (FSB) for developing voluntary recommendations to guide consistent and useful climate-related disclosures.
- In this context, a preliminary assessment of all G20 countries was conducted in order to shortlist an 'Assessment Universe' for studying the global climate change disclosure landscape. The preliminary assessment included the following:
 - ✓ Understanding the potential drivers for climate change disclosures
 - ✓ Understanding the status of each country with respect to the identified potential drivers
 - ✓ Shortlisting the assessment universe for a detailed assessment
- The detailed assessment is conducted to understand the impact of potential drivers and interventions utilized in different countries to help increase the adoption of TCFD's recommendations. It also analyses the obstacles that TCFD adoption is facing around the world.

Potential Drivers for TCFD Adoption



National Government Supports TCFD

National governments have released an official statement supporting TCFD



National Government Released Guidance on Climate-related Disclosures

National governments have released a guidance document on environment or climate change related disclosures for corporates



National Governments Released Guidance on TCFD

National governments have released a guidance document on TCFD for corporates or investors



Incorporation in Legislation

TCFD or climate change related disclosures are mandatory legal requirements



Mandatory GHG Emissions Reporting by Companies

National governments have made it mandatory for companies (from all or predefined sectors) to report their GHG emissions footprint



Mandatory Climate-related Reporting by Companies

National government have made it mandatory for companies (from all or predefined sectors) to publicly disclose their climate change related risks and opportunities.



Risk of Litigation

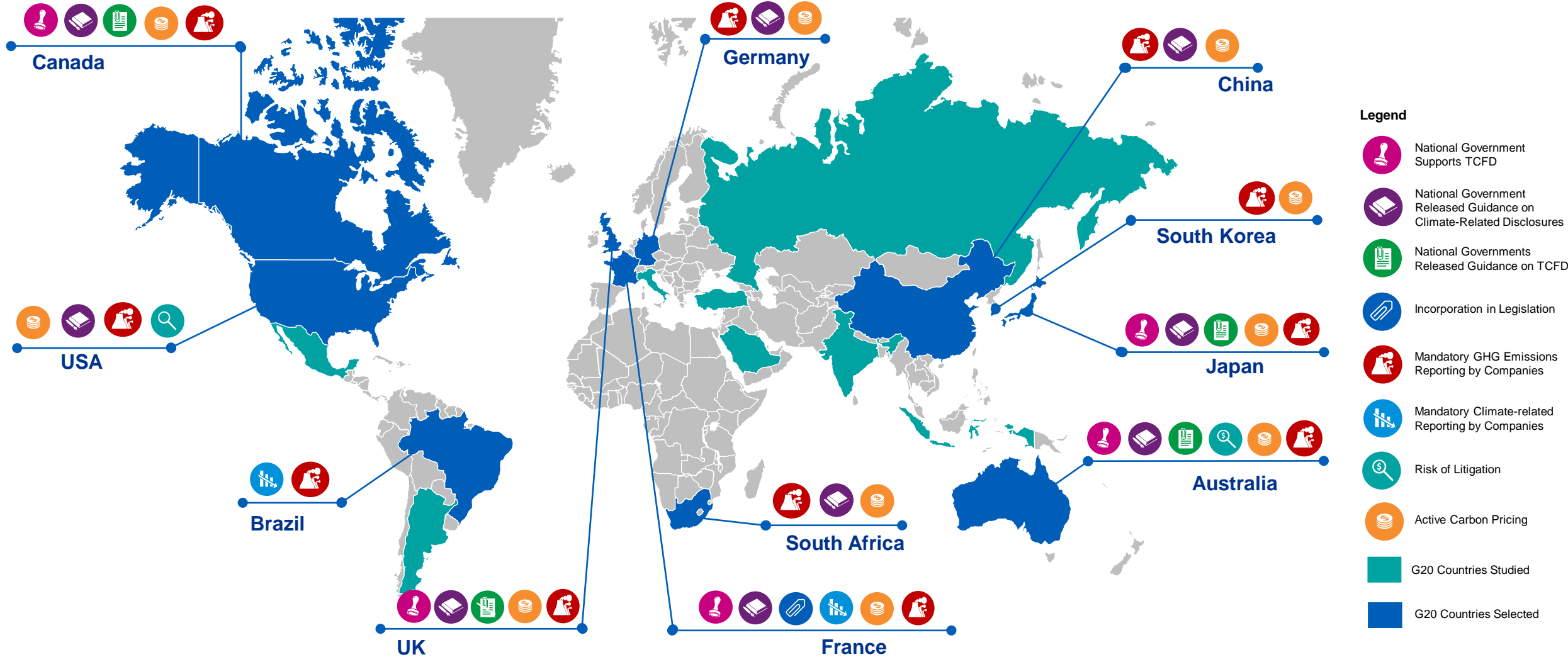
Legal actions by National governments or other stakeholders (such as investors) for not disclosing climate change risks and impacts on businesses



