How to adjust Ukraine's energy tariffs? International experience of energy reform and social protection

Jörg Radeke & Woldemar Walter

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Outline

1. **Introduction**
2. Poland – Shock therapy
3. Hungary – Adjustment with obstacles
4. Bulgaria – Gradual increase and targeted support
5. Conclusions and recommendations

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1. Introduction

- Ukraine faces the urgent need to adjust energy tariffs – especially gas – to market levels
- Other countries in the region have been in a similar position – many of which have already completed their adjustment of energy tariffs
- **Main question: How did these countries conduct the energy tariff adjustment and what lessons can be drawn?**

To answer this question, we conducted case studies for Poland, Hungary and Bulgaria, which describe:

- The situation before the adjustment
- The speed of the adjustment process
- The complementary measures taken to cushion the tariff rise
- The socio-economic impact on incomes, energy costs, poverty, etc.
- What lessons can be learned for Ukraine's adjustment process?

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2. Poland – Shock therapy

Poland was one of the first countries to adjust energy tariffs following the collapse of communism. Its adjustment period can be separated in two parts – a first period of rapid and steep price increases between 1990 and 1994 and a more gradual increase of tariffs thereafter.

- **Situation before adjustment:**

– The energy share of household's total expenditure ranged between 2.5% for workers and 4.9% for pensioners before the adjustment in a system that substantially subsidised energy use

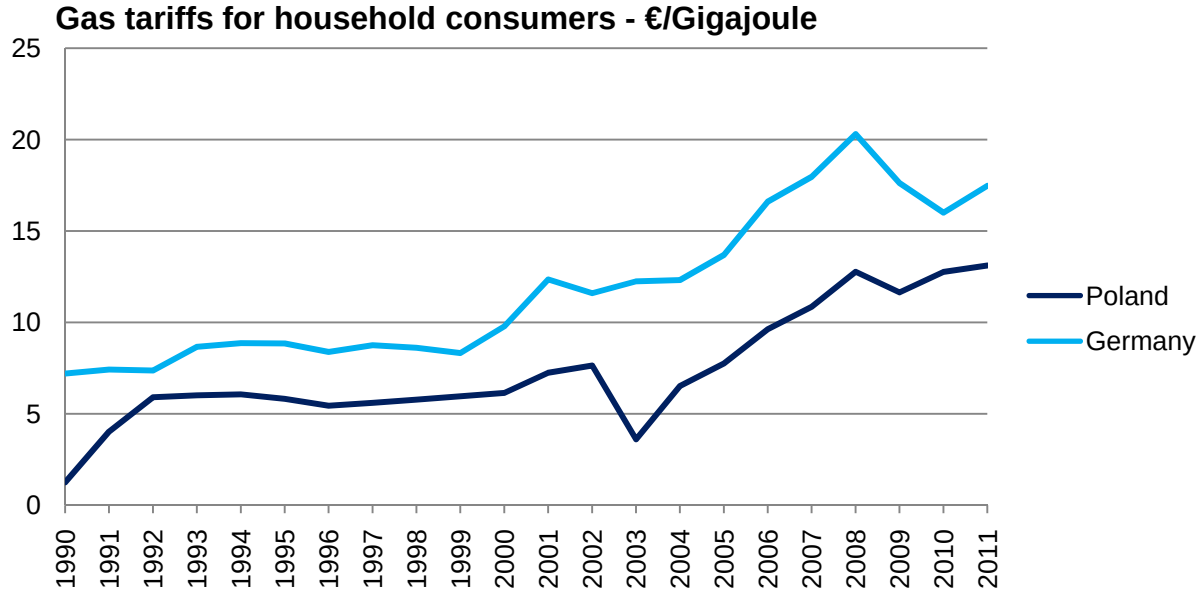
– Economic climate: Collapse of economic system; characterised through a deep recession with a 14% real GDP decline between 1991-1992
– Rising unemployment (reaching 16% in 1993) combined with low incomes and rising poverty incidence

