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THE ENERGY UNION NEEDS A NEW APPROACH TO POLICY-MAKING

A PROPOSAL TO PLACE RISK MANAGEMENT AND EVIDENCE-BASED ANALYSIS AT THE HEART OF EUROPEAN ENERGY POLICY

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- > The current process for developing EU energy policy involves establishing a number of policy levers and obtaining political agreement to progressively increase the impact of these levers over time.
- > This incremental approach has delivered considerable success. However, there is increasing concern that it will not be capable of delivering the policy innovation that is required to address the increasingly complex and interrelated landscape of policy challenges. Without change, there is a risk that significant money will be wasted and key policy objective will not be delivered. Moreover, a new approach is needed to gain the support of industry stakeholders and the wider public.
- > The Brussels change-over of 2014 heralded a new step in EU policy making. "This time it is different" affirmed the European Parliament elections posters, and new European Commission President Jean-Claude Juncker announced "a new start for Europe" in his political guidelines.
- In particular, the Energy Union concept stresses the need for the EU to 'up its game' in energy policy but this is unlikely to deliver any material changes without an overhaul of the underlying policy process. The new opportunities and risks that are emerging require new thinking with a broader scope that is based on more rigorous analytical foundations.
- The creation of a new independent institution the European Energy and Climate Risk Observatory – would provide the necessary substance to bring the Energy Union concept to life. It would be responsible for monitoring systemic risks and recommending appropriate policy responses with a view to building a broad consensus on the nature of the risk landscape through objective and evidence-based analysis.
- > This would not affect the balance of responsibilities between the EU and Member States nor would it require significant new resources, but it would be a means to improve the robustness and evidence base of decision-making at all levels. Moreover, it would provide a much improved basis for achieving wider stakeholder buy-in to EU energy policy and has the potential to dramatically reduce the chilling effect on investment caused by uncertainty about the future which threatens the ability to respond to security concerns and challenges Europe's growth prospects.



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The European policy making context

The EU is different from most organisations that need to take strategic decisions. Whereas most organisations involve a clear decision making hierarchy, with an ultimate 'boss' who must be persuaded of the rights or wrongs of competing choices, the EU is a partnership of 28 Member States who must all be broadly satisfied with policy proposals. Despite complex legal underpinnings, the EU is essentially a political construct in which decisions have to satisfy the political requirements of each Member State.

The European Commission has had to be innovative when developing energy policy in order to maximise progress within these political constraints. Usually this has involved establishing the need for action and agreeing initial policy steps that represent a baseline acceptable to all Member States. As time moves on, and evidence about the need for more action accumulates, the Commission seeks political acceptance for incremental steps beyond the policy measures adopted previously. This approach has proved effective in achieving progress since Member States are content to take more action than was agreed to in the past and it avoids the risks associated with opening up the whole issue from scratch. The debate, therefore, is essentially restricted to the size of the incremental steps.

This 'incrementalist' approach can be seen throughout the EU energy policy agenda. Initially starting with indicative targets for key system variables (reductions in CO2 emissions, deployment of renewables, reductions in demand and levels of interconnection), the policy process develops through incremental steps whereby target levels are increased, indicative targets are made mandatory, and new systems are put in place to ensure better cooperation between Member States. The Commission has honed its technical analysis to support this type of negotiation. The box below contains an explanation of how the particular features of energy system modelling have been designed to support an incremental political negotiation and the implications of this choice.

This approach to energy policy development has been successful. However, the world is changing and the consequences of failing to agree and deliver effective policy measures are becoming more significant. It is therefore reasonable to ask whether this approach to policy-making remains valid and, if not, what alternatives are available.

The role of energy modelling and analysis in the policy process

The energy system modelling and analysis undertaken by the EU Commission reflects that it is trying to facilitate agreement between Member State governments with potentially diverse political interests. The analysis is tightly framed with reference to previous political agreements and modelling work restricted to assessing the costs associated with increased ambition within the existing policy framework.

This high level approach has given rise to a number of features of the energy modelling process that have raised concern amongst stakeholders. In particular, the Commission has appeared overly reliant on the National Technical University of Athens PRIMES model. This model is widely considered to be something of a 'black box' with little understanding of the underlying assumptions or how they are processed. It is impossible for third parties to replicate the Commission analysis or test the sensitivity of the results.



From the perspective of the Commission, the PRIMES model has a number of important features. Firstly, the use of the same model as in previous policy exercises ensures that any changes arising from new policy proposals are purely a consequence of the policy change and updated views of the world rather than a result of using a different methodology. Secondly, it is possible to constrain the model to represent highly sub-optimal but politically acceptable features of the energy system – for example, particular national energy mixes or limitations on inter-state energy transfers. Moreover, the opacity of the model ensures that these heuristic constraints are not subject to external scrutiny that could risk derailing political debate away from the policy change under investigation. Finally, the complexity of the model enables national energy systems to be represented at a sufficiently granular level to satisfy Member State governments that the impact on their country has been accurately assessed.

