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**CLIMATE
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**3rd ADB Virtual Dialogue on Resilient
Infrastructure Webinar:
Measures for strengthening resilience of
infrastructure**
December 2020

Professor John Dora
john.dora@climatesense.global



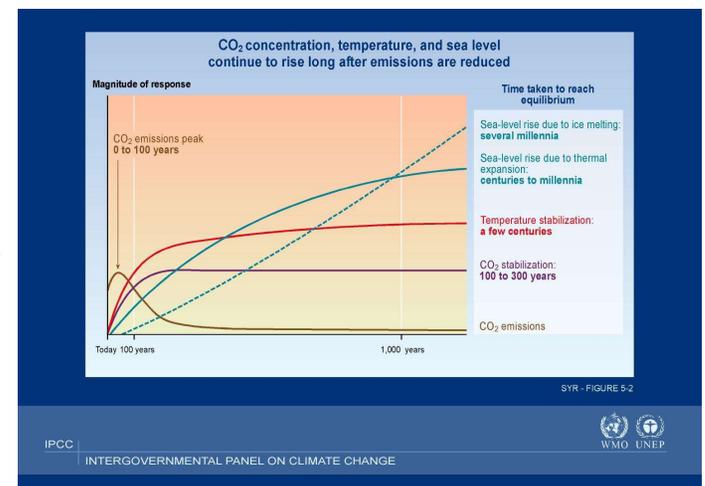
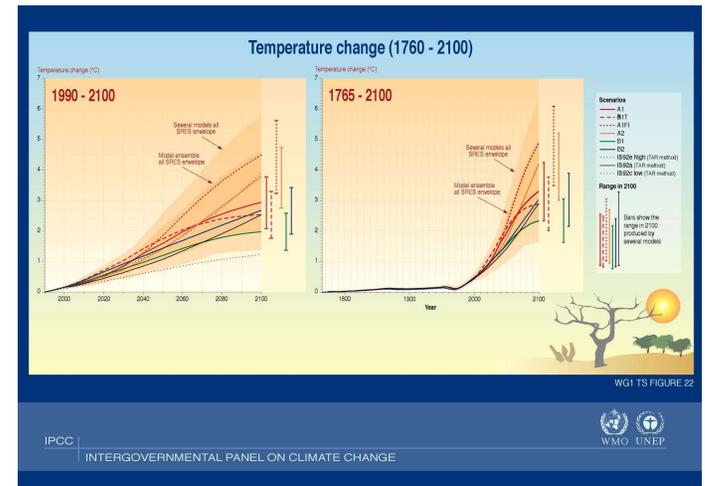
Dec 2020

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Scene and landscape

- Climate changing more rapidly than expected
- Paris 2016 Agreement
 - Includes for Adaptation – a more building resilient society
 - NDCs highly relevant – COP 26
- Paris 2016 ... we need to adapt ... rapidly!
- Centuries before global temperatures settle
- What about Infrastructure?

2/3 of the infrastructure needed for 2050 *has yet to be built* (World Bank, COP 22)



Infrastructure needs *Standards*

- Standards make a difference
 - Mandated v voluntary
 - Examples of standards
 - Government's Policies include 'Guidelines' and 'codes of practice' v 'Requirements'
 - Infrastructure design standards
 - Bringing benefits and value
 - Recognised *best* practice
 - Politically neutral
 - Adoption into infrastructure lifecycle
 - ISO 14090 Adaptation to climate change
- BUT: Many need modifying** to cover future resilience - Climate demographic, population change



Standards' entry points

- Planning and development: actions prior to project inception
- Early stages of project design
- Structural design stage
- Construction, maintenance and operational stages

Good practice:

- Good conceptual design very early on in the development of an infrastructure project can mean lower costs and better serviceability and safety of operation throughout the project's lifecycle –
- Easier to change designs whilst drawings are on the 'drawing board' than when construction is underway.
- Even better to avoid exposure to hazards through planning rules



Practical examples

- ISO 14090 Adaptation to climate change (2019) - international BEST practice in resilience planning
 - Applicable to ANY organisation, ANY sector
 - Takes a flexible approach and is applicable at any stage of adaptation
 - Systems, risk, data, uncertainties covered
 - Enables tailored solutions, not 'one size fits all'
 - Iterative – not linear - use no matter what stage you are at in adaptation
 - Embeds as 'business as usual'
 - Links to Paris 2016 and UN SDGs
 - Monitoring, evaluating and making the right changes
- Make the best of existing design codes
 - Adapt them to suit local and future conditions
- Next generation Structural Eurocodes to be modified to for future climate data
- Much guidance available



Opportunities

- Link planning policy with avoiding development in exposed areas
- Review long-term infrastructure policies and strategies
- Adopt risk-based adaptation
- Think 'systems'
- Use a managed adaptive approach
- Build sustainability into decision making
- Build back better after destruction

Lenders, Governments, Clients ALL can specify future climate resilience, compliant with existing standards





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THANK YOU

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