



**CTI 7: Workshop, Leipzig, 21-25 October 2006**

**Tuesday, 24 October 2006**

**Working Group 6: Post 2012 The Future of Emission  
Trading – Options and Challenges**

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## 2004-2006 status

- 70% productive capacity utilization (EU25 > 85%);
- Bulgarian GDP per capita is 1/3 of the EU25 (GDP<sub>1988</sub> not achieved yet), consumption far below vs.1988 level;
- energy intensity 2.3 times >EU25 (2002) but 5 to 8 times as officially reported by many international agencies;
- Bulgaria takes 4-th place in Europe in electricity export (2005);
- forthcoming closure of nuclear power capacity of 1300 MW from January 1, 2007;
- expected short- midterm regional shortages;
- growing regional energy supply dependence;
- impacts on Kyoto/post Kyoto process and Future of (EU) ETS.



**Emitted GHG (CO<sub>2</sub>eqv Kyoto and CO<sub>2</sub> NAP EU ETS):  
gr/EUR(USD) of GDP and tons per capita**

<b>Indicators (Countries)</b>	<b>CO<sub>2</sub>/ GDP 1990</b>	<b>CO<sub>2</sub>/ GDP ppp 1990</b>	<b>CO<sub>2</sub> / GDP 2003</b>	<b>CO<sub>2</sub> / GDP ppp2003</b>	<b>CO<sub>2</sub> NAP/ GDP ppp 2005</b>	<b>CO<sub>2</sub> /capita 1990</b>	<b>CO<sub>2</sub> /capita 2003</b>	<b>CO<sub>2</sub> NAP /capita 2005</b>
Austria	0,5	0,46	0,4	0,43	0,16	10,08	11,31	4,06
Germany	0,83	0,83	0,47	0,53	0,26	15,73	12,82	6,05
Greece	1,67	-	0,89	0,72	0,39	11,0	13,64	6,76
Hungary	1,63	1,63*	1,13	0,63	0,24	11,8	8,03	3,08
Poland	2,93	2,93*	2,07	1,03	0,64	14,83	10,07	6,25
<b>Bulgaria</b>	<b>(6,83) *</b>	<b>5,42</b>	<b>3,86</b>	<b>1,38</b>	<b>0,69*</b>	<b>15,77</b>	<b>7,62</b>	<b>4,36</b>

## Post Kyoto Bulgarian Perspectives: The rough estimate

- Actual 1988 CO<sub>2</sub> eqv **141,8 Mt**
- KP Target 2008-2012 (less reg./impl. JI): **<120,0 Mt**
- 2004 reported CO<sub>2</sub> eqv emissions: **66,5 Mt**
- Expected min PK commitment (2020): - **15% 120,5 Mt**
- Basic assumptions: - long term GDP annual growth **5(6)%;**
- CO<sub>2</sub> emissions growth **5(4)%;**
- Projected CO<sub>2</sub> eqv emissions (2020): **145,2 Mt(5%)**  
**129,5Mt (4%)**
- **Expected gaps: -25 Mt(10 Mt)**
- **Necessity for Banking under KP and reconsider policy on JI**

# Experience in drafting NAP-1(2)

- Preparatory and Consultation Process;
- Reviews of GDP and Sector Growth Forecasts;
- Changes in Methodology (EU Guidelines from Dec 22, 2005) – inconsistent interpretation of the “Combustion installation” throughout entire EU ?
- Consideration of Nuclear Reactors Conservation (Closure) and undertaken JI;
- Reserve for unregistered and s.c. “sleeping” installations (with lower capacity utilization);
- Others.

## Future of (EU) ETS: some considerations

- Assuring commitment from bigger emitters (states);
- Implementation of global ETS (possible auctioning ?);
- Specific approach to countries meeting Kyoto targets;
- *Fare vs formal* burden sharing in EU-27(CO2 per capita, CO2 per EUR GDPppp) – Possible Banking;
- Agreeing on Common EU (global) policy on Nuclear Power development and addressing:
  - energy supply dependences
  - effects on combating climate change;
- Sector approach (EU and or globally)
- Small Emitters;
- Mutual Recognition of verification.

# Problems to be addressed

Focus on:

- Development (selection) of sets of sector specific carbon intensity indicators (targets) related to BAT;
- Imperfection of the electricity and gas markets;
- Impacts on the non-price adjustment sectors (exposed to worldwide competition);
- Tech transfer and capacity to reduce & CCS emissions instead of cutting production;
- Non-carbon based producers (hydro, **nuclear**, renewables).