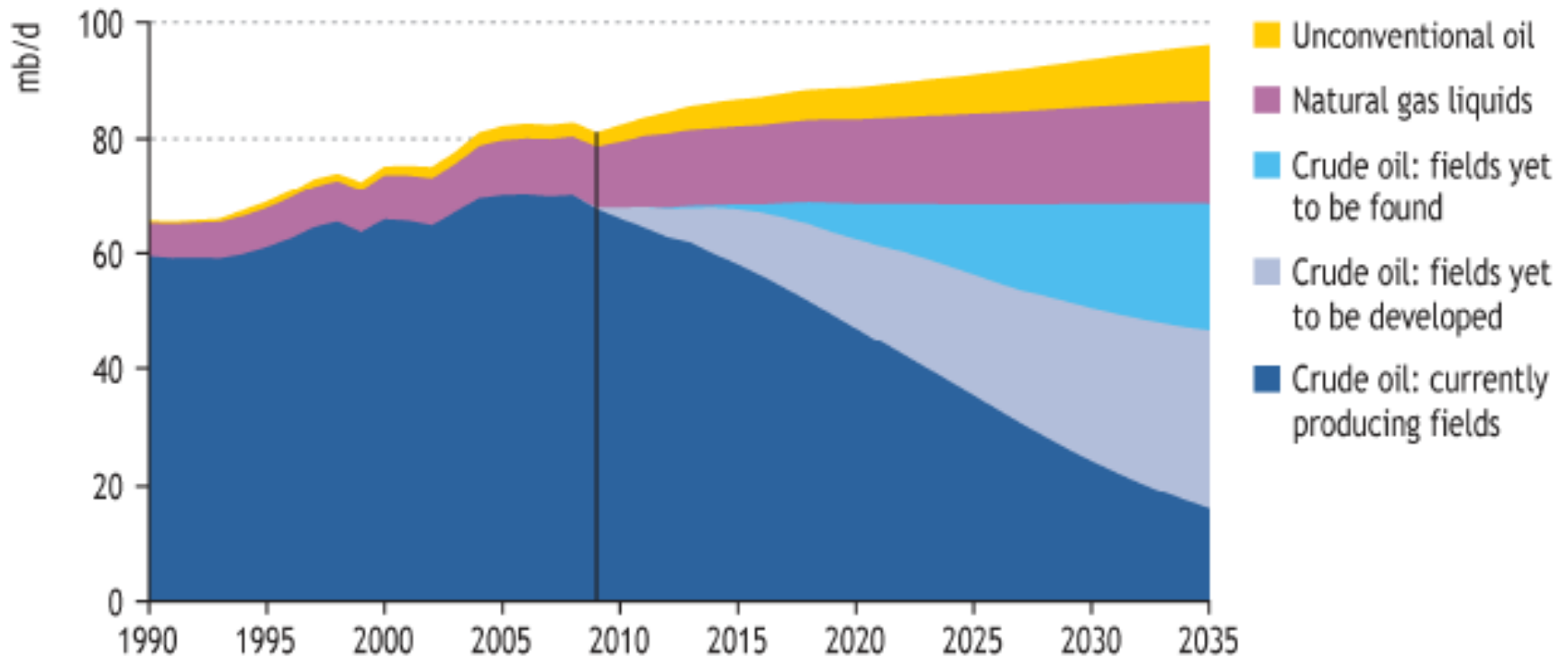


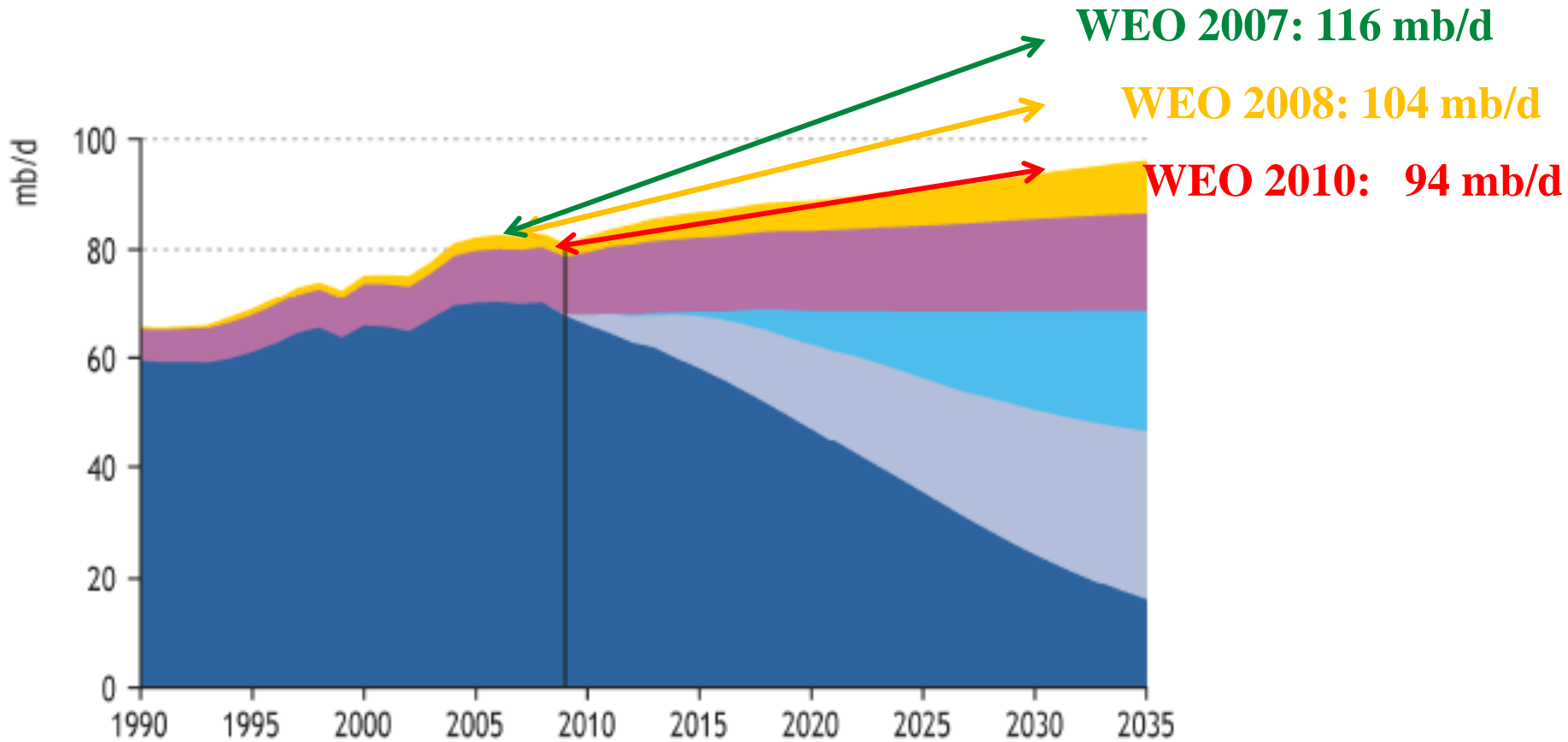
Rising Energy Costs for (Austrian) Households in the face of Peak Oil

