

Energy poverty – from a global perspective to Austria

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Origin

- Oil crises 1970s in GB
- “fuel poverty” was introduced as a term in 1976
 - 75/76 cold winter
 - Energy suppliers changed their billing system (from prepayment to quarterly bills)
 - Electricity was used for heating (Nuclear power was seen as a cheap supplier of electric energy)

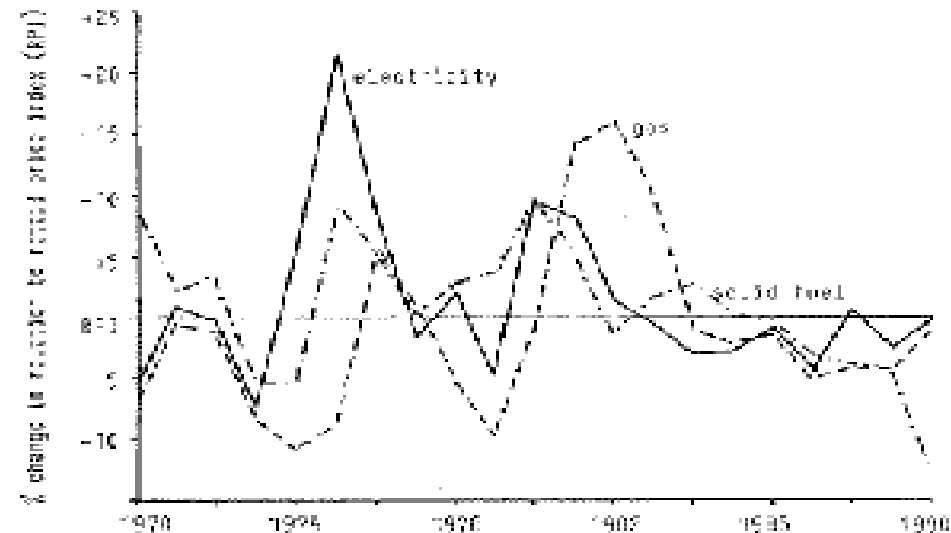


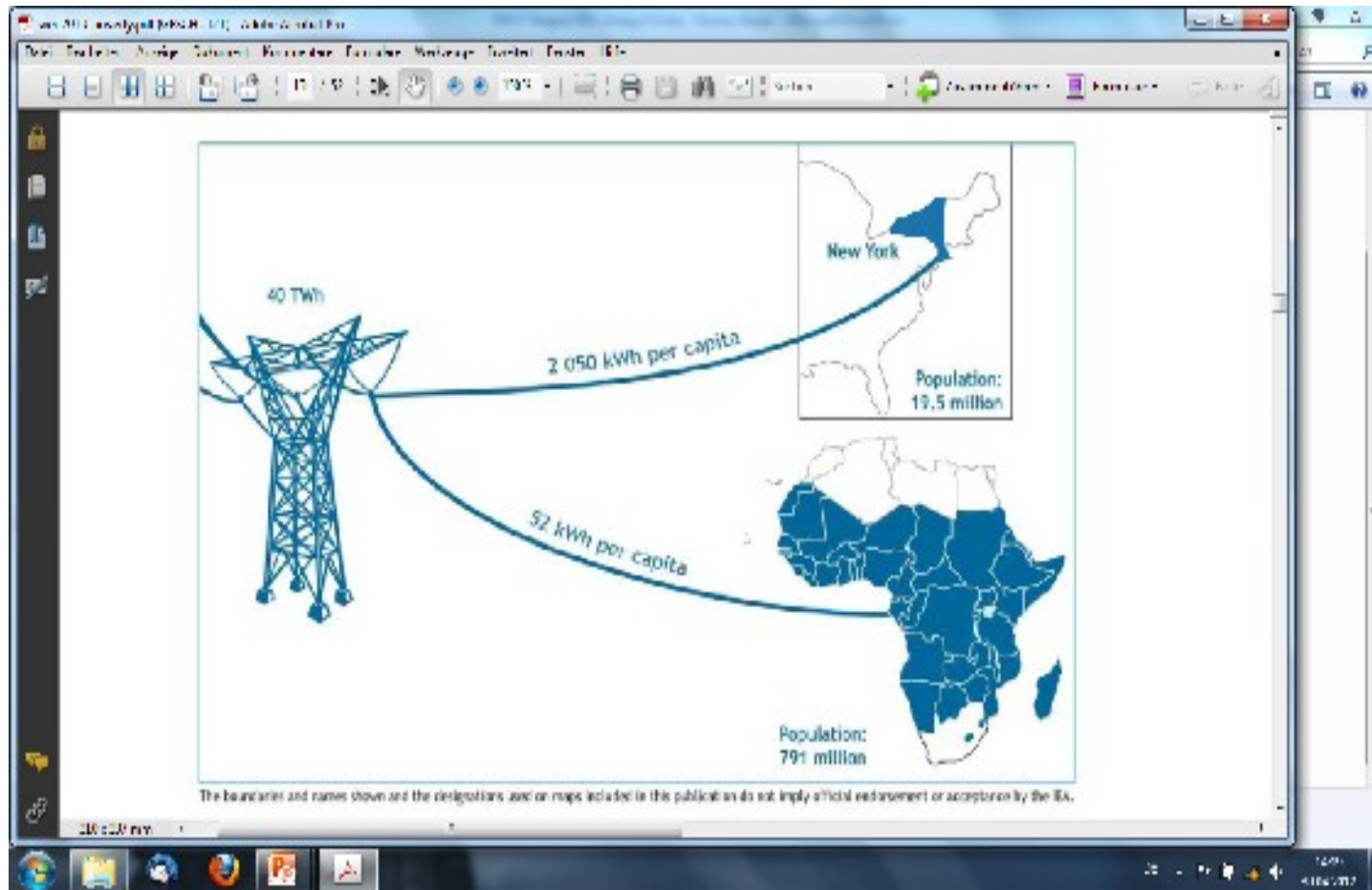
Figure 2.2 Annual changes in the real price of gas, electricity and solid fuel. UK 1970-80

