

**Interreg**



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North-West Europe



**Energy  
transition**

**ResNRJwater**

# Programme

## 11 - 12 June 2024



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## Launch conference of ResNRJwater Project (INTERREG NWE)

Resilient energy supply for and from water and  
wastewater infrastructures in North-West Europe

**11 - 12 June 2024, ChorForum Essen**



# Programme Tuesday 11<sup>th</sup> June 2024

Moderation: *Katrin Prüfjg, Communication and media trainer*

9:30 Registration and welcome coffee

## 10:00 SUSTAINABLE ENERGY TRANSFORMATION NEEDS THE WATER AND WASTEWATER SECTOR

*Uli Paetzel, President of the German Water Association and CEO Lippeverband*

## 10:15 INTRODUCTION TO THE RESNRJWATER PROJECT

*Marie-Edith Ploteau, Project coordinator, Lippeverband*

## 10:30 DYNAMIC LINKAGES OF THE PROJECT WITH EXISTING INITIATIVES

### **Programme energy 2027 in the Emscher-Lippe area**

*Frank Obenaus, CTO Emschergenossenschaft*

### **Linear photovoltaics: introduction to CNR's first demonstrators and strategy**

*Benjamin Graff, Head of Open Innovation, Compagnie Nationale du Rhône*

### **Riothermia in the Flemish region**

*Matthias Verbeke, Corporate Innovation Expert, Aquafin*

### **Advanced WWTP regarding self-energy generation from renewable energy**

*Ingo Schoppe, CEO ARA Thunersee*

11:30 Coffee break

## 12:00 EXPECTATIONS TOWARDS TERRITORIAL COOPERATION TO DIVERSIFY THE RENEWABLE ENERGY SUPPLY IN NORTH-WEST EUROPE

*Ilka Meisel, Head of Unit European Market, Ministerium für Wirtschaft, Industrie, Klimaschutz und Energie des Landes Nordrhein-Westfalen*

## 12:15 PANEL DISCUSSION: HOW CAN THE WATER AND WASTEWATER SECTOR INCREASE A RESILIENT ENERGY SUPPLY IN NORTH-WEST EUROPE?

**Brian Murphy**, General Assembly Representative for Ireland co-Chairperson of Committee on Economics and Legal Affairs, EurEau

**Amandine Leroux**, Manager Consumer-Centric Energy Solutions, ELIA Transmission BE

**Phil James**, Founder, Galway Energie Co-operative

**Christelle Humski**, CEO Territoire d'énergie Loire-Atlantique

**Annika Kleinschmidt**, Policy adviser water and wastewater service, Bundesverband der Energie- und Wasserwirtschaft e.V. - Landesgruppe Nordrhein-Westfalen

13:00 Lunch

# Programme Tuesday 11<sup>th</sup> June 2024

## 14:00 EXCURSION - SITE VISIT OF A LARGE ENERGY-OPTIMISED WASTEWATER TREATMENT PLANT OF THE EMSCHERGENOSSENSCHAFT IN BOTTROP

The excursion will lead the participants to the Emschergenossenschaft's wastewater treatment plant Bottrop. It is one of the first largely energy-autonomous large-scale treatment plant. Its advanced model of heat and power flow management rely on the optimal combination of distinct uses and sources of energy: power production from sewage sludge, sewage gas, solar panel, wind turbine; solar supported thermal drying of sewage sludge; and underway heat recovery from wastewater effluent and production of renewable e-fuel.



## 16:00 EXCURSION - ZOOM ON THE FORESEEN PILOT PLANTS OF THE RESNJRWATER PROJECT

The following presentations are held in a room at the wastewater treatment plant (wwtp) in Bottrop, after the site visit

### **Pilot a smart energy management and storage system at a small wwtp in the Lippe area**

*Maren van der Meer, Lippeverband*

### **Pilot a battery energy storage system at a wwtp in Merksem**

*Jeroen Deurinck, Aquafin*

### **Pilot a heat management system for biomethane production at a wwtp in North-Holland**

*Denise Winters, Hoogheemraadschap Hollands Noorderkwartier*

### **Pilot photovoltaic systems applied at small wwtps in Loire-Atlantique**

*Emmanuel Bourien, Territoire d'énergie Loire-Atlantique*

*The bus for the excursion is ready to go at the entrance of ChorForum. The excursion finished approximately at 18:00. The number of participants is limited.*

## 19:00 JOINT NETWORKING DINNER

All participants of the conference are invited to join the networking dinner after the excursion in the restaurant Tablo, Huyssenalle 5, 45128 Essen

# Programme Wednesday 12<sup>th</sup> June 2024

The programme on Wednesday 11<sup>th</sup> June is open to the partners and associated organisations of the project. This working group meeting aims to jointly progress on the project activities.

