



Bundesministerium
für Umwelt, Naturschutz
und Reaktorsicherheit

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The new EEG

Basis to double the
RES-E share until 2020

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Contents

- The overall view
- The history of the FIT in Germany
- The new FIT
- Costs
- Conclusions



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The overall view

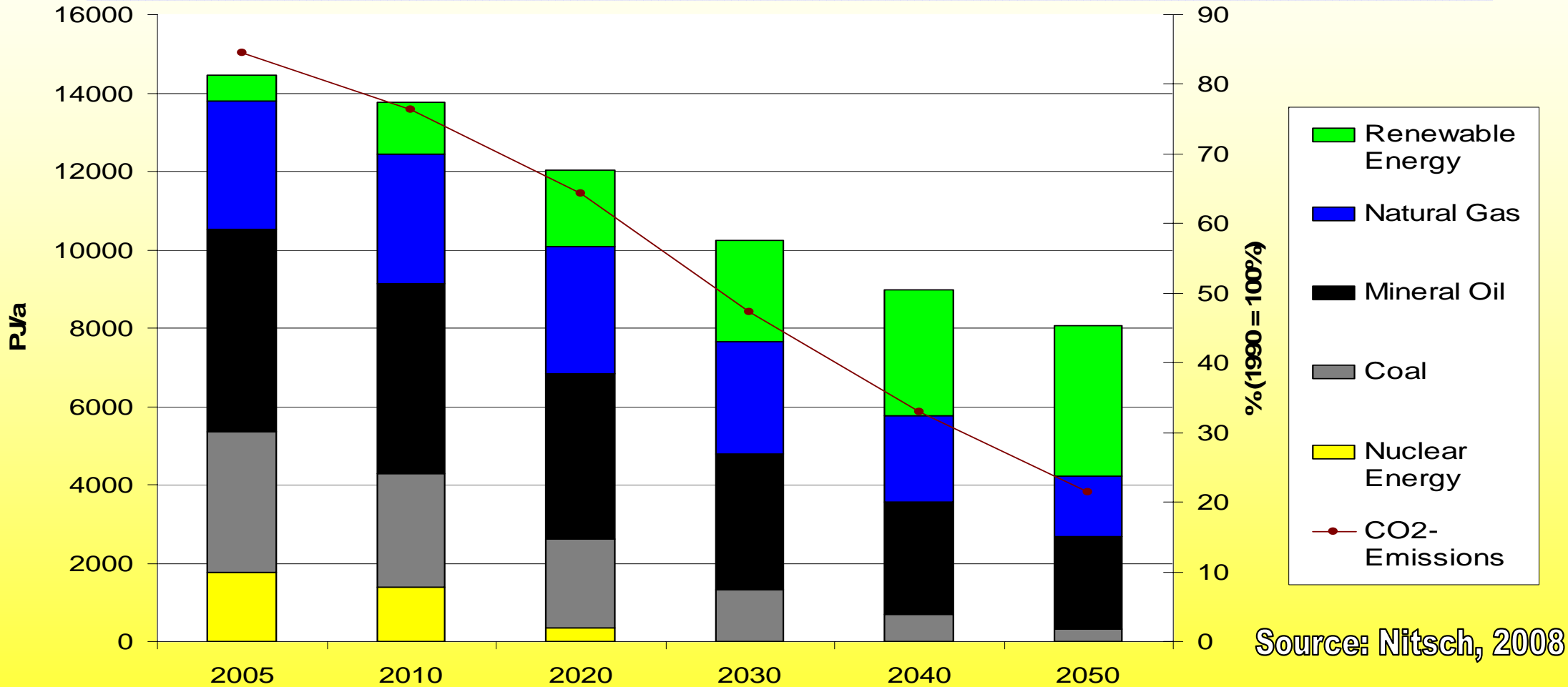
A possible energy future for Germany until 2050

- 80 % less CO₂ emissions, and
 - no nuclear energy



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Energy consumption, energy mix and CO₂-Emissions



