

Juncker's Mission to the New Energy Team: Avoiding the hard choices

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On 10 September 2014, Jean-Claude Juncker presented his team of Commissioners. In his mission letter to Arias Cañete, he asked the designated Commissioner for Climate Action and Energy to focus on further developing EU policy for renewables in order to “be a world leader in this sector” and on promoting the EU Emissions Trading System “to ensure that we reach our climate goals in a cost-effective way”. Furthermore, he would like Alenka Bratušek, the designated Vice-President for Energy Union, to focus on “completing the internal energy market” and on “increasing competition”.

Given the state of play in EU energy markets, this set of objectives appears to be very ambitious and more importantly, partially conflicting. Today, many EU member states are confronted with overcapacity in the power sector as a result of an electricity demand being roughly 9% lower than originally expected.¹ Similarly, the Emissions Trading System is struggling with an oversupply of CO₂ emissions allowances, mainly as a result of the economic downturn that supplied a substantial part of the intended emissions reduction. This has led to a dramatic price drop of CO₂ allowances. It is therefore not surprising that we're observing a strong decrease of wholesale electricity prices in central-western Europe² but also in other regions.³ This is a normal market reaction to overcapacity, low CO₂ prices and a policy-induced deployment of renewables. Unless this will be addressed, the EU is not likely to deliver on any of the three EU energy policy objectives: competitiveness, security of supply and sustainability. The priorities identified by the new Commission President and the way the discussions are going on the 2030 energy and climate framework are a cause for concern.

¹ The 2008-09 economic crisis was accompanied by an unparalleled drop in electricity demand. At the end of 2012, the electricity demand in the EU-27 was still 3% lower than in 2008. Back in 2008, analysts were expecting an annual growth rate of 1.5% (Capros et al., 2008). Thus, the divergence between projected and realised values amounts to roughly 9%.

² In Germany, the average market price has dropped from €65.7/MWh in 2008 to €37.9/MWh in 2013 (-42%). A similar development can be observed in the French power exchange: prices dropped from €69.2 to €43.2/MWh in the same period of time (-38%).

³ In Spain, one could observe a 31% price drop during the last five years (average price in 2013: €44.3/MWh). In Italy, prices decreased by 28% in the same period of time (average price in 2013: €63.0/MWh). Thus, the decrease in these regions was not as strong as in central-western Europe, but still significant.

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What is wrong?

Under the current market conditions, there will not be any market-driven investment in any technologies, let alone low-carbon ones. Market-driven investments are made when market prices are likely to remunerate an investment. This is not the case right now. Any investment decision taken today is backed up by dedicated support mechanisms – be it feed-in tariffs for renewables (and possibly in the future also for nuclear) or capacity payments for conventional power. Not being market-driven, i.e. not reflecting the actual situation of supply and demand, further adding supply to an already-saturated system will further depress wholesale power prices. The current approach is comparable to trying to accommodate a growing number of elephants in a shrinking room.

Furthermore, demand response (i.e. consumers reacting to price signals) – often mentioned as a key element of the future energy system – will not evolve under the current market conditions. The value of decreasing consumption in times of overcapacity is close to zero, simply because there will be no price spikes. And in some markets, the regulator has set price caps and does therefore not allow for price spikes, which would encourage consumers to adapt their consumption pattern.

But what is probably the most worrying development from an EU perspective is that all of these support schemes have one thing in common: they are designed as national policy instruments. Therefore, they are another nail in the coffin for the idea of having a single energy market, which – one might recall – holds out the promise of delivering cost-effective solutions by increasing cross-border competition. Already today, the internal electricity market is far from completed due to a high share of national taxes and levies in end-consumer prices. With a growing number of national subsidy mechanisms and depressed wholesale prices, the share of (national) taxes and levies in the overall price can only increase.

Faced with this situation, a need for action on a European level arises. Textbooks on economics suggest that overcapacity will reduce itself and, as a result, wholesale prices will recover. Furthermore, investments in low-carbon technologies will be made once the CO₂ price will have risen to such a level that carbon-intensive power plants have to be taken offline for economic reasons. This holds true only for competitive markets without state intervention, which is not the case for today's electricity markets. In some markets, power producers are not even allowed to decommission power plants without prior consent by the regulator. But even assuming a highly competitive and undistorted power market, investments in capital-intensive energy technologies such as renewables, carbon capture and storage or nuclear require a high and relatively stable CO₂ price. Empirical evidence shows that political uncertainty will lead to a higher risk premium on the capital employed, which significantly affects total costs of capital-intensive investments. The crucial question therefore is whether policy-makers can credibly guarantee a high and stable CO₂ price for the coming decades. It remains to be seen whether the Stability Reserve Mechanism for the Emissions Trading System can guarantee all that.

If this is not the case, it may be the right time to re-think the current approach.

What needs to be done?

A first step is to accept that not all objectives, which Mr Juncker asked his Commissioners to focus on, can be pursued in the same time frame with the same priority. There are trade-offs to be considered. Becoming a world leader in renewables will likely require continued support of their deployment with dedicated policy instruments, such as a feed-in premium or green certificates. But this reduces the significance of the internal market as a price signal for other

investments, thus creating a need for corresponding instruments for the (shrinking) rest of the market. Completely phasing out state interventions would strengthen the internal market but would also make the transition to a low-carbon economy more difficult, possibly impossible.

It may be useful to focus on fewer and more concrete objectives. One key challenge of the next Commission will be to deal with subsidy schemes not in a national but in a regional way.⁴ Strategies should be developed for regional convergence and ultimately joint or at least compatible support systems. This will help to re-generate a meaningful wholesale price. A second key challenge will be to solve the remuneration problem of investors without protecting overcapacity, in the event that the revised Emissions Trading System prove not to be sufficiently effective. This will be important to guarantee a more efficient allocation of capital and re-establish a meaningful wholesale price signal. One that allows innovative and market-compatible solutions, such as demand-response to evolve. A third key challenge will be to ensure that member states actually assume their responsibilities when it comes to increasing interconnection infrastructure. This will reverse the questionable development in some markets where new supply is being added, although neighbouring markets are faced with overcapacity. Furthermore, this will smoothen out the variability of renewables, reduce the need for back-up capacity and therefore improve the cost-effectiveness of renewables. This should become the first and foremost priority of the European Commission.

References

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de Jong, J. and C. Egenhofer (2014), "Exploring a Regional Approach to EU Energy Policies", CEPS Special Report, CEPS, Brussels, 15 April.

⁴ See de Jong and Egenhofer (2014).