However, the world has now moved on. The energy and climate challenges require a more significant response and this can only be delivered with support from industry stakeholders and the wider public. This in turn requires an analytical approach that is more flexible and transparent. It is necessary to develop shared assumptions about the future and to understand which matter the most and how they might change. The models must be capable of demonstrating our exposure to future uncertainty such that the political discussion can focus on the bets we are prepared to take and those we are not. Above all, the models must allow us to understand the whole range of policy levers that are available – across the value chain, geographical borders and sectors – such that least cost solutions can be identified. Finally, it is important that analytical results are widely accepted and they should be reproducible by independent analysts using a variety of energy system models.

The new policy paradigm

The energy policy challenge is becoming considerably more complex with new risks and opportunities emerging. Policy-makers must continue to strive to deliver the potentially conflicting objectives of security of supply, decarbonisation and competitiveness in a highly uncertain future. Poor policy decisions that involve big bets on commodity prices or technology costs could lead to considerable money being wasted and the risk that policy objectives will not be delivered.

Many Member States continue to cling to self-determination over energy policy despite the fact that it is increasingly difficult for individual Member States to effectively identify and manage policy delivery risks on their own. The functional interdependence created by the move towards an integrated European market means that disruptions and policy failures within individual Member States will have implications across borders. Moreover, the extent of the risks, often global in nature, can only be addressed cost-effectively through a collective response. The world in which we operate is becoming increasingly complex, driven by systemic risks that cannot be avoided by individual Member States, and this situation demands a new and potentially significant response.

There are many exciting significant opportunities to consider. New technologies have the potential to revolutionise the way energy is both produced and consumed and it is necessary to ensure that the market environment encourages the development and deployment of these

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technologies and the companies that will bring them to market. Market integration between Member States is becoming a physical reality but real changes need to happen in the way energy systems operate if the potential security and cost benefits are to be realised. Also, we will begin to forego some significant opportunities if we continue to focus on the electricity system without considering the interactions that are emerging with heat and transport sectors.

This new paradigm demands that the EU adopts a new approach to energy policy development involving a more rigorous assessment of the challenges and the potential solutions. This, in turn, will require significant changes in how the future is analysed, who does the analysis and how it informs the policy process. Energy policy affects all EU citizens and, if successful, this new approach will provide a clear basis upon which the policy can be explained to market participants, investors and the wider public.

A new political impetus

European institutions have been aware of this shifting paradigm for some time, and have taken steps to improve their common understanding as well as their collaboration and decision-making processes. For instance ESPAS, the European Strategy and Policy Analysis System¹, was set up in 2010 to catalyse more effective policy making processes by providing a common basis for European institutions to understand global trends and their implications for the European Union. It marked a clear step-change by looking beyond a 10-year time horizon, promoting inter-institutional collaboration (between the European Commission, the EEAS, the Council of the EU and the European Parliament in this case), and institutionalising 'foresight' into political and policy decisions. In the European Commission, inter-service collaboration and horizontal work has also grown over the past 10 years, often supported by BEPA, the Bureau of European Policy Advisors, to allow more integrated policy-making. The European Parliament is also adapting, as demonstrated by the creation in 2014 of the directorate for Parliamentary Research Service². This new directorate will support the institution in evidence-based policy making in a context of rising complexity.

The European project is a unique experiment in multinational governance, and is as such constantly evolving. The 2014 change-over in European institutions created an opportunity to accelerate this process by upgrading European structures and processes in line with the rising complexity of the energy, environmental and economic crises that Europe is facing. It also had to adapt to another very visible trend: the rise of euro-scepticism and populism across Europe, often vindictively targeted at "Brussels bureaucrats".

President Jean-Claude Juncker has developed his political guidelines "A new start for Europe" around the necessity to restore European citizens' confidence, strengthen the European institution's democratic legitimacy, and assert the EU's added value by being "bigger and more ambitious on big things, and smaller and more modest on small things"³. He also set out to "break down silos and static structures" by grouping his team of Commissioners around core priorities such as a "resilient energy union with a forward-looking climate policy". Such a

¹ http://europa.eu/espas/about-espas/index_en.htm

² http://www.europarl.europa.eu/the-secretary-general/en/activities/recent_activities/articles/articles-2013/articles-2013-november/articles-2013-november-2.html

³ Press release for the European Commission 2015 Work Programm: http://europa.eu/rapid/press-release_IP-14-2703_en.htm



structure should help European policy-makers look beyond their core expertise rather than drawing artificial lines between energy, environmental, industrial and innovation issues.

