



The Future of Electricity Liberalisation in Europe

Michael Pollitt
Judge Business School

*11th IAEE European Conference, Vilnius
27th August, 2010*



Outline

- Elements of EU electricity liberalisation
- Progress with Liberalisation
- Objectives of energy/electricity policy
- Future developments of electricity policy
- A sensible electricity policy?

The Single Market in Electricity (Jamansb and Pollitt, 05)

- Competition in generation
- Competition in retail/supply

- Regulated Third Party Grid Access
- Effective unbundling / disintegration
- Independent regulation
- Effective competition policy enforcement
- Increased cross-border trade

Summary of Progress: 1 (Pollitt, 09)

- Impressive forcing effect due to Directives
 - Opening proceeding rapidly
 - Standardisation of structures and rules
 - Strong support from European Commission
- Market benefits:
 - Increased trading
 - Improvements in quality of regulation
 - Impressive labour productivity gains
 - Some price falls and convergence to 2003
- Market challenges:
 - Price divergence since 2003
 - Continuing (and increasing) market power

Summary of Progress: 2

- Social Cost Benefit of Reforms still difficult
 - Consumers were seeing lower prices and convergence
 - Profits of EU electricity firms, not suffering unduly
 - Impact on government unclear but not significantly –ve
- Significant issues remain
 - Retail competition per se
 - Competition in the market for gas
 - Security of supply agenda
 - Climate change policy impact: 20-20-20 targets=?
 - Vulnerable customers
- Consistency of belief in (energy) markets important

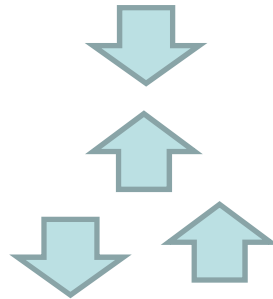
The Objectives of Energy Policy

- The impossible trinity:

- Competitiveness

- Energy Security

- Decarbonisation

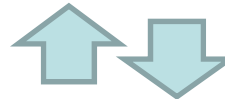


- The other ones:

- Elimination of (energy) poverty

- Renewables??

- Green jobs/economy/technology???



Elements of Future EU Policy: 1

- Policy towards natural gas (Findlater and Noel, 2010)
 - Gas improves security (especially in short run), affordability and decarbonisation
 - A single European gas market improves all three
- Unbundling (Nillesen and Pollitt, 08; Pollitt, 08)
 - Case for D/S splitting
 - Case for ISO/ITOs
- Ownership (Pollitt, 10a; Kelly and Pollitt, 10; Haney and Pollitt, 10)
 - Role for PPP and mixed ownership
 - Role for financial / mutual / cooperative / community SPVs
 - Role for local authorities /local entrepreneurship /prosumers

Elements of Future EU Policy: 2

- Competition on supply side (e.g. Parail, 10)
 - Competition enforcement action by Commission and nation regulators significant
 - Stricter policy on mergers
 - Extension to networks especially for offshore and interconnectors
- Competition on demand side (e.g. Platchkov and Pollitt, 10)
 - Smart metering and technologies an opportunity
 - Extends and completes competitive market
 - Integration of power/heat/transport in prospect
- Regulation (Ofgem, 2010; Pollitt and Bialek, 08)
 - Sustainable network regulation
 - Nodal pricing in T, and D?

Elements of Future EU Policy: 3

- Renewables (see Pollitt, 10b, Lange, 10)
 - Renewables directive not credible
 - Interferes with both EUETS and energy markets and must be made compatible with both
 - Are currently disgraceful con trick as climate policy
 - Need optimal subsidies for renewables
- Role of EU Commission (see Pollitt, 09)
 - Very important so far
 - Needs to sort out competing directives and focus on competitiveness and carbon
 - 4th Energy Package?

A sensible EU electricity policy?

