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COMMISSION STAFF WORKING DOCUMENT

RESULTS OF THE PUBLIC CONSULTATION ON THE "STOCKTAKING DOCUMENT TOWARDS A NEW ENERGY STRATEGY FOR EUROPE 2011-2020"

Accompanying document to the


Energy 2020
A strategy for competitive, sustainable and secure energy
Executive Summary

On 7 May 2010, the Commission launched a public consultation on the future of energy strategy to 2020 based on the stock taking document "Towards a new Energy Strategy for Europe 2011-2020". The stock taking document analysed the progresses achieved in EU energy policy in the past few years, assessed shortcomings of exiting policies and proposed new initiatives to be implemented in the next decade.

The public consultation on the Stock Taking received some 250 contributions. This report summarise the responses. It is divided in three sections reflecting the three main chapters of the stocktaking document:

- The wide majority of the contributions supported the full implementation of agreed policies. They underlined that in developing a new strategy we were not starting from scratch and our starting point must be the full implementation of existing policies. Moreover, it was pointed out that proposals for new legislative initiatives will not be credible if existing measure have not been fully implemented.

- Respondents called for the full integration of the longer term perspective: there was a broad support to integrate our policies in a long term perspective and to set the energy strategy for 2020 in the context of a vision for the longer term. It was also suggested that, as our 2050 strategy goals will be achieved progressively, the 2020 strategy should have intermediate milestones and action plans at shorter intervals e.g. 3 years.

- A number of priority areas for the future energy were highlighted
  There was a broad agreement for promotion of technological development. The implementation of the SET Plan and related European Industrial Initiatives should be the core of EU's low carbon technology policy.
  There was also a common view on the need for a new approach for the EU infrastructure energy policy. The forthcoming Energy Infrastructure Package was seen as an opportunity to present a strategic analysis and proposals for the future EU energy network.
  While there was agreement on the need to decarbonise our energy system, a variety of views emerged on quantified targets and diverse views were expressed on the most efficient policy initiatives to decarbonise our energy system.
  The vast majority of the contributions supported strengthening the EU external energy policy as well as enhancing the coordination of Member State initiatives.
  With reference to citizen protection particular emphasis was given to public awareness. There were calls for a stronger social dimension in energy policy, spelt out in a specific chapter.

While responses to the stocktaking document, were heterogeneous and different stakeholders put emphasis on different policy initiatives, the overwhelming majority welcomed the document and was in favour of a more coordinated and proactive energy policy at EU level.
1 Introduction and background

European energy policy has been high on the EU agenda in the past few years. The European Commission adopted two Strategic Energy Reviews on January 2007 and October 2008 proposing a number of strategic initiatives for a new EU energy policy. Most of the proposals in the two Strategic Energy Reviews have been translated into community legislation. However, in the Commission's view, the growing challenges of energy security, climate change, the urge to recover economic growth, the urgency of stepping up efforts to deliver the 20-20-20 objectives for 2020 and the need to move to a more sustainable energy path call for a new European Energy Strategy.

On 7 May 2010, the Commission launched a public consultation on the stock taking document "Towards a new Energy Strategy for Europe 2011-2020". The stock taking document analysed the progress achieved in EU energy policy in the past few years, assessed shortcoming of exiting policies and proposed new initiatives to be implemented in the next decade (Energy 2020).

The public consultation1 on the Stock Taking received some 250 responses. This document provides an overview of these contributions.

Out of the 271 responses received, 8 were from Member States and some 20 from other administrations (third countries, regional and local bodies). Contributions were also received from energy regulators, industry and industry associations, academia, NGOs, various organisations and individual citizens.

Responses to the stocktaking document were heterogeneous and different stakeholders put emphasis on different policy initiatives, but the overwhelming majority welcomed the document and was in favour of a more coordinated and proactive energy policy at EU level.

