

„Lead Study 2007“

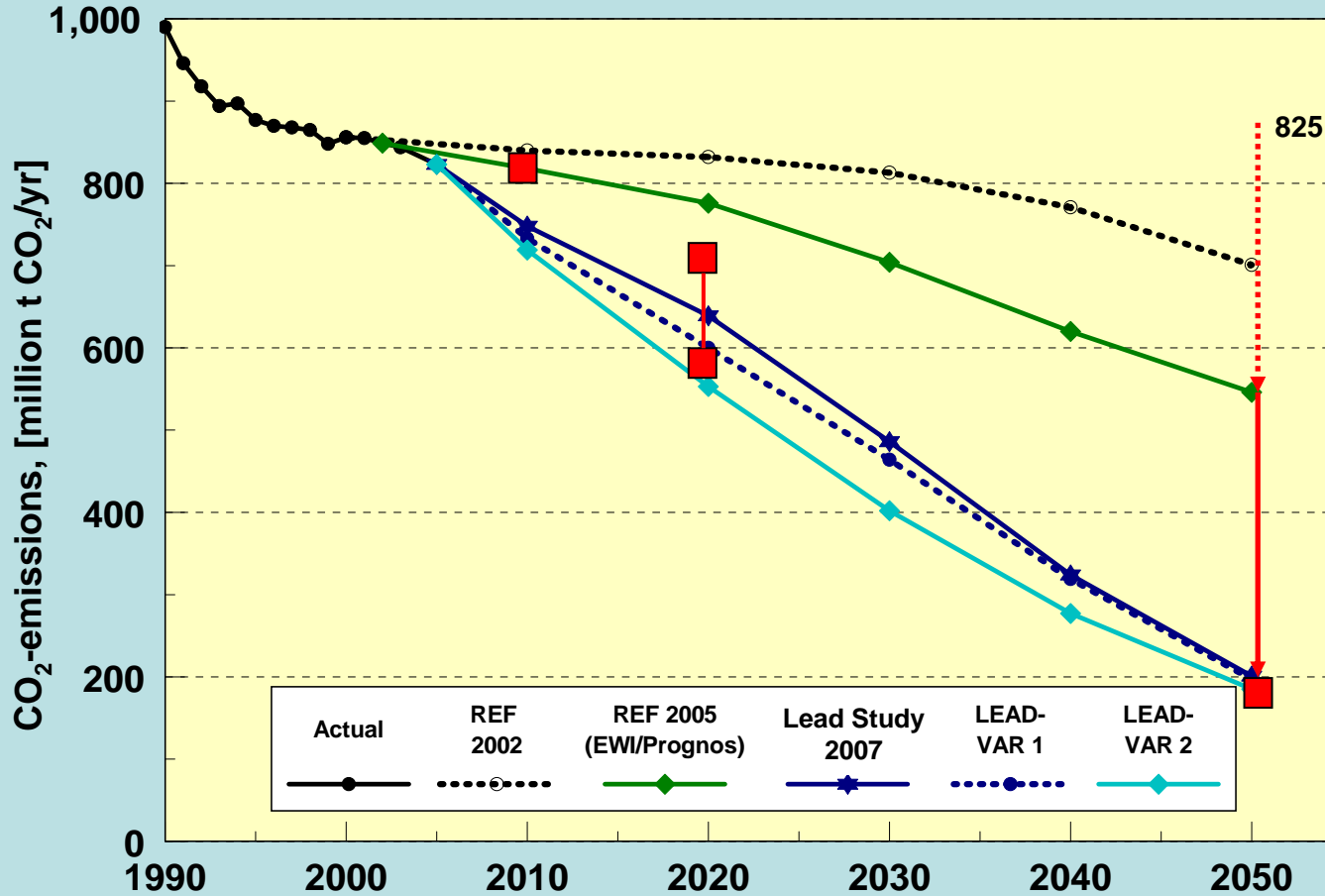
- The German Strategy to increase the use of renewable energies**

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Germany's necessary contribution to climate protection until 2050

- only energy related emissions -



CO₂-reduction goals with regard to 1990:

21 % until 2008-2012 (Kyoto)