Source: Nitsch, 2008

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FIT in Germany

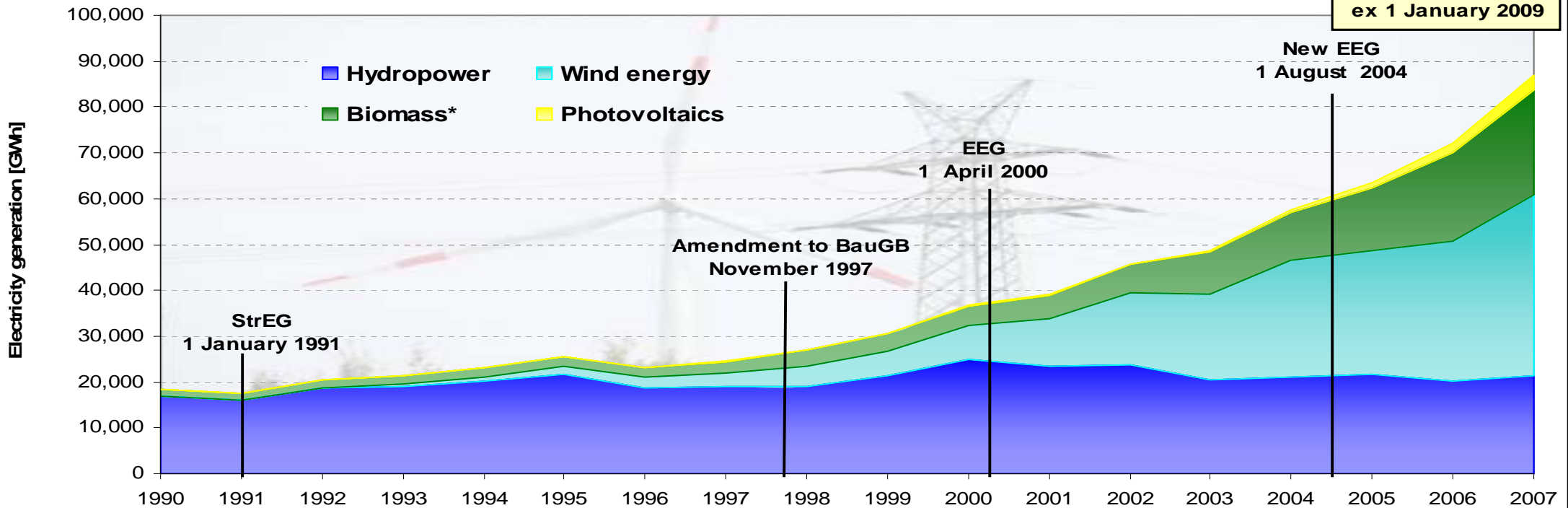
< history >

- 1991: feed-in system comes into force (Stromeinspeisungsgesetz - StrEG)
- 2000: Renewable Energy Sources Act (EEG)
- 2004: Optimised new EEG
- 2009: Optimised new EEG



RES-E < history >

Development of electricity generation from renewable energies in Germany, 1990 - 2007



*Solid, liquid, gaseous biomass, biogenic share of waste, landfill and sewage gas;

StrEG: Act on the Sale of Electricity to the Grid; BauGB: Construction Code; EEG: Renewable Energy Sources Act;

Electricity from geothermal energy is not presented due to the negligible quantities of electricity produced;

