



Climate Change in the Pacific

Challenges and opportunities for a low emissions climate resilient future

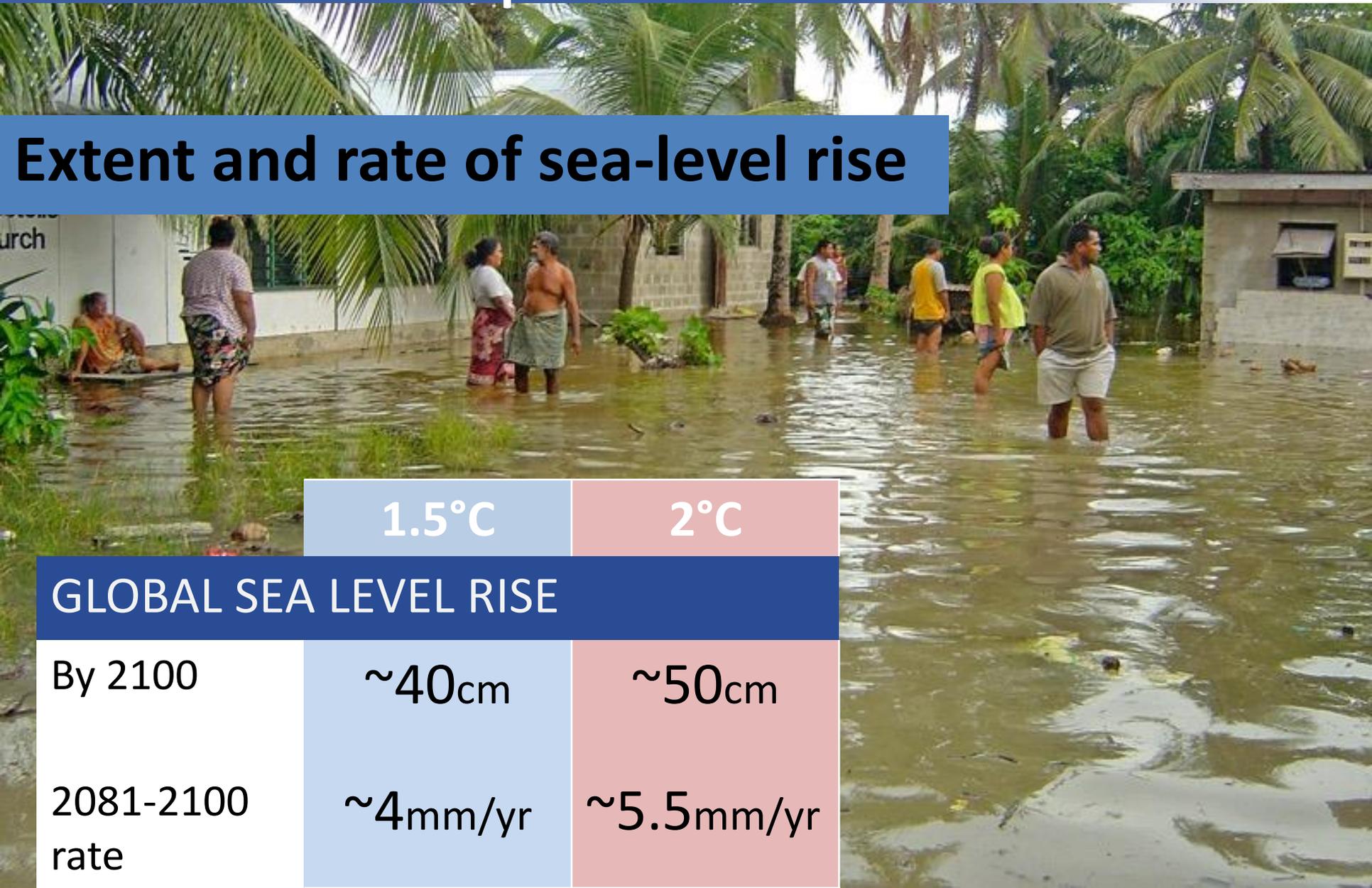
Patrick Pringle , Senior Research Associate, Climate Analytics

30 July, 2018

- Limiting warming to 1.5°C would avoid the most drastic impacts of climate change but still entail large adaptation costs
- We are not on track to achieve 1.5°C
- Limiting warming to 1.5°C is feasible and comes with substantial benefits for sustainable development
- Strongly increased near-term ambition & action until 2030 is decisive to achieve 1.5°C