30 - 40% until 2020

80% until 2050

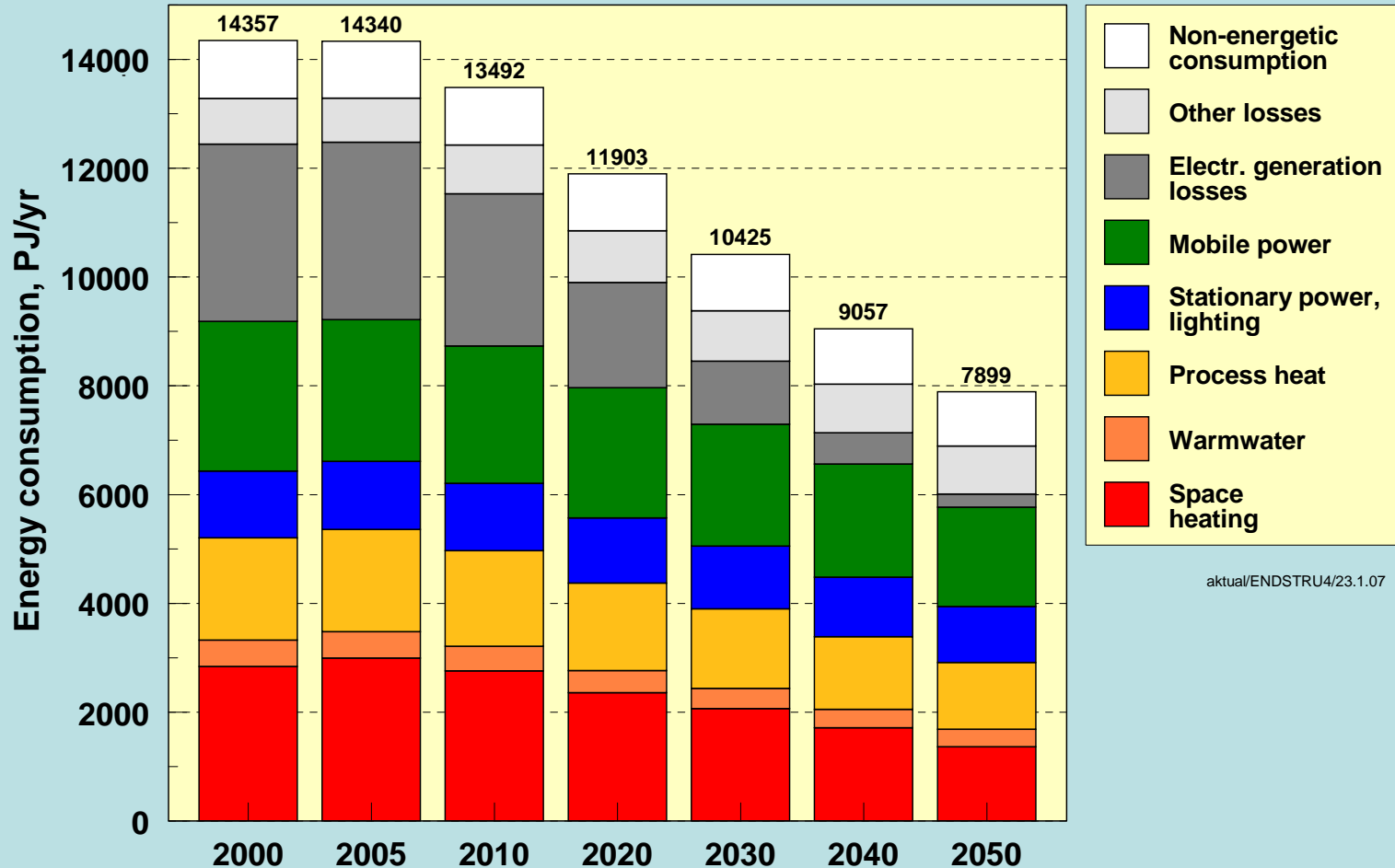
Aktual/co3; 5.4.07



Element I: Strong growth of energy efficiency

Reduction until 2050: Final energy - 38%; Primary energy - 45% (cogen. from 10% to 25%)