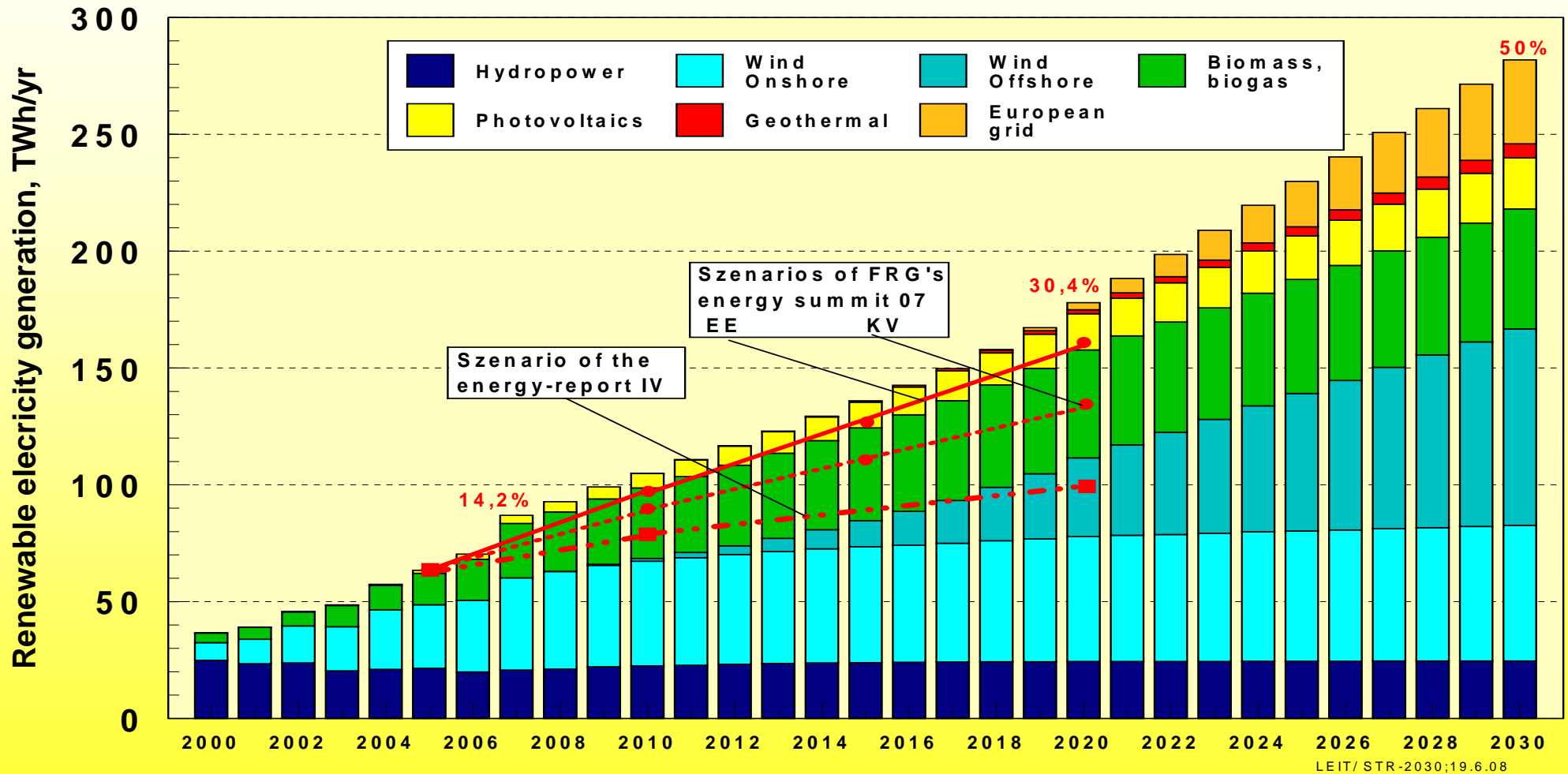
Source: BMU-Brochure: "Renewable energy sources in figures – national and international development", Internet Update, Kl III 1; Version: 15.12.2008; provisional figures



