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

The Water Test Network

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Business Development Lead
Scottish Water Horizons

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

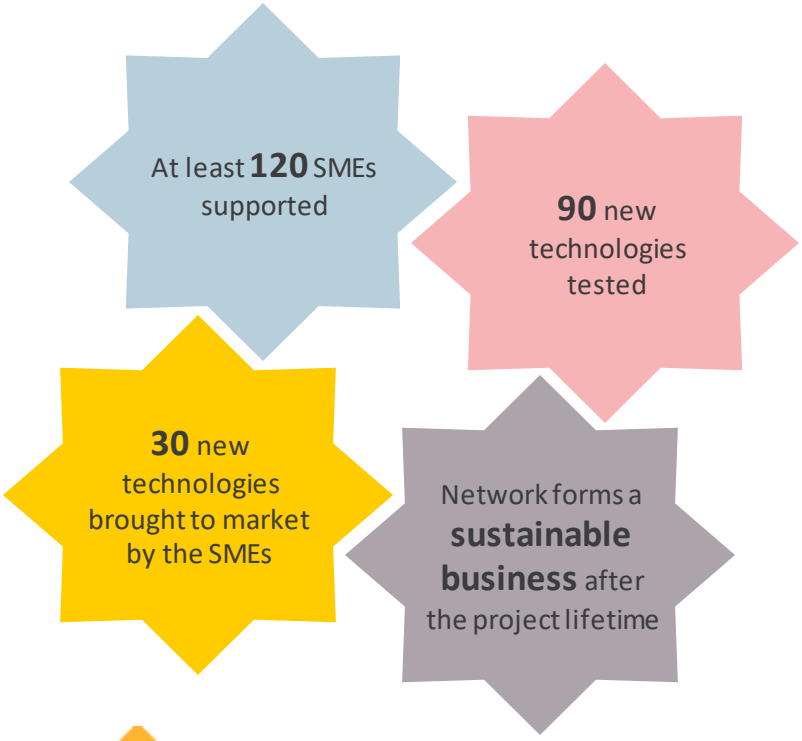
THEMATIC PRIORITY:

INNOVATION

Goal: Speed up market uptake of innovative water technology

Tool: Transnational network of testing facilities

SMEs can demonstrate and fine-tune innovative technology in a real setting



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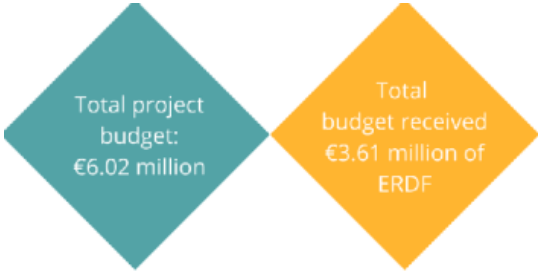

Recap of the Project Model

- A transnational network of testing facilities
- Making available a range of water types for testing
- Providing validation and verification services
- In the form of a fully-funded integrated support package
- Tailored to the needs of the SMEs
- Linking them to the best-fit facility for their testing / verification needs

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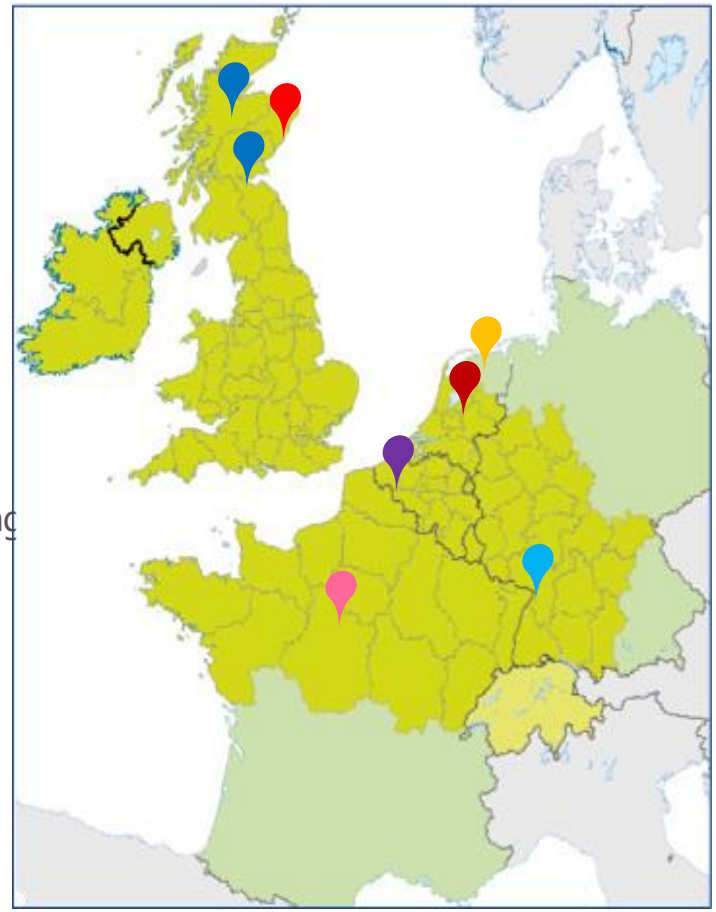
Transnational Network

