

PGI 00040 BRIDGES project

Bridging competence infrastructure gaps and speeding up growth and jobs delivery in regions



Good practice theme 2 R2B, Research to business Partnerships and Interregional Work Group 2 (IWG2)

1st interregional policy learning session
Ljubljana 20 & 21st April 2016

- Wageningen UR, PP10
- Centre for Research and Technology-Hellas/Institute for Research and Technology-Thessaly, PP9
- Kainuun Etu Oy, PP1



Wageningen UR

University : education and fundamental research
Research Center: applied research

Strategic themes

1. Food Production
2. Global Food and Nutrition Security
3. Metropolitan solutions: Living in and Feeding the Green City
4. Biobased Circular Economy
5. Healthy Food for Healthy Lives
6. Planet Earth Management



Introduction

- Remco Kranendonk, researcher regional development and governance
- Environmental Science Group
- Project leader regional strategy Alterra
- Biobased Clusters and Metropolitan Food Clusters
- Climate KIC, H2020, Interreg



CERTH/IRETETH

- CERTH is a Research Centre, the largest in Northern Greece, with 5 Institutes, amongst which the Institute for Research and Technology-Thessaly (IRETETH).
- CERTH is listed among the TOP-20 E.U. institutions with the highest participation in competitive research grants.
- More than **700 people** work at CERTH with the majority being scientists.
- IRETETH has 4 departments: Agrotechnology, Mechatronics, Biomedicine and Kinesiology, as well as 1 spin-off company (NOVA MECHANICA). It is located in Volos, Central Greece.



CERTH/IRETETH

- IRETETH has implemented two important projects for Innovation Strategy Implementation: **Regional Innovation Pole for Thessaly Region (RIP Thessaly)** 2006-2010 and **Smart Innovation Pole of Thessaly Region: Research, Innovation, Strategies** (2011-2015). The first project set the foundation for the development of the RIS3 of Thessaly Region, with the formulation of 3 Poles (Agropolis, Technopolis, Biopolis). This work continued in the next project, with the cooperation with businesses in the region to create 3 clusters (agrofood, health, ICT). Both projects were funded by the European Union, NSRF, through the Competitiveness Operational Programme.
- IRETETH is member of the Regional Innovation Council of Thessaly Region and took part in the formulation of the RIS3 strategy (entrepreneurial discovery, thematic working groups, revision of RIS3 plan), leading the stakeholders group in the agrofood theme.



CERTH/IRETETH

- IRETETH has formed strategic partnerships with businesses in order to transfer the results of our research to their production (WESTFALIA, etc). Our cooperation with them is funded mainly by the Competitiveness O.P. (PAVET, Innovation Vouchers, COOPERATION). For RIS3, we submitted proposals together with these enterprises in the entrepreneurial discovery process. Examples of projects: Sustainable agricultural/livestock buildings, Biowaste, Climate change mitigation etc.
- Start-ups are also emerging from IRETETH and its researchers and research activities.



Transition to Bio economy - complex problem

- Grand challenges: food security, climate, energy, biodiversity
- Long time horizon
- Creating new value chains between biomass producers and processors
- Market creation, upscaling
- Collaboration between the domains
- Interactive planning process
- Cascade, aiming for high value business initiatives
- Use all biomass components optimally
- Transdisciplinarity
- Job creation



Tobe - Key messages

- Make **strategic choices within regions**, but also foster diversity, multiple routes and pathways from various biomass resources, converting into various bio-based products. Optimization and flexibility. Differentiation strategies
- Adaptation of management techniques to support transition: alignment (come to optimal connection between domains, sectors, regions) and engagement (of people, civil society) strategies.

Regional biomass management

- **Connecting the regions** – interregional cluster approach - in order to come to pan-European value chains and productivity, to strengthen Europe in the global competition
- Macro **regional strategies** (Danube, Nordic, Alps, BIGC, IAR...)

BERST: BioEconomy Regional Strategy Toolkit

FP7: dec 2013-nov 2015

What BERST stands for?

