





Stairway to Excellence: Teaming up with Polish Regions

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combining scientific excellence with commercial relevance

ERRIN



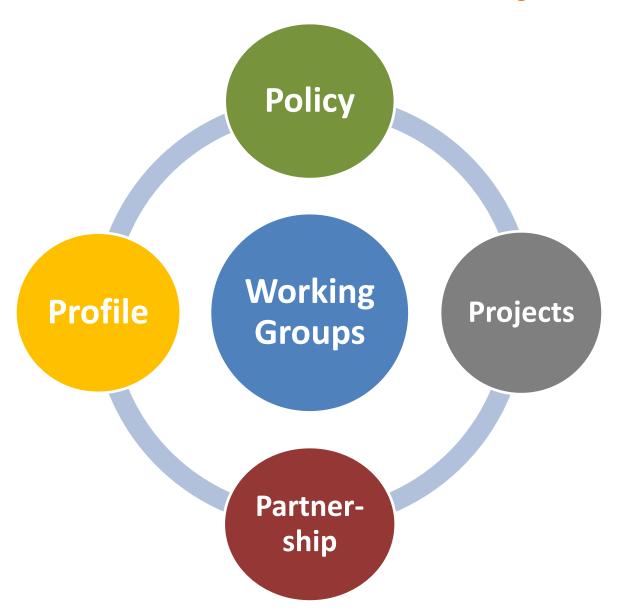


- Brussels-based Platform
- **☐** 120 member regions
- ☐ Focus on research and innovation
- Brokerage events
- ☐ RIS3
- Widening Participation

ERRIN Members:

Pomorskie
Kujawsko Pomorskie
Lodzkie Region
Malopolska

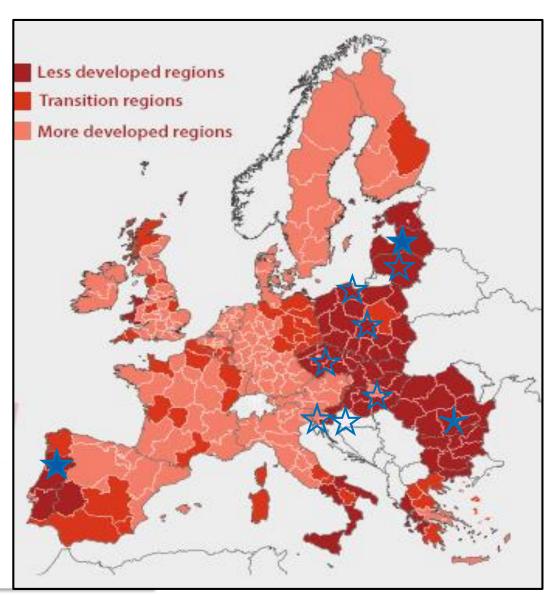
ERRIN Membership



ERRIN Working Groups 2016

Bio-economy/ Energy & Health Climate Change Food & Agri Water / Process **Smart Cities** Transport **Industry** Advanced Tourism manufacturing/ Blue Growth Nano Design & Policy / RIS3 ICT Creativity

Stairway to Excellence: building high trust network



Shortlist of 10 regions:

- Latvia (Iv)
- North-Portugal (pt)
- Slovenia (sl)
- Lithuania (lt)
- Pomorskie (pl)
- Łódź (pl)
- Budapest (hu)
- South Moravia (cz)
- Bucharest (ro)
- Croatia (hr)



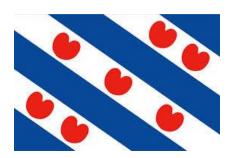


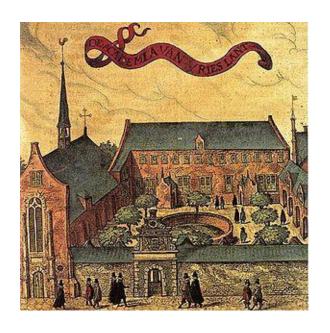
7th Century: North Sea (or the Frisian Sea)





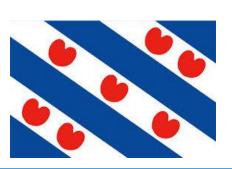
It was the Frisians who reinvented useful money, and taught their ideas to the Franks under Charlemagne.

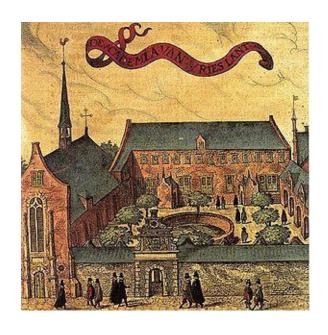




258 years of academic experience

University of Franeker or Academy of Friesland (Latin: Academia Franekerensis)

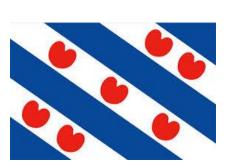




Stop your smart regional specialisation!



