

ANALYSIS & OVERVIEW OF WATER EUROPE MEMBERS' EUROPEAN PROJECTS





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Introduction

Dear reader,

Our strategy at Water Europe revolves around the ambition to realise the value of water for our society and our economy, and achieve a European Water-Smart Society, while providing excellent services to members. Representing the whole water value chain, Water Europe is engaged in raising the water topic on the political agenda, ensuring that water receives the proper attention in the European funding programmes and facilitating our members' involvement in research projects. Earlier this year, we started a stakeholders' and EU-funded projects' analysis and we are now proud to share with you its results and conclusions in this new publication that if anything else proves one thing: Our hard work and efforts have paid off.

Our new publication has a threefold aim. Firstly, to present you an overview of all the EU- water related projects funded under H2020, Interreg and LIFE programmes. Secondly, to provide you with impressive statistics and insights on the projects that our Water Europe members have been successfully involved over the years. Lastly, to take you on a journey into the projects Water Europe has participated, wishing not only to acknowledge the achievements of these projects but also to present concrete examples of innovation, the impact they have caused and their added value in European research.

We would like to thank all people who contributed to making this publication happen. After all, let's keep in mind that knowledge sharing, experience exchange, and collaborative work are not only essential factors to create successful projects' consortia but it's the only way to achieve a Water-Smart Society. To all our members and partners, we wish that this publication inspires you and stimulates you to keep up the good work of bringing your breakthrough ideas to life in the years to come.

Enjoy the read.



Section 1

Analysis of the EU-funded water related projects from 2014 to 2019

Investing in research and innovation means a lot of things. It means to capitalise on Europe's future and its sustainable development. It means to compete globally and improve the lives of millions of people in Europe and around the world. It means to encourage cooperation across countries and disciplines. Lastly but most importantly, it means to help solving some of the biggest societal challenges our planet faces. Water is one of them.

Securing long-term resilience, stability and sustainability of water systems provides the foundation for a future Water-Smart Society where the new sources for economic development and social stability are based on new investment and governance models to realise the true value of water.

In this regard, the EU has supported and supports the water sector development through a number of flagship programmes such as the running R&I FP Horizon 2020, LIFE+ and INTERREG.

This publication aspires to highlight the efforts and the contribution of the EU to the water sector by offering a snapshot on how the above-cited programmes have allocated resources for the implementation of water-related projects across Europe and highlight **the participation of Water Europe members in these projects, which is remarkable just considering that in more than 70% of the water-related H2020 RIA and IA projects, WE members play the role of the coordinator or participating partner.**

This review covers the years from 2014 to 2019, including the funds from Horizon 2020, LIFE+ and INTERREG programmes, while the related allocation of resources across the period is based on the official start-up date of the projects.

So far, Horizon 2020 has contributed to the water sector approximately with 1.245 M€, LIFE+ with 820M€, and INTERREG with 1.000M€, and the calls for proposal for the year 2020 will bring even further means.

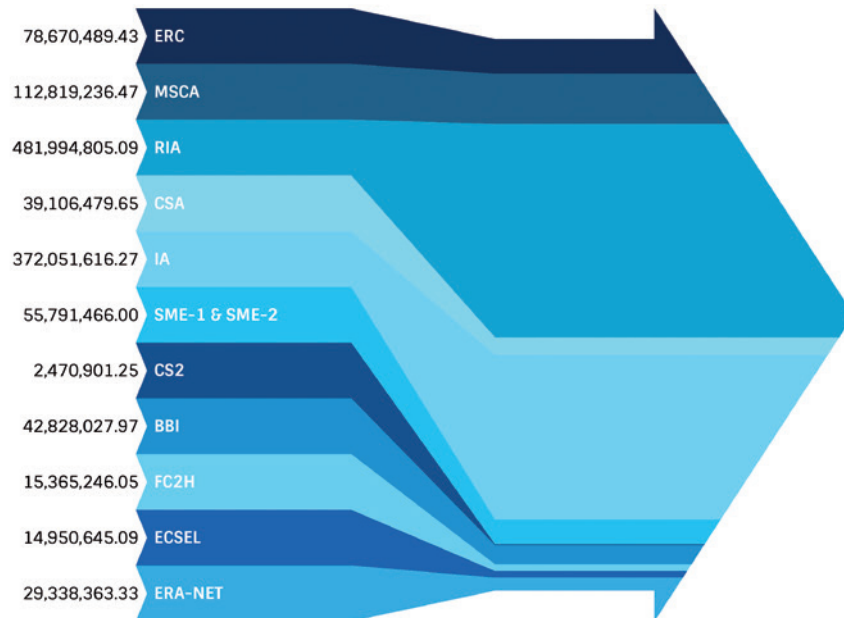
The first part of this section is dedicated to the analysis of the totality of the funded water projects, while the second part focuses on water projects with the participation of Water Europe members.

¹ RIA: research and innovation actions, R&D to establish new knowledge or explore the feasibility of a new or improved technology, product, process, service or solution (including basic and applied research, technology development and integration, testing and validation on a small-scale prototype in a laboratory or simulated environment).

² IA: innovation activities directly aiming at producing plans and arrangements or designs for new, altered or improved products, processes or services (including prototyping, testing, demonstrating, piloting, large-scale product validation and market replication)

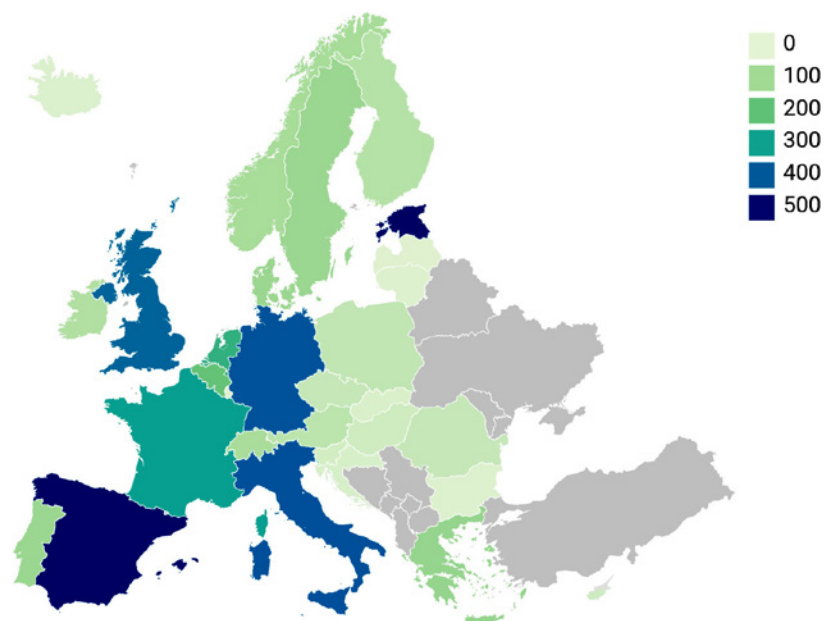
1.1 Overall outline of EU-funded water related projects 2014-2019³

