

# Bridging the Innovation Divide and Boosting Critical Mass in Innovation Ecosystems - Latvia



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iWATERMAP High Level Event  
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# Challenges and solution for Latvia water innovation ecosystem at the 2018



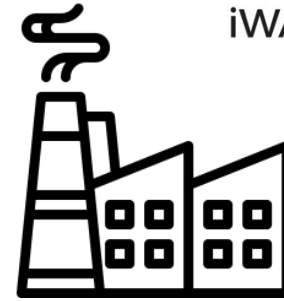
iWATERMAP  
Interreg Europe



**Government  
& Municipalities**



**Academia**



**Industry**



Sporadic and non-systematic co-operation between sectors

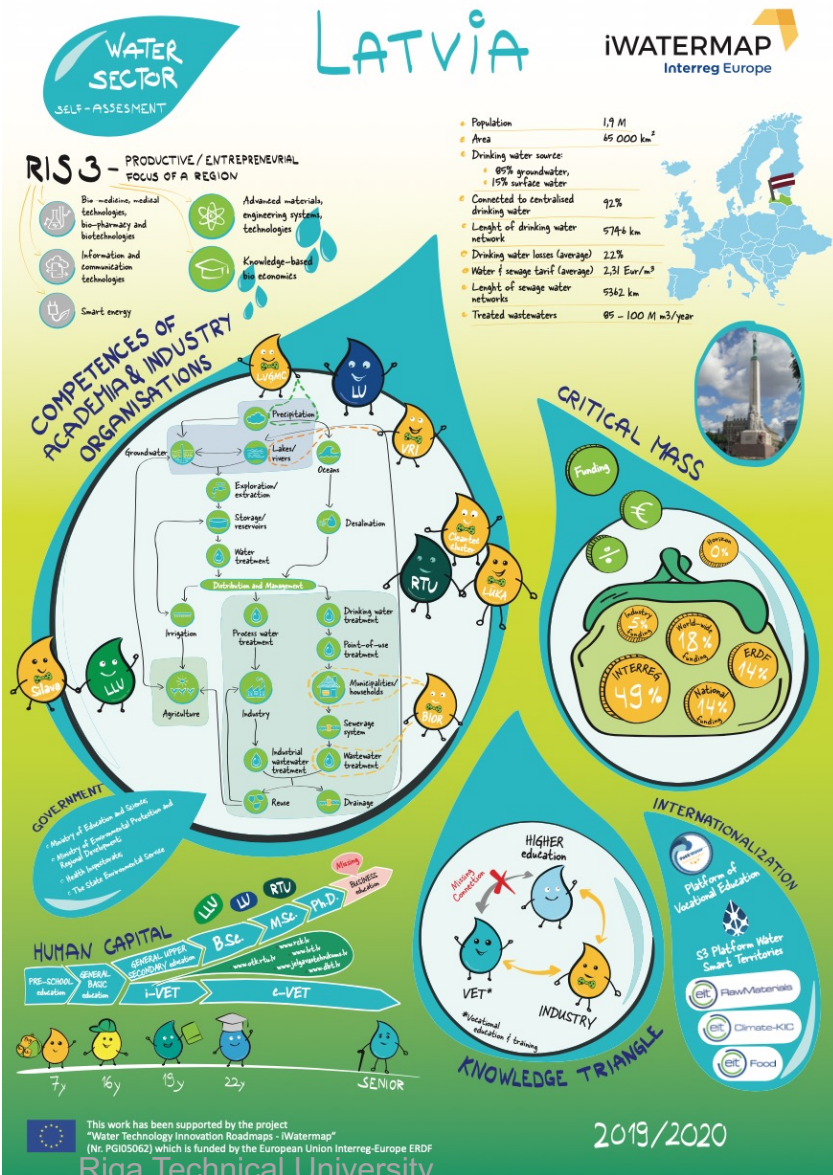
Missing "hotspots" for long term co-operation

