Poland: assessing the investment landscape

Phil Grant – Redpoint Energy

27th February 2006, Budapest

Market snapshot… the negatives

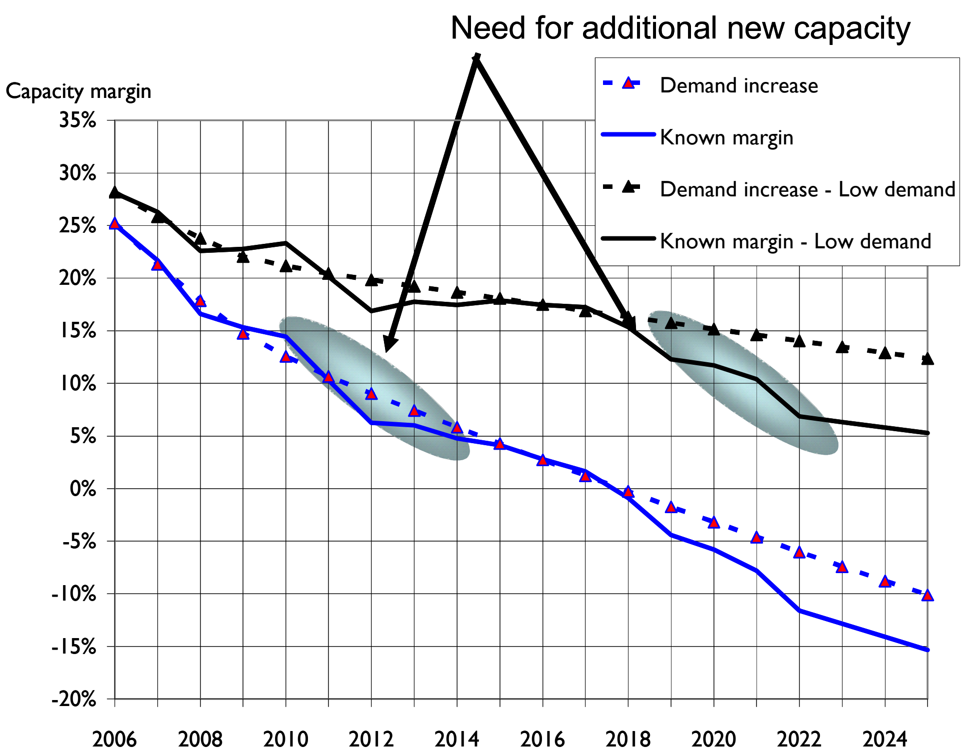
- Slow demand growth
- Historically high capacity margin
- Regulatory and political uncertainty
- Environmental challenges
- Fragmented market structure
- Low market liquidity to date
- Opaque pricing signals
- Evolving market rules

Yet appetite of foreign investors in gaining physical position in the generation market remains high