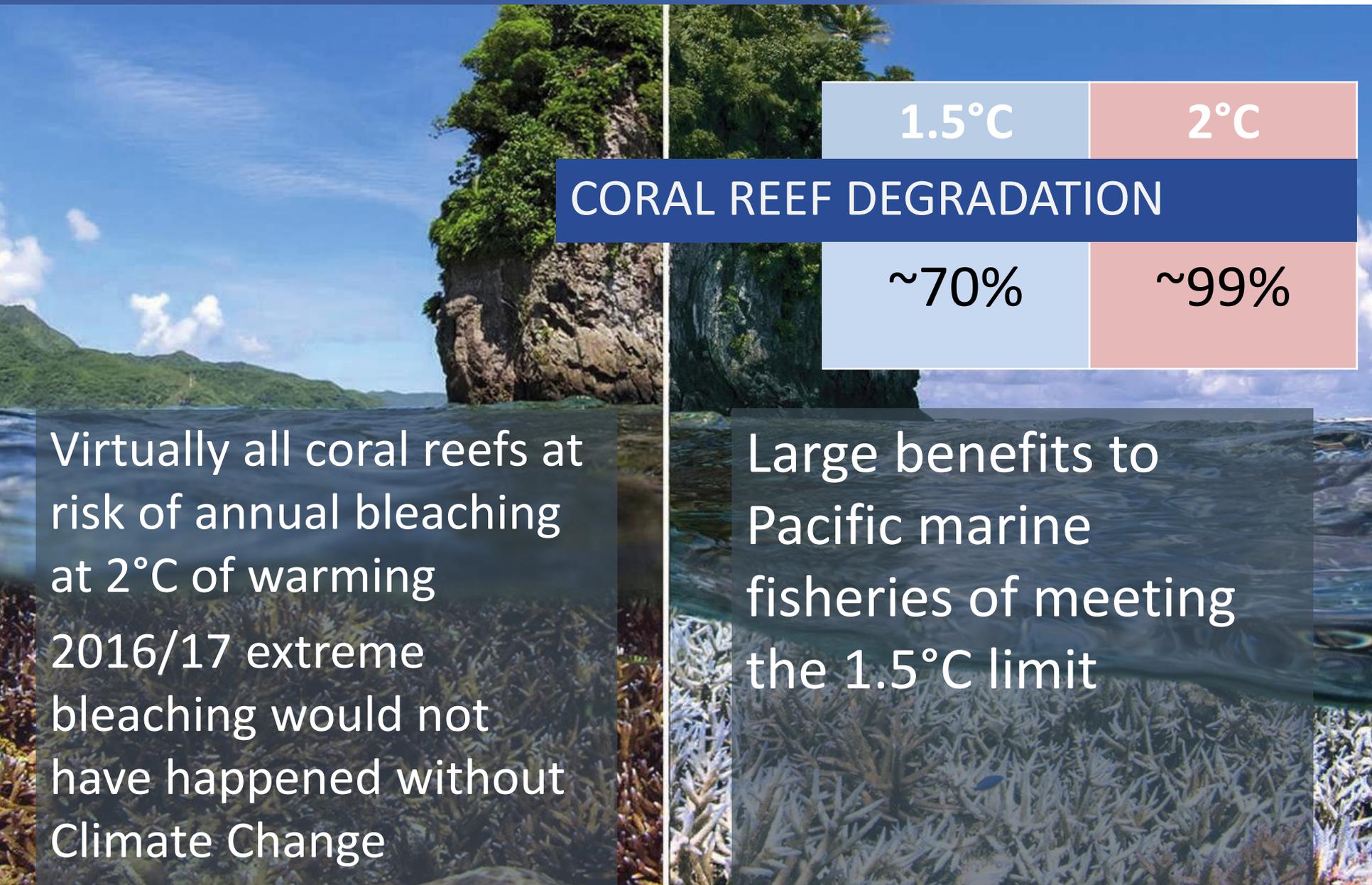
1) Limiting warming to 1.5°C avoids some of the most drastic impacts

Extent and rate of sea-level rise



	1.5°C	2°C
GLOBAL SEA LEVEL RISE		
By 2100	~40cm	~50cm
2081-2100 rate	~4mm/yr	~5.5mm/yr

