Climate Change and Insurance Industry: Taking action as risk managers and investors

Perspectives on risks and opportunities from insurance industry's C-level executives

Maryam Golnaraghi, Ph.D.
Director of Extreme Events and Climate Risk
Insurance Working Group,
Principles for Financial Action towards a Sustainable Society (PFA21)
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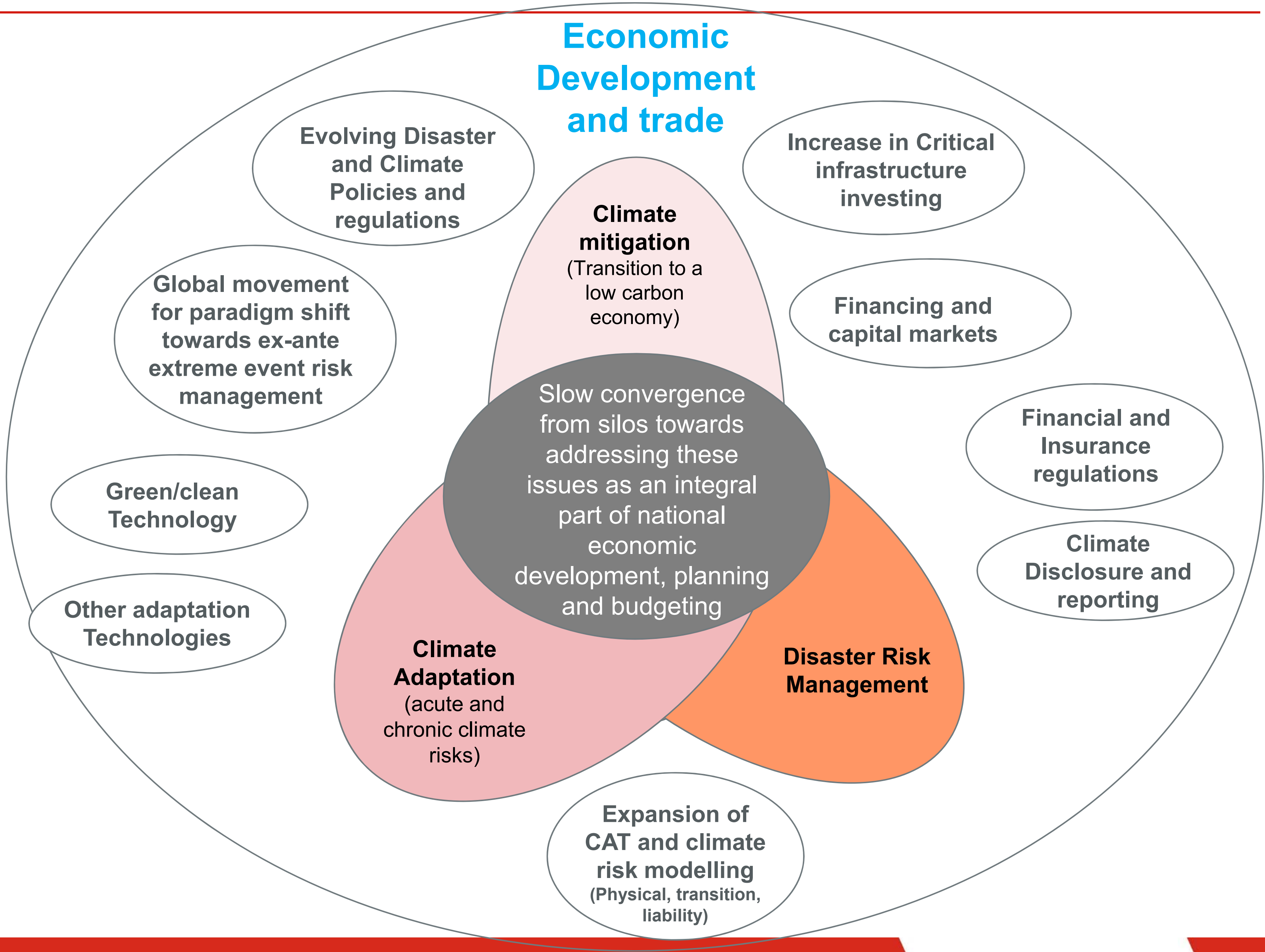
Climate change and the Insurance Industry: Taking Actions as Risk Managers and Investors