Market snapshot… reasons for optimism

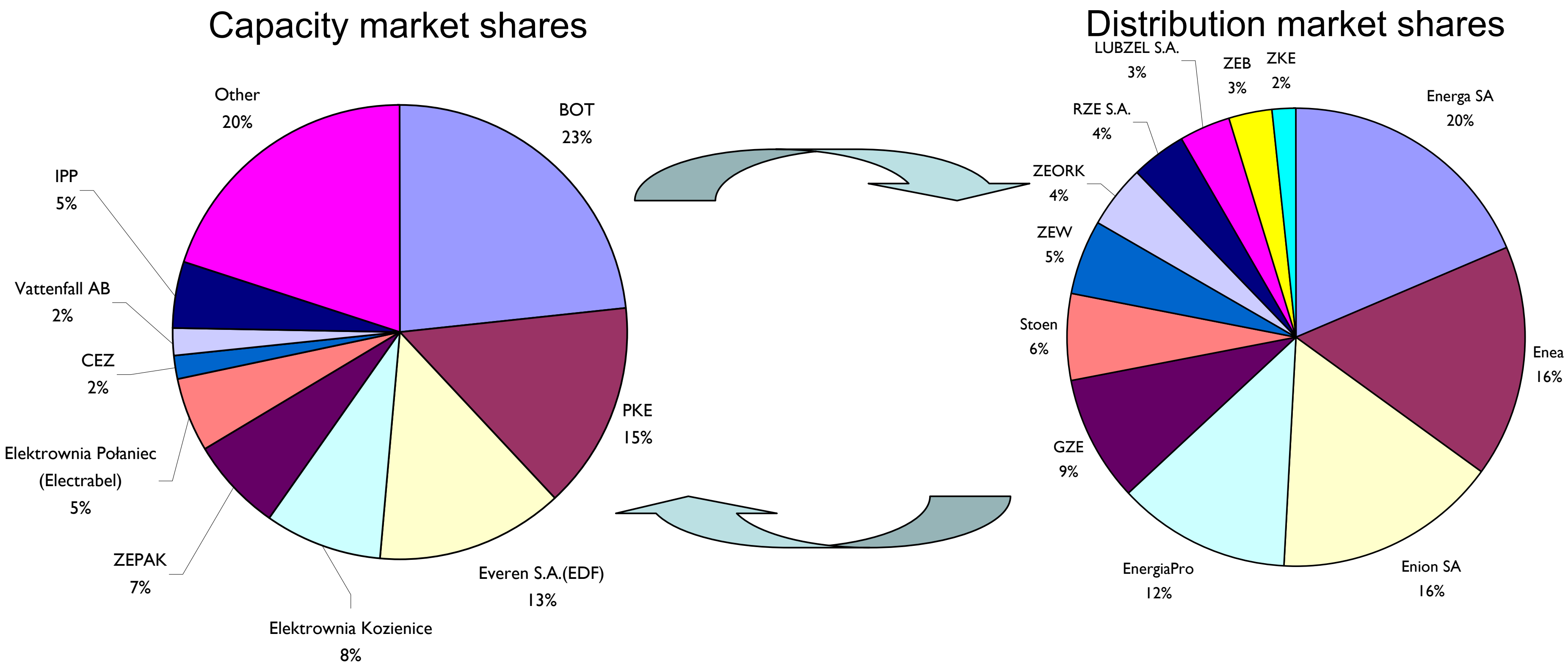
- Demand restructuring reached saturation levels
- Long CO_2 position relative to Kyoto
- Increasing liquidity – with or without PPA restructuring
- New renewable incentive mechanisms
- Indigenous fuel position – flat supply curve
- Rising international commodity prices
- Strategic importance?

Is new capacity actually required?



- Two demand scenarios
- Two definitions of capacity margin –
  - Demand increase shows today's margin, and assumes no further plant changes
  - Known margin shows today's margin, together with future 'known' changes in generation capacity
- Clearly shows need for new capacity in medium-term!

A fragmented market



- Current market structure likely to change
  - Intervention and explicit formation of 'National Champions'
  - Overwhelming trend across Europe towards vertical integration from upstream producers to end-user delivery

Vertical integration – is it the panacea?

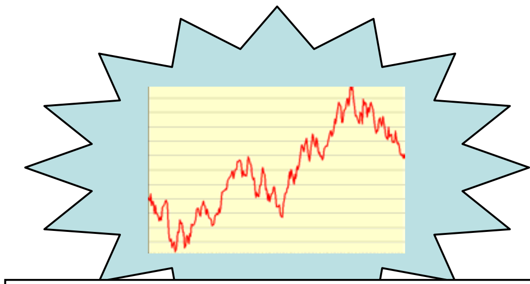
- Physical hedge
  - Natural offset of market risks – price and volume
  - ‘sticky’ retail pricing vs volatile commodity market prices
  - Reduces exposure to imbalance markets
- Economies of scale
  - Larger balance sheet
  - Strong/stable cashflows
- Margin management
  - A ‘strategic tool’ in competitive retail markets

Leads to a lower WACC, and ultimately facilitates capex investment

BUT may dampen liquidity and increase hedging costs and risks for single sector players!

Vertical integration – Business Synergies?

In the absence of vertical integration significant costs incurred by individual business units **crossing market spread** and **managing imbalance exposures**.