Active Carbon Pricing

Presence of functional nation-wide carbon pricing mechanism regulated by government authorities

Assessment Universe



Detailed Assessment

North America

United States

United States is one of the leading jurisdictions with high number of companies reporting on climate risks despite the lack of mandatory climate disclosure requirements at federal level. However, mandatory reporting requirements are robust at state and city level and progress trends to come from states such as California.

Potential drivers

Released guidance on climate related disclosures

Mandatory GHG emissions Reporting by companies

Risk of litigation

Active carbon pricing

- ✓ Under Securities and Exchange Commission (SEC), disclosure of climate change related risks and opportunities is mandatory in SEC filings if it is deemed material to the organization. It has also provided guidance on climate related risks to US businesses.
- ✓ As per the law, stakeholders can seek remedies through climate litigation, if businesses failed to sufficiently disclose climate change risks. There have been more than 35 cases in the country in the recent years where investors, shareholders, consumers and regulatory bodies have filed a case against corporates for non-disclosure and/or misreporting of climate-related information. The majority of the cases have been against the oil and gas companies.
- ✓ At federal level, there is no requirement for entities to report on GHG emissions however mandatory reporting requirements exist at state level. About 40 states (80%) in the country have mandatory reporting requirements for certain types of entities which include electricity generators, cement plants and petroleum refineries.
- ✓ Influential US investors and businesses such as Blackrock and CalSTRS and companies such as CitiGroup, JetBlue, and PepsiCo have officially declared their support to TCFD recommendations. Blackrock, the largest asset management firm in the world, has listed climate risk disclosures as one of its engagement priorities and urged companies to report in alignment of TCFD recommendations.

Impacts of potential drivers on climate change disclosures

- SEC regulation is not successful in disclosing climate change risk to investors. Although SEC provided interpretive guidance, there is lack of clarity on how companies should assess material climate risks.
- The number of climate change litigation cases on the content of financial reports has been increasing in the recent years. Although it has encouraged few companies to disclose adequate climate related information but it has also led the companies to limit the amount of information disclosed to reduce the risk of misrepresentations and potential litigation.
- Given that investor support for TCFD recommendations has been increasing, it is likely that the adoption of TCFD recommendations amongst corporates will increase in the future. However, given that investor support has grown only recently, it is too early to draw interconnection with increasing climate-related disclosures and investor pressure with absolute certainty.

Canada's federal government has focused significantly on climate change issues and is on a journey towards implementing TCFD-compliant initiatives. Canada is amongst the few nations that have declared their official support to TCFD. It is one of the leading countries with high number of companies reporting on climate change issues.

Potential drivers

National government supports TCFD

Released guidance on climate related disclosures

Released guidance on TCFD

Mandatory GHG emissions reporting by companies

Active carbon pricing

- ✓ The Canadian Securities regulations requires companies to disclose information material to investors, which encompasses material environmental issues. In 2010, Canadian Securities Administrators (CSA) released guidance for companies to identify material environmental matters including climate change.
- ✓ More recently, the government has committed to increase awareness around TCFD by developing guidance documents and also committed to monitor developments in disclosure practices.
- ✓ On May 11, 2020, the Federal Government introduced the Large Employer Emergency Financing Facility (LEEFF), to provide funding for Canada's large businesses affected by COVID-19 outbreak. Companies applying for LEEFF would be required to disclose climate-related information annually in line with TCFD recommendations.
- ✓ Canada has GHG reporting program at both federal and province level. Also, in 2019 federal government established national carbon price across all Canadian provinces with a tax rate of CAD10/tCO₂e. The tax rate rises at CAD10/tCO₂e annually to reach CAD50/tCO₂e in 2022.
- ✓ Canadian investors are pushing companies to disclose information that enable them to make informed decisions. Largest pension funds in the country have declared their support to TCFD recommendations and integration of ESG in company's strategy and risk management. According to a survey conducted in 2016, majority of Canadian institutional investors stated their consideration for ESG issues in investment decisions.

