

The EU Energy Package 2030: rupture or continuity?

The road to Energy
Realism in Europe
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“Difficult to predict, but the paper says clearly that climate/energy package has been successful. #2030eu”¹ tweeted Commissioner for Climate Action Connie Hedegaard replying to my question on whether the Green Paper on the 2030 framework for climate and energy policy will reflect either continuity or rupture compared to the 2020 package. True.

It is difficult because this Green Paper intends to give an answer to a pair of tough questions:

- 1 How Europe can reconcile long term decarbonisation targets with the urgent need to make the whole process affordable for industries and citizens and;
- 2 Will EU’s global leadership on climate change continue to be a political priority and main driver of the energy policy?

Today, some indicators confirm that policy continuity would take Europe to an unsustainable and dramatic energy crisis. The risk of policy inertia means that by 2035, European citizens would pay 40% more for residential electricity than Americans and more than twice as Chinese. Affordability issues may lead to desperate national energy choices. While the US has chosen natural gas as the pivotal energy source for the next decades, the EU has involuntarily bumped into coal’s revival². The structural weakness of the Emission Trading Scheme (ETS) is doing the rest by pushing the entire EU energy policy to run in default mode. The result is that national governments are de facto taking over with its own national plans and initiatives. The EU energy policy is coming back to national capitals.

Timing is critical. While the economic crisis dictates the short term needs, the decarbonisation agenda requires a long term compromise with a relatively expensive bill. This apparent temporal clash is polarising forces among influential stakeholders splitting the debate into two heavy ideological sides: industrialisers vs decarbonisers. By creating an artificial clivage, this persistent tension is eroding policy maker’s capacity to find compromises and set a common vision for the post-2020 framework. Yet there is still a way out.

The Green Paper 2030 is opening the door for the first exhaustive assessment of what the Energy and Climate Package 2020 has delivered and what should be done in the light of the post financial crisis and Lisbon Treaty era. Adapting or changing, adjusting or reinventing; the EU and national governments have the opportunity to go beyond today’s target-monopolised debate and rethink the basis for a fundamental change in the European Energy Policy.

This paper calls for a deep policy rupture. Far from answering all the particular questions of the public consultation, it challenges the current policy framework and calls for a new foundational phase of the European energy policy. A new approach (“energy realism”) with different assumptions is proposed aiming at rescuing our thinking from policy taboos, emotional assumptions and intra-institutional struggles.

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What went wrong with the Package 2020?

The first problem with the 2020 Package is more emotional than rational; it was about an uncontrollable and unrealistic optimism about EU's possibilities to become the global example of sustainable economic development.

The 2020 package design belongs to a different world. EU policy makers elaborated this package in a completely different economic outlook where the Spanish economy was still booming and the euro crisis and bail outs were not part of top media headlines. In turn, the political agenda was focused on the poor record of the Lisbon Strategy and the post-constitutional debate which ended up with the adoption of the Lisbon Treaty in 2009. By that time, less than a bunch of policy makers knew what shale gas or hydraulic fracking was about.

The 2020 Package with its 20-20-20 targets is a product of the pre-financial crisis in Europe. Any serious assessment of the package cannot be disconnected from the financial crisis. The package reflects an almost positivist approach when it comes to sustainable economic development in Europe. The first problem with the 2020 Package is more emotional than rational; it was about an uncontrollable and unrealistic optimism about EU's possibilities to become the global example of sustainable economic development. This approach was unanimous among the three EU institutions. It was not a unilateral European Commission plan but a clear consensus among all the key institutional players, as the following European Commission's Communication published in January 2008 reflects:

"2007 marked a turning point for the EU's climate and energy policy. Europe showed itself ready to give global leadership: to tackle climate change, to face up to the challenge of secure, sustainable and competitive energy, and to make the European economy a model for sustainable development in the 21st century (...) The agreement by the March 2007 European Council to set precise, legally binding targets was a symbol of Europe's determination."³

The second problem is its rigidity. The basis of the package is set under a business (and technology) as usual scenario. Any technological breakthrough or game changer in Europe or abroad was implicitly excluded. The rigidity was not limited to technology breakthroughs but also in terms of policy drivers and policy tools. Almost set in stone, the 20-20-20 targets stipulated the basis for a rather euro-centric and static model. The Emission Trading Scheme (ETS) and binding renewable energy targets are the cornerstone of this package that seemed to have an end on its own: the irremediable CO₂ reductions in the EU by 2020. This determination was the ultimate driver of the energy policy and was intended to provide the basis for the EU to become the global leader in climate change negotiations.

