

# Multi-stakeholder Innovation Project within the Knowledge Based Bioeconomy

## Baltic Forum for Innovative Technologies for Sustainable Manure Management **Baltic MANURE**

**Markku Järvenpää, MTT**

**Coordinator of the BatMan project**

Director of Agricultural Engineering Research  
MTT Agrifood Research Finland  
Markku.jarvenpaa@mtt.fi



- EU strategy for the Baltic Sea Region - Action Plan 2009 Objective: To make the Baltic Sea Region:
  - AN ENVIRONMENTALLY SUSTAINABLE PLACE
  - A PROSPEROUS PLACE
    - Baltic Forum for Inventive and sustainable Manure processing
  - ACCESSIBLE AND ATTRACTIVE
  - SAFE AND SECURE

## Manure challenges

- Large animal units and regionally intensive animal production
  - 1320 IPPC regulated farms in Baltic region (EU MS)
  - High amount of nutrients to be distributed
  - Logistic challenges
- Economy of scale
  - large animal units may make processing of manure economically attractive
  - Production of renewable energy



# Baltic Manure (BatMan) Project

- Baltic Manure is a Flagship project in the Action Plan of the **EU Strategy for the Baltic Sea Region** adopted by member states in 2009
- The project is financed by the European Union's **Baltic Sea Region Programme 2007-2013**

Lead Partner: MTT Agrifood Research Finland

Total budget: 3,72 million €  
(ERDF: 2,85 M€, Partnership 0,87 M€)

18 partners from 8 countries (+ Russia associated)

Duration 2010 - 2013



BUSINESS OPPORTUNITIES

1. MTT Agrifood Research Finland (Lead) (FI)
2. Finnish Environment Institute (FI)
3. Agro Business Park A/S, Innovation Centre for Bioenergy and Environmental Technology (DK)
4. Aarhus University, DK
5. University of Southern Denmark, DK
6. JTI - Swedish Institute for Agricultural and Environmental Engineering (SE)
7. Julius Kühn-Institut, Federal Research Centre for Cultivated Plants (JKI) (DE)
8. Estonian University of Life Sciences (ES)
9. University of Rostock (DE)
10. Green Federation GAJA (PI)
11. University of Helsinki, Department of Agrotechnology (FI)
12. University of Gdansk, Pomeranian Center for Environmental Research & Technology (PL)
13. Latvia Agricultural University (LV)
14. Lithuanian Research Centre for Agriculture and Forestry (LT)
15. Innovation and Education Centre Hohen Luckow IBZ, German Biogas Association Mecklenburg-Vorpommern (DE)
16. LTC AB/Enterprise Europe Network (SE)
17. Turku Science Park Ltd (FI)
18. Estonian Research Institute of Agriculture (EE)

**The partners: 13 Research entities; 4 Technology transfer organisations (eg. Enterprise Europe Network) and an Environmental association.**

**The project is a top-down project in the sense that it roots from the EU Baltic Sea Strategy. However, the role of the Farmers Union was apparent in preparation of the Strategy.**

**Link to Farmers was generated through the Baltic Deal Project (from the same programme) and nationally through national advisory projects (such as TEHO-project in Finland):**

- demonstrate the value of manure as fertilizer AND its role (when miss-used) to the environment
- increase the knowledge about available technologies
- generate useful modes for cooperation and win-win business models

## OBJECTIVES: to turn manure problems into business opportunities by:

- Bringing together stakeholders and enhancing knowledge
- Stimulating technology and business development
- Providing useful policy recommendations
- Improving manure handling and use in the Baltic Sea region

Relevance to EIP-AGRI in "fostering innovation by closing the gap between research and practice":

- To bring best scientific knowledge into practise by
  - Increasing awareness of technologies
  - Providing policy recommendations (to facilitate adoption of best practices and technologies and remove barriers)
  - Developing new business models into the "Manure Chain"

- Core partners: MTT Agrifood Research Finland & Agro Business Park Denmark
  - Teleconference
  - Starting meeting with 5 key partners early 2010
  - Others invited by “jungle drum” and workshops
- The partnership was built being aware of other Agri-Environmental projects such as:
  - Baltic Compass (ongoing BSR project)
  - Baltic Deal (another Flagship in the Strategy, for extension and farmers association)
- Added value of the parallel projects was considered crucial!

- Application was prepared for the Baltic Sea Region Programme 2007-2013
- The Strategy for the BSR was not – as such – coherent with the objectives of the Baltic Sea Region Programme
  - The Flagship status in the Strategy was not enough
  - We had to identify a call with appropriate objectives and
  - We had to prepare a good and competitive proposal!
- At 7. Feb.2011 a Grant Contract was signed between the lead partner and the Investitions Bank Schleswig Holstein
- Baltic Deal got the Grant six months before
- Very soon, a **voluntary Cluster of the three Agri-Environmental Projects were established**

# The Agri-Environmental Cluster

The added value of the cluster: "Triple Helix":  
to combine

- Technology transfer to farmers,
- Policy development and
- Technology development

Synergy: Voluntary coordination and sharing of results

Technology  
producers  
Research  
Business



BALTIC MANURE  
BUSINESS OPPORTUNITIES



Baltic Deal

Technology  
users

Farmers

Administration  
Carrots

Whip

Public pressure / Public acceptance



- Further Clustering: The BSR – Programme Joint Technical Secretariat established a further cluster of “**Water Saving Projects**”: The Baltic Impulse, with the aim to collect and streamline the results of 9 projects;
- Coordination by the Baltic Sea Action Group (BSAG)
  - [http://www.bsag.fi/en/focus\\_areas/cross-sectoral\\_activities/Pages/Baltic-Impulse.aspx](http://www.bsag.fi/en/focus_areas/cross-sectoral_activities/Pages/Baltic-Impulse.aspx)
- A very important action by the JTS to add value to individual projects!
- Policy Recommendations to be further developed by the HELCOM ministers.

1. Recommendations for farmers
  2. Recommendations for technology producers
  3. Recommendations for policy makers
- All three aspects needed to boost the change of the current paradigm! (Triple Helix)
  - Farmers were reached by Baltic Deal and National Extension projects (like TEHO)
  - Joint Annual Result Conference:
    - A Greener Agriculture for a Bluer Baltic Sea (GABBS)
    - Forum for stakeholders (multiple organisers: Projects, Farmers Federations, WWF...)
    - Including “Year of the farmer -award” and “Manure award”

# Baltic Manure Recommendations for future EIP Operational Groups and for the Managing Authority

- Cross-border projects are more complex than national ones
  - Structure of farms and the society at large
  - GDP, level of technology, social and demographic factors
- Number of key partners: not too few – not too many
- Different Languages of different actors (mis-interpretation; need time to learn communication)
- Management of funds: Simplicity of the rules; Maximal Consistency and Minimum Bureaucracy (The BSRP turned out difficult to small partners!)
  - Flexibility of the work programme "learning project"
  - Flexibility of the partnership
  - Entrance, exchange and exit of partners (in a three year projects, changes are a fact; in this view the BSRP rules were quite tough)
- Good communication between OG and MA
  - (The BSRP JTS is excellent in this ankle!)

- Innovation is a complex issue:
  - Technology: a lot is available but not adopted
  - Users: habits, existing infra and knowledge are barriers of change
  - Regulatory barriers: the regulatory framework often blocks systemic changes
  - Adaptation: the Rules are different in each country
- The Operational Groups should involve a wide spectrum of actors and
- Reserve time and effort for the dialogue



# Baltic Manure

Baltic Forum for Innovative Technologies for Sustainable Manure Management  
or the other story of

# BATMAN