



**POLYSTYRENE MARKET
IN
CENTRAL AND EASTERN EUROPE
– LAST DEVELOPMENT**

Tomas Biedrawa

**PS+ABS Conference
Moscow, 16-09-2009**

AGENDA

1. INTRODUCTION - MACROECONOMIC TRENDS

2. PS (GPPS, HIPS)

3. EPS

4. XPS

5. SUMMARY

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1. INTRODUCTION - MACROECONOMIC TRENDS

2. PS (GPPS, HIPS)

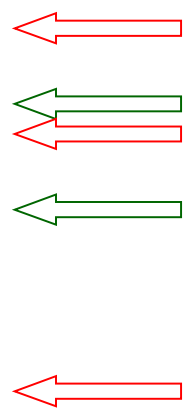
3. EPS

4. XPS

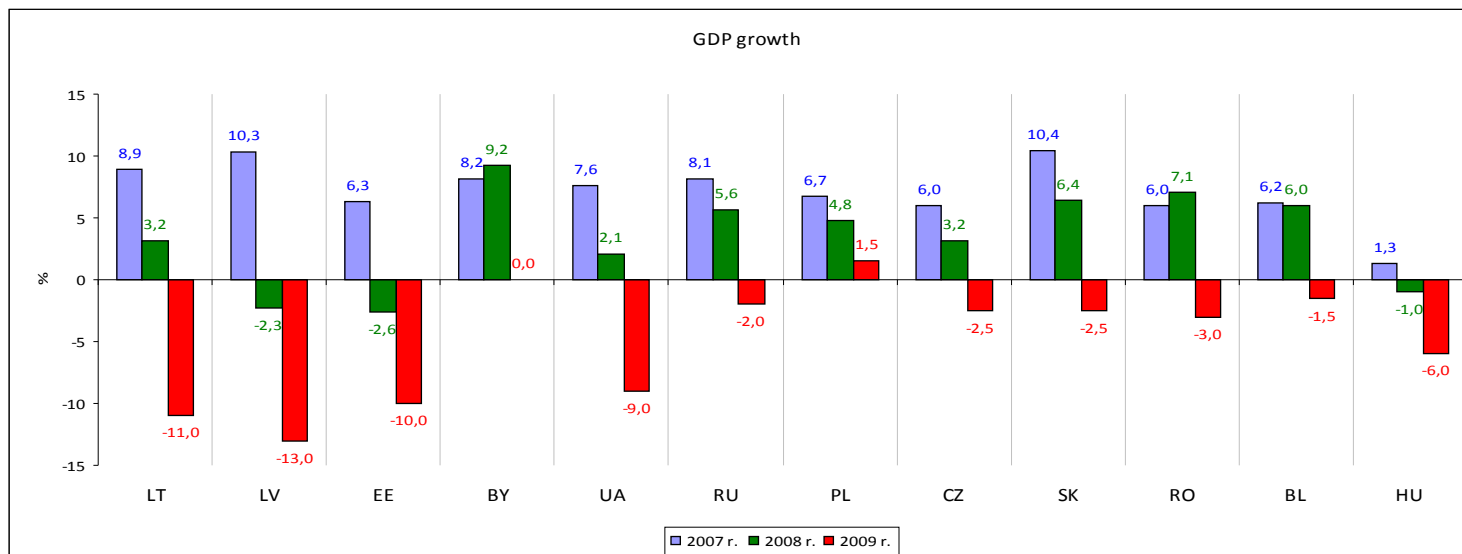
5. SUMMARY

INTRODUCTION – MACROECONOMIC TRENDS

Country	Population	PDP per capita	GDP 2008	GDP 2009e
	<i>mln</i>	<i>thou.USD</i>	%	%
LT	3,3	17,7	3,2	-11,0
LV	2,3	17,8	-2,3	-13,0
EE	1,4	21,2	-2,6	-10,0
BY	9,7	11,8	9,2	0,0
UA	45,7	6,9	2,1	-9,0
RU	140	15,8	5,6	-2,0
PL	38,5	17,3	4,8	1,5
CZ	10,2	26,1	3,2	-2,5
SK	5,4	21,9	6,4	-2,5
RO	22,2	12,2	7,1	-3,0
BL	7,2	12,9	6,0	-1,5
HU	9,9	19,8	-1,0	-6,0



- Probably only Polish GDP will grow in 2009,
- Belorussian on 2008 level,
- The weakest performance in Baltic States and Ukraine.



AGENDA

1. INTRODUCTION - MACROECONOMIC TRENDS

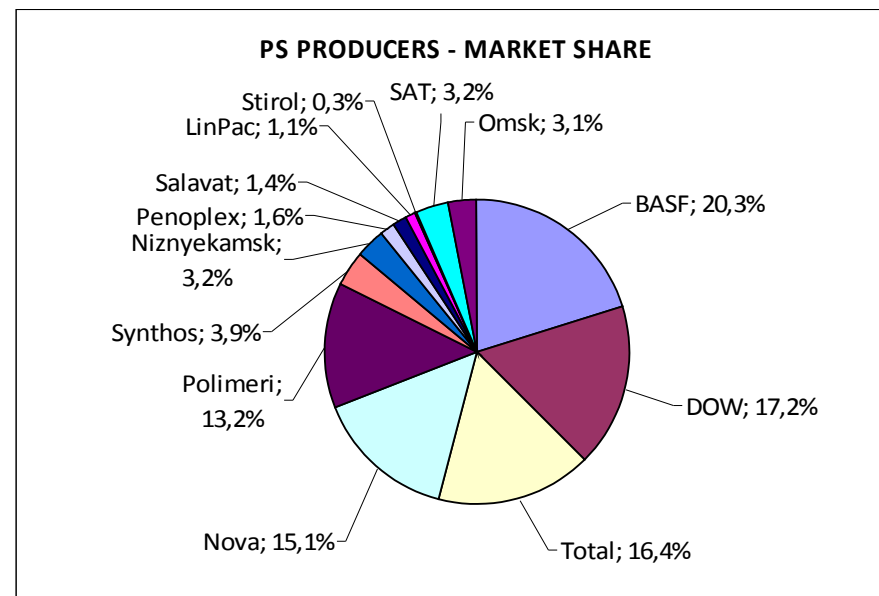
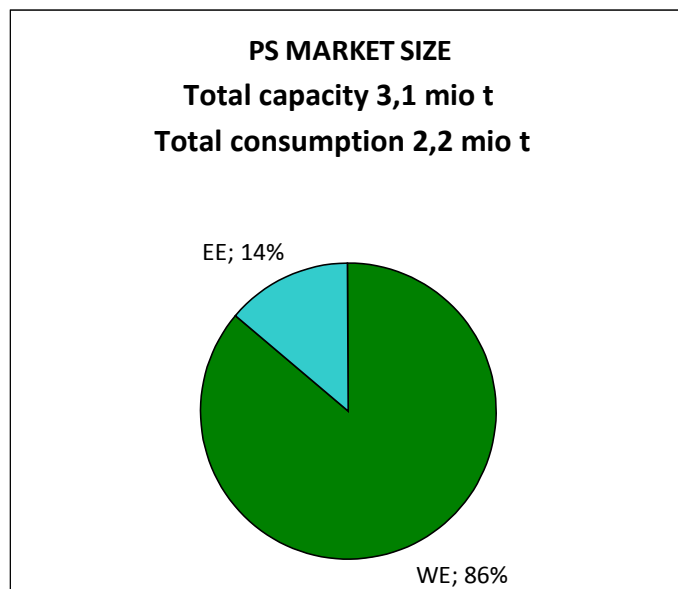
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PS – MARKET DESCRIPTION