(See Noel and Pollitt, 10)

- High & stable (or credibly rising) carbon prices
- A learning benefit-based renewables policy
- A fact-based electricity security policy
- Better public engagement on costs of policy
- Reliance on market mechanisms



UNIVERSITY OF
CAMBRIDGE | Electricity Policy
Research Group

Concluding comments

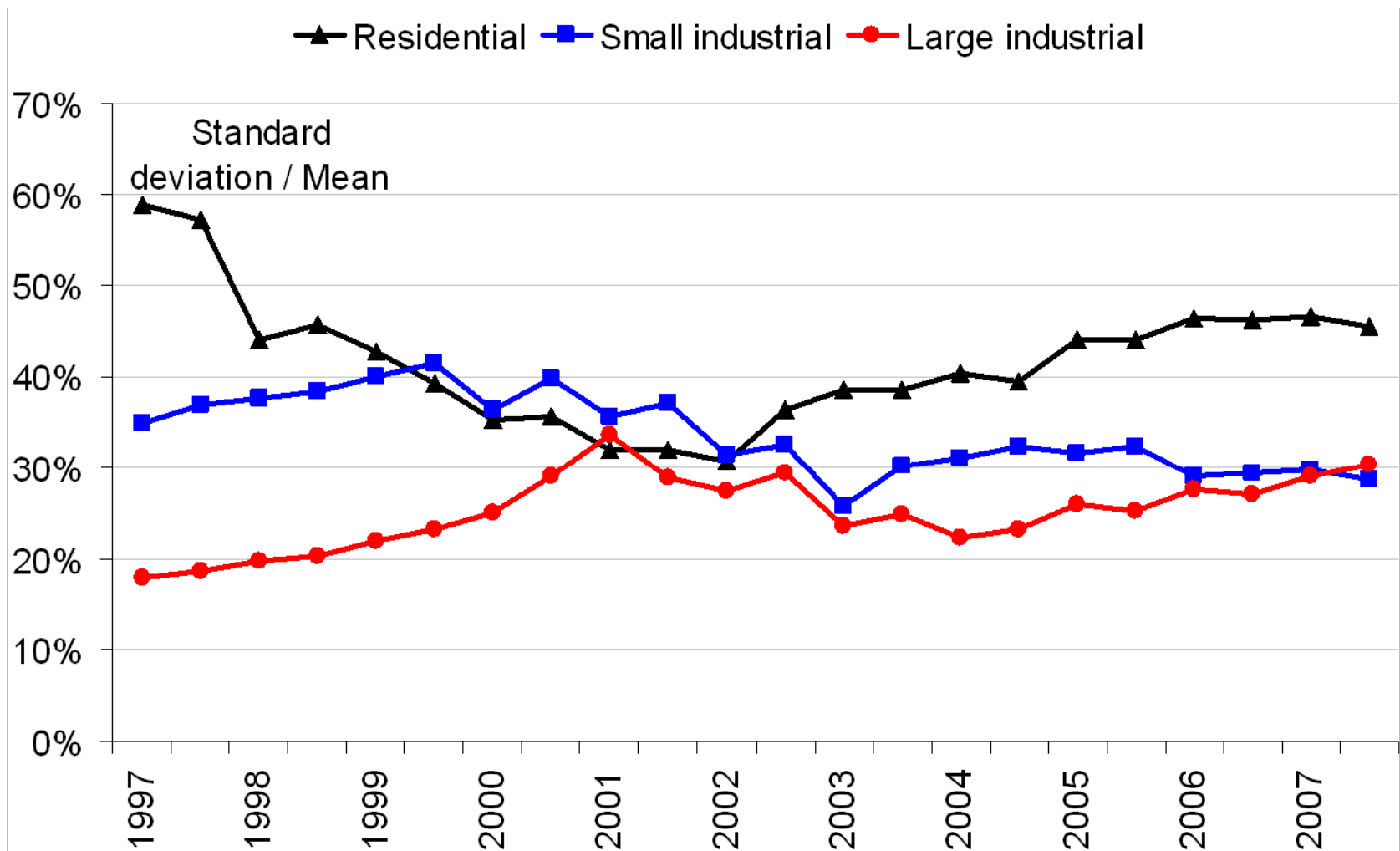
- The size of *the current energy 'policy mess' is substantial* in most EU countries and at the EU level.
- The *EU Single Market Project is a great one* – it still applies to the electricity market and is key to progress.
- In electricity *the project has been high-jacked by investment interests* in renewables and energy security.
- Only policies with *clear theoretical/empirical support and overall consistency* are worthy of EU-wide agreement.
- The market discovery process (accompanied by anti-monopoly policies) [as opposed to the Project Discovery process!] is the only one capable of delivering decarbonisation of electricity with efficient costs and prices.