Impacts of potential drivers on climate change disclosures

- Non-financial reporting guidance issued by government have existed for many years in country, which encourages issuers to disclose climate risks. The presence of reporting requirements at both federal and province level ensures higher level of compliance.
- Demands for better reporting on climate change risks and opportunities by investors and shareholders have been increasing which is also prompting industries to disclose climate risks. While majority of the issuers provide climate change related information, a few reporting companies provide only boilerplate disclosures which raises the concerns around adequacy of information required by investors.
- Clarity around future increase in carbon price enables companies to assess their carbon risks and opportunities and prepare forward looking strategies.
- It is likely that support of influential investors and government commitment might increase the adoption of TCFD recommendations. However, it is only recently that TCFD recommendations are being endorsed by investors and government thus, it is difficult to claim the impacts of these actions on climate risk disclosures with absolute certainty.

South America

The companies headquartered have low level of preparedness and there is limited motivation among companies to consider climate change risks in financial context. According to the 2019 CDP report, companies in Brazil are less likely to report on climate risks as compared to other countries.

Potential drivers

Mandatory GHG emissions reporting by companies (sector specific)

Mandatory climate-related reporting by companies (sector specific)

- ✓ While there are no requirements and guidance for companies in Brazil for climate reporting, there exist two notable exceptions: mandatory reporting for publicly owned electric utilities and for companies listed on the São Paulo stock exchange (B3).
 - With the restructuring and privatization of electricity sector, in 2002 Brazilian Electricity Regulatory Agency (ANEEL) introduced mandatory requirements for electric energy companies to report on social and environment responsibility. ANEEL recommends companies to disclose information on set of predefined indicators (including GHG emissions) and adopt GRI principles for their annual sustainability reports.
 - Companies listed on São Paulo stock exchange are required to report on environmental performance under the Brazilian Securities Exchange Commission (CVM). The stock exchange also ranks listed companies based on Carbon Efficient Index - businesses willing to voluntarily participate in GHG reporting

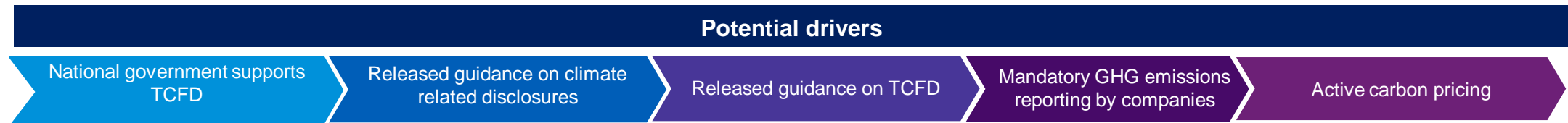
Impacts of potential drivers on climate change disclosures

- There has been higher level of compliance amongst the public utilities and companies listed on B3 stock exchange. Over the years, there has been significant increase in the number of electric utilities and listed companies disclosing sustainability and climate change related issues.
- Although these two regulations (mentioned above) have received their objectives of transparent disclosure practices, overall the level of non-financial reporting in Brazil is low. Thus it indicates the importance of regulatory policies in increasing the adoption of environment and climate related matters by businesses in their strategy and decision making.
- Other major reasons for lack of motivation in Brazilian companies are economic vulnerabilities owing to recession and foreign direct investment on fossil fuels. The economic recession in Brazil had an impact on access to financial services, with adverse impact on public finance. Also high foreign direct investment in oil and gas assets has made climate change reporting insignificant for companies to disclose climate related information.

Europe

United Kingdom

UK is in forefront when it comes to climate change disclosure space. The high momentum amongst companies for disclosing climate related information is in response to increasing regulatory and political demands for greater accountability related to the financial impact of risks and opportunities.