A network of testing facilities:

- James Hutton Limited laboratory in Aberdeen, Scotland
- Scottish Water's two development centres in Bo'ness & Inverness, Scotland
- CEW & WA's 6 demosites in Netherlands
- WVV's centre in Apeldoorn, Netherlands
- VITO partnering with Ghent University in Kortrijk, Belgium & VITO partnering with De Watergroep in Diksmuide, Belgium
- TZW's water technology centre in Karlsruhe, Germany
- PRIME demonstration site at Orléans, France



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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

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Fully funded support

Investigative report

Access to test facility

Verification report

Up to €50,000 of total support

Investigative report - delivered by a test facility Innovation Chaser. Analyses development and support needs of the SME and their proposed technology

Access to test facility - Access required varies from a few days in a lab to several weeks in a full-scale water plant. Value of test access will typically be €5,000 - €40,000 per SME

Verification report - Support with validation and verification to assist market entry. This will include help for SMEs to get ISO or similar certification for their product. Typical costs are €25,000 - € 40,000

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Validation and Verification

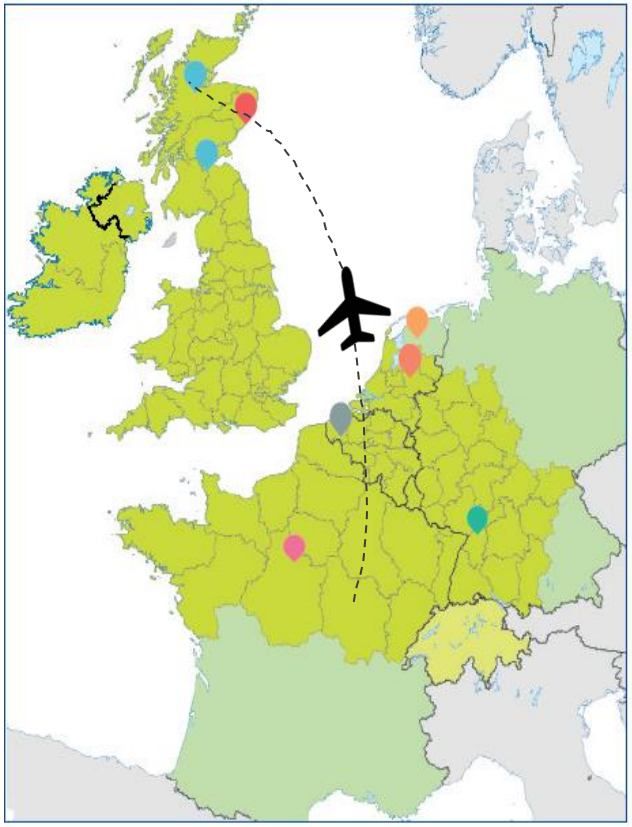
One of the key components of the support packages on offer is support with validation and verification to assist market entry, where necessary.

This will include help for SMEs to get ISO or similar certification for their product.

Processes like ETV (Environmental Technology Verification) can help SMEs fast track innovation by providing independent verification of performance and regulatory compliance.

