

Private Sector Engagement in Climate Adaptation and Resilience

Emilie Mazzacurati, Founder and CEO
Four Twenty Seven, Inc.

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Climate change #1 global economic risk

	2011	2012	2013	2014	2015	2016
1st	Fiscal crises	Major systemic financial failure	Major systemic financial failure	Fiscal crises	Water crises	Failure of climate-change mitigation and adaptation
2nd	Climate change	Water supply crises	Water supply crises	Climate change	Rapid and massive spread of infectious diseases	Weapons of mass destruction
3rd	Geopolitical conflict	Food shortage crises	Chronic fiscal imbalances	Water crises	Weapons of mass destruction	Water crises
4th	Asset price collapse	Chronic fiscal imbalances	Diffusion of weapons of mass destruction	Unemployment and underemployment	Interstate conflict with regional consequences	Large-scale involuntary migration
5th	Extreme energy price volatility	Extreme volatility in energy and agriculture prices	Failure of climate-change mitigation and adaptation	Critical information infrastructure breakdown	Failure of climate-change mitigation and adaptation	Severe energy price shock

■ Economic
 ■ Environmental
 ■ Geopolitical
 ■ Societal
 ■ Technological

And also in top #3 most likely...

	2011	2012	2013	2014	2015	2016
1st	Storms and cyclones	Severe income disparity	Severe income disparity	Income disparity	Interstate conflict with regional consequences	Large-scale involuntary migration
2nd	Flooding	Chronic fiscal imbalances	Chronic fiscal imbalances	Extreme weather events	Extreme weather events	Extreme weather events
3rd	Corruption	Rising greenhouse gas emissions	Rising greenhouse gas emissions	Unemployment and underemployment	Failure of national governance	Failure of climate-change mitigation and adaptation
4th	Biodiversity loss	Cyber attacks	Water supply crises	Climate Change	State collapse or crisis	Interstate conflict with regional consequences
5th	Climate Change	Water supply crises	Mismanagement of population ageing	Cyber attacks	High structural unemployment or underemployment	Major natural catastrophes

■ Economic
 ■ Environmental
 ■ Geopolitical
 ■ Societal
 ■ Technological



Climate change risk a potential systemic risk to the financial system



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Climate Solutions

POLICY BRIEF - April 4, 2016
The Evolving Regulatory Landscape of Financial Climate Risk Disclosure

POLICY BRIEF
THE EVOLVING REGULATORY LANDSCAPE OF FINANCIAL CLIMATE RISK DISCLOSURE

This Four Twenty Seven Policy Brief provides a summary of key findings from the Task Force of Climate-Related Financial Disclosures Phase I Report and highlights issues of interest to reporters and users of financial disclosures within corporations from the financial and non-financial sector.

What is the Task Force on Climate-Related Financial Disclosures?

In December 2015, the Financial Stability Board created a Task Force on Climate-Related Financial Disclosures (TCFD). The industry-led Task Force, chaired by Michael Bloomberg, is mandated to make recommendations for improving voluntary financial disclosure of climate-related risks. This coordinated international effort comes after investor advocacy organizations, like Ceres, have called attention to the poor quality of climate risk disclosures in financial filings (10-K management disclosures) and the lack of enthusiasm from the Securities and Exchange Commission in enforcing its 2010 guidance on climate change disclosure.

The Task Force released its Phase I report on April 1st. The report provides a high-level review of the existing landscape of climate-related disclosures, establishes fundamental principles for effective disclosures, and defines the scope and objective of the Task Force's work through 2016. The report comes on the heels of an SEC ruling that ExxonMobil must include a climate change resolution on its annual shareholder proxy at the request of shareholders including the NY State Pension Fund.

Why is this important?

The ultimate goal of the TCFD is to enable financial market participants to incorporate considerations on climate risks and opportunities into investment, credit and insurance-underwriting decisions, as well as to increase investor engagement with boards and management with respect to corporate climate risk management. This portends momentous change for the most exposed sectors. Over time we believe that the impact of the report has the potential to mainstream climate risk analysis and disclosure reporting requirements across all financial asset classes – equity, commodities, real estate, bonds – and will force a focus on climate resilience for all underlying assets - corporations, energy, agriculture, real estate, cities, and more.

Improved financial disclosures on climate-related risk will enable more informed decision-making within the financial markets and yield positive impacts for the economy. A higher standard on financial disclosures will also enable “appropriate pricing and distribution of risks throughout markets” and reduce financial instability by lowering the risk of an abrupt change in asset values (“transition” risk).

Just as the ultimate goal of the FSB and the G20 is to avoid another major financial crisis. In our view, the Task Force embodies the best climate change financial policy architecture that will promote market efficiency in a context of scientific uncertainty and information asymmetry. While the Task Force recommendations will not be binding, they come at a time when market authorities and financial regulators are looking to gain a greater understanding of climate change impacts on financial

Reference Documents

- TCFD Phase I Report
- SEC Commission Guidance Regarding Disclosure Related to Climate Change
- Ceres Cool Response Report
- SASB Technical Bulletin 2016-01

Financial Stability Board

The Financial Stability Board (FSB) was created under the authority of the G20. It is an international body that monitors and makes recommendations about the global financial system to promote international financial stability.

