

ENERGY ROADMAP 2050 OF THE EUROPEAN UNION AND OTHER ZERO CARBON PROPOSALS

Posted on 09/03/2011 by Naider



Zero emissions by 2050.. or almost. The European Union has just published the communication [A Roadmap for moving to a competitive low carbon economy in 2050](#) (March 8, 2011). The announced objective is to reduce greenhouse gas emissions by 80% by the year 2050 in relation to 1990 emissions. According to the communication, the most cost-effective trajectory is to reach a 25% reduction by 2020 , 40% by 2030, and 60% by 2040.

[A Roadmap for moving to a competitive low carbon economy in 2050](#)

To achieve such ambitious goals, a large investment in different low-carbon technologies is considered necessary. Thus, it is considered necessary for public and private investment to increase by around €270,000 million per year over the next 40 years.

A whole declaration of intent with a view to the next Durban Summit and, above all, around the future of the European economy.

Zero carbon proposals

In line with this communication, I have selected a series of reports and documents that come from the world of NGOs, business associations or different European states; they all revolve around an energy future without greenhouse gas emissions:

- [The Energy Report. 100% Renewable Energy by 2050](#), by WWF and Ecofys, which presents a world energy scenario based 100% on renewable energy in the year 2050.
- [Renewables 2050. A report on the potential of renewable energies in mainland Spain](#), by Greenpeace, a technical analysis of the feasibility of a peninsular electricity generation system with a high contribution of renewable energies by the year 2050; It is concluded that in all the Autonomous Communities there are sufficient renewable energy resources to supply all their demand for electricity and total energy. The second installment of the report delves into the economic viability of the proposed scenario: [Renewable 100%. A renewable electricity system for mainland Spain and its economic viability](#).
- [Zero Carbon Britain 2030. A new Energy Strategy](#), produced by [Centre for Alternative Technology](#), presenting an emission-free energy system (electricity and heat) for Greater Britain in the year 2030.
- [Roadmap 2050. A practical Guide to a Low-Carbon Europe](#), produced by European Climate Foundation, a lobby grouping mainly companies (although there are also organizations like WWF involved) and whose activity and reports seem to have had a lot to do with the [communication from the European Union](#) with which this post begins. In fact, this study details in technical and economic terms how an 80% reduction in GHG emissions could be achieved for Europe in the year 2050.
- [A sustainable energy and climate policy for the environment, competitiveness and long-term stability](#), communication from the Swedish government in which the main lines of action of its climate and energy policy are exposed. I goal: zero emissions by 2050.
- [Energy Strategy 2050, from coal, oil and gas to green Energy](#): Denmark's energy strategy. Main objective: zero dependence on fossil fuels by 2050; Denmark expects to reduce the use of fossil fuels by 33% in 2020 compared to 2009.
- [Global Change Spain 2020/50](#), prepared by [Complutense Center for Environmental Studies and Information](#). Document that exposes the need to articulate a concerted strategy for Spain that reformulates its economic model and reduces energy demand, resolving electricity

[consumption to 100% with renewable systems and reducing its GHG emissions by around 50% in 2030 and between a 80%-90% in 2050 in relation to 1990 \(it should be said that the document does not present scenarios or concrete measures\).](#)

We will go shelling in future posts the different documents cited; For now, we'll start by reviewing the WWF report a bit more in depth.


The Energy Report of WWF and Ecofys

WWF in collaboration with Ecofys presented at the beginning of 2011 the report [The Energy Report, 100% Renewable Energy by 2050](#) which exposes the possibility, at least technically, of supplying all the world's energy in 2050 from sources of renewable origin.



[Evolution of energy supply in the Energy Scenario, showing the key developments . The Energy Report, 100% Renewable Energy by 2050.](#)

The world energy supply scenario prepared by Ecofys for the WWF document contemplates the progressive introduction of different renewable energy technologies, giving great importance to currently expanding technologies such as off-shore wind or concentrated solar power. The notable contribution of biofuels is also noteworthy (although the so-called traditional ones are gradually disappearing).

 [Overall composition of global energy supply in the Scenario. The Energy Report, 100% Renewable Energy by 2050.](#)

What has been said: in future posts we will review the rest of the documents and reports presented.

There are no comments yet.