

Klima Szenarioanalyse und die TCFD

Presentation by Nico Kröner

8 November 2022

Climate risk and opportunities disclosures

The TCFD framework is best practice for climate risk disclosure, and complements other disclosure frameworks

2015

ESTABLISH

The TCFD was established by the G20's Financial Stability Board (FSB), tasked with developing a framework that encourages **greater transparency** by organizations on the **financial risks and opportunities** posed by climate change.

2017

FRAMEWORK

The TCFD **Recommendations** presented a **voluntary reporting framework**, whereby organizations disclose against four key pillars to manage climate change

2017 - Now

ADOPTION

The TCFD is considered **international best practice** for climate risk disclosure, and has prompted **other reporting standards (e.g., CDP) to align their approach with TCFD**.

It is regarded as international best practice, supported by over **2,600 organizations globally** that represent a market capitalization of over **USD \$25 trillion**.*



*Source: TCFD, 2021 Status Report (2021)

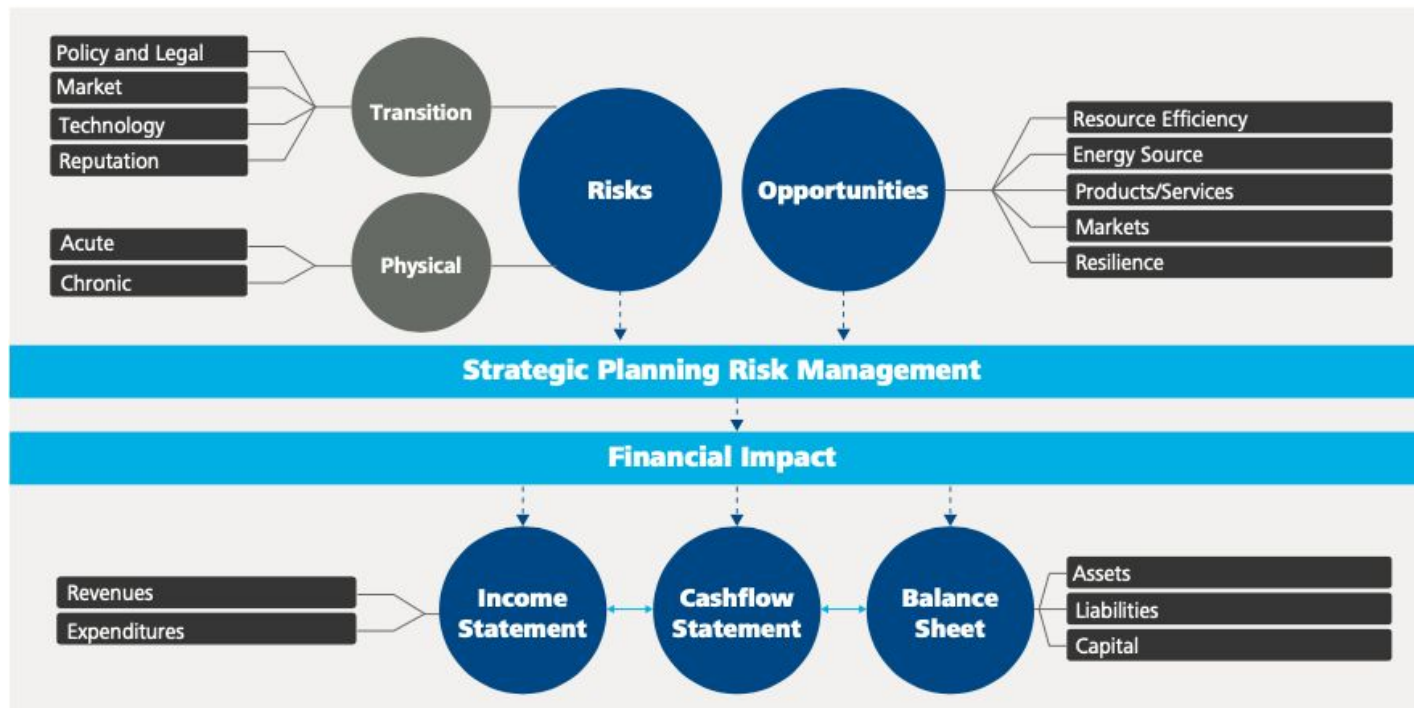
The TCFD framework

11 recommended disclosures across the four recommendations

Governance	Strategy	Risk Management	Metrics and Targets
<p>Disclose the company's governance around climate-related risks and opportunities.</p>	<p>Disclose the actual and potential impacts of climate-related risks and opportunities on the company's businesses, strategy, and financial planning where such information is material.</p>	<p>Disclose how the company identifies, assesses, and manages climate-related risks.</p>	<p>Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.</p>
