



EUROPEAN PARLIAMENT

2009 - 2014

Plenary sitting

A7-0035/2013

7.2.2013

REPORT

on the Energy roadmap 2050, a future with energy
(2012/2103(INI))

Committee on Industry, Research and Energy

Rapporteur: Niki Tzavela

CONTENTS

	Page
MOTION FOR A EUROPEAN PARLIAMENT RESOLUTION.....	3
OPINION OF THE COMMITTEE ON FOREIGN AFFAIRS.....	24
OPINION OF THE COMMITTEE ON THE ENVIRONMENT, PUBLIC HEALTH AND FOOD SAFETY.....	29
OPINION OF THE COMMITTEE ON THE INTERNAL MARKET AND CONSUMER PROTECTION.....	34
OPINION OF THE COMMITTEE ON REGIONAL DEVELOPMENT.....	40
RESULT OF FINAL VOTE IN COMMITTEE.....	44

MOTION FOR A EUROPEAN PARLIAMENT RESOLUTION

on the Energy roadmap 2050, a future with energy

(2012/2103(INI))

The European Parliament,

- having regard to the Commission Communication ‘Energy Roadmap 2050 and the accompanying working documents (COM(2011)0885),
 - having regard to the Directive 2012/27/EU on Energy Efficiency¹,
 - having regard to its resolution of 12 June 2012² on Engaging in energy policy cooperation beyond our borders: A strategic approach to secure, sustainable and competitive energy supply,
 - having regard its resolution of 15 March 2012 on a Roadmap for moving to a competitive low carbon economy in 2050³,
 - having regard to its resolution on the industrial, energy and other aspects of shale gas and oil⁴ and its resolution on environmental impacts of shale gas and shale oil extraction activities⁵ adopted on 21 November 2012,
 - having regard to Rule 48 of its Rules of Procedure,
 - having regard to the report of the Committee on Industry, Research and Energy and the opinions of the Committee on Foreign Affairs, the Committee on the Environment, Public Health and Food Safety, the Committee on the Internal Market and Consumer Protection and the Committee on Regional Development (A7-0035/2013),
- A. Whereas it should be recalled that the pillars of the EU energy policy are security of supply (diversity of sources), competitive prices and energy efficiency, which are complemented by the policy aim to reduce greenhouse gas emissions;
- B. Whereas the competitiveness of European industry needs to be taken into account by means of adequate policies and instruments and by adapting to a process that would re-industrialise the EU economy;
- C. Whereas it is in the interests of Member States to reduce their dependency on energy imports with volatile prices, and to diversify energy supplies;
- D. Whereas the challenge of energy security is to alleviate uncertainties that give rise to tensions between states and to reduce market inefficiencies that hamper the benefits of

¹ OJ L 315 14.11.2012.

² Texts adopted, P7_TA(2012)0238.

³ Texts adopted, P7_TA(2012)0086.

⁴ Texts adopted, P7_TA(2012)0444.

⁵ Texts adopted, P7_TA(2012)0443.

trade, both for suppliers and consumers;

- E. Whereas it is important to obtain an early indication of whether the challenging goals of the Roadmap can be achieved and to review the impact on the EU's economy, not least as regards global competitiveness, employment and social security;
- F. Whereas the Member States, energy companies and the general public need to have a clear view of the direction of the EU's energy policy, which must be backed by more certainty, including milestones and targets for 2030, with a view to incentivising and reducing the risk of long-term investments;

Objectives of the EU2050 Energy Roadmap

1. Recognises the benefits that Member States derive from working together for an energy system transformation; endorses, therefore, the Commission's Energy Roadmap 2050 as a basis for proposing legislative and other initiatives on energy policy with a view to developing a policy framework for 2030, including milestones and targets on greenhouse gas emissions, renewable energy and energy efficiency, with the aim of establishing an ambitious and stable legal and regulatory framework; notes that defining energy targets for 2050 and the intervening period assumes pan-European governance ; proposes the adoption, within the spirit of solidarity, of a strategy that allows Member States to cooperate under the Roadmap in a spirit of solidarity – the creation of a European Energy Community; encourages work to define the 2030 policy framework within a timeframe that is appropriate for providing investor security;
2. Notes that the proposed scenarios for 2050 are not of a deterministic nature, but rather serve as a basis for constructive dialogue on how to transform Europe's energy system in order to meet the long-term goal of reducing greenhouse gas emissions by 80-95 % below 1990 levels by 2050; underlines that all future energy projections, including the Energy Roadmap, are based on certain assumptions as to technological and economic developments; calls, therefore, on the Commission to update the Roadmap regularly; points out that the impact assessment of the Commission does not analyse in more detail the possible trajectories for each different Member State, group of Member States or regional cluster up to 2050;
3. Welcomes the fact that the Commission's Energy Roadmap 2050 provides outlines of different scenarios; emphasises that both the scenarios based on current trends and those based on decarbonisation are no more than projections; notes that, as such, they certainly do not cover the full range of possibilities, and can therefore do no more than offer ideas for the future structure of Europe's energy supply;
4. Emphasises that the projections prepared for the Commission's Energy Roadmap 2050 need to be developed further, including on the basis of models other than the PRIMES energy system model, and that additional low-carbon scenarios need to be outlined (e.g. 'increased use of nuclear energy' and 'increased use of gas with CCS') in order to promote a better understanding of the alternative approaches to developing a secure, cost-effective, low-emission energy supply for Europe in the future;
5. Acknowledges the fact that electricity from low carbon sources are indispensable for

decarbonisation, requiring an almost carbon free electricity sector in the EU by 2050;

6. Highlights the importance of the EU's energy policy amidst the economic and financial crisis; emphasises the role that energy plays in spurring growth and economic competitiveness and creating jobs in the EU; calls on the Commission to propose post-2020 strategies and to present, as soon as possible, a 2030 policy framework for a EU energy policy; believes that this policy framework should be consistent with the EU's 2050 decarbonisation agenda and that it should take into account the 'no regrets' options identified in the Roadmap; calls for action to be taken to minimise the energy sector's negative impact on the environment, while taking into account the effects of the action taken on the competitiveness of national economies and the EU economy, as well as on the citizens' security of energy supply;
7. Notes that implementing environmental and climate policies without taking account of challenges such as energy security cannot be a replacement for an energy policy conducted according to the principle of sustainable development, which guarantees current and future generations equitable, universal and competitive access to energy resources while respecting the natural environment;
8. Encourages the Member States to step up their ongoing efforts to reach the current 2020 targets in the area of EU energy policy, in particular the 20 % energy efficiency target which is currently not on track; stresses that the timely and full implementation of all provisions of the Directive on the promotion of the use of energy from renewable sources¹ is vital for achieving the EU's binding target of at least 20 % by 2020;
9. Calls on the Commission to adopt the strategy of regional energy specialisation, allowing regions to develop those energy sources which provide the most efficient means of fulfilling the European 2050 goals, such as solar energy in South and wind in the North; believes that, on the basis of this specialisation, the EU should move to measuring European energy objectives on a EU-wide scale in place of national targets;
10. Believes that the transition to a low-carbon and energy-efficient economy is an opportunity not only for sustainability but also for the security of supply and for competitiveness in Europe, and that reducing greenhouse gas emissions can be a competitive advantage in the growing global market for energy-related goods and services; underlines that this is an opportunity for SMEs in the EU operating on the renewable energy market, giving an excellent impulse to the development of entrepreneurship and innovation and possibly providing a prime source of job creation;
11. Stresses that a clear, coherent and consistent policy and regulatory framework is of major importance to help stimulate the necessary investments for the 'no regrets' technologies, as defined in the Roadmap, in an economically efficient and sustainable way; highlights the core aims of the Europe 2020 strategy for smart, sustainable and inclusive growth and calls for such a policy approach to be pursued beyond 2020; notes that in order to make an informed and balanced decision regarding post-2020 strategies, a review of the existing

¹ Directive 2009/28/EC of 23 April 2009, OJ L 140 05.06.2009. An amending proposal (COM(2012)0595) is currently under discussions.

2020 strategies will be necessary; underlines the importance of an energy strategy focused on increasing the EU's energy security economic and industrial competitiveness, jobs creation, social aspects and environmental sustainability through measures such as the increased deployment of renewables, the diversification of supply routes, suppliers and sources, including better interconnections among Member States, energy efficiency and a more efficient and optimised power system design to boost investments in sustainable energy production and backup and balancing technology;

12. Notes that functioning carbon markets and the prices of energy sources play a major role in determining the behaviour of market actors, including industry and consumers; calls for a post-2020 policy framework to be guided by the 'polluters pay' principle and by long-term rules to guarantee security for markets actors;
13. Recalls that it is in the competence of each Member State to define its own energy mix; acknowledges that the Energy Roadmap 2050 complements national, regional and local efforts to modernise energy supply; acknowledges, therefore, the need for the Member States to work together on the basis of common objectives; stresses, moreover, that to be able to reach an energy transformation that is well coordinated, Union-wide, interconnected and sustainable, there is a very important role to be played by the EU – including in ensuring that national policies are consistent with EU aims and laws; urges the Member States and the Commission to continue to pursue options that can meet the EU's long-term energy goals and climate change targets (as agreed by the Council) as part of global efforts in a technology diverse, sustainable, economically efficient, competitive and safe way, with as little distortion of the market as possible, and to continue with efforts at national level to fully tap the potential for cost-effective energy savings, supported, inter alia, by available EU financial instruments; recognises, at the same time, the merits of developing a coordinated and, where appropriate, common European approach which has to allow for the special features of small-scale energy systems and the resulting need for flexibility;
14. Stresses that basing the energy systems of EU Member States on their own energy resources, and on their ability to access them, is an essential pillar of the EU's energy security; believes, therefore, that from this perspective it would be most rational for the Member States to develop those energy technologies for which they have potential and experience, and which guarantee them a continuous and stable supply of energy, while maintaining environmental and climate standards;
15. Points out that the main trend of planned actions should not focus on achieving top-down scenarios on reduction goals, as is currently the case, but on implementing action scenarios that take account of issues such as the existing potential in Member States, the prospects for the development of economically effective new technologies, and the global effects of implementing the proposed policy, in order that reduction goals for the following years may be proposed (bottom-up approach);
16. Recognises the conclusions reached in the Energy Roadmap 2050 that the transition towards a sustainable energy sector on an EU-wide scale is technically and economically feasible, and according to the Commission's analysis less costly in the long-run than a continuation of current policies; points out, however, that account should be taken of the

national context, which may differ significantly between Member States;

17. Believes that the goals towards 2050 will never be reached unless the EU takes its responsibilities and fulfils a key role in the transition; especially for huge projects such as the construction of off-shore wind farms in the North Sea; believes that for cross-border infrastructure affecting several or all Member States, the EU should outline priority projects and function as a key investor, thereby leveraging private investments;
18. Recognises that the increasing importance of electricity in the future energy mix requires that all means of low-carbon electricity production (involving conversion efficiency, renewables, carbon capture and storage (CCS) and nuclear energy) will need to be harnessed if climate goals are to be achieved without jeopardising competitiveness and security of supply;
19. Stresses that ensuring a fully developed cross-border energy infrastructure, and an information exchange mechanism, within the Union is the precondition of the success of the Roadmap; stresses, therefore, the need for strong coordination between Member States' policies and for joint action, solidarity and transparency in the fields of external energy policy, energy security and new energy infrastructure investments;
20. Regrets that the Commission did not implement the recommendations of its peer-reviewed Advisory Group on the Energy Roadmap 2050; calls on the Commission to issue an updated version of the Energy Roadmap, taking these recommendations into account;