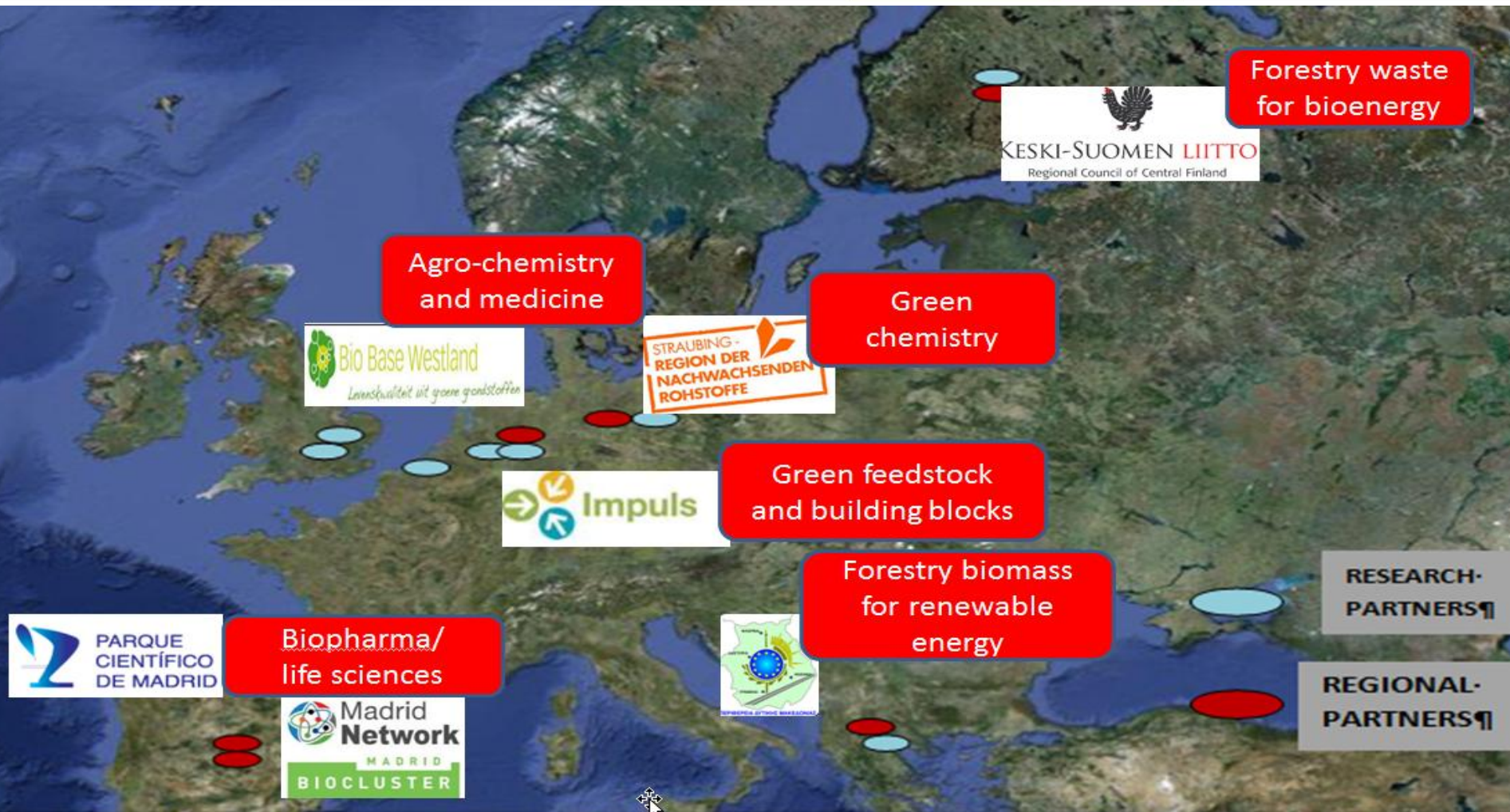
This toolkit aims to help regions to

- recognize their bioeconomy potential
- assess their potential to develop or expand bioeconomy activities
- better exploit that potential