michael.cerveney@oegut.at

IEA World Energy Outlook 2010: World Oil Production

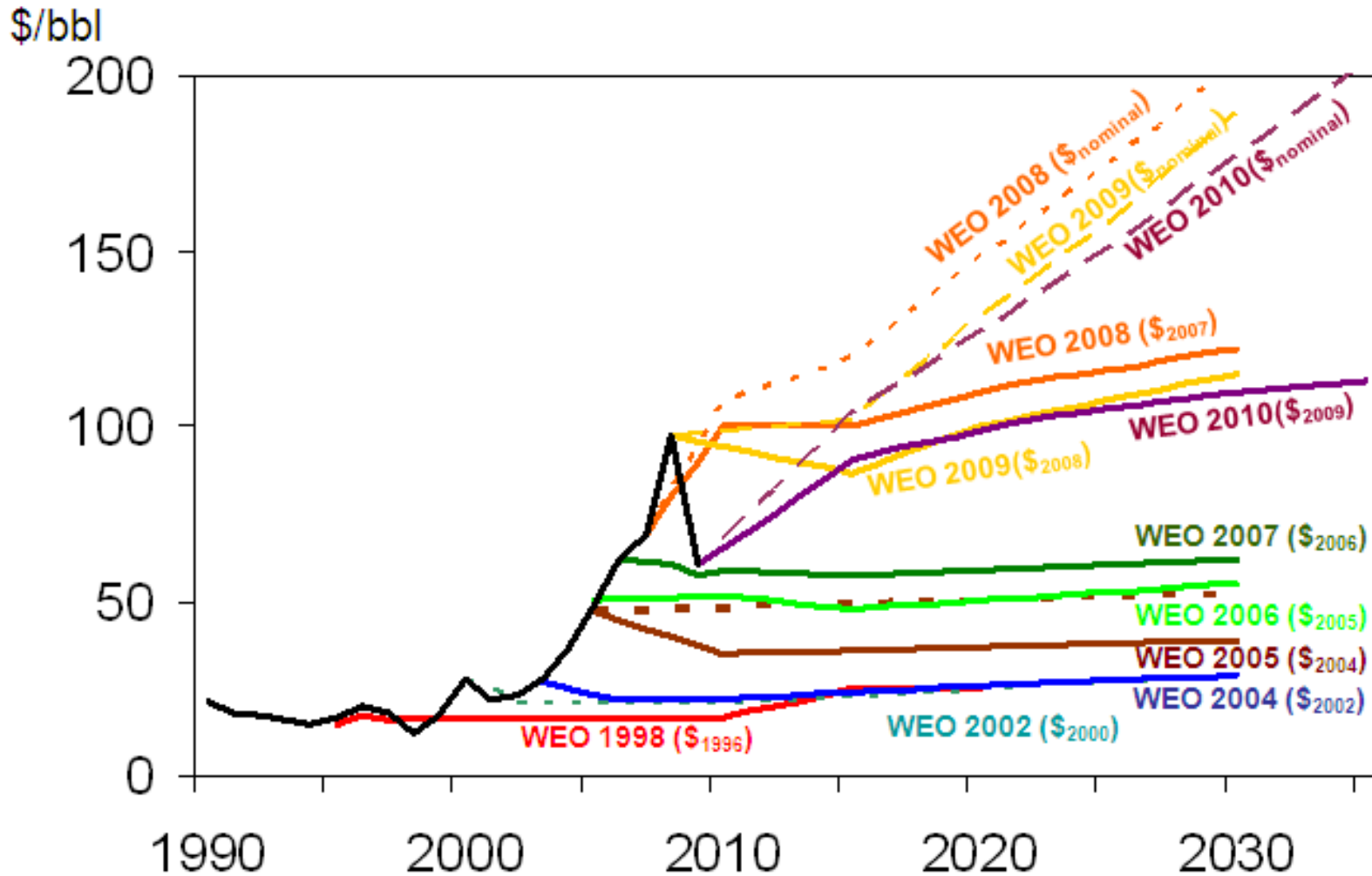