Key Elements of a long-term strategy

21. Welcomes the conclusions reached in the Energy Roadmap 2050 that there are similarities between the actions that must be taken in the analysed scenarios in order to transform the EU's energy system; welcomes in this context the Commission's conclusions that increased deployment of renewables, energy efficiency and energy infrastructure, including smart grids, are the 'no regret' options, in particular when they are market driven, regardless of the specific path chosen to achieve a 'decarbonised 2050 energy system'; invites the Commission to explore a combined "high renewables and high energy efficiency" scenario; takes the view that a choice made about which path to take would help increase investment certainty;
22. Believes that the financial crisis should be used as an opportunity to transform the EU model of society towards a highly energy-efficient, fully renewables-based and climate-resilient economy;
23. Recognises that a higher share of renewable energy sources in the energy mix after 2020 is a key aspect of a more sustainable energy system; recognises, furthermore, that all of the scenarios explored in the Commission Communication assume an increased share of renewable energy in the EU energy mix of around 30 % in gross final energy consumption in 2030, and of at least 55 % in 2050; stresses that a move towards a better energy efficiency policy can facilitate a higher share of renewables; calls on the Commission to take decentralised generation explicitly into account in future estimates; calls also on the Commission to clearly map financial, technical and infrastructural obstacles that hamper the growth of decentralised generation in the Member States;

Energy Efficiency

24. Stresses that improved energy efficiency and energy savings will play an essential role in the transformation of the energy system, and that meeting the 2020 objectives is a prerequisite for making further progress up to 2050; recommends, in this respect, that the Member States step up their efforts to fully implement the recently adopted Energy Efficiency Directive, and recommends that awareness-raising campaigns and energy efficiency be integrated into national educational curricula in the Member States; recommends that the Member States and the Commission do more to include national ideas and involve national development banks and to support exchanges of best practice; recalls that energy efficiency, if properly implemented, is a cost-effective way for the EU to achieve its long-term goals as regards energy savings, climate change, and economic and energy security; recognises that shifting to a more energy-efficient economy can accelerate the spread of innovative technological solutions, decrease fossil fuel imports and improve the competitiveness and growth of industry in the Union; believes that the move towards a better energy-efficiency policy should focus on the whole energy supply and demand chain, including transformation, transmission, distribution and supply, alongside industrial, building and household consumption; stresses that the EU's long-term energy-efficiency policy should take the reduction of energy use in buildings as a central element, given that existing building renovation represents enormous energy saving potential; stresses that the current rate and quality of building renovation needs to be substantially scaled up in order to allow the EU to significantly reduce the energy consumption of the existing building stock by 80 %, relative to 2010 levels, by 2050; calls, in this regard, on the Member States to adopt ambitious, long-term building renovation strategies as required by the Energy Efficiency Directive;
25. Emphasises the urgent need for new, modernised, smart and flexible energy infrastructure, especially smart grids, to allow for a more flexible back-up and balancing power capacity, including individual microgeneration and storage systems, new electricity uses (such as electric vehicles) and demand response programmes (including smart meters), and a fully integrated European grid system, inter alia, in order to integrate all sources of energy across the EU, as has been proven necessary; recalls that cost-optimal policies differ according to demand patterns, supply potential, geographic characteristics and economic contexts at the local level; stresses, moreover, the urgent need for the establishment of a stable and predictable regulatory framework, as well as for EU-wide market mechanisms to boost flexibility, including capacity uptake and storage, and for EU co-financing of infrastructure projects of common interest that are in line with the Energy Infrastructure Guidelines and the Connecting Europe Facility;
26. Notes that EU and national financial means, including budgetary and investment policies, are prerequisite to building new energy infrastructure in Europe, taking into consideration the costs of building new and decommissioning outdated facilities and the costs of environmental and social rehabilitation programmes in the regions concerned;
27. Asks the Commission to investigate the potential of, and the various possible technologies, for energy storage in the EU in a holistic manner, through the integration of EU internal energy market, including energy network capacities, energy and climate change policies and the protection of consumers' interests, so that the Union's energy and

climate goals can be attained, dependence on energy from outside the EU diminished, and a genuine single market and level playing field for energy created, with the highest possible degree of security of energy supply for the future;

Renewable energy

28. Stresses that a more European approach to renewable energy policy is key in the medium to long term; encourages the Member States and their regions to improve cooperation, including by making greater use of the cooperation arrangements provided for in the Renewable Energy Directive in order to optimise the efficiency of renewables expansion, bring the costs of renewable energy down and ensure that more investments within the EU are made where they will be most productive and efficient, taking into account the specific characteristics of each Member State; emphasises the importance of putting targets in to place; highlights, in this context, the Commission's important role as a facilitator in coordinating, financially supporting and preparing appropriate analyses of renewable energy resources and potential for the Member States, and welcomes its declared intention to draw up guidelines on trade in renewables; points out that renewables will, in the long term, move to the centre of the energy mix in Europe, as they progress from technology development to mass production and deployment, from small-scale to larger-scale – integrating local and more remote sources – and from subsidised to competitive; emphasises that the increasing uptake of renewables requires changes in policy and energy market structure to be made with a view to adapting markets to this reality and achieving greater market integration, in particular in rewarding flexibility and services to the grid system stability; stresses the importance of stable regulatory frameworks, both on an EU as on a Member State level to stimulate investments; highlights the need for simplified administrative procedures and stable and efficient support schemes that can be adapted over time and phased out when technologies and supply chains mature and become competitive, and market failures are resolved; stresses, however, that retroactive changes in support schemes have a detrimental effect on investor confidence and thereby increase the risks associated with investments and their costs;
29. Recognises that renewable energy targets have been successful, and calls on the Member States to implement the stable policies needed for them to meet their 2020 targets;
30. Recalls the role of projects such as Desertec and the use of renewable energy sources in neighbouring regions; highlights the prospect of 'Project Helios' transporting electricity produced by renewable energy from South-East Europe to Central Europe as well as the further expansion of wind energy in the North Sea and other regions; emphasises that the opportunity to import electricity produced from renewable sources from neighbouring regions needs to be complemented by encouraging and facilitating the development of renewable and low-emission sources of energy, e.g. in the southern Mediterranean and the North Sea regions, and by more interconnections within European networks;
31. Stresses that, for many renewable energy resources, it is currently impossible to guarantee a stable energy supply under current technological conditions, which entails the need to maintain reserves of conventional energy sources on stand-by; calls on the Commission, in this context, to submit an analysis of how renewable energy sources can be developed sustainably, and, above all, how to support stable sources of renewable energy; considers

that, in the case of less stable energy sources, analyses should be conducted on the cost-effectiveness of ensuring reserve power, and energy-storage technologies should be developed;

32. Highlights that in order to achieve the total decarbonisation of the EU power supply in the long-term, there is a need to pursue closer integration with neighbouring countries and regions such as Norway, Switzerland and the southern Mediterranean; stresses that Europe can benefit from the development of the substantial renewable sources of energy in these regions to meet both local demand and, with the development of long-distance grid interconnections, a limited percentage of EU demand; notes that more interconnection will enable Member States to export and import renewable electricity to ensure a reliable energy supply, and to balance variable power generation such as wind; points out, in this context, that interconnection to Norway offers a particular advantage to the EU because it opens access to the significant electricity storage capabilities of Norwegian hydropower plants;
33. Stresses the importance of microgeneration for increasing the share of renewable energy sources; highlights, moreover, the importance of microgeneration for increasing energy efficiency, securing energy supply and engaging citizens in their own energy use and in the fight against climate change; emphasises, in this regard, the need for a coherent EU strategy for microgeneration that includes measures to update energy infrastructure, reduce legislative burdens and exchange best practices of fiscal incentives;
34. Highlights the need to secure a sufficiently strong policy framework post-2020 for renewable energy technologies that have not yet reached grid parity, designed with a view to converge and, at a later stage, phase out subsidies;
35. Notes that the Energy Roadmap 2050 scenarios imply a higher amount of biofuels; believes that, in this regard, the Commission should support the move to third generation biofuels based on food crop waste products, and to impose similar conditions on imported biofuels;
36. Asks the Commission to present a proposal on how to increase efficiency in the deployment of renewable sources of energy within the EU and its regions by striving towards a system of EU-wide common incentives for renewable energy sources, which would permit the deployment of specific types of renewables in those regions of the EU where they are most cost-efficient, and thereby lower electricity prices; believes that, in the medium term, market groups for renewables at regional level could be created;
37. Calls on the Member States and the Commission to support and promote global open market policies for renewable goods and to ensure the removal of all trade barriers, thereby boosting the EU's competitiveness by promoting renewable energy technology exports;
38. Recognises that renewable energy targets have been successful and should be prolonged to 2030; calls on the Member States to keep on track towards meeting their 2020 targets; is concerned by Member States' increasingly abrupt changes to support mechanisms for renewable energy, in particular retroactive changes to and the freezing of support; calls on the Commission to monitor carefully the implementation of the Renewable Energy

Directive's and to take action if necessary; calls on the Member States to provide stable frameworks for investments in renewable energy, including stable and regularly reviewed support schemes and streamlined administrative procedures;

39. Calls on the Commission and the Member States to increase significantly the sums earmarked for energy efficiency measures in the future Multiannual Financial Framework;

Infrastructure and the internal energy market

40. Stresses that, as the EU pursues the goal of energy security and energy independence, emphasis needs to be shifted towards a model of energy interdependence between the Member States by ensuring the swift completion of the EU internal energy market and the EU smart and supergrid infrastructure linking North, South, East and West, in order to make the best use the comparative advantages of each Member State, as well as by using the full potential of decentralised and micro-scale energy production and smart energy infrastructures in all Member States; highlights the importance of ensuring that policy and regulatory developments in the Member States are fully in line with the three liberalisation packages, eliminate remaining infrastructure 'bottlenecks' and market failures and do not create new barriers to electricity and gas market integration; stresses, moreover, that energy policy decisions in each national system need also to take into account how such decisions could affect other Member States; suggests that it would be desirable to determine whether and how the expertise and facilities of the Agency for the Cooperation of Energy Regulators (ACER) might be put to use in the performance of the above tasks;
41. Recognises that energy infrastructure projects are characterised by vast upfront investment and a 20-60 year operational lifetime; recalls that the current market environment is highly unpredictable, and that investors are therefore hesitant when it comes to energy infrastructure development; stresses that new strategies and innovative instruments should be promoted to encourage infrastructure investments, enabling a quick adaptation to the rapidly changing environment;
42. Emphasises the need to implement present policies and regulations so that the existing energy infrastructure is better utilised for the benefit of the EU consumer; calls on the Commission and ACER to monitor more strictly the national implementation of rules such as the ones related to the 'use it or lose it' principle;
43. Stresses the need for a fully integrated European energy market by 2014; notes the importance of full implementation of the internal energy market legislation in all Member States and the need to ensure that no Member State or region remains isolated from the European gas and electricity networks after 2015; highlights the need to take the social impact and energy costs into account while making sure that energy prices are more transparent and better reflect costs, including environmental costs where these are not taken fully into account;
44. Notes the creation of an information exchange mechanism for intergovernmental agreements between the Member States and third countries on energy policy, given that this mechanism is oriented at enhancing policy transparency, coordination and efficiency in the EU as a whole; calls on the Member States to show further ambition in ensuring that agreements contrary to internal energy market legislation are not put in place; considers

that the Commission should be able to examine draft agreements for their compatibility with such legislation, and to participate in negotiations where relevant; considers that the information-exchange mechanism is a step towards further coordinating energy purchasing outside of the EU, which is of crucial importance for realising the goals of the Energy Roadmap 2050;

