



FP7-INCO-2010-6.1, ERA-WIDE

**“Advancing Research and Cooperation Capacities of  
IHM NASU towards ERA”  
ERAIHM**

**Final Conference**



ROYAL INSTITUTE  
OF TECHNOLOGY



March, 26, 2013, Kiev (Ukraine)



# Project Coordinator



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# Background



Number of Agreement: 266587

- Project number: 266587
- Title: “Advancing Research and Cooperation Capacities of IHM NASU towards ERA”
- Acronym: ERAIHM
- Duration: 31 months
- STARTING DATE: 01 November 2010
- EC CONTRIBUTION: 385,763.00 EUR





# List of Partners

- Institute of Hydromechanics of National Academy of Sciences of Ukraine (IHM NASU, Kiev)
- Kungliga Tekniska Högskolan/Royal Institute of Technology (KTH, Stockholm, Sweden)
- Technische Universiteit Delft/ Delft University of Technology (TU Delft, The Netherlands)



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# Objectives



## Wider Objective:

To reinforce the cooperation capacities of one of the leading research centres of Ukraine - Institute of Hydromechanics of the National Academy of Sciences of Ukraine (IHM NASU) and enhancing its part participation in European Framework Programmes.



# Objectives



## Specific Project Objectives:

- To develop a strategy of IHM NASU aimed at ensuring coherence of its RTD activities with socio-economic needs of Ukraine, enhancing its cooperation with European Research Centres and participation in European Framework Programmes.
- To develop and implement training modules at IHM NASU to build capacity in participation in Fp7 and to facilitate involvement of stakeholders in innovation process.
- To develop a Communication and dissemination toolkit for improvement of IHM visibility for Ukrainian and European research centres and stakeholders, networking, dissemination and exchange of scientific information and design of joint RTD activities.





Institute of Hydromechanics  
of NAS of Ukraine

# History of cooperation

**"UKRMOBIL"**, *Facilitating academic mobility between EU and Ukraine, 2004-2005*

**"UKRBRIDGE"**, *Bridging the gap between University and businesses, 2005-2009*

**"UNIQTUOL"**, *Implementing tools and policies for quality work at institutional level, 2010-2013*

**"CREDO"**, *Creation of third cycle studies - Doctoral Programme in Renewable Energy and Environmental Technology, 2010-2013*

**" IEMAST "** *Establishing Modern Master-level Studies in Industrial Ecology, 2011-2014*





# Launch of *The Joint Swedish-Ukrainian Laboratory on Sustainable Environmental and Energy Technologies*

13 November 2007, Kiev, UKRAINE.





# ASSESSMENT OF COMPETITIVE ADVANTAGE OF IHM BY SECTORS

IHM NASU (12-15 September, 2011)

## TELEMEDICINE ACOUSTICS



**ACADEMICIAN GRINCHNKO  
WITH ERAIHM TEAM,  
IHM NASU**

## RENEWABLE ENERGY HYDRO- TERMO- DYNAMICS



**PETRO MOROZ  
PRESIDENT  
"UKRINTERM" CORPORATION**



**DECLAN GORDON CARROLL  
DIRECTOR  
GREENPICKLE INTERNATIONAL LTD  
WITH ERAIHM TEAM**

# ASSESSMENT OF COMPETITIVE ADVANTAGE OF IHM BY SECTORS

IHM NASU (12-15 September, 2011)

## SHIPBUILDING HYDROMECHANICS



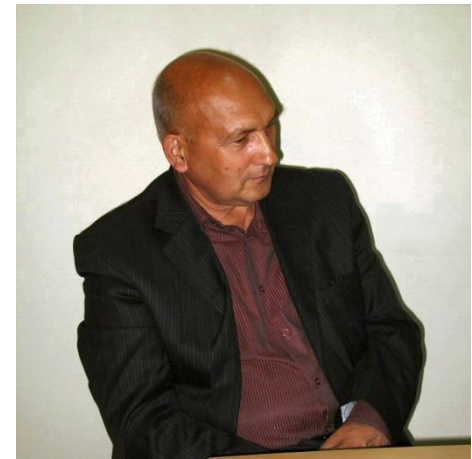
**EUGEN PRIMUK  
CHIEF DESIGNER  
DESIGN BUREAU "SCHUNA"**