The following sections summarise the views expressed under the three main chapters of the stocktaking document:

2.1 A strong focus on implementing agreed policies;

2.2 Full integration in the longer term perspective;

2.3 Priority areas for the future strategy:
- leadership in technological innovation,
- modern integrated grid,
- making progress towards a low-carbon energy system,
- a strong and coordinated external energy policy,
- protecting the EU citizens

2.1 A strong focus on implementing agreed policies

The wide majority of the contributions supported the full implementation of agreed policies. It was underlined that, in developing a new strategy, we were not starting with a blank canvas and our starting point must be the full implementation of existing policies. Moreover new legislation would not be credible if existing measure had not been fully implemented.

Strong support was expressed for early compliance with the requirement of the Regulation on security of gas supply\(^2\) and further integration of the internal energy market through full implementation of third package and the swift start of ACER\(^3\) and ENTSOs\(^4\). It was however indicated that it was premature to advocate for strengthening ACER and ENTSOs mandates before the full implementation of the third package.

While supporting the strengthening of a fully liberalised internal market, most of the contributions acknowledged that the internal market alone will not deliver all the objectives of our policies. As a consequence complementary policy initiatives would be needed to promote new and smarter energy infrastructures, research & innovation, deployment of low carbon technologies etc.

Some stakeholders expressed the view that before proposing new policy initiatives a detailed assessment was needed to learn from past initiatives.

2.2 Full integration in the longer term perspective

There was a broad support to integrate EU policies in a long term perspective and on the need to set the Energy 2020 in the context of a vision for the longer term.

A longer term perspective of EU energy policies would be an opportunity to move to a secure sustainable and competitive low carbon European economy. This move however should be done in a cost effective way identifying the most efficient pathways to the 2050 objectives of reduction in greenhouse gas emissions\(^5\).

Long term perspectives should not imply lack of flexibility and our policies should be adaptable to new global opportunities and challenges as for example the economic crisis, the impact of unconventional gas, new technology breakthrough etc... As regards as technological innovation we should not locked into a particular technology but rather facilitate the development of a basket of low carbon options.

As EU 2050 strategy goals will be achieved progressively, the 2020 strategy should foresee intermediate milestones and action plans on shorter intervals e.g. 3 years.

It would also be useful to have energy specific objectives beyond the 2020 timeline. There were therefore calls for 2020 strategy to include milestones beyond the next

\(^3\) Agency for Coordination of Energy Regulators.
\(^4\) European Network of Transmission System Operators.
\(^5\) The European Council committed in 2009 to a reduction in greenhouse gas emissions of 80-95% by 2050 compared to the 1990 level in a context of such reduction agreed by developed countries as a group.
decade, given the long lead in time of energy projects and the need for companies to have clear public policy objectives to plan their investments. The 2050 roadmap scenarios should be developed in a transparent matter and results should be shared and discussed with Member States and stakeholders taking advantage of their experience and knowledge. New proposed EU initiatives must add value to Member States, regional and local efforts and must be subject to rigorous impact assessment.

It was also suggested that, in line with the US Energy Information Administration, the EU should prepare bi-annual energy outlooks.

A few stakeholders indicated that our 2020 strategy should cater already for a possible shift to 30% cut in greenhouse gas and we should aim to a long term vision with an EU completely independent from fossil fuels. Some expressed the view that the ultimate target should be the full decarbonisation of the energy sector and the roadmap to 2050 should include at least a scenario aiming at 100% renewable energies.

It was emphasised that energy policies have close interlinks with other sectors and should be “mainstreamed” into all other relevant EU initiatives such us research and innovation, transport, environment & climate, agriculture, external relations, trade and budget. Next EU budget must be "climate proofed" and actions in different domains should contribute to our overall climate change objectives. Many of the contributions advocated for a higher priority for energy issues in the new financial perspectives 2014-2020.

2.3 Priority areas for the future energy

2.3.1 Leadership in technological innovation

There was broad agreement that the promotion of technological development needs a mixture of market measures and other specific initiatives. The implementation of the Strategic Energy Technology Plan (SET Plan) and related European Industrial Initiatives should be the core of EU’s low carbon technology policy.

Most of the stakeholders recognised that substantial funding will be needed for technological innovation however divergent views existed on how to ensure such funding. Some advocated a doubling or even tripling EU funding for energy research in the new financial perspectives. Some expressed the view that in times of limited public funds, EU should concentrate its technology and innovation funding/policy on leverage for private Research Development and Demonstration (RD&D) spending. Another suggestion was to focus and redirect part of the Cohesion Policy funds towards energy projects.

