



# Ecology and Life Science Contact Office Establishment in Klaipeda and its Perspectives

**Olga Belous**

**Klaipeda**

**2010**





## EU and National Policy Priorities

**SUSTAINABILITY**

**PEOPLE**

**NATURE**

**PROFIT**

**BIOMEDICAL BRANCH**

**Scientific**

**Biotechnological**

**Innovative**

**PRIORITY AREAS**

**life science,  
biotechnology,  
sustainable  
molecular science**

**Safety**

**Health**

**Environment**

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## A Challenge for a Scientist

### Sustainable Entrepreneurship in bioscience

**INTERNATIONAL (CROSS-  
BORDER) CO-OPERATION**

**GOOD CONTACT  
WITH BUSINESS**

**ADMINISTRATIVE  
SUPPORT**



## A Challenge for a Businessman

### Sustainable Entrepreneurship in bio - economy



**INTERNATIONAL (CROSS-  
BORDER) CO-OPERATION**

**GOOD CONTACT  
WITH RESEARCH  
ORGANIZATIONS**

**ADMINISTRATIVE  
SUPPORT**



## A Challenge for an Administrator

### Sustainable Entrepreneurship in bio - management

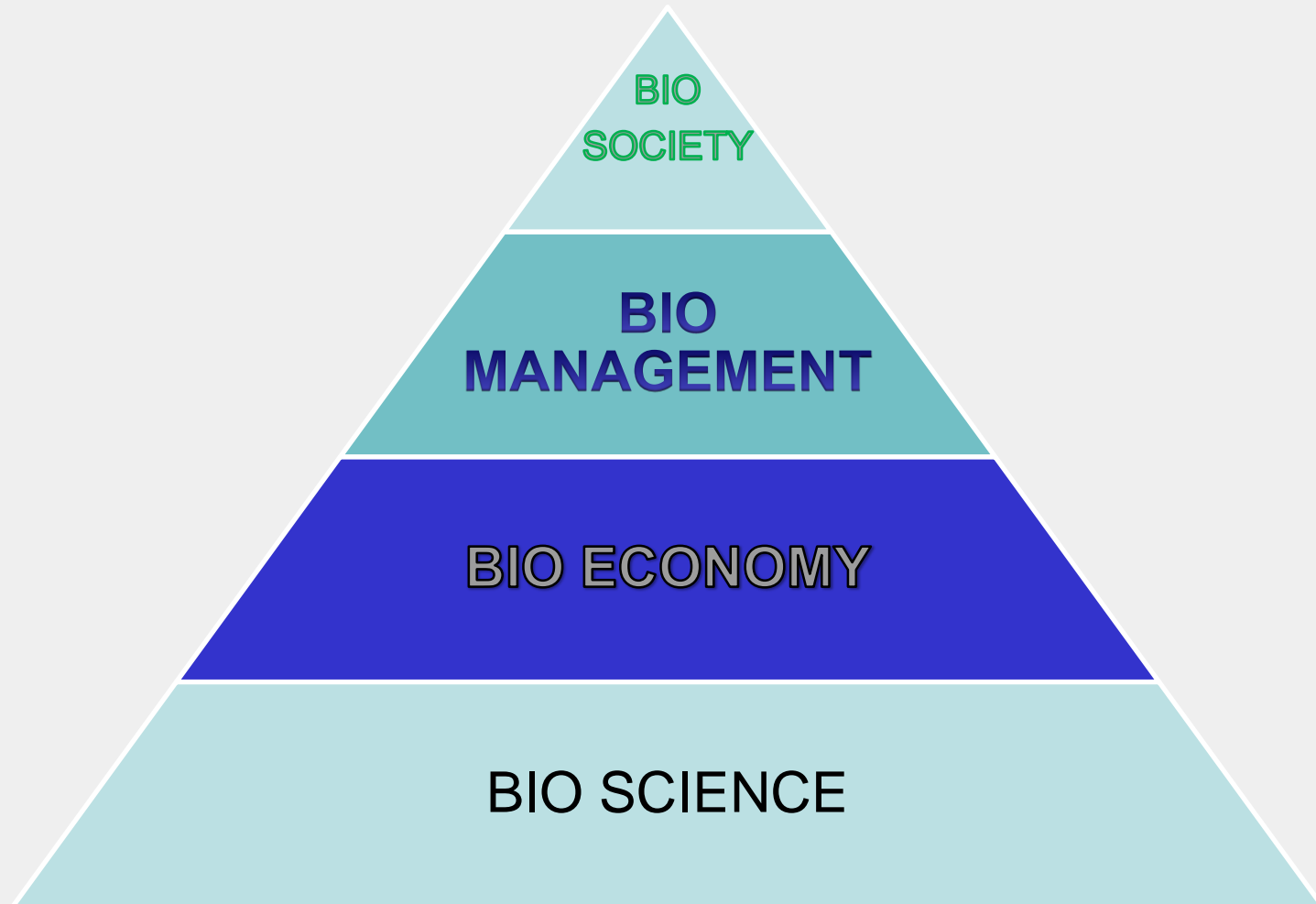
**INTERNATIONAL (CROSS-  
BORDER) CO-OPERATION**