University of Franeker or Academy of Friesland (Latin: Academia Franekerensis)
Active 1585 – 1843 (258 years)



Water & Milk



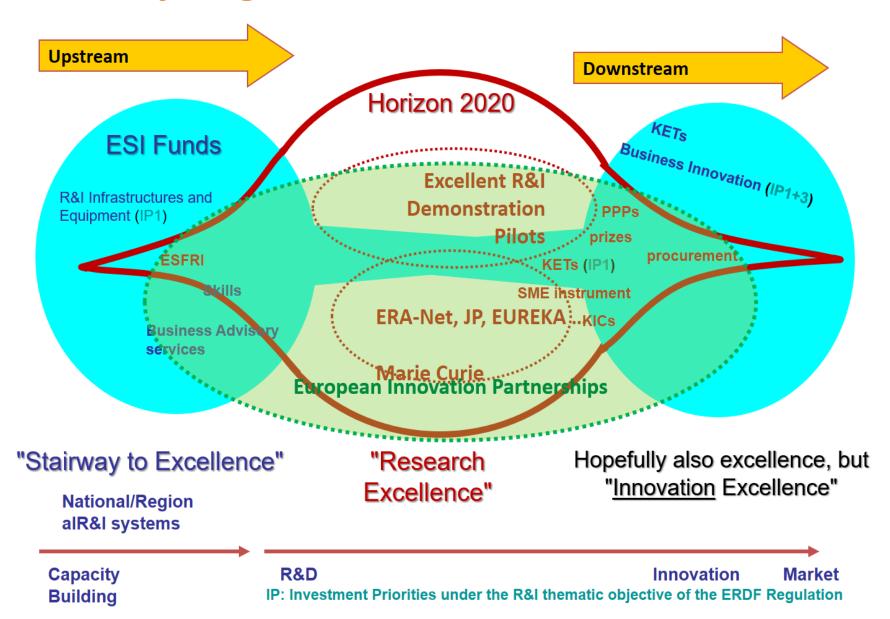








Synergies with Horizon2020?



Wetsus PPP-model: a decade of growth through synergy in funding (2003-2017)

Vitens Shell Alliander Unilever

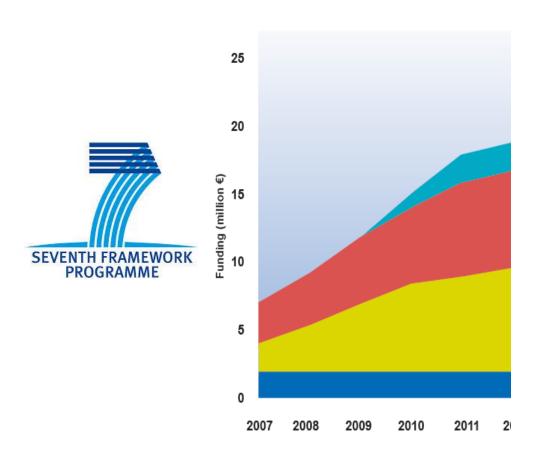


2003: ERDF Begin RIS3





Wetsus PPP-model: a decade of growth through synergy in funding (2003-2017)