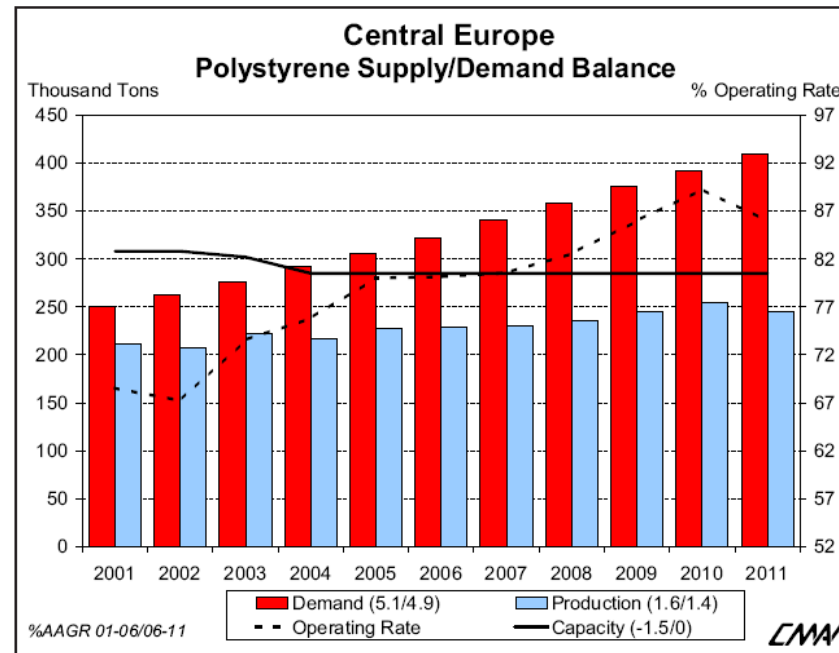
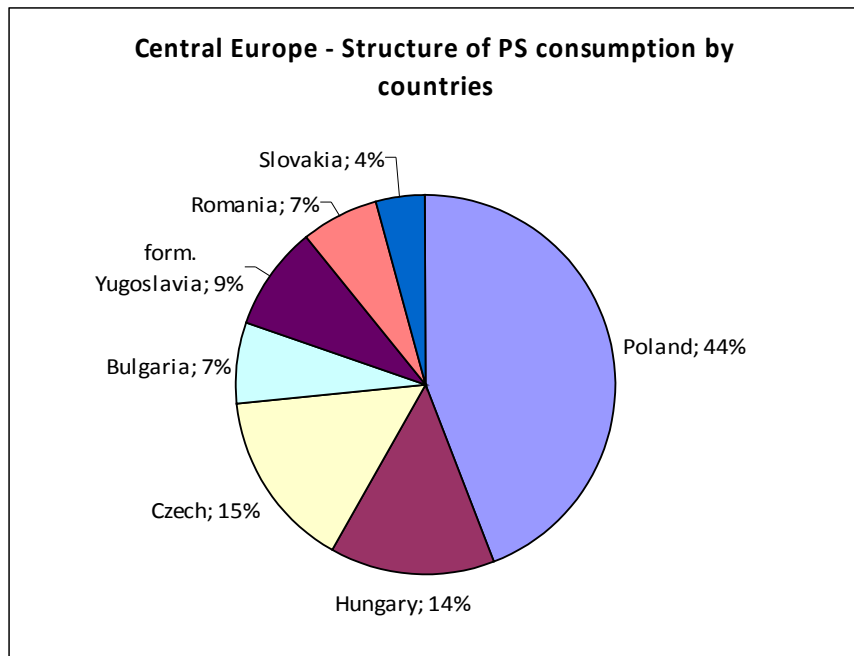


MAIN APPLICATIONS

	Europe	CE	Russia	USA	Poland	Czech
Packaging	40%	60%	36%	34%	55%	46%
E&E	26%	17%	23%	24%	24%	15%
Others	34%	23%	41%	42%	21%	39%