## AGRICULTURE HYDROTECHNICS



**VIKTOR IAROVOÏ  
HEAD OF DEPARTMENT ON  
INNOVATION AND INVESTMENT  
KYIV REGIONAL ADMINISTRATION**

## AVIATION AERODYNAMICS



**NIKOLAI ORLOV  
HEAD OF EXPERIMENTAL  
INVESTIGATION DEPARTMENT  
OF AERODYNAMICS  
"ANTONOV":**

# **THE INTERNATIONAL WORKSHOP: "STRENGTHENING THE INNOVATION CAPACITY AND COMPETITIVENESS OF UKRAINE" :**

Great Conference-Hall of NASU, Kyiv (16 September, 2011)

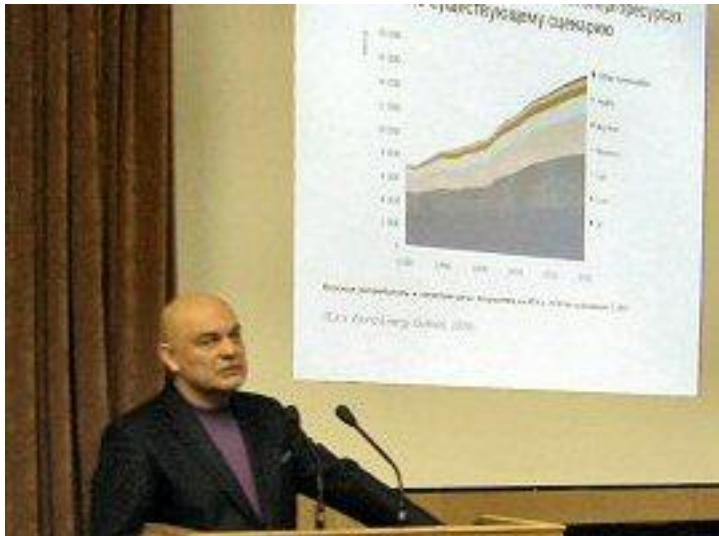


**The round table discussion:  
GRAND CHALLENGES –  
GRAND OPPORTUNITIES**



**ERAHM team meeting with  
Academician B.Ye.Paton,  
the President of NASU  
and Prof. Flodström  
Vice President of the European Institute of Innovation and  
Technology**

# Collaboration with stakeholders: Seminars, workshops and training



**TRAINING-SEMINAR ON RENEWABLE ENERGY TECHNOLOGIES IN THE MUNICIPAL ENGINEERING WITH MAJORS OF UKRAINIAN CITIES**



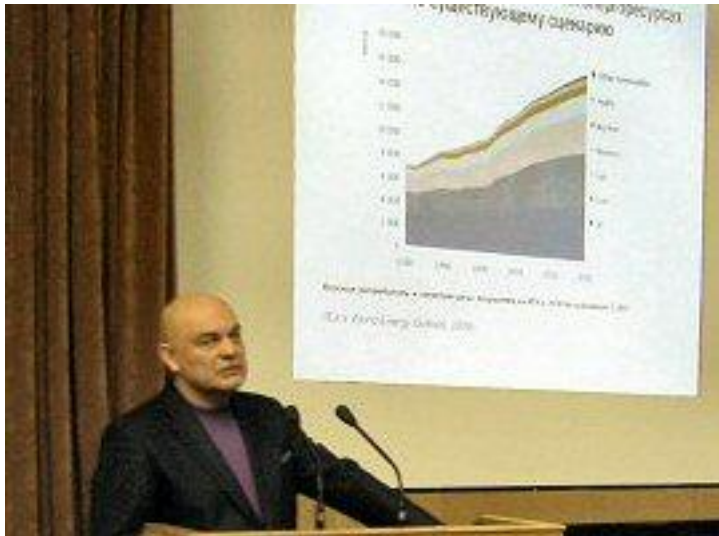
**EXPERIENCE OF IMPLEMENTATION OF ENERGY SAVING EQUIPMENT OF THE "EUROPEAN ENERGY COMPANY" CORPORATION, Zaporizhzhya (21 October, 2011)**



