



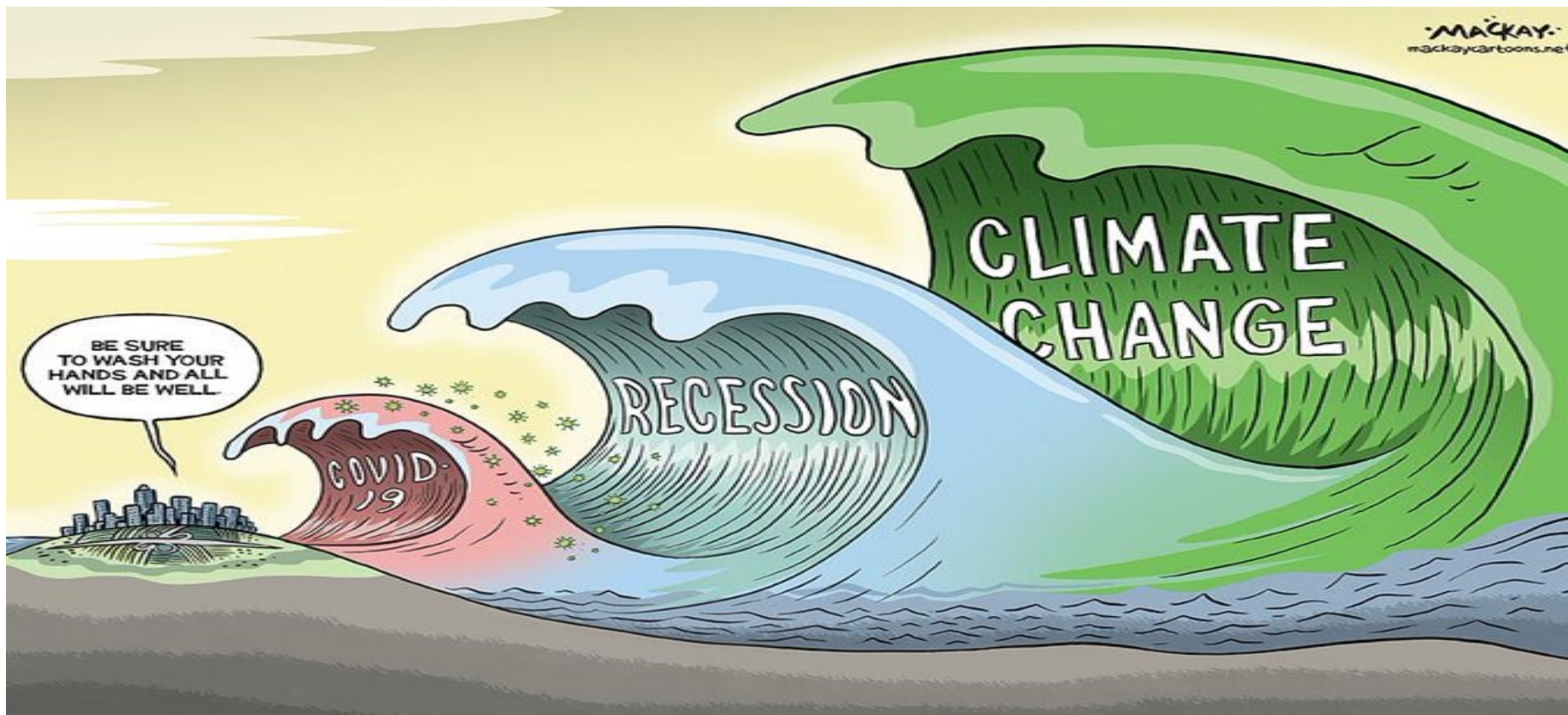
Climate change and financial reporting impacts