Source: Based on price indices from DUKE5

Definition – Energy Poverty

- Definition:
 - No official global, European or Austrian definition
 - Only two EU-countries (GB and Ireland) have an official definition
 - More than 10% of the household budget for energy services
 - Combination: low income (1); energy prices (2); conditions of dwelling (3) (Boardman 2010)
- Focus:
 - Private Household
 - exclusion of homeless, persons that are living under institutionalized conditions etc.
 - Only energy that is consumed in the private household; no transportation, mobility, consumption of energy outside
- Context:

Global Situation (1)



(IEA/UNDP 2010)

Global Situation (2)

- 1,4 billion without a connection to energy grids
- In some countries black outs and insecurity concerning energy supply
- 2,7 billion have to rely on traditional energy resources (wood, dung etc.)
- Gathering of materials structures daily routines
- Open indoor-fires have serious health effects

(Sovacool et al. 2012)

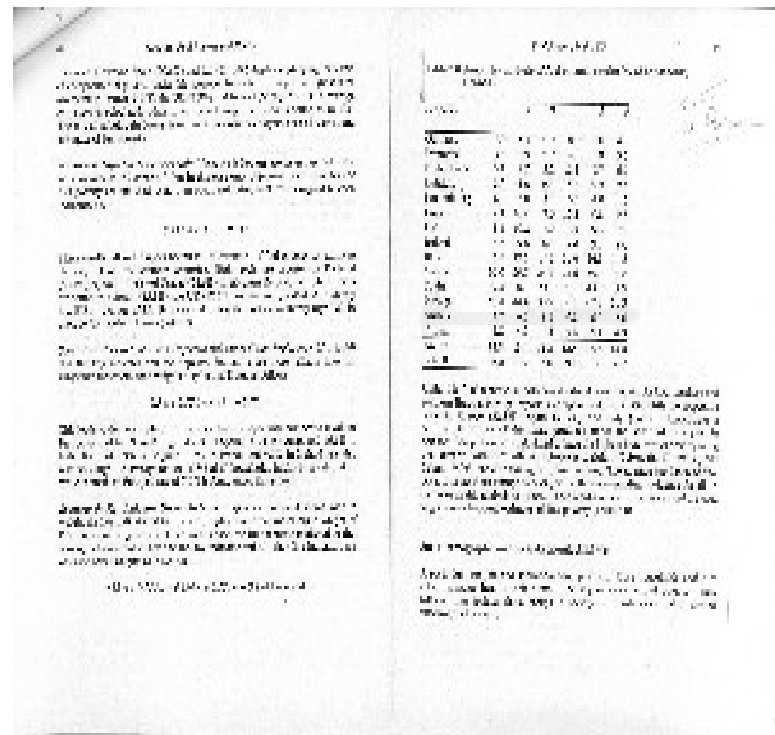
Energy Poverty in Europe

- GB, Ireland have an official definition
 - 16% of British households were energy poor in 2009
- Various initiatives in EU-countries to minimize the burden of energy bills of the financial weak
 - Germany: energy saving campaign with more than 65.000 households
- Eastern Europe
 - Since 1991 massive economic transformations, also concerning the energy industries Problem of transformation of socio-technological infrastructure into liberal and privatized market structures (Buzar 2007)
- In general:
 - Little cross-European research activity
 - Little comparative data