References

- Brophy Haney, A. and Pollitt, M. (2010), *New Models of Public Ownership in Energy*, EPRG Working Paper Series, forthcoming.
- Findlater, S. and Noel, P. (2010), *Gas Supply Security in the Baltic States: A Qualitative Assessment*, EPRG Working Paper No.1008.
- Jamasb, T. and Pollitt, M. (2005), 'Electricity Market Reform in the European Union: Review of Progress toward Liberalization & Integration', *Energy Journal*, Special Issue on European Electricity Liberalisation, pp.11-42.
- Platchkov, L. and Pollitt, M. (2010), *The Economics of Energy and Electricity Demand*, EPRG Working Paper, forthcoming.
- Kelly, S. and Pollitt, M. (2010), 'An assessment of the present and future opportunities for Combined Heat and Power with District Heating (CHP-DH) in the United Kingdom', *Energy Policy*, forthcoming.
- Lange, R.J. (2010), Optimal support for renewable deployment: A case study in German photovoltaic, Presentation at EPRG Spring Seminar, May 14th, <http://www.eprg.group.cam.ac.uk/wp-content/uploads/2010/05/Lange.pdf>
- Noel, P. and Pollitt, M. (2010), 'Don't Lose Power', *Parliamentary Brief*, Vol.12, Issue 11, pp.6-8.
- Nillesen, P. and Pollitt, M. (2008), *Ownership unbundling in electricity distribution: empirical evidence from New Zealand*, EPRG Working Paper No.0816.
- Ofgem (2010), *Regulating energy networks for the future: RPI-X@20 Recommendations Consultation*, Ref.91/10, London: Ofgem.
- Parail, V. (2010), *The Economics of Interconnectors*, Presentation at EPRG Spring Seminar, May 14th, Available at: <http://www.eprg.group.cam.ac.uk/wp-content/uploads/2010/05/Parail.pdf>
- Pollitt, M. and Bialek, J. (2008), Electricity Network Investment and Regulation for a low-carbon future', in Grubb, M., Jamasb, T. and Pollitt, M. (eds.), *Delivery a low-carbon electricity system*, Cambridge: Cambridge University Press, pp.183-206.
- Pollitt, M.(2008), 'The arguments for and against ownership unbundling of energy networks', *Energy Policy* 36(2):704-713.
- Pollitt, M.(2009), Electricity Liberalisation in the European Union: A Progress Report', *Mercato Concorrenza Regole* 3/2009, pp.497-523. [In Italian]; English Version: *EPRG Working Paper No.0929*.
- Pollitt, M. (2010a), 'Does Electricity (and Heat) Network Regulation have anything to learn from Fixed Line Telecoms Regulation?', *Energy Policy*, Vol.38 (3), pp.1360-1371.
- Pollitt, M. (2010b), *UK Renewable Energy Policy since 1990*, EPRG Working Paper No.1002.
- Pollitt, M. (2010c), 'Ofgem 'discovers' how not to meet EU carbon targets', *Parliamentary Brief*, Vol.12, Issue 8, pp.19-20.

