Capgemini Report: Governments and Regulators Increase Pressure on European Utilities\textsuperscript{1} Despite Volatile Conditions

European Energy Market Observatory Report Also Shows Slow Progress Against EU2020 Objectives\textsuperscript{2}

Paris, November 19, 2012 – Capgemini, one of the world's foremost providers of consulting, technology and outsourcing services, supported by Exane BNP Paribas, CMS Bureau Francis Lefebvre and VaasaETT Global Energy Think Tank\textsuperscript{3}, today announced the results of the fourteenth European Energy Market Observatory (EEMO) report. The study shows that in a period of economic uncertainty, governments and regulators are putting extra pressure on Utilities, jeopardizing not only future profitability but also much-needed investment in energy infrastructure.

The economic crisis has resulted in price volatility and a stagnation in European energy consumption (at constant temperature), causing downward pressure on Utilities’ earnings and stock performance. Plans by several countries to revisit their energy policy in the wake of the Fukushima accident, new taxes and an EU compromise text in place from 2014 penalizing Utilities whose customers do not achieve certain energy savings have placed an even greater burden on them. Faced with a required €1 trillion investment in energy infrastructure over the next decade\textsuperscript{4}, Utilities must plan for the long-term in increasingly difficult short-term conditions. Colette Lewiner, Energy and Utilities Advisor to Capgemini’s Chairman, comments: “Governments should be careful not to kill the goose that lays the golden egg, especially as large Utilities are currently divesting from Europe. Undermining Utilities attempts to make much-needed investment in energy infrastructure could be costly once the economy rebounds and demand for electricity and gas increases again.”

\textsuperscript{1} Utilities deliver electricity, gas, water and environmental services to end customers
\textsuperscript{2} The EU 2020 objectives: 20% greenhouse gas emissions reduction compared to the 1990 level by 2020; share of 20% renewable energies in the final energy consumption by 2020; 20% savings in primary energy consumption compared to projected 2020 figure (i.e. back to 1990 level by 2020)
\textsuperscript{3} Exane BNP Paribas, CMS Bureau Francis Lefebvre and VaasaETT Global Energy Think Tank are partners of the Capgemini European Energy Markets Observatory. More information is available at the foot of the press release.
\textsuperscript{4} Estimation made by the EU before the Fukushima nuclear accident
Low European coal prices are threatening the needed gas plants profitability

Although oil prices have remained high owing to geopolitical issues notably the threat of war with Iran, the economic crisis in Europe and the US – and weaker growth in China and Brazil – has caused stagnation in the consumption of gas and electricity.

In the US, producers are exploiting shale gas at a very competitive cost, driving US gas prices down. However the situation is different in Europe as gas is not an international market and as long-term gas contracts oil price indexation has resulted in much higher gas prices, with continental Europe long-term gas prices approximately 300 per cent higher than the US.

This low gas market in the US has resulted in a coal surplus – driving the cost of coal down in Europe – prompting the closure of several gas plants and a potential loss of 10,000 MW between now and 2014. However, these European gas plants are badly needed to back up renewable energy generation and help the grid cope with spikes in demand (during very cold or hot days). Thus launching “capacity markets” to allow those plants to remain viable is a priority measure for the industry.

The cost of energy transition looms on the horizon

The Fukushima accident in March 2011 led to questioning nuclear energy sustainability, with countries examining how to reduce nuclear share of the energy mix. As a result, the European energy mix will start to evolve towards less nuclear and more renewables, gas, and in some countries, coal. These scenarios that should generate more CO₂ emissions require significant additional investment from Utilities which will impact generation and grid costs and thus retail prices. In Germany, following the May 2011 nuclear phase out decision, electricity prices will significantly increase for domestic customers. Equally, German industrial customers could see prices go up by 70 per cent by 2025.

In France, if nuclear is lowered to 50 per cent of total energy generation, then electricity prices will go up by 16 per cent, translating into a 12 per cent retail price increase.

Renewable progress threatened by decreased subsidies

With more than 70 per cent additional capacity in 2011, renewable energies have continued to expand in Europe. However, despite large offshore wind projects launched in Member States like the UK and France, the EU2020 objective of 20 per cent renewables in the energy mix by 2020 will be difficult to meet. This is a result of the sovereign debt crisis prompting governments to reduce the feed-in tariffs and fiscal incentives that have fuelled renewable progress. The solar power industry has been hit particularly hard. These reduced subsidies have created oversupply for equipment manufacturing companies globally, and have also prompted China to significantly increase their exports of equipment – particularly solar photovoltaic solar panels – to the US and

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5 Potential closures could reach 10,000 MW from now to 2014
6 Karlsruhe Technology Institute study from the Baden-Württemberg Chamber of Commerce
7 UFE study “Electricity 2030: The choices for France?”