Recommended Disclosures	Recommended Disclosures	Recommended Disclosures	Recommended Disclosures
<p>a) Describe the board's oversight of climate-related risks and opportunities.</p>	<p>a) Describe the climate-related risks and opportunities the company has identified over the short, medium, and long term.</p>	<p>a) Describe the company's processes for identifying and assessing climate-related risks.</p>	<p>a) Disclose the metrics used by the company to assess climate-related risks and opportunities in line with its strategy and risk management process.</p>
<p>b) Describe management's role in assessing and managing climate-related risks and opportunities.</p>	<p>b) Describe the impact of climate-related risks and opportunities on the company's businesses, strategy, and financial planning.</p>	<p>b) Describe the company's processes for managing climate-related risks.</p>	<p>b) Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks.</p>
	<p>c) Describe the resilience of the company's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.</p>	<p>c) Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the company's overall risk management.</p>	<p>c) Describe the targets used by the company to manage climate-related risks and opportunities and performance against targets.</p>

The TCFD framework

Climate-related physical and transition risks and opportunities have a financial impact



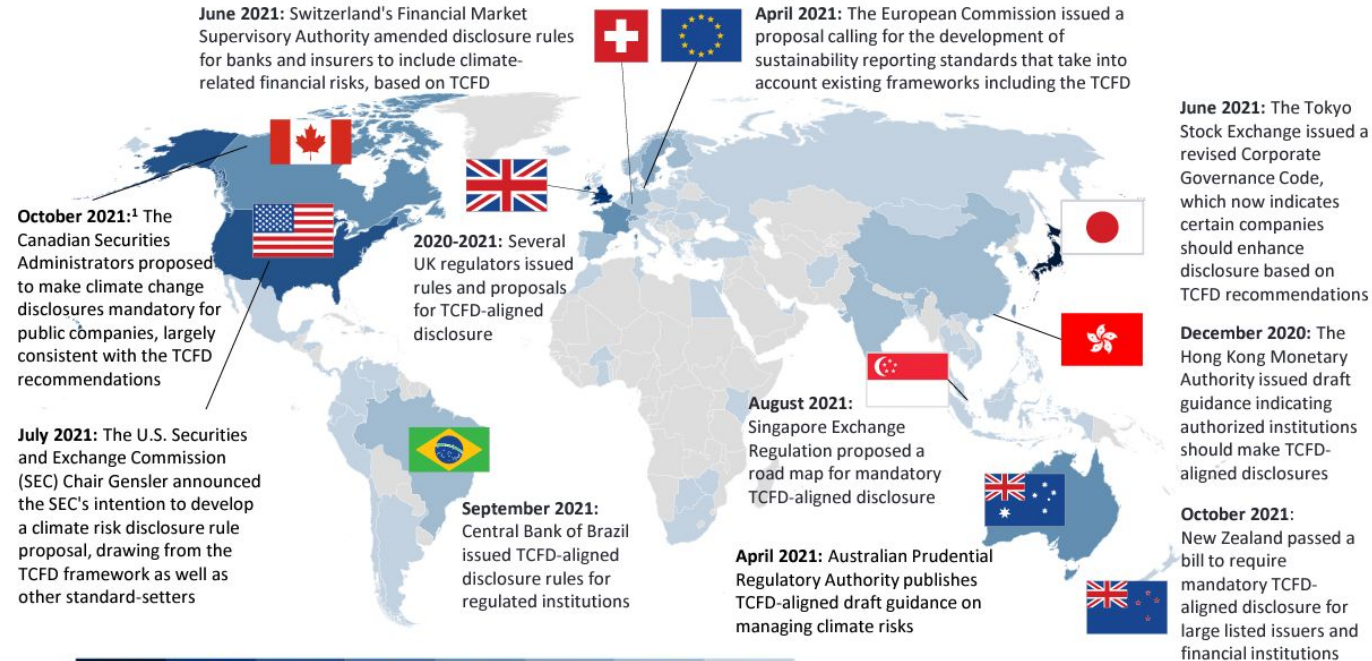
Source: TCFD, Recommendations of the Task Force on Climate-related Financial Disclosures (2017)

