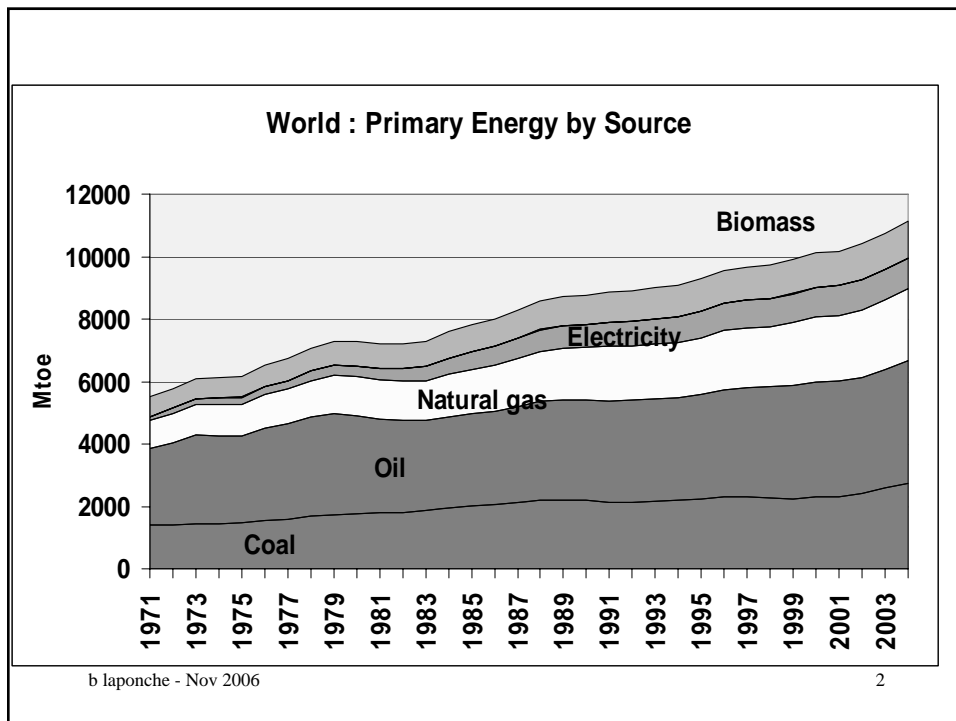


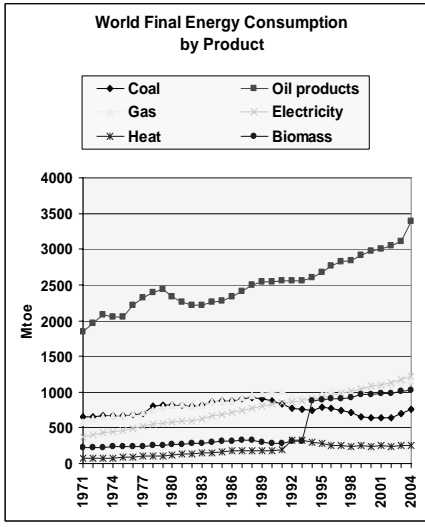
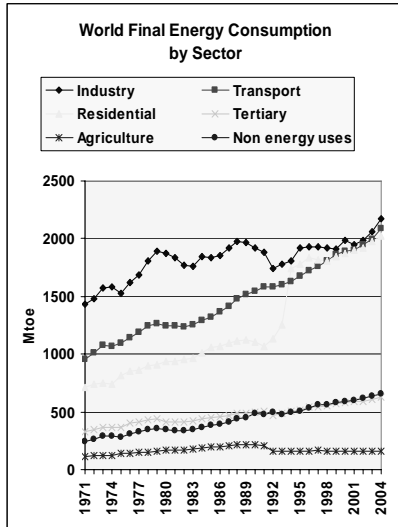
# Energy Efficiency