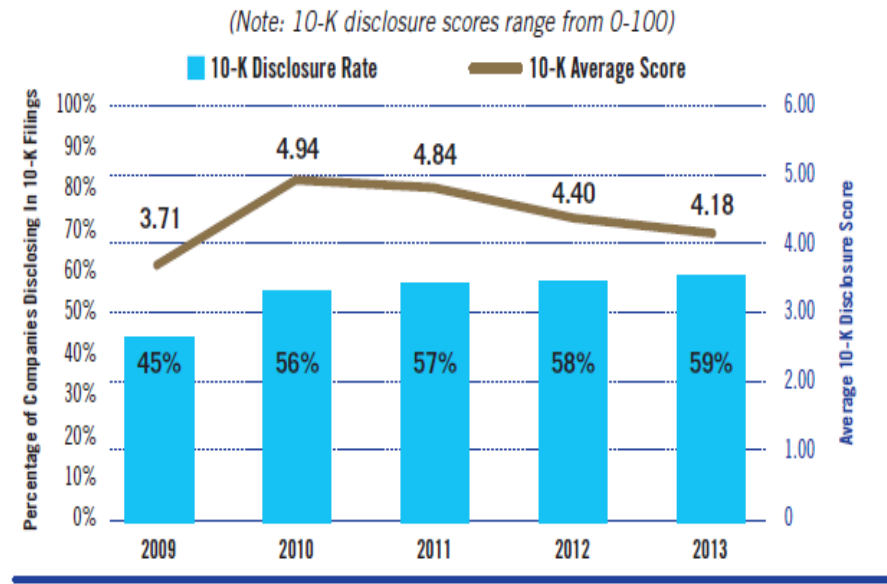
Contact our Team:

Emilie Mazzacurati
+1 415.930.9089
emazzacurati@427mt.com
www.427mt.com

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FIGURE 1: 10-K CLIMATE DISCLOSURE BY S&P 500 COMPANIES, 2009-2013



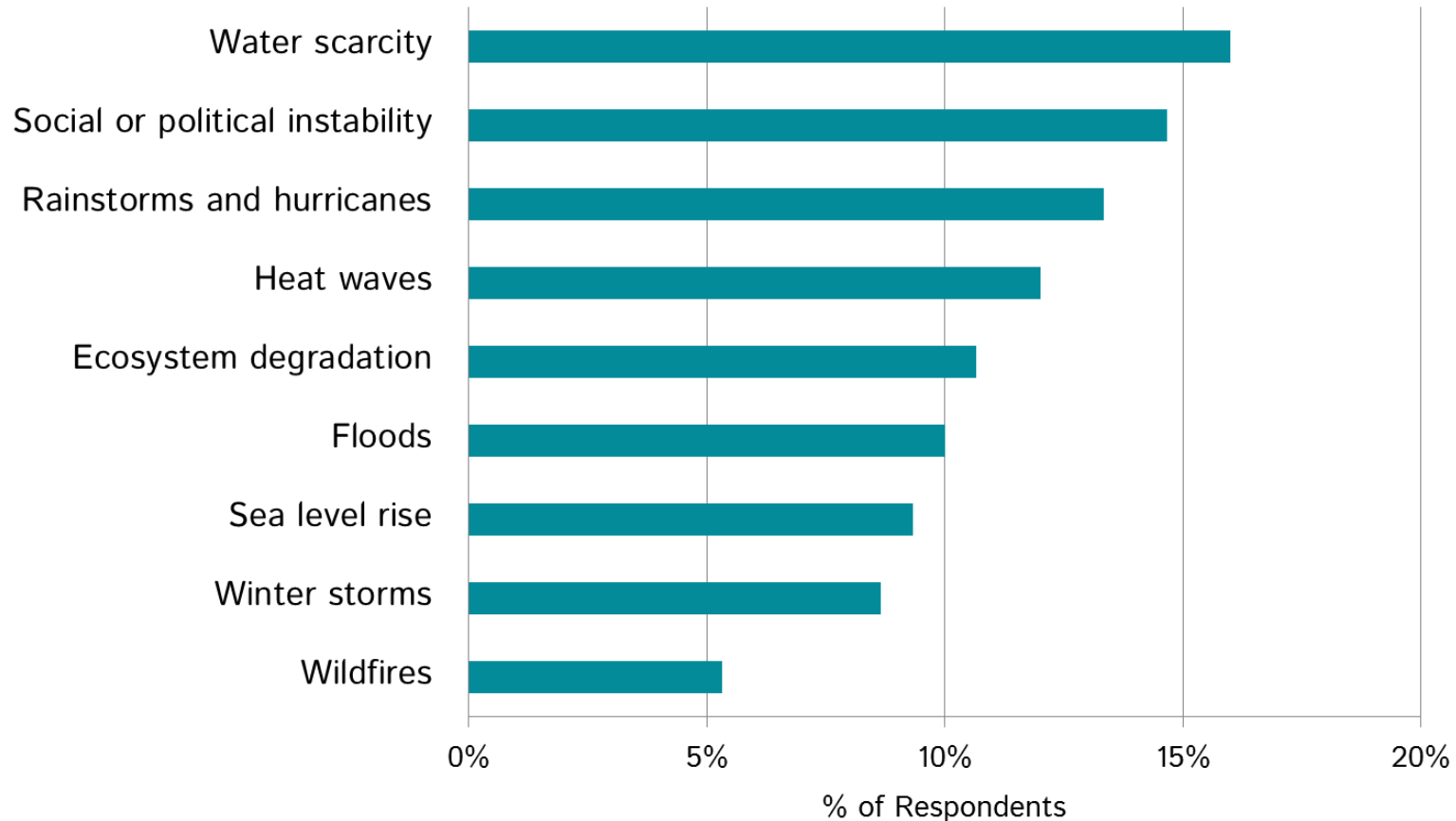
Source: Cool Response, Ceres 2015

Source: Four Twenty Seven, *The evolving regulatory landscape of financial climate risk disclosure*, April 2016
http://427mt.com/2016/04/tfcd_disclosure_of_climaterisk/



Water Scarcity and Political Instability are Key Risk Drivers

In your view, which of the following direct or indirect impacts of climate change present a risk to your company?



Source: 2015 Corporate Adaptation Survey, Four Twenty Seven and ND-GAIN. All rights reserved.



Climate Risk Lays Beyond the Fence





Few Companies Have Performed a Comprehensive Risk Assessment

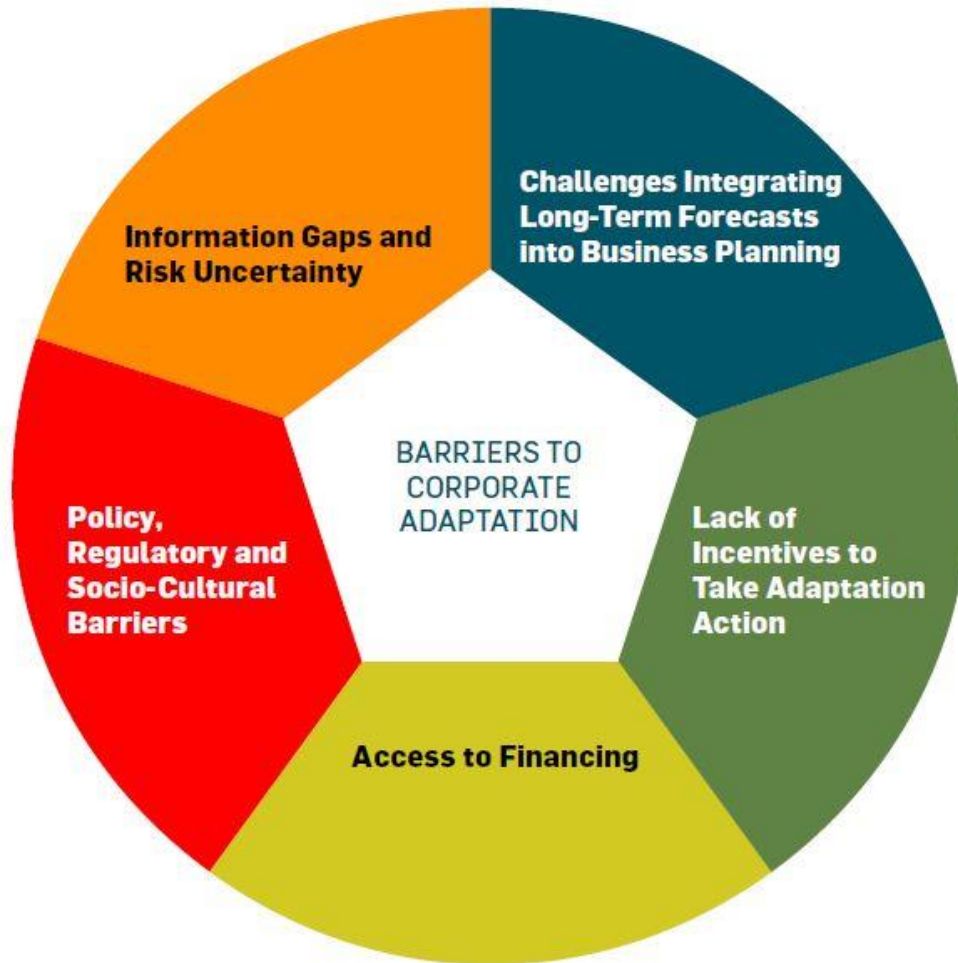
How does your company assess risks related to the physical impacts of climate change?