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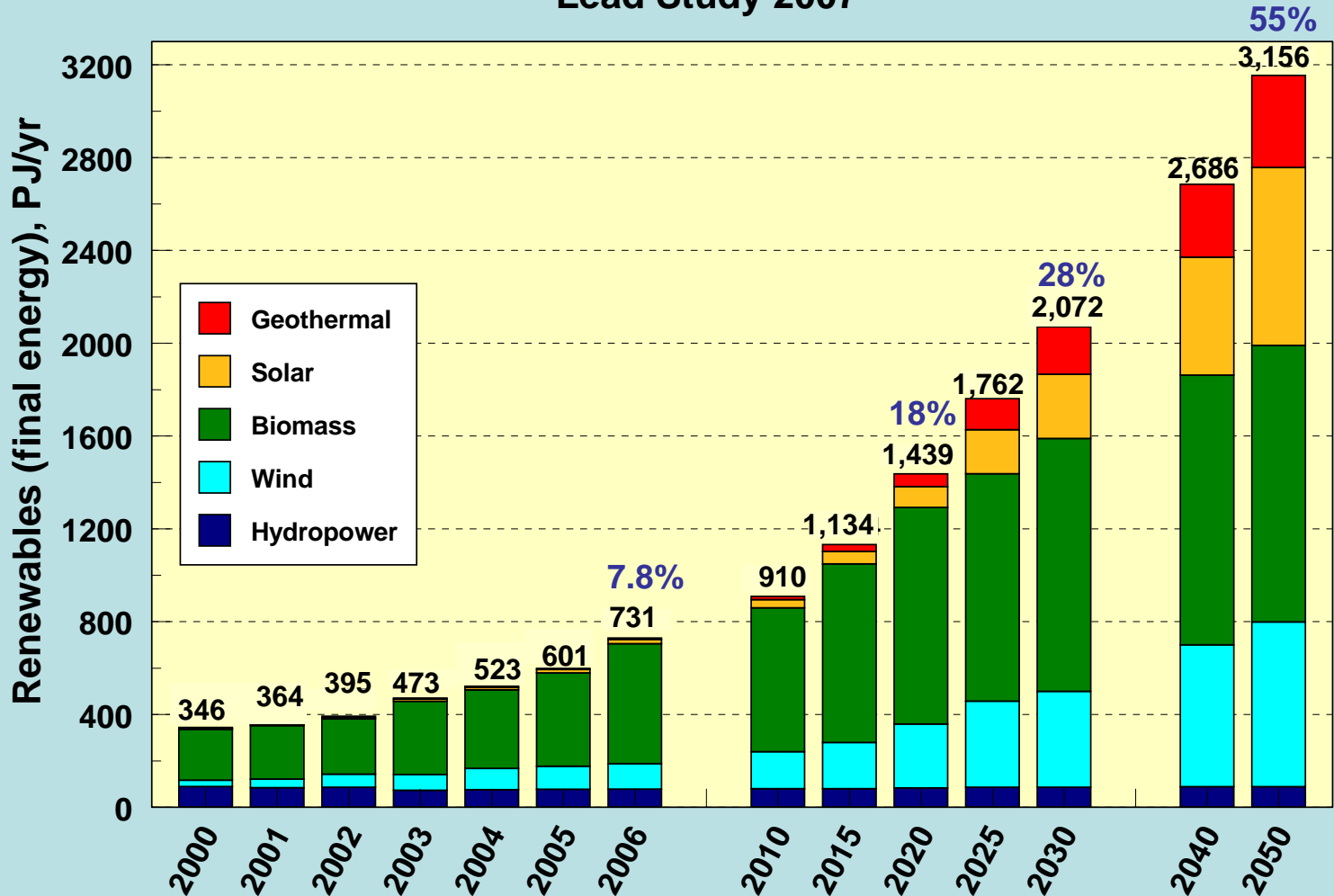


Element II: Building up of renewables:

Average growth of the renewable share 2006 -2050: 1 %/a

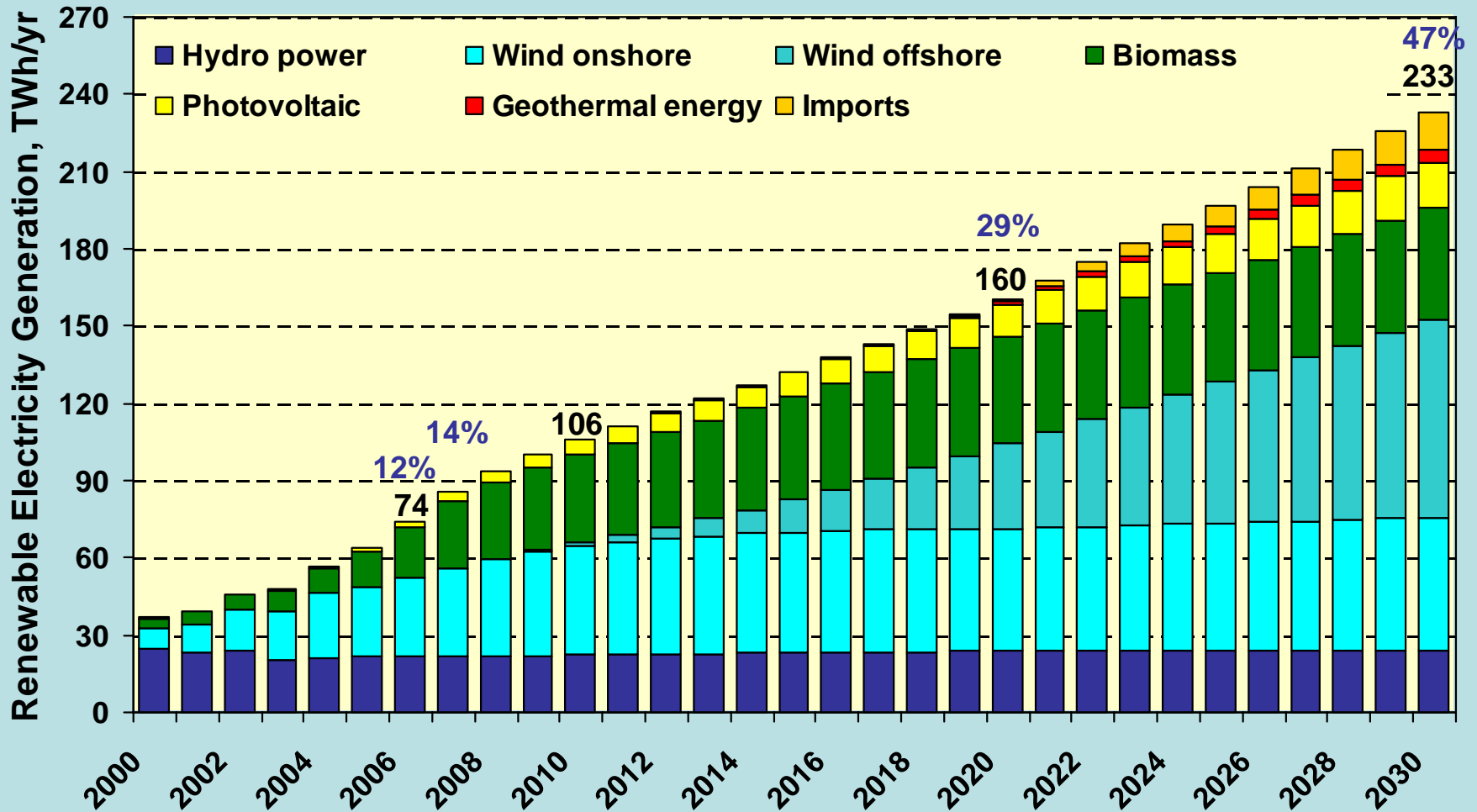
(Shares in 2007/2020/2050 : electricity 14/29/79%; heat 6.5/14/48%; fuels 7/17/42%)

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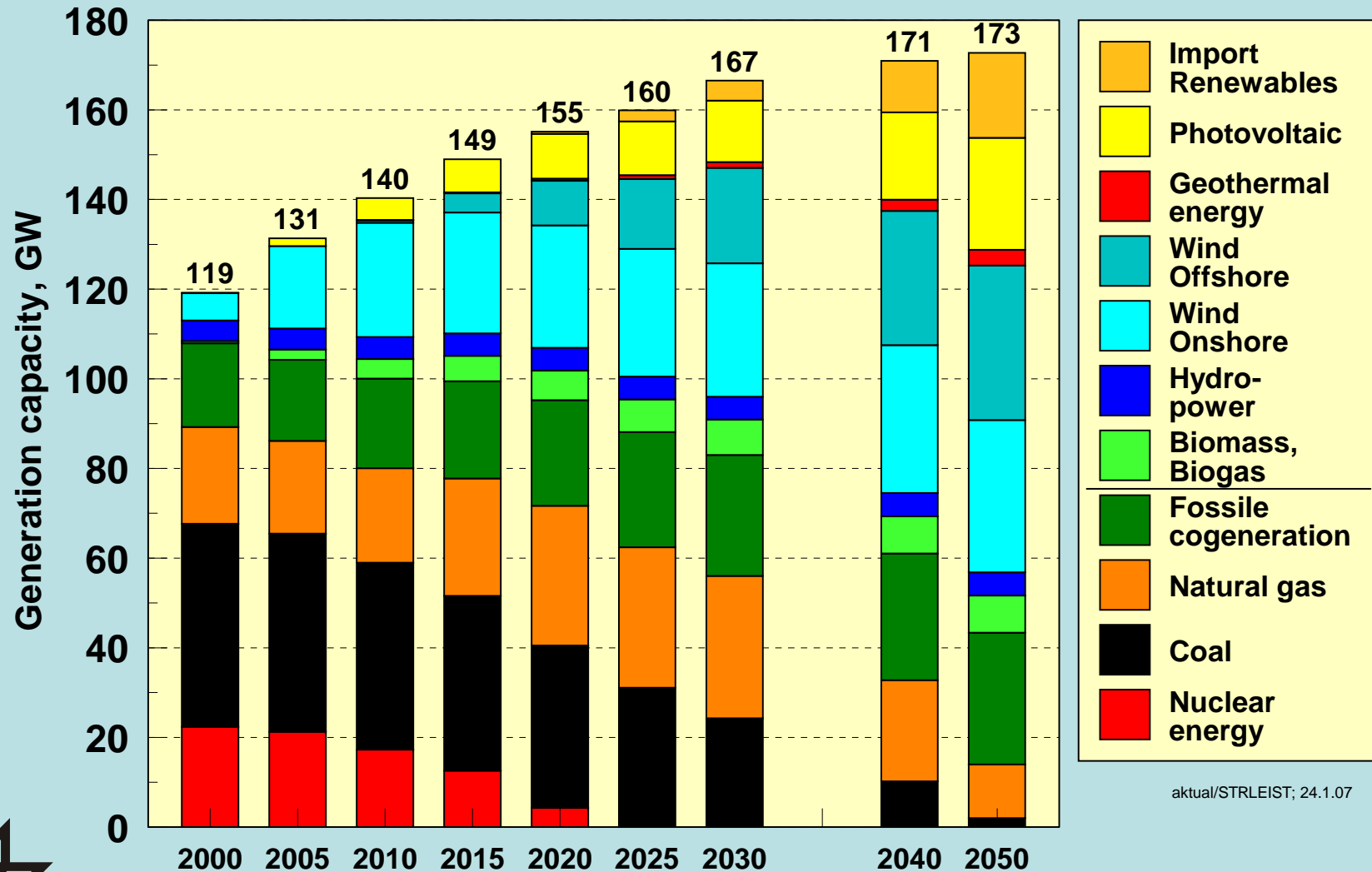
Aktual/EE-END; 19.06.07