It's all about **regional bioeconomies**

- insights and data in the toolkit (mainly) come from regions and are (mainly) meant for regions
- knowledge institutes assess and expand the regional input and make it accessible by constructing the actual (online) tools

example BERST consortium



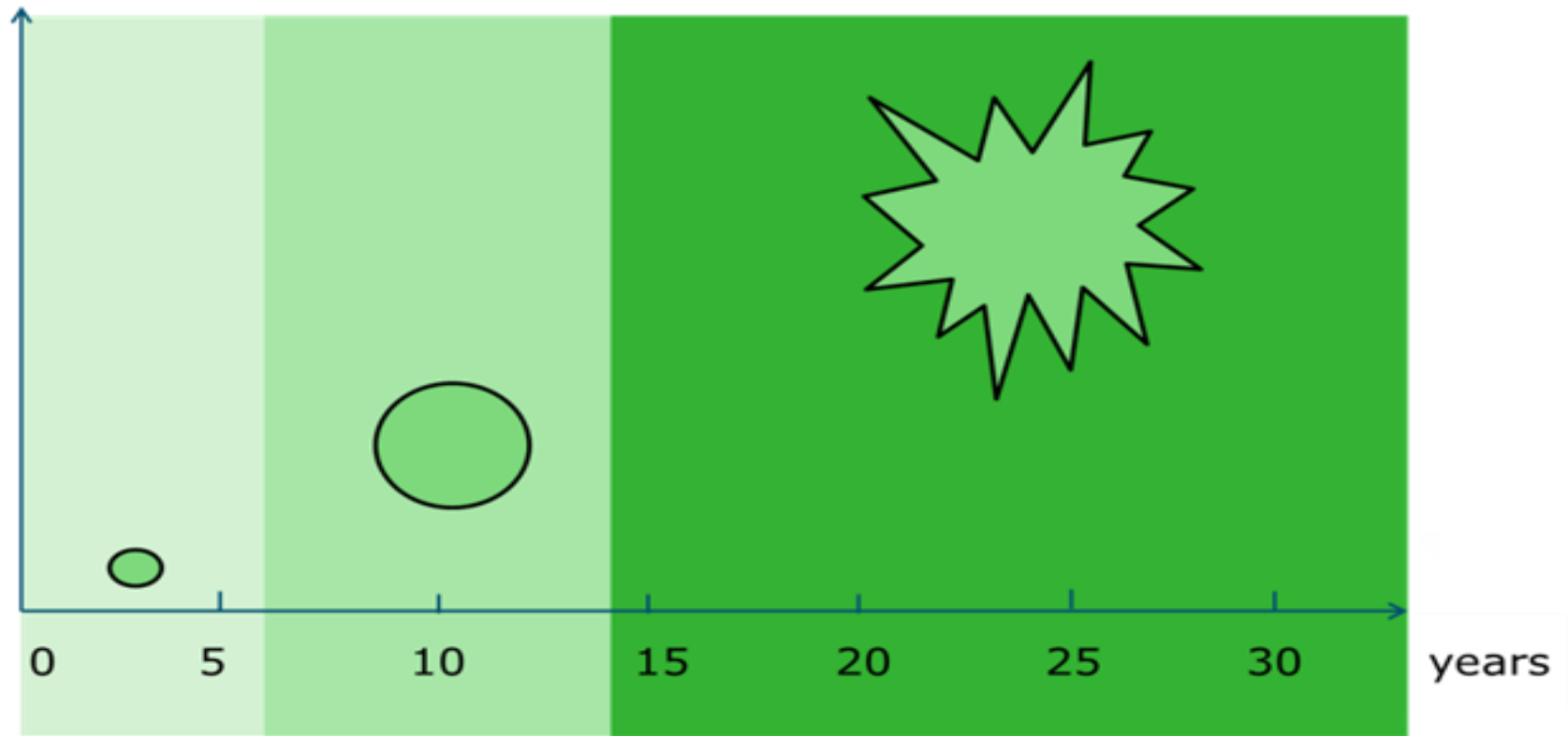
Mapping bio economy potential

Key indicators

- Biomass resources – availability – what kind of biomass, volumes
- biomass processors – what are the existing sectors that may process biomass to biobased products: food, feed, energy, chemical (biobased products), pulp and paper
- infra: transportation possibilities, port, distances
- education and research: presence of Universities and HEI; R&D activities, biorefinery facilities, campuses,
- cluster management, triple helix cooperation
- policies and strategies; bio economy strategy, instruments and measures
- regional profiling: internal and external

