

# MANAGING CLIMATE CHANGE RISKS

MESA DE FINANZAS VERDES DE CHILE



Climate change is becoming increasingly important in the private and public spheres, leading the world to a context where it is essential to assess climate risks and opportunities



### Social context



Concern about climate change has come to the forefront of the collective global consciousness. Climate change responsibility. Reputational risk.



### Financial markets



Climate change and sustainability is also becoming a focal point for financial markets. Investors demand greater transparency.



### New opportunities



Climate change mitigation and the transition to a more sustainable economy will also bring new opportunities. Rise of new emerging sectors and huge capital investments.



### Regulation and standards

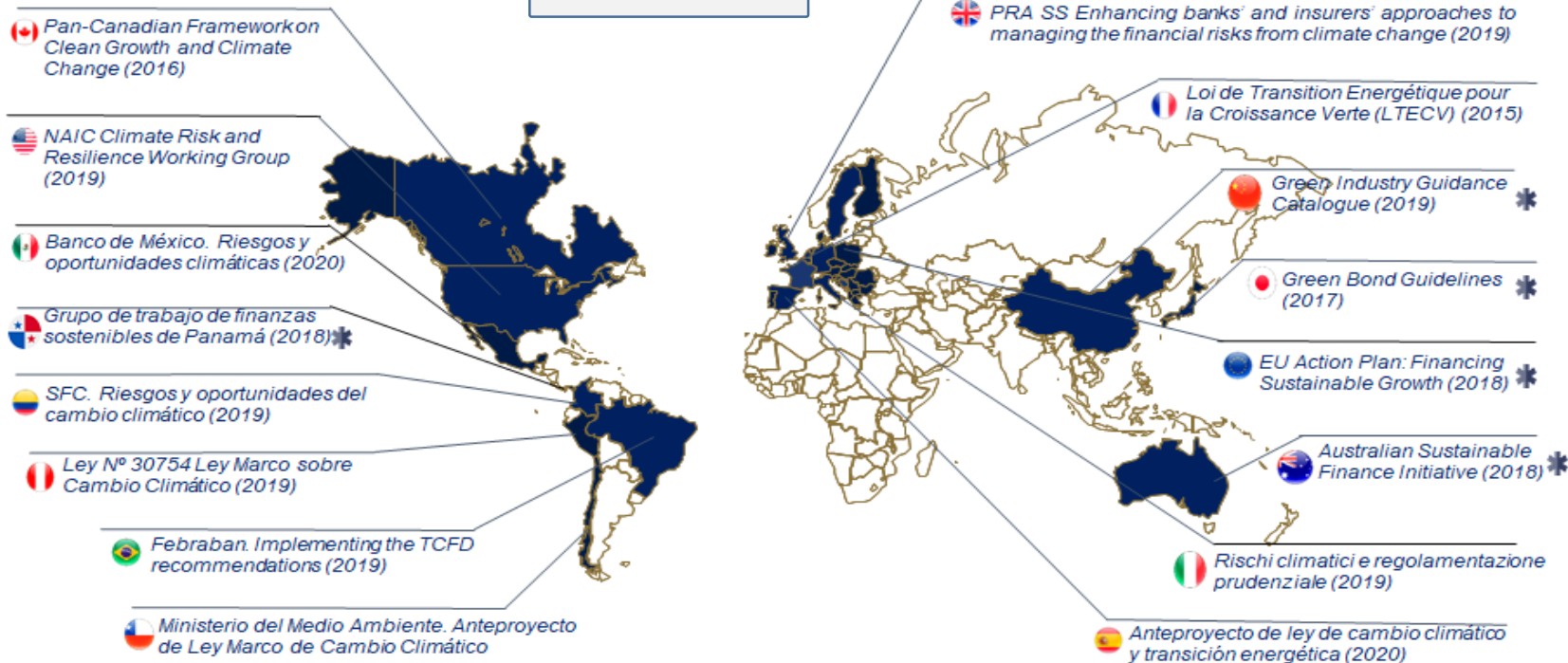


Regulators, supervisors and international organizations have been increasingly active in establishing regulation and standards.



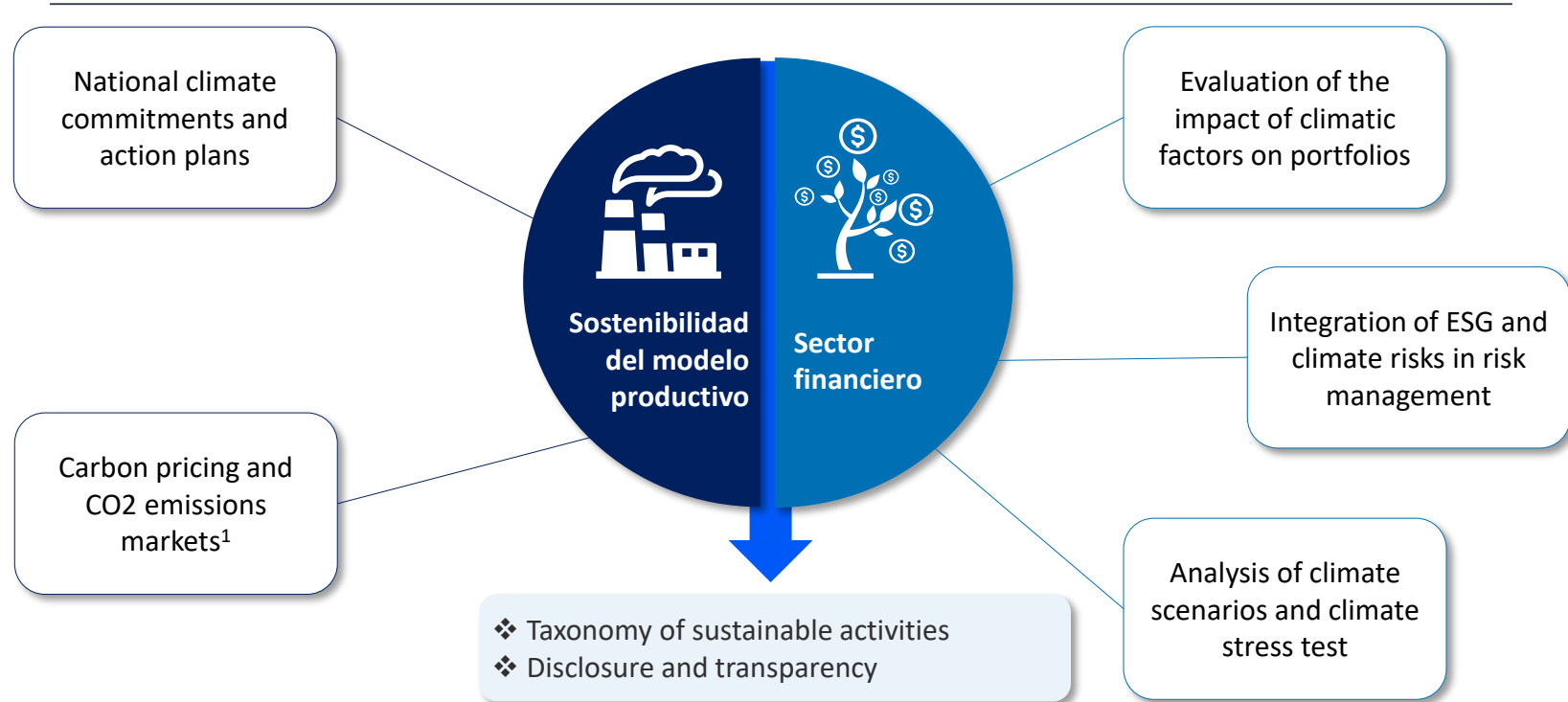
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Non exhaustive



\* Iniciativas en el ámbito de la sostenibilidad, no sólo riesgos climáticos

## Several trends in financial regulation and supervision around climate risks and sustainability are observed globally



Climate change risks can be divided into two main categories: those derived from physical impacts and those derived from the transition to a low carbon economy



### Physical risks

Derived from the increasing severity of extreme weather events or from long-term changes of the climate

Subcategories of physical risks:

- **Acute risks:** those caused by extreme weather events whose frequency and intensity would increase due climate change.
- **Chronic risks:** those that result from medium or long-term changes in climate behavior, especially due to a general increase in temperatures.



### Transition risks

The transition to a decarbonized production system implies a drastic transformation of the global economy, which carries significant risks for companies

Subcategories of transition risks:

- **Regulatory and legal risks:** arising from political and regulatory action which seeks to limit the activities that contribute to climate change.
- **Technological risks:** arising from innovation and improvements which help transition to a low-carbon economy.
- **Market risks:** arising from changes in supply and demand as climate criteria are taken into account.
- **Reputational risks:** arising from changes in perception of certain activities and economic sectors.



## Climate risk management may be organised in four key pillars: strategy, governance, risk management, reporting and disclosure

- **Business environment and risk identification:** identify material risks and understand their impact in the short, medium and long term.
  - **Business strategy:** integrate material risks in the business strategy.
  - Develop a **Strategic Action Plan**.
  - **Sustainable finance:** develop a sustainable finance strategy.
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- **Reporting to the management and governing bodies:** criteria, metrics, data and target setting.
  - External **disclosure** standards.



- **Management body:** consider in the strategy, objectives and risk management framework, and oversight.
  - **Risk appetite:** explicitly include.
  - **Organisational structure:** assign responsibility following 3 LoD.
  - Assign sufficient **people and resources**.
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- **Climate Risk management framework.**
  - **Measuring:** methodologies and tools.
  - Consider within **credit, operational, market and liquidity** risk.
  - **Impact on capital:** ICAAP, Pillar II.



Climate risk management involves comprehensively reviewing the financial and non-financial risk management frameworks, specially for credit, market, non-financial and liquidity risks

### Credit risk

Integrate in the admission and monitoring process:

- Impact on PDs.
- Review rating models.
- Identification of exposures under various scenarios.
- Impact on collateral valuation.
- Review of pricing of operations.

### Market risk

Monitor the effect of climate risk on positions and future investments:

- Incorporation at least in Debt, Equity and “equity-related” instruments.
- Incorporation in FOREX and commodity positions.
- Review of credit spreads.
- stress test tools.

### Non-financial risk

- Review of business continuity plans.
- Review of recovery plans.
- Impact on reputational risk.
- Impact on liability risk.
- Compliance risk review.

### Liquidity risk

- Incorporation into liquidity risk management.
- Incorporation into buffer calibration.
- Forward-looking evaluations, considering both BAU situation and stress conditions.

### Scenario analysis and stress test

- Incorporation in ICAAP.
- Scenarios on physical (IPCC or IEA) and transition risks.
- Various temperature scenarios and timeframes.
- Impacts in the recovery and resolution scenarios.





MANAGEMENT TRAINING DAY 2020

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The right half of the slide features an aerial photograph of a river. The river is a light blue-grey color and flows from the top left towards the bottom right. It is surrounded by a dense, dark green forest. The river's path is slightly irregular, with some smaller channels and eddies visible. The overall scene is a natural, scenic view of a river in a forested area.

**Thank you!**