IEA World Energy Outlook: World Oil Production



IEA's Oilprice Forecasts

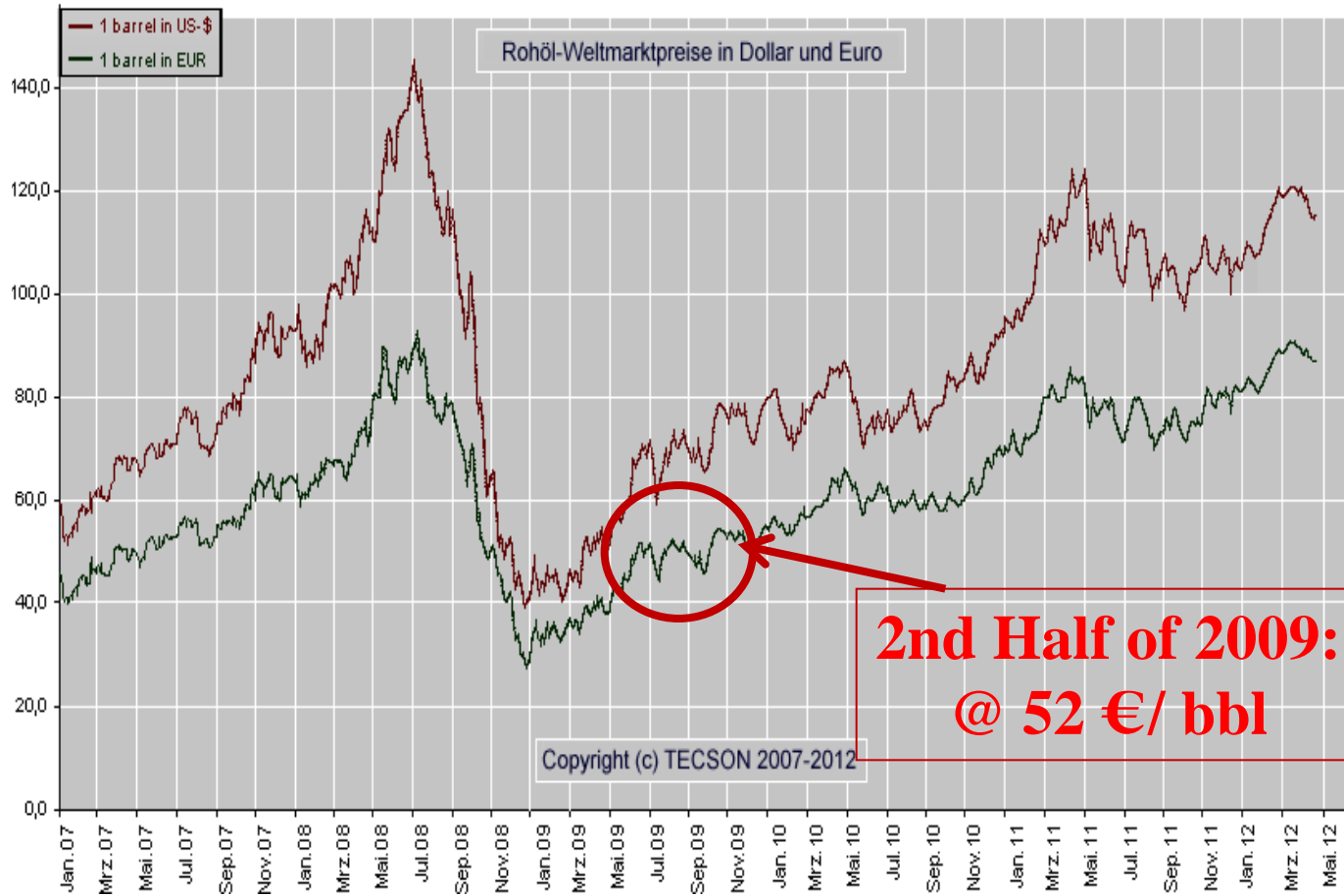
World Energy Outlooks (WEO) 1998 bis 2010



