

Butch Bacani,

Programme Leader, The UNEP FI Principles for Sustainable Insurance Initiative, (SWITZERLAND)



HELLENIC ASSOCIATION OF INSURANCE COMPANIES

Friday, 23.9.2016



A global sustainability framework and the largest collaborative initiative between the UN and the insurance industry

The Principles for Sustainable Insurance

Insuring for sustainable development

18th Hydra Meeting

23 September 2016, Greece

Butch Bacani Programme Leader UN Environment's Principles for Sustainable Insurance Initiative The triple role of the insurance industry in sustainable development





Global studies by the UN and the insurance industry on environmental, social and governance (ESG) risks and opportunities relevant to insurance



2007







Examples of key ESG issues (or "sustainability issues")

- Climate change
- Natural disasters
- Biodiversity loss & ecosystem degradation
- Water scarcity
- Food insecurity
- Environmental pollution
- Violation of human rights & labour standards
- Social inequality & financial exclusion
- Emerging health risks & pandemics
- Ageing populations & demographic change
- Technological risks including big data
- Accountability & transparency issues
- Trust & reputation issues
- Unethical business conduct & practices
- Corruption
- Unfair treatment of customers

2015



A changing environmental risk landscape



The safe operating space of 4 of 9 interlinked planetary boundaries have already been exceeded



The 9 planetary boundaries

- 1. Change in biosphere integrity (biodiversity loss and species extinction)
- 2. Biogeochemical flows (nitrogen and phosphorus cycles)
- 3. Climate change
- 4. Land-system change (e.g. deforestation)
- 5. Ocean acidification
- 6. Freshwater use
- 7. Stratospheric ozone depletion
- 8. Novel entities (not yet quantified) (e.g. organic pollutants, radioactive materials, nanomaterials and micro-plastics)
- 9. Atmospheric aerosol loading (not yet quantified) (microscopic particles in the atmosphere that affect climate and living organisms)

Source: Steffen et al. 2015. Planetary Boundaries: Guiding human development on a changing planet. Science Vol. 347 no. 6223

The Principles for Sustainable Insurance: A global commitment to drive systemic change





Launch of the PSI at Rio+20









"The Principles for Sustainable Insurance provide a global roadmap to develop and expand the innovative risk management and insurance solutions that we need to promote renewable energy, clean water, food security, sustainable cities and disasterresilient communities.

With world premium volume of more than \$4 trillion and global assets under management of more than \$24 trillion, insurers that embed sustainability in their business operations can catalyze the kinds of financial and investment flows and long-term perspectives needed for sustainable development.

"The United Nations looks forward to working with all sectors of society towards the global embrace of this important new initiative as we shape the future we want."

- Ban Ki-moon, UN Secretary-General







PSI membership by country of domicile



- 95 members and growing
- Insurers representing over 20% of world premium + USD 14 trillion in assets under management
- Largest collaborative initiative between the UN and the insurance industry



PSI as insurance industry criteria





Sustainability indices

PSI part of insurance industry criteria of Dow Jones Sustainability Indices, FTSE4Good, and Brazil's BM&FBOVESPA Corporate Sustainability Index

Swiss Re remains insurance industry leader in sustainability according to 2016 DJSI (Sep 2016)

"Swiss Re remains the insurance industry sector leader in the DJSI for the third consecutive year, and the tenth time since 2004"

AXA rewarded for its constant progress in sustainability (Sep 2016)

"Since 2006, AXA has improved its score in the DJSI. From 62/100 in 2006, its score has reached 85/100 in 2016"



Approaches to understanding risk

Oasis Loss Modelling Framework



Mission:

- Improve risk assessment through better models, transparency, performance, and innovation
- Provide open source, plug and play, catastrophe risk modelling platform
- Establish a commercially vibrant community of providers and users of Oasis software, models, data, and tools

Challenges being tackled:

- Lack of capacity on how to evaluate and communicate risks
- Lack of transparency on how risks are estimated, inability to verify or manipulate underlying assumptions or parameters
- Insufficient hazard, vulnerability and exposure data and risk models to assess and price the severity and probability of losses
- Duplication of efforts and lack of standards, resulting in "reinvention" of models, platforms, data and information
- Inadequate insurance coverage particularly in developing countries highly vulnerable to climate and disaster risks

