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## The EU '2020 Energy Initiative': The post-Lisbon pattern of change in EU energy policy

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In November 2010 the European Commission has eventually issued its 'Energy 2020' communication<sup>1</sup>, a strategic document within the broader framework of the 'Europe 2020. A strategy for smart, sustainable and inclusive growth' programme<sup>2</sup>. The Energy 2020 strategy—or the 'Energy Initiative'—lays the groundwork for a new approach to energy policy in the European Union (EU). Within the framework of Europe 2020, the Energy Initiative collects the results of what had been already achieved through the 2000-2010 Lisbon Strategy, identifies the shortcomings of past interventions<sup>3</sup>, and introduces new ambitious objectives for the EU's common energy policy actions in the coming years.

### The context: an unsustainable energy landscape?

In order to achieve structural objectives of competitive and lasting growth, the EU has long identified energy sustainability as one of the short-term "greatest tests which Europe has to face"<sup>4</sup>. In order to succeed, the Member States and EU institutions have developed an ambitious plan to cut energy emissions, increase renewable sources' quotas in the EU's energy batch, and increase energy efficiency. All by 20%, all by

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2020. The task is not easy, since the present scenario of energy production and consumption in Europe is anything but reassuring.

Gross energy consumption in 2007 still depended for almost 80% upon fossil (oil and natural gas) and solid (e.g., coal) fuels, while consumption from renewable sources accounted for just 7.8% of the total<sup>5</sup>. Moreover, in the light of recent events, the contribution of nuclear energy to the overall EU energy production endowment (13.4%) remains at least as controversial as that of traditional sources. The changing ratio between fossil and renewable sources is not only an environmental concern. The rapid depletion of fossil fuels and the increasing dependence upon specific (and thereby powerful) foreign producers<sup>6</sup> elicits a security-of-supply issue, making traditional sources all the more unreliable in the longer run.

As regards security of energy supply, policy action was urgently needed to face an increasingly unsustainable import dependence—in particular as far as fossil and solid fuels were concerned. In 2007, approximately 83% of consumed oil had been imported. Nearly 60% of the overall natural gas consumption and 41% of solid fuels came from imported sources. Not only does this trend make the EU's and its Member States' economies vulnerable to sudden disruptions and crises (as the Russia-Ukraine 'gas wars' in 2006 and 2009 have recently shown), but it also seriously affects the international stature and leverage of the EU as a significant interlocutor in global energy governance and fora.

As in several earlier communications<sup>7</sup>, finally, the European Commission has emphasised the importance of a new, 'smarter' concept of energy sustainability. This builds on more efficient end-user consumption as a way to reduce energy intensity and dependence, to increase energy diversification, and to meet some of the most pressing environmental concerns.

A disquieting international conjuncture, the effects of lasting economic crisis and uncertainty, and the growing awareness of the challenges threatening the environment and the prospects for a sustainable life in industrialised societies have all prompted a reaction from EU institutions and Member States. Inevitably, this needs to be quick, consistent, and feasible. On the grounds of the latest institutional developments of the Treaty of Lisbon, entered into force at the end of

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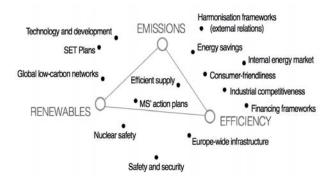
2009, the EU has taken on the effort of a common energy strategy for its future.

# The content: the 2020 goal line and five key priorities

The Energy Initiative starts where the Lisbon strategy stopped. In May 2007, the presidential conclusions of the Brussels European Council first set out the ambitious 20-20-20 objective for the EU's energy and climate change policies: a 20% reduction on CO<sub>2</sub> emissions, a 20% increase of energy efficiency, and a 20% quota of renewable sources in the EU's energy endowment to be achieved by 2020. The European Commission took on the challenge through its 'Energy and Climate Package'8 that came eventually into force in 2009. Only a few months later, however, the Commission did not hesitate to admit that the 2007 platform was "unlikely to achieve all the 2020 targets" and in general "wholly inadequate to the longer term challenges".

Accordingly, the Energy Initiative presents a wider array of short-term objectives, reform proposals, and policy priorities meant to strengthen the institutional basis of the 20-20-20 objectives. The document acknowledges five key priorities ranging over energy efficiency, the implementation of the internal energy market, and energy implications on the EU's external relations. While holding firm on the 2020 objectives, the Energy Initiative pictures a 'cloud' (see Figure 1) of strategic priorities for short- and medium-term action by EU institutions and Member States.