Best fit facility. Tailored to needs

- The support package will be tailored to the needs to the SME
- During the application process a testing plan will detail what facility best suits the needs of the SME
- This is a transnational network and SMEs can access facilities across the NWE region



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Innovation support vouchers

- The support packages come in the form of Innovation Support Vouchers
- The vouchers fund of the relevant support, such as the cost of hosting the trial at a testing facility
- All SME costs such as logistics, travel and accommodation must be met by the SME

Up to €50,000 of total support

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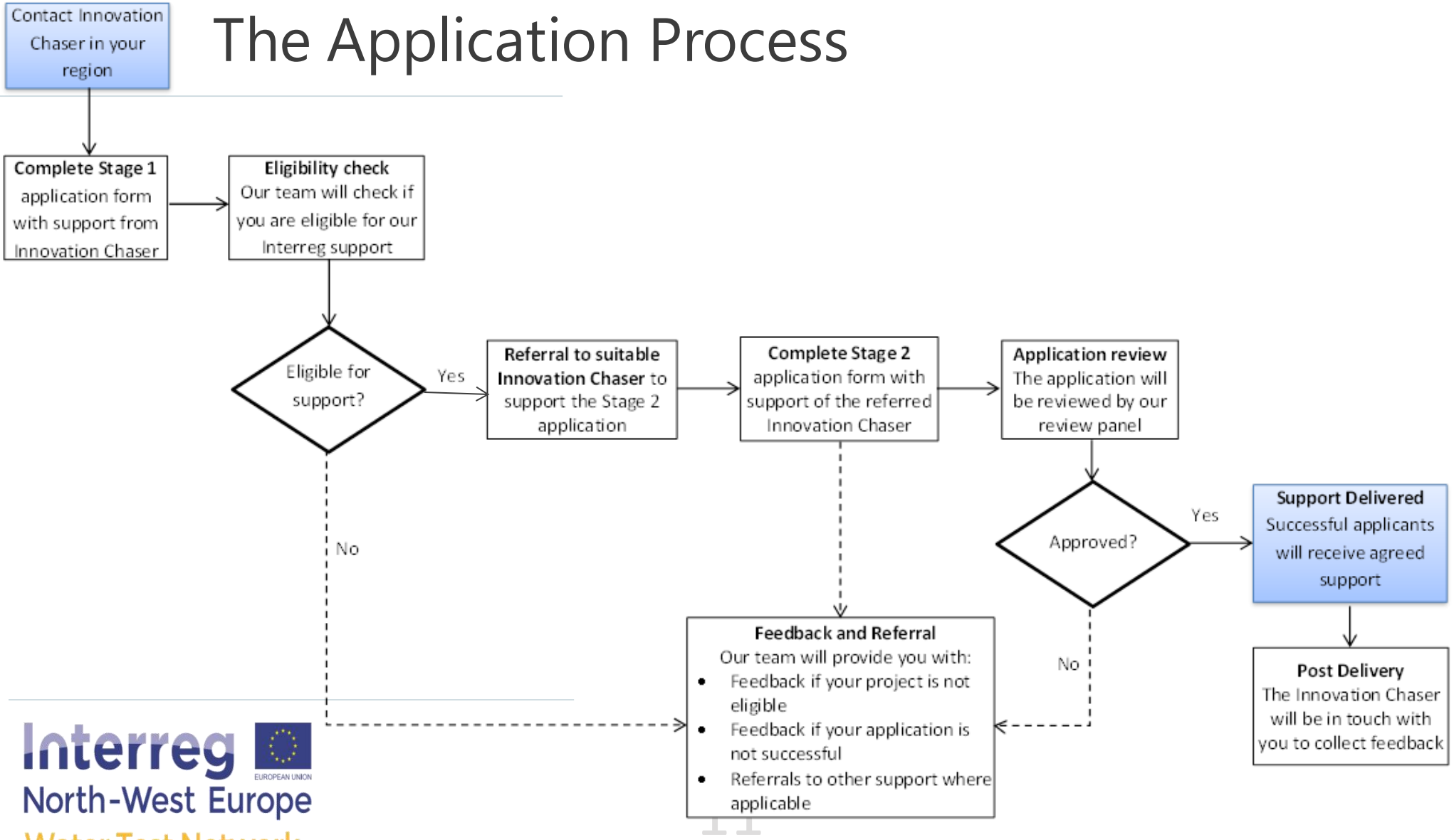
Who can apply and when

- 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

Applications for the vouchers can be submitted at any point from
11th December 2018 until 1st August 2021

The Application Process



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Innovation Chasers

Role of the innovation chaser

- There are 8 Innovation Chasers in the Water Test Network
- The Innovation Chaser is the first point of contact for applicant SMEs
- They will support the SMEs throughout the application process
- Innovation Chasers will also be responsible for creating case studies of successful applicants

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

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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 	Richard Allan ✉ Richard.Allan@hutton.ac.uk ☎ +44 1382568952	**UK – Scottish Water** 	Daniel Gerdes ✉ daniel.gerdes@scottishwater.co.uk ☎ +44 7484509431

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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.