1. Our research and influencing approach
2. Addressing climate risks and realizing climate-related opportunities in climate adaptation (climate resilience) and mitigation (transitioning to a low carbon economy): Shifting towards a core business issue
3. Insurance industry's C-level perspectives:
   - Governance and climate risk
   - Liability side and climate change: Activities and challenges
   - Investment side and climate change: Activities and challenges
   - Underwriting and investing in climate resilience and decarbonization of critical infrastructure
4. Recommendations and next steps
5. Take-away messages

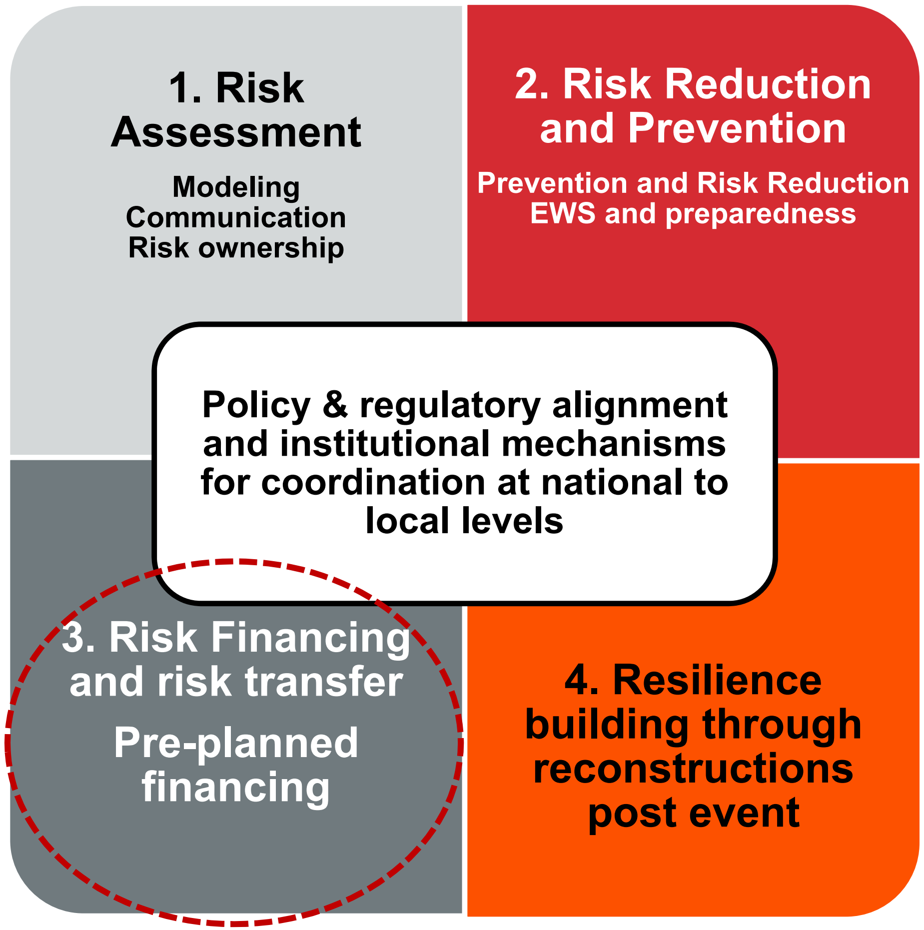
- Only recently, financial and economic impacts of climate change have been defined under physical risks, liability risks and transition risks

- Nationally, climate mitigation, climate adaptation and DRR debates are slowly converging, linked to economic development, trade and security driven by many external factors…yet there is significant fragmentation and uncertainty

- Climate change debate has evolved from a scientific, environmental, social responsibility issue into a core business issue!


Economic Development and trade
Evolving Disaster and Climate Policies and regulations
Increase in Critical infrastructure investing
Climate mitigation (Transition to a low carbon economy)
Global movement for paradigm shift towards ex-ante extreme event risk management
Financing and capital markets
Slow convergence from silos towards addressing these issues as an integral part of national economic development, planning and budgeting
Financial and Insurance regulations
Green/clean Technology
Climate Disclosure and reporting
Other adaptation Technologies
Climate Adaptation (acute and chronic climate risks)
Disaster Risk Management
Expansion of CAT and climate risk modelling (Physical, transition, liability)

With rising financial impacts of weather-related extremes need for and integrated and comprehensive approach to managing these risks is coming into focus of governments.



