Is "technology neutrality" appropriate to sustain renewables deployment?

Background

The discussion on the reform of the power sector has at times attributed market distortions almost exclusively to the regulatory frameworks for the promotion of renewable energy. However, as the European Commission states in the Staff Working Document (2013) 439, market failures are systemic and support mechanisms have been enacted to counter these persistent market flaws.

The State aid guidelines 2014-2020 aim to minimise market distortions allegedly caused by the financial support to renewable energy. To that end, they indicate an evolution towards technology neutral support mechanisms from 2017 onwards. Although the Guidelines provide some flexibility for their application through exemptions for small-scale plants and through opt-out provisions, they fail to fully take into consideration the specificities of the power sector and the intrinsic characteristics of renewables.

Challenge

Reaching the EU's 2030 climate and energy objectives will require almost 50% of the domestic electricity to be produced by renewables. The European post-2020 regulatory framework should therefore enable the shift towards a renewables-based energy system where the contribution of flexible generation assets is properly valued.

A technology neutral, market-based approach to energy systems will fail to deliver on the EU's climate and energy objectives. A one-size-fits-all model will favour incumbent technologies and undermine energy security by hampering the deployment of indigenous renewable sources. Moreover, it will prevent timely investment decisions necessary for the decarbonisation of the power system and add additional costs to the energy transition.

No single support model can properly factor in the different technology profiles of renewable energy sources. Applying a single system across the board stifles innovation and slows down the reduction of technology costs (e.g. ocean energy / offshore wind). Technology neutral systems require technologies with significantly different technical characteristics to compete instead of incentivising the deployment of a broad mix of renewables that can make the energy system more efficient and more resilient.

Solution

Support mechanisms need to be differentiated according to the technical characteristics of each technology (e.g. cost, size, risk profile, project lead time, ability to provide system services). This would ensure the most cost effective deployment of a sufficiently broad portfolio of renewable energies to meet the EU's renewables targets for 2020 and 2030 and drive the long-term decarbonisation objective of the EU economy.

In the absence of national binding targets, sufficient flexibility should be granted to Member States beyond 2020 to design appropriate support mechanisms according to technology characteristics (please see annex on technology risk profiles) and national market considerations.

The revised Renewable Energy Directive should outline general principles for the design of such support mechanisms in the post-2020 period. As a supporting instrument to the implementation of the Directive, the State aid guidelines for the post-2020 period should not create new rules but be fully aligned with the revised sectorial legislation.

The signatories:

EREF
European Renewable Energies Federation