Stages of regional development

Cluster size



Initial stage
and take off

Drive to
maturity

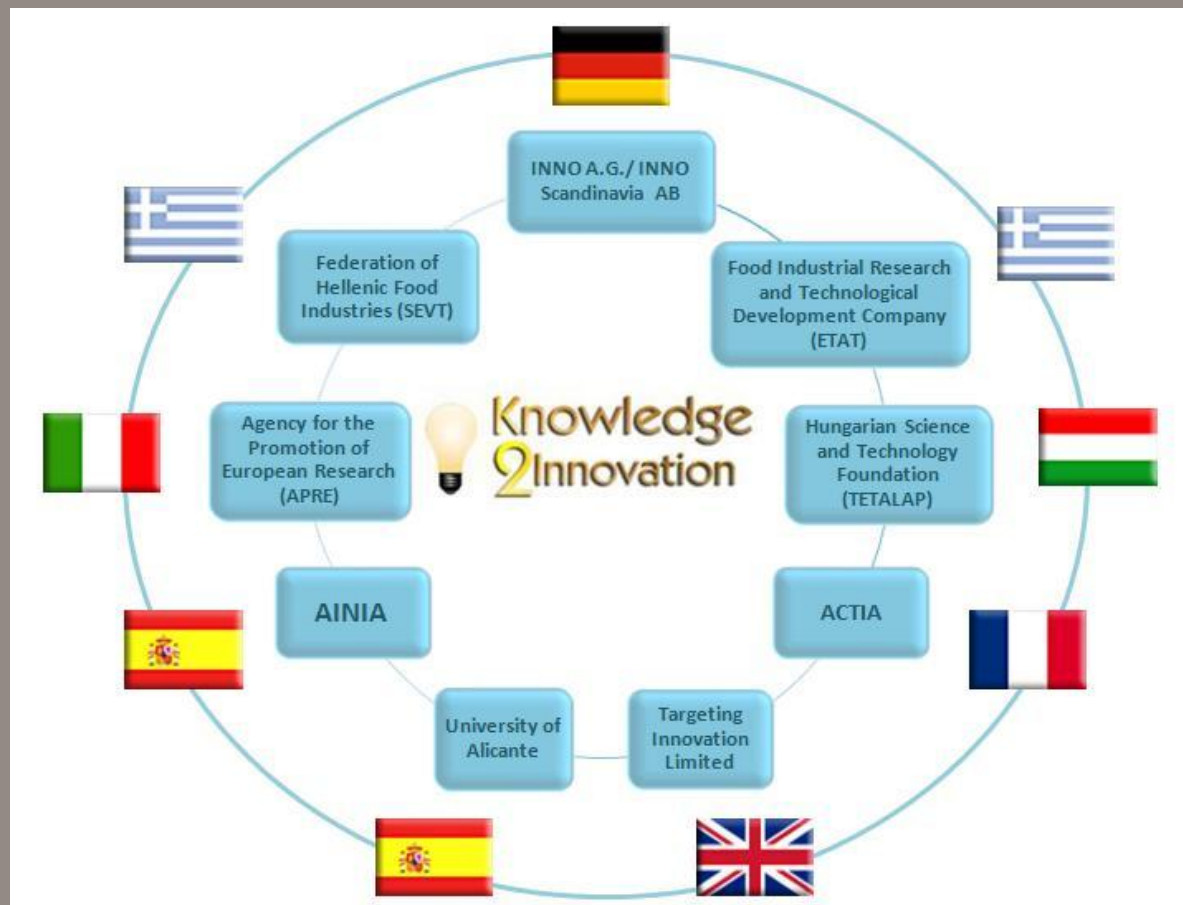
Age of mature
production

Regional Profile



- regional profile **configuration** of:
 - physical characteristics, economical structure, infrastructure
 - type of bioregion, chain, function/position, within wider bio economy landscape, crossovers
 - organizational structure, governance, network, support structure and services
 - strategy: vision, development path, short term/long term, instruments and measures
- Regional profile **external**: competitive advantages, marketing, attract attention, business, investments and funding
- Regional profile **internal**: strategic decision making, focus and clear objectives, create communality and connectedness, mobilize people along these lines, support infrastructure, new intermediates in triple helix, create dynamics by entrepreneurial discovery

