EIP-AGRI Workshop ‘Building new biomass supply chains for the bio-based economy’
May 27 – 28, 2015 – Alghero, Italy
EIP-AGRI Workshop ‘Building new biomass supply chains for the bio-based economy’
Thursday 28 May 2015, Alghero - Italy

09:00 – 09:10 Opening and introducing Day 2

09:10 – 09:40 Working further on outcomes of interactive session 1

09:40 – 10:40 Presenting support tools
- EIP-AGRI (Rural development and H2020) Ms Virginie Rimbert
- National Policy Strategy on bioeconomy in Germany and its implementation Mr Hans-Jürgen Froese
- RMT Biomasse et Territoires: French national network for technical support for building biomass supply chains Ms Laurie Ducatillon

10:40 – 10:45 Introducing interactive session 2

10:45 – 11:00 Coffee Break

11:00 – 12:10 Interactive session 2: Addressing solutions and tools

12:10 – 12:45 Reporting back to the plenary and discussions

12:45 – 13:00 Wrapping up and closing
Mr Rob Peters – Directorate-General Agriculture and Rural Development

13:00 Lunch
National Policy Strategy on Bioeconomy and its implementation

Dr. Hans-Jürgen Froese
Head of division
Bioeconomy and industrial use of biomass
Major points of presentation

I. National Policy Strategy on Bioeconomy

II. Funding programme on renewable raw materials

III. Implementation of EIP-Agri in Germany

IV. Information and cooperation in the EU
I. National Policy Strategy on Bioeconomy

EU-Strategy (2012)
Innovating for sustainable growth:
„A Bioeconomy for Europe“

German Strategy (2013)
Renewable resources and biotechnological processes as a basis for food, industry and energy
I. National Policy Strategy on Bioeconomy

Guiding Principles

Priority of food security over production of raw materials for industry and energy

Preference for paths of use with higher value creation

Strengthening of cascading and coupled use

Support for key technologies

Compliance with social, environmental, nature and animal protection standards

A competitive bioeconomy requires well-trained and well-informed specialists
I. National Policy Strategy on Bioeconomy

Fields of Action

- Coherent policy framework
  - Information and dialogue with society
  - Education and training

- Sustainable production and allocation of renewable resources

- Growth markets, innovative technologies and products

- International context

- Value chains and networks

- Competition of land use
I. National Policy Strategy on Bioeconomy

Focus and Output of the Strategy

- Objectives
- Guiding Principles
- Strategic Approach
- Measures

Coherent Bioeconomy Policy

- Economic and Energy Policy
- Food Policy
- Agriculture, Forestry and Fishery Policy
- Environment and Climate Policy
- R&D Policy
- Development Policy

Interministerial Working Group on Bioeconomy
II. Funding Programme on Renewable Raw Materials

Objectives

Key Funding Areas

Impact for rural development

Supporting new biobased value chains
II. Funding Programme on Renewable Raw Materials

Objectives

- Sustainable production and use of renewable resources
- Development of new and improved conversion technologies along the complete biobased value chain
- Sustainable production of biobased producer and consumer goods as well as bioenergy carriers
- Development of integrated concepts (e.g. recycling, cascade use, biorefineries)
- Development of international, practicable, and cross-sectoral sustainability schemes and standards
II. Funding Programme on Renewable Raw Materials

**Current key funding areas** (in force since 8\textsuperscript{th} of May 2015)

1. **Breeding** to improve yield and quality of agricultural plants
2. Sustainable **materials flow management** for an optimal supply with biogenic resources
3. Concepts for sustainable production and use of biomass considering the resource water
4. Enhancement of **Sustainable forestry** to maintain the forest functions
5. Development of sustainable and innovative biobased **conversion technologies**
6. Decentralised production of high value products from **aquatic systems**
7. Optimisation of the use of biogenic **residues** and opening up of **recycling** options
8. Development of sustainable and efficient biobased **heat** provision concepts as well as biobased construction and insulating **materials** for **buildings**
9. Conversion of biogenic raw materials to **semi-finished goods and end-products**
10. Information and **social dialogue** concerning **bioeconomy and sustainability**
II. Funding Programme on Renewable Raw Materials

