


19TH OSCE ECONOMIC AND ENVIRONMENTAL FORUM
“Promotion of common actions and co-operation in the OSCE area
in the fields of development of sustainable energy and transport”
CONCLUDING MEETING
Prague, 14-16 September 2011
Special Session 1

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**Integrated Solutions –
The Key to Sustainable Energy Use**

Insights from the Global Energy Assessment

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Confronting the Challenges of Energy for
Sustainable Development:
The Role of Scientific and Technical Analysis

IIASA
International Institute for Applied Systems Analysis
and its international partners present

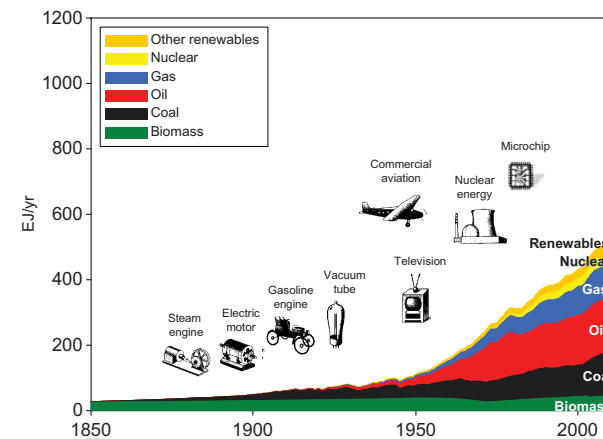
www.GlobalEnergyAssessment.org

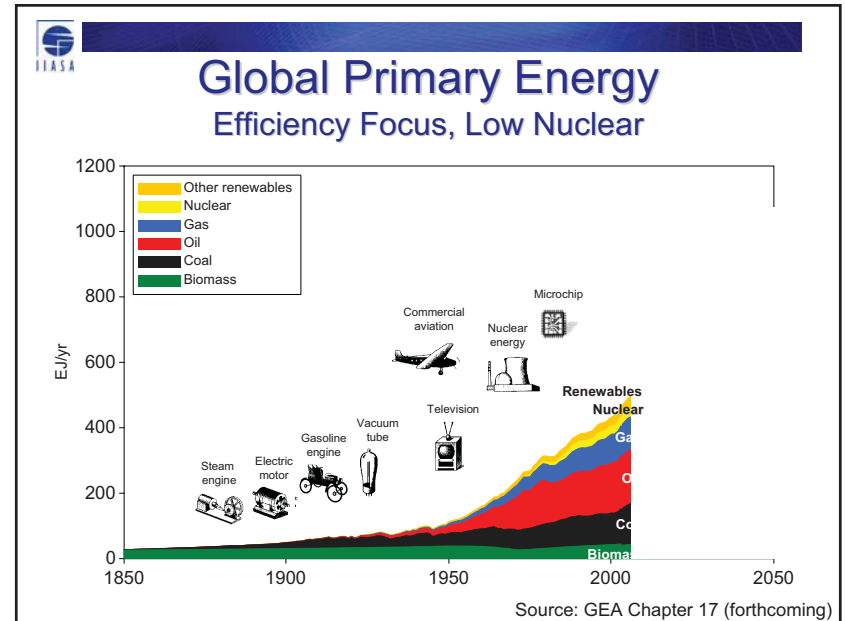
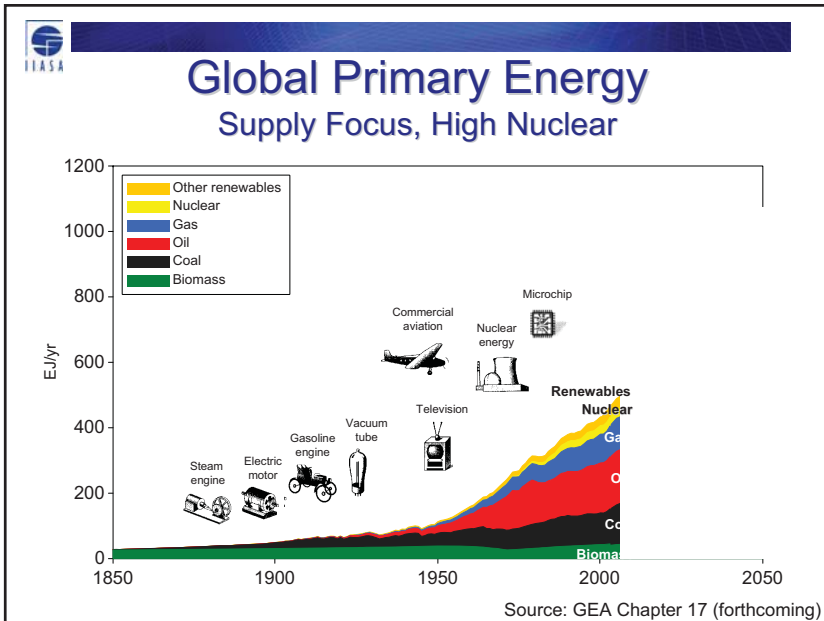
Toward a more Sustainable Future