Latest trends since 2015

- **Linkages between financial resilience and economic development**
  - Risk-information - risk communication
  - Policy and regulatory reforms
  - Governance: shift from silo line-ministry to a all-of-the-society approach (risk ownership)
  - Integration into national planning/budgeting
  - Ministers of finance are “slowly” engaging
  - Critical infrastructure, supply chain & trade
- **Benefits of risk transfer and role of market-based risk transfer is being recognized.**
  - Closer engagement with re/insurance industry
  - G20, G7, APEC
  - International donors: InsuResilience
  - IDF: Industry/World Bank/UN

Sources: Geneva Associations (2016b, 2017) and Geneva Association & IDF (2017)

Climate Policy and Regulations

The Paris Agreement

- Common but differentiated responsibilities => policy fragmentation
- 2050:Net-zero emission target

National targets being submitted

- Need for closer engagement of local govs and industry

Pricing carbon and carbon emission caps

- Carbon tax vs. ETSs

Diverging subsidies and tax incentives

- Fossil fuel subsidies vs. tax incentives for green investments

- **Growing wave of climate policy and regulations**
- **Fragmented, with sketchy implementation pathways**
  - Fragmented sectoral approaches d

Technology

Green/clean technologies gaining market share

- LED, solar, onshore wind, hybrid/electric cars

New investments growing steadily, e.g. renewable energy

Energy-smart technologies rising targets, e.g. energy efficiency

- **Growing opportunities in green and clean technology, although still risky and volatile**

Financing and Capital Markets

Shareholder interest in climate action

Increasing interest in sustainable investment

- Green investing coalitions: BlackRock, State Street, Goldman Sachs, Deutsche Bank

Rise in green bond markets, but needing proper monitoring

Sustainable Financing Frameworks, lowering barriers to sustainable investing

- EU-HLTF + Argentina, France, Italy, Netherlands, Singapore, Sweden
- G20 WG; Global Green Finance Committee (ICMA/GFMA)

Rating agencies linking climate risk to credit ratings (companies, sovereign, municipalities)

- **Pipeline of investable grade opportunities**
- **Asset classification**
- **standardization, tools, methodologies expertise**

Reporting and Compliance

Emergence of wide range of mandatory and voluntary frameworks

- Environmental and sustainability driven
- Highly fragmented depending on stakeholder
- Increased reporting not leading to enhanced transparency

FSB-TCFD

- Effort of convergence towards coherent and consistent annual reporting of climate risks
- A wide range of tools for reporting and benchmarks (WBA, etc.)
- IAIS/UNEPS-FI/SIFreport (linked to FSB TCFD's recommendations)
- SEC's are starting to act (e.g., Canada, EU)

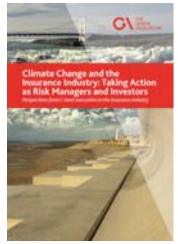
- **Emerging standard climate risk reporting – a potential game changer**
- **Indices to benchmark performance for investors**
- **Regulators are starting to act**

Sources: Geneva Association (2018a)

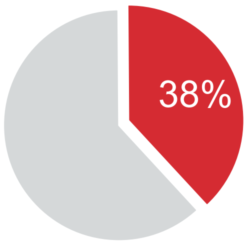
- Framing of climate risk under **physical risks, liability risks and transition risks** is enabling quantification and monitoring of these risks and integrating these into core business

- Climate risk is moving out of the Environmental, Social, Governance (ESG) conversation and into mainstream corporate governance, strategy, investing and decision-making (linked to FSB-TCFD)

- Issues are increasingly evolving around
  - Role of corporate policy and practice in measuring and managing this risks
  - Acquiring expertise + standard methodologies, tools, scenario analysis 2/3/4 deg. C,

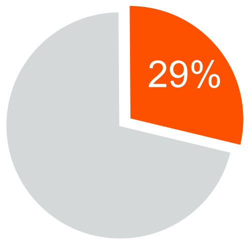


Climate risk is being considered by the boards and C-level executives of the participating companies in three ways….