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Europe. As a result, it is forecasted that in the short-term at least half of the world’s existing solar photovoltaic manufacturers could be taken over or go bankrupted\(^8\).

**EU Emissions targets should be met, but mainly due to economic slowdown**

Although the market and regulatory signals are currently insufficient to encourage the industry to move towards low carbon technology, the EU 2020 CO\(_2\) objectives should be met owing to the economic crisis and industrial plants relocation to Asia resulting in lower energy consumption and hence lower CO\(_2\) emissions. To be efficient the ETS system is in radical need of reform. The carbon emission rights price has decreased from €14/t in early 2011 to €6-7/t in May 2012, reflecting an excess of ETS\(^9\) rights. Specifically, in the short-term extra allowances must be back-loaded to re-establish the scarcity required to push prices up. However, the EU’s internal procedures mean this much-needed amendment will not be solved until April 2013\(^{10}\).

**Energy efficiency objectives**

The EU 2020 energy efficiency objective will be difficult to meet. Thus, in June 2012, an EU compromise text for the energy efficiency directive was adopted. It requires Utilities companies to ensure their own clients achieve energy savings from 2014 on. It is mandated that these aggregated savings should reach, year on year, 1.5% of the Utilities’ annual sales. If a Utility fails to deliver these aggregated savings, it will incur a penalty.

**Huge infrastructure investments required, but Utilities are slowing down their capital expenditure**

In Europe a minimum of €1 trillion investments in infrastructure – including generation, grids, LNG\(^{11}\) regasification facilities and pipelines – are required by 2020. In the electricity industry, these investments are needed to replace ageing plants in Europe (where almost 9.5 GW were decommissioned in 2011) and more generally for grid reinforcement to improve security of supply, accommodate decentralized and renewable energies and transform present grids into smart ones. In gas, investment in large importation pipelines and LNG facilities are required. This estimation does not include a minimum of €350 billion\(^{12}\) of German investments in electricity generation and grids for compensating the nuclear phase-out, or the nuclear plants safety measures improvements required in Europe which will, in France for example, cost €10 billion for the 58 reactors\(^{13}\). Current economic instability and a lack of reliable projections for the euro zone’s future are discouraging many Utilities from making the necessary investment. However, the post-crisis “wake-up call” promises to be challenging.

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\(^8\) Renewable energy country attractiveness indices, Issue 33, Ernst & Young and Bloomberg New Energy Finance, May 2012  
\(^9\) ETS: Emissions Trading Scheme, the European system of carbon certificates trading  
\(^10\) Deutsche Bank estimation  
\(^11\) LNG: Liquefied Natural Gas  
\(^12\) Estimation by the German state bank KfW  
\(^13\) Estimation by ASN, the French nuclear safety authority

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Utilities are under pressure

During the observation period, Utilities stock performance compared to MSCI Europe decreased and their price earnings ratio decreased. However, legislative and political activity during the period suggests European regulators and governments still consider Utilities as ‘cash cows’. For example, the new EU energy efficiency compromise that requires Utilities to ensure their own clients achieve energy savings from 2014 or face penalties is a significant burden. In addition, political decisions like the accelerated nuclear phase-out in Germany and annual taxes on nuclear power generation imposed by Belgium and recently by Spain show that key stakeholders still see Utilities as an easy source of revenue.

For a copy of the abstract report, please visit: http://www.capgemini.com/eemo

About the Capgemini European Energy Markets Observatory (EEMO)
Capgemini’s European Energy Markets Observatory (EEMO) is an annual report that tracks the progress in establishing an open and competitive electricity and gas market in EU-27 (+ Norway and Switzerland) as well as the progress on the EU Climate-Energy package objectives. The 14th edition is built on a majority of public data sources combined with Capgemini methodology and knowledge, and based on 2011 and winter 2011/2012 data sets. Specific insights on the European energy policy; the financial situation of Utilities and the performance of the sector; and the switching and retail prices are brought by CMS Bureau Francis Lefebvre, Exane BNP Paribas and VaasaETT Global Energy Think Tank respectively.

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With more than 120,000 people in 40 countries, Capgemini is one of the world's foremost providers of consulting, technology and outsourcing services. The Group reported 2011 global revenues of EUR 9.7 billion. Together with its clients, Capgemini creates and delivers business and technology solutions that fit their needs and drive the results they want. A deeply multicultural organization, Capgemini has developed its own way of working, the Collaborative Business Experience™, and draws on Rightshore®, its worldwide delivery model.
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