

28 September 2011

Climate and Development in the Year 2050: Well-Adapted?

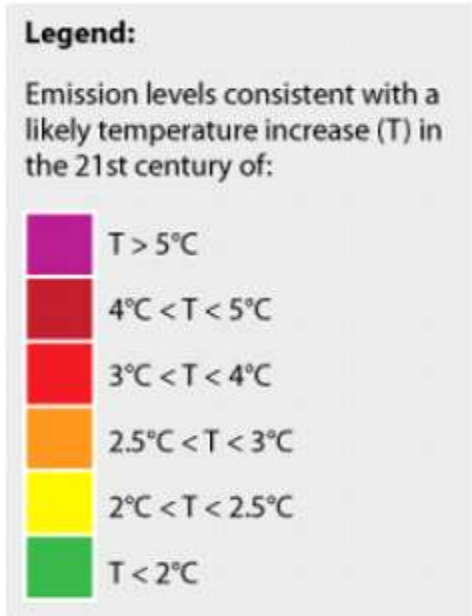
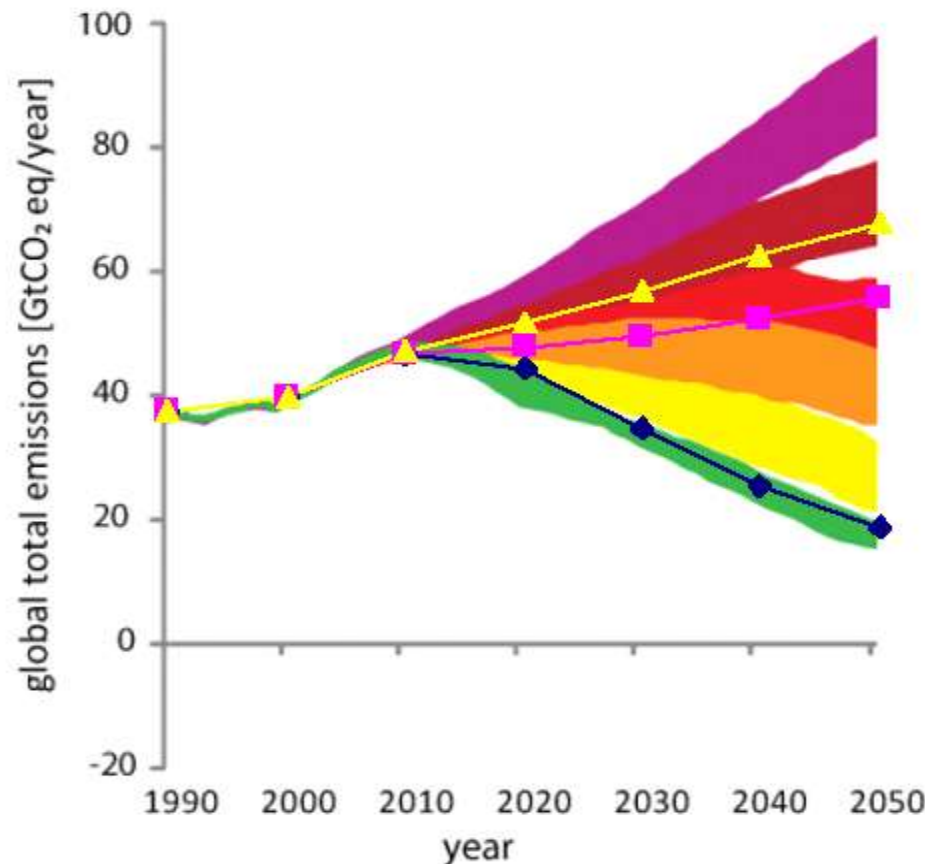
Berlin Summer Dialogue 2011

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- Impacts of Climate change
- International negotiations (UNFCCC)
- Financing climate
- EU
 - Mitigation
 - EU White Paper on Adaptation
 - EU Adaptation Strategy 2013 and Clearinghouse Mechanism

The impact of climate action on the global temperature increase by 2050

Global emissions pathway in the next 40 years will determine likely warming by the end of the century



Impacts by 2050

Africa: projected sea level rise will affect low-lying coastal areas with large populations -> cost of adaptation could amount up to 10% of GDP

Asia: increase of morbidity/mortality due to diarrhoeal diseases primarily associated with floods/droughts in E-, S-, S-E-Asia

