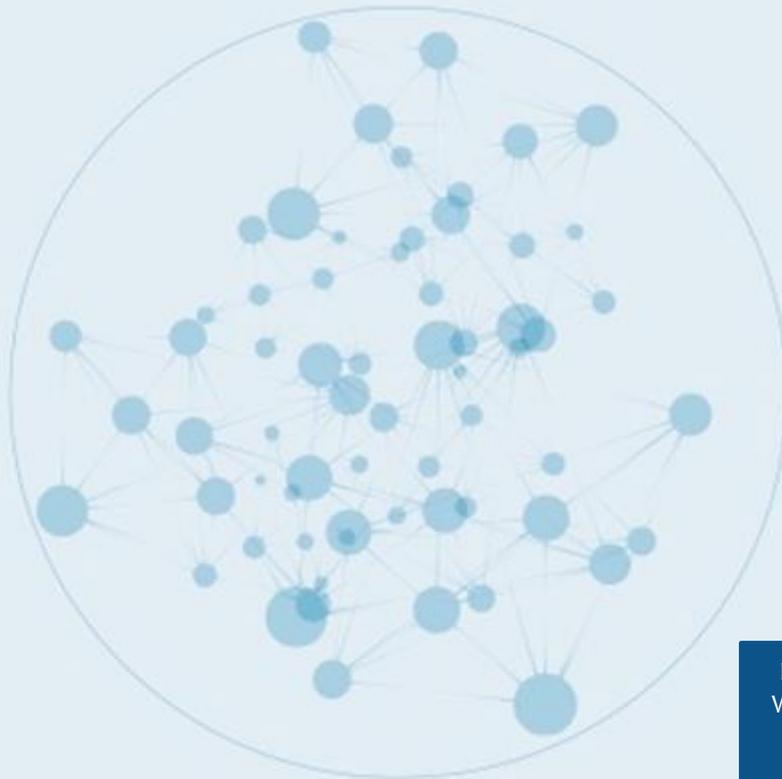




# INSURANCE 2030

## Harnessing Insurance for Sustainable Development



INQUIRY  
WORKING  
PAPER

15/01

June  
2015

## The UNEP Inquiry

The Inquiry into the Design of a Sustainable Financial System has been initiated by the United Nations Environment Programme to advance policy options to improve the financial system's effectiveness in mobilizing capital towards a green and inclusive economy—in other words, sustainable development. Established in January 2014, it will publish its final report in October 2015.

More information on the Inquiry is at: [www.unep.org/inquiry](http://www.unep.org/inquiry) or from: Ms. Mahenau Agha, Director of Outreach [mahenau.gha@unep.org](mailto:mahenau.gha@unep.org).

## The UNEP FI Principles for Sustainable Insurance Initiative

The UNEP FI Principles for Sustainable Insurance serve as a global framework for the insurance industry to address environmental, social and governance risks and opportunities. As of May 2015, more than 80 organisations have adopted the Principles, including insurers representing approximately 15% of world premium volume and US\$9 trillion in assets under management. The vision of the PSI Initiative is of a risk aware world, where the insurance industry is trusted and plays its full role in enabling a healthy, safe, resilient and sustainable society.

More information on the PSI is at: [www.unepfi.org/psi](http://www.unepfi.org/psi) or from: [butch.bacani@unep.org](mailto:butch.bacani@unep.org) and [diana.almoro@unep.org](mailto:diana.almoro@unep.org).

## About this report

This report presents a suite of options that could strengthen the alignment between the insurance industry and sustainable development through to 2030. It represents the culmination of a significant process of engagement between the UNEP Inquiry and PSI and insurance industry stakeholders around the world, including:

- A global consultation gathering submissions from more than 30 respondents from insurance companies, regulators and stakeholders in over 20 countries, bolstered by engagements held in Africa, Asia, Europe and North America.
- The Insurance 2030 Roundtable, hosted by Swiss Re on 11-12 May 2015 in Ruschlikon, Switzerland, which brought together over 70 participants representing leading global insurers and regulators from around the globe. The UNEP Inquiry and the PSI would like to express their thanks for the support of Swiss Re for their support and collaboration in delivering this event.

**Comments are welcome and should be sent to** [butch.bacani@unep.org](mailto:butch.bacani@unep.org) **and** [nick.robins@unep.org](mailto:nick.robins@unep.org).

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## Highlights

In its role as risk manager, risk carrier and investor, insurance is at the heart of a sustainable financial system. Initiatives to harness insurance for sustainable development are picking up momentum – and 2015 represents a critical opportunity to think ahead about the priorities for scaling up action. International milestones on disaster risk reduction, finance for development, new sustainable development goals and a new climate change agreement provide the context for strategic reflection on the policies and partnerships necessary to realize the full potential of insurance.

This report presents a suite of options that could strengthen the alignment between the insurance industry and sustainable development through to 2030. Insurance firms and regulators have identified a set of interlocking priorities for insurance looking forward to 2030, such as natural disasters, access to insurance, climate change, socio-economic disruptions and long-term investment.

Across the world, we have identified a growing range of innovations by insurance companies, multi-stakeholder initiatives and policymakers that better harness insurance for sustainable development, across the dimensions of risk, access and investment.

### Key actions to harness insurance for sustainable development

	Cross-cutting	Risk	Access	Investment
<b>Corporate Actions</b>	Principles-driven commitments (Brazil's CNSeg)	Sharing data and information (Finance Norway)	Product innovations (Index Insurance)	Portfolio analysis and disclosure (Montreal Carbon Pledge)
	Sustainability Risk Management Frameworks (Swiss Re, Allianz)	Direct risk resilience support (Swiss Re)	Distribution and Deployment (Mobile technology)	Investment frameworks and funding commitments (Axa)
<b>Multi-stakeholder Actions</b>	Policy-oriented partnerships (Australian Business Roundtable, P4A)	Partnerships for risk assessment: sharing capabilities and knowledge (1-in-100 Initiative)	Partnerships for access: engagement, capacity building, and implementation (A2II, IIF, GIIF)	Partnerships to develop project pipelines (GreenInvest)
<b>Actions</b>	Regional insurance facilities and partnerships (African Risk Capacity)	Mandatory coverage approaches (China)	Policy-directed market provision (India)	Solvency regulations, Capital requirements, and Tax incentives (EU)
	Insurance development roadmaps Frameworks for risk prevention	Mandatory Risk assessment and disclosure (US, UK)	Support for market development (Philippines) Public finance for access (G7)	

Our discussions and engagements have also brought forward a set of overarching priorities for different channels of action – which we have grouped as requirements for success, remaining challenges, and issues for scale-up.

## Requirements for success, challenges, and priorities

	Requirements for success	Challenges	Priorities for scale-up
Corporate	Making commitments meaningful (clear, time-bound, quantifiable)	Skills and capabilities Sustaining momentum	Moving from commitments to deals Clear policy objectives and requests
Multi-stakeholder	Impact assessment, monitoring, and evaluation	Identification and engagement of core stakeholders	Knowledge sharing and communication
Regulation	Effective Incentives and compliance instruments Cross-ministerial collaboration	Skills and Capabilities Avoiding unintended consequences	Managing tensions between objectives Strategies for managing policy misalignments

Our assessment suggests key areas of focus for industry and regulators, including:

- Making commitments meaningful
- Moving from commitments to deals
- Managing tensions between objectives
- Addressing knowledge and skills gaps

Looking across the insurance sector, it is clear that there is significant progress already underway on many sustainable development challenges – and that emerging industry, regulatory, and policy efforts need to be integrated and scaled up. Catalysing the energy of 2015 into meaningful action for long-term change will require sustained effort in coming years. The UNEP Inquiry and the PSI have identified three potential measures to scale up the innovations identified in this document through enhanced coordination, knowledge sharing, and coherence:

- Convene an Insurance Network on Sustainable Development - to improve dialogue, stimulate innovation and partnerships, and improve coherence between existing initiatives.
- Establish a Sustainable Insurance Policy Forum - to scale up policy progress through enhanced cooperation and collaboration between governments.
- Agree a set of Insurance Development Goals to focus long-term efforts beyond 2015.

## 1 2015: A strategic opportunity for convergence

### 1.1 The role of the insurance industry in sustainable development

As risk managers, risk carriers and investors, the insurance industry has the potential to play a strategic role in securing sustainable development.<sup>1</sup> In brief, insurance promotes actions that prevent and reduce risk. Beyond providing financial resilience, insurance acts as an *enabler* of solutions that drive social and environmental sustainability. Moreover, insurers can support sustainable development through their investments across asset classes and geographies.

However, there are a number of barriers that can prevent the realisation of the sector's full potential, including market failures, misaligned policy frameworks, underdeveloped markets as well as gaps in critical capabilities. Disruptive technological innovations in data analytics and mobile technologies pose new challenges and opportunities to the insurance industry business model across the value chain, from risk pricing to product distribution.

A growing number of industry practitioners and policymakers are innovating in response to the converging challenges of natural disasters, social exclusion, climate change and long-term finance. Innovations are arising through multiple channels, including corporate commitments, multi-stakeholder partnerships, and insurance policy and regulation. The current challenge for the industry is to identify experiments with high-potential for scale up; actions which will not just contribute to economic prosperity, social inclusion and environmental regeneration, but also bring multiple co-benefits of enhanced consumer trust, insurance industry growth, and adaption to an evolving market environments.

### 1.2 A growing momentum

Up until 2000, the insurance industry initiatives focused on addressing sustainable development challenges were limited.<sup>2</sup> Microinsurance was not part of the insurance vocabulary. Ageing populations was not a global issue for the insurance industry. Index-based and usage-based insurance, insurance for people with HIV/AIDS, and insurance for renewable energy and green buildings and vehicles were virtually non-existent.

Natural catastrophes proved to be a seminal focal point: significantly increasing economic and social losses due to exposure to natural disasters around the world inspired an increasing sophistication of risk analysis, particularly in catastrophe risk models.

In the 15 years since 2000, there has been a clear evolution of initiatives that demonstrate the growing role of insurance in addressing sustainable development challenges, particularly in the areas of natural catastrophes and disaster risk reduction, access to insurance, and climate change:

- Consultative Group to Assist the Poor (CGAP) Working Group on Microinsurance (2002)
- Chief Risk Officers Forum Emerging Risks Initiative (2005)
- Munich Climate Insurance Initiative (MCII) (2005)
- ClimateWise Principles (2007)
- ILO Microinsurance Innovation Facility (2008)
- Microinsurance Network (2009)

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<sup>1</sup> For a more substantive review, please see: Bacani, B. (2014) *A Systemic View of the insurance industry, regulation, and sustainable development*. UNEP Inquiry/UN PSI working paper, December 2014.

<sup>2</sup> Examples were the UNEP Statement of Environmental Commitment by the Insurance Industry (1995) and the UNEP Insurance Industry Initiative (1997).

- Access to Insurance Initiative (2009)
- Kyoto Statement of The Geneva Association (2009)
- The Global Insurance Industry Statement: “Adapting to climate change in developing countries” (2010) of ClimateWise, MCII, Geneva Association and UNEP FI
- UNEP FI Principles for Sustainable Insurance (PSI) (2012)
- The Global Insurance Industry Statement: “Building climate and disaster-resilient communities and economies” (2013) of ClimateWise, MCII and UNEP FI
- The Climate Risk Statement of The Geneva Association (2014)
- ILO Impact Insurance Facility (2014)
- PSI Statement: “United for disaster resilience: The insurance industry’s statement in support of disaster risk reduction” (2015)
- G7 Initiative on Climate Risk Insurance (2015)

Looking at this evolution, it is clear that progress has been made in many critical areas, including an increasing focus on Environmental, Social and Governance (ESG) issues in underwriting and investment. However, there has been limited progress on delivering coherence across different elements of the sustainable development agenda. This is beginning to change, with new models being put forward to address challenges at the nexus of access, climate change, and economic sustainability in insurance products – and continued scale-up is an immediate and pressing concern.