WATER EUROPE - FUNDING ALLOCATION ACROSS H2020 FUNDING SCHEMES



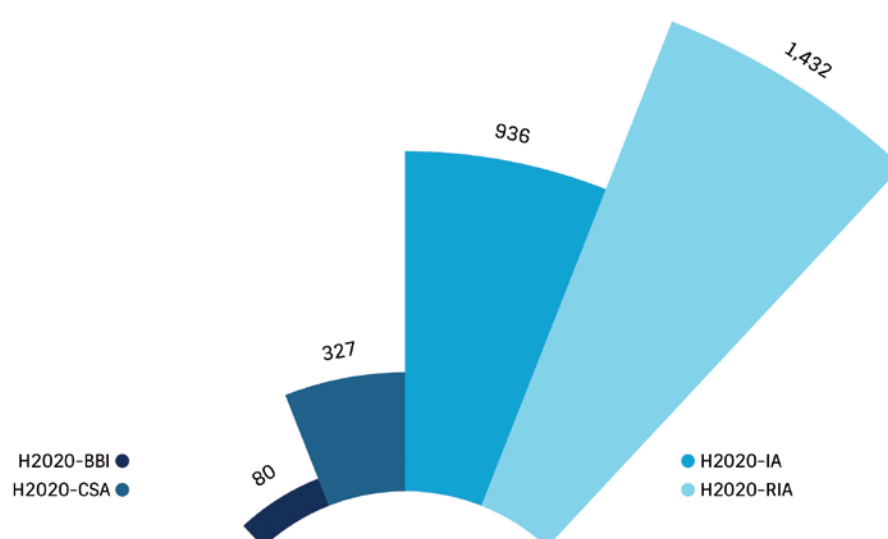
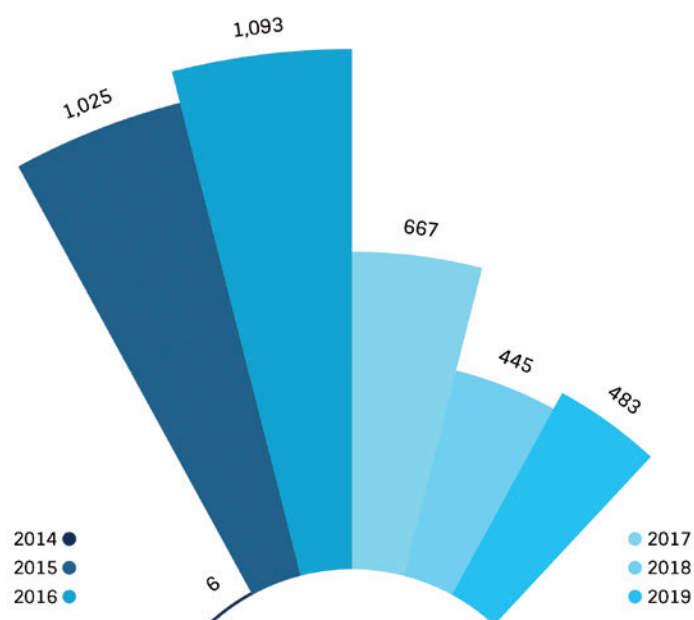
³ Related allocation of resources across the period is based on the official start-up date of the projects

TOTAL NUMBER OF H2020 WATER PROJECT PARTICIPATIONS PER EU/EFTA COUNTRY

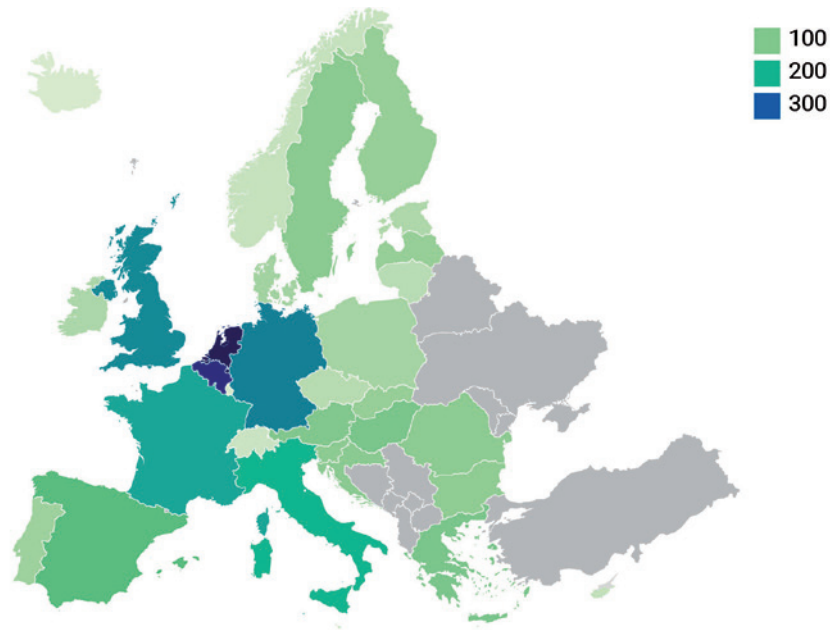


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NUMBER OF PROJECT PARTICIPATIONS IN H2O2O WATER PROJECTS FUNDED UNDER THE FOUR H2O2O BBI, CSA, IA, AND RIA ACROSS THE YEARS