## 9:00 PLENARY SESSION

### Introduction to the project working group meeting

*Marie-Edith Ploteau, Lippeverband*

## 9:30 PARALLEL BREAKOUT SESSIONS - 1<sup>ST</sup> ROUND

### Multicriteria procedure for a continuous detection of RES-potentials in regions

*Emmanuel Bourien, TE44  
Andreas Sanders, LV*

### Procedure for creating heat potential maps

*Adrian Treis, EG  
Denise Winters, HHNK*

## 11:30 WRAP-UP OF THE BREAKOUT SESSION IN THE PLENARY

12:30 *Lunch*

## 13:30 PARALLEL BREAKOUT SESSIONS - 2<sup>ND</sup> ROUND

### Blueprint for transforming existing large wastewater treatment plants into energy hubs

*Maren van der Meer, LV  
Denise Winters, HHNK*

### Capacity building concept for staff members and young professionals in the w&w sector

*Carsten Palkowski, InfraWatt  
Mandy Plehn, EG*

## 15:00 PARALLEL BREAKOUT SESSIONS - 3<sup>RD</sup> ROUND

### Comparison of the legal frameworks regarding self-consumption of own-generated power in the w&w sector

*Saeed Alsamhi, UGalway  
Niklas Höing, EG*

### Technical monitoring data of the ResNRJwater demonstrators

*Bastian Jungblut, LV  
Matthias Verbeke, Aquafin*

## 16:00 WRAP-UP OF BREAKOUT SESSIONS IN THE PLENARY AND FOLLOW-UP

## 16:30 END OF THE WORKING GROUP MEETING

# Programme Wednesday 12<sup>th</sup> June 2024

## **17:00 PROJECT STEERING GROUP MEETING**

Only open to the members of the project steering group of ResNRJwater.

**A separate agenda will be shared by e-mail to the PSG members**

## **18:30 END OF THE PROJECT STEERING GROUP MEETING**

# Information of the conference

<b>VENUE</b>	<b>11 June 2024</b>	<b>ChorForum Essen</b> Fischerstrasse 2-4 45128 Essen
	<b>12 June 2024</b>	<b>Emscherhaus</b> Kronprinzenstrasse 24 45128 Essen

<b>HOTEL</b>	<b>LIST OF HOTELS CLOSE TO THE CONFERENCE VENUE</b> <p>The two hotels below have pre-reserved rooms for your participation at special conditions to this event. Self-booking and self-payment apply.</p> <p><b>Motel One Essen</b>, Kennedyplatz 3, 45127 Essen</p> <p>Rooms in the framework of the event can be booked. Please indicate booking with code ResNRJwater. Booking by email: essen@motel-one.com or by phone: +49 201 437 537-0. The following conditions occur: Cancellation up to 14 days in advance is free of charge.</p> <p><b>Intercity Hotel Essen</b>, Hachestraße 10, 45127 Essen</p> <p>A room contingent is reserved at a price of 119 €/night incl. breakfast. Important: Please indicate booking with code ResNRJwater. Booking by email essen@intercityhotel.com or by phone: +49 201 821841-0. The following conditions occur: The reservation is valid until 27.05.2024. Later booking may lead to different prices. Cancellation up to 3 days in advance is free of charge.</p>
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<b>LANGUAGE</b>	<b>English</b>
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<b>PROJECT WEBSITE</b>	<b>resnrjwater.nweurope.eu</b>
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<b>REGISTRATION</b>	<p>Please register to the conference via this link:</p> <p><b><u><a href="#">ResNRJwater launch conference registration link</a></u></b></p> <p>Registration is open <b>until the 3 June 2024</b></p> <p>The event is free of charge. The number of places is limited.</p>
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# Information of the conference

## WHY RESNRJWATER?

Due to energy and climate crisis, municipalities in North-West Europe need to optimise their energy supply, especially for **energy-intensive water and wastewater infrastructure** (wastewater treatment plants, pumping stations). At the same time, the land used for this purpose (wwtp, sewers, retention basins, dykes, pumping stations, lakes) offers unexploited potential for the generation and use of renewable energies: solar/wind power, heat/cooling, green gas. **The space-intensive water infrastructures can become energy self-sufficient and also supply neighbouring communities** with surplus heat and electricity. Due to a balanced spatial distribution, wastewater treatment plants can become energy hubs that also contribute to **grid stabilisation**.

By project end, waterboards and intermunicipalities in 4 areas (DE/Emscher-Lippe region, BE/Flanders, NL/North-Holland, FR/Loire-Atlantique) can adopt a strategy to **turn the water and wastewater infrastructure into energy hubs**. Based on 7 demonstration plants, they can uptake validated technologies using renewable energy sources, a smart energy management and storage system for a decentralised and resilient energy supply as well as a concept for consumption of energy-surplus.

## THE RESNRJWATER PARTNERS

- Lippeverband (DE)
- Hoogheemraadschap Hollands Noorderkwartier (NL)
- Territoire d'énergie Loire-Atlantique (FR)
- Aquafin NV (BE)
- Emschergenossenschaft (DE)
- SEM EnR44 (FR)
- BETREM GmbH (DE)
- InfraWatt (CH)
- University of Galway (IE)