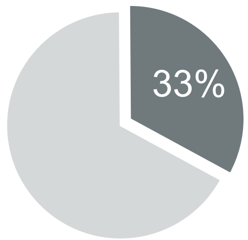
38% of the companies consider climate change as a core business issue

- Climate change is a strategic topic
- Climate risk and opportunities being considered through governance, strategy, risk management, investments and operations
- Established inter-departmental mechanisms/ teams to assess climate risks and opportunities, and advise the Board and C-level executives
- Climate change increasingly being integrated into their policies and businesses



29% of the companies consider climate change as a sustainability issue that is transitioning to core business

- Recognise the need for converging institutionally on climate change from the perspective of both risks and opportunities
- Setting up dedicated teams to explore and assess pros and cons of company-wide strategies.
- CEO-level leadership



33% of the companies con-sider climate change as a sustainability and environ-mental issue

- Part of their corporate social responsibility / sustainability activities
- A dedicated sustainability committee at the Board level (for some)
- Reduce their carbon footprint
- In some cases, C-level executives have specific roles– with the CEO driving the topics

On the Liability side, the industry is actively addressing climate change in a number of ways … but eight critical issues were highlighted hurdling the expansion of risk transfer, globally.

Geneva Association 2018a: https://www.genevaassociation.org/research-topics/extreme-events-and-climate-risk/climate-change-and-insurance-industry-taking-action

The insurance industry is already taking action through its underwriting and specialized services…

- **Offering risk transfer products** to:
  - Build financial resilience to Nat cat
  - Incentivise reduction of GHG emissions;
  - Specifilaized products to de-risk the green/clean technology pathways from start-up to commercialisation
  - Protection of government budgets, e.g., regional pools
  - Business interruption, contingent business interruption, supply chain failure
- **Setting up Innovation unites, incubators** and new centers of excellence with focus on analytics and adaptation research
- **Offering customers** (and increasingly governments) with risk knowledge, preventive solutions with incentives
- **More efficient assessment and pay out** systems compared to post disaster aid

Eight primary factors hindering the expansion of market-based insurance…

1. Limited access to risk information and risk pricing difficulties
2. Public policy, legislative and regulatory issues related to, e.g.,:
   - Risk reduction and risk transfer;
   - Enabling the insurance industry to operate
3. General lack of awareness about economic benefits of insurance
4. Need for stakeholder-relevant products
5. Weakness of domestic insurance market in rural and low-income countries
6. Limited take-up linked to post disaster aid and complexity of products
7. Regulatory barriers to access global reinsurance (in some countries)
8. Scalability and sustainability

On the Investment side, the industry is increasingly recognizing the importance of “climate-aware” investing and integrating climate risk into investment strategies … but a number of issues, hurdle expansion of green investing.

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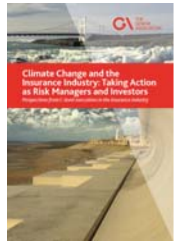
Increasingly, climate change is being considered as a risk factor and an emerging investment theme for the majority of the CIOs.

- All CIOs recognise the **importance of "climate-aware investing"**.
  - Integrating climate change is actively coming into focus through a variety of investment policies
    - Not investing in thermal coal mining or coal power generation.
    - Making a conscious choice not to divest from fossil-fuel intensive companies, divesting could indirectly chock main funding to green
    - Not investing in fossil intensive sectors if they are underwriting them (ERM)
  - **Various approaches** are being adopted:
    - Screening; Best-in-class (inclusionary screening); Thematic investments; Divestment, Active ownership; Due diligence when selecting an external asset manager to outsource the asset management function; ESG integration
  - **ESG is emerging as the predominant** methodology, but with differing opinions

Expansion of green investing is hurdled by a number of issues, linked to five key areas: (1) financing and markets, (2) Insurance regulations, (3) climate change-related policies, (4) technology; and (5) data and transparency for informed investing

- Lack of pipeline of investable-grade opportunities
- Need for "Green" asset classification and tools and methodologies
- Expansion of green bonds/monitoring; and other investment tools
- Sketchy national decarbonisation pathways, uncertainty with climate policies, regulations, conflicting policy signals
- Regulatory risk capital charges could restrain investing with long-term view
- High volatility of green/clean-tech markets
- Lack of data and transparency linked to fragmented reporting



Insurers consider critical infrastructure as fundamental to scaling up socio-economic resilience to physical risks of climate and transitioning to a low-carbon economy

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As risk managers and underwriters, the industry is already underwriting critical infrastructure, and there is willingness to expand coverage, but a number of challenges remain!