Detailed structure of electricity generation of renewables until 2030



Development of total electricity generation capacity

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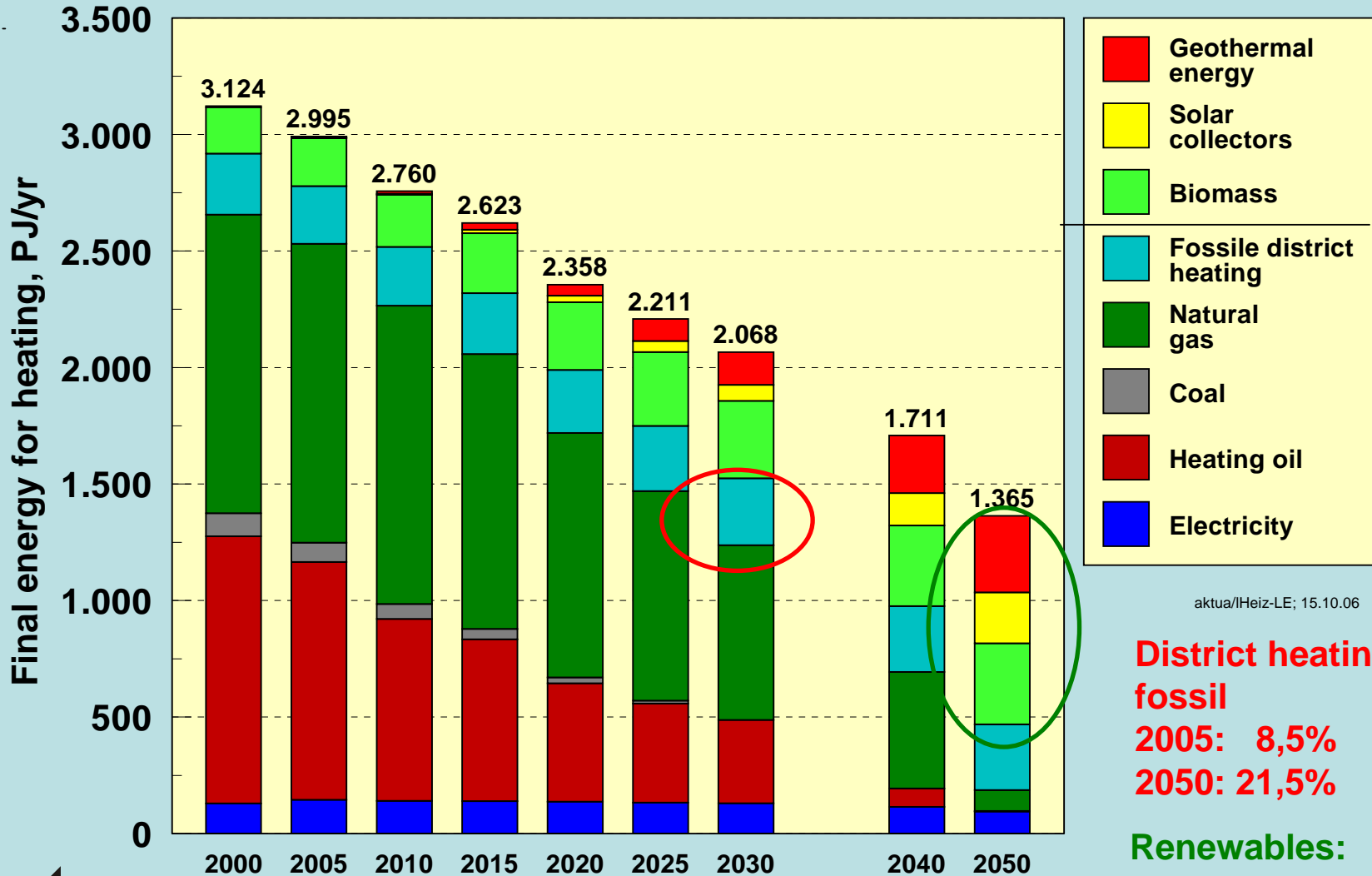