Quelle: International Energy Agency 2010

Grafik:
Ludwig
Bölkow
Systemtechnik

Study „Zersiedelt“ – Scenario: Oilprice (Brent) @ 200 \$ or 150 € per Barrel



201?:
@ 150 €/ bbl

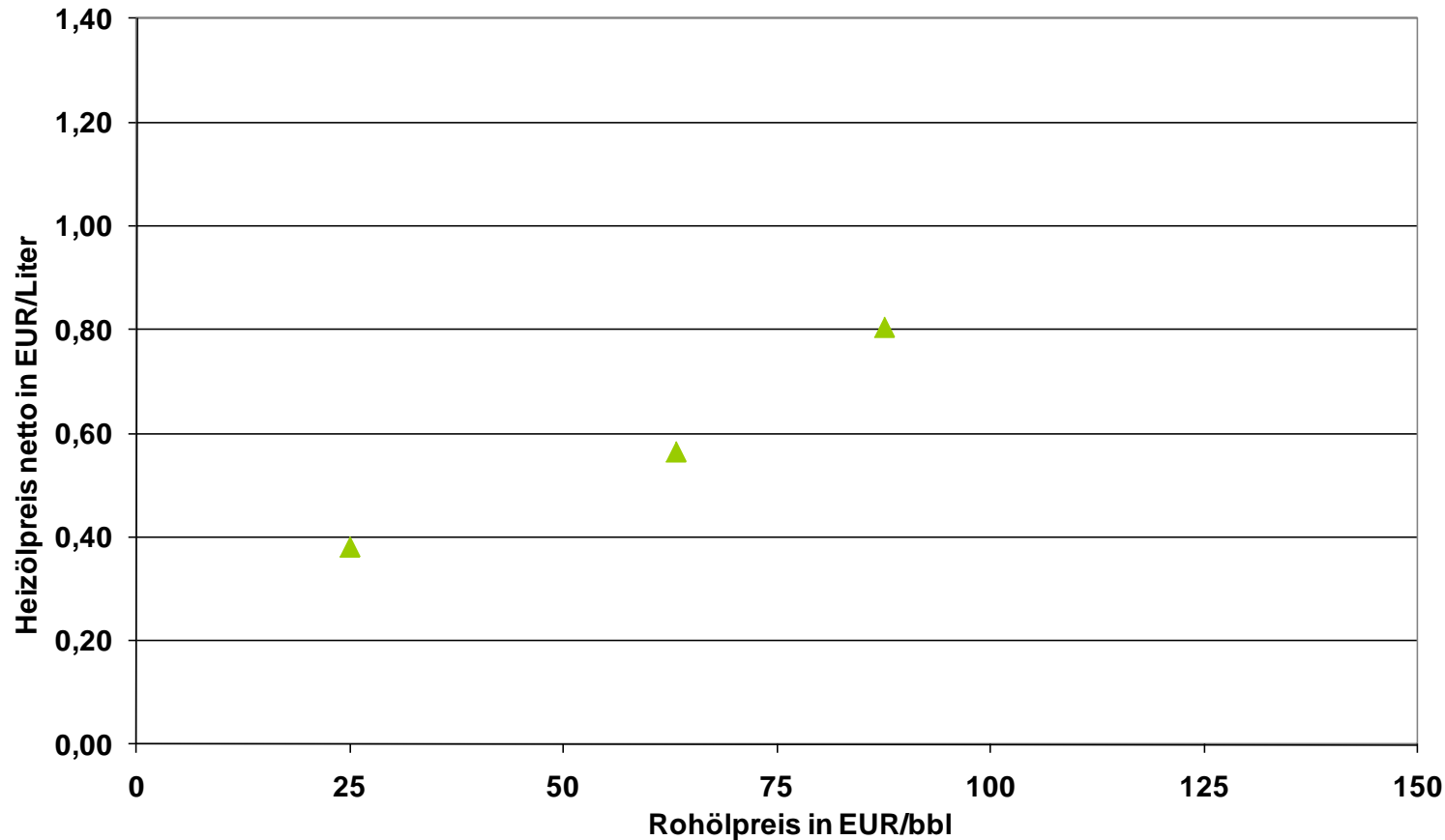
Study „ZERSiedelt“ (www.zersiedelt.at)

