

Managing Climate Risk: Implications and Opportunities around TCFD for Companies in India

Webinar | 25 March | 11:30 AM to 1:00 PM IST

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Managing Climate Risk: Implications and Opportunities around TCFD for Companies in India

Webinar

25 March 2021

Our Speakers Today



Saurabh Mishra

Joint Secretary,
Government of India,
Ministry of Finance



Shikhar Jain

Principal Counsellor,
CII (Confederation of
Indian Industry)



Praveen Anant

Head – Sustainability,
Adani Energy Vertical



Dr. Tony Rooke

Director,
Climate and Resilience Hub,
Willis Towers Watson



Damandeep Singh

Director,
CDP India



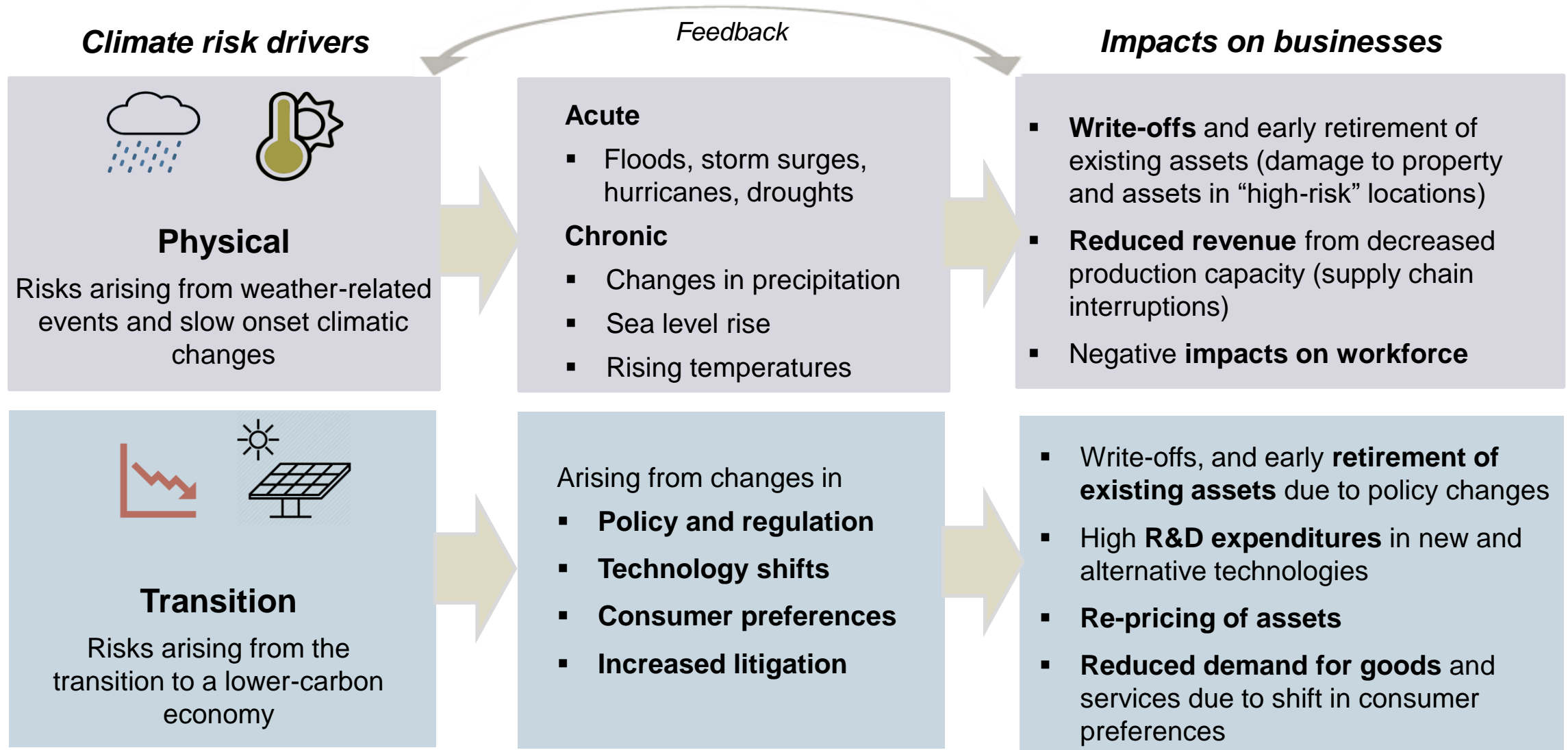
Anu Jogesh

Associate Director,
Climate and Resilience Hub,
Willis Towers Watson
(Moderator)

Agenda

Session	Speakers
Introduction	Anu Jogesh , Willis Towers Watson
Role of the public and private sector, specifically the insurance industry, in addressing climate risks in India	Saurabh Mishra , Government of India
TCFD adoption in India: Trends, implications, challenges and opportunities	Shikhar Jain , CII
TCFD disclosure journey: Getting started and lessons learned	Praveen Anant , Adani Energy Vertical
Global best practices and recommendations	Tony Rooke , Willis Towers Watson
Panel Discussion and Q&A: Ensuring TCFD is more than a tick-boxing exercise: What can companies do assess and manage climate risks?	<ul style="list-style-type: none">▪ Praveen Anant▪ Damandeep Singh▪ Shikhar Jain▪ Tony Rooke▪ Anu Jogesh (Moderator)
Polling Questions	Audience

Climate risks to businesses



Addressing climate risks also presents opportunities

Climate risk management



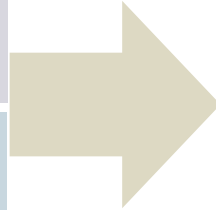
Adaptation

Building resilience of businesses and communities to the physical impacts of climate change



Mitigation

Investing in initiatives to build a low carbon economy



Opportunities to businesses



- **Resource efficiency** and cost savings
- Adoption of low-emission **energy sources**
- Better access to **capital**
- Development of new **products and services**
- Access to new **markets**
- **Resilience**

Task Force on Climate Related Financial Disclosures



WHAT

- The TCFD is a **voluntary disclosure initiative** founded in 2015
- It is a market-led initiative, **led by the** G20's Financial Stability Board
- TCFD released its recommendations in 2017
- Aimed at helping financial and non-financial companies integrate climate risks into existing their risk management framework

