



NEW AND AMBITIOUS OR JUST MORE OF THE SAME ? THE ENERGY UNION AT A CROSSROADS

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The following paper outlines the necessity of giving new momentum to a coherent and comprehensive European energy policy. We initially outline the status quo and the recent initiatives from the European Council and Commission before calling for a more ambitious Energy Union with clearly defined policy proposals for action.

« L'Europe se fera dans les crises. » (Jean Monnet)

1 - EUROPE IS IN A CRISIS – SO IS EUROPE'S ENERGY POLICY

The European project is facing one of its deepest crises in its 60-year history. Since 2008, the economic and financial crisis has been weakening Member State economies. The threat of political disintegration is real if Greece were to be forced out of the Eurozone in the coming months or if the United Kingdom were to leave the European Union as a result of the upcoming referendum. The “Barroso decade” has seen no major progress, as the internal market logic launched in the 1990s lost its initial momentum of bringing Europe's nations closer together. Faced with new challenges such as terrorism, mass migration and mass unemployment, Member States seem unable to come up with an

ambitious approach that would give back to “Brussels” some of the credibility it has lost among the European people.

The situation in which Europe’s energy policy finds itself today could be described as a crisis, too. Started about 30 years ago, the so-called internal energy market has run out of steam. Launched with the idea that liberalisation and free markets would increase competitiveness and reduce energy prices, the internal market agenda has suffered as much from national opposition tactics as from its unsuitability to tackle the other challenges of energy policy: securing energy supplies, and building an integrated energy system that effectively as well as substantially reduces CO2 emissions. This has led to increasing doubt about the market’s ability to deliver sufficient investments, which are much needed to achieve Europe’s energy and climate objectives.

Moreover, new technologies – from renewable energies and hydraulic fracturing for unconventional fossil fuels to new storage capacities, energy management services and decentralised solutions – are acting as game-changers for the European energy system with multiple consequences. Traditional market players are confronted with new market dynamics and higher competition. Both incumbents and new market players suffer from the lack of stable regulatory frameworks, responding to market uncertainty with investment inertia.

Finally, tensions and conflicts close to Europe’s borders (Eastern Ukraine, Syria, Iraq, and Libya, Algeria etc.) and the decline in oil prices have reminded Europe of the global dimension of energy policy and of our dependency from external fossil fuel suppliers for decades to come.

2 - ENERGY – AND THE ENERGY TRANSITION IN PARTICULAR – COULD AND SHOULD GIVE NEW IMPETUS TO THE EUROPEAN DREAM

Since the establishment of the European Coal and Steel Community in 1951, energy has been one of the backbones of the European project. An ambitious “grand projet” in the field of energy could give new momentum to European integration.

First, the physics of existing electricity systems – namely the fact that supply and demand have to be balanced at all times– make integration of energy systems across the continent a foremost necessity. This is why national networks have developed across borders for many decades already. For most Member States autarky would be much more expensive – and it would probably be impossible to achieve the same security standards, at least for smaller Member States. Due to the fact that more intermittent renewable energy resources are phased into the grid, further interconnections, grid development efforts and storage capacities are likely to be needed to balance out electricity production and consumption. This should be of mutual interest to the Member States, even if infrastructure projects always need to be assessed based on a case-by-case cost-benefit analysis. The challenge today is to develop a European grid that is flexible and smart enough to react to growing volatility and to level out excess supply.

Second, as a basic good in everyone’s life, energy has a strong social component. As most of us have an electricity or gas bill to pay, a car to fuel with petrol or one or several consumer goods or personal devices running on electricity, people feel concerned by the challenges faced by today’s

energy systems: the need to make energy more sustainable while keeping its access affordable for all, including the poor. Today's national energy policies however lack cost-effectiveness (from a macro-economic perspective) and fairness when it comes to sharing these costs among consumers. As our awareness increases concerning the impact our energy choices have on both the climate and the environment, more and more people from all European countries understand that the energy transition is not just a short-term policy fad, but a fundamental change with impacts on everyone's choices and behaviour. As such, the energy transition can be a formidable, unifying political project for the whole continent and a unique catalyser for investment, jobs and growth.

Third, the geopolitical nature of energy makes solidarity and coordinated energy diplomacy beneficial. The EU, with its scarce and declining primary resources, is the largest fossil fuel importing region in the world, and some Member States are heavily dependent on one single gas supplier, leading to increasing security concerns especially with respect to Russian gas imports. It is therefore of vital interest for EU members, in particular in Central and Eastern Europe, when discussing contracts with their suppliers, to know that they can rely on mechanisms of joint solidarity. Furthermore, the technological changes underway in the energy field are global: While Europe has been a frontrunner for the development of renewable energy and energy efficiency technologies between 2000 and 2010, the biggest markets for solar power plants or electric vehicles today are in the USA or China. If Europe wants to remain a global leader in clean technologies, it needs the critical mass of its Union to drive the agenda on international standards, to pool resources for research and innovation and to have sufficient market size to attract the best industry players. Finally, the Union has a vital role to play in ensuring the competitiveness of its economy by setting world class production and energy efficiency standards and ensuring that the decoupling of economic growth and energy consumption remains compatible with a strong industrial base.

So energy policy, one could think, is an obvious candidate to further Europe's integration, as it is important, concrete and inspiring for Europe's citizens. But reality is more complicated.

3 - A LONG-AWAITED IMPETUS, THE ENERGY UNION PROJECT STARTED WITH GREAT HOPES, BUT THE COMMISSION'S CONCRETE PROPOSALS LACK AMBITION

The idea of some new European energy initiative has been maturing in Brussels' policy circles for several years. In 2005/2006, the Ukrainian gas crisis triggered the idea of energy being a key dimension of a common European foreign policy. In 2010, Jacques Delors and Jerzy Buzek threw their political weight behind the concept of a "European Energy Community"¹, which however remained only an issue for Brussels' think tanks and other Europhile circles. Things changed when the now president of the European Council, Donald Tusk, in the wake of Russia's annexation of Crimea, called for an "energy union" to break Russia's energy "stranglehold" on Europe in April 2014². Though initially focussed on security of supply, the idea of a much broader union finally reached the highest political level: the "accidental child" – as a Council insider put it – was born.

¹ <http://www.delorsinstitute.eu/011-2245--Towards-a-new-European-Energy-Community-Joint-Declaration-by-Jerzy-Buzek-and-Jacques-Delors.html>

² <http://on.ft.com/1ffQ7na>

As a candidate for the Commission Presidency, Jean-Claude Juncker adopted this initiative. Understandably indeed, energy security concerns alone were not enough to unify 28 Member States around the idea. So President Juncker identified five dimensions – energy security, solidarity and trust; full integration of the European energy market; energy efficiency as a means to moderate demand; decarbonisation of the economy; research, innovation, and competitiveness – which would take into account the concerns of all Member States. These were developed in a Framework Strategy published on 25 February 2015 which set out 15 action points³.

On the one hand, one could argue that everything is in there: implementing existing energy legislation, in particular the third internal energy market package; diversifying EU gas supplies, improving resilience in case of supply disruptions; making intergovernmental agreements more transparent; promoting trans-European energy infrastructure; rethinking the EU's electricity market design; strengthening the role of European regulators and network operators as well as regional cooperation initiatives; increasing transparency on energy prices; advancing towards more energy efficiency, notably in buildings; speeding up decarbonisation in transports; achieving the EU's GHG emission reduction and renewable energy objectives for 2030; developing a stronger European research and innovation agenda for energy and transport; speaking with one voice to the outside world on energy and climate issues.

On the other hand, one could say that the very fact that everything is in there means that there is no real diagnosis on the most pressing issues, insufficient hierarchisation, and that there is – more worryingly – nothing new to be found among the Commission's proposals. By simply stipulating activities that are in fact already existing policies or measures, no added value, no new impetus is created. The Commission services in DG energy, DG climate and DG transport wrote what they are already doing and what they are planning to do going forward: ensuring full implementation of the third internal energy market package, supporting the implementation of major infrastructure projects, proposing new targets for 2030 etc. In other words, these proposals would have come anyways. Insiders will tell you that this is normal: “We don't want the German Energy Union, we don't want it “à la française”, we don't want a Polish or British Energy Union either, so this is what you get...”.

However, this “business as usual” approach to the Energy Union makes it impossible to honestly take stock of where European energy policy has really succeeded or failed so far. We need to identify the areas Europe should focus its attention on in the coming years to really achieve progress rather than muddling through as before, and we need – more importantly – to implement concrete policies which appeal to all European citizens and should be actively promoted at home by European politicians. Such a more ambitious approach to the Energy Union would imply admitting that a key element of Europe's energy policy – i.e. the internal market policy – is in the doldrums and that the approach which prevailed so far cannot be the way forward. The lion's share of political attention and administrative effort has gone into building a well-functioning European electricity and gas market. While gas market functioning has improved – though with persistent differences between Eastern and Western Europe –, electricity markets face fundamental challenges.

³ http://ec.europa.eu/priorities/energy-union/docs/energyunion_en.pdf

The main challenge derives from the replacement of formerly centralised systems of energy production and distribution by increasing shares of decentralised renewable energy systems. Decreasing demand in the context of the economic crisis, prices favourable to coal rather than gas power plants and the increase of renewable capacities have all led to overcapacities in conventional base load power generation. At the same time, more flexible solutions (storage, demand-side response, investments in grid and back-up capacities to cover demand peaks) are needed to tackle the higher volatility of power production. We are moving away from a fossil fuel based system whose costs are mainly operating costs, towards a system based on more volatile renewable capacities, whose costs are mainly capital costs. Short-term markets provide adequate signals for operational decisions, but they do not trigger adequate long-term investments (“missing money problem”). Policy makers at national and European level have been taken by surprise by the combined effects of their own policies for more market and competition on the one hand and more renewables on the other hand. Struggling with the task to manage the energy transition, each Member State thinks that it alone can best decide how to face the challenges. Arguments that current problems are merely the result of renewable energy subsidies fall short of acknowledging that the actual shortcomings of the electricity market design are at the core of the missing money problem.

Taken hostage by differing national responses to these Union-wide problems, the European Commission has been unable so far to come up with a timely, appropriate energy policy response. Instead, it has used its powers in the field of competition policy to rein in or harmonise renewables support, capacity mechanisms and similar schemes that slowly deconstruct the internal market well before its completion. More recently, the Commission has put out a consultation on the electricity market design, but its content appears close to what already exists.

All this is an insufficient technocratic answer to what are essentially questions of political choice: What energy future do we want for Europe as a whole? How much trust Member States have to build among each other to integrate their national energy systems into a European system that is both efficient and sustainable? What should be the balance between national and European prerogatives to enhance a common energy policy? And how will the necessary investments for this be financed, based on which rules for sharing costs and benefits?

4 - A MORE AMBITIOUS ENERGY UNION IS POSSIBLE.

The Council of Energy Ministers, in its 8 June 2015 conclusions, recognised that “the EU institutions and Member States need to take work forward on building an Energy Union” – in other words: there is still a lot to do. The Energy Council also tasked the European Commission to come up with more concrete proposals on the governance of the Energy Union, which the February communication mentioned only in very vague terms. First promising elements can be found in a discussion paper on governance that was prepared for a meeting of directors general for energy and climate on 15 July 2015. It calls for better monitoring of national energy policies, integrated energy and climate plans for each Member State with clear projections and closer regional cooperation, with a view to develop a new iterative planning process. Vice-president Šefčovič has been touring European capitals over the past weeks to collect ideas on how to put some flesh on the Energy Union bones. And the Council of Energy Ministers will meet again on 26 November 2015 to discuss the topic. The Commission should begin to deliver on these issues when it presents its legislative proposals announced for 2016.

We believe that the Energy Union can be a success if it builds on a set of guiding principles and ambitious policy proposals.

Firstly, the Union has to be based on a transparent governance structure with a clear division of competencies

Energy has so far been a shared competence between the EU and Member States. Although in 2009 the Treaty of Lisbon introduced for the first time a specific legal basis for energy policy in the founding treaties of the EU⁴, Member States alone remain responsible of their energy mix choices. As a result, new tensions have arisen at the heart of European energy policy.

This makes it all the more crucial to close the gap between European and national policy debates and politics, to ensure national political orientations are as coordinated as possible and together shape a coherent European energy system.

National lawmakers have their say on key aspects of energy policy such as the energy mix or renewable energy support schemes, and they make the link with citizens in each Member State. A renewed and strengthened governance framework should thus make sure members of national Parliaments are on board when European energy policy decisions are taken.

This could be achieved by creating a “European Parliamentary Platform on Energy”, which would bring together representatives from the committees in charge of energy in each of the 28 national Parliaments and the European Parliament, to discuss the future of energy policy in Europe. Such a platform could enable the involved groups to engage in a dialogue with civil society actors and thereby to progressively harmonise their views on the further development of the Energy Union. This body could also create spaces for enhanced cooperation to discuss regional policy issues affecting only a subgroup of Member States. Furthermore, a periodic and structured consultation process with EU institutions would allow a strengthening of the parliamentary interests in European energy policy.

Secondly, an energy system reform is necessary to achieve the Union’s long-term energy policy goals

Pivotal to the transformation of energy production and consumption is joint planning, a market design reform, a stable framework for investment and network development as well as clear priorities for research, development and innovation policies.

Member States will not adopt the same strategies concerning the energy mix, but all share the same long-term goal of a more sustainable energy system. To get there, joint planning will be necessary. Member States should plan their respective investments in the energy system in a much more coordinated way, if they want to build an integrated European energy system that leaves space for the specific choices of each country. Current reporting obligations of Member States regarding energy policy (including the ones set up under the European Semester) need to be both streamlined and

⁴ Article 194 of the Treaty on the Functioning of the EU

strengthened, to become proper impact assessments: they should be sufficiently detailed to get a common understanding of the potential impacts of national energy policies on neighbouring countries, highlighting expected costs and benefits at both national and European levels.

The design of electricity markets will also have to change, both to allow further integration of short-term markets and to give the right long-term signals for new capacities Member States want to develop in renewables, storage and back-up facilities, while accelerating the phase-out of inefficient, carbon intensive base load overcapacities. Uncoordinated and complex national capacity mechanisms will not get us there. Rather, their existence reflects the flaws of the current market design. The European Commission should launch a real debate on this important issue, and ensure that all options are on the table, including the ones which would constitute a complete transformation of current market arrangements. One solution to be explored could be the creation of regulated or publicly controlled entities at regional level, which would allow investments following European interests in renewables, storage and back-up facilities to happen by entering into long-term contracts with generators, while ensuring competition between them. This in fact already applies today, albeit in an uncoordinated and thus costly way, through national renewable support schemes and capacity reserve mechanisms, which in many cases boil down to long-term contracts with regulated Transmission System Operators or publicly controlled entities. This new scheme would not replace short-term markets, which could still provide the appropriate incentives for operational decisions and dispatch. It would require an in-depth coordination at regional level to define the objectives of the regulated or publicly controlled buyers when it comes to entering into long-term contracts with investors in renewable, storage or back-up capacities, while being flexible enough to accommodate different national energy policy choices.

Whatever the strategies of each Member State are, grids will play an ever-increasing role in accommodating the evolving energy mix. Regional integration of network operators – through smart grids, joint control centres and integration into regional operators – will help speeding up the integration of national markets.

In order to meet our goals for 2050 one has to be aware that neither a linear extrapolation of the past is possible, nor can a step-by-step policy account for the need to completely change our mode of energy generation and consumption. We have to innovate: most of the technologies that will dominate the energy world of the 2050's have still to be invented or developed. This is why the Energy Union should step up Europe's efforts in developing strategic energy and climate technologies with a focus on a few key topics and sufficient funding. Energy efficiency, energy storage, smart grids and clean mobility are the areas in which a massive push on R&D would be a no regret move. Furthermore, we have to think all sectors, namely electricity, heat and transport together and connect them in a smart way, taking advantage of the possibilities of digitalisation. To increase the impact of support, national research and innovation agencies should jointly elaborate their funding programmes, merge available funds at European level, thereby spreading best practices in terms of innovative financing, and develop early on common technical standards to allow for the emergence of strong European industrial players for the energy transition.

Thirdly, the robustness of Europe's energy policy in the longer term depends on its integration with Europe's broader policy goals

If energy policy has been a controversial issue for such a long time, this is also due to it being linked to and entangled with so many other policy fields, from transport policy to fiscal, social, trade, economic or foreign policy. The Energy Union will only succeed if it manages to take a holistic approach and reconcile the various policy objectives.

To increase energy security, no Member State should be left entirely dependent on one single supplier. The necessary infrastructure should be implemented to make sure all Member States can diversify their supply portfolio and to prevent abuses from dominant suppliers. European funds available for energy networks should be clearly prioritised towards such projects.

Integration is also needed with Europe's climate policy instruments. While the European emissions trading scheme (EU ETS) needs to be strengthened and extended, the sectors not subject to EU ETS (e.g. buildings, agriculture, transport) should receive a price signal through a European-wide carbon tax that would prevent the current market distortions created by the existence of different national taxation schemes.

Clean mobility is a central piece of the energy system we are aiming for. This is why the Energy Union should dedicate significant means to this objective, beyond research & development. The EU should develop a network of European transnational green mobility corridors and support their equipment with charging stations for electric and hydrogen vehicles.