In short, the aspiration to become the global leader on climate change has articulated, dominated and structured the energy policy debate in Brussels from 2007 until the end of 2010. The EU energy policy has de facto become a policy support to reduce GHG emissions in short and long terms. The energy policy has primarily been servicing climate change goals as part of the decarbonisation trajectories, clearly depicted in the Energy Road Map 2050.

There are important explicit and implicit assumptions that have sustained the architecture of the 2020 package. While some of them are connected to external factors, some others are affecting the policy design and the EU institutional setup. One of the critical reasons to call for a policy rupture is that the EU should unmask them and decide whether it can continue to operate under the existing ones or, by contrary it needs to reformulate them.

There are seven essentials assumptions that can be challenged today:

- 1** The EU can effectively lead international climate change negotiations and this global mission should be the main vector for the EU energy and climate policy;
- 2** The triple EU energy policy objectives (sustainability, competitiveness and security of supply) are equally important and the package has to deliver results in all the three objectives simultaneously;
- 3** Energy prices will not fundamentally change in Europe (and the US) but gradual liberalisation of energy markets will help to push prices down with positive effects for competitiveness;
- 4** Renewable binding targets with vigorous national support schemes will be affordable for the entire decade (2010-2020) and renewable energy sources integration into the electricity grid and transport sector will be smooth;
- 5** Pre-established decarbonisation trajectories (i.e. Road Maps) and the confirmation of the “no regret” option will incentivise companies to massively invest in the modernisation of energy infrastructure;
- 6** A multiple and varied packages of EU-wide legislation for energy, transport and climate will coexist and interact smoothly to hit overall EU GHG reduction target (i.e. ETS and energy efficiency) helping to “Europeanise” the energy policy;
- 7** DG Climate Action and DG Energy will easily find compromises to propose policy and regulatory frameworks in the context of the EU energy and climate 2020 Package.

All the seven essential assumptions are facing hard times. A reality check is needed.

The first assumption is the most important one and requires a serious assessment because it is the vector of the overall 2020 package.

Nobody can deny Europe’s efforts to exert influence in the COP meetings. Figures show however the limited impact of its leadership: the carbon intensity of energy production worldwide has remained flat for over two decades. A new report from the IEA confirms that in 1990 57.1 tonnes of CO₂ were released per terrajoule produced while in 2010

the figure stood at 56.7/Tj⁴. Europe is still responsible for the 11% of CO₂ emissions and has done a respectable work at home. However, climate change negotiations are shifting from a multilateral soft power bargain lead by the EU to a sort of bipolar arrangement between US and China. While China is considering to unveil a CO₂ strategy as of 2016, the G2 seems to be the natural leader of the post Kyoto era. The recent Sino-American agreement to work more closely on Climate Change can trigger new forces to find alternative approaches for agreements in December 2015. As a global actor, the EU has to accept the limited influence it will have with a weakening economy and transitional energy and climate policy. A political decision should be taken among all the EU institutions and governments to recognise that this leadership vanished over time and that an adaptation of the domestic policy in terms of CO₂ is required to maintain a realistic opportunity to influence G2 and developing nations in the post-Kyoto era.

The second assumption has its origins well before the design of the Package 2020. EU policy makers have hardly indicated a predominance of one of these goals (sustainability, security of supply and competitiveness) since the adoption of the Green Paper in 2000. In practice, each objective of the EU energy policy has been prioritised based on the political and economic context. While competitiveness was predominating in the beginning of the century (oil peaks), security of supply gained ground with the double gas crisis (Ukraine and Russia 2006-2009) in the end of the past decade. In turn, the crisis was temporary and the 2020 Package has put sustainability through a CO₂ trajectory as a top priority among the other two goals. The dynamic transition from one goal to another in less than one decade shows that delivering results in all three would be ideal but resulted in a mere policy chimera.