Rural development

- Bioenergy as a pillar of rural bioeconomy
- Increase of biobased energy supply by mobilisation of unused biomass
- Sustainable and efficient bioenergy production and utilization of existing local resources
- Development of rural-based concepts along the complete value chain
- Stakeholder information and social dialogue
- Local value creation by rural bioeconomy
- Funding of the initiative “Bioenergy regions” for the development of rural bioenergy concepts

Action plan „Energy for tomorrow – Opportunities for rural areas“
II. Funding Programme on Renewable Raw Materials

Rural development

- 1st funding phase (2009 – 2012):
  - Networking activities, public dialogue
  - Rural bioenergy concepts, technical feasibility studies
  - Funding: 400,000,00 € per region
  - 25 regions

- 2nd funding phase (2012 – 2015):
  - Creation of added value in the rural area
  - Improvement of efficiency (e.g. biomass flow, bioenergy production/use)
  - Knowledge transfer to other regions (called twin regions)
  - Funding: 330,000,00 € per region
  - 21 regions and 21 twins

Quelle: http://www.bioenergie-regionen.de/bioenergie-regionen-2012-2015/
II. Funding Programme on Renewable Raw Materials

Rural development – added value

Realised added value in the 1st funding phase (2011) within the 25 “Bioenergy Regions”
(renewable energy in total):

- About 3 Mio. € funding for all 25 “Bioenergy Regions”
- About 297 Mio. € added-value:
  - Electricity (all RE): ~ 191 Mio. €
  - Fuels: ~ 91 Mio. € (including transportation fuels)
- Factor 10: An average of about 120.000 € per “Bioenergy region” generates an average of about 12 Mio. € added value
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Rural development – Examples

- Centralised biomass depots in the Höxter region
  - Development of a bio-waste concept as part of a rural bioeconomy concept
  - Creation of a centralised biomass depot
  - Mobilisation of additional biomass waste and residues (e.g. green municipal yard and garden waste)

- Bioenergy villages in the Lake Constance region
  - Financial support of rural local heating concepts
  - Knowledge transfer to stakeholders from other regions as well as to local politicians and mayors
II. Funding Programme on Renewable Raw Materials

Rural development – Examples

- Rural biogas fuelling station in Jameln/Wendland (since 2006)
- Operator: rural co-operative Raiffeisen-Waren-Genossenschaft (RWG)
- SunGas®: biogas methane content (after upgrading): 95 %
- Underground gas pipeline connecting the biogas plant and the public fuelling station

„Driving with bio-methane“
II. Funding Programme on Renewable Raw Materials

Rural development – Examples

- Rural green biorefinery based on grass (juice/fiber)
- Mechanical separation into grass juice and grass fiber
- Grass fibers are processed to get insulation material or re-inforced composites
- Depleted grass juice is used for biogas generation
- Commercial production and demonstration plant in Brensbach (Hesse)

http://www.biowert.de
II. Funding Programme on Renewable Raw Materials

New Research Project (in preparation): Development of special biogradable foils for agriculture with new properties such as temporally biodegradation and additive fertilizer effect

- Compounding of biogradable polymers (for example PLA, Polycaprolacton, Polyhydroxyalkanoates, Polybutylensuccinat) and special additives
- Investigation of the properties of these new materials
- Development of foils for gardening and agriculture
- Demonstration of the temporally biodegradation and the additive fertilizer effects
II. Funding Programme on Renewable Raw Materials

New Research Project (in preparation):
Development of wooden prepregs that contain biobased binder

- Development prepreg binder (resin) formulations from renewable resources
- Development of continuously impregnated prepregs based on wood veneers
- Demonstration of using semi-finished products for freely deformed applications
- Design demonstrators according the requirements of associated industrial partners
II. Funding Programme on Renewable Raw Materials