Europe should finally integrate its energy policy objectives with economic competitiveness and industrial policy objectives, making sure that the energy transition leads neither to burdening the competitiveness of energy-intensive industries that operate in global markets, nor to energy cost dumping for certain privileged sectors between European countries. A more comprehensive approach is needed: rather than focusing exclusively on harmonised wholesale market prices, a truly European energy policy should strive to harmonise the overall cost of energy, notably for energy-intensive consumers across the Union, by considering wholesale prices, but also network costs and taxes. This should start with renewed efforts to harmonize energy-related taxes, tax exemptions and state aid.

We believe a stronger European Energy Union is not only technically possible but also politically in reach. We call on European leaders to seize the chances such an ambitious Energy Union offers to get the EU out of its current political crisis and to give new momentum to Europe's integration.

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1 - EUROPE IS IN A CRISIS – SO IS EUROPE'S ENERGY POLICY

The European project is facing one of its deepest crises in its 60-year history. Since 2008, the economic and financial crisis has been weakening Member State economies. The threat of political disintegration is real if Greece were to be forced out of the Eurozone in the coming months or if the United Kingdom were to leave the European Union as a result of the upcoming referendum. The “Barroso decade” has seen no major progress, as the internal market logic launched in the 1990s lost its initial momentum of bringing Europe's nations closer together. Faced with new challenges such as terrorism, mass migration and mass unemployment, Member States seem unable to come up with an

ambitious approach that would give back to “Brussels” some of the credibility it has lost among the European people.

The situation in which Europe’s energy policy finds itself today could be described as a crisis, too. Started about 30 years ago, the so-called internal energy market has run out of steam. Launched with the idea that liberalisation and free markets would increase competitiveness and reduce energy prices, the internal market agenda has suffered as much from national opposition tactics as from its unsuitability to tackle the other challenges of energy policy: securing energy supplies, and building an integrated energy system that effectively as well as substantially reduces CO2 emissions. This has led to increasing doubt about the market’s ability to deliver sufficient investments, which are much needed to achieve Europe’s energy and climate objectives.

Moreover, new technologies – from renewable energies and hydraulic fracturing for unconventional fossil fuels to new storage capacities, energy management services and decentralised solutions – are acting as game-changers for the European energy system with multiple consequences. Traditional market players are confronted with new market dynamics and higher competition. Both incumbents and new market players suffer from the lack of stable regulatory frameworks, responding to market uncertainty with investment inertia.

Finally, tensions and conflicts close to Europe’s borders (Eastern Ukraine, Syria, Iraq, and Libya, Algeria etc.) and the decline in oil prices have reminded Europe of the global dimension of energy policy and of our dependency from external fossil fuel suppliers for decades to come.

2 - ENERGY – AND THE ENERGY TRANSITION IN PARTICULAR – COULD AND SHOULD GIVE NEW IMPETUS TO THE EUROPEAN DREAM

Since the establishment of the European Coal and Steel Community in 1951, energy has been one of the backbones of the European project. An ambitious “grand projet” in the field of energy could give new momentum to European integration.

First, the physics of existing electricity systems – namely the fact that supply and demand have to be balanced at all times– make integration of energy systems across the continent a foremost necessity. This is why national networks have developed across borders for many decades already. For most Member States autarky would be much more expensive – and it would probably be impossible to achieve the same security standards, at least for smaller Member States. Due to the fact that more intermittent renewable energy resources are phased into the grid, further interconnections, grid development efforts and storage capacities are likely to be needed to balance out electricity production and consumption. This should be of mutual interest to the Member States, even if infrastructure projects always need to be assessed based on a case-by-case cost-benefit analysis. The challenge today is to develop a European grid that is flexible and smart enough to react to growing volatility and to level out excess supply.

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energy systems: the need to make energy more sustainable while keeping its access affordable for all, including the poor. Today's national energy policies however lack cost-effectiveness (from a macro-economic perspective) and fairness when it comes to sharing these costs among consumers. As our awareness increases concerning the impact our energy choices have on both the climate and the environment, more and more people from all European countries understand that the energy transition is not just a short-term policy fad, but a fundamental change with impacts on everyone's choices and behaviour. As such, the energy transition can be a formidable, unifying political project for the whole continent and a unique catalyser for investment, jobs and growth.

Third, the geopolitical nature of energy makes solidarity and coordinated energy diplomacy beneficial. The EU, with its scarce and declining primary resources, is the largest fossil fuel importing region in the world, and some Member States are heavily dependent on one single gas supplier, leading to increasing security concerns especially with respect to Russian gas imports. It is therefore of vital interest for EU members, in particular in Central and Eastern Europe, when discussing contracts with their suppliers, to know that they can rely on mechanisms of joint solidarity. Furthermore, the technological changes underway in the energy field are global: While Europe has been a frontrunner for the development of renewable energy and energy efficiency technologies between 2000 and 2010, the biggest markets for solar power plants or electric vehicles today are in the USA or China. If Europe wants to remain a global leader in clean technologies, it needs the critical mass of its Union to drive the agenda on international standards, to pool resources for research and innovation and to have sufficient market size to attract the best industry players. Finally, the Union has a vital role to play in ensuring the competitiveness of its economy by setting world class production and energy efficiency standards and ensuring that the decoupling of economic growth and energy consumption remains compatible with a strong industrial base.

So energy policy, one could think, is an obvious candidate to further Europe's integration, as it is important, concrete and inspiring for Europe's citizens. But reality is more complicated.

3 - A LONG-AWAITED IMPETUS, THE ENERGY UNION PROJECT STARTED WITH GREAT HOPES, BUT THE COMMISSION'S CONCRETE PROPOSALS LACK AMBITION

The idea of some new European energy initiative has been maturing in Brussels' policy circles for several years. In 2005/2006, the Ukrainian gas crisis triggered the idea of energy being a key dimension of a common European foreign policy. In 2010, Jacques Delors and Jerzy Buzek threw their political weight behind the concept of a "European Energy Community"¹, which however remained only an issue for Brussels' think tanks and other Europhile circles. Things changed when the now president of the European Council, Donald Tusk, in the wake of Russia's annexation of Crimea, called for an "energy union" to break Russia's energy "stranglehold" on Europe in April 2014². Though initially focussed on security of supply, the idea of a much broader union finally reached the highest political level: the "accidental child" – as a Council insider put it – was born.

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On the one hand, one could argue that everything is in there: implementing existing energy legislation, in particular the third internal energy market package; diversifying EU gas supplies, improving resilience in case of supply disruptions; making intergovernmental agreements more transparent; promoting trans-European energy infrastructure; rethinking the EU's electricity market design; strengthening the role of European regulators and network operators as well as regional cooperation initiatives; increasing transparency on energy prices; advancing towards more energy efficiency, notably in buildings; speeding up decarbonisation in transports; achieving the EU's GHG emission reduction and renewable energy objectives for 2030; developing a stronger European research and innovation agenda for energy and transport; speaking with one voice to the outside world on energy and climate issues.

On the other hand, one could say that the very fact that everything is in there means that there is no real diagnosis on the most pressing issues, insufficient hierarchisation, and that there is – more worryingly – nothing new to be found among the Commission's proposals. By simply stipulating activities that are in fact already existing policies or measures, no added value, no new impetus is created. The Commission services in DG energy, DG climate and DG transport wrote what they are already doing and what they are planning to do going forward: ensuring full implementation of the third internal energy market package, supporting the implementation of major infrastructure projects, proposing new targets for 2030 etc. In other words, these proposals would have come anyways. Insiders will tell you that this is normal: “We don't want the German Energy Union, we don't want it “à la française”, we don't want a Polish or British Energy Union either, so this is what you get...”.

However, this “business as usual” approach to the Energy Union makes it impossible to honestly take stock of where European energy policy has really succeeded or failed so far. We need to identify the areas Europe should focus its attention on in the coming years to really achieve progress rather than muddling through as before, and we need – more importantly – to implement concrete policies which appeal to all European citizens and should be actively promoted at home by European politicians. Such a more ambitious approach to the Energy Union would imply admitting that a key element of Europe's energy policy – i.e. the internal market policy – is in the doldrums and that the approach which prevailed so far cannot be the way forward. The lion's share of political attention and administrative effort has gone into building a well-functioning European electricity and gas market. While gas market functioning has improved – though with persistent differences between Eastern and Western Europe –, electricity markets face fundamental challenges.

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The main challenge derives from the replacement of formerly centralised systems of energy production and distribution by increasing shares of decentralised renewable energy systems. Decreasing demand in the context of the economic crisis, prices favourable to coal rather than gas power plants and the increase of renewable capacities have all led to overcapacities in conventional base load power generation. At the same time, more flexible solutions (storage, demand-side response, investments in grid and back-up capacities to cover demand peaks) are needed to tackle the higher volatility of power production. We are moving away from a fossil fuel based system whose costs are mainly operating costs, towards a system based on more volatile renewable capacities, whose costs are mainly capital costs. Short-term markets provide adequate signals for operational decisions, but they do not trigger adequate long-term investments (“missing money problem”). Policy makers at national and European level have been taken by surprise by the combined effects of their own policies for more market and competition on the one hand and more renewables on the other hand. Struggling with the task to manage the energy transition, each Member State thinks that it alone can best decide how to face the challenges. Arguments that current problems are merely the result of renewable energy subsidies fall short of acknowledging that the actual shortcomings of the electricity market design are at the core of the missing money problem.

Taken hostage by differing national responses to these Union-wide problems, the European Commission has been unable so far to come up with a timely, appropriate energy policy response. Instead, it has used its powers in the field of competition policy to rein in or harmonise renewables support, capacity mechanisms and similar schemes that slowly deconstruct the internal market well before its completion. More recently, the Commission has put out a consultation on the electricity market design, but its content appears close to what already exists.

All this is an insufficient technocratic answer to what are essentially questions of political choice: What energy future do we want for Europe as a whole? How much trust Member States have to build among each other to integrate their national energy systems into a European system that is both efficient and sustainable? What should be the balance between national and European prerogatives to enhance a common energy policy? And how will the necessary investments for this be financed, based on which rules for sharing costs and benefits?

4 - A MORE AMBITIOUS ENERGY UNION IS POSSIBLE.

The Council of Energy Ministers, in its 8 June 2015 conclusions, recognised that “the EU institutions and Member States need to take work forward on building an Energy Union” – in other words: there is still a lot to do. The Energy Council also tasked the European Commission to come up with more concrete proposals on the governance of the Energy Union, which the February communication mentioned only in very vague terms. First promising elements can be found in a discussion paper on governance that was prepared for a meeting of directors general for energy and climate on 15 July 2015. It calls for better monitoring of national energy policies, integrated energy and climate plans for each Member State with clear projections and closer regional cooperation, with a view to develop a new iterative planning process. Vice-president Šefčovič has been touring European capitals over the past weeks to collect ideas on how to put some flesh on the Energy Union bones. And the Council of Energy Ministers will meet again on 26 November 2015 to discuss the topic. The Commission should begin to deliver on these issues when it presents its legislative proposals announced for 2016.

We believe that the Energy Union can be a success if it builds on a set of guiding principles and ambitious policy proposals.

Firstly, the Union has to be based on a transparent governance structure with a clear division of competencies

Energy has so far been a shared competence between the EU and Member States. Although in 2009 the Treaty of Lisbon introduced for the first time a specific legal basis for energy policy in the founding treaties of the EU⁴, Member States alone remain responsible of their energy mix choices. As a result, new tensions have arisen at the heart of European energy policy.

This makes it all the more crucial to close the gap between European and national policy debates and politics, to ensure national political orientations are as coordinated as possible and together shape a coherent European energy system.

National lawmakers have their say on key aspects of energy policy such as the energy mix or renewable energy support schemes, and they make the link with citizens in each Member State. A renewed and strengthened governance framework should thus make sure members of national Parliaments are on board when European energy policy decisions are taken.

This could be achieved by creating a “European Parliamentary Platform on Energy”, which would bring together representatives from the committees in charge of energy in each of the 28 national Parliaments and the European Parliament, to discuss the future of energy policy in Europe. Such a platform could enable the involved groups to engage in a dialogue with civil society actors and thereby to progressively harmonise their views on the further development of the Energy Union. This body could also create spaces for enhanced cooperation to discuss regional policy issues affecting only a subgroup of Member States. Furthermore, a periodic and structured consultation process with EU institutions would allow a strengthening of the parliamentary interests in European energy policy.

Secondly, an energy system reform is necessary to achieve the Union’s long-term energy policy goals

Pivotal to the transformation of energy production and consumption is joint planning, a market design reform, a stable framework for investment and network development as well as clear priorities for research, development and innovation policies.

Member States will not adopt the same strategies concerning the energy mix, but all share the same long-term goal of a more sustainable energy system. To get there, joint planning will be necessary. Member States should plan their respective investments in the energy system in a much more coordinated way, if they want to build an integrated European energy system that leaves space for the specific choices of each country. Current reporting obligations of Member States regarding energy policy (including the ones set up under the European Semester) need to be both streamlined and

⁴ Article 194 of the Treaty on the Functioning of the EU

strengthened, to become proper impact assessments: they should be sufficiently detailed to get a common understanding of the potential impacts of national energy policies on neighbouring countries, highlighting expected costs and benefits at both national and European levels.

The design of electricity markets will also have to change, both to allow further integration of short-term markets and to give the right long-term signals for new capacities Member States want to develop in renewables, storage and back-up facilities, while accelerating the phase-out of inefficient, carbon intensive base load overcapacities. Uncoordinated and complex national capacity mechanisms will not get us there. Rather, their existence reflects the flaws of the current market design. The European Commission should launch a real debate on this important issue, and ensure that all options are on the table, including the ones which would constitute a complete transformation of current market arrangements. One solution to be explored could be the creation of regulated or publicly controlled entities at regional level, which would allow investments following European interests in renewables, storage and back-up facilities to happen by entering into long-term contracts with generators, while ensuring competition between them. This in fact already applies today, albeit in an uncoordinated and thus costly way, through national renewable support schemes and capacity reserve mechanisms, which in many cases boil down to long-term contracts with regulated Transmission System Operators or publicly controlled entities. This new scheme would not replace short-term markets, which could still provide the appropriate incentives for operational decisions and dispatch. It would require an in-depth coordination at regional level to define the objectives of the regulated or publicly controlled buyers when it comes to entering into long-term contracts with investors in renewable, storage or back-up capacities, while being flexible enough to accommodate different national energy policy choices.

Whatever the strategies of each Member State are, grids will play an ever-increasing role in accommodating the evolving energy mix. Regional integration of network operators – through smart grids, joint control centres and integration into regional operators – will help speeding up the integration of national markets.

In order to meet our goals for 2050 one has to be aware that neither a linear extrapolation of the past is possible, nor can a step-by-step policy account for the need to completely change our mode of energy generation and consumption. We have to innovate: most of the technologies that will dominate the energy world of the 2050's have still to be invented or developed. This is why the Energy Union should step up Europe's efforts in developing strategic energy and climate technologies with a focus on a few key topics and sufficient funding. Energy efficiency, energy storage, smart grids and clean mobility are the areas in which a massive push on R&D would be a no regret move. Furthermore, we have to think all sectors, namely electricity, heat and transport together and connect them in a smart way, taking advantage of the possibilities of digitalisation. To increase the impact of support, national research and innovation agencies should jointly elaborate their funding programmes, merge available funds at European level, thereby spreading best practices in terms of innovative financing, and develop early on common technical standards to allow for the emergence of strong European industrial players for the energy transition.

Thirdly, the robustness of Europe's energy policy in the longer term depends on its integration with Europe's broader policy goals

If energy policy has been a controversial issue for such a long time, this is also due to it being linked to and entangled with so many other policy fields, from transport policy to fiscal, social, trade, economic or foreign policy. The Energy Union will only succeed if it manages to take a holistic approach and reconcile the various policy objectives.

To increase energy security, no Member State should be left entirely dependent on one single supplier. The necessary infrastructure should be implemented to make sure all Member States can diversify their supply portfolio and to prevent abuses from dominant suppliers. European funds available for energy networks should be clearly prioritised towards such projects.

Integration is also needed with Europe's climate policy instruments. While the European emissions trading scheme (EU ETS) needs to be strengthened and extended, the sectors not subject to EU ETS (e.g. buildings, agriculture, transport) should receive a price signal through a European-wide carbon tax that would prevent the current market distortions created by the existence of different national taxation schemes.

Clean mobility is a central piece of the energy system we are aiming for. This is why the Energy Union should dedicate significant means to this objective, beyond research & development. The EU should develop a network of European transnational green mobility corridors and support their equipment with charging stations for electric and hydrogen vehicles.

Europe should finally integrate its energy policy objectives with economic competitiveness and industrial policy objectives, making sure that the energy transition leads neither to burdening the competitiveness of energy-intensive industries that operate in global markets, nor to energy cost dumping for certain privileged sectors between European countries. A more comprehensive approach is needed: rather than focusing exclusively on harmonised wholesale market prices, a truly European energy policy should strive to harmonise the overall cost of energy, notably for energy-intensive consumers across the Union, by considering wholesale prices, but also network costs and taxes. This should start with renewed efforts to harmonize energy-related taxes, tax exemptions and state aid.

We believe a stronger European Energy Union is not only technically possible but also politically in reach. We call on European leaders to seize the chances such an ambitious Energy Union offers to get the EU out of its current political crisis and to give new momentum to Europe's integration.

NEW AND AMBITIOUS OR JUST MORE OF THE SAME ? THE ENERGY UNION AT A CROSSROADS

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November 23rd, 2015

The following paper outlines the necessity of giving new momentum to a coherent and comprehensive European energy policy. We initially outline the status quo and the recent initiatives from the European Council and Commission before calling for a more ambitious Energy Union with clearly defined policy proposals for action.

