

# EU-CANADA Workshop

## Renewable Carbon Sources processing to fuels and chemicals

Brussels, 9-10 July 2015



**EU-Canada Workshop**

**Canada**

### Workshop summary



Under initiative of Florence University and Sherbrooke University, hosted by the European Commission, in close collaboration with the Mission of Canadian to the EU and with the support of BioFuelNet Canada, the « *EU-Canada Workshop on Renewable Carbon Sources processing to fuels and chemicals* » was held July 9 and 10, 2015 in Brussels, Belgium. The event was organized conjointly by Pr David Chiaramonti (University of Florence), Dr Kyriakos Maniatis (DG Energy) and Pr Jean-Michel Lavoie (Université de

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Sherbrooke). On the Canadian side, many top level researchers linked with BioFuelNet were present. As well, many representatives from the industry both for Canada and the EU attended the workshop. To inaugurate the workshop, representatives from both administrations provided information on the policies in terms of energy, biofuels and the interest toward working together in this field. From the EU, Mr Christopher Jones (Deputy Director General of DG Energy), opened the workshop while from Canada the Deputy Head of Mission of Canada to the EU, Mr Alan Bowman, welcomed the participants.



Mr Chirstopher Jones and Mr Alan Bowman (picture provided by BioFuelNet Canada)

Then presentations were made on Background, Scope and Objectives of the Workshop, as well as on EU Climate and R&D EC programmes from Dr Andrea Strachinescu (Head of Unit DG Energy) and from Pr Kevin Vessey (St-Mary's University) on behalf of BioFuelNet. After this introduction, the workshop was oriented toward the theme of biomass production and availability in both zones after which conversion process were investigated including gasification, pyrolysis and renewable bio-commodities. For gasification, Enerkem from Canada presented on their technology and on the adaptability of the latter to the European zone. From Europe, Goteborg Energi presented their experience through the GoBiGas

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project. For pyrolysis, the Canadian industry was represented by Prof Patrice Mangin that discussed about the “La Tuque” project whilst BTG provided an overview of their fully industrial scale pyrolysis technology (Empyro project). The first day also involved a panel discussion on these themes from both side (EU and CAN) and both from academia and the industry discussing on the opportunity to collaborate. A general consensus was shown that all participants, industry and academia alike were looking for opportunities to work one with another. Canadian companies had interest into expanding their market to Europe whilst European companies had interest toward having access to Canadian feedstock to go forward with their technologies and were wondering what kind of policies would be available in Canada for such approach.



Panel discussion after a first very efficient day of discussion and presentations (picture provided by BioFuelNet Canada)

Since the first day of the workshop was oriented toward thermochemical conversion processes, the second day was more specifically intended for biological conversion of biomass. The discussion was started by Prof Jack Saddler for the University of British Columbia followed by Prof Gunnar Liden from Lund

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University. Both showed the advances in the field of cellulose extraction and hydrolysis to glucose in order to produce lignocellulosic ethanol. This part of the discussion involved as well representatives from Ethanol GreenField Québec Inc (Canada) and from Biochemtex (Europe). Also during the second day, a discussion was held on aviation biofuels with participation of Air Canada and Lufthansa. Another panel discussion was held during the morning session. The afternoon was dedicated to a brokerage event where different funding sources were identified, including from Dr Kyriakos Maniatis, Pr David Chiaramonti and Pr Jean-Michel Lavoie. Ms Jennifer Daubeny, director of Science, Technology and Innovation Canada also addressed the workshop through videoconference showing funding opportunities in Canada. The last part of the day was completed through presentations from Dr Maniatis, Theodore Goumas from Exergia, Don O'Connor from (S&T)2 Consultants and Julie Tolmie on information tools BIOMAP LITE and BioJetMap.

David Chiaramonti and Jean-Michel Lavoie