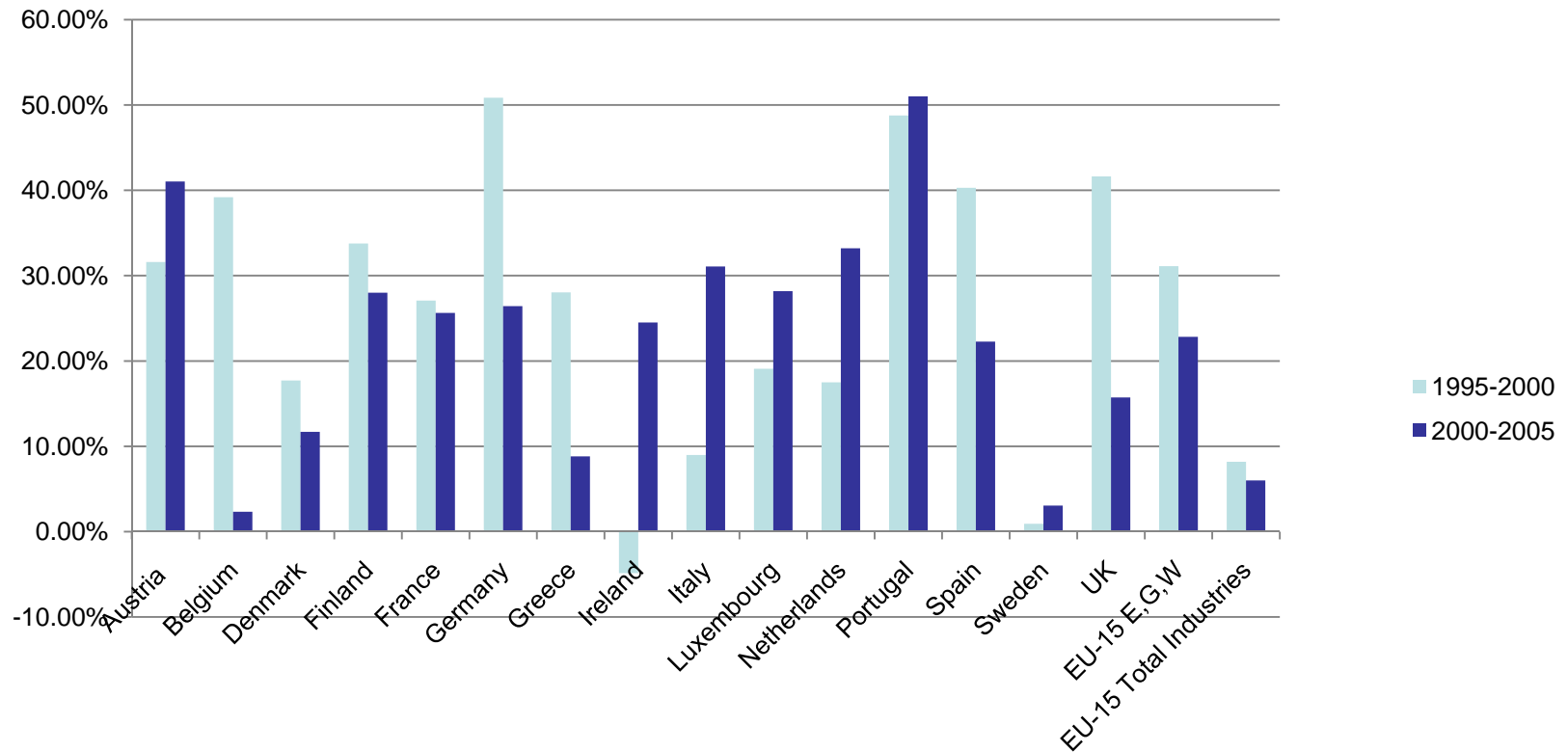
APPENDIX

EU Price Convergence



Source: Eurostat

Labour Productivity in Electricity, Gas and Water 1995-2005



Source: EU KLEMS database: Output per hour worked

(LP_I).



UNIVERSITY OF CAMBRIDGE

Electricity Policy Research Group

Merchant Interconnection (Parail, 10)

- NorNed cable 700 MW
- Investment in increments of 350MW
- €11.5/MW/h gives IRR of 10% for NorNed investment with a 20 year life
- Estimated socially optimal capacity is 3,850MW
- Lumpiness may stop the last 350MW investment
- Difference between socially optimal and profit maximising interconnection capacity <10%

Optimal FIT for German PV

Year	German	Optimal
2010	€0.43/kWh	€0.32/kWh
2011	9%	8%
2012	9%	8%
2013	9%	7%
2014	9%	7%
2015	9%	7%
2016	9%	6%
2017	9%	6%
2018	9%	6%
2019	9%	6%
2020	9%	6%

Source: Lange, 10.