« L'Europe se fera dans les crises. » (Jean Monnet)

1 - EUROPE IS IN A CRISIS – SO IS EUROPE'S ENERGY POLICY

The European project is facing one of its deepest crises in its 60-year history. Since 2008, the economic and financial crisis has been weakening Member State economies. The threat of political disintegration is real if Greece were to be forced out of the Eurozone in the coming months or if the United Kingdom were to leave the European Union as a result of the upcoming referendum. The “Barroso decade” has seen no major progress, as the internal market logic launched in the 1990s lost its initial momentum of bringing Europe's nations closer together. Faced with new challenges such as terrorism, mass migration and mass unemployment, Member States seem unable to come up with an

ambitious approach that would give back to “Brussels” some of the credibility it has lost among the European people.

The situation in which Europe’s energy policy finds itself today could be described as a crisis, too. Started about 30 years ago, the so-called internal energy market has run out of steam. Launched with the idea that liberalisation and free markets would increase competitiveness and reduce energy prices, the internal market agenda has suffered as much from national opposition tactics as from its unsuitability to tackle the other challenges of energy policy: securing energy supplies, and building an integrated energy system that effectively as well as substantially reduces CO2 emissions. This has led to increasing doubt about the market’s ability to deliver sufficient investments, which are much needed to achieve Europe’s energy and climate objectives.

Moreover, new technologies – from renewable energies and hydraulic fracturing for unconventional fossil fuels to new storage capacities, energy management services and decentralised solutions – are acting as game-changers for the European energy system with multiple consequences. Traditional market players are confronted with new market dynamics and higher competition. Both incumbents and new market players suffer from the lack of stable regulatory frameworks, responding to market uncertainty with investment inertia.

Finally, tensions and conflicts close to Europe’s borders (Eastern Ukraine, Syria, Iraq, and Libya, Algeria etc.) and the decline in oil prices have reminded Europe of the global dimension of energy policy and of our dependency from external fossil fuel suppliers for decades to come.

2 - ENERGY – AND THE ENERGY TRANSITION IN PARTICULAR – COULD AND SHOULD GIVE NEW IMPETUS TO THE EUROPEAN DREAM

Since the establishment of the European Coal and Steel Community in 1951, energy has been one of the backbones of the European project. An ambitious “grand projet” in the field of energy could give new momentum to European integration.

First, the physics of existing electricity systems – namely the fact that supply and demand have to be balanced at all times– make integration of energy systems across the continent a foremost necessity. This is why national networks have developed across borders for many decades already. For most Member States autarky would be much more expensive – and it would probably be impossible to achieve the same security standards, at least for smaller Member States. Due to the fact that more intermittent renewable energy resources are phased into the grid, further interconnections, grid development efforts and storage capacities are likely to be needed to balance out electricity production and consumption. This should be of mutual interest to the Member States, even if infrastructure projects always need to be assessed based on a case-by-case cost-benefit analysis. The challenge today is to develop a European grid that is flexible and smart enough to react to growing volatility and to level out excess supply.

Second, as a basic good in everyone’s life, energy has a strong social component. As most of us have an electricity or gas bill to pay, a car to fuel with petrol or one or several consumer goods or personal devices running on electricity, people feel concerned by the challenges faced by today’s

energy systems: the need to make energy more sustainable while keeping its access affordable for all, including the poor. Today's national energy policies however lack cost-effectiveness (from a macro-economic perspective) and fairness when it comes to sharing these costs among consumers. As our awareness increases concerning the impact our energy choices have on both the climate and the environment, more and more people from all European countries understand that the energy transition is not just a short-term policy fad, but a fundamental change with impacts on everyone's choices and behaviour. As such, the energy transition can be a formidable, unifying political project for the whole continent and a unique catalyser for investment, jobs and growth.

Third, the geopolitical nature of energy makes solidarity and coordinated energy diplomacy beneficial. The EU, with its scarce and declining primary resources, is the largest fossil fuel importing region in the world, and some Member States are heavily dependent on one single gas supplier, leading to increasing security concerns especially with respect to Russian gas imports. It is therefore of vital interest for EU members, in particular in Central and Eastern Europe, when discussing contracts with their suppliers, to know that they can rely on mechanisms of joint solidarity. Furthermore, the technological changes underway in the energy field are global: While Europe has been a frontrunner for the development of renewable energy and energy efficiency technologies between 2000 and 2010, the biggest markets for solar power plants or electric vehicles today are in the USA or China. If Europe wants to remain a global leader in clean technologies, it needs the critical mass of its Union to drive the agenda on international standards, to pool resources for research and innovation and to have sufficient market size to attract the best industry players. Finally, the Union has a vital role to play in ensuring the competitiveness of its economy by setting world class production and energy efficiency standards and ensuring that the decoupling of economic growth and energy consumption remains compatible with a strong industrial base.

So energy policy, one could think, is an obvious candidate to further Europe's integration, as it is important, concrete and inspiring for Europe's citizens. But reality is more complicated.

3 - A LONG-AWAITED IMPETUS, THE ENERGY UNION PROJECT STARTED WITH GREAT HOPES, BUT THE COMMISSION'S CONCRETE PROPOSALS LACK AMBITION

The idea of some new European energy initiative has been maturing in Brussels' policy circles for several years. In 2005/2006, the Ukrainian gas crisis triggered the idea of energy being a key dimension of a common European foreign policy. In 2010, Jacques Delors and Jerzy Buzek threw their political weight behind the concept of a "European Energy Community"¹, which however remained only an issue for Brussels' think tanks and other Europhile circles. Things changed when the now president of the European Council, Donald Tusk, in the wake of Russia's annexation of Crimea, called for an "energy union" to break Russia's energy "stranglehold" on Europe in April 2014². Though initially focussed on security of supply, the idea of a much broader union finally reached the highest political level: the "accidental child" – as a Council insider put it – was born.

¹ <http://www.delorsinstitute.eu/011-2245--Towards-a-new-European-Energy-Community-Joint-Declaration-by-Jerzy-Buzek-and-Jacques-Delors.html>

² <http://on.ft.com/1ffQ7na>

As a candidate for the Commission Presidency, Jean-Claude Juncker adopted this initiative. Understandably indeed, energy security concerns alone were not enough to unify 28 Member States around the idea. So President Juncker identified five dimensions – energy security, solidarity and trust; full integration of the European energy market; energy efficiency as a means to moderate demand; decarbonisation of the economy; research, innovation, and competitiveness – which would take into account the concerns of all Member States. These were developed in a Framework Strategy published on 25 February 2015 which set out 15 action points³.

On the one hand, one could argue that everything is in there: implementing existing energy legislation, in particular the third internal energy market package; diversifying EU gas supplies, improving resilience in case of supply disruptions; making intergovernmental agreements more transparent; promoting trans-European energy infrastructure; rethinking the EU's electricity market design; strengthening the role of European regulators and network operators as well as regional cooperation initiatives; increasing transparency on energy prices; advancing towards more energy efficiency, notably in buildings; speeding up decarbonisation in transports; achieving the EU's GHG emission reduction and renewable energy objectives for 2030; developing a stronger European research and innovation agenda for energy and transport; speaking with one voice to the outside world on energy and climate issues.

On the other hand, one could say that the very fact that everything is in there means that there is no real diagnosis on the most pressing issues, insufficient hierarchisation, and that there is – more worryingly – nothing new to be found among the Commission's proposals. By simply stipulating activities that are in fact already existing policies or measures, no added value, no new impetus is created. The Commission services in DG energy, DG climate and DG transport wrote what they are already doing and what they are planning to do going forward: ensuring full implementation of the third internal energy market package, supporting the implementation of major infrastructure projects, proposing new targets for 2030 etc. In other words, these proposals would have come anyways. Insiders will tell you that this is normal: “We don't want the German Energy Union, we don't want it “à la française”, we don't want a Polish or British Energy Union either, so this is what you get...”.

However, this “business as usual” approach to the Energy Union makes it impossible to honestly take stock of where European energy policy has really succeeded or failed so far. We need to identify the areas Europe should focus its attention on in the coming years to really achieve progress rather than muddling through as before, and we need – more importantly – to implement concrete policies which appeal to all European citizens and should be actively promoted at home by European politicians. Such a more ambitious approach to the Energy Union would imply admitting that a key element of Europe's energy policy – i.e. the internal market policy – is in the doldrums and that the approach which prevailed so far cannot be the way forward. The lion's share of political attention and administrative effort has gone into building a well-functioning European electricity and gas market. While gas market functioning has improved – though with persistent differences between Eastern and Western Europe –, electricity markets face fundamental challenges.

³ http://ec.europa.eu/priorities/energy-union/docs/energyunion_en.pdf

The main challenge derives from the replacement of formerly centralised systems of energy production and distribution by increasing shares of decentralised renewable energy systems. Decreasing demand in the context of the economic crisis, prices favourable to coal rather than gas power plants and the increase of renewable capacities have all led to overcapacities in conventional base load power generation. At the same time, more flexible solutions (storage, demand-side response, investments in grid and back-up capacities to cover demand peaks) are needed to tackle the higher volatility of power production. We are moving away from a fossil fuel based system whose costs are mainly operating costs, towards a system based on more volatile renewable capacities, whose costs are mainly capital costs. Short-term markets provide adequate signals for operational decisions, but they do not trigger adequate long-term investments (“missing money problem”). Policy makers at national and European level have been taken by surprise by the combined effects of their own policies for more market and competition on the one hand and more renewables on the other hand. Struggling with the task to manage the energy transition, each Member State thinks that it alone can best decide how to face the challenges. Arguments that current problems are merely the result of renewable energy subsidies fall short of acknowledging that the actual shortcomings of the electricity market design are at the core of the missing money problem.

Taken hostage by differing national responses to these Union-wide problems, the European Commission has been unable so far to come up with a timely, appropriate energy policy response. Instead, it has used its powers in the field of competition policy to rein in or harmonise renewables support, capacity mechanisms and similar schemes that slowly deconstruct the internal market well before its completion. More recently, the Commission has put out a consultation on the electricity market design, but its content appears close to what already exists.

All this is an insufficient technocratic answer to what are essentially questions of political choice: What energy future do we want for Europe as a whole? How much trust Member States have to build among each other to integrate their national energy systems into a European system that is both efficient and sustainable? What should be the balance between national and European prerogatives to enhance a common energy policy? And how will the necessary investments for this be financed, based on which rules for sharing costs and benefits?

4 - A MORE AMBITIOUS ENERGY UNION IS POSSIBLE.

The Council of Energy Ministers, in its 8 June 2015 conclusions, recognised that “the EU institutions and Member States need to take work forward on building an Energy Union” – in other words: there is still a lot to do. The Energy Council also tasked the European Commission to come up with more concrete proposals on the governance of the Energy Union, which the February communication mentioned only in very vague terms. First promising elements can be found in a discussion paper on governance that was prepared for a meeting of directors general for energy and climate on 15 July 2015. It calls for better monitoring of national energy policies, integrated energy and climate plans for each Member State with clear projections and closer regional cooperation, with a view to develop a new iterative planning process. Vice-president Šefčovič has been touring European capitals over the past weeks to collect ideas on how to put some flesh on the Energy Union bones. And the Council of Energy Ministers will meet again on 26 November 2015 to discuss the topic. The Commission should begin to deliver on these issues when it presents its legislative proposals announced for 2016.

We believe that the Energy Union can be a success if it builds on a set of guiding principles and ambitious policy proposals.

Firstly, the Union has to be based on a transparent governance structure with a clear division of competencies

Energy has so far been a shared competence between the EU and Member States. Although in 2009 the Treaty of Lisbon introduced for the first time a specific legal basis for energy policy in the founding treaties of the EU⁴, Member States alone remain responsible of their energy mix choices. As a result, new tensions have arisen at the heart of European energy policy.

This makes it all the more crucial to close the gap between European and national policy debates and politics, to ensure national political orientations are as coordinated as possible and together shape a coherent European energy system.

National lawmakers have their say on key aspects of energy policy such as the energy mix or renewable energy support schemes, and they make the link with citizens in each Member State. A renewed and strengthened governance framework should thus make sure members of national Parliaments are on board when European energy policy decisions are taken.

This could be achieved by creating a “European Parliamentary Platform on Energy”, which would bring together representatives from the committees in charge of energy in each of the 28 national Parliaments and the European Parliament, to discuss the future of energy policy in Europe. Such a platform could enable the involved groups to engage in a dialogue with civil society actors and thereby to progressively harmonise their views on the further development of the Energy Union. This body could also create spaces for enhanced cooperation to discuss regional policy issues affecting only a subgroup of Member States. Furthermore, a periodic and structured consultation process with EU institutions would allow a strengthening of the parliamentary interests in European energy policy.

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Pivotal to the transformation of energy production and consumption is joint planning, a market design reform, a stable framework for investment and network development as well as clear priorities for research, development and innovation policies.

Member States will not adopt the same strategies concerning the energy mix, but all share the same long-term goal of a more sustainable energy system. To get there, joint planning will be necessary. Member States should plan their respective investments in the energy system in a much more coordinated way, if they want to build an integrated European energy system that leaves space for the specific choices of each country. Current reporting obligations of Member States regarding energy policy (including the ones set up under the European Semester) need to be both streamlined and

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strengthened, to become proper impact assessments: they should be sufficiently detailed to get a common understanding of the potential impacts of national energy policies on neighbouring countries, highlighting expected costs and benefits at both national and European levels.

The design of electricity markets will also have to change, both to allow further integration of short-term markets and to give the right long-term signals for new capacities Member States want to develop in renewables, storage and back-up facilities, while accelerating the phase-out of inefficient, carbon intensive base load overcapacities. Uncoordinated and complex national capacity mechanisms will not get us there. Rather, their existence reflects the flaws of the current market design. The European Commission should launch a real debate on this important issue, and ensure that all options are on the table, including the ones which would constitute a complete transformation of current market arrangements. One solution to be explored could be the creation of regulated or publicly controlled entities at regional level, which would allow investments following European interests in renewables, storage and back-up facilities to happen by entering into long-term contracts with generators, while ensuring competition between them. This in fact already applies today, albeit in an uncoordinated and thus costly way, through national renewable support schemes and capacity reserve mechanisms, which in many cases boil down to long-term contracts with regulated Transmission System Operators or publicly controlled entities. This new scheme would not replace short-term markets, which could still provide the appropriate incentives for operational decisions and dispatch. It would require an in-depth coordination at regional level to define the objectives of the regulated or publicly controlled buyers when it comes to entering into long-term contracts with investors in renewable, storage or back-up capacities, while being flexible enough to accommodate different national energy policy choices.

Whatever the strategies of each Member State are, grids will play an ever-increasing role in accommodating the evolving energy mix. Regional integration of network operators – through smart grids, joint control centres and integration into regional operators – will help speeding up the integration of national markets.

In order to meet our goals for 2050 one has to be aware that neither a linear extrapolation of the past is possible, nor can a step-by-step policy account for the need to completely change our mode of energy generation and consumption. We have to innovate: most of the technologies that will dominate the energy world of the 2050's have still to be invented or developed. This is why the Energy Union should step up Europe's efforts in developing strategic energy and climate technologies with a focus on a few key topics and sufficient funding. Energy efficiency, energy storage, smart grids and clean mobility are the areas in which a massive push on R&D would be a no regret move. Furthermore, we have to think all sectors, namely electricity, heat and transport together and connect them in a smart way, taking advantage of the possibilities of digitalisation. To increase the impact of support, national research and innovation agencies should jointly elaborate their funding programmes, merge available funds at European level, thereby spreading best practices in terms of innovative financing, and develop early on common technical standards to allow for the emergence of strong European industrial players for the energy transition.

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If energy policy has been a controversial issue for such a long time, this is also due to it being linked to and entangled with so many other policy fields, from transport policy to fiscal, social, trade, economic or foreign policy. The Energy Union will only succeed if it manages to take a holistic approach and reconcile the various policy objectives.

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1 - EUROPE IS IN A CRISIS – SO IS EUROPE'S ENERGY POLICY

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ambitious approach that would give back to “Brussels” some of the credibility it has lost among the European people.

The situation in which Europe’s energy policy finds itself today could be described as a crisis, too. Started about 30 years ago, the so-called internal energy market has run out of steam. Launched with the idea that liberalisation and free markets would increase competitiveness and reduce energy prices, the internal market agenda has suffered as much from national opposition tactics as from its unsuitability to tackle the other challenges of energy policy: securing energy supplies, and building an integrated energy system that effectively as well as substantially reduces CO2 emissions. This has led to increasing doubt about the market’s ability to deliver sufficient investments, which are much needed to achieve Europe’s energy and climate objectives.

Moreover, new technologies – from renewable energies and hydraulic fracturing for unconventional fossil fuels to new storage capacities, energy management services and decentralised solutions – are acting as game-changers for the European energy system with multiple consequences. Traditional market players are confronted with new market dynamics and higher competition. Both incumbents and new market players suffer from the lack of stable regulatory frameworks, responding to market uncertainty with investment inertia.

Finally, tensions and conflicts close to Europe’s borders (Eastern Ukraine, Syria, Iraq, and Libya, Algeria etc.) and the decline in oil prices have reminded Europe of the global dimension of energy policy and of our dependency from external fossil fuel suppliers for decades to come.

2 - ENERGY – AND THE ENERGY TRANSITION IN PARTICULAR – COULD AND SHOULD GIVE NEW IMPETUS TO THE EUROPEAN DREAM

Since the establishment of the European Coal and Steel Community in 1951, energy has been one of the backbones of the European project. An ambitious “grand projet” in the field of energy could give new momentum to European integration.