- ✓ UK has reporting guidance and regulations for companies for many years. The Companies Act 2006 requires businesses to produce strategic reports, as part of their annual reports, which should include a description of the company's climate risks, where they are financially material.
- ✓ The Financial Reporting Council (FRC) has also released guidance for companies to highlight current or future impacts of climate change on their financial position.
- ✓ In 2013, government implemented UK specific carbon price and the rate is set by the government three years in advance to help prepare businesses and prevent market volatility.
- ✓ More recently, as part of Green Finance Strategy all UK listed companies will be required to report on their climate risks and strategies to mitigate these risks by 2022. The government has also set out its expectations for all listed companies and large asset owners to disclose climate related information in line with the TCFD recommendations.

Impacts of potential drivers on climate change disclosures

- Increasing regulatory and political scrutiny has recently raised awareness amongst companies of the impact of climate change on their investment strategies. Thus, a large number of organizations are reporting on these issues and have mature climate change related disclosures.
- Clarity around future increase in price of carbon in the economy enables companies to assess their carbon risks and opportunities and prepare forward looking strategies.
- Influential financial players in UK such as Bank of England, London Stock Exchange have released statements for actively supporting TCFD recommendations which might be the reason for high number of UK-based TCFD signatories.
- The upcoming mandatory reporting requirement would significantly increase the TCFD adoption by reporting companies and the current French leadership on non-financial disclosure legislation could also act as a catalyst for stringent action by UK government.

France is leading the way globally in climate change disclosure space. It is the first and only country to encode mandatory ESG and climate change related disclosure in legislation through its Energy Transition Law.

Potential drivers



- ✓ The regulatory push for companies to disclose their environmental, social, and governance (ESG) criteria dates to 2001, enforced via the French Environmental Law. Since then, the government has gradually extended the enforcement of regulatory measures from major listed companies to wide range of actors.
- ✓ More recently, the Energy Transition Law introduced in 2015 has made it mandatory for institutional investors and companies (Article 173-VI for investors, and Article 173-IV for companies) to provide information on the way that they take into account ESG factors as well as climate risks into their business strategies. Article 173 is built on comply or explain approach.
- ✓ Companies participating in the EU ETS are required to report on GHG emissions through their operations. Apart from this, France also has domestic requirement for entities to report on carbon emissions.

Impacts of potential drivers on climate change disclosures

- Mandatory reporting requirement and proactive government actions are major reasons for companies to disclose climate related information. The guidance documents released by government are comprehensive which provides clarity to issuers and reduces challenges of misinterpretation.
- While many investors in France have been engaged in responsible investment for some time however, since the introduction of the mandate, there has been an increase in the number of companies (mainly the organizations providing supplementary insurance and retirement savings plan) disclosing climate related risks and opportunities. The companies which already had ESG reports also came up with new disclosures dedicated specifically to Article 173. Also, there have been improvements in the quality of information provided in the disclosures, with a few companies providing substantial analysis on their exposure to impacts of climate change.
- Section VI of the article 173 targets specifically the investors (such as insurance and mutual insurance companies, pension scheme organizations, asset managers etc.) for integrating ESG and climate risk into their strategies. Given the fact that financial sector underperforms in climate disclosure space, the legislation ensures and encourages active participation of investors to disclose climate risks in their investment portfolios. Thus, France might play an enabling role for other countries in future.

Germany is one of the leaders in climate change disclosure space globally. Companies in Germany are amongst the most prepared for adopting TCFD recommendations. However, the progress in Germany is comparatively slow as compared to other European countries such as United Kingdom and France.

Potential drivers

Release guidance on climate related disclosures

Mandatory GHG emissions reporting by companies

Active carbon pricing

- ✓ Climate related disclosures in Germany is mainly driven by the EU Directive on Non-Financial Reporting (NFR) which requires disclosure of environmental information that is relevant to the company's performance. EU has also released guidance document for companies to report in line with NFRD.
- ✓ It is mandatory for entities participating in EU ETS to report on carbon emissions as required by the EU Directive.