Decreased survival of tropical coral reefs

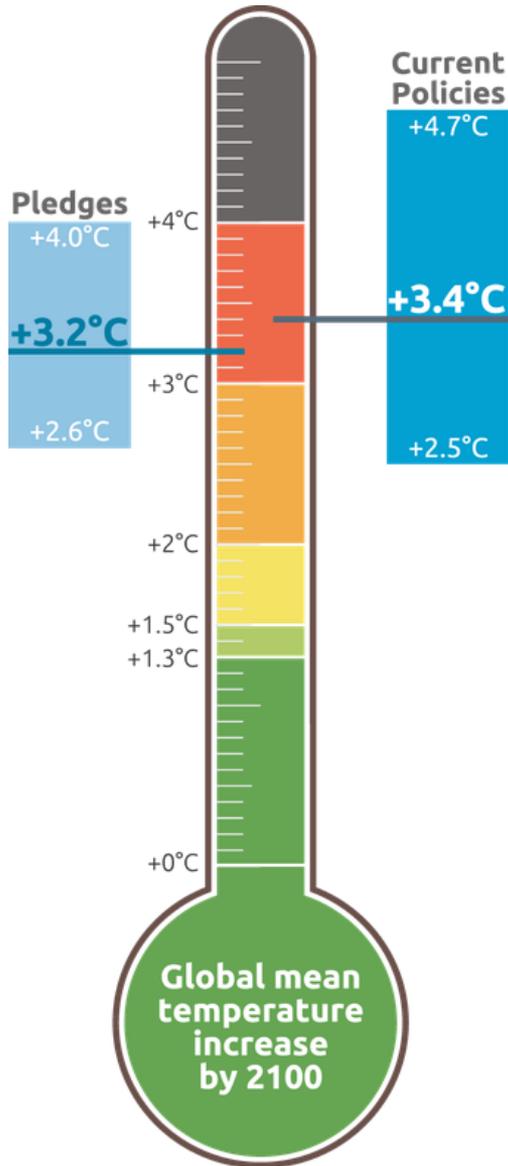


1.5°C	2°C
CORAL REEF DEGRADATION	
~70%	~99%

Virtually all coral reefs at risk of annual bleaching at 2°C of warming
2016/17 extreme bleaching would not have happened without Climate Change

Large benefits to Pacific marine fisheries of meeting the 1.5°C limit

2) We are not on track to achieve 1.5°C



- But ...0.2°C improvement in climate action since 2016, reducing projected warming by 2100 to 3.4°C.
- Significant improvement on climate action globally, despite US rollbacks as India and China move ahead



CAT warming projections
Global temperature increase by 2100

November 2017 Update

3) Limiting warming to 1.5°C is feasible

- New 1.5°C scenarios for IPCC 1.5C SR show warming can be limited to **well below 2°C and below 1.5°C**: peak warming
 - **Confirms technological and economic feasibility**
- Sustainability is essential enabling factor for 1.5°C