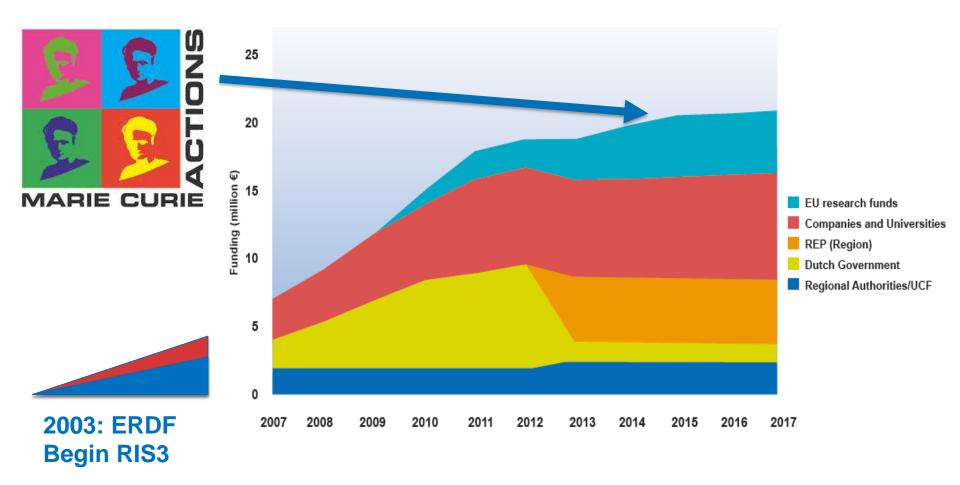






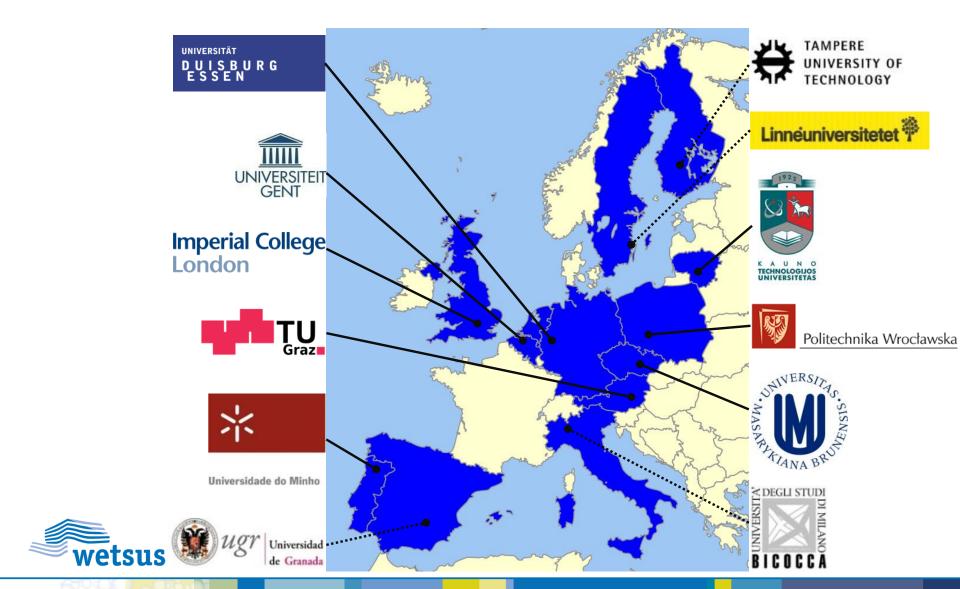


Wetsus PPP-model: a decade of growth through synergy in funding (2003-2017)





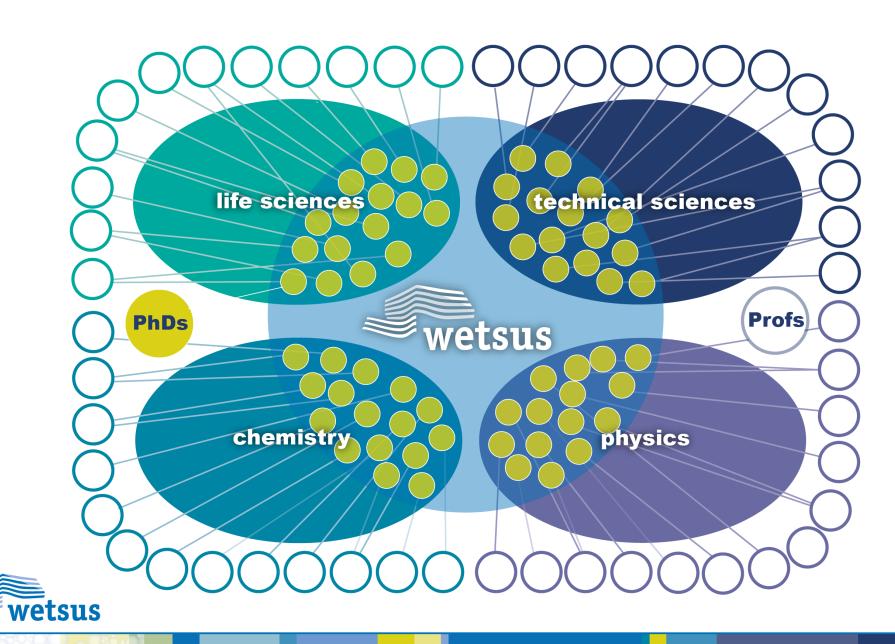
European university partners



Multidisciplinarity Needed



Multidisciplinary research program



Research indicators per unit (full output 2005-2012/2013)