Audit Committee No. 49

Date | 30 August 2022

Time | 13.30-14.30





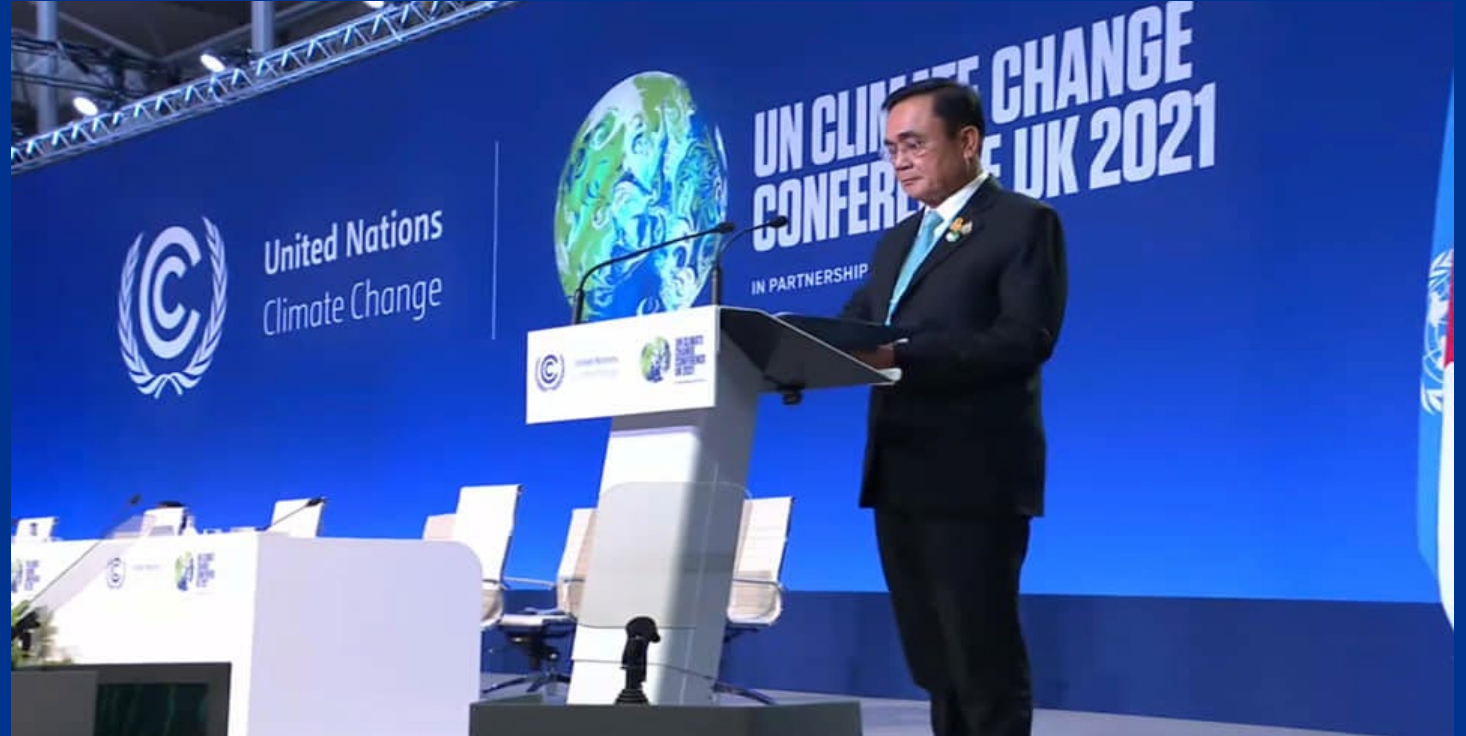


**“Climate change could be irreversible
by year 2030”**

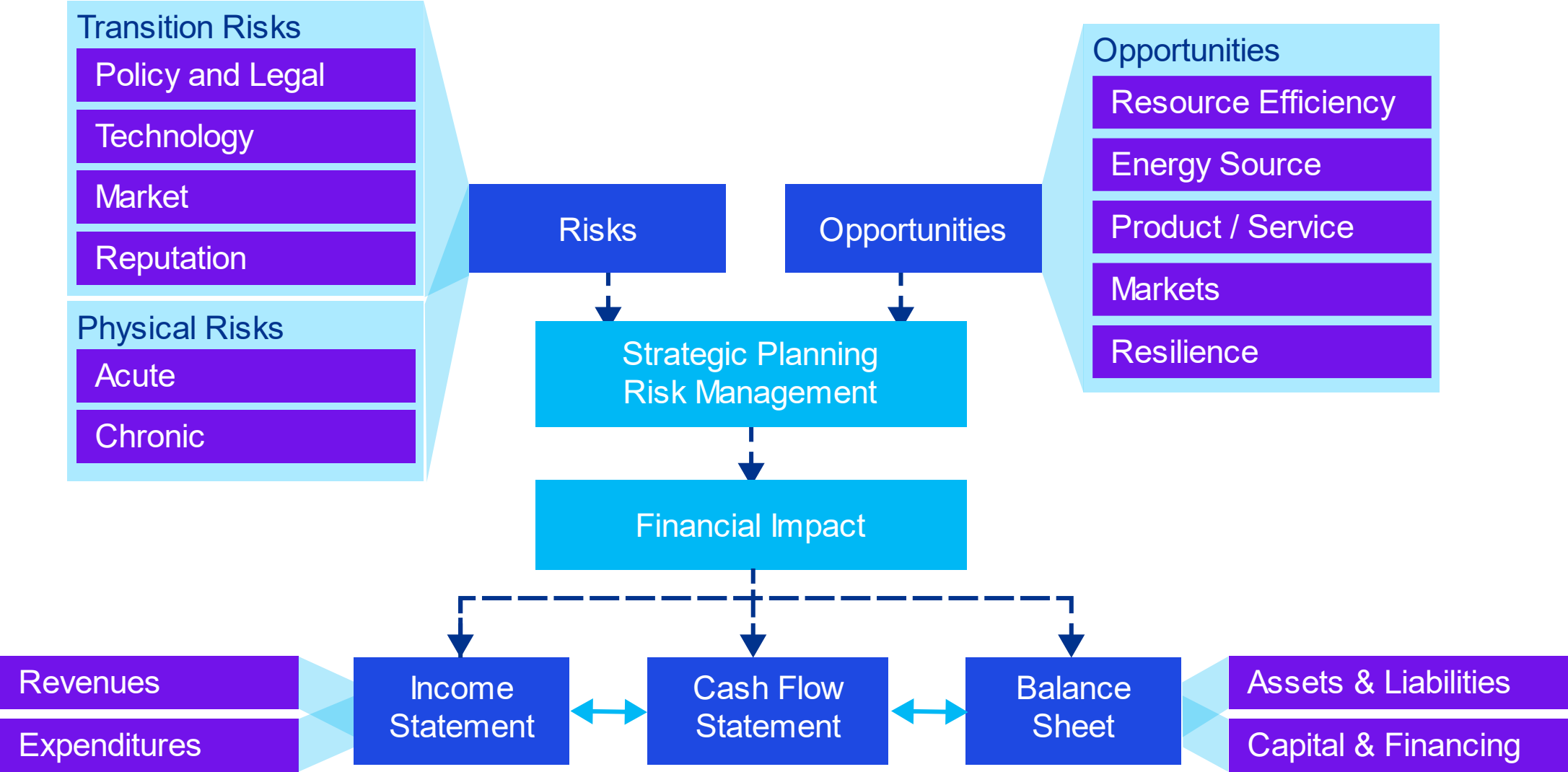
– UN Intergovernmental Panel on Climate Change –