**WORKSHOP FOR REPRESENTATIVES OF DESIGN DEPARTMENTS OF THE "EUROPEAN ENERGY COMPANY"**



# Collaboration with stakeholders: Seminars, workshops and training



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# Collaboration with stakeholders

## Infrastructure project: Large scale Heat Pump at Bortnichi Sewage Water Treatment Plant, Kiev



**Bert Andersson presents the experience of  
TERMOECONOMI company  
at Kiev VODOKANAL**

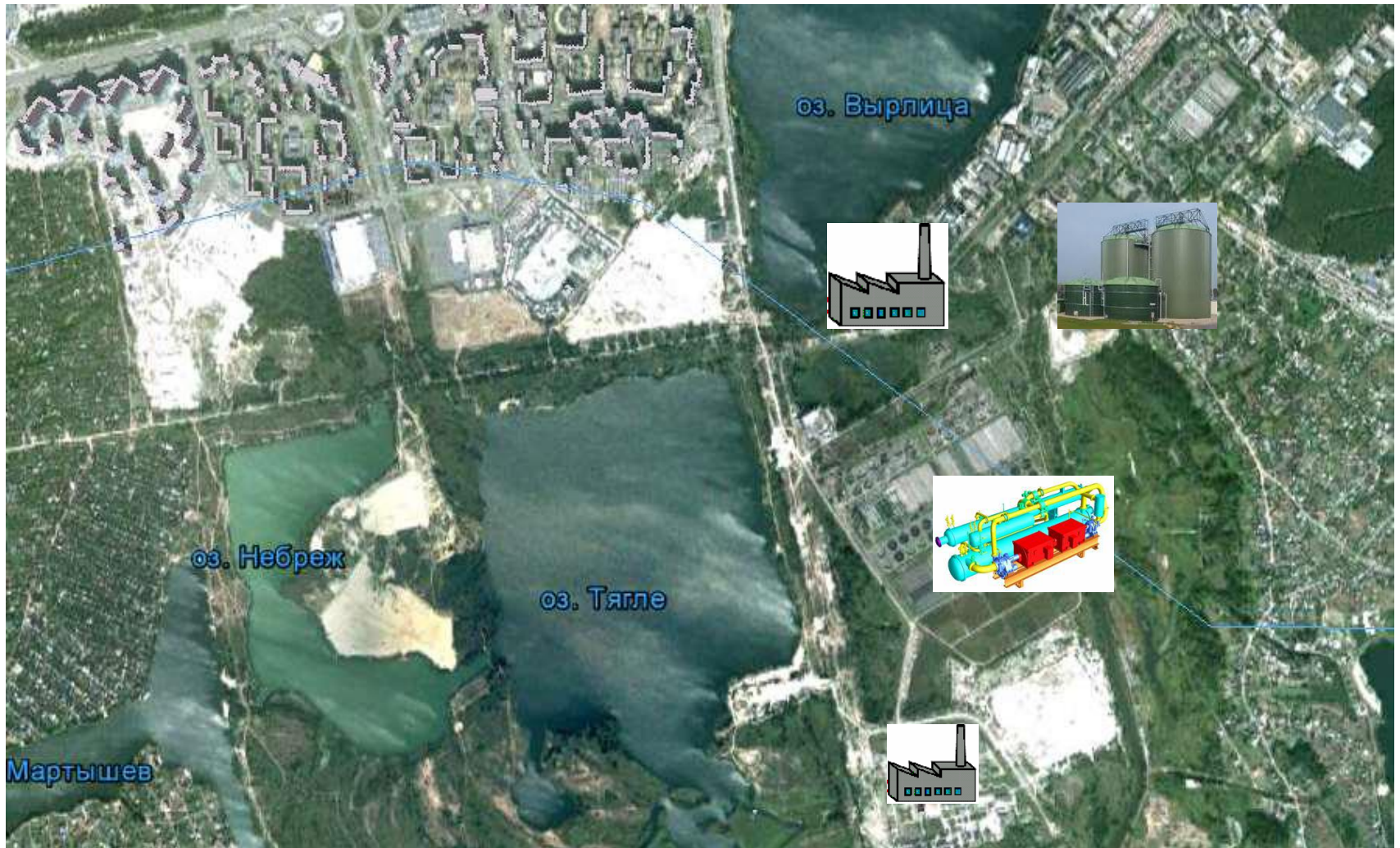


**Pumping room of BSA**

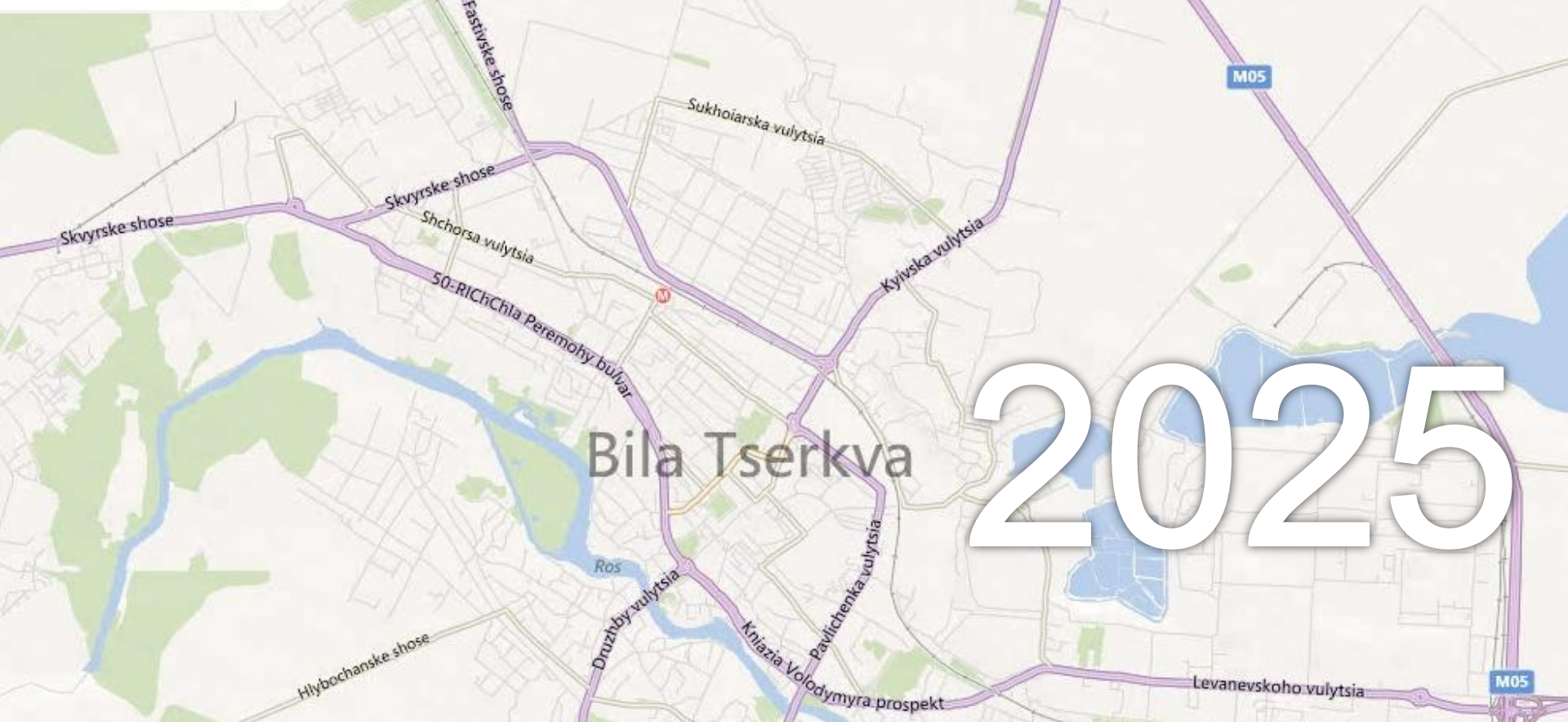


# Collaboration with stakeholders

Infrastructure project: Large scale Heat Pump at Bortnichi Sewage Water Treatment Plant, Kiev







Scenario development for the heating system in Bela Zerkov city for 2025 using backcasting methodology.







