



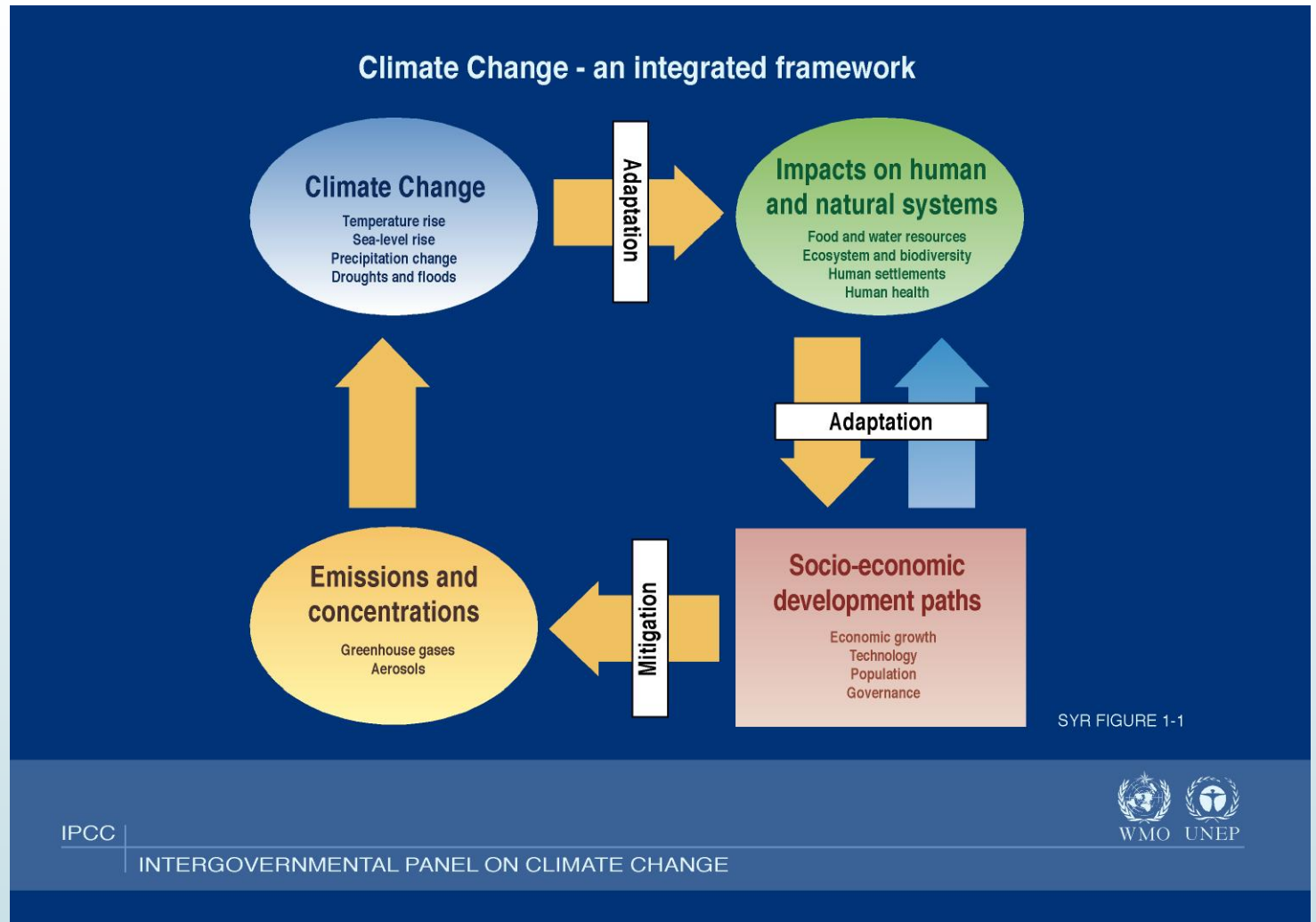
Climate Change and SDGs: Policy Coherence?

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Back in 2001...

- The relationships between climate change and sustainable development have been recognised for many years now and was captured in the **third assessment report of IPCC**





COP 7, Marrakesh, 2001

Recognizing that the World Summit on Sustainable Development provides an important opportunity for addressing the linkages between climate change and sustainable development,

- *Remain* deeply concerned that all countries, particularly developing countries including the least developed countries and small island States, face increased risk of negative impacts of climate change;
- *Recognize* that, in this context, the problems of poverty, land degradation, access to water and food and human health remain at the centre of global attention; therefore, the synergies between the United Nations Framework Convention on Climate Change, the Convention on Biological Diversity, and the United Nations Convention to Combat Desertification in those Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa, should continue to be explored through various channels, in order to achieve sustainable development;

The Marrakesh Ministerial Declaration



Fast Forward to 2014 (AR5)...