Although such developments show willingness from the European Commission, this restructuring is insufficient to rebuild confidence in the European project and to develop a new approach to policy-making that is effective in responding to the material energy and climate risks we face. It thus highlights the need for a new 'big idea' which would both place risk management at the heart of policy-making, and would not require additional political capital from Brussels.

A new risk management approach

The European Energy and Climate Risk Observatory

A critical step forward would be to create an independent and authoritative voice that can undertake the analysis of the future energy system. This body would be responsible for identifying the systemic risks that could affect delivery of policy objectives and proposing possible policy remedies that could be adopted by the EU as a whole or individual Member States. EU-level energy security assessments are currently undertaken for a limited range of potential shocks (e.g. stress-tests for adequacy of gas storage). However, at present there is no pan-EU body currently in charge of monitoring systemic risks on an on-going basis. This has worrying parallels to the economic crisis, where individually-rational decisions by different actors made the system as a whole collectively vulnerable.

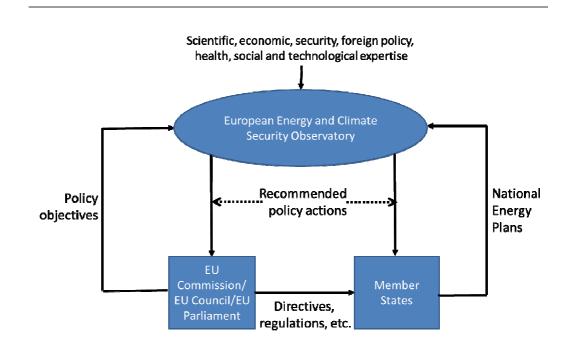
The responsibilities of this new institution, which could be called the 'European Energy and Climate Risk Observatory', would be:

- Horizon-scanning for potential risks to the delivery of EU and Member State energy and climate objectives, drawing on a full range of climate, economic, security, foreign policy, health, social and technological expertise.
- > **Modelling and assessment to test the robustness** of Europe's energy policy and decarbonisation pathway against credible external shocks and extreme scenarios.
- Independent evaluation of the collective resilience to this risk landscape of Member State energy strategies and, in particular, the national energy plans produced as part of the 2030 climate and energy framework.
- > **Monitoring progress in delivery** against certain indicators designed to show whether Europe is on track to deliver policy objectives.
- Submission of recommendations to both the Council of the European Union and European Commission on EU- and national-level actions to manage risk and increase resilience.

The role of the proposed European Energy and Climate Security Observatory in the overall policy process is illustrated in the following chart:

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Political rationale

This would not represent a wholesale concentration of responsibility at the EU-level or a repatriation of powers to Member States, but rather a **means to improve the robustness and evidence base of decision-making at all levels**. The independent nature of this body would be critical since this is necessary to build broad consensus, both within the policy-making community and amongst stakeholders, on the nature of the risk landscape through objective and evidence-based analysis. If successful, it has the potential to dramatically reduce the chilling effect on investment caused by uncertainty about the future which threatens the ability to respond to security concerns and challenges Europe's growth prospects.

Starting point

Setting up this new European body does not require additional resource. For example, the starting point could be a virtual body combining existing Member State, European Commission and other European bodies expertise (for instance including the European Environment Agency, the Market Observatory for Energy, the Joint Research Council, and the European Strategy and Policy Analysis System) but with a redefined mandate.



Conclusions

The EU Commission has sought to drive forward the energy policy agenda by identifying key policy levers and then achieve political consensus for incremental changes in ambition surrounding these levers. This approach has delivered considerable progress but there is concern that it will not be able to tackle an increasingly complex and interrelated set of energy policy challenges. Moreover, the political nature of the policy discussion makes it hard for Governments to sell the proposed measures to market participants and investors, let alone EU citizens.

The extent of the policy challenge is widely recognised and the concept of an Energy Union has been proposed to help address the situation. However, the Energy Union cannot succeed without new thinking that involves a more strategic approach, putting the assessment and management of future uncertainty at the heart of the policy process. It is not practicable for individual Member States to undertake an effective analysis of future uncertainty on their own given the functional inter-dependence of the EU energy market. The risk factors are also typically global in nature and require a collective EU response.

A successful Energy Union can be brought to life by a new institution – the European Energy and Climate Risk Observatory – responsible for monitoring systemic risks and recommending appropriate policy responses. It would need to be genuinely independent and, therefore, able to build a broad consensus on the nature of the risk landscape through objective and evidence-based analysis. This would not affect the balance of responsibilities between the EU and Member States but rather be a means to improve the robustness and evidence base of decision-making at all levels.



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