First, the physics of existing electricity systems – namely the fact that supply and demand have to be balanced at all times– make integration of energy systems across the continent a foremost necessity. This is why national networks have developed across borders for many decades already. For most Member States autarky would be much more expensive – and it would probably be impossible to achieve the same security standards, at least for smaller Member States. Due to the fact that more intermittent renewable energy resources are phased into the grid, further interconnections, grid development efforts and storage capacities are likely to be needed to balance out electricity production and consumption. This should be of mutual interest to the Member States, even if infrastructure projects always need to be assessed based on a case-by-case cost-benefit analysis. The challenge today is to develop a European grid that is flexible and smart enough to react to growing volatility and to level out excess supply.

Second, as a basic good in everyone’s life, energy has a strong social component. As most of us have an electricity or gas bill to pay, a car to fuel with petrol or one or several consumer goods or personal devices running on electricity, people feel concerned by the challenges faced by today’s

energy systems: the need to make energy more sustainable while keeping its access affordable for all, including the poor. Today's national energy policies however lack cost-effectiveness (from a macro-economic perspective) and fairness when it comes to sharing these costs among consumers. As our awareness increases concerning the impact our energy choices have on both the climate and the environment, more and more people from all European countries understand that the energy transition is not just a short-term policy fad, but a fundamental change with impacts on everyone's choices and behaviour. As such, the energy transition can be a formidable, unifying political project for the whole continent and a unique catalyser for investment, jobs and growth.

Third, the geopolitical nature of energy makes solidarity and coordinated energy diplomacy beneficial. The EU, with its scarce and declining primary resources, is the largest fossil fuel importing region in the world, and some Member States are heavily dependent on one single gas supplier, leading to increasing security concerns especially with respect to Russian gas imports. It is therefore of vital interest for EU members, in particular in Central and Eastern Europe, when discussing contracts with their suppliers, to know that they can rely on mechanisms of joint solidarity. Furthermore, the technological changes underway in the energy field are global: While Europe has been a frontrunner for the development of renewable energy and energy efficiency technologies between 2000 and 2010, the biggest markets for solar power plants or electric vehicles today are in the USA or China. If Europe wants to remain a global leader in clean technologies, it needs the critical mass of its Union to drive the agenda on international standards, to pool resources for research and innovation and to have sufficient market size to attract the best industry players. Finally, the Union has a vital role to play in ensuring the competitiveness of its economy by setting world class production and energy efficiency standards and ensuring that the decoupling of economic growth and energy consumption remains compatible with a strong industrial base.

So energy policy, one could think, is an obvious candidate to further Europe's integration, as it is important, concrete and inspiring for Europe's citizens. But reality is more complicated.

3 - A LONG-AWAITED IMPETUS, THE ENERGY UNION PROJECT STARTED WITH GREAT HOPES, BUT THE COMMISSION'S CONCRETE PROPOSALS LACK AMBITION

The idea of some new European energy initiative has been maturing in Brussels' policy circles for several years. In 2005/2006, the Ukrainian gas crisis triggered the idea of energy being a key dimension of a common European foreign policy. In 2010, Jacques Delors and Jerzy Buzek threw their political weight behind the concept of a "European Energy Community"¹, which however remained only an issue for Brussels' think tanks and other Europhile circles. Things changed when the now president of the European Council, Donald Tusk, in the wake of Russia's annexation of Crimea, called for an "energy union" to break Russia's energy "stranglehold" on Europe in April 2014². Though initially focussed on security of supply, the idea of a much broader union finally reached the highest political level: the "accidental child" – as a Council insider put it – was born.

¹ <http://www.delorsinstitute.eu/011-2245--Towards-a-new-European-Energy-Community-Joint-Declaration-by-Jerzy-Buzek-and-Jacques-Delors.html>

² <http://on.ft.com/1ffQ7na>

As a candidate for the Commission Presidency, Jean-Claude Juncker adopted this initiative. Understandably indeed, energy security concerns alone were not enough to unify 28 Member States around the idea. So President Juncker identified five dimensions – energy security, solidarity and trust; full integration of the European energy market; energy efficiency as a means to moderate demand; decarbonisation of the economy; research, innovation, and competitiveness – which would take into account the concerns of all Member States. These were developed in a Framework Strategy published on 25 February 2015 which set out 15 action points³.

On the one hand, one could argue that everything is in there: implementing existing energy legislation, in particular the third internal energy market package; diversifying EU gas supplies, improving resilience in case of supply disruptions; making intergovernmental agreements more transparent; promoting trans-European energy infrastructure; rethinking the EU's electricity market design; strengthening the role of European regulators and network operators as well as regional cooperation initiatives; increasing transparency on energy prices; advancing towards more energy efficiency, notably in buildings; speeding up decarbonisation in transports; achieving the EU's GHG emission reduction and renewable energy objectives for 2030; developing a stronger European research and innovation agenda for energy and transport; speaking with one voice to the outside world on energy and climate issues.

On the other hand, one could say that the very fact that everything is in there means that there is no real diagnosis on the most pressing issues, insufficient hierarchisation, and that there is – more worryingly – nothing new to be found among the Commission's proposals. By simply stipulating activities that are in fact already existing policies or measures, no added value, no new impetus is created. The Commission services in DG energy, DG climate and DG transport wrote what they are already doing and what they are planning to do going forward: ensuring full implementation of the third internal energy market package, supporting the implementation of major infrastructure projects, proposing new targets for 2030 etc. In other words, these proposals would have come anyways. Insiders will tell you that this is normal: “We don't want the German Energy Union, we don't want it “à la française”, we don't want a Polish or British Energy Union either, so this is what you get...”.

However, this “business as usual” approach to the Energy Union makes it impossible to honestly take stock of where European energy policy has really succeeded or failed so far. We need to identify the areas Europe should focus its attention on in the coming years to really achieve progress rather than muddling through as before, and we need – more importantly – to implement concrete policies which appeal to all European citizens and should be actively promoted at home by European politicians. Such a more ambitious approach to the Energy Union would imply admitting that a key element of Europe's energy policy – i.e. the internal market policy – is in the doldrums and that the approach which prevailed so far cannot be the way forward. The lion's share of political attention and administrative effort has gone into building a well-functioning European electricity and gas market. While gas market functioning has improved – though with persistent differences between Eastern and Western Europe –, electricity markets face fundamental challenges.

³ http://ec.europa.eu/priorities/energy-union/docs/energyunion_en.pdf

The main challenge derives from the replacement of formerly centralised systems of energy production and distribution by increasing shares of decentralised renewable energy systems. Decreasing demand in the context of the economic crisis, prices favourable to coal rather than gas power plants and the increase of renewable capacities have all led to overcapacities in conventional base load power generation. At the same time, more flexible solutions (storage, demand-side response, investments in grid and back-up capacities to cover demand peaks) are needed to tackle the higher volatility of power production. We are moving away from a fossil fuel based system whose costs are mainly operating costs, towards a system based on more volatile renewable capacities, whose costs are mainly capital costs. Short-term markets provide adequate signals for operational decisions, but they do not trigger adequate long-term investments (“missing money problem”). Policy makers at national and European level have been taken by surprise by the combined effects of their own policies for more market and competition on the one hand and more renewables on the other hand. Struggling with the task to manage the energy transition, each Member State thinks that it alone can best decide how to face the challenges. Arguments that current problems are merely the result of renewable energy subsidies fall short of acknowledging that the actual shortcomings of the electricity market design are at the core of the missing money problem.

Taken hostage by differing national responses to these Union-wide problems, the European Commission has been unable so far to come up with a timely, appropriate energy policy response. Instead, it has used its powers in the field of competition policy to rein in or harmonise renewables support, capacity mechanisms and similar schemes that slowly deconstruct the internal market well before its completion. More recently, the Commission has put out a consultation on the electricity market design, but its content appears close to what already exists.

All this is an insufficient technocratic answer to what are essentially questions of political choice: What energy future do we want for Europe as a whole? How much trust Member States have to build among each other to integrate their national energy systems into a European system that is both efficient and sustainable? What should be the balance between national and European prerogatives to enhance a common energy policy? And how will the necessary investments for this be financed, based on which rules for sharing costs and benefits?

4 - A MORE AMBITIOUS ENERGY UNION IS POSSIBLE.

The Council of Energy Ministers, in its 8 June 2015 conclusions, recognised that “the EU institutions and Member States need to take work forward on building an Energy Union” – in other words: there is still a lot to do. The Energy Council also tasked the European Commission to come up with more concrete proposals on the governance of the Energy Union, which the February communication mentioned only in very vague terms. First promising elements can be found in a discussion paper on governance that was prepared for a meeting of directors general for energy and climate on 15 July 2015. It calls for better monitoring of national energy policies, integrated energy and climate plans for each Member State with clear projections and closer regional cooperation, with a view to develop a new iterative planning process. Vice-president Šefčovič has been touring European capitals over the past weeks to collect ideas on how to put some flesh on the Energy Union bones. And the Council of Energy Ministers will meet again on 26 November 2015 to discuss the topic. The Commission should begin to deliver on these issues when it presents its legislative proposals announced for 2016.

We believe that the Energy Union can be a success if it builds on a set of guiding principles and ambitious policy proposals.

Firstly, the Union has to be based on a transparent governance structure with a clear division of competencies

Energy has so far been a shared competence between the EU and Member States. Although in 2009 the Treaty of Lisbon introduced for the first time a specific legal basis for energy policy in the founding treaties of the EU⁴, Member States alone remain responsible of their energy mix choices. As a result, new tensions have arisen at the heart of European energy policy.

This makes it all the more crucial to close the gap between European and national policy debates and politics, to ensure national political orientations are as coordinated as possible and together shape a coherent European energy system.

National lawmakers have their say on key aspects of energy policy such as the energy mix or renewable energy support schemes, and they make the link with citizens in each Member State. A renewed and strengthened governance framework should thus make sure members of national Parliaments are on board when European energy policy decisions are taken.

This could be achieved by creating a “European Parliamentary Platform on Energy”, which would bring together representatives from the committees in charge of energy in each of the 28 national Parliaments and the European Parliament, to discuss the future of energy policy in Europe. Such a platform could enable the involved groups to engage in a dialogue with civil society actors and thereby to progressively harmonise their views on the further development of the Energy Union. This body could also create spaces for enhanced cooperation to discuss regional policy issues affecting only a subgroup of Member States. Furthermore, a periodic and structured consultation process with EU institutions would allow a strengthening of the parliamentary interests in European energy policy.

Secondly, an energy system reform is necessary to achieve the Union’s long-term energy policy goals

Pivotal to the transformation of energy production and consumption is joint planning, a market design reform, a stable framework for investment and network development as well as clear priorities for research, development and innovation policies.

Member States will not adopt the same strategies concerning the energy mix, but all share the same long-term goal of a more sustainable energy system. To get there, joint planning will be necessary. Member States should plan their respective investments in the energy system in a much more coordinated way, if they want to build an integrated European energy system that leaves space for the specific choices of each country. Current reporting obligations of Member States regarding energy policy (including the ones set up under the European Semester) need to be both streamlined and

⁴ Article 194 of the Treaty on the Functioning of the EU

strengthened, to become proper impact assessments: they should be sufficiently detailed to get a common understanding of the potential impacts of national energy policies on neighbouring countries, highlighting expected costs and benefits at both national and European levels.

The design of electricity markets will also have to change, both to allow further integration of short-term markets and to give the right long-term signals for new capacities Member States want to develop in renewables, storage and back-up facilities, while accelerating the phase-out of inefficient, carbon intensive base load overcapacities. Uncoordinated and complex national capacity mechanisms will not get us there. Rather, their existence reflects the flaws of the current market design. The European Commission should launch a real debate on this important issue, and ensure that all options are on the table, including the ones which would constitute a complete transformation of current market arrangements. One solution to be explored could be the creation of regulated or publicly controlled entities at regional level, which would allow investments following European interests in renewables, storage and back-up facilities to happen by entering into long-term contracts with generators, while ensuring competition between them. This in fact already applies today, albeit in an uncoordinated and thus costly way, through national renewable support schemes and capacity reserve mechanisms, which in many cases boil down to long-term contracts with regulated Transmission System Operators or publicly controlled entities. This new scheme would not replace short-term markets, which could still provide the appropriate incentives for operational decisions and dispatch. It would require an in-depth coordination at regional level to define the objectives of the regulated or publicly controlled buyers when it comes to entering into long-term contracts with investors in renewable, storage or back-up capacities, while being flexible enough to accommodate different national energy policy choices.

Whatever the strategies of each Member State are, grids will play an ever-increasing role in accommodating the evolving energy mix. Regional integration of network operators – through smart grids, joint control centres and integration into regional operators – will help speeding up the integration of national markets.

In order to meet our goals for 2050 one has to be aware that neither a linear extrapolation of the past is possible, nor can a step-by-step policy account for the need to completely change our mode of energy generation and consumption. We have to innovate: most of the technologies that will dominate the energy world of the 2050's have still to be invented or developed. This is why the Energy Union should step up Europe's efforts in developing strategic energy and climate technologies with a focus on a few key topics and sufficient funding. Energy efficiency, energy storage, smart grids and clean mobility are the areas in which a massive push on R&D would be a no regret move. Furthermore, we have to think all sectors, namely electricity, heat and transport together and connect them in a smart way, taking advantage of the possibilities of digitalisation. To increase the impact of support, national research and innovation agencies should jointly elaborate their funding programmes, merge available funds at European level, thereby spreading best practices in terms of innovative financing, and develop early on common technical standards to allow for the emergence of strong European industrial players for the energy transition.

Thirdly, the robustness of Europe's energy policy in the longer term depends on its integration with Europe's broader policy goals

If energy policy has been a controversial issue for such a long time, this is also due to it being linked to and entangled with so many other policy fields, from transport policy to fiscal, social, trade, economic or foreign policy. The Energy Union will only succeed if it manages to take a holistic approach and reconcile the various policy objectives.

To increase energy security, no Member State should be left entirely dependent on one single supplier. The necessary infrastructure should be implemented to make sure all Member States can diversify their supply portfolio and to prevent abuses from dominant suppliers. European funds available for energy networks should be clearly prioritised towards such projects.

Integration is also needed with Europe's climate policy instruments. While the European emissions trading scheme (EU ETS) needs to be strengthened and extended, the sectors not subject to EU ETS (e.g. buildings, agriculture, transport) should receive a price signal through a European-wide carbon tax that would prevent the current market distortions created by the existence of different national taxation schemes.

Clean mobility is a central piece of the energy system we are aiming for. This is why the Energy Union should dedicate significant means to this objective, beyond research & development. The EU should develop a network of European transnational green mobility corridors and support their equipment with charging stations for electric and hydrogen vehicles.

Europe should finally integrate its energy policy objectives with economic competitiveness and industrial policy objectives, making sure that the energy transition leads neither to burdening the competitiveness of energy-intensive industries that operate in global markets, nor to energy cost dumping for certain privileged sectors between European countries. A more comprehensive approach is needed: rather than focusing exclusively on harmonised wholesale market prices, a truly European energy policy should strive to harmonise the overall cost of energy, notably for energy-intensive consumers across the Union, by considering wholesale prices, but also network costs and taxes. This should start with renewed efforts to harmonize energy-related taxes, tax exemptions and state aid.

We believe a stronger European Energy Union is not only technically possible but also politically in reach. We call on European leaders to seize the chances such an ambitious Energy Union offers to get the EU out of its current political crisis and to give new momentum to Europe's integration.

NEW AND AMBITIOUS OR JUST MORE OF THE SAME ? THE ENERGY UNION AT A CROSSROADS

Christophe Schramm, former adviser to the French energy minister, Terra Nova, France

Antoine Guillou, energy and climate change coordinator, Terra Nova, France

Robert Schachtschneider, energy policy adviser, former assistant to MP Dirk Becker, former spokesperson for energy and economy, Social Democratic Party, Germany

Philipp Fink, policy officer for climate, energy, environmental and structural policies in the division for economic and social policies, Friedrich-Ebert-Stiftung, Germany

Institute of Public Affairs, Poland

Daniel Scholten, assistant professor, Faculty of Technology, Policy and Management, Delft University of Technology, Netherlands

Michel Derdevet, faculty member, College of Europe Bruges, Belgium

November 23rd, 2015

The following paper outlines the necessity of giving new momentum to a coherent and comprehensive European energy policy. We initially outline the status quo and the recent initiatives from the European Council and Commission before calling for a more ambitious Energy Union with clearly defined policy proposals for action.

« L'Europe se fera dans les crises. » (Jean Monnet)

1 - EUROPE IS IN A CRISIS – SO IS EUROPE'S ENERGY POLICY

The European project is facing one of its deepest crises in its 60-year history. Since 2008, the economic and financial crisis has been weakening Member State economies. The threat of political disintegration is real if Greece were to be forced out of the Eurozone in the coming months or if the United Kingdom were to leave the European Union as a result of the upcoming referendum. The “Barroso decade” has seen no major progress, as the internal market logic launched in the 1990s lost its initial momentum of bringing Europe's nations closer together. Faced with new challenges such as terrorism, mass migration and mass unemployment, Member States seem unable to come up with an

ambitious approach that would give back to “Brussels” some of the credibility it has lost among the European people.