Supporting new biobased value chains

means:

▪ to include the development of resource efficient, environmentally friendly, high value creating and competitive technologies and biobased products beyond the state of the art,

▪ to rely on concepts for integrated and sustainable supply and use of renewable resources and biobased products, which are developed and implemented in social discourse,

▪ to take into consideration the political, economic, social and legal framework for a sustainable bioeconomy.
III. Implementation of EIP-Agri in Germany

EIP AGRI – Programming in Germany
III. Implementation of EIP-Agri in Germany

- **Starting point:** 13 regional programmes for rural development plus 1 national programme for national network- and 1 programme for framework-setting

- **Programme content:** Almost all Federal States (except Saarland) will implement EIP AGRI (e.g. implementation of 80 % bzw. 92 %)
  -> EU Comparison: 89 of 118 programmes (75%)

- **Status of programme-authorization** by COM (11.5.2015):
  Approval of 8 programmes (SN, ST, HE, MV, NW, BY, Federal programme for networking, Federal programme for framework-setting)

- **Expected approval of all german programmes** by end of may 2015
III. Implementation of EIP-Agri in Germany

- Financial Support of EIP Agri-Programmes in Germany (Estimations for the period 2014 – 2020)

- Total EIP in Germany = 121 Mio. €
  
  of which
  
  - Brandenburg = 25 Mio. €
  - Lower Saxony = 17.5 Mio. €
  - Baden-Wuerttemberg = 15.8 Mio. €
  - North Rhine-Westphalia = 10 Mio. €
  - Schleswig-Holstein = 10 Mio. €
  - Thuringia = 9.1 Mio. €
IV. Information and cooperation in the EU

Bioeconomy / EU-Commission

- COM is working on the implementation of the EU Bioeconomy Strategy and established a bioeconomy observatory in 2013.
- Com launched “BBI” (Bio-based industries), a Public-Private–Partnership between the EU and the Bio-based Industries Consortium, operating under Horizon 2020. The first call has already been published.
- The European Bioeconomy Panel was established in 2013 to support interactions between the different policy areas, sectors and stakeholders in the bioeconomy.
- An interservice consultation group is working to share information on ongoing bioeconomy activities between the relevant DGs.
IV. Information and cooperation in the EU

BioEconomy Cluster

- Founded in 2012 with 15 partners, 2014: 97 partners
- The only German Leading Edge Cluster for Bioeconomy
- Organised as a regional network (BioEconomy e.V.)
  Core region: Saxony-Anhalt and Saxony
- Supported by the German Federal Ministry of Research and Education and the Ministry of Sciences and Economic Affairs of the Federal State Saxony-Anhalt
- Full membership in the Biobased Industries Consortium (BIC)
- Bringing together Science – Industry – Policy
- National and International partnerships in China, France, Austria, Switzerland, Italy, Canada, UK, Netherlands
- Currently funded joint R&D-projects: > 45
IV. Information and cooperation in the EU

BioEconomy Cluster

A cross-industry value-adding cluster with availability of raw materials and integrated chemical sites

Goals

- **Sustainable use** of non-food biomass (beech wood)
- **Long-term alternatives** to fossil raw materials

Actions

- Providing **cost-efficient environment** for R&D investments
- Development of **innovative products**
- Building of **new markets**
- **Extension** of existing value chains
- Cascading utilisation & coupled production
IV. Information and cooperation in the EU

Biobased value-chains are, throughout the world, linked with a lot of players working in different areas with different solutions. This relates to EU level as well as international level.

**Bioeconomy / Member states**

- Some MS have developed strategies on bioeconomy or at least working on such concepts
- All the national concepts and strategies – based on the specific national circumstances - have in common a holistic cross-sector approach to developing a competitive operating environment for the bioeconomy.
- More consistency of support programmes and more information exchange between MS and between MS and COM is needed to better use synergies and to avoid double funding