ADAPTATION AND INFRASTRUCTURE

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THE NEED FOR ADAPTATION

ADAPTATION FINANCE *what is it?*

'Finance that assists in the process of adjustment to actual or expected climate change impacts or effects'.

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An opportunity that reduces risk

THE OPPORTUNITIES *what do they look like?*

Themes	Providing finance for .
Water efficiency & security measures	Efficient irrigation systems, recycling systems, water harvesting, desalination
Protection against flood risk	Infrastructure changes/augmentation, new infrastructure, coastal protection measures, drainage improvements
Climate-related insurance	Indexed weather-based insurance
Heat stress reduction	Finance for cooling/building design, infrastructure design, greening cities & buildings, insulation, energy efficiency
Early warning systems	Technology investments in early warning for extreme weather
Bushfire protection measures	Building design, fire system improvement & installation
Agricultural resilience and farm improvements	Changes to farm management techniques, equipment to improvement farm resilience

BARRIERS *to investment in climate adaptation*

- Lack of institutional capacity/information/education
- Lack of measurement frameworks and local geographical climate data to help inform infrastructure planning and investment decision making (e.g. portfolio analysis of climate impacts)
- Poor understanding of costs and benefits of investing in adaptation
- Lack of clear revenues stream for commercial returns
- Technology risk (insufficient understanding of technology options or the local skills to deploy technologies)
- Ability to achieve scale, reduce DD costs and benefit from economies of scale – need large projects or aggregation models
- Credible project proponents or counterparties
- Effective coordination and clear accountabilities across different levels of government

HOW IS FINANCE RESPONDING?

TCV GREEN BOND

Arranged the first Climate Bond certified government Green Bond and Australia's first government issued Green Bond.

A$300m Green Bond with proceeds earmarked for financing low carbon buildings, renewable energy, low-carbon public transport and energy efficient water treatment

QTC GREEN BOND

Joint lead manager for the largest Green Bond issuance ever by an Australian entity.

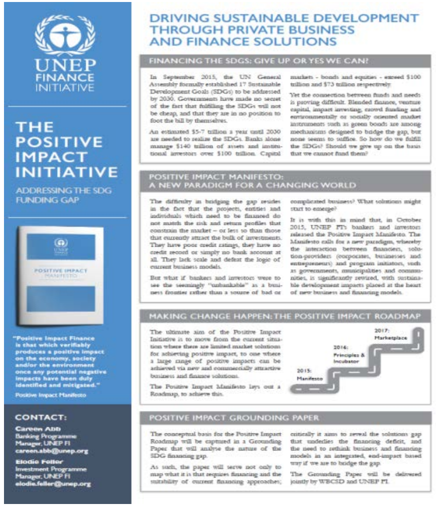
A$750m Green Bond with proceeds earmarked for financing renewable energy, low carbon transport, drought resistance and flood defence and natural ecosystem preservation.

ADAPTATION FUND

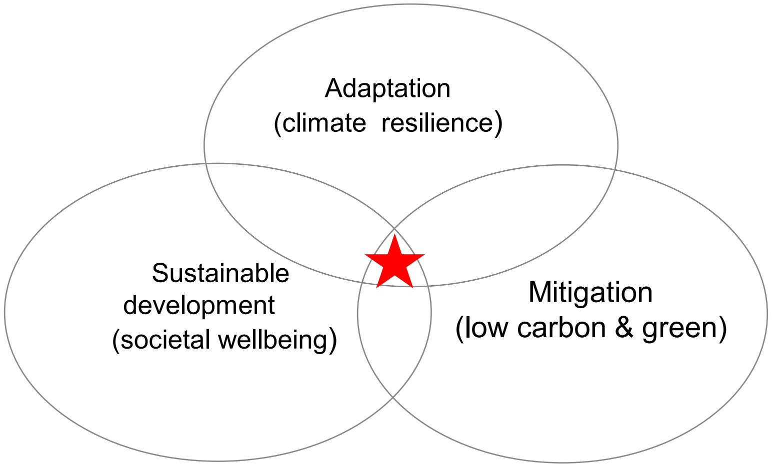
GREEN CLIMATE FUND

Climate Bonds INITIATIVE

SUSTAINABLE DEVELOPMENT GOALS



ALIGNMENT TO THE SDGS – *triple the benefit*



- Annual SDG funding needs USD 5-7 trillion a year until 2030
- National and sector literature surveyed by UNEP indicates that the costs of adaptation could range from **US$140 billion to US$300 billion by 2030**, and between **US$280 billion and US$500 billion by 2050**. **SOURCE: THE ADAPTATION GAP REPORT 2016 UNEP**

CLOSING MESSAGES *enabling adaptation finance requires…*

- Access to quality/credit worthy projects
- Getting the risk and return right
- Applying existing financial products to adaptation issues to get speed to market and scale
- Innovative partnerships to leverage government funding, minimise risk, build deployment capability and provide an enabling environment

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