Austria – Statistics

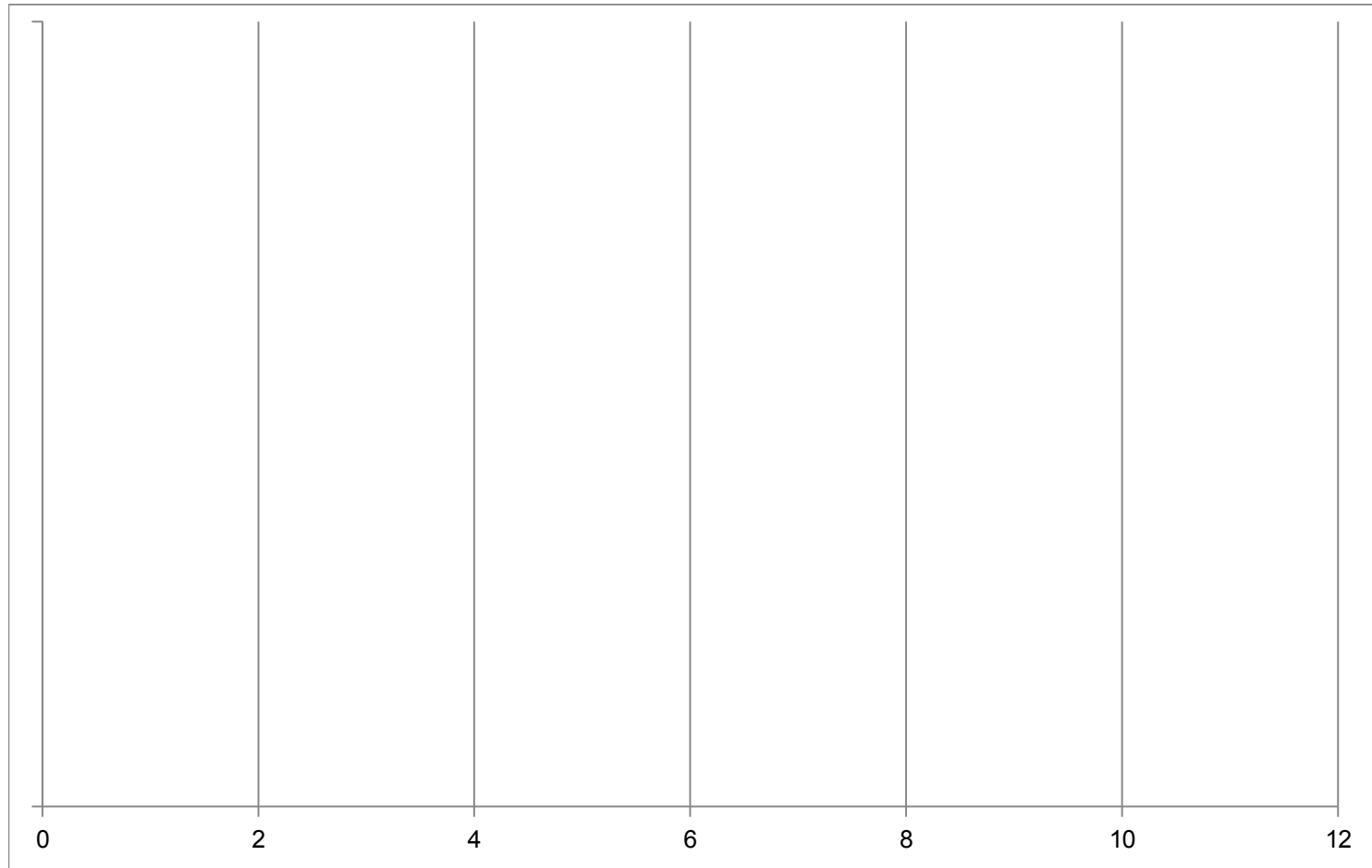
- Poverty rate is low in EU-comparison (11,2%)
- High developed social security system
- Affordable warmth:
 - EU-SILC
 - 2008: 4% (333.000)
 - 2009: 3% (237.000)
 - EQLS
 - 2007: 3,7%
 - Lowest income quartile 6,7%