Business case



TCFD regulation in 2021

Various jurisdictions are taking steps to encourage or mandate TCFD-aligned disclosures. In Europe, this includes GB, Switzerland and the EU



Types of climate risks and opportunities

Physical risks



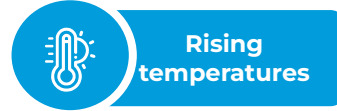
Acute physical risks (event-driven)

Acute risks refer to risks that are event-driven, such as increased frequency and severity of extreme weather events (e.g. hurricanes, wildfires, floods)



Chronic physical risks (long-term shifts in climate patterns)

Chronic risks refer to longer-term shifts in climate patterns, such as gradual changes in precipitation and temperature patterns



Types of climate risks and opportunities

Transition risks and opportunities

Transition-related risks



Policy



Legal



Technology



Market



Reputation

Transition-related opportunities



Resource
efficiency



Energy
source



Products and
services



Markets

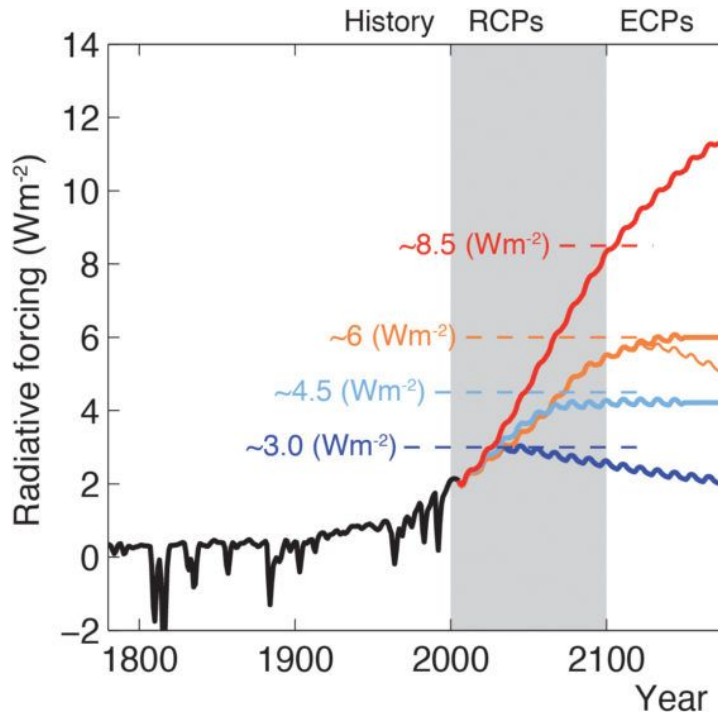


Resilience

Scenario analysis



Physical climate change scenarios

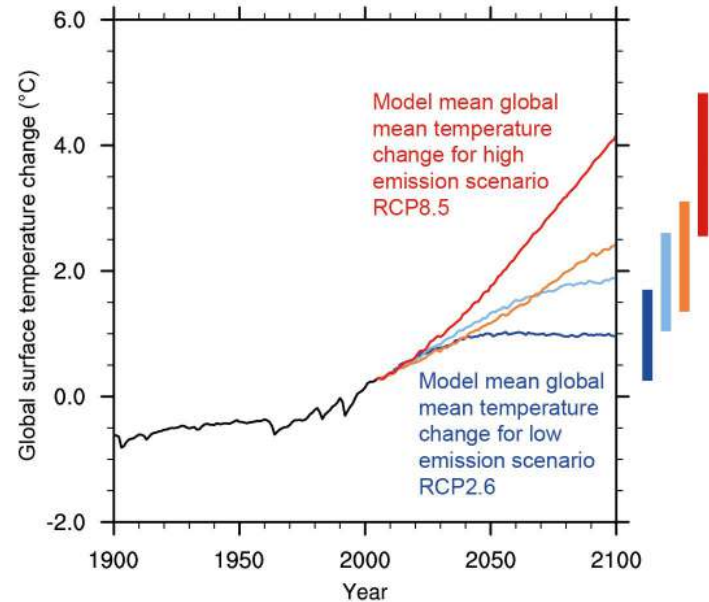
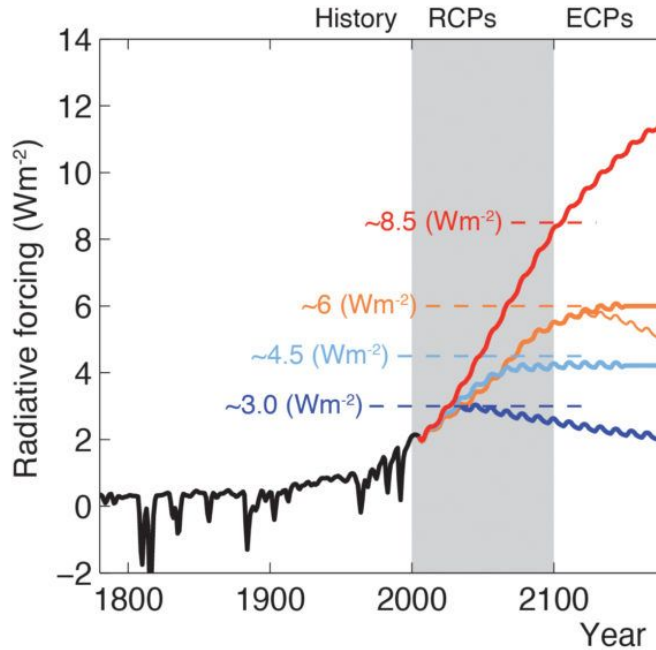


- RCP = Representative concentration pathways
- Four RCPs exist:
 - RCP2.6
 - RCP4.5
 - RCP6
 - RCP8.5
- The RCP's prescribe a concentration of GHG in the atmosphere together with the associated emissions without making assumptions on how the emissions are produced

Source: Stocker et al. 2013 (IPCC Fifth Assessment Report, Working Group 1, Introduction, Figbox1-1-1).

