SMART SPECIALISATION PLATFORM

Bioeconomy – smart specialisation in West Pomeranian region

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Connecting RIS3 in the Baltic Sea Region
Malmö, November 7, 2013

Invest in West Pomerania

Regional specializations

- **bioeconomy**
- **maritime & logistics**
- **metal-machine industry**
- **services of the future**
- **tourism & health**

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Invest in West Pomerania

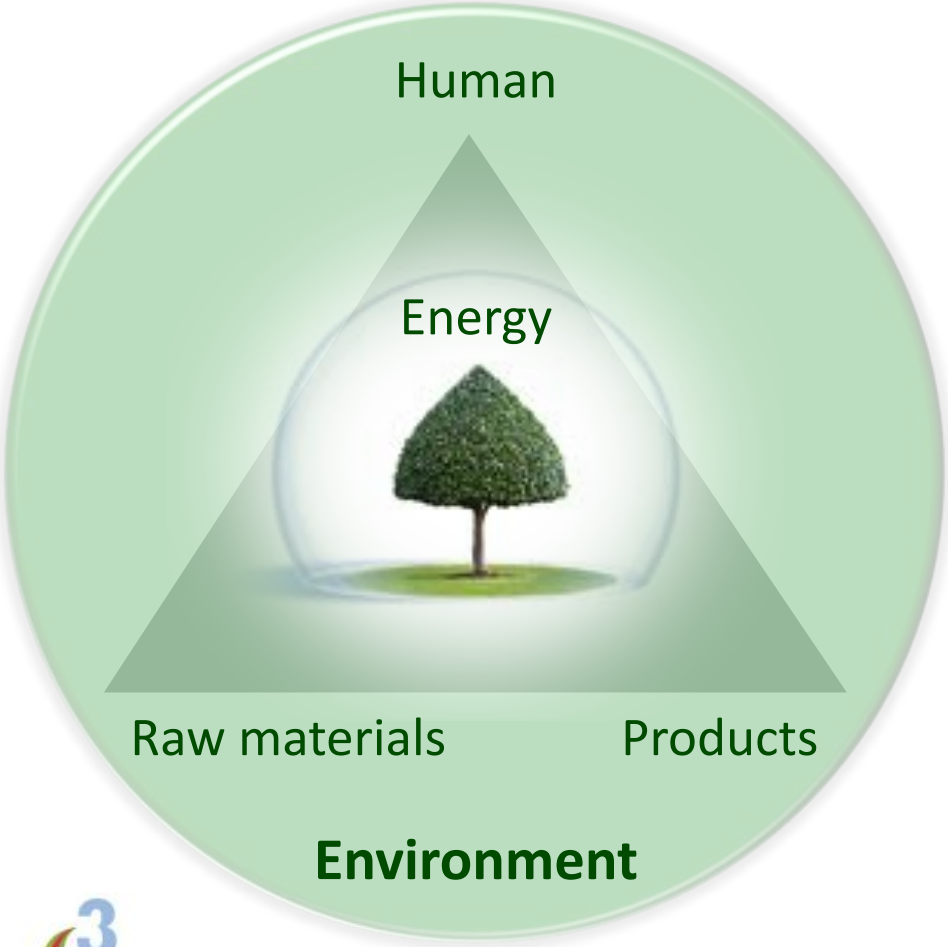
Investors' Assistance Center

Bioeconomy

- agri-food sector, wood-furniture sector, renewable energy, green chemistry, materials science, packaging
- 13 000 SMEs
- 90 000 employed
- 25 billion PLN revenue
- 9 billion PLN export
- 52% of export
- CLUSTERS: Wood & Furniture in Koszalin, Green Chemistry, Construction Cluster, Green Locomotive, sEaNERGIA

The main idea of West Pomeranian Centre of Bioeconomy

OUR MOTTO: Sustainable development of the region based on natural resources



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Key partners:

Zachodniopomorski Uniwersytet Technologiczny w Szczecinie

Uniwersytet Szczeciński

Urząd Marszałkowski Województwa Zachodniopomorskiego

Pomorski Uniwersytet Medyczny w Szczecinie PUM

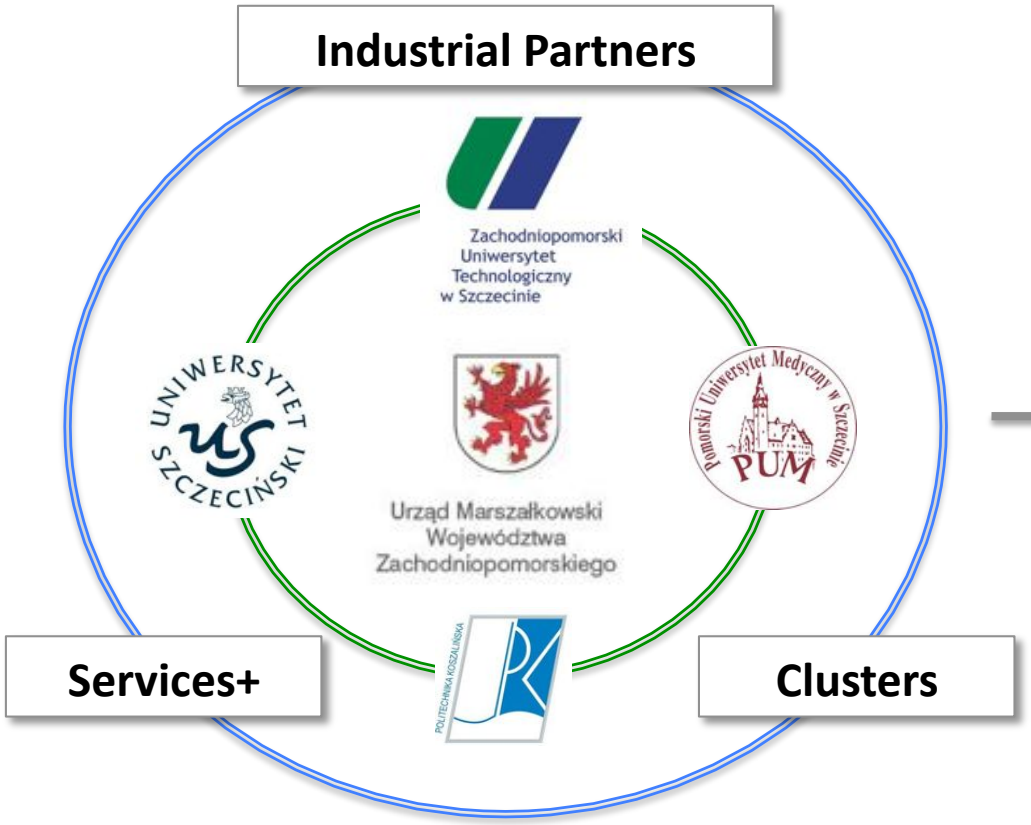
Politechnika Koszalińska

- **4 public univerities** from the region (more than 200 scientist)
  (3 from Szczecin and one from Koszalin);
- **Marshal Office** of West Pomeranian Region
- other public organizations (clusters ect.)
- industrial partners

The overal goal of West Pomeranian Centre of Bioeconomy

The Cooperative Research Centre model:

- to <u>bring end-users and researchers together to build critical mass to work on key strategic projects</u>.



