# Innovatiesteunpunt

Innovation Support Centre for Agricultural and Rural Development



#### Introduction

Innovatiesteunpunt(ISP) is the non-profit Innovation Support Centre for Agricultural and Rural Development, operating in the region of Flanders, the Dutch-speaking northern part of Belgium. ISP is embedded within Boerenbond and Landelijke Gilden, the conglomerate of the main farmers organization and the main rural movement in Flanders, with a membership of 17,000 farmers and 70,000 rural families.

ISP focuses on three main types of innovation:

- Business development: making farmers the drivers of a 'smarter', more competitive but sustainable rural economy.
- Technological development: helping farmers in optimizing their use of natural resources so as 'to achieve more with less'.
- Rural development: employing participative processes to make our countryside vibrant and socially resilient.



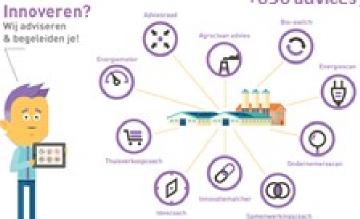
+50 inspiring articles/year We inspire We 'bridge the gap' between farmers, researchers and other innovation actors





## **Innovation Support Centre**









## Technical areas of expertise

#### Climate:

- Climate mitigation and business model on carbon > sequestration
- Towards climate neutral farms through farm specific climate scan
- Innovative climate and business related opportunities
- Initiating feasible and innovative agro-ecological practices

#### Food waste and sidestreams:

- Map and inventory (food) waste
- Participate in larger scale projects and solutions
- Individual advice and trajectory possibilities
- Alternative uses for the residual flow
- Vast network in food processing and pilot installations

#### (Renewable) Energy:

- Innovative and feasible energy technologies and business models
- Energy saving measures
- On-farm production and smart use of renewable energy
- Practices of on-farm energy storage (heat, electricity)
- Community energy

#### New crops:

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- Individual advice and trajectory possibilities
- Find applications for every part of the crop (limit crop waste)
- Tests and demos at farms
- Business plans for algae farms
- Business plans for insect farming
- Network of farmers interested in new crops, especially protein crops (both for food and feed)

## Business oriented areas of expertise

#### Organic switch:

- First-line advise to farmers willing to make the switch to organic farming
- Advising and supporting farmers in their switch
- Organic consultants and platform 'Bio Zoekt Boer'(= Organic looks for farmer)

#### Short food chains:

- First-line advise to farmers wanting to start with a farm shop, or other farm activities
- Connecting farmers with same engagement and common vision in networks

## Business development and new • business models

- Guiding farmers when in need of support;
- Check on capabilities as a manager; What are their strengths and weaknesses as an entrepreneur? What is their company vision? Financial insight and skills as a negotiator? ...
- Help in building and/of finetuning their (new) business models

## Product development and initiating new coöperations

- More and more farmers are starting with the development of their own processed products, often in combination with a farm shop
- Consultants with experience as previous product developers
- Also product development on food waste products

#### Climate

We have a broad **network** and **experience** in mobilising farmers to participate in various innovative **climate and business related opportunities** and **projects**.



We initiate **feasible and innovative agro-ecological practices** that contribute to more sustainable and circular farming systems and multifunctional land use.

We are experienced with co-creative, result-based and participatory approaches. Yearly we provide **inspirational courses** to starting farmers about climate change and agriculture.

#### **POTENTIAL CASES:**

- Climate mitigation and business model on carbon sequestration
- Towards climate neutral farms through farm specific climate scan that leads to a list of relevant climate impact reducing measures, as well as a list of the most economically feasible measures.



Hanne Leirs
hanne.leirs@innovatiesteunpunt.be
Expertise: climate and emissions



Jana Roels jana.roels@innovatiesteunpunt.be Expertise: Climate and food waste

### Climate - projects

#### Klimrek



Flemish project developing a scientific based advisory tool (climate scan) for reducing climate impact in three sectors: dairy, arable and pig farming

Our role: Active role in cocreative climate scan development to ensure that the scan is also meeting the farmers needs; Advising and guiding farmers in making their farm climate-proof; Embedding the climate scan in our work; Training of climate advisors

### Carbon Farming



Building new business models around carbon sequestrating (CS) techniques on agricultural land

Our role: WP lead of show cases: validation and transfer, setting up new collaborations and business models between carbon farmers and interested stakeholders, informing and inspiring farmers on the potential of carbon sequestrating techniques

#### The climate team



Regional project in the Province of Antwerp. 6 dairy farmers and climate experts. Implementation, testing and

Implementation, testing and demonstration of feasible climate measures on dairy farms

**Our role:** Connect relevant parties, lead partner, facilitate co-creation

bundle the advice and results in a practical manual

## Energy

We yearly advise around 200 farmers on their energy management at the farm. Because of this close contact, we have a thorough insight of the field.

We are specialized in matching energy demand profiles with the appropriate production technology. We apply this gained knowledge on innovative solutions concerning energy efficiency and sustainable production, practical implementation, storage and opportunities for community energy.

The lessons learned are widely disseminated towards farmers and rural communities as well as exchanged with our extensive network of research institutions and technology suppliers for the purpose of European projects.



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## Tool "Farmers with Power!"





Know your farm (how much energy is needed and when)



Smart use of own produced energy

In 6 steps to an energy efficient farm



How to optimise the energy bill

Which renewable energy souces apply to the farm



Which energy saving measures apply to the farm

### Energy - projects

## HyPerFarm



Agro-voltaic systems: dual land use for crop production and simultaneous power production

Developing and demonstrating new ways of utilizing and distributing the energy produced on-farm: heat pumps, e-robots, hydrogen production, storage and use, and e-driven pyrolysis of biomass side-streams that captures carbon while also improving soil quality.

