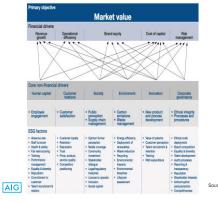
AIG			
Fostering the Future: Sustainable ERM for Sustainable Business	Fan Yang Risk Analyst ERM MRMS +12225515481 Fan Yang@alg.com		
ERM Symposium April 7 2016	Sean Keenan Senior Managing Director ERM MRNMS 112177070369 Sean Keenan∰aljg.com		
Disclaimer	7		
This presentation does reflect any official position	n of AIG and contains no explicit		
This presentation does reflect any official positio or implicit statement of corporate opinion or prac opinions of the authors and all responsibility for them.	ctice. It reflects the views and errors and omissions resides with		
AIG	2		
		-	
Sustainability Megatrends			
[112]			
AIG	5		

The second secon	
What is Sustainability?	
"Meeting the needs of the present generation without compromising the	
ability of future generations to meet their	
own needs" (Brundtland Report 1987)	
THE WARRA COMMISSION Nested Interdependencies  ON FORWEIGNAMENT	
Environment Environmental	
Capital	
Society Social Capital	
Purpage	
Financial Capital	
AIG 4	
7.10	
_	
Corporate Sustainability	
<ul> <li>Definition: The <u>Objective</u> of creating value consistent with the long-term preservation and enhancement of environmental, social and financial capital</li> </ul>	
preservation and emianeement of environmental, social and intuition expital	
Vital Capital for Insurers:	
<ul> <li>Environmental/Natural/Ecological Capital</li> <li>Natural resources and processes needed by organizations to maintain operations,</li> </ul>	
produce products and deliver services  Social/Human Capital	
Human relationships, partnerships and cooperation; may include Human Capital (health,	
knowledge, skills, intellectual outputs and culture of the individuals)  Financial/Economic Capital	
Financial capital: provided by investors and/or generated from business activities	
Economic capital: financial capital to cover the economic effects of risk taking activities	
AIG	
7	
Corporate Sustainability continued	
Environmental, Social and Governance (ESG)	
Factors used to gauge the Sustainability performance of the company, portfolio and risk attributes	
Key Drivers	
New Norm in Sustainability  Coloring Coloring Reporting Resporting  New Sustainability Rating	
Accounting Rules and Slandards	
Regulatory	
Environment	

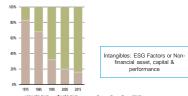
# Cothers: Rating Agencies, Stock Exchanges Others: Rating Agencies, Stock Exchanges Others: Rating Agencies, Stock Exchanges Outliny of the product + Outliny of the product + Outliny of the company o

## Why Does Sustainability Matter in Corporate Value Creation?



# Measuring True Value

Market value of corporate asset reflecting in change in perceptions and expenditures



- Corporate Reporting
   Sustainability Accounting Standards Board (SASB)
   International Integrated Reporting Council (IIRC)
   Global Reporting Initiative (GRI)
- Rating
   Credit Rating incorporating ESG criteria
   Sustainability rating

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	7	
70		
72		
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	7	
72 is  A. % of our conference materials that are from green		
products  B. % of global assets that are managed in a sustainable and	d	
responsible manner C.% of S&P 500 report on Sustainability		
<ul> <li>D. % of CEO view Sustainability as a means to gain competitive advantages</li> </ul>		
AIG	11	
	-	
Data and Tools	•	
Data as an enabler     Information Infrastructure		
Traditional financial metrics + Sustainability tools     ESG metrics and KPIs     ✓ Internally developed (e.g. employee engagement scores, customer loyalty index,		
reputation indicator)  ✓ External sources (e.g. GRI, Bloomberg, third-party consultants, public resources from WBCSD)  Benchmark		
The Gold-standard Benchmark for a truly sustainable business (2014) The Future-fit Business Benchmark (2015) Framework		
✓ Sustainability Helix (2007) ✓ The Value Driver Model (2013)		
We can no longer afford to use the wrong tools in measuring the important asset, or appropriately measure without effective disclosure, or even worse not to measure at all!		
AIG	12	

### Insurance & Sustainability

- Risk taking: our core reason for being
   Insuring ESG risks

  - > Inadvertently insured risks
- Investment: economic expression of our thoughts and value
  - Risk and return
  - Impact/ESG investment
- Sustainability of our own business model
  - > Net Positive\*
  - > Fitness for Future
  - > Inner Resilience