Low number of people involved in sector



**Mapping ecosystem  
Connecting stakeholders  
Education of teachers & professionals  
Rising awareness and game changers**

# Mapping Latvian water innovation ecosystem



- **Expertise covers urban water cycle but not sufficient synergy**
- **Teachers capacity of professional educations need to be improved**
- **Not sufficient awareness about water innovation potential**
- **More link with industry needed**
- **Potential for internalisation of higher education**



# Connecting stakeholders

- Strengthened positions of water in the largest association of **employers' organizations** (LDDK) in developing requirement for education in professional schools and universities
- **Water association and cleantech clusters** is becoming the main driver for cooperating with industry
- **Secondary schools** are involved in rising interest about water sectors for kids
- **The ministries**, especially Educational and Science, support with legal framework
- **Universities** are working closely with **cluster** organisation







**Improving the high quality professional engineer education programmes that are related to industry needs and is needed as a basis for any innovation in sector**

**Small-scale cooperation project DVEE with Estonia (profession standards, co-operation development of vocational education)**

**Teacher training project (8 teachers in vocational education trained)**



MCAST



# Co-operation between stakeholders in development of vocational education programmes Pilot Platform of Vocational Excellence Water (Pilot PoVE Water 1.0 and PoVE Scale-up 2.0))

## Latvian researchers developing method for determining spread of Covid-19 in sewage

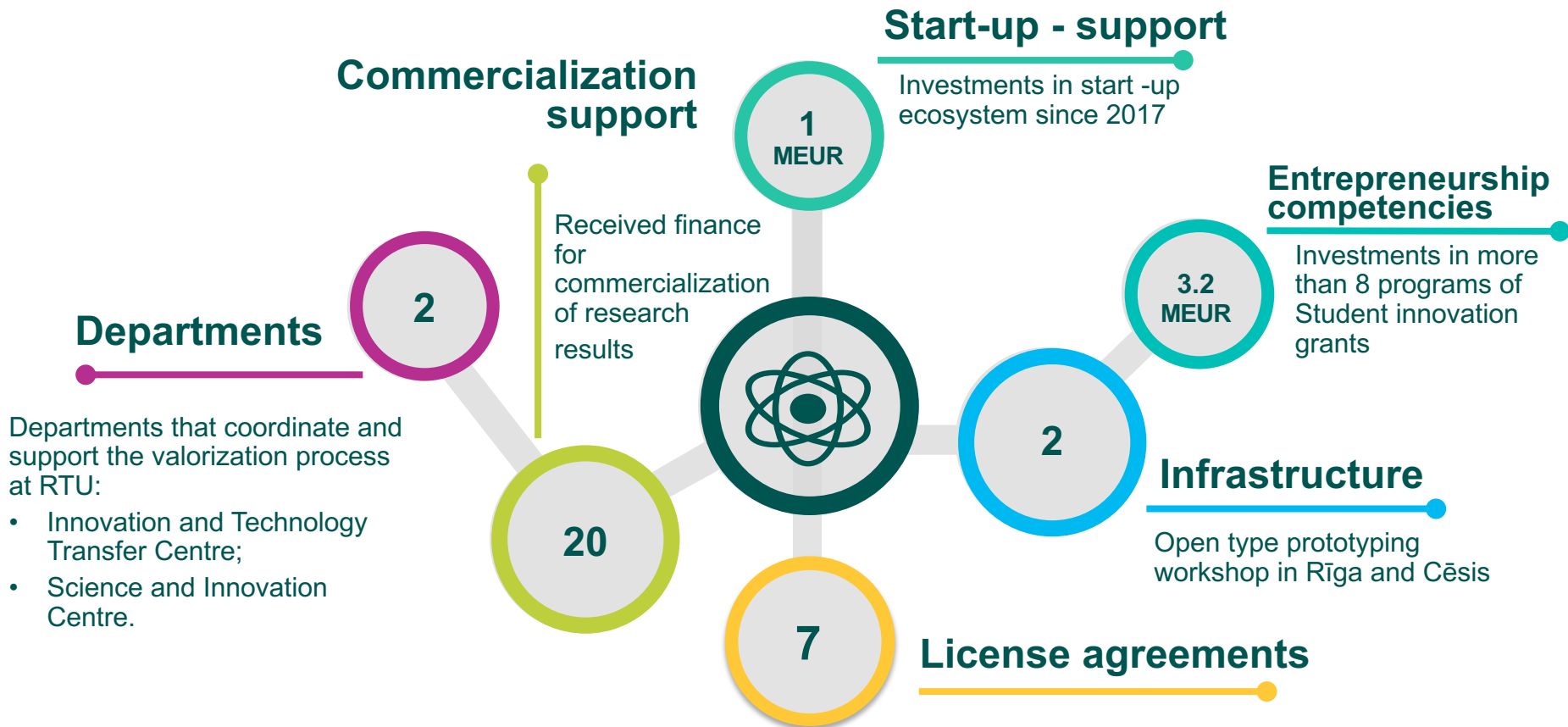
21. May, 2020



IEGULDĪJUMS TAVĀ NĀKOTNĒ

ESF project “improvement of professional competence of employed persons” (started education of 16 WWTP operators) and involving in research (WBE)

# Taping into UNIVERSITY INNOVATION ECOSYSTEM





# Main avenues for start-up growth from university

**Student start-up:**  
professors engaged and  
EIT suport

**Research and**  
**prototyping for**  
**startups out**

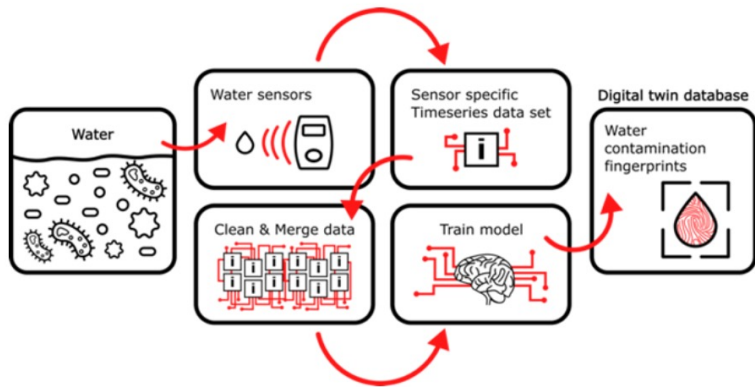
**Working with incubators**  
**and accelerators,**  
**IP managment**





# RTU Licensed technologies into start-up

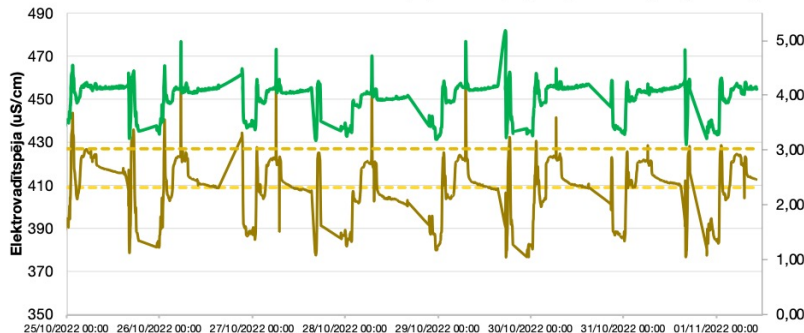
Principles of WATERSON technology



## Core team & advisory

 <p><b>CEO</b> Dāvids Štēbelis MBA</p>	 <p><b>IT</b> Mg. Sc. Ing. Mārtiņš Bondars IT System Architect, DevOps</p>	 <p><b>Customer care</b> Dr. Jānis Rubulis Drinking water researcher</p>	 <p><b>Advisor</b> Dr. Tālis Juhna Scientist in water technologies</p>
 <p><b>CTO</b> Dr. Sandis Dejus Drinking water researcher</p>	 <p><b>AI architect</b> Dr. Sergej Parshutin Researcher in data science, machine learning and deep learning</p>	 <p><b>Lab expert</b> Valts Urbanovičs Study water technologies in RTU</p>	 <p><b>Advisor</b> Dr. Corina Carpentier Expert and scientist in water monitoring technologies</p>