- In most countries **assessing impacts of natural hazards on project life cycle not a priority .**
  - Focus is mainly on operational risks, such as fire and explosion, as these are higher probability events.
- **Limited incentives**, especially for private operators, to increase resilience.
- **Investments** in critical infrastructure **primarily is focused on decarbonisation** with **insufficient attention** to climate **resilience.**
- **Need for high quality data to assess various risks** for entire life cycle: design, construction, operation and maintenance

As investors there is need for stable, predictable regulatory, political and market conditions…

- Need for pipeline of investable infrastructure projects (limited transparency on the volume)
- Investments remain relatively complex, non-standardised, and illiquid.
- Regulatory and political impediments
- Political and currency risks barriers in low and middle income countries
- Additional constraints related to capital charges.
- Different contractual terms, intra- and inter-countries (increases due diligence)
- Need for greater standardisation in terms of documentation and disclosure
- Need for pooling projects

Recommendations

1. Addressing external barriers:
Third party stake-holders such as governments, policymakers, standard setting bodies and regulators across sectors should work in a more coordinated fashion to address key barriers that hinder insurers from scaling up their contribution to climate adaptation and mitigation

2. The insurance industry (company and industy level) should continue to institutionalise climate change as a core business issue, expand its contributions towards building financial resilience to climate risks and supporting the transition to a low-carbon economy by collaborating with governments and other key stakeholders

3. Critical Infrastructure:
Governments and the insurance industry should explore ways to support climate resilient and decarbonized critical infrastructure through the industry's risk management, underwriting and investment functions

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Focus in the next 2 years: In collaboration with strategic partners, leading academic centers and the insurance industry the GA will conduct risk management, policy-, economic and financial research to underpin our future engagement in shaping the relevant debates

Comparative Analysis of Flood Risk Management

✓ Australia, Canada, Japan, Germany, UK and USA

Role of the Insurance industry, as risk experts and investors in supporting climate resilience and decarbonization of critical infrastructure

✓ "Pathways to Climate Resilient and decarbonized Critical Infrastructure in the 21st Century – A High-Level Dialogue on the Role of the Insurance Industry and Public-Private Partnerships" (Co-hosted by Intact Financial Corporation and Sun Life Financial) (18-19 September 2018)

A Sustainability(ESG)/Investment/Climate Risk Task Team (SICRTT) is being established

✓ To prioritize GA's research on the investment-related matters with clear justification

✓ To develop a research framework for the highest priority topics for consideration of GA Board in November 2018

- **Building financial resilience** to physical risks of climate change requires **proactive risk management** and adaptation strategies.

- **Transitioning to a low-carbon economy** needs to **be well-planned and follow a predictable path**

  - ✓ Alignment across layers of government and the private sector.

  - ✓ Implementation will take time and may take longer in some countries and regions depending on existing policies and political frameworks.

- **Despite growing waves of climate change related policies** and regulations, **national pathways** for building climate resilience and transitioning to a low-carbon economy **remain sketchy**.

- **A complex network of stakeholders** are working on a growing number of adaptation and mitigation initiatives, but these **efforts also remain fragmented**

- **Addressing climate change goals at scale** requires key barriers, opportunities and solutions be identified and addressed through **more coordinated dialogue, engagement and action among key stakeholders**

