

Opinion of the Committee of the Regions on 'Energy roadmap 2050'

(2012/C 391/04)

THE COMMITTEE OF THE REGIONS

- calls for the role of local and regional authorities to be properly recognised and backed up by adequate resources and capacities as well as suitable governance instruments insofar as they are in the front line, either directly as partners in local sustainable energy projects or when it comes to planning new infrastructure, granting authorisations, investments, public contracts, production and controlling energy consumption;
- reiterates that priority should be given to the integration of renewable energy, produced at local level from a variety of decentralised resources such as wind, hydro, geothermal, solar power and biomass, into the distribution network thus making energy transport and distribution infrastructure more intelligent (smart grids), a prerequisite for effective competition that can deliver real benefits to final consumers;
- stresses that meeting the increasing need for flexibility in the energy system requires suitable storage technologies – such as pumped storage units – at all voltage levels that can store surpluses and reconvert them into electricity for the grid on a large scale; strategic instruments for technology research and promotion should be developed and deployed to this end;
- recommends that information and communication technologies (ICT) play a greater role in facilitating the uptake of innovation, as multipliers of information, and energy-consumption solutions for strategic sectors such as smart cities, which include policies concerning sustainable mobility, smart grids, and sustainable building;
- stresses the urgent need to complete the implementation of an internal market in energy that helps guarantee energy supplies at affordable prices by 2014, to rectify the energy isolation of individual Member States by 2015, to institute a fair balance of resources among regions and to stabilise and improve the framework conditions for the European energy sector in order to limit the additional costs of the energy transition.

Rapporteur	Ugo CAPPELLACCI (IT/EPP), President of the Autonomous Region of Sardinia
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	COM(2011) 885 final

I. POLICY RECOMMENDATIONS

THE COMMITTEE OF THE REGIONS

A. A European strategy for the transformation of energy systems

1. agrees on the urgent need to frame a long-term European strategy for the energy sector that can make a tangible contribution to the EU's 2050 decarbonisation objective. Transforming the energy system is not only a responsibility towards future generations, but also represents a real opportunity for Europe in terms of growth, development, jobs, competitiveness and increasing energy independence;

2. welcomes the energy roadmap 2050, but thinks that it is not detailed and clear enough to enable Member States, regional and local authorities and investors to take decisions as from today, and beyond 2020, to promote a new energy model, or to create certainty for planning. At the same time it stresses the importance of following it up now by adopting specific measures: for example, it is worth considering the possibility of introducing a ban on national subsidies for fossil fuels;

3. notes that the roadmap lacks an assessment of the starting position in terms of the objectives set for this decade by the 2020 energy strategy, and therefore, in its absence, this should be considered before setting the objectives and the political framework for 2030 referred to in the last of the roadmap's conclusions. Furthermore, the process of transforming the energy system should include intermediate phases at 2030 and 2040, in line with the emissions reduction targets set out in the *Roadmap for moving to a competitive low carbon economy in 2050* ⁽¹⁾. A phased roadmap could involve the use of transitional fuels/energy sources as part of a gradual transformation, while also ensuring energy independence and security. It would also be conducive to attaining tangible results, and monitoring and assessing the progress of the measures;

4. takes the view that the technology-neutral approach adopted in the document is unsuitable and must be reconsidered to give priority in the long term to the approaches, technologies and fuels whose results are certain and which can be used sustainably and securely, in the light of experience

and lessons learnt on renewable energy sources and innovative technologies. Moreover, this drive to overhaul the energy system in sustainable terms must take account of the altered landscape in terms of the availability of resources, brought about by the current economic crisis, and of the potential environmental and social consequences that may result;

5. is convinced of the value of the interdependency between environmental and social policies and of the consequent need to guarantee equal access for all to secure and sustainable energy supplies with the lowest possible environmental impact at reasonable prices in the medium and long term, and to guarantee access for all to the means of controlling domestic consumption and of producing renewable energy locally and at reasonable prices;