	RI	P
WETSUS	2.15	189
AUSTRALIA WATER	1.94	114
EAWAG	1.88	1377
TZW TECHNOL	1.62	75
KWR	1.56	228
UNESCO IHE	1.35	590
SUEZ ENVIRONM	1.16	63
ANJOU RECH VEOLIA	1.10	93



Trust based on cooperation

Companies (7)

Alliander

Landustrie

Fuji Film

Magneto

Mast Carbon

A.Hak

REDstack



Maarten van Riet Theme manager





Universities 6 projects (4 PhD, 2 post-doc)

University Twente Wageningen University





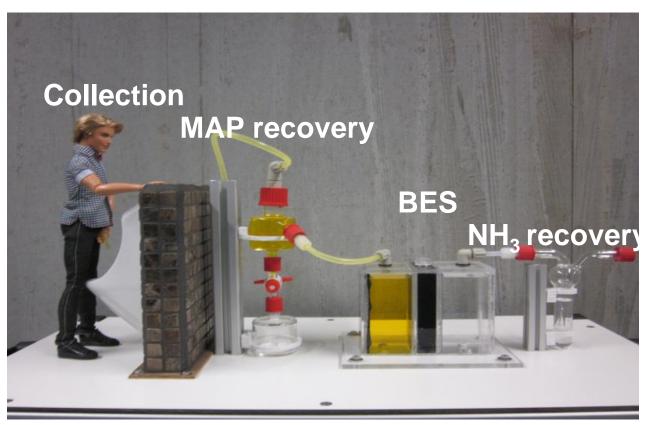
Salinity Gradient Energy







Breakthrough research and Innovation leading to Systemic Changes





Innovation Ecosystems become more important





Study track water Leeuwarden

lifelong learning Age >

from 10 years

from 12 years

from 16 years

from 20 years

from 25 years

Primary education

- 3 Water Days
- · 8+ Program
- Water Wonder Lab

Secundary education

- Honours program
- · Teaching material
- Profile Selection Test

Vocational education

- Training and education professionals
- Empowering vocational education

Applied sciences water

- Bachelor of
- Environment
- Biotechnology
- Chemical Engineering

Master water technology

MSc Water Technology (joint degree)

PhD

Research schools

Business education

- MBA Program
- Masterclasses
- · Business Challenge



































Water university

Water Alliance members (mostly national)

































































































































































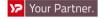












Wetsus Participants (NL, EU and global)



































































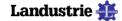
































































Wetsus participants (EU + Global)