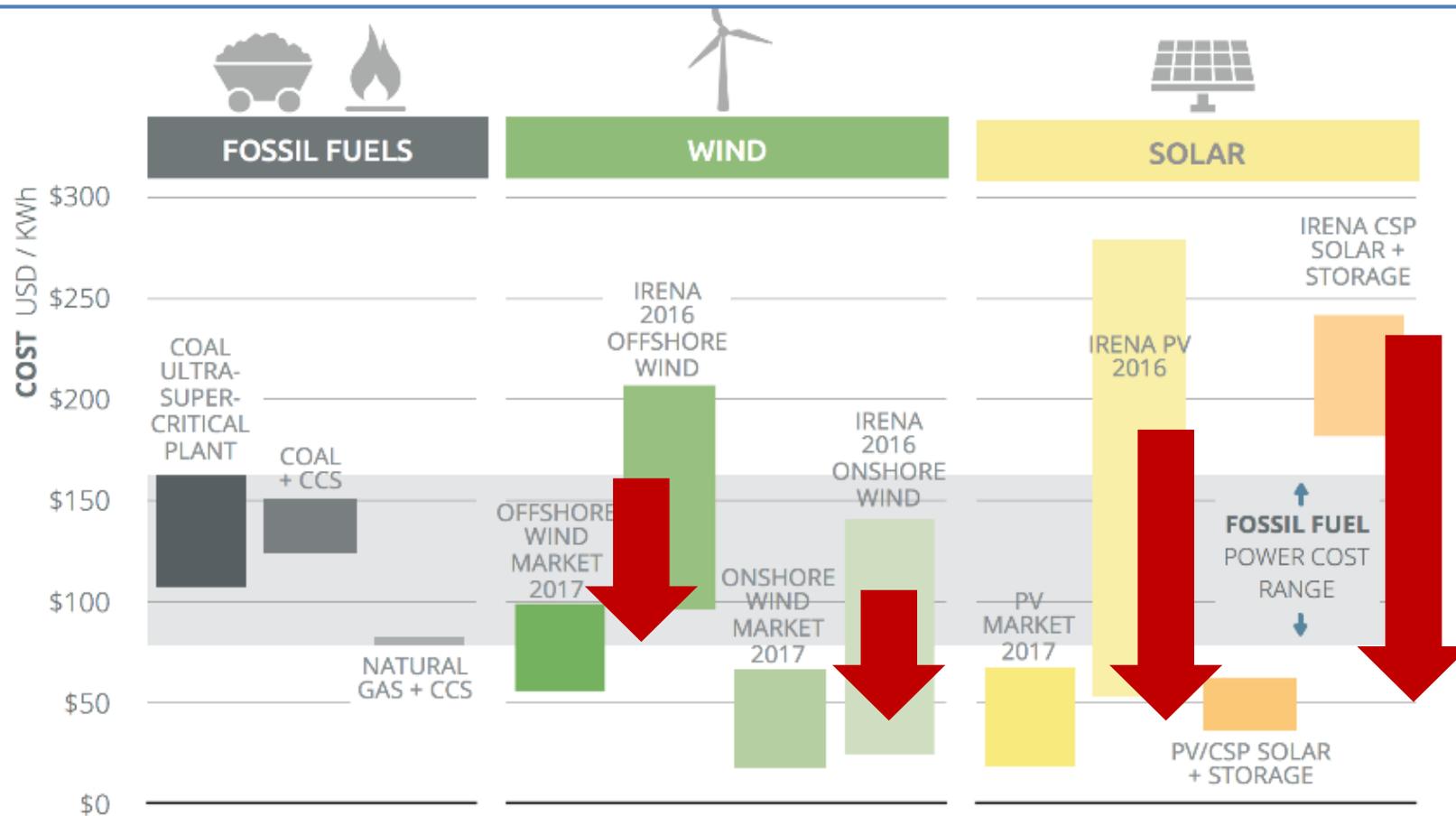
4) Strong near term ambition is vital to 1.5°C

- Roadmap to achieve a 1.5°C limit in 2100:
 - global CO₂ emissions peak no later than 2020
 - halving anthropogenic CO₂ emissions every decade
 - net- zero emissions around mid-century
- Coal phase out by 2050
 - By 2030 OECD; 2040 China; and by 2050 for the Rest of World
 - Requires early retirement of power plants, no new capacity.



Renewables costs are declining

Mitigation targets in nationally determined contributions (NDCs) under the Paris Agreement are based on pre-2014 information that can be regarded as outdated today



2017 Market Prices lower by 50% and more than IRENA 2016 estimates

Progress on adaptation and mitigation

- Adaptation happening in an increasing number of sectors
 - Success in accessing climate finance
 - In context of strengthening regional and national frameworks and institutions
- High ambition - national roadmaps and/or in NDCs
 - e.g. Cook Islands 100% renewable electricity by 2020; Samoa 100% renewable electricity by 2025
- Regional mitigation initiatives e.g.
 - Pacific Centre of Excellence for Renewable Energy and Energy Efficiency in Tonga
 - Pacific NDC Hub



- Increasing evidence of the importance of 1.5°C for adaptation
 - Mitigation as an adaptation enabler
- Incremental adjustments may not be sufficient in many places
 - What could transformational change look like in the Pacific?
 - How can Governments use GCF (and other climate finance) to make this happen?



Reflections and questions for this week

- Close connection between people, oceans and islands is vital asset
 - How do we ensure a country-driven approach?
 - Can we make better use of science and traditional knowledge?
 - How do we address both climate and non-climate drivers?
- Learning what works, in which contexts, for whom and why is vital
 - Are learning effectively and acting on what we know?
 - Are we using M&E for learning as well as accountability?



There are reasons to be hopeful – but we must act now!

Thank you!

www.climateanalytics.org

<http://climateanalytics.org/projects/impact-climate-action.html>



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