6. calls for the involvement of local and regional authorities in the process of framing policies such as decarbonising energy in terms of energy efficiency, control of consumption, production and new technologies, for the roadmap to be revised in line with local and regional authorities' potential and needs, and for those authorities' important role to be backed up by adequate resources, capacities and governance instruments;

B. Assessment of impact on the ground and social implications

7. points out that the effort required to transform energy systems and the consequences of doing so will vary depending on each region's energy profile and the resources available to them, and that the possible economic, financial and administrative costs of a European energy initiative should be justified on the basis of a detailed impact assessment that takes adequate account of the specific circumstances at local and regional levels, in particular aspects relating to energy isolation;

8. concurs that transforming energy systems in structural terms entails the need to build and/or modernise energy infrastructure; notes that the costs of this transformation are uneven across Europe's regions, which could pose a threat to social cohesion;

9. recommends the development of instruments able to assess the effects of transforming energy systems at local level, in economic, social and environmental terms. Thus points to the importance of increasing the quality and scope of the most common macroeconomic indicators used to assess policy effectiveness, adding in both the issue of energy from the

⁽¹⁾ COM(2011) 112 final.

perspective of sustainability, and also a social and environmental dimension that can reflect variations in terms of social cohesion, the accessibility and affordability of basic goods and services, health status, poverty, including fuel poverty, natural resources and quality of life in general;

C. Role of local and regional authorities

10. is convinced that achieving global goals in the energy sector requires initiatives to be carried out at local level. To that end, underlines that territorial targets have already been effectively used in various local and regional authorities, as an expression of multilevel governance in energy-system transformation;

11. stresses the importance, in the new energy system, of cross-border cooperation and solidarity and thus the need for coordination at EU level. Efforts need to be made at all levels of governance, which must involve close cooperation with local and regional authorities, and a clear definition of roles and the arrangements for interaction;

12. calls for the role of local and regional authorities to be properly recognised and backed up by adequate resources and capacities as well as suitable governance instruments insofar as they are in the front line, either directly as partners in local sustainable energy projects or when it comes to planning new infrastructure, granting authorisations, investments, public contracts, production and controlling energy consumption. Furthermore, the social dialogue and involvement of the social partners recommended in the roadmap to manage the change requires the capacity of local and regional authorities to disseminate information extensively and act as intermediaries, which should thus not only be clearly acknowledged, but also effectively bolstered;

13. recommends continuity in reinforcing existing positive measures and behaviour patterns at local level, expanding the level of commitment to them and the inclusiveness of all areas of cooperation within the Covenant of Mayors, for example, or of other interregional, national and international structures, supporting their role as driving forces in promoting change, stimulating local economic development and establishing information and cooperation networks;

D. Energy efficiency, energy saving and renewable energy

14. agrees that it is a priority to promote energy saving in order to reduce the demand for energy not only through awareness-raising, education and changing public habits, but also by backing the development of new technologies that can secure more efficient consumption of resources and greater economic growth, competitiveness and employment and by Member States backing energy self-supply systems, with a view to fostering the most rational possible use of energy, a distributed energy system and more genuine public involvement in decision-making on the type and use of energy.

With a view to severing the link between economic growth and energy consumption, points out that a reduction in consumption, where this results from increased process efficiency and energy saving, may be considered as an indicator of growth rather than recession, and can benefit the economy;

15. reaffirms its support for the idea of energy efficiency playing one of the key roles in meeting the emission reduction targets set for 2050. Concurs on the need to identify more ambitious energy efficiency measures and cost-optimal strategies and considers that binding standards at European level are needed here. At the same time, it stresses the urgency of taking action in the areas that could immediately contribute greatly to energy saving, such as improved energy efficiency of buildings and more sustainable mobility;

16. When formulating and implementing urgent measures needed for energy conversion, it must always be ensured that they are consistent in terms of sustainability. There should be an assessment of the risks of progress in one area triggering negative effects in others;

17. is in favour of creating value for energy savings through sustainable market mechanisms, as explored in the *Energy efficiency plan 2011* ⁽²⁾;