UKAnglian Water

HAPPS

Mast Carbon

Berson UV

USA/Canada

General Electric

DOW

DC Water

Trojan UV

<u>Japan</u>

Fuji

Kurita

Kuraray

Spain

Israel

ICL

Abengoa

Germany

Skion

Esco Salt

France

Veolia Eau

Aqua Nirvana

Laborelec-Engie

Austria

IPF

SNT

Finland

Kemira

Neste Oil

Denmark

Grundfos

Saudi Arabia

Sabic

<u>Ireland</u>

O₂Environmental

Norway

Yara

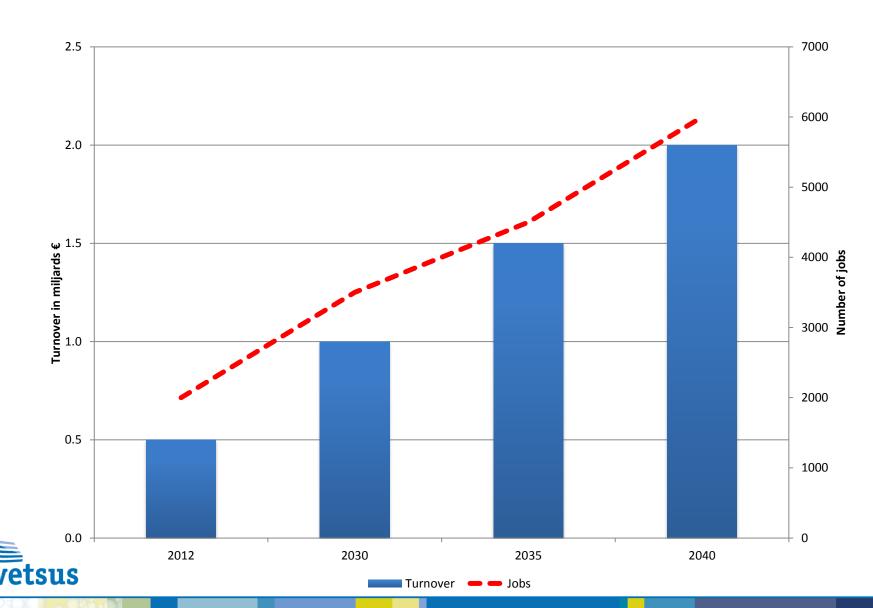


2007 – 2015: 80 patents and 25 spin-off companies created

Wetsus spin-off companies		
REDstack	Automatic Electric Europe Special Products	
• DeSaH	HydrOwashr	
Westt	Salttech	
Aqua Explorer	Biotrack	
Dutch Rainmaker	TailTec	
EasyMeasure	ExtIns Technologies	
Water ProMaSys	Aiforo	
• Capilix	• Duplaco	
Pure Green	Somut	
Smart Frequencies	Wisect	
Water Waves	• Djipper	
Metal Membranes	High Voltage Water	
AquaBattery		



Watertech jobs and turnover in Fryslân



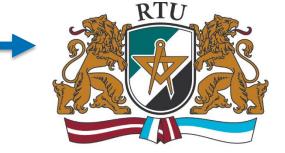
Seal of Excellence





European Union funding for Research & Innovation

Teaming: RTU-Wetsus
Center of Excellence for Smart
Engineering Technologies





hydr\0washr



Wetsus: European Centre of Excellence for Sustainable Water Technology





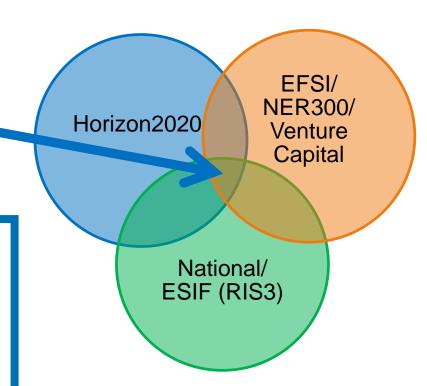


European Center of Excellence (EU-CoE)

The EU-CoE is active in the intersection between Horizon2020, national funding schemes, ESIF (RIS3) and market investments (such as EFSI, NER300 and Venture Capital).

The EU-CoE is the most efficient European cooperation model to achieve:

- High quality research papers
- Validation of research results
- Innovation efficiency
- Valuable Patents
- Spin-off companies
- World leadership in (emerging) industries
- Economic growth and jobs

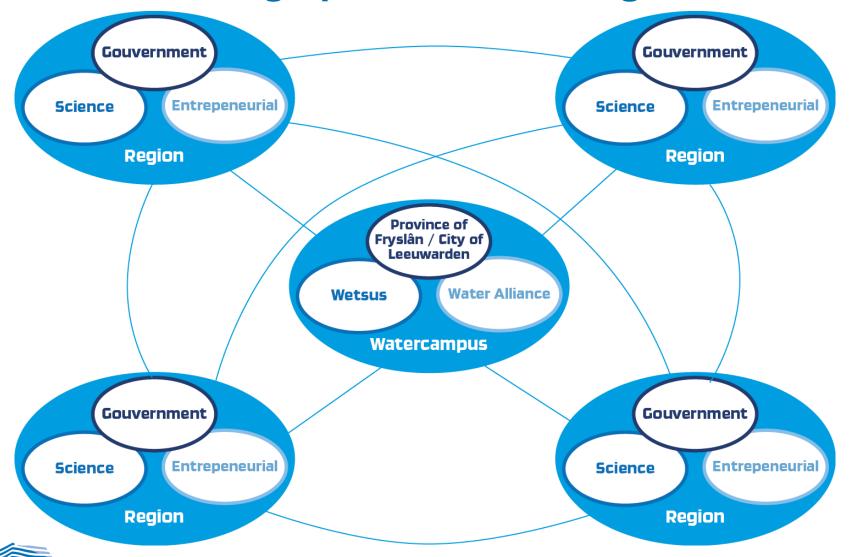


European Center of Excellence (EU-CoE)

Soft conditions:	Hard conditions:
High Trust Environment Innovation (reputation) Partnership (benevolence) Reliability (integrity)	 SMEs and Multinationals have equal rights Long-Term Public and Private Commitment Strict IP Regulation Distance from Peer Groups Companies Prioritize Research Projects Focus on Global Impact



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www.wetsus.eu www.watercampus.nl www.topsectorwater.nl

Wetsus is co-funded by:

- the Dutch Ministry of Economic Affairs (TKI-Topsector Water, Peaks in the Delta)
- · the Dutch Ministry of Infrastructure and the Environment
- the European Union (European Fund for Regional Development and Seventh Framework Programme), investing in your future
- Northern Netherlands Provinces (REP-SNN)
- the City of Leeuwarden, the Province of Fryslân and University Campus Fryslân