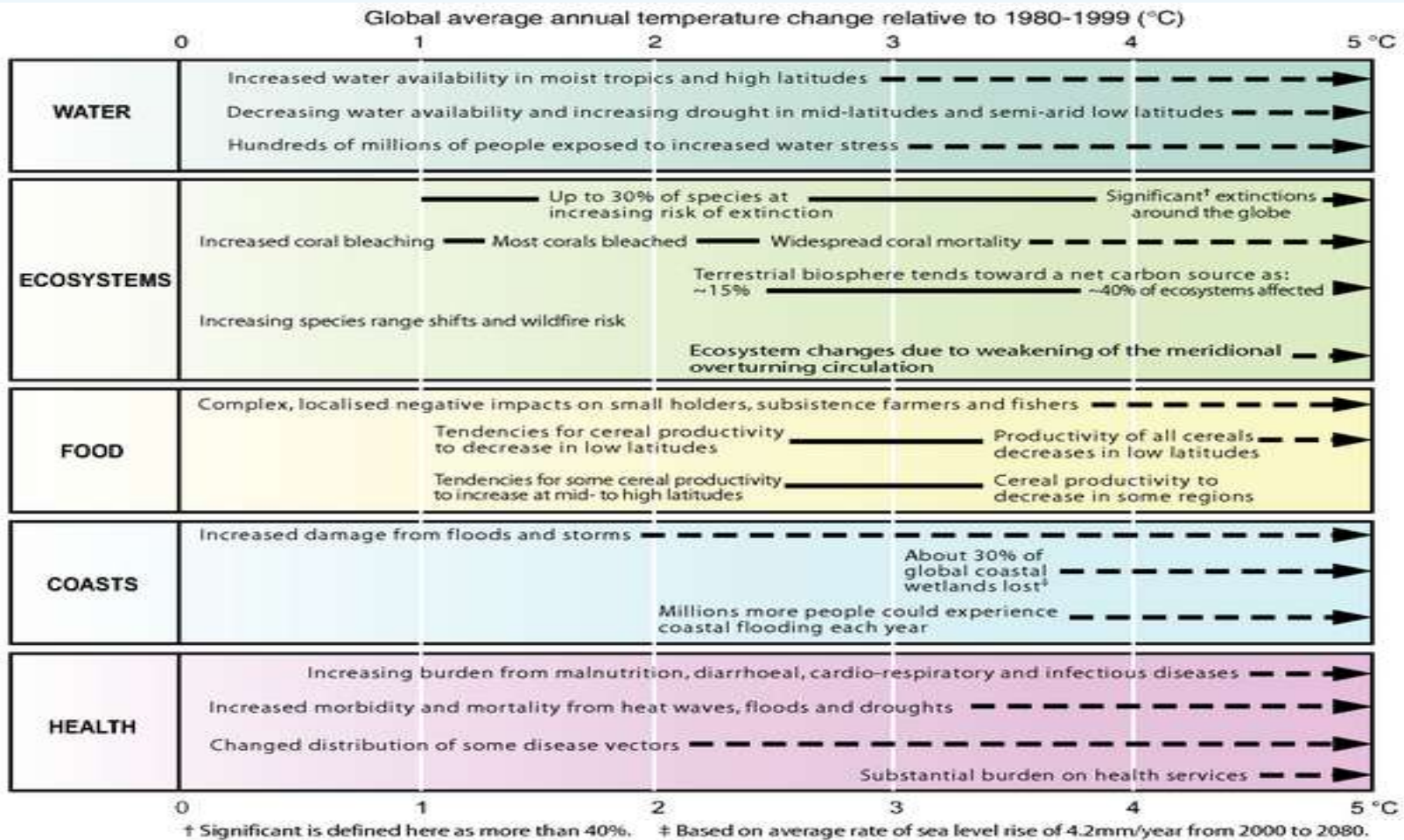
North America: cities further challenged by increased number, intensity, duration of heat waves

Latin America: decrease in soil water gradually replaces tropical forest by savanna in eastern Amazonia

Not to forget:

- projected world's population of more than 9bn people -> more than 1bn people will face shortage of fresh water and food
- IPCC highlighted that impacts of climate change are likely to result in migration.

Impacts associated with global warming



The way forward....

- **Impacts are already being felt all over the world**
 - ↳ **Mitigation efforts** at all levels (UNFCCC, national, regional) have a **crucial role to play** over the next years/decades in order to reach the 2° goal
- **The less we mitigate, the more we have to adapt**
 - ↳ Economic, social and environmental pressure in particular for SIDS, LDCs
 - ↳ We need to invest in adaptation measures now in order to avoid higher costs in the future



Aggregated damage and adaptation costs for Europe

- **UNFCCC** (2007) estimates the costs of adaptation in the infrastructure and coastal protection sectors at EUR **2.5–16 billion/year** for Europe by 2030
- **SOER 2010** applying the PAGE model to the Stern Review findings assumes adaptation costs for the EU15 of **€ 21–50 billion/year** with a mean estimate of € 37 billion/year
- **ADAM** project reports adaptation costs in Western Europe in 2020 estimated at 0.04 % of GDP (**€ 4.1 billion**) rising to 0.13 % of GDP (**€ 29 billion**) in 2050 under a 2°C scenario

Economic Impacts of Climate Change in Europe (no adaptation)

Analysis	Current	2020s	2050s	2080s
Top Down Estimates (PAGE model) marginal additional costs of climate change over current				
A1B		€19 billion/year equivalent to 0.06% GDP	€144 billion/year equivalent to 0.5% GDP	€2494 billion/year equivalent to 3.7% GDP
2 degrees		€18 billion/year equivalent to 0.06% GDP	€93 billion/year equivalent to 0.3% GDP	€596 billion/year equivalent to 0.9% GDP