Good Practice 2 R2B Partnerships



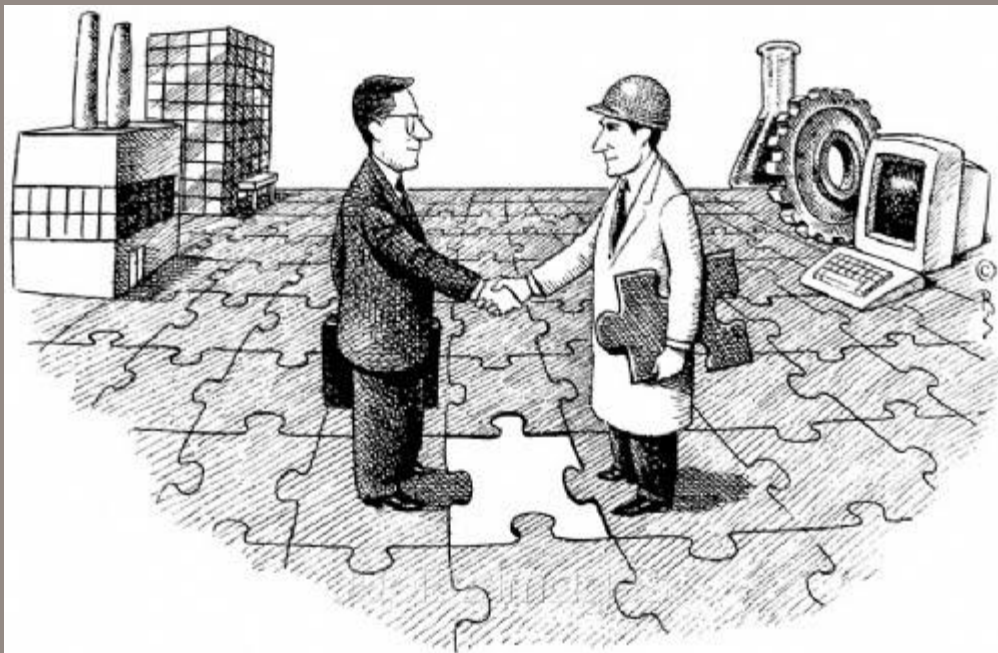
FP7- KNOWLEDGE2IN NOVATION Project

Boosting the bio-economy through research

An EU-funded initiative has developed tools and methods to help facilitate knowledge transfer between academia and industry in the agriculture, food and forestry sectors.



Good Practice 2 R2B Partnerships



Transfer of Research results to agrofood businesses: AGRO-START Project Good Practice Guide



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For quality of life

Wageningen UR collaboration with Regions



Wageningen UR profile:

- Creation of a unique profile compared to other knowledge institutes
- 5 Departments: production (plant, animal), processing, environment and society

Way of working:

- Partnership in regio
- Knowledge brokers
- Team with representatives of all departments – One Wageningen

4 phases or account development:

- Networking and agenda setting
- Small projects
- Large projects
- Regional programming

- the shift in focus on scientific research towards *innovation*
- regional economy vs sustainability: balanced growth in regions (global challenges: Food, Health, Sustainability, BioBased Economy)
- Triple helix collaboration: government, market and knowledge
- SWOT analysis, action planning
- Clusters and cluster initiatives
- Entrepreneurial discovery process (iterative, initiative, pilots and investments)
- Process of regional profiling

R2B Activities



- From research to business development
- From researcher to knowledge broker Participation in triple helix: strategic and operational
- Alignment of research activities to regions and market partners
- Initiative to funds and programs
- From national perspective to collaboration in the EU era:
- from exchange of initiatives and learning to functional relations between regions



The S3 design process can be described through “six steps”, each of which relates to the process rather than a theory or even any specific policy objective:

- Step 1: Analyse the regional context and potential for innovation;
- Step 2: Ensure participation and ownership;
- Step 3: Elaborate an overall vision for the future of the region;
- Step 4: Identify priorities;
- Step 5: Define a coherent policy mix and action plan;
- Step 6: Integrate monitoring and evaluation mechanisms.



- utilizing entrepreneurial knowledge existing in a region
- focusing on market opportunities
- optimise the access to and use of resources (physical, financial, intellectual, market knowledge)
- involve all types of innovation actors , e.g. businesses, technology and competence centres, universities and public agencies, science and business parks, business angels and venture capitalists, civil society
- interactive nature, that brings the different actors together in a participatory process
- discover jointly the smart specialisation fields and develop a suitable policy mix to implement it

The concept of R2B partnerships



Good practice theme 2 R2B partnerships addresses the innovation processes in which the innovation is developed and brought further in collaboration between research and businesses, to come to deployment of the regional bio-economies.