Thailand's Commitment at COP26

- Thailand ranked 9th on the Global Climate Risk Index 2021 by “extreme weather events” between 2010 to 2019
- Enhance GHG emission reduction target up to 40%
- Carbon Neutrality by 2050
- Net Zero Emission by or before 2065






Climate risk, opportunities and financial impacts






Climate-related Risks and Financial Impacts

Physical Risks

Chronic Hazard

-  Sea Level Rise
-  Temperature Patters
-  Drought

Acute Hazard

-  Precipitation/
Flooding
-  Extreme Wind
-  Cyclone

Transition Risks

-  Policy and Legal Risk
-  Technology Risk
-  Reputation Risk
-  Market Risk

\$
Financial
Impacts


Climate
Risks

Potential Financial Impacts

-  Physical damage to assets and rising insurance costs
-  Supply chain disruptions
-  Changes in operations and production processes and costs
-  Compliance costs and taxes
-  Changes in demand for products / services
-  Litigation expense, settlements, fines and penalties

Key considerations

Considering climate-related risks and opportunities and their financial impacts when preparing financial statements

Considering materiality from both a quantitative and qualitative perspective in relation to disclosures of key judgements and assumptions related to climate risk

Providing clear and robust disclosures, especially of the key judgements and estimates affected by climate-related matters

Ensuring consistency of assumptions used in relevant areas of the company's financial statements and that they are in sync to the extent appropriate with information related to climate-related risks discussed elsewhere in the annual report.

10

questions to start your impact assessment

- 01 Has your company made a net-zero commitment?
- 02 Does your company have polluting assets?
- 03 Is your company exposed to carbon-related regulation?
- 04 What about your inventory and production costs?
- 05 Does your company take part in an emissions scheme?
- 06 Does your company borrow funds?
- 07 Is your company a provider of finance?
- 08 What about your staff benefits?
- 09 What about your cash flow forecasts?
- 10 What about your disclosures?



Has your company made a net-zero commitment?

Do you need to buy new, greener assets?

- If so, this may mean replacing existing assets with greener assets earlier than originally expected.
- This could lead to higher [depreciation and amortisation](#) expenses.

Do you need to write down your existing assets?

- If so, a significant impairment loss may arise because the assumptions for assessing the [recoverable amounts](#) may change.

Does the commitment trigger any liability?

- If your company has made a public announcement on its climate-change commitments, then this could trigger a [liability](#).



Does your company have polluting assets?

Do you need or plan to replace them?

- If so, polluting assets may need to be depreciated more quickly or written down – e.g. because of changes to the company's strategy or asset management policies.

Have you recorded all environmental liabilities?

- Changes in or new legislation may result in your company needing to record additional liabilities.
- Even if there is no legal requirement to clean up environmental damage but your company has made a public announcement that it is committed to do so, then it may need to recognise an [environmental liability](#).

Do you plan to renegotiate any leases?

- Changes in economic incentives to use or cease using a leased asset in the future – e.g. a [polluting asset](#) – could cause a lease contract's terms to be renegotiated.
- Ending or changing these terms before the lease contract expires could trigger a change in the measurement of the lease asset and lease liability.



Is your company exposed to carbon-related regulation?

How do you measure your liability for pollutants?

- A [provision](#) for emitted pollutants is measured at the company's best estimate of the future clean-up costs.
- Making this estimate may require specialised knowledge of environmental issues – e.g. the quantity and type of contaminants involved, the local geography and remediation costs.

Will compliance costs or taxes impact your prices?

- New climate-related policies or legislation may affect your company's [revenues or operating costs](#) – e.g. a carbon tax.

Can you still use your assets as planned or do you need to write them down?

- Your company may need to review the existing pool of assets if new restrictions are introduced – e.g. on using diesel trucks.
- Such restrictions may mean that assets need to be depreciated more quickly or written down.

A man in a light blue shirt is seen from the back, standing in a warehouse filled with shelves of boxes. He is holding a clipboard and a pen, looking down at it. The warehouse is brightly lit, and the shelves are filled with various boxes and materials.

What about your inventory and production costs?

Will the cost of your products rise?

- [Inventory](#) and production costs may increase due to carbon taxes, emissions schemes, changes in production processes or substitution of raw materials for more environmentally friendly materials.

Could your products or raw materials be banned?

- Products that are considered to contribute to climate change may see governmental limits or bans.

Could shifting customer trends impact your inventory?

- Shifts in customer trends to more climate-friendly and sustainable products could decrease demand for your less green products and cause inventory write-downs.



Does your company take part in an emissions scheme?

How do you account for allowances and grants?

- If you receive emission certificates from the government or purchase them, you may account for them either as intangible assets or inventories.
- Emission certificates received are measured initially at their fair value or a nominal amount – i.e. zero. Those purchased are measured at cost.

How do you account for the liability if you exceed the emissions target?

- If your company would incur a monetary penalty if it failed to meet an emissions target, then it would recognise a liability for that monetary amount.
- Some [schemes](#) require a company to purchase emission certificates to settle the liability. If there is no active market, then measuring the liability is more complex.

Do you receive green credits that you can monetise?

- If your company receives green credits – e.g. for generating green energy – then it could sell or trade them.
- These credits could be recognised as assets if they meet relevant criteria. Measuring these assets could be complex if the credits are not actively traded.



Does your company borrow funds?

Do you have loans with climate-linked covenants?

- Failing to meet any carbon emission targets in a loan agreement could cause your company to be in breach of its covenants. Breaches would need to be disclosed.
- In some cases, a breach of a loan covenant could cause the lender to withdraw that loan or request immediate repayment.
- You would need to consider the breach as part of a broader assessment to determine your company's ability to continue as a [going concern](#).

Is your borrowing rate impacted by climate-related risks?

- Lenders might include environmental aspects when pricing a loan.
- For example, if they grant a discount on the interest rate when certain climate-related targets are met, then your company's interest costs could fall. This loan may also be a hybrid contract with [embedded derivatives](#).



Is your company a provider of finance?

Do you reflect climate-related risks appropriately in measuring credit losses?

- The impact of climate-related risks on [expected credit losses](#) (ECL) will vary depending on: their expected severity and timing, the impact on the borrower and on the lender's loan portfolio, and the duration of the loan portfolio.
- The impact on ECL today could be limited because the most significant effects of climate change may be expected to emerge over the medium to longer term.
- However, it is important to monitor the speed and scale of these matters and consider their possible impacts on the measurement of ECL.

Do your credit risk disclosures address exposure to clients with higher climate-related risks?

- Your company may need to expand its credit risk disclosures to highlight sectors with higher exposure to climate-related risks.

How do you classify loans linked to climate targets?

- Classifying a [loan with climate-related features](#) will depend on how those features affect the cash flows.
- A loan with contractual cash flows that are impacted by these features may need to be classified as at fair value through profit or loss.



What about your staff benefits?

Do they reflect preferences for greener alternatives – e.g. providing low-interest loans to finance the purchase of an electric car?

- If so, then these may give rise to [short-term benefits](#) recorded in profit or loss.

Do they include climate-related performance criteria?

- For share-based payment arrangements, these criteria would generally meet the definition of a non-market condition and would not affect the fair value of the share-based payment.
- For other long-term employee benefits, a climate-related condition would be included in the measurement of the liability.



What about your cash flow forecasts?

Do they reflect climate-related matters adequately?

- The impact of climate-related matters on the assumptions underlying cash flow forecasts needs to be considered.
- For example, cash flow projections for [impairment testing](#) need to be based on reasonable and supportable assumptions that represent management's best estimate of the range of future economic conditions.

Are your cash flow projections used in calculating the recoverable amount impacted by climate-related matters?

- If the impacts of climate-related matters are ignored when performing impairment calculations, then the carrying amounts of assets – e.g. goodwill, property, plant and equipment, right-of-use assets and intangible assets – could be overstated.

Do the forecasts for assessing going concern consider different scenarios?

- Consider different possible scenarios, including a severe but plausible downside scenario.
- Additional disclosures may be required – e.g. significant judgements made on the assessment of [material uncertainties](#).



What about your disclosures?

Are they clear and robust about assumptions you've made?

- Your company will need to provide disclosures in its financial statements that are specific to its circumstances and provide clear and meaningful insights into the significant judgements and estimates made by management.
- For example, this might mean enhancing sensitivity disclosures and disclosures about the key assumptions made and major sources of estimation uncertainty.

Will they help investors understand the judgements you've made about the future?

- Your disclosures of significant assumptions and judgements on climate-related matters in the financial statements need to be clear and transparent.

Are they in sync with other sections of your annual report?

- It is important that the information in the back and front end of your annual report is in sync to the extent appropriate and complements each other.

Example of financial reporting

Disclosure of climate-related matters in the financial statements

Use of estimates

Impairment of non-financial assets

Furthermore, in line with its business model and in the context of the acceleration of the decarbonization of the generation mix and driving the energy transition process, the Group has also carefully assessed whether climate change issues have affected the reasonable and supportable assumption used to estimate expected cash flows. In this regard, where necessary, the Group has also taken account of the long-term impact of climate change, in particular by considering in the estimation of the terminal value a long-term growth rate in line with the change in electricity demand in 2030-2050 based on the specific characteristics of the businesses involved.

Information on the main assumptions used to estimate the recoverable amount of assets with reference to the impacts relating to the COVID-19 pandemic and climate change, as well as information on changes in these assumptions, is provided in note 22 "Goodwill".

Company	Enel SpA
Operation	Energy multinational and one of the world's leading integrated operators in the electricity and gas industries
Fiscal year	31 Dec 2020
Stock exchange	Italian stock exchange

- Reflect climate-related risks in key assumptions used
- Disclose the impact of climate change on the key assumptions used to determine the recoverable amount of an asset



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Example of disclosure in Financial Statements

The Group has also taken account of the long-term impact of climate change, in particular by considering in the estimation of the terminal value a long-term growth rate in line with the change in electricity demand in 2030-2050 based on the specific characteristics of the businesses involved.

The Group therefore confirmed its strategic direction based on the trends associated with the energy transition. The use of capital has been focused on decarbonization through the development of generation assets that use renewable sources, on the enabling infrastructures linked to the development of networks and on the implementa-

tion of platform models, making the most of technological and digital evolution, which will foster the electrification of energy consumption, as well as the development of new services for end users.

In 2020, Enel's decarbonization roadmap was updated to capture the acceleration in the spread of renewables and the reduction in thermal generation capacity envisaged in the new 2021-2023 Strategic Plan and in the 2030 ambitions presented on the 2020 Capital Markets Day, setting the following objectives in line with the Paris Agreement:

TIME HORIZON		GREENHOUSE GAS (GHG) REDUCTION TARGET
Short term	2023	> Direct emissions of Scope 1 greenhouse gases to 148 gCO _{2eq} /kWh (-32% compared with 2020)
Medium term	2030	> Direct emissions of Scope 1 greenhouse gases to 82 gCO _{2eq} /kWh (-80% compared with 2017, consistent with the 1.5 °C path as certified by the SBTi) > 16% reduction in indirect Scope 3 emissions associate with gas consumption by end users compared with 2017
Long term	2050	> Full decarbonization of energy mix

In addition, the scenarios used to determine cash flows took account of the impact of COVID-19.

The value in use calculated as described above was found to be greater than the amount recognized on the statement of financial position.

In order to verify the robustness of the value in use of the CGUs, sensitivity analyses were conducted for the main

drivers of the amounts, in particular WACC, the long-term growth rate and margins, the outcomes of which fully supported that amount.

The table below reports the composition of the main goodwill amounts by CGU, along with the discount rates applied and the time horizon over which the expected cash flows have been discounted.

Ref: ENEL financial statements 2020

Climate change and long-term scenarios

Enel promotes transparency in its climate-change disclosures and works to demonstrate to its stakeholders that it is tackling climate change with diligence and determination. Enel has therefore publicly committed itself to adopting the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) of the Financial Stability Board, which in June 2017 published specific recommendations for the voluntary reporting of the financial impact of climate risks. The Group is also taking on board the "Guidelines on reporting climate-related information" published by the European Commission in June 2019, which, together with the TCFD recommendations and the GRI

Furthermore, Enel, as a signatory of the "Business Ambition for 1.5 °C" campaign promoted by the United Nations and other institutions, is committed to setting a long-term goal to achieve net zero emissions along the entire value chain by 2050 and to pursue evidence-based targets in all relevant areas consistent with the criteria and recommendations of the Science Based Targets initiative (SBTi).

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Long term	2050	> Full decarbonization of energy mix

This acceleration in the reduction of greenhouse gas emissions is also a response to the appeal of the Intergovernmental Panel on Climate Change (IPCC) as part of its effort to strengthen the global response to the climate change threat. Included in the IPCC special report, the appeal warns of the impacts of global warming of 1.5 °C above pre-industrial levels and the related global greenhouse gas emission pathways.

From scenario to strategic decisions

The Group develops short-, medium- and long-term scenarios for the energy industry and for macroeconomic and financial conditions in order to support its strategic and industrial planning and the evaluation of investments and extraordinary corporate transactions. The role of climate change in these scenarios is increasingly important in terms of:

Ref: ENEL annual report 2020

ISSB Update

Crowded Reporting Frameworks



International sustainability reporting journey



Working group to accelerate convergence in global sustainability reporting standards

International Sustainability Standard Boards “ISSB”



ISSB Standard timeline



The first two standards may be issued as soon as H2 2022. Individual jurisdictions will decide whether and when to adopt them.

With strong support from International Organization of Securities Commissions (“IOSCO”), a rapid route to full adoption is expected in a number of jurisdictions. In some jurisdictions, the standards will provide a baseline.

Some public and private companies may choose to adopt them voluntarily – e.g. in response to investor or societal pressure.

ISSB Standard disclosure requirement



Material information that:

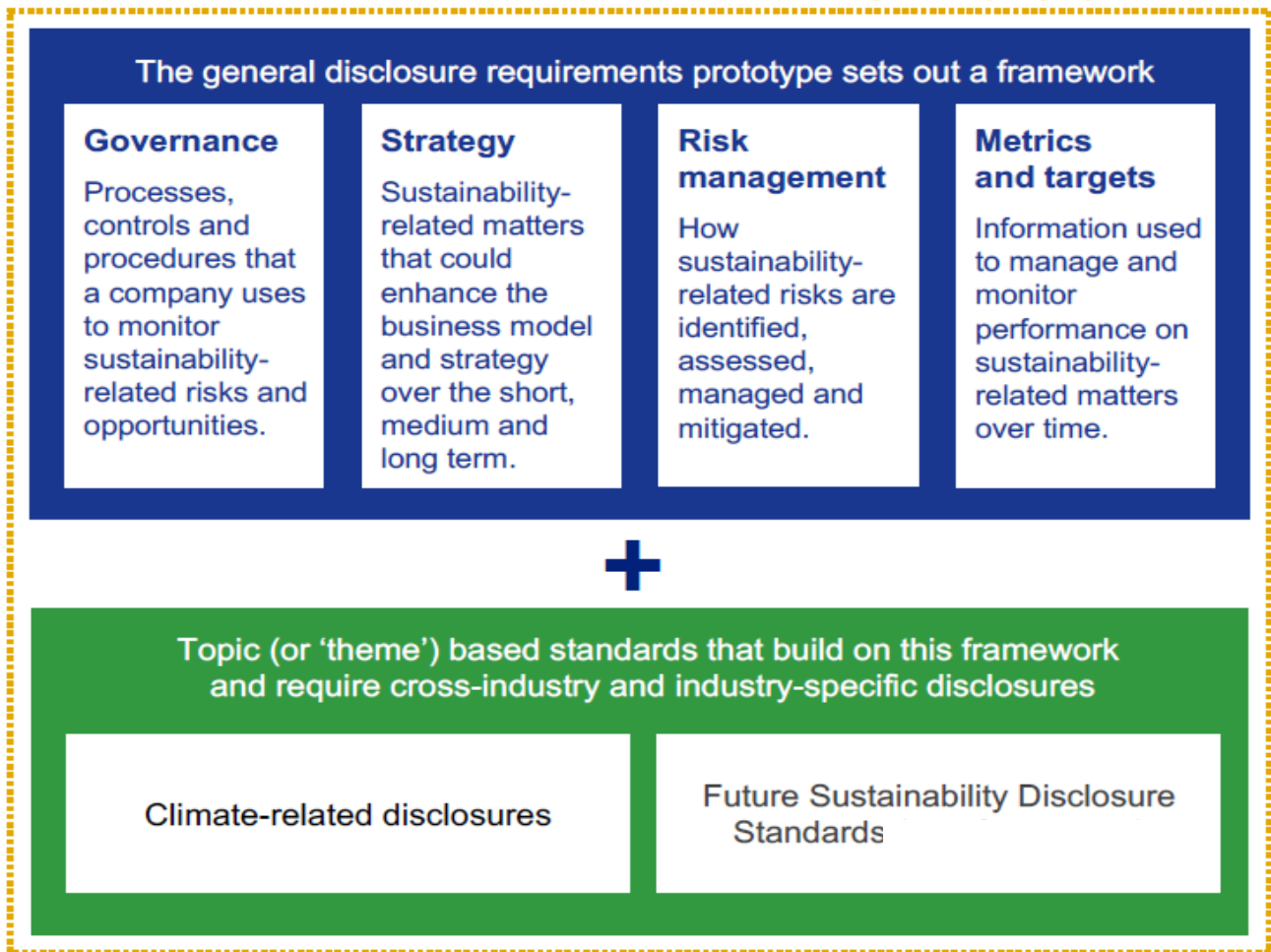
- Provides a complete and balanced explanation of significant sustainability risks and opportunities.
- Covers governance, strategy, risk management and metrics and targets.
- Focuses on the needs of investors and creditors, and drivers of enterprise value.
- Is consistent, comparable and connected.
- Is relevant to the sector and industry.
- Is presented across time horizons: short, medium and long-term.



Material metrics based on:

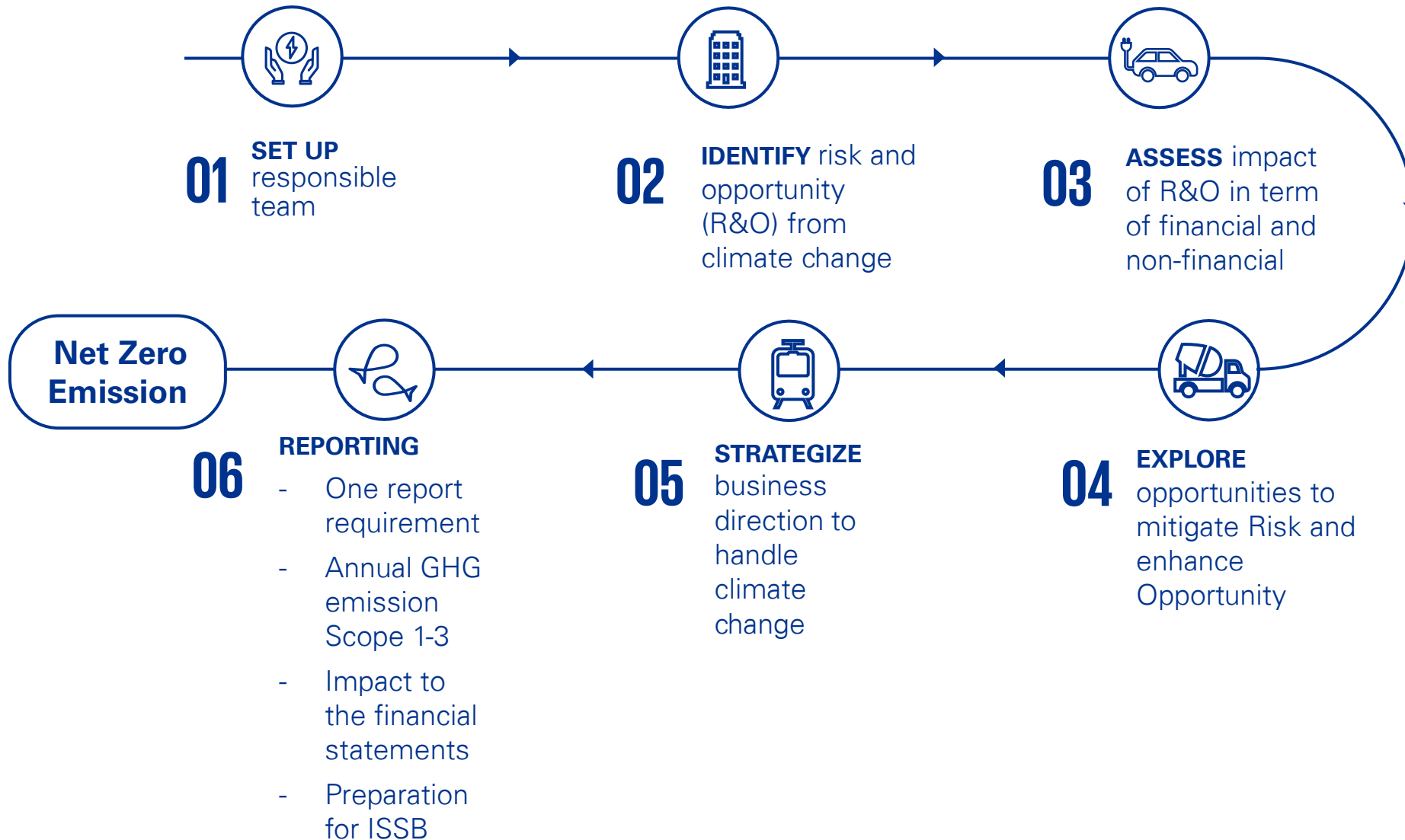
- Measurement requirements specified in the climate prototype or with reference to other frameworks such as the Greenhouse Gas Protocol.

Disclosures focus on matters that are critical to the way a company operates:



Action plan

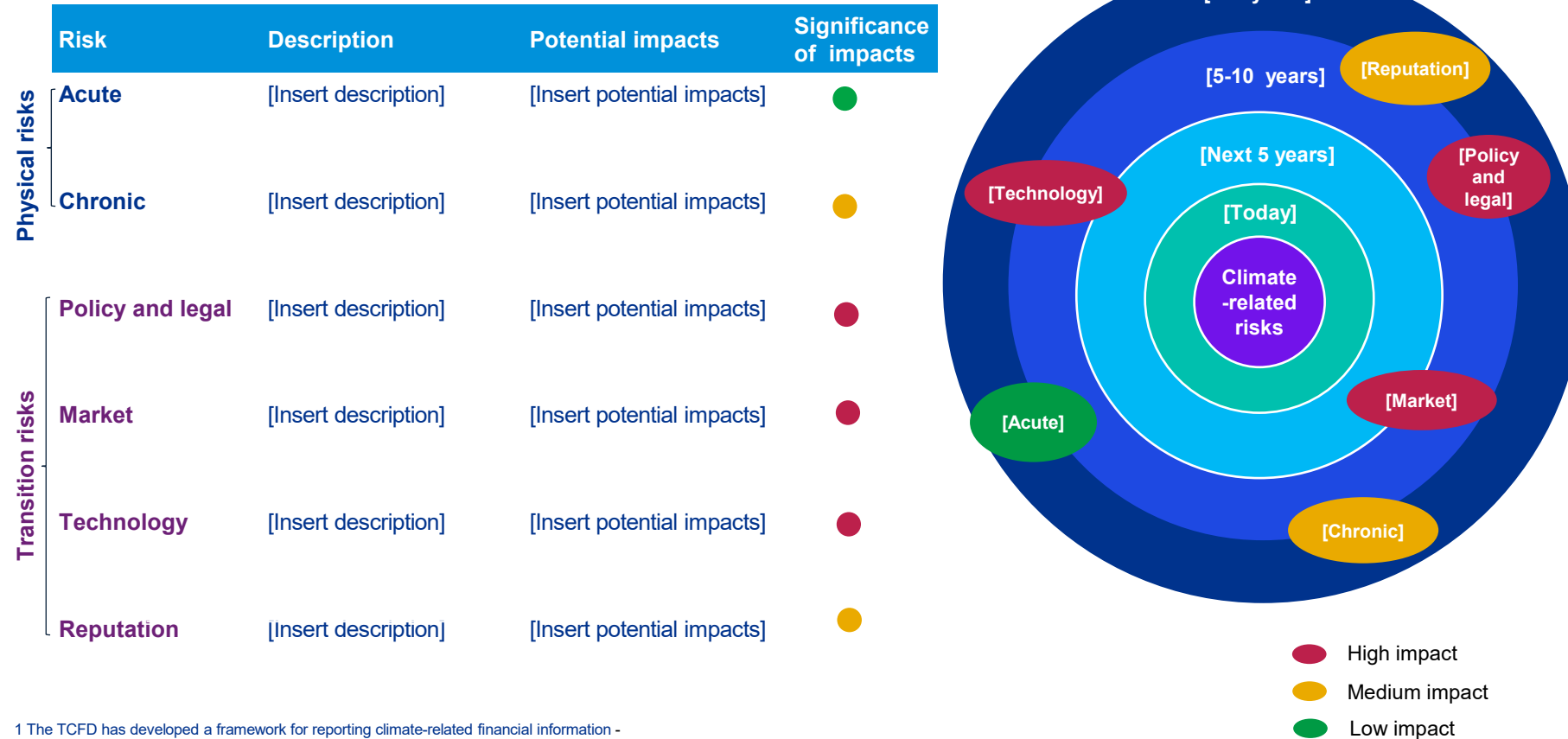
Climate change: Action plan



Potential effects of climate-related risks on the entity

The Task Force on Climate-related Financial Disclosures (TCFD)¹ splits climate-related risks into two categories: risks related to the physical impacts of climate change and risks related to the transition to a decarbonised carbon economy.

Management's current assessment of the risks, and the potential impacts and timing, is as follows:



¹ The TCFD has developed a framework for reporting climate-related financial information - ['Recommendations of the Task Force on Climate-related Financial Disclosures'](#).

Potential impacts on financial reporting

Management's assessment of the potential impacts of climate-related risks on financial reporting		Observations
[Asset useful lives]	[Asset lives may be affected by commitments and strategies that affect the future operation of the business model. For example, commitments to operate the business on a carbon neutral basis, or changes to the business model to respond to changing customer needs.]	[Insert observations]
[Impairment]	[Longer-term 'business as usual' assumptions in impairment testing models may be affected by expectations of changes related to climate-related issues.]	[Insert observations]
[Provisions and contingent liabilities]	[Constructive obligations may arise from specific commitments or past practice to remedy environmental damage. Provisions for longer-term contracts may be required if costs attributable to climate-related factors affect expectations of their future profitability]	[Insert observations]
[Expected credit losses]	[Actual or expected adverse changes in the regulatory, economic or technological environment of borrowers could result in a significant change in their ability to meet debt obligations.]	[Insert observations]
[Financial instrument risk exposure]	[Climate-related factors may create concentrations of risk that are correlated across investments in different entities and sectors. Concentration risk disclosures under IFRS® Standards may be material, regardless of their numerical impact.]	[Insert observations]
[Materiality considerations]	[Users want to understand how climate risk has been considered in preparing the financial statements, and will expect transparent disclosure of the assumptions, judgements and estimates made.]	[Insert observations]

Key questions



Q&A



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