Volatile Power & Imbalance Markets

buy

sell

Volatile Coal/Gas/Oil Markets

buy

sell

Retail Business

transfer price

Generation Business

transfer price

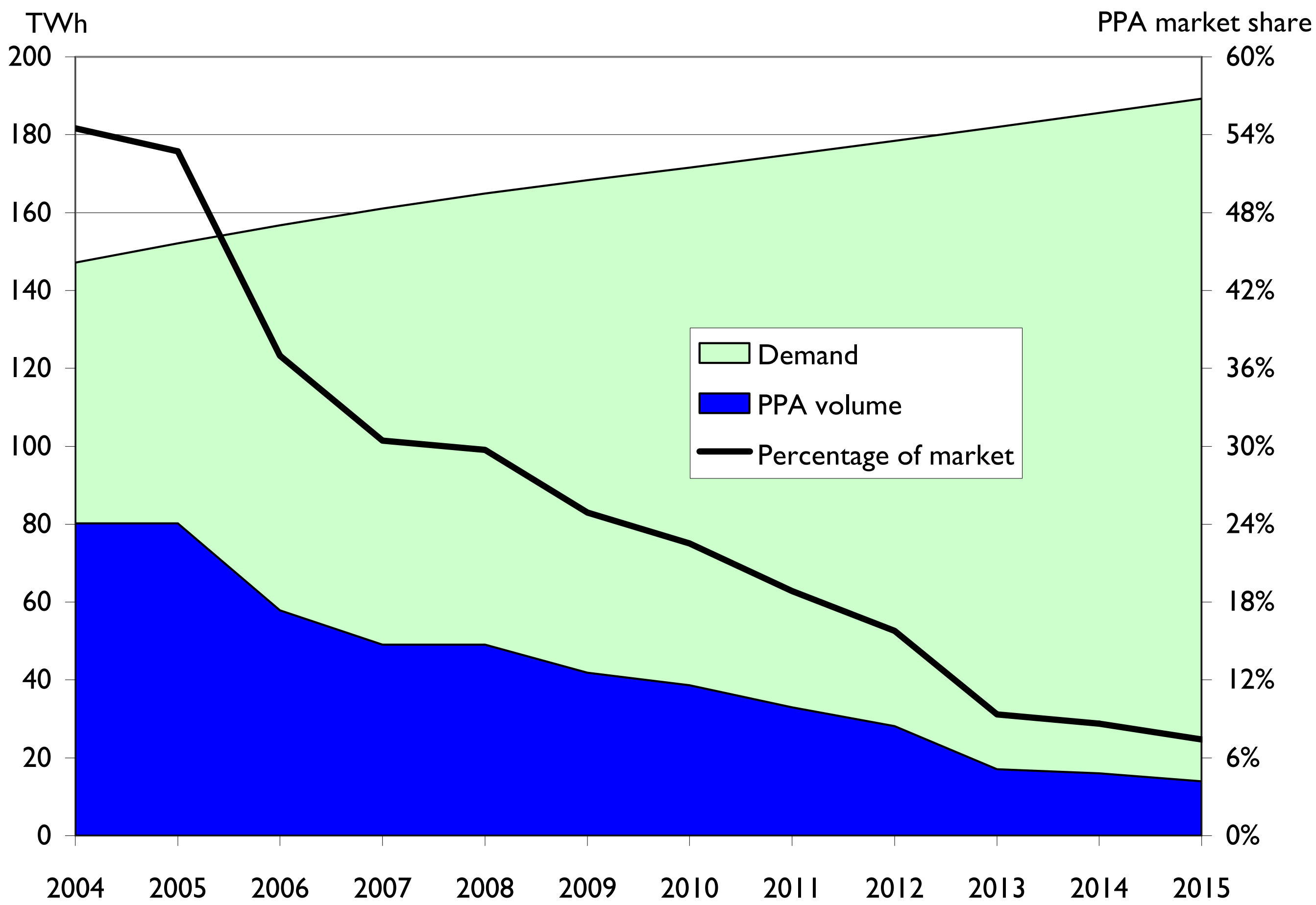
Upstream Business

Vertical Integration means 'sticky' nature of **retail** business pricing and demand provides a reliable market for **generation/upstream** production.

€

Strong and stable cashflows from **retail** business can be used to fund 'lumpy' capex requirements for maintaining/developing **generation** and **upstream** businesses.