For Energy Security and Sustainable Development

Bernard LAPONCHE

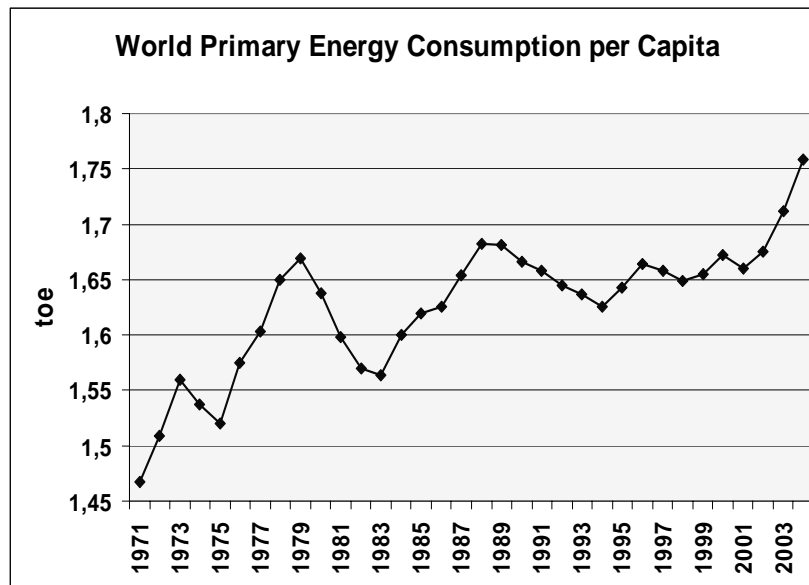
UNECE - Sustainable Energy Committee  
Geneva - November 30, 2006





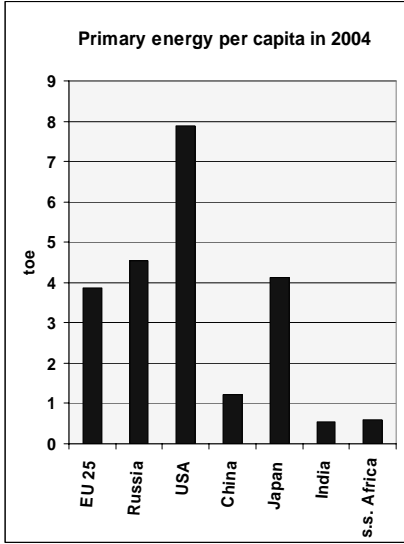
b laponche - Nov 2006

3

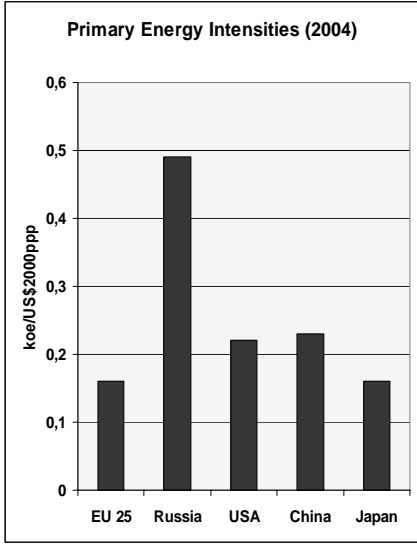


b laponche - Nov 2006

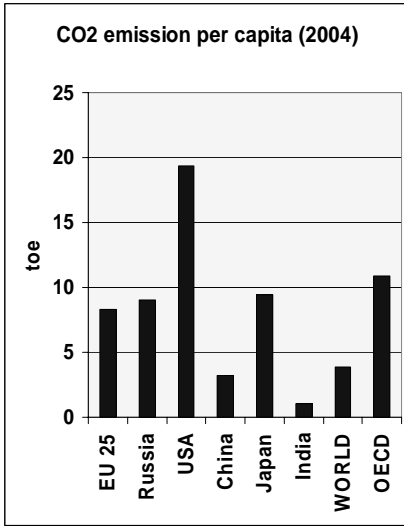
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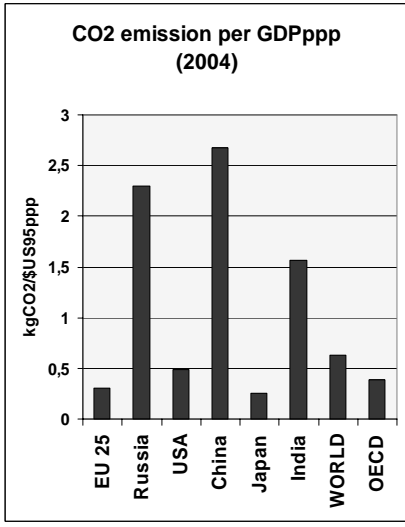
b laponche - Nov 2006