- **Climate change debate has evolved** from a scientific, environmental, social responsibility issue **into a core business issue**
  - ✓ Implementation will take time and may take longer in some countries and regions depending on existing policies and political frameworks.
- **The insurance industry is a critical part of the solution. It** is neither the polluter, nor the climate policy setter, but it plays a critical role as risk experts, underwriters and investors in enabling economic resilience and entrepreneurial pathways for addressing climate change goals and targets
- **Climate risk is being considered by the boards and C-level executives** of the participating companies in three ways
- **On the Liability side,** the industry is actively addressing climate change in a number of ways … but eight critical issues continue to hurdle expansion of risk transfer.
- **On the Investment side,** the industry is increasingly recognizing the importance of "climate-aware" investing but a number of issues, hurdle green investing
- **Insurers consider critical infrastructure as fundamental** to scaling up socio-economic resilience to physical risks of climate and transitioning to a low-carbon economy
- **Next steps: Raise awareness and conduct policy-industry relevant f**orward looking research to help shape future policies and regulatory dialogues

Thank you

Maryam Golnaraghi,
Director of Extreme Events and Climate Risk Program

maryam_Golnaraghi@Genevaassociation.org

For more information about The Geneva Association:
www.genevaassociation.org

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Stakeholder segments in climate adaptation and disaster risk reduction

Governments all levels and Policy making bodies

Scientific and technical community

- UN: WMO, UNESCO and its Intergovernmental Oceanographic Commission, UNEP
- The non-governmental International Council for Science (ICSU)
- Inter-governmental panel on Climate Change (IPCC)
- Engineering associations such as International Association for Wind Engineering (IAWE)

Commercial Risk Modelling Community

United Nations and related organisations and processes

- UN Secretary General's Office
- General Assembly, the UN Economic and Social Council (ECOSOC)
- The Chief Executives Board (CEB)
- UNISDR, UNFCCC
- UN Specialised agencies and Programmes
- Inter-agency coordination platforms (UNDG, IASC, etc.) and UN country offices
- WTO (latest development)

Non-governmental organisation

- International Federation of Red Cross and Red Crescent Societies (IFRC)
- The Rockefeller Foundation
- Oxfam
- The Nature Conservancy
- Environmental Defence Fund
- World Wildlife Fund

OECD

Other

- Traditional and social media
- Catastrophe Risk Modelling Community
- World Economic Forum (WEF)
- World Business Council for Sustainable development (WBCSD)
- Infrastructure-related associations

Socio-Economic Groupings

- G7
- G20
- EU
- Asia-Pacific Economic Cooperation (APEC)
- Association of Southeast Asian National (ASEAN); South Asian Association for Regional Cooperation (SAARC)
- Caribbean Community (CARICOM)

International donors

- United States Agency for International development (USAID)
- The UK Department for International Development (DfID)
- The German Development Ministry (BMZ)
- Agence Francaise de Development
- Swedisch International Development Cooperation Agency (SIDA)
- European Commission (EC)
- Japan International Cooperation Agency (JICA)