aktual/STRLEIST; 24.1.07



Energy consumption for space heating

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aktua/IHeiz-LE; 15.10.06

District heating, fossil

2005: 8,5%

2050: 21,5%

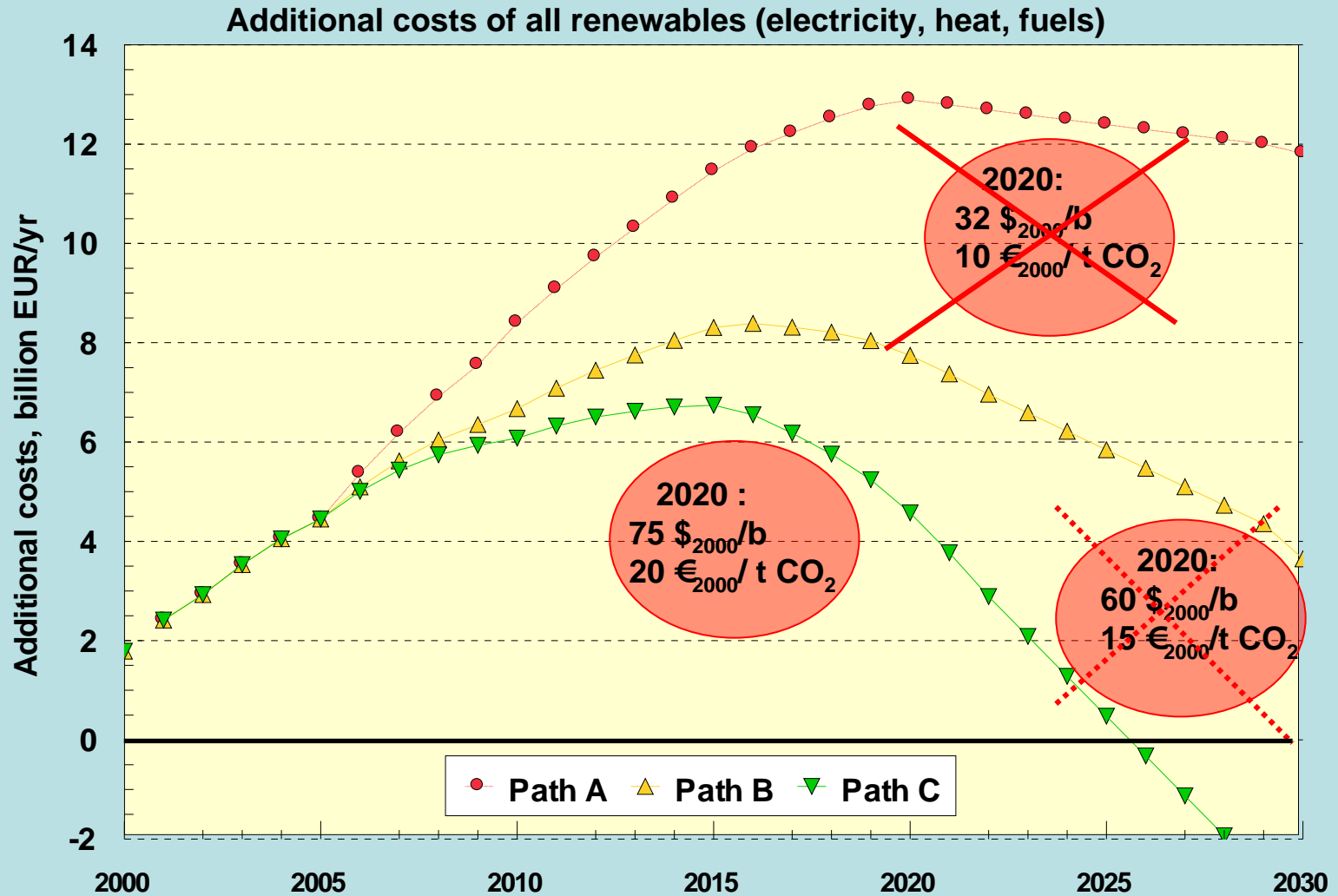
Renewables:

2005: 7%

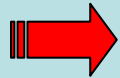
2050: 66%



The economic assessment of the expansion of renewables asks for realistic assumptions concerning the future development of fossil energy prices and CO₂-mitigation costs



Main results of the scenario assessment



To enter a sustainable energy supply system in an economical way, all three strategies „Energy efficiency“, „Cogeneration“ and „Renewable energies“ have to be mobilized in time, with strong emphasis and coordinated with each other.

Need for action



The expansion of the use of renewable heat has to increase dramatically in order to reach the set goals on renewables in total.



The implementation of efficiency- as well as cogeneration strategies is not yet sufficient. An optimal use of renewable energy can only occur if these potentials are being taken into account.

Thank you for your attention!

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