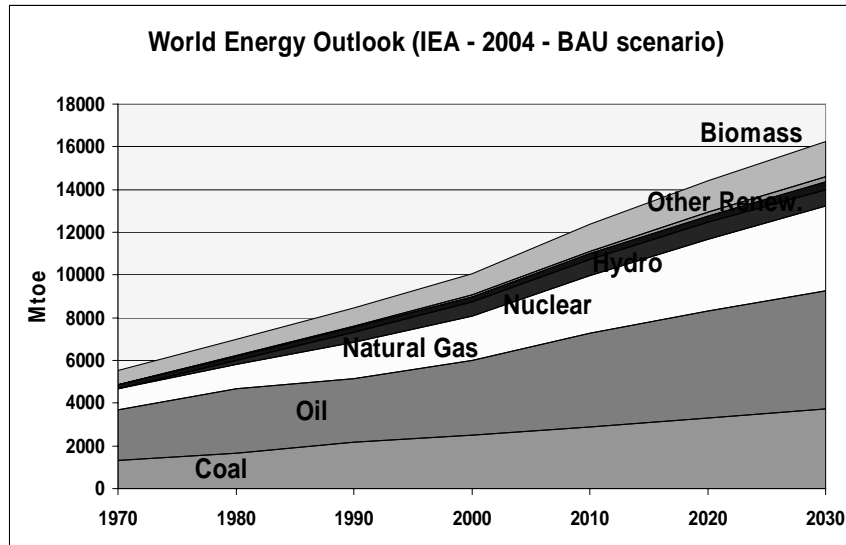
5



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6



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7

**This is not sustainable**

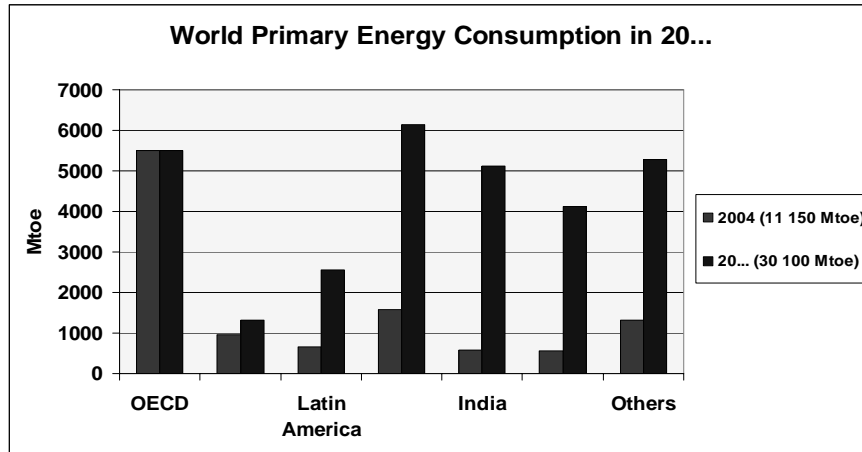
« With current policies, our energy future is insecure and environmentally unstable »

*IEA Executive Director (Nairobi, November 14, 2006)*

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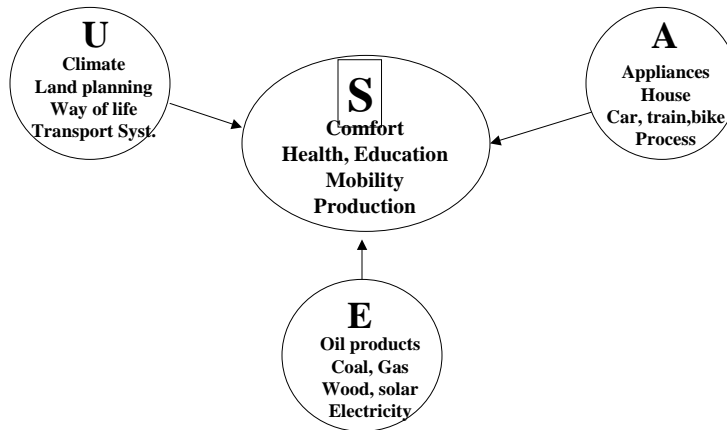
# What if?