45. Highlights the need to increase the incentives of investors in the energy market by increasing profitability and easing – without relaxing – the bureaucratic procedures;
46. Recognises that the financial crisis has made it more difficult to attract the required investment to finance the transformation of the energy system; highlights the new challenges, such as the need for flexible back-up and balancing resources in the power system (e.g. flexible generation, robust transmission network, storage, demand management, microgeneration and interconnection) to help accommodate the expected increase in variable power generation from renewable sources; emphasises the importance of infrastructure at distribution levels and the important role that proactive consumers and distribution system operators (DSOs) play during the integration into the system of decentralised energy products and demand-side efficiency measures; stresses the need for a proper assessment of the capacity available in Europe, and of the need for sufficient interconnections, and for flexible and balancing back-up capacity, to match supply with demand, thus ensuring security of electricity and gas supply; points out that granting higher priority to demand-side management and demand-side energy generation would considerably strengthen the integration of decentralised energy sources and advance the achievement of overall energy policy objectives;
47. Stresses that, since the current infrastructure is outdated, huge investments will be necessary in each scenario of the Commission's Communication on the Roadmap 2050; points out that, in each scenario, this will result in a rise in the energy prices until 2030; notes, furthermore, that, according to the Commission, the largest share of these increases are already happening in the reference scenario since they are linked to the replacement of the next 20-year-old, already fully written-off generation capacity;
48. Stresses that the European Union's energy security is dependent on greater diversification among its sources of imports; highlights, therefore, the need for the EU to actively strengthen cooperation with its partners; notes the delays affecting the completion of the Southern Corridor; stresses the need to achieve energy security through energy diversification, recalls the significant contribution of liquefied natural gas (LNG) and LNG fleets to the EU's energy supply, and emphasises the potential of a complementary LNG corridor in the East Mediterranean and Black Sea regions to serve as a flexible energy carrier and as an incentive for increased competition within the EU internal energy market;
49. Recalls that the Union's strategic partnerships with producer and transit countries, in particular countries covered by the European Neighbourhood Policy (ENP), require adequate tools, predictability, stability and long-term investment; emphasises, to that end, that the Union's climate objectives should be backed by EU infrastructure investment projects oriented at diversifying supply routes and increasing the Union's energy security, such as Nabucco;

50. Recalls that, in accordance with the internal market package, the main role for financing energy infrastructure lies with market players; acknowledges that some innovative or strategically important projects that are justified from a security of supply, solidarity and sustainability perspective but are unable to attract enough market-based finance may require limited public support to leverage private funding; emphasises that such projects should be selected based on clear, transparent criteria avoiding distortion of competition and taking into account the interests of consumers, and should be fully in line with the EU energy and climate change goals;
51. Stresses that most Energy Roadmap 2050 scenarios will be unfeasible without the development of local smart distribution network grids for electricity and gas; believes that in addition to cross-border projects, the Union should adopt measures to support local grid creation or renovation, especially in regards to access for protected consumers;
52. Emphasises the importance of the Connecting Europe Facility, in which a considerable amount of funding is reserved for transforming and further developing the energy infrastructure in the EU; stresses the importance of identifying and supporting crucial sustainable projects on a large as well as on a small scale;
53. Highlights the role of a one-stop-shop approach in complementing the EU's simplification objectives to cut red tape, thereby speeding up authorisation and permit procedures and reducing the administrative burden on companies seeking authorisation concerning the development of energy infrastructure, whilst guaranteeing due respect for the applicable rules and regulations; calls on the Member States to review their procedures in this regard;
54. Calls on the Commission urgently to address the regulatory uncertainty for institutional investors in the interpretation of third energy package when acting as a passive investor in both transmission and generation capacity;
55. Calls on the Commission urgently to address the issue of lacking incentives to smart grid investments for DSOs and transmission system operator (TSOs) in information and communications technology (ICT) and other innovative technologies that facilitate a better and greater utilisation of the existing grid;

Social dimension

56. Welcomes the inclusion of the social dimension in the Energy Roadmap 2050; considers that, in this respect, special attention should be given to energy poverty and employment; insists, with regard to energy poverty, that energy should be affordable for all, and calls on the Commission and the Member States, and on local authorities and competent social bodies, to work together on tailored solutions to counter such issues as electricity and heat poverty, with a special emphasis on low-income, vulnerable households that are most affected by higher energy prices; takes the view, therefore, that such a strategy should promote energy efficiency and savings as this is one of the most effective ways to reduce energy bills, and should analyse national measures such as taxation, public procurement and heat pricing, etc., in particular where they are hindering energy efficiency investments or the optimisation of heat production and use, and make recommendations on good and bad practice; stresses the importance of developing and communicating more energy efficiency measures, stimulating demand- and supply-side actions and creating awareness

campaigns to enhance the necessary behavioural changes; asks the Member States to report on a regular basis on actions taken to protect households from rising energy bills and energy poverty; asks the Commission, with regard to employment, to promote measures for adjusting education, retraining and requalification in order to help the Member States bring about a highly skilled workforce ready to play its part in the energy transition; asks the Commission to provide Parliament, by the end of 2013, with more information on the impact of this transition on employment in the energy, industrial and service sectors, and to develop concrete mechanisms to assist workers and the sectors concerned; recommends that the Member States take into account the external costs and benefits of energy generation and consumption, such as the health benefits from air quality improvements; considers that a social dialogue on the implications of the Energy Roadmap, which should encompass all stakeholders involved, is a key factor and will remain so during the transition;

57. Points out that adopting a decarbonisation strategy that does not take into account the situation of some Member States may lead to a massive increase in energy poverty, which is defined as a situation in which over 10 % of household budgets is spent on energy;
58. Emphasises the need to protect consumers from high energy prices, and to protect businesses from unfair competition as well as from artificially low prices from companies outside the EU, in accordance with the urgings made at the Rio+20 summit regarding the enforced role of the WTO;
59. Urges the Member States and the international community to boost educational institutions capable of producing a skilled labour force, as well as the next generation of scientists and innovators, in areas such as the safe supply and use of energy, energy security and energy efficiency; recalls, in this regard, the important role of Horizon 2020 and the European Institute of Innovation and Technology in bridging the gap between education, research and implementation in the energy sector;
60. Wishes to highlight the key role of price transparency and consumer information; takes the view, therefore, that it is up to the Commission to determine, as accurately as possible, the impact of such factors on the energy prices paid by individuals and businesses in the various scenarios chosen;

The role of specific energy sources

61. Believes that all types of low-carbon technology will be needed to achieve the ambitious goal of decarbonising the EU's energy system in general and the electricity sector in particular; accepts that it will remain uncertain which technologies will be technically and commercially proven within the required time scale; stresses that flexibility must be preserved in order to allow adaptation to the technological and socio-economic changes that will arise;
62. Acknowledges that conventional fossil fuels are likely to remain part of the energy system at least during the transition to a low-carbon energy system;
63. Acknowledges that nuclear energy is currently used as an important low-emission energy source; calls on the Commission to work towards improved public acceptance of nuclear

energy, utilising the results of the recent nuclear stress tests;

64. Agrees with the Commission that nuclear energy will remain an important contributor since some Member States continue to see nuclear energy as a secure, reliable and affordable source of low-carbon electricity generation; recognises that the scenario analysis shows that nuclear energy can contribute to lower system costs and lower electricity prices;
65. Agrees with the Commission that natural gas will play an important role, in the short to medium term, in the transformation of the energy system, since it represents a relatively quick and cost-efficient way of reducing reliance on other more polluting fossil fuels; stressing the need to diversify natural gas supply routes to the European Union; warns against investments that could lead to lock-in long-term dependency on fossil fuels;
66. Recognises natural gas potential as a flexible back-up for balancing variable renewable energy supply alongside electricity storage, interconnection and demand-response; considers affording greater importance to gas, particularly if technologies for carbon capture and storage become more widely available; believes that the objective of reducing greenhouse gas emissions must be the core consideration here, and the prevailing objective in the energy mix;
67. Emphasises the need to tackle the anticipated growth of gas and electricity imports from third countries to the EU in the short- and medium-term, with a view of securing the energy supply; reiterates that, for some regions and Member States, this challenge is closely linked with a dependency on gas and oil import from a single third country; acknowledges that meeting this challenge requires, inter alia, a strengthened role for indigenous energy resources and renewables, which are vital to ensure competitiveness and security of supply, as well as actions oriented at diversifying the portfolio of energy suppliers, routes and sources; acknowledges that one strategic objective in this regard is to aim at the realisation of the Southern Gas Corridor, and the achievement of the supply route to the EU of roughly 10-20 % of the EU gas demand by 2020, in order to enable each European region to have physical access to at least two different sources of gas;
68. Points out that lignite will also have a role to play in the future diversification of the energy mix; emphasises that lignite mining remains competitive even under the current EU climate protection targets, notably as it has a relative advantage in terms of extraction costs;
69. Notes that CCS could play a role on the road to decarbonisation by 2050; notes, however, that CCS is still at the research and development stage; notes that CCS development remains highly uncertain due to unresolved problems, such as non-specified delays, high costs and efficiency concerns; stresses that CCS, developed in an economically efficient, safe and sustainable way, will need to be in use on a commercial scale as soon as possible; highlights that CCS is also an important option for the decarbonisation of several energy-intensive industries such as oil refining aluminium smelting and cement production; calls on the Commission to draw up a mid-term report evaluating the results obtained from the use of EU-subsidised demonstration projects for coal-fired power stations;
70. Underlines the importance of policy intervention, public funding and an appropriate

carbon price to demonstrate and ensure the early deployment of CCS technology in Europe from 2020; underlines the importance of the EU demonstration programme to build public acceptance and support for CCS as an important technology to reduce greenhouse gas emissions;