PROJECT

innovative products

and/or

novel technologies

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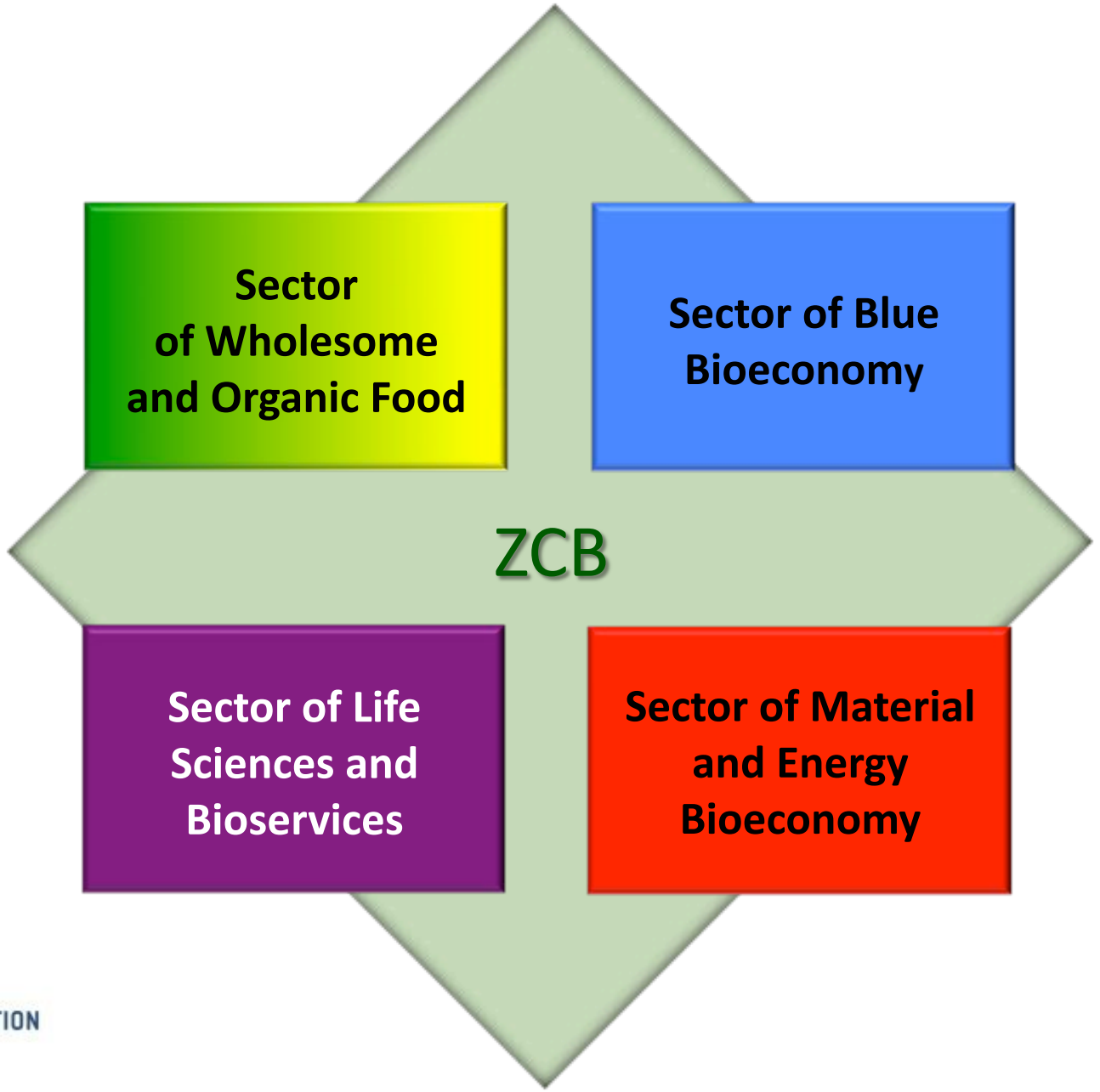
Sectors of Bioeconomy in the WPV & Intersectoral Units



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Some project ideas.....

- processing of BIO-by-products towards food additives and valuable chemicals (biorefinery of biomass including agriculture, wood and food by-products)

Sector of Wholesome and Organic Food

- fisheries - restoration of marine organisms in Baltic see, including fishes such as cod and turbot
- sustainable aquaculture

Sector of Blue Bioeconomy

- micro- and nanomaterials for various applications (from packaging to bio-materials).
- renewable sources of energy (from biomass, via solar to wind energy) - energy efficiency of the production and use of biomass

Sector of Material and Energy Bioeconomy

- genomics and proteomics as power tool in life sciences

(molecular genetics of cancer, stem cells - therapy of various diseases)

