

# Translating climate change into carbon risk

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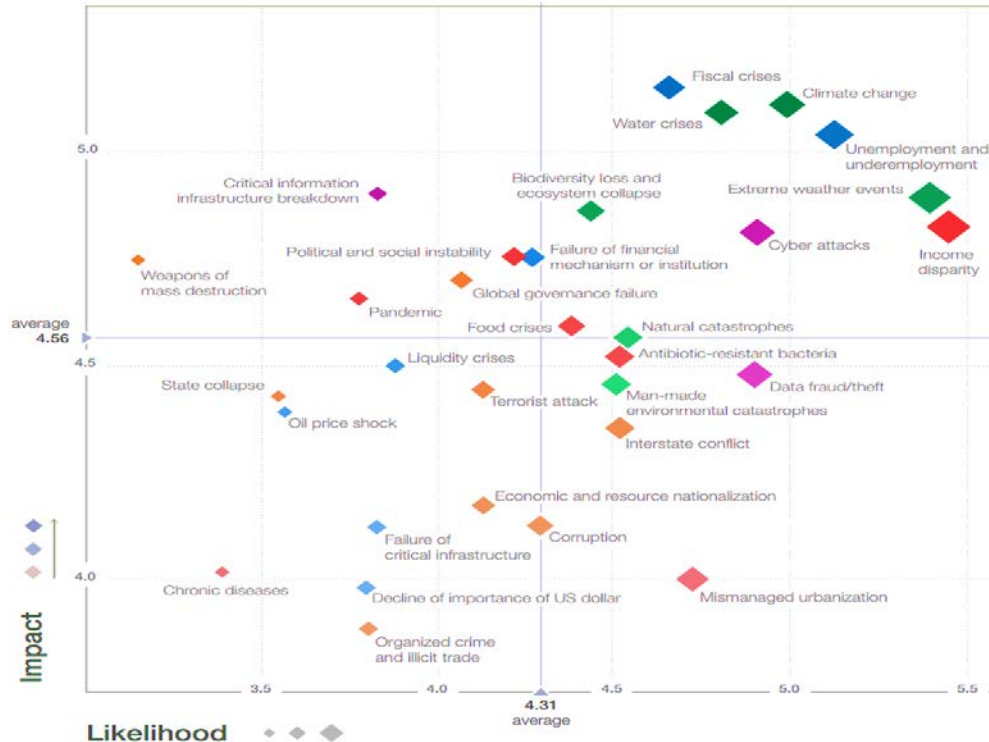
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*This presentation has been prepared for the Actuaries Institute 2014 ERM Seminar.  
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# Interrelated & systemic risks...

Figure 1.1: The Global Risks Landscape 2014



- Economic Risks**
  - Fiscal crises
  - Failure of financial mechanism or institution
  - Liquidity crises
  - Unemployment and underemployment
  - Oil price shock
  - Failure of critical infrastructure
  - Decline of importance of US dollar
- Geopolitical Risks**
  - Global governance failure
  - State collapse
  - Corruption
  - Organized crime and illicit trade
  - Terrorist attack
  - Weapons of mass destruction
  - Interstate conflict
  - Economic and resource nationalization
- Environmental Risks**
  - Extreme weather events
  - Natural catastrophes
  - Man-made environmental catastrophes
  - Biodiversity loss and ecosystem collapse
  - Water crises
- Societal Risks**
  - Food crises
  - Pandemic
  - Chronic diseases
  - Income disparity
  - Antibiotic-resistant bacteria
  - Mismanaged urbanization
  - ical and social instability
- Technological Risks**
  - Critical information infrastructure breakdown
  - Cyber attacks
  - Data fraud/theft