A general view was that, in assessing the envisaged low carbon technology portfolio the EU should avoid not only to "pick the winner" but also to create a long shopping list of new technologies. The EU should concentrate on a limited number of technological innovations close to their commercialisation.

It was underlined that energy related RD&D is currently dispersed and supported by different schemes at national and EU levels. Strong efforts were called for to reduce and
simplify cumbersome administrative procedures and to explain the financial possibilities, to researchers and industry, in a simpler and more coordinated way.

2.3.2 Modern integrated grid

There was a common view on the need for a new approach to EU infrastructure energy policy. The existing TransEuropean Energy Network (TEN-E) instrument was considered inadequate. The forthcoming Energy Infrastructure Package was seen as an opportunity to present a strategic analysis and proposal for a new EU energy network. The new instrument should aim at a more flexible and strategic approach as we need not only new infrastructures but also a grid which is more integrated, interconnected and smarter.

According to some respondents, besides electricity & gas, oil and Carbon Capture and Storage (CCS) infrastructures should be included. The lack of pan-European interconnections was a frequent concern. The new infrastructure policy should reaffirm the need to have a minimum of 10% of cross border electricity interconnection capacity identified in the 2007 Energy Action Plan. Support was expressed for ad hoc appointments of "European Coordinators". While respecting national sovereignty for permitting procedures, there was support for setting up a common set of rules including time limit. The social cost of delaying infrastructure investments needs to be considered.

There was broad agreement that, in the next decade, despite our efforts to move to a low carbon economy, the EU will remain dependent on fossil fuels, of which most will be imported. The EU should therefore develop mechanisms to cope with possible supply disruption.

Several argued that the best way to improve our security of supply was to diversify oil and gas supply sources and routes. Support to the Southern Corridor initiative and cooperation with Mediterranean suppliers was expressed. Strong support was given to the fast implementation to the Security of Gas Supply Regulation and regional cooperation initiatives such as the Baltic Energy Market Interconnection Plan (BEMIP).

In the view of many respondents, infrastructure development should in principle be market driven and market distortion should be avoided. There was however broad agreement that specific projects, such as infrastructures to ensure oil and gas security in case of supply disruption, will not be built only on economic premises and specific financial and political support might be needed.

Different views were expressed on financial means for the new infrastructure instrument. Some argued for a substantial increase of funding including the possibility to fund significantly projects beyond the feasibility phase. Other suggested no significant increase in the EU budget but rather a maximisation of the financial resources from existing instruments, such as EU Cohesion Policy funds and better coordination among different source of funding and loans (Commission, financial institutions, Member States etc...).

A few stakeholders indicated that the conclusion that market cannot provide necessary investments was premature before the third internal energy market package had been
fully implemented and operational. The general view was that the user and not the taxpayer should pay for infrastructures. Some exceptions could be considered only for investments for the long term reduction of greenhouse gas emissions. There were calls to limit investments which extend EU dependence on fossil fuels, suggesting that our long term aim should be independence of fossil fuels to increase security of supply, resilience to high oil and gas prices and to address the climate change threat.

2.3.3 Making progress towards a low-carbon energy system

There was general support for a progressive decarbonisation of our energy system, which was seen an opportunity for growth and job creation. However, most of the contributions were against a unilateral increase in EU's emission reduction targets beyond 20% at this stage.

There was a common consensus that the new energy policy choice should support EU long term objectives to reduce emissions by 80-95%. It was stressed that such choices must be based on extensive cost-benefit analysis, with an open and transparent trade-off among the different options. It was also underlined that such new policy choice must show a clear European added value.

While there was broad agreement on the need to decarbonise our energy system, a variety of views emerged on quantified target for decarbonisation spanning from "a low carbon energy system", to 80% decarbonisation up to a full decarbonisation (taking advantage of nuclear and CCS) and finally an energy system completely based on renewables.

