

Workshop – Launch Phase II of Model Demonstrator Regions
Gaseous Industrial Effluents as Non-Fossil Feedstock for Sustainable Chemicals Production

9 November 2016

Representation of Regione Lombardia (Place Champ de Mars 2, 1050 Brussels)

Rationale and scope of the event

In order to lower current CO₂ emission levels as part of activities included in the Circular Economy Action Plan in 2015, it is important to promote innovative industrial processes. For example, industrial symbiosis allows waste or by-products of one industry to become inputs for another. For the production of more sustainable chemicals the re-use of gaseous effluents is another example of an innovative process. The EU is supporting such promising developments through its research and innovation financing programme, Horizon 2020, among other activities. In this respect, the Commission announced in its Circular Economy Action Plan the inclusion of the re-use of gaseous effluents such as CO₂ and others as a contribution to, on the one hand, helping in reducing GHG emissions and, on the other hand, contributing to the storage of various amounts of CO₂ in different manufactured products when smartly combined with recycling schemes, industrial symbiosis, and novel product design.

However and in order to allow for this to materialise, it is important that GHG emissions such as CO₂ and other gases are recognised as a feedstock and no longer alone as waste or emissions. This led to better explaining the

Articles 4 and 5 – By-products of the Waste Framework Directive (WFD). Also, the Energy Union Package Communication calls for *"A forward-looking approach to carbon capture and storage (CCS) and carbon capture and use (CCU) for the power and industrial sectors, which will be critical to reaching the 2050 climate objectives in a cost-effective way. This will require an enabling policy framework, including a reform of the Emissions Trading System and the new Innovation Fund, to increase business and investor clarity, which is needed to further develop this technology."* The ILUC Directive 2015/1513 includes the 'ANNEX IX' to the Directive 98/70/EC relating to the quality of petrol and diesel fuels and amending Directive 2009/28/EC on the promotion of the use of energy from renewable sources and there especially the item *"(s) Carbon capture and utilisation for transport purposes, if the energy source is renewable in accordance with point (a) of the second paragraph of Article 2"*.

The objective of this workshop is to provide information about different activities in different European Regions on re-using CO₂ and other industrial gaseous effluents as a feedstock; facilitating the energy challenge by providing stored energy at a large scale and offering a solution to inter-seasonal challenges of supply and demand; decreasing GHG emissions; boosting the resource efficient use of gaseous resources including CO₂ utilisation with and without transformation by also discussing the different aspects related to a policy framework for this re-use of CO₂ and other gaseous effluents as a feedstock. It is also the objective informing and discussing about a systemic approach in support of such activities and new forms of industrial symbiosis using such feedstock for the manufacturing of more sustainable chemicals by also discussing industries current activities. The Workshop, as can be seen from its attached programme, is structured along presentations and panel discussions. Hence, we would like to invite you to attend and contribute to the discussions during this event.

Registration: ecrn@ecrn.net

Draft Programme

Moderators: Johanna Bernsel/Federico Musso, DG GROW.D2

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| 8:45 – 9:15 | Registration and Coffee/Tea |
| 9:15 – 9:45 | Welcome and Opening
- <i>Fabrizio Sala, ECRN</i>
- <i>Carlo Pettinelli, DG GROW.D</i> |
| 9:45 – 10:15 | Gaseous industrial effluents as an asset for the circular economy
- <i>Reinhard Büscher, DG GROW.D2</i> |
| 10:15 – 11:15 | Re-use of gaseous industrial effluents as chemical feedstock in practise: <ul style="list-style-type: none">- Scotland (UK) – Caroline Strain, Head of Chemical Sciences at Scottish Enterprise, Highlands and Islands Enterprise (HIE), Scottish Economic Development Agency- East-Flanders (Belgium) – Linda Verdonck, Project Manager Business Development, POM Oost-Vlaanderen- North Rhine-Westphalia (Germany) – Karl-Uwe Bütof, Director General State Economic Policy, Industry, Service Sector, Clusters Ministry of Economic Affairs and Energy of the State of North Rhine-Westphalia- Province of Zeeland (NL) – Peter Bijkerk, Regional Development Agency of the Province of Zeeland (Impuls Zeeland) |
| 11:15 – 12:30 | Panel Discussion – The policy framework for the re-use of gaseous industrial effluents as non-fossil feedstock for energy and sustainable chemicals
– <i>Moderator: Johanna Bernsel – DG GROW.D2</i>

- <i>Heidi Moens, DG GROW/F3 – KETs</i>
- <i>Maria Velkova, DG CLIMA.C4 – Climate change actions</i>
- <i>Achim Boenke, DG GROW.D2 – Sustainable chemicals</i>
- <i>Evangelos Tzimas, DGJRC/C.7 – Energy Union</i> |
| 12:30 – 13:30 | Lunch, Networking & Self-Assessment Tool (SAT) Demonstration |
| 13:30 – 14:30 | Towards a systemic approach in support of the re-use of industrial gaseous effluents: the European Sustainable Chemicals Support Service <ul style="list-style-type: none">- <i>Timoteo De La Fuente, DG GROW.D2</i>- <i>Ignacio Martin, European Sustainable Chemicals Support Service (ESCSS)</i> |

14:30 – 16:00	<p>Panel Discussion – New forms of industrial symbiosis through the re-use of gaseous industrial effluents as non-fossil feedstock for sustainable chemicals – <i>Moderator: Frederico Musso - DG GROW.D2</i></p> <p>- <i>Youssef Travalay or Damien Dallemagne – EU-SCO2T-Project</i> - <i>Gernot Glotz, K41</i> - <i>Salvatore Bertucci, ArcelorMittal</i> - <i>Joukio Riikka, Metsä Group</i> - <i>Karsten Malsch, Covestro</i></p>
16:00 – 16:30	<p>General Discussion <i>Moderator: Reinhard Büscher, DG GROW.D2</i></p>
16:00 – 16:30	<p>Concluding Remarks - <i>Achim Boenke, DG GROW.D2</i></p>
16:30 – 16:45	<p>Closing Remarks - <i>Renatka Krčova, ECRN</i></p>
16:45 – 17:30	Networking Coffee/Tea & Self-Assessment Tool (SAT) Demonstration
17:30	Closure of the Event