SPM 3 Future Pathways for Adaptation, Mitigation and Sustainable Development

- Adaptation and mitigation are complementary strategies for reducing and managing the risks of climate change. Substantial emissions reductions over the next few decades can reduce climate risks in the 21st century and beyond, increase prospects for effective adaptation, reduce the costs and challenges of mitigation in the longer term and contribute to climate-resilient pathways for sustainable development. {3.2, 3.3, 3.4}

SPM 3.1:Delaying mitigation shifts burdens from the present to the future, and insufficient adaptation responses to emerging impacts are already eroding the basis for sustainable development































































And in
2015...




"Climate change is one of the greatest challenges of our time and its adverse impacts undermine the ability of all countries to achieve sustainable development. Increases in global temperature, sea level rise, ocean acidification and other climate change impacts are seriously affecting coastal areas and low-lying coastal countries, including many least developed countries and small island developing States. The survival of many societies, and of the biological support systems of the planet, is at risk." (Article 14, Agenda 2030)

Acknowledging that climate change is a common concern of humankind, Parties should, when taking action to address climate change, respect, promote and consider their respective obligations on human rights, the right to health, the rights of indigenous peoples, local communities, migrants, children, persons with disabilities and people in vulnerable situations and the right to development, as well as gender equality, empowerment of women and intergenerational equity, (Paris Agreement)

Risk of failure to achieve the SDGs by 2030

Sustainable Development Goals			Risk		Confidence
			High-ambition	Low-ambition	
Global level	SDG 1	Poverty			
	SDG 5	Gender equality			
	SDG 6	Water and sanitation			
	SDG 7	Energy			
Country level	Dominica	SDG 1			
		SDG 5			
		SDG 6			
		SDG 7			
	Jamaica	SDG 1			
		SDG 5			
		SDG 6			
		SDG 7			
	Pakistan	SDG 1			
		SDG 5			
		SDG 6			
		SDG 7			
	Uganda	SDG 1			
		SDG 5			
		SDG 6			
		SDG 7			

'Risk of failure to achieve a SDG' combines the likelihood of failing to achieve a SDG with the magnitude of departure from the SDG for a given climate agreement scenario.

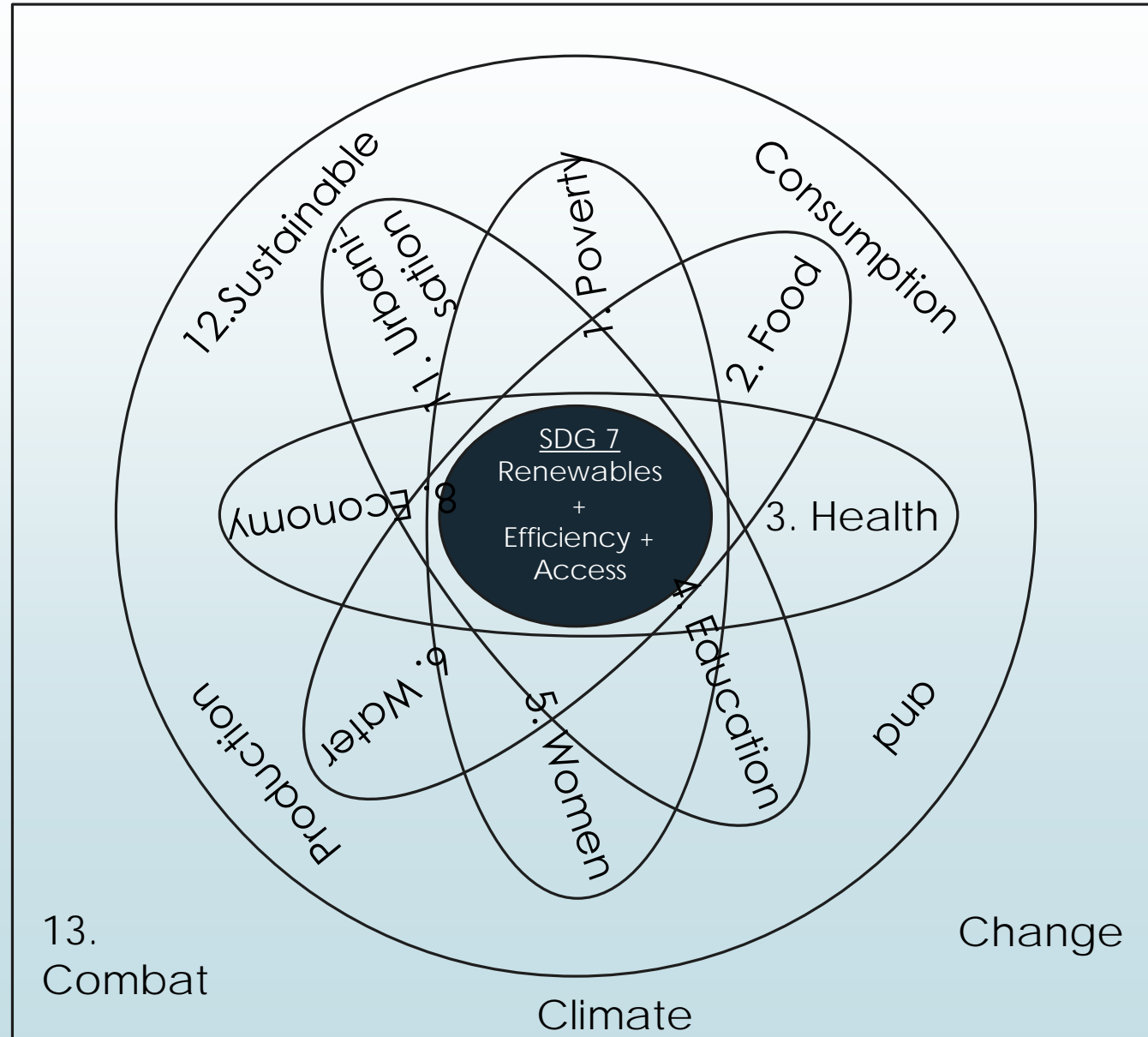
-  **Very high risk of failure to achieve the SDG** – Very likely that the SDG will not be achieved and potential for substantial departure from the SDG. Very unlikely to achieve the SDG.
-  **High risk of failure to achieve the SDG** – Likely that the SDG will not be achieved and potential for moderate to substantial departure from the SDG. Unlikely to achieve the SDG.
-  **Medium risk of failure to achieve the SDG** – About as likely as not that the SDG will not be achieved and potential for moderate departure from the SDG. About as likely as not to achieve the SDG.