### 1.3 The 2015 opportunity

At the global level, 2015 represents a critical opportunity to build on progress so far with four milestones providing a strategic direction:

- March 2015: The Sendai Framework for Disaster Risk Reduction 2015-2030, which was produced at the 3<sup>rd</sup> UN World Conference on Disaster Risk Reduction in Sendai and succeeded the “Hyogo Framework for Action 2005-2015: Building the resilience of nations and communities to disasters”
- July 2015: The 3<sup>rd</sup> UN Conference on Financing for Development in Addis Ababa, which will support the implementation of the Post-2015 Sustainable Development Agenda
- September 2015: The UN Sustainable Development Goals, which will be adopted at a UN summit in New York and succeed the UN Millennium Development Goals as part of the Post-2015 Sustainable Development Agenda
- December 2015: The finalization of a new, universal climate agreement under the UN Framework Convention on Climate Change in Paris

Alongside this, G20 governments and others are putting in place critical elements of the post-crisis framework in terms of financial stability and mobilizing long-term finance. In April 2015, G20 finance ministers and central bank governors also requested the Financial Stability Board to convene financial sector participants to take account of climate-related issues.<sup>3</sup> Looking at these milestones it becomes clear that insurance is expected to play an increasingly significant role within the global sustainable development agenda – through underwriting, investment, knowledge sharing, capacity building, and innovation.

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<sup>3</sup> G20 (2015) G20 Finance Ministers and Central Bankers Meeting Communique. <https://g20.org/wp-content/uploads/2015/04/April-G20-FMCBG-Communique-Final.pdf>

## Insurance and the Sendai Framework for Disaster Risk Reduction 2015-2030

The 3<sup>rd</sup> UN World Conference on Disaster Risk Reduction produced the Sendai Framework for Disaster Risk Reduction 2015-2030, which aims to “prevent new and reduce existing disaster risk” through “measures that prevent and reduce hazard exposure and vulnerability to disaster, increase preparedness for response and recovery, and thus strengthen resilience.”

The Framework is organized around four priority areas: understanding disaster risk, strengthening disaster risk governance, investing in disaster risk reduction for resilience, and enhancing disaster preparedness. Risk transfer, risk sharing and insurance are explicitly referenced under Priority 3:

30. (b) Promote mechanisms for disaster risk transfer and insurance, risk sharing and retention and financial protection (...) in order to reduce the financial impact of disasters on governments and societies, in urban and rural areas;

31. (b) Promote the development and strengthening of disaster risk transfer and sharing mechanisms and instruments in close cooperation with partners in the international community, business, international financial institutions and other relevant stakeholders;

However, as the risk management process in insurance mirrors the disaster risk management continuum, each of the four priority areas is directly relevant to the insurance industry. The Framework recognizes that “while States have the overall responsibility for reducing disaster risk, it is a shared responsibility between Governments and relevant stakeholders.”

In this regard, it explicitly cites the business and financial institutions and regulators as key stakeholders:

31. (c) Business, professional associations and private sector financial institutions, including financial regulators and accounting bodies, as well as philanthropic foundations, to: integrate disaster risk management, including business continuity, into business models and practices (...); engage in awareness-raising and training for their employees and customers; engage in and support research and innovation as well as technological development for disaster risk management; share and disseminate knowledge, practices and non-sensitive data; and actively participate (...) in the development of normative frameworks and technical standards that incorporate disaster risk management.

## Insurance and the Addis Ababa Accord<sup>4</sup>

From 13-16 July 2015, the 3<sup>rd</sup> International Conference on Financing for Development will gather heads of state and ministers, as well as business and civil society, to agree a global framework for financing sustainable development.<sup>5</sup> The ‘zero draft’ of the outcome document which was presented in March 2015 incorporated a range of measures that touch on the role of insurance, including:

- Introducing policy frameworks and incentives that ensure that private investment is aligned with sustainable development.
- Implementing environmental, social and governance (ESG) reporting frameworks.
- Working with industry-group, national regulators and international accounting standard-setting bodies to identify metrics that could frame ‘generally accepted’ sustainable development accounting principles.
- Designing capital markets’ regulation that promotes incentives along the investment chain aligned with long-term performance and sustainability indicators.
- Ensuring access to financial services for all, including the poor, women, rural and marginalized communities and persons with disabilities.
- Meeting longer-term financing needs through establishing long-term bond and insurance markets.
- Calling for a global initiative to help scale up investments in sustainable and resilient infrastructure.
- Ensuring international financial agreements, rules and standards (such as banking and insurance regulation) are consistent with each other and with progress towards the SDGs.

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<sup>4</sup> UN (2015) *Addis Ababa Accord: Zero Draft of the Outcome document*, see [www.un.org/esa/ffd/wp-content/uploads/2015/03/1ds-zero-draft-outcome.pdf](http://www.un.org/esa/ffd/wp-content/uploads/2015/03/1ds-zero-draft-outcome.pdf)

<sup>5</sup> See UNEP Inquiry (2015) *Aligning Africa’s Financial System with Sustainable Development* (available at [http://apps.unep.org/publications/index.php?option=com\\_pub&task=download&file=011746\\_en](http://apps.unep.org/publications/index.php?option=com_pub&task=download&file=011746_en)) and also UNEP Inquiry (2015) *Aligning the Financial Systems in the Asia Pacific Region to Sustainable Development* (available at [http://apps.unep.org/publications/index.php?option=com\\_pub&task=download&file=011744\\_en](http://apps.unep.org/publications/index.php?option=com_pub&task=download&file=011744_en))

## Loss and Damage in the UNFCCC

Within the international climate change process, a critical area of potential engagement is the UNFCCC Warsaw International Mechanism for Loss and Damage associated with Climate Change Impacts. The two core goals of the UN Framework Convention on Climate Change (UNFCCC) - mitigation and adaptation - are both of fundamental relevance to the sector.

Mounting scientific evidence suggests that despite global mitigation and adaptation efforts, residual losses and damages from climate change are inevitable.<sup>6</sup> Loss and Damage can result from slow-onset events (e.g. sea level rise, glacial retreat) or extreme events (e.g. extreme rainfall, flooding, heat waves). With the establishment of the Warsaw International Mechanism (WIM) for Loss and Damage associated with Climate Change Impacts at COP 19 in 2013, loss and damage from climate change has risen to global attention.

Over the next two years the WIM will seek to address gaps in knowledge, collect and share relevant data, and strengthen dialogue between stakeholders. The initial two-year work plan of the WIM identifies nine action areas, two of which explicitly refer to risk management approaches, insurance and other financial instruments:

“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 that address the risks of loss and damage associated with the adverse effects of climate change to facilitate finance in loss and damage situations... These 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...”

However, as the risk management process in insurance includes understanding, preventing and reducing risk, other action areas are also relevant. These include understanding how loss and damage affect vulnerable countries, populations and ecosystems; enhancing data on and knowledge of the risks of slow-onset events and their impacts; and enhancing the understanding of the capacity and coordination needs with regard to building resilience against loss and damage.

The WIM presents an important opportunity for the insurance industry to exercise leadership and demonstrate how it can collaborate and support effective climate change adaptation, and help manage loss and damage that have not been avoided through climate change mitigation and adaptation efforts.

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<sup>6</sup> UNEP (2014) *Loss and Damage: When Adaptation is NOT Enough*. April 2014.  
[http://na.unep.net/geas/getUNEPPageWithArticleIDScript.php?article\\_id=111](http://na.unep.net/geas/getUNEPPageWithArticleIDScript.php?article_id=111)

## Insurance and the proposed UN Sustainable Development Goals

Currently the UN Open Working Group is developing a set of Sustainable Development Goals (SDGs), which will build upon the Millennium Development Goals and converge with the post 2015 development agenda. As noted by a recent paper by the Willis Research Network, many of the 17 proposed goal areas are relevant to insurance:<sup>7</sup>

1	<b>Poverty</b>	Access to insurance to increase social protection, including through microinsurance
2	<b>Hunger, Food Security and Nutrition</b>	Provision of insurance solutions for climate resilient agriculture; ecosystem services and natural capital
3	<b>Healthy lives and well being</b>	Core health insurance priorities; broad overlaps across other priorities
4	<b>Education</b>	Limited potential for insurance
5	<b>Gender equality and empowerment</b>	Potential for targeted insurance solutions and outreach, but overall limited potential
6	<b>Water and sanitation</b>	Investments and insurance for water infrastructure
7	<b>Sustainable energy</b>	Investments and insurance for clean energy projects, including innovative products for financing
8	<b>Inclusive economic growth and employment</b>	Strengthen economic resilience through insurance for SMEs; increase capacity of domestic institutions
9	<b>Infrastructure, industrialization, innovation</b>	Core investment priorities
10	<b>Inequality and national and international levels</b>	Support effective frameworks for financial sector regulation; otherwise limited potential
11	<b>Inclusive, safe, resilient, and sustainable cities</b>	Health, property, and a wide range of other non-life insurance priorities
12	<b>Sustainable production and consumption</b>	Knowledge creation and cross-sector leadership to understand and manage risks
13	<b>Climate change</b>	Significant core insurance priorities, across underwriting and investment
14	<b>Oceans, seas and marine resources</b>	Innovation in insurance products
15	<b>Terrestrial ecosystems and biodiversity</b>	Knowledge creation and cross-sector leadership to understand and manage risks
16	<b>Justice and accountability</b>	Support for cultures of risk management within institutions and organisations
17	<b>Global partnership for sustainable development</b>	Support for broader role of financial sector within sustainable development

<sup>7</sup> Douglas, R. (2015) *The Insurance Sector and the 2015 – 2016 UN Processes: Opportunities for Progress*. Willis Research Network Working Draft, 10 March 2015.

## 2 Looking ahead: key concerns and priorities

The results of the joint PSI-Inquiry consultation illustrate increasing convergence around key sustainable development risks and opportunities in insurance markets around the world. Here we provide a high-level synthesis of key insurance industry priorities to 2030.

### 2.1 Insurance industry priorities to 2030

#### Natural disasters

The insurance industry's experience tells us that disasters are becoming more frequent and more severe. Together with higher exposure through population growth, urbanisation and climate change, this is expected to result in a significant increase in losses over coming decades. Risk sharing and risk transfer mechanisms such as insurance will be important in helping communities and economies meet these threats.

Between 2005 and 2015 over 700 thousand people lost their lives, over 1.4 million were injured and approximately 23 million were made homeless as a result of disasters, with more than 1.5 billion people were affected.<sup>8</sup> Total economic losses from natural disasters in the last decade were more than US\$1.3 trillion, with total direct losses in the range of US\$2.5 trillion so far this century.<sup>9</sup> In the past decade, average economic losses from disasters were about US\$190 billion per year, while average insured losses were about US\$60 billion per year.<sup>10</sup> This century, more than one million people have already lost their lives to disasters.<sup>11</sup>

Continued innovation from the insurance industry will be required in the near future to manage natural disaster risk. Catastrophe insurance pools and index-based insurance solutions can facilitate the coverage of disaster risk in highly exposed and vulnerable communities. More investment in disaster risk reduction will lead to less economic, social and environmental losses; safer and more resilient communities and economies; less public and private funds spent on disaster relief and recovery, enabling better investment; and more access to affordable insurance to help communities manage the uncertainty of adversity and the financial hardship associated with unexpected losses.

#### Access to insurance

Access to insurance – in terms of product availability, distribution, and consumer engagement – remains a critical challenge across developing and developed countries. Key barriers include low levels of financial literacy and engagement with financial services, as well as a lack of needed risk data, perceived cost-ineffectiveness of products, and other regulatory barriers. While certain initiatives have had major positive impacts (including the expansion of microinsurance), market tensions remain between access to affordable insurance and risk-

*“Financial education is at the centre of sustainability for the insurance sector”*

**Consultation Respondent**

<sup>8</sup> UN World Conference on Disaster Risk Reduction (2015) Sendai Framework for Disaster Risk Reduction 2015-2030. [www.wcdrr.org/uploads/Sendai\\_Framework\\_for\\_Disaster\\_Risk\\_Reduction\\_2015-2030.pdf](http://www.wcdrr.org/uploads/Sendai_Framework_for_Disaster_Risk_Reduction_2015-2030.pdf)

<sup>9</sup> UNEP Inquiry (2014), *Aligning the financial system with sustainable development: An invitation and background briefing* (available at [http://apps.unep.org/publications/index.php?option=com\\_pub&task=download&file=011742\\_en](http://apps.unep.org/publications/index.php?option=com_pub&task=download&file=011742_en))

<sup>10</sup> Swiss Re (2014), *Sigma report: Natural catastrophes and man-made disasters in 2013*.

<sup>11</sup> International Federation of Red Cross and Red Crescent Societies (2013 & 2014), *World Disasters Report*.

based pricing. Importantly, this is increasingly being recognized as a global issue: in certain developed countries, low-income populations with higher exposure to natural hazards are increasingly met with difficulty due to certain geographic areas being redlined by providers.

### Climate change and the low-carbon transition

Climate change represents a significant concern for insurers globally, as the short and long term impacts become increasingly material. During the past decade, 80% of natural disasters were climate-related,<sup>12</sup> and climate change is predicted to increase the frequency and intensity of extreme weather events such as floods and storms.<sup>13</sup> Recently, the drivers of major water crisis (including in California and Brazil) have been acknowledged as clearly linked to climate change.