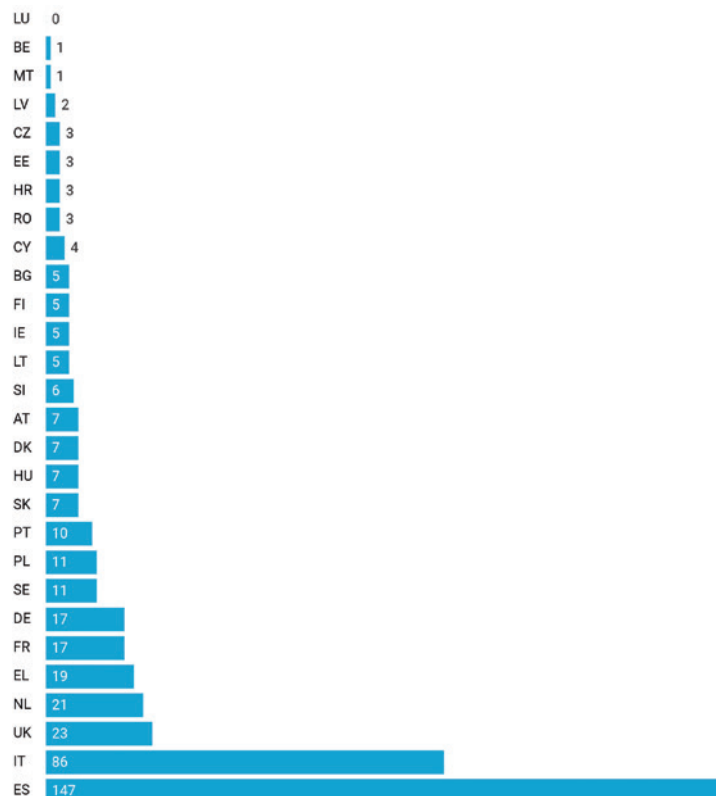


TOTAL NUMBER OF PROJECT PARTICIPATIONS IN THE INTERREG PROGRAM FROM 2014 TO 2019



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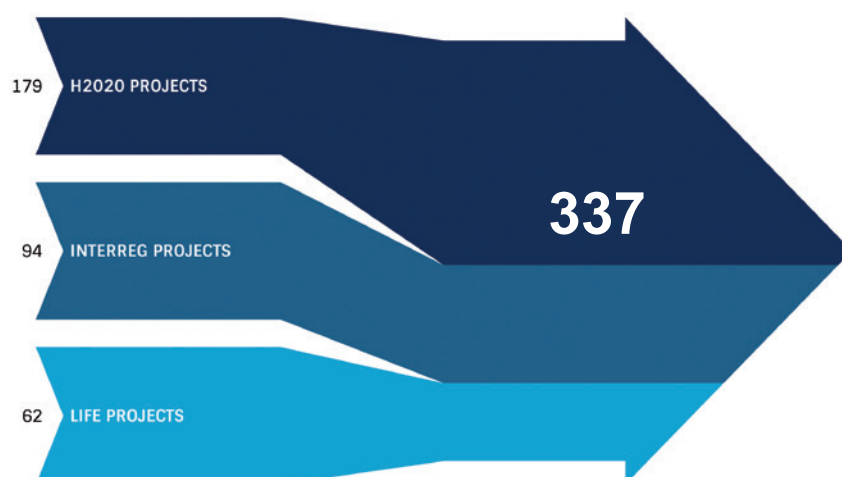
NUMBER OF DISTINCT COORDINATOR ORGANISATIONS PARTICIPATED IN LIFE WATER PROJECTS FROM THE SAME EU COUNTRY FROM 2014 TO 2019



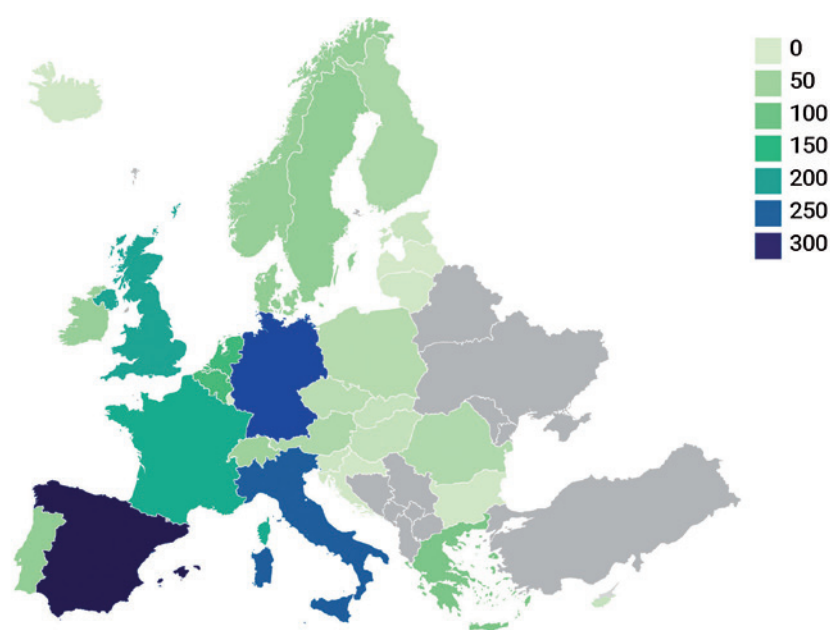
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1.2 Water Europe Members' participation in the EU-funded water related projects

WATER EUROPE MEMBERS' WATER RELATED PROJECTS BY FUNDING PROGRAMME

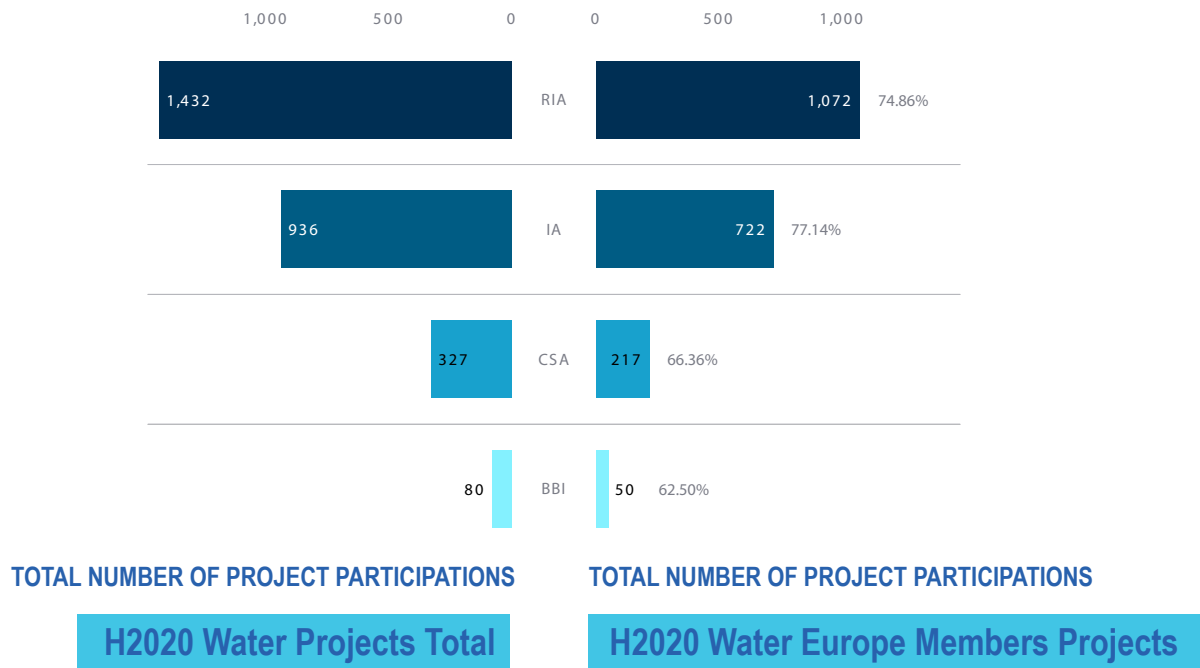


TOTAL NUMBER OF H2020 WATER EUROPE MEMBERS' PROJECT PARTICIPATIONS PER EU/EFTA COUNTRY (BY OFFICAL PROJECT START DATE)

