Interreg North-West Europe
Water Test Network
European Regional Development Fund

Water Test Network Webinar

Interreg North-West Europe
Water Test Network
European Regional Development Fund

Webinar Programme

Introduction to the webinar by Stefan Bergsma (Water Alliance)
WTN project and its services by Ruth McNeil (Scottish Water Horizons)

Experiences of SMEs:
Kuhn Gmbh by Michael Kuhn (Kuhn GmbH)
IPM by Jafar Noori (IPM)
Microvi UK Limited by Ajay Nair (Microvi UK Limited)
Pharem Biotech by Martin Ryen (Pharem Biotech)

Voucher application process by Charlotte Boeckaert (VLAKWA)
Q & A with Ruth McNeil, Charlotte Boeckaert and Stefan Bergsma

Interreg
EUROPEAN UNION
North-West Europe
Water Test Network
European Regional Development Fund

The project and its services by Ruth McNeil

Support at least 120 SMEs

Test 90 new technologies within the network

Bring 30 of these new technologies to market

Facilitate 60 collaborations between SMEs & research institutes

Scottish Water
Trusted to serve Scotland
James Hutton Limited
Impact through Science
TZW Technologiezentrum Wasser
Vlakwa
empowered by vito
GHENT UNIVERSITY
De Watergroep
cew
wateralliance
provinsje fryslân
provincie fryslân
brgm
vallei en veluwe
CLEAN TECH REGIO

The Water Test Network

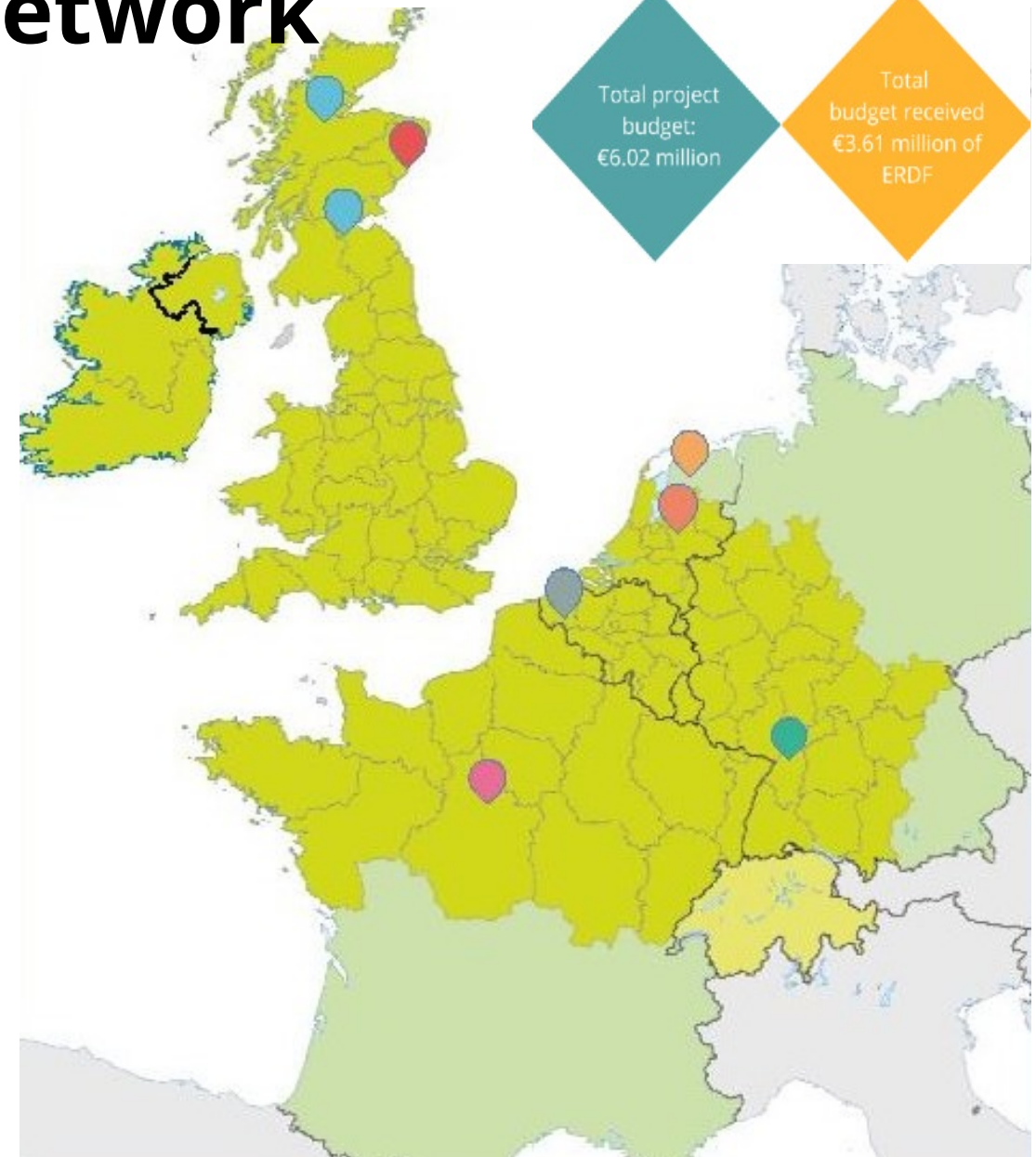
- A transnational collaboration creating a network of testing facilities
- Supporting SMEs to develop, test and verify their innovations
- Addressing key sector needs and accelerating the time to market