**GOOD CONTACT  
WITH RESEARCH**

**GOOD CONTACT  
WITH BUSINESS**



# A Challenge for a Society



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# CONTACT POINT

- ❖ **WHY IS KLAIPEDA?**
- ❖ **IS IT ENOUGH COMPETENCE?**
- ❖ **WHAT IS THE MAIN AREA OF FUTHER ACTIVITIES?**
- ❖ **PILOTS EXAMPLES**
- ❖ **PUBLIC PARTICIPATION**



# **ECOTECHNICS**

**Mid Sweden University -Ostersund**

**New Speciality in Bachelor  
Study Programme- form 1998**

**Ecotechnics-East**

**Aquaculture, Permoculture,  
Forestry,**

**Pilot projects – Environmental  
management (EMAS, ISO 14000)**

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## **SUB - MARINER**

**Leader Partner: Environmental Ministry,  
Berlin, Germany**

**Marine Resources, Sustainable Usage, CO<sub>2</sub>  
prevention, Economic Development**

**INTERREG IVB – BALTIC SEA REGION**

**Germany, Estonia, Latvia, Poland,  
Sweden, Denmark, Lithuania**

**Perspectives: blue technology, algae  
culture, alternative energy**

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## GENESIS –FP7

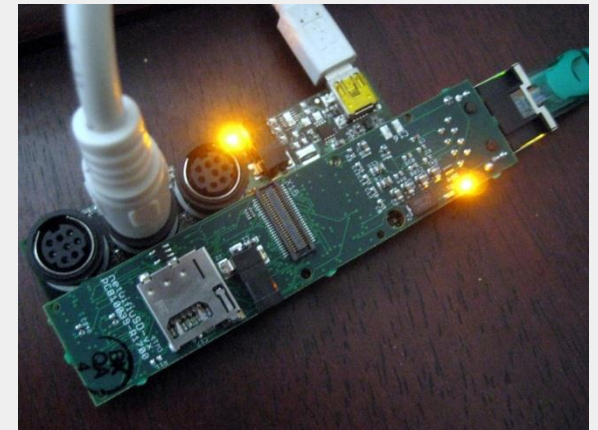
### GENeric European Sustainable Information Space for Environment



Thales, Institute Pasteur,  
Sogreah (France)

Surface water body  
eutrophication – toxicity of  
cyanobacteria  
Early Warning Service  
Water Framework Directive

Cyanobacteria and Health  
Aspects



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## **WOOD-NET - FP7 project**

*The implementation of research potential of the Latvian State Institute of Wood Chemistry in the European Research Area*