*“36% of [company representatives] considered that risk issues related to global climate change have already influenced risk underwriting [in our country], and 53% believe that they will influence risk underwriting in the next decade.”*

**Consultation Respondent**

Rapid and intensifying climate change will have wide ranging implications for the insurance industry across life and non-life insurance lines, as well as investment. In certain developing countries, respondents reported that the impacts of climate are being increasingly felt within insurance underwriting. However, a lack of appropriate data and broader market failures within the real economy is complicating the ability of insurers to respond to rapidly changing environmental and market conditions.

Climate change has been a driver of market innovation, policy engagement and analysis, and is now stimulating new regulatory approaches for insurance in many countries.<sup>14</sup> Respondents agreed on the need for product innovations that can promote the transition to a low-carbon and resource-efficient economy, such as specific insurance products for clean energy projects, green buildings, energy efficiency, and hybrid and electric vehicles. Advancements in index-based insurance are supporting coverage of a more diffuse range of climate-related risks. More specific solutions, including policy risk insurance for renewable energy investments, insurance solutions for low-emission transport, and products for green rebuilding and green domestic appliance replacements, are beginning to emerge. Developments in environmental liability insurance covering risks arising from environmental damage continue to gain momentum, especially in major emerging economies such as China.

### Socio-economic disruptions, demographic trends and development

Socio-economic disruptions linked to demographic trends are key a concern in emerging economies and developed countries with increasing wealth inequality. In Europe, the retraction of the welfare state and introduction of austerity measures has resulted in the rollback public health systems, which may necessitate new health-related service offerings. Widespread youth unemployment and financial instability remain as barriers. Pension system issues and wealth transfer between generations represents a long-term challenge. Political risks, including corruption and money laundering, continue to negatively affect levels of trust in the financial sector.

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<sup>12</sup> WMO (2014) *Atlas of Mortality and Economic Losses from Weather, Climate, and Water Extremes (1970-2012)*. WMO No. 1123. [www.wmo.int/pages/prog/drr/transfer/2014.06.12-WMO1123\\_Atlas\\_120614.pdf](http://www.wmo.int/pages/prog/drr/transfer/2014.06.12-WMO1123_Atlas_120614.pdf)

<sup>13</sup> IPCC (2014) AR5 WG1: Chapter 11 and Chapter 12. [www.climatechange2013.org/](http://www.climatechange2013.org/)

<sup>14</sup> See: Carroll, C., Randolph Evans J., Patton, L. (2014) *Climate Change and Insurance*, American Bar Association; Lloyd's (2014) *Catastrophe Modelling and Climate Change*; MunichRe (2014) *Natural Catastrophes 2013*; Geneva Association (2014) *Climate Risk Statement*; ClimateWise, MCII, UNEPFI (2013) *Global insurance industry statement*.

In developed countries and major emerging economies, ageing populations may present a critical social and economic sustainability challenge. Ageing populations will require access to new products and services, and will greatly increase the burden on health systems and health-related claims. In rapidly developing countries, changes in demographic balances (the sex ratio at national level) may have significant long-term impacts on economic and social systems that affect demand for products.

Issues at the nexus of urbanisation, lifestyles, and human health were identified as emerging challenges across many contexts. The impacts of air pollution on respiratory health, an increasing prevalence of chronic dietary diseases (such as obesity), and negative environmental quality outcomes are key insurance challenges in major economies with rapidly developing middle classes, such as China, India, Mexico and Brazil. As these trends are set to increase, insurers are presented with both increasing risks and opportunities in developing new innovative products.

### **Long-term investment and sustainable development**

With over US\$29 trillion in assets under management globally, the insurance industry plays a significant role in investment across asset classes.<sup>15</sup> Insurers are increasingly interested in reallocating capital towards long-term investments – and linking this with sustainability. However, many respondents remained concerned that international regulatory frameworks were constraining their capacity to make investment choices that could support sustainable development. Parallel to the debate on Basel III impact on long-term debt capital, there has been concern on the impact of financial reforms (for example EU’s Solvency II) and post-crisis regulatory developments on insurers’ appetite to allocate capital to long-term infrastructure. This constellation of issues is also seen as a priority in countries with other risk-based solvency regimes under development, such as the Solvency Assessment and Management (SAM) regime in South Africa and the China Risk-Oriented Solvency System (C-ROSS).

*“Investments in infrastructure and other social investments should not be penalized requiring higher capital requirements.”*

**Consultation Respondent**

Many respondents also expressed a need for regulatory approaches which expand beyond the insurance sphere to address issues across the investment chain – including those stemming from current investment management practices. The degree of convergence in these responses is indicative of the growing support for a step-change in the use of financial policy and regulation to promote sustainable development objectives.

### **Accountability, trust, and reputation**

Trust and reputation issues continue to present challenges for insurers, banks and the broader financial sector. An annual international trust and credibility survey<sup>16</sup> of business and governments has consistently rated financial services, which includes banks and insurers, as the least trusted global industry. Many respondents agreed that increasing a base level of public trust in the insurance industry is a critical priority. Increasing transparency within firms across insurance products and operations, including investment, is a necessary first step towards this goal.

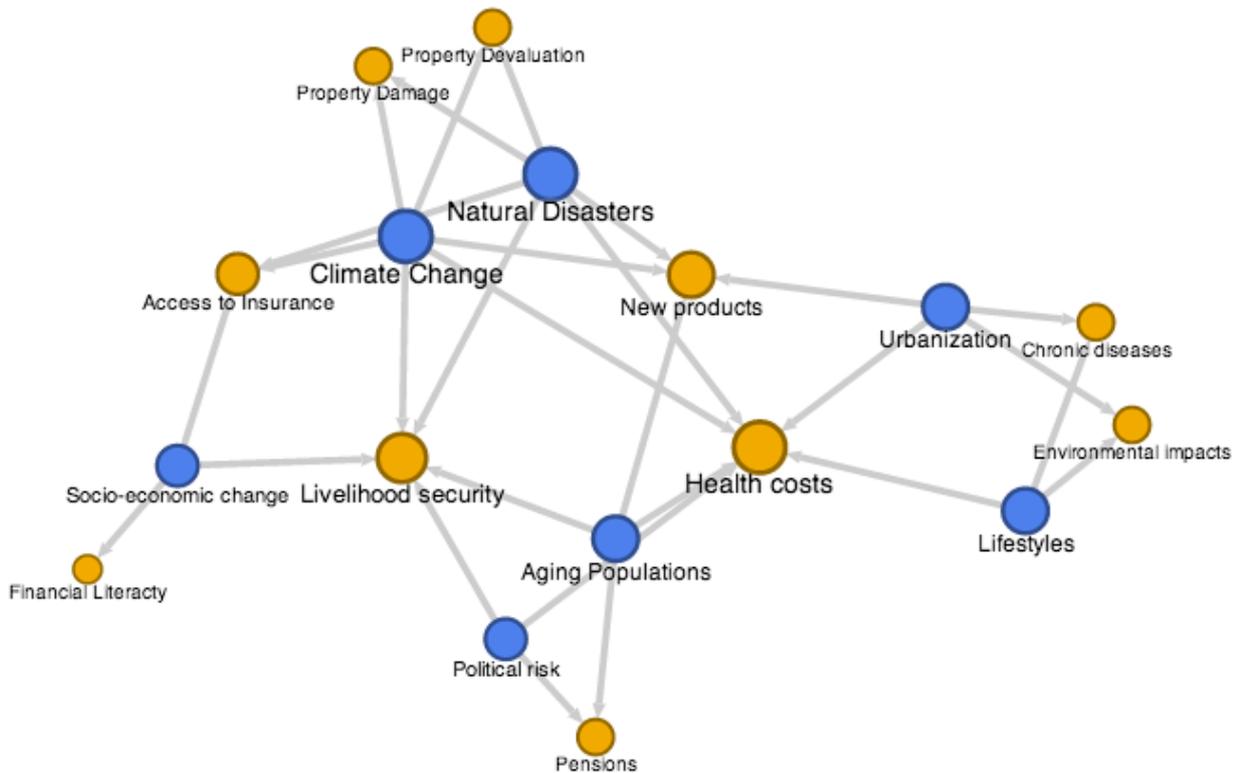
<sup>15</sup> TheCityUK (2014), *UK fund management 2014: An attractive proposition for international funds*. [www.thecityuk.com/research/our-work/reports-list/uk-fund-management-2014/](http://www.thecityuk.com/research/our-work/reports-list/uk-fund-management-2014/)

<sup>16</sup> Edelman Berland (2014), *Edelman Trust Barometer: Annual global study*. [www.edelman.com/insights/intellectual-property/2014-edelman-trust-barometer/](http://www.edelman.com/insights/intellectual-property/2014-edelman-trust-barometer/)

## 2.2 Understanding links between key priorities

Many of the individual priority issues identified above are closely linked. Climate change, for example, is expected to increase risks posed by natural disasters, while economic growth in developing countries is expected to have implications for health, environmental quality, and access to insurance. A high-level overview of connections between risk drivers (blue) and insurance issues (yellow) is presented below.

**Figure 1: Risk drivers and Insurance issues**



Source: PSI & UNEP Inquiry, Consultation Responses, 2015

## 2.3 Policy proposals identified in the global consultation

Drawing on the responses to the global consultation, it is clear that a large majority of firms and regulators in developed and developing countries support a more integrated approach to sustainable development within the insurance industry. The role of insurance policy and regulation will be critical in this context. Policy suggestions from respondents exhibited convergence in a number of key areas for insurance policy reform, including embedding sustainable development priorities at international and national levels, incorporating sustainable development priorities into insurance regulation, and incentivizing innovation. Certain respondents, however, remained sceptical about the potential for negative unintended consequences of further regulatory controls on the insurance industry.

**Table 1: Policy suggestions for an integrated approach to sustainable development**

<p><b>Embedding ESG at the international level</b></p>	<ul style="list-style-type: none"> <li>• Development of new international compacts</li> <li>• Integration of ESG issues into IAIS ICPs</li> <li>• National regulators joining the PSI, employing principles at the national level</li> </ul>
<p><b>Ensuring coherence at the national level</b></p>	<ul style="list-style-type: none"> <li>• Insurance industry development roadmaps</li> <li>• Insurance industry strategies linked to national-level SD plans</li> <li>• Insurance industry strategies linked to existing ESG and SD frameworks in other financial sectors (e.g. banking)</li> <li>• Greater communication on policy interactions and potential misalignments</li> <li>• Ensuring that prudential rules apply to different asset classes</li> <li>• Incorporate climate change factors in mandatory insurance</li> </ul>
<p><b>Incorporating sustainable development in insurance policy and regulation</b></p>	<ul style="list-style-type: none"> <li>• Mainstreaming ESG and SD issues into regulatory frameworks</li> <li>• Guidance for insurers to develop risk policies targeting ESG and SD issues</li> <li>• Integrating ESG and SD factors into underwriting criteria</li> <li>• Development of incentives and targeted mechanisms to steer consumers/clients towards sustainable choices</li> <li>• Development of national ESG and SD risk databases</li> <li>• Transparency and reporting of ESG and SD risks and opportunities</li> <li>• Consultation and engagement on ESG and SD risks and opportunities</li> <li>• Compliance measures, including ESG scorecards, KPIs, reporting</li> </ul>
<p><b>Incentivizing Innovation</b></p>	<ul style="list-style-type: none"> <li>• Incentives for business innovation (underwriting practices, operations, and strategic planning)</li> <li>• Incentives for risk prevention</li> <li>• Incentives to support broader participation in SD initiatives</li> <li>• Differential treatment of sustainable investment options</li> <li>• Linking insurance products to other systems (banking, postal)</li> </ul>
<p><b>Disaster risk management and resilience</b></p>	<ul style="list-style-type: none"> <li>• Provision of regulatory frameworks for disaster risk management</li> <li>• Guidance for firms on the development of comprehensive disaster response strategies</li> <li>• Requirements to increase disaster risk management capitalization</li> <li>• Allowing for insurance firms to be a “first response”</li> <li>• Requirements for expedited settlement in the event of emergency as an industry standard</li> <li>• Public/private agreements and risk sharing for major catastrophe insurance</li> <li>• Adequate treatment of unexpected losses within capital requirements</li> <li>• Sharing catastrophe assessment and controls across the industry based on Solvency II principles</li> </ul>
<p><b>Creating Effective Collaboration</b></p>	<ul style="list-style-type: none"> <li>• Working groups and coalitions to identify SD risks and opportunities at the national level</li> <li>• Collaborative discussions and consultation processes to support regulation design</li> <li>• Industry bodies to liaise between firms and regulators on reporting, compliance, and transparency issues</li> <li>• Industry-wide events, such as sustainability forums</li> <li>• Recognition of best practice or achievements by the industry as a way of generating momentum and leadership</li> <li>• Developing mechanisms for international collaboration between regulators to share best practice</li> <li>• Facilitating multi-stakeholder dialogues with academia, civil society, NGOs, and other relevant stakeholders</li> </ul>

**Key quotes from consultation respondents:**

*“The meeting of minds of insurance regulators and insurers is critical to the path towards the integration of sustainable development into policy and regulation.”*

*“The regulator and the insurance industry must “walk together”, with the same goals in order to avoid unintended consequence.”*

*“We are not there yet and the prospects for this to happen – especially in times of financial crisis, where ESG risks cannot be appreciated – are unlikely in the very near future. At this point, the role of ‘enlightened’ individual companies (e.g. PSI members) could be pivotal.”*

### 3 Harnessing Insurance: Emerging Innovations and Gaps

There appear to be three main categories of actions on sustainable development priorities within the insurance industry:

- Corporate actions, including commitments
- Multi-stakeholder actions, including partnerships
- Policy and regulatory actions

Across the world, we have identified a growing range of innovations by insurance companies, multi-stakeholder initiatives and policymakers that better harness insurance for sustainable development, across the dimensions of risk, access and investment (Table 2).