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RES-E < future >



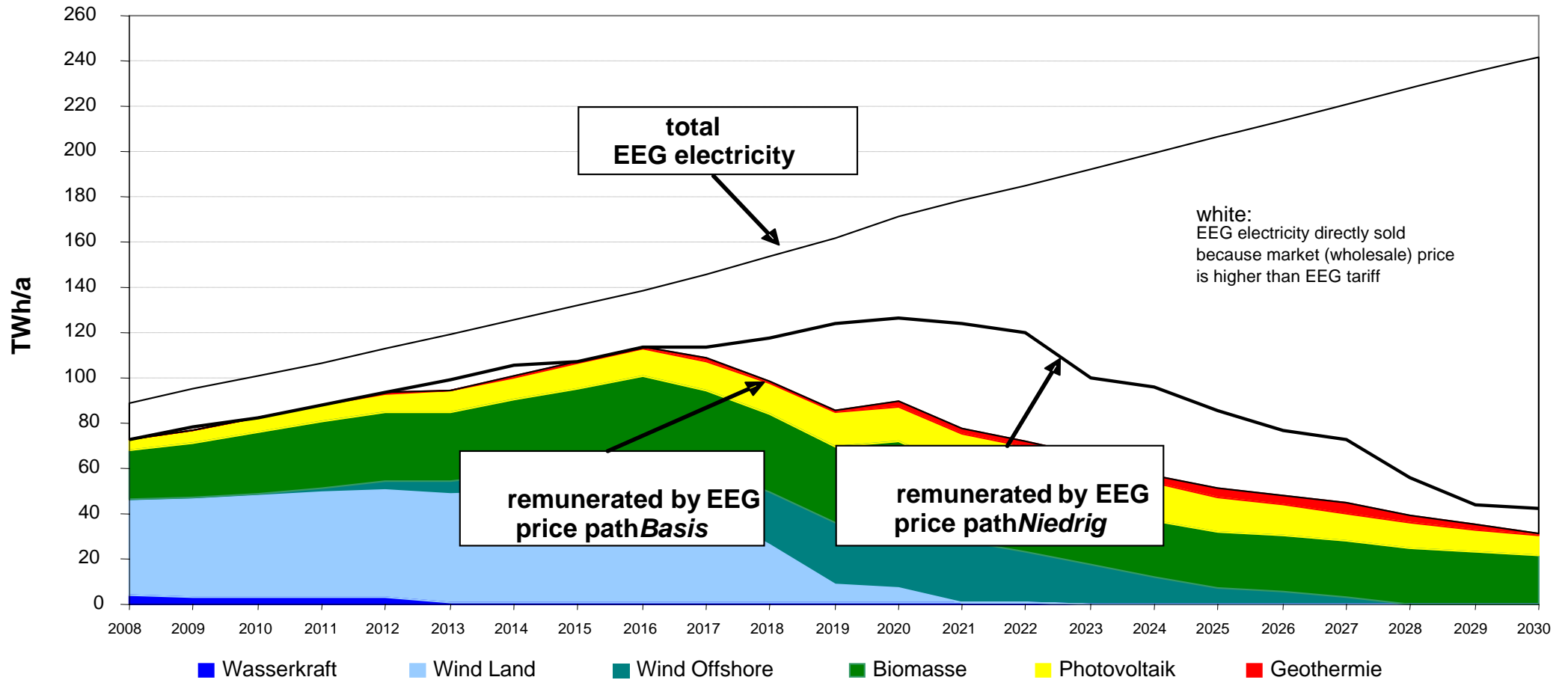
The New EEG

New targets for the share of RES-E

- 2010: old target of at least 12,5% not mentioned anymore (share in 2008: 15%)
- 2020: at least 20% → at least 30%
- new: after 2020 continued steady increase (which equals 50% in 2030)



The New EEG



The New EEG

- Continued: RE-Priority for grid access, transmission and distribution
- Continued: Fixed prices for RE-power
- Continued: Equalisation of additional costs for electricity from RE between all grid operators and electricity suppliers

The New EEG

- Continued: All different types of RE are considered and differentiated by source, size of the plant and location (wind)
- Continued: Annual decrease of the tariff due to technical development (degression)
- Continued: Companies needing a lot of power have to pay less
New: EMAS-certification has to be provided

The New EEG

New: Higher tariffs (for 2009) for

- Biomass: small installations, CHP, cultivated biomass and farm fertilizer
- Wind on-shore
- Wind off-shore
- Geothermal power

The New EEG

Tariff for power from solar radiation (PV)

- Increase of the degression
- Old degression: 5-6.5%/a
- New degression: 8-10%/a
- Automatic adaption of degression in dependence of growth

The New EEG

New:

Automatic adaption of degression in
dependence of growth

- Increase of the degression by 1%-point if more than 1500, 1700 or 1900 MW new capacity is installed in one year
- Decrease of the degression by 1%-point if less than 1000, 1100 or 1200 MW new capacity is installed in one year

The New EEG

Biomass

- Higher efficiency through increased bonus for CHP (new CHP bonus for geothermal installations)
- New: Standards for methane leakage
- New: Directive for sustainability
- New: No tariffs for liquid biomass in installations larger than 150 kW_{el}



