

Research facility network catalyses Europe's biomass potential

November 18 2015



Completed in September 2015, the four-year BRISK project brought together 26 partners from across Europe – various academic and research institutions – to establish a highly visible network of demonstration rigs.

'Many SMEs and students don't have access to these facilities,' explains project coordinator Professor Andrew Martin from the Royal Institute of Technology (KTH) in Sweden. 'The BRISK project sought to open up these rigs to the whole [research community](#), to overcome fragmentation and enable new feedstocks to be tested.'

More than 200 individuals from 26 European countries were able to carry out experiments on second generation biofuels at these facilities, helping to boost Europe's competitiveness in the global bioeconomy. Indeed, such has been its success that efforts are already in place to find a successor to BRISK.

'Now that the project is over we are already building up a new consortium, and looking to find a Horizon 2020 call that matches our needs,' says Martin. 'Our aim is to broaden our scope further to include more bio-processes and a wider range of feedstocks.'

Advanced biofuels manufactured from biomass have the potential to create thousands of new jobs by stimulating rural development and contributing to Europe's energy security as a sustainable alternative to fossil fuels. Enhancing biomass use will also help Europe to meet its targets of curbing [greenhouse gas emissions](#) by 20 % by 2020 and 50 % by 2050.

In order to capitalise on this, the BRISK project established a searchable online database of partner laboratories throughout Europe. Here, SMEs and researchers could find detailed information about thermal biomass conversion facilities open for experiments. The project concept was that any researcher could apply to access a project partner facility located outside their home country, thus promoting transnational cooperation.

BRISK paid for access costs along with a grant for travel and subsistence. The consortium also developed protocols and databases to facilitate data sharing and benchmarking of experimental rigs, an important legacy that will continue to benefit the European research community.

Through joint research activities, partners created new experimental methodologies including biomass processing techniques and procedures.

Visits to facilities ranged from a few days to three month placements for PhD students. In all cases, European expertise in biomass was furthered, and knowledge transferred across borders. 'This project was important in encouraging research networking, and also provided an opportunity to improve the quality of rigs,' says Martin.

One UK-based researcher for example was able to broaden her PhD research at ENEA's facilities in Italy by running trials to convert biomass into a synthetic gas (the main application of which is electricity generation). A researcher from Cordoba University in Spain was able to visit TU Graz in Austria in order to further his research into biofuels (reducing nitrogen oxide during biomass combustion in small scale [biomass](#) boilers).

'We found that it can take time for word to get out, so at the end of this project there was a lot of activity,' says Martin. 'We hope that in any future [project](#), now that our reputation has grown, we will be able to reach out to a wider audience and also attract more researchers from outside the EU.'

More information: For further information, please visit the BRISK project website: briskeu.com/

Provided by CORDIS

Citation: Research facility network catalyses Europe's biomass potential (2015, November 18) retrieved 7 July 2024 from <https://phys.org/news/2015-11-facility-network-catalyses-europe-biomass.html>

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