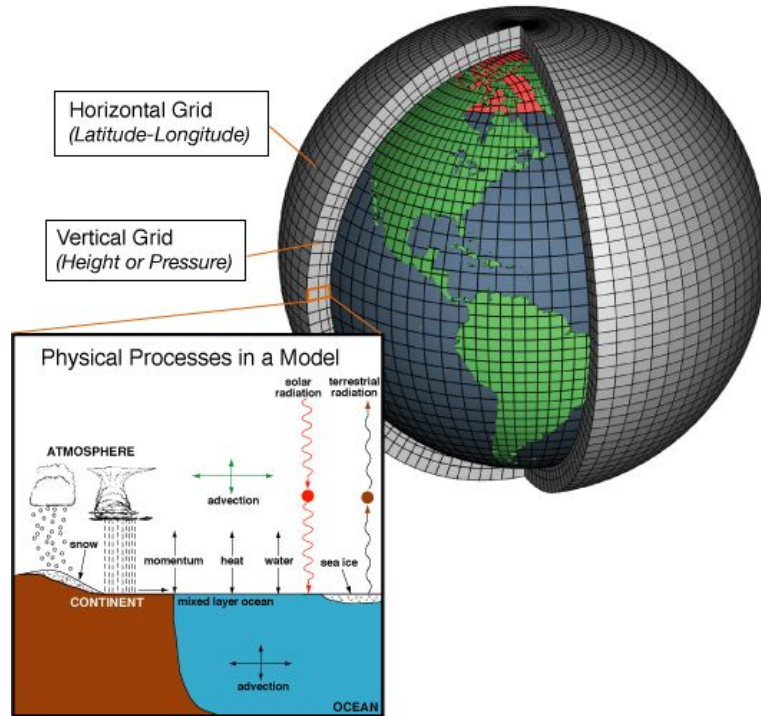
Climate projections

Translating GHG concentrations into future climate



Global climate model ensembles (CMIP5)

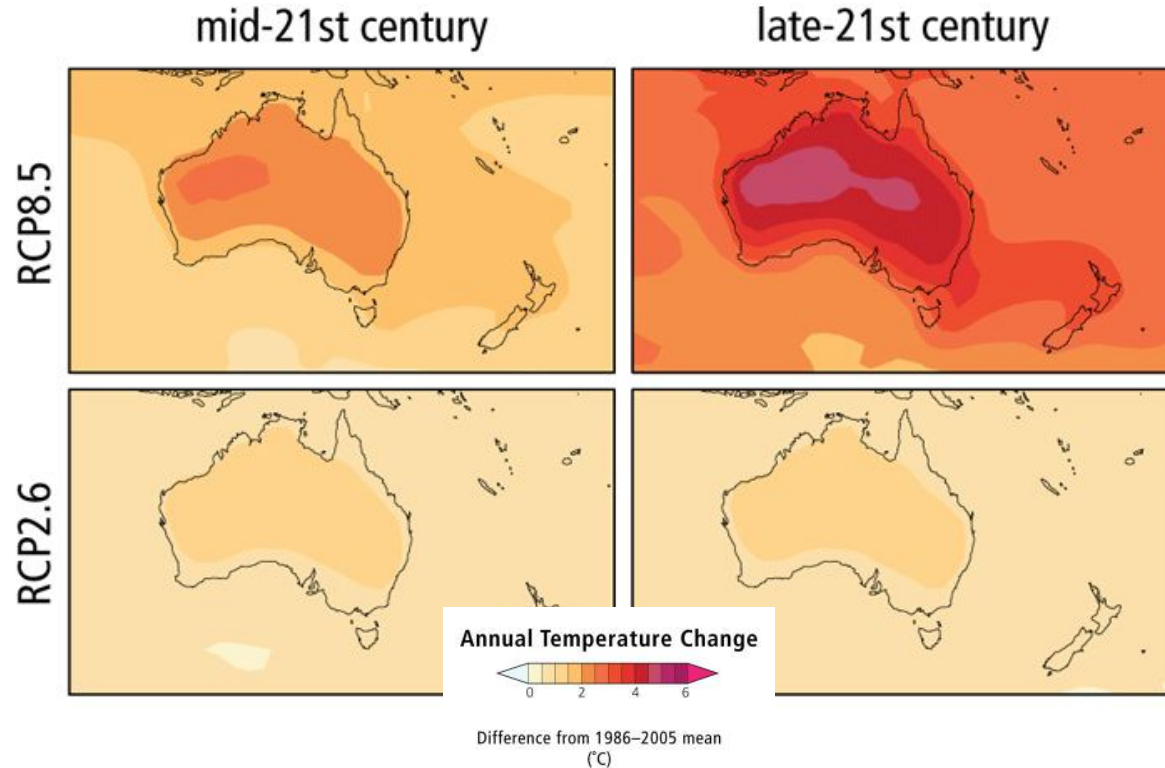
Climate models



Source: NOAA (<https://www.climate.gov/file/atmosphericmodelschematicpng>)