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2. Poland – Shock therapy

- **Adjustment process:**

– Introduction of a new pricing system for energy, including gas in the early 1990s; subsidies were eliminated over a four year period
– Natural gas tariffs increased by over 220% in 1991 and 50% in 1992
– Other prices were also adjusted: District heating tariffs increased six-fold until 1994



Source: Eurostat

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2. Poland – Shock therapy

- **Complementary measures:**

- Despite sharp increase, new tariff policy was not accompanied by any specifically designed measures to protect the poor
  - Additionally, existing social assistance programmes poorly designed and badly administrated – so could not cope with increase in fuel poverty
  - Ineffective administration, mostly through local governments, led to patchy distribution of social benefits
    - Support funds to be distributed by local government partly used for unrelated public spending, for example road maintenance
    - Indeed, in 1995 one-third of eligible poor families did not received the full benefit they would have been entitled to
  - To address the issues a **housing allowance system** was introduced in 1995 – yet flaws persisted
  - Complex eligibility criteria led to a low coverage – only 6% of households benefitted in September 1997

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2. Poland – Shock therapy

- **Socio-economic impact:**

– By 1993 the energy expenditure share of total expenditure rose to 8.8% for workers (from 2.5%) and to 11.7% for pensioners (from 4.9%)
– The average household spent around 7% of its expenditure on energy – compared to below 4% in Germany in 1993
– The poverty incidence increased to 20% in 1993-94 (from 6% in 1987/88)
– The entire social insurance expenditure reached 20% of GDP in 1992 (from 4.7% in 1988)

However: The tariff adjustment coincided with the collapse of the Polish economy and increased energy tariffs only partly contributed to the increase in poverty and social security expenditure

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2. Poland – Shock therapy

- **Lessons learned:**

1. Tariff increase in Poland in the early 90s coincided with economic transition, high unemployment and rising poverty
2. Raising tariffs to market level in little more than two years proved too ambitious
3. Tariff increase was not accompanied with targeted social assistance
4. An outdated, bureaucratic social security system and public administration was not able provide the assistance necessary
5. Distributing support funds to local administrations was ineffective
6. Consequence: Energy subsidies were removed without having an alternative system in place to protect the poor
7. Second phase of Polish energy price adjustment much better managed and more relevant for Ukrainian experience
8. Ukraine today in a much more favourable, stable economic situation compared to Poland in the early 90s
9. Ukraine's poverty incidence lower, so no need for universal subsidies

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3. Hungary – Adjustment with obstacles

In Hungary the adjustment started later than in Poland in the mid-1990s. However, tariffs were not fully raised to cost recovery levels. Only later, in a second step between 2006 and 2010 the remaining subsidies were eliminated.

- **Situation before adjustment:**

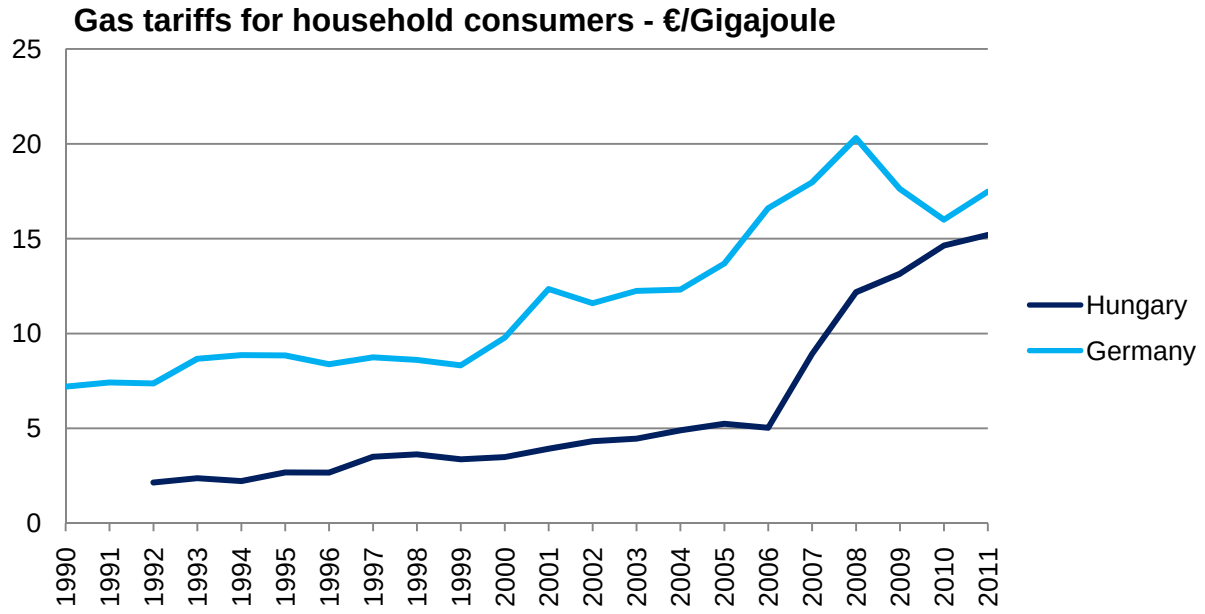
– Similar as other East-block countries Hungary's energy tariffs were highly subsidised at the beginning of the 90s