Source: 2015 Corporate Adaptation Survey, Four Twenty Seven and ND-GAIN. All rights reserved.



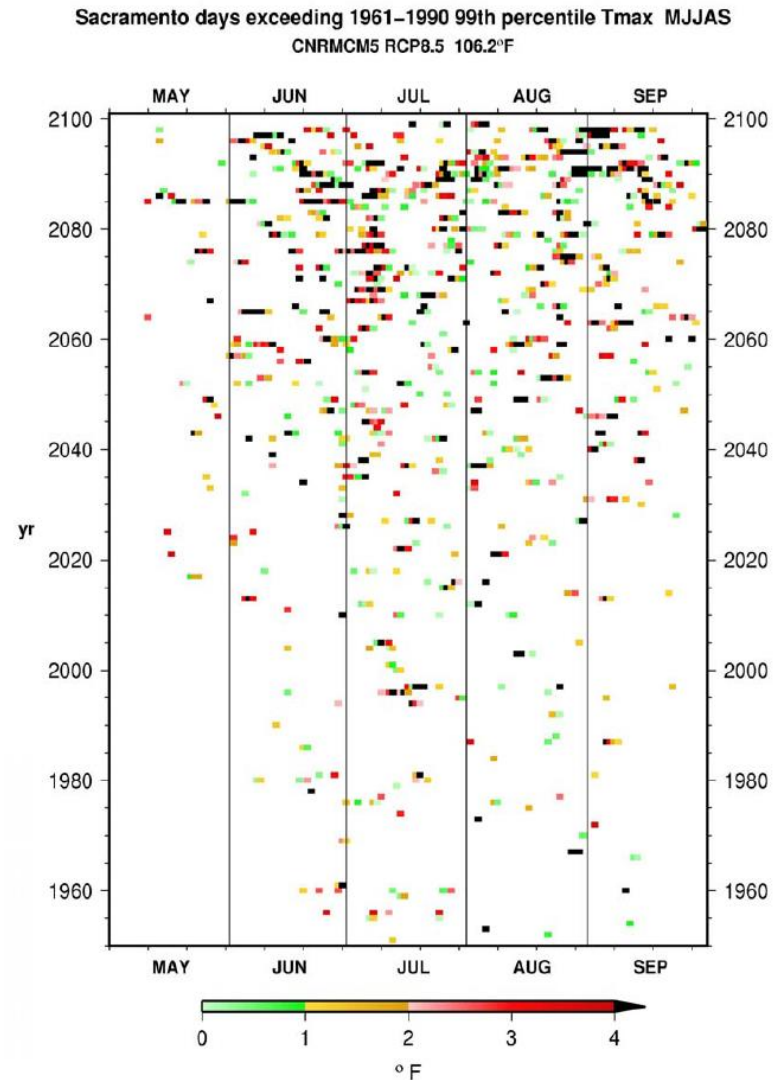
Barriers to Corporate Adaptation



Source: *The Business Case for Corporate Adaptation*, Caring for Climate, December 2015
<http://427mt.com/resources/responsible-corporate-adaptation/>