Source: WEF Global Risks 2014

# ...and continually evolving

**Table 1.3:** The Evolving Global Risks Landscape (2007-2014)

**Top 5 Global Risks in Terms of Likelihood**

	2007	2008	2009	2010	2011	2012	2013	2014
1st	Breakdown of critical information infrastructure	Asset price collapse	Asset price collapse	Asset price collapse	Storms and cyclones	Severe income disparity	Severe income disparity	Income disparity
2nd	Chronic disease in developed countries	Middle East instability	Slowing Chinese economy (<6%)	Slowing Chinese economy (<6%)	Flooding	Chronic fiscal imbalances	Chronic fiscal imbalances	Extreme weather events
3rd	Oil price shock	Failed and failing states	Chronic disease	Chronic disease	Corruption	Rising greenhouse gas emissions	Rising greenhouse gas emissions	Unemployment and underemployment
4th	China economic hard landing	Oil and gas price spike	Global governance gaps	Fiscal crises	Biodiversity loss	Cyber attacks	Water supply crises	Climate change
5th	Asset price collapse	Chronic disease, developed world	Retrenchment from globalization (emerging)	Global governance gaps	Climate change	Water supply crises	Mismanagement of population ageing	Cyber attacks

**Top 5 Global Risks in Terms of Impact**

	2007	2008	2009	2010	2011	2012	2013	2014
1st	Asset price collapse	Asset price collapse	Asset price collapse	Asset price collapse	Fiscal crises	Major systemic financial failure	Major systemic financial failure	Fiscal crises
2nd	Retrenchment from globalization	Retrenchment from globalization (developed)	Retrenchment from globalization (developed)	Retrenchment from globalization (developed)	Climate change	Water supply crises	Water supply crises	Climate change
3rd	Interstate and civil wars	Slowing Chinese economy (<6%)	Oil and gas price spike	Oil price spikes	Geopolitical conflict	Food shortage crises	Chronic fiscal imbalances	Water crises
4th	Pandemics	Oil and gas price spike	Chronic disease	Chronic disease	Asset price collapse	Chronic fiscal imbalances	Diffusion of weapons of mass destruction	Unemployment and underemployment
5th	Oil price shock	Pandemics	Fiscal crises	Fiscal crises	Extreme energy price volatility	Extreme volatility in energy and agriculture prices	Failure of climate change adaptation	Critical information infrastructure breakdown

■ Economic 
 ■ Environmental 
 ■ Geopolitical 
 ■ Societal 
 ■ Technological

# How are these issues managed by a bank?

- Translating science into strategy.
- Translating strategy into commercial opportunity.
- Translating outcomes into disclosure.

# Strategy

- Released 12 November 2014.
- Follows on from 2008-2013 statement.
- Includes key principles, position and 2017 Action Plan.
  
- Three engagement themes:
  1. Building resilience
  2. Sustainable cities
  3. Investing for the Two Degree Economy.



# Opportunity

(and risk management)



## SUSTAINABILITY STRATEGY SCORECARD

EMBRACE SOCIETAL CHANGE ENVIRONMENTAL SOLUTIONS BETTER FINANCIAL FUTURES

### 2014 SUSTAINABILITY SCORECARD

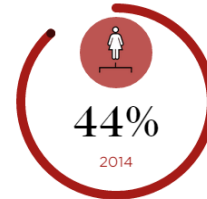
2014 full-year

HOVER TO EXPLORE MORE

EMBRACE SOCIETAL CHANGE

ENVIRONMENTAL SOLUTIONS

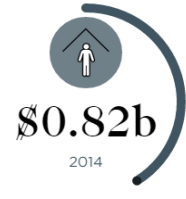
BETTER FINANCIAL FUTURES



WOMEN IN LEADERSHIP



MAKE UP TO \$6 BILLION AVAILABLE FOR INVESTMENT IN CLEANTECH



MAKE UP TO \$2 BILLION AVAILABLE FOR INVESTMENT IN SOCIAL AND AFFORDABLE HOUSING

Met



Exceeded



On Track



Increased women in leadership to 44%, in line with target and up from 42% in 2013, supported by ongoing recruitment initiatives, development, talent management and advocacy.

Women in leadership includes Executive, Senior Manager and Manager roles.

\$8.0 billion lent to the CleanTech and environmental services sector significantly exceeding our commitment to make available up to \$6 billion by 2017.

Contributing to this increase was expanded data capture, growth in number of property clients investing in green buildings and growth across the portfolio overall. As we exceeded our 2017 target, we will review strategy options next year.