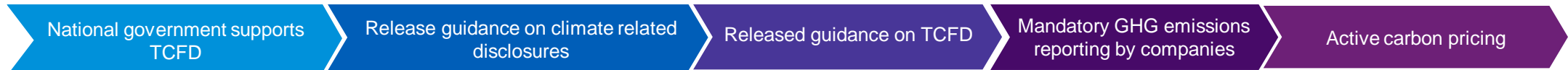
Impacts of potential drivers on climate change disclosures

- As far as domestic initiatives are concerned, German accounting standards do not offer guidance on climate-related disclosures, emissions reporting and carbon pricing. All these policies are based on EU Directive which could be one of the reasons for slow uptake of climate related disclosures and TCFD recommendations in Germany.
- Moreover, the financial sector in Germany is less influential as compared other industrial sectors such as automobiles, chemicals and manufacturing which are actively aiming to slow down the implementation process of TCFD and climate-related disclosures in the country.

Asia

Japan is amongst the front runners globally with large number of companies disclosing their climate risks. Many business in Japan have embraced TCFD as a framework for strategic change and also committed to report in line with TCFD recommendations.

Potential drivers



- ✓ The government of Japan is actively supporting implementation of TCFD recommendations with the aim of emerging as a climate leader globally. Ministry for Economy, Trade and Industry (METI), the Ministry of the Environment and the Financial Services Agency of Japan formed a consortium to bring together institutional investors and businesses to promote dialogues around climate related disclosures.
- ✓ To increase awareness around TCFD and importance of climate related disclosures, Japan organized the first ever corporate summit of TCFD in Tokyo which attracted over 300 participants.
- ✓ To support business for transparent and consistent disclosures, the government has released several guidance documents such as guidance on reporting of GHG emissions, TCFD recommendation, scenario analysis and SBTi.
- ✓ Japan has mandatory GHG accounting and reporting system for large entities since 2006. Also, entities falling in the predefined sectors (industrial and commercial sectors) and thresholds are mandated to participate in the emission trading system.

Impacts of potential drivers on climate change disclosures

- Unlike countries like France, Japan does not have mandatory climate risks reporting requirements however, it is still emerging as a leader in climate change disclosure space.
- As a result of government's focus towards increasing awareness around importance of climate-related disclosures (through workshops or guidance documents), a large number of companies are motivated to disclose and consider climate related risks in their business strategies.
- The government of Japan started witnessing inclination of companies towards transparent disclosures after the TCFD summit. The year 2019 witnessed a significant increase in the number of companies (from 44 to 243) reporting climate change issues in line with TCFD recommendations.
- Japan has the world's largest consortium of TCFD members in the world. The highest number of companies in CDP's A list category, in the latest global ranking of transparency and action on climate change, are from Japan.

Currently, the companies headquartered in China fails to disclose material information for investors on climate related issues. To improve the progress of China in climate change disclosure space, government is implementing initiatives to boost its green finance through international collaborations ((such as the UK-China pilot on climate related and environmental risk disclosure) and domestic policies (such as mandatory ESG reporting).

Potential drivers

Released guidance on climate-related disclosures

Mandatory GHG emissions reporting by companies

Active carbon pricing

- ✓ In 2008 State Environmental Protection Administration in China had released guidance document on disclosure of environmental information by enterprises. Stock exchanges such as Shenzhen Stock Exchange and Shanghai Stock Exchange had also released ESG reporting guidance for listed companies.
- ✓ China has implemented guidelines for accounting and reporting of GHG emissions which requires entities (from industries such as cement, iron and steel, electricity sector) to report their GHG emissions. It also requires industries from power sector to participate in national Emission Trading Scheme.
- ✓ Recently, representatives from the China Securities Regulatory Commission and the Green Finance Committee described a new mandatory environmental disclosure regulation roadmap which will eventually require all listed companies to disclose ESG information by 2020.

Impacts of potential drivers on climate change disclosures

- Despite having certain reporting requirements and guidance by the government and efforts of stock exchange, companies fail to disclose their climate risks.
- China has an active emissions trading system and mandatory emissions reporting requirement. However, as per the global TCFD preparedness report, China has the least percent of companies disclosing their Scope1, 2 and 3 emissions.
- Guidance documents released by government and stock exchange does not provide sufficient information to entities and remains very broad in scope. Also, most of the information has to be disclosed on voluntary basis. Thus, unclear guidance and voluntary disclosure could be few of the challenges that companies face in China.
- However, Chinese government seems to be determined to improve ESG standards for all the China based companies. Chinese market is expected to deliver more progress in the near future with the implementation of mandatory ESG reporting requirements. Thus, the regulatory approach might drive the progress in China and increase transparency on climate related risks and opportunities.