– Economic climate: In 1994 Hungary had overcome the worst of the post communism adjustment period
– GDP per head average USD 4,100 in 1994
– Although unemployment stood at 10%, the economy had started to grow again following an eye-watering 15% contraction between 1990 and 1993

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3. Hungary

- **Adjustment process:**
  - In the first adjustment step between 1994 and 1997 gas tariffs increased by 60%
  - However, energy tariffs – especially gas – remained substantially below cost recovery level
  - The second adjustment step took only place between 2006 and 2010 when subsidies were eliminated and tariffs reached market level



Source: Eurostat

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3. Hungary

- **Complementary measures:**

First adjustment period (1994-1997):

– **Housing maintenance program** was introduced in 1993, which provided financial assistance for rent, utility and heating
– Additionally, a temporary **social energy fund** in place from 1997 to 1998 to buffer energy price increases – support was means-tested

Second adjustment period (2006-2010):

– During the second adjustment period an additional social support instrument was introduced
– A special means-tested **gas price allowance program** was introduced in 2006 which was centrally managed by the treasury

Assessment:

– As such various energy assistance measures in place to assist to low-income households

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3. Hungary

- **Complementary measures (continued):**

– Anecdotal evidence indicates poor targeting with less than half of the funds of the **housing maintenance programme** benefitting low income households – reducing effectiveness of the measure
– Moderate coverage: 200 000 households (4.8% of all households) benefitted from the housing maintenance program in 2000
– Bulk of the support was going towards rent, only 23% towards heating
– Assistance programmes were administrated locally and, since 1998, eligibility criteria were also set by local policy makers
– This contributed to low and inadequate coverage and unequal eligibility
– In some cases municipalities spend social funds on other purposes

– In comparison, the **gas price allowance programme** introduced during the second adjustment period 2006-2010 was more comprehensive
– But the instrument was rather expensive – with annual cost of USD 600 m it accounted for 83% of all housing support and equalled 0.4% of GDP in 2007

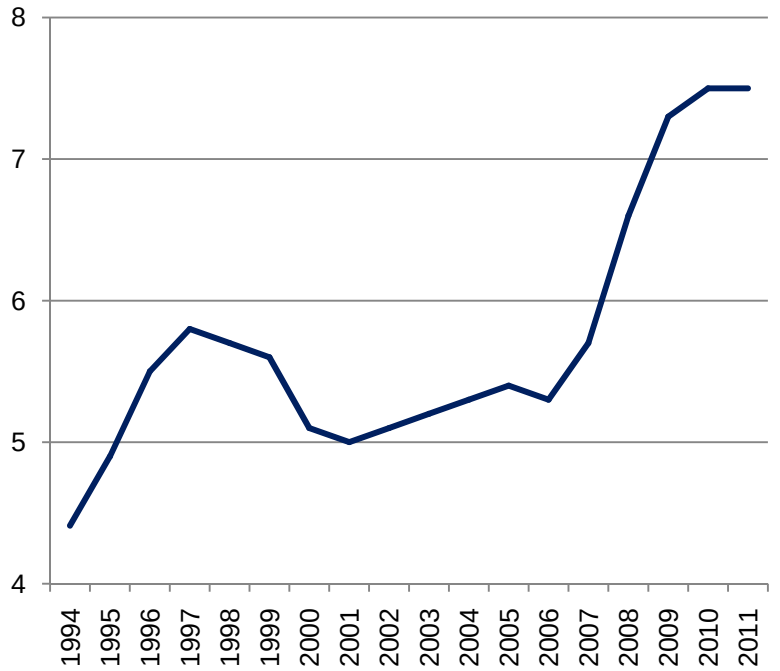
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3. Hungary

