

# Pressure on Energy Prices

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*Successful Responses for Utilities*



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# Executive summary

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## **Abusing their position or carrying everyone's load?**

Energy utility companies across Europe are feeling huge customer and political resistance to recent and forthcoming price increases.

The increases have highly visible causes. Oil, gas and coal prices have all hit record highs in recent months. Meanwhile, massive investments are needed to meet both customer and regulatory requirements.

Legacy infrastructure needs to be repaired or replaced – most of Europe's existing energy infrastructure was built in the 1960s with a 40-50 year life, so it must be renewed in the next 10-15 years. Demand for energy continues to grow. Rising concerns about security of supply necessitate increases in interconnection, storage and buffer capacity. Investment is also required to respond to both consumer and political calls for an increasing share of energy to be supplied by renewable sources such as wind, wave and solar.

Nevertheless, incumbents are being accused of abusing their dominant market positions. And pressure is mounting on politicians to limit further retail price increases.

This situation presents incumbent utilities with a multi-dimensional challenge. They must ensure adequate cash flows and profits to pay the higher costs they face and make the necessary investments. They must prepare for increasingly well-functioning integrated and transparent wholesale markets, as the EU pushes its liberalization agenda with increasing vigor. And they need to prepare for increasingly stringent regulations on CO<sub>2</sub> and other emissions.

Arthur D. Little's work with energy utilities across Europe shows that practical solutions to this multi-dimensional challenge do exist. Incumbents adopting such solutions are not only surviving, but becoming more competitive in terms of generation capacity, carbon position, revenue per customer and cost structure.

## A realistic perspective

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The first step in addressing any challenge is recognizing its full extent.

For many energy utilities, costs are a major concern. Wholesale market prices for fossil fuels have risen enormously. As a result, generation costs in fossil-based thermal plants have risen dramatically, pushing up wholesale electricity market prices. In addition, the introduction of CO allowances, feed-in tariffs and green certificates is also contributing to higher wholesale electricity price levels. Consumers are unhappy, but marketers procuring energy in competitive markets need to recover the additional costs they incur. Meanwhile, sources of 'competitively priced' primary energy are becoming increasingly difficult to find.

Some incumbents have been accused of raising their retail prices by more than the increases in wholesale prices. In reality, while dominant market positions do exist in European countries, *de jure* monopolies are a thing of the past. The Second European Directives in Gas and Electricity have started a process of opening up the market, and incumbents will inevitably face more competition. Also, national markets are being integrated into regions of harmonized trading and regulation; this will increase the number of competing players in a given trading area, and pave the way towards more liquid, transparent and competitive wholesale markets. This development will force those intent on surviving the transition period to adapt to a new, tougher and more competitive environment, where efforts to improve performance, efficiency and cost positions will pay off in the form of improved competitive edge.

Incumbents can improve their "costs to serve," but still not affect their total cost base by a huge amount. More than 80% of total utility costs are composed of wholesale energy costs and network access costs (controlled by regulators). This percentage varies with fuel type, customer size and other factors. However, the levels of cost savings to be gained from reducing the costs of serving customers are always relatively small. This suggests that, in addition to improving costs to serve and service levels in order to remain competitive at the retail end, integrated utilities will need to find ways of improving efficiency in utilizing primary fuels in the generation part of their operations to achieve any significant impact on overall cost positions. Reduced operations and maintenance costs across both generation and distribution businesses have the potential to substantially improve the bottom-line of many such businesses. Smart applications of new technology – clean coal plants, wind power, biomass, microgeneration, and others – could also make a major difference to both carbon emissions and costs in 15-20 years, though not in the next 2-4 years.

*“The Second European Directives in Gas and Electricity have started a process of opening up the market, and incumbents will inevitably face more competition.”*

# Effective responses

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Several strategies are available to incumbent utilities to address the risks and threats to their business. The following examples illustrate some of the ways in which Arthur D. Little is helping European utilities to turn challenges into opportunities for improvement and sustainable growth.

In a bid to become a leading energy utility in South Eastern Europe, one company had undertaken initial restructuring and spin-off activities. It was ready to move on to the next stage of **organizational and financial restructuring**.

With Arthur D. Little support, the company identified significant potential for operational cost reduction, working capital optimization and personnel downsizing. A comprehensive review of business strategy, embracing the entire value chain, yielded new business opportunities. We identified benefits to be gained from restructuring the organization in all segments and functional levels.

A Southern European utility had adopted a **business process management (BPM)** model to improve efficiency, but with only limited success. Not all of the organization had adopted the model; in areas that had, some employees were operating the new model but with no change in behavior or attitude to work. Arthur D. Little helped to identify why the model was not working, and then planned a set of actions at Central and Business Unit level to ensure people had the tools, understanding, information, authority and sense of responsibility they needed to introduce and use it effectively.

For a North European utility, we assessed the potential to **improve operational expenses**. A substantial ROCE gap had emerged in recent years compared with best-practice utilities, despite continuing improvement efforts. We benchmarked operating expenses across all functions and found more than 15% cost improvement potential when compared with best practice. The urgency sparked by this insight at Board level led to the development of a revised organizational model and new efficiency programs. Substantial operations and maintenance cost improvements were achieved in both generation and distribution, as well as across retail operations.

After regulatory changes led to liberalization of a West European gas and electricity market, one utility sought to **reduce costs and increase the efficiency** of retail sales operations. Arthur D. Little examined key metrics such as sales and contracting costs, customer perceptions of quality, and timing to identify critical problems. Several initiatives were identified and designed in detail to achieve the utility's goals. Some were implemented during the project, and their positive impact demonstrated the appropriateness of the solution.

When a North European utility was seeking to **unbundle** its grid and supply activities, government approval for the plan was refused until it had undergone several alterations. A comprehensive program of listing necessary requirements by electricity and gas law, with respect to grid and supply activities and consequences for utilities, was conducted by Arthur D. Little. We evaluated the utility's organization and activities, looking for synergies that could be lost in the unbundling of services. We were then able to provide the company with a revised plan, minimizing both loss of synergies and costs, which won approval.

**Rethinking and reworking the whole business** can sometimes be the most direct route to becoming more competitive. Working with a European energy utility, we contributed to redefining the business model, setting up a new management control and reporting system, installing new approaches to customer care and risk management. We developed a new supply strategy for all goods and services, and implemented new processes and systems for procurement, maintenance and asset management. Outcomes included significant cost savings, improved supplier relationships, improved risk management and stronger financial control.

## A next step

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Given the two-way squeeze on European energy utilities – upward pressure on costs and investment, downward pressure on prices they can charge – the imperative to act quickly is clear.

The burning question is what form that action should take to deliver the results – financial, social and environmental – that will satisfy shareholders, government, society and other stakeholders in the short, medium and longer term.

*“Given the two-way squeeze on European energy utilities – upward pressure on costs and investment, downward pressure on prices they can charge – the imperative to act quickly is clear.”*

Would your company benefit most from organizational and financial restructuring; from unbundling its services or reshaping the portfolio; from a new model for business process management; or from a combination of all these? Could an overhaul of operating expenses across business units deliver both quick wins and better long term profits? Or should you be rethinking and reworking the entire business from end to end? Would more effective supply chain relationships and/or more efficient internal processes yield the desired results?

If any of the issues highlighted here affect your organization, and you would like to explore effective responses aligned with your business’s strategy, strengths and ‘soft spots’, contact your local Arthur D. Little office.

# Contacts

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If you would like more information or to arrange an informal discussion on the issues raised here and how they affect your business, please contact:

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#### Coal-Fired Power Plant

An electricity pylon stands by exhaust pluming from the main chimneys of a coal-fired power plant in Berlin, Germany. At least 26 new coal-fired power plants will go into operation in Germany in coming years. Germany's environment minister has defended the move, citing the need to replace older plants that have much higher emissions of CO<sub>2</sub> gas.

#### Arthur D. Little

Arthur D. Little, founded in 1886, is a global leader in management consultancy, linking strategy, innovation and technology with deep industry knowledge. We offer our clients sustainable solutions to their most complex business problems.

Arthur D. Little has a collaborative client engagement style, exceptional people and a firm-wide commitment to quality and integrity. The firm has over 30 offices worldwide. With its partner Altran Technologies, Arthur D. Little has access to a network of over 16,000 professionals. Arthur D. Little is proud to serve many of the Fortune 100 companies globally, in addition to many other leading firms and public sector organisations. For further information please visit [www.adl.com](http://www.adl.com)

For over 40 years we've helped clients solve some of the world's toughest energy problems. We help energy companies master huge and complex challenges, in rapidly changing situations, often under very demanding geographic, economic, regulatory and political conditions. Our clients include the world's largest oil and utilities companies.

We work together with them as partners to bring clear thinking to bear on key strategic issues. What sets us apart is our unique ability to combine four factors: a deep practical understanding of the energy industry and its most difficult challenges, the highest calibre of people, innovation to produce fresh insights and a commitment to achieving measurable results. It's what we're known for and enables us to create solutions that effectively satisfy the needs of our clients, all the way from boardroom to operations.

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