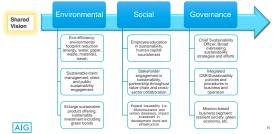
### The Role of Insurance in Sustainability

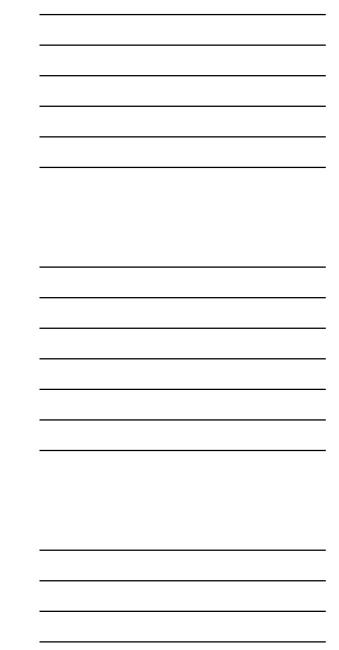
Major global problems by ESG category and corresponding insurance solutions



# Industry Leading Sustainability Practice

- Incorporate Sustainability principles in asset and liability management through Principles of Responsible Investment (PRI) and Principles of Sustainable
- From measurement to reporting





### Corporate Purpose Matters



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Slide used by Brendan LeBlanc, EY, at Sustainable Brands 2015, June 2015. The data is based in EY resear

### Results from Two Meta-Studies

- More than 100 literatures reviewed by Deutsche Bank:
  - ✓ High Sustainability firms have a lower cost of capital in terms of debt and equity
  - √ 89% of the studies show market-based outperformance of High Sustainability firms and 85% of the studies exhibit accounting-based outperformance
- A study of over 190 papers conducted by the University of Oxford:
  - ✓ 88% of the research shows that solid ESG practices result in better operational performance of firms
  - √ 90% of the studies on the cost of capital show that sound Sustainability standards lower the cost of capital of companies
  - √ 80% of the studies show that stock price performance of companies is positively influenced by good Sustainability practices.

High Sustainability Firm: A company which has adopted a comprehensive set of corporate policies related to the environment, employees, community, products and customers

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: Deutsche Bank(2012): Sustainable ng- Establishing Long-Term Value and nance and silvy of Oxford (2014): From olders to Stakeholders

# Summary: Sustainability Imperative for Insurers

There could be significant financial implications:

- · Conscious customers/client
  - > Customer demand for responsible/meaningful brand
  - > Sustainability Questionnaires/Survey/Assessments becoming more common in commercial clients
- Industry best practice
  - Market differentiation
  - > Improvement of balance sheet through sustainability risk management
- More profit, better ROI, higher share price

Cost of comfortable inaction is compounding:

- Reactive to regulatory change/legal standards
  - > EU Directive disclosure of non-financial information starting 2017
- Evolution of corporate valuation in context of ESG and sustainability
  - > Sustainability rating and reporting

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Sustainable ERM		
AIG		
Fit-For-Future Bus	siness Model	
I OI I UIUIE DU	OILIOGO IVIOGEI	
	Traditional business	21st century business
Purpose of the Firm	Maximize shareholder	Maximize stakeholder
	value	shared value including silent stakeholders
Legitimate Forms of	Financial	Financial, Environmental,
Capital	i II lai lulai	Social, Human
Bottom Lines	Profit	Profit, Planet, People
Strategic Focus	Growth and Consumption	Stakeholder well-being
Negative Impacts	Externalized	Internalized
Boundaries	The firm	The firm's value chain
Transparency	Less transparent	Transparent
Business model	Sell products, linear, profit	Sell services, circular,
	short-termism	mission-based, Business for Social Good
		TOT SOCIAL GOOD
* Special thanks	s to Sustainability expert Bob Willar	d for his thought leadership
AIO		
Overtain - U. EDI	N 4	
Sustainable ERI	M	
Management of ESG	issues for the purpose of s	takeholders' shared
value creation to rea	lize sustainable developme	nt of the firm and the
society it operates in	ı	
Stakeholders		
> Shareholders		
	lders including silent stakeh	olders
Values	ğ	
	ue, satisfaction and long-ter	m Sustainability
Capital Management		•
	tal, environmental capital ar	d social capital. etc.
		,
AIG		