Enhancing and promoting catastrophe risk modelling



Opportunities to enhance catastrophe risk modelling

- **Rapid-onset events** such as extreme rainfall, cyclones and floods
- Slow-onset events such as sea-level rise, rising temperatures, desertification, and land & forest degradation
- **Natural ecosystems** such as mangroves, coral reefs, wetlands, sand dunes and forests

UN Environment and insurers working with institutional investors

 Demonstrating value of catastrophe risk modelling to largest responsible investment initiative initiative, representing more than USD 60 trillion in assets under management

UN Environment working with Risk Management Solutions, Global Canopy Programme, and German government (BMZ & GIZ)

- Pilot project on environmental stress testing
- Develop and test an analytical framework and model for banks to test the potential impact of drought events on their corporate loan portfolios

AXA-PSI international climate resilience survey of cities & SMEs

PSI Principles for Sustainable Insurance

- Over 40 city/urban leaders (e.g. mayors) in developed and developing countries
- Over 1,100 small-to-medium-sized enterprises (SMEs) in Europe, Asia & the Americas
- Cities emphasising need to combine adaptation with mitigation in climate change response
- Cities need to be well prepared to withstand climate impacts, including a resilient economy
- Only 27% of SMEs are well prepared for consequences of climate change; only 27% adapting their business to be more resilient
- 79% of SMEs think insurers should do more to help businesses adapt to the consequences of climate change
- Adaptation and resilience should be proactive and integrated into business strategies. Private sector engagement is key





Approaches to reducing risk

The Australian Business Roundtable for Disaster Resilience & Safer Communities







Awarded certificate of distinction at 2015 UN Sasakawa Awards for Disaster Reduction

Australian government investment

Disaster risk reduction \$50 million

> Post-disaster relief & recovery \$560 million

- Economic costs of natural disasters in Australia average \$6.3 billion each year, projected to rise to \$23 billion by 2050. But for every \$10 spent on post-disaster relief & recovery by Australian government, only \$1 is spent on disaster risk reduction
- In Dec 2012, Insurance Australia Group (IAG) initiated the formation of the Australian Business Roundtable for Disaster Resilience & Safer Communities, working with Investa (property developer), Munich Re (reinsurer), Optus (telecom), Westpac Group (bank), and the Australian Red Cross
- In Sep 2014, Australian government's Productivity Commission released a draft report recognising the inequality of current natural disaster funding arrangements, taking on board recommendations put forward the Australian Business Roundtable in the "Building an open platform for disaster resilience decisions" research paper
- Commission echoed the call for federal government to spend more on disaster risk reduction and less on subsidising state government clean-up programmes. From 2007-14, it estimates that 97% of federal payments to state and local bodies were for rebuilding, as opposed to only 3% for risk reduction
- Commission recommend that the Australian government increase its state funding for disaster risk reduction to \$200 million. Supports the Roundtable's research, identifying economic savings of up to \$14.6 billion by 2050 through nationallycoordinated disaster risk reduction investment, improved access to information, and prioritised research



City Innovation Platform for African Infrastructure Risk & Resilience

- Bring together city leaders, private sector and experts (e.g. city management, financiers, insurers, developers, engineers, scientists, community reps) to prototype solutions to major infrastructure and resilience challenges in African cities
- Generate bankable and insurable infrastructure projects
- Collaborate to lower risk and increase shared value
- Share global and regional best practice for critical processes
- Lay the foundations for a city-friendly African finance and insurance hub to reduce risk across Africa's urban infrastructure landscape



- Set up CIP-AIRRs in 1 to 2 cities per year
- First city: Dar es Salaam (Q4 2016)
- Initial commitment of **5 years** to allow significant, visible results to manifest
- A collaborative project led by Santam, PSI, ICLEI, ClimateWise, Global Infrastructure Basel, Marsh, Moody's and Sanlam