THEMATIC PRIORITY:

INNOVATION

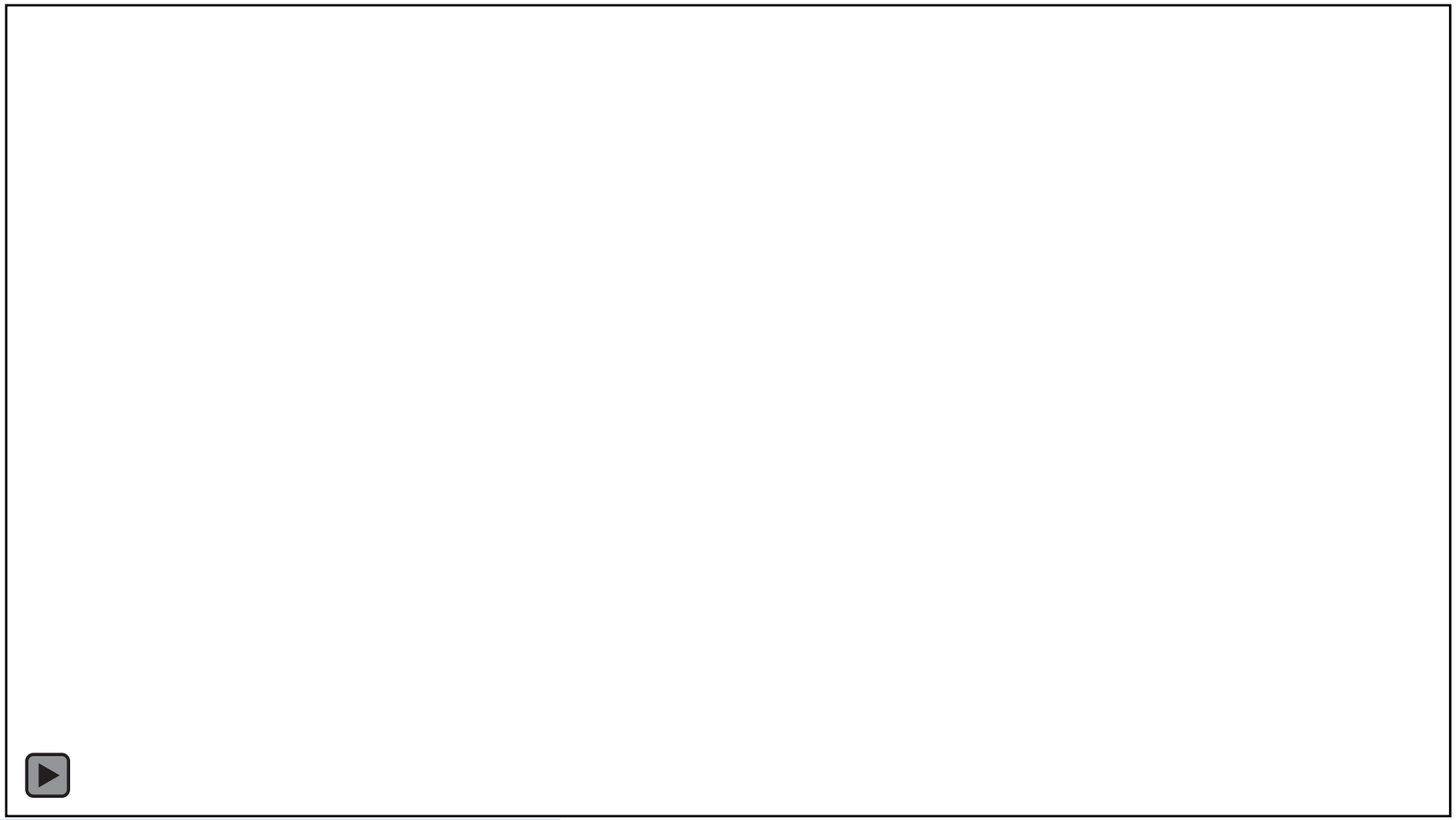
Total project budget: €6.02 million

Total budget received €3.61 million of ERDF



Interreg North-West Europe Water Test Network

14 testing facilities



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Range of water types

The testing network enables testing on a range of water types:

- Municipal waste
- Industrial waste water, various sources available
- Raw water
- hospital waste water
- desalination and blue energy
- sensor and data-measuring applications
- water flows on a dairy farm
- Sludge
- Biogas
- Struvite
- Tap water
- Surface water and groundwater
- Rainwater
- Vegetable processing process water and waste water

Interreg North-West Europe Water Test Network

Range of water types – Germany & France

BRGM – Platform for Remediation and Innovation in Environmental Metrology (PRIME)

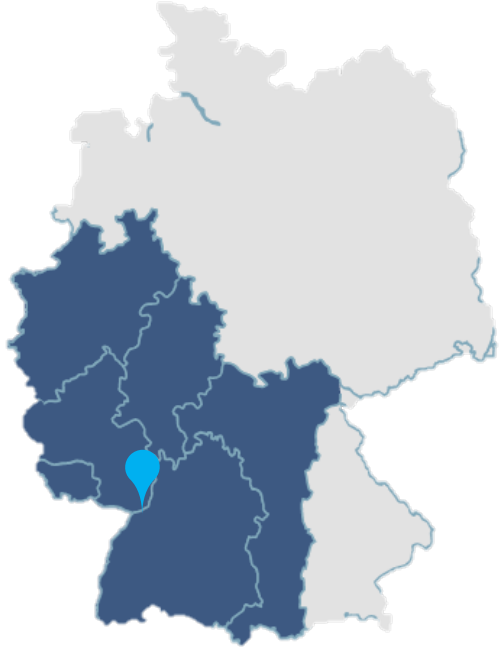
PRIME provides experimental testing on a variety of scales for:

- Drinking water
- Ground water (untreated)
- Wastewaters can be brought on site

TZW - DVGW Water Technology Center

This testing facility provides access to:

- Drinking water from the local network available after various treatments, e.g. flocculation, sand filtration, membrane filtration and disinfection



Interreg North-West Europe Water Test Network

European Regional Development Fund

Range of water types - Belgium

VITO partnering with Ghent University – VEG-i-TEC

It provides testing facilities for the following water types:

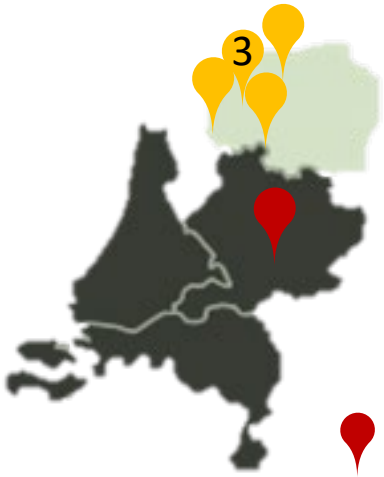
- Surface water (river Leie)
- Freatic groundwater (12 m)
- Rainwater
- Tap water
- Vegetable processing process water and waste water

VITO partnering with De Watergroep - 'De Blankaart'

The testing facility is available for SMEs to test technology for:

- Treating surface water into drinking water
- Testing techniques for treating wastewater from the ion exchange process

Range of water types - Netherlands



CEW / WA – various testing facilities

There are 6 testing facilities across the Northern Netherlands which enable testing of various water types:

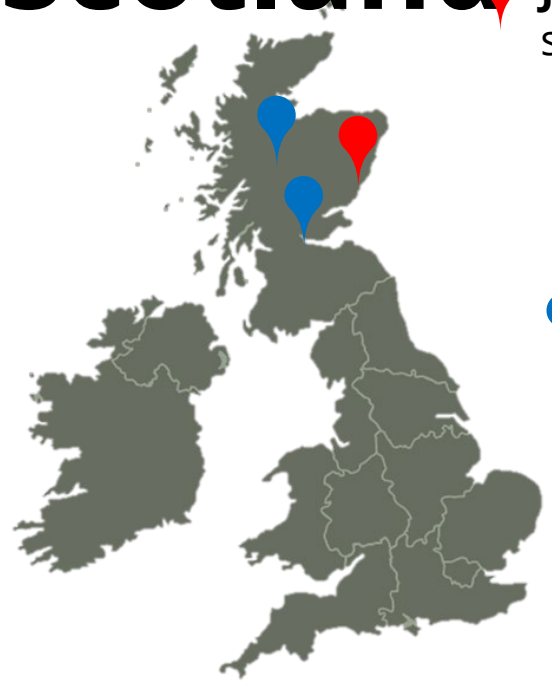
- Hospital waste water
- Desalination and blue energy
- Municipal waste water treatment technologies
- Sensor and data-measuring applications
- Biological treatment of industrial wastewater
- Water flows on a dairy farm

Regional Water Authority Vallei and Velluwe - Apeldoorn

Waste Water Treatment Centre:

- Municipal wastewater
- Municipal sludge
- Industrial sludges
- Biogas
- Struvite
- Tap water

Range of water types - Scotland



James Hutton Limited, the laboratory provides verification services, handling samples prepared outside the facility.

- Inorganic and organic pollutants
- Very experienced scientific team

Scottish Water Development Centres

- Waste Water Development Centre in Bo'ness:
  - Municipal wastewater
  - Industrial wastewater
- Water Development Centre in Gorthleck, Inverness:
  - Raw water connections
  - 10 micron filtered water
  - Borehole raw water

Project Aims

Goal

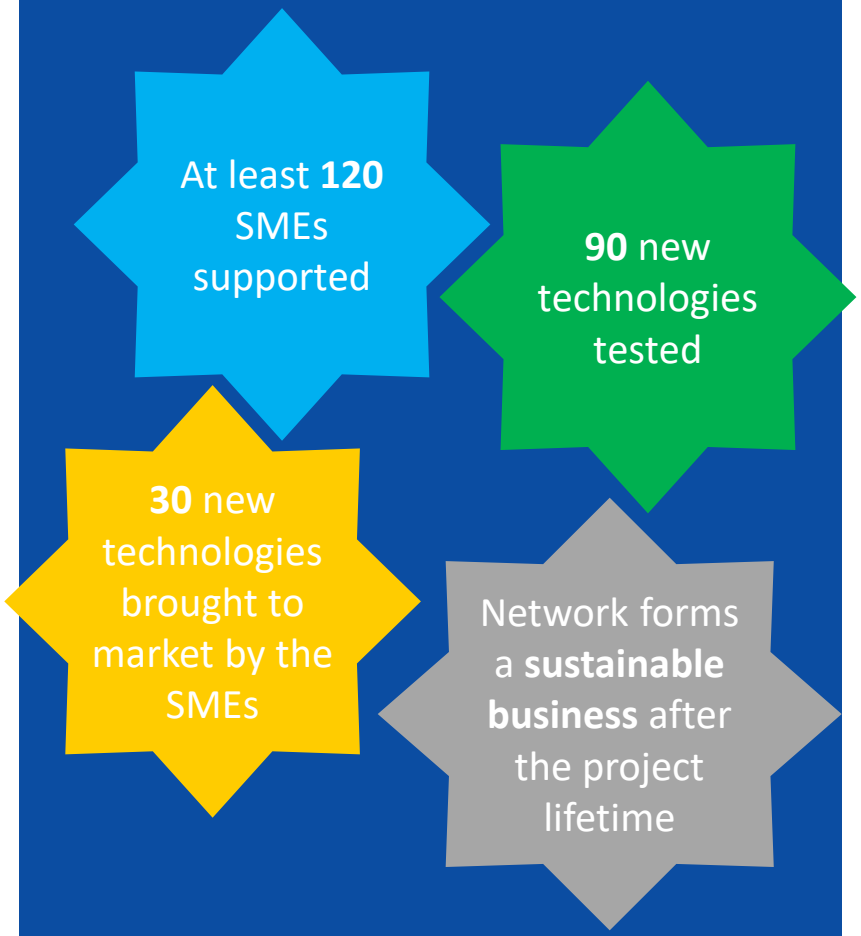
Accelerate market uptake of innovative water technologies