The situation in which Europe’s energy policy finds itself today could be described as a crisis, too. Started about 30 years ago, the so-called internal energy market has run out of steam. Launched with the idea that liberalisation and free markets would increase competitiveness and reduce energy prices, the internal market agenda has suffered as much from national opposition tactics as from its unsuitability to tackle the other challenges of energy policy: securing energy supplies, and building an integrated energy system that effectively as well as substantially reduces CO2 emissions. This has led to increasing doubt about the market’s ability to deliver sufficient investments, which are much needed to achieve Europe’s energy and climate objectives.

Moreover, new technologies – from renewable energies and hydraulic fracturing for unconventional fossil fuels to new storage capacities, energy management services and decentralised solutions – are acting as game-changers for the European energy system with multiple consequences. Traditional market players are confronted with new market dynamics and higher competition. Both incumbents and new market players suffer from the lack of stable regulatory frameworks, responding to market uncertainty with investment inertia.

Finally, tensions and conflicts close to Europe’s borders (Eastern Ukraine, Syria, Iraq, and Libya, Algeria etc.) and the decline in oil prices have reminded Europe of the global dimension of energy policy and of our dependency from external fossil fuel suppliers for decades to come.

2 - ENERGY – AND THE ENERGY TRANSITION IN PARTICULAR – COULD AND SHOULD GIVE NEW IMPETUS TO THE EUROPEAN DREAM

Since the establishment of the European Coal and Steel Community in 1951, energy has been one of the backbones of the European project. An ambitious “grand projet” in the field of energy could give new momentum to European integration.

First, the physics of existing electricity systems – namely the fact that supply and demand have to be balanced at all times– make integration of energy systems across the continent a foremost necessity. This is why national networks have developed across borders for many decades already. For most Member States autarky would be much more expensive – and it would probably be impossible to achieve the same security standards, at least for smaller Member States. Due to the fact that more intermittent renewable energy resources are phased into the grid, further interconnections, grid development efforts and storage capacities are likely to be needed to balance out electricity production and consumption. This should be of mutual interest to the Member States, even if infrastructure projects always need to be assessed based on a case-by-case cost-benefit analysis. The challenge today is to develop a European grid that is flexible and smart enough to react to growing volatility and to level out excess supply.

Second, as a basic good in everyone’s life, energy has a strong social component. As most of us have an electricity or gas bill to pay, a car to fuel with petrol or one or several consumer goods or personal devices running on electricity, people feel concerned by the challenges faced by today’s

energy systems: the need to make energy more sustainable while keeping its access affordable for all, including the poor. Today's national energy policies however lack cost-effectiveness (from a macro-economic perspective) and fairness when it comes to sharing these costs among consumers. As our awareness increases concerning the impact our energy choices have on both the climate and the environment, more and more people from all European countries understand that the energy transition is not just a short-term policy fad, but a fundamental change with impacts on everyone's choices and behaviour. As such, the energy transition can be a formidable, unifying political project for the whole continent and a unique catalyser for investment, jobs and growth.

Third, the geopolitical nature of energy makes solidarity and coordinated energy diplomacy beneficial. The EU, with its scarce and declining primary resources, is the largest fossil fuel importing region in the world, and some Member States are heavily dependent on one single gas supplier, leading to increasing security concerns especially with respect to Russian gas imports. It is therefore of vital interest for EU members, in particular in Central and Eastern Europe, when discussing contracts with their suppliers, to know that they can rely on mechanisms of joint solidarity. Furthermore, the technological changes underway in the energy field are global: While Europe has been a frontrunner for the development of renewable energy and energy efficiency technologies between 2000 and 2010, the biggest markets for solar power plants or electric vehicles today are in the USA or China. If Europe wants to remain a global leader in clean technologies, it needs the critical mass of its Union to drive the agenda on international standards, to pool resources for research and innovation and to have sufficient market size to attract the best industry players. Finally, the Union has a vital role to play in ensuring the competitiveness of its economy by setting world class production and energy efficiency standards and ensuring that the decoupling of economic growth and energy consumption remains compatible with a strong industrial base.

So energy policy, one could think, is an obvious candidate to further Europe's integration, as it is important, concrete and inspiring for Europe's citizens. But reality is more complicated.

3 - A LONG-AWAITED IMPETUS, THE ENERGY UNION PROJECT STARTED WITH GREAT HOPES, BUT THE COMMISSION'S CONCRETE PROPOSALS LACK AMBITION

The idea of some new European energy initiative has been maturing in Brussels' policy circles for several years. In 2005/2006, the Ukrainian gas crisis triggered the idea of energy being a key dimension of a common European foreign policy. In 2010, Jacques Delors and Jerzy Buzek threw their political weight behind the concept of a "European Energy Community"¹, which however remained only an issue for Brussels' think tanks and other Europhile circles. Things changed when the now president of the European Council, Donald Tusk, in the wake of Russia's annexation of Crimea, called for an "energy union" to break Russia's energy "stranglehold" on Europe in April 2014². Though initially focussed on security of supply, the idea of a much broader union finally reached the highest political level: the "accidental child" – as a Council insider put it – was born.

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As a candidate for the Commission Presidency, Jean-Claude Juncker adopted this initiative. Understandably indeed, energy security concerns alone were not enough to unify 28 Member States around the idea. So President Juncker identified five dimensions – energy security, solidarity and trust; full integration of the European energy market; energy efficiency as a means to moderate demand; decarbonisation of the economy; research, innovation, and competitiveness – which would take into account the concerns of all Member States. These were developed in a Framework Strategy published on 25 February 2015 which set out 15 action points³.

On the one hand, one could argue that everything is in there: implementing existing energy legislation, in particular the third internal energy market package; diversifying EU gas supplies, improving resilience in case of supply disruptions; making intergovernmental agreements more transparent; promoting trans-European energy infrastructure; rethinking the EU's electricity market design; strengthening the role of European regulators and network operators as well as regional cooperation initiatives; increasing transparency on energy prices; advancing towards more energy efficiency, notably in buildings; speeding up decarbonisation in transports; achieving the EU's GHG emission reduction and renewable energy objectives for 2030; developing a stronger European research and innovation agenda for energy and transport; speaking with one voice to the outside world on energy and climate issues.

On the other hand, one could say that the very fact that everything is in there means that there is no real diagnosis on the most pressing issues, insufficient hierarchisation, and that there is – more worryingly – nothing new to be found among the Commission's proposals. By simply stipulating activities that are in fact already existing policies or measures, no added value, no new impetus is created. The Commission services in DG energy, DG climate and DG transport wrote what they are already doing and what they are planning to do going forward: ensuring full implementation of the third internal energy market package, supporting the implementation of major infrastructure projects, proposing new targets for 2030 etc. In other words, these proposals would have come anyways. Insiders will tell you that this is normal: “We don't want the German Energy Union, we don't want it “à la française”, we don't want a Polish or British Energy Union either, so this is what you get...”.

However, this “business as usual” approach to the Energy Union makes it impossible to honestly take stock of where European energy policy has really succeeded or failed so far. We need to identify the areas Europe should focus its attention on in the coming years to really achieve progress rather than muddling through as before, and we need – more importantly – to implement concrete policies which appeal to all European citizens and should be actively promoted at home by European politicians. Such a more ambitious approach to the Energy Union would imply admitting that a key element of Europe's energy policy – i.e. the internal market policy – is in the doldrums and that the approach which prevailed so far cannot be the way forward. The lion's share of political attention and administrative effort has gone into building a well-functioning European electricity and gas market. While gas market functioning has improved – though with persistent differences between Eastern and Western Europe –, electricity markets face fundamental challenges.

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The main challenge derives from the replacement of formerly centralised systems of energy production and distribution by increasing shares of decentralised renewable energy systems. Decreasing demand in the context of the economic crisis, prices favourable to coal rather than gas power plants and the increase of renewable capacities have all led to overcapacities in conventional base load power generation. At the same time, more flexible solutions (storage, demand-side response, investments in grid and back-up capacities to cover demand peaks) are needed to tackle the higher volatility of power production. We are moving away from a fossil fuel based system whose costs are mainly operating costs, towards a system based on more volatile renewable capacities, whose costs are mainly capital costs. Short-term markets provide adequate signals for operational decisions, but they do not trigger adequate long-term investments (“missing money problem”). Policy makers at national and European level have been taken by surprise by the combined effects of their own policies for more market and competition on the one hand and more renewables on the other hand. Struggling with the task to manage the energy transition, each Member State thinks that it alone can best decide how to face the challenges. Arguments that current problems are merely the result of renewable energy subsidies fall short of acknowledging that the actual shortcomings of the electricity market design are at the core of the missing money problem.

Taken hostage by differing national responses to these Union-wide problems, the European Commission has been unable so far to come up with a timely, appropriate energy policy response. Instead, it has used its powers in the field of competition policy to rein in or harmonise renewables support, capacity mechanisms and similar schemes that slowly deconstruct the internal market well before its completion. More recently, the Commission has put out a consultation on the electricity market design, but its content appears close to what already exists.

All this is an insufficient technocratic answer to what are essentially questions of political choice: What energy future do we want for Europe as a whole? How much trust Member States have to build among each other to integrate their national energy systems into a European system that is both efficient and sustainable? What should be the balance between national and European prerogatives to enhance a common energy policy? And how will the necessary investments for this be financed, based on which rules for sharing costs and benefits?

4 - A MORE AMBITIOUS ENERGY UNION IS POSSIBLE.

The Council of Energy Ministers, in its 8 June 2015 conclusions, recognised that “the EU institutions and Member States need to take work forward on building an Energy Union” – in other words: there is still a lot to do. The Energy Council also tasked the European Commission to come up with more concrete proposals on the governance of the Energy Union, which the February communication mentioned only in very vague terms. First promising elements can be found in a discussion paper on governance that was prepared for a meeting of directors general for energy and climate on 15 July 2015. It calls for better monitoring of national energy policies, integrated energy and climate plans for each Member State with clear projections and closer regional cooperation, with a view to develop a new iterative planning process. Vice-president Šefčovič has been touring European capitals over the past weeks to collect ideas on how to put some flesh on the Energy Union bones. And the Council of Energy Ministers will meet again on 26 November 2015 to discuss the topic. The Commission should begin to deliver on these issues when it presents its legislative proposals announced for 2016.

We believe that the Energy Union can be a success if it builds on a set of guiding principles and ambitious policy proposals.

Firstly, the Union has to be based on a transparent governance structure with a clear division of competencies

Energy has so far been a shared competence between the EU and Member States. Although in 2009 the Treaty of Lisbon introduced for the first time a specific legal basis for energy policy in the founding treaties of the EU⁴, Member States alone remain responsible of their energy mix choices. As a result, new tensions have arisen at the heart of European energy policy.

This makes it all the more crucial to close the gap between European and national policy debates and politics, to ensure national political orientations are as coordinated as possible and together shape a coherent European energy system.

National lawmakers have their say on key aspects of energy policy such as the energy mix or renewable energy support schemes, and they make the link with citizens in each Member State. A renewed and strengthened governance framework should thus make sure members of national Parliaments are on board when European energy policy decisions are taken.

This could be achieved by creating a “European Parliamentary Platform on Energy”, which would bring together representatives from the committees in charge of energy in each of the 28 national Parliaments and the European Parliament, to discuss the future of energy policy in Europe. Such a platform could enable the involved groups to engage in a dialogue with civil society actors and thereby to progressively harmonise their views on the further development of the Energy Union. This body could also create spaces for enhanced cooperation to discuss regional policy issues affecting only a subgroup of Member States. Furthermore, a periodic and structured consultation process with EU institutions would allow a strengthening of the parliamentary interests in European energy policy.

Secondly, an energy system reform is necessary to achieve the Union’s long-term energy policy goals

Pivotal to the transformation of energy production and consumption is joint planning, a market design reform, a stable framework for investment and network development as well as clear priorities for research, development and innovation policies.

Member States will not adopt the same strategies concerning the energy mix, but all share the same long-term goal of a more sustainable energy system. To get there, joint planning will be necessary. Member States should plan their respective investments in the energy system in a much more coordinated way, if they want to build an integrated European energy system that leaves space for the specific choices of each country. Current reporting obligations of Member States regarding energy policy (including the ones set up under the European Semester) need to be both streamlined and

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strengthened, to become proper impact assessments: they should be sufficiently detailed to get a common understanding of the potential impacts of national energy policies on neighbouring countries, highlighting expected costs and benefits at both national and European levels.

The design of electricity markets will also have to change, both to allow further integration of short-term markets and to give the right long-term signals for new capacities Member States want to develop in renewables, storage and back-up facilities, while accelerating the phase-out of inefficient, carbon intensive base load overcapacities. Uncoordinated and complex national capacity mechanisms will not get us there. Rather, their existence reflects the flaws of the current market design. The European Commission should launch a real debate on this important issue, and ensure that all options are on the table, including the ones which would constitute a complete transformation of current market arrangements. One solution to be explored could be the creation of regulated or publicly controlled entities at regional level, which would allow investments following European interests in renewables, storage and back-up facilities to happen by entering into long-term contracts with generators, while ensuring competition between them. This in fact already applies today, albeit in an uncoordinated and thus costly way, through national renewable support schemes and capacity reserve mechanisms, which in many cases boil down to long-term contracts with regulated Transmission System Operators or publicly controlled entities. This new scheme would not replace short-term markets, which could still provide the appropriate incentives for operational decisions and dispatch. It would require an in-depth coordination at regional level to define the objectives of the regulated or publicly controlled buyers when it comes to entering into long-term contracts with investors in renewable, storage or back-up capacities, while being flexible enough to accommodate different national energy policy choices.

Whatever the strategies of each Member State are, grids will play an ever-increasing role in accommodating the evolving energy mix. Regional integration of network operators – through smart grids, joint control centres and integration into regional operators – will help speeding up the integration of national markets.

In order to meet our goals for 2050 one has to be aware that neither a linear extrapolation of the past is possible, nor can a step-by-step policy account for the need to completely change our mode of energy generation and consumption. We have to innovate: most of the technologies that will dominate the energy world of the 2050's have still to be invented or developed. This is why the Energy Union should step up Europe's efforts in developing strategic energy and climate technologies with a focus on a few key topics and sufficient funding. Energy efficiency, energy storage, smart grids and clean mobility are the areas in which a massive push on R&D would be a no regret move. Furthermore, we have to think all sectors, namely electricity, heat and transport together and connect them in a smart way, taking advantage of the possibilities of digitalisation. To increase the impact of support, national research and innovation agencies should jointly elaborate their funding programmes, merge available funds at European level, thereby spreading best practices in terms of innovative financing, and develop early on common technical standards to allow for the emergence of strong European industrial players for the energy transition.

Thirdly, the robustness of Europe's energy policy in the longer term depends on its integration with Europe's broader policy goals

If energy policy has been a controversial issue for such a long time, this is also due to it being linked to and entangled with so many other policy fields, from transport policy to fiscal, social, trade, economic or foreign policy. The Energy Union will only succeed if it manages to take a holistic approach and reconcile the various policy objectives.

To increase energy security, no Member State should be left entirely dependent on one single supplier. The necessary infrastructure should be implemented to make sure all Member States can diversify their supply portfolio and to prevent abuses from dominant suppliers. European funds available for energy networks should be clearly prioritised towards such projects.

Integration is also needed with Europe's climate policy instruments. While the European emissions trading scheme (EU ETS) needs to be strengthened and extended, the sectors not subject to EU ETS (e.g. buildings, agriculture, transport) should receive a price signal through a European-wide carbon tax that would prevent the current market distortions created by the existence of different national taxation schemes.

Clean mobility is a central piece of the energy system we are aiming for. This is why the Energy Union should dedicate significant means to this objective, beyond research & development. The EU should develop a network of European transnational green mobility corridors and support their equipment with charging stations for electric and hydrogen vehicles.

Europe should finally integrate its energy policy objectives with economic competitiveness and industrial policy objectives, making sure that the energy transition leads neither to burdening the competitiveness of energy-intensive industries that operate in global markets, nor to energy cost dumping for certain privileged sectors between European countries. A more comprehensive approach is needed: rather than focusing exclusively on harmonised wholesale market prices, a truly European energy policy should strive to harmonise the overall cost of energy, notably for energy-intensive consumers across the Union, by considering wholesale prices, but also network costs and taxes. This should start with renewed efforts to harmonize energy-related taxes, tax exemptions and state aid.

We believe a stronger European Energy Union is not only technically possible but also politically in reach. We call on European leaders to seize the chances such an ambitious Energy Union offers to get the EU out of its current political crisis and to give new momentum to Europe's integration.

NEW AND AMBITIOUS OR JUST MORE OF THE SAME ? THE ENERGY UNION AT A CROSSROADS

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November 23rd, 2015

The following paper outlines the necessity of giving new momentum to a coherent and comprehensive European energy policy. We initially outline the status quo and the recent initiatives from the European Council and Commission before calling for a more ambitious Energy Union with clearly defined policy proposals for action.

« L'Europe se fera dans les crises. » (Jean Monnet)

1 - EUROPE IS IN A CRISIS – SO IS EUROPE'S ENERGY POLICY

The European project is facing one of its deepest crises in its 60-year history. Since 2008, the economic and financial crisis has been weakening Member State economies. The threat of political disintegration is real if Greece were to be forced out of the Eurozone in the coming months or if the United Kingdom were to leave the European Union as a result of the upcoming referendum. The “Barroso decade” has seen no major progress, as the internal market logic launched in the 1990s lost its initial momentum of bringing Europe's nations closer together. Faced with new challenges such as terrorism, mass migration and mass unemployment, Member States seem unable to come up with an

ambitious approach that would give back to “Brussels” some of the credibility it has lost among the European people.