71. Calls on the Commission to enable and promote knowledge sharing and collaboration within the EU and internationally to ensure the best engineering value is captured at scale in CCS demonstration projects; calls on the Commission to support early investment in pipeline infrastructure and to coordinate cross-border planning to ensure access to CO₂ sinks from 2020, and to undertake research to characterise storage reservoirs in Europe; calls on the Commission to work actively with Member States and industry to communicate the benefits and safety of CCS in order to build public confidence in the technology;
72. Notes that optimal, safe and sustainable development and use of domestic and regional energy resources, and the competitiveness of infrastructure necessary for the stable supply of domestic or imported energy sources, can contribute to increased energy security, and should therefore constitute a priority when forming EU energy policy;
73. Notes that, as long as demand for products based on crude oil continues, keeping a European presence in the refining industry is important in order to help secure security of supply, support the competitiveness of downstream industries such as the petrochemical industry, set worldwide standards for fuel refining quality, insure compliance with environmental requirements and preserve employment in those sectors; highlights, as well, the finding of the Energy Roadmap that oil is likely to remain in the energy mix even in 2050, albeit with a much lower share than today, and used mainly in long-distance passenger and freight transports;
74. Believes that special attention must be applied to those Member State regions where coal is currently the overwhelming source of energy and/or where coal production and coal powered electrical production are vital regional sources of employment; believes that additional, EU-supported social measures will be required if the Energy Roadmap 2050 scenarios are to be accepted by the populations of these regions;

Global challenges in the field of energy

75. While recognising that the EU operates in a global context and acting alone may not bring all the expected benefits, recalls the November 2011 TTE Council conclusions on strengthening the external dimension of the EU energy policy, wherein the Council emphasised the need for a broader and more coordinated EU approach to international energy relations in order to meet global energy challenges and climate change, and the need to address competitiveness and carbon leakage related issues and maintain and promote the highest nuclear safety standards, while at the same time ensuring the safe, secure, sustainable and diversified supply of energy;
76. Stresses the need to ensure the energy security and eventual self-sufficiency of the EU, primarily achieved by promoting energy efficiency and savings and renewable energy, which will, together with other alternative sources of energy, reduce import dependency; notes the emerging interest in the exploration of oil and gas fields in the Mediterranean

Sea and the Black Sea; believes that there is an urgent need to put in place a comprehensive EU policy on oil and gas drilling at sea; believes that emphasis should be put on potential hazards and on the delineation of exclusive economic zones (EEZs) for the Member States concerned and relevant third countries in accordance with the UNCLOS Convention, to which all Member States, and the EU as such, are signatories;

77. Emphasises that the granting of licensing rights for drilling and the delineation of EEZs will become a source of friction with third countries, and that the EU should maintain a high political profile in this respect and seek to preclude international discord; underlines that energy should be used as a motor for peace, environmental integrity, cooperation and stability;
78. Calls for the EU-Russia Energy Roadmap to be based on principles of mutual respect and reciprocity, grounded in World Trade Organisation, Energy Charter Treaty and Third Energy Package rules; calls on the Commission to implement and execute, in an effective manner, EU internal market and competition rules vis-à-vis all energy sector undertakings operating on the territory of the Union; welcomes, in this respect, the recent investigation into anticompetitive behaviour by Gazprom and its European subsidiaries, and deplores the politically motivated decree of the President of the Russian Federation preventing its energy companies from cooperating with EU institutions; insists that every energy sector undertaking is expected to cooperate fully with the investigative authorities; calls on the Commission to propose an appropriate response to this decree and to ensure that the investigation can proceed;
79. Calls on the Commission to draw up a comprehensive set of short-, medium- and long-term energy policy priorities for the EU to pursue in relations with its neighbours with a view to establishing a common legal area based on the acquis-related principles and norms of the internal energy market; stresses the importance of extending the Energy Community further, notably to include candidate countries and countries in the Eastern Partnership, Central Asia and the Mediterranean, and of setting up legal control mechanisms to deal with deficient acquis implementation; calls on the Union to show solidarity with regard to its partners which are part of the Energy Community; condemns, in this regard, the recent threats made by the Russian Federation vis-à-vis Moldova;
80. Stresses that the EU energy policy must in no way contradict the basic principles upon which the EU was founded with regard, in particular, to democracy and human rights; calls on the Commission, in this regard, to privilege in its energy relations producers and transit countries that share and support the same values;
81. Underlines the importance of strengthening cooperation and dialogue with other strategic energy partners; considers that the growing influence of emerging economies in the global energy markets, as well as growth in their energy demand, make it essential for the EU to engage with these partners in a comprehensive manner, across all energy areas; notes that, in the long term, the European Union has to increase coordination with regards to purchases of energy from third countries; calls for a closer cooperation between the Council, the Commission and the European External Action Service (EEAS) so that the EU may speak with one voice on issues concerning energy policy, as defined by the EU legislation and by indications from the Commission's Directorate-General for Energy;

recalls that Parliament should be kept regularly informed on developments in this area;

82. Stresses that the solidarity between Member States called for in the EU Treaty should apply both to the daily working and the crisis management of the internal and external energy policy; calls on the Commission to provide a clear definition of ‘energy solidarity’ in order to ensure that it is respected by all Member States;
83. Stresses that there will be no compromise on safety and security of either traditional (e.g. nuclear) or new (e.g. unconventional oil and gas) energy sources, and believes that the EU should continue efforts to strengthen the safety and security framework and take a lead in international efforts in this field;
84. Emphasises that as Member States set about connecting and integrating their national markets through investments in infrastructure and the approval of common regulations, continuous efforts should also be made to collaborate with Russia in order to identify creative and mutually acceptable measures aimed at reducing discrepancies between the two energy markets;
85. Stresses that as energy supply is shifting towards developing economies, the EU should engage in intensive dialogue and cooperation with the BRICS countries with respect to energy efficiency, renewable energy sources, clean coal, CCS, smart grids, fusion research and nuclear safety; the EU should also develop a clear policy for research and innovation collaboration in the energy sector with these countries;
86. Calls on the EU to continue to play an active role in the international negotiations on the global climate deal; stresses that the EU needs to know what the consequences of a failure to conclude a global climate change agreement would be; regrets that the Roadmap does not present a scenario where no such agreement is reached; stresses that achieving a legally binding global agreement on emissions reduction – and the involvement in the process of the world’s biggest emitters, such as China, India, the US and Brazil – will increase the chances of achieving a real reduction in greenhouse gas emissions; points to the need to respond to the challenge posed by carbon leakage by avoiding the relocation of energy-intensive industries outside the EU;

Emissions Trading Scheme (ETS)

87. Recognises that the ETS is currently the principal – though not only – instrument for reducing industrial greenhouse gas emissions and promoting investment in safe and sustainable low-carbon technologies; notes that structural improvement of the ETS is necessary in order to increase the scheme’s ability to respond to economic downturns and upturns, restore investors’ certainty and strengthen market-based incentives for investment in and the use of low-carbon technologies; notes that any structural changes to the ETS would require a comprehensive assessment of the environmental, economic and social effects as well as of the impact on low-carbon investments, on the electricity price and on the competitiveness of energy-intensive industries, in particular regarding the risk of carbon leakage; calls on the Commission and the Member States to facilitate and encourage the development of innovative, safe and sustainable technological solutions by EU industries;

88. Calls on the Commission to adopt a single uniform policy regarding EU industries jeopardised by the cost of indirect CO₂ emissions and to prevent any widening of the disparities between sensitive energy sectors operating within sound economies and those operating in Member States experiencing the consequences of the debt crisis;
89. Asks the Commission to come forward as soon as possible with an additional assessment with suggestions for recommended actions to prevent the risk of carbon leakage caused by reallocation of production facilities to locations outside the EU, focusing in particular on additional scenarios in which limited or no further global action is taken on carbon emission reduction;
90. Emphasises that non-ETS sector causes some 55 % of the EU's greenhouse gas emissions and that it is essential to ensure that, concomitant with the ETS, also non-ETS sectors are taking their responsibility to curb emissions; stresses the need for political guidance at the EU level, and for concrete actions to be taken to address this issue;
91. Recognises that the ETS is experiencing problems not originally anticipated, and that the accumulating surplus of allowances will depress the incentive to promote low carbon investments for many years to come; notes that this endangers the effectiveness of the ETS as the EU's principal mechanism to reduce emissions in a manner that creates a level playing field for competing technologies, that gives companies flexibility to develop their own mitigation strategy, and that provides for specific measures to combat carbon leakage; calls on the Commission to adopt measures to correct the failings of the ETS and to allow it to function as originally envisaged: suggests that these measures include:
- (a) presenting as soon as possible a report to Parliament and the Council which shall examine, amongst other aspects, the impacts on incentives for investments in low-carbon technologies and the risk of carbon leakage; before the start of the third phase, the Commission should, if appropriate, amend the regulation referred to in article 10(4) of Directive 2003/87/EC in order to implement appropriate measures which may include withholding the necessary amount of allowances;
 - (b) proposing legislation at the earliest appropriate date to modify the 1.74 % annual linear reduction requirement so as to meet the requirements of the 2050 CO₂ reduction target;
 - (c) undertaking and publishing an assessment of the value of establishing a reserve price for the auction of allowances;
 - (d) taking steps to increase the input of relevant information and the transparency of the ETS registry, so as to enable more effective monitoring and evaluation;

Research, human resources, new technologies and alternative fuels

92. Believes that prices play a crucial role in energy-related investment and energy production; notes that the different Member States' policies to promote renewable energy should be seen as a learning curve; takes the opinion that the recent, relatively high prices of fossil fuels will promote the development of renewable energy, provided that policy and market failures are removed; recommends that the Member States promote and

support more efficient support schemes for renewable energy in order to minimise increases in energy prices; asks the Commission to explore options for a more coordinated, convergent, integrated European system of renewables support;

93. Believes that the rise in recent years of energy bills in the EU has developed a ‘smart’, common-sense-based approach to cut energy use through energy efficiency and energy savings; stresses the importance of accompanying this natural yet insufficient change in behaviour with the right policy actions, and with financial support, in order to enhance further energy savings; stresses the need for stimulating consumers to generate their own energy; stresses that the role of ICT and its implementation throughout smart grid networks is increasingly important for the development of efficient energy consumption and, in particular, for the development of demand response programmes (including smart meters), which should help consumers become active stakeholders in energy efficiency by providing them with easily understood, real-time data on energy consumption in households and businesses, and on the surplus that is fed back to the grid, as well as with information on energy efficiency measures and possibilities;
94. Believes that energy infrastructure should become more end-user orientated, with a stronger focus on the interaction between distribution system capacities and consumption, and emphasises the need for real-time, two-directional power and information flows; points out the benefits for consumers of new technologies, such as demand-side energy management and demand-response systems, that improve energy efficiency of supply and demand;
95. Believes that the roll out of smart grids is a matter of urgency, and that, without them, the integration of distributed renewable generation and the improvement of energy consumption efficiency (which are basic for the achievement of the objectives of the 20/20/20 Climate and Energy Package) will not be possible;
96. Emphasises the role of smart grids to allow two-way communication between electricity producers and customers, and points out that smart grids can allow consumers to observe and adapt their electricity use; points out that strong personal data protection, and consumer education programmes such as information campaigns in schools and universities, are essential, in particular if smart meters are to have a real impact; stresses that the Member States should make the relevant information available on websites for consumers and that all relevant actors – such as builders, architects and suppliers of heat, cooling and electricity equipment – should obtain up-to-date information, compare prices and services, and, on that basis, choose the energy provider most suitable for their purposes;
97. Calls on the Commission to ensure that Horizon 2020, and the European Innovation Partnerships under the Innovation Union, prioritise energy system optimisation and the need to develop all types of sustainable low-carbon technologies in order to spur EU competitiveness, promote job opportunities and create incentives to responsible energy behaviour; supports the goals of the EU Strategic Energy Technology Plan and of the associated European Industrial Initiatives in this regard; stresses that promoting energy efficiency and reducing the cost of renewable energy through technological improvements and innovation should also be accorded the highest priority by, inter alia, earmarking a

higher share of public research budgets for renewable energy and energy efficiency research, particularly in Horizon 2020 and the SET plan;