Agenda 2030

“The 17 Sustainable Development Goals and 169 targets which we are announcing today ... are integrated and indivisible and balance the three dimensions of sustainable development: the economic, social and environmental.” Preamble of *Transforming our World: The 2030 Agenda For Sustainable Development*

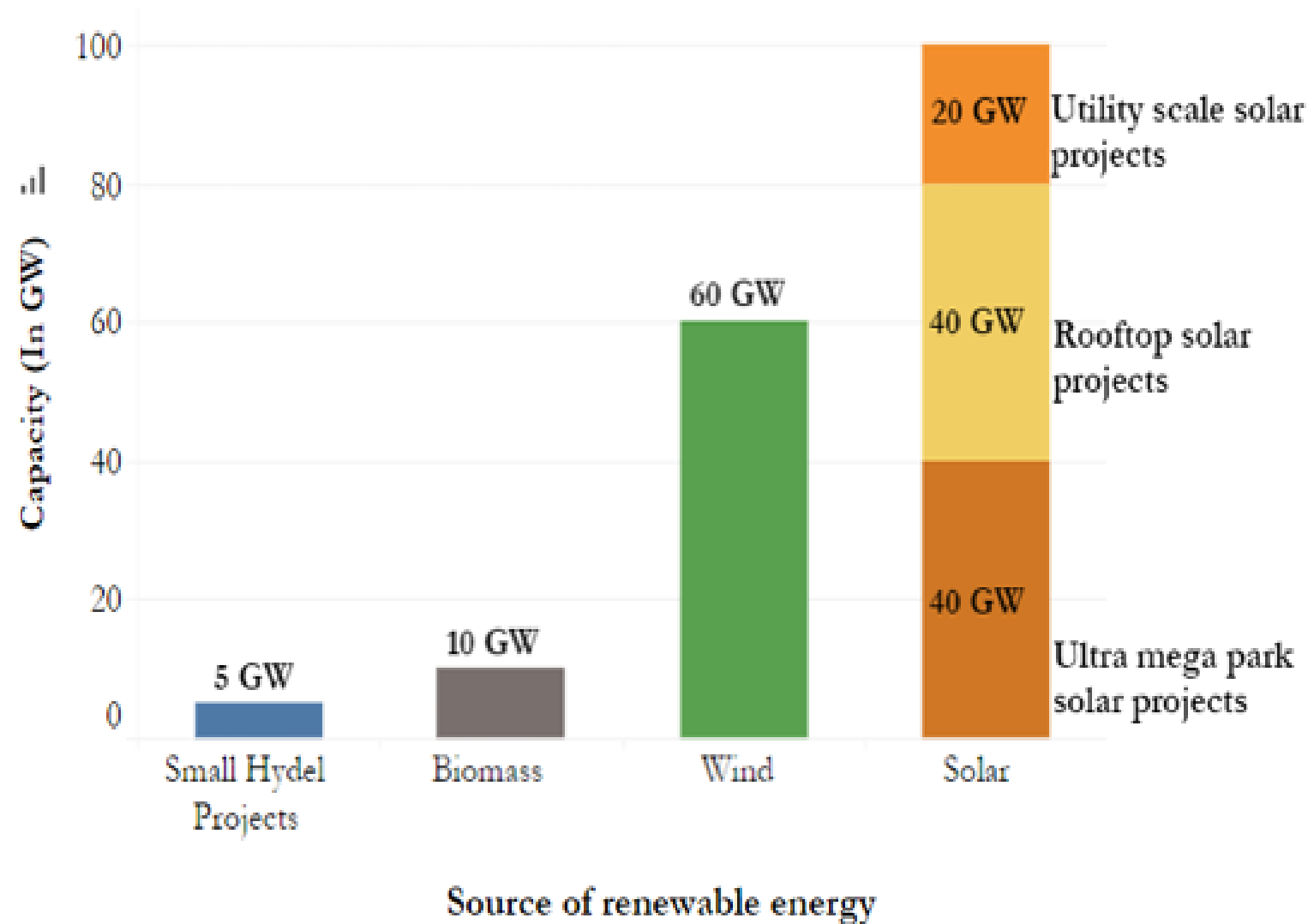
Energy, a major contributor to CC, too is Inter-linked with other SDGs