The third assumption is today agonising. EU energy prices are choking the moribund economies. Electricity prices in Europe have been rising and there is no sign that they will decrease and converge. The gradual liberalisation of the markets boosted by the Third Energy Package has faced a systematic transposition⁵ opposition/delay by Member States and energy prices are inflated by a plethora of diverging national taxation. In the meantime, the US shale gas boom has dramatically changed the international energy outlook.

Concerning the fourth assumption, the enforcement of binding targets for Renewable Energy has worked very well in Europe. The latest reports confirm that Europe hit 12,6% of RES but the forecast for the next year is scary. Partly due to the changes that national support schemes are undergoing and the delicate budgetary situation, a serious slowdown in the progression to the 20% target is highly likely. The main challenge is how to move from an all-RES (wind, solar, etc) expensive Renewable support scheme model to a more tailor made system that phases out unnecessary support to already mature technologies and inject subsidies to the right technology in the right EU country. Funding and subsidies to achieve grid parity in those technologies that are not mature enough is accompanied by an effect of the successful integration of RES into the grid system: intermittency and generation adequacy.

The fifth assumption is about investments. The investments for energy infrastructure needed have not happened and does not seem to happen anytime soon. Europe has a 1 trillion black hole to modernise electricity and gas infrastructure. The current policy framework is discouraging investors. The Road Map 2050 has defined several confusing scenarios and it has just confirmed the “no regret” option. This exercise has not been useful to ensure a consistent policy in the next 20 years.

The sixth assumption relates to the coherence of the multiple pieces of legislation enacted. The EU has put forward three key pieces of legislation for this package: RED, ETS and the Energy Efficiency Directive. The adoption of the efficiency legislation showed that proposing mandatory provisions (i.e. an annual obligation to save 1,5 % of energy) is not far from having a mandatory target for energy efficiency which has then collided with the functioning of the ETS. There was a political decision to push Member States to do more with energy efficiency in order to hit the voluntary target by 2020. This decision has gone too far by redefining the Package 2020 and incorporating crucial sectors such as CHP, buildings and power sector in only one piece of legislation. The intention to simplify legislation came at the expenses of coherence and viability of the entire package.

The last assumption is strictly linked to the institutional configuration of the EU after the adoption of the Lisbon Treaty. Over the last years, we have seen increasing differences between two fundamental Directorate Generals: DG Energy and DG Climate Action. Positions taken on thorny issues such as ETS and Indirect Land Use Change for liquid biofuels (ILUC) have shown important differences in terms of how to implement the objectives of the Package 2020 and the rationale behind legislative proposals. Sometimes they seemed to work in silos rather than as a coherent bloc representing the Commission. Although these intra-Commission frictions were not the common denominator in all the dossiers, these differences have also had some similar tensions between ITRE (Industry) and ENVI (Environment) Committees in the European Parliament. The clivage industrialisers vs decarbonisers was present at the ETS backloading proposal rejected by the Plenary of the European Parliament, confirming the difficulties that the system is facing when deciding energy and climate energy policy these days.

As a global actor, the EU has to accept the limited influence it will have with a weakening economy and transitional energy and climate policy.

Building the rupture: four urgent tasks

Assessing the American shale gas boom is decisive for Europe. In the US, unconventional oil and gas accounted for \$238 billion in economic activity, 1,7 million jobs and \$62 million in taxes in 2012.

Given the unstable nature of the current assumptions, the first burning question is where to start. The European Commission and national governments should work together on four urgent tasks: dismantle pre-existent taboos (set key principles), re-assess the impacts of the Lisbon Treaty in the energy policy - with particular attention to subsidiarity, elaborate a new set of assumptions and propose concrete elements for the Package 2030.

Fracking taboos: Lessons from the shale gas boom in America

Assessing the American shale gas boom is decisive for Europe. In the US, unconventional oil and gas accounted for \$238 billion in economic activity, 1,7 million jobs and \$62 million in taxes in 2012⁶. With these figures, the US shale gas boom is challenging several pre-existent taboos of the EU energy policy. Controversies around "fracking" have obliged policy makers to put in the table some vital question that a pure energy policy needs to consider. Firstly, EU policy makers have re discovered the importance to promote indigenous energy sources. Can we all Europeans believe that our continent is condemned to higher rates of dependency after the US shale case? Moreover, the American shale boom is reminding policy makers that the energy sector could also promote innovation, reduce prices, enhance industrial policy and manage environmental impacts beyond GHG emissions with its own resources (i.e. methane). Why Europe will prevent itself to develop high-tech know how that can apply in countries that are extremely rich on shale gas such as Ukraine, Argentina or China? This requires opening our euro-centric vision to new horizons even if it will take time to digest. More importantly, shale gas is anticipating the increasing need to integrate water policy into the future energy package. The so called nexus energy-water should be considered. In short, the shale gas lesson leads us to four important and basic principles of what we can call energy realism:

The first principle is that energy transitions are long and expensive. Moving from one predominant energy source to another requires fundamental changes in the energy system but also in the industrial complex and consumer's mindset. Historical transitions of energy systems have led to impressive lifestyle changes. They have major impacts on societal behaviour. History however shows that changing energy sources and mixes take decades or centuries.

The second principle is that energy systems do not operate in isolation. They do represent an essential part of regional, national and even continental economies. Energy systems should be seen as an economic multiplier and technology enabler that can support economic growth, investments and development. Energy policy should be closely assessed together with other relevant policies: trade, transport, research and climate change.

The third is that energy systems should be designed to provide competitive price markets and security of supply. That is the primary role for most of the nations. Moreover, systems that become expensive and insecure have fewer chances to create climate friendly dynamics.

The last one is that a successful energy policy requires a vision. Such a vision cannot be driven by one indicator or target. Policy makers are obliged to forecast and take risks. Predictability and flexibility are both required for energy policy to succeed and the political system should also be ready to deliver on time when needed.

The Lisbon Treaty and the energy policy

The Lisbon Treaty is not a revolution for the EU Energy Policy⁷. Apart from the external relations chapter, the text is neither an invitation to launch a decarbonisation process nor an attempt to Europeanise the energy policy. These two are mere political objectives. Decision on energy mixes, use and promotion of indigenous energy sources and taxation remain a competence of each Member State. National capitals are decisive in this process and cannot be ignored. The implementation of the Treaty has not resolved the historic tension between the national right to decide on the energy mix and the EU role to protect the environment through regulation or by invoking the precautionary principle. Unless the treaty is revised, the energy policy will coexist with this intrinsic legal and political headache.

New assumptions: crystallising the rupture

A rupture requires a new set of realistic assumptions that could frame the new policy design. I would propose the following seven assumptions:

- 1** Member States will take more control of energy policy including different GHG targets and industrial strategies;
- 2** Replicating the structure and tools of the Package 2020 will not necessarily lead to the same results;
- 3** Climate Change negotiations will be led by the US and China with a more limited –still relevant- influence of the EU;
- 4** The US will become a net global exporter of energy changing the international energy outlook and trade by 2020-2025 with Asia as its main export market;
- 5** The EU liberalisation of gas and electricity markets will not automatically reduce energy prices making “energy poverty” a higher political issue in the national governments agenda;
- 6** National public support schemes for renewables and new technology will be more limited;
- 7** A reduced but still important share of fossil fuels will be important for the EU to pursue its competitiveness and decarbonisation agenda altogether.

The proposed 7 new assumptions depict a less optimistic scenario for the EU. However, those are important to launch a debate on how to think a new vision, a smart regulatory package and a more harmonious implementation which provides certainty to economic operators and credibility to the EU as an important regional actor.

What policy? A 2030 package with a 2040 vision

Irrespective of the combination of policies we choose, the fate of the Emission Trading Scheme (ETS) has to be decided. The system is in coma. There is no point to discuss today if the instrument is market based or manipulated by regulators.

Following some of the principles and assumptions mentioned above, the 2030 Energy Package should define a vision that shifts from just quantifiable CO₂ objectives to some important hows. Based on competitive prices driven policy, a vision should further develop on how our regulatory framework will set a level playing field for at least 20 years. The vision should give a clear signal where objectives can match with concrete policy and regulatory frameworks in a two decade timeframe. The first strong signal to reduce the 1 trillion gap problem is to take the risk to think post-2030 and define the vision 2040 with a policy design with tools for two decades (2020-2040). Also, a policy framework that draws a clear line between the power generation and transport sector is a must - including a specific regulatory framework for each of the sectors.