Next Steps

- Innovation support voucher call open for applicants – 11th December 2018
- Local promotion of the Water Test Network in partner countries

We ask you to promote the Water Test Network opportunities to SMEs and your water sector networks

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ANY QUESTIONS?

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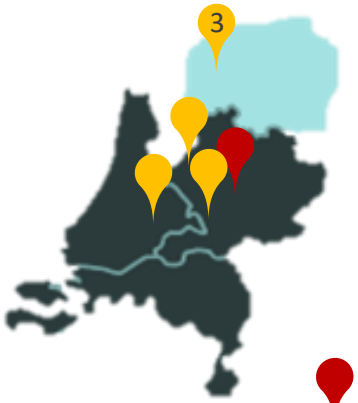
Range of water types - Netherlands



CEW / WA – various testing facilities

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

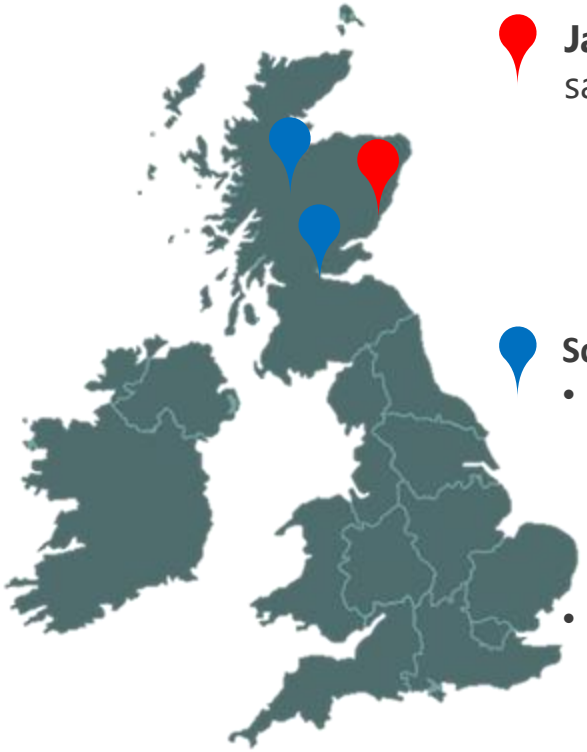
- Antonius Hospital – hospital waste water
- Wetsalt – desalination and blue energy
- Wetterskip Fryslân – municipal waste water treatment technologies
- SenTec – sensor and data-measuring applications
- Water Application Centre – biological treatment of industrial wastewater
- Dairy Campus – water flows on a dairy farm

Regional Water Authority Vallei and Velluwe - Apeldoorn

Waste Water Treatment Centre:

- Municipal wastewater (influent, different partly treated wastewater streams, effluent)
- Municipal sludge (untreated, hydrolysed sludge, digested sludge, rejection water)
- Industrial sludges (untreated, digested, digestate)
- Biogas
- Struvite
- Tap water

Range of water types - Scotland



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

- Environmental Technology Standard (ETV) ISO14034
- Inorganic and organic pollutants mostly accredited to ISO17025
- Scientific team with many years' expertise analysing environmental waters and private water supply samples.

Scottish Water Development Centres

- Waste Water Development Centre in Bo'ness:
  - Municipal (raw unscreened, raw screened, secondary sewage, activated sludge, final effluent)
  - Industrial waste water, various sources available upon request
- Water Development Centre in Gorthleck, Inverness:
  - Raw water connections
  - 10 micron filtered water
  - Borehole raw water

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Range of water types - Belgium

VITO partnering with Ghent University – VEG-i-TEC

VEG-i-TEC is a university research and expertise centre for the processing of vegetables and potatoes. It provides testing facilities for the following water types:

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

VITO partnering with De Watergroep - 'De Blankaart'

A pilot installation for research into an alternative approach to conventional surface water treatment. 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

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Range of water types – Germany & France

TZW - DVGW Water Technology Center

This testing facility provides access to:

- Drinking water from the local network available after:
  - flocculation, sand filtration, activated carbon: GAC, PAC,
  - membrane filtration: reverse osmosis, micro-filtration, ultra-filtration
  - disinfection: chlorination, ozonation, UV

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

PRIME provides experimental means on a variety of scales for the following water types:

- Drinking water from the local network
- Ground water (untreated) extracted onsite
- Facilities enabling study of wastewaters to be brought on site

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