The situation in which Europe’s energy policy finds itself today could be described as a crisis, too. Started about 30 years ago, the so-called internal energy market has run out of steam. Launched with the idea that liberalisation and free markets would increase competitiveness and reduce energy prices, the internal market agenda has suffered as much from national opposition tactics as from its unsuitability to tackle the other challenges of energy policy: securing energy supplies, and building an integrated energy system that effectively as well as substantially reduces CO2 emissions. This has led to increasing doubt about the market’s ability to deliver sufficient investments, which are much needed to achieve Europe’s energy and climate objectives.

Moreover, new technologies – from renewable energies and hydraulic fracturing for unconventional fossil fuels to new storage capacities, energy management services and decentralised solutions – are acting as game-changers for the European energy system with multiple consequences. Traditional market players are confronted with new market dynamics and higher competition. Both incumbents and new market players suffer from the lack of stable regulatory frameworks, responding to market uncertainty with investment inertia.

Finally, tensions and conflicts close to Europe’s borders (Eastern Ukraine, Syria, Iraq, and Libya, Algeria etc.) and the decline in oil prices have reminded Europe of the global dimension of energy policy and of our dependency from external fossil fuel suppliers for decades to come.

2 - ENERGY – AND THE ENERGY TRANSITION IN PARTICULAR – COULD AND SHOULD GIVE NEW IMPETUS TO THE EUROPEAN DREAM

Since the establishment of the European Coal and Steel Community in 1951, energy has been one of the backbones of the European project. An ambitious “grand projet” in the field of energy could give new momentum to European integration.

First, the physics of existing electricity systems – namely the fact that supply and demand have to be balanced at all times– make integration of energy systems across the continent a foremost necessity. This is why national networks have developed across borders for many decades already. For most Member States autarky would be much more expensive – and it would probably be impossible to achieve the same security standards, at least for smaller Member States. Due to the fact that more intermittent renewable energy resources are phased into the grid, further interconnections, grid development efforts and storage capacities are likely to be needed to balance out electricity production and consumption. This should be of mutual interest to the Member States, even if infrastructure projects always need to be assessed based on a case-by-case cost-benefit analysis. The challenge today is to develop a European grid that is flexible and smart enough to react to growing volatility and to level out excess supply.

Second, as a basic good in everyone’s life, energy has a strong social component. As most of us have an electricity or gas bill to pay, a car to fuel with petrol or one or several consumer goods or personal devices running on electricity, people feel concerned by the challenges faced by today’s

energy systems: the need to make energy more sustainable while keeping its access affordable for all, including the poor. Today's national energy policies however lack cost-effectiveness (from a macro-economic perspective) and fairness when it comes to sharing these costs among consumers. As our awareness increases concerning the impact our energy choices have on both the climate and the environment, more and more people from all European countries understand that the energy transition is not just a short-term policy fad, but a fundamental change with impacts on everyone's choices and behaviour. As such, the energy transition can be a formidable, unifying political project for the whole continent and a unique catalyser for investment, jobs and growth.

Third, the geopolitical nature of energy makes solidarity and coordinated energy diplomacy beneficial. The EU, with its scarce and declining primary resources, is the largest fossil fuel importing region in the world, and some Member States are heavily dependent on one single gas supplier, leading to increasing security concerns especially with respect to Russian gas imports. It is therefore of vital interest for EU members, in particular in Central and Eastern Europe, when discussing contracts with their suppliers, to know that they can rely on mechanisms of joint solidarity. Furthermore, the technological changes underway in the energy field are global: While Europe has been a frontrunner for the development of renewable energy and energy efficiency technologies between 2000 and 2010, the biggest markets for solar power plants or electric vehicles today are in the USA or China. If Europe wants to remain a global leader in clean technologies, it needs the critical mass of its Union to drive the agenda on international standards, to pool resources for research and innovation and to have sufficient market size to attract the best industry players. Finally, the Union has a vital role to play in ensuring the competitiveness of its economy by setting world class production and energy efficiency standards and ensuring that the decoupling of economic growth and energy consumption remains compatible with a strong industrial base.

So energy policy, one could think, is an obvious candidate to further Europe's integration, as it is important, concrete and inspiring for Europe's citizens. But reality is more complicated.

3 - A LONG-AWAITED IMPETUS, THE ENERGY UNION PROJECT STARTED WITH GREAT HOPES, BUT THE COMMISSION'S CONCRETE PROPOSALS LACK AMBITION

The idea of some new European energy initiative has been maturing in Brussels' policy circles for several years. In 2005/2006, the Ukrainian gas crisis triggered the idea of energy being a key dimension of a common European foreign policy. In 2010, Jacques Delors and Jerzy Buzek threw their political weight behind the concept of a "European Energy Community"¹, which however remained only an issue for Brussels' think tanks and other Europhile circles. Things changed when the now president of the European Council, Donald Tusk, in the wake of Russia's annexation of Crimea, called for an "energy union" to break Russia's energy "stranglehold" on Europe in April 2014². Though initially focussed on security of supply, the idea of a much broader union finally reached the highest political level: the "accidental child" – as a Council insider put it – was born.

¹ <http://www.delorsinstitute.eu/011-2245--Towards-a-new-European-Energy-Community-Joint-Declaration-by-Jerzy-Buzek-and-Jacques-Delors.html>

² <http://on.ft.com/1ffQ7na>

As a candidate for the Commission Presidency, Jean-Claude Juncker adopted this initiative. Understandably indeed, energy security concerns alone were not enough to unify 28 Member States around the idea. So President Juncker identified five dimensions – energy security, solidarity and trust; full integration of the European energy market; energy efficiency as a means to moderate demand; decarbonisation of the economy; research, innovation, and competitiveness – which would take into account the concerns of all Member States. These were developed in a Framework Strategy published on 25 February 2015 which set out 15 action points³.

On the one hand, one could argue that everything is in there: implementing existing energy legislation, in particular the third internal energy market package; diversifying EU gas supplies, improving resilience in case of supply disruptions; making intergovernmental agreements more transparent; promoting trans-European energy infrastructure; rethinking the EU's electricity market design; strengthening the role of European regulators and network operators as well as regional cooperation initiatives; increasing transparency on energy prices; advancing towards more energy efficiency, notably in buildings; speeding up decarbonisation in transports; achieving the EU's GHG emission reduction and renewable energy objectives for 2030; developing a stronger European research and innovation agenda for energy and transport; speaking with one voice to the outside world on energy and climate issues.

On the other hand, one could say that the very fact that everything is in there means that there is no real diagnosis on the most pressing issues, insufficient hierarchisation, and that there is – more worryingly – nothing new to be found among the Commission's proposals. By simply stipulating activities that are in fact already existing policies or measures, no added value, no new impetus is created. The Commission services in DG energy, DG climate and DG transport wrote what they are already doing and what they are planning to do going forward: ensuring full implementation of the third internal energy market package, supporting the implementation of major infrastructure projects, proposing new targets for 2030 etc. In other words, these proposals would have come anyways. Insiders will tell you that this is normal: “We don't want the German Energy Union, we don't want it “à la française”, we don't want a Polish or British Energy Union either, so this is what you get...”.

However, this “business as usual” approach to the Energy Union makes it impossible to honestly take stock of where European energy policy has really succeeded or failed so far. We need to identify the areas Europe should focus its attention on in the coming years to really achieve progress rather than muddling through as before, and we need – more importantly – to implement concrete policies which appeal to all European citizens and should be actively promoted at home by European politicians. Such a more ambitious approach to the Energy Union would imply admitting that a key element of Europe's energy policy – i.e. the internal market policy – is in the doldrums and that the approach which prevailed so far cannot be the way forward. The lion's share of political attention and administrative effort has gone into building a well-functioning European electricity and gas market. While gas market functioning has improved – though with persistent differences between Eastern and Western Europe –, electricity markets face fundamental challenges.

³ http://ec.europa.eu/priorities/energy-union/docs/energyunion_en.pdf

The main challenge derives from the replacement of formerly centralised systems of energy production and distribution by increasing shares of decentralised renewable energy systems. Decreasing demand in the context of the economic crisis, prices favourable to coal rather than gas power plants and the increase of renewable capacities have all led to overcapacities in conventional base load power generation. At the same time, more flexible solutions (storage, demand-side response, investments in grid and back-up capacities to cover demand peaks) are needed to tackle the higher volatility of power production. We are moving away from a fossil fuel based system whose costs are mainly operating costs, towards a system based on more volatile renewable capacities, whose costs are mainly capital costs. Short-term markets provide adequate signals for operational decisions, but they do not trigger adequate long-term investments (“missing money problem”). Policy makers at national and European level have been taken by surprise by the combined effects of their own policies for more market and competition on the one hand and more renewables on the other hand. Struggling with the task to manage the energy transition, each Member State thinks that it alone can best decide how to face the challenges. Arguments that current problems are merely the result of renewable energy subsidies fall short of acknowledging that the actual shortcomings of the electricity market design are at the core of the missing money problem.

Taken hostage by differing national responses to these Union-wide problems, the European Commission has been unable so far to come up with a timely, appropriate energy policy response. Instead, it has used its powers in the field of competition policy to rein in or harmonise renewables support, capacity mechanisms and similar schemes that slowly deconstruct the internal market well before its completion. More recently, the Commission has put out a consultation on the electricity market design, but its content appears close to what already exists.

All this is an insufficient technocratic answer to what are essentially questions of political choice: What energy future do we want for Europe as a whole? How much trust Member States have to build among each other to integrate their national energy systems into a European system that is both efficient and sustainable? What should be the balance between national and European prerogatives to enhance a common energy policy? And how will the necessary investments for this be financed, based on which rules for sharing costs and benefits?

4 - A MORE AMBITIOUS ENERGY UNION IS POSSIBLE.

The Council of Energy Ministers, in its 8 June 2015 conclusions, recognised that “the EU institutions and Member States need to take work forward on building an Energy Union” – in other words: there is still a lot to do. The Energy Council also tasked the European Commission to come up with more concrete proposals on the governance of the Energy Union, which the February communication mentioned only in very vague terms. First promising elements can be found in a discussion paper on governance that was prepared for a meeting of directors general for energy and climate on 15 July 2015. It calls for better monitoring of national energy policies, integrated energy and climate plans for each Member State with clear projections and closer regional cooperation, with a view to develop a new iterative planning process. Vice-president Šefčovič has been touring European capitals over the past weeks to collect ideas on how to put some flesh on the Energy Union bones. And the Council of Energy Ministers will meet again on 26 November 2015 to discuss the topic. The Commission should begin to deliver on these issues when it presents its legislative proposals announced for 2016.

We believe that the Energy Union can be a success if it builds on a set of guiding principles and ambitious policy proposals.

Firstly, the Union has to be based on a transparent governance structure with a clear division of competencies

Energy has so far been a shared competence between the EU and Member States. Although in 2009 the Treaty of Lisbon introduced for the first time a specific legal basis for energy policy in the founding treaties of the EU⁴, Member States alone remain responsible of their energy mix choices. As a result, new tensions have arisen at the heart of European energy policy.

This makes it all the more crucial to close the gap between European and national policy debates and politics, to ensure national political orientations are as coordinated as possible and together shape a coherent European energy system.

National lawmakers have their say on key aspects of energy policy such as the energy mix or renewable energy support schemes, and they make the link with citizens in each Member State. A renewed and strengthened governance framework should thus make sure members of national Parliaments are on board when European energy policy decisions are taken.

This could be achieved by creating a “European Parliamentary Platform on Energy”, which would bring together representatives from the committees in charge of energy in each of the 28 national Parliaments and the European Parliament, to discuss the future of energy policy in Europe. Such a platform could enable the involved groups to engage in a dialogue with civil society actors and thereby to progressively harmonise their views on the further development of the Energy Union. This body could also create spaces for enhanced cooperation to discuss regional policy issues affecting only a subgroup of Member States. Furthermore, a periodic and structured consultation process with EU institutions would allow a strengthening of the parliamentary interests in European energy policy.

Secondly, an energy system reform is necessary to achieve the Union’s long-term energy policy goals

Pivotal to the transformation of energy production and consumption is joint planning, a market design reform, a stable framework for investment and network development as well as clear priorities for research, development and innovation policies.

Member States will not adopt the same strategies concerning the energy mix, but all share the same long-term goal of a more sustainable energy system. To get there, joint planning will be necessary. Member States should plan their respective investments in the energy system in a much more coordinated way, if they want to build an integrated European energy system that leaves space for the specific choices of each country. Current reporting obligations of Member States regarding energy policy (including the ones set up under the European Semester) need to be both streamlined and

⁴ Article 194 of the Treaty on the Functioning of the EU

strengthened, to become proper impact assessments: they should be sufficiently detailed to get a common understanding of the potential impacts of national energy policies on neighbouring countries, highlighting expected costs and benefits at both national and European levels.

The design of electricity markets will also have to change, both to allow further integration of short-term markets and to give the right long-term signals for new capacities Member States want to develop in renewables, storage and back-up facilities, while accelerating the phase-out of inefficient, carbon intensive base load overcapacities. Uncoordinated and complex national capacity mechanisms will not get us there. Rather, their existence reflects the flaws of the current market design. The European Commission should launch a real debate on this important issue, and ensure that all options are on the table, including the ones which would constitute a complete transformation of current market arrangements. One solution to be explored could be the creation of regulated or publicly controlled entities at regional level, which would allow investments following European interests in renewables, storage and back-up facilities to happen by entering into long-term contracts with generators, while ensuring competition between them. This in fact already applies today, albeit in an uncoordinated and thus costly way, through national renewable support schemes and capacity reserve mechanisms, which in many cases boil down to long-term contracts with regulated Transmission System Operators or publicly controlled entities. This new scheme would not replace short-term markets, which could still provide the appropriate incentives for operational decisions and dispatch. It would require an in-depth coordination at regional level to define the objectives of the regulated or publicly controlled buyers when it comes to entering into long-term contracts with investors in renewable, storage or back-up capacities, while being flexible enough to accommodate different national energy policy choices.

Whatever the strategies of each Member State are, grids will play an ever-increasing role in accommodating the evolving energy mix. Regional integration of network operators – through smart grids, joint control centres and integration into regional operators – will help speeding up the integration of national markets.

In order to meet our goals for 2050 one has to be aware that neither a linear extrapolation of the past is possible, nor can a step-by-step policy account for the need to completely change our mode of energy generation and consumption. We have to innovate: most of the technologies that will dominate the energy world of the 2050's have still to be invented or developed. This is why the Energy Union should step up Europe's efforts in developing strategic energy and climate technologies with a focus on a few key topics and sufficient funding. Energy efficiency, energy storage, smart grids and clean mobility are the areas in which a massive push on R&D would be a no regret move. Furthermore, we have to think all sectors, namely electricity, heat and transport together and connect them in a smart way, taking advantage of the possibilities of digitalisation. To increase the impact of support, national research and innovation agencies should jointly elaborate their funding programmes, merge available funds at European level, thereby spreading best practices in terms of innovative financing, and develop early on common technical standards to allow for the emergence of strong European industrial players for the energy transition.

Thirdly, the robustness of Europe's energy policy in the longer term depends on its integration with Europe's broader policy goals

If energy policy has been a controversial issue for such a long time, this is also due to it being linked to and entangled with so many other policy fields, from transport policy to fiscal, social, trade, economic or foreign policy. The Energy Union will only succeed if it manages to take a holistic approach and reconcile the various policy objectives.

To increase energy security, no Member State should be left entirely dependent on one single supplier. The necessary infrastructure should be implemented to make sure all Member States can diversify their supply portfolio and to prevent abuses from dominant suppliers. European funds available for energy networks should be clearly prioritised towards such projects.

Integration is also needed with Europe's climate policy instruments. While the European emissions trading scheme (EU ETS) needs to be strengthened and extended, the sectors not subject to EU ETS (e.g. buildings, agriculture, transport) should receive a price signal through a European-wide carbon tax that would prevent the current market distortions created by the existence of different national taxation schemes.

Clean mobility is a central piece of the energy system we are aiming for. This is why the Energy Union should dedicate significant means to this objective, beyond research & development. The EU should develop a network of European transnational green mobility corridors and support their equipment with charging stations for electric and hydrogen vehicles.

Europe should finally integrate its energy policy objectives with economic competitiveness and industrial policy objectives, making sure that the energy transition leads neither to burdening the competitiveness of energy-intensive industries that operate in global markets, nor to energy cost dumping for certain privileged sectors between European countries. A more comprehensive approach is needed: rather than focusing exclusively on harmonised wholesale market prices, a truly European energy policy should strive to harmonise the overall cost of energy, notably for energy-intensive consumers across the Union, by considering wholesale prices, but also network costs and taxes. This should start with renewed efforts to harmonize energy-related taxes, tax exemptions and state aid.

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1 - EUROPE IS IN A CRISIS – SO IS EUROPE'S ENERGY POLICY

The European project is facing one of its deepest crises in its 60-year history. Since 2008, the economic and financial crisis has been weakening Member State economies. The threat of political disintegration is real if Greece were to be forced out of the Eurozone in the coming months or if the United Kingdom were to leave the European Union as a result of the upcoming referendum. The “Barroso decade” has seen no major progress, as the internal market logic launched in the 1990s lost its initial momentum of bringing Europe's nations closer together. Faced with new challenges such as terrorism, mass migration and mass unemployment, Member States seem unable to come up with an

ambitious approach that would give back to “Brussels” some of the credibility it has lost among the European people.