Lastly, it has to tackle the issue on what to do with ETS and which role will play in the long run before designing a package of policies.

ETS: dead or alive?

Irrespective of the combination of policies we choose, the fate of the Emission Trading Scheme (ETS) has to be decided. The system is in coma. There is no point to discuss today if the instrument is market based or manipulated by regulators. The most important question is how this system can be the epicentre of the EU energy and climate policy with a moribund carbon signal that demolishes the logic of this policy package and the interaction with other policies. ETS cannot survive with "backloading", it needs a structural reform that can fit with the entire energy policy instruments or be replaced by an effective alternative. EU ETS is a victim of its own design and is not delivering as the main driver of green investments, jobs and affordable decarbonisation. This failure is blowing up the roots of the decarbonising agenda deeply rooted in the current package and to make sense require an immediate solution on what to do during its dark age. If ETS will stay and be part of the agenda, it has to play an important role together with a more balanced Effort Sharing Decision (ESD) to cover all the sectors for the next 25 years. A lack of consensus of the next Parliament and Council to have a strong ETS-ESD package means that a more predictable and effective substitute is needed.

Two scenarios: overall target vs calibrated scenario model

Nowadays, there are two important policy scenarios: a simple overall GHG target and a multiple-target sector scenario.

The EU overall GHG target scenario without targets per policy

An overall GHG emissions target assumes that ETS will revive and that a carbon signal will drive green technology and jobs. Too optimistic, this scenario would only allow the market to pick winners and losers if the scope of ETS covered all the sectors or an adjusted ETS-ESD package is updated, creating incentives to trigger carbon price signal in short terms. Put simply, an effective ETS structural reform (carbon floor?) would be a must to make it happen effectively. The risk remains high as the EU cannot afford an extremely volatile carbon price that would shock investors in cyclical ups and downs.

A calibrated risky scenario focus on investments, affordability and new policy areas

A more complex architecture of the policy framework for 2020-2040 implies a vision based on the new assumptions proposed. This package is not a menu of targets but rather a set of critical policies that could adjust EU's serious ambitions to some emergent realities and reinforce the basis of a more effective EU energy policy. Indeed, there are six important elements:

1. Targets: a binding plus-10% RES target

The EU needs a binding 35% overall GHG reduction target by 2030 (See Chart 1). This target will ensure EU's commitment to continue its efforts to decarbonise the economy while playing an important role in the international arena. Besides this overall target, a 40% voluntary target for Renewable Energy Sources as the milestone for 2030 and 55% by 2040. The EU cannot abandon its bet on renewables to reduce CO₂ emissions but it needs to develop a realistic and affordable scenario for each Member State.

For the period 2020-2030, a plus-10% binding target calculated per Member State can be proposed. By 2018, the European Commission should make an assessment of the share of RES per Member State and define the 10% plus that each Member State will have to achieve in the next decade. There should be two clear instruments to implement this plan: the revision of the RED Directive for transport and a new proposal for a Directive for RES and the power generation sector in order to deal with intermittency, capacity payments and investments.

The successor of the RED Directive should define binding targets for the EU to hit the 40% voluntary target in which all the sustainable biofuels (20% or 25%) that comply with the sustainability criteria can fill the quota and electric cars must enjoy a sub-target of about 5% from the overall transport target. The transport sector has a massive potential to transform mobility, innovate and create jobs. U-Turn policies such as dubious Indirect Land Use Change (ILUC) effects models have eroded the credibility of the EU as a legislator risking to be a source of never endless WTO trade disputes with key energy partners.

Additionally, a new directive should set the framework for integration of renewables into the power generation grid. The issue of capacity payments, investments and intermittency should be integrated with clear rules reflecting the modernisation of state aid at EU level.