There are three relevant sub-processes, focussing on:

- networks
- Innovation
- finance

All three sub processes are relevant for regional innovations.

Networks - towards Innovation ecosystem



- connecting research and business together: from stakeholders to strategic partners within an network.
- mobilisation of partners, raising awareness, getting to know each other, common initiatives, shared value creation. Matchmaking and network management will be key activities within the region
- mobilisation of knowledge: universities, research institutes, various disciplines (plant breeding, bioprocessing, commercial and marketing knowledge, environmental and societal knowledge coverage)
- mobilisation of entrepreneurs: biomass producers, biomass processors (different sectors), logistics, buyers. SME and large companies
- Creating intermediate organizations, support organizations, cluster management

Innovation Process



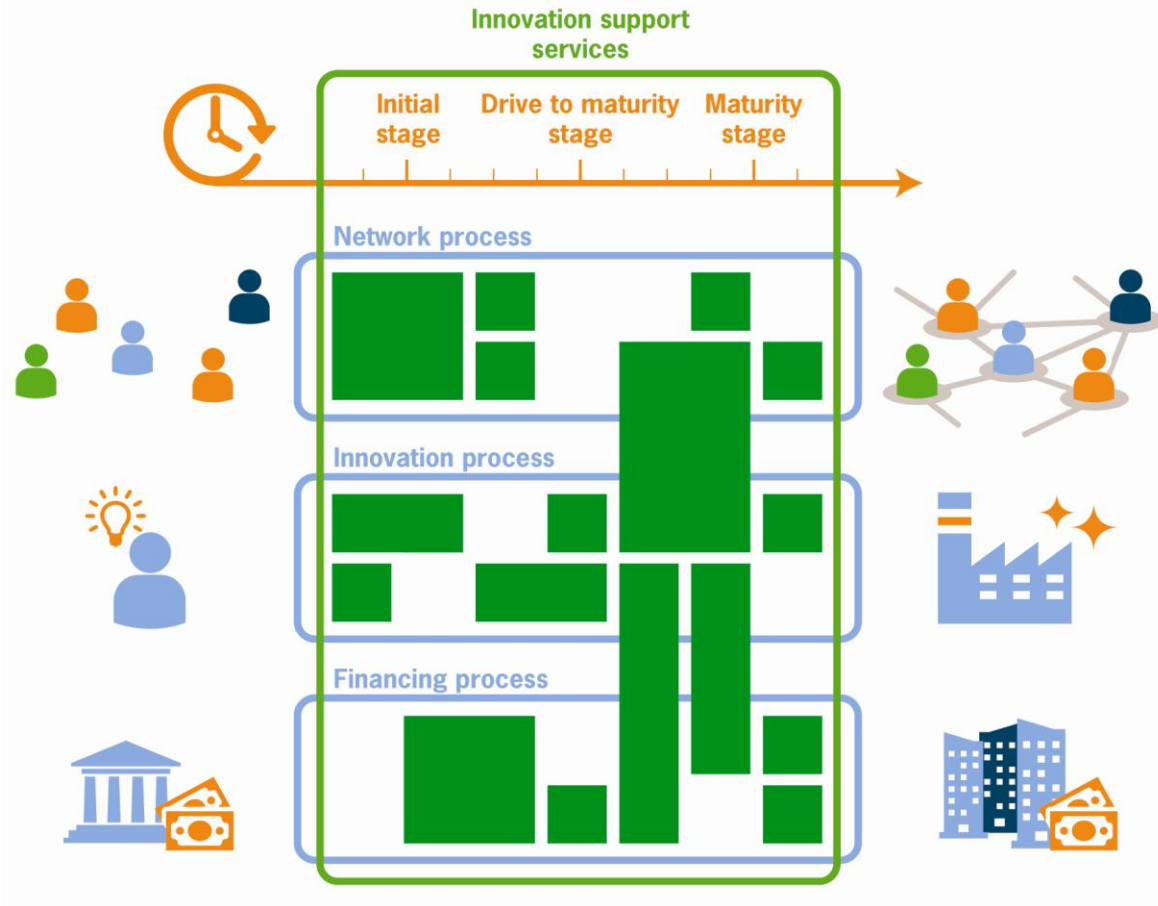
- from fundamental knowledge and ideas to pilots, business cases and new industries
- applied science (explore new innovative ideas, develop new technologies)
- pilots and demo's (test the innovations, prove the advantages and added value)
- to business (startups, investments, scale-ups).