/oody's INVESTORS SERVICE

Principles for Sustainable Insurance





Approaches to transferring risk

Implementing the Principles: Examples A company commitment





"Sustainable business is good business." – Swiss Re

Swiss Re's Sustainability Risk Framework

Umbrella policies

- Human rights
- Environmental protection

Guidelines

- Animal testing
- Dams
- Defence sector
- Forestry, pulp & paper, palm oil
- Mining
- Nuclear non-proliferation
- Oil & gas

| SG Criteria Evaluation | | | | | | | | | n 1.0 - 10.04. 20 | |
|--|---|------|---|--------|----------|------|--|------------------------------|-------------------|--|
| isk: | | | | | | | | Marcus Weber, SFR 1.4.3, Luc | ia Rückner, GD 1 | |
| /w: | | | | | | | | | | |
| ate: | | | | | | | | | | |
| | | WEEK | | better | | N/a* | No info** | Comment | Weblink | |
| iocial implications | | | | | | | | | | |
| Political context and public awareness | 0 | • | | | 7 | | | | | |
| Labour and working conditions | 0 | ٠ | | ×. | A | | | | RIFC | |
| Health, safety and security for the community | 0 | 4 | 1 | | 24 | | | | Sour C | |
| Displacement of people | 0 | 4 | | | 7 | | | | | |
| Cultural heritage | 0 | 4 | 1 | | | | | |] | |
| invironmental implications | | | | | | | | | | |
| Pollution prevention | 0 | 4 | 6 | | 7 | | | | | |
| Conservation of natural resources and biodiversity | 0 | ٠ | 6 | | 3 | | | | SIF | |
| Sovernance implications | | | | | | | | | | |
| Responsible and correct planning and evaluation | 2 | 4 | | ÷. | 7 | | | | @ mar | |
| Compliance | 2 | ٠ | | ÷ | R | | | | O THINK! | |
| Consultation and transparency | 7 | ٠ | | | A | | | | | |
| inal assessment: | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | * Check this box if the criterion is not applicable and please explain why in a comment ** Check this box if no explicit information is available | | | |

Munich Re's underwriting tool to assess ESG issues in engineering projects

The PSI Global Resilience Project:

Linking disaster risk reduction and risk transfer/insurance





Global Parametrics



- Parametric risk transfer provider backed by a third-party capitalised fund, focused on reducing the insurance protection gap in vulnerable communities in developing countries
- Backed my strong science and risk modelling, mandate is to offer parametric risk transfer to organisations (e.g. NGOs, development banks, microfinance providers, municipalities) while sharing the risk with third-party investors via an investment fund structure (Natural Disaster Fund)
- Funded for launch by German government's Climate Insurance Fund, run by KfW (German Development Bank) and supported by UK Department for International Development, aims to be independent going concern within a few years
- Backed by the Natural Disaster Fund, capitalised by public financing and third-party capital providers (e.g. investors in insurance-linked securities, investment funds, insurers and reinsurers),
- Aims to transfer risks efficiently and diversify risks globally to lower cost of risk capital and insurance coverage and increase insurance penetration 21



Approaches to investment

Approaches to investment

AXA





Allianz

- Coal divestment of about EUR 4 billion: Mining companies that derive more than 30% of revenues from coal mining, or electric utilities that derive more than 30% of generated electricity from thermal coal
- Doubling wind energy investments to EUR 4 billion



 Allianz and Storebrand join Portfolio Decarbonization Coalition of investors now overseeing decarbonization of USD 600 billion in assets under management



Market-wide collaboration

Brazilian market collaboration on sustainable development

2015 environmental, social and goals by the Brazilian insurance industry

Through the work of the Brazilian Insurance Confederation's (CNseg) Sustainability & Innovation Committee

Goal 1:

40% of insurers will integrate environmental, social and governance criteria into their risk underwriting policy

Goal 2:

30% of insurers will have an environmental, social and governance engagement programme targeted at brokers

Goal 3:

50% of insurance industry will integrate official public policy from municipal, state and federal governments into their social responsibility policy

Goal 4:

50% of insurers will report on environmental, social and governance criteria

CNseg monitoring progress through surveys since 2014

CNseg has developed "Balanced Scorecard for 2016-18" to measure progress in achieving strategic objectives on sustainability, including the ESG goals