98. Maintains that research into new alternative fuels is essential in order to meet long-term environmental and climate targets, and therefore looks to the Horizon 2020 programme to provide the necessary incentives;
99. Stresses the importance of further research and development by public institutions, and by industry, to improve and increase energy efficiency, and the use of renewable energy and natural gas, in the road, maritime and aviation sectors;

Heating and cooling

100. Calls for greater attention to be paid to the heat and cooling sectors; calls, in this respects, on the EU to consider the full integration of the heating and cooling sector into the transformation of the energy system; notes that this sector today represents ca. 45 % of the final energy consumption in Europe, and that a better understanding of the important role of heating and cooling is needed; calls on the Commission, therefore, to gather the required data reflecting the energy sources for and uses of heating and cooling, as well as the distribution of heat to different groups of final consumers (e.g. residential, industry, tertiary); encourages the development of combined heat and power plants that use renewable or recovered and waste heat, and supports further research on cooling and heating systems with a view to executing the EU's ambitious policy; calls on public authorities to update demand forecasts on the 2050 horizon and to produce impact assessments of regional underground conditions in order to optimise resource allocation; calls, furthermore, on the Commission and the Member States to allocate increased funding to local energy infrastructures such as district heating and cooling – including through R&D and innovative financial instruments – that bring about efficient, low- and no-carbon solutions that will substitute the import and European-wide exchange/transport of energy; notes that electrification and readily available renewable energy solutions (geothermal, biomass including biodegradable waste, solar thermal and hydro/aerothermal), in combination with energy efficiency measures, have the potential to decarbonise the heat demand by 2050 in a more cost-effective way, while addressing the problem of energy poverty;

Final remarks

101. Welcomes the forthcoming Commission Communications on CCS, on the internal market, on energy efficiency and energy technologies with a view to making further progress on the political choices identified in the Energy Roadmap 2050;
102. Believes that, in order to ensure security of energy supply, special attention should be given to the EU's external border regions by supporting the networking and development of new energy infrastructures in cooperation with neighbouring countries;
103. Notes that differing geographical conditions make it impossible to apply a 'one-size-fits-all' energy policy to all regions; believes – notwithstanding the criteria for joint action and while aware of the need to comply with EU policy frameworks – that each European region should be allowed to pursue an individual plan, geared to its situation and

economy, developing those sustainable energy sources which can fulfil the Energy Roadmap 2050 goals most effectively, and recalls that renewable energy generation in particular has a key role to play in terms of development and employment, in both rural and non-rural areas; calls, therefore, on all regions to develop and implement energy strategies, and to consider including energy in their research and innovation strategies for smart specialisation; believes that, on the basis of such specialisation, the EU should measure European energy objectives on an EU-wide scale in place of national targets;

104. Emphasises the importance of transparency, democratic oversight and civil society involvement in relations with third countries in the field of energy;
105. Stresses the importance of reducing the total consumption of energy, and of increasing energy efficiency, in the transport sector, including through transport planning and support for public transport at Member State level; stresses as well that renewable energy projects under the Trans-European Network programme for transport and for energy (TEN-T and TEN-E) should be accelerated;
106. Takes the view that the overall decarbonisation goal necessitates a substantial reduction in transport emissions, which implies the further development of alternative fuels, improvements in the efficiency of means of transport, and a substantial rise in electricity use, and thus high levels of investment in electricity infrastructure, grid management and energy storage; notes that quick action is needed to avoid being locked into a higher emission path on account of the long lifecycle of infrastructure;
107. Strongly encourages the idea of incorporating the conclusions of the Commission working document 'Regions 2020 – an assessment of future challenges for EU regions' concerning the importance of also taking account of the potential of the outermost and less developed regions in the field of energy supply in the years ahead;
108. Draws attention to the complex relationship between energy, food supply and security developments, particularly with regard to unsustainable first generation biofuels which may have a negative social and environmental impact on developing countries; recommends, therefore, a step-up in investment and development of sustainable advanced biofuels from agricultural waste products and algae;
109. Recalls the importance of the environmental integrity of energy production; calls on the Member States to apply Environmental Impact Assessment requirements strictly and to all types of energy production, including unconventional gas;
110. Calls on the Commission to support the so-called 'energy security clause' – to be included in all trade, association, and partnership and cooperation agreements with producer and transit countries – which would lay down a code of conduct, and explicitly outline measures to be taken in the event of any unilateral change in terms by one of the partners;
111. Notes the importance of broad cooperation in the Arctic region, particularly among countries in the Euro-Atlantic sphere, including an agreement on a special regime; calls, therefore, on the Commission to come forward with a holistic assessment of the benefits and risks of EU involvement in the Arctic, including an environmental risk analysis,

given the very fragile and indispensable areas, especially in the high Arctic;

112. Instructs its President to forward this resolution to the Council and the Commission.

14.11.2012

OPINION OF THE COMMITTEE ON FOREIGN AFFAIRS

for the Committee on Industry, Research and Energy

on the Energy Roadmap 2050, a future with energy
(2012/2103(INI))

Rapporteur: Jacek Saryusz-Wolski

SUGGESTIONS

The Committee on Foreign Affairs calls on the Committee on Industry, Research and Energy, as the committee responsible, to incorporate the following suggestions in its motion for a resolution:

1. Reminds the Commission that the EU's energy policy further to climate change and environmental policies must be in line with other priority policies of the Union, including its security, foreign and neighbourhood, trade, and development policies, as well as its policies in defence of human rights and democratic principles; calls for a stronger alignment with immediate effect to ensure the effectiveness of its energy policy as well as the coherence and credibility of its foreign policy; highlights that working towards EU energy independence improves the EU's standing as a global actor;
2. Reminds the Commission that the guiding principles of EU energy policy should be to ensure the supply of energy and to reduce the EU's excessive energy dependency in this area;
3. Emphasises that the EU's energy policy should aim for a greater degree of independence – i.a. by pursuing higher energy efficiency, promoting renewable energy sources and switching to low emission sources – and thereby boost rather than compromise the Union's competitiveness; calls, to that end, on the Commission to come forward with initiatives, serving to protect the EU's competitiveness, to prevent the risk of carbon leakage caused by the reallocation of production outside the EU, especially in the case of limited or no global action on carbon emission reduction; recalls that the EU's energy policy should be balanced in such a way to ensure the implementation of measures to safeguard access to the three pillars of secure, sustainable and competitive energy;
4. Emphasises the developments taking place in global energy markets, including the increased role of natural gas from unconventional energy sources and of new

technologies, the changing supply and demand patterns and the emergence of new producing and transit countries, all of which should be taken into account when forming the EU's energy policy;

5. Stresses that the solidarity between Member States called for by the EU Treaty , should apply both to the daily working of and the crisis management of the internal and external energy policy; calls on the Commission to provide a clear definition of 'energy solidarity' in order to ensure that it is respected by all Member States;
6. Calls on the Commission and the European External Action Service (EEAS) to set the strategic priorities of the external energy policy, with due consideration given to Europe's high degree of energy dependency, while at the same time pursuing an active climate policy by engaging with all parties to the UNFCCC and, in particular, with key partners such as the United States and the five BRICS countries; underlines in particular the need to deepen the dialogue on strategic energy issues of mutual interest, to foster cooperation on energy policies and to strengthen research collaboration within dedicated fora such as the US-EU Energy Council;
7. Stresses that the EU energy policy must in no way contradict the basic principles upon which the EU was founded with regard, in particular, to democracy and human rights; calls on the Commission, in this regard, to privilege in its energy relations producers and transit countries that share and support the same values;
8. Calls on the Commission to draw up a comprehensive set of short-, medium- and long-term energy policy priorities for the EU to pursue in relations with its neighbours with a view to establishing a common legal area based on the acquis-related principles and norms of the internal energy market; stresses the importance of further extending the Energy Community, notably to candidate countries and to countries in the Eastern Partnership, Central Asia and the Mediterranean, and of setting up legal control mechanisms to deal with deficient acquis implementation; calls on the Union to show solidarity with regard to its partners which are part of the Energy Community; condemns, in this regard, the recent threats made by the Russian Federation vis-à-vis Moldova;
9. Highlights, furthermore, the emerging importance of the exploration of oil and gas fields in the Mediterranean Sea and the Arctic; believes that there is an urgent need to develop an EU policy on oil and gas drilling at sea, including the delineation of exclusive economic zones (EEZs) of EU Member States and relevant third countries in accordance with the UNCLOS Convention, to which all EU Member States and the EU as such are signatories;
10. Emphasises that the EU should maintain a high political profile during the delineation of EEZs, and during the process of granting licensing rights for drilling, in order to prevent friction with third countries; underlines that energy should be used as a motor for peace, cooperation and stability;
11. Is convinced that more effective management at a global level would improve cooperation with producer, transit and consumer countries; believes that the EU should therefore play a major role in the international management of energy policy, with a view to promoting transparent and non-discriminative principles, pursuing the objective of sustainability,

lowering prices and transaction costs and setting incentives for market participants to compete on price and quality;