Two Questions

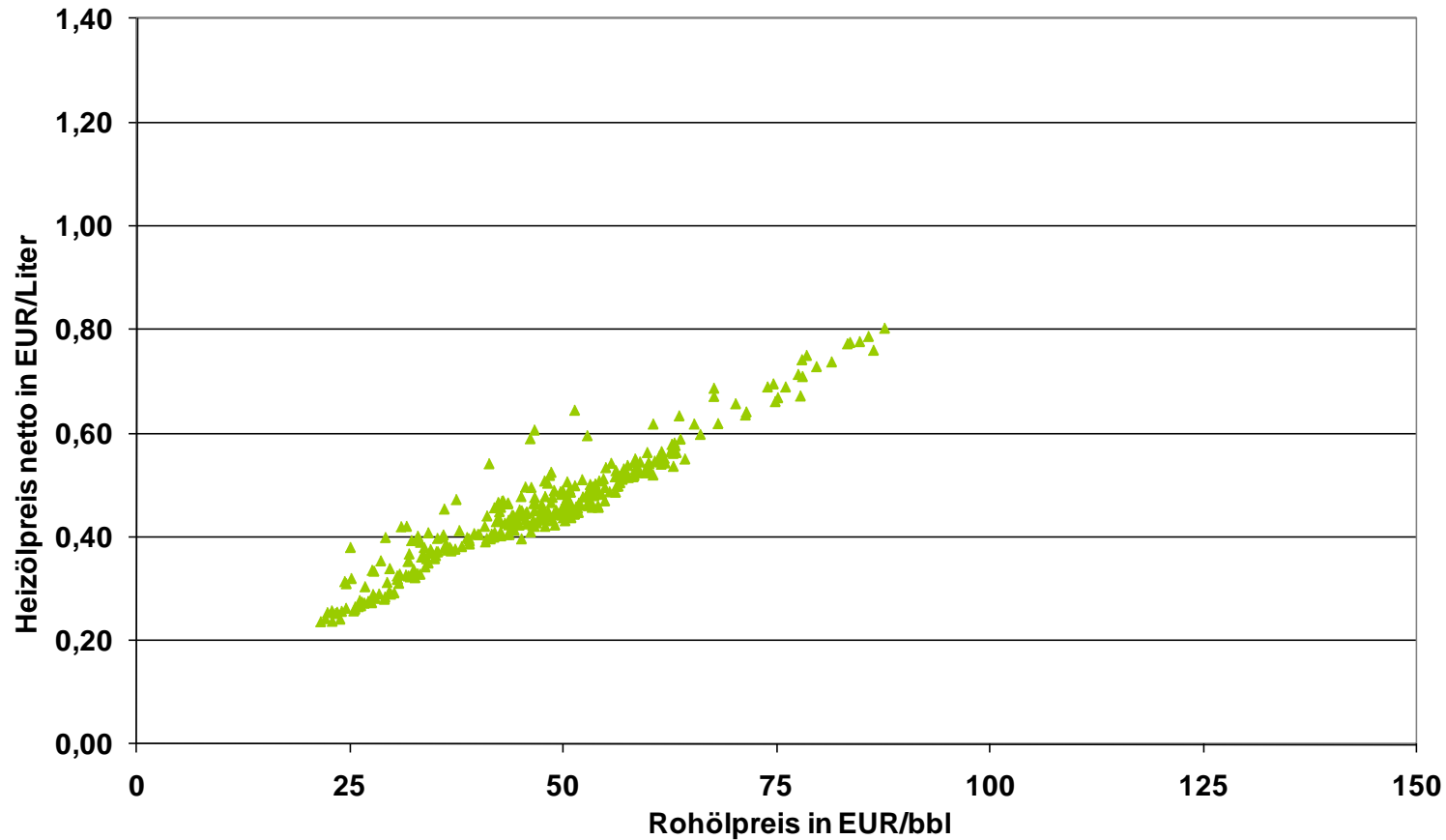


- What will be the Prices of fuels & electricity in Austria @ 150 € /bbl?
- What will be the additional Costs for Austrian Housholds @ 150 € /bbl (compared to 52 € in late 2009)

