

Energy Supply and its Impact on Regional Level: International Trends, National and Regional Opportunities

DI Gregor Grill

Salzburg, 14. September 2009



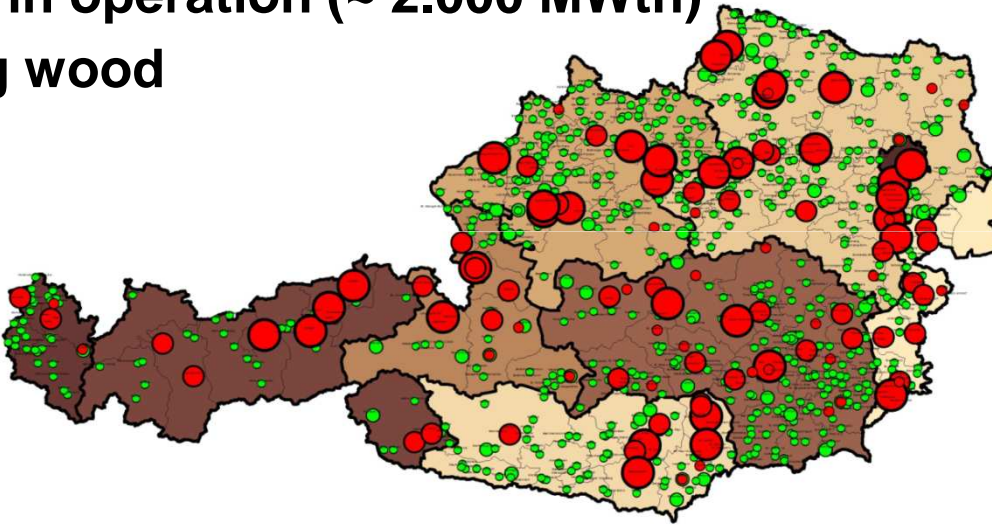
landwirtschaftskammer
österreich

Content

- **National Success – Regional Bioheat Supply in Austria**
- **International Finance Transactions for Energy versus Added Value in the Region**
- **Sustainability of Wood Production versus Exploitation of Oil Reserves**
- **Compendium**



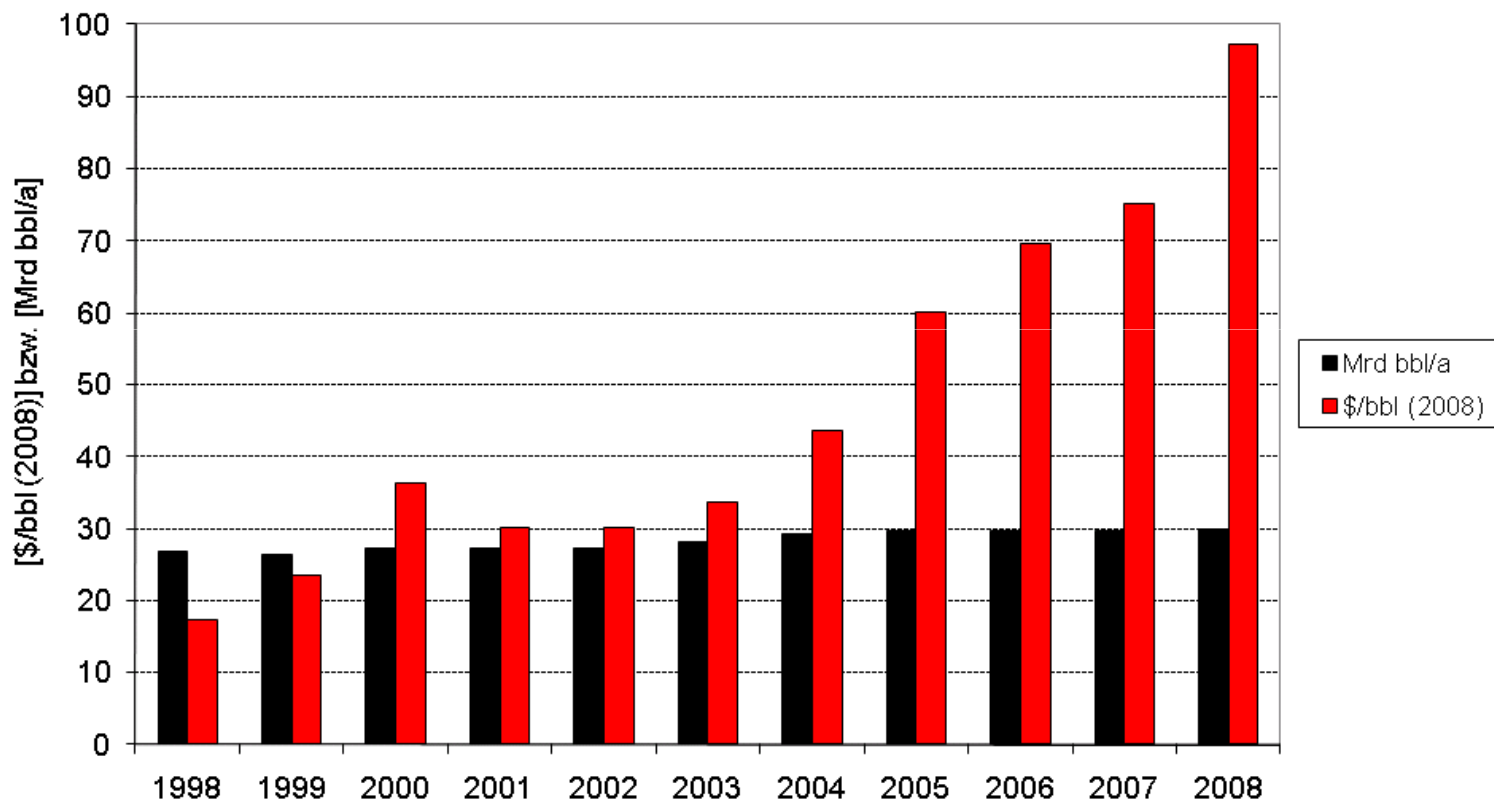
Austrian Success Story: Supply with Bioheat on Regional Level