18. appreciates that it is clear that the share of renewable energy rises in all decarbonisation scenarios as early as 2030, and accounts for the lion's share compared to other technologies by 2050. However, regrets that none of the roadmap's scenarios gives consideration to solutions integrating renewables and energy efficiency, in order to increase the sustainability of the transformation process towards a scenario free of fossil fuels for the energy system and to progress towards the decarbonisation of the sector. Moreover, whilst noting that the roadmap acknowledges that renewables are vital to the heating and cooling sector, the Committee regrets that no in-depth analysis has been made of the key role that that sector, with its significant impact on overall energy consumption, should play (i) in the process of decarbonising the European energy system by 2050 and, by extension, (ii) when drawing up current and future energy policies;

19. reiterates the comments made in opinion CdR 7/2011 of 30 June and 1 July 2011 on *Energy infrastructure priorities for 2020 and beyond*, and the priorities relating to promoting energy transport networks and the integration of renewable energy, produced at local level from a variety of decentralised resources such as wind, hydro, geothermal, solar power and biomass, amongst others, into the distribution network thus making energy transport and distribution infrastructure more intelligent (smart grids), a prerequisite for effective competition that can deliver real benefits to final consumers. Meeting the

⁽²⁾ COM(2011) 109 final.

increasing need for flexibility in the energy system requires suitable storage technologies – such as pumped storage units – at all voltage levels that can store surpluses and reconvert them into electricity for the grid on a large scale; strategic instruments for technology research and promotion should be developed and deployed to this end;

E. Conventional sources of energy (gas, coal, oil), unconventional sources and nuclear

20. agrees that diversification of supply is necessary in order to safeguard energy security. Stresses the importance of having clear guidelines drafted for a transition phase in which the conventional sources of energy (gas, coal, oil) could play a supporting role, in their most carbon-efficient and sustainable forms, with particular emphasis on CO₂ capture and storage technologies, along the road to achieving a decarbonised energy system, while the technologies, infrastructure and behaviour patterns that the change requires are developing;

21. would express concern about the importance attributed in the strategy to technologies which are not yet available on a commercial scale and recommends that the exploitation of unconventional sources of gas, such as shale gas, and the use of technologies whose risk factors have not yet been fully assessed or controlled, and which can operate on a cross-border basis, be researched and discussed at EU level to assess their potential short- and long-term environmental and social effects, in compliance with current legislation and, as in the case of shale gas, with a view to the possible need for regulation; therefore welcomes the Commission's intention to promote research into technologies that can contribute to the decarbonisation of energy transformation processes and proposes that life-cycle analyses be included as key evaluation points in decision-making;

22. is critical of the causal relationship between decarbonisation and nuclear energy asserted in the Energy Roadmap and of the assumption that nuclear energy contributes to lower system costs and electricity prices, whilst at the same time it is recognised that "safety costs and the costs for decommissioning existing plants and disposing of waste are likely to increase". The CoR therefore calls for particular attention to be given to long-term scenarios based on non-conventional renewable sources of energy and to the fact that growing public concerns about nuclear safety may reduce the appetite for new private investments in that sector, thus necessitating more state subsidies or higher electricity prices, which would hit the poorest in our communities hardest;

F. Investment and access to finance

23. believes that establishing a reference framework for investment, at least up to 2030, could boost the efficacy of the roadmap and create greater certainty on the market for both private and institutional operators, especially if it also refers to national investment targets that take account of local

and regional authorities' action plans. Greater certainty in terms of investment could also help achieve the 2020 goals, particularly on energy efficiency and saving, on which efforts still need to be stepped up. The reference framework would also be enhanced if the skills of Europe's energy efficiency and renewable energy sectors were mapped out for the purposes of targeting investment in order to build on their momentum for growth and boost the European economic operators within those sectors;