The situation in which Europe’s energy policy finds itself today could be described as a crisis, too. Started about 30 years ago, the so-called internal energy market has run out of steam. Launched with the idea that liberalisation and free markets would increase competitiveness and reduce energy prices, the internal market agenda has suffered as much from national opposition tactics as from its unsuitability to tackle the other challenges of energy policy: securing energy supplies, and building an integrated energy system that effectively as well as substantially reduces CO2 emissions. This has led to increasing doubt about the market’s ability to deliver sufficient investments, which are much needed to achieve Europe’s energy and climate objectives.

Moreover, new technologies – from renewable energies and hydraulic fracturing for unconventional fossil fuels to new storage capacities, energy management services and decentralised solutions – are acting as game-changers for the European energy system with multiple consequences. Traditional market players are confronted with new market dynamics and higher competition. Both incumbents and new market players suffer from the lack of stable regulatory frameworks, responding to market uncertainty with investment inertia.

Finally, tensions and conflicts close to Europe’s borders (Eastern Ukraine, Syria, Iraq, and Libya, Algeria etc.) and the decline in oil prices have reminded Europe of the global dimension of energy policy and of our dependency from external fossil fuel suppliers for decades to come.

2 - ENERGY – AND THE ENERGY TRANSITION IN PARTICULAR – COULD AND SHOULD GIVE NEW IMPETUS TO THE EUROPEAN DREAM

Since the establishment of the European Coal and Steel Community in 1951, energy has been one of the backbones of the European project. An ambitious “grand projet” in the field of energy could give new momentum to European integration.

First, the physics of existing electricity systems – namely the fact that supply and demand have to be balanced at all times– make integration of energy systems across the continent a foremost necessity. This is why national networks have developed across borders for many decades already. For most Member States autarky would be much more expensive – and it would probably be impossible to achieve the same security standards, at least for smaller Member States. Due to the fact that more intermittent renewable energy resources are phased into the grid, further interconnections, grid development efforts and storage capacities are likely to be needed to balance out electricity production and consumption. This should be of mutual interest to the Member States, even if infrastructure projects always need to be assessed based on a case-by-case cost-benefit analysis. The challenge today is to develop a European grid that is flexible and smart enough to react to growing volatility and to level out excess supply.

Second, as a basic good in everyone’s life, energy has a strong social component. As most of us have an electricity or gas bill to pay, a car to fuel with petrol or one or several consumer goods or personal devices running on electricity, people feel concerned by the challenges faced by today’s

energy systems: the need to make energy more sustainable while keeping its access affordable for all, including the poor. Today's national energy policies however lack cost-effectiveness (from a macro-economic perspective) and fairness when it comes to sharing these costs among consumers. As our awareness increases concerning the impact our energy choices have on both the climate and the environment, more and more people from all European countries understand that the energy transition is not just a short-term policy fad, but a fundamental change with impacts on everyone's choices and behaviour. As such, the energy transition can be a formidable, unifying political project for the whole continent and a unique catalyser for investment, jobs and growth.

Third, the geopolitical nature of energy makes solidarity and coordinated energy diplomacy beneficial. The EU, with its scarce and declining primary resources, is the largest fossil fuel importing region in the world, and some Member States are heavily dependent on one single gas supplier, leading to increasing security concerns especially with respect to Russian gas imports. It is therefore of vital interest for EU members, in particular in Central and Eastern Europe, when discussing contracts with their suppliers, to know that they can rely on mechanisms of joint solidarity. Furthermore, the technological changes underway in the energy field are global: While Europe has been a frontrunner for the development of renewable energy and energy efficiency technologies between 2000 and 2010, the biggest markets for solar power plants or electric vehicles today are in the USA or China. If Europe wants to remain a global leader in clean technologies, it needs the critical mass of its Union to drive the agenda on international standards, to pool resources for research and innovation and to have sufficient market size to attract the best industry players. Finally, the Union has a vital role to play in ensuring the competitiveness of its economy by setting world class production and energy efficiency standards and ensuring that the decoupling of economic growth and energy consumption remains compatible with a strong industrial base.

So energy policy, one could think, is an obvious candidate to further Europe's integration, as it is important, concrete and inspiring for Europe's citizens. But reality is more complicated.

3 - A LONG-AWAITED IMPETUS, THE ENERGY UNION PROJECT STARTED WITH GREAT HOPES, BUT THE COMMISSION'S CONCRETE PROPOSALS LACK AMBITION

The idea of some new European energy initiative has been maturing in Brussels' policy circles for several years. In 2005/2006, the Ukrainian gas crisis triggered the idea of energy being a key dimension of a common European foreign policy. In 2010, Jacques Delors and Jerzy Buzek threw their political weight behind the concept of a "European Energy Community"¹, which however remained only an issue for Brussels' think tanks and other Europhile circles. Things changed when the now president of the European Council, Donald Tusk, in the wake of Russia's annexation of Crimea, called for an "energy union" to break Russia's energy "stranglehold" on Europe in April 2014². Though initially focussed on security of supply, the idea of a much broader union finally reached the highest political level: the "accidental child" – as a Council insider put it – was born.

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As a candidate for the Commission Presidency, Jean-Claude Juncker adopted this initiative. Understandably indeed, energy security concerns alone were not enough to unify 28 Member States around the idea. So President Juncker identified five dimensions – energy security, solidarity and trust; full integration of the European energy market; energy efficiency as a means to moderate demand; decarbonisation of the economy; research, innovation, and competitiveness – which would take into account the concerns of all Member States. These were developed in a Framework Strategy published on 25 February 2015 which set out 15 action points³.

On the one hand, one could argue that everything is in there: implementing existing energy legislation, in particular the third internal energy market package; diversifying EU gas supplies, improving resilience in case of supply disruptions; making intergovernmental agreements more transparent; promoting trans-European energy infrastructure; rethinking the EU's electricity market design; strengthening the role of European regulators and network operators as well as regional cooperation initiatives; increasing transparency on energy prices; advancing towards more energy efficiency, notably in buildings; speeding up decarbonisation in transports; achieving the EU's GHG emission reduction and renewable energy objectives for 2030; developing a stronger European research and innovation agenda for energy and transport; speaking with one voice to the outside world on energy and climate issues.

On the other hand, one could say that the very fact that everything is in there means that there is no real diagnosis on the most pressing issues, insufficient hierarchisation, and that there is – more worryingly – nothing new to be found among the Commission's proposals. By simply stipulating activities that are in fact already existing policies or measures, no added value, no new impetus is created. The Commission services in DG energy, DG climate and DG transport wrote what they are already doing and what they are planning to do going forward: ensuring full implementation of the third internal energy market package, supporting the implementation of major infrastructure projects, proposing new targets for 2030 etc. In other words, these proposals would have come anyways. Insiders will tell you that this is normal: “We don't want the German Energy Union, we don't want it “à la française”, we don't want a Polish or British Energy Union either, so this is what you get...”.

However, this “business as usual” approach to the Energy Union makes it impossible to honestly take stock of where European energy policy has really succeeded or failed so far. We need to identify the areas Europe should focus its attention on in the coming years to really achieve progress rather than muddling through as before, and we need – more importantly – to implement concrete policies which appeal to all European citizens and should be actively promoted at home by European politicians. Such a more ambitious approach to the Energy Union would imply admitting that a key element of Europe's energy policy – i.e. the internal market policy – is in the doldrums and that the approach which prevailed so far cannot be the way forward. The lion's share of political attention and administrative effort has gone into building a well-functioning European electricity and gas market. While gas market functioning has improved – though with persistent differences between Eastern and Western Europe –, electricity markets face fundamental challenges.

³ http://ec.europa.eu/priorities/energy-union/docs/energyunion_en.pdf

The main challenge derives from the replacement of formerly centralised systems of energy production and distribution by increasing shares of decentralised renewable energy systems. Decreasing demand in the context of the economic crisis, prices favourable to coal rather than gas power plants and the increase of renewable capacities have all led to overcapacities in conventional base load power generation. At the same time, more flexible solutions (storage, demand-side response, investments in grid and back-up capacities to cover demand peaks) are needed to tackle the higher volatility of power production. We are moving away from a fossil fuel based system whose costs are mainly operating costs, towards a system based on more volatile renewable capacities, whose costs are mainly capital costs. Short-term markets provide adequate signals for operational decisions, but they do not trigger adequate long-term investments (“missing money problem”). Policy makers at national and European level have been taken by surprise by the combined effects of their own policies for more market and competition on the one hand and more renewables on the other hand. Struggling with the task to manage the energy transition, each Member State thinks that it alone can best decide how to face the challenges. Arguments that current problems are merely the result of renewable energy subsidies fall short of acknowledging that the actual shortcomings of the electricity market design are at the core of the missing money problem.

Taken hostage by differing national responses to these Union-wide problems, the European Commission has been unable so far to come up with a timely, appropriate energy policy response. Instead, it has used its powers in the field of competition policy to rein in or harmonise renewables support, capacity mechanisms and similar schemes that slowly deconstruct the internal market well before its completion. More recently, the Commission has put out a consultation on the electricity market design, but its content appears close to what already exists.

All this is an insufficient technocratic answer to what are essentially questions of political choice: What energy future do we want for Europe as a whole? How much trust Member States have to build among each other to integrate their national energy systems into a European system that is both efficient and sustainable? What should be the balance between national and European prerogatives to enhance a common energy policy? And how will the necessary investments for this be financed, based on which rules for sharing costs and benefits?

4 - A MORE AMBITIOUS ENERGY UNION IS POSSIBLE.

The Council of Energy Ministers, in its 8 June 2015 conclusions, recognised that “the EU institutions and Member States need to take work forward on building an Energy Union” – in other words: there is still a lot to do. The Energy Council also tasked the European Commission to come up with more concrete proposals on the governance of the Energy Union, which the February communication mentioned only in very vague terms. First promising elements can be found in a discussion paper on governance that was prepared for a meeting of directors general for energy and climate on 15 July 2015. It calls for better monitoring of national energy policies, integrated energy and climate plans for each Member State with clear projections and closer regional cooperation, with a view to develop a new iterative planning process. Vice-president Šefčovič has been touring European capitals over the past weeks to collect ideas on how to put some flesh on the Energy Union bones. And the Council of Energy Ministers will meet again on 26 November 2015 to discuss the topic. The Commission should begin to deliver on these issues when it presents its legislative proposals announced for 2016.

We believe that the Energy Union can be a success if it builds on a set of guiding principles and ambitious policy proposals.

Firstly, the Union has to be based on a transparent governance structure with a clear division of competencies

Energy has so far been a shared competence between the EU and Member States. Although in 2009 the Treaty of Lisbon introduced for the first time a specific legal basis for energy policy in the founding treaties of the EU⁴, Member States alone remain responsible of their energy mix choices. As a result, new tensions have arisen at the heart of European energy policy.

This makes it all the more crucial to close the gap between European and national policy debates and politics, to ensure national political orientations are as coordinated as possible and together shape a coherent European energy system.

National lawmakers have their say on key aspects of energy policy such as the energy mix or renewable energy support schemes, and they make the link with citizens in each Member State. A renewed and strengthened governance framework should thus make sure members of national Parliaments are on board when European energy policy decisions are taken.

This could be achieved by creating a “European Parliamentary Platform on Energy”, which would bring together representatives from the committees in charge of energy in each of the 28 national Parliaments and the European Parliament, to discuss the future of energy policy in Europe. Such a platform could enable the involved groups to engage in a dialogue with civil society actors and thereby to progressively harmonise their views on the further development of the Energy Union. This body could also create spaces for enhanced cooperation to discuss regional policy issues affecting only a subgroup of Member States. Furthermore, a periodic and structured consultation process with EU institutions would allow a strengthening of the parliamentary interests in European energy policy.

Secondly, an energy system reform is necessary to achieve the Union’s long-term energy policy goals

Pivotal to the transformation of energy production and consumption is joint planning, a market design reform, a stable framework for investment and network development as well as clear priorities for research, development and innovation policies.

Member States will not adopt the same strategies concerning the energy mix, but all share the same long-term goal of a more sustainable energy system. To get there, joint planning will be necessary. Member States should plan their respective investments in the energy system in a much more coordinated way, if they want to build an integrated European energy system that leaves space for the specific choices of each country. Current reporting obligations of Member States regarding energy policy (including the ones set up under the European Semester) need to be both streamlined and

⁴ Article 194 of the Treaty on the Functioning of the EU

strengthened, to become proper impact assessments: they should be sufficiently detailed to get a common understanding of the potential impacts of national energy policies on neighbouring countries, highlighting expected costs and benefits at both national and European levels.

The design of electricity markets will also have to change, both to allow further integration of short-term markets and to give the right long-term signals for new capacities Member States want to develop in renewables, storage and back-up facilities, while accelerating the phase-out of inefficient, carbon intensive base load overcapacities. Uncoordinated and complex national capacity mechanisms will not get us there. Rather, their existence reflects the flaws of the current market design. The European Commission should launch a real debate on this important issue, and ensure that all options are on the table, including the ones which would constitute a complete transformation of current market arrangements. One solution to be explored could be the creation of regulated or publicly controlled entities at regional level, which would allow investments following European interests in renewables, storage and back-up facilities to happen by entering into long-term contracts with generators, while ensuring competition between them. This in fact already applies today, albeit in an uncoordinated and thus costly way, through national renewable support schemes and capacity reserve mechanisms, which in many cases boil down to long-term contracts with regulated Transmission System Operators or publicly controlled entities. This new scheme would not replace short-term markets, which could still provide the appropriate incentives for operational decisions and dispatch. It would require an in-depth coordination at regional level to define the objectives of the regulated or publicly controlled buyers when it comes to entering into long-term contracts with investors in renewable, storage or back-up capacities, while being flexible enough to accommodate different national energy policy choices.

Whatever the strategies of each Member State are, grids will play an ever-increasing role in accommodating the evolving energy mix. Regional integration of network operators – through smart grids, joint control centres and integration into regional operators – will help speeding up the integration of national markets.

In order to meet our goals for 2050 one has to be aware that neither a linear extrapolation of the past is possible, nor can a step-by-step policy account for the need to completely change our mode of energy generation and consumption. We have to innovate: most of the technologies that will dominate the energy world of the 2050's have still to be invented or developed. This is why the Energy Union should step up Europe's efforts in developing strategic energy and climate technologies with a focus on a few key topics and sufficient funding. Energy efficiency, energy storage, smart grids and clean mobility are the areas in which a massive push on R&D would be a no regret move. Furthermore, we have to think all sectors, namely electricity, heat and transport together and connect them in a smart way, taking advantage of the possibilities of digitalisation. To increase the impact of support, national research and innovation agencies should jointly elaborate their funding programmes, merge available funds at European level, thereby spreading best practices in terms of innovative financing, and develop early on common technical standards to allow for the emergence of strong European industrial players for the energy transition.

Thirdly, the robustness of Europe's energy policy in the longer term depends on its integration with Europe's broader policy goals

If energy policy has been a controversial issue for such a long time, this is also due to it being linked to and entangled with so many other policy fields, from transport policy to fiscal, social, trade, economic or foreign policy. The Energy Union will only succeed if it manages to take a holistic approach and reconcile the various policy objectives.

To increase energy security, no Member State should be left entirely dependent on one single supplier. The necessary infrastructure should be implemented to make sure all Member States can diversify their supply portfolio and to prevent abuses from dominant suppliers. European funds available for energy networks should be clearly prioritised towards such projects.

Integration is also needed with Europe's climate policy instruments. While the European emissions trading scheme (EU ETS) needs to be strengthened and extended, the sectors not subject to EU ETS (e.g. buildings, agriculture, transport) should receive a price signal through a European-wide carbon tax that would prevent the current market distortions created by the existence of different national taxation schemes.

Clean mobility is a central piece of the energy system we are aiming for. This is why the Energy Union should dedicate significant means to this objective, beyond research & development. The EU should develop a network of European transnational green mobility corridors and support their equipment with charging stations for electric and hydrogen vehicles.

Europe should finally integrate its energy policy objectives with economic competitiveness and industrial policy objectives, making sure that the energy transition leads neither to burdening the competitiveness of energy-intensive industries that operate in global markets, nor to energy cost dumping for certain privileged sectors between European countries. A more comprehensive approach is needed: rather than focusing exclusively on harmonised wholesale market prices, a truly European energy policy should strive to harmonise the overall cost of energy, notably for energy-intensive consumers across the Union, by considering wholesale prices, but also network costs and taxes. This should start with renewed efforts to harmonize energy-related taxes, tax exemptions and state aid.

We believe a stronger European Energy Union is not only technically possible but also politically in reach. We call on European leaders to seize the chances such an ambitious Energy Union offers to get the EU out of its current political crisis and to give new momentum to Europe's integration.

NEW AND AMBITIOUS OR JUST MORE OF THE SAME ? THE ENERGY UNION AT A CROSSROADS

Christophe Schramm, former adviser to the French energy minister, Terra Nova, France

Antoine Guillou, energy and climate change coordinator, Terra Nova, France

Robert Schachtschneider, energy policy adviser, former assistant to MP Dirk Becker, former spokesperson for energy and economy, Social Democratic Party, Germany

Philipp Fink, policy officer for climate, energy, environmental and structural policies in the division for economic and social policies, Friedrich-Ebert-Stiftung, Germany

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Daniel Scholten, assistant professor, Faculty of Technology, Policy and Management, Delft University of Technology, Netherlands

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November 23rd, 2015

The following paper outlines the necessity of giving new momentum to a coherent and comprehensive European energy policy. We initially outline the status quo and the recent initiatives from the European Council and Commission before calling for a more ambitious Energy Union with clearly defined policy proposals for action.