**Prof. G. Shulga, Prof. A. Anderson**



*Nitrogen enriched binders for soil erosion prevention – substrate preparation*

*Prevention of industrial and natural slopes instability, forestry*



## Lithuanian shipyards and “green fleet”!



**South Europe, UK, Germany**

**Efficient waterborne transport**

**Ballast water, antifouling  
system, waste utilization**



## **Renewable Energy**

### **Regional Mobilizing of Sustainable Waste-to-Energy Production–REMOWE**

**Leader partner - Malardalen University,  
Sweden, Dr. Eva Thorin**

**Germany, Estonia, Finland, Poland, Lithuania**

**Contribution to an improved environmental quality by  
reduction of carbon dioxide emissions.**

**Demonstration of potentials to balance energy  
consumption and sustainable use of renewable  
sources**

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## **KU Coastal Research and Planning Institute**

**SDI4SEB** – **Neighbourhood** - Sustainable Development Indicators for ICZM in the South-East Baltic --



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**POWER** – **Neighbourhood** - Perspectives of Offshore Wind Energy Development in Marine Areas (Lithuania, Poland, Russian)



## Coastal Research and Planning Institute

**BaltSeaPlan** – **BSR Programme 2007-2013** - Compilation of current uses, conflicts and natural values of the Baltic Sea

**GRaBS** project – **Interreg IVC-** Green and Blue Space Adaptation for Urban Areas and Eco Towns - Integration of climate change adaptation into regional planning and development by putting in place green and blue infrastructure.



## **Integrated Marine Science, Studies, and Business Centre (Valley)**

Renovation and modernization of infrastructure and quality of university marine studies

Increase the potential of Lithuanian marine science and technologies in the international market of marine services

Concentration of the highly qualified local and foreign experts of various fields of marine science

Ensure the conditions for tight collaboration among science, business and academic institutions





## Integrated Marine Science, Studies, and Business Centre (Valley)



**Klaipėda University** –  
educational programmes in  
line with business demands

**Integrated Marine Science,  
Studies, and Business Centre** –  
joint research. International  
projects

**Klaipėda Science and  
Technology Park** –  
cooperation between science  
and business

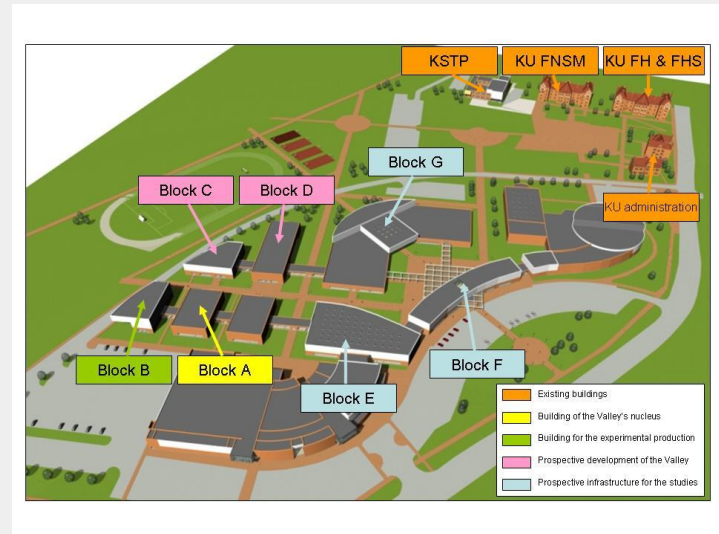
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# INFRASTRUCTURE of MARINE VALLEY