12. Recalls that the Union's strategic partnerships with energy producer and transit countries, in particular countries covered by the European Neighbourhood Policy (ENP), require adequate tools, predictability, stability and long-term investment fully consistent with internal energy market legislation; recalls the importance of the swift completion of the energy interconnections with neighbouring countries as a way to strengthen relations with those countries; emphasises, to that end, that the Union's climate objectives must be in accord with EU long-term infrastructure investment projects oriented at diversifying supply routes and energy sources and at increasing the Union's energy security, such as the Southern Corridor, including the Nabucco Pipeline and its potential linkage to the countries of Eastern and Central Europe;
13. Emphasises the importance of transparency, democratic oversight and civil society involvement in relations with third countries in the field of energy;
14. Draws attention to the complex relationship between energy, food supply and security developments, particularly with regard to unsustainable first generation biofuels which may have a negative social and environmental impact on developing countries; recommends, therefore, a step-up in investment and development of sustainable advanced biofuels from agricultural waste products and algae;
15. Is convinced that the Council should grant the Commission a mandate to conduct negotiations on infrastructure projects of strategic importance that affect the security of supply for the EU as a whole, and that such mandates should also be considered in the instances of other intergovernmental agreements considered to have a significant impact on the EU's long-term energy policy objectives, in particular its energy independence; welcomes, in this regard, the progress made in the Commission-led negotiations on the treaty between the EU, Azerbaijan and Turkmenistan to build the Trans-Caspian Pipeline System;
16. Notes the creation of an information exchange mechanism for intergovernmental agreements between EU Member States and third countries on energy policy, given that this mechanism is oriented at enhancing policy transparency, coordination and efficiency in the EU as a whole; calls on the Member States to show further ambition in ensuring that agreements contrary to internal energy market legislation are not put in place; considers that the Commission should be able to examine draft agreements for their compatibility with such legislation, and to participate in negotiations where relevant; considers that the information-exchange mechanism is a step towards further coordinating energy purchasing outside of the EU, which is of crucial importance for realising the goals of the Energy Roadmap 2050;
17. Calls for the EU-Russia Energy Roadmap to be based on principles of mutual respect and reciprocity, grounded in World Trade Organisation, Energy Charter Treaty and Third Energy Package rules; calls on the Commission to implement and execute, in an effective manner, EU internal market and competition rules vis-à-vis all energy sector undertakings operating on the territory of the Union; welcomes, in this respect, the recent investigation into anticompetitive behaviour by Gazprom and its European subsidiaries, and deplores

the politically motivated decree of the President of the Russian Federation preventing its energy companies from cooperating with EU institutions; insists that every energy sector undertaking is expected fully to cooperate with the investigative authorities; calls on the Commission to propose an appropriate response to this decree and to ensure that the investigation can proceed;

18. Emphasises the need to tackle the anticipated growth of gas and electricity imports from third countries to the EU in the short- and medium-term with view of securing the energy supply; reiterates that, for some regions and Member States, this challenge is closely linked with a dependency on gas and oil import from a single third country; acknowledges that meeting this challenge requires, inter alia, a strengthened role for indigenous energy resources and renewables, which are vital to ensure competitiveness and security of supply, as well as actions oriented at diversifying the portfolio of energy suppliers, routes and sources; acknowledges that one strategic objective in this regard is to aim at the realisation of the Southern Gas Corridor, and the achievement of the supply route to the EU of roughly 10-20 % of the EU gas demand by 2020, in order to enable each European region to have physical access to at least two different sources of gas;
19. Notes the importance of broad cooperation in the Arctic region, particularly among countries in the Euro-Atlantic sphere; calls, therefore, on the Commission to come forward with a holistic assessment of the benefits and risks of EU involvement in the Arctic, including an environmental risk analysis, given the very fragile and indispensable areas, especially in the High Arctic;
20. Calls on the Commission to support the so-called 'energy security clause' – to be included in all trade, association, and partnership and cooperation agreements with producer and transit countries – which would lay down a code of conduct, and explicitly outline measures to be taken in the event of any unilateral change in terms by one of the partners;
21. Calls for closer cooperation between the Council, the Commission and the EEAS so that they may speak and act jointly on issues concerning external energy policy; stresses the need to establish an energy policy desk within the EEAS, and to involve EU delegations in the conduct of energy diplomacy on the ground; recalls that it should remain regularly informed on the developments in this area.

RESULT OF FINAL VOTE IN COMMITTEE

Date adopted	6.11.2012
Result of final vote	+: 41 -: 2 0: 6
Members present for the final vote	Franziska Katharina Brantner, Frieda Brepoels, Elmar Brok, Marietta Giannakou, Ana Gomes, Anna Ibrisagic, Liisa Jaakonsaari, Tunne Kelam, Evgeni Kirilov, Maria Eleni Koppa, Andrey Kovatchev, Eduard Kukan, Vytautas Landsbergis, Sabine Lösing, Ulrike Lunacek, Mario Mauro, Francisco José Millán Mon, Alexander Mirsky, María Muñiz De Urquiza, Annemie Neyts-Uyttebroeck, Norica Nicolai, Pier Antonio Panzeri, Ioan Mircea Paşcu, Alojz Peterle, Bernd Posselt, Hans-Gert Pöttering, Cristian Dan Preda, Fiorello Provera, José Ignacio Salafranca Sánchez-Neyra, Nikolaos Salavrakos, Jacek Saryusz-Wolski, György Schöpflin, Marek Siwiec, Laurence J.A.J. Stassen, Charles Tannock, Inese Vaidere, Sir Graham Watson, Karim Zéríbi
Substitute(s) present for the final vote	Véronique De Keyser, Norbert Neuser, Alf Svensson, László Tőkés, Ivo Vajgl, Alejo Vidal-Quadras
Substitute(s) under Rule 187(2) present for the final vote	Leonidas Donskis, Jolanta Emilia Hibner, Michèle Striffler, Rui Tavares, Róza Gräfin von Thun und Hohenstein

15.10.2012

OPINION OF THE COMMITTEE ON THE ENVIRONMENT, PUBLIC HEALTH AND FOOD SAFETY

for the Committee on Industry, Research and Energy

on the Energy Roadmap 2050, a future with energy
(2012/2103(INI))

Rapporteur: Romana Jordan

SUGGESTIONS

The Committee on the Environment, Public Health and Food Safety calls on the Committee on Industry, Research and Energy, as the committee responsible, to incorporate the following suggestions in its motion for a resolution:

1. Welcomes the EU's commitment to reducing greenhouse gas emissions as its contribution to the worldwide efforts to limit the global mean temperature rise to below 2° above pre-industrial levels; also welcomes the Commission's aim of exploring possible ways of delivering the EU's decarbonisation objective while ensuring security of energy supply and a competitive Europe;
2. Finds it regrettable that the Commission has based all its decarbonisation scenarios on the assumption of global climate action and has not carried out any analysis with a view to determining the EU's ambitions in the event that global action is delayed; also regrets the Commission's omission to look into a scenario based on high levels of energy efficiency and renewable energy, which would be the most resilient to higher oil prices or declining oil supplies;
3. Supports the conclusion that decarbonisation of the EU by 2050 is feasible and that it will require high levels of investment, R&D, behaviour change and demand management; stresses the need to invest now to avoid a lock-in into unsustainable technologies; calls on the Commission to ensure clarity and stability for investors, by reducing over-regulation and setting clear, ambitious and binding targets for emissions reductions, efficiency and renewable energy for 2030, to be based on a 'high-efficiency and renewables' scenario, following the respective assessment; highlights the fact that local stakeholders are key to implementing a truly successful low-carbon vision and to fostering an integrated approach to energy, and thus should be encouraged by the Commission through adequate planning

and funding support;

4. Supports the Commission's conclusion that the two most important no-regret options for transforming our energy system are energy efficiency and a high share for renewables; takes the view that relying on ETS alone to transform our energy system would require a high carbon price that could increase the risk of carbon leakage; considers, therefore, that supplementary measures to support energy efficiency and renewable energy are necessary;
5. Considers that the lack of detailed studies in the Commission's impact assessment on the social and economic implications of further reductions in greenhouse gas emissions for individual Member States – given the variations in the energy mix across the Member States – should urgently be addressed; considers that such studies will form the basis for the formulation of fair, long-term options in the climate and energy sector;
6. Calls on the Commission to propose a clear goal for 2030 by setting an ambitious target for CO₂ reduction which takes account of renewable energy and efficiency targets; reiterates the need to meet, as a minimum, the milestones for emission reduction referred to in the low-carbon Roadmap and to propose appropriate levels for the various targets as soon as possible for the period after 2020;
7. Draws attention to the fact that millions of EU citizens are currently suffering from energy poverty, recalling that their numbers may rise further unless the Commission steps up the transition to a low-carbon, energy-efficient economy through both supply-side and demand-side mechanisms, fostering an overarching change in energy consumption behaviour;
8. Considers that post-2020 commitments concerning new reduction targets beyond those already accepted should be conditional on an analysis and presentation by the Commission of the progress achieved in implementing the 2020 reduction targets;
9. Takes the view that the development of renewable energy sources up to 2050 must proceed gradually, and that indicative targets until 2050 should therefore be set now; considers the setting of a binding target for 2030 to be an absolute necessity if investment security for actors is to be established;
10. Stresses that achieving a legally binding global agreement on emissions reduction and the involvement in the process of the world's biggest emitters, such as China, India, the US and Brazil, will increase the chances of achieving a real reduction in greenhouse gas emissions;
11. Calls on the Commission and the Member States to develop sound mechanisms for financing the energy transition, including a strengthened ETS, innovation initiatives such as Horizon 2020, greater involvement of the EIB in the financing of renewable energy and energy efficiency projects, and market -based mechanisms, and also to promote the development of crossborder energy networks;
12. Urges the Commission and the Member States to develop policies and joint infrastructures aimed at ensuring that by 2050 the EU has achieved self-sufficiency and self-production for at least 50 % of its total overall energy needs;

13. Points out that any expansion of the ETS must be precisely defined, and must not result in an artificial increase in the price of emission allowances through the use of set-aside or similar mechanisms;
14. Points out the need to respond to the real danger posed by carbon leakage if energy-intensive industries relocate outside the EU;
15. Asks the Commission to come forward as soon as possible with an additional assessment making suggestions for recommended actions that might prevent the risks of carbon leakage caused by reallocation of production outside the EU, with particular emphasis on evaluating additional scenarios in the case of limited or no further global action on carbon emissions reduction;
16. Calls on the Commission, when developing energy infrastructure plans, to take into consideration the potential risks of carbon leakage, especially in Member States with extensive borders and geographical proximity to non-EU countries;
17. Calls on the Commission and the Member States to step up the development and deployment of sustainable and climate-friendly technologies, to strengthen the role of renewable energy sources (inter alia by giving them priority of dispatch and increasing their commercialisation, e.g. through stable and predictable support schemes), to step up the efficient use of energy sources, and to phase out fuel subsidies that encourage wasteful consumption and inefficient use of resources and, together with other market deficits like market concentration, regulated energy prices and lack of liquidity in intra-day and balancing markets, hinder the competitiveness of mature renewable energy technologies; in this regard, reiterates its call for sustainability criteria for energy use of biomass that would ensure both overall resource efficiency and climate benefits within a reasonable timeframe while also strengthening the functioning of the internal energy market;
18. Takes the view that the overall decarbonisation goal necessitates a substantial reduction in transport emissions, which implies the further development of alternative fuels, improvements in the efficiency of means of transport, and a substantial rise in electricity use and thus high levels of investment in electricity infrastructure, grid management and energy storage; notes that quick action is needed to avoid being locked into a higher emission path on account of the long lifecycle of infrastructure;
19. Welcomes the important role of renewable energy sources for decarbonisation and energy security, and calls for their greater commercialisation; is concerned at the slow pace of development and deployment of CCS technologies, in the light of the foreseeable further global use of coal as an energy source; acknowledges that nuclear energy is currently used as a major low-emissions energy source, and calls on the Commission to work towards improving its acceptance by the public, making use of the results of stress tests; encourages initiatives to disseminate comprehensive information to the public with a view to improving public acceptance of the siting of facilities;
20. Calls on the Commission to complete, as a matter of urgency, the establishment of a fully harmonised common EU energy market whose smooth operation will help achieve the established energy and climate targets;