- > 1.000 biomass district heating plants in operation (~ 1.100 MWth)
 - > 100.000 full automatic biomass boilers in operation (~ 6.000 MWth)
 - > 450.000 heat storing stoves in operation (~ 2.000 MWth)
 - 700.000 households are using wood as main source for heating
- 
- 400 MWel biomass CHP plants (~ 2.000 MWth)
 - Regional bioheat as essential backup load in Gas-crisis 2009
 - Biomass substitutes 3,5 billion m³/a of natural gas
 - In wintertime substitution of > 1 million m³/h natural gas



Global Development of Crude Oil Production and Oil Prices

Globale Entwicklung der Ölproduktion und des Ölpreises (brent)



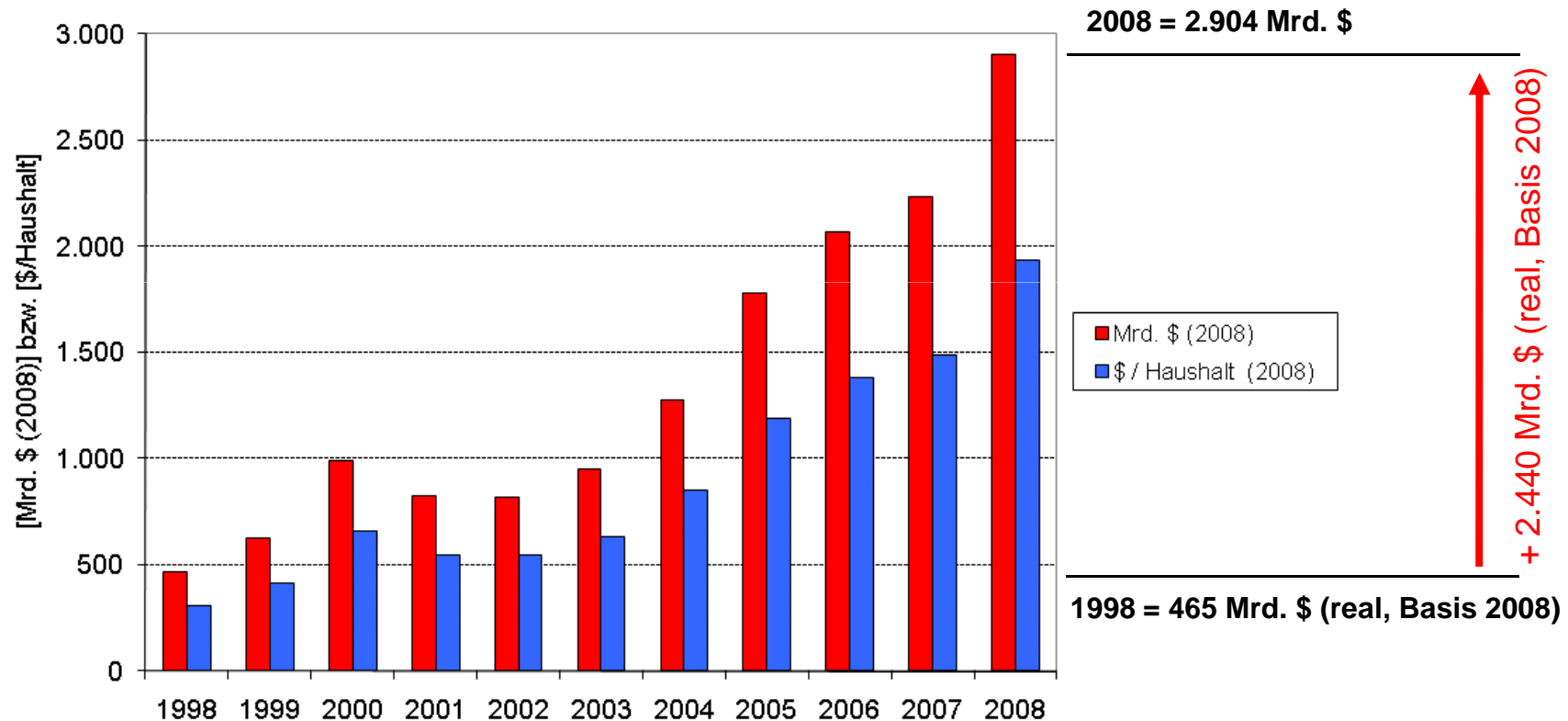
Quelle: BP Statistical Review of World Energy (2009)