R2B cooperation needed

Tools: research projects, pilot projects, living labs, venture labs and competence centers.

- from public funding to private investment; in the first phases of biobased innovation trajectories often public funding in knowledge and research is involved (H2020),
- Business starts to invest in pilot and demo phase. PPP is challenging (ERDF)
- Venture capitalists, banks (EIB), investors.
- Intermediate organizations or knowledge brokers play often an important role in bridging public and private interest..

Innovation Services



What are we seeking to understand through the good practice description? What are our aims?

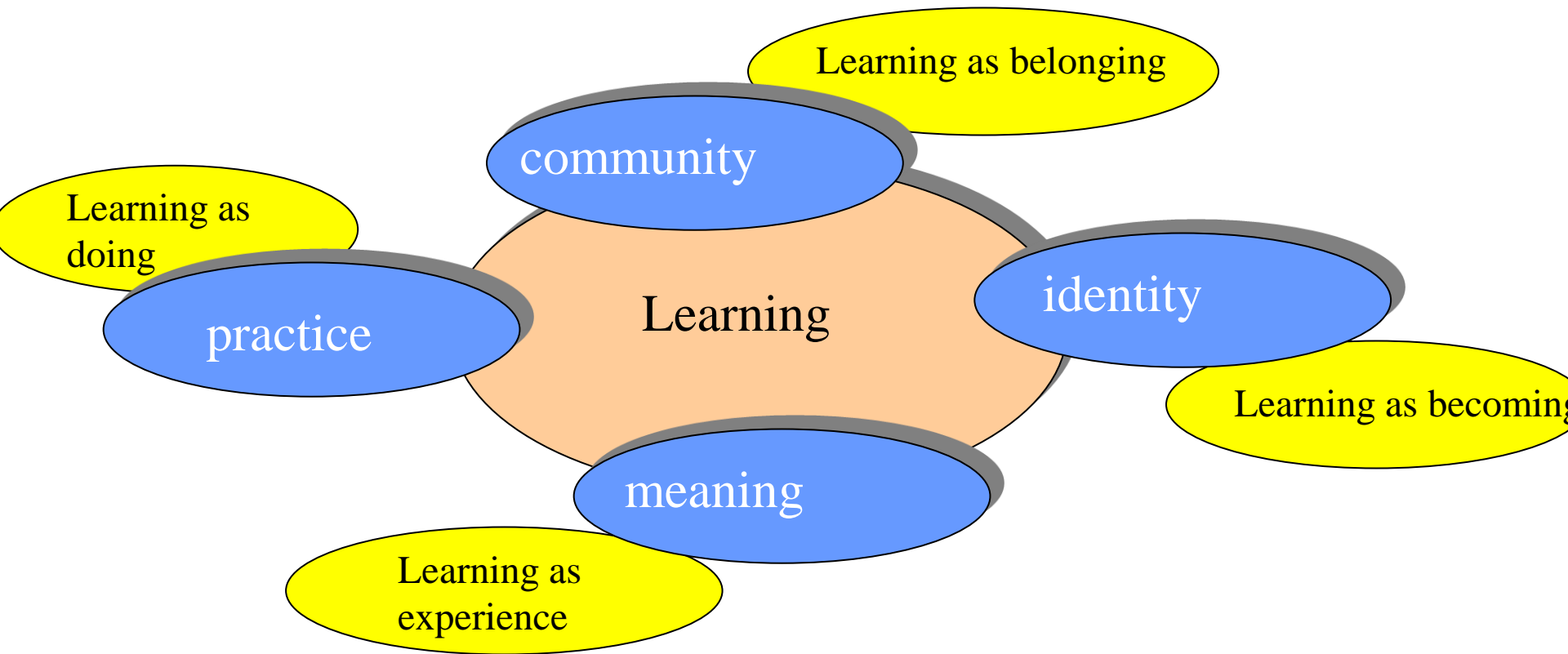
- How have the good practices emerged?
- What are drivers and enablers of good practices?
- What are the results of good practices?
- What are the barriers for Research2business partnerships?
- Where were the activities located? Within the region or with partners outside the region?
- Have they become widely accepted in the region, and if not, why not?
- How can good practices get follow up?