(Statistik Austria 2010 & 2011; EQLS 2009; Healy 2004)



- α = Unable to afford to heat home adequately
- β = Unable to pay utility bills on time
- π = Lack of adequate heating facilities
- δ = Damp walls and/or floors
- λ = Rotten window frames
- μ = Lacking central heating

Energy expenditures 2004/2005 vs. 2009/2010 per household

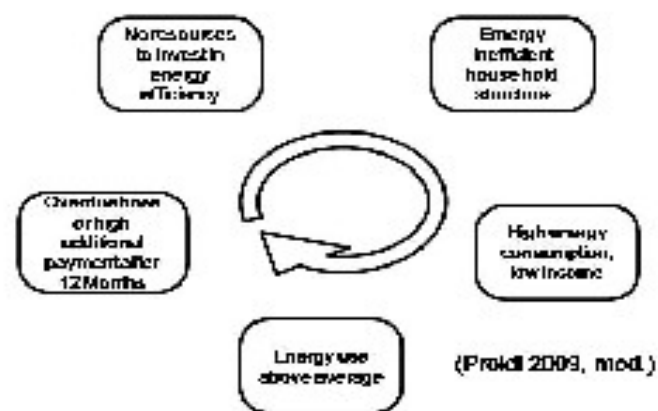


(AK 2011; Statistik Austria 2011)

Research in Austria

- First study in 2009: Dynamic of energy debt
- Second qualitative study in Vienna (50 income poor households):
 - Limited financial options
 - Austerity
 - Tenant vs. landlord
- 2011 first recognition by national funding schemes
(Proidl 2009, Brunner et al. 2010 & 2011)

Research in Austria (1):
Dynamic of energy debt



Case study in Styria

- Energy poverty is not yet in the perception of institutions or organizations
- Rising bills for energy do play a more significant role (Caritas Styria, 2008-2009, support doubled in this area)
- Debtors are under a lot of (psychological) pressure by creditors (i.e. mail-order business)
- No cooperation between social welfare and energy suppliers
- Role of the energy suppliers/utilities
- Always seen as problem of consumption (individualized) and not as a consequence of structural circumstances (e.g. fossil fuel based economy; right on energy; social problem)

Outlook – Scenario for Austria additional spending (200USD per barrel)