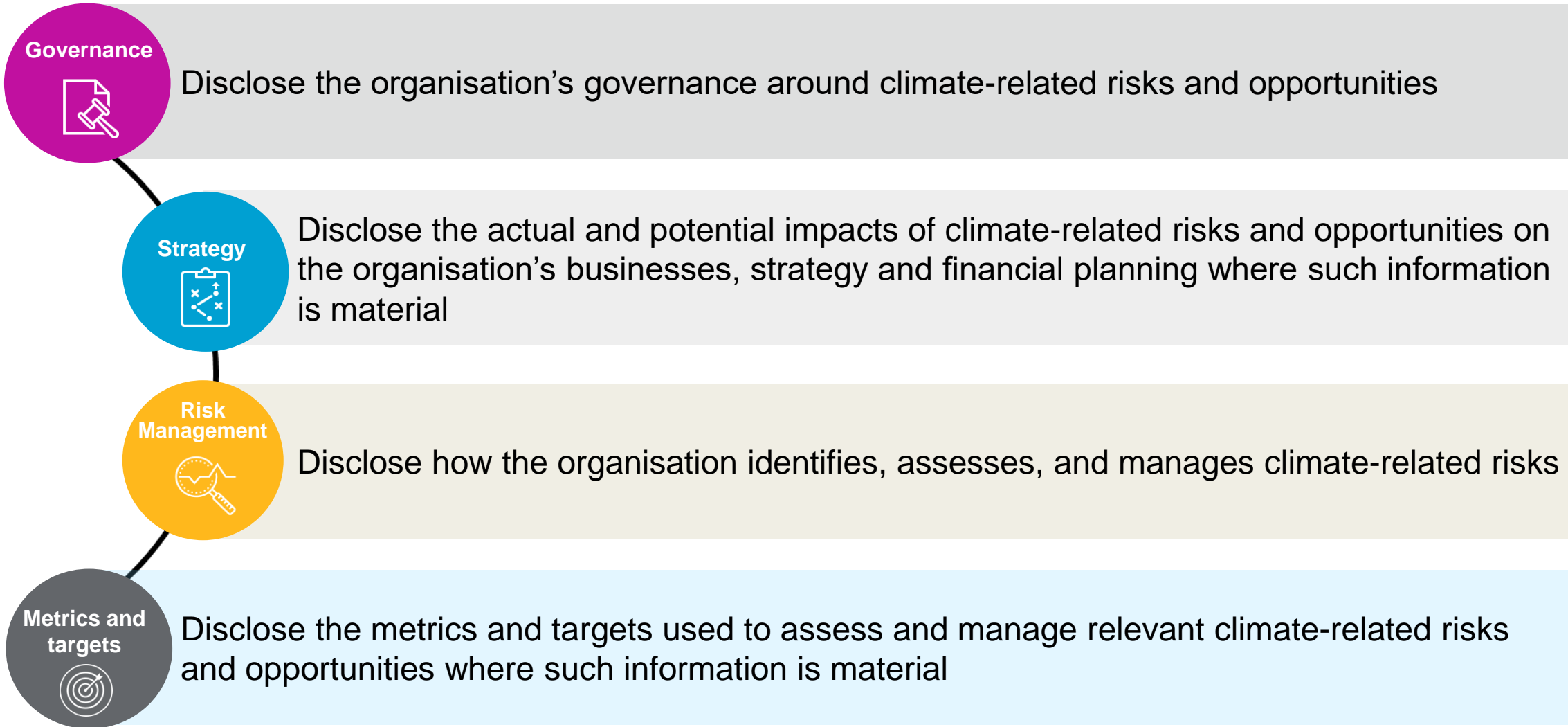
WHY

- TCFD is the first disclosure framework to focus on the **financial implications** of climate change
- Aligned with other existing voluntary and mandatory climate-related reporting frameworks

WHERE

- 1,500 organisations globally support the TCFD
- This includes companies with a market capitalisation of over USD \$12 trillion
- Financial institutions responsible for assets of over USD \$150 trillion

TCFD recommendations are aligned to four pillars



Poll Question 1

Is climate change a risk to your organisation?

- Yes, our business operations, supply chains and/or workforce have been impacted by physical climate events (*such as floods cyclones, erratic rainfall, landslides, heat waves etc.*)
- We are concerned about and/or have been impacted by transition risks (*such as policy, legal and technology changes in transitioning to a low carbon economy*)
- We are concerned about both physical and transition risks
- Climate risk is not a concern now but may be a risk to our business in the future
- Not sure



Saurabh Mishra
Joint Secretary,
Government of India,
Ministry of Finance

Keynote address: Role of the public and private sector, particularly the insurance industry, in addressing climate risks in India

Importance of addressing climate change

As per the World meteorological department, a specialised agency of UN, the global average temperature likely to rise by nearly 5°C, by the end of the 21st century

Temperature in India can rise upto 4.4°C as per a report of Union Ministry of Earth Sciences

North Eastern India is at "particularly high risk" to flooding from snow and glacier melt, according to a Journal "Earth Systems and Environments (June 2020)"

In 2020 alone, India was impacted by multiple cyclones, torrential rains and floods that inundated large parts of the country as well as one of the worst locust attacks in decades

Economic impact of climate change

According to a United Nations report, during 1998-2017, India has suffered economic losses of nearly 80 billion USD due to climate-related disasters

The UN report also states that climate related disaster losses have increased by more than 150% during the period

Top Indian companies estimate an economic impact of about ₹7.14 lakh crore (nearly US\$100 billion) over the next five years from the risks posed by the climate crisis, according to a report by CDP

Future implications

Increase in the magnitude, frequency, and erraticity of climate change related events.

Decreased agriculture productivity & loss of infrastructure assets

Reduced productivity of labour force, supply chain disruptions to companies

Financial losses to both communities and businesses

Recognising the change



Globally, governments, regulatory agencies, and representative bodies across sectors are coming together to raise ambition on climate action.



Acceptance of the fact that climate change can impact financial stability



Several governments have made climate risk disclosures by financial and non-financial industries under the TCFD framework mandatory

India's commitment



Developed national action plan on climate change along with state climate plans



Focus on accelerating the use of clean and renewable energy



Expected to achieve NDC target of reducing the emissions intensity of its GDP by 33 to 35 per cent from 2005 levels before 2030

India's commitment...



Taken the lead in setting up a global Coalition for Disaster Resilient Infrastructure (CDRI), a multi-stakeholder global partnership



Regulatory agencies like the Reserve Bank of India are acknowledging the impact of climate change to the financial sector.



Last year, the RBI in its Annual Report on regulation and financial stability noted that, there is a need “for an appropriate framework to identify, assess and manage (climate-linked) financial risks.”

TCFD in India

An assessment of BSE100 companies was carried out to study the coverage of TCFD recommendations in current disclosures in India by KPMG and Shakti foundation.

- A majority of Indian companies (54%) are lagging with regards to climate change related disclosures.
- Companies in the financial sector are underperforming on TCFD adoption as compared to companies in the non-financial sector.
- Public companies lag behind private companies in TCFD adoption.
- Most non financial companies see climate change as a material risk

'Born Green' Vs 'Turning Green'

Countries have evolved with varied maturity curves from agri. to industrial to digital phases;
Net-zero emissions may see similar phasing

Companies too may follow a similar phasing...
Born Green
Vs
Turning Green

Digital
Vs
Conventional

Developing time-bound goals and objectives in sync with which stage or category the company falls into

Climate Risk & Insurance

Capabilities

- Insurers have useful analytical tools, models, risk exposure and loss data at their disposal.
- Integration of climate change scenarios is a natural extension

Scenarios

- Extend the analysis to cover different scenarios spanning geographies, LOBs and portfolios

Climate

- Develop an integrated mechanism embedding net-zero targets with climate risks and opportunities

Insurance

- Create an integrated view on insurance underwriting and investment, to build on a consistent logic

Way Forward

Climate risk assessments and management need to be mainstreamed in company planning.

Focus on improving resource efficiency in areas such as water, energy and waste. Industries that are large and resource-intensive will have a longer journey ahead.

Regulators may collaborate with research institutes and consulting firms to develop guidance documents, spread awareness and monitor progress in disclosure practice.

Adopting TCFD as it provides a useful framework & metric to begin the process of assessing climate risks, developing and implementing strategies to address these risks, and monitoring progress around it

Poll Question 2

To what extent has your organisation engaged with the Task force for Climate related Financial disclosures (TCFD)?

- Our company is a TCFD signatory
- Our company is a signatory and has voluntarily disclosed under the TCFD framework
- We are aware of the TCFD, but our company is not a signatory
- We report our climate risks but not under the TCFD framework
- I have not heard of TCFD
- Not sure



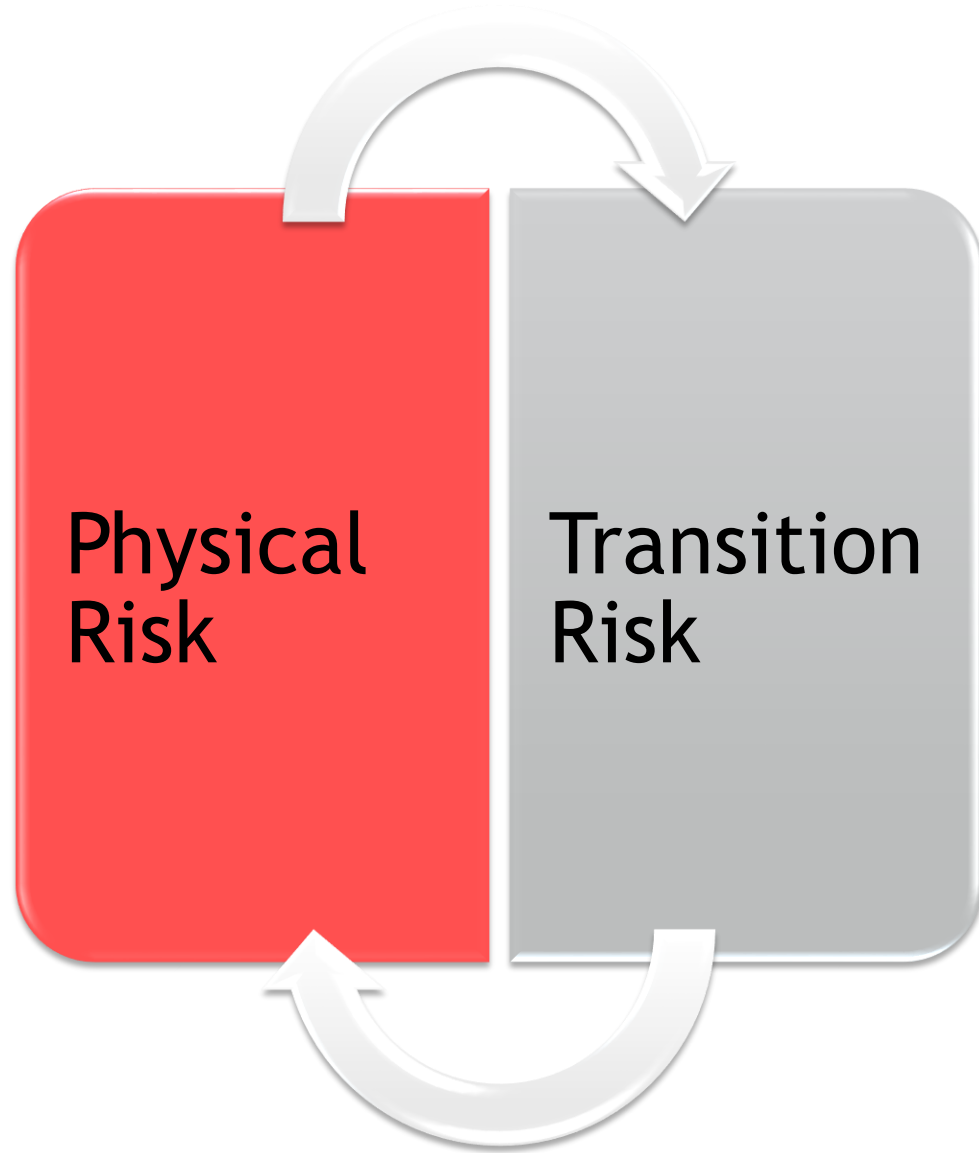
Shikhar Jain
Principal Counsellor,
CII
(Confederation of Indian Industry)