Moreover, a wide divergence of views, summarised hereafter, was expressed on the most efficient policy initiatives to decarbonise our energy system:

- **Energy efficiency and renewables were considered a major contributor for the decarbonisation of our energy system.** Support to promote renewable energy sources should continue. However measures to support renewables must avoid market distortion.

  A specific problem highlighted was lack of results in our energy efficiency strategy and a need for a step change in energy efficiency through all sectors. Nevertheless a thorough evaluation of Energy Efficiency Action Plan 2006-2009 must be done before proposing new initiatives. The majority of the papers were against mandatory EU energy efficiency target. The importance for the EU to play a leading role in energy efficiency in its international relations was underlined.

  Considerable opportunities for energy savings exist in the building sector. Such opportunities are generally best achieved at local or regional level and the network of Smart Cities and Covenant of Majors are good examples to be pursued. Support was expressed for the recent recast of the Energy Performance of Building Directive but requests were made for a harmonised calculation method through EU rather than a regional approach.

  Currently large scale industrial installations are affected by energy efficiency legislation through Emission Trading System (ETS) but small industries, small generation plants and cogeneration plants are left out. There is a need to address energy efficiency through all the energy supply chain including cogeneration. An EU strategy for thermal energy (heating and cooling) introducing binding or at least indicative targets for Combined Heat and Power (CHP) is needed.
• **ETS/Taxes**: there is a need for harmonised carbon taxation at European level and swift finalisation of the Directive on taxation of energy products. ETS has not delivered enough results and the EU needs an adequate market price for CO₂. This should be achieved by tightening the ETS cap and removing windfall profits in case in which there is no risk of carbon leakage outside the EU. Some contributions supported a CO₂ tax for sectors outside ETS and others were against it. It was suggested that at a time of reduced public budget measures tightening of ETS, revising the energy taxation Directive and phasing out of fossil fuels subsidies could be implemented without increasing government expenditures.

• **Gas**: a number of stakeholders underlined that natural gas played a major role in decarbonising our energy mix in the past years. Gas will continue to be a key element in our energy mix and can contribute to substantial additional reduction in greenhouse gas emissions particularly in the next decade. Gas is the cleanest fossil fuels and emits much less CO₂ than other fossil fuels after combustion. Technological innovation and dissemination are needed to bring additional energy/emissions savings e.g. the next generation of gas turbines aiming at 60%+ efficiency. Moreover gas fired power plants will the ideal solution as a back up fuel to complement the foreseen increased production of electricity from intermittent renewables. It was added that the current reduction in gas demand is mainly due to the economic crisis and additional gas will need to be imported in the EU future also in consideration of the depletion of our indigenous reserves. The potential for additional unconventional gas reserves in the EU is still to be fully assessed but should be kept in mind. As regards as security of supply, clear messages on security of gas demand are needed to attract the necessary investments in exploration and production pipelines and LNG terminals. It is important to fully recognise the role of gas in EU policies and send clear messages to gas producers to avoid a supply crunch in the medium to long term.

• **Technology and innovation**: energy must be viewed as a system not a single sector. Therefore opportunities through the whole chain of energy production and consumption should be exploited taking advantage of a basket of solutions rather than a "silver bullet" approach. The largest mitigation can be achieved from accelerated deployment of existing technologies close to market commercialisation. As access to capital is the greatest challenge for low carbon entrepreneurs there is a need for a better recognition of low carbon technologies in the EU budget. Different options were proposed: increasing the EU budget for RD&D and more funding for low carbon technology from the Structural and Cohesion Funds. Some stakeholders advocate the setting up of a low carbon energy fund.

• **Transport**: support was expressed for a stronger emphasis on decarbonisation of the transport sector as transport accounts for two thirds of EU oil consumption. Electrification and hydrogen could provide material contribution for mobility in the long term but in the short term opportunities offered by a "mosaic" of solutions need to be exploited as there is no a "one size fits all" solution. Opportunities for carbon reduction will be offered by: reduction of consumption in cars but also in lorries,
buses and minibuses, use of biofuels and increased penetration on natural gas vehicles\(^6\). Utilisation of gas in transport is a proven technology and an increased use of gas in our vehicles will allow reducing emissions of CO\(_2\) and other pollutants in the sector.