25







Evolving financial policy & regulatory frameworks

The UN Environment Inquiry into the Design of Sustainable Financial System





The financial system we need

- Launched in 2014, the UN Environment Inquiry aims to advance options to align "rules of the game" that govern the financial system with sustainable development
- Global report launched at IMF and World Bank Meetings in Lima, Peru in October 2015
- Working in over 15 countries
- Inquiry serving as Secretariat for G20 Green
 Finance Study Group co-chaired by People's
 Bank of China and the Bank of England
- Italian National Dialogue on Sustainable
 Finance convened by Italian Ministry of
 Environment and Inquiry
- PSI and Inquiry working with insurance regulators worldwide to establish a Sustainable Insurance Forum for Supervisors in 2016

Greening China's Financial System & G20 Green Finance Study Group



Green investment needs: USD 400 billion per annum to finance green investment, but only 15% from public sources

Green financial system: People's Bank of China co-authored proposals with UN Environment Inquiry on closing the gap: green bonds, green ratings, lender liability, environmental insurance, stock market disclosure

International cooperation: Established G20 Green Finance Study Group

Apr 2015





INA SSOCIATION WITH

WITH SUPPORT FROM

Jan 2016

G20 Green Finance Study Group launched by China as part of its 2016 G20 Presidency

Co-chaired by the People's Bank of China and the Bank of England

Non-G20 countries work stream

Climate change: Insurance, disclosure and financial stability



"Climate change is the tragedy of the horizon."

– Mark Carney, Governor of the Bank of England & Chair of the Financial Stability Board

"More widely, insurers had clear views on their role in driving a wider societal response to climate change. They believed that it was their responsibility to show leadership on the issue. This is taking a variety of forms, including participation in industry initiatives, such as...**becoming a signatory to the Principles for Sustainable Insurance**..."

- Climate change report of the Prudential Regulation Authority of the Bank of England (September 2015)



- At G20's request, FSB has been engaged to determine how the financial sector can better **incorporate climate-related issues into decision-making by companies, insurers, investors and other important actors in the financial system**
- Established in December 2015, TCFD will assess current state of play on climate-related risk disclosures and design voluntary recommendations to help shape best practices for such disclosures
- TCFD membership includes capital providers, major issuers, accounting firms and rating agencies, presenting a unique opportunity to form a collaborative partnership between users and preparers of financial reports
- TCFD will consider physical, liability and transition risks associated with climate change and what constitutes effective financial disclosures across industries
- TCFD's work will help firms understand what financial markets want from disclosure in order to measure and respond to climate change risks, and encourage firms to align their disclosures with investors' needs
- Final report will set out specific recommendations and guidelines for disclosure by identifying leading practices to **improve** consistency, accessibility, clarity and usefulness of climate-related financial reporting

Insurance regulators demonstrating leadership and commitment to sustainable development

Principles for Sustainable Insurance



- Insurance regulators demonstrating leadership and commitment by signing the PSI
- Insurance regulators starting to address the sustainability dimension of their mandates and taking action on challenges such as climate change adaptation and mitigation, disaster risk management, and financial inclusion
- Since 2009, US National Association of Insurance Commissioners has required insurers to disclose financial risks from climate change, with several states implementing mandatory disclosure
- California Insurance Commissioner implementing a comprehensive climate action plan spanning underwriting, green insurance products, investment, land-use planning, and building codes
- Washington State Insurance Commissioner encouraging insurers and stakeholders to be involved in efforts on land-use regulation and building code requirements to prevent or reduce climate problems
- In 2015, Bank of England's Prudential Regulation Authority completed in-depth assessment of the risk of climate change to insurers and policyholders, across physical, liability and transition risks
- Philippine Insurance Commissioner has championed financial inclusion through microinsurance; promoting disaster insurance mechanisms across individual, local and national levels

The coming Sustainable Insurance Forum for Supervisors (SIF)

- PSI and UNEP Inquiry working with insurance regulators to establish a Sustainable Insurance Forum for Supervisors (SIF) in 2016
- SIF → Practical arena to strengthen ability of insurance regulators to manage sustainability dimensions of their mandates through international cooperation
- Inaugural SIF meeting in December 2016 in San Francisco, hosted by the Insurance Commissioner of California



Insurance in intergovernmental mechanisms & initiatives

The Paris Agreement on Climate Change







Key elements:

- Goal to limit global average temperature increase "to well below 2 C above preindustrial levels and pursuing efforts to limit the temperature increase to 1.5 C"
- Adaptation and loss & damage
- Regular review and enhancement of ambition
- Global stock-taking of progress
- Climate finance
- Over 1,300 non-state actors, including businesses, NGOs, and many insurers have signed the Paris Pledge for Action