TCFD adoption in India: Trends, implications, challenges and opportunities

In what way does the TCFD process help companies understand climate risks and opportunities to their businesses are how can they adapt strategy to manage these risks?



How are companies approaching physical versus transition risks in India?



What are some common problems in engaging on TCFD?



How is climate change closely linked to other goals – e.g. poverty, SDGs, energy security, why it is so important also assess and disclose on climate risks?



Potential opportunities for businesses



Lessons from CII's engagement with Indian companies on their assessment and management of climate risks, and their engagement with TCFD

How we engage?



Lessons

- Indian companies have a long ground to cover
- Strong need for capacity building measures and technical guidance
- Private cos. performing better than public ones
- Non-financial sectors companies have greater climate related disclosures

Poll Question 3

What are your organisation's current, or likely future, drivers in engaging with the TCFD? *(You can choose more than one option)*

- Investor requirements
- Risk management against existing and/or new regulation
- Physical impacts of climate change
- Industry/peer pressure
- Consumer expectations
- Insurer requirements
- Company reputation



Praveen Anant
Head – Sustainability,
Adani Energy Vertical

TCFD disclosure journey: Getting started and lessons learned

OVERVIEW

- Initial motivation and drivers to sign in to the TCFD
- What does the process entail
- What do you commit to when you become a signatory to the TCFD
- Opportunities and challenges
- Initiatives and way forward
- Advice for others

TCFD– CORE ELEMENTS

Core Elements of Recommended Climate-Related Financial Disclosures

Governance

Disclose the organization's governance around climate-related risks and opportunities.

Strategy

Disclose the actual and potential impacts of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning where such information is material.

Risk Management

Disclose how the organization identifies, assesses, and manages climate-related risks.

Metrics & Targets

Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.

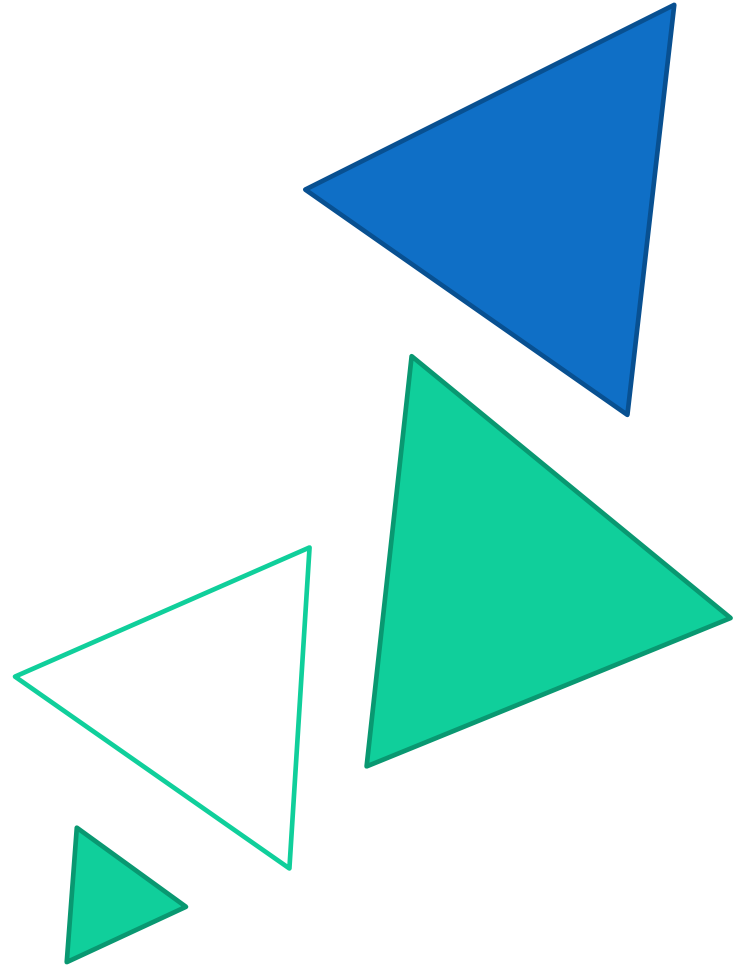
Being TCFD Signatory: Motivation and Drivers for Companies in Electric Utility Sector

- National Energy Policy focusing on energy security and transition to clean energy
- Risk and opportunities in market transactions towards low carbon economy



WHAT DO YOU COMMIT TO WHEN YOU BECOME A SIGNATORY TO THE TCFD?

- Our support to TCFD and its recommendations.
- Action to build a more resilient financial system through climate-related disclosure.



GOVERNANCE: BOARD LEVEL

Sustainability and CSR Committee and Risk Management Committee

- Oversight on policies, strategies, goals, targets and performance with stakeholder's perspective



GOVERNANCE: MANAGEMENT LEVEL

- **Apex Sustainability Committee (ASC) Chaired by Head of the Management:**
 - Identification of climate related physical and market transitional risk and opportunities
- **ESG Working Group guided by Head ESG:**
 - Integrating climate consideration into business through management systems
 - Standardising Monitoring, Reporting and Verification (MRV) process in the Company.

Alignment of employees interest with ESG:

- Intrinsic and Extrinsic Motivational Drivers



CLIMATE STRATEGY

- **Being customer centric:**
 - Provide baseload demand by benign coal conversion for grid stability and growth of renewables
- **Being future ready:**
 - To stay on top of the futuristic merit order dispatch based on emissions for electric utilities.
- **Physical risk to assets:**
 - Address by design and siting of the assets.
- **Market transitional risk:**
 - Address by tapping opportunities in renewables, transmission and adopting technology for green fuels (green-hydrogen)



RISK MANAGEMENT

- **Enterprise Risk Management (ERM) based on COSO Framework.**
 - Taking inputs from internal and external stakeholders
 - Board level oversight on Strategic and High Potential Risk
- **Focus on Technology and Innovation**
 - Leader in adopting latest technology – Super Critical, Ultra Super Critical, HVDC Transmission, High Efficiency Renewable,
 - Assets to withstand physical risk: Cyclone up to 198 Km/hr, Coastal plants FFL w.r.t chart datum



RISK MANAGEMENT.....(CONTINUED)

- Better-than-PAT target performance
generating EScerts as an incentive for power
plants
- Participating in WRI's Carbon Market
Simulation in India