Our role: Innovative business models, dissemination and communication

#### **ECCO**



Interreg North West Europe

12 energy communities, farmers organisations, technological and economic research centres

Create new local farmer-citizen Energy Community Co-Operatives (ECCO's)

**Our role**: Connect relevant parties, lead partner, facilitate co-creation, business development

## BioEnergy Farm



Intelligent Energy Europe

Promoting micro scale digestion

7 countries, 13 partners

#### Our role:

Advising farmers, dissemination and communication



## Energy - projects

#### ICare4Farm



Interreg North West Europe

9 partners

Boost the use of solar thermal energy in farming in NWE

**Our role**: Pilot site, market overview in Flanders

#### SAVE



Flemish project SAVE "Slim Aansturen Van Energie"

12 partners: 6 research institutes, 2 end-users organisations and 2 technology suppliers associations

Demand side management at SME level

Maximum use of own produced energy: shifting loads, energy storage, buffering

**Our role**: Lead partner, Research on flexible processes in farms, Advising farmers, Dissemination and communication

#### Sense-it



Sense-it : sensor technology in floriculture

"how can I closely monitor the growth, development and quality of my crop?"

"How can I estimate and where possible reduce the energy consumption of my crop?

**Our role**: Advising farmers Dissemination and communication

## Energy - projects

CO2 and CH4 as carriers for regional development



The aim of this project was to strengthen the economic strength of the region by laying the foundation for a profitable infrastructure for carbon dioxide (CO2) and methane (CH4) on both sides of the border.

#### Our role:

Case study agriculture

Report: "Utilization of hydrogen and methane for mobile applications"

#### Food waste and sidestreams

We map and build inventories on (food) waste issues. Solutions for waste issues can appear in different scales, sometimes it leads to individual (company level) solutions, but often a collaboration approach is necessary to connect different farmers and combine their waste streams in order to lead to an economically feasible solution.

We work with farmers to find a solution that is feasible for his/her company to solve their (food) waste issue. We map out the residual flow and look where preventive measures are possible. In addition to prevention, we will also look for alternative uses for the residual flow.

The solution(s) often lead to either a collaboration or to product development. There is no ready-made solution, as the issue of (food) waste is farm specific. We want to offer various possible solutions and measures.



Jana Roels jana.roels@innovatiesteunpunt.be Expertise: Climate and food waste

## Food waste and sidestreams - projects

#### Food Heroes



Interreg North-West Europe 12 innovation support services of different sectors: agriculture, food and creative industries.

Reduce food losses in the primary sectors by co-creating higher value applications for by-products & out-of-spec products

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Our role: Co-lead partner, facilitate co-creation, business and marketing development

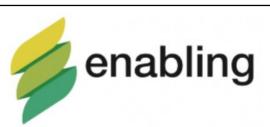
### Food from food



The Food from Food project stimulates, supports and accelerates innovations in the agro and food industry in the field of valorisation from vegetable by-products to food products.

Our role: Build inventory of food waste in primary sector in Flanders, lead and facilitate farmers into product and business development and marketing leading to new food products

## Enabling



Enhance New Approaches in BioBased Local Innovation Networks for Growth. The main goal is to support the spreading of best practices and innovation in the provision (production, pre-processing) of biomass for the BBI (Bio-Based Industry).

Our role: WP lead coaching and brokerage activities, advice, coach and connect farmers and other stakeholders in biobased economy

## New crops

We inspire and advice farmers on their questions about new crops. What are the possible applications and market opportunities of new crops? What are the possible advantages of other crops in the crop rotation?

This knowledge is disseminated towards farmers.

The questions of farmers and the crops they are interested in are exchanged with our extensive network of research institutes. We bring the questions and solutions of both parties together.



<u>Kristof Severijns</u> kristof.severijns@innovatiesteunpunt.be Expertise: New crops

#### **IDEA**



IDEA envisions the development and enrolment of economic viable value chains based on micro-algae in North-West Europe.

Yearrond micro-algae production

Research partners from Belgium, Germany, France, The Netherlands and Ireland

#### Our role:

- Advising farmers
- Dissemination and communication
- Options of platform concepts that facilitate to link offer and demand of algae based biomass (fractions) and derived products
- Ideas for an algae federation

#### Valuesect



ValuSect enhances the innovation performance of enterprises working with insects. Already existing insectbased food products will be evaluated for food safety and shelf life and 40 company cases will be supported by a voucher system. The partners are mainly research institutes active in food safety and insect breeding. Farmers interested in getting started with insect breeding are supported with knowledge about the use of food losses and the effect on the insect as well as market opportunities.

#### Our role:

- Literature study
- Supply the selected food losses
- WP leader longterm:
  - longterm communication plan
  - strategy for continuating the accelerator activities
  - transnational value chain report

# Agrifood Chain Network on new crops - CropExplore



One of the strong points of ISP is our network and short reach to farmers, researchers as well as other parties in the overall agrifoodchain in Flanders.

This is what we are doing currently in regard to new crops and we feel the need to proceed with this.

It needs to be mentioned that new collaborations and/ or EIP project will follow out of this Network.

#### Our role:

- Connecting farmers and different stakeholders from the overall agrifoodchain
- Advising farmers
- Bringing together engaged farmers, food processing companies, suppliers, machine constructors, researchers and advisors
- Tool for online and physical 'chain approach'