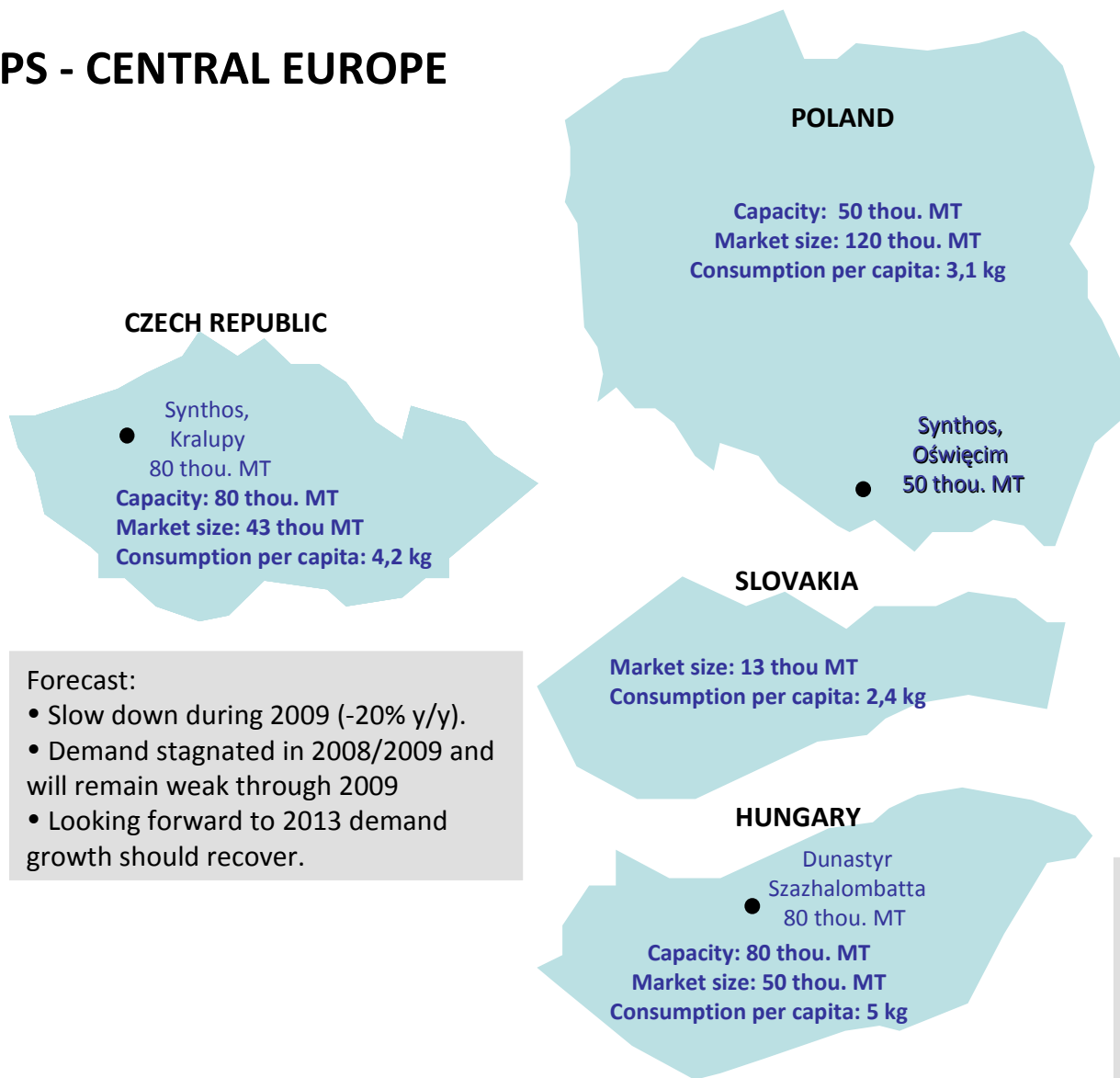
- Average utilization rate not exceed 70%,
- In Europe main applications are packaging, but in Russia and USA other applications,
- For E&E applications in Central Europe are used substitutes.

PS IN CENTRAL EUROPE



- PS production in 2006 – 245 000 MT (annual growth 3%),
- PS demand 322 000 MT, largest usage in Poland and Hungary (60%),
- Demand exceeds production – significant import from West Europe,
- Vast majority of consumption – one-time packaging (60%).

PS - CENTRAL EUROPE



Forecast:

- Slow down during 2009 (-20% y/y).
- Demand stagnated in 2008/2009 and will remain weak through 2009
- Looking forward to 2013 demand growth should recover.

Forecast:

- Slowdown in 2009 (-10% y/y). After the slowdown caused by the crisis, in the period 2010-2013, expected stabilisation on level 126 thou. MT
- The market will mainly sustained by developments in packaging while demand will be well down in appliance.

Forecast:

- One of the fastest rates growth during year 2003-2008 in Europe. Large growth in 2009 (+10% y/y).
- Weak demand in appliance sector will be offset by continuing growth in packaging sector. Demand growth expected to average 5% for the period through 2013.

Forecast:

- Market demand slow dramatically during 2009 (-25%)
- Appliance will especially weak while packaging market will continue to enjoy some growth.

PS – CENTRAL AND EASTERN EUROPE

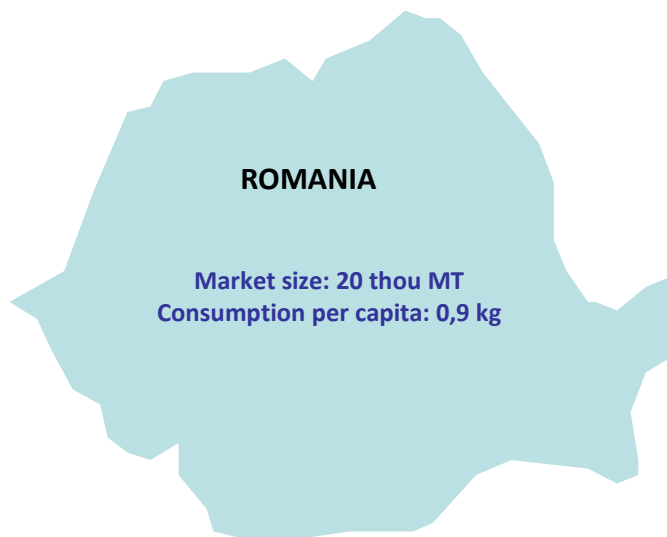
BALTIC STATES



Forecast:

- Growth of PS market 14% in 2009
- Strong growth between 2003-2009 (+9%)
- Demand will remain through 2009-2010 but is expected to recover after 2010.

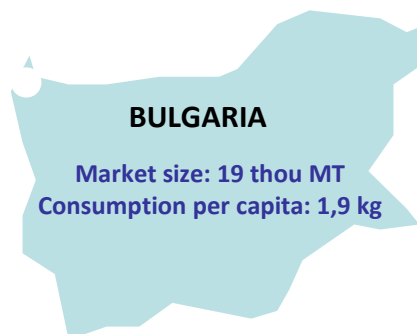
ROMANIA



Forecast:

- Significant growth in 2009 (+13% y/y), however for 2009/10 the market is expected to shrink
- Back to the path of growth in the years 2011-2013.