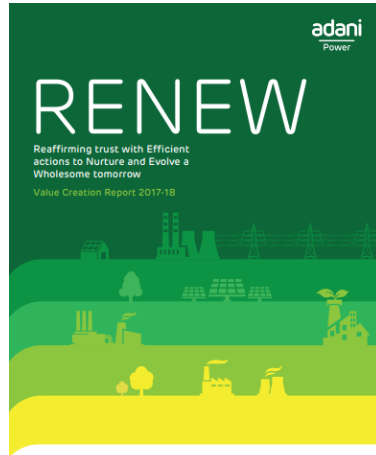
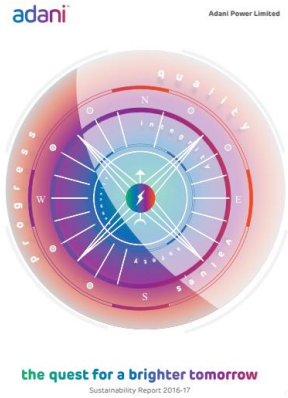


METRICS AND TARGETS

- Monitoring, Reporting and Verification (MRV)
 - External and independent assurance
- Publicly disclosed targets and performance
 - Staying better than Indian grid emission factor (CM) for CO₂



METRICS AND TARGETS: PUBLIC DISCLOSURES



Adani Power Limited

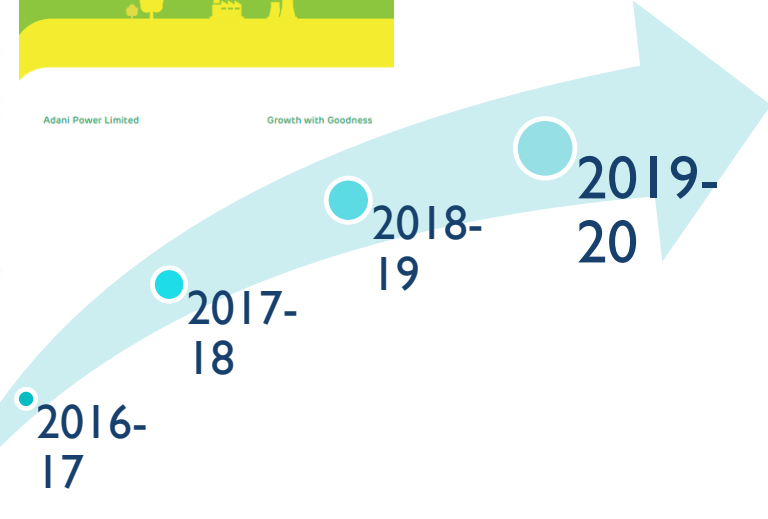
Growth with Goodness



Adani Power Limited
Sustainability Performance and Value Creation Report 2018-19



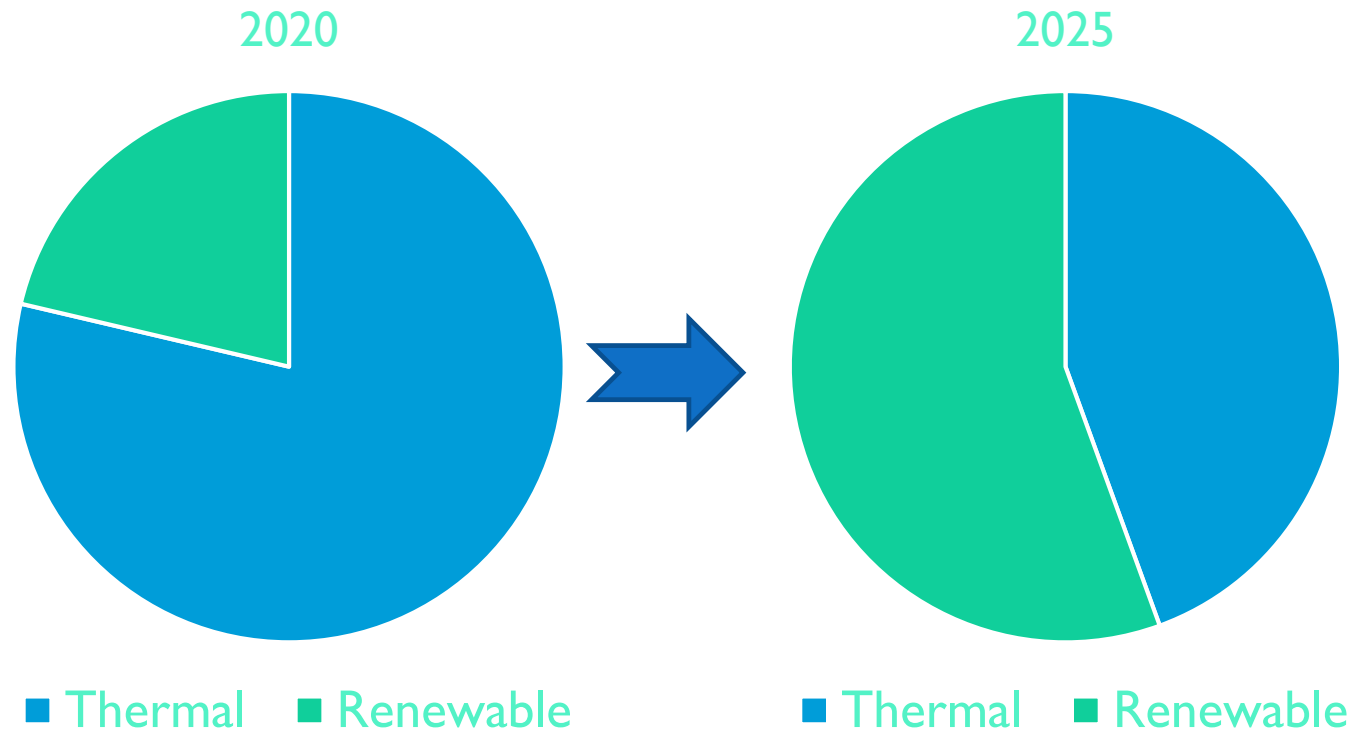
adani Power
2019-20
ESG Report



METRICS AND TARGETS: BALANCING GENERATION

- **Towards net zero emissions**

- Capping and balancing thermal with renewable within the group



OPPORTUNITIES AND CHALLENGES

Focus Area	Challenges
Regulatory	GHG emissions-reduction laws or regulations introduced or pending in regions where the company, its suppliers, or its customers are operating
Supplier Chain and reliability	Suppliers passing higher energy-or emissions-related costs to customers; supply chain business interruption risk
Product and technology	Decreased demand for products with relatively high GHG emissions; increased demand for competitors' products with lower emissions
Litigation	GHG-related lawsuits directed at the company or an entity in the value chain
Reputation	Consumer backlash, stakeholder backlash, or negative media coverage about a company, its activities, or entities in the value chain based on GHG management practices.

OPPORTUNITIES AND CHALLENGES

Focus Area	Opportunity
Efficiency and cost savings	A reduction in GHG emissions often corresponds to decreased costs and an increase in companies' operational efficiency.
Drive innovation	A comprehensive approach to GHG management provides new incentives for innovation in supply chain management and product
Customer loyalty	Low-emissions goods and services are increasingly more valuable to consumers, and demand will continue to grow for new products that demonstrably reduce emissions throughout the value chain
Stakeholder relations	Improve stakeholder relationships through proactive disclosure and demonstration of environmental stewardship
Company differentiation	External parties (e.g. customers, investors, regulators, shareholders, and others) are increasingly interested in documented emissions reductions

OUR INITIATIVES

■ **Corporate Governance:**

- Strong commitment from top management
- Integrating climate concern in business decision making
- Defined roles and responsibilities on climate related issue.
- Robust Monitoring, Reporting and Verification (MRV) process.
- Functional Risk Committees for Identification and Assessment of Risk and Opportunities
- Action Planning for Short, Medium and Long-Term time horizon
- Transparent public disclosures for informed decision making by stakeholders : [CDP](#), [GRI](#), [DJSI](#)

OUR INITIATIVES

■ Focus on Performance:

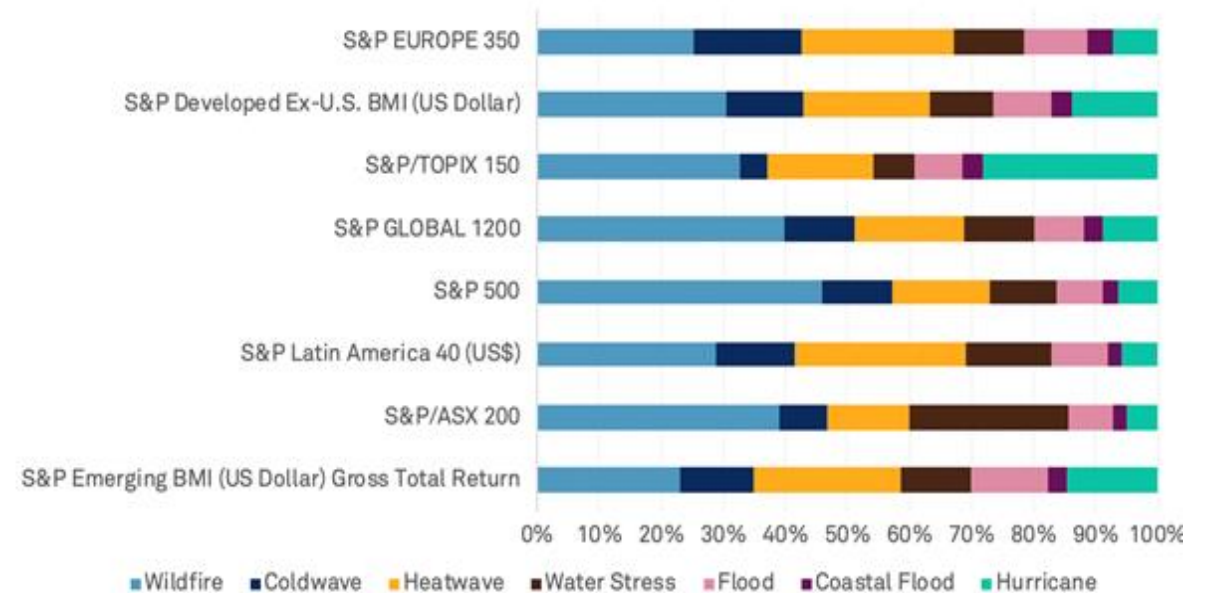
- Created history by synchronising India's first super-critical technology based generating unit, also world's first supercritical thermal project to get registered as a CDM Project
- >75% capacity from Supercritical and Ultra-Supercritical technology-based units
- Continues efforts on energy efficiency results in better than target PAT performance and better than Indian grid emission factor (CM).
- ATL's commitment to Private Sector declaration on Climate Change in India



OUR INITIATIVES

- Using risk analysis for likely scenarios in our business:
- Types of risks and estimated financial impact from SP Global
- <https://www.spglobal.com/en/research-insights/featured/understanding-climate-risk-at-the-asset-level-the-interplay-of-transition-and-physical-risks>

Figure 2: Physical Risk Drivers by Index. Moderate Climate Change Scenario. 2050. (Trucost Analysis as at 13 November 2019)



WAY FORWARD

- Framework for internal carbon pricing (ICP)
- Sensitivity analysis of operational units
- Integration of RCP climate scenarios in project planning for climate resilient infrastructure
- Balancing energy mix – a step towards Net Zero Emissions

OUR ADVICE

- Investors are interested in climate resilient businesses
- Opportunities are here, only need to change viewpoint of business

Poll Question 4

What would your organisation find most challenging in making TCFD disclosures?
(You can choose more than one option)

- Limited board-level buy-in
- Limited internal capacity to operationalise TCFD
- Limited availability of climate and linked data
- Inadequate or inconsistent methodologies to assess and disclose climate risks
- No government mandate to manage and disclose climate risks
- High costs of assessment



Dr. Tony Rooke
Director,
Climate and Resilience Hub,
Willis Towers Watson

Global best practices and recommendations



What is TCFD?

- The TCFD is a **voluntary** disclosure initiative founded in 2015, with recommendations report from the Financial Stability Board issues in June 2017
- The FCA is currently undertaking a consultation to make TCFD disclosures **mandatory for premium listed companies by 2022**
- It is supported by institutions representing over £100trn of assets

TCFD develops recommendations in 4 thematic areas that are applicable to organisations across sectors and jurisdictions, promoting transparency and financial stability

Governance
Disclose the organisations governance around climate related risks and opportunities

Strategy
Disclose the actual and potential impacts of climate related risks and opportunities on the organisation’s businesses, strategy and financial planning where such information is material

Risk Management
Disclose how the organisation identified, assesses and manages climate related risks

Metrics and Targets
Disclose the metrics and targets used to assess and manage relevant climate related risks and opportunities where such information is material

Climate risk and opportunity quantification underpin strategies

Climate risk driver



Physical

The immediate risks arising from weather-related events and slow onset climatic changes



Transition

The financial risks arising from the transition to a lower-carbon economy



Liability

The risk of actions initiated by claimants who have suffered loss and damage arising from climate change

Challenges for our clients

Acute

- Change in frequency of weather events (Flooding, typhoons, wildfires)
- Change in severity of weather events

Chronic

- Sea level rise
- Rising temperatures

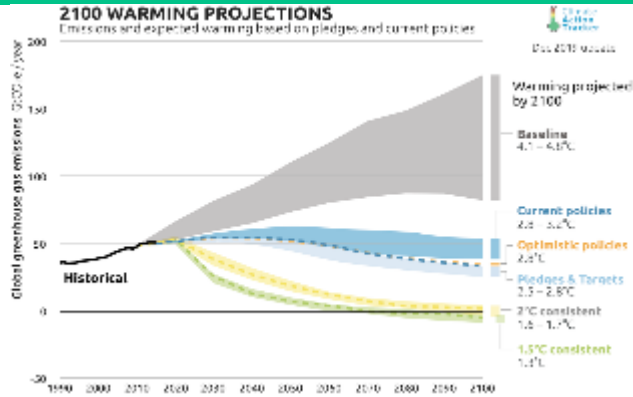
- Arising from changes in policy, technology, societal pressure and consumer preference
- Some sectors of the economy face big shifts in asset values or higher costs of doing business

- Active litigation ranges from individuals, corporates and class actions
- New area of law being developed and tested in different jurisdictions

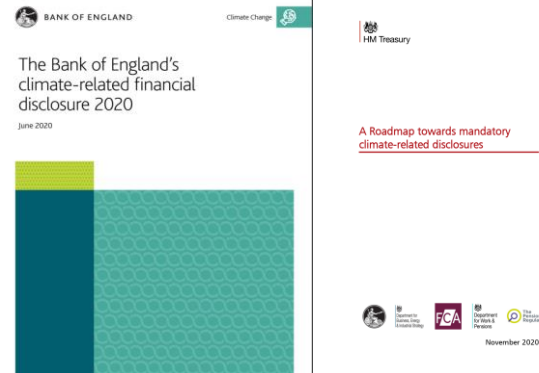
TCFD places financial risks and opportunities at the heart of business strategy

For various reasons, climate related financial disclosure is ever more important

Climate Change is Observable and Fuelled by Industry



Increasing Regulatory Attention



Collective International Multi-Industry Shift



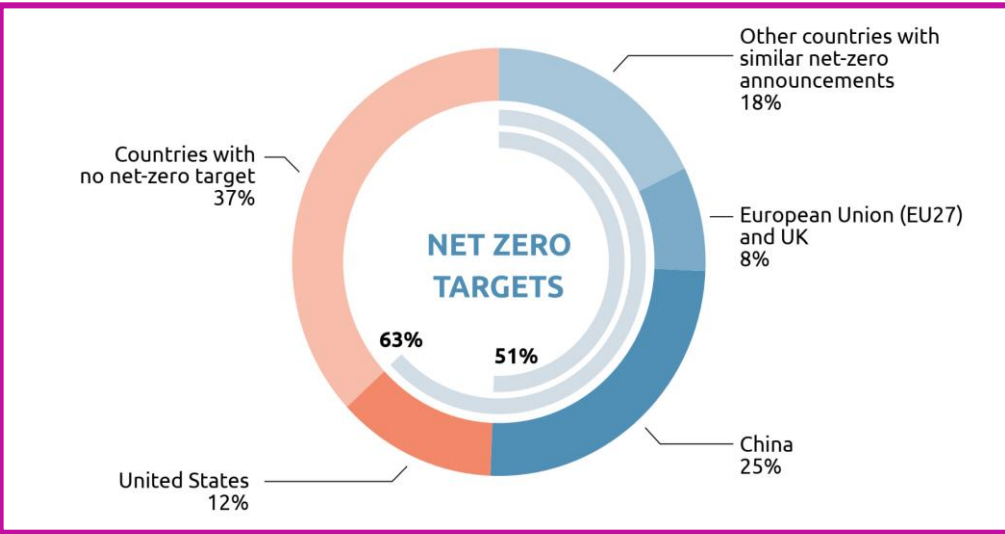
Why are companies encouraged to complete TCFD submissions?