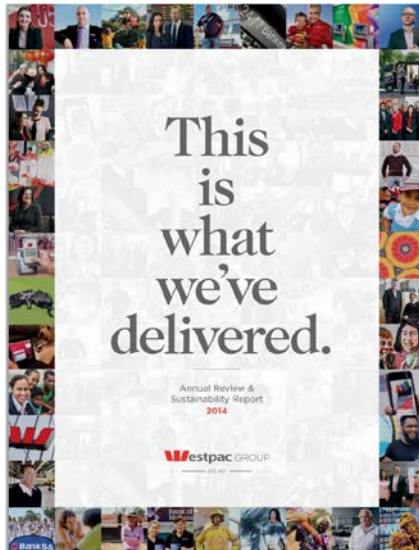
Cumulative total as at 30 September 2014.

\$0.82 billion lent to the social and affordable housing sector at 30 September 2014, up from \$0.65 billion at 30 September 2013.

Announced the Group's largest single community housing finance transaction for construction of 275 new affordable houses.

Cumulative total as at 30 September 2014.

# Disclosure



This is what we've  
delivered in 2014.

Annual Review &  
Sustainability Report  
2014

Find out more



Westpac Group Annual Review and Sustainability Report 2014  
Westpac Banking Corporation  
ABN 33 007 457 141

Customer Focus

Westpac Institutional Bank

	2014	2013	2012	2011	2010
<b>Relationship Strength Index Ranking<sup>1</sup></b>					
Relationship Banking	1	1	1	2	1
Transactional Banking	1	1	1	1	1
<b>Country profile of institutional banking activities</b>					
<b>(Country income classification)<sup>2</sup></b>					
Low (% of total customers)	0.87	0.74	2.18	0.69	1.61
Middle-upper (% of total customers)	2.54	2.30	3.87	2.75	0.92
High (% of total customers)	96.59	96.96	94.15	96.56	97.47
Low (% of total exposures)	-	-	-	-	-
Low-middle (% of total exposures)	1.31	0.72	1.17	0.35	1.12
Middle-upper (% of total exposures)	4.71	3.65	2.84	3.08	0.49
High (% of total exposures)	93.97	95.63	95.99	95.66	98.39
<b>Infrastructure and utilities financing – Australia &amp; NZ</b>					
Total attributable financing (\$m)	3,197	3,007	2,727	2,565	2,467
Renewable (%)	28.4	24.0	24.5	20.5	17.4
Brown coal (%)	4.0	4.5	5.2	11.8	12.0
Black coal (%)	15.6	16.2	20.8	22.3	18.7
Gas (%)	20.4	23.6	21.6	20.4	19.6
Liquid fuel (%)	1.4	0.8	0.7	0.2	0.2
Hydro (%)	30.2	30.9	27.2	24.7	24.2
<b>Infrastructure and utilities portfolio emissions intensity (CO<sub>2</sub>e/\$m)</b>					
Westpac finance <sup>3</sup>	0.41	0.44			
Benchmark NZM <sup>3</sup>	0.87	0.87			
<b>Lending to mining – Australia &amp; NZ<sup>2</sup></b>					
Total lending to mining (\$m)	5,019	3,972			
Total natural resources lending (\$m)	7,578	6,100			
Coal mining (%)	7.6	9.6			
Oil and Gas extraction (%)	26.0	26.0			
Metals Ore Mining (%)	32.6	29.0			
Explores (O <sub>2</sub> )	-	-			
Other activities (%) <sup>2</sup>	33.8	35.5			
<b>ClimateTech and environmental services financing – Australia &amp; NZ<sup>2</sup></b>					
Total attributable financing (\$m)	7,078	6,428	3,140		
Energy Efficiency (%)	0.6	0.6	0.8		
Green Buildings (%)	66.2	62.9	27.6		
Green Businesses (%)	0.9	1.0	1.8		
Renewable Energy Projects (%)	24.7	26.3	43.1		
Waste (%)	3.5	3.6	7.0		
Water (%)	0.2	0.2	0.2		
Forestry (%)	3.5	3.5	7.5		
Land Remediation (%)	0.1	1.7	-		
Other <sup>2</sup> (%)	0.2	0.3	0.0		

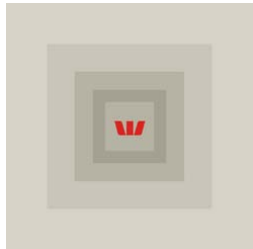
<sup>1</sup> Based on 2014 data.

<sup>2</sup> Data Aggregates (2) climate exposure has moved to register.

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# Thank you! (and the disclaimer)

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