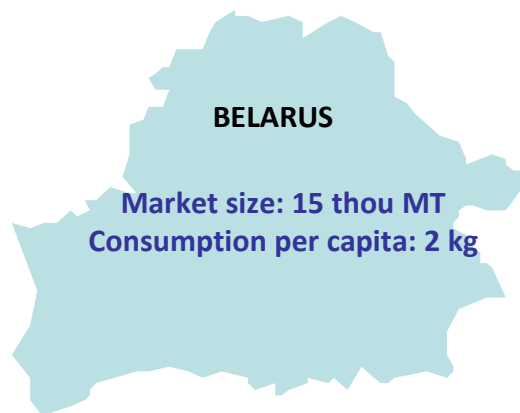
BULGARIA



Forecast:

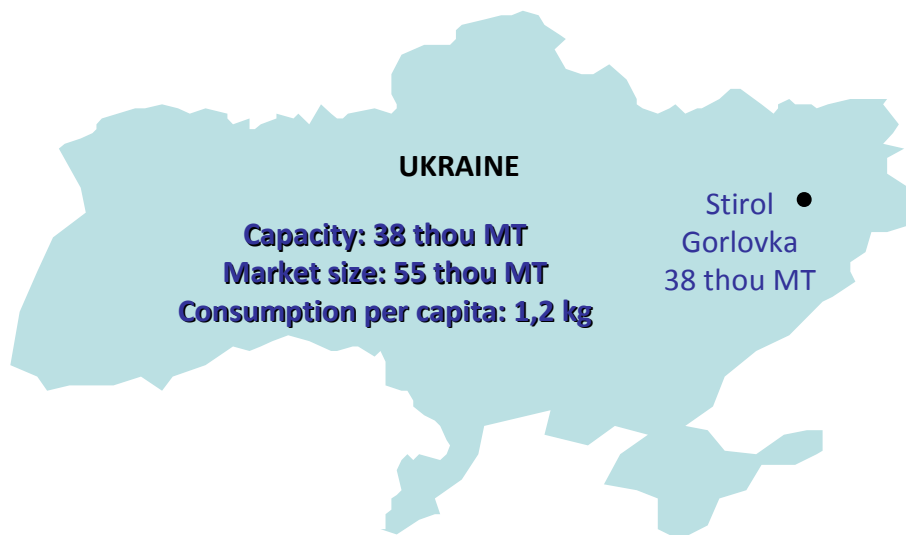
- Weak position of PS market (-25% y/y),
- Future market growth is expected to continue (2011-2013).
- The market growth will be driven by foreign investment and consumer spending.

PS – CENTRAL AND EASTERN EUROPE



Forecast:

- Growth of PS market about 5-10% in 2009.



Forecast:

- Growth of PS market 20% in 2009.

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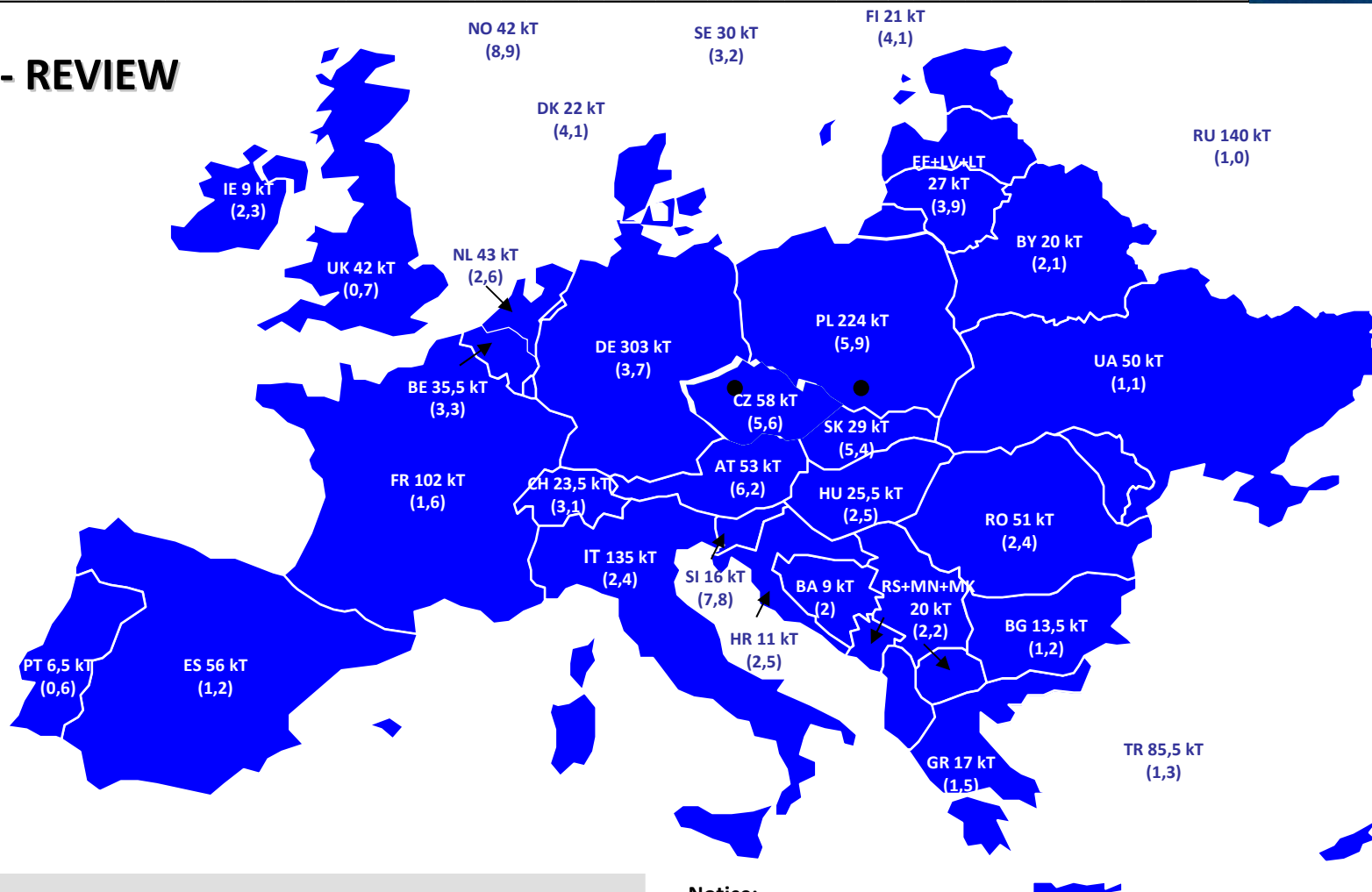
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EPS - REVIEW