**Table 2: Key actions to harness insurance for sustainable development**

	Cross-cutting	Risk	Access	Investment
<b>Corporate Actions</b>	Principles-driven commitments (Brazil’s CNSeg)	Sharing data and information (Finance Norway)	Product innovations (Index Insurance)	Portfolio analysis and disclosure (Montreal Carbon Pledge)
	Sustainability Risk Management Frameworks (Swiss Re, Allianz)	Direct risk resilience support (Swiss Re)	Distribution and Deployment (Mobile technology)	Investment frameworks and funding commitments (Axa)
<b>Multi-stakeholder Actions</b>	Policy-oriented partnerships (Australian Business Roundtable, P4A)	Partnerships for risk assessment: sharing capabilities and knowledge (1-in-100 Initiative)	Partnerships for access: engagement, capacity building, and implementation (A2I, IIF, GIIF)	Partnerships to develop project pipelines (GreenInvest)
	Regional insurance facilities and partnerships (African Risk Capacity)	Mandatory coverage approaches (China)	Policy-directed market provision (India)	Solvency regulations, Capital requirements, and Tax incentives (EU)
<b>Actions</b>	Insurance development roadmaps	Mandatory Risk assessment and disclosure (USA, UK)	Support for market development (Philippines)	
	Frameworks for risk prevention		Public finance for access (G7)	

Over the following pages we discuss these actions, and provide examples of innovation in practice. We also outline remaining questions, gaps, and key issues for further research.

#### 3.1 Corporate

Over the course of 2014-2015, several insurance organisations and coalitions put forward commitments on sustainable development challenges. Commitments are an important catalytic element to drive leadership and foster positive competition amongst insurers on sustainable development challenges. Looking across corporate actions, the majority of commitments made relate to disaster risk reduction, sharing of data and skills, and investment. Finding ways to make these commitments matter – by expanding their scope, and shifting the “visibility/impact” ratio of actions – is the key challenge going forward.

### 3.1.1 Cross Cutting

#### Principles-Driven Commitments

Linking to existing industry principles can be a way to ensure that commitments are clearly oriented and are coherent within a common framework, as well as increasing the visibility of monitoring through reporting against established indicators. Examples are arising at national and international levels, including:

- **PSI commitments on disaster resilience and sustainable development:** The PSI is now calling on insurance organisations to exercise leadership and make voluntary commitments to build disaster resilience and promote sustainable development.<sup>17</sup> These commitments are concrete actions on risk management, insurance products, investment, partnerships, and disclosure frameworks that promote disaster risk reduction, climate change adaptation and mitigation, financial inclusion, sustainable investment, and accountability and transparency. Critical to the success of these commitments is that they are specific, clearly measurable, and time-bound.
- **CNSeg PSI Targets:** CNSeg, the National Confederation of General Insurance, Private Pension and Life, Supplementary Health and Capitalization in Brazil, is an association which aims to bring together stakeholders, coordinate policy actions, advance strategy and interface with government and civil society entities. In 2013, CNSeg implemented a decision to integrate key targets derived from the four PSI principles, time-bound to 2015:
  - 40% of insurers will integrate ESG issues in risk underwriting policy
  - 30% of insurers have an engagement program brokers on ESG issues
  - 50% of insurers will integrate into their social responsibility policies the official policies of local, state and federal governments
  - 50% of insurers will report ESG issues by 2015

Recent research has found that 3 of these four goals (1, 2, and 4) have been achieved ahead of schedule, suggesting a high level of commitment from national companies.<sup>18</sup>

#### Sustainability Risk Management Frameworks

Our findings suggest that integrated frameworks for sustainability risk management across insurance lines and asset classes could help support the mainstreaming of sustainability issues across the insurance industry value chain. At the company level, early frameworks are emerging:

- **Swiss Re:** Swiss Re's Sustainability Risk Framework is a group-wide risk management methodology, consisting of eight policies on sensitive sectors or issues, a process for sensitive business risks in due diligence, and company and country exclusions.<sup>19</sup> The framework is applied to all business transactions – importantly, to investments as well as underwriting activities.
- **Allianz:** Allianz overarching ESG approach considers sustainability risks across insurance and investment areas. In Insurance, these include ESG guidelines on sensitive business areas in insurance activities the development of strategies to engage corporate customers on ESG

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<sup>17</sup> For more information and a database of existing commitments, please refer to: [www.unepfi.org/psi/commitments/](http://www.unepfi.org/psi/commitments/)

<sup>18</sup> CNSeg (2015) "Pesquisa da CNSeg revela comprometimento das seguradoras com PSI" CNSeg Press Release, December 2014. <http://sustentabilidade.cnsseg.org.br/?p=3839>

<sup>19</sup> Swiss Re (2015) Our Sustainability Risk Framework. Swiss Re Website. [www.swissre.com/corporate\\_responsibility/managing\\_env\\_risks.html](http://www.swissre.com/corporate_responsibility/managing_env_risks.html)

issues.<sup>20</sup> In investment, a global ESG directive for investments was implemented in 2014.<sup>21</sup> To support these efforts, actions have been taken to integrate ESG risks into global training modules for underwriters, and have delivered a range of other internal training.

The challenge is for such company practices to be routine and deepened at the industry level and across markets. Industry organisations, including the CRO Forum, represent an opportunity for furthering integrated approaches to sustainability risk management.

For insurance regulators, the Insurance Core Principles (ICPs) of the International Association of Insurance Supervisors (IAIS) provide the global insurance regulatory framework. However, the ICPs do not explicitly recognize the interlocking environment, social and governance dimensions of sustainable development, or the materiality of ESG risks and opportunities to the insurance industry. There has been considerable support for the further integration of ESG principles into various elements of the ICPs. Drawing on the ICPs has also proven to be a powerful lever for progress in other contexts, such as support for national capacity building around access to insurance.

### 3.1.2 Risk

#### Sharing data, information, and models

The wealth of data and information accumulated by insurers is a valuable resource that could significantly improve risk prevention and resilience efforts if made available to the public. For several years the insurance industry has made contributions of this nature, especially in terms of natural catastrophe risk. Expanding the scope and the type of information shared (for example, claims data) stands as a high-potential area for action.

Quality historical data is crucial to appropriately valuing estimates of future losses and the value of preventative actions. Sharing insurance data can greatly improve such analysis – and can support a range of public policy objectives. Data on catastrophe damages and claims, for example, can help inform public policies for land use by providing a clear view on what development plans carry higher risks to property. Currently, industry stakeholders are calling for increased data sharing across multiple areas,<sup>22</sup> and efforts are underway to scale up collaboration.<sup>23</sup>

- **Finance Norway:** A recent study has been undertaken by industry association Finance Norway to assess the impact of using disaster loss insurance data from Norwegian insurance companies to strengthen municipalities' capacities to prevent future climate-related natural hazards and urban flooding.<sup>24</sup> Funded by Finance Norway and structured as a public private partnership, this project gathered and transferred company data to universities and several municipalities which then applied the geo-coded data to spatial planning, especially planning of land-use and water and

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<sup>20</sup> Allianz (2015) ESG in Underwriting. Allianz website.

[https://www.allianz.com/en/sustainability/sustainability\\_at\\_allianz/insurer/esg\\_in\\_underwriting.html/](https://www.allianz.com/en/sustainability/sustainability_at_allianz/insurer/esg_in_underwriting.html/)

<sup>21</sup> Allianz (2015) Sustainability in our own investments. Allianz website.

[https://www.allianz.com/en/sustainability/sustainability\\_at\\_allianz/investor/sustainability\\_in\\_our\\_own\\_investments.html/](https://www.allianz.com/en/sustainability/sustainability_at_allianz/investor/sustainability_in_our_own_investments.html/)

<sup>22</sup> KPMG (2015) "Insurers should open-up data to benefit wider society, says KPMG." March 2015.

[www.kpmg.com/uk/en/issuesandinsights/articlespublications/newsreleases/pages/insurers-should-open-up-data-to-benefit-wider-society-says-kpmg.aspx](http://www.kpmg.com/uk/en/issuesandinsights/articlespublications/newsreleases/pages/insurers-should-open-up-data-to-benefit-wider-society-says-kpmg.aspx)

<sup>23</sup> EC (2015) Guidance for Recording and Sharing Disaster Damage and Loss Data: Towards the development of operational indicators to translate the Sendai Framework into action. European Commission, March 2015.

<https://ec.europa.eu/jrc/en/publication/eur-scientific-and-technical-research-reports/guidance-recording-and-sharing-disaster-damage-and-loss-data-towards-development-operational>

<sup>24</sup> Ebeltoft, M. Disaster Loss Reduction project: Using local insurance loss data to strengthen municipalities' efforts to prevent climate-related natural hazards <http://drr.jrc.ec.europa.eu/LinkClick.aspx?fileticket=imuUa7tfoDM%3D&tabid=109&portalid=0&mid=554>

sanitation. Initial findings suggest that sharing this data can significantly improve the planning knowledge base of municipalities, leading to improved land use planning for disaster resilience.

### Direct risk resilience support

Beyond data sharing, the cutting edge risk management expertise of the insurance industry can support the resilience of communities and governments through direct engagement, capacity building, and targeted underwriting provisions. Swiss Re's recent commitments at the Montreal Climate Summit to have advised 50 sovereigns and sub-sovereigns on climate risk resilience, and to have offered them protection of USD 10bn against these risks – is a positive step in this direction.<sup>25</sup> Knowledge sharing and capacity building is critical to if nations are to be able to operationalize frameworks for risk management into mechanisms for resilience. Based on Swiss Re's experience, however, engagement alone will not bring about change – identifying credible partners with which to co-invest (for example, national or international development finance institutions), and other mechanisms through which to secure strong commitments from local governments, stand as important elements for success.<sup>26</sup>

### 3.1.3 Access

There is increasing consensus on the positive benefits to firms stemming from actions to increase access to insurance. Through the use of innovative products and deployment solutions, new models can ensure that reaching new markets is an economically sustainable proposition.

#### Product innovation for low-income clients

Through developing new and innovative products, the insurance industry plays a central role in creating the financial infrastructure necessary to overcome barriers to access. In addition, the insurance industry can support emerging innovations by taking them to scale – a key example being the evolution of index-based insurance.

#### Innovations in access: Index-based insurance

Index-based insurance products pay out on the basis of a pre-determined index (e.g. rainfall level, livestock mortality rates) for losses of assets and investments, primarily working capital, resulting from weather or catastrophic events. Statistical indexes are developed based on deviation from normal levels of specific parameters, such as rainfall levels or livestock mortality rates. Having products linked to an index simplifies the claims process by eliminating the traditional role of assessors, making the settlement process more objective and transparent. While often provided at the micro level (for example, to individual smallholder farmers), index-based insurance is also being promoted at the meso-level to risk aggregators such as microfinance institutions (as in the Dominican Republic<sup>27</sup>), and at the national level (for example, in Uruguay<sup>28</sup>).

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<sup>25</sup> Swiss Re (2014) *Swiss Re at UN Climate Summit*. Swiss Re Press Release.