Figure 1. The 'cloud' of the Energy Initiative's objectives and priorities.



#### Priority 1: an energy-efficient Europe

Efficiency of consumption has now become a long-standing commitment of the EU, which has pro-

duced a number of leading documents and legislative efforts to meet the increasingly tight requirements of 'intelligent' consumption in an energy-craving society. The European Energy Efficiency Action Plan<sup>10</sup> (EEAP) was the first attempt to sort the EU's policy intervention on efficiency in an orderly fashion. The document and its annexes suggested tens of policy actions, priorities, and proposal. The European Commission has recently published a new 'Energy Efficiency Plan'<sup>11</sup> setting forth new guidelines for future policy options as well as presenting an assessment of previous legislative actions.

Energy savings have been a crucial instrument to foster consumption efficiency. Especially in buildings and transport, EU institutions have emphasised how a functioning internal market, updated infrastructures, and balanced investment in development and technology can improve performance and at the same time curb down costs, squanders, and dependence on imports. The Energy Initiative and the Energy Efficiency Plan have put forth a number of proposal on eco-design, energy efficiency schemes, and new efficiency standards to be applied to European industries as well as to imports and third-party relations with non-EU partners. The Initiative, moreover, builds on the EEAP framework's achievements over the last five years: energy consumption has not meaningfully increased in the 2005-2008 period while energy intensity<sup>12</sup> all over the EU-27 area has been steadily decreasing.

Industrial performance remains in the spotlight. The Energy Initiative and the efficiency plan include several guidelines for both large companies and small and medium sized enterprises (SMEs) in the manufacturing sector. Mandatory "regular energy audits" as well as competitive best-practice policies will be implemented to secure benchmarking and compliance. Besides this 'negative' performance control, the EU is trying to develop 'positive' measures that create incentives for an efficient energy economy, that is, new business opportunities in cleaner and more sustainable energy to spread Europe-wide.

Energy efficiency also has strong connections with radical innovations in energy supply. The EEAP, the Energy Initiative, and the new Energy Efficiency Plan are repleted with references to a more efficient and sustainable supply. This has several diverse implications. The EU has increasingly pushed for the diffusion of renewable sources of energy and their techno-

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logical innovation. The new strategic documents have explicitly set out that the 'renewables endowment' of the EU is poor and obsolescent. The lack of truly intra-European cross-border infrastructure, together with the reliance on "large hydropower, onshore wind, biomass and first-generation biofuels" is hampering the achievement of the 2020 objectives on renewables 15. Although the 2009 Renewable Energy Directive 16 has framed these objectives into a binding legal instrument, to date implementation in the Member States has been poor, while national energy markets remain largely non-competitive and inward-looking.

#### Priority 2: a consistent internal energy market

A set of three basic issues is hindering the development of an efficient internal energy market within the EU—a pre-condition for a sustainable energy future for the continent: (a) harmonisation of market competitiveness rules within the Member States has been lacking; (b) technical and logistical infrastructure development has been inadequate; (c) available funding is insufficient to change this state of affairs.

The European Commission has undertaken a major legislative effort to tackle competition constraints by means of the 2009 'third legislative package' of liberalisation rules for the energy market. Moreover, the financial crisis has elicited a new wave of protectionist and nationally-framed intervention by Member States that certainly did not help implementation of EU norms. Finally, the EU has pushed for the harmonisation of highly-diverging national rules by increasing cooperation, dialogue, and exchange among national regulators and agencies. The Energy Regulators Group for Electricity and Gas (ERGEG) has met regularly since 2003, and the European Agency for the Cooperation of Energy Regulators (ACER) has taken up operations in Slovenia on March 3<sup>rd</sup>, 2011.

The inadequacy of the current financial instruments is all the more blatant when it comes to intra-European energy infrastructure. The EU has invested both economic and political resources in the trans-European energy networks (TEN-E), a broad project that covers pan-European infrastructure development and modernisation, alongside technological amelioration and supply diversification. Although several projects under the TEN-E umbrella have been successfully completed, the rate is still disappointing (9 projects of European interest out of 32). Moreover, a structural issue of lacking harmonisation and coordination among the Member States could not be solved over the years. Finally, a mere 155 million Euros was granted to fund TEN-E projects over the 2007-2013 period.