International and regional development banks

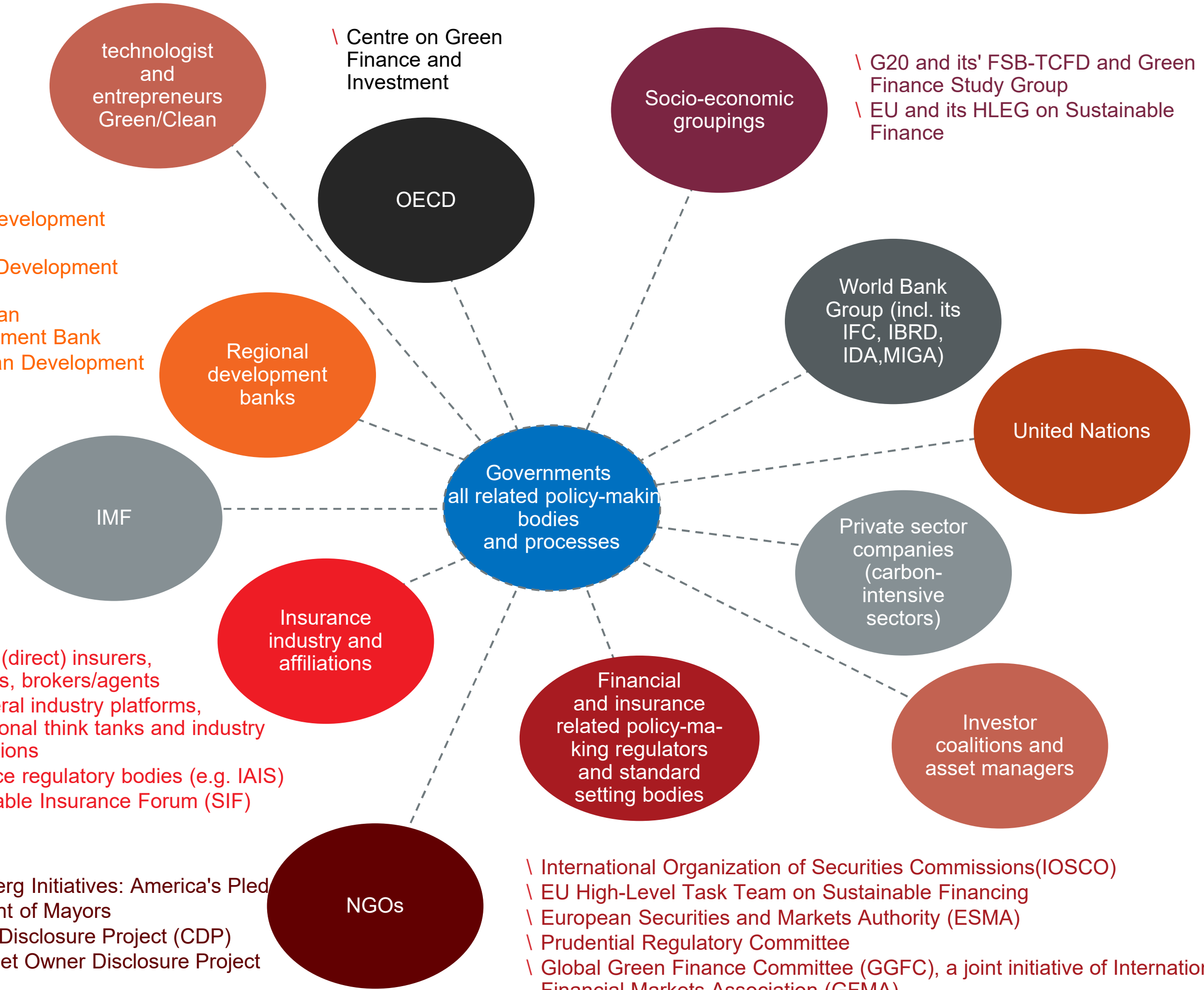
- World Bank Group (incl. its GFDRR, GIF, Climate Team, DRFI)
- Asian Development Bank
- African Development Bank
- Caribbean Development Bank
- European Development Bank

Insurance Industry and Affiliations

- Primary (direct)insurers, reinsurers, brokers/agents
- Multilateral industry platforms, international think tanks and industry associations
- Insurance regulatory bodies, e.g. the International Association of insurance supervisors (IAIS)
- Sustainable Insurance Forum (SIF)

Geneva Association (2018a)

The complex landscape of stakeholders engaged in transitioning to low carbon economy



- Centre on Green Finance and Investment

- G20 and its' FSB-TCFD and Green Finance Study Group
- EU and its HLEG on Sustainable Finance

- Asian Development Bank
- African Development Bank
- Caribbean Development Bank
- European Development Bank

- UNSG Office
- UN Climate
- UNFCCC and its Standing Committee on Finance
- UNEP-FI, WMO
- UN Global Compact
- UNCTAD

- Primary (direct) insurers, reinsures, brokers/agents
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- Bloomberg Initiatives: America's Pled
- Covenant of Mayors
- Carbon Disclosure Project (CDP)
- The Asset Owner Disclosure Project (AODP)
- Global Reporting Initiative (GRI)
- World Benchmarking Alliance

- International Organization of Securities Commissions(IOSCO)
- EU High-Level Task Team on Sustainable Financing
- European Securities and Markets Authority (ESMA)
- Prudential Regulatory Committee
- Global Green Finance Committee (GGFC), a joint initiative of International Capital Market Association (ICMA) and Global Financial Markets Association (GFMA)
- International Association of Insurance Supervisors (IAIS)
- European Insurance Pensions Authority (EIOPA)
- Bank of International Settlements (BIS)
- MSCI
- Stock exchanges
- Rating agencies (Standard and Poor's, Moody's, Fitch)
- Asset managers, investment firms, custodians (e.g. BlackRock, Goldman Sachs, State Street)
- Various green investment coalitions)