landwirtschaftskammer
österreich

Evaluation of Global Oil Production

Bewertung der globalen Ölproduktion

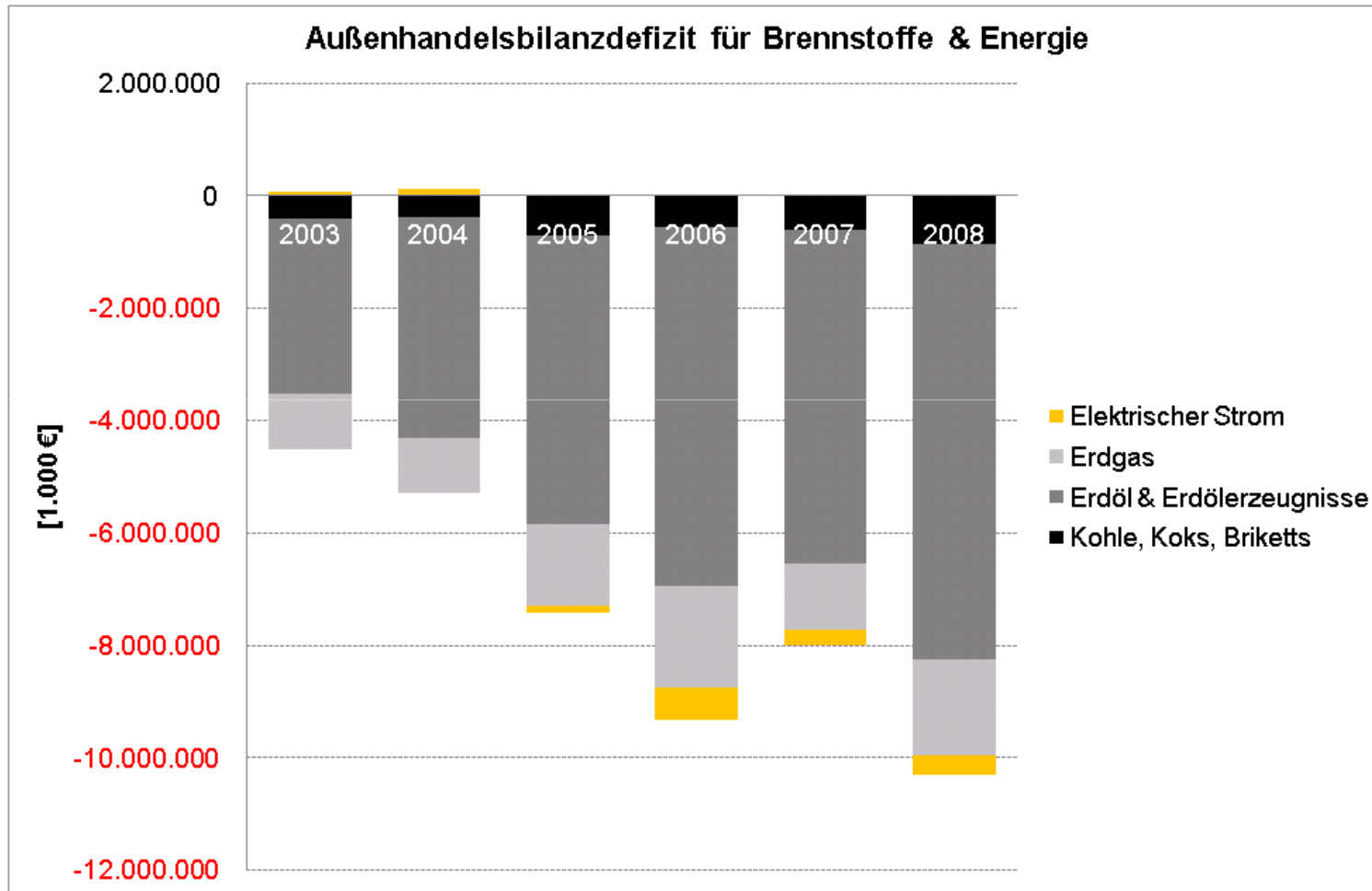


Quelle: BP Statistical Review of World Energy (2009), eigene Berechnungen



landwirtschaftskammer
österreich

Negative Tradebalance for Energyimports in Austria



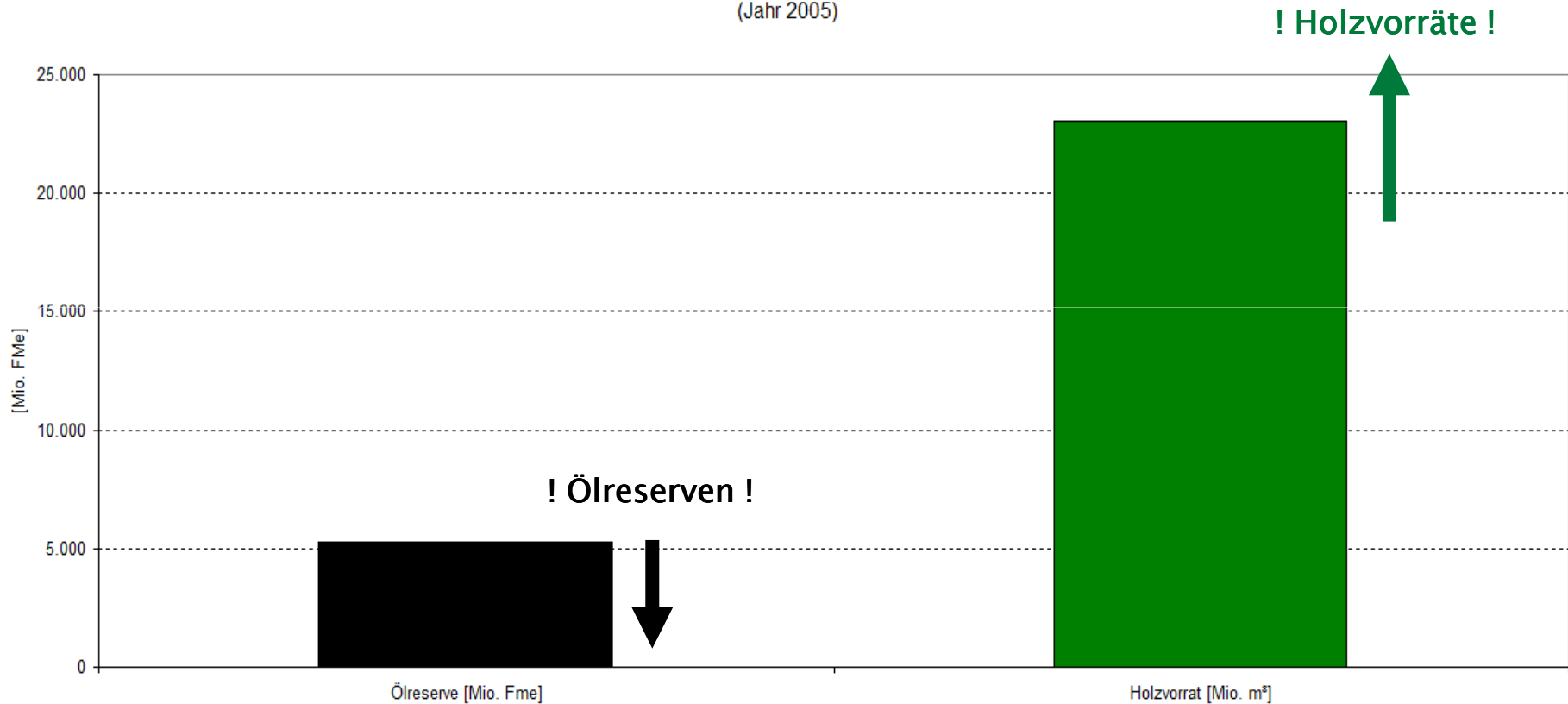
Quelle: Statistik Austria (2009)