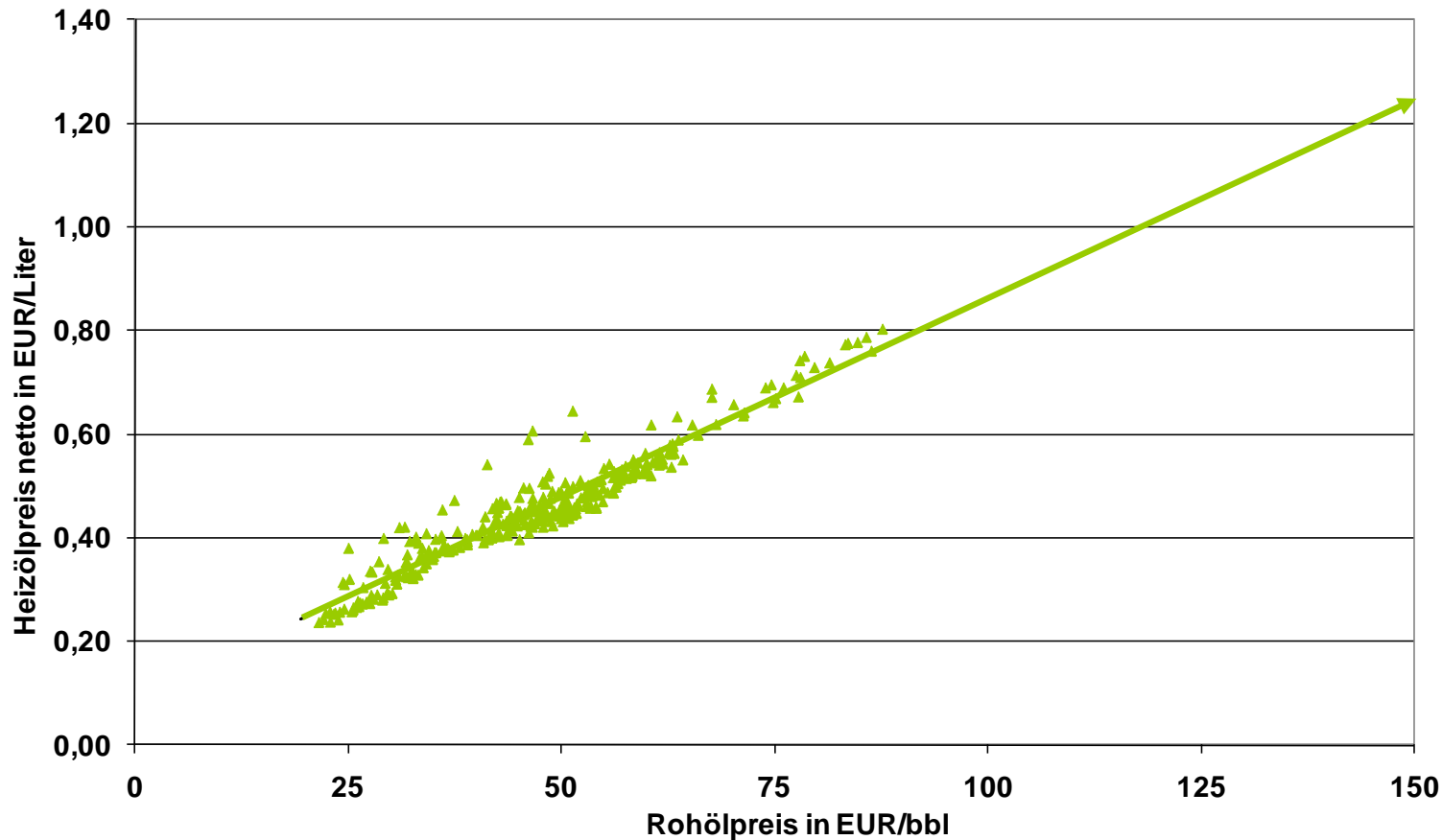
Historic Heating Oil Prices & Crude Oil Prices