South Korea

South Korea ranks lower than other countries globally in climate change disclosure space. However, as compared to few Asian countries (such as China, Indonesia, India), companies based in South Korea are better performers.

Potential drivers

Mandatory GHG emissions reporting by companies

Active carbon pricing

- ✓ South Korea implemented GHG and Energy Target Management System in 2012 which required covered facilities to report and verify GHG emissions from their operations. The scheme imposed companies with energy and emission reduction targets, and also required them to verify and track their performance.
- ✓ In 2015, the government launched nation-wide Korea Emission Trading System which requires entities (that annually discharge over 125,000 tCO₂e and/or workplaces that annually emit over 25,000 tCO₂e) from five sectors – power, waste, industry, buildings and transpiration to participate in the national carbon market.

Impacts of potential drivers on climate change disclosures

- South Korean companies are amongst the leading performers in Asia (and across the globe) when it comes to disclosing information on metrics and targets and risk management. This can be attributed to the mandatory policies in the country which requires entities to report on their carbon emissions as well disclose mitigation strategies to deal with climate change.
- While the performance of South Korea on other two TCFD pillars i.e. governance and strategy is very low (both in Asia and globally) since there are no regulatory policies or other drivers pushing disclosure of such information.
- One of the reasons for lack of more stringent action by government on climate related disclosures could be low motivation levels amongst the industrial sector. For instance, many companies were against the implementation of nation wide carbon market in the country and argued that limit on emissions would increase manufacturing cost and weaken competitive advantage.

Australia

Australia is one of the leading countries in climate change disclosure space. The high number of disclosures in the country is a result of Australian regulatory interest in management of entities climate risk exposure and reporting.

Potential drivers



- ✓ In 2018, the Australian Accounting Standards Board (AASB) issued guidance for preparers, assurers and auditors on assessing climate related risks in the context of financial statements.
- ✓ Furthermore, in August 2019 Australian Securities and Investment Commissions (ASIC) updated its Regulatory Guides which specifically lists climate change as an external threat and recommends ASX listed companies to disclose climate risks in their annual filings. It also encourages companies to consider the adoption of TCFD recommendations in disclosing their climate change related risks and exposures.
- ✓ It is mandatory for facilities (that emit more than 25,000tCO₂e or consume more than 100TJ of energy annually) to report their GHG emissions and energy use under the National Greenhouse and Energy Reporting Scheme.
- ✓ The risk of climate litigation is material in Australia. Legal action have been taken by shareholders against businesses for not disclosing a complete and holistic view of their financial statements, by missing out on climate change risk information in their annual reports. For instance, in 2017 a case was filed against Retail Employees Superannuation Trust, one of the Australia's largest asset owners, on failing to provide information on climate risks and strategies to address those risks.

Impacts of potential drivers on climate change disclosures

- Climate change disclosures in Australia are mainly driven by mature regulatory framework. A large number of companies are reporting on their climate risks and opportunities and incremental improvement in disclosures is observed over the years.
- While companies are considering climate change as material risk, they fall short of disclosing the desired information required by investors. The leadership is limited to only a few top performers with significant difference between quality of information disclosed by leaders and laggards.
- Although, for improving the quality of disclosures, ASIC has provided guidance and recommended companies to disclose in line with TCFD, it is too early to state impacts of such recommendations.

South Africa

South Africa

South Africa is one of the developing countries which is leading the way globally in climate change and sustainability reporting. It is the first country to introduce mandatory integrated reporting requirement for listed companies.

Potential drivers

Released guidance on climate related disclosures

Mandatory GHG emissions reporting by companies

Active carbon pricing

- ✓ The non-legislated King Code on good corporate governance requires companies to disclose environment and sustainability related information, integrated as part of their annual financial reports. It recommends companies to produce reports based on international frameworks such as GRI, IIRC and ISO standards. Compliance with King Code is a requirement for companies to be listed on Johannesburg Stock Exchange.
- ✓ In 2017, the government implemented National Greenhouse Gas Emission Reporting Regulations to gather information from the businesses on their annual emissions, to update national greenhouse gas inventory. Further, in 2019 government introduced carbon tax in the country through the promulgation of National Greenhouse Gas Emission Reporting Regulations. The tax was introduced at the rate of USD6.90 which will increase annually by inflation plus 2 per cent until 2022.