- Energy is a crucial development goal for responding to challenges in the 21st century
- Universal access is a pre-condition for overcoming poverty and feasible if all stake-holders work together.
- Energy transformation will bring multiple co-benefits for health, security, climate change
- Financing requirements are huge but achievable with right and sustained policies

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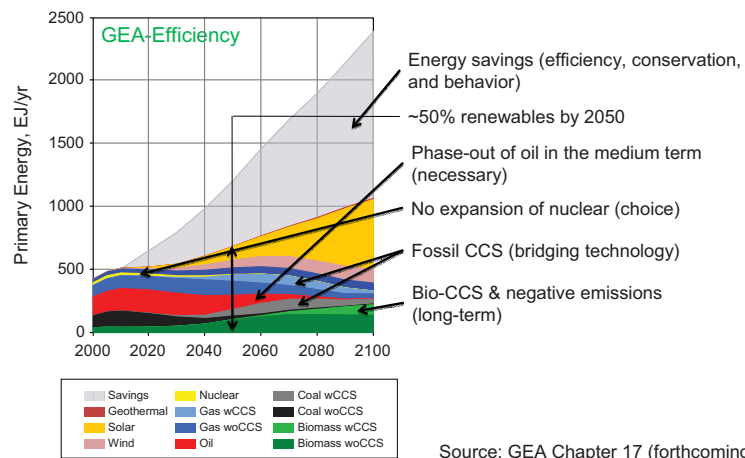
Global Primary Energy Industrial Revolution until Today







Efficiency & "Smart" Systems = high flexibility for supply



Example of savings by reconstruction

Before reconstruction



over 150 kWh/(m²a)

