

# INCREASING THE REGIONAL COMPETITIVENESS AND ECONOMIC GROWTH THROUGH THE RTD&I ON SUSTAINABLE WATER MANAGEMENT





### WaterTech Cluster of Western Greece

- Recent Achievements through SWAM & STinno FP7-RoK Projects



Coordinating Organisation:

**Patras Science Park SA** 

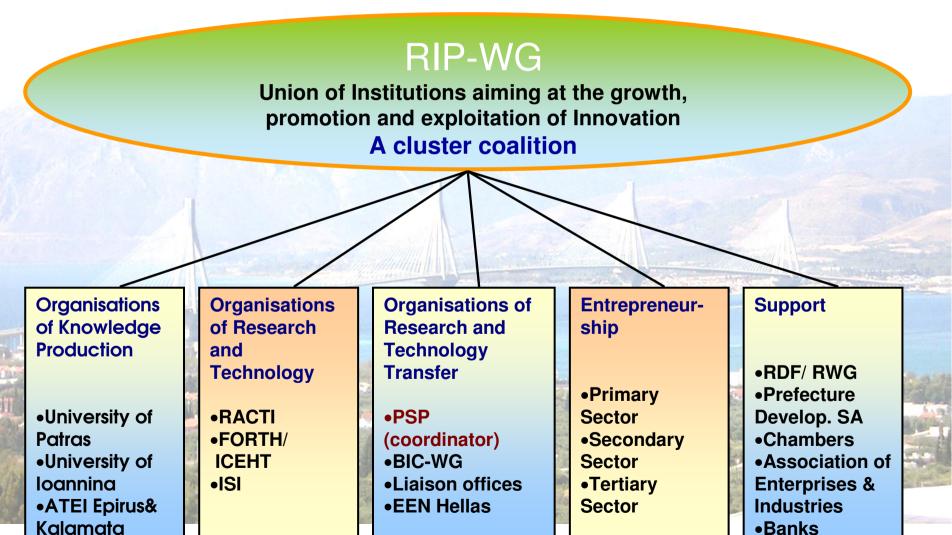
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# Regional Innovation Pole of Western Greece (RIP-WG) Coordinating Organization: Patras Science Park www.innopolewest.gr

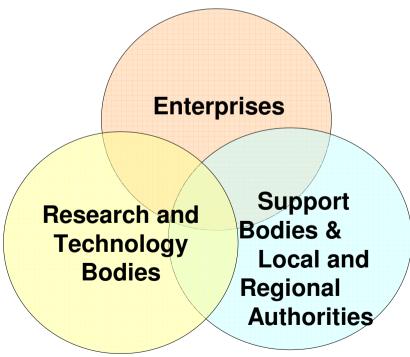






 The WaterTech cluster of WG is a part of Regional Innovation Pole of Western Greece - 3 Thematic Areas: Information & Communication Technologies, Food Safety & Technologies, Environmental Protection & Management

The WaterTech cluster comprises of all actors of the triplehelix innovation model:



# WaterTech Cluster of RWG (business actors)



### **Enterprises**

- ENBIO Ltd
- Municipal Water and Sewage Company of Patras (DEYAP)
- YDATOR-Efstratiadis Corporation
- Municipal Water and Sewage Companies
- EV.GE Pistiolas SA
- Environmental Technologies Ltd
- SHIELCO Ltd

# WaterTech Cluster of RWG (research actors 1/2)



### **Research Institutions**

- Foundation for Research & Technology, Hellas -Institute of Chemical Engineering and High Temperature Chemical Processes (FORTH/ICE-HT)
- Laboratory of contamination of subsoil and underground waters & remediation techniques
- Laboratory for the measurement of transport properties of porous and fractured materials
- Laboratory of simulation of processes and materials

# WaterTech Cluster of RWG (research actors 2/2)



### University of Patras

- Environmental Engineering Laboratory (Civil Eng. Dept)
- Laboratory of Biochemical Environmental Technology (Chem. Eng. Dept)
- Hydrogeology Laboratory (Geology Dept)
- Laboratory of Inorganic and Analytical Chemistry (Chemistry Dept)
- Networks of the University of Patras

### University of Western Greece, Agrinio

Department of Environmental and Natural Resources Management

# WaterTech Cluster of RWG (support actors)



### **Support Bodies & Local and Regional Authorities**

- Region of Western Greece
  - Regional Development Fund (RDF/RWG)
  - Directorate of Water Resource Management
    - Department of Monitoring and Control of Quality and Quantity of Water
    - Department of Improvement and Protection of Water Resources
    - Logistics Department, Licensing, Organization and Communication

#### Patras Science Park



## Patras Science Park www.psp.org.gr



### Role

- ➤ **Animator** of Regional Innovative Development
- Creation and development of innovative technological units & spin-offs
- ➤ National Focus Point for Science Parks and RTD policy
- ➤ Coordination of Regional Innovation Pole of Western Greece and Cluster Development