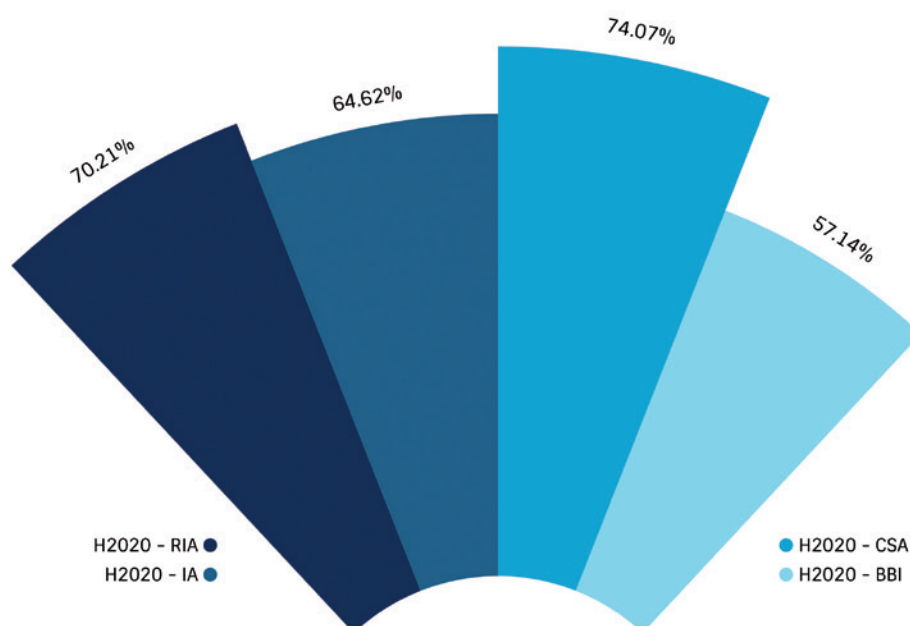


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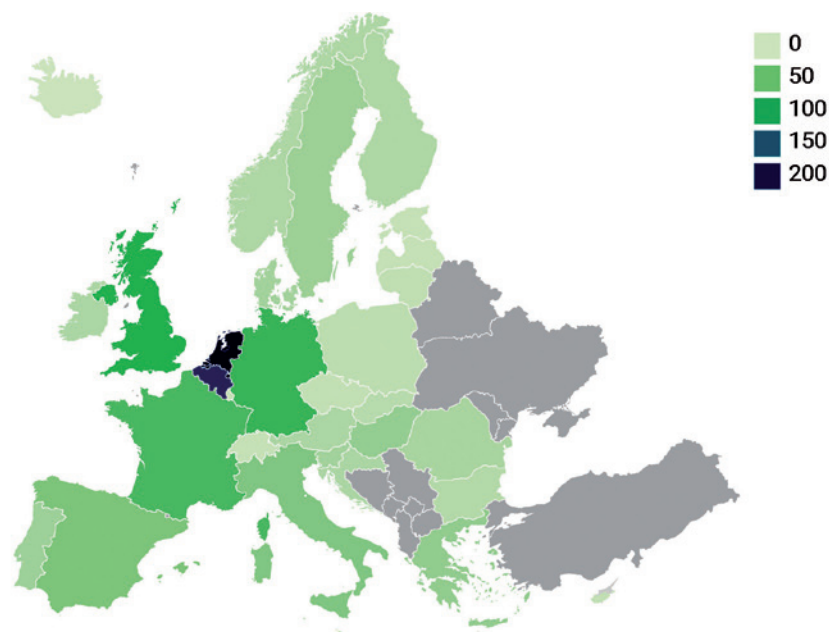
COMPARATIVE OVERVIEW: TOTAL NUMBER OF PROJECT PARTICIPATIONS IN ALL WATER PROJECTS AND WATER EUROPE MEMBERS' PROJECTS, FUNDED UNDER H20 20 RIA, IA, CSA, AND BBI



SHARE OF WE MEMBERS' PROJECTS OF TOTAL WATER-RELATED PROJECTS FUNDED UNDER H20 20 RIA, IA, CSA, AND BBI

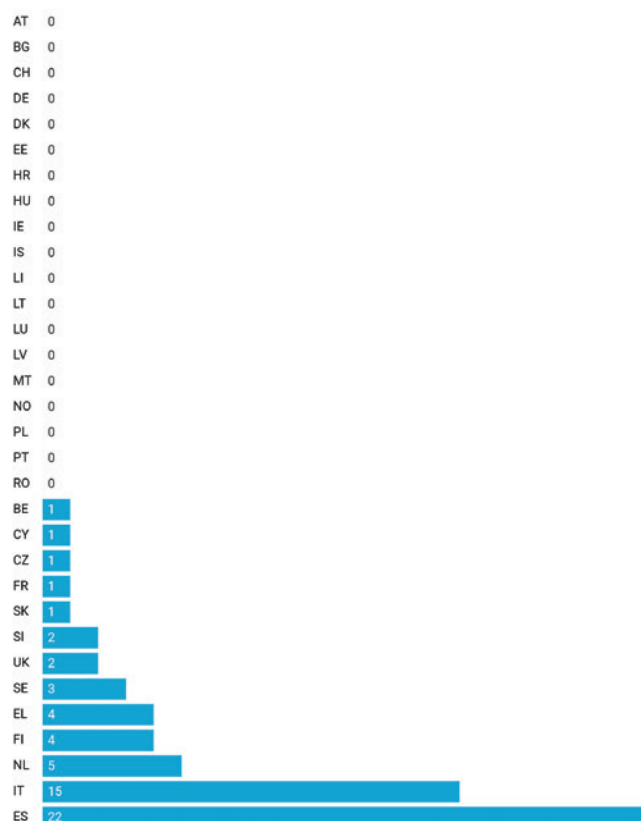


WATER EUROPE MEMBERS' INTERREG PROJECT PARTICIPATIONS



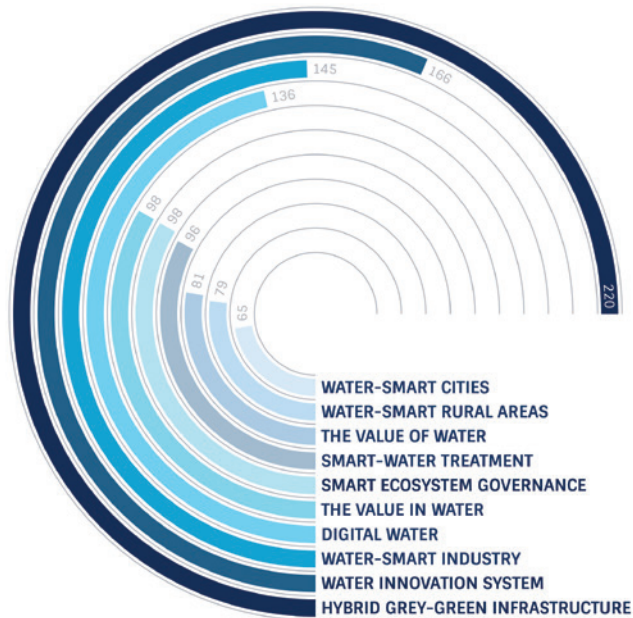
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NUMBER OF DISTINCT COORDINATOR ORGANISATIONS PARTICIPATED FROM THE SAME COUNTRY IN LIFE WATER EUROPE MEMBERS' PROJECTS

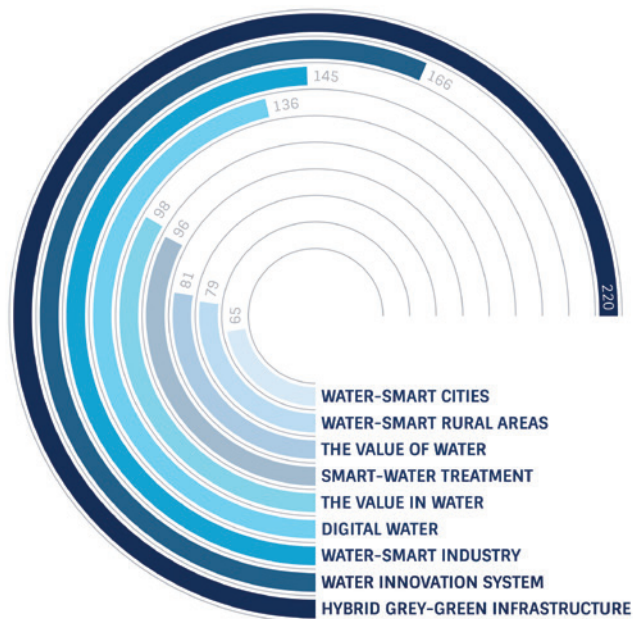


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WATER EUROPE PROJECTS ALIGNMENT WITH THE WATER EUROPE VISION CLUSTERS LEADERSHIP TEAMS, AND SIRA



Visualisation according to
WE SIRA



Visualisation according
to the WE Clusters and
Vision Leadership Teams

Section 2

Interviews with the Coordinators of the Water Europe projects

aqua3S



COORDINATOR

Anastasios Karakostas

ORGANIZATION

Centre For Research
And Technology
Hellas - CERTH

Starting Date

1-sept-19

Duration

36 months

Total Costs

€ 6,853,608.75

EU Contribution

€ 5,997,067.88

Project reference

H2020-SU-SEC-
2018-2019-2020: 832876

Number of partners

23

Website

www.aqua3s.eu

What is the project about?