- TCFD helps companies prepare a strategic and prudent response
- Provides guidance based on four core areas for organisations to **demonstrate to investors** how they are managing climate related financial risks and opportunities and how to disclose this information
- Aims to increase the **transparency around climate risks** and encourage organisations to **build long term resilience** into their strategies and processes

There is growth policy maker and financial institutional need to manage climate risk

Net zero and 1.5oC alignment are key themes

Government net zero target setting



Paris aligned target setting for business

Equity-focussed, portfolio transition (1.5°C alignment)

Capital market transition finance (1.5°C alignment)

Financial system resilience

SCIENCE BASED TARGETS
 WWF, CDP, WORLD RESOURCES INSTITUTE, United Nations Global Compact
 1000+ companies

Race to Zero
 UNFCCC, UN CLIMATE CHANGE CONFERENCE UN 2021

FSEG & Race to Resilience
 UNFCCC, UN CLIMATE CHANGE CONFERENCE UN 2021, OXFORD

Net-Zero Asset Managers Alliance
 CDP, Ceres, IIGCC, PRI

Climate Action 100+
 168+ companies
 Ceres, IIGCC, PRI

Net-Zero Asset Owners Alliance
 FINANCE UNEP INITIATIVE, PRI Principles for Responsible Investment

Say on climate
 CDP, CHILDREN'S INVESTMENT FUND FOUNDATION, ACCR

Financing credible transitions
 Climate Bonds, CREDIT SUISSE






















Climate Transition Finance
 ICM A, Green Bond Principles, Sustainability Bond Guidelines, Sustainability-Linked Bond Principles

Coalition for Climate Resilient Investment
 Governments, FIs, NGOs, etc.

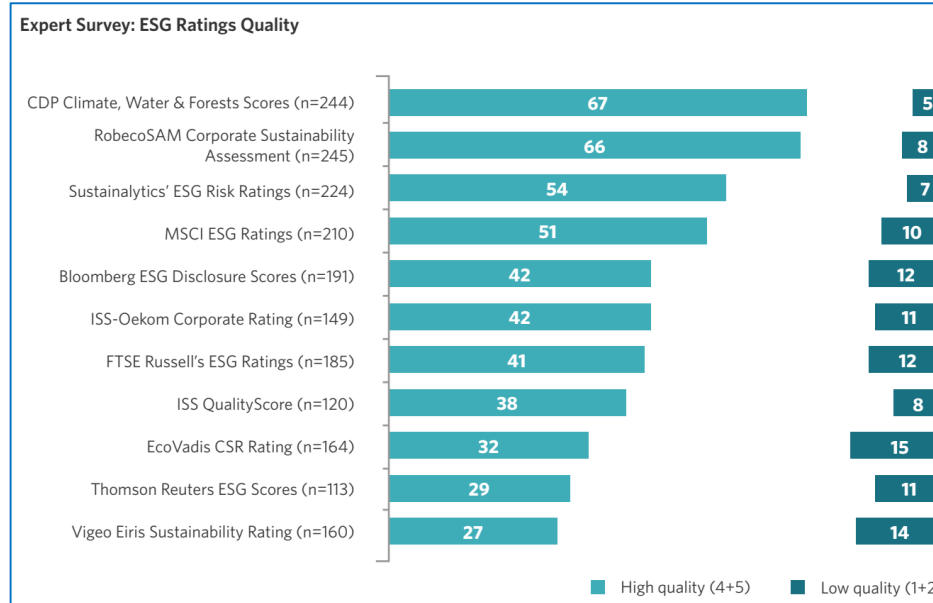
NGFS
 87 central banks / regulators

Accurate reporting of risk and strategy affect valuation and access to capital

Leading ESG Reporting Frameworks

ESG Reporting framework / standard	E	S	G
 TCFD TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES			
 CDP DISCLOSURE INSIGHT ACTION			
 GRI			
 SAM Now a Part of S&P Global			
 SASB			
 CDSB Climate Disclosure Standards Board			

Leading ESG Ratings



Source: 2020 Rate the Raters, Sustainability March 2020

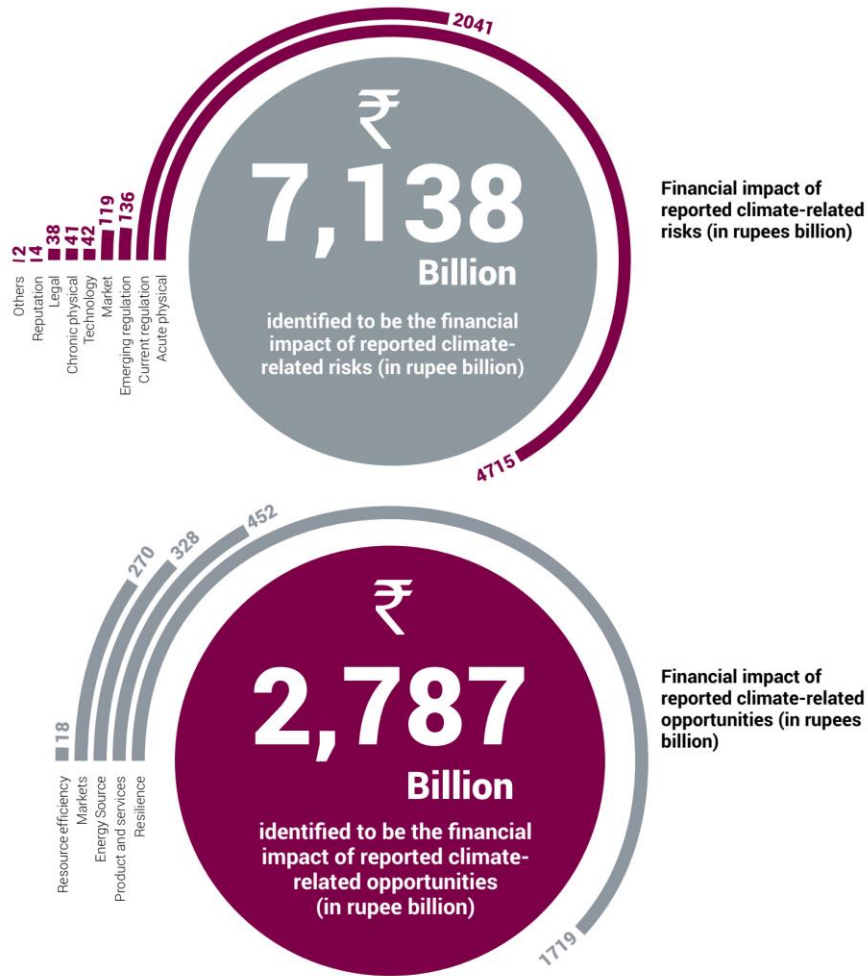
CDP 2020 India ratings

Hindustan Zinc	A
Indusind Bank	A
Mahindra & Mahindra	A
Tech Mahindra	A
Godrej Consumer Products Limited	A-
Infosys Ltd.	A-
JSW Steel Ltd.	A-
Marico	A-
Mindtree Ltd.	A-
Tata Communications	A-
Tata Consultancy Services	A-
Tata Consumer Products	A-
Tata Motors	A-
Tata Steel	A-
Wipro	A-
YES BANK Limited	A-

