

Pre-Conference Highlights

Parallel Session: Technologies to face climate change – Approaches to better manage climate change mitigation and adaptation for rural areas

Moderator: Kaley Hart, ENRD Contact Point

BACKGROUND

This workshop discussed innovative technologies that can be used to improve the way rural areas address climate change mitigation and adaptation and means of enabling their implementation. Rural areas play a critical role in the shift to a low-carbon economy. Not only can they contribute to reducing the impacts of climate change, but they can also benefit from opportunities offered by innovative solutions and strategies for adapting to a changing climate.

The workshop focused on the potential contribution of forestry and farming to climate change mitigation, alongside other environmental services related to adaptation efforts. Discussions considered the potential of rural areas to contribute to renewable energy, the circular economy and the bioeconomy, looking at low-carbon solutions. In addition, the key actions needed to encourage changes in consumer behaviour in order to reduce the carbon footprint of their purchasing habits were explored.

PANELIST PRESENTATIONS



Engaging rural communities: the Menter Môn experience
Gerallt Llewelyn Jones
Menter Môn, Wales, UK

'[Menter Môn](#)', a third sector company, has led a Local Action Group (LAG), on the Isle of Anglesey in Wales for the past 23 years. The LAG relies on working with rural communities and bringing together public and private stakeholders. This multi-actor, Community-led Local Development (CLLD) approach allows interested local authorities and motivated groups to join forces and design innovative solutions to local problems.

A major result has been the creation of a coastal footpath network of ~200km. This successful model of cooperation where top-down and bottom-up development meet recently scaled up its capacity and ambition, and the LAG was awarded a 45-year lease to develop tidal stream arrays in a 37km² sea bed zone in the Irish Sea of Morlais.

« What makes us different, makes us interesting. What makes us interesting, makes us marketable. What makes us marketable, drives us up the economic ladder. »



Community energy for a fair energy system
Stanislas D'Herbement
REScoop

By 2050, half of EU citizens (~264 million) could produce sufficient renewable electricity to meet ~45% of their regions' energy demand through a citizen-owned system allowing people to be the operators of their own utilities. Cooperatives could contribute ~37% of the electricity produced by these so-called 'energy citizens'.

The cooperative model allows local people and communities to become actively engaged in renewable energy projects. The creation of new Energy Community Cooperatives (ECCOs) in rural areas is one of the goals of the [ECCO transnational project](#) which aims to reduce greenhouse gas emissions. The project was launched at the end of 2017, under the Interreg North-West Europe programme (financed by the European Regional Development Fund).

« We ask citizens to listen and change their behaviour. But we need to start by listening to citizens. »



Climate-smart agriculture to support climate change mitigation and adaptation
Giuseppe Maggio
Food and Agriculture Organization of the United Nations (FAO)

Climate-smart agriculture (CSA) is an approach that can be adapted to specific locations to transform, re-orient and diversify agricultural systems in order to support their development and ensure food security in a changing climate. It aims to: increase agricultural productivity and incomes sustainably; adapt and build resilience to climate change; and reduce and/or eliminate greenhouse gas emissions, where possible.

FAO's *Economics and Policy Innovations for Climate-Smart Agriculture (EPIC)* programme aims to identify and harmonise affordable CSA policies in order to support the transition to CSA in developing countries. Consumers can play a role in driving climate-smart agriculture. An example of consumer-driven diversification in sub-Saharan Africa is the case of the Zambia Breweries Plc which commissioned 4 000 small-scale farmers to grow cassava and sorghum (drought-tolerant crops) in response to increasing consumer demand.

« The CSA approach encourages flexible and context-specific solutions likely to be affordable for farmers and governments. »



Forestry as a technology to address climate change
Jo O'Hara
Forestry Commission, Scotland, UK

Forestry offers three powerful tools to address climate change mitigation and adaptation: carbon capture; landscape-scale adaptation; and supply of low-carbon products used as substitutes for materials reliant on fossil fuels for their composition or manufacture. Forest ecosystems across the world are some of the most effective systems for locking carbon into biomass across a wide range of climatic zones.

Forest management can mitigate or exacerbate climatic effects (e.g. water cycles), having an impact on flooding and, indirectly, on agricultural performance. Therefore, it is important to take climate change into account in forestry strategies and management plans, including site-specific assessments of proposals for woodland expansion or deforestation as these are essential for ensuring that the right forests are in the right places.

« Forests do not exist in laboratories. People and other organisms live in and alongside most forests and only accurate planning can maximise forests' contribution to climate change mitigation and adaptation. »

MAIN OUTCOMES FROM THE DISCUSSIONS

- **Stimulate local partnerships** for land use and local planning, creating a stronger sense of ownership and improving knowledge about the natural resource base. Regulatory frameworks are important 'pull factors'.
- **Improve understanding of climate performance** through appropriate tools for farmers/foresters (carbon calculators), as well as retail/consumers (e.g. labelling to show the carbon footprint of food).
- **Facilitate knowledge exchange** and capacity building across the board: from land managers and communities to policy-makers and consumers.
- **Good governance** is more important than profit. Encourage local energy cooperatives (energy democracy).
- **Money is important** to support costs where needed but must be available at the right point in time. New ways of financing should be considered to encourage innovation and risk taking, e.g. start-up costs need to be refunded only if the initiative succeeds.

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