



## Climate Change, Energy & Security: Challenges & Prospects

1<sup>st</sup> Preparatory Meeting , 21<sup>st</sup> OSCE Economic and Environmental Forum ,  
Vienna, 4 February 2013

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### Topics and Services

**❖ Creative Solutions and Service Provider for ecological, social, economic, and political challenges**



- Strategies and solutions for global sustainability topics
- Integrated research and consulting approach
- Interdisciplinary team of experts with 80 staff members
- Global network of partners and service providers
- Worldwide 500 successfully completed projects

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## Introduction



### Key Questions:

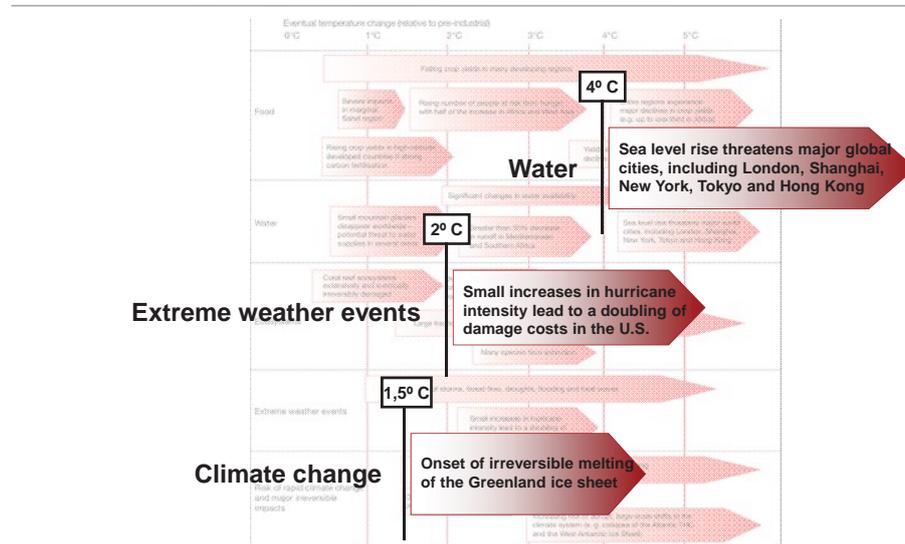
- How is climate change related to peace and security ?
- How will future energy consumption affect climate change?
- How can climate & energy policies support security, stability and also wealth?



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## Scale of Climate Impacts



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## Climate, Conflicts and Stability



**Resources:** Competition over resources (land, water, energy, food, labour, income, ...) will increase.

**Borders:** Sea-level rise will question the territorial integrity of states and it may exacerbate unresolved maritime issues

**Fragility:** Changing distribution of resources and inadequate management of climate impacts may erode the social contract – and may (further) destabilise states.



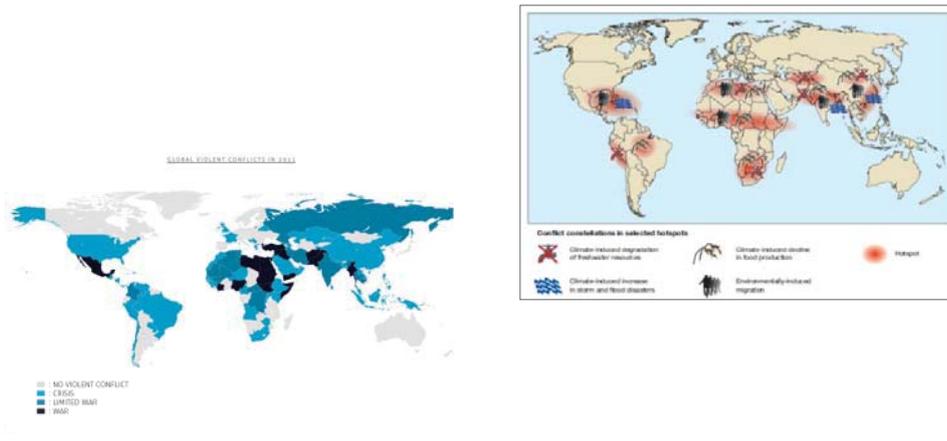
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## “Regions at risk”



Already fragile/ unstable states are primarily affected by climate change



Crisis and Wars in 2011 (HIK 2012); German Advisory Council on Global Change (WGBU) (2007) 7



# Global Energy Prospects



## World Energy Outlook 2012

„Taking all new developments and policies into account, the world is still failing to put the global energy system onto a more sustainable path.“