Insurance in the context of the UN Framework Convention on Climate Change (UNFCCC)



UNFCCC Warsaw International Mechanism for Loss & Damage associated with Climate Change Impacts

- Action Area 2 → "Enhance the understanding of, and promote, comprehensive risk management approaches (assessment, reduction, transfer, retention), including social protection instruments and transformational approaches, in building long-term resilience of countries, vulnerable populations and communities..."
- Action Area 7 → "Encourage comprehensive risk management by the diffusion of information related to financial instruments and tools...may include: comprehensive risk management capacity with risk pooling and transfer; catastrophe risk insurance; contingency finance; climate-themed bonds and their certification; catastrophe bonds; and financing approaches to making development climate resilient..."

Paris Agreement on Climate Change

- Paragraph 49 → "Requests the Executive Committee of the Warsaw International Mechanism to establish a clearinghouse for risk transfer that serves as a repository for information on insurance and risk transfer, in order to facilitate the efforts of Parties to develop and implement comprehensive risk management strategies"
- Article 8 → "3. Parties should enhance understanding, action and support...with respect to loss and damage associated with the adverse effects of climate change...areas of cooperation and facilitation...may include: a) Early warning systems; (b) Emergency preparedness; (c) Slow onset events; (d) Events that may involve irreversible and permanent loss and damage; (e) Comprehensive risk assessment and management; (f) Risk insurance facilities, climate risk pooling and other insurance solutions (g) Non-economic losses; (h) Resilience of communities, livelihoods and ecosystems."

UNFCCC Standing Committee on Finance (4-5 Sep 2016, Manila, Philippines)

2016 Forum → "Financial instruments that address the risks of loss and damage 33 associated with the adverse effects of climate change"

Intergovernmental initiatives

The UN-Secretary-General's Climate Resilience Initiative (A2R): Anticipate, Absorb, Reshape



- Launched at 2015 UN Climate Change Conference (COP21)
- UN system-backed, multi-stakeholder global platform to catalyse action and address gaps
- Specific 2020 outcomes



G7 Climate Risk Insurance Initiative ("InsuResilience")

 Germany, together with the G7 and partner countries, to provide up to an additional 400 million poor people with insurance against the risks of climate change by 2020



The Vulnerable Twenty Group of Ministers of Finance (V20)

- Focuses on economic and financial responses to climate change to increase investments in climate resilience and low-emission development
- "Study the creation of a sovereign V20 Climate Risk Pooling Mechanism



UN High-Level Meeting on Resilience April 2016, UN Headquarters, New York



"The world needs your leadership to meet the climate challenge."



Ban Ki-moon UN Secretary-General UN Secretary-General's 5 new challenges to the insurance industry:

- Measure carbon footprint of investment portfolios by 2020, and decarbonize investments
- Double investments in sustainable energy by 2020
- Work with UN to ensure that early warning and early action systems are made available to most vulnerable countries by 2020
- Provide the most vulnerable with greater access to risk transfer mechanisms
- Develop auditable standards in insurance industry that incorporate the Sustainable Development Goals

Help achieve the 2030 UN Sustainable Development Goals through "Insurance Development Goals"





The Economist's Insurance Summit 2016: Guardians of the Future



Feb 2016, London

"Insurance 2030, a UN report from June 2015, explored how the insurance industry can be harnessed to support sustainable development.

"A recommendation was made to create **Insurance Development Goals** that align with the UN Sustainable Development Goals, in order to tackle issues of access to insurance, long-term investments, climate change and natural disasters."





"The debate is no longer about whether, it's about when.

"As an insurer, I have personally witnessed many times humanity's capacity for resilience. This gives me hope that we will learn from the errors of the past and set ourselves on a path towards a more sustainable future, beginning here today and resulting in a comprehensive, fair and ambitious agreement this December. In any case, we have no choice: a 2 C world might be insurable, a 4 C world certainly would not be."

Henri de Castries, Chairman & CEO, AXA Group

22 May 2015, Climate Finance Day, Paris





"A risk aware world, where the insurance industry is trusted and plays its full role in enabling a healthy, safe, resilient and sustainable society."

www.unepfi.org/psi