21. Takes the view that it will not be possible to guarantee sustainable energy supply throughout the Union as long as its entire territory is not served by smart networks, and accordingly urges the Commission to contribute more actively to the establishment of such networks as soon as possible, ensuring above all that no Member State remains unlinked to the EU joint networks.
22. Urges the Commission and the Member States to integrate all existing technologies and infrastructure in order to create a genuine EU supergrid for electricity and gas, with efficient smart metering possibilities for citizens enabling them to enjoy secure supply at reasonable and fair prices;
23. Calls on the EU to consider the full integration of the heating and cooling sector in the pathways towards a low-carbon 2050 energy system; notes that this sector represents today some 45 % of final energy consumption in Europe, and that a better understanding of the important role of heating and cooling in terms of low-carbon energy systems is needed;
24. Asks the Commission to investigate the potential of and the various possible technologies for energy storage in the EU in a holistic manner, through integration of EU policies in the field of the internal market, energy network capacities and energy and climate change policies, alongside consumers' interests, so that the Union's energy and climate goals can be attained, dependence on energy from outside the EU is diminished, and a genuine single market and level playing field for energy are created, with the highest possible degree of security of energy supply for the future;
25. Recalls that every Member State has the right under the Treaties to decide on its own energy mix, on the basis of its geographical and technical situation and as determined by local raw materials reserves;
26. Recalls the importance of the environmental integrity of energy production; calls on the Member States to strictly apply Environmental Impact Assessment requirements to all types of energy production, including unconventional gas;
27. Notes the increased activity surrounding the exploration of oil and gas fields in the Mediterranean and the Arctic; believes that the EU should promote the development of an international legal framework for the protection of the High Arctic, on lines similar to those already established for the Antarctic in the Antarctic Treaty and the Protocol on Environmental Protection; considers that for other parts of the Arctic which fall within the exclusive economic zones of EU Member States or EEA countries, there is an urgent need for the proposed regulation on the safety of offshore oil and gas to include drilling requirements which ensure that remote areas are not exposed to a higher risk than other areas and that extreme operating conditions, such as long-lasting darkness, icy conditions or deep water, are accurately reflected in the authorisation process;
28. Recalls that the EU budget needs to be aligned with the Union's climate, environmental and energy targets.

RESULT OF FINAL VOTE IN COMMITTEE

Date adopted	10.10.2012
Result of final vote	+: 52 -: 9 0: 2
Members present for the final vote	Martina Anderson, Elena Oana Antonescu, Kriton Arsenis, Sophie Auconie, Pilar Ayuso, Paolo Bartolozzi, Sandrine Bélier, Sergio Berlato, Lajos Bokros, Milan Cabrnock, Martin Callanan, Nessa Childers, Yves Cochet, Chris Davies, Bas Eickhout, Edite Estrela, Jill Evans, Karl-Heinz Florenz, Elisabetta Gardini, Gerben-Jan Gerbrandy, Matthias Groote, Françoise Grossetête, Cristina Gutiérrez-Cortines, Satu Hassi, Jolanta Emilia Hibner, Karin Kadenbach, Christa Klauß, Eija-Riitta Korhola, Holger Kraemer, Jo Leinen, Corinne Lepage, Peter Liese, Zofija Mazej Kukovič, Linda McAvan, Radvilė Morkūnaitė-Mikulėnienė, Miroslav Ouzký, Vladko Todorov Panayotov, Gilles Pargneaux, Andres Perello Rodriguez, Mario Pirillo, Pavel Poc, Anna Rosbach, Oreste Rossi, Kārlis Šadurskis, Daciana Octavia Sârbu, Carl Schlyter, Horst Schnellhardt, Richard Seeber, Theodoros Skylakakis, Bogusław Sonik, Claudiu Ciprian Tănăsescu, Salvatore Tatarella, Thomas Ulmer, Åsa Westlund, Sabine Wils
Substitute(s) present for the final vote	Adam Gierek, Julie Girling, Romana Jordan, Csaba Sándor Tabajdi, Marita Ulvskog, Vladimir Urutchev, Anna Záborská, Andrea Zannoni

6.12.2012

OPINION OF THE COMMITTEE ON THE INTERNAL MARKET AND CONSUMER PROTECTION

for the Committee on Industry, Research and Energy

on the Energy Roadmap 2050, a future with energy
(2012/2103(INI))

Rapporteur: Olle Schmidt

SUGGESTIONS

The Committee on the Internal Market and Consumer Protection calls on the Committee on Industry, Research and Energy, as the committee responsible, to incorporate the following suggestions in its motion for a resolution:

1. Welcomes the Commission communication and underlines the need for concrete policy proposals; believes that it is crucial to agree on the direction of the Union's long-term policy, once the goals of the Europe 2020 strategy have been met, in the interest of predictability for industry and consumers;
2. Stresses that it is crucially important that the Member States and the Commission ensure timely, correct and full implementation of existing legislation, including the regulatory work called for by the Third Internal Energy Market Package and fair competition rules for all energy sector undertakings operating on the territory of the Union, in order to achieve an integrated and competitive European internal energy market by 2014; calls on the Commission and the Agency for the Cooperation of Energy Regulators (ACER) to monitor national implementation measures more strictly and to develop new business models;
3. Stresses the importance of the internal energy market, and underlines that major efforts still need to be made to diminish the dependence on energy from third countries and to ensure a more self-sufficient and self-producing EU in 2050; asks the Member States to implement the Trans-European Energy Network guidelines and ensure energy interconnectivity and interoperability at the EU-level;
4. Believes that an open, transparent, integrated, harmonised and competitive internal energy market is needed in order to achieve competitive energy prices, security of supply, sustainability, and efficient large-scale deployment of renewable energy and of energy

from unconventional sources, and that the completion of such a market still remains an important challenge for all Member States; welcomes the liberalisation of the internal energy market as a necessary step to cut the cost of electricity and gas for consumers while ensuring that the energy markets become more transparent and better monitored, thereby making for competitive and, from the consumer's point of view, fair prices; considers it essential to that end to ensure that national regulatory authorities function effectively and are coordinated at the European level;

5. Believes that the transition to a low-carbon and energy-efficient economy is an opportunity not only for sustainability but also for the security of supply and competitiveness in Europe, and that reducing greenhouse gas emissions can be a competitive advantage in the growing global market for energy-related goods and services; underlines that this is an opportunity for the European SMEs operating on the renewable energy market, giving an excellent impulse to the development of entrepreneurship and innovation and possibly providing a prime source of job creation;
6. Stresses that energy efficiency is a highly cost-effective way for Europe to achieve its energy, climate change and economic goals; recalls the enormous potential of energy efficiency in limiting our dependence on imported energy and re-launching the economy; recognises that shifting to a more energy-efficient economy would accelerate the spread of innovative technological solutions and improve the competitiveness of industry in the Union, boosting economic growth and creating high quality jobs in several sectors related to energy efficiency;
7. Points to the need to support decentralised, small-scale producers of renewable energy, including regional and local authorities, so as to help them integrate into the grid, and considers that regional and local authorities should continue to enjoy simplified access to European Investment Bank (EIB) financing for sustainable energy;
8. Points out that the current system of promoting renewables is economically inefficient owing to the many different programmes across the Member States; calls for a clear policy framework at the Union level in order strategically to foster economically efficient investments in low-carbon energy at the local, regional, national and Union level;
9. Maintains that the choice of energy mix, while a matter for the individual Member States, should allow for the common objectives and, where appropriate, be the subject of a coordinated European approach, as the targets proposed might otherwise not be reached, especially with regard to efforts to combine renewable energy sources; points out that approximate investment needs, in terms of energy infrastructure, will be impossible to predict without estimating the likely make-up of the energy mix in 2030;
10. Emphasises the role of energy in stimulating growth and competitiveness in the EU; calls on the Commission to come up with a post-2020 strategy and to present a 2030 policy framework for a European energy policy with a single green house gas reduction target that is compatible with the EU 2050 decarbonisation objectives and is backed by an impact assessment; encourages the Member States to step up their ongoing efforts to reach the current 2020 targets in the area of EU energy policy;
11. Considers it vital to focus the attention of the Union and the Member States on

investments in infrastructure to enhance energy security and the modernisation of the energy supply, bearing in mind that the most effective way to encourage such investments in the long term is to combine them with specific regulatory and fiscal measures and the necessary national public policies;

12. Points out that the impact of carbon capture, transport and storage (CCS) is still unclear; takes note of the International Energy Agency (IEA) report 'World Energy Outlook 2012', which highlights the role of CCS in some policy scenarios; recognises that there are concerns among the public with regard to this technology, and calls on the Commission to draw up a mid-term report evaluating the results obtained from the use of EU-subsidised demonstration projects for coal-fired power stations;
13. Emphasises the role of smart grids to allow two-way communication between electricity producers and customers, and points out that smart grids can allow consumers to observe and adapt their electricity use; points out that strong personal data protection and consumer education programmes, such as information campaigns in schools and universities, are essential, in particular if smart meters are to have a real impact; stresses that the Member States should make the relevant information available on websites for consumers and that all relevant actors, such as builders, architects and suppliers of heat, cooling and electricity equipment, should obtain up-to-date information and compare prices and services and, on that basis, choose the energy provider most suitable for their purposes;
14. Believes that the role of information and communication technologies (ICT) needs to be promoted, and that there must be a firm European commitment to innovation and research, given that the development of innovative technologies will help to enhance safety and attract investment;
15. Draws attention to the Energy Policy for Europe, which recognises the contribution of nuclear power in the areas of competitiveness, cost efficiency, CO₂ emission reduction and security of supply; points out that nuclear energy technologies have a potential to meet energy and climate objectives in both the short and longer term, as long as the safety requirements applicable to their operation are fully met, taking into account the entire life cycle of projects;
16. Acknowledges that instruments such as energy taxes, carbon taxes and emission trading schemes are key drivers to reach the emission reduction targets in a cost-efficient way, but considers that they will burden the consumers with higher energy prices in the end;
17. Stresses the importance of reducing the total consumption of energy, and of increasing energy efficiency, in the transport sector, including through transport planning and support for public transport at Member State level; stresses as well that renewable energy projects under the Trans-European Network programme for transport and for energy (TEN-T and TEN-E) should be accelerated;
18. Emphasises the role of national targets for energy from biofuels and for other renewable fuels for transport, as they are key to achieve the objectives set out in the Commission's communication; points out that these targets provide certainty for investors and encourage the development of renewable resources; stresses, however, the importance of

encouraging the use of second-generation biofuels produced from wastes, residues and other non-food cellulosic materials;