Elektrovadītspējas un kopējā organiskā oglekļa izmaiņas



## Piloting



Rīga



Liepāja



# Rising awareness about water within the framework of UN SDG

## 6 CLEAN WATER AND SANITATION

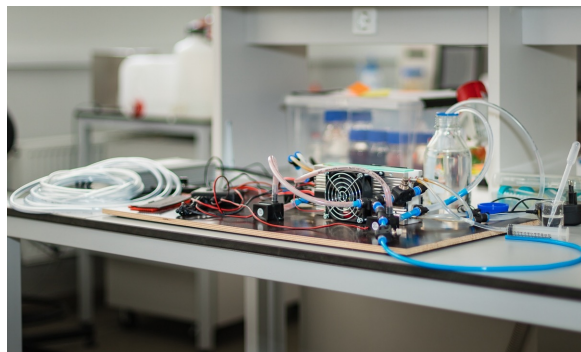


Through RTU Green Campus we organize informative and educational activities on the importance of water sanitation and conservation



2.4 % of RTU research publications contribute to SDG 6 (2019-2022)

### PHARMACEUTICAL INDUSTRY WASTEWATER TREATMENT



### EFFICIENT AND AFFORDABLE WATER PURIFICATION TECHNOLOGY FOR THE PREVENTION OF MICROBIOLOGICAL POLLUTION



### GUIDELINES FOR ENSURING CONSTANTLY GOOD WATER QUALITY



# Platform for connection in Europe university networks



Uniting over...

100 000

STUDENTS

450 000+

ALUMNI

7 000

ACADEMIC STAFF AND RESEARCHERS

5 000

ADMINISTRATIVE AND TECHNICAL STAFF

600+

START-UPS LAUNCHED

## 8 pioneers

Université de technologie de Troyes (France)

Hochschule Darmstadt, University of Applied Sciences (Germany)

Rīgas Tehniskā universitāte (Latvia)

Technological University Dublin (Ireland)

Технически университет София, Technical University of Sofia (Bulgaria)

Τεχνολογικό Πανεπιστήμιο Κύπρου, Cyprus University of Technology (Cyprus)

Universidad Politécnica de Cartagena (Spain)

Universitatea Tehnică din Cluj-Napoca

## 39 associates

1

higher education institution

8

local or regional public bodies and authorities

3

NGOs and university alliances

10

chambers of commerce or employers' unions

4

business incubators and junior enterprises

7

alumni and students associations or unions

1

research centre

5

companies

## OUR VISION FOR THE FUTURE

The mission of the **European University of Technology**, Eut+, is first and foremost to serve the betterment of society. Europe requires **top-quality education** for its **diverse groups**, where talent can translate into ability: to act and react, to experiment and invent, to anticipate and transform. We empower our students to become technologically literate professionals and responsible European citizens. We ensure that they are well-qualified to play a fruitful role in society; aware of the broader implications of

technological development and of their responsibility towards global challenges. Everybody, regardless of their background, should be able to study and succeed in our European University.

Our vision and mission are underpinned by the **pivotal role that technology plays** in forging an **inclusive and sustainable** future. Humanity today faces challenges of unprecedented breadth such as climate change, overused resources, growing inequality, and



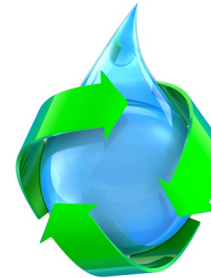
# Future steps in development of water sector



iWATERMAP  
Interreg Europe



**Merging the interests and activities of stakeholders**



**Increase the overall knowledge and awareness in environmental protection and water sector – attract more people**



**Formalization of the co-operation (Memorandum)**



**INNOVATION!**

**Thank you**