



Conclusions from the conference

Preamble

The third EU-India conference on advanced biofuels confirmed that the cooperation between technology developers and users from both sides have established an open, transparent and constructive dialogue. This facilitates the collaboration and in turn the deployment of advanced biofuels in both economic areas, EU and India.

The stakeholders recognise that significant efforts have been undertaken by the European Commission and the Indian Government to promote and support the development of advanced biofuels. In particular the targeted efforts by the Ministry of Petroleum and Natural Gas as well as those of the Directorate General for Energy have spearheaded those efforts both at the innovation but also at the policy and market areas.

However, advanced biofuels are still in the early stages of development and face serious technical, market and policy barriers. Advanced biofuels have to compete with fossil fuels that have been established over decades as the market leaders and thus advanced biofuels still need coordinated support in order to be able to compete in the market with the unsustainable fossil carbon fuels in the transport sector.

The stakeholders and participants at the conference debated the barriers faced by advanced biofuels in an effort to identify and chart a roadmap which will ensure the successful deployment of the sustainable low carbon fuels aiming to decarbonise transport and contribute in achieving the targets of the Paris Agreement; to which both the EU and India are signatories.

These barriers are subdivided in 7 areas and are presented below as Key Learnings.

Key Learnings from the Conference: Addressing the barriers

1. Effectiveness of Bioenergy projects

- Identification of technology gaps and stronger support for R&D to make Bioenergy projects commercially competitive.
- Support R&D for future potential improvements such as new value chains or conversion processes.
- Create and enhance a consultative process between technology providers, investors, administration and other stakeholders to accelerate deployment.
- Support in the valorisation and market creation for the by-products of the various value chains.
- Develop strategies to lower CAPEX and OPEX and design optimisation paths to achieve that.

2. Financing bioenergy projects

- Sensitising the financing institutions in understanding that bioenergy is and will remain the most important sector among renewable energy sources.
- Without bioenergy it is not possible to achieve the Paris Agreement obligations of EU and India.
- A new enabling financing mechanism needs to be developed and the developers need to access and tap into green funds.

3. Optimising the upstream section of the value chain

- Creating supply management and pricing mechanisms for the feedstocks.
- Creation of biomass depots – by the local/regional government or via private entrepreneur networks to facilitate storage and supply
- Securing the involvement of the agricultural sector as strategic partner.
- Optimising logistics by upstream pre-processing of biomass feedstock for lower process costs.

4. Need for advocacy, training and capacity building

- The public and the citizen at large needs to be educated on the benefits and opportunities of bioenergy.
- A learning interdisciplinary community in the total ecosystem needs to be build for proper training and education at a wide range of competencies at all levels.
- Integrate bioenergy bio based economy and circular economy in the curriculum.

5. Accelerating permitting and licencing approvals at the local level

- Rethinking categorisation, approvals and clearance.
- Establishment of single window clearance for all bioenergy projects.
- Necessity of creating of market mechanisms, e.g. tradable carbon credits, to incentivize the bioenergy programme - both at national and international level.

6. 2G ethanol technology now at the brink of market introduction

- Technology developers and Companies have engineered the projects ‘technically’ and have proven the technical reliability and economic viability.
- For the next phase there is a need to integrate the technical project in its ecosystem to attract more investment into the sector

7. The series of EU-India conferences have demonstrated the creation of an ongoing interaction and integration between EU and India parties

- Intensification and further strengthening of this process is essential to the maturation of the initiatives.
- High level of open information exchange reflects a great trust in the collaboration.
- In addition to this, an EU-Indo working group of key stakeholders may help, guide and accelerate the process.
- Necessity of funding for R&D, probably an EU-Indo joint fund to support joint R&D activities.