landwirtschaftskammer
österreich

Sustainability of Wood Production versus Ruinous Exploitation of Oil Reserves in EU

Ölreserven und Holzvorräte in der EU27
(Jahr 2005)



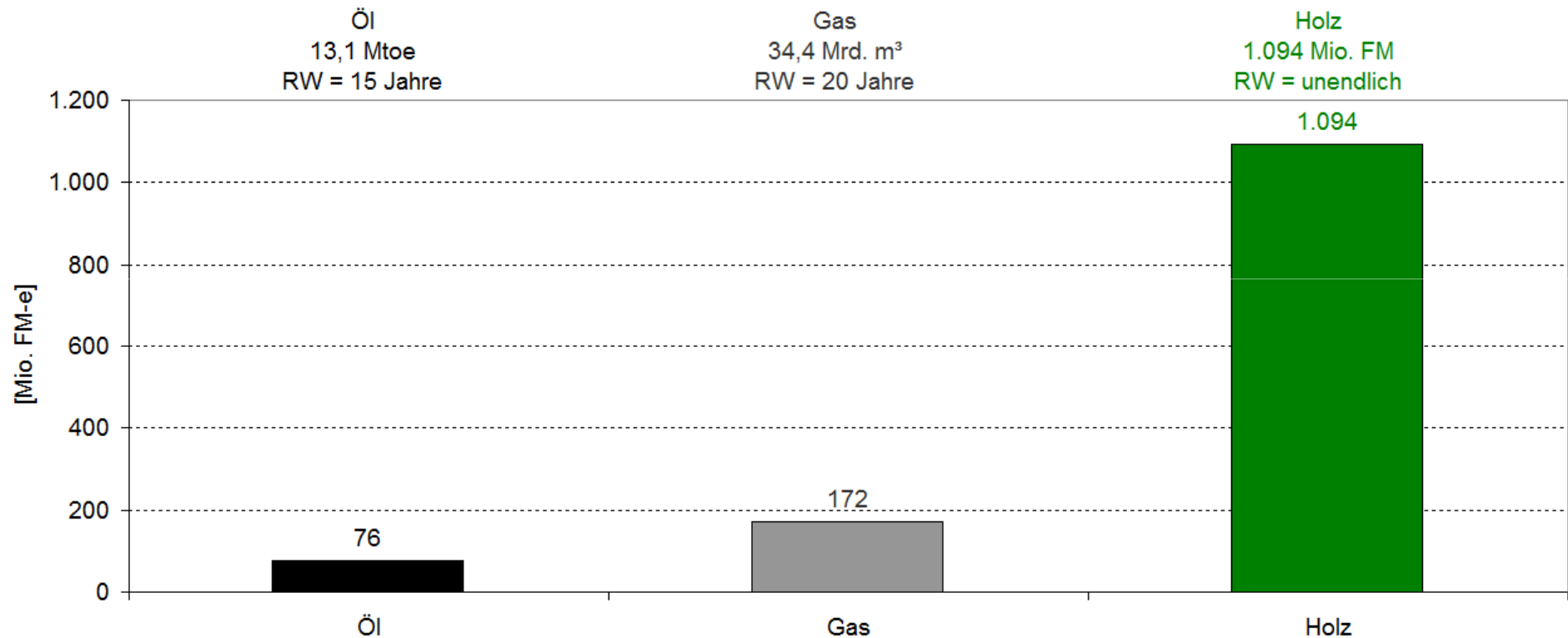
Datenquelle: FV der Mineralölindustrie



landwirtschaftskammer
österreich

Sustainability of Wood Production versus Ruinous Exploitation of Oil Reserves in Austria