2. The role of indigenous energy sources: fossil fuels, biomass, unconventional fuels

A second important element is indigenous energy sources including fossil and non-fossil. Denying the role played by some fossil and non-fossil indigenous energy sources is putting under risk the viability of the decarbonisation of the economy. Fossil fuels, unconventional fuels and biomass will all play an important role in the EU energy mix in the next 20 years. The EU should develop a strategy defining the importance that energy sources such as gas, unconventional gas, biomass and all indigenous sources will have in the next twenty years. Investors

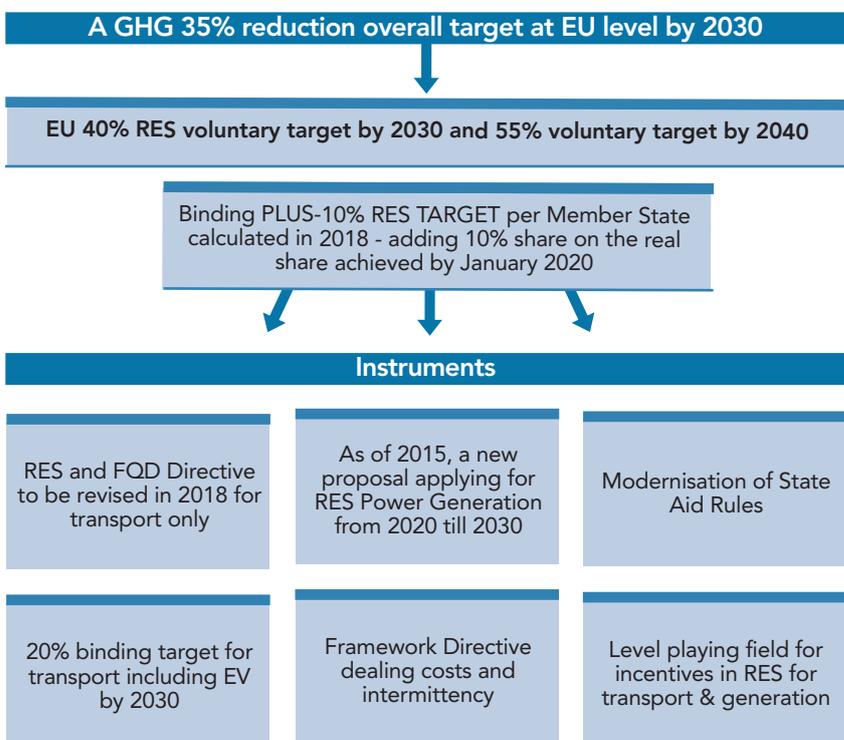
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According to reliable sources, 44% of total water abstraction in the European Union is used for energy production.

need to receive a clear signal that the EU will not become the only no-go area of fossil fuels in the world. A sign towards a wrong direction on this would only create unexpected market reactions which will not be aligned to regulatory and political objectives⁸. The EU needs more clarity and a solid line for the next 20 years that cannot change every 5. A commitment on the importance of sources such as gas, biomass and shale gas is decisive to bring back investors in our continent and make sure that the US will not skip Europe as a potential market for its indigenous energy sources.

3. Integration of energy-water nexus into our energy policy

The third (and new) element is related to water policy. Water savings can provide benefits to reduce energy consumption, electricity bills and thus CO₂ emissions. The energy sector can play a big role which connects to innovation and efficiency. According to reliable sources⁹, 44% of total water abstraction in the European Union is used for energy production. Industries that use large amounts of water include the oil and gas, energy and mining. Savings can be huge from 15 to 90 %. The regulatory framework and Water Blue Print¹⁰ is shy at this respect. It is not about creating extra burden to economic operators but to stimulate them to further integrate water management and re-use in their energy production processes. A voluntary target to save energy by 2030 and 2040 could help to create stimulus towards a more integrated energy-water policy.



4. The creation of an European Fund for Energy Poverty

Energy or fuel poverty is not a phenomenon from particular European countries but a real European problem that the financial crisis has exacerbated. The courageous Belgian EU Presidency was the only attempt to introduce this phenomenon in the EU agenda with limited success. Europe has the responsibility and opportunity to assist regions and companies that need to reduce energy costs to survive. The EU has to establish a monitoring system per region and define a series of financial instruments together with the European Investment Bank (EIB) to reduce the burden of energy costs in Europe. In short, a more direct support from Europe would be decisive and a fund should be directed to those that we will not be able to cover its energy needs across the continent.

5. Enforced Cooperation: energy taxation

A new commitment is needed between the EU institutions and Member States. A radical reform on their taxation system is required to reduce energy costs. EU liberalisation will not happen soon and may not be enough to deliver a real competitive energy prices. VAT and other national taxes will continue to diverge and the liberalisation of the market will be incomplete. The European Commission could elaborate on a plan on the impacts that energy taxation coordination between groups of Member States can help to reduce price divergence and energy costs.