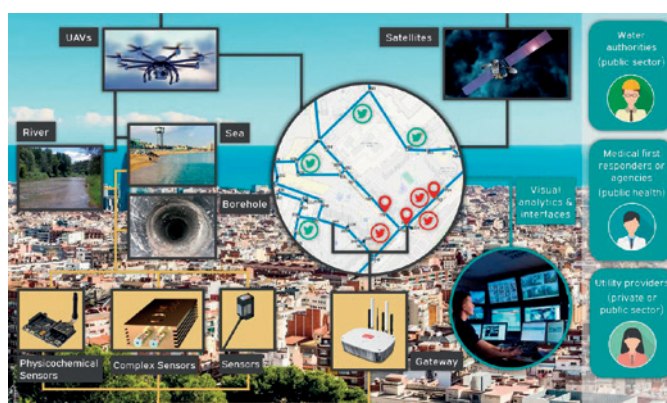
aqua3S project will create strategies and methods enabling water facilities to easily integrate solutions regarding water safety. aqua3S combines novel technologies in water safety and security, aiming to standardise existing sensor technologies complemented by state-of-the-art detection mechanisms. On the one hand, sensor networks are deployed in water supply networks and sources, supported by complex sensors for enhanced detection; on the other hand, sensor measurements are supported by videos from Unmanned Aerial Vehicles (UAVs), satellite images and social media observations from the citizens that report low-quality water in their area (e.g. by colorisation), creating also social awareness and an interactive knowledge transfer. The proposed technical solution is designed to offer a very effective detection system, taking into account the cost of the aqua3S platform and targets at very high return over investment ratio, by exploiting and combining open data sources to complement sensor measurements.

What are the specific challenges the project addresses?

Exposure of citizens to potential disasters has led to vulnerable societies that require risk reduction measures. Drinking water is one main source of risk when its safety and security is not ensured. Although several technologies for the analysis of drinking water have been proposed, there is a gap on how we could integrate them in the existing water safety networks. To fill this gap, aqua3S combines novel technologies in water safety and security, aiming to standardise existing sensor technologies complemented by state-of-the-art detection mechanisms.

What are the key research and innovation goals of the project and their expected impact?

aqua3S foresees the improvement of innovation capacity and integration of new knowledge in five main areas of innovation. **Innovation in substance detection in water:** aqua3S will customise and integrate a set of available sensors deployed at key points under control of the water utilities in order to cover the maximum possible number of these substances and send the relevant warning signal. **Innovation in data acquisition from UAVs and earth observation:** aqua3S streams of EO data will be continuously gathered and analysed to forecast natural hazards which potentially affect the water quality or monitor their changes in a predefined area of interest. **Innovation in social media monitoring:** aqua3S will gather social media data in social media public and open accounts to focus on the event and the creation of social awareness. **Innovation in algorithms for threat detection and localisation in the existing water distribution networks:** The algorithm will be implemented as a software tool for anomaly detection at water distribution networks and will be integrated into the early warning system. **Innovation in crisis management modelling for enhance preparedness:** Through aqua3S crisis management, modelling for each case study of the project will be implemented.



RIMA



COORDINATOR

Christophe Leroux

ORGANIZATION

Commissariat A L
Energie Atomique Et
Aux Energies Alter-
natives - CEA

Starting Date

1-jan-19

Duration

48 months

Total Costs

€ 16,048,605.00

EU Contribution

€ 16,048,605.00

Project reference

H2020-DT-2018-1: 824990

Number of partners

23

Website

www.rimanetwork.eu

What is the project about?

RIMA is a European project which received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 824990. RIMA is one of the instruments of the European Commission's strategy regarding Digitizing European Industry. Its objective is to build a network of Digital Innovation Hubs (DIHs) to facilitate uptake of robotics technologies for the inspection and maintenance of infrastructures. RIMA covers inspection and maintenance of oil and gas, energy distribution and production, nuclear, transport (roads, rail, waterways, and hubs) and water supply and sanitation infrastructures. DIH are organizations offering a set of services to industries to facilitate technology transfer, such as technical expertise in robotics, definition of path to market, coaching, training, and support to funding, connection to regulation bodies for instance. RIMA network holds thirteen DIHs located in regions engaged in research and innovation on inspection and maintenance of infrastructures.

What are the specific challenges the project addresses?

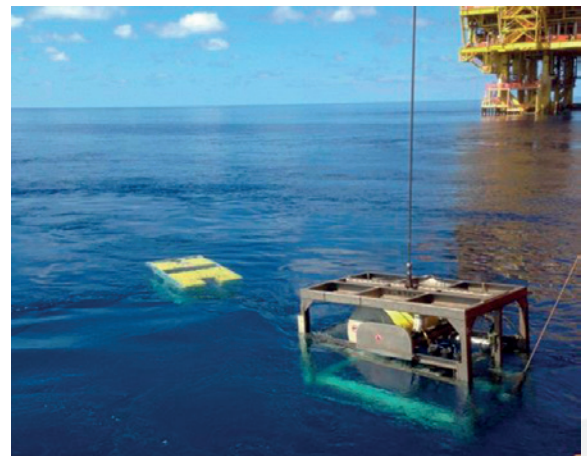
Our challenge is to reinforce this connection and to provide education and training on robotics I&M, while connecting the value chain - research, technology companies, service providers, end users and investors- to accelerate economic growth in the field. RIMA project holds a set of "facilitators" whose role is to help in making connection with stakeholders (integrators, techno and service providers, asset owners and asset operators). Among these facilitators, RIMA includes the European sectorial associations Water Europe, FORATOM (nuclear), EFNDT (Non Destructive Testing), FEHRL (transport) and SPRINT ROBOTICS (Oil and Gas).

What are the key research and innovation goals of the project and their expected impact?

SMEs are at the heart of RIMA's activities regarding deployment of robotics technologies. Half of RIMA's budget, 8M€, will be distributed by RIMA to European SMEs by means of two open calls. These open calls are aiming at stimulating deployment of robotics technologies held in the RIMA DIHs in the industry using challenges defined by asset owners or asset operators. RIMA will select applications that show the maximum socioeconomic impact for Europe (creation of employment, creation of new products, of new markets, of new companies, etc.). Applicants selected by independent experts will receive up to 300k€ to conduct demonstration or tech transfer experiments from six to fourteen months. A market place is being also set up in order to support the sustainability of the RIMA network beyond the terms of the project.



Robotics for Inspection
and Maintenance



NEXTGEN



COORDINATOR

Jos Frijns



COORDINATOR

Christos Makropoulos

ORGANIZATION

KWR Water B.V. - KWR

Starting Date

1-jul-18

Duration

48 months

Total Costs

€ 11,397,543,54

EU Contribution

€ 9,965,230.51

Project reference

H2020-CIRC

2017 Two Stage: 776541

Number of partners

30

Website

www.nextgenwater.eu

What is the project about?