Vorräte und Reichweiten (RW) in Österreich

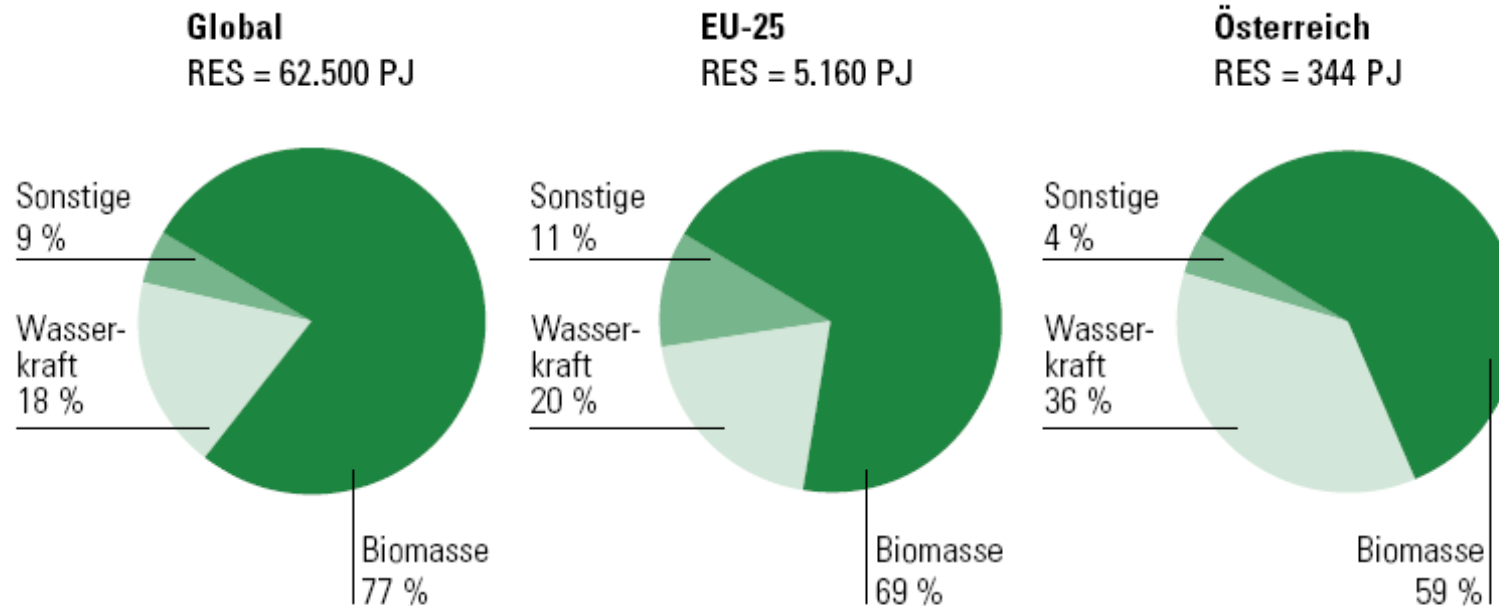


Quelle: Fachverband der Mineralölindustrie Österreichs 2008, BFW – ÖWI 00/02



landwirtschaftskammer
österreich

Biomass Dominates the Portfolio of Renewable Energies



Innerhalb des Portfolios der erneuerbaren Energien dominiert Biomasse auf globaler (ca. 77%), europäischer (ca. 69%) und nationaler Ebene (ca. 60%).