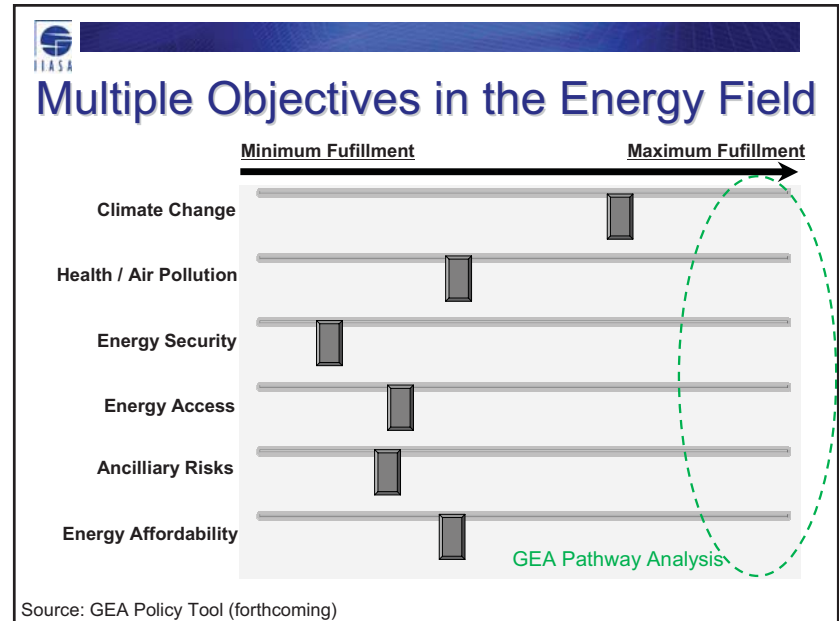
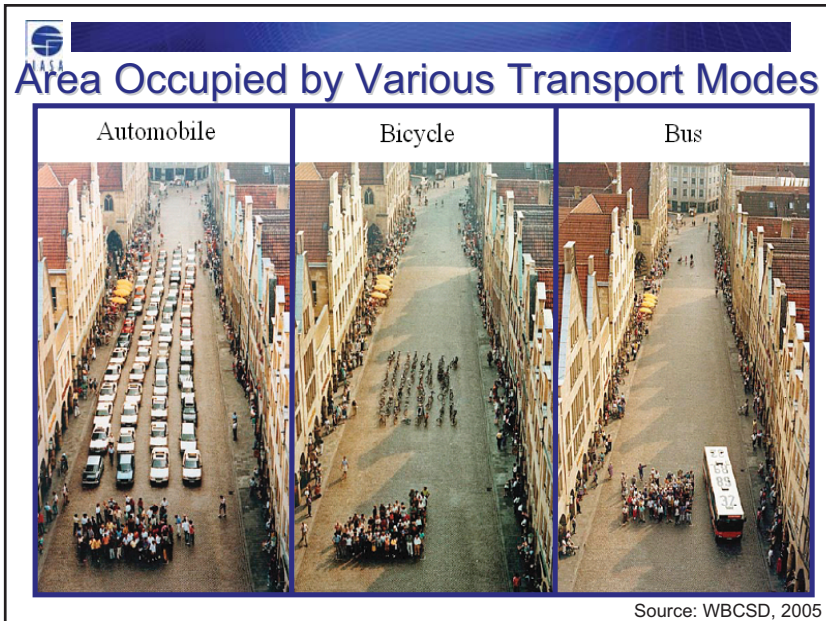
Reconstruction according to the passive house principle



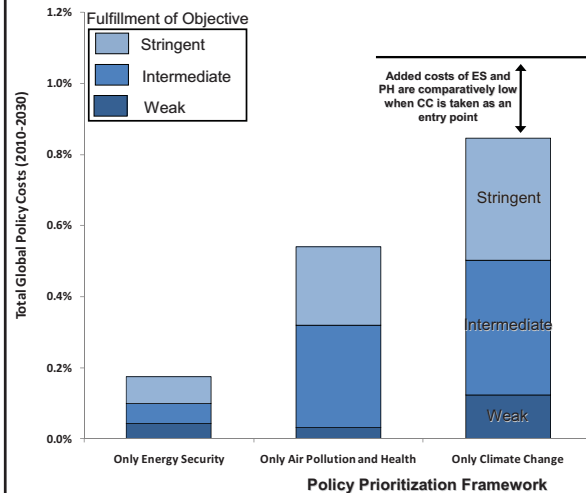
15 kWh/(m²a)

-90%

Source: Jan Barta, Center for Passive Buildings, <http://www.pasivnidomy.cz>, EEBW2006



Synergies of Multiple Objectives



Some Final Thoughts...

- Integrated approaches are the key to sustainable energy use
- In most countries separate institutions are tasked with analyzing and establishing policies for the different energy-related objectives
- Bundling responsibilities in fewer institutions as well as coordinating internationally will help facilitating integrated approaches
- An opportunity for OSCE?



Thank You!

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