

## New Models of Public Ownership in Energy

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This paper discusses some of the new and continuing ways in which the public sector is involved in the electricity / energy sector around the world. This involvement continues to be significant in spite of the long-running trend towards privatisation, competition and independent regulation in the energy sector. Indeed all of our examples are drawn from countries – the UK (Great Britain and Northern Ireland), Denmark, New Zealand, Finland and Chile - in which the trend towards liberalisation has been apparent and where the liberalised market and regulatory arrangements are often thought to be examples of good practice worthy of being studied and adopted in other countries.

The public involvement we discuss is occurring in different stages of the energy system, in projects with very different risk and technology characteristics. Thus we discuss examples of investments in electricity generation (nuclear and renewable), transmission and distribution (of both electricity and gas) and in LNG import facilities (where the power sector is an anchor customer).

This paper is motivated by the current investment challenges facing the wider energy sector, and the power sector in particular.

We outline four theoretical frameworks which examine the role of public vs private ownership in regulated sectors, such as energy. These frameworks are grounded in the early literature on public choice and the theory of economic regulation. For each, we introduce the theoretical results, what they depend on and then ask whether the current challenges facing the power industry are likely to imply stronger support for public ownership.

We then go on to look at six case studies of continuing public ownership – Middelgunden wind park , Denmark; Olkiluoto 3 nuclear plant, Finland; LNG terminals, Chile; electricity distribution companies

(EPBs), New Zealand; electricity and gas transmission interconnectors, Northern Ireland; and combined heat and power (CHP) based energy service companies, Great Britain.

We conclude that public ownership remains potentially significant in and for the power sector. The case studies examined provide a variety of examples of the nature of modern public ownership. They show that public involvement can co-exist with generally liberalised electricity markets, including at the retail market level. They also demonstrate that public 'ownership' can take a significant number of forms including: mutual ownership (e.g. Mutual Energy Holdings in Northern Ireland), consumer trusts (e.g. some EPBs in New Zealand), state ownership (e.g. ENAP in Chile, Fortum in Finland) and municipal ownership (e.g. some EPBs in New Zealand and some ESCOs in Great Britain). They further illustrate the mechanisms by which accountability operates via the selection processes for boards of directors.

There are good reasons to think that the case for mixed public-private ownership models in energy is improving. However it is important to point out that the theoretical case for significant private ownership within most national energy systems remains strong. Many countries have in fact yet to introduce any significant private involvement in their electricity and gas sectors.

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