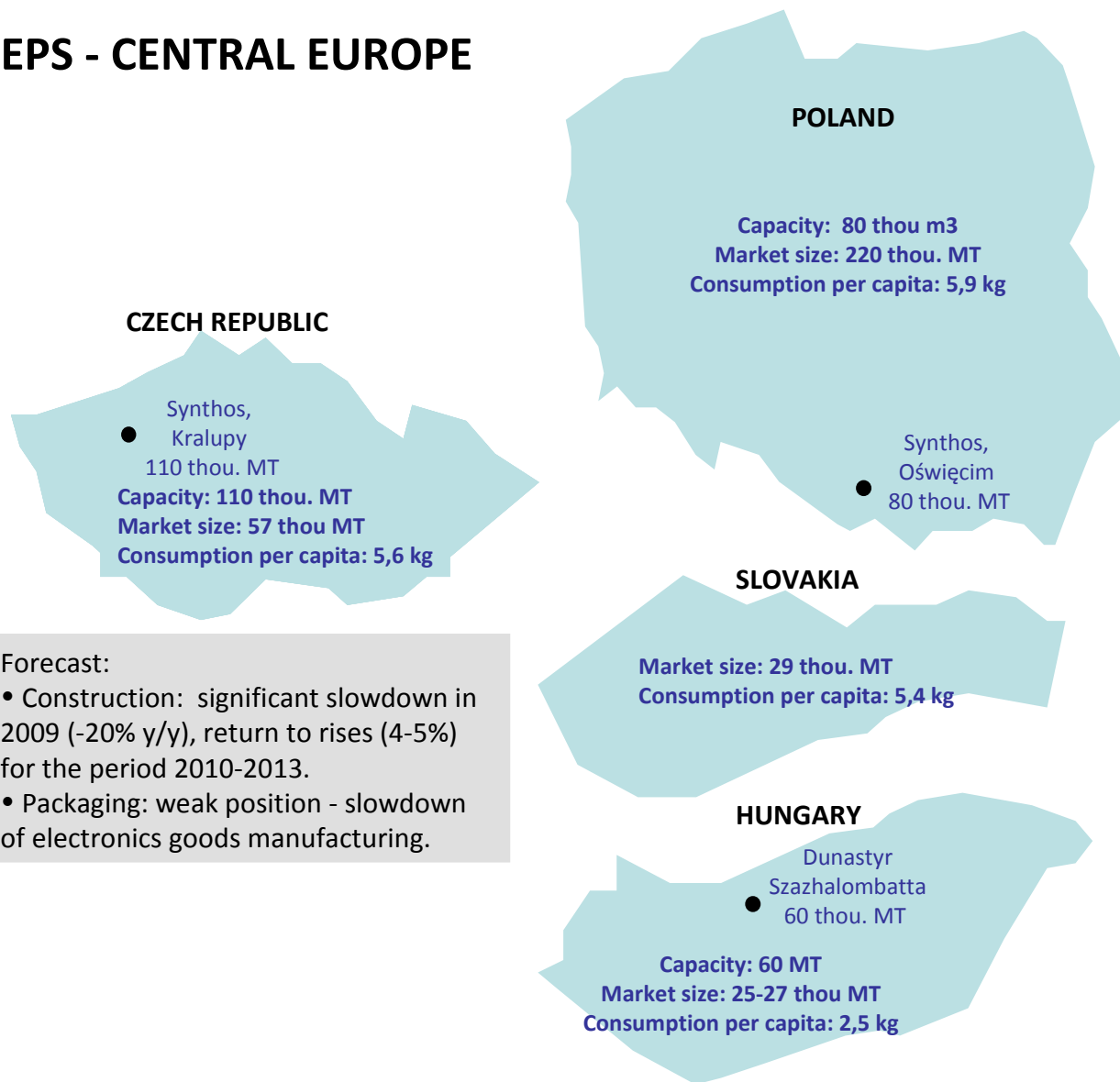
Notice:

Country consumption ONLY according to EPS beads sales, real data of country consumption are influenced by cross-border trading (e.g. PL→SK, PL→DE, SK→HU, SK→AT, SK→CZ, CZ→SK, CZ→AT, IT→AT, SI→AT, HR→SI, RS→HU, CH→AT, etc.)

Total consumption (2008): 1 480 kT/y
 (incl.all applications: construction, packaging, protection, others)

Avg consumption in Europe: 3 kg/cap.

EPS - CENTRAL EUROPE



Forecast:

- Construction: significant slowdown in 2009 (-20% y/y), return to rises (4-5%) for the period 2010-2013.
- Packaging: weak position - slowdown of electronics goods manufacturing.

Forecast:

- Construction: slowdown in 2009 (-14% y/y). After a slowdown caused by the crisis, in the period 2010-2013, expected increase at the same level as in the years 2004 – 2008 (7%).
- Packaging: week position - slowdown of electronics goods manufacturing.

Forecast:

- Construction: slowdown in 2009 (-10% y/y). In the period 2010-2013, expected increase, but at a lower level than in the years 2004 - 2008.
- Packaging: week position - slowdown of electronics goods manufacturing.

Forecast:

- Stable EPS market (-1%y/y). In the period 2010-2013, the expected slight increase (1-2%).
- Packaging: week position - slowdown of electronics goods manufacturing.

EPS – CENTRAL AND EASTERN EUROPE

BALTIC STATES



Forecast:

- Significant slowdown in 2009 (-50% y/y)!
- Back to the path of growth no later than in the years 2011-2012.

ROMANIA

Market size: 51 thou. MT
Consumption per capita: 2,4 kg

Forecast:

- Significant slowdown in 2009 (-9% y/y), the construction market has an annual lull – the lack of large projects.
- Back to the path of growth in the years 2011-2013.