Sustainability Implies Adjustment to Corporate Objectives	7	
Traditional Now Also Includes		
Risk Economic prosperity (Profit)		
Profitability  Growth  Environmental stewardship (Planet)  (Panet)  (People)		
Create profit for shareholders while protecting the environment and improte lives of those with whom the corporation interacts	ving	
AIG	22	
Seven Sustainability Dimensions	٦	
This is a socially and environmentally responsible organization		
Community and Society This organization in plays an active role in the community characteristic in the community characteristi		
customers / clants services on the environment confidence in confidence		
Governance This organization consideration for the constitution of		
Sustainability risk, an integral part of extended ERM, – how well are we managing it?		
"Engaging Employees through CSR," CHSR and Hewitt Associates webnar, January 2010. Based on a slide used during the webnar.	23	
Sustainable ERM Framework		
Risk Identification Risk Measurement Communication		
Understand the Sustainability issue in occe insurance process and Sustainability rule of each corporate function.*  Lidentify risks by ESG category  Use hard data and soft data  Redefine Value  Build and use diverse tool sets  Improve corporate report  Calculate company's  Stakeholder engagemen  environmental footprint and  Employee training		
loeniny risks by ESS classifying social impact properties of the p		
Scorecard, KPIs and KRIs  Corporate Governance		
Board-Level Oversight "Chief Sustainability Officer "Sustainability Steering Committee "Culture of Human Right- Humanistic Management with a Employee First Culture "Process and Procedure Sustainability Data Collection Analysis, Decision-Making" Inflastructure and System to embed Sustainability Measurement and Goals into Busi Remuneration, Incentives, Performance Measurement "New Model for Collaboration	hts *	
Corporate Mission Value Vision  *Please refer to Appendix C and D	24	

Think Outside the Box: Downside - Corporate Culture Risk

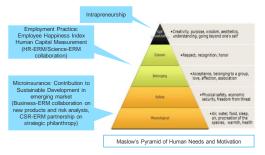
- #1 risk for corporate failure
- Firms of Endearment
   Emotional intelligence in the workplace & Humanistic Management
- Text mining in employee surveys/feedbacks
- Sentiment analysis in corporate communication

Competitive	Cooperative
Compete Hierarchies, Rules Infiltrate Explain Independent Firm Single-minded Tough Achievement Disciplined	Collaborate  Networks, Alliances  Adapt Explore Interdependent Flexible, Compromising Understanding Discussion, Open Relationships Learning

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Source: Sisodia, Wolfe and Sheth (2007): Firms of Endearment

Think Outside the Box: Upside-Sustainable Development



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Implications for Actuaries and Risk Professionals

Sustainability Literacy		
Future Value		
Thinking Thinking		
Systems Strategy		
Systems Thinking Thinking		
AIG Source: Sustainability Education Framework	28	
Source: Sustainability Education Framework		
	_	
ESG Competency	•	
AIG	29	
	-	
Our Values, Beliefs and Actions Can Shape a Sustainable World		
One Person Matters!		
Small Moves		
Big Shifts		
AIG	30	