Sector of Life Sciences and Bioservices

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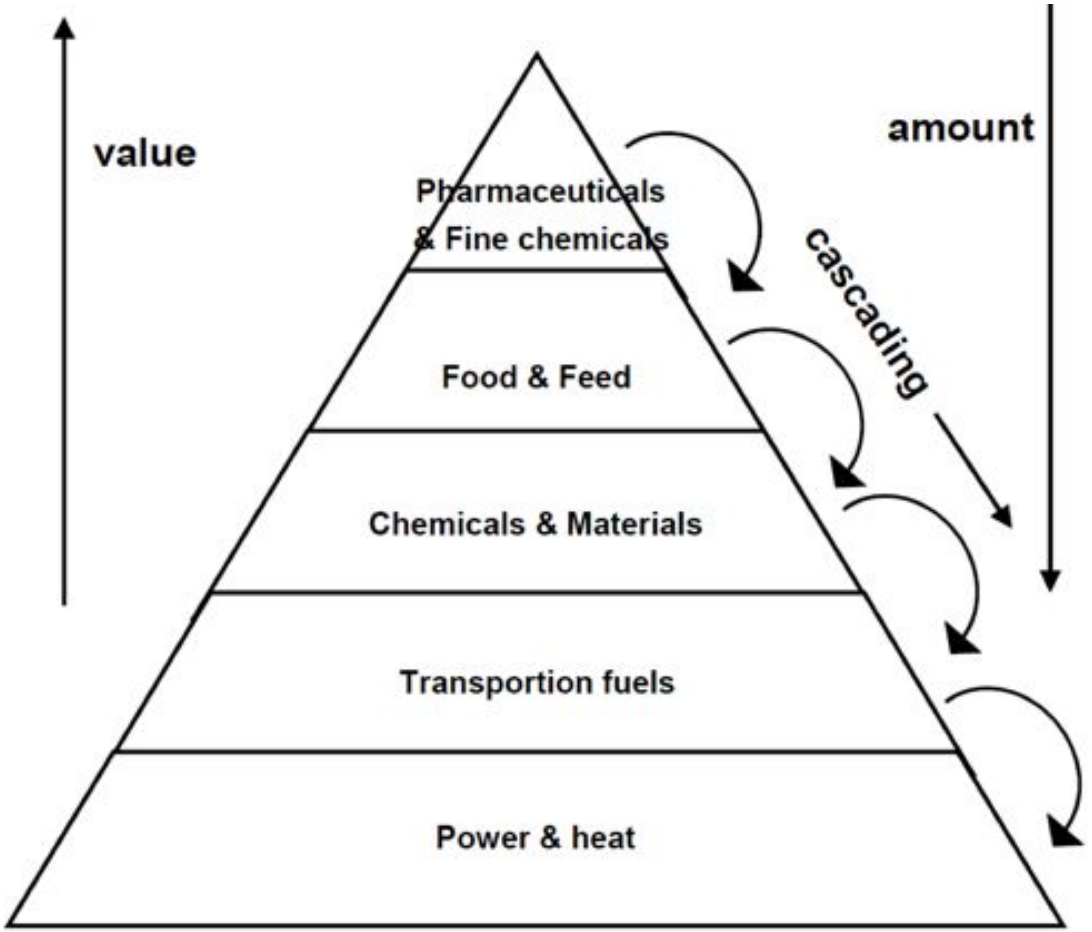
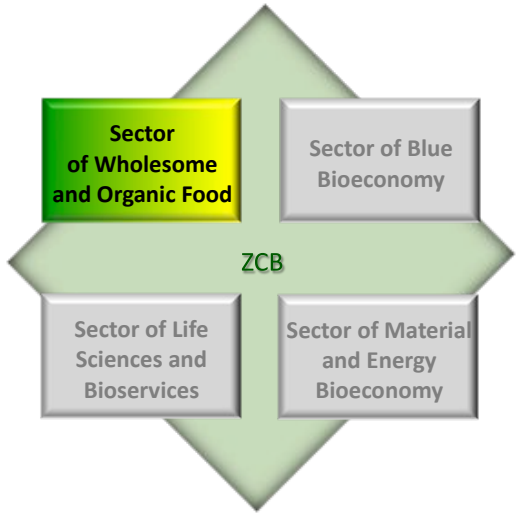
Sector of Wholesome and Organic Food

- processing of BIO-by-products towards food additives and valuable chemicals (biorefinery of biomass including agriculture, wood and food by-products)