+ Information Gaps and Risk Uncertainty

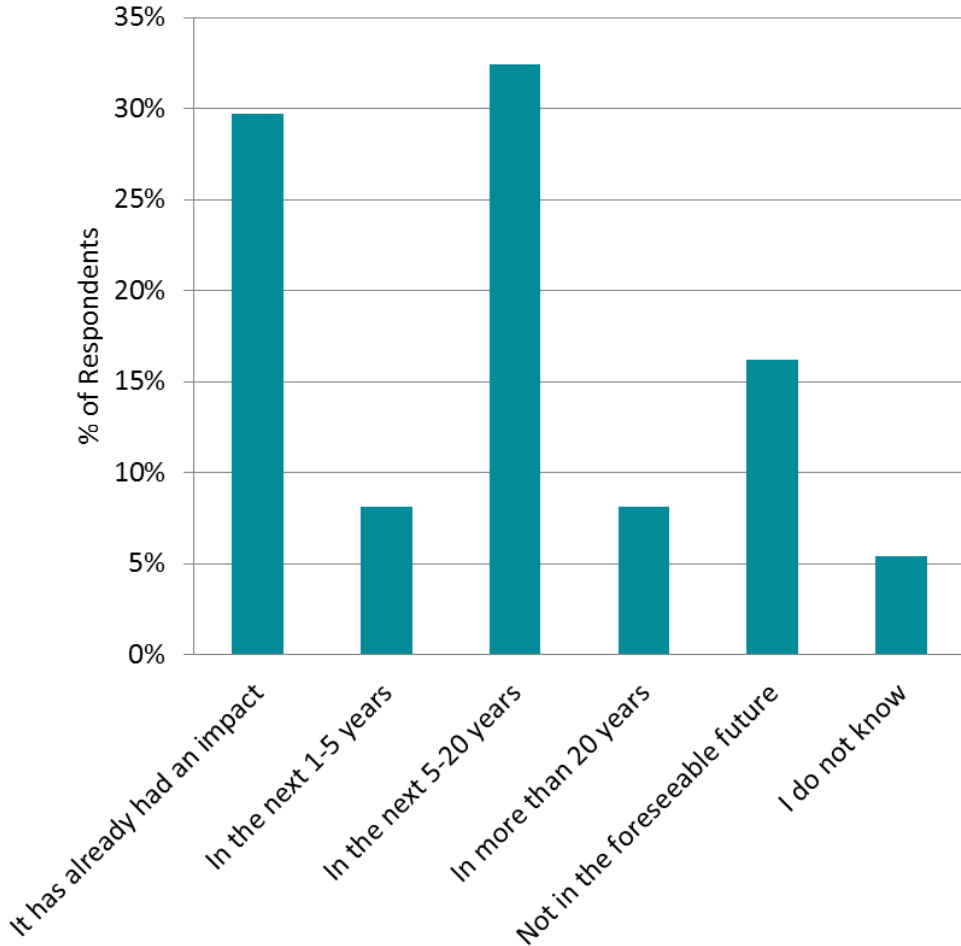
- Complex datasets
 - Different temporal and spatial scales
 - Local climate data does not equal local knowledge
 - Interplay with natural resources and other human activities
 - Impact on secondary variable
- ... over 100+ locations





The Tragedy of the Horizons

When will the impacts of climate change have a material impact on your company?

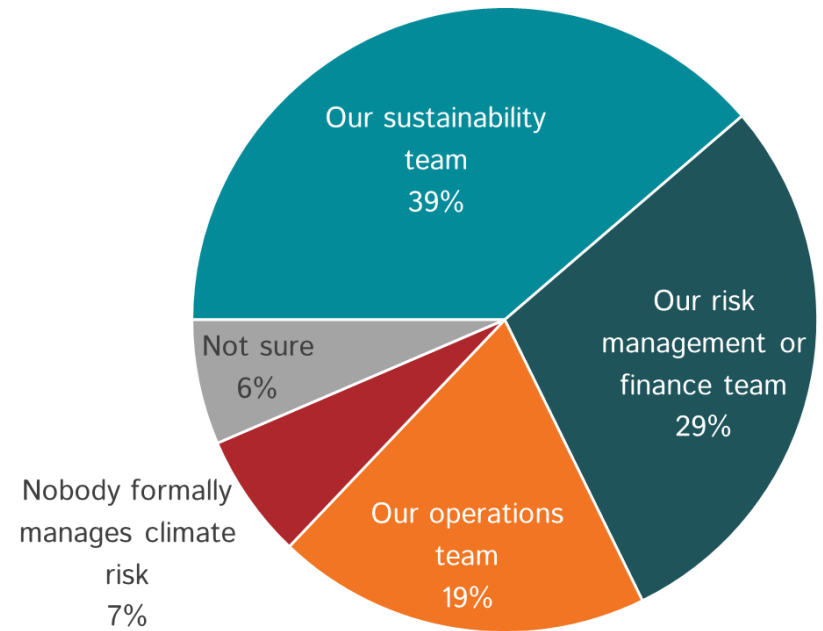




Lack of Incentives & Weak Corporate Governance

- Climate change remains a “sustainability” issue even when it calls for risk management response
- Not a priority for executive leadership
 - Often remains controversial
- Misalignment between role & responsibilities
 - Incl. budget, expertise, etc.