« L'Europe se fera dans les crises. » (Jean Monnet)

1 - EUROPE IS IN A CRISIS – SO IS EUROPE'S ENERGY POLICY

The European project is facing one of its deepest crises in its 60-year history. Since 2008, the economic and financial crisis has been weakening Member State economies. The threat of political disintegration is real if Greece were to be forced out of the Eurozone in the coming months or if the United Kingdom were to leave the European Union as a result of the upcoming referendum. The “Barroso decade” has seen no major progress, as the internal market logic launched in the 1990s lost its initial momentum of bringing Europe's nations closer together. Faced with new challenges such as terrorism, mass migration and mass unemployment, Member States seem unable to come up with an

ambitious approach that would give back to “Brussels” some of the credibility it has lost among the European people.

The situation in which Europe’s energy policy finds itself today could be described as a crisis, too. Started about 30 years ago, the so-called internal energy market has run out of steam. Launched with the idea that liberalisation and free markets would increase competitiveness and reduce energy prices, the internal market agenda has suffered as much from national opposition tactics as from its unsuitability to tackle the other challenges of energy policy: securing energy supplies, and building an integrated energy system that effectively as well as substantially reduces CO2 emissions. This has led to increasing doubt about the market’s ability to deliver sufficient investments, which are much needed to achieve Europe’s energy and climate objectives.

Moreover, new technologies – from renewable energies and hydraulic fracturing for unconventional fossil fuels to new storage capacities, energy management services and decentralised solutions – are acting as game-changers for the European energy system with multiple consequences. Traditional market players are confronted with new market dynamics and higher competition. Both incumbents and new market players suffer from the lack of stable regulatory frameworks, responding to market uncertainty with investment inertia.

Finally, tensions and conflicts close to Europe’s borders (Eastern Ukraine, Syria, Iraq, and Libya, Algeria etc.) and the decline in oil prices have reminded Europe of the global dimension of energy policy and of our dependency from external fossil fuel suppliers for decades to come.

2 - ENERGY – AND THE ENERGY TRANSITION IN PARTICULAR – COULD AND SHOULD GIVE NEW IMPETUS TO THE EUROPEAN DREAM

Since the establishment of the European Coal and Steel Community in 1951, energy has been one of the backbones of the European project. An ambitious “grand projet” in the field of energy could give new momentum to European integration.

First, the physics of existing electricity systems – namely the fact that supply and demand have to be balanced at all times– make integration of energy systems across the continent a foremost necessity. This is why national networks have developed across borders for many decades already. For most Member States autarky would be much more expensive – and it would probably be impossible to achieve the same security standards, at least for smaller Member States. Due to the fact that more intermittent renewable energy resources are phased into the grid, further interconnections, grid development efforts and storage capacities are likely to be needed to balance out electricity production and consumption. This should be of mutual interest to the Member States, even if infrastructure projects always need to be assessed based on a case-by-case cost-benefit analysis. The challenge today is to develop a European grid that is flexible and smart enough to react to growing volatility and to level out excess supply.

Second, as a basic good in everyone’s life, energy has a strong social component. As most of us have an electricity or gas bill to pay, a car to fuel with petrol or one or several consumer goods or personal devices running on electricity, people feel concerned by the challenges faced by today’s

energy systems: the need to make energy more sustainable while keeping its access affordable for all, including the poor. Today's national energy policies however lack cost-effectiveness (from a macro-economic perspective) and fairness when it comes to sharing these costs among consumers. As our awareness increases concerning the impact our energy choices have on both the climate and the environment, more and more people from all European countries understand that the energy transition is not just a short-term policy fad, but a fundamental change with impacts on everyone's choices and behaviour. As such, the energy transition can be a formidable, unifying political project for the whole continent and a unique catalyser for investment, jobs and growth.

Third, the geopolitical nature of energy makes solidarity and coordinated energy diplomacy beneficial. The EU, with its scarce and declining primary resources, is the largest fossil fuel importing region in the world, and some Member States are heavily dependent on one single gas supplier, leading to increasing security concerns especially with respect to Russian gas imports. It is therefore of vital interest for EU members, in particular in Central and Eastern Europe, when discussing contracts with their suppliers, to know that they can rely on mechanisms of joint solidarity. Furthermore, the technological changes underway in the energy field are global: While Europe has been a frontrunner for the development of renewable energy and energy efficiency technologies between 2000 and 2010, the biggest markets for solar power plants or electric vehicles today are in the USA or China. If Europe wants to remain a global leader in clean technologies, it needs the critical mass of its Union to drive the agenda on international standards, to pool resources for research and innovation and to have sufficient market size to attract the best industry players. Finally, the Union has a vital role to play in ensuring the competitiveness of its economy by setting world class production and energy efficiency standards and ensuring that the decoupling of economic growth and energy consumption remains compatible with a strong industrial base.

So energy policy, one could think, is an obvious candidate to further Europe's integration, as it is important, concrete and inspiring for Europe's citizens. But reality is more complicated.

3 - A LONG-AWAITED IMPETUS, THE ENERGY UNION PROJECT STARTED WITH GREAT HOPES, BUT THE COMMISSION'S CONCRETE PROPOSALS LACK AMBITION

The idea of some new European energy initiative has been maturing in Brussels' policy circles for several years. In 2005/2006, the Ukrainian gas crisis triggered the idea of energy being a key dimension of a common European foreign policy. In 2010, Jacques Delors and Jerzy Buzek threw their political weight behind the concept of a "European Energy Community"¹, which however remained only an issue for Brussels' think tanks and other Europhile circles. Things changed when the now president of the European Council, Donald Tusk, in the wake of Russia's annexation of Crimea, called for an "energy union" to break Russia's energy "stranglehold" on Europe in April 2014². Though initially focussed on security of supply, the idea of a much broader union finally reached the highest political level: the "accidental child" – as a Council insider put it – was born.

¹ <http://www.delorsinstitute.eu/011-2245--Towards-a-new-European-Energy-Community-Joint-Declaration-by-Jerzy-Buzek-and-Jacques-Delors.html>

² <http://on.ft.com/1ffQ7na>

As a candidate for the Commission Presidency, Jean-Claude Juncker adopted this initiative. Understandably indeed, energy security concerns alone were not enough to unify 28 Member States around the idea. So President Juncker identified five dimensions – energy security, solidarity and trust; full integration of the European energy market; energy efficiency as a means to moderate demand; decarbonisation of the economy; research, innovation, and competitiveness – which would take into account the concerns of all Member States. These were developed in a Framework Strategy published on 25 February 2015 which set out 15 action points³.

On the one hand, one could argue that everything is in there: implementing existing energy legislation, in particular the third internal energy market package; diversifying EU gas supplies, improving resilience in case of supply disruptions; making intergovernmental agreements more transparent; promoting trans-European energy infrastructure; rethinking the EU's electricity market design; strengthening the role of European regulators and network operators as well as regional cooperation initiatives; increasing transparency on energy prices; advancing towards more energy efficiency, notably in buildings; speeding up decarbonisation in transports; achieving the EU's GHG emission reduction and renewable energy objectives for 2030; developing a stronger European research and innovation agenda for energy and transport; speaking with one voice to the outside world on energy and climate issues.

On the other hand, one could say that the very fact that everything is in there means that there is no real diagnosis on the most pressing issues, insufficient hierarchisation, and that there is – more worryingly – nothing new to be found among the Commission's proposals. By simply stipulating activities that are in fact already existing policies or measures, no added value, no new impetus is created. The Commission services in DG energy, DG climate and DG transport wrote what they are already doing and what they are planning to do going forward: ensuring full implementation of the third internal energy market package, supporting the implementation of major infrastructure projects, proposing new targets for 2030 etc. In other words, these proposals would have come anyways. Insiders will tell you that this is normal: “We don't want the German Energy Union, we don't want it “à la française”, we don't want a Polish or British Energy Union either, so this is what you get...”.

However, this “business as usual” approach to the Energy Union makes it impossible to honestly take stock of where European energy policy has really succeeded or failed so far. We need to identify the areas Europe should focus its attention on in the coming years to really achieve progress rather than muddling through as before, and we need – more importantly – to implement concrete policies which appeal to all European citizens and should be actively promoted at home by European politicians. Such a more ambitious approach to the Energy Union would imply admitting that a key element of Europe's energy policy – i.e. the internal market policy – is in the doldrums and that the approach which prevailed so far cannot be the way forward. The lion's share of political attention and administrative effort has gone into building a well-functioning European electricity and gas market. While gas market functioning has improved – though with persistent differences between Eastern and Western Europe –, electricity markets face fundamental challenges.

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The main challenge derives from the replacement of formerly centralised systems of energy production and distribution by increasing shares of decentralised renewable energy systems. Decreasing demand in the context of the economic crisis, prices favourable to coal rather than gas power plants and the increase of renewable capacities have all led to overcapacities in conventional base load power generation. At the same time, more flexible solutions (storage, demand-side response, investments in grid and back-up capacities to cover demand peaks) are needed to tackle the higher volatility of power production. We are moving away from a fossil fuel based system whose costs are mainly operating costs, towards a system based on more volatile renewable capacities, whose costs are mainly capital costs. Short-term markets provide adequate signals for operational decisions, but they do not trigger adequate long-term investments (“missing money problem”). Policy makers at national and European level have been taken by surprise by the combined effects of their own policies for more market and competition on the one hand and more renewables on the other hand. Struggling with the task to manage the energy transition, each Member State thinks that it alone can best decide how to face the challenges. Arguments that current problems are merely the result of renewable energy subsidies fall short of acknowledging that the actual shortcomings of the electricity market design are at the core of the missing money problem.

Taken hostage by differing national responses to these Union-wide problems, the European Commission has been unable so far to come up with a timely, appropriate energy policy response. Instead, it has used its powers in the field of competition policy to rein in or harmonise renewables support, capacity mechanisms and similar schemes that slowly deconstruct the internal market well before its completion. More recently, the Commission has put out a consultation on the electricity market design, but its content appears close to what already exists.

All this is an insufficient technocratic answer to what are essentially questions of political choice: What energy future do we want for Europe as a whole? How much trust Member States have to build among each other to integrate their national energy systems into a European system that is both efficient and sustainable? What should be the balance between national and European prerogatives to enhance a common energy policy? And how will the necessary investments for this be financed, based on which rules for sharing costs and benefits?

4 - A MORE AMBITIOUS ENERGY UNION IS POSSIBLE.

The Council of Energy Ministers, in its 8 June 2015 conclusions, recognised that “the EU institutions and Member States need to take work forward on building an Energy Union” – in other words: there is still a lot to do. The Energy Council also tasked the European Commission to come up with more concrete proposals on the governance of the Energy Union, which the February communication mentioned only in very vague terms. First promising elements can be found in a discussion paper on governance that was prepared for a meeting of directors general for energy and climate on 15 July 2015. It calls for better monitoring of national energy policies, integrated energy and climate plans for each Member State with clear projections and closer regional cooperation, with a view to develop a new iterative planning process. Vice-president Šefčovič has been touring European capitals over the past weeks to collect ideas on how to put some flesh on the Energy Union bones. And the Council of Energy Ministers will meet again on 26 November 2015 to discuss the topic. The Commission should begin to deliver on these issues when it presents its legislative proposals announced for 2016.

We believe that the Energy Union can be a success if it builds on a set of guiding principles and ambitious policy proposals.

Firstly, the Union has to be based on a transparent governance structure with a clear division of competencies

Energy has so far been a shared competence between the EU and Member States. Although in 2009 the Treaty of Lisbon introduced for the first time a specific legal basis for energy policy in the founding treaties of the EU⁴, Member States alone remain responsible of their energy mix choices. As a result, new tensions have arisen at the heart of European energy policy.

This makes it all the more crucial to close the gap between European and national policy debates and politics, to ensure national political orientations are as coordinated as possible and together shape a coherent European energy system.

National lawmakers have their say on key aspects of energy policy such as the energy mix or renewable energy support schemes, and they make the link with citizens in each Member State. A renewed and strengthened governance framework should thus make sure members of national Parliaments are on board when European energy policy decisions are taken.

This could be achieved by creating a “European Parliamentary Platform on Energy”, which would bring together representatives from the committees in charge of energy in each of the 28 national Parliaments and the European Parliament, to discuss the future of energy policy in Europe. Such a platform could enable the involved groups to engage in a dialogue with civil society actors and thereby to progressively harmonise their views on the further development of the Energy Union. This body could also create spaces for enhanced cooperation to discuss regional policy issues affecting only a subgroup of Member States. Furthermore, a periodic and structured consultation process with EU institutions would allow a strengthening of the parliamentary interests in European energy policy.

Secondly, an energy system reform is necessary to achieve the Union’s long-term energy policy goals

Pivotal to the transformation of energy production and consumption is joint planning, a market design reform, a stable framework for investment and network development as well as clear priorities for research, development and innovation policies.

Member States will not adopt the same strategies concerning the energy mix, but all share the same long-term goal of a more sustainable energy system. To get there, joint planning will be necessary. Member States should plan their respective investments in the energy system in a much more coordinated way, if they want to build an integrated European energy system that leaves space for the specific choices of each country. Current reporting obligations of Member States regarding energy policy (including the ones set up under the European Semester) need to be both streamlined and

⁴ Article 194 of the Treaty on the Functioning of the EU

strengthened, to become proper impact assessments: they should be sufficiently detailed to get a common understanding of the potential impacts of national energy policies on neighbouring countries, highlighting expected costs and benefits at both national and European levels.

The design of electricity markets will also have to change, both to allow further integration of short-term markets and to give the right long-term signals for new capacities Member States want to develop in renewables, storage and back-up facilities, while accelerating the phase-out of inefficient, carbon intensive base load overcapacities. Uncoordinated and complex national capacity mechanisms will not get us there. Rather, their existence reflects the flaws of the current market design. The European Commission should launch a real debate on this important issue, and ensure that all options are on the table, including the ones which would constitute a complete transformation of current market arrangements. One solution to be explored could be the creation of regulated or publicly controlled entities at regional level, which would allow investments following European interests in renewables, storage and back-up facilities to happen by entering into long-term contracts with generators, while ensuring competition between them. This in fact already applies today, albeit in an uncoordinated and thus costly way, through national renewable support schemes and capacity reserve mechanisms, which in many cases boil down to long-term contracts with regulated Transmission System Operators or publicly controlled entities. This new scheme would not replace short-term markets, which could still provide the appropriate incentives for operational decisions and dispatch. It would require an in-depth coordination at regional level to define the objectives of the regulated or publicly controlled buyers when it comes to entering into long-term contracts with investors in renewable, storage or back-up capacities, while being flexible enough to accommodate different national energy policy choices.

Whatever the strategies of each Member State are, grids will play an ever-increasing role in accommodating the evolving energy mix. Regional integration of network operators – through smart grids, joint control centres and integration into regional operators – will help speeding up the integration of national markets.

In order to meet our goals for 2050 one has to be aware that neither a linear extrapolation of the past is possible, nor can a step-by-step policy account for the need to completely change our mode of energy generation and consumption. We have to innovate: most of the technologies that will dominate the energy world of the 2050's have still to be invented or developed. This is why the Energy Union should step up Europe's efforts in developing strategic energy and climate technologies with a focus on a few key topics and sufficient funding. Energy efficiency, energy storage, smart grids and clean mobility are the areas in which a massive push on R&D would be a no regret move. Furthermore, we have to think all sectors, namely electricity, heat and transport together and connect them in a smart way, taking advantage of the possibilities of digitalisation. To increase the impact of support, national research and innovation agencies should jointly elaborate their funding programmes, merge available funds at European level, thereby spreading best practices in terms of innovative financing, and develop early on common technical standards to allow for the emergence of strong European industrial players for the energy transition.

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If energy policy has been a controversial issue for such a long time, this is also due to it being linked to and entangled with so many other policy fields, from transport policy to fiscal, social, trade, economic or foreign policy. The Energy Union will only succeed if it manages to take a holistic approach and reconcile the various policy objectives.

To increase energy security, no Member State should be left entirely dependent on one single supplier. The necessary infrastructure should be implemented to make sure all Member States can diversify their supply portfolio and to prevent abuses from dominant suppliers. European funds available for energy networks should be clearly prioritised towards such projects.

Integration is also needed with Europe's climate policy instruments. While the European emissions trading scheme (EU ETS) needs to be strengthened and extended, the sectors not subject to EU ETS (e.g. buildings, agriculture, transport) should receive a price signal through a European-wide carbon tax that would prevent the current market distortions created by the existence of different national taxation schemes.

Clean mobility is a central piece of the energy system we are aiming for. This is why the Energy Union should dedicate significant means to this objective, beyond research & development. The EU should develop a network of European transnational green mobility corridors and support their equipment with charging stations for electric and hydrogen vehicles.

Europe should finally integrate its energy policy objectives with economic competitiveness and industrial policy objectives, making sure that the energy transition leads neither to burdening the competitiveness of energy-intensive industries that operate in global markets, nor to energy cost dumping for certain privileged sectors between European countries. A more comprehensive approach is needed: rather than focusing exclusively on harmonised wholesale market prices, a truly European energy policy should strive to harmonise the overall cost of energy, notably for energy-intensive consumers across the Union, by considering wholesale prices, but also network costs and taxes. This should start with renewed efforts to harmonize energy-related taxes, tax exemptions and state aid.

We believe a stronger European Energy Union is not only technically possible but also politically in reach. We call on European leaders to seize the chances such an ambitious Energy Union offers to get the EU out of its current political crisis and to give new momentum to Europe's integration.