[www.swissre.com/rethinking/climate\\_and\\_natural\\_disaster\\_risk/Swiss\\_Re\\_at\\_UN\\_Climate\\_Summit.html](http://www.swissre.com/rethinking/climate_and_natural_disaster_risk/Swiss_Re_at_UN_Climate_Summit.html)

<sup>26</sup> Contribution to Ruschlikon Roundtable Discussion, 12 May 2015.

<sup>27</sup> IFC (2015) *Feasibility study for macro and meso-level index insurance - Dominican Republic*. IFC Website.

[www.ifc.org/wps/wcm/connect/industry\\_ext\\_content/ifc\\_external\\_corporate\\_site/industries/financial+markets/retail+finance/insurance/feasibility+study+for+macro+and+meso-level+index+insurance++dominican+republic](http://www.ifc.org/wps/wcm/connect/industry_ext_content/ifc_external_corporate_site/industries/financial+markets/retail+finance/insurance/feasibility+study+for+macro+and+meso-level+index+insurance++dominican+republic)

<sup>28</sup> IFC (2015) *Feasibility study for livestock Index Insurance*. IFC Website.

[www.ifc.org/wps/wcm/connect/industry\\_ext\\_content/ifc\\_external\\_corporate\\_site/industries/financial+markets/retail+finance/insurance/feasibility+study+for+livestock+index+insurance++uruguay](http://www.ifc.org/wps/wcm/connect/industry_ext_content/ifc_external_corporate_site/industries/financial+markets/retail+finance/insurance/feasibility+study+for+livestock+index+insurance++uruguay)

Index-based approaches have largely focused on agriculture, and have been delivered through partnerships. Engaging through these partnerships can contribute to the scaling of these innovations and expansion across a wider range of risk categories.

Beyond index-based products, firms are continuing to expand a range of other microinsurance offerings. Clear commitments and strategies to expand coverage can support access objectives, as well as opening up new markets for growth.

### **Distribution and deployment**

Alongside the provision of new types of products and services, insurers can facilitate increased access to insurance by utilizing new distribution channels. In many developing countries, technological innovations (including mobile payments technologies) are having significant impacts on the structure of financial services, and the financial literacy of new customer groups.

Distribution models that link insurance to existing points of contact for low-income consumers – such as links to existing microfinance schemes, or postal services – can support engagement with a large base of potential customers. By being proactive in engagements with regulators, firms can help support these types of distribution innovations.

#### **3.1.4 Investment**

The role of insurers as institutional investors is critical to the delivery of low-carbon, climate resilient, and inclusive economic growth. It is clear that insurers are ambitious in meeting this challenge, but multiple barriers – including market failures in the real economy, and policies such as solvency regulations – remain a key issue. Beyond contributing to the resolution of existing challenges with clear “asks” at national and international levels, insurers can make significant progress on the investment challenge through commitments and actions on risk analysis, disclosure, and financing.

### **Portfolio analysis and disclosure**

In their search for low-risk, long-term investment options, insurers are taking a leadership role within the financial sector on risk analysis and disclosure. Scaling up ambition in this area can be achieved by joining existing initiatives, including the Montreal Carbon Pledge and Portfolio Decarbonisation coalition:

- **The Montréal Carbon Pledge and the Portfolio Decarbonisation Coalition:** The Pledge was launched in September 2014 at the Principles for Responsible Investment (PRI) Annual Event in Montréal, and is supported by the PRI and UNEP FI. It aims to attract commitment from portfolios totalling US\$3 trillion in time for the 2015 UN Climate Change Conference (COP21) in Paris. By signing the Montréal Carbon Pledge, investors – such as pension funds, insurers and investment managers – commit to measure and publicly disclose the carbon footprint of their investment portfolios on an annual basis. Insurers that have signed the Pledge include The Co-operators Group and Folksam. By signing the Pledge, investors are able to formalize commitments to the goals of the Portfolio Decarbonisation Coalition (PDC) co-founded by UNEP FI, Amundi, AP4 and CDP. The PDC is a multi-stakeholder initiative that will drive greenhouse gas emission reductions on the ground by mobilizing a critical mass of institutional investors committed to gradually decarbonizing their portfolios. It seeks to assemble a coalition of investors who, in aggregate, will commit to decarbonizing at least USD 100 billion in institutional investment across asset classes by COP21.

## Investment Frameworks and Funding Commitments

An increasing number of insurers are making commitments on sustainable development financing, with multiple instances focused on climate finance:

- **ICMIF and IIS commitments on climate-smart investment:** At the UN Secretary-General’s Climate Summit in 2014, the International Cooperative & Mutual Insurance Federation (ICMIF) and the International Insurance Society (IIS) made commitments to double climate-smart investments from US\$42 billion to US\$84 billion by end-2015; increase climate-smart investments to 10 times the current amount by 2020; and create and monitor a Climate Risk Investment Framework by the time of the 2015 UN Climate Change Conference in Paris, with such a framework to be accountable under the Post-2015 Framework for Disaster Risk Reduction and adopted across the insurance industry.
- **Axa Climate Finance Commitments:** At the Paris Climate Finance Day meeting in May 2015, Axa made several public commitments pertaining to investment, including the direct divestment from firms involved in “companies most exposed to coal related activities”, amounting to €500 million. In addition, Axa has committed to tripling its green investment footprint, with a target of €3 billion by 2020, and committed to ESG footprinting across all of its asset classes.

*“Climate risk for us is neither an ideological or theoretical issue: it is a core business issue. As long as the ‘systemic risk’ of carbon is not correctly embedded into regulatory frameworks, through efficient carbon pricing mechanisms and more broadly favourable treatment for longer-term investments that are necessary to limit climate risks, it will always be a story of a few responsible actors doing their best within a broader financial system that is not designed for sustainability.”*

**Henri de Castries, CEO, Axa, speaking at Climate Finance Day, May 2015**

Delivering clear investment frameworks for sustainable development stands as an important priority. While climate finance is crucial, it is one component of a broader basket of needs that will arise during the transition to a green economy. Integrated approaches that link risks and opportunities at the group level, including the development of new insurance products that can support green investment opportunities, could achieve multiple benefits.

### 3.2 Multi-stakeholder partnerships

A growing number of multi-stakeholder partnerships have been established to address on key sustainable development challenges, mostly focusing on access to insurance, climate change and disaster resilience. These partnerships are proving very effective in areas where they can bridge the gap between industry and government by delivering clear policy suggestions, sharing information and data, and linking together groups of stakeholders in new ways. At the regional level, partnerships across countries are helping to reduce risk and increase access to insurance at multiple scales.

### 3.2.1 Cross Cutting

#### Policy-oriented partnerships

Insurers have been active in establishing partnerships linking stakeholders beyond the financial sector with governments to motivate improved policies for risk prevention and resilience. Notable examples include:

- **Australian Business Roundtable for Disaster Resilience & Safer Communities:** In 2012, Insurance Australia Group (IAG) initiated the formation of the Australian Business Roundtable for Disaster Resilience & Safer Communities (ABRDRSC), a partnership that includes the Australian Red Cross, IAG, Investa Property Group, Munich Re, Optus and Westpac Group. Its vision is to work collaboratively with governments to effect change in public policy and increase investment aimed at building safer and more resilient communities, and to actively improve the capacity of people and businesses to better withstand future natural disasters. The work of the Roundtable is based around a five-tiered strategy of mitigation infrastructure, adaptation research, risk information, strategic alliances, and community education. Following two research reports, the ABRDRSC made three key recommendations to government:
  - Appoint a National Resilience Advisor supported by a Business and Community Advisory Group;
  - Commit to long-term annual consolidated disaster mitigation funding; and
  - Create frameworks to identify and prioritize investment activities.

These recommendations have directly influenced policy, including the launch of a Productivity Commission inquiry into natural disaster funding – which recently recommended that mitigation funding to states should be increased by \$200 million per year, and matched by state governments.<sup>29</sup> The success of the roundtable has inspired IAG to bring a similar agenda to the global level and lead the PSI Global Resilience Project (see below).

- **Partners For Action:** Beginning in 2013/14, The Co-operators Group initiated a multi-stakeholder research and engagement effort to determine means to de-risk the Canadian residential property market from the increasingly negative impacts of overland flooding. A central component of this work was the convening of a core group of stakeholders included property & casualty insurers, policymakers, flood risk experts, professional associations, businesses and the legal community to identify winning conditions to de-risk flood potential.<sup>30</sup> Research efforts have so far included studies on the viability of flood risk insurance, and a recent analysis of 15 cities' preparedness for floods and key policy options across municipal services, utilities, telecommunications, emergency response, and other issues.<sup>31</sup> In April 2015 The Co-operators and Farm Mutual Reinsurance Plan announced the creation of the Partners for Action (P4A) Network, hosted at the University of Waterloo's Faculty of Environment, which will continue to advance flood resiliency in Canada.
- **PSI Global Resilience Project:** The GRP a collaborative project bringing together insurers from around the world and key stakeholders to build disaster-resilient communities and economies by

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<sup>29</sup> Australian Government Productivity Commission (2015) *Natural Disaster Funding Inquiry report*. May 1<sup>st</sup>, 2015. [www.pc.gov.au/inquiries/completed/disaster-funding/report](http://www.pc.gov.au/inquiries/completed/disaster-funding/report)

<sup>30</sup> Feltmate, B., and Thistlethwaite, J. (2014) *Partners for Action: Priorities for advancing flood resiliency in Canada*. University of Waterloo Centre for the Environment and The Co-operators Group.

<sup>31</sup> The Cooperators (2015) Cooperators Press Release. <http://newsreleases.cooperators.ca/2015-05-21-New-study-assesses-15-Canadian-cities-preparedness-for-flooding>

shifting the focus of governments, NGOs, communities and businesses to investing in upfront measures that reduce disaster risk, rather than post-disaster relief and recovery efforts. The GRP seeks to do this by deepening understanding of disaster risk reduction activities globally related to cyclones, floods and earthquakes; identifying the economic and social costs of disasters; and assessing the effectiveness of disaster risk reduction measures. This information will be used to provide insight into effective insurance industry engagement strategies that can be carried out by the PSI and its members with governments, NGOs, communities and businesses to support disaster risk reduction activities, particularly in highly exposed and vulnerable countries.

Looking across these partnerships, a number of key enabling conditions and principles are emerging as elements of achieving high levels of impact:

- Engaging the core insurance industry stakeholders to build consensus on issues and objectives for consideration
- Engaging a broad network of stakeholders beyond insurance, including corporate stakeholders in relevant industries
- Identify the correct scale and scope of policy engagement, for example, targeting municipal governments, national policymakers, regulators, or other decision-makers
- Developing a clear strategic plan for engagement, including a structured approach for implementation and follow-up. Identifying a specific organisation to act as an implementing body or network host (for example, a university or NGO) appears to be a useful approach for carrying actions forward
- Sharing experience on the process, including best practices for stakeholder engagement

### 3.2.2 Risk

#### Sharing risk assessment capabilities and knowledge

The re/insurance sector has the longest history of incorporating environmental factors such as extreme weather events into their annual solvency assessments, testing their resilience against the worst combination of 1 in 200 year events. Importantly, progress has been achieved not through a single measure, but a series of interlinked regulatory metrics, financial regulation and reporting, credit ratings, accounting standards and investor analysis and accountability. There are multiple initiatives currently underway to support enhanced knowledge sharing and adoption of industry best practices both within and outside the insurance sector:

- **1-in-100 Initiative:** Initiated following the UN Climate Summit in September 2014, the 1-in-100 Initiative aims to stimulate reform of banking and securities regulation, credit ratings and public and private accounting standards to take account of weather and natural hazard risks by drawing on methods employed within the insurance and reinsurance industries. It is made up of a growing coalition of approximately thirty organizations from across financial services, corporate sectors, and other institutions, and is focused on regulatory, technical, and commercial tracks of work up until the Paris Climate Conference.
- **Munich Climate Insurance Initiative:** The Munich Climate Insurance Initiative (MCII) was initiated by Munich Re in 2005 in response to the growing realisation that insurance solutions can play a role in adaptation to climate change, as suggested in the UN Framework Convention on Climate Change and the Kyoto Protocol. The initiative is hosted at the United Nations University Institute for Environment and Human Security (UNU-EHS) and comprises insurers, climate change and

adaptation experts, NGOs, and policy researchers intent on finding solutions to the risks posed by climate change. MCII provides a forum for insurance-related expertise applied to climate change issues. Its aims include developing insurance-related solutions to help manage the climate change impacts, carrying out pilot projects and sharing information on effective climate insurance mechanisms, promoting insurance approaches in cooperation with other organisations and initiatives, and promoting loss reduction measures for climate-related events.