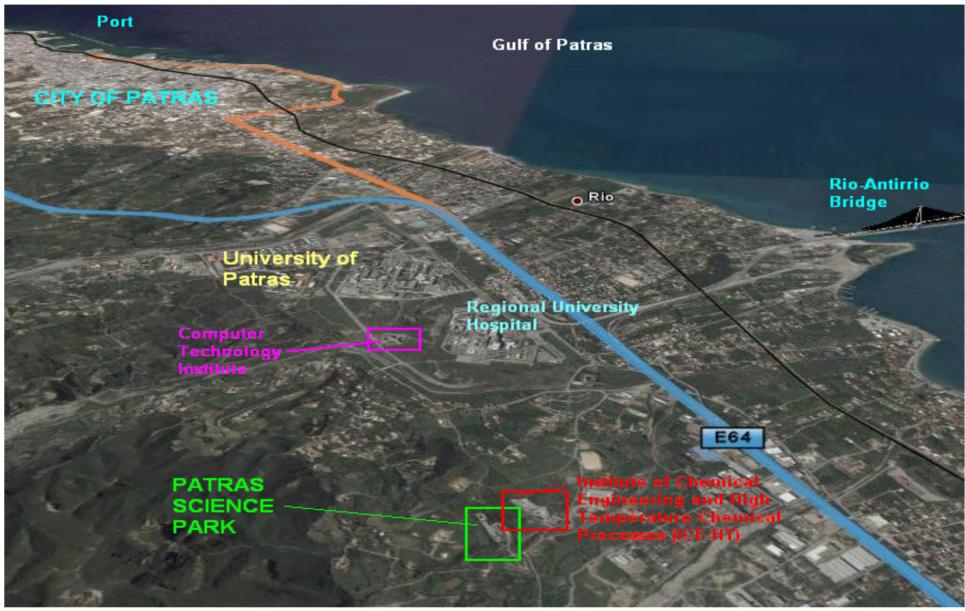


### <u>Goals</u>

- ➤ Constructive connection of the RTD organizations with the Enterprises, mainly those in the Region of Western Greece
- ➤ Attraction of **foreign investments** in high technology sectors

## Region of Western Greece – Geographical Proximity









- New and more enterprises!
- Spatial mapping of clusters
  - Where and what clusters exist?
  - Feasibility study, market analysis
- Sector analysis
  - Which is the sector?
- Lack of large enterprises
  - How is the production organized?
- Low export profile
  - What is the demand?
- Small investments



# RWG WaterTech Cluster: we need more and new enterprises (1/3)



## Why should an Enterprise join a Cluster?

- Benefits in terms of competitiveness, profitability, growth
- Efficiency, Productivity, Competitiveness
- Access to Specialized Inputs
- Access to Information & Knowledge
- Complementarities
- Access to institutions and public goods
- Opportunities for Innovation and Upgrading
- Single platform, coordinating, facilitating optimization of active values.



# RWG WaterTech Cluster: we need more and new enterprises (2/3)



### What does a Cluster offer to an Enterprise?

- Access to
  - suppliers
  - specialized support services
  - experienced and qualified workforce
  - knowledge transfer in an informal environment
  - synergies, efficient use of resources and logical systems
  - ideas, talents
- Geographical proximity
  - R&D
  - Developers



# RWG WaterTech Cluster: we need more and new enterprises (3/3)



#### **Benefits**

- Hard benefits:
- Efficient business transactions
- Smarter investments
- Less expenditures that produce profit and workplaces
- Soft benefits:
- Learning
- Benchmarking
- Trust



## Actions (1/2)



- Network development
- Strengthen the sector of renewable energy sources and sustainable water & waste management
- Specialized Programs for the sustainable local Development from the Academic Institutions
- Strengthen the culture of Green Entrepreneurship
  - Business training and skills
  - Business Plan competitions
  - Feast on green entrepreneurship



## Actions (2/2)



- Strengthening of Social Capital
  - Meetings with company presentations
  - Open forums & Technology Seminars
  - B2B conjunctions and university business events
  - Social Events
  - 1-2 International Symposia
- Marketing support (market capital)
- Internationalization
- Protection & Exploitation of Intellectual Property



## Financing & Viability



- Own funds
- EU Support
  - NSFR and Sectorial
  - FP7 Research
  - Competitiveness and Innovation Program
- National Policies
  - Development Law
- Private Investments
- Raising capital from financial market



# WaterTech cluster participation in projects of EU 7th Framework Programme



## Project STInno: Sustainable Innovations and Treatment in Industrial Waste Water Clusters

- The STInno project introduces 3 research driven clusters and 12 partners from 5 European countries. The regions of Päijät-Häme, Kalmar and Western Greece have a common objective to strengthen RTD resources in industrial wastewater treatment and become world leaders in sustainable, cost and energy efficient methods.
- The regions have clear focus on clean technologies and complement each other as they are in different stage in their cluster development, RTD policies, disciplines and sustainability. Together with expertise of the RTD partners, enormous amount of knowledge on wastewater treatment, methods and techniques involved is being generated.