## Energy-related CO2 emissions:

31.2 Gt >> 37.0 Gt (2011-2035)

## Fossil fuel share/global energy mix:

81% >> 75%

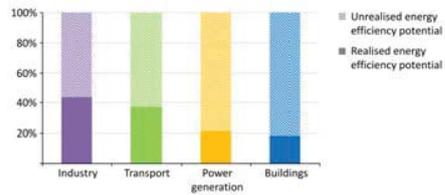
## Sustainable Prospects (2010-2035):

\* Share renewables / global electricity:

20% >> 31%

\* Share global water use for energy:

15 >> 35%



*Two-thirds of the economic potential to improve energy efficiency remains untapped in the period to 2035*

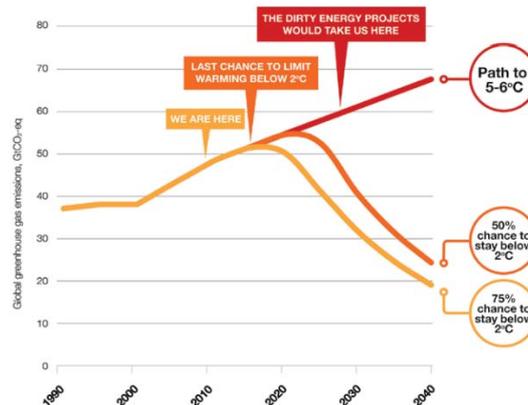
Source: International Energy Agency 2012: "World Energy Outlook"

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# Possible fossil fuels & climate change scenario "Point of no return"



❖ The impact of 14 enormous coal, oil and shale gas extraction projects



Source: Greenpeace 2013: "The massive climate threats we must avoid"

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## Climate Change and Security at the UN level



❖ “The Security Council expresses its concern that possible adverse effects of climate change may, in the long run, aggravate certain existing threats to international peace and security .”



**April 2007:** Debate in the UN Security Council at the Initiative of the UK

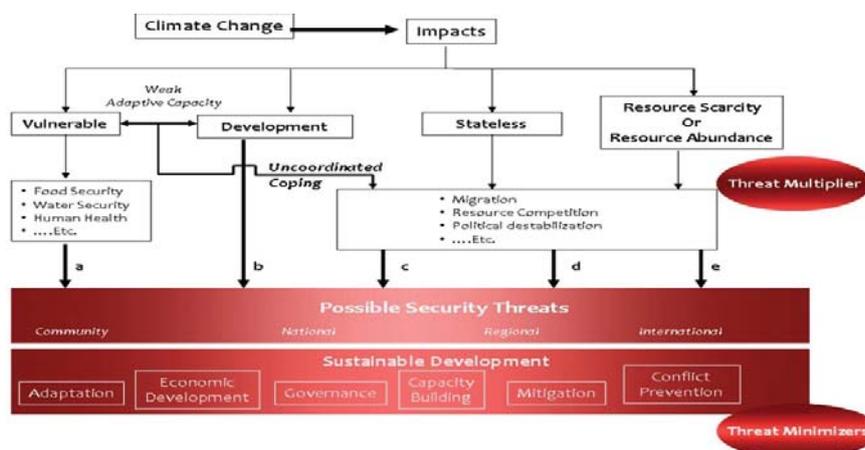
**June 2009:** UN Resolution on climate change and security, report by the Secretary- General

**July 2011:** Debate in the UN Security Council under the German Presidency - PRST

## Climate Change and Security at the UN level



United Nations – Report by UN Secretary -General in September 2009



Source: UN Secretary General 2009

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## Areas of activity for climate diplomacy



### Area 1: Adaptation to Climate Change

Conflict-sensitive approaches, policy coordination, participation, institutional strengthening, long-term financing

### Area 2: Transboundary Environmental Cooperation

River basins, Nature reserves (Peace Parks), trust- and peace-building,

### Area 3: Early Warning Systems and Vulnerability Assessment

Integrate natural, geographical and political information, assessments as basis for informed decision making, early warning – early action

### Area 4: Sustainable Energy Policies and Green Economy

Build partnerships to design / implement policy measures such as low carbon and green growth strategies, renewable energy incentives or emission trading

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Please find more information at [www.climate-diplomacy.org](http://www.climate-diplomacy.org)



### Europe's thirst for biofuels spells hunger for millions

Land used to power European cars with biofuels for one year could produce enough wheat and maize to feed 127 million people, Oxfam reveals ahead of today's important EU Energy Ministers' meeting.

[read more >](#)

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