**ReENERGY**

**[www.renergy.nu](http://www.renergy.nu)**



The Baltic Sea Region Programme

SI.

## **Thematic partnership ReENERGY:**

*Shared visions of sustainable energy systems in cities of the Baltic Sea Region*

### **The overall aim:**

To create a transnational multi-stakeholder platform for sharing visions of sustainable energy systems in cities of the Baltic Sea Region.



## The Baltic Sea Region Programme



### Sweden:

- Kungliga Tekniska högskolan
- Östersunds kommun
- Blekinge Tekniska högskola

### Ukraine:

- National Technical University of Ukraine
- National University of Water Management and Nature Resources Use, Rivne
- Institute of Hydromechanics of National Academy of Science of Ukraine
- The municipality of Bila Tserkva City
- Municipal Company "Kievvodokanal"
- Association of power efficiency engineering of Ukraine
- Association of Energy-efficient cities of Ukraine



## The Baltic Sea Region Programme



### **Estonia:**

- Tallinn University of Technology (TUT)

### **Belarus:**

- Belarussian National Technical University

### **Moldova:**

- Technical University of Moldova
- Continuing Education Institute, Moldova

# ERAIHM: the ERA of new relations

**ShifoSound** project objective:

To implement real-time remote **tele-consultation services** using ultrasound and other medical imaging systems in order to reduce health inequalities and promoting valuable eHealth technology as a means for closing gaps in healthcare access and quality in the Central Baltic Region.





# ERAIHM: the ERA of new relations

## **ShifoSound** project consortium:

- Karolinska University Hospital & Karolinska Institutet (Sweden);
- Royal Institute of Technology - KTH (Sweden);
- **Institute of Hydromechanics of National Academy of Sciences of Ukraine;**
- Institute for Occupational Health of National Academy of Medical Sciences of Ukraine;
- Nizhegorodsk State Medical Academy (Russia);
- Pauls Stradins Clinical University Hospital (Latvia);
- Lattelecom (Latvia).



# InnoValueNet: Transnational network for facilitating climate of creativity and innovation in BSR

InnoValueNet project objective: To establish a multi-stakeholders transnational network in the Baltic Sea region for facilitation development of common environment for fostering innovation, entrepreneurship and economic growth

## InnoValueNet partners:

### Sweden

- Royal Institute of Technology, KTH, Coordinator
- Karolinska Institute, KI
- National Agency for Higher Education, HSV

### Ukraine

- IHM NASU
- National Technical University of Ukraine “Kiev Polytechnic Institute”, NTUU “KPI”
- National Aerospace University, KhAI
- Donbass State Engineering Academy, DSEA
- Ukrainian Chamber of Commerce and Industry, UCCI
- Institute of Economic and Forecasting, National Academy of Sciences of Ukraine, IEF
- State Agency of Science, Innovation and Information Technology, SASIIT
- Association of Machine-Building Technologists of Ukraine, AMBTU

### Belarus

- Centre of Innovative Engineering Technologies, CIET
- Belorussian National Technical University, BNTU
- State Enterprise “Scientific and Technological Park BNTU “Polytechnic”, STP

