



**The Central European Initiative
as a driver for the promotion of Advanced Biofuels
in Central, East and South-East Europe**

**Presentation by
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on behalf of**

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➤ The **Central European Initiative** (CEI) is an intergovernmental / international organization with 18 Member Countries and a population of 240 million:

- 9 (soon 10, with Croatia) are also EU members
- 3 are still far in their path towards membership
- the others are at different stages of their respective candidature
- CEI Member Countries are different from most points of view, (dimension, socio-economic development etc.) **but** share and have consolidated over 20 years a vital **mission** in common:

Regional Cooperation for European Integration

while providing

A Bridge between Macroregions

- **Sustainable energy** is top priority for CEI.
- **Advanced Biofuels** are the most attractive option for any eco-friendly energy strategy as they are efficiently produced from different feedstock without competing with food or cash crops for fertile land and water, and reducing global GHG. They also address priorities in Science, Innovation, Environment, Agriculture (same mantras that are repeated in Bruxelles...)
- In fact, Advanced Biofuels are the best equation **combining**:
 - Energy security
 - Environment protection
 - Rural development and food security
 - Far-reaching global market opportunities

Promoting Advanced Biofuels is a priority action for CEI

- The development of Advanced Biofuels is complemented by that of biorefinery, i.e. production of added value biochemical materials, which will be the basis for a **new chemical industry**
- Today chemical industry heavily depends on by-products of oil refinery: by-products of Advanced Biofuels will bring a **revolution** which also will require more R&D efforts and imply new opportunities
- The prospects of **additional income for farmers** – therefore a consistent rural development - must also be a crucial element in the evaluation for a strategic choice in favour of Advanced Biofuels

- CEI Countries have consistent agricultural and forestry sectors and represent a great and largely still unexploited reservoir of bio-resources
- CEI Countries have relevant human resources, well grounded on a strong industrial and scientific tradition which is still there despite a period of impoverishment.
- CEI Countries represent a very relevant market.
- **In other words, CEI Countries are the ideal location for investing in the bio-economy, and they are definitely ready to export knowledge-based, skilled and specialized workforce to support similar investment all-over Europe.**

- CEI Countries cannot wait years to buy new/future technologies related to the Bio-based Economy, unless they accept an external impact on their national priorities
- **Next technologies** for Advanced Biofuels are around the corner: five years is a very short time in view of a long-term sustainable strategy. **But** several pilot plants are already being built worldwide, with technology already available, and second generation industrial scale plants are ready for production (using selected agricultural waste) without needing ad hoc incentives.
- These countries must **invest now** adequate resources in **applied research** and development:
 - **human resources** are ready **available**, but must get organised
 - **bankable projects** can be implemented now, even without incentives

- **Concrete objective:** to improve public and political awareness, so that investing becomes more attractive and remunerative.
- **Needed through CEI:** further increasing **process efficiency**
 - Organising existing human resources through applied research
 - Supporting capacity building (advanced training, workshops, seminars, networking, public and political awareness)
 - Catalysing financial instruments available
 - Creating a user friendly digital system in support to decision making about investments (and their location) based on smart integration of data from GIS, on agronomy, engineering, finance, norms, legislation, transport and logistics, etc.
- Our strategic challenge for Advanced Biofuels in CEI Countries is:

from waste to energy !

- In 2012, CEI commissioned to Bloomberg a comprehensive **Report on Advanced Biofuels** as a most relevant aspect for a bio-based economy in today reality. The Report can be downloaded from CEI website (www.cei.int/Bloomberg).

- Potential benefits of Advanced Biofuels in the CEI region according to the **residue potential scenario** which considers only agricultural waste as feedstock (for which cost-efficient technology is available), converting all agricultural residue ready available (i.e. 17,5%):
 - **Job creation**, 580.000 man-years of employment in the years 2012-2030 and up to **36.000 permanent jobs** predominantly in rural areas (collecting and transporting residue and operating biorefineries)
 - **Innovation and economic growth**, with an ethanol potential in 2030 of 30 billion litres per year, requiring a total **investment of €40 billion** in 2012-2030 for a total **revenue of +/- €260 billion** in 2012-2050
 - **Energy security**, moving from high dependence on foreign oil towards greater fuel self-sufficiency for transport
 - **Environment Protection** through a reduction of CO2 emissions (around 40%) by replacing 61% of fossil gasoline in 2030 with next generation ethanol converted from agriculture residue.

- CEI region represent a large market for a Bio-based Economy, which has been neglected so far. CEI high level efforts in awareness building:
 - **CEI Meeting of Ministers for Science and Technology**
(October 2011; September 2012)
 - **CEI Ministerial Conference on Renewable Energy in a Bio-based Economy: the Option of Advanced Biofuels**
(September 2012, with the participation of Ministers for Science and Technology, Energy, Agriculture, Environment, Economic Development)
 - Many currently on-going CEI activities on awareness building on Bio-economy at all levels, involving Governments, other Public Agencies and Bodies, sector organizations and professional associations (industry, farmers, foresters) , the scientific and the business communities.

- CEI is participating to major EU-funded projects (hopefully to be funded by the EC) to identify and overcome all preconditions that today represent obstacles to prompt implementation of industrial projects with technologies already available in the market.

The question is: are we ready to mobilise the necessary resources now?

THANK YOU FOR YOUR KIND ATTENTION

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Bloomberg Report: www.cei.int/Bloomberg