With reference to electrification of the vehicle fleets, the importance of the standardisation of recharging of electric cars was underlined (to be able to drive from North Cape to south of Italy without changing car).

- **Nuclear**: some papers expressed the view that a low carbon energy mix will be achievable only through nuclear which is also a key element also for our security of supply objectives. The Commission's initiative on Safety of nuclear installations was welcomed.

- **Coal** cannot be disregarded and remains an important element of our energy mix. A few contributors emphasised that the commercialisation of carbon capture and storage technology will allow a "decarbonised" exploitation of solid fuels.

### 2.3.4 A strong and coordinated external energy policy

The vast majority of the contributions supported strengthening the EU external energy policy as well as increasing the coordination of Member States initiatives. The 2009 gas crisis was cited as an example demonstrating the advantage of an integrated and coordinated approach in our external energy relations. The overall EU energy strategy should therefore clearly include and define the objectives of an external energy policy. The new competence under the Lisbon Treaty gives the opportunity to strengthen EU weight and coordinate our external actions.

There was also recognition of energy as a global issue and the interdependence of EU energy initiatives with the global energy landscape.

The broad objective of our external policy should be better relations with producers, consumers and transit countries.

A number of priorities were indicated such as: closer cooperation with the Russia (finalisation of the post Partnership and Cooperation Agreement with robust provisions for energy), continuing to press for reforms in Ukraine, enlarging membership of the Energy Community and fostering cooperation with Mediterranean and African countries.

However, external energy policy should not aim only at securing continuous supply of fossil fuels but also underpin EU's vision for sustainable development and our low carbon targets target in international climate change negotiations.

Tools such as: negotiations of early warning mechanisms, support early notification of bilateral agreements with third countries and promotion of nuclear safety and security standards with third countries were mentioned.

Some stakeholders suggested that respect for human rights should have a greater focus in our energy relations with third countries.

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\(^6\) In natural gas vehicles gas can be used in forms compressed natural gas (CNG), liquefied petroleum gas (LPG) gas to liquid (GTL).
Beside cooperation on a bilateral basis, efforts should continue in international organisation and bodies such as the IEA, IEF\(^7\), IRENA\(^8\) IPEEC\(^9\) and the Energy Charter. The EU should use its weight and influence in a coordinated way to achieve and promote its energy and climate change objectives in such fora.

There was support for a stronger EU voice in the international energy arena. However, some stakeholders indicated that it was not for the EU to negotiate commercial deals with producers. The commercial activities of EU companies should rather be supported by good political relations and a clear and stable international legislative framework. The EU "Energy Dialogues" should aim at full market access and reciprocity issues to create a level playing field.

2.3.5 Protecting EU citizens

The broad view was that the EU should aim to assure reliable availability of affordable and sustainable energy to citizens. However some papers underlined the possible dichotomy between "affordable price" and competitive markets. Open and transparent markets should be the principle means to assure a good deal for citizens. The objective of "affordable price" could not be achieved through distorting measures such as price caps and subsidies.

Support was expressed for the Commission initiative to increase transparency of energy markets.

Particular emphasis was given to public awareness. In a liberalised energy market a large part of the improvements for example in energy efficiency will be function of the awareness and behaviour of individual energy consumers, households and local administrations vis-à-vis the different energy options. Therefore initiatives of public awareness need to be pursued. More information is also need by the EU citizens on the possibility for contract switching, on comparability of bills and overall transparency in contracts. Proposals for public awareness initiatives vis-à-vis the citizens to address issues in relation to public perception of underground carbon capture and storage, nuclear and disposal of nuclear waste were also made.

It was also pointed out that the EU energy strategy needs a stronger social dimension spelt out in a specific chapter. New policies choices need to take into account the implications on the workforce, and should be accompanied by an assessment of the impact of different scenarios on level of employment, on Health Safety and Environment (HSE) issues and on the amount and type of labour skills which will be needed in future.

\(^{7}\) International Energy Forum.  
\(^{8}\) International Renewable Energy Agency.  
\(^{9}\) International Partnership for Energy Efficiency Cooperation.