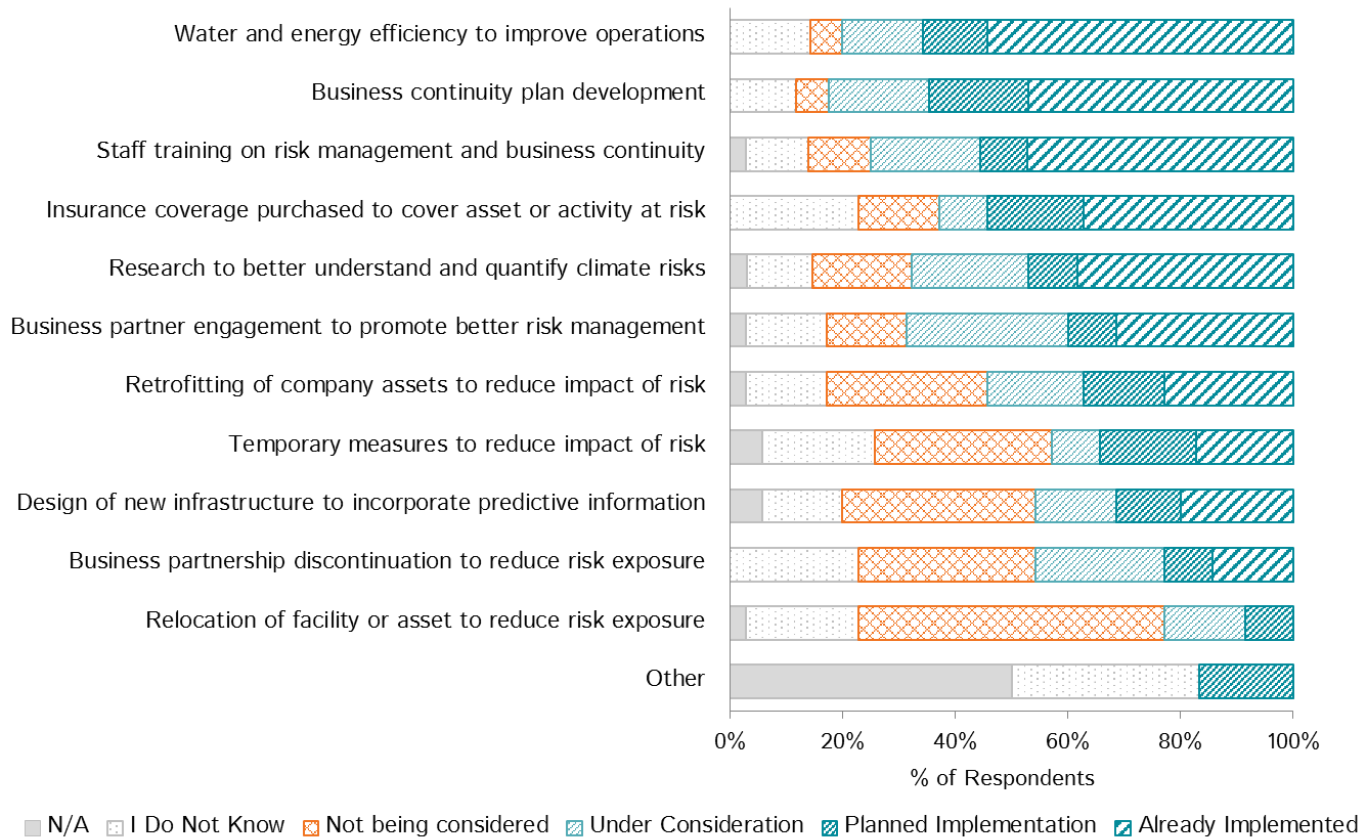
Question: Who in your company currently tracks climate-related risks (e.g. business disruptions due to extreme weather events) and their impacts on profit and losses?





Companies are Investing in Efficiency and Staff Training

Which of the following climate risk mitigation or adaptation measures has your company implemented?



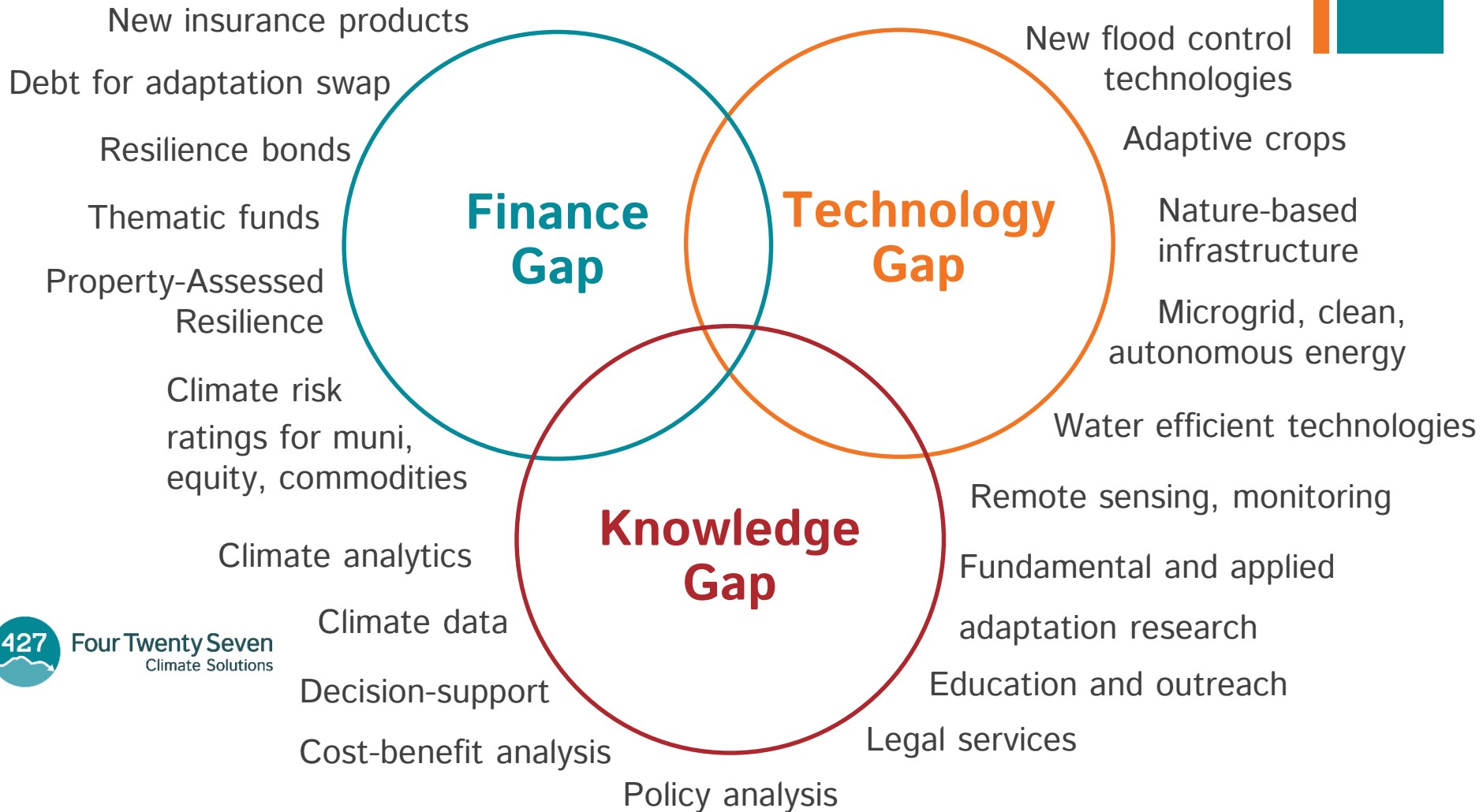
Source: 2015 Corporate Adaptation Survey, Four Twenty Seven and ND-GAIN. All rights reserved.