Tool

Transnational network of testing facilities

Enabling SMEs to fine-tune and test technologies in a real setting

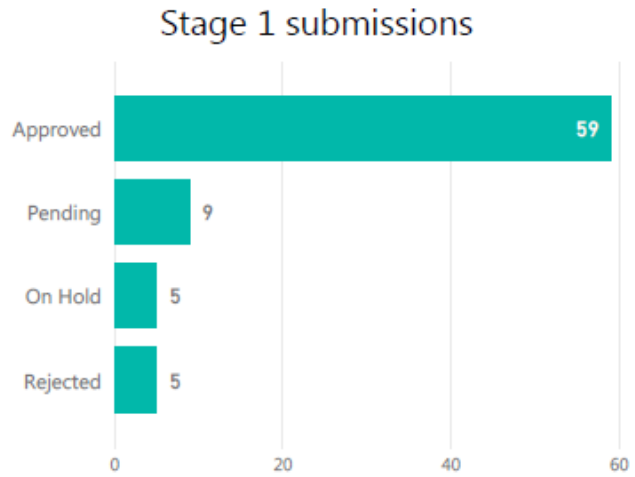
Target
6 December 2021

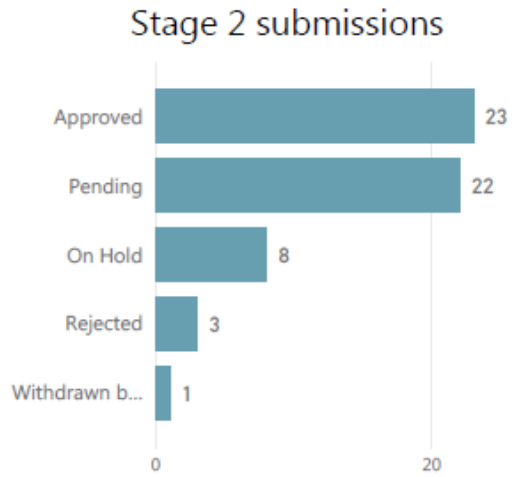


Innovation Support Vouchers

Up to €50,000 of total of in-kind support

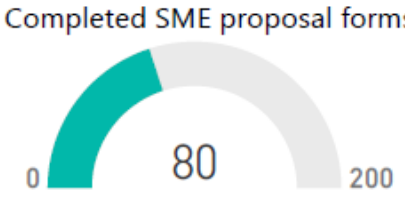
Project Progress





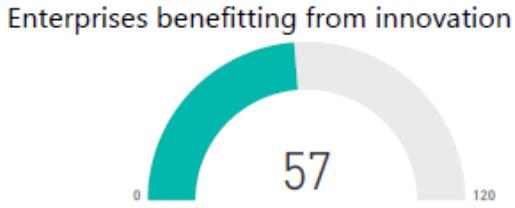
Origin of application

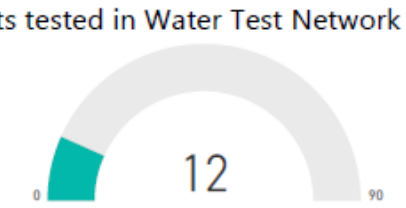
Country	Count of Project ID
Austria	1
Belgium	3
Denmark	1
Finland	1
France	7
Germany	11
Netherlands	23
Sweden	1
United Kingdom	32
Total	**80**

