EGMONT Royal Institute for International Relations

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Some Questions about EU Gas and Electricity Policy

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1. A few reminders

- 1.1. Gas, electricity: a dual aspect:
 - a) public services/utilities: proximity;
 - b) strategic assets: their "good management" does not depend solely upon the (short-term) requirements of consumers.
- 1.2. They are (technically and economically) complex products (which we tend to forget... See 1.1.a)):
 - a) network industries;
 - b) electricity highly non-storable;
 gas storable, but that does not necessarily mean available...
- 1.3. As with all energy products, ten years ago "they came into the agora"...

2. Happy birthday!

The first directive on the "liberalisation" of electricity in Europe celebrates its 15th anniversary in 2011.

- 2.1. Competition:
 - > Why? To *incentivise* the players (generators, consumers, etc.).
 - ➢ How? By replacing "planning" with "the market".
 - But: Don't throw the baby out with the bathwater...

"Well functioning (electricity) markets should reproduce idealized central planning results" (Paul Joskow, MIT)

2. Happy birthday!

2.2. But:

 \succ Liberalisation \neq no regulation.

On the contrary, it may be that:

"(...) the competitive markets have more federal regulations than the regulated markets they replaced" (Borenstein and Bushnell, 2000)

- The "market design" (i.e. the rules of the game) is important: "The market cannot solve the market *design* problem" (W. Hogan, Harvard-JFK).
- Each market is defined by three factors:

a) the *nature* of the product tradedb) the *place* of exchangec) the *time* of exchange

2. Happy birthday!

	Ε	G
Nature	(Strong) non-storability	Storable, but
Place	Network industry	network industry as well
Time	What about price(s) at T seen from t? What about price(s) at T seen from t? T t (spots, forwards, futures, hedging, etc.)	

- 3.1. What kind of "preparation" for this great reform?
- 3.2. The "worst of both worlds"?

e.g.: "Missing Money" and market design.

- 3.3. The market(s)...
 - "market power", or how to qualify and judge something we measure badly?

e.g.: the failure of classical indicators (HHI & C°).

"relevant market"

e.g.: the convergence of electricity prices.

Illustration of the "missing money" problem

Efficient prices

Missing money problem



Note: Illustration purposes

Source: LECG



Strong convergence of forward market prices in regional market



- 3.4. What form(s) of competition?
 - "Through" the market or "for" the market?

e.g.: retail competition, in electricity.

A competitive internal market... subject to an oligopoly of exporters?

e.g.: gas, "whose price is determined equally by exporters and the market: the first two figures before the decimal point for the former - and the two figures after the point for the latter..."

A competitive internal market... subject to the iron rule of the "fundamentals".

e.g.: wholesale electricity prices.



3.5. An "undergone subsidiarity"

e.g.: - TSOs;

- Regulators.

- 3.6. Competition Law:
 - ➤ "Ex-post" or "ex-ante"?
 - ... and regulation?

4. And some observations

- 4.1. *(Market) prices* remain linked to the "fundamentals":
 - electricity is a "secondary energy";
 - ➤ gas is an imported energy .
- 4.2. The *(major) players*:
 - there is somewhat of concentrations (G+E, for example);
 - position taking outside of the territories in which they are "incumbents" ("for" the market...).
- 4.3. Is (current) *retail competition* weak?
 - ➢ low involvement good?
 - transaction costs?
 - access to (rather) sophisticated info?
- 4.4. *Very slow* progress in:
 - market design;
 - cooperation between TSOs, Regulators, etc.;
 - structuring and efficiency of exchanges.

4. And some observations



4. And some observations



5. "Come with the wind"...

- > 20% RES in energy = 35% RES in electricity...
- > Availability: energy \neq available capacity \neq installed capacity.
- Feed-in-tariffs and priority access to the grid? Or towards "two parts tariffs"?
- Impact on "classical plants/capacities": how to pay for what remains necessary and what the "market prices" could no longer cover...?
- Subsidies: "rational anticipation" or "too fast, too strong"?

5. "Come with the wind"...



5. "Come with the wind"....

Wind



- 5. "Come with the wind"....
 - Existing CCGT 2010



UK January 2010 (based on 2000)

Source: Pöyry, 2009

5. "Come with the wind"....



• Existing CCGT 2030

UK January 2030 (based on 2000)

Source: Pöyry, 2009

6. Some current and (remaining) questions

Energy and Environment

The objectives of European energy and environmental policy

- 1 Competition
- Directives on the liberalisation of electricity and gas markets
- Regulations on "cross-border exchanges" of electricity and gas
- Agency for the Cooperation of Energy Regulators



6. Some current and (remaining) questions

- Competition: ±50% of "off-market" electricity. Towards a revival of long-term policies? What are they? (e.g. UK current "reform")
- Long-term incentives for infrastructure (e.g. the Commission's Note, Nov. 2010): "€1 trillion"...

6. Some current and (remaining) questions

- > Incentives for generation: $p_{MKT} < c_{DEV}$...
- In G+E, can the market (alone) provide LT signals? "Market time" and "Investment time(s)".
 - Forwards: 3-4 years
 - Investments: completion: 4-10⁺ years
 - life spans: 20-60 years
- "Smart market" or "Smart regulation"?
- Energy policy and Treaties: revisited?