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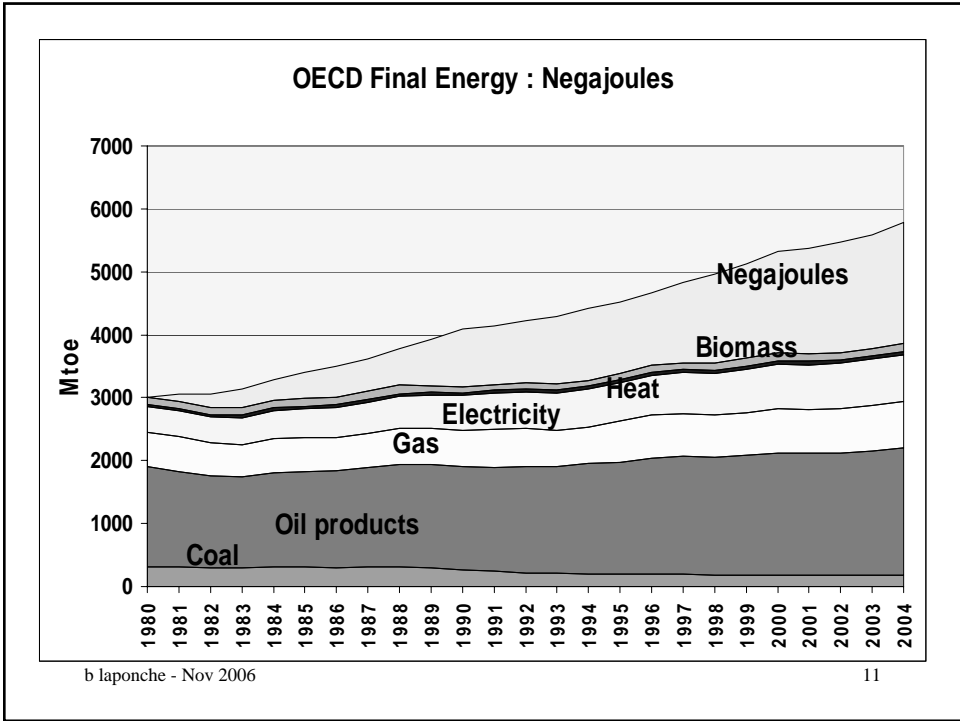
9

## New Energy Paradigm

$$S = U * A * E$$


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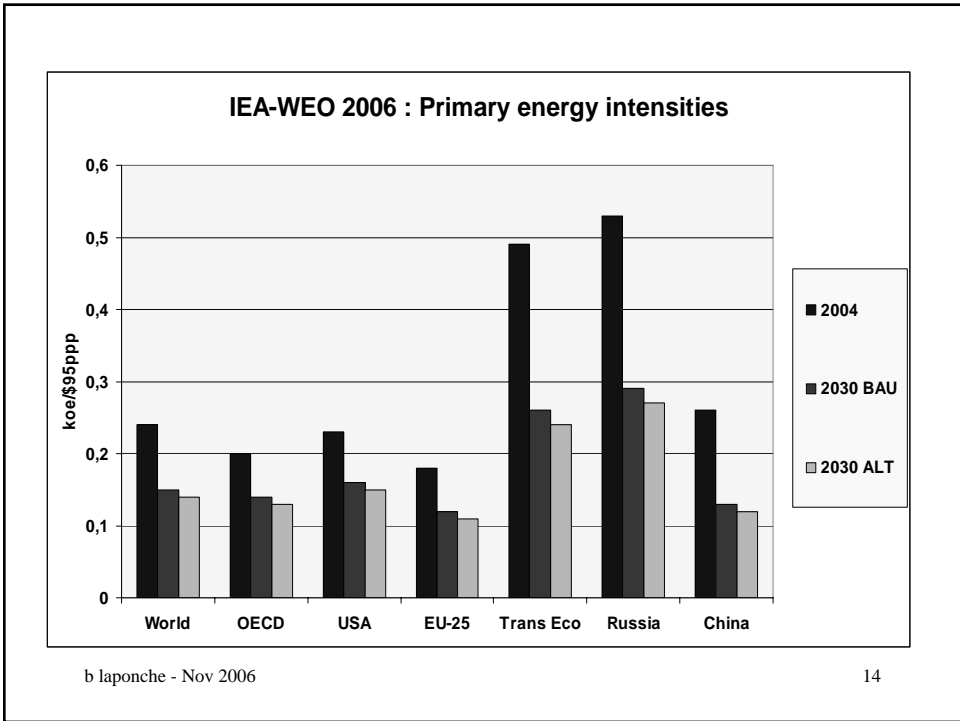
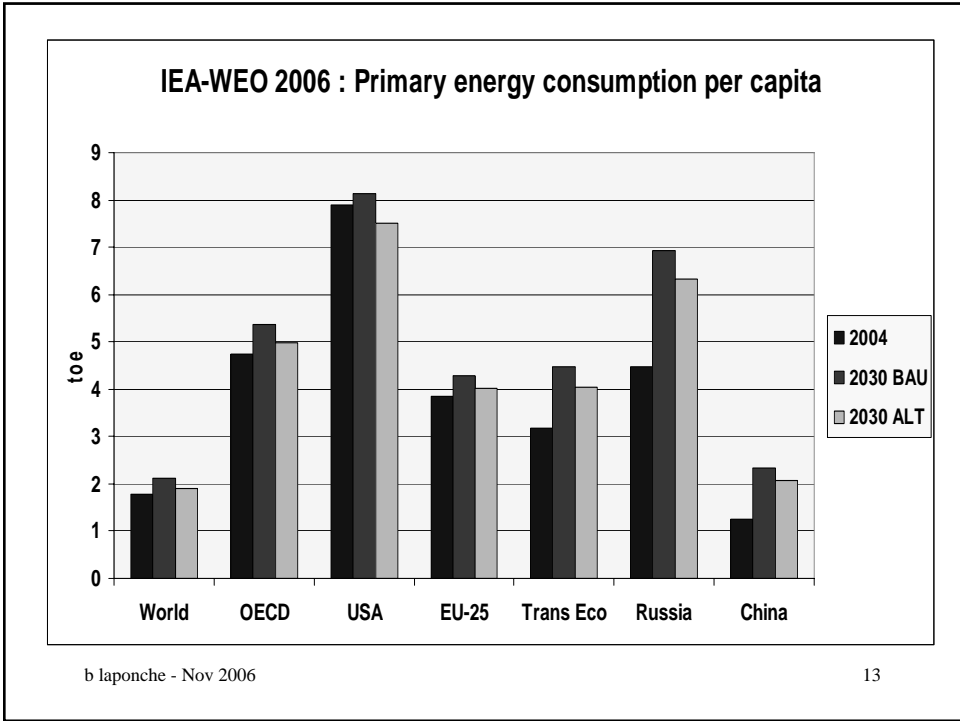
10