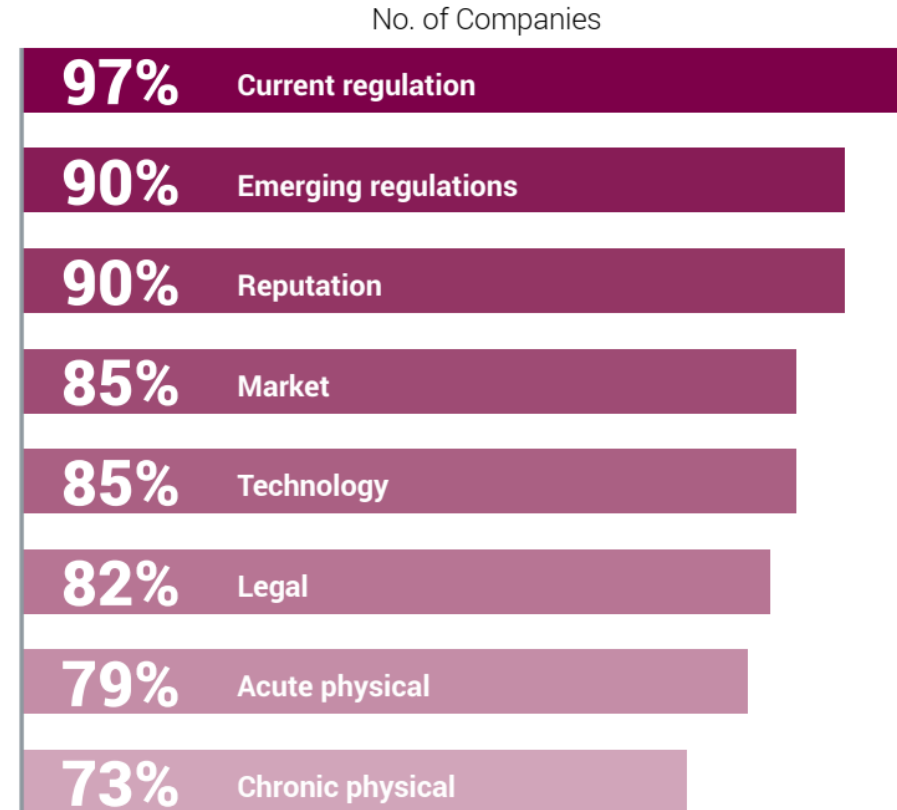
Source: CDP India Report, March 2021

Best practices – India

Size of risk / opportunity impact from climate change is driven mostly from physical risk and regulation



Risks relevant to Indian companies

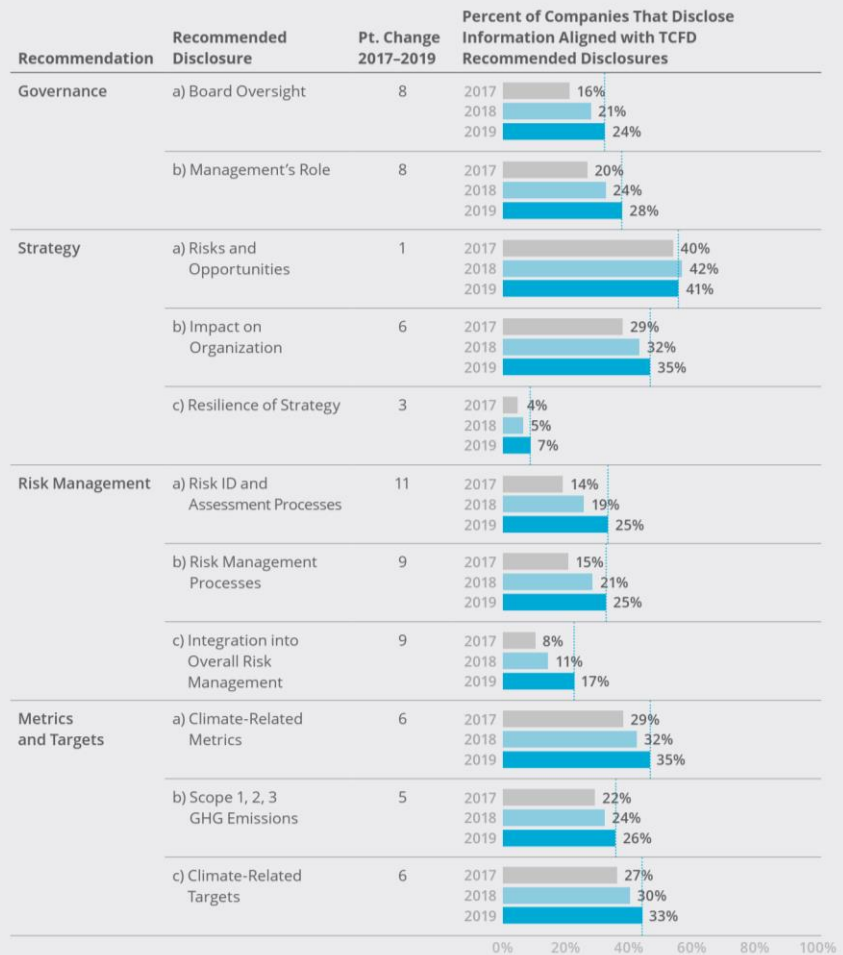


Source: CDP India Report, March 2021

Globally: Europe, N America, Japan and Australasia lead the way in reporting TCFD

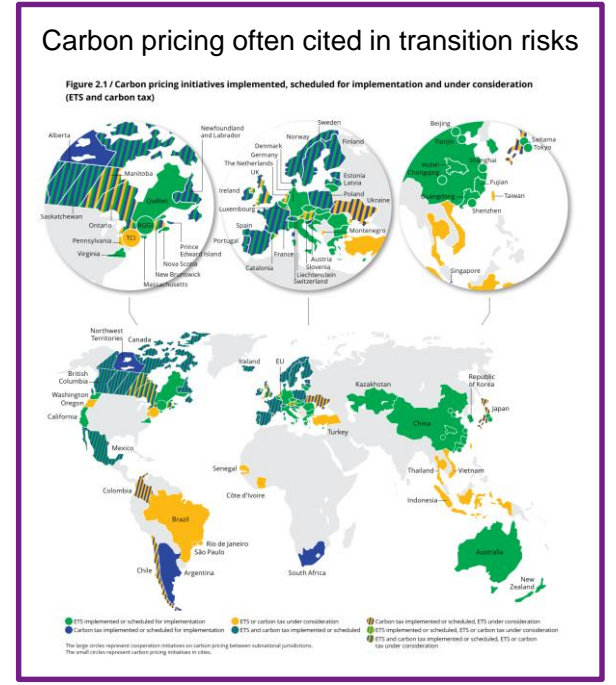
Scenario analysis is in its infancy, physical and transition risks are best reported

TCFD-Aligned Disclosures by Year



Legend: Percentage of companies that disclosed information aligned with TCFD recommended disclosures in 2019

Source: TCFD 2020 status report



Best practice is when climate risk assessment shapes business strategy

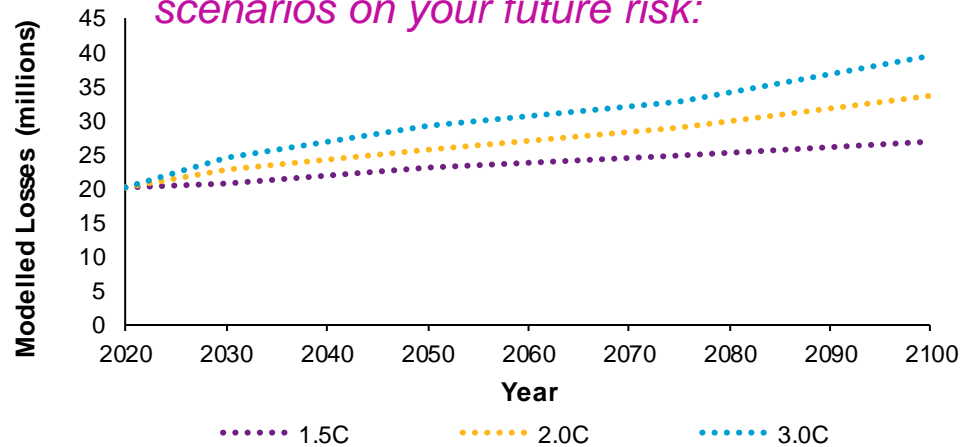
Quantify Future Climate Risk

Climate Quantified™

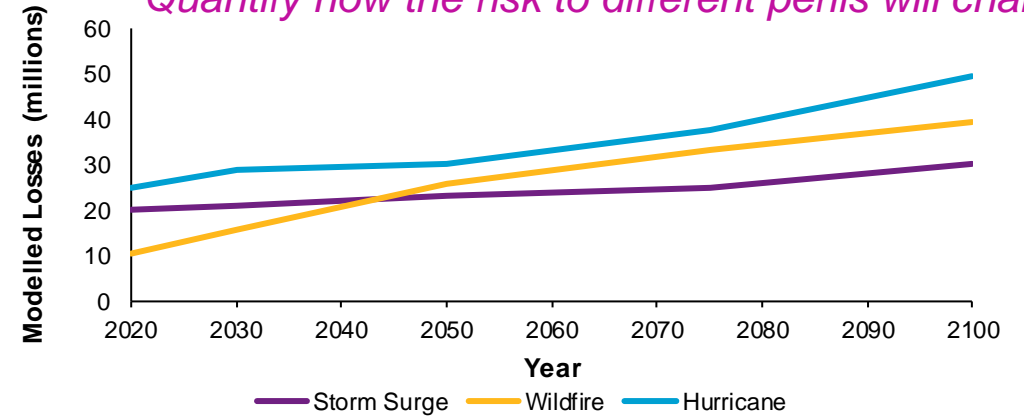


Example outputs (for reference only)