6. Merging DG Energy and DG Climate Action into one DG

It is simple: one Directorate General working under one Commissioner and two Director Generals. The climate agenda cannot have its own pathway but should have a common one with the energy policy. One DG will reduce costs and create more synergies among officials. This should avoid different policy lines or agendas and the energy policy should stick to the economic and competitiveness agenda.

Conclusion

The Energy Package 2030 is an enormous opportunity. It will not tackle all the different challenges that the current policy framework presents but it could become a starting point towards a rupture. More realistic and sharp, the new policy framework has to re-define the assumptions which can guide the architecture of the new policy package. In this context, resolving the role of ETS and defining a calibrated energy policy on renewables and indigenous energy sources is crucial. Also, the European Commission cannot ignore the europeanization of energy poverty as an issue and the increasing role that water policy has in the energy agenda. Member States and Commission have to be courageous and walk towards the rupture with determination or the energy crisis will push the agendas to national capitals and exacerbate the ideological clivage between industrialisers and decarbonisers.

Energy or fuel poverty is not a phenomenon from particular European countries but a real European problem that the financial crisis has exacerbated.

Member States and Commission have to be courageous and walk towards the rupture with determination or the energy crisis will push the agendas to national capitals and exacerbate the ideological clivage between industrialisers and decarbonisers.

Footnotes

1. Commissioner Hedegaard twited “@MaximoBXL Difficult to predict, but the paper says clearly that the climate/energy package has been successful. #2030eu”, at 4.35 PM on 27 March 2013
2. According to the Quarterly Coal Report, October – December 2012 elaborated by the US Energy Information Administration, the EU has increased coal imports by 23% in the last year (2011-2012) from the US - with Austria reaching an annual increase of 406%.
Link: <http://www.eia.gov/coal/production/quarterly/pdf/t7p01p1.pdf>
3. European Commission: Communication on Europe’s climate change opportunity, 23 January 2008.
Link: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2008:0030:FIN:EN:PDF>
4. “Energy as Dirty as 20 Years Ago on Slow Climate Effort, IEA Says”, Bloomberg 17 April 2013
Link: <http://www.bloomberg.com/news/2013-04-17/energy-as-dirty-as-20-years-ago-on-slow-climate-effort-iea-says.html> “Internal energy market in doubt as 18 states face court” (Euractiv, 3 October 2011) Link: <http://www.euractiv.com/energy/internal-energy-market-doubt-18-news-508048>
5. “Internal energy market in doubt as 18 states face court” (Euractiv, 3 October 2011)
Link: <http://www.euractiv.com/energy/internal-energy-market-doubt-18-news-508048>
6. The Economist, 16th March 2013 Special Report: America’s Competitiveness, page 7
7. “EU Energy Policy under the Treaty of Lisbon Rules – Between a new policy and business as usual” by Jean Frederik Braun (24 February 2011). Link: <http://www.ceps.eu/book/eu-energy-policy-under-treaty-lisbon-rules-between-new-policy-and-business-usual>
8. Despite the 2020 Package advocates for a sustainable economy, more than 60% of new power capacity under construction in Germany is based on hard coal which is about 6.6 gigawatts of new hard coal capacity and 3.5 is in the pipeline. Source: ENDS 8 April 2013: “Germany’s energy pipeline dominated by coal”.
Link: <http://www.endseurope.com/31296/germanys-energy-pipeline-dominated-by-coal>
9. Institute of International and European Affairs,
Link: <http://www.iiea.com/blogosphere/the-water-energy-nexus>

Disclaimer

THIS GOAL OF THIS PAPER IS TO CONTRIBUTE TO THE ENERGY POLICY DEBATE AND ENRICH THE CURRENT DISCUSSIONS IN BRUSSELS AND NATIONAL CAPITALS. THIS PAPER REFLECTS THE PERSONAL VIEW OF THE AUTHOR AND DOES NOT PURPORT TO REPRESENT THE VIEWS OR THE OFFICIAL POLICY OF ANY COMPANY, ASSOCIATION, ORGANISATION OR ANY INDIVIDUAL.

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