- A climate model is a mathematical representation of the physical processes governing the climate system on a numerical grid
- Many different climate models exist
- The scientific community regularly combines most existing models in large coordinated efforts called (Coupled Model Intercomparison Projects CMIP)
- The most tested is the CMIP5 data used for the 5th assessment report. The newest data comes from CMIP6 which is the bases for 6th assessment report.

Scenario analysis in the context of climate change



Source: Reisinger et al. 2014 (IPCC Fifth Assessment Report, Working Group 2, Australasia Regional Chapter, Figure 25-1).

About South Pole

Pictured: South Pole's Kariba Forestry Project, established to protect the threatened rainforest on Lake Kariba in northern Zimbabwe.



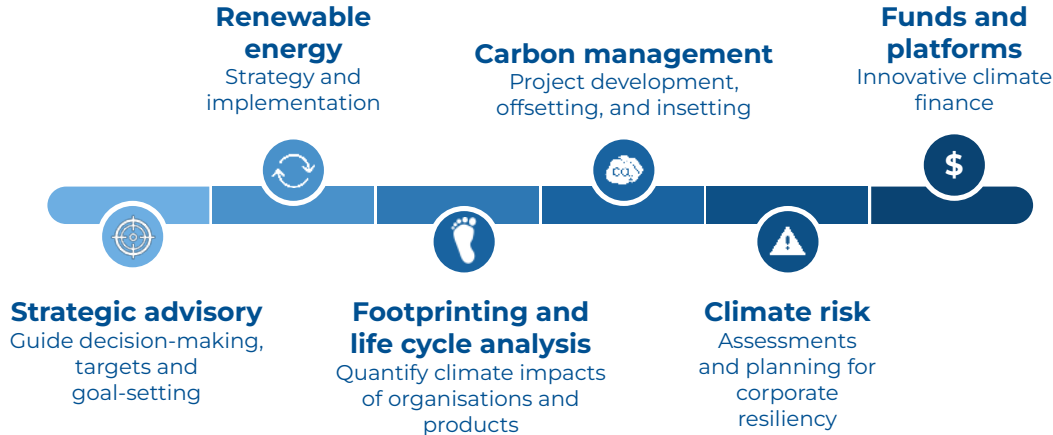
Who we are



South Pole is a **profit-for-purpose** company that enables corporates, capital markets and the public sector to **reduce their impacts** on **climate change** while mitigating risk and creating value on their **sustainability journeys**

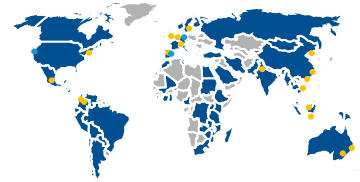
South Pole Climate Solutions

Providing support along the entire corporate sustainability journey



Global impact, local reach

700+ employees in 20 offices: engineers, consultants, scientists, project developers and finance experts



Extensive client and partner network

McKinsey & Company



Deutsche Bank



MARS

L'ORÉAL



Our work



140,000

GWh of renewable
energy generated

That's
equivalent to
21 million
cars taken off
the roads



+2 trillion

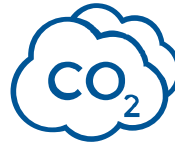
in investments
screened for
climate risk
(EUR)



≈1000

carbon emission
reduction **projects**
developed in over
50 countries

Over
100,000
jobs
created



+170 million

metric tonnes of
carbon dioxide
reduced

**EUR 15
billion**
mobilised for
climate
mitigation
projects

2 million
hectares of
forests
protected

Pictured: South Pole's Kariba
Forest Protection Project in
Zimbabwe



THE CLIMATE IS CHANGING

ARE YOU?