A small drop in the ocean of the "energy investments in the order of one trillion euros" <sup>17</sup> that the Commission considers as a condition for overcoming the barriers to an efficient energy market, the Energy Initiative and the efficiency plan have adopted a new approach to project financing, in the attempt to link post-crisis recovery policies with energy and climate change policies. A nearly 4 billion euros programme (European Energy Programme for Recovery, EEPR) has been initiated in the attempt to likewise stimulate private investments in the sector.

#### Priority 3: safer and secure energy

The framework of the 2020 Energy Initiative emphasises the 'role' of the final consumer. European citizens are at the same time urged to engage in a more responsible and efficient consumption and acknowledged as the legitimate recipients of "the best prices, the widest choice of suppliers and the best quality of service possible"18. On the one hand, EU institutions are promoting the development of consumer-friendlier technologies that may help end-users both reducing consumptions and spreading best practices, provided that a more efficient and transparent consumption entails a positive cascade of effects on waste, demand, and diversification. On the other hand, and most interestingly, the Energy Initiatives addresses a specific class of citizens, that is, energy workers. Policies for 'safer' energy can also increase awareness of working conditions in the sector and enhance the development of safer and more efficient technologies for extraction, production, and distribution.

#### Priority 4: a smarter and useful energy

The Energy Initiative also attempts to join energy and knowledge together. Priority 4 builds on the experience of the 2000-2010 Lisbon Strategy—i.e., making the EU "the most competitive and dynamic knowledge-based economy in the world" borrowing the basic principle that no real policy progress is achievable unless it is first triggered by a meaningful "technological shift". The knowledge-driven commitment of EU institutions revolves extensively around the lynchpin of the Strategic Energy

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Technology (SET) plans. The SET plans ambitiously aim to meet the target of a 20% drop in CO<sub>2</sub> emissions while boosting a cleaner-energy industry of green technology and infrastructures.

Moreover, the SET plans specifically address the shortcomings of the previous energy efficiency frameworks. Underdeveloped technologies—e.g., offshore wind power farms, solar power smart grids, second-generation fuels, and even hydrogen—are included in the guidelines. Finally, these knowledge-centred efforts in the Energy Initiative will absorb the largest financial resources of the strategy: initiatives for a gross amount of 10 billion Euros have already been set out in the strategic document.

## Priority 5: why a cohesive Europe cannot stay alone

Energy external relations of the EU are a controversial topic. The EU is at the same time a vulnerable player in the energy international arena and a model-exporter. The EU lacks a consistent voice in global energy negotiations, while it is also seen as an all-but-unique laboratory for comprehensive and state-of-the-art energy standards and legislation. No doubt, this paradox has hindered the development of an actual 'EU foreign energy policy'. Yet, the external implications of Europe's energy efficiency and supply remain a crucial topic for both policy-makers and academics.

The EU is import-dependent. For decades now, the twenty-seven Member States have simply consumed much more than they will ever possibly be able to produce. The EU is therefore bound to import. In exchange for its security of supply, the EU accepts the trade-off with dependence on external suppliers. As noted above, the EU's supply pattern is not reassuring: just two sources provide the EU with nearly half of its oil and three producers with over 80% of its natural gas supplies.

Diversification is therefore a crucial objective for the sustainable future of Europe's energy security. On the one hand, EU institutions have focussed their efforts on the diversification of supply: energy substitution (i.e., decreasing dependence from fossil fuels and combustibles, while increasing reliance on renewable sources) would theoretically trigger a positive loop by reducing dependence on external import, addressing environmental concerns, and boosting business and investment opportunities. On the other hand, EU institutions have somewhat neglected the possibility to

'diversify suppliers', that is, to give the EU such a strong common voice in external energy relations that it may be able to overcome import fragmentation among its Member States and gain bargaining power when dealing with external suppliers.

The case of EU-Russia relations is a telling example. The EU has lacked a degree of cohesion and strategic coordination that would have allowed it to avoid the consequences of the 'gas wars' between Russia and Ukraine in 2006 and 2009. When defining its institutional relationship with the EU over the last twenty years, the Russian Federation has overtly obstructed any binding agreements on energy, even though 46% of Russia's overall exports go to the EU, and energy products amount for nearly 80% of this share<sup>21</sup>. By privileging bilateral intergovernmental relations, Russia bypasses the EU as a single energy market player in order to fragment its weight at the negotiation table. Although the concept of EU-Russia interdependence, especially in the academia, is now given extensive credit<sup>22</sup>, in actuality—by transforming its main energy buyer and energy trade partner into an unsettled archipelago of divergent interests and jealousies-Russia has upset the balance of its relation with the EU largely in its own favour.