NextGen is a 4-year H2020 project under the EU Water in the Context of the Circular Economy programme. The project mobilises a strong partnership of 30 water companies, industry, specialised SMEs, applied research institutes, technology platforms, city and regional authorities. KWR is the project coordinator. NextGen will demonstrate innovative technological, business and governance solutions for water in the circular economy in ten high-profile, large-scale, demonstration cases across Europe, and we will develop the necessary approaches, tools and partnerships, to transfer and upscale. By introducing innovative solutions for closing the cycles of the water system, NextGen contributes to the challenges of water scarcity, raw materials depletion and climate change

What are the specific challenges the project addresses?

NextGen addresses a wide range of challenges related to water-embedded resources:

- water: reuse at multiple scales supported by nature-based storage, optimal management strategies, advanced treatment technologies, engineered ecosystems and compact/mobile/scalable systems;
- energy: combined water-energy management, treatment plants as energy factories, water-enabled heat transfer, storage and recovery for allied industries and commercial sectors
- materials: nutrient mining and reuse, manufacturing new products from waste streams, regenerating and repurposing membranes to reduce water reuse costs, and producing activated carbon from sludge to minimise costs of micro-pollutant removal.

What are the key research and innovation goals of the project and their expected impact?

NextGen's innovative circular water solutions will be demonstrated at ten large-scale sites across Europe. Emphasis will be on the conditions for successful application and upscaling. At the demo sites, the circular technologies are demonstrated, and these solutions are assessed on their environmental and economic performance. Stakeholder engagement and citizens involvement in devising circular water solutions is organized in communities of practices and public engagement activities. Key findings on the regulatory and governance (pre)conditions will be used to develop an EU Roadmap to support wider uptake of circular solutions in the water sector. All this work gears towards the development of new circular economy business models and market opportunities.



Hydrousa



COORDINATOR

Simos Malamis

ORGANIZATION

**National Technical
University Of Athens
- NTUA**

Starting Date

1-jul-18

Duration

54 months

Total Costs

€ 12,015,448.75

EU Contribution

€ 9,958,706.88

Project reference

H2020-CIRC-2017
Two Stage: 776643

Number of partners

29

Website

www.hydrousa.org



What is the project about?

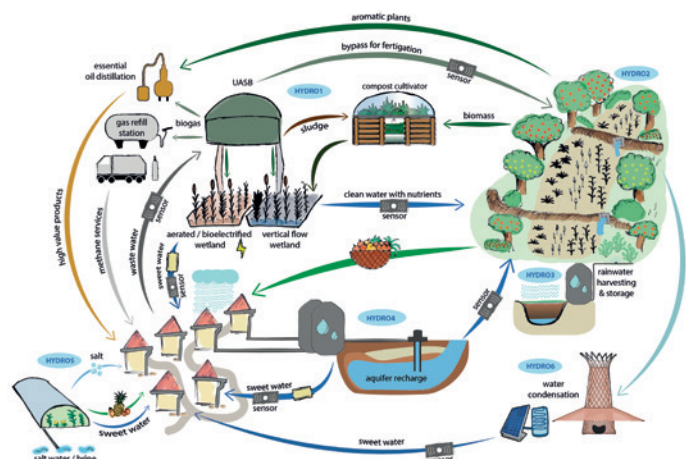
HYDROUSA is a Horizon2020 Innovation Action, circular economy project which aims to set up, demonstrate and optimise low-cost, innovative, nature-based solutions for the treatment and recovery of non-conventional water sources such as wastewater, rainwater, groundwater, seawater and atmospheric vapour water. HYDROUSA focuses on decentralized, water scarce Mediterranean areas facing significant challenges in terms of water resources management. HYDROUSA solutions produce water suitable for multiple purposes such as domestic and agricultural use and drinking water. The HYDROUSA solutions lead to an increase of the agricultural production, therefore, boosting the economic activities of water-scarce Mediterranean areas.

What are the specific challenges the project addresses?

The Mediterranean region has been identified as one of the most vulnerable regions to climatic and anthropogenic changes in the world. Water resources in the Mediterranean are limited and unevenly distributed leading to serious water scarcity problems, while the high touristic activities during the summer months increase this stress. Agriculture is the prime water consumer, since more than 70% of water in the Mediterranean is used for agricultural activities. The existing wastewater treatment plants are often too overloaded to cope with the high seasonal loads, while some regions are not serviced at all. In several Mediterranean areas wastewater is discharged without (sufficient) treatment into the sea or septic tanks/pits are used. The desalination processes implemented to produce drinking water from seawater significantly increase the energy demand. Considering the water-energy-food nexus, activities within the concept of circular economy are urgently required within the Mediterranean. HYDROUSA aims to tackle these problems by delivering high quality water at low cost for multiple purposes at water scarce decentralized areas.

What are the key research and innovation goals of the project and their expected impact?

HYDROUSA does not only develop innovative water services, but revolutionizes the water value chains in Mediterranean areas from water abstraction and use up to sewage treatment and reuse. It changes the human water cycle at a local level by valorizing non-conventional water resources, which are currently not being exploited. The notion of onsite water reuse is dominant, minimizing the requirements for infrastructure to convey water and sewage, one of the main limitations of water reuse. HYDROUSA integrates engineered and nature based solutions at a decentralized level to recover resources at a local level. Decentralized treatment and use of resources also abolish the complex supply chain procedures and key players, maximizing the benefits and profit margins for producers and final users. Since no intermediaries are involved, the benefits are maintained within the local communities.



ZEROBRINE



COORDINATOR

Roelof Moll

ORGANIZATION

Technische
Universiteit
Delft - TU Delft

Starting Date

1-jun-17

Duration

48 months

Total Costs

€ 11,081,972.78

EU Contribution

€ 9,992,209.11

Project reference

H2020-CIRC-2016
Two Stage: 730390

Number of partners

22

Website

www.zerobrine.eu



What is the project about?

ZERO BRINE aims to facilitate the implementation of a circular economy package for brines generated in the process industry, by developing concepts, technological solutions and business models to recover and reuse valuable minerals from brines while minimizing environmental impacts. The project integrates several emerging and innovative technologies to recover end-products of high quality and sufficient purity with a good market value. Large-scale demonstration sites are set-up in the Netherlands (industry water supply), Poland (coal mine industry), Spain (silica mining) and Turkey (textile industry). Brine Excellence Centers (BECs) and an Online Brine Platform (OBP) are being established to promote mineral and water recovery. The project is being implemented by a consortium of 22 European partners (SMEs, industries, universities, consultancies and research institutes) and is coordinated by Delft University of Technology.

What are the specific challenges the project addresses?

The major challenge of the project is to identify effective, innovative and workable solutions for various different industries that are provided by a large number of suppliers throughout Europe. This needs specific care and time for implementation and testing, while the industrial sector has a broad interest and large expectations and cannot wait for the results. In addition, specific constraints, like impeding effects of organics in brines, should be tackled. Finally, the introduction and implementation of the new circular economy business models, based on economically sound and industrially relevant solutions, is a key challenge ahead.

What are the key research and innovation goals of the project and their expected impact?

Our key innovation goal is the demonstration of the value of the ZERO BRINE circular economy concept, i.e. the successful integration of innovative technologies in a business environment. Specific technological research goals comprise the potential reduction in waste volume, the purity of the minerals to be recovered, sustainability and reliability of the process chain excluding scaling risks, and the effectiveness of the use of waste heat. Further research focusses on the development and validation of innovative and circular economy business models.

