Policies for renewable energy boost economy and jobs

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The study which was coordinated by Fraunhofer Institute for Systems and Inno-vation Research ISI shows that, by improving current policies the target of 20% RES in final energy consumption in 2020 can be achieved, which will provide a net effect of about 410,000 additional jobs as well as a 0.24% additional gross domestic product (GDP). It is the first study to assess the economic effects of a sustainable energy policy based on supporting RES in this detail, looking not only at jobs in the RES sector itself, but also taking its impact on all sectors of the economy into account.

Energy Commissioner Andris Piebalgs said: "This shows that benefits of renew-ables in terms of security of supply and fighting climate change can go hand in hand with economic benefits". The unique approach of the study is that in order to calculate future economic effects, two well-established, independent macro-economic models were used in parallel and their results were compared for maximum reliability. Therefore the researchers developed two scenarios for the future of policies supporting renewable energy: one called BAU (Business As Usual) based on current policies, and the other ADP (Accelerated Deploy-ment Policies), taking stronger RES policies into account. These two scenarios are characterised in the following way:

- the BAU scenario leads to a share of RES in final energy consumption of 14% by 2020 and 17% by 2030

- the ADP scenario leads to a share of RES in final energy consumption of 20% by 2020 and 30% by 2030.

In order to provide in-depth view of the future economic impact in renewable energy the two scenarios of the study of European RES deployment are com-bined with three scenarios that represent a possible range of future world market shares taken by European economies in the field of RES technologies: a pessimistic (PE), a moderate (ME) and an optimistic (OE) export scenario. Fundamental to the study is that increased use of RES has various effects on the economy, some of which are positive in terms of employment and eco-nomic growth, while others are negative. The Employ-RES analysis presents both gross and net effects. Broadly speaking, gross effects include only the positive effects in RES and RES-related industries, while net effects are the sum of positive and negative effects. For the net effects, all relevant economic mechanisms are considered. Based on this two selected key results of the study are:

- The total net increase in employment in the RES sector in the EU-27 in 2020 compared to the hypothetical scenario, in which all RES support policies are abandoned, will amount to about 115.000 - 200.000 people in the BAU scenario and to 396.000 - 417.000 people in the ADP sce-nario.

- The net change in gross domestic product due to RES policies in 2020 is expected to amount to 0.11% - 0.14% in the BAU-ME scenario (moderate export) and to 0.23% - 0.25% in the ADP-ME scenario for the EU-27 (ranges according to results of the two models used)[1].

"Policies promoting technological innovation in RES are therefore essential to strengthen the first-mover advantage of Europe's RES

industries. If successful, these technologies can help the EU maintain a higher world market share of RES and the net GDP advantage is expected to increase further after the year 2020", says Mario Ragwitz, Head of Business Unit Renewable Energies at Fraunhofer ISI.

The study suggests that recent strong growth in comparably low-cost biomass and onshore wind projects needs to be sustained, as these technologies are expected to generate most of the near-term future RES production, em-ployment and economic growth.

In addition, more innovative technologies such as photovoltaic, offshore wind, solar thermal electricity and second-generation biofuels require more financial support in the short-term, because precisely these technologies are key for achieving the EU's 2020 RES target. This can lead to higher market shares in the future, to maintain the EU's current competitive position in the global market for RES technologies and to increase employment and GDP in the mid term.

More information: The full report is available at ec.europa.eu/energy/renewables … studies/index_en.htm

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