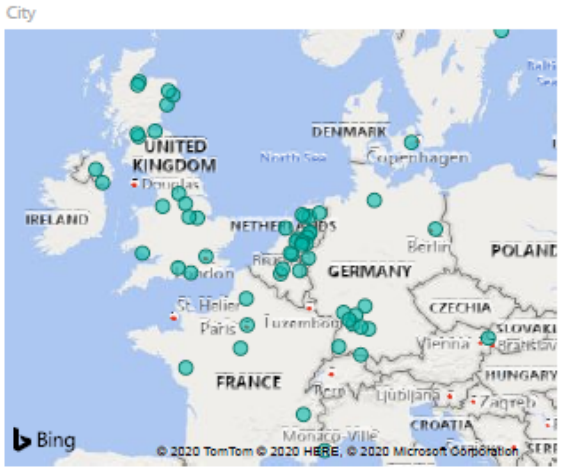


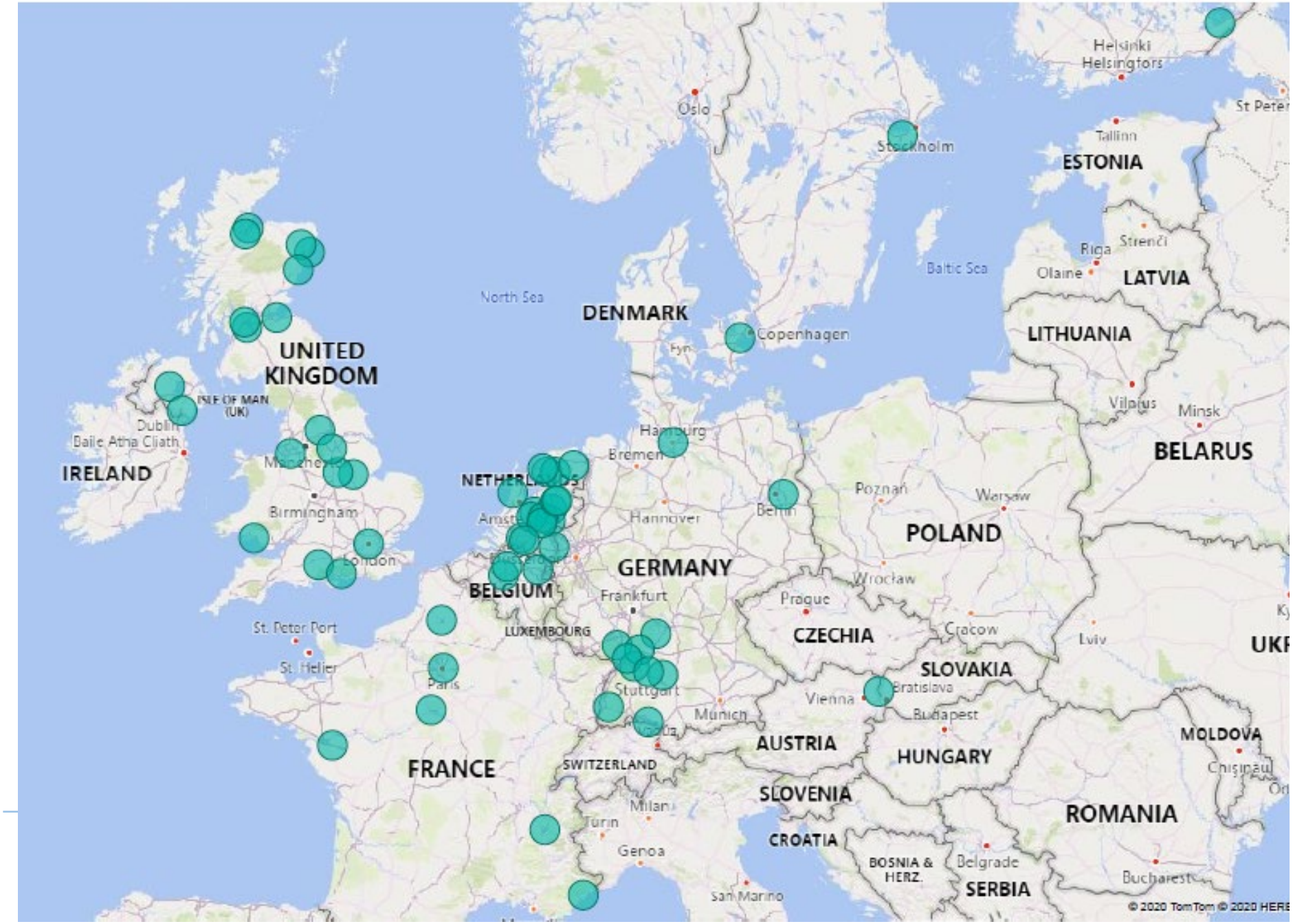
Applications per project partner

BRGM	CEW	JHI	SWH	TZW	VITO	WVV
8	18	8	24	4	4	14








Helsinki
Helsingfors
Oslo
Stockholm
Tallinn
ESTONIA
Riga
Strenči
Olaine
LATVIA
Baltic Sea
North Sea
DENMARK
Copenhagen
LITHUANIA
UNITED KINGDOM
ISLE OF MAN (UK)
Dublin
Baile Átha Cliath
IRELAND
Vilnius
Minsk
BELARUS
Hamburg
Bremen
NETHERLANDS
Amsterdam
Hannover
Berlin
Poznań
Warsaw
POLAND
Birmingham
London
GERMANY
Wrocław
Prague
BELGIUM
Frankfurt
CZECHIA
Kraków
Lviv
UKR
St. Peter Port
St. Helier
LUXEMBOURG
SLOVAKIA
Paris
Stuttgart
Vienna
Bratislava
Budapest
Munich
AUSTRIA
MOLDOVA
Chișinău
HUNGARY
FRANCE
SWITZERLAND
SLOVENIA
Milan
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Technologies testing through WTN

www.nweurope.eu/water-test-network

Experiences of SMEs

KUHN GmbH | *water experts - worldwide*

- Manufacturer of high-quality machines for the mechanical treatment of wastewater in wastewater treatment plants
- Family-run enterprise with more than 90 years of experience and 160 employees
- Our product portfolio includes all types and sizes of Archimedean screw pumps, screens and screenings treatment, grit treatment, conveyors, compact plants and heat exchangers for wastewater
- We offer turnkey products including maintenance and repair services – everything from a single source
- Extensive expert knowledge based on decades of experience in manufacturing wastewater engineering systems and the installation of several thousand machines
- Both mechanical and electrical engineering services
- KUHN machines provide clean water and clean energy in more than 40 countries all around the globe