### Georgia

- Ilia State University, Georgia

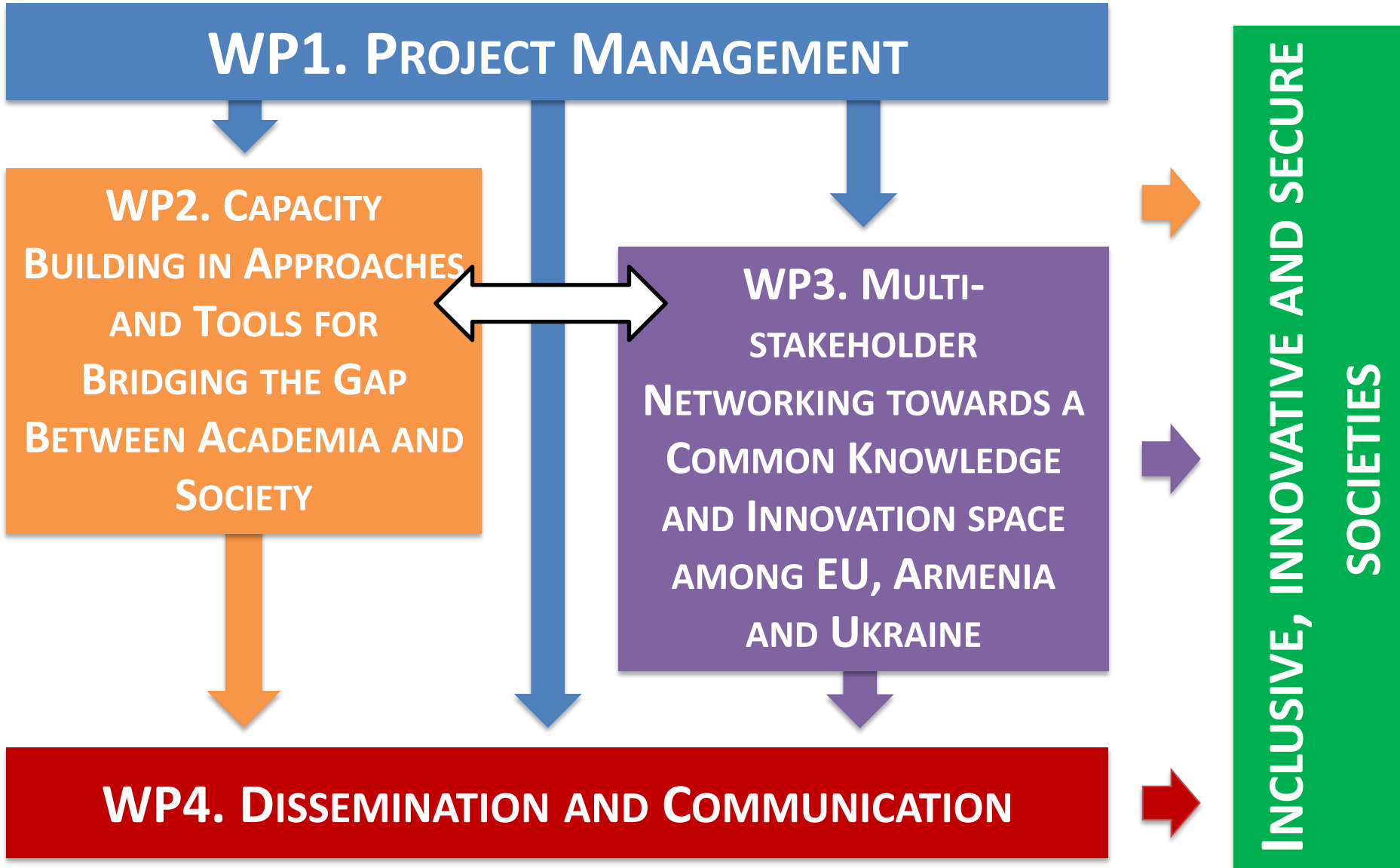


# RISLink

Advancing capacities on linking research, innovation and society in Armenia and Ukraine through cooperation with EU partners

1. KTH, Sweden
2. TU Delft, Netherlands
3. IHM NAS, Ukraine
4. IM NAS RA, Armenia
5. Sustainable Business Hub, Sweden
6. European Energy Company, Ukraine
7. Technology Transfer Association, Armenia
8. Association of Energy Efficient Cities, Ukraine

# RISLink





Institute of Hydromechanics  
of NAS of Ukraine



Thanks!

Questions?