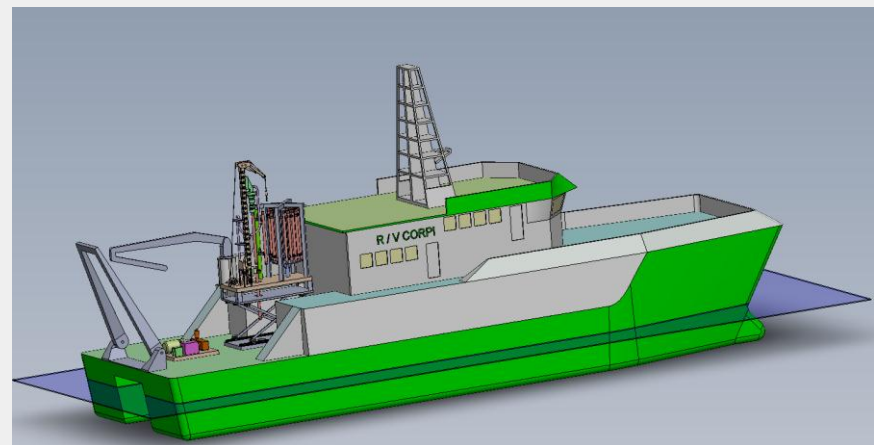
*Main buildings of the Valley*



*Research laboratories*



*Research Vessel*



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# Plants physiology and environmental stress

*Moscow agricultural academy*

*Experimental development*



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## **Health issues**

*Hydrocarbons in environment*

*Bioindicators and Biomatrix -1-hydroxypyrene*

*Risk for Human Health*

*Contribution to Alert System Development*

*Diseases Prevention, Damage  
Calculation*

*Drinking water and air contamination impact on health*



## **PRE-STUDY and TRAINING ACTIVITIES**

Pre-study of needs and competences (finalised beginning 1st trimester 2011)

Selection of relevant tools (fin. end 1st trim. 2011)

Finding of suitable methods (fin. mid 1st trim. 2011)

Modules preparation (fin. end 1st trim. 2011)

Modules expertise (fin. end 2nd trim. 2011)

Training programmes and timetable (fin. 3rd trim. 2011)

Implementation (fin. 2nd trimester 2012)



## Public Participation

- Stakeholders participating in the survey of the training needs - **Academics, SME's, Individuals and Government/Administration**
- Evaluation of Training Modules Development - **Scientists, Students, SME's, Individuals, Experts**
- Cross border pilot project incubations - **Administration, Politicians, Academics, Entrepreneurs, Individuals**



## PILOT PROJECTS

*Management resources: climate change*

*Food production*

*Waste conversion industry*

*Sewage treatment*

*Restoration of polluted body of water: eutrophication*

*Agriculture: soil vitality*

*Architecture and landscape design*

*“Green” fleet*



## PILOT PROJECTS

Wind, solar and wave based energy sources

Organic waste conversion to feeds for livestock and fish

Flowers, mushrooms, vegetables, fish cultivation

Sludge degradation – biogas, energetic forest

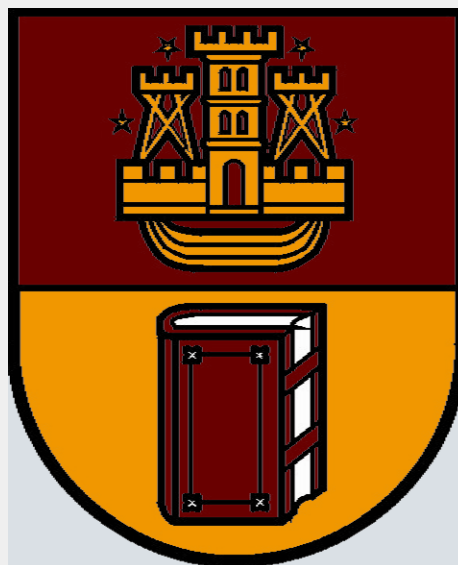
Aquaculture, horticulture, vermiculture (usage of macrophytes, earthworms, algae, zooplankton, snails, crayfish)

Design of ecological buildings with recycling and reuse of waste and use of renewable energy





# Thank You For Attention



<http://www.ku.lt>

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