24. calls, in particular, for the resources to be clearly identified for promoting decentralised investment in sustainable energy (control of consumption and production of renewable energy) that can contribute to the efficient use of resources and to the development of a green economy and green jobs at local and regional levels; for an additional financial instrument to be identified that would be managed on a decentralised basis to facilitate implementation of the sustainable energy action plans (SEAP); and for support (both economic and legislative) for small decentralised producers of renewable energy, including local and regional authorities, to facilitate its integration into the grid;

25. recommends prolonging and expanding the positive experience of the *Intelligent Energy for Europe* programme and clearly setting out how to draw on a significant share of the funds available under cohesion policy. Feels, among other things, that Structural Fund resources should be allocated to facilitate the forging of local partnerships aimed at decentralised development of low-carbon energy-efficient technologies; specifically, thinks that the Social Fund should be used to create human capital that can plan, manage and provide technical assistance in respect of energy issues, both in terms of solutions and implementation technologies and partnerships;

26. believes that local authorities should continue to benefit from simplified access to funding from the European Investment Bank (EIB) for sustainable energy purposes. Priority should be given to projects that integrate energy efficiency and renewable energy for the purpose of sustainable territorial development, and procedures should be simplified and access to funding facilitated for smaller authorities;

27. stresses that national measures are not enough to ensure effective funding for energy infrastructure, and therefore proposes greater financial support for projects in the energy sector, in particular for those aiming to promote wider use of solutions using renewable sources, including for heating and cooling buildings;

28. proposes that a strategy be rolled out to support the development of regional clusters and partnerships and cooperation between existing ones, which have already proved their worth on the ground as sound instruments for developing green energy markets and energy efficiency, mobilising investment and developing professional skills and jobs;

G. Research, innovation and implementation

29. agrees that a firm commitment to innovation and research needs to be encouraged at EU level, being convinced that the development of more efficient and less expensive innovative technologies can help create greater certainty in the sector and attract capital, including by means of a rational allocation of resources within the new Horizon 2020 programme;

30. strongly emphasises the need for consistency, in terms of goals and priorities, between that the new Horizon 2020 research programme and the energy roadmap 2050;

31. feels that innovation and research related to small-scale energy production need to be more strongly encouraged, for example with regard to smaller watercourses, wind power for individual or small groups of households, localised solar power, and heat generation from thermal springs where available;

32. would encourage greater research and development focus on the potential for ocean energy (wave and tidal) which offers enormous potential for safe, secure and sustainable energy provision;

33. proposes to develop replicable procedures, on the basis of existing best practice across various regions, to support the creation of innovation clusters, regional energy-innovation platforms and other forms of public-private partnership between local and regional authorities, academia and industry. Such partnerships could be instrumental in terms of regional development and local economies and ensure that innovations and technologies are more adaptable, accessible and cost-effective at local level;

34. believes that the roadmap will have a major bearing on agriculture and forestry policies and that it will thus be

necessary to support research work enabling these sectors to adapt and evolve onto a more sustainable footing;

35. recommends that information and communication technologies (ICT) play a greater role in facilitating the uptake of innovation, as multipliers of information, and energy-consumption solutions for strategic sectors such as smart cities, which include policies concerning sustainable mobility, smart grids, and sustainable building;

36. suggests highlighting the importance of research and of training specialists, particularly by the Member States, so that they can then draw on qualified resources and study programmes capable of ensuring the effectiveness of the technologies of the future, so as to be able to introduce innovations and implement strategic plans;

H. The internal market and the global market

37. stresses the urgent need to complete the implementation of an internal market in energy that helps guarantee energy supplies at affordable prices by 2014, to rectify the energy isolation of individual Member States by 2015, to institute a fair balance of resources among regions and to stabilise and improve the framework conditions for the European energy sector in order to limit the additional costs of the energy transition;

38. recommends improving the carbon quota trading system by fundamentally changing the procedure for the free allocation of quotas, which in its current form runs counter to the objective of the ETS by keeping the price of certificates too low. In doing so, the situation faced by industry players operating on international markets whose competitiveness could be undermined by carbon leakage to third countries should be taken into account.

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*The President
of the Committee of the Regions*
Ramón Luis VALCÁRCEL SISO