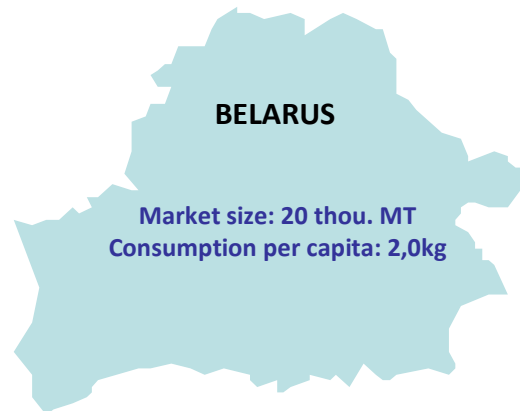
BULGARIA

Market size: 13,5 thou. MT
Consumption per capita: 1,2 kg

Forecast:

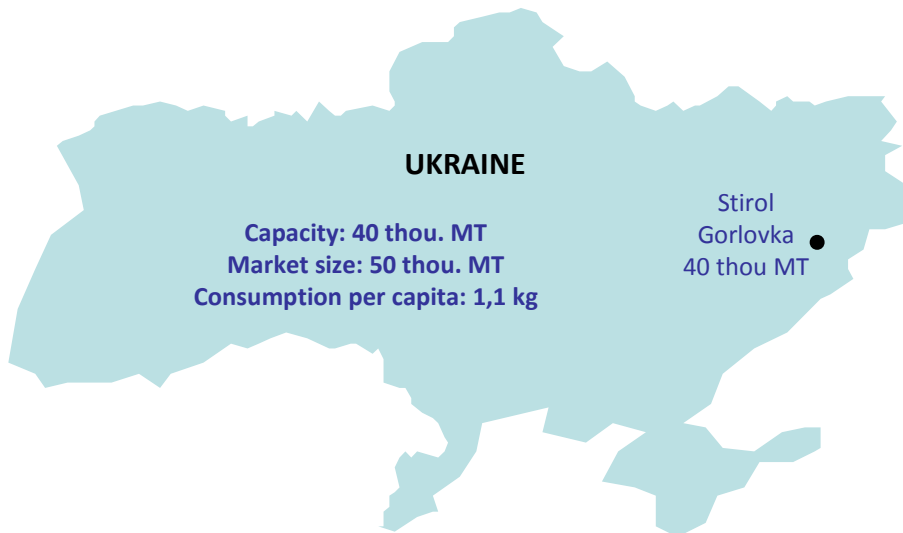
- Weak position of EPS market (-25% y/y), expected back to growth path in the years 2010-2013.

EPS – CENTRAL AND EASTERN EUROPE



Forecast:

- Slowdown in 2009 to 5% (2008: 25%).
- Back to the path of growth in the years 2010-2013 (10-15%).



Forecast:

- Slowdown of EPS market in 2009 – 2010 (-5% y/y)
- Back to the path of growth in the years 2011-2013 (15-20%) - insulation market perspective.

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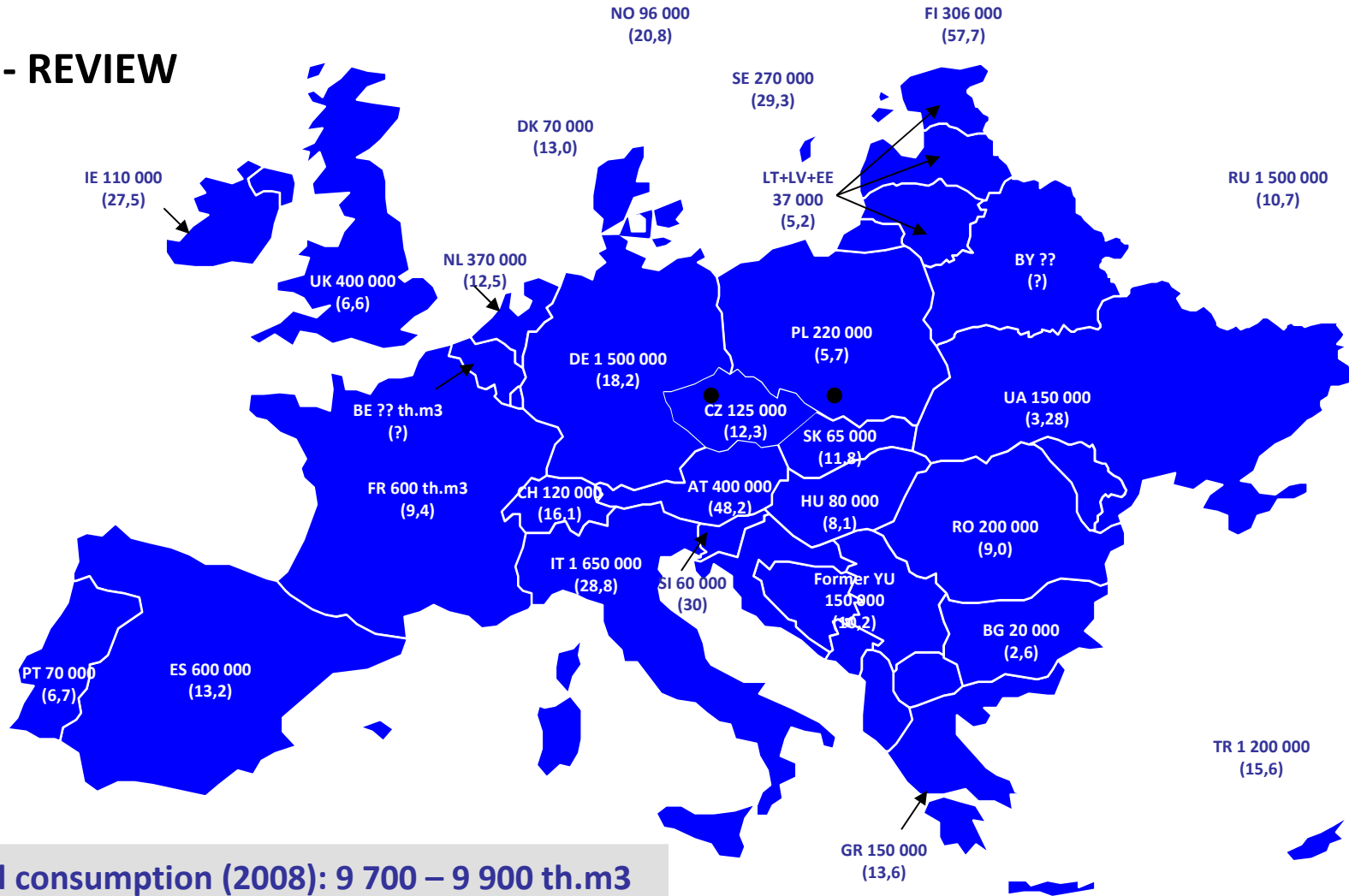
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XPS - REVIEW