Biorefinery – biomass not only source of energy





„ERA-NET MNT „Development and processing of agricultural by-products to multimaterial microfibrous composite packaging materials"

- define and characterize the **most promising agricultural by-products**, which could be apply in Europe as **source of natural fibre materials**,
- development of functionalized (mechanical, antimicrobial and humidity resistance) **food packaging materials** obtained by **injection moulding** or **compression moulding** based on the agricultural fibre by-products,
- manufacture of such by-products should be as simple as possible enabling **mass production with minimum capital cost**

Duration:	01.05.2012 - 30.04.2015
Funding agency:	NCBiR Narodowe Centrum Badań i Rozwoju, VINNOVA
International partners:	• Sweden / Karlstad University, Lantmannen • Austria – BOKU (Wien) • Poland /CBIMO, Dept. of Plastic Processing (ZUT), InterPlastik

West Pomeranian Uniwersity of Technology, Szczecin

Lantmännen

INTERPLASTIK

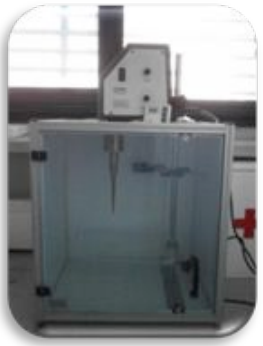
Karlstads Universitet

BOKU

Center of Bioimmobilisation and Innovative Packaging Materials

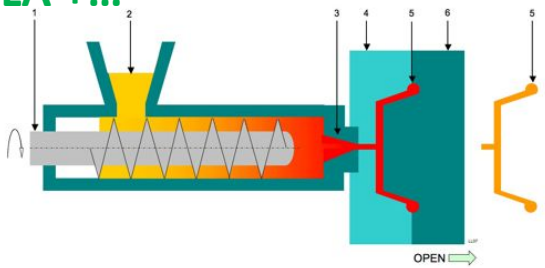
Bio2mat

WP1. Selection of By-products

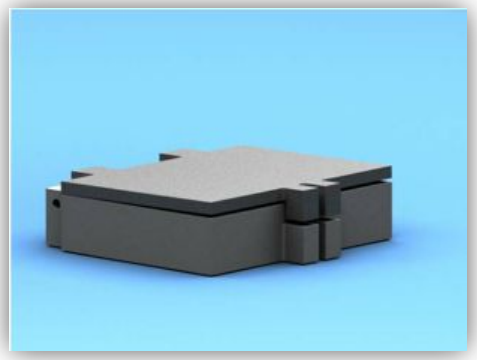


WP2. Processing/ purification

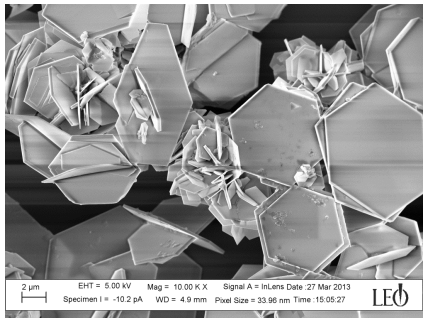
WP6. Injection moulding PLA +...



WP4. Compression moulding



WP3/5. Funct. Coatings



WP6. Prototype

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KARLSTADS UNIVERSITET

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We are looking for.....

We are looking within Baltic Sea Regions for collaboration around:

- *specific R&D projects* including at the same time involvement of research organisations and industrial partners;
- projects, which will create a critical mass towards *good proposals within new calls of Horizon 2020 (Industrial leadership);*
- projects, which will joint market creation for *specific type of BioEconomy products and services.*

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WHY and WHO needs to collaborate on what…?

WHY collaboration:

To create competitive Industries within Horizon 2020:

- aims at making Europe a more attractive location to invest in research and innovation, by promoting activities where businesses set the agenda;
- provide major investment in key industrial technologies, maximise the growth potential of European companies by providing them with adequate levels of finance and help innovative SMEs to grow into world-leading companies.

WHO needs to collaborate on what:

- Industrial partners with representative of research organisations on new project ideas within Horizon 2020.

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Bioeconomy - from trans-regional to international cooperation