#### Region of Päijät-Häme (Finland)

1. Lahti Science and Business Park, 2. Regional Council of Päijät-Häme, 3. Lappeenranta University of Technology, 4. Helsinki University of Technology

#### Region of Kalmar (Sweden)

5. Sustainable Sweden South East, 6. Regional Council of Kalmar, 7. University of Kalmar

#### Region of Western Greece (Greece)

8. Patras Science Park, 9. Regional Council of Western Greece, 10. Foundation of Research and Technology of Hellas /ICE-HT (FORTH)

#### Region of Perugia (Italy)

11. International Association of Mediterranean Agro-Industrial Waste

#### **United Kingdom**

12. Lancaster Environment Centre



# WaterTech cluster participation in projects of EU 7th Framework Programme



## Project SWAM: Increasing the Regional Competitiveness & Economic Growth through the RTD&I on Sustainable Water Management

- SWAM brings together three regions (region of Murcia (Spain), region of Eastern Galilee (Israel) and region of Western Greece (Greece)) where water management and water technology sector/companies play an important role in local economies and have potential to stimulate regional development and competitiveness.
- The overall objective of the SWAM Project is to create a common dialogue platform and a joint action plan among three innovative and dynamic Water-Tech clusters that will maximise their capacity for better RTD investments at regional level through complementarities and synergies, so as to contribute to sustainable development, economic growth, global competitiveness of the regions, and the emergence of the Water-Tech lead market.

#### Region of Murcia (Spain)

1. Directorate-General for Universities and Science Policy. Region of Murcia (coordianator), 2. University of Murcia, 3. Technological Centre for Energy and Environment, 4. Machinery Manufacturers Association.

#### Region of Eastern Galilee (Israel)

5. Association for Medicine and Research in Galilee, 6. Migal Galilee Technology Centre Ltd., 7. Beruty & Sons Ltd.

#### **Region of Western Greece (Greece)**

8. Regional Development Fund. Region of Western Greece, 9. Foundation for Research and Technology, Hellas. Institute of Chemical Engineering and High Temperature Chemical Processes, 10. Patras Science Park S.A., 11. ENBIO Ltd.



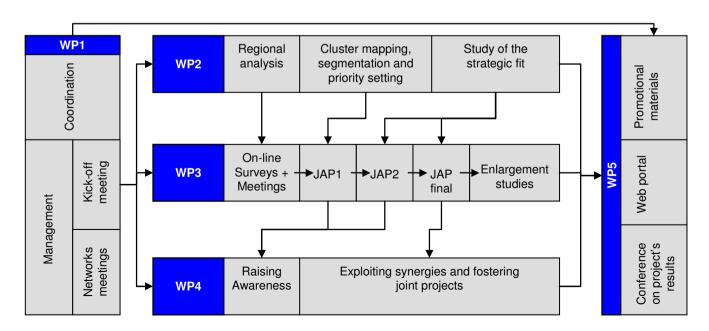


- What do all we expect from SWAM?
  - "To contribute to the regional economic development through a sustainable partnership in water technology"
- Specific objectives:
  - Strengthen the three participant research-driven clusters
  - Deeper understanding of all participant clusters
  - Creation of a sharing environment of priorities and strategies
  - Promotion of collaboration among researchers and companies intra-cluster & inter-cluster

#### **SWAM Activities**



- What will we do during SWAM?
  - Analysis of the three water-tech clusters
  - Development of a <u>Joint Action Plan</u>
  - Creation of a <u>Sustainable Collaboration Platform</u>
  - Regional & world-wide dissemination and awareness



### **Joint Action Plan - Main Recommandation Actions**



A1: Sharing of the RTD infrastructures

A2: Enhancing skills and knowledge transfer

A3: Increasing researcher mobility, including secondments and know-how transfer between research and industry

A4: Selection & Supporting relevant collaborative of RTD projects – Target Areas

A5: Defining international cooperation activities including Mutual learning and mentoring

**A6:** Dissemination and Information

## Main achievements & further expectations



- To strengthen RTD resources in water management and wastewater treatment (wm&wt)
- To create spin-off and new enterprises in wm & wt
  - Conversion of the strong RTD offer of the region to entrepreneurial success
  - Solution of the existing environmental problems of the region,
     e.g., olive mill wastewater, marine pollution, contamination, etc.
  - New jobs and sustainable development
- To become recognizable and long-term among the leaders worldwide in efficient wm & wt
- Midterm increase of regional competitiveness and improvement of the regional economy
- Promotion of an eco-friendly attitude

### More Info:







- www.watertechwest.gr
- www.swam-project.eu
- www.stinno.eu
- www.psp.org.gr
- vgp@psp.org.gr



Thank you for your attention!