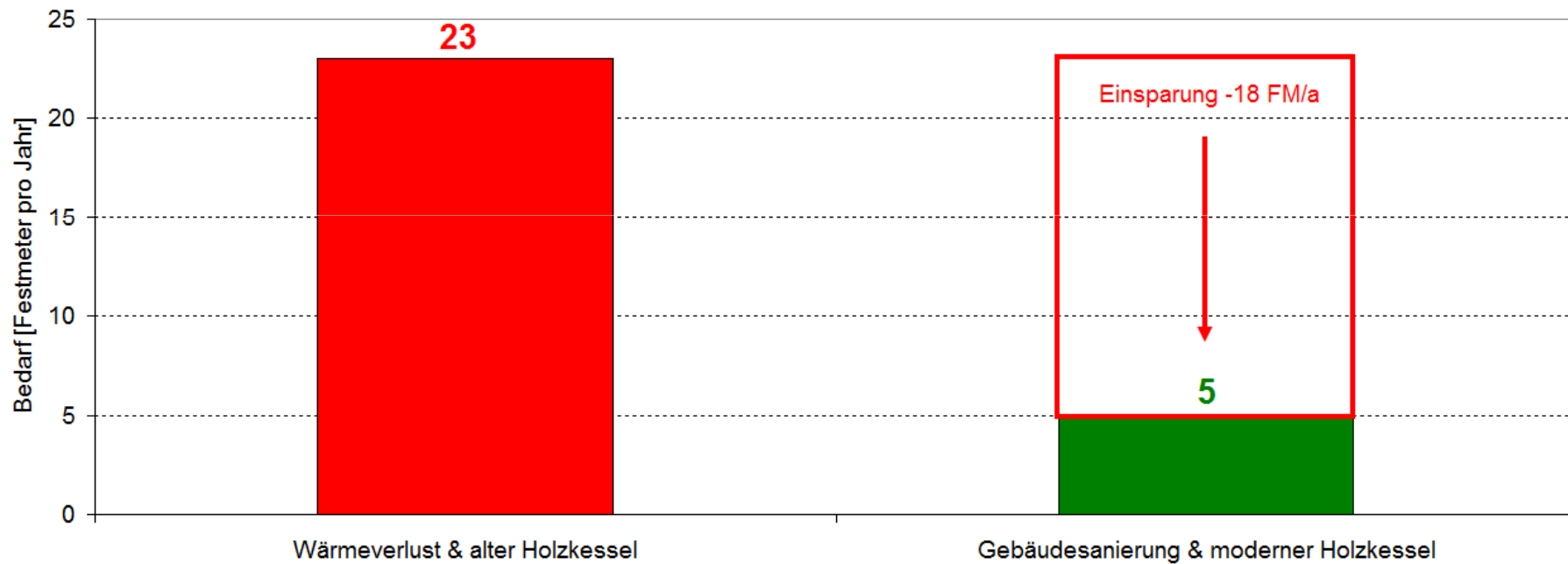
Datenquelle: IEA, Eurostat, Statistik Austria, Zahlen 2006, Renewable energy sources



landwirtschaftskammer
österreich

Positive Example: More Efficiency through Modern Boilers and Modernising Isolation of Buildings

Effizienzbeispiel: Sanierung eines Einfamilienhauses
Brennholzeinsparung 4,6 : 1



Quelle: LKO – eigene Berechnungen



landwirtschaftskammer
österreich

**Oil Price 1998 - 2008 -> where are 2.500 Mrd. \$?
-> Intelligent Sponsorship with Money from Austria!**



Thank you for your attention!

DI Gregor Grill

Landwirtschaftskammer Österreich

Forst- und Holzwirtschaft, Energie

A-1014 Wien, Schauflergasse 6

T +43 1 53441 8592

F +43 1 53441 8529

Email: g.grill@lk-oe.at

Web: www.lk-oe.at



landwirtschaftskammer
österreich