### 3.2.3 Access

#### Partnerships for access: Engagement, capacity building, and implementation support

International partnerships have made significant headway in expanding access to insurance products for customers who have never been insured. Many dimensions of sustainable development challenges are linked to financial inclusion, and access initiatives have advanced products for disaster risk. Further strengthening the links between access and sustainability objectives could present opportunities across multiple fronts, including in the design and provision of regulatory frameworks, capacity building, and customer engagement. Notable examples of progress in this area include:

- **Access to Insurance Initiative:** A2II engages multilateral organisations, governments and firms to enhance broad-based, demand-oriented and sustainable access to insurance for low-income customers.<sup>32</sup> The Initiative's activities are built on two pillars:
  - Generating the knowledge that policymakers and supervisors need on financial inclusion (e.g. good regulatory practices to inform IAIS-globally accepted insurance standards such as the ICPs)
  - Enabling the effective use of knowledge (e.g. helping regulators implement the ICPs in national regulatory frameworks)

In 2012, the IAIS adopted the Application Paper on Regulation and Supervision Supporting Inclusive Insurance Markets,<sup>33</sup> which provides regulators (particularly in developing countries) with guidance implementing the ICPs and balancing consumer protection and financial stability priorities.

- **Regional programmes** include the Regulatory Framework Promotion of Pro-poor Insurance Markets in Asia, which supports insurance regulators in enhancing the enabling conditions for pro-poor insurance. The programme uses Access to Insurance Initiative methodology and IAIS global tools to build the capacity of insurance regulators, and currently has mutual exchange forums on inclusive insurance in Indonesia, Mongolia, Nepal, the Philippines, Thailand and Vietnam.<sup>34</sup>
- **ILO Impact Insurance Facility:** Rebranded in 2014 from the Microinsurance Innovation Facility, the ILO Impact Insurance Facility aims to enable the insurance industry, governments, and partners to realize the potential of insurance for social and economic development through market development, capacity building, research and innovation. The stated goal of the programme is to reduce the vulnerability of more than 100 million low-income people through insurance-related activities by 2018.

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<sup>32</sup> Access to Insurance Initiative (2015) "About the Initiative." [www.a2ii.org/about-the-initiative/faq.html](http://www.a2ii.org/about-the-initiative/faq.html)

<sup>33</sup> IAIS (2012) Application Paper on Regulation and Supervision Supporting Inclusive Insurance Markets. [www.iaisweb.org/Supervisory-Material/Application-papers-763](http://www.iaisweb.org/Supervisory-Material/Application-papers-763)

<sup>34</sup> RFPI Asia (2015) <http://inclusiveinsuranceasia.com/index.html>

- **IFC Global Index Insurance Facility:** the GIIF is multi-donor trust fund supporting the development and growth of local markets for weather and disaster index-based insurance in developing countries, primarily Sub-Saharan Africa, Latin America and the Caribbean and Asia Pacific.<sup>35</sup> Working through a series of local implementing partners, the GIIF is working to expand index insurance at meso- and macro-levels: In Haiti, GIIF’s implementing partner MiCRO provides insurance protection for a microfinance institution against natural catastrophes and weather events (floods, earthquakes and hurricane events) so that it can write off loans made to micro-entrepreneurs whose homes and businesses are destroyed or damaged.

### 3.2.4 Investment

#### Actions to Develop Project Pipelines

An inadequate pipeline of investable projects had been repeatedly identified as a key barrier to institutional investment in options that can support sustainable development, including low-carbon infrastructure. While there are many issues which affect the supply and demand for green finance from institutional investors (including regulatory constraints), new partnerships in this area can help address some of these challenges. Emerging examples include:

- **G20 GreenInvest platform:** In connection with the G20 Development Working Group, GreenInvest is a G20 mandated dialogue platform aiming to mobilize institutional investor capital for inclusive green investments in emerging markets. This platform will serve as a forum for public and private stakeholders to share knowledge on the creation of enabling conditions for scaling up these investments, including the promotion of new mechanisms to de-risk projects and increase their attractiveness to different types of institutional investors.

Insurers can contribute to these types of partnerships by identifying clear policy “asks” on market frameworks, de-risking mechanisms, and ascertaining priority areas for action from the industry side.

### 3.3 Insurance policy and regulation

Insurance policy and regulation will be critical to guide actions on sustainable development challenges within the insurance industry. National insurance regulators in countries around the world are innovating in response to sustainable development challenges, and innovations in financial policymaking in many countries can support the role of insurance in this context. Effective insurance policy frameworks that balance priorities of risk, affordability, financial sustainability, and access will require deep engagement with industry and civil society.

*“Climate change is an obvious physical threat to all of us, but increasingly it also poses a serious financial threat to the insurance industry, which could impact the affordability of insurance products. In order to maintain available and affordable insurance, the insurance industry and regulators can and should play a role in addressing this challenge by working with other industry sectors, policymakers and the general public.”*

**Dave Jones, Insurance Commissioner of the State of California, US**

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<sup>35</sup> IFC (2015) Global Index Insurance Facility. IFC Website.

[www.ifc.org/wps/wcm/connect/industry\\_ext\\_content/ifc\\_external\\_corporate\\_site/industries/financial+markets/retail+finance/insurance/global+index+insurance+facility](http://www.ifc.org/wps/wcm/connect/industry_ext_content/ifc_external_corporate_site/industries/financial+markets/retail+finance/insurance/global+index+insurance+facility)

### 3.3.1 Cross Cutting

#### Regional Insurance Partnerships and Facilities

National insurance facilities have proven very successful in minimizing risk and expanding access to insurance at multiple levels within countries. There are several regional insurance facilities in operation at national and international levels, including the African Risk Capacity, Caribbean Catastrophe Risk Insurance Facility, Central America Natural Disaster Insurance Facility, Pacific Catastrophe Risk Assessment and Financing Initiative, and Turkish Catastrophe Insurance Pool. The majority of these efforts have focused on natural disaster risk reduction, but some are expanding scope to consider a broader range of risks. Importantly, these partnerships can play a catalytic role in expanding access to insurance by creating the frameworks necessary to engage private insurers. In addition, increasing the prevalence of risk mitigation structures in national economies can increase their attractiveness for investment. A key example of this broad based approach is the African Risk Capacity, detailed below:

- **African Risk Capacity:** The African Risk Capacity was established as a specialized African Union agency to help member states improve capacities to prepare for and respond to extreme weather events and natural disasters in order to protect the food security of their vulnerable populations, through the use of catastrophe risk pooling and risk transfer mechanisms. This partnership aims to deliver a pan-African disaster response system that increases the efficiency and timeliness of disaster response. Current projects include the development of outbreak and epidemic insurance for sovereign states, in the aftermath of the Ebola crisis of 2014. The ARC provides support for prevention activities in the form of a catastrophe bond, with pay-outs to fund pre-approved, peer-reviewed payments to communities to fund adaptation and resilience projects. Several countries are set to join the ARC in 2016. As the capacity expands, governments will be able to convene to understand how risks should be managed at the African Union level.

Risk capacities and catastrophe pools can increase their coverage and efficiency by clearly demonstrating the benefits of participation to governments. In this context, clear definitions of covered risks, rapid pay-out mechanisms, and coordination between scales of governance stand as important priorities.

*“Poor people are as sophisticated, if not more sophisticated in managing money than those in developed world. In this context, it’s clear that insurance products need to be cheaper, not to be ‘dumbed down’.”*

*Rachel Kyte, World Bank Group vice president and special envoy for climate change, speaking at Climate Finance Day, May 2015.*

#### Insurance development roadmaps

Many countries are taking an integrated approach to alignment of financial systems with sustainable development, often through the creation of phased strategic plans or roadmaps. Notable examples include the Roadmap for Sustainable Finance in Indonesia, developed by regulator OJK,<sup>36</sup> France’s White Paper on Financing the Ecological Transition,<sup>37</sup> and the recommendations of China’s Green Finance Task Force.<sup>38</sup> Applying such an approach to the insurance industry could improve alignment with sustainable

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<sup>36</sup> UNEP Inquiry, IFC & ASRIA (2015) *Towards a Sustainable Financial System in Indonesia*

<sup>37</sup> Ministry of Economy & Ministry of Ecology and Sustainable Development (2013) *White Paper on Financing the Ecological Transition*. Paris. [www.consultations-publiques.developpement-durable.gouv.fr/IMG/pdf/131220-lfte\\_LB-v\\_okPostCabPostPLF\\_UK-Clean\\_RetourDGT\\_ValidationsJ\\_retourDGT2\\_Propre.pdf](http://www.consultations-publiques.developpement-durable.gouv.fr/IMG/pdf/131220-lfte_LB-v_okPostCabPostPLF_UK-Clean_RetourDGT_ValidationsJ_retourDGT2_Propre.pdf)

<sup>38</sup> People’s Bank of China & UNEP Inquiry (2015) *Establishing China’s Green Financial System*. Report of the Green Finance Task Force. Beijing: People’s Bank of China. <http://web.unep.org/inquiry/blog/establishing-china%E2%80%99s-green-financial-system>

development objectives at the national level, and help coordinate actions across the financial system.

### **Integrated frameworks for risk prevention**

Insurance regulators in some jurisdictions are taking an active role in developing regulatory mandates that support disaster risk resilience through preventative actions and planning measures. Many insurers are also expressing a desire for frameworks to allow for companies to take a more active role in disaster risk prevention. Notable examples at the country level include:

- **Philippines:** The Ministry of Finance, including the insurance regulator, is developing a comprehensive disaster risk insurance strategy and mechanism in collaboration with the World Bank and the country's Government Service Insurance System.
- **Saudi Arabia:** Insurance regulator SAMA requires companies to set up disaster risk management plans and disaster coverage within reinsurance arrangements in order to obtain licenses, in addition to requiring companies to set up disaster reserves.

Developing integrated frameworks for risk prevention, that link insurance regulation and with national disaster risk management and climate adaptation plans, could increase the engagement the industry in providing prevention support and solutions. Linking prevention activities to existing insurance supervision activities (such as licensing) could help mainstream prevention into firm-level strategies and product provision.

### **3.3.2 Risk**

#### **Mandatory coverage**

Mandatory requirements to hold insurance coverage for sustainability risks have so far been implemented to manage for natural catastrophes. Mandatory requirements may be imposed on individuals (i.e. specific types of property insurance) and on firms (i.e. for environmental damage). Some mandatory public schemes have been plagued by financing challenges, with heavy dependence on public subsidies making them uneconomic, or high premiums being unaffordable for consumers. As a result, certain areas in both developed and developing countries exhibit low levels of coverage for natural catastrophe events such as earthquakes.

#### **The Evolution of California Earthquake Insurance**

Earthquake insurance was a mandatory component of home insurance in California up until the Northridge earthquake of 1994 – responding to an unprecedented \$12.5 billion in insurance claims, insurers refused to underwrite further home insurance policies. After interim policies were implemented the California Earthquake Authority was established in 1996 as a publically managed, privately funded entity. High prices for residential products, and a high deductible, have resulted in a low take up rate: only about 10 percent of homeowners purchase earthquake coverage.<sup>39</sup> Recent studies by the USGS suggest that California is at a higher risk of major earthquakes than previously thought: there is a 63% chance that the San Francisco bay area will experience one or more serious earthquakes by 2036.<sup>40</sup>

<sup>39</sup> Earthquake Authority (2014) Annual Report. [www.earthquakeauthority.com/whoweare/PublishingImages/Pages/Legislative-Reports/Annual%20Report%20to%20the%20Legislature%20and%20Insurance%20Commissioner%20-%20Reporting%20Year%202013.pdf](http://www.earthquakeauthority.com/whoweare/PublishingImages/Pages/Legislative-Reports/Annual%20Report%20to%20the%20Legislature%20and%20Insurance%20Commissioner%20-%20Reporting%20Year%202013.pdf)

<sup>40</sup> USGS (2014) New Insights on the Nation's Earthquake Hazards. USGS Press release. [www.usgs.gov/blogs/features/usgs\\_top\\_story/new-insight-on-the-nations-earthquake-hazards/](http://www.usgs.gov/blogs/features/usgs_top_story/new-insight-on-the-nations-earthquake-hazards/)

There are multiple examples of successful mandatory insurance schemes in place – and there appears to be increasing interest in mandatory coverage schemes for environmental risk in both developed and developing countries. Notable examples include:

- **Iceland Catastrophe Insurance:** Founded in 1975 as a public undertaking, the Iceland Catastrophe Insurance (ICI) functions as an insurance company.<sup>41</sup> Insurance for earthquakes, volcanic eruptions, avalanches, rock slides and floods is mandatory for all real estate in Iceland; as well as for contents insured against fire. Buildings are insured according to their valuation for fire as assessed by the Registers Iceland.
- **Switzerland’s Cantonal Building Insurance:** Natural hazard insurance in Switzerland is mandatory, linked to fire insurance.<sup>42</sup> Customers must either purchase this insurance from cantonal public monopolies (active in 19 cantons), or from private insurers in remaining cantons. Due to public ownership structures and mandatory comprehensive provision, adverse selection is minimized and mutualisation is maximized.
- **New Zealand’s Earthquake Commission:** Natural catastrophe insurance is linked to fire insurance coverage in New Zealand, and is provided by the Earthquake Commission, a government owned crown entity.<sup>43</sup> For residential property storm and flood damage is also covered.
- **Spain’s Consorcio de Compensacion de Seguros:** A national-level reinsurance fund, CCS covers disasters such as floods, earthquakes, tsunamis, storms, and terrorism.<sup>44</sup> Compulsory surcharges on premiums of certain lines of property and person insurance, collected by private companies, forms the basis of the fund.

