The role of the Central European Initiative in promoting Advanced Biofuels in the prospect of a bio-based economy: the great potential of the region

Presentation by
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The Central European Initiative (CEI) is the oldest intergovernmental organization of its kind in this part of Europe, being established in 1989 as the first forum promoting regional cooperation among Countries of Central and Eastern Europe.

- The CEI has now 18 Member Countries, spreading from the Adriatic to the Black Sea and the Baltic, with a population of more than 240 million:
  - 9 (soon 10, with Croatia) are also EU Member States
  - Others are at different levels of relationship with the EU: Candidates and Potential Candidates, or EU Neighbours encompassed by EU Eastern Partnership Policy
  - CEI Member Countries are different from most points of view, but – over more than 20 years of collaboration – have consolidated a shared vision and a common mission:

Regional Cooperation for European Integration while providing
A Bridge between Macroregions
Regional Cooperation for European Integration - A Bridge between Macroregions

**Priorities**

The activities of CEI are many-folded and refer to different spheres. Among them, Science and Technology are top priority.

- **Sustainable Energy** plays a prominent and growing role, with special attention focusing on the promotion of **Advanced Biofuels** (i.e. fuels produced from non-food biomass, agricultural and forestry residues and energy crops, provided that these are not in competition with food and feed).

- **Bioeconomy**, primarily the conversion of biomass into energy, is a particularly interesting option for CEI Countries, owing to the role of agricultural and forestry sectors, and to the long-standing academic and industrial tradition. CEI Countries shall hence profit from the next programming period that, through Horizon 2020 and other channels, will dedicate relevant resources to this specific sector.

CEI is committed to contribute to **strengthening the capacities** at decision-making level and to support the development and **implementation of biomass strategies** in its Member Countries, and in the region, thus fostering the substantiation of targets set at national and regional level and facilitating the implementation of concrete **biomass value chains** and relevant **bankable projects**.

**Commitment**

The CEI is committed to support its Member Countries in order to:

- Sustain actors in research, innovation and the industry to streamline their efforts in line with the knowledge triangle concept and the research and innovation smart specialization strategy (RIS3)

- Support capacity building through advanced training, workshops and seminars, targeting both researchers and technical staff that will be employed along the relevant value chains

- Endorse public and political awareness through networking and dissemination

- Promote access to available financial instruments

CEI is in the position to **bridge the gap** between EU Member States and non-EU countries. It is not a figure of speech: the potential of our Member Countries is widely recognized, yet key players in Europe not always know how to approach them. On the other hand, our Countries might benefit from targeted assistance for better coordinating their efforts, streamlining **strategic planning**, accessing sector-specific fora or promoting an active role for research centres and industries in order to **attract investments**.
Progress is raging, with next generation technologies already available or just around the corner. Advanced Biofuels are leading this green race: several pilot plants are being built worldwide, with technologies mature for up-scaling.

- CEI Countries cannot be passive players and wait until technologies are made available. Neither shall they become simple purchasers of the new range of bio-based products. Unless they accept an external impact on their national priorities, these countries must invest now in research and industrial deployment (and be adequately supported in doing so).

CEI Countries could benefit from Bioeconomy in terms of *rural development* (modernization, additional income for farmers, enhanced land management, reduced rural flight), *energy security* (less dependency on imports, more domestic energy carriers available for export), *innovation* (cost-effective R&D, reduced brain drain), *job creation*, etc. *Environmental benefits* could mitigate the impact of obsolete industries, contributing to reducing GHG emissions. In the longer perspective, relevant impact in terms of *economic growth* could be expected.

### Instruments

Activities of CEI Secretariat for the promotion of Bioeconomy and Advanced Biofuels are devised along different lines of action:

- **At decision-making level**
  - We organize the *Annual Meeting of Ministers for Science and Technology*, which is a privileged occasion for policy-makers of CEI Member Countries to congregate and discuss common challenges and joint strategies. In 2012 we organized the first *CEI Ministerial Conference on Bioeconomy* with the participation of relevant Ministries, EC representatives and other stakeholders.

- **At stakeholders level**
  - We set-up the *CEI Network of Science and Technology* which includes Centres of Excellence based in Trieste and recognized worldwide. The outreach of this activity spreads also to other Institutions operating in CEI region cooperating regularly with the Centres of the Network. This is an on-going process, with the number of stakeholders constantly growing.

- **At operational level**
  - We established *pro-active dialogue* with the EC and leading sector-specific fora of European scope.
Milestones

- A comprehensive Report on Advanced Biofuels in CEI Countries has been commissioned to Bloomberg. Being widely disseminated, it contributed to set the grounds for further activities.
- CEI participated in many sector-specific conferences and events, promoting the potential of the region.
- An extended network of relationships with main actors at EU level and in CEI Countries has been created. This gave us the possibility to be invited to contribute to most relevant initiatives, such as the EBTP and the Public Private Partnership on Bioeconomy.
- Owing to these efforts, the CEI is involved in the preparation of a number of EU-funded projects.

The Bloomberg report

- The Report on Advanced Biofuels in CEI Countries was commissioned to Bloomberg in 2012. It is deliberately based on a very conservative approach, considering the utilization of only 17.5% of agricultural residues, only existing conversion technologies, and no change in current land-use.
  - Job creation, 580,000 man-years in 2012-2030, and up to 36,000 permanent jobs, predominantly in rural areas.
  - Innovation and economic growth, with an ethanol potential up to 30bln litres/year, requiring a total investment of €40bln for a revenue of +/- €260bln in 2012-2050.
  - 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.

Download from: www.cei.int/Bloomberg
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Job creation

Full-scale deployment of technologies for the conversion of non-food biomass into Advanced Biofuels in CEI Countries could generate approximately 36,000 permanent jobs in the next 20 years:

- In agriculture: the opportunity of additional income will foster the attractiveness of the sector; new specialized jobs will come from implementation of innovative techniques and utilization of marginal lands (agronomists, skilled workforce)
- In logistics: whole new supply chains will be created to mobilize feedstocks; the network will be ramified, requiring managers, technicians and skilled workforce for collection centres and pre-treatment facilities, and operators in the transport sector
- In transformation industry: a new generation of engineers, technicians and specialized workforce will be required for the construction and the management of biorefineries
- Even more jobs will be created in academia and research, distribution, retail, services…

HOW: awareness building, training, technical assistance and financial support

EU Projects and more

- Two major project proposals have been submitted in 2012, in the framework of the last FP7 call. The proposals aim at contributing to the technological shift that will allow achieving EU2020 goals through the promotion of bio-based products value chains. Focusing on the development of local, regional and pan-European schemes for the mobilization of feedstock, our overall objective is to promote and support sustainable and reliable biomass supply through actions that will allow streamlining biomass flows.

- The consortia including major EU players, we also involved partners and stakeholders from CEI Member Countries, as we believe that both proposals could significantly contribute to the development of the sector in this part of Europe. The proposals are currently undergoing the negotiation phase, and we are confident that the outcome will be positive.

Thanks to our activities, Bioeconomy stakeholders from the EU acknowledge CEI the role of focal point for awareness building on Bioeconomy at governmental level in its Member Countries, and for enhancing market potential of CEI region in relation to the rest of Europe.
THANK YOU FOR YOUR ATTENTION

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