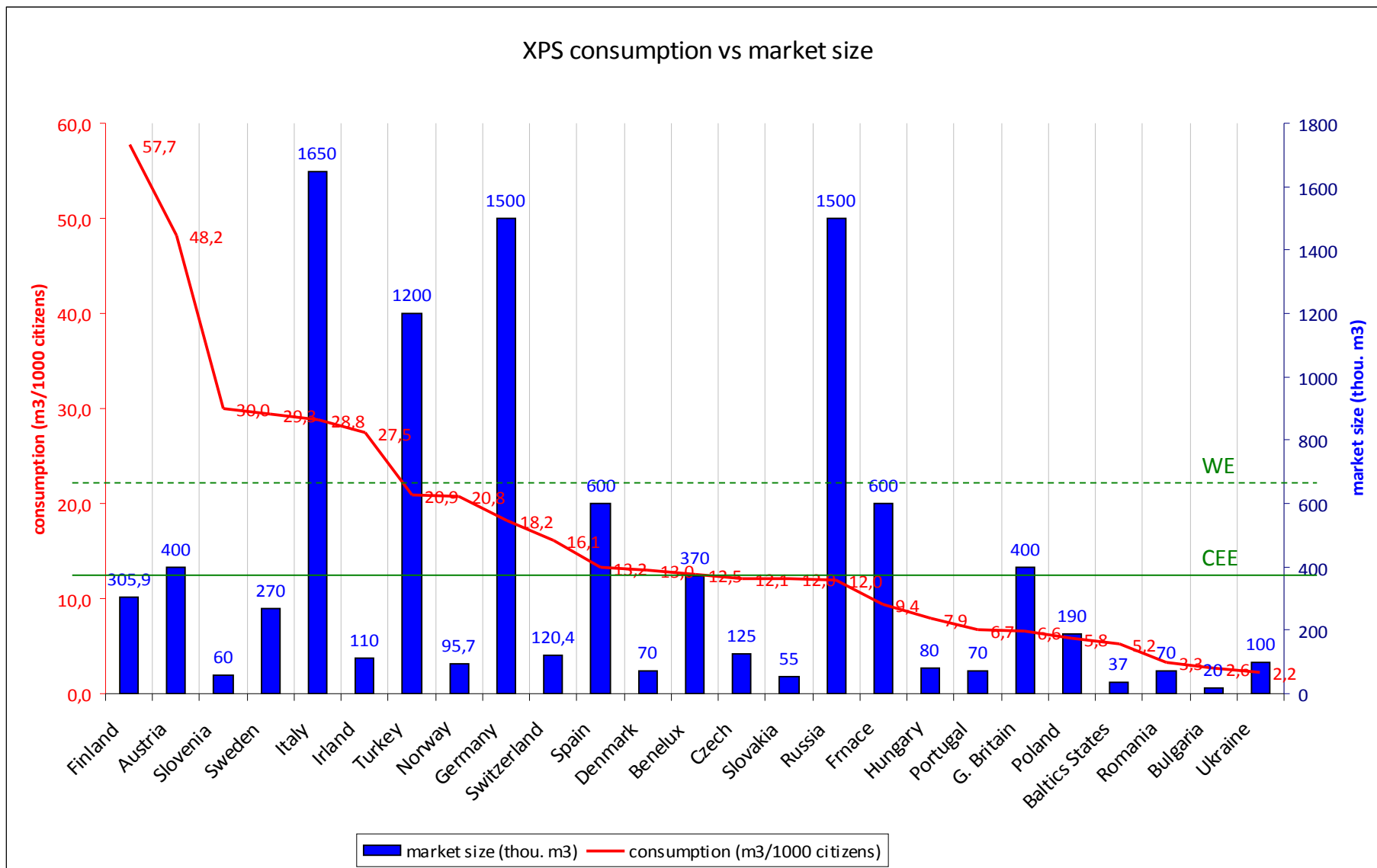


Total consumption (2008): 9 700 – 9 900 th.m3
 (= 291-297 kt of GPPS, 30 kg/m3)