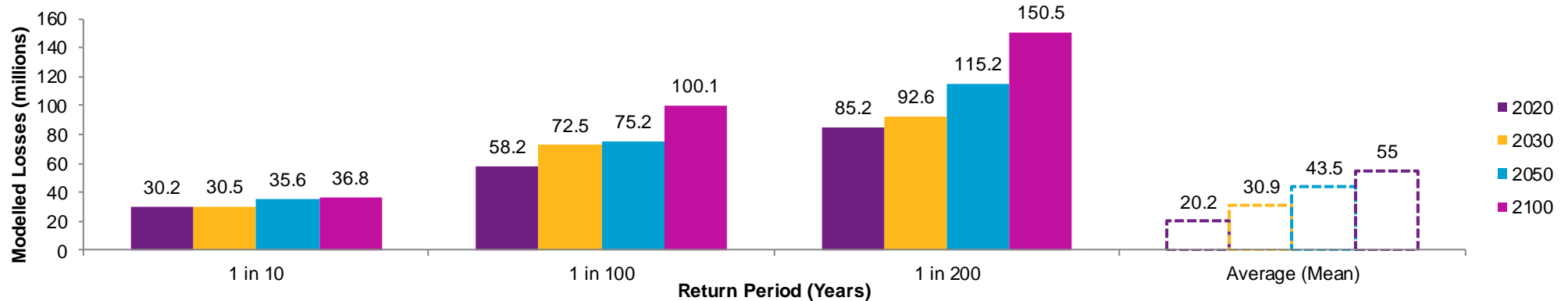
Understand the impact of different climate scenarios on your future risk:



Quantify how the risk to different perils will change:

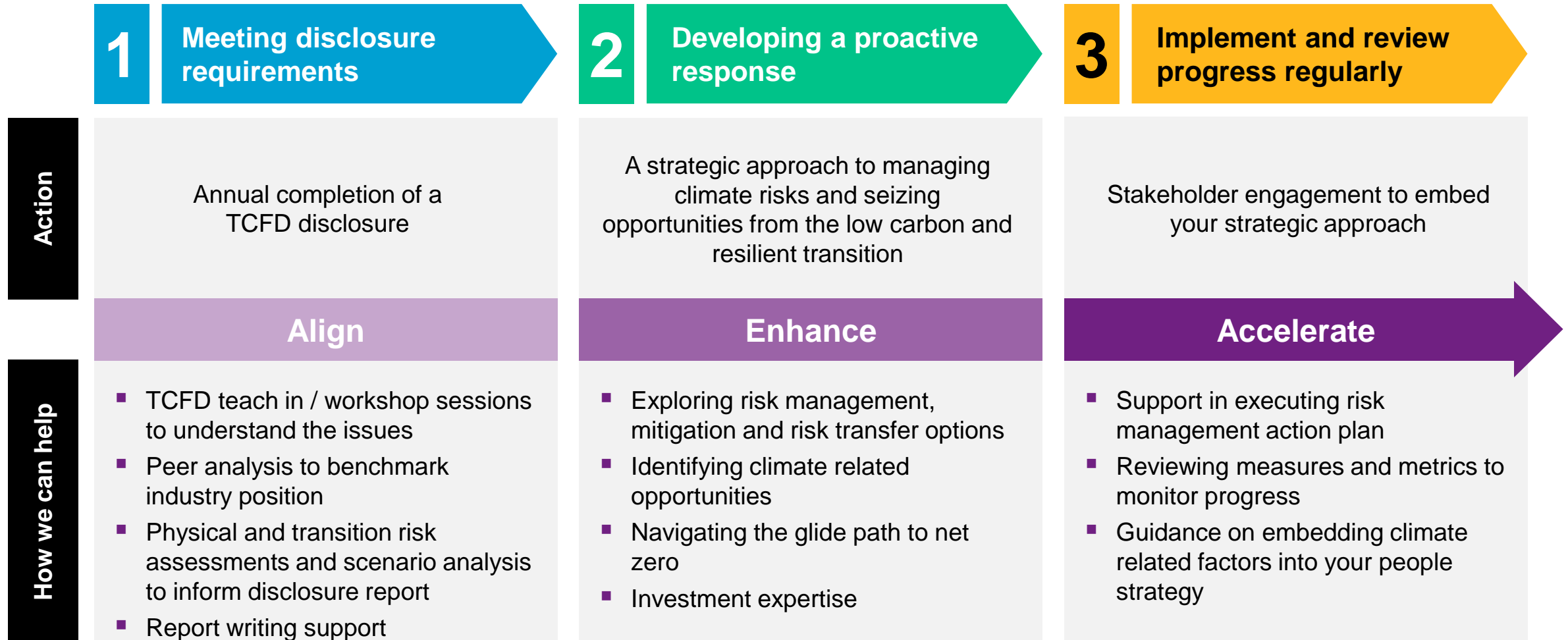


Analyse how the exposure to low probability losses will change in the future:



A strategic approach to responding to TCFD disclosure

How WTW can support your organisation to understand climate risk and maximise opportunity



Our team have shaped the TCFD from the start and continue to set agenda

We are uniquely positioned to implement TCFD with our clients and help them strategically

Physical Risk Assessment
 Transition Risk Assessment
 Portfolio, equity and Value at Risk
 Strategy and transition planning
 Scenario analysis
 Climate Resilience




TCFD implementation:

- Banks & Insurers
- Asset Mangers & Owners
- Clients across multiple industries



May 2020



Phase I (July 2018)



Phase II (September 2020)






Implementation of TCFD disclosure for half of world's market capitalisation of companies

Implementation of TCFD disclosure by regulators



TCFD: is UK plc readying itself for climate-related financial disclosures?
Willis Towers Watson TCFD Pulse Survey – Volume 1 (October 2020)



Willis Towers Watson

Survey highlights

- UK companies are generally not well prepared for TCFD; financial companies more so**
- But climate is increasingly seen as a risk management and financial issue**
- Common challenges exist**

70% have yet to publish a TCFD disclosure or to begin the process of preparing their response.	63% are still in the exploratory phase of considering how climate-related risks and opportunities will impact business strategy and financial planning.
66% state that either the risk management or finance function leads, or co-leads, responses on climate-related risks and opportunities	87% see investors as the key audience for climate disclosures.
70% are concerned about defining the metrics used for TCFD reporting.	Only 10% are likely to include climate-related metrics and targets into remuneration policy in the next 12 months.

Poll Question 5

Do you think your organisation needs to become a signatory and make a TCFD disclosure?

- Yes, we intend to start soon
- Yes, but not for a couple of years
- Not sure
- No

Panel Discussion: Ensuring TCFD is more than a tick-boxing exercise: What can companies do assess and manage climate risks?



Anu Jogesh

Associate Director,
Climate and Resilience Hub,
Willis Towers Watson
(Moderator)



Shikhar Jain

Principal Counsellor,
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Dr. Tony Rooke

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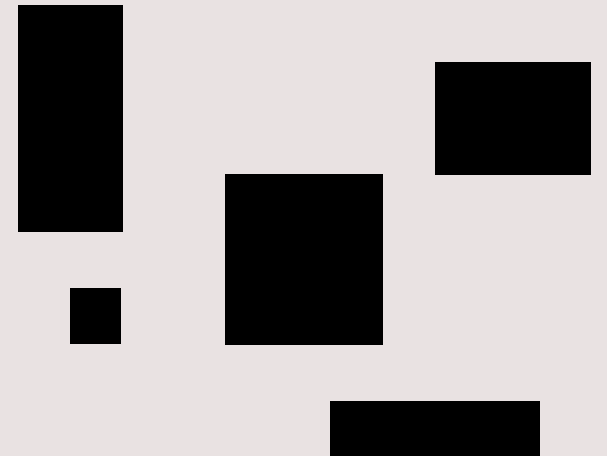


Damandeep Singh

Director,
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Questions?

Please type your questions in the Q&A Panel located on the right-hand side of your screen.



Thank You!

The webinar will be uploaded on our website and shared with all participants. For more information, please write to: Marketing.India@willistowerswatson.com.