The Energy Initiative, however, attempts to improve the performance of the EU as a single, consistent energy player by enhancing its own role as a norm-exporter and standard-setter. The 2020 strategy supports the expansion of the successful model of the EU's internal market to the EU's greater geographic proximity. Existing institutional frameworks such as the European Neighbourhood Policy, the Energy Community, and the processes of stabilisation and accession should work as proxies, vehicles of the norms that structure and define the EU's energy market. A harmonised broader 'European' energy market that includes the EU as well as key producing partners and transit countries is a pre-condition for the development of new infrastructure, a drop in transaction and adaptation costs, and an upsurge in investments and opportunities within a significantly larger 'common energy market'.

The EU is also trying to use its know-how and expertise in technological development—hardly paired by any of its partners—to spread its own industrial, legal, and political standards worldwide. In the midst of an international conjuncture of economic crisis, climate change concerns, and unsustainable devel-

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opment patterns, the EU as a 'single player' is guiding a process of innovation on a global scale: the EU has cooperated with the G8 countries to establish an International Partnership on Energy Efficiency Cooperation (IPEEC); the European Commission owns a "right of scrutiny" on every nuclear energy agreement that EU Member States and third parties negotiate; the EU has supported and guided the establishment of the new International Renewable Energy Agency (IRENE) and the renovation of the International Energy Agency's (IEA) mandate. This strategy has not always been successful. The Energy Charter Treaty, a pioneering project of integration and harmonisation that the EU has supported since 1991, is still dragging itself in a political limbo that prevents it to be as effective an international energy policy platform as it was originally meant to be.

Crisis, however, can offer the EU new momentum and opportunities. The expansion of the 'green economy' and the growing sensitivity of global climate change issues can give EU institutions a new spring-board for global leadership. The EU has a valuable comparative advantage in greener technologies, policy-making know-how, and cultural awareness. The prospects of a low-carbon industrial society and sustainable productivity can be a 'new beginning' for the EU to speak with one powerful voice in global energy relations.

#### A 2020 commitment-expectations gap?

The Energy Initiative certainly sets out ambitious objectives that could not be achieved without a structural revision of the EU's instruments and powers. The energy market of the EU remains a fragmented reality, where a multiplicity of (often diverging) interests collide and disperse in a nebula of needs, demands, and egoisms. If differences in goals and objectives among Member States persist, it is likewise true that they have fewer incentives to commit. The Energy Initiative was thought to call for new action, a more responsible way of thinking of energy policy and energy security as a shared European concern.

The Energy Initiative rests, however, on solid policy bases. It builds on the legacy of the Lisbon Strategy for a more competitive knowledge-based economy in the EU and on the financial and political support of the broader 'Europe 2020' strategy to which EU institutions and Member States have committed for the next decade. But, even more importantly, the

Energy Initiative also builds on the developments of the Treaty of Lisbon. Entered into force in December 2009, the Treaty has given a new and stronger thrust to energy policy in Europe. The Lisbon Treaty has renovated the administrative and political machinery of the EU, especially through the Treaty on the Functioning of the European Union (TFEU).

The TFEU now explicitly lists energy as a "shared competence between the Union and its Member States"<sup>23</sup>, an attribution that was completely absent in the previous Treaty system. According to the new rules, moreover, Member States can legislate autonomously only in the absence of earlier EU norms on energy policy. This 'copernican revolution' is completed by the introduction of a Treaty title (XXI, Article 194 TFEU) specifically dedicated to energy. Article 194 broadens the EU's room for manoeuvre by scrapping the previous label of 'internal market' in favour of that of 'energy market'. This rule, consequently, allows the EU to take on new competencies on energy external relations.

What the EU really faces, ultimately, is a decade in which the opportunities may well outnumber the challenges. Surely, the EU will have to recover from a disastrous economic recession; it will have to heal an increasingly unsustainable industrialised society that can neither forgo its wealth nor keep growing in a disorderly and irresponsible way; it will have to overcome natural challenges such as resource depletion and climate change without causing more environmental harm; and it will have to focus on the longer-term welfare of the generations of European citizens yet to come.

The Energy Initiative is part of this process. It builds on past experiences and draws a viable future of efficient energy consumption, environmentally-concerned development and knowledge, and consistent presence in the global energy arena. Energy 2020 is a starting point. It is a call for solidarity among EU Member States and commitment to a new way of thinking about energy policy: once again the EU can be a first-mover towards a more sustainable future, and the Energy Initiative takes on the first step.