- **Socio-economic impact:**

– Energy cost share increased from around 4.0% in of expenditure in 1994 to 7.5% in 2011 – however, even declined between 1997 and 2001
– Delayed adjustment was a large burden on budget
– The *gas price allowance programme* from 2006 had to be scaled down in 2011 as it was a drain on public finances

Energy cost expenditure as share of total expenditure, %



Source: Eurostat

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3. Hungary

- **Lessons learned:**

1. Timing of energy price adjustment in Hungary more favourable since worst effects of economic fallout following the collapse of communism were over
2. However, adjustment steps too timid and discontinued in 1997 well below market level
3. Allowing local authorities to decide about how and whom to support turned out to be not effective
4. As a result, social assistance lacked uniform eligibility and adequate levels of provision – low income household were not sufficiently protected
5. This may have contributed to lack of political will to raise energy tariffs to full market level after 1997
6. Final adjustment postponed for too long – at high cost to Hungarian economy
7. However, when second period tariff increase finally happened, it featured an effective social assistance programme

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4. Bulgaria

In Bulgaria natural gas is the most important fuel for district heating. District heating tariffs were continuously raised between 1997 and 2005.

- **Situation before adjustment:**

– District heating provided heat for around 20% of population, accounting for 23% of final energy use in 1997
– Energy expenditure as share of total expenditure was around 12% at the end of the 90s (with a 14.2% share for poor households)
– In 1997 37% of population were considered poor according to the World Bank measure[1)]
– Consequently, social protection of low income household had priority

Economic climate:

– Economic transition to a market economy was marked through high inflation, declining incomes (income per head fell by almost 50% between 1990 and 1997 to USD 1,300 per head) and rising poverty
– Unemployment peaked at 18% in 2000

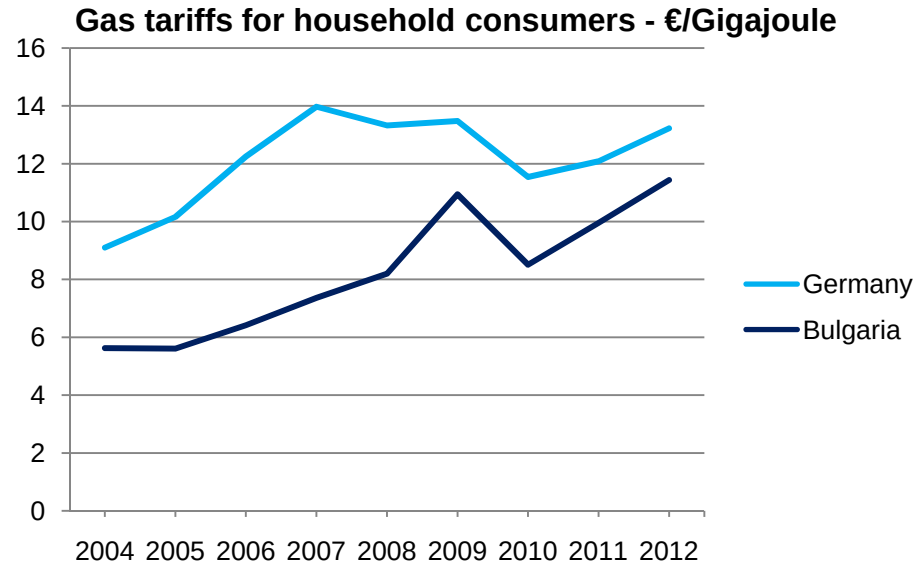
[1)] Income below 60% of medium income

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4. Bulgaria

- **Adjustment process:**

– Continuous, gradual adjustment process
– District heating prices raised by approx. 10% every year between 1997 and 2005 when universal subsidies were completely abolished
– After subsidies were eliminated natural gas tariffs and consequently district heating tariffs increased further reflecting rising global energy prices