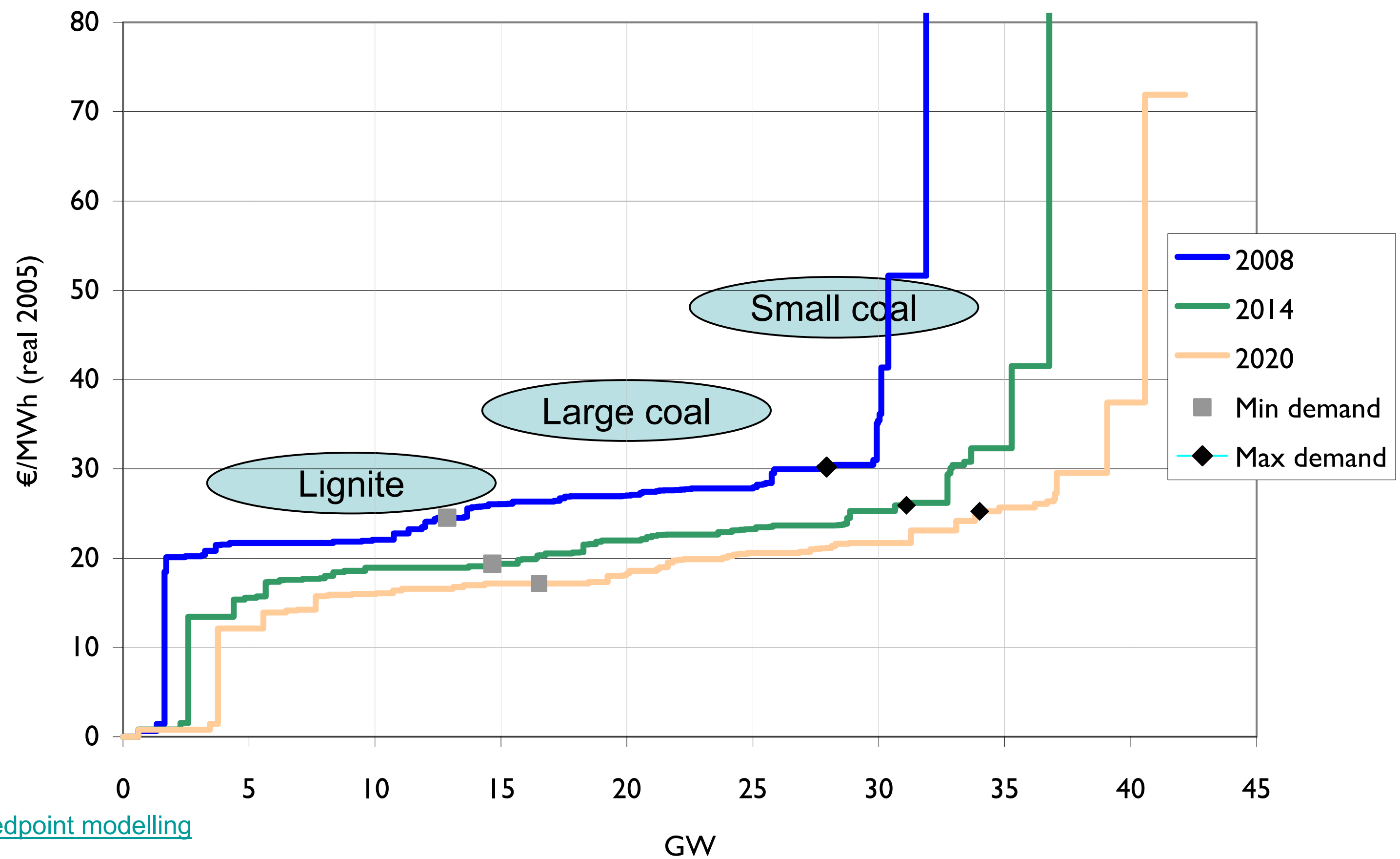
Increasing liquidity….??



Source: Redpoint estimate

The need for cost competitiveness

- Spread of only €10 /MWh in SRMC across more than 80% of capacity
  - Very flat supply curve means small cost changes have significant impact on competitive position



Source: Redpoint modelling

In summary

- Market players looks set to embark on a vertically integrated strategy
- May bring forth new capacity in medium term
- Presents increased market risks to IPP-type players
- These players will need to secure competitive advantage through:
  - Operational and contractual flexibility
  - Niche projects
  - Timing of investment
- Thanks for your attention!

About Redpoint Energy

Redpoint Energy is a niche energy consultancy, specialising in delivering market and risk analysis to support decision making surrounding investments and strategy formation. Using state-of-the-art analytical approaches, Redpoint's highly experienced team provides its clients with detailed insights into the factors behind key strategic decisions. Since its formation in October 2004 by three former senior managers from Caminus, Redpoint's clients have included some of Europe's largest energy companies and financial institutions, providing advice and analysis on areas including fuel procurement, generation asset investment, risk measurement, retail pricing strategies and carbon market modelling.

For further information please contact:
phil.grant@redpointenergy.com
www.redpointenergy.com
020 7278 5955