Historic Heating Oil Prices & Crude Oil Prices



... extrapolating the Trend Line



Household Energy Prices* @ 150 € per Barrel compared with 2009 @ 52 € / bbl



	Price @ 200 \$/bbl (150 €/bbl) crude oil	Price @ 70 \$/bbl (52 €/bbl) crude oil
Motor fuel (petrol/diesel avg.)	2,00 € / Liter	1,06 € / Liter
Heating oil extra light	1,60 € / Liter	0,72 € / Liter
Natural gas (Austrian average)	10,5 Ct / kWh	6,5 Ct / kWh
Electricity (Austrian average)	26,4 Ct / kWh	18,0 Ct / kWh

* including taxes and grid price; time-lags are not considered

Source: own calculation



Zu EnergieRelevanten Aspekten der Entstehung und Zukunft
von Siedlungsstrukturen und Wohngebäudetypen in Österreich
www.zersiedelt.at NEUE ENERGIEN 2020 Projekt 822099

Case Studies for 6 typical Austrian Households



■ Urban households – 2 cases:

1. Single, 60 m² flat in 100 y/o house, gas-heated, 3.000 km/a
2. Couple, 120 m² refurb. terraced house, gas, 5.000 km/a



■ Suburban households – 2 cases:

3. 3 persons, 150 m² unrefurb. single-family-house, oil-heated, 18.000 km/a
4. Couple, 150 m² low-energy house, heat pump, 15.000 km/a



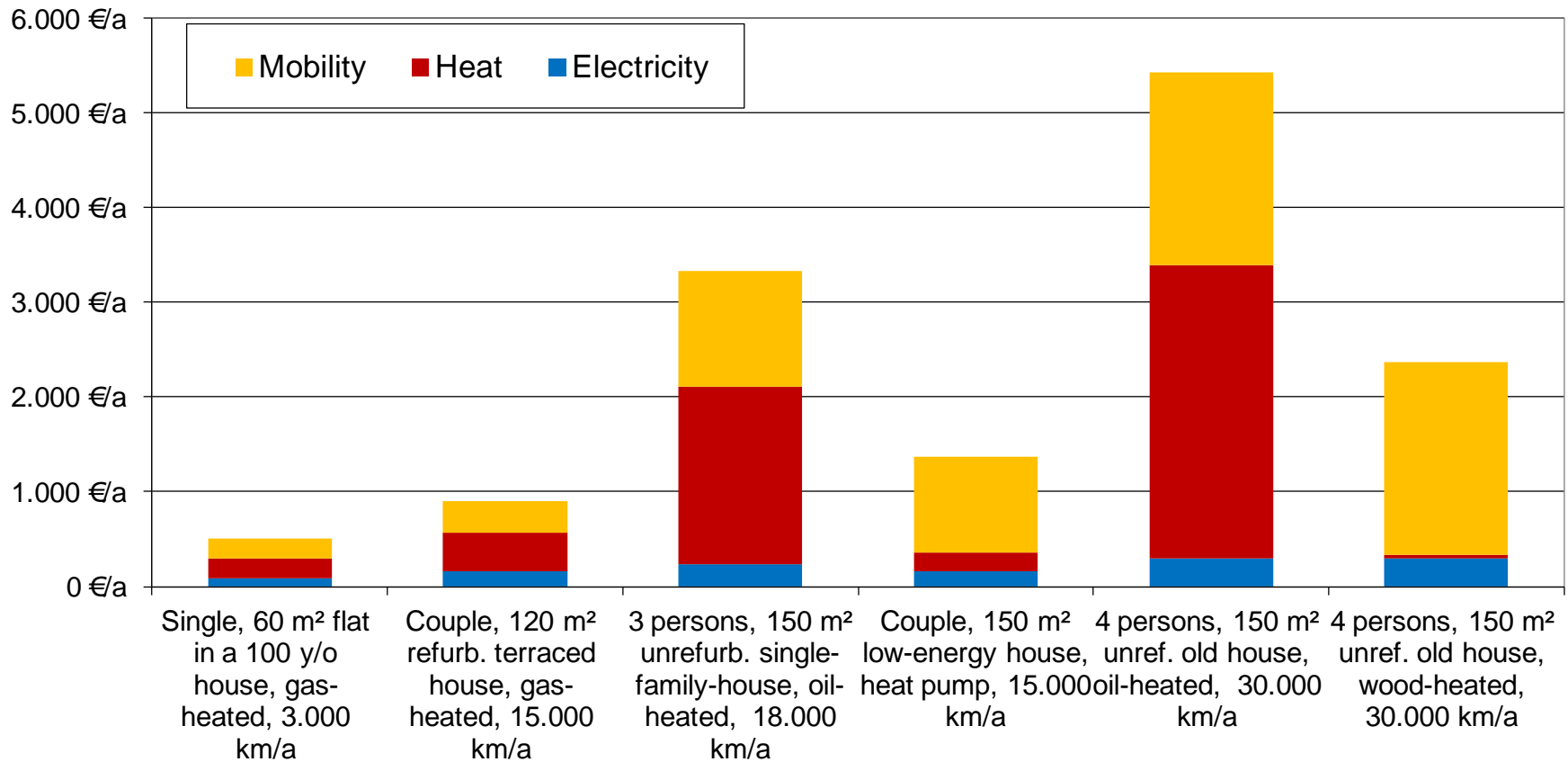
■ Rural households – 2 cases:

5. 4 persons, 150 m² unref. old house, oil-heated, 30.000 km/a
6. Similar to 5. but wood-heated



Annual additional Costs for Households

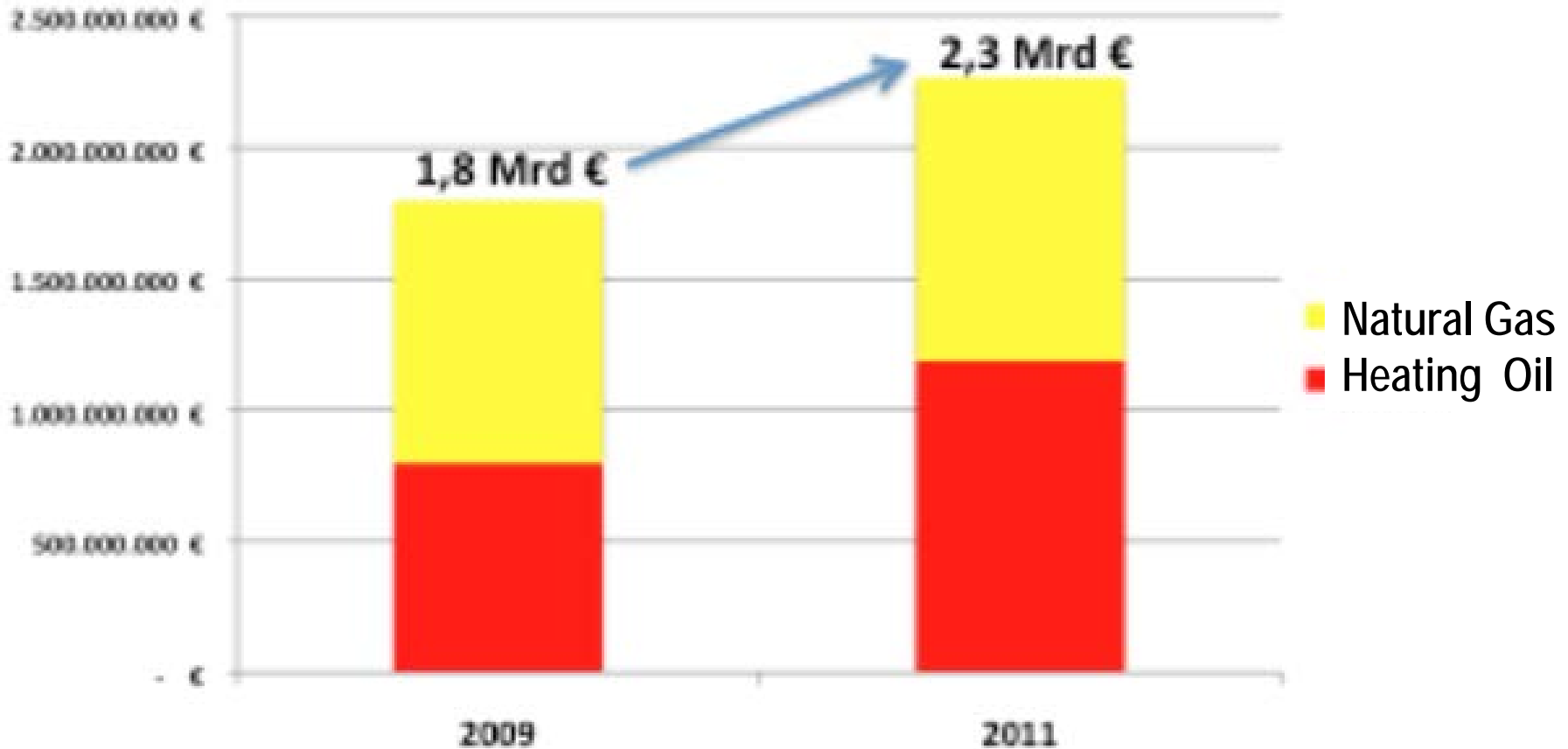
@ 150 €/bbl vs. 52 €/bbl (without behavioural changes!)



A petrol station in Austria: What a difference two years make



Expenditures of private Households for Heating with Natural Gas and Heating Oil



Thank you for your attention

michael.cervený@oegut.at

More on:

