



PÖYRY'S UKRAINIAN ELECTRICITY SECTOR REPORT

As a part of new report series

Pöyry is launching a series of new reports on different areas of the energy industry. This document describes our new report on the Ukrainian electricity sector.

The path to liberalisation and how likely it is to be fulfilled in the mid- to long-term is a key uncertainty in the Ukrainian electricity sector. Given that some of Ukraine's neighbouring power markets, both to the West and East, have undertaken certain electricity market reforms in recent years (with EU countries aiming for full liberalisation), it seems that the pressure on the country to de-regulate its power industry will only get stronger. This report examines the present status of the Ukrainian electricity market, also provides a historical overview of major developments, and focuses on some future potential trends.

Background Outline

Since the beginning of the liberalisation process in late '80s and early '90s predominantly in Western Europe, the European power sector has changed significantly, while at the same time, there are further challenges lying ahead. Over recent years, this market development is characterised by growing electricity demand, the increased use of renewable energy sources, environmental regulations, new technologies, problems in the supply of primary energy sources, and a general market consolidation. There is also a further – partly politically driven – push for the secure and sustainable energy supplies, partly accentuated by the trend to diversify energy suppliers away from some traditional trading partners such as Russia.

Additionally, the financial and economic crisis has had a strong impact on the European power markets such as short term price decreases and, consequently, delayed investments, underpinned by large decreases in power demand in 2009. For the Eastern European markets in particular, the need for investments to renew and strengthen the power system is very high and even urgent. Moreover, these markets are faced with a low but increasing degree of market liberalisation.

In recent years, nearly half of Ukraine's electricity was generated in nuclear power plants, followed by coal- and gas-fired plants accounting for around 45%, with the balance mainly contributed by hydro electricity. Although it occurred back in 1986, the country's Chernobyl nuclear incident significantly influenced the development of the atomic power industry across Europe and, in particular in Central and Eastern European countries.

Given the political and economic pressure to renegotiate its natural gas supply and transit contracts from Russia, Ukraine's national strategy is to strengthen its security of energy supplies, which is potentially reinforcing the gradual re-development of nuclear electricity in the country. At the start of 2009 for example, Russia's decision to reduce supplies to Ukraine over a gas price dispute (over transit and market price terms), reduced actual supply volumes to Europe by around 30%.

Nevertheless, the new Ukrainian government has softened the country's position towards Moscow, which might have further implication for the country's national energy strategy and in particular the nuclear power sector. Nuclear power, however, still remains one of Ukraine's potentially viable routes to limit its dependence on Russian gas exports.



Energy security independence from Russia is critical for Ukraine... but at what price will it be achieved and what are the critical steps towards this goal?

Main Sections to the Report

- **Market summary:** This part of the report shows the current development of the Ukrainian power market and electricity prices. It also reviews the potential development of the market on a regional basis over the mid-term.
- **Supply and demand balance:** Includes supply by fuel/technology type (total production, including net imports/exports, and net supply level) as well as total demand, including recent historical developments.
- **Wholesale trading:** The potential development of bilateral contracting between various market players within Ukraine and cross-border regional trading.
- **Infrastructure:** Generation capacity development in recent years as well as forward view over the mid-term combined with an overview of electricity networks.

Why Pöyry Management Consulting?

The Pöyry group is a client- and technology-oriented, globally operating consulting and engineering company. It has four core areas of expertise: urban & mobility, water & environment, energy and industry. The Group employs more than 7,000 experts in more than 45 countries.

Pöyry Management Consulting provides integrated management consulting services for the entire energy sector, covering the whole value chain. The Energy Consulting team offers solutions from strategy to implementation gaining leverage with our combined know-how of management skills, power economics and technology. Our clients are energy companies, contractors, suppliers, investors, energy users, multilateral institutions and fuel industry.

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