If designed properly, mandatory coverage approaches could support multiple resilience objectives and lower the private and public cost of damage that would be otherwise uninsured. In addition, mandatory approaches can create a critical mass of contributors – potentially working around the scale issues posed by markets where vulnerable populations represent an “un-insurable” business proposition. Key priorities for delivering economically sustainable mandatory coverage schemes include:

- Identifying the appropriate scale for inclusion, whether at the community, state, or country-level
- Carefully designing opt-out and renewal mechanisms to ensure that coverage is consistent over time and transfers of ownership
- Targeted research to evaluate costs, benefits, and risks of different co-financing structures to ensure a balance between risk-based pricing and affordability
- Mechanisms to ensure compliance that facilitate simple verification of insurance coverage – for example, by linking products to property tax, a proposal currently under discussion in the Philippines.<sup>45</sup>

Potential options for improving the balance between financial sustainability and equity include the provision of targeted subsidies at the individual level to assist certain qualified individuals with the cost of premiums, replicating existing structures for health insurance in countries such as the US.

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<sup>41</sup> [www.vidlagatrygging.is/en/about-the-ici/](http://www.vidlagatrygging.is/en/about-the-ici/)

<sup>42</sup> <http://kgvonline.ch/KGV/Home-KGV.aspx>

<sup>43</sup> [www.eqc.govt.nz/about-ecq/our-role](http://www.eqc.govt.nz/about-ecq/our-role)

<sup>44</sup> [www.conorseguros.es/web/](http://www.conorseguros.es/web/)

<sup>45</sup> Contribution to Ruschlikon Roundtable Discussion, 12 May 2015.

*“At the end of the day, if society is paying for event-driven compensation, this is the least efficient way of managing risk and protecting well-being. Governments have a strong rationale in the provision of mandatory insurance.”*

**Achim Steiner, UNEP Executive Director**

In addition to mandatory approaches for individuals or homeowners against environmental risk, mandatory coverage mechanisms are being introduced as a way to cover risks to broader public posed by environmental pollution. In this way, mandatory insurance is being used to manage un-priced environmental externalities resulting from corporate operations – and incentives linked to such schemes may also target externalities of unsustainable investment allocations in the real economy. Notable in this context is China’s evolving framework for environmental liability insurance:

- **China:** In February 2013 China’s Ministry of Environmental Protection (MEP) and the China Insurance Regulatory Commission (CIRC) jointly released the “Guiding Opinions on Carrying Out the Pilot Program on Compulsory Environmental Pollution Liability Insurance,” which targets firms in highly polluting sectors to participate in a liability insurance system to ensure they can provide compensation for environmental damages caused. Under these guidelines, local environmental protection departments and insurance regulatory bureaus have developed regulations and policies on the development of specific products. Industries currently included in the scheme include mining, processing and smelting of heavy ores, lead battery manufacturing, leather production, and chemical materials and products manufacturing. In its recent collaboration with the UNEP Inquiry, the People’s Bank of China has identified several key issues facing the evolution of pollution liability insurance schemes,<sup>46</sup> including:
  - A lack of national-level legislation and clear legal basis for liability
  - Inadequate law enforcement for infringement liabilities leading to a low cost of pollution violations, weakening corporate willingness to participate
  - Unclear and inconsistent standards for indemnities for environmental pollution damages affecting institutional design and product evolution
  - A lack of support policy frameworks and effective incentive mechanisms
  - Remaining issues stemming from moral hazard and adverse choice

In its summary recommendation, the PBC has called on the government to put forward: “Regulations on Compulsory Environmental Pollution Liability Insurance, promulgate detailed taxation and administrative licensing policies as supplementary measures, create an enabling framework for professional risk assessment services, establish damage determination criteria, and through all these efforts accentuate the synergistic effect of environmental pollution liability insurance and green credit.”<sup>47</sup>

Clearly, the use of environmental insurance as a policy tool to correct for weaknesses in environmental regulation may not be a desirable approach in all market contexts. In order for such approaches to be effective, several key policy and legislative elements – including a clear definition of liabilities; comprehensive mainstreaming across relevant policy and regulatory bodies; effective compliance mechanisms; and strong institutional design across scales – will need to be in place.

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<sup>46</sup> People’s Bank of China & UNEP Inquiry (2015) *Establishing China’s Green Financial System – Detailed Recommendation 12: Create a Compulsory Green Insurance System*. [http://apps.unep.org/publications/pmtdocuments/ECGFS\\_Detailed\\_Recommendation\\_12\\_Compulsory\\_Green\\_Insurance.pdf](http://apps.unep.org/publications/pmtdocuments/ECGFS_Detailed_Recommendation_12_Compulsory_Green_Insurance.pdf)

<sup>47</sup> People’s Bank of China & UNEP Inquiry (2015) *Establishing China’s Green Financial System – Final Report of the Green Finance Task Force*. [http://apps.unep.org/publications/index.php?option=com\\_pub&task=download&file=011651\\_en](http://apps.unep.org/publications/index.php?option=com_pub&task=download&file=011651_en)

## Mandatory Risk Assessment and Disclosure

Regulators are implementing requirements on risk assessment and disclosure by insurance firms, with the primary focus has so far being climate-based risks. Two notable examples include efforts underway in the US and the UK:

- **US NAIC Climate Disclosure Survey:** The NAIC adopted a white paper on the potential impacts of climate change on regulation in 2008, and in 2009 approved a requirement that insurers disclose to regulators the financial risks they face from climate change, and actions they are taking to respond. States that have mandatory public disclosure include California, Connecticut, Minnesota, New York and Washington. In 2012, the NAIC adopted revisions to the Financial Condition Examiners Handbook to ensure that insurers are addressing climate risks, including risk-focused questions on potential impacts of climate change on solvency,<sup>48</sup> building on actions on disclosure. A recent analysis of the disclosures made by 330 of the largest insurers concluded that most of the company responses show a “lack of preparedness in addressing climate-related risks and opportunities.”<sup>49</sup>
- The **UK Prudential Regulation Authority** will complete a Climate Change Adaptation Report in 2015, examining the impact of climate change on the PRA’s objectives and the role of insurance regulation in supporting climate change adaptation.<sup>50</sup> Emerging themes have included both the physical impacts of climate change as well as the transition risk to portfolios posed by potential stranding of high carbon assets.

Looking across these and other efforts, it appears that applying mandatory risk disclosure requirements on insurers could be a strategic action for assessment of potential systemic risks at the industry level, as well as helping to catalyse actions to improve internal risk management practices. The US and UK experiences also suggest that any potential disclosure requirements should:

- Focus on a range of different time periods appropriate to different risks (i.e. beyond the 1-3 time horizons of regulators or central banks)
- Be applied consistently across a broad range of risks beyond climate mitigation or adaptation
- Be integrated with risk assessment practices on the investment side of the business
- Engage the building momentum on environmental stress testing present elsewhere in the financial system, for example the 1-in-100 initiative.

### 3.3.3 Access

#### Policy-directed market provision

In addition to mandatory coverage, policies mandating the provision of insurance products are increasing in popularity a way to facilitate access concentrated on the supply side. Governments in many countries are implementing policies that require the provision of insurance as a way to increase access. Recent research by A2ii identifies a continuum of approaches to market provision (See Figure 2 below).

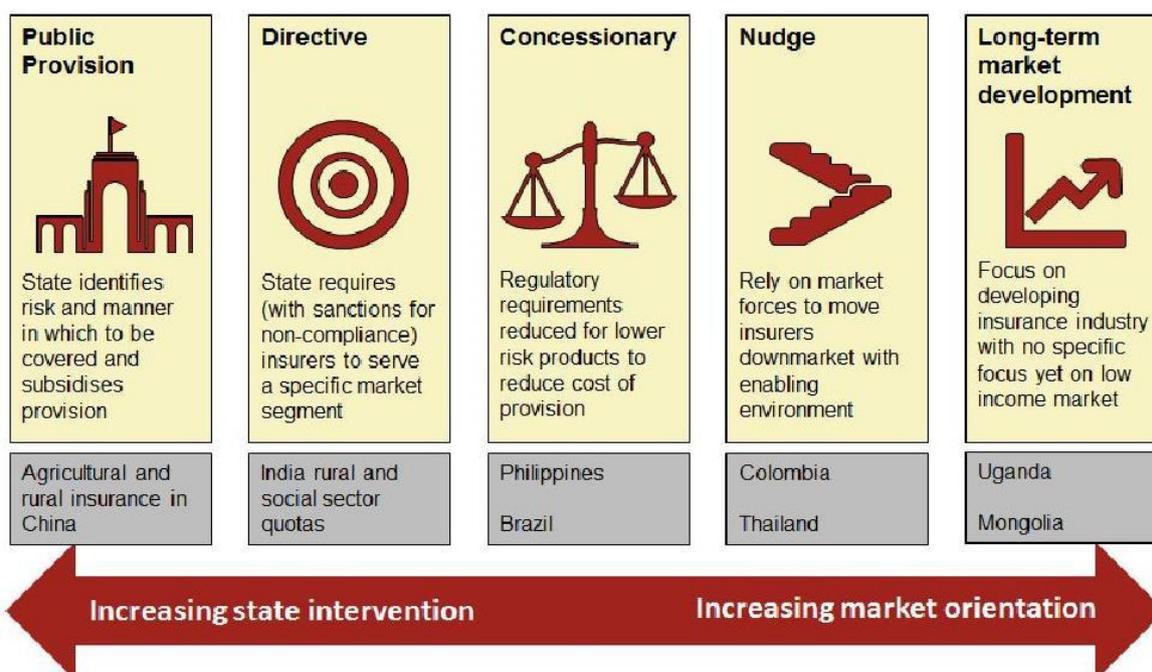
#### Figure 2: Approaches for market provision

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<sup>48</sup> Leurig, S. and Dlugolecki, A. (2013). *Insurer Climate Risk Disclosure Survey*. Boston: CERES

<sup>49</sup> *Ibid.*

<sup>50</sup> Bank of England Financial Policy Committee (2015) *Record of the Financial Policy Committee Meeting*, 24 March 2015. [www.bankofengland.co.uk/publications/Documents/records/fpc/pdf/2015/record1504.pdf](http://www.bankofengland.co.uk/publications/Documents/records/fpc/pdf/2015/record1504.pdf)



Source: Access to Insurance Initiative, 2014.<sup>51</sup>

Directed approaches on firms for the compulsory provision of insurance include:

- India:** Insurance provision regulations in India follow multiple approaches, with directed elements pertaining to rural and social sector quotas for insurers. Under regulations implemented by the Insurance Regulatory and Development Authority (IRDA) in 2002,<sup>52</sup> Indian firms must satisfy a number of quotas for the extension of insurance coverage, which are linked to financial penalties for non-compliance and license cancellations in the event of repeated violations. The quotas are as follows:
  - Life insurers must extend policies written in rural sectors from 7% of total business in their 1<sup>st</sup> financial year, increasing to 16% in the 5<sup>th</sup> year
  - General insurers must earn 2% of total gross premium income from the rural sector in their 1<sup>st</sup> financial year, increasing to 5% in the 3<sup>rd</sup> year
  - All insurers must cover 5,000 life policies in the social sector in their 1<sup>st</sup> year, extending to 20,000 in their 5<sup>th</sup> year.
- South Africa:** Under the Financial Sector Charter of 2012, specific penetration targets for the extension of financial services to low-income markets were implemented. In response to these targets the industry developed a range of access product standards, identifying products qualifying for charter points.<sup>53</sup>

While increasing access to insurance can have multiple economic co-benefits, it is important that policies for market provision duly consider the risks of forcing firms to stay in markets which are otherwise un-insurable – building up risk of future systemic damages posed by unsustainable development pathways.