#### **Notes**

<sup>1</sup> 

<sup>&</sup>lt;sup>1</sup> European Commission (2010a). *Energy 2020. A strategy for competitive, sustainable and secure energy.* COM(2010) 639 final. Brussels, 10 November 2010.

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- <sup>2</sup> European Commission (2010b). Europe 2020. A strategy for smart, sustainable and inclusive growth. COM(2010) 2020 final. Brussels, 3 March 2010.
- <sup>3</sup> See for instance the previous EU-wide strategic commitment, European Commission (2006a). *A European strategy for sustainable, competitive and secure energy.* COM(2006) 105 final. Brussels, 8 March 2006
- <sup>4</sup> European Commission (2010a). Energy 2020, p. 2.
- <sup>5</sup> Data from DG Transport and Energy (2010). *EU Energy in Figures* 2010. Brussels, 26 January 2010.
- <sup>6</sup> In 2007, half of oil imports to the EU came from just two producers, i.e., Russia (34%) and Norway (15.5%). Russia also accounted for 40.8% of the overall natural gas imports to the EU-27. Together with Norway's (26.7%) and Algeria's (16.9%) quotas, as of 2007 a worrying 84.4% of natural gas imports came from just three producers—eliciting a serious concern for supply diversification.
- <sup>7</sup> European Commission, (2000). *Action Plan to improve energy efficiency in the European Community.* COM(2000) 247 final. Brussels, 26 April 2000; European Commission (2005). *Green paper on energy efficiency, or Doing more with less.* COM(2005) 265 final. Brussels: 22 June 2005; European Commission (2006). *Mobilising public and private finance towards global access to climate-friendly, affordable and secure energy services: The Global Energy Efficiency and Renewable Energy Fund.* COM(2006) 583 final. Brussels, 6 October 2006.
- $^8$  Together with the 'Effort Sharing Decision' (406/2009/EC), the 'package' also includes a batch of binding legislation: Directive 2009/28/EC on the promotion of renewable energy sources, Directive 2009/29/EC on emission trading schemes, and Directive 2009/31/EC on geological storage of carbon dioxide, i.e.,  $\text{CO}_2$  capture and storage (CSS).
- <sup>9</sup> European Commission (2010a). *Energy 2020*, p. 3.
- <sup>10</sup> European Commission (2006b). *Action Plan for energy efficiency: realising the potential.* COM(2006) 545 final. Brussels, 19 October 2006.
- <sup>11</sup> European Commission (2011). *Energy efficiency plan.* COM(2011) 109 final. Brussels, 8 March 2011.
- <sup>12</sup> The amount of energy needed to produce a unit of wealth, e.g., gross domestic product or industrial output.
- <sup>13</sup> European Commission (2011). Energy efficiency plan, p. 10.
- <sup>14</sup> European Commission (2010c). *Commission Staff Working Document. State of play in the EU energy policy.* SEC(2010) 1346 final. Brussels, 10 November 2010, p. 15.
- $^{15}$  The renewables' quota of total energy consumption in the EU has grown from 7.6% in 2001 to 9.8% in 2007 (+2.2.%). Proportionally, the share of renewable energy should grow up to 14.6% in 2020, far below the expected 20% objective.
- <sup>16</sup> Directive 2009/28/ÉC.
- <sup>17</sup> European Commission (2010a). *Energy 2020*, p. 2.
- <sup>18</sup> European Commission (2010c). *Commission Staff Working Document*, p. 9.
- <sup>19</sup> European Council (2000). Presidential Conclusions. Lisbon, 23-24 March 2000.
- <sup>20</sup> European Commission (2010a). *Energy 2020*, p. 14.
- <sup>21</sup> Data as of 2010, from DG Trade, *Russia. EU bilateral trade and trade with the world. Statistics.* Brussels, 17 March 2011, available online at <a href="http://trade.ec.europa.eu/doclib/docs/2006/september/tradoc\_113440.pd">http://trade.ec.europa.eu/doclib/docs/2006/september/tradoc\_113440.pd</a> f.
- <sup>22</sup> See for instance Dominique Finon and Catherine Locatelli (2008). *Russian and European gas interdependence: Could contractual trade channel geopolitics?*. Energy Policy, 36(1), p. 423-442.

<sup>23</sup> TFEU, Article 4.2.



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