Source: Eurostat

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4. Bulgaria

- **Complementary measures:**

– In Winter 1996/1997 together with European Union support the **Winter Supplement Program (WSP)** was introduced
– The WSP provided *means-tested* energy cost assistance during the winter season (November to March) for low-income households
– Link to existing social security system: People qualified for WSP payments when they were eligible for social assistance (i.e., income is under a guaranteed minimum income defined by the government)
– Initially, in 2001, the programme was partially funded by local government and partially funded by central government
  – Problem: Municipalities experienced lack of funding, spent money on other purposes
  – Consequence: 30% funding deficit and reduced protection of regional households
  – Full national funding from 2003 eliminated the problems on municipal level
– Parallel to the adjustment Bulgarian government focused on energy-efficiency measures to lower energy expenditure

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4. Bulgaria

- **Complementary measures (continued):**

Assessment:

– The World Bank testified the WSP extremely effective targeting after initial problems with local funding were resolved
– In 2007, 70% of the funds disbursed were going to the poorest 10% of households
– Assistance averaged USD 97 in the winter 2002/2003
– Although it covered only approx. 70% of the average household heating costs, flat rate subsidy meant it left intact incentives to reduce energy consumption
– Especially, as support for reducing energy consumption was available
– Given its effective targeting, WSP did not overburden government finances

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4. Bulgaria

- **Socio-economic impact:**

– The average household energy expenditure rose to 15% in 2007 (from an estimated 12% in 1997)
– The WSP spending amounted to USD 60 m annually
– As such, WSP equalled only 1.2% of all social spending and 0.2% of GDP in 2007
– Therefore only a small burden for the national budget, but very effective
– Poverty incidence declined to 23.9% in 2010 – compared to 37% when adjustment was started
– Income levels rose to USD 7,242 per head in 2010

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4. Bulgaria

- **Lessons learned:**

1. Energy tariff adjustment in Bulgaria very successful
2. Gradual, predictable yet decisive increase of tariffs and parallel removal of subsidies
3. The Bulgarian government succeeded in installing a well-targeted and thus cost effective social assistance programme
4. Link to existing well-working social assistance instruments reduced the cost of administrating the energy cost support programme
5. Eventual full central government funding and administration addressed initial short comings
6. Level of support largely adequate while not overburdening public finances
7. EU provided financial and technical assistance for first years
8. Flat rate support left incentives for reduction of energy use intact
9. Additional support for energy efficiency improvements helped households to reduce their energy bills

