

EnBW

Energie braucht Impulse

EnBW Energy Baden-Württemberg Inc.



- Third largest utility in Germany
- Main areas of operation:
 - Power generation and trade, grid, sales
 - > Energy and environmental services
 - Natural Gas (mid and downstream)
- Turnover 2011: more than 18bn Euro



Energy efficiency targets for Europe ...



- EU-Green Package (from 2008)
 - 20% Green House Gas reduction until 2020 (ref. 1990)
 - 20% Renewables in energy until 2020
 - 20% Energy efficiency increase until 2020 (ref. BAU)
- Energy Service Directive: decrease in final energy consumption by 9% until 2016 (ref. BAU)
- Energy Efficiency Directive 2012; national implementation 2014 to 2020

... and Germany



	Until 2020	Until 2050
Reduction of CO2 emissions (ref. 1990)	- 40 %	- 80 %
Decrease in primary energy consumption (ref. 2008)	- 20 %	- 50 %
Reduction in heat consumption	- 20 %	- 80 %
Reduction in electricity consumption	- 10 %	- 25 %
Reduction of final energy consumption in mobility (traffic)	- 10 %	- 40 %
Share of renewable energy in electricity generation	35 %	80 %
Annual energetic reconstruction rate for buildings	2 %	2 %

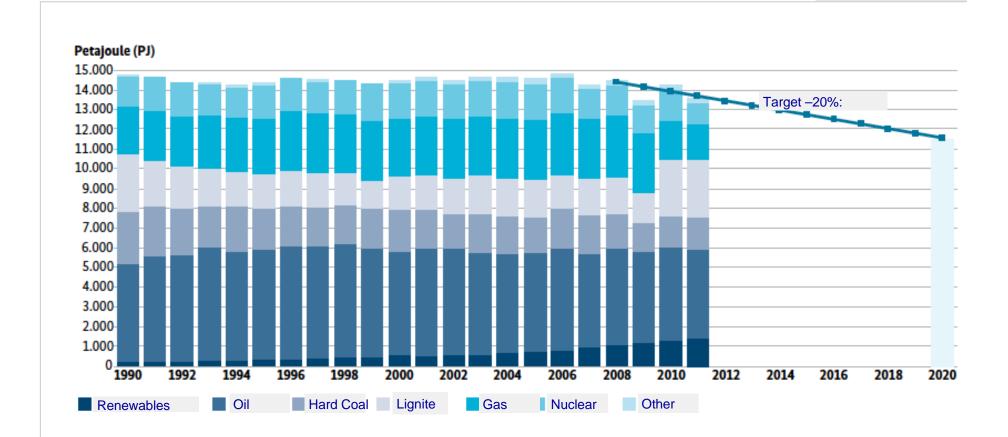
EU Energy Efficiency Directive (since Dec. 4th, 2012)



Efficiency Target	 Implementation of a non-binding efficiency target in all EU-Member States COM is monitoring the process
Energy Efficiency Commitment System	 Annual energy savings of 1.5% Choice between a legal obligation for utilities or alternative measures Eligibility of preliminaries and savings from generation, trade und grids
Messures in the public sector	 3% annual reconstruction rate for the public sector Implementation of an efficiency plan for all public buildings (states and municipalities included)
Energy Audits	 Mandatory energy audits for "big companies" Audits have to be independent and carried out by certified auditors
Informative Billing	 Sensitization of the customer with regard to demand issues Quarterly statement of consumption Cost free sending
СНР	Obligation for heat extraction for new and modernized fossil power plants >20 MW

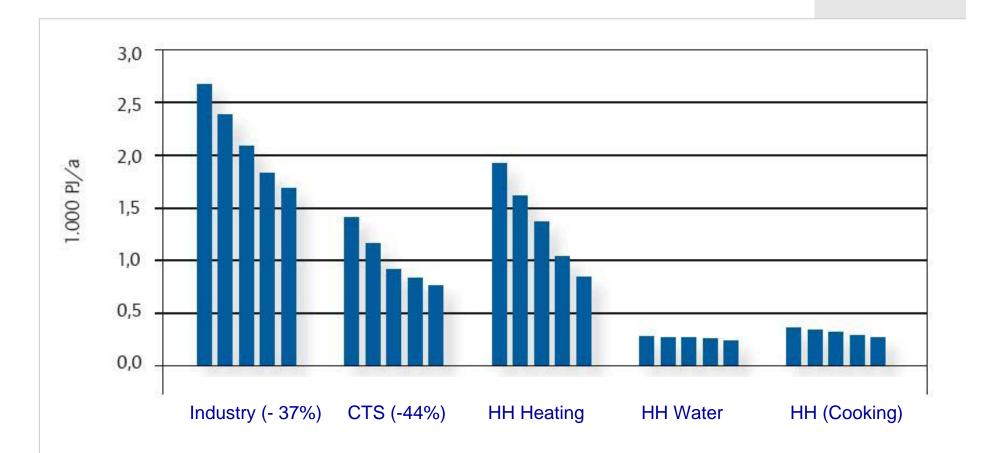
Primary energy consumption in Germany is slightly decreasing





Energy saving potentials in Germany 2008 - 2050





Source: Prognos 2010, 2008 left 2020, 2030, 2040, 2050 (right)

Actual German discussion on efficiency: "Eliminate constraints and open up potentials"



- Technical saving potential is clearly higher than political targets example: reconstruction of buildings; especially modernization of heating installations
- The political triad of "obligation funding / incentives information" has to be improved
- Example funding: discontinuity of funding the German Energy- and Climate Funds is chronically underfunded
- Example obligation / incentives: The law for incentives and legal obligations in the area of building reconstructions failed twice in the mediation committee between Bundesrat (upper house) and Bundestag (lower house)
- Example obligation: potentials in CTS and industry remain untouched due to an unclear regulatory environment

Summary and Outlook



- Energy efficiency is an important part of the Energiewende in Germany and Europe
- It has to be a joint effort of politics, economy and society to raise the awareness for saving energy
- Political measures should not destroy entrepreneurial spirit nor economical efficiency potentials by general obligations and unselective public funding
- EnBW Inc. wants to become first address for B2C and B2B customers as well as municipalities for decentralized energy solutions there are market opportunities in energy efficiency even for utilities!
- > EnBW Inc. supports an ambitioned efficiency policy in Germany and Europe