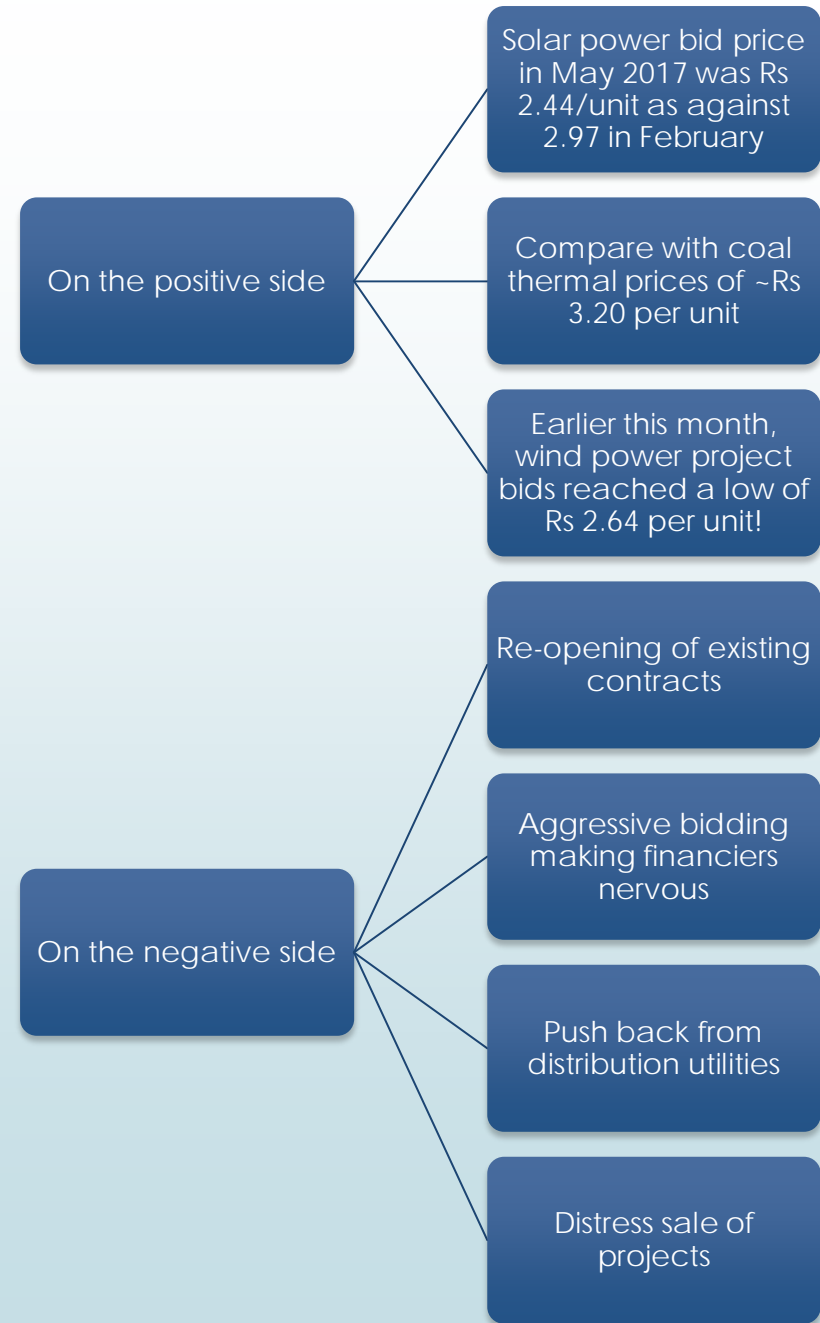


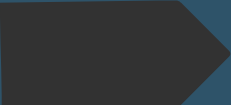
India's Energy Related Targets and Impacts

India's 2022 Renewable Energy Target



175 GW of Renewable Energy by 2022





Ban sale of diesel/petrol vehicles by 2030

India sold over 3 million passenger vehicles in 2016-17 and a total of close to 28 million vehicles

Current electric vehicle manufacturing capacity in the country negligible

Battery manufacturing and costs a major concern

Urban support infrastructure will need huge investments

Transition strategy? If sales ban from 2030, manufacturers are likely to stop new models by 2025 or earlier. Uncertainties around current programme to move to Euro VI equivalent vehicles and fuels?



Energy Efficiency

01

Major programmes on lighting – building and street, pump set energy efficiencies, industrial energy efficiency

02

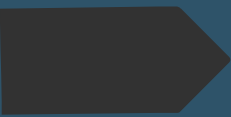
Interesting new models on market aggregation

03

Certification and standards

04

Waste to energy – knee jerk reactions



Energy Access and others

Still relying on extension of grid

Major announcement on 100%
electricity access by end of 2018

No clear strategy yet

Solar rooftops – 40 GW

Actual – 1 GW by September 2016





A small aside – Global Targets


- If we meet the Paris target, we will still have the committed climate change, whose effects are visible, and the impacts of the further temperature increase to cope with.
- Sustainable development would then mean that in addition to trying to progress from the current status, we negate effectively and almost immediately, any impacts of committed and future climate change.
- The effectiveness and practical implementability of the proposed adaptive strategies or the real costs of these are still poorly understood
- **And, if we don't meet this target**, then the risks of “large scale singular events” become high – we can then forget sustainable development?
- Paris agreement does not recognise a scenario above 2 deg C for adaptation purposes



Thank you