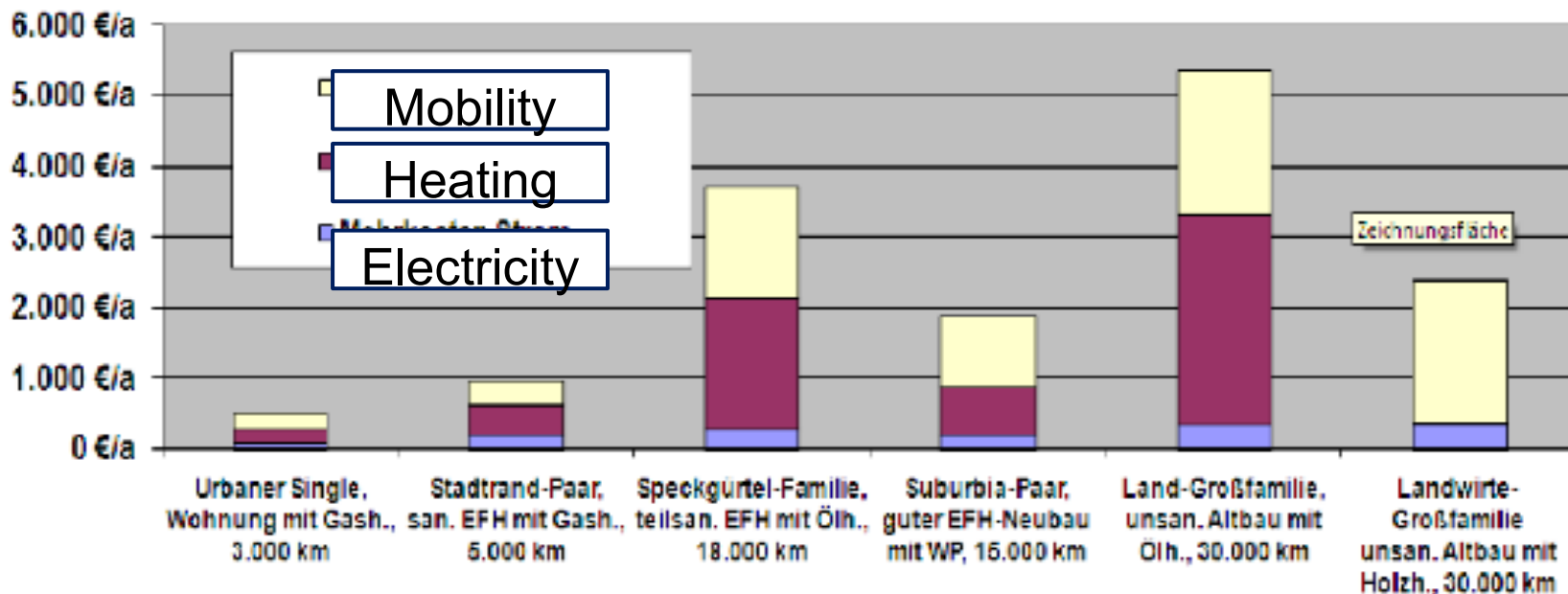


Abbildung: Mehrkosten (für Heizung & Warmwasser, Mobilität und Strom) für sechs Beispielshaushalte bei einem Ölpreis von 200 im Vergleich zu 70 Dollar pro Barrel



(ÖGUT 2011)

Conclusions

- Energy poverty has to be systematically included in agendas that try to tackle the rising energy consumption
- Further research into the connection of socio-economic and socio-technical dimensions of energy poverty is needed
- Rising socio-economic inequalities needs to be set into the context of individual/household energy consumption
- There has to be established (at least) an European definition/understanding of energy poverty

References



- AK Oberösterreich (2011): Energiearmut: In immer mehr Haushalten fehlt das Geld für Strom und Heizung, Presseausendung.
- Berger, Thomas (2011), Energiearmut: Eine Studie über Situation, Ursachen, Betroffene, AkteurInnen und Handlungsoptionen. <http://www.spectro.st/content/download/465/2319>, 15.11.2011.
- Boardman, Brenda (2010), *Fixing Fuel Poverty. Challenges and Solutions*. London: Earthscan.
- Buzar, Stefan (2007), *Energy Poverty in Eastern Europe. Hidden Geographies of Deprivation*. Hampshire: Ashgate.
- BMASK (2009), 'Armutgefährdung in Österreich. EU-SILC 2008 Eingliederungsindikatoren. Sozial politische Studienreihe, Band 2', http://www.statistik.at/web_de/statistiken/soziales/armut_und_soziale_eingliederung/index.html.
- BMASK (2010), 'Sozialbericht 2009-2010. Ressortaktivitäten und sozialpolitische Analysen.'. Wien.
- BMASK (2011), 'Armutgefährdung und Lebensbedingungen in Österreich Ergebnisse aus EU-SILC 2009.Tabellenband', http://www.statistik.at/web_de/statistiken/soziales/armut_und_soziale_eingliederung/index.html.
- Brunner, Karl-Michael, Anja Christanell and Markus Spitzer (2010), 'Energiekonsum, Armut, Nachhaltigkeit'. 11. *Symposium Energieinnovation*. Graz: 13 (10.-12.02.2010).
- Brunner, Karl-Michael, Markus Spitzer and Anja Christanell (2011), 'Energiekonsum und Armut', in: Gertraude Mikl-Horke (Ed.), *Sozioökonomie: Die Rückkehr der Wirtschaft in die Gesellschaft*. Marburg: Metropolis-Verlag.
- EQLS (2009), 'European Quality of Life Survey 2007 - Mapping the results', http://www.eurofound.europa.eu/areas/qualityoflife/eqls/eqls2007/2eqls_07_08.htm.
- Getzinger, Günter and Thomas Berger (2011), 'Energiearmut: Ursachen, Folgen und Wege zu ihrer Bekämpfung', in: Landesenergieverein Steiermark (Ed.), *Heading towards a sustainable energy future. A summary of scientific papers in memoriam Manfred Heindler*. Graz.
- Healy, Jonathan D. (2004), *Housing, fuel poverty, and health: a pan-European analysis*. Hampshire: Ashgate.
- Kraemer, Klaus (2007), 'Umwelt und soziale Ungleichheit', *Leviathan* 35 (3): 348-372.
- Kraemer, Klaus (2011), 'Prekärer Wohlstand und nachhaltiger Konsum', *Österreichische Zeitschrift für Soziologie* 36 (2): 35-54.
- OECD/IEA (2010), Energy Poverty. How to make modern energy access universal? Special early excerpt of the *World Energy Outlook 2010* for the UN General Assembly on the Millennium Development Goals. http://www.worldenergyoutlook.org/docs/weo2010/weo2010_poverty.pdf, 07.01.2011

Thank you!

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