MANAGING CLIMATE CHANGE RISKS

MESA DE FINANZAS VERDES DE CHILE

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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.
Context and regulation | Climate change risk management | Methodological framework | MS Initiatives

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Non exhaustive

- Pan-Canadian Framework on Clean Growth and Climate Change (2016)
- NAIC Climate Risk and Resilience Working Group (2019)
- Banco de México. Riesgos y oportunidades climáticas (2020)
- GRUPO de trabajo de finanzas sostenibles de Panamá (2018)
- SFC. Riesgos y oportunidades del cambio climático (2019)
- Ley N° 30754 Ley Marco sobre Cambio Climático (2019)
- Febraban. Implementing the TCFD recommendations (2019)
- Ministerio del Medio Ambiente. Anteproyecto de Ley Marco de Cambio Climático
- PRA SS Enhancing banks’ and insurers’ approaches to managing the financial risks from climate change (2019)
- Loi de Transition Énergétique pour la Croissance Verte (LTECV) (2015)
- Green Bond Guidelines (2017)
- Australian Sustainable Finance Initiative (2018)
- Rischi climatici e regolamentazione prudenzielle (2019)
- Anteproyecto de ley de cambio climático y transición energética (2020)

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.

- National climate commitments and action plans
- Carbon pricing and CO2 emissions markets
- Evaluation of the impact of climatic factors on portfolios
- Integration of ESG and climate risks in risk management
- Analysis of climate scenarios and climate stress test
- Taxonomy of sustainable activities
- Disclosure and transparency

(1) For more information, see the World Bank Carbon Pricing Dashboard.
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

### 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 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.

**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.

- **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**.

- **Reporting to the management and governing bodies**: criteria, metrics, data and target setting.
- **External disclosure standards**.

- **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.
Thank you!