19. Believes that the Member States should encourage local and regional authorities to set up renewable energy action plans and take measures to raise public awareness of the benefits of energy from renewable sources;
20. Considers that it should be made clear what can be done through energy policy and social policy respectively; points out that all the scenarios put forward by the Commissions suggest that the costs of energy and transportation will rise and will account for an increasing part of the expenses made by consumers and SMEs; believes that the Member States should develop measures to ensure affordable, accessible and available energy for all citizens, especially those most vulnerable in society;
21. Considers energy education to be both the key to changing behaviour and a cornerstone of a new model for sustainable development; urges the Commission to allocate the resources needed for energy education within the next multi-annual financial framework;
22. Maintains that the Commission, together with the Member States, regional and local authorities, and civil society representatives, should periodically carry out 'energy education' campaigns in European, national, regional, and local media, interactive campaigns included, in order to make clear and comprehensible information accessible to all citizens, businesses and industry associations; recognises as well the need for information campaigns to be aimed at schools and universities so as to involve younger generations in the cultural shift;
23. Acknowledges the Union's commitment to reduce greenhouse gas emissions by 80-95 % below 1990 levels by 2050; underlines the need for urgent action at local, regional, national, international and global levels to adequately address the task of limiting global average surface temperature increases to less than 2 degrees centigrade in order to prevent further dangerous climate change;
24. Believes that the financial crisis should be used as an opportunity to transform our development model of society towards a highly energy-efficient, fully renewable-based and climate-resilient economy; underlines the need for the Commission to come forward with proposals for a 2030 energy and climate package based on the current three pillars. i.e., reducing greenhouse gases, promoting renewable energies and increasing energy efficiency;
25. Emphasises that greater attention must be paid to energy use if the transformation of the energy system is to become a reality; stresses the need to give higher priority to demand-side management in order to ensure the deployment, at the end-users side, of technologies and systems that achieve the transition of the energy system at an affordable and sustainable cost to society;
26. Calls on the Commission to draw up a comprehensive set of short-, medium- and long-term energy policy priorities to be pursued by the EU in its relations with its neighbours, with a view to establish a common legal area based on the acquis-related principles and norms of the internal energy market.

RESULT OF FINAL VOTE IN COMMITTEE

Date adopted	28.11.2012
Result of final vote	+: 33 -: 4 0: 0
Members present for the final vote	Pablo Arias Echeverría, Cristian Silviu Buşoi, Birgit Collin-Langen, Lara Comi, Anna Maria Corazza Bildt, Cornelis de Jong, Vicente Miguel Garcés Ramón, Thomas Händel, Malcolm Harbour, Sandra Kalniete, Edvard Kožušník, Toine Manders, Franz Obermayr, Sirpa Pietikäinen, Phil Prendergast, Mitro Repo, Zuzana Roithová, Heide Rühle, Christel Schaldemose, Andreas Schwab, Catherine Stihler, Róza Gräfin von Thun und Hohenstein, Gino Trematerra, Bernadette Vergnaud, Barbara Weiler
Substitute(s) present for the final vote	Raffaele Baldassarre, Regina Bastos, Jürgen Creutzmann, Ashley Fox, Marielle Gallo, María Irigoyen Pérez, Morten Løkkegaard, Konstantinos Poupakis, Sylvana Rapti, Marc Tarabella, Patricia van der Kammen, Kerstin Westphal

29.11.2012

OPINION OF THE COMMITTEE ON REGIONAL DEVELOPMENT

for the Committee on Industry, Research and Energy

on the Energy Roadmap 2050, a future with energy
(2012/2103(INI))

Rapporteur: Lena Kolarska-Bobińska

SUGGESTIONS

The Committee on Regional Development calls on the Committee on Industry, Research and Energy, as the committee responsible, to incorporate the following suggestions in its motion for a resolution:

1. Welcomes the Commission's Energy Roadmap 2050 and its goal of ensuring all European citizens equal and universal access to a sustainable supply of energy;
2. Stresses the need to reconcile the application of the climate objectives and the need for sustainable and competitive growth and energy security within the regions; considers it deeply regrettable, in this regard, that the Roadmap is based on EU-wide scenarios alone, does not present the effect of policy choices on individual Member States, and fails to take account of specific circumstances at local and regional level; believes their involvement in all the stages and procedures of implementation is essential in order to preserve and reinforce territorial cohesion;
3. Supports the recommendation of the Energy Roadmap Advisory Group to explicitly address and make transparent the potential trade-offs and synergies between carbon reduction, security of supply and competitiveness, under each scenario;
4. Strongly encourages the idea of incorporating the conclusions of the Commission working document 'Regions 2020 – an assessment of future challenges for EU regions' concerning the importance of also taking account of the potential of the outermost and less developed regions in the field of energy supply in the years ahead;
5. Stresses that all future energy action must apply fair burden-sharing between European regions, taking account of their specific circumstances;

6. Believes that attention must be paid to those regions where coal is still the predominant source of energy and/or where coal production and coal-powered electrical production are vital regional sources of employment; believes that additional social measures on the part of Member States, supported by strong measures at EU level, are required for regional labour markets to adapt to green jobs and training and for the Energy Roadmap 2050 scenarios to be accepted by the populations of the regions concerned; believes it is necessary to opt for promoting renewable energy and energy saving, in line with the 2020 targets;
7. Believes that the Energy Roadmap proposals must be supported by the proper funding of specific programmes, and that cohesion policy should not be seen as a replacement for such funding; stresses that cohesion policy can support certain areas of action, such as energy efficiency, as an additional source of financial support, but only where the programmes in question promote cohesion policy objectives;
8. Stresses that most of the Energy Roadmap scenarios will not be feasible without increased connectivity and the development of local and regional smart distribution network grids for electricity and gas, as well as decentralised and micro-scale renewable energy production; believes that, in addition to crossborder projects, the Union should adopt measures to support this kind of local and regional smart energy infrastructure creation or updating in all European regions;
9. Believes that, in order to ensure security of energy supply, special attention should be given to the EU's external border regions by supporting the networking and development of new energy infrastructures in cooperation with neighbouring countries;
10. Notes that all future energy projections, including the Energy Roadmap, are based on uncertain assumptions as to technological and economic developments; stresses, therefore, that all policy choices and programmes, including those connected with cohesion policy, must be subject to continuous review and adjustment and based on the most cautious assumptions possible;
11. Stresses that the present economic climate underscores the need to adopt an integrated approach to energy matters, taking account of their economic, environmental and social aspects; believes it is essential to pay heed to both beneficial and adverse side-effects when carrying out the work required to ensure, in the medium and long term, that all European citizens will have access to safe, sustainable, and affordable energy;
12. Believes – given that every Energy Roadmap scenario shows that energy prices will increase over the coming years – that the Member States should agree on action aimed at ensuring that price increases are proportionate to differing levels of household income across Europe and preventing an increase in energy poverty in Europe;
13. Notes that differing geographical conditions make it impossible to apply a ‘one-size-fits-all’ energy policy to all regions; notwithstanding the criteria for joint action and while aware of the need to comply with EU policy frameworks, believes that each European region should be allowed to pursue an individual plan geared to its situation and economy, developing those sustainable energy sources which can fulfil the Energy Roadmap 2050 goals most effectively, and recalls that renewable energy generation in particular has a key

role to play in terms of development and employment, in both rural and non-rural areas; calls, therefore, on all regions to develop and implement energy strategies, and to consider including energy in their research and innovation strategies for smart specialisation; believes that, on the basis of such specialisation, the EU should measure European energy objectives on an EU-wide scale in place of national targets;

14. Regrets that the Commission did not implement the recommendations of its peer-reviewed Advisory Group on the Energy Roadmap 2050; calls on the Commission to issue an updated version of the Energy Roadmap taking those recommendations into account;
15. Recalls that the regional dimension of the energy challenge is strongly determined by national choices concerning the energy mix and energy infrastructure development; underscores, therefore, the need for the EU to develop a genuine common energy policy, ensuring the functioning of the internal market and security of supply of energy and valid for all regions;
16. Supports a global agreement on climate change, but regrets the fact that the Roadmap does not propose a scenario should no such agreement be reached; underlines the risk of carbon leakage to Europe's heavy industry and its effect on regional development and social cohesion;
17. Asks the Commission to present a proposal on how to increase efficiency in the deployment of renewable sources of energy within the EU and its regions by striving towards a system of EU-wide common incentives for renewable energy sources, which would permit the deployment of specific types of renewables in those regions of the EU where they are most cost-efficient, and thereby lower electricity prices; believes that in the medium term, market groups for renewables at regional level could be created.

RESULT OF FINAL VOTE IN COMMITTEE

Date adopted	27.11.2012
Result of final vote	+: 35 -: 1 0: 1
Members present for the final vote	François Alfonsi, Luís Paulo Alves, Victor Boştinaru, John Bufton, Salvatore Caronna, Nikos Chrysogelos, Francesco De Angelis, Tamás Deutsch, Rosa Estaràs Ferragut, Danuta Maria Hübner, María Irigoyen Pérez, Seán Kelly, Mojca Kleva, Constanze Angela Krehl, Petru Constantin Luhan, Ramona Nicole Mănescu, Iosif Matula, Erminia Mazzoni, Jens Nilsson, Jan Olbrycht, Younous Omarjee, Tomasz Piotr Poręba, Ewald Stadler, Georgios Stavrakakis, Nuno Teixeira, Lambert van Nistelrooij, Oldřich Vlasák, Kerstin Westphal, Hermann Winkler
Substitute(s) present for the final vote	Jan Březina, Andrea Cozzolino, Ivars Godmanis, Karin Kadenbach, Lena Kolarska-Bobińska, Heide Rühle, Vilja Savisaar-Toomast, Elisabeth Schroedter

RESULT OF FINAL VOTE IN COMMITTEE

Date adopted	24.1.2013
Result of final vote	+: 35 -: 9 0: 14
Members present for the final vote	Josefa Andrés Barea, Zigmantas Balčytis, Ivo Belet, Maria Da Graça Carvalho, Giles Chichester, Jürgen Creutzmann, Pilar del Castillo Vera, Dimitrios Droutsas, Christian Ehler, Vicky Ford, Gaston Franco, Adam Gierek, Robert Goebbels, Fiona Hall, Jacky Hénin, Romana Jordan, Krišjānis Kariņš, Lena Kolarska-Bobińska, Marisa Matias, Judith A. Merkies, Angelika Niebler, Jaroslav Paška, Vittorio Prodi, Miloslav Ransdorf, Herbert Reul, Teresa Riera Madurell, Michèle Rivasi, Jens Rohde, Paul Rübig, Amalia Sartori, Salvador Sedó i Alabart, Francisco Sosa Wagner, Konrad Szymański, Britta Thomsen, Patrizia Toia, Evžen Tošenovský, Catherine Trautmann, Ioannis A. Tsoukalas, Claude Turmes, Niki Tzavela, Marita Ulvskog, Vladimir Urutchev, Kathleen Van Brempt, Alejo Vidal-Quadras
Substitute(s) present for the final vote	Antonio Cancian, Daniel Caspary, Françoise Grossetête, Jolanta Emilia Hibner, Yannick Jadot, Seán Kelly, Holger Krahmer, Bernd Lange, Werner Langen, Markus Pieper
Substitute(s) under Rule 187(2) present for the final vote	Catherine Bearder, Jean-Paul Besset, Karima Delli, Nikolaos Salavrakos