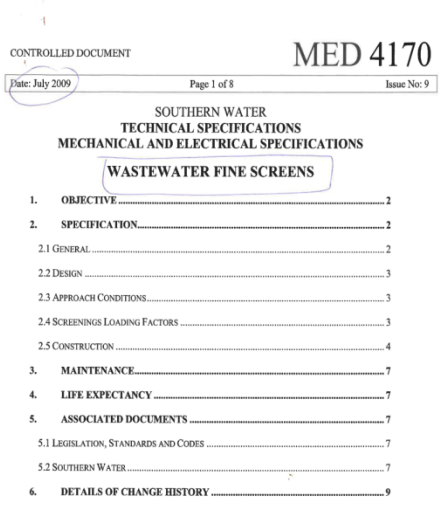
WASTEWATER AND RECYCLING TECHNOLOGY

DRINKING WATER SYSTEMS

INDUSTRIAL WATER TREATMENT

KUHN GmbH | *water experts - worldwide*

Source: Gabarron



CONTROLLED DOCUMENT

MED 4170

Date: July 2009 | Page 1 of 8 | Issue No: 9

SOUTHERN WATER

TECHNICAL SPECIFICATIONS

MECHANICAL AND ELECTRICAL SPECIFICATIONS

WASTEWATER FINE SCREENS

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European Regional Development Fund

Water Test Network Stage 1 Application Form

Water Test Network

All information provided in this application form will be used under the lawful basis of Legitimate Interest to review the eligibility of the application and facilitate communication between the Water Test Network project and the SME. Further information on the lawful basis and the privacy policy of each project partner can be found on the project website http://www.nweurope.eu/projects/project-search/water-test-network/

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Water Test Network
European Regional Development Fund

Stage 2 - Application form

Water Test Network

To help you complete the application form please read the WATER TEST NETWORK *Guidance Notes* for this voucher call, which will be provided as a separate document. All information provided in this application form will be used under the lawful basis of Legitimate Interest to review the eligibility of the application and facilitate communication between the Water Test Network project and the SME. Further information on the lawful basis and the privacy policy of each project partner can be found on the project website http://www.nweurope.eu/projects/project-search/water-test-network/.

Submit completed electronic applications to the Innovation Chaser that supported you during this application.
Please note the closing date for receipt of your electronic Application Form is 01-August-2021

Version 1.4
August 2018
Scottish Water Horizons Ltd

Water Test Network - Stage 2 Application Form - Version 1.4 1

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Letter of approval for Stage 2 application

Water Test Network

Thank you!