### Potentials of energy savings at year 2020 in the Green Paper on Energy Efficiency (June 2005) For the EU (25)

Potential savings in Mtoe	2020 Rigorous implementation of adopted measures	2020+ Implementation of additional measures
Buildings heating/cooling, electric appliances	56 (41) (15)	105 (70) (35)
Industry	16	30
Transport	45	90
Co-generation	40	60
Other energy transformation, etc.	33	75
<b>TOTAL energy savings</b>	<b>190</b>	<b>360</b>

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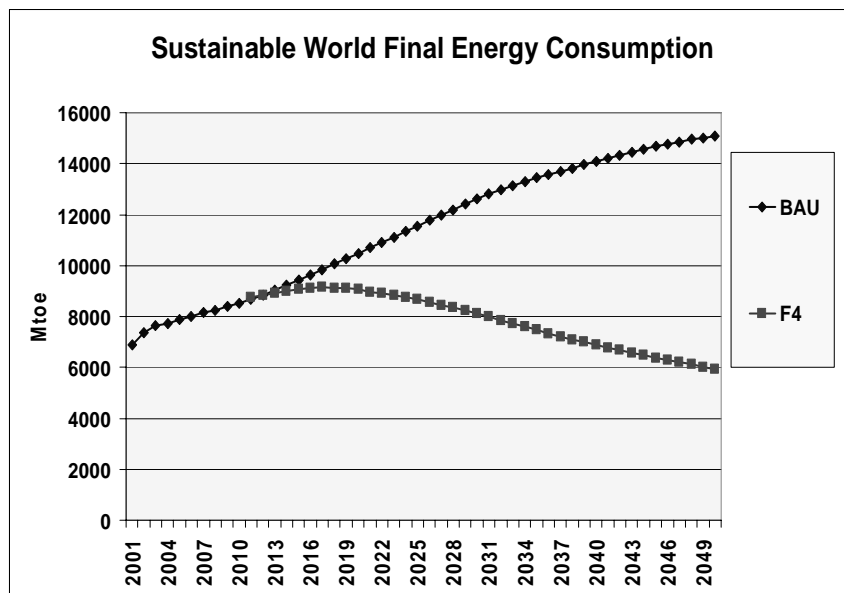


## Energy Efficiency Scenarios for Transition Economies & Russia

- Energy Intensities Convergence
- South East & Central Europe, 2030: EU 15, 2015
- CIS & Russia, 2030: OECD & USA, 2015
  
- EE potential at 2030: about 35%
- Russia: 300 Mtoe in 2030

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## Messages and Lessons Learnt

- A common strategy: non sustainability, convergence, win-win actions
- Accumulated experience and good practice
- The human factor
- Appropriate tools and financial mechanisms