Expected impacts of the project comprise resource optimization for water and minerals, including strategic reduction of e.g. magnesium imports from China, reduction of residual waste generation including waste heat, provision of economic, social and environmental sustainability of the proposed approaches, fostering new business opportunities within the circular economy concept supporting the transition to a circular economy and improving competitiveness of EU enterprises in the global market.



STOP-IT



COORDINATOR

Rita Ugarelli

ORGANIZATION SINTEF AS

Starting Date
1-jun-17

Duration
48 months

Total Costs
€ 9,616,525.18

EU Contribution
€ 8,255,319.50

Project reference
CIP-2016-2017-1: 740610

Number or partners
25

Website
www.stop-it-project.eu

What is the project about?

STOP-IT (Strategic, Tactical, Operational Protection of water Infrastructure against cyber-physical Threats) project is all about developing an integrated approach to manage risks to water critical infrastructure (both the physical and cyber asset of it), in addition to training solutions to enhance the cyber skills and capabilities of the water sector to meet future needs. This mission can be neither addressed nor solved in isolation. With a strong team of 23 partners from across Europe and Israel, the project is co-developing an all-hazards risk management framework to protect water critical infrastructures against physical and cyber threats.

What are the specific challenges the project addresses?

Water critical infrastructures are essential for life. Technologies allow us to operate the systems and these days more digital technologies are used, which means new opportunities, but also new risks. Cybersecurity is a top priority in the water sector because cyberattacks on water utilities can have impacts on public health, but also on other critical services that depend on the continuous delivery of water. Managing cybersecurity is a complex task, which requires a multidisciplinary risk-based approach.

What are the key research and innovation goals of the project and their expected impact?

The main technological outcome of STOP-IT is an integrated, scalable, adaptable and flexible platform (at least TRL 7), which integrates nine modular components including solutions to:

- plan for preparedness (both prevention and mitigation) by stress testing the cyber physical systems of the network under scenarios of attack;
- mdetect cyber (i.e. jamming attacks) and physical (i.e. intruders, sabotage) threats and protect the system in real time;
- mmonitor and protect the data integrity of the IT and SCADA systems;
- mcontrol the access to restricted environment and for defined purposes;
- mcollect and share data feeds from incidents and provide preventive actions for the existing system and instantly visualize the alerts and suggested countermeasures;
- mcommunicate and share information with the public in areas affected by critical events;
- develop capabilities by using the solutions as a basis for training material and activities.

All the STOP-IT technologies are ready to be tested and validated by the frontrunner water utilities. STOP-IT also includes follower utilities that will undertake training and knowledge transfer exercises with a focus on the interactive learning, transferability and scalability of the STOP-IT solutions.

Visualization of WP5 activities
(links between activities and with other WPs)



STOP-IT

IC4WATER



COORDINATOR

Dominique Darmendrail

ORGANIZATION

Agence Nationale De
La Recherche - ANR

Starting Date

1-jan-17

Duration

60 months

Total Costs

€ 2,289,000.00

EU Contribution

€ 2,289,000.00

Project reference

H2020-SC5-2016-
OneStageB: 730264

Number of partners

20

Website

www.waterjpi.eu/joint-calls/joint-call-2017-ic4water



What is the project about?

Water challenges are recognised by the World Economic Forum as a top risk in terms of impact to the economy and society in the upcoming years. Water crises, associated with the failure of climate change adaptation, are also perceived as more likely to occur and have an impact than the average risk. Global water requirements are projected to increase by 40% by 2030. In this context, the outreach and opening of the Water JPI to international partners is increasingly raising interest among the latter. In Support of the Water JPI development, IC4Water is a Coordination and Support Action funded by the European Commission for the development of international cooperation in Research and Innovation in the Water area. It aims to elaborate new principles of transnational RDI cooperation and to develop a common strategy co-designed with the Water JPI members, European initiatives (such as the other JPIs, or Water Europe) and International partners.

What are the specific challenges the project addresses?

Tackling these global challenges requires joining resources (human, financial) at international level in order to create a critical mass able to provide solutions to the Society. This cooperation faces numerous challenges: complexity of cooperation models, lack of national programmes, disparities in time scales, or variety of interest groups and agendas. Why should it do so? What kind of countries are of interest? Still though, there are a number of important benefits, motivations and enabling factors, including greater impact of R&D results and of scientific discovery and advances in technology; scale, scope and complexity of research topics and international issues; or capacity-building.

What are the key research and innovation goals of the project and their expected impact?

IC4WATER aims to increase the scale and ambition of water RDI activities beyond the current level, raising the overall coherence and efficiency of the use of European resources and valorising European know-how on water solutions at a global level in the context of the UN SDGs agenda. This is done via a set of joint activities, iterative coordination with the existing Water JPI SRIA and developing cooperation models with the most relevant partners (funders, economic sector, researchers). It also aspires to develop long-term RDI cooperation with European and international institutions for making the Water JPI, in cooperation with the European Commission, a privileged and attractive partner for global RDI cooperation. IC4WATER will have a strengthened role for underpinning knowledge and evidence for supporting the implementation of related international & EU policies, and the global water-related negotiations and fora. This will be achieved through co-creation and co-development of appropriate tools and concrete actions for reaching the UN SDGs objectives by 2030, which require innovative solutions easily transposable in all countries.

2030 UN Sustainable Development Goals



Water is central to many of the UN SDGs

REWATCH



COORDINATOR

Montse Calderer Perich

ORGANIZATION

**Fundacio Eurecat -
Eurecat**

Starting Date

1-sept-16

Duration

40 months

Total Costs

€ 2,645,765.00

EU Contribution

€ 1,586,556.00

Project reference

LIFE15 ENV/ES/000480

Number of partners

5

Website

www.rewatch.eu



What is the project about?

REWATCH is a LIFE project financed by the European Union, coordinated by the Eurecat technology centre and joined by the Spanish companies DuPont Water Solutions and Veolia Water Systems Ibérica, the Dutch Research Centre KWR Water and the Water Europe from Belgium. REWATCH aims to validate an innovative system that combines different technologies to treat and reuse wastewater from the petrochemical industry to obtain high-quality reclaimed water likely to be reused at the petrochemical industry itself. The REWATCH prototype will be tested at the DOW Chemical Ibérica ethylene cracker facilities in Tarragona (Spain), a region facing water supply shortages in certain periods of the year. The petrochemical industry has a high water consumption and generates considerable volumes of wastewater. At European level, this sector alone is responsible for 1,750 million m³ of wastewater a year. Experts believe that the water demand to produce ethylene could be reduced by 3.5 million m³ a year if this treatment and reuse scheme is implemented industrywide, increasing the availability of water resources.

What are the specific challenges the project addresses?

The main challenges of the REWATCH project are to validate an innovative treatment system and generate a predictive model to be used in other petrochemical plants. Besides this, the project aims to promote social awareness about the impacts that the generation of wastewater and freshwater overexploitation have on the environment. REWATCH will engage the participation of social stakeholders to encourage other petrochemical plants to use this innovative technology.

What are the key research and innovation goals of the project and their expected impact?