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Opportunities

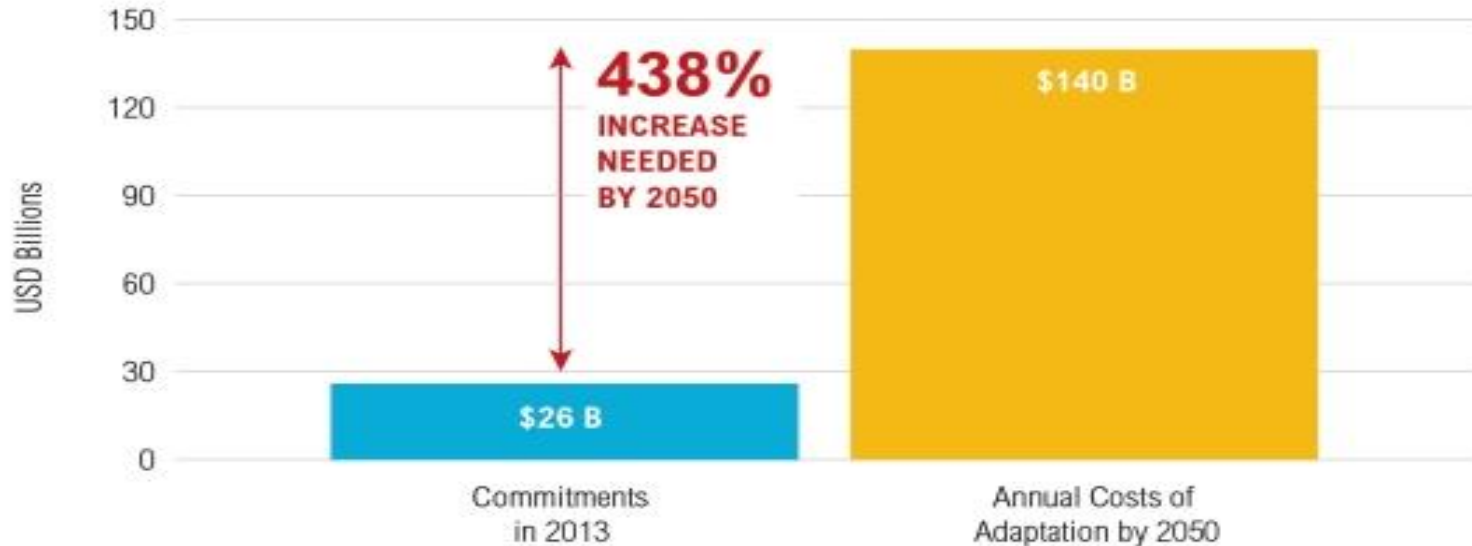
+ Climate business opportunities





Bridging the Gap in Adaptation Finance

Gap Between Estimated Adaptation Needs and Available Public Finance
(2013-2050, Low Estimate)



Source: UNEP (2014), "The Adaptation Gap Report."