GP theme 2 template



- Introduction/Executive summary
- R2B Good practice description:
 - Conceptual background
 - How are R2B brought together - network
 - description of process of collaboration
 - Effectiveness and efficiency in terms of innovation and finance
 - Critical aspects
 - Follow up and conclusions

Community of practice (CoP) - Networks and social learning



CoP Definitions

a group of people bound together by certain **mutual** concerns, interests, **activities** and institutions (Talbot, 1995)

groups of people informally bound together by **shared expertise** and **passion** for a joint enterprise (Wenger en Snyder, 2000)

a group of people with a shared interest, purpose or goal, who **get to know each** other over time (Kim, 2000)

groups of people who share similar goals and interests. They employ common practices, work with the same tools and express themselves in a **common language** (CoVis-project)

CoP is a method to share best practices, to identify **joint challenges**, opportunities to discover **new perspectives** as a base for **new initiatives**.



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CoP Operating principles

- complex problems
- scientific and practical knowledge
- both learning **and** doing
- iterative process between inside and outside CoP
- breakthrough – system innovation (institutional, physical, economical, theoretical and technological)



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Common activities of a CoP meeting

- Getting to know and understand each other
- (joint) agenda setting
- Practice (excursion, workshop techniques, dialogues)
- Give meaning to developments, themes, networks and regions
- Joint action planning
- Development of alignment and dissemination strategies

International Working Group 2 – IWG2



- The good practices selected and described within the framework of GP theme2: R2B partnerships and GP theme 3 Synergies between regions, regional – national – international will be discussed in depth by the Interregional Working Group2 (IWG2) formed by policy makers, intermediate organizations and managing authorities.
- In BRIDGES project, Interregional Work Group 2 (IWG2) will discuss the alignment of academic and public research with enterprise and industry needs.

IWG2 - objectives

- develop a common understanding of biobased regions: R2B, synergies, instruments, all aspects
- exchange information and practices between regions
- discuss good practices demonstrating R2B partnerships contributing to biobased innovations and investments - integrating regional and interregional options.
- being helpful to regional strategy development (RIS3 – smart specialization)
- Biobased regions chain development – functional relations between regions
- connect EU biobased regional platforms and networks
- initiating new projects/business cases – successful preparation of an innovation projects - vouchers
- designing and facilitating the IWG2



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IWG2 members and coordination



Policy makers, managing authorities and intermediate organizations:

PP1: Kainuun Etu Oy, FI

PP5: Development Agency of Western Macedonia, GR

PP6: Soca Valley Development Centre, SI

PP7: Pannon Business Network Association, HU

PP9: Centre for research and Technology Hellas / Institute for research and Technology Thessaly, GR

PP3: Lubelskie Voivodship, PL

PP4: Regional Council of Uusimaa, FI

IWG2 will be coordinated by PP10 Wageningen UR and PP1 Kainuun Etu Oy

IWG 2 implementation and themes



Sem 1, IPL 1, establishment of IWG2.

Sem 2, IPL2, IWG2 meeting 1: Introduction of the IWG2, discussion of regional contexts in respect to innovation funding schemes, performance, needs. Preparation PP10&PP1, moderation PP10, notes PP1.

Sem 3, IPL3, IWG2 meeting 2: Discussion of results of GP theme 3 outputs and the regional benchmarking exercises, regional absorptiveness potential. Preparation PP10&PP1, moderation PP10, notes PP1.

Sem 4, IPL4, IWG2 meeting 3: Recommendation of the IWG2 members for issues to be included into the innovation vouchers & leveraging of funds action plan units AC2 and AC3. Preparation PP10&PP1, moderation PP10, notes PP1.

Sem 5, IPL5, IWG2 meeting 4: Following the peer review of the draft action plans, the IWG2 team convenes to adjust action & endorsement plan recommendations for AC4 of the action plans. Preparation PP10&PP1, moderation PP10, notes PP1.

Capitalization report: semester 6, PP1..