Source: ClimateCost



International negotiations - UNFCCC

- Aiming for a global and comprehensive legally-binding framework consistent with the 2°C objective engaging all major economies
- Full Implementation and operationalisation of the Cancun Framework on Adaptation



UNFCCC - Cancun Adaptation Framework

- **Adaptation Committee:**
 - gathering and providing relevant information and knowledge, increasing technical support, facilitating implementation of activities, strengthening synergies with other organisations
- **Work program on loss and damage:**
 - serve as a knowledge base with broad involvement of stakeholders
 - Managing risks and vulnerabilities should follow a country driven approach with support of international community
- **National Adaptation Planning:**
 - Process for LDCs to plan, prioritize, implement medium- and long-term adaptation needs and implementing strategies and programmes to address those needs
- **Green Climate Fund:**
 - Complementing the network of funding mechanisms in addressing adaptation, REDD+ and mitigation
 - Providing and mobilizing resources for under-funded areas

Climate change & Finance

Fast-Start-Financing:

- EU's overall commitment to provide € 7.2 billion for the period 2010-2012 (about one third of all fast start funding)
- In 2010, the EU engaged € 2.2 billion of fast start funding

Supporting existing multilateral funding instruments

- 57.4% (€ 1.2 billion) of 2010 fast start funding delivered through multilateral channels
- E.g. Climate Investments Funds, Global Environment Facility, Adaptation Fund, LDC Fund, Forest Carbon Partnership Facility, etc.

Long-term financing:

- ***Cancun Agreements:***
 - commitment to mobilise USD 100 billion by 2020 in the context of meaningful mitigation action and transparency on implementation
 - from a variety of sources: public, private, innovative sources, etc.
- Commission staff working document on "***Scaling up international climate finance after 2012***" of April 2011
 - confirms that it will be "challenging but feasible" to meet the goal of mobilising USD 100 billion per year by 2020
 - identifies a number of possible sources for climate financing

GCCA – Global Climate Change Alliance

- **Cooperation intending to** deepen dialogue, cooperation and enhance support on climate change, especially in the context of the international negotiations for a post-2012 climate regime, between the European and:
 - the most vulnerable to climate change, in particular Least Developed Countries (LDCs)
 - Small Island Developing States (SIDS)
- **Priority Areas:**
 - Adaptation, REDD, CDM, promoting DRR, mainstreaming climate change into poverty reduction development strategies
 - Budget support as preferred modality
- **Budget**
 - € 200 million (2008-2011)
 - € 60+ million (2012-2013)



Examples of GCCA projects

- **SAMOA: Supporting Climate Change Adaptation for the Samoan Water Sector**
 - Integration of adaptation in the Water for Life Sector Plan and programme cycle
 - Rehabilitation/reconstruction (system) of drainage infrastructure Asset Management system and implementation of maintenance plan for drainage infrastructure

- **BHUTAN: Climate change adaptation in the renewable natural resources (RNR) sector**
 - Mainstreaming climate change adaptation in the RNR sector E.g. integration in the five-year plan
 - Climate change adaptation is considered and approached as multi-sectoral theme E.g. Institutional framework

EU - mitigation

Europe 2020 Strategy – climate part

- 20% cut in GHG emissions by 2020 – conditionally up to 30%
- 20% of energy from renewables
- 20% increase of energy efficiency



Roadmap 2050

- Objective of reducing GHG emissions by 80-95% by 2050 compared to 1990



EU White Paper on adaptation

Adopted in April 2009

- Outlines an action plan on four pillars
 - Strengthen the knowledge base
 - Mainstreaming climate Adaptation into key policy areas
 - Policy instruments for financing adaptation
 - Stepping up international cooperation

- includes 33 long-term actions
 - (29 actions are ongoing or already completed)

- Implementation phase : 2009-2012




EU Adaptation Strategy EU Clearinghouse Mechanism

2013 EU Adaptation Strategy

- Enhancing the knowledgebase and widening access to information
- Mainstreaming adaptation into policies, strategies and programmes at EU level
- Support and facilitation for Member States, regions, cities and other stakeholders
- Capturing the potential of the market, market-based instruments and the private sector

EU “Clearinghouse Mechanism”, a major information portal on adaptation

- disseminate the best scientific information on projected climate change impacts and vulnerabilities for the EU
- provide guidelines and tools to develop adaptation strategies
- help to form networks between stakeholders facing similar adaptation challenges
- Project launched in 2011 by DG CLIMA – will be operational in March 2012



In 2050, the earth could be ravaged by hurricanes and droughts, and populated by millions of climate refugees.

It would be the result of the world's failure to act on time, despite seeing the writing on the wall.

DW-world.de

<http://ec.europa.eu/clima/sites/change/>

Thank you very much for your attention!