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- Climate change over the 21st century is projected to reduce renewable surface water and groundwater resources significantly in most dry subtropical regions (*robust evidence, high agreement*), intensifying competition for water among sectors (*limited evidence, medium agreement*). In presently dry regions, drought frequency will *likely* increase by the end of the 21st century under RCP8.5 (*medium confidence*). In contrast, water resources are projected to increase at high latitudes (*robust evidence, high agreement*). Climate change is projected to reduce raw water quality and pose risks to drinking water quality even with conventional treatment, due to interacting factors: increased temperature; increased sediment, nutrient, and pollutant loadings from heavy rainfall; increased concentration of pollutants during droughts; and disruption of treatment facilities during floods (*medium evidence, high agreement*). Adaptive water management techniques, including scenario planning, learning-based approaches, and flexible and low-regret solutions, can help create resilience to uncertain hydrological changes and impacts due to climate change (*limited evidence, high agreement*).⁴⁸
 - For Sea level rise, IPCC AR5 gives no adaptation strategies

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- If climate change was to reach 3°C, most of Bangladesh and Florida would drown, while major coastal cities – Shanghai, Lagos, Mumbai – would be swamped, creating large likely flows of climate refugees. Most regions in the world would see a significant drop in food production and increasing numbers of extreme weather events, whether heat waves, floods or storms. This likely scenario for a 3°C rise does not take into account the considerable risk that self-reinforcing feedback loops set in when a certain threshold is reached, leading to an ever-increasing rise in temperature. Potential thresholds include the melting of the arctic permafrost releasing methane into the atmosphere, forest dieback releasing the carbon currently stored in the Amazon and boreal forests, or the melting of polar ice caps that would no longer reflect away light and heat from the sun.
 - <http://america.aljazeera.com/articles/2015/9/23/climate-change-effects-from-a-3-c-world.html>

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- Adaptation Fund: Total contributions 618 Million Dollars
 - Cost to Puerto Rico alone of Hurricane Irma - \$ 45 to \$ 95 Billion!