Impacts of potential drivers on climate change disclosures

- The South African response to sustainability and climate change reporting has been a result of increasing global pressure for businesses to integrate non-financial issues in corporate annual filings.
- King Code on good corporate governance and mandatory requirement for integrated reporting to be listed on Johannesburg Stock Exchange is a major driver for high number of companies reporting on climate change and sustainability matters.
- The number of reporting companies in South Africa have increased significantly over the years and both quality and quantity of information on ESG has also improved under the King III. Globally, businesses in South Africa outperforms other companies headquartered in few of the developed nations (such as Norway and Finland), in terms of both coverage and quality of climate related risks and opportunities.
- Further, there is enhanced regulatory pressure from government on businesses to report their GHG emissions for effective implementation of carbon tax in the country.

Global Insights

- **Without a change in regulations or a push from investors, companies are not likely to change their reporting practices.** This is evident from the fact that the countries which have mandatory reporting requirements or strong regulatory push from the government (such as UK, France) are performing better as compared to other countries with little or no push from government.
- **Regulatory measures around climate related disclosures often have an immediate effect** resulting in increase in the number of reporting companies. It can also result in improvement quality of reports over time. For instance, France witnessed increase in number of reporting companies and improvement in quality of reports within two years of implementation of Energy Transition Law.
- While regulatory push is instrumental, lack of **investor pressure** can also slow down the momentum for transparent disclosures. There have been concerns raised by companies (in countries such as UK) regarding the lack of investor interest in climate change issues.
- It is evident from countries assessment that the presence of mandatory GHG emissions reporting regulations and functional carbon pricing mechanisms are not the major drivers for disclosure of climate related information by companies.
- One of the challenges that companies face (in countries such as China and US) is **lack of clarity in the guidance documents** provided by regulators. Guidance documents/regulations fail to ask for information that needs to be disclosed at a sufficient level of detail. Also, there is a gap between the expectations of investors and information disclosed by the companies.
- Regulatory policies in few of the countries (such as France) are based on **comply or explain approach** i.e. companies must either report or explain why they are unable to do so. This improves transparency while providing flexibility to issuers for reporting on material topics.
- Majority of the countries implement policies which makes use of global reporting standards such as **GRI, IIRC, ISO standards**. This enables consistency and comparability in disclosures globally.
- Climate change disclosure regulations in few countries (such as South Africa) are implemented in **coordination with stock exchanges** which enables overall assessment of climate change and sustainability reports at country level.

Recommendations

Recommendations for TCFD Adoption in India

Based on the findings and learnings from the country assessment, the following recommendations would be relevant to increase the adoption of TCFD recommendations in India:

- As evident that **regulatory push** has been instrumental in increasing the adoption of climate change related disclosures therefore, it is recommended that policy makers in India should consider the following:
 - ✓ **Implementing regulatory measures to drive Indian companies towards transparent disclosure:** This can be done through implementation of new policies or by bringing changes in already existing regulations (such as addition of climate risks indicators in Business Responsibility Report template).
 - ✓ **Implementing regulatory measures based on comply or explain approach** to strengthen climate related disclosures while providing flexibility to reporting companies. The framework should focus on encouraging issuers to either disclose material climate risks or explain why these risks are not material to their organization.
 - ✓ **Developing a detailed guidance document for reporting on climate change related information** to help corporates understand the level and quality of information required to be reported by corporates. To reduce the challenges of misinterpretation, it is recommended to develop comprehensive guidance providing information on different kinds of climate risks and materiality assessments.
- While regulatory push advances transparent disclosure practices, if complemented with additional drivers such as **investor pressure** can yield better adoption results. It is recommended that regulators should try to spread awareness amongst Indian investors on climate change and potential implications of climate risks on their investment decisions.

Knowledge Partner: KPMG India

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The performance of services provided and the report issued to the Client are based on and subject to the terms of the Contract.

This report sets forth our views based on the completeness and accuracy of the facts stated to us and any assumptions that were included. If any of the facts and assumptions is not complete or accurate, it is imperative that we be informed accordingly, as the inaccuracy or incompleteness thereof could have a material effect on our conclusions.

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We have not performed an audit and do not express an opinion or any other form of assurance.

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