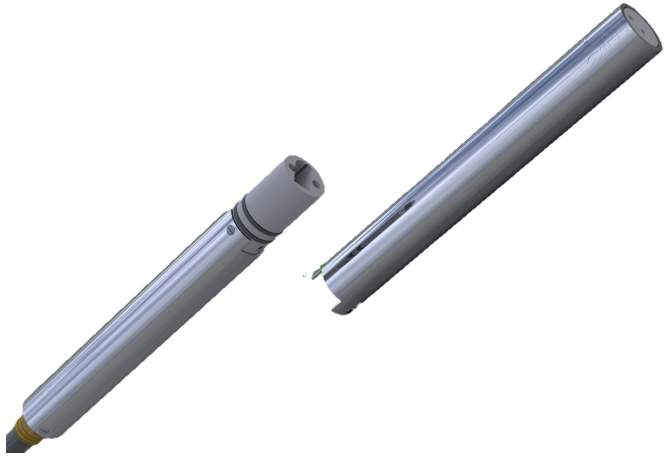
Intelligent Pollutant Monitoring

Jafar S. Noori

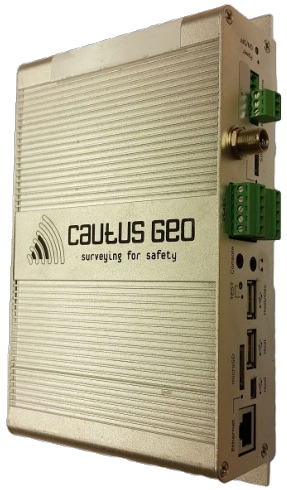
www.intpm.dk

Demo video

Current options

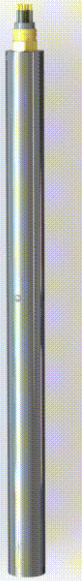


IPM measuring Torpedo



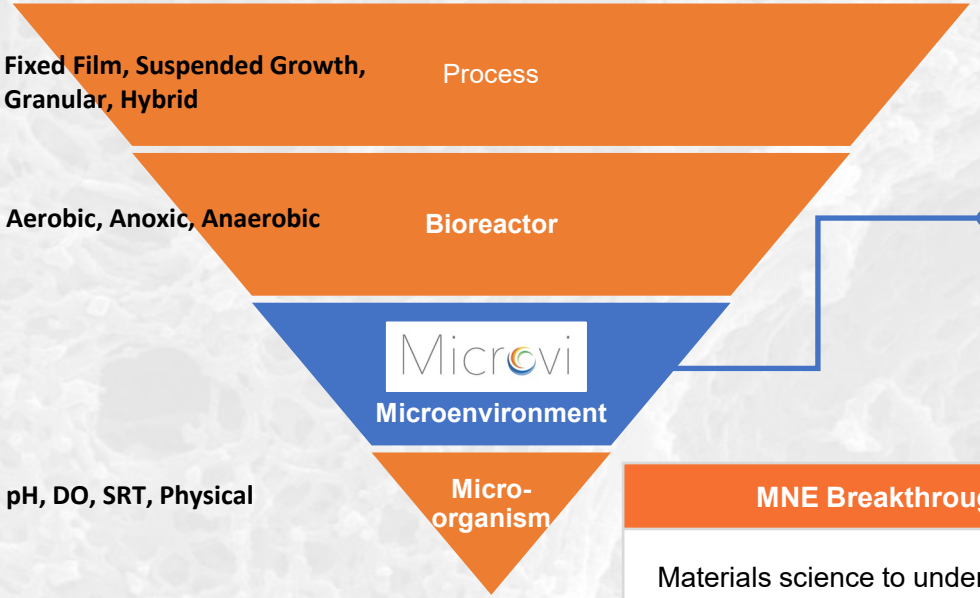
Cautus Geo Data Logger

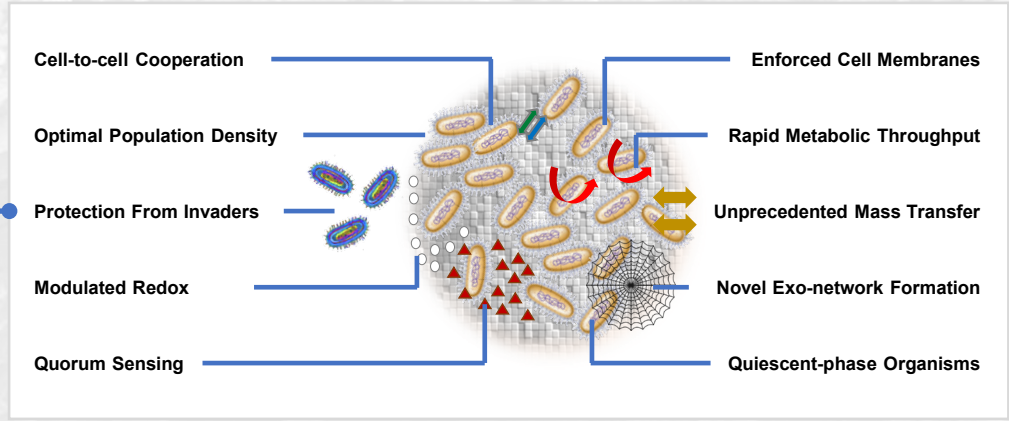
System

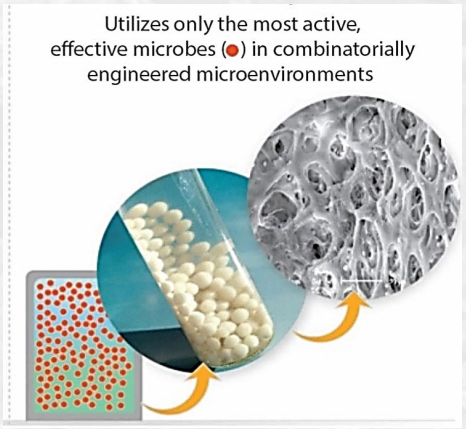


Microvi Addresses an Important White Space in Industrial Biotech

The MNE biocatalyst optimizes numerous processes at the microenvironmental level







MNE Breakthrough #1

Materials science to understand, create and refine the optimum deployment environment for organism performance

+

MNE Breakthrough #2

Microbiology selects the most robust and high performing organisms for a given process

=

MNE Breakthrough #3

Leveraging the autonomous behaviour of organism communities similar to nature

Key Technology Advantages

- Reduced Footprint 50%
- Zero biological solids production
- Reduced Energy Requirements by 30 – 40%
- Simple Operation “Fit and Forget”
- Low Maintenance
- Increasing existing asset capacity

Water Treatment

- Nitrate
- Ammonia
- Taste & Odour

Wastewater Treatment

- BOD / COD
- Ammonia
- Nitrogen
- Phosphorous
- Priority Substances

Benefits To Microvi of WTN

Outside of the financial benefits, two critical benefits of WTN to Microvi have been

1. Firstly a **safe and controlled environment** in which performance can be tested in a variety of configurations at minimal disruption.
    - This is coupled with onsite physical presence to conduct routine tasks and analysis allowing sucessful long term testing without constant site attendance, **improving the reliability and creditability** of the testing.
2. Secondly, with other trials ongoing and a continous engagement programme by WTN with other utlilities and industry actors , this gives extensive **exposure** of the technology with opporunties to undertake tours, presentations and potential collaborations with other technology providors and customers.
    - The onsite facilities make for an **excellent marketing** platform.