## Support for Market Development

<sup>51</sup> Access to Insurance Initiative (2014) Regulatory Approaches to Inclusive Insurance Market Development: Cross-country Synthesis Paper 2. August 2014. [https://a2ii.org/sites/default/files/reports/2014\\_08\\_08\\_a2ii\\_cross-country\\_synthesis\\_doc\\_2\\_final.pdf](https://a2ii.org/sites/default/files/reports/2014_08_08_a2ii_cross-country_synthesis_doc_2_final.pdf)

<sup>52</sup> IDRA (2002) Obligations of insurers to rural and social sectors. [www.irda.gov.in/ADMINCMS/cms/frmGeneral\\_Layout.aspx?page=PageNo66&flag=1](http://www.irda.gov.in/ADMINCMS/cms/frmGeneral_Layout.aspx?page=PageNo66&flag=1)

<sup>53</sup> Access to Insurance Initiative (2014) Regulatory Approaches to Inclusive Insurance Market Development: Cross-country Synthesis Paper 2. August 2014. [https://a2ii.org/sites/default/files/reports/2014\\_03\\_10\\_annex\\_9\\_a2ii\\_cross-country\\_synthesis\\_doc\\_2\\_for\\_consultation.pdf](https://a2ii.org/sites/default/files/reports/2014_03_10_annex_9_a2ii_cross-country_synthesis_doc_2_for_consultation.pdf)

In recent years, a growing number of microinsurance-specific regulatory frameworks to support market development have been implemented in Asia and Latin America, including Brazil, China, India, Mexico, Peru and other countries. Territories where microinsurance regulation is under consideration include Nigeria, Pakistan, South Africa and member countries of the Inter-African Conference on Insurance Markets (CIMA), spanning French-speaking countries in Central Africa and West Africa.<sup>54</sup> Developing robust micro-insurance regulations that are comprehensive across the value chain stands as an important priority.

- Philippines: Microinsurance has played a significant role in the recovery of communities and livelihoods in the face of multiple disasters in recent years. The regulatory framework for microinsurance in the Philippine, which touches virtually all aspects from licensing, product development, opening new markets, establishment of new providers, and processes for claims and complaints, has been critical to the expansion of markets for microinsurance products. With a coverage ratio of over 20%, the Philippines had this highest microinsurance coverage ratio in the Asia and Oceania region in 2013.<sup>55</sup>

*“I see insurance as the main tool to promote inclusive growth and an inclusive society. We think that every individual can contribute to our national development if we provide financial security regardless of their economic status in life. Our national experience shows that microinsurance offers hope.”*

**Emmanuel F. Dooc, Insurance Commissioner, Philippines,  
speaking at APEC Disaster Risk Finance summit, April 2015.**

Market support may be required to deliver insurance products for new business models and technological innovations. While progress has been made on insurance for clean technology investments, new types of insurance for mobile-based business innovations – for example, ride-sharing services like Uber and Lyft – may bring new regulatory challenges.

### **Public finance for access**

Introducing targeted subsidies to increase access, including the delivery of publicly financed climate risk insurance, can support access objectives. The recent G7 Initiative on Climate Risk Insurance is an example of such an approach. Announced in May 2015, the Initiative aims to increase the resilience of developing countries against climate-induced and other natural disasters, with the goal of reaching 400 million beneficiaries by 2020. The German Government has so far committed €150 million of initial funding for the programme. Public finance approaches, including those involving co-investment, must be carefully designed to avoid over-reliance on subsidies. In this context, partnerships with national and international development finance institutions, and degrees of consumer participation, are important priorities.

*“In the end, risk transfer solutions will only be self-sustaining in the long term if the beneficiaries themselves (people and countries) participate financially. The experience of the insurance industry has shown that this is needed to give people and incentive to mitigate risks.”*

**Munich Re<sup>56</sup>**

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<sup>54</sup> Biener, C., Eling, M. and Schmit, J. (2013), *Regulation in microinsurance markets: Principles, practice and directions for future development*

<sup>55</sup> Munich Re Foundation (2013) *The Landscape of Microinsurance in Asia and Oceania 2013*. [www.munichre-foundation.org/dms/MRS/Documents/Microinsurance/2013MILandscape/2013\\_AsiaOceaniaLandscape\\_BriefingNote\\_E\\_Web.pdf](http://www.munichre-foundation.org/dms/MRS/Documents/Microinsurance/2013MILandscape/2013_AsiaOceaniaLandscape_BriefingNote_E_Web.pdf)

<sup>56</sup> Munich Re (2015) *G7 Climate Insurance Conference Briefing*.

[https://www.munichre.com/site/corporate/get/documents\\_E1837531455/mr/assetpool.shared/Documents/o\\_Corporate%20Website/1\\_The%20Group/Focus/Climate%20Change/munich-re-g7-initiative-berlin.pdf](https://www.munichre.com/site/corporate/get/documents_E1837531455/mr/assetpool.shared/Documents/o_Corporate%20Website/1_The%20Group/Focus/Climate%20Change/munich-re-g7-initiative-berlin.pdf)

### 3.3.4 Investment

#### **Solvency regulations, investment frameworks, and tax incentives**

Key priorities include aligning insurer solvency regimes with long-term low-carbon and resilience; including high-carbon risk into asset allocation and benchmarks (especially coal); and building a global green bond market. At the national level, frameworks within the financial sector and investment industries are beginning to have impacts on insurers in certain countries, most notably in Europe. Elsewhere, Japan's FSA is motivating insurers to integrate ESG issues into investment decision-making. Our engagements elicited a broad range of different policy suggestions, many of which are specific to national contexts. Looking across these, a number of key groups of actions emerge:

- Reduced capital requirements for green/resilient investment
- Guarantees or other de-risking elements that can enhance project ratings
- Implementation of aggregation mechanisms to bundle projects together, including through innovations such as infrastructure investment trusts
- Provision of tax-based incentives for investment in sustainability
- Actions to support the integration of sustainable development priorities across the investment chain, through incentive structures and information flows between insurers and the broader financial system
- Mechanisms and policies to support active ownership practices
- Applying international principles, standards, and guidance on sustainable investment

## 4 Pathways to scale: key challenges and priorities

This paper has provided a high-level overview of key sustainable development issues and responses originating from the industry, partnerships, and the world or regulation. Bringing these findings together, it is clear that integrated approaches to sustainable development challenges are required to harmonize efforts, access potential synergies, and avoid unintended consequences of misalignment. Our discussions and engagements have also brought forward a set of overarching priorities for different channels of action – which we have grouped as requirements for success, remaining challenges, and issues for scale-up (Table 3).

**Table 3: Requirements for success, challenges, and priorities**

	Requirements for success	Challenges	Priorities for scale-up
<b>Corporate</b>	Making commitments meaningful (clear, time-bound, quantifiable)	Skills and capabilities Sustaining momentum	Moving from commitments to deals Clear policy objectives and requests
<b>Multi-stakeholder</b>	Impact assessment, monitoring, and evaluation	Identification and engagement of core stakeholders	Knowledge sharing and communication
<b>Regulation</b>	Effective Incentives and compliance instruments	Skills and Capabilities	Managing tensions between objectives
	Cross-ministerial collaboration	Avoiding unintended consequences	Strategies for managing policy misalignments

Below, we discuss four key priority themes in greater detail.

### **Making commitments meaningful**

Ensuring that commitments are meaningful (i.e. moving from aspiration to clear targeted action) is a key priority for corporate actions. Clear, time-bound, and quantifiable commitments, with built-in mechanisms for monitoring and evaluation, have repeatedly been demonstrated as more effective. If industry commitments remain diffuse, and are not linked to clear metrics or timeframes, they will far less impact than otherwise possible. Similarly, in order to avoid “commitment fatigue” building up over 2015, coherent frameworks in which to organize and evaluate commitments – such as the PSI – could increase impact. It is also important to ensure that commitments to frameworks for action do not simply devolve into a label for doing business – but rather lead to clear actions with defined contributions and responsibilities.

### **Moving from commitments to deals**

As part of making commitments clear and meaningful, industry stakeholders should aim to move from aspirational signalling to clear and explicit requests from policy-makers – in essence, making commitments central to deals with governments to achieve shared objectives. Industry associations can play an important role in building a clear voice for industry stakeholders on policy issues leading up to key events in 2015 and beyond.

## Managing tensions between objectives

Natural tensions exist between extending insurance coverage and managing appropriate risk pricing. The “redlining” of communities or geographic areas to insurance coverage may be an economically rational but socially regressive response – while regulated insurance provision may pose an undue risk burden, especially in the context of longer-term risks and uncertainties. Finding ways to ensure that insurers stay in markets and provide the right products, without forcing firms to underwrite unsustainable or high risk development, may require increased engagement between insurance regulators and policy-makers.

*“How can insurance companies and regulators constrain risks that come from policymakers, not from climate change itself?”*

Roundtable Participant

## Addressing knowledge and skills gaps

There appears to be a skills gap among insurance practitioners and regulators in their understanding of a range of environmental, social and governance (ESG) issues. Most countries have a national insurance institute, usually backed by the national insurance association. National and international insurance institutes, as well as academic institutions with insurance courses and programmes, are natural starting points for embedding sustainable development in insurance education and training. As sustainability illiteracy extends to insurance regulators and non-industry stakeholders, this could be an opportunity for insurers, regulators and stakeholders to collaborate and nurture an insurance culture of sustainability. In this regard, there could be valuable lessons from the vast experience in building knowledge and literacy on microinsurance and disaster risk management across markets.

*“An indispensable and transversal requirement for facilitating the alignment of the financial system with sustainable development is a paradigm shift in business, economics and finance education.”*

Swiss Input into the UNEP Inquiry, 2015<sup>57</sup>

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<sup>57</sup> Federal Office for the Environment (2015) Design of a Sustainable Financial System: Swiss Team Input into the UNEP Inquiry. Retrieved from: [http://apps.unep.org/publications/index.php?option=com\\_pub&task=download&file=011740\\_en](http://apps.unep.org/publications/index.php?option=com_pub&task=download&file=011740_en)

## 5 Next Steps for Action

Catalysing the energy of 2015 into meaningful action for change will require sustained effort in coming years. We have identified three things that that could take forward the innovations to scale.

### Scaling up action through enhanced industry networks

Over the years, insurance industry initiatives that address sustainable development challenges have generated risk awareness and stimulated innovative insurance solutions. On balance, these initiatives have so far evolved independently. Greater coordination between them could potentially lead to even greater impact. For example, microinsurance and financial inclusion initiatives and disaster risk reduction and climate risk insurance initiatives could strengthen collaborative efforts, particularly in the context of communities highly vulnerable to disaster risk. Enhanced networks to facilitate coordination at the industry level could create a more strategic, coherent and systemic approach to sustainable development challenges.

An **Insurance Network on Sustainable Development** could improve dialogue, stimulate innovation and partnerships, and improve coherence between existing initiatives. Actions related to this agenda are already emerging, with the establishment of the forthcoming Insurance Development Forum.

### Strengthening policy leadership through international engagement

The principal sustainable development priorities of insurance policy have so far been increase access to insurance and disaster resilience. However, there has been limited equivalent focus on other sustainability issues. Moreover, there has been limited engagement from insurance policymakers and regulators in discussions on global frameworks on sustainable development.

A **Sustainable Insurance Policy Forum** could represent an opportunity to scale up policy progress through enhanced cooperation and collaboration between governments across borders. Mechanisms for knowledge sharing could either be in the form of new platforms for dialogue, or by creating new tracks for sustainability priorities within existing platforms – such as the Access to Insurance Initiative.

### Actions to focus long-term efforts

The UNEP Inquiry and the PSI recognized the need for a coordinated process to assess the outcomes of the 2015 milestones for the insurance sector, to champion policy coherence at the national and international levels and catalyse insurance industry action. One option could be the development of **Insurance Development Goals** – clear global targets for risk prevention and resilience to natural catastrophes and climate based hazards, access to sustainable insurance products, and investments to support the transition to a low-carbon climate-resilient economy.

*“Please do not underestimate the power of what you, the insurance industry, can do in the solutions space – hold it within your hands to plan the sustainability transition in an orderly way.”*

**Christiana Figueres, UNFCCC Executive Secretary**



**PSI**  
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**Inquiry: Design of a Sustainable Financial System/Principles for Sustainable Insurance**

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