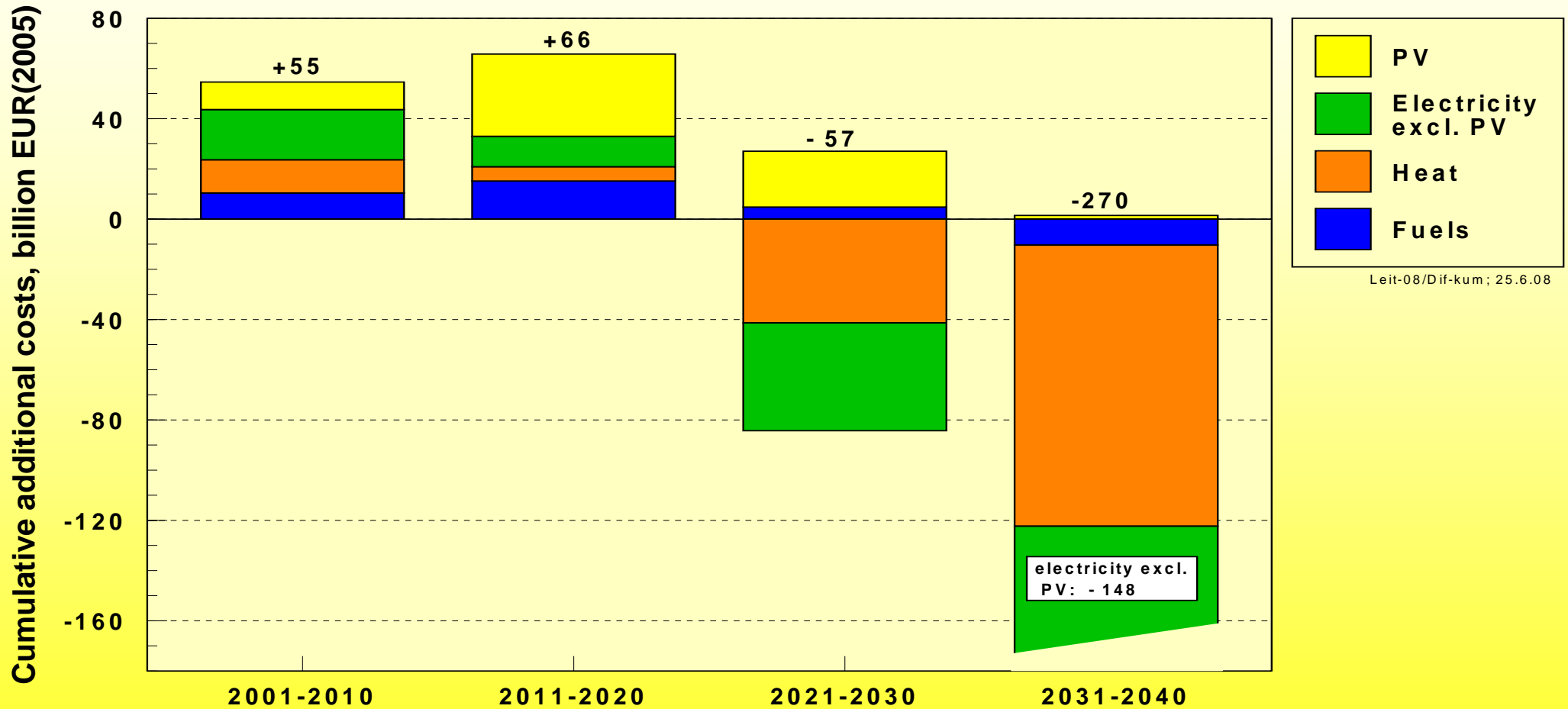
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Costs

- Lead scenario 2008; path A -





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Conclusions

- Strong and dynamic development of RES-E in the past
- Policies to achieve German RE target (at least 30% RES-E in 2020) in force (EEG)
- RES-E development will help to achieve German climate goals and to phase out nuclear energy
- Next steps needed: Integration of RES-E and conventional energy system



Thank you very much!

More Information:

www.bmu.de

www.erneuerbare-energien.de

www.feed-in-cooperation.org