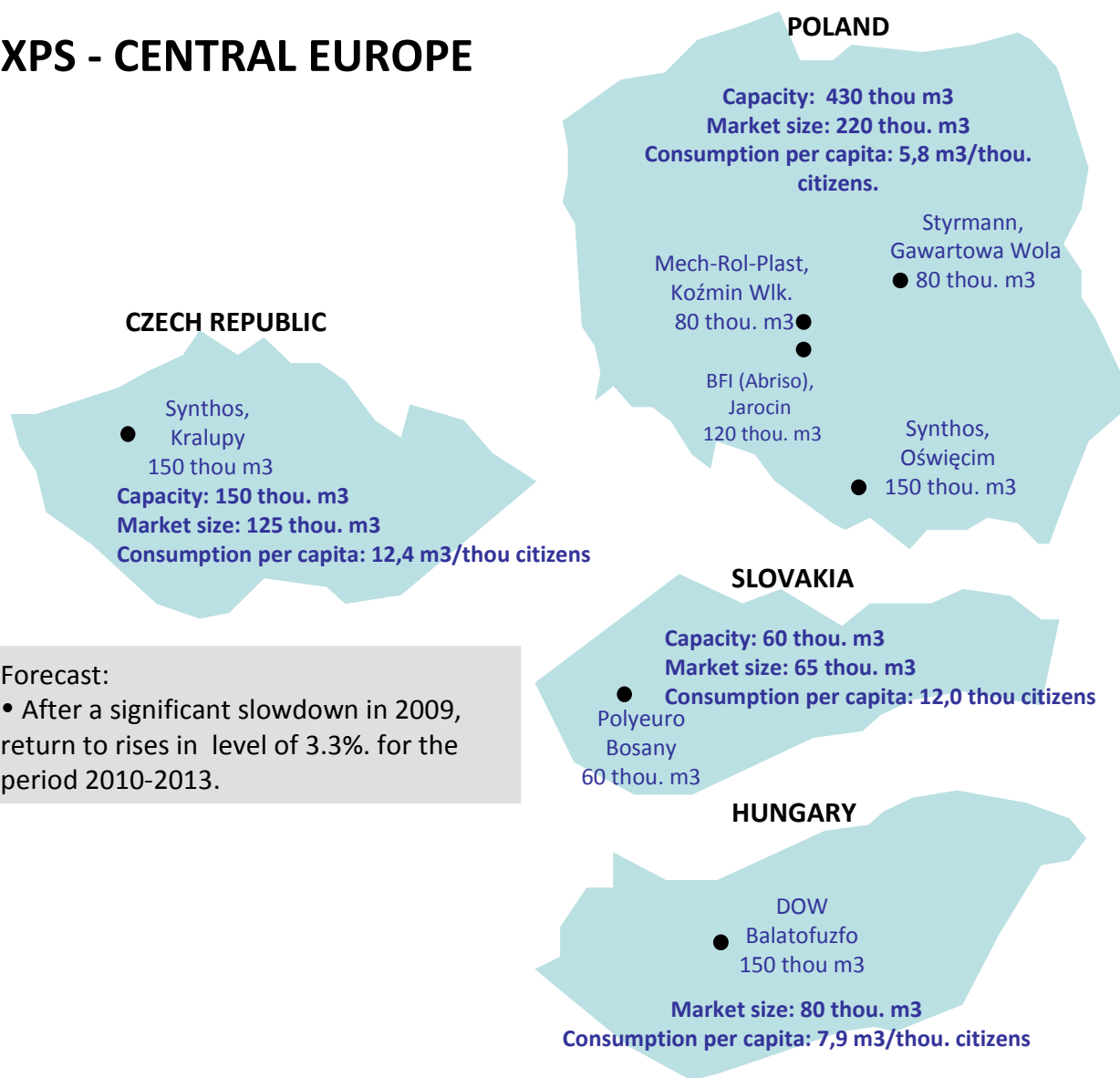
Avg consumption in Europe: 16 m3/1000 inhab.

PS MARKET IN CENTRAL AND EASTERN EUROPE – LAST DEVELOPMENT

XPS consumption vs market size



XPS - CENTRAL EUROPE



Forecast:

- After a significant slowdown in 2009, return to rises in level of 3.3%. for the period 2010-2013.

Forecast:

- Growing market. After a slowdown caused by the crisis, it is possible to increase the consumption of the XPS of 15% per annum.

Forecast:

- Significant slowdown in 2009: a small number of orders from the Slovak business partners, the low level of exports.
- In the period 2010-2013, the expected increase, but at a lower level than in the years 2004 - 2008.

Forecast:

- Downward trend in construction is from 2005. It will be maintained throughout 2009, the revival will be in 2010 unless the government can handle the deficit.

XPS – CENTRAL AND EASTERN EUROPE

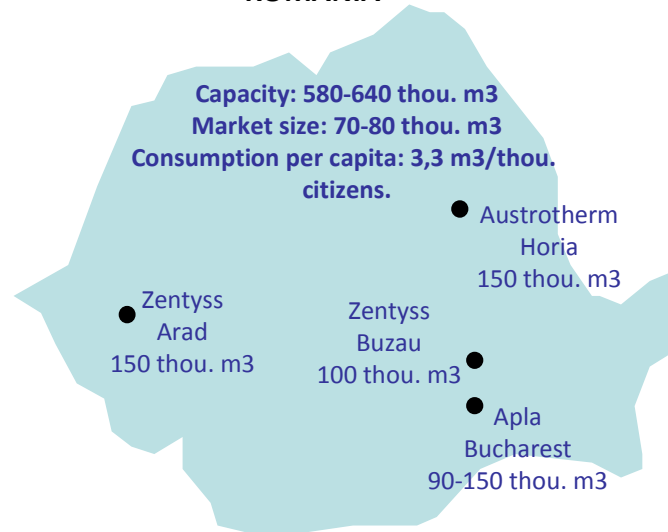
BALTIC STATES



Forecast:

- Significant slowdown in 2009 (-40-50% y/y)!
- Back to the path of growth no later than in the years 2011-2012.

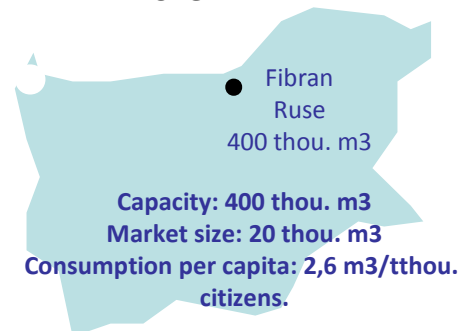
ROMANIA



Forecast:

- Significant slowdown in 2009. In 2009, the construction market has an annual lull – the lack of large projects.
- Back to the path of growth in the years 2011-2013.

BULGARIA



Forecast:

- 6% of GDP in 2008 and 1.1% in 2009, the expected significant acceleration from 2011-2013 to 4.4% of GDP.

XPS – CENTRAL AND EASTERN EUROPE



Forecast:

- -9% of GDP in 2009 and 1.0% in 2010, huge investment needs (Euro 2012): a hotel-tourist accommodation, transport infrastructure.
- Insulation market perspective: a huge energy consumption vs. rising energy prices.

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SUMMARY

PS

- **Overcapacity in Europe. Positive trends in certain countries in Eastern Europe. Better in packaging than other applications, moving production of household appliances from West to East.**

EPS

- **Lower decrease of the market in construction applications, weak performance in packaging. Pressure from energy pricing to insulate buildings, financial support from governments in EU countries.**

XPS

- **Currently overcapacity in Europe, lack of projects,**
- **Waiting for economical growth – infrastructural buildings, and insulation of residential/non-residential buildings. Certain differences among particular countries**

Thank you for your kind attention



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