Innovation for a natural and sustainable water industry

Martin Ryen, CEO

Wastewater treatment systems

Pharem Filtration System (PFS)

Flexible Application

- Enzyme functionality open up for application towards a wide range of challenges
- Can be applied to both industrial and wastewater applications
- Efficiency, Target OMPs, Costs can all be adjusted toward customer needs

OpEx based Business Model

- Minimizes CapEx costs
- OpEx comparable to Ozone based solutions

Compact and Safe

- Low infrastructure imprint
- Natural based product add no hazard to the work place

PHAREM

The Demonstration sites

PFS for municipal wastewater treatment

Netherlands site:

WWTP: Appeldorn WWTP
Capacity: 10 m^3/24h
Runtime (current stage): 1st of June – 31st of July
(Will be taken over by STOWA)

Swedish site:

WWTP: Rustorp ARV
Capacity: 50 m^3/24 h
Runtime (current stage): 20th of April – 31st of June
(Extension intended)

Interreg

- **Opens up the possibilities to extend current demonstrations (Netherlands)**
- **Expand the current goals of demonstrations**
  - **Sample size**
  - **Scale**

PHAREM

Innovation support vouchers by Charlotte Boeckaert

- Support includes hosting the trial at testing facility: operator, analyses, electricity, …
- SME to bring own technology and to cover logistics, travel and accommodation
- Up to **€ 50,000** of total support

Who can apply?

- All small and medium enterprises (SMEs) from North West Europe can apply for the innovation vouchers
- An SME is defined as an organisation with no more than 250 employees and a turnover of at most €50 million

The Application Process: 3 steps

1. Contact your innovation chaser

Innovation Chasers

- 8 Innovation Chasers in the Water Test Network
- first point of contact for applicant SMEs
- support SMEs throughout the application process

Meet your local Innovation Chaser

Belgium – VITO 	Charlotte Boeckaert ✉ cb@vlakwa.be ☎ +32 56241261	**France – BRGM** 	Christophe Mouvet ✉ c.mouvet@brgm.fr ☎ +33 238643908
Germany – TZW 	Beate Hambsch ✉ beate.hambsch@tzw.de ☎ +49 7219678220	**Ireland – Enterprise Ireland** 	Liam Curran ✉ Liam.curran@enterprise-ireland.com ☎ +35 361777014 ☎ +35 3876813794

Meet your local Innovation Chaser

Netherlands – CEW 	Jordi Moreno ✉ j.moreno@cew.nl ☎ +31 582100919 ☎ +31 657772569	**Netherlands – WVV** 	Peter-Jan van Oene ✉ PvanOene@vallei-veluwe.nl ☎ +31 612986083
Scotland – JHL 	Rodger McGovern ✉ rodger.mcgovern@huttonltd.com ☎ +44 3449 285428	**UK – Scottish Water** 	Ruth McNeil ✉ ruth.mcneil@scottishwater.co.uk ☎ +44 7827 956643

The Application Process: 3 steps

1. Contact your innovation chaser

2. Stage 1 application

Stage 1 application

1. Complete and sign the SME/de-minimis declaration

   De-minimis = SME has not received > € 200 000 support in the past 3 years

2. Submit stage 1 application form

   Administrative details, innovation and support needed

   Ca. 2 p

https://www.nweurope.eu/projects/project-search/water-test-network/#tab-4

The Application Process: 3 steps

1. Contact your innovation chaser
2. Stage 1 application
3. Stage 2 application

Stage 2 application

1. Submit stage 2 application form

   TRL level, test description, target industry, risks, economic and wider impact

   Ca. 10 p

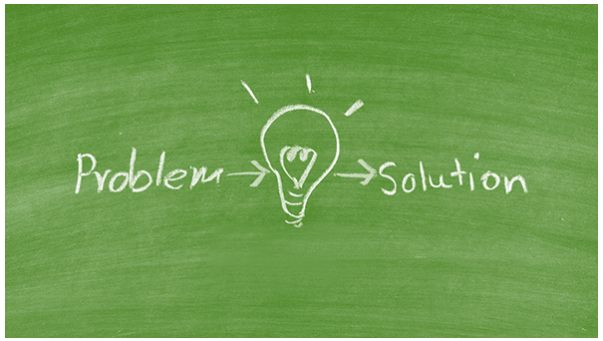
https://www.nweurope.eu/projects/project-search/water-test-network/#tab-4

Timing

- Applications for the vouchers can be submitted at any point until **1st August 2021**
- Evaluation stage 1: < 1 week
- Evaluation stage 2: ca. 1 month

Problem-Solution Challenges

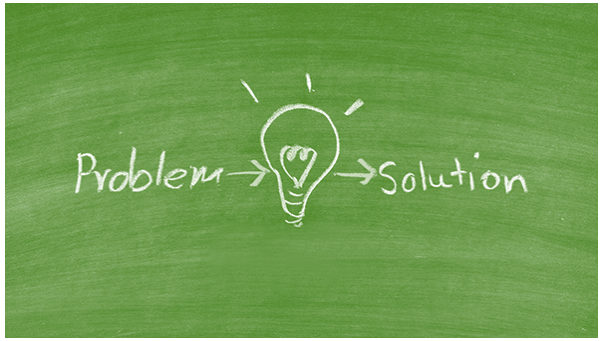
- 'Innovation Challenges' at regular time intervals (5 over project life).
- Problems experienced by Water Users (public utilities, large industries) to which a solution is sought from innovative SMEs
- Engaging SMEs in a 'meet the buyer' type exercise, where challenges will be promoted amongst SMEs
- Encourage SME-academic collaborations



Innovation Challenge n° 3

- Technologies for PFAS removal
- Fully-funded support, meet stakeholders and showcase at international water fair
- Deadline: 1 September 2020 – 12 pm

https://www.nweurope.eu/projects/project-search/water-test-network/#tab-8



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Water Test Network Webinar Q&A

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Thank you for joining us

FOR MORE INFORMATION

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@WaterNetwork_EU