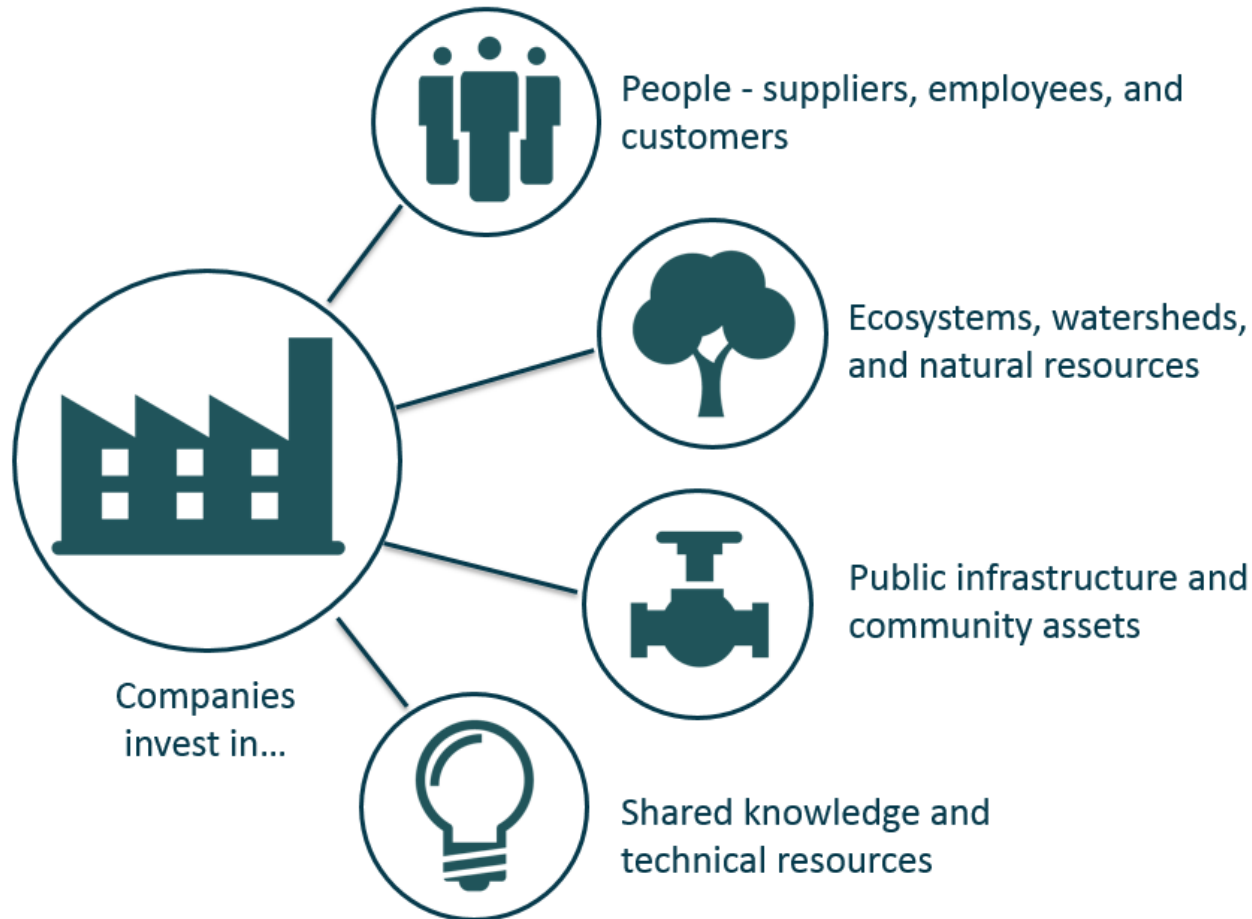
Note: This data represents conservative estimates; a high estimate of commitments in 2013 and a low estimate of annual adaptation needs by 2050, according to UNEP's 2014 "Adaptation Gap Report".



WORLD RESOURCES INSTITUTE



Leverage corporate adaptation into community resilience





Local Businesses as Community Assets

- Small businesses have different needs and resources from large companies.

Among those who had to close their business,

44 percent

reported that it took

seven days or more to open their doors again.



Source: *The Hartford 2013 Small Business Pulse Survey: Storm Sandy*. All rights reserved.





Recommendations for Policy Makers

- **Build a foundation for private sector investments and action**
 - ✓ Develop common language and reference concepts to align goals and support partnerships
- **Align public and private adaptation interests**
 - ✓ Develop guidance for specific sectors and work with local business associations to promote info sharing
- **Leverage private resources and market forces for the public good**
 - ✓ Develop incentives and opportunities for private sector players to “match” public funds



Climate change is already affecting our **economy**.
Together, we can build resilience.

Take the **next step** with us.



Four Twenty Seven
Climate Solutions

Emilie Mazzacurati, Founder and CEO
emazzacurati@427mt.com - 415.420.0074
www.427mt.com