Appendix		
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Selection of Materia	al ESG Factors	
Fundament L///FW	0!! ((0))	
Environmental ("E")  Biodiversity/land use	Social ("S")  Community relations	Governance ("G")  Accountability
Carbon emissions	Controversial business	Anti-takeover measurement
	Customer relations/product	Board structure/size
Climate change risks Energy usage	Customer relations/product  Diversity issues	Board structure/size Bribery and corruption
Climate change risks		
Climate change risks Energy usage	Diversity issues	Bribery and corruption CEO duality Executive compensation
Climate change risks Energy usage Raw material sourcing Regulatory/legal risks	Diversity issues Employee relations Health and safety	Bribery and corruption CEO duality Executive compensation scheme
Climate change risks Energy usage Raw material sourcing Regulatory/legal risks Supply chain management	Diversity issues Employee relations Health and safety Human capital management	Bribery and corruption CEO duality Executive compensation scheme Ownership structure
Climate change risks Energy usage Raw material sourcing Regulatory/legal risks Supply chain management Waste and recycling	Diversity issues Employee relations Health and safety Human capital management Human rights	Bribery and corruption CEO duality  Executive compensation scheme Ownership structure Shareholder rights
Climate change risks Energy usage Raw material sourcing Regulatory/legal risks Supply chain management Waste and recycling Water management	Diversity issues Employee relations Health and safety  Human capital management Human rights Responsible marketing and R&D	Bribery and corruption CEO duality  Executive compensation scheme  Ownership structure  Shareholder rights  Transparency
Climate change risks Energy usage Raw material sourcing Regulatory/legal risks Supply chain management Waste and recycling	Diversity issues Employee relations Health and safety Human capital management Human rights Responsible marketing and	Bribery and corruption CEO duality  Executive compensation scheme Ownership structure Shareholder rights
Climate change risks Energy usage Raw material sourcing Regulatory/legal risks Supply chain management Waste and recycling Water management Weather events	Diversity issues Employee relations Health and safety  Human capital management Human rights Responsible marketing and R&D	Bribery and corruption CEO duality Executive compensation scheme Ownership structure Shareholder rights Transparency Voting procedures
Climate change risks Energy usage Raw material sourcing Regulatory/legal risks Supply chain management Waste and recycling Water management Weather events	Diversity issues Employee relations Health and safety Human capital management Human rights Responsible marketing and R&D Union relationships	Bribery and corruption CEO duality Executive compensation scheme Ownership structure Shareholder rights Transparency Voting procedures
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Climate change risks Energy usage Raw material sourcing Regulatory/legal risks Supply chain management Waste and recycling Water management Weather events  Dat  AIG  Principles of Respo  1. We will incorporate ESG i processes. We will be active owners practices.	Diversity issues  Employee relations  Health and safety  Human capital management  Human rights  Responsible marketing and  R&D  Union relationships  a has been synthesized from several sou	Bribery and corruption CEO duality Executive compensation scheme Ownership structure Shareholder rights Transparency Voting procedures rrees: MSCI, USB, SASB and GRI
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Assets under management by PRI signatories now stands at more than US\$59 trillion, up from US\$4 trillion at the PRI's launch in 2006
 For best practice, research paper, company disclosure and other resources, please visit <a href="https://www.unpri.org">www.unpri.org</a>

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# Principles of Sustainable Insurance (PSI) We will embed in our decision-making environmental, social and governance issues relevant to our insurance business. 2. We will work together with our clients and business partners to raise awareness of environmental, social and governance issues, manage risk and develop solutions. We will work together with governments, regulators and other key stakeholders to promote widespread action across society on environmental, social and governance issues. We will demonstrate accountability and transparency in regularly disclosing publicly our progress in implementing the Principles. As of November 2015, 90 organizations have adopted the Principles, including insurers representing approximately 20% of world premium volume and USD 14 trillion in assets under management. The Principles are part of the insurance industry criteria of the Dow Jones Sustainability Indices and FTSE4000d. • For best practice, research paper, company disclosure and other resources, please visit www.unpsi.org AIG Core Insurance Processes and Sustainability Risk Assessment Fairness in data collection, development of risk models, pricing Risk Reduction Advice about alternatives to insurance. Enforcement of riskreducing measures Management of the aggregate risk to avoid insolvency Exposure Control Product Design Covering risks that are relevant from an ESG perspective Distribution Partnering with networks for efficient access to at-risk customers Marketing Consumer product education, fair incentives to take out insurance. Opt-outs Speedy and considerate indemnity. Fair dispute resolution Claims Handling Partner with sustainability-minded suppliers for positive ESG impact Procurement Administration Accurate record-keeping. Accessibility for complaints. AIG Examples of Sustainability in Corporate Supporting Functions Partner with Data team to track sustainability data in support of measuring company goals and asure of corporate overall

Innovate accounting process to capture Triple Bottom Lines, etc. Research the interplay of ESG risks and balance sheet risk with Risk Analytics

Attract and invest in appropriate

sustainability projects
Support ESG integration (e.g. PSI,
PRI implementation, etc.)
Coordinate corporate functions
for ESG training by discipline
Collaborate with Actuarial and
Analytics team to measure
human capital, etc.

Finance activities that matter to our stakeholders and our capabilities for

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<b>-</b>	
Other Helpful Resources	
Harvard Business Review on Sustainability:	
https://hbr.org/topic/sustainability	
<ul> <li>MIT Slogan Management Review on Sustainability: http://sloanreview.mit.edu/big-ideas/sustainability/</li> </ul>	
Blog of Sustainability Expert Bob Willard:	
http://sustainabilityadvantage.com/blog/	
The Guardian Sustainable Business News:	
http://www.theguardian.com/us/sustainable-business	
Insight from GreenBiz:	
https://www.greenbiz.com/insights	
<ul> <li>Sustainability papers downloadable at the websites of some major consulting firms and investment firms</li> </ul>	
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