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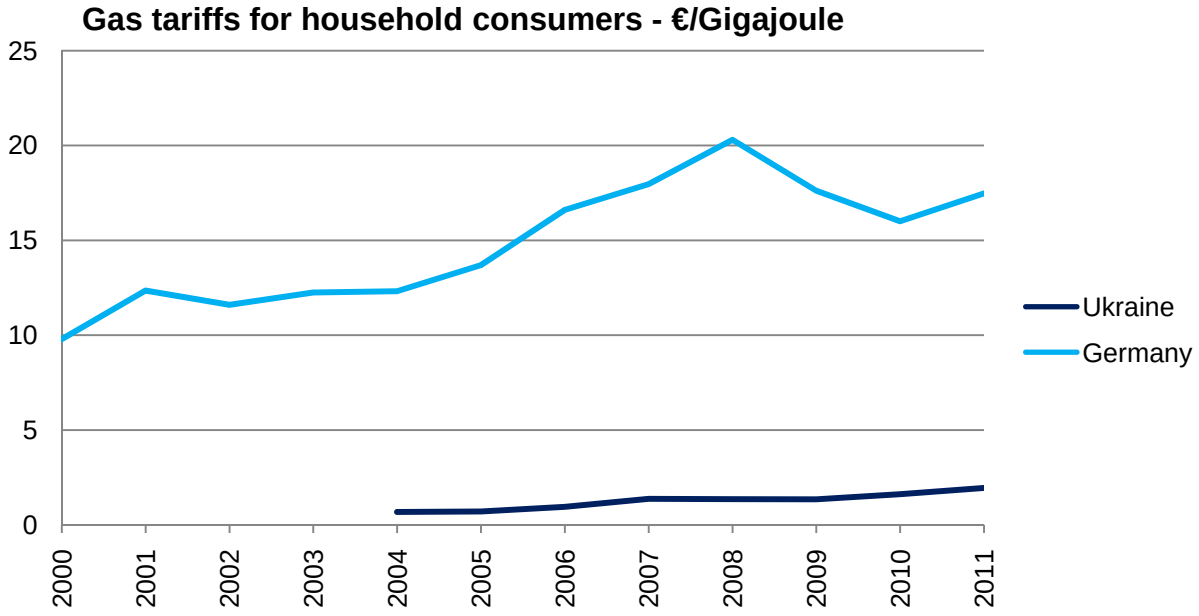
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5. Conclusion and recommendations for Ukraine

- **Ukraine's situation before adjustment:**
  - Gas tariffs for households and heating companies significantly below import cost - however, industry and public sector pay tariffs close to market level
  - Adjustment started in 2005 and gas tariffs increased by over 300% since 2004
  - However, this rather reflects the extreme low starting point - tariffs were below import prices even before import costs started to increase
  - Further substantial adjustment needed



Source: Eurostat, NERC, Naftogaz

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5. Conclusion and recommendations for Ukraine

Although the situation in Ukraine is unique, a number of conclusion can be drawn from the case study analysis:

Tariff adjustment

- Ukraine's large adjustment need and long delay in aligning tariffs mean that the initial increase has to be substantial – similar to Hungary's second tariff adjustment process in 2006
- A significant gas tariff increase of at least 50% at the beginning of the adjustment process would send the signal that the government is committed to align gas tariffs with import costs
- After the first large increase further increases should be gradual and predictable
- Substantial adjustment steps are needed towards full cost recovery. Hungary's second adjustment period provides a good example

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5. Conclusion and recommendations for Ukraine

Complementary measures

- Unlike Poland before the adjustment, the economic situation in Ukraine is more stable
- Poverty incidence declined over the last years – a large share of households can now afford to pay a fair price for energy tariffs
- Bulgarian experience shows that well-target measures can effectively protect the poor households at low cost to the government
- Bulgaria's use of existing social welfare programmes suggests that this is a effective way to distribute funds which reduces administrative cost
  - With the "Low Income Family Support" Programme a well-targeted programme exists in Ukraine – yet level of funding too low for effective support (see PB/02/2012)
- Polish, Hungarian and, to some degree Bulgarian, experiences suggest that distributing social protection funds is best done through central government – and not through municipalities

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5. Conclusion and recommendations for Ukraine

Complementary measures (continued)

- Bulgarian case indicates that accompanying tariff increases with support for energy efficiency in households can reduce adverse impact on households and increase political acceptance
- Social support should maintain incentives to reduce energy consumption – e.g. flat rate amount. This also reduces the administrative burden
- Like Bulgaria, the Ukrainian government should make use of international technical and financial assistance, which would be available to support a credible energy policy reform concept

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Contacts

Jörg Radeke
radeke@berlin-economics.com

Woldemar Walter
walter@berlin-economics.com

German Advisory Group
c/o BE Berlin Economics GmbH
Schillerstr. 59, D-10627 Berlin
Tel: +49 30 / 20 61 34 64 0
Fax: +49 30 / 20 61 34 64 9
www.beratergruppe-ukraine.de

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