The REWATCH innovative system includes a prototype with five different technologies to constitute a completely new treatment scheme: Actiflo®-based physicochemical pre-treatment (ballasted settling), moving bed biofilm reactor (MBBR), DuPont™ Ultrafiltration (UF), DuPont™ Reverse Osmosis (RO) and DuPont™ Ion Exchange (IER). The process is designed in such a way that the treated water may exit after any treatment step depending on the desired water quality. Unlike other reusing technologies, with this project, industrial wastewater could be treated in the same place it is generated and where it can potentially be used again. REWATCH project will also develop a decision support tool to predict the environmental and economic benefits of the new technology, and encourage other petrochemical plants to implement the innovative water reuse scheme in their facilities.



Sim4Nexus



COORDINATOR

Floor Brouwer

ORGANIZATION

Stichting
Wageningen
Research - WR

Starting Date

1-jun-16

Duration

48 months

Total Costs

€ 7,895,657.50

EU Contribution

€ 7,895,657.50

Project reference

H2020-WATER-2015-two-
stage: 689150

Number or partners

27

Website

www.sim4nexus.eu

What is the project about?

SIM4NEXUS is the acronym of the EU-funded project 'Sustainable Integrated Management for the nexus of water-land-food-energy-climate for a resource-efficient Europe'. SIM4NEXUS addresses all these resources and their interlinkages, and also accounts for the possible impact on these elements in response to climate and relevant policy changes. Twelve case studies are implemented to test them at different scales (i.e. regional, national, transboundary, European and global). Barriers to a resource efficient and low-carbon Europe are addressed, including policy inconsistencies and incoherence and knowledge gaps related to the complex interactions.

Gaming has been established as means for understanding policies, leading to acceptance, mitigating conflicts and seeking compromise. However, to our best knowledge, a Serious Game has never been developed for the nexus based on such an extensive list of scientifically sound models and methodologies. Serious Games are developed in SIM4NEXUS as an enhanced visualisation tool, assisting users in better understanding and visualising policies at different scales, towards a better scientific understanding of the Nexus of water-land-food-energy-climate.

What are the specific challenges the project addresses?

Water, energy, food, land and climate are tightly connected, and actions on one sector impact other sectors, creating feedbacks and unanticipated consequences. There is a need to train practitioners and students to address societal challenges (e.g. transition to a low-carbon economy and resource efficiency) with complex features (e.g. interdependence between water-land-food-energy-climate). Serious Games do facilitate dialogue and stimulate learning regarding such challenging topics. Playing Serious Games is an emerging area to connect ideas from different domains (e.g. water, energy, food, land and climate). Alternative solutions are debated and compared with a perspective to co-create shared solutions. The main purpose of these serious games should be to enable stakeholders to understand and learn about the medium and long- term implications of nexus-related policies.

What are the key research and innovation goals of the project and their expected impact?

The scientific understanding of the water-food-land-energy-climate nexus is improved, and applicable at a range of scales (regional, national, transboundary, European and global).

Serious Games are proposed to explore a long-term (3-5 decades) integrated approach to business and policy planning and a training tool for use with local educators, considering resilience, environmental protection and low-carbon development. They combine a fun activity with being a learning component. It is used for purposes other than mere entertainment, for education, decision making and public policy making.



AfriAlliance



COORDINATOR

Uta Wehn

ORGANIZATION

**Stichting IHE Delft
Institute For Water
Education - IHE Delft**

Starting Date

1-march-16

Duration

60 months

Total Costs

€ 3,238,735.00

EU Contribution

€ 3,238,735.00

Project reference

H2020-WATER-2015-one-
stage: 689162

Number of partners

16

Website

www.afrialliance.org



What is the project about?

Africa is one of the regions most in need of innovative solutions for tackling water and climate change-related challenges, yet many parts of Africa are also suffering from the lack of water-related skills and capacity as well as wide-spread institutional fragmentation. The AfriAlliance project aims to better prepare Africa for future climate change challenges by having African and European stakeholders work together in the areas of water innovation, research, policy, and capacity development.

What are the specific challenges the project addresses?

The water sector is facing enormous challenges due to climate change, rapid population growth, rising demand for water, increasing pollution of sources, which altogether lead to ever more insecure water resources. Specifically, in Africa, the lack of appropriate water-related skills and capacity, the wide-spread institutional fragmentation within Africa as well as between Africa and the EU is a major obstacle to meeting the Sustainable Development Goals and addressing water crises, many with severe Climate Change implications. In addition to this, the lack of effective synergies between policy, research and entrepreneurs in Africa means that current mechanisms to effectively transfer relevant EU knowledge and technologies to African economies or vice versa are not enough to accomplish market uptake and provide solutions for pressing local water problems in Africa. This is where AfriAlliance steps in to address these challenges by increasing the preparedness to address the vulnerability of water and climate change-related challenges.

What are the key research and innovation goals of the project and their expected impact?

Among the key goals of the project is to promote and implement a strengthened coordination within Africa and between Africa and the EU, increasing this way the interactions among well-connected and comprehensive group of stakeholders capable to better address current and emerging water and Climate Change related Challenges. Thus, AfriAlliance is playing a vital role in minimising the existing fragmentation by connecting the broader water sector community in Africa with the EU and other relevant international actors. Through its activities, AfriAlliance enhances knowledge sharing and technology transfer in online and offline environments and events for African and EU stakeholders. The project has been also producing dynamic catalogues of demand-driven R&I opportunities to address short-term challenges and demand-driven R&I agendas identifying long-term knowledge needs, the same moment that it is expected to deliver a variety of monitoring and forecasting tools and processes for water and climate.



EnergyWater



COORDINATOR

David González

ORGANIZATION

**Instituto Tecnológico
De Castilla Y León
- ITCL**

Starting Date

1-feb-16

Duration

36 months

Total Costs

€ 1,971,187.50

EU Contribution

€ 1,971,187.50

Project reference

H2020-EE-2015-3-Market
Uptake: 696112

Number or partners

11

Website

www.energywater-project.eu

What was the project about?

The 3-years' project, EnergyWater started its activities in 2016, led by ITCL. The main objective was to provide support to SMEs by enabling energy efficient water processes, through the development of the Energy Management Self-Assessment (EMSA)-web tool and the creation of the Energy Angels Network. The EMSA web-tool is a free and anonymous ICT tool created to compare and benchmark the energy performance in industrial water process in European manufacturing industries. The implementation of the EMSA is supported by the Energy Angels network, a group of energy experts that, through the EMSA web tool, assisted companies to evaluate their water processes regarding the water-energy nexus, building energy efficiency indicators that could be compared with benchmarking strategies as well as be used to identify cost-saving measures. At the end of the project, a benchmarking database was built with 311 companies that anonymously compared their EE indicators, enabling them to know their energy efficiency status compared against other companies at EU level.

What were the specific challenges the project addressed?

The EnergyWater proposal addressed the topic "EE 16-2014/2015: Organizational innovation to increase energy efficiency in industry" as well as the following specific areas "industrial systems efficiency benchmarking" and "energy management in SMEs and industry". In this sense, two main aspects have to be taken into consideration in order to remove market barriers that block EE improvement on SMEs: having access to reliable information about saving potentials (through the EMSA web tool) and after that, having access to skilled providers (through the Energy Angels Network) who share not only a strong experience in this area but also a services portfolio that gives real solutions to real industrial problems.

What were the key research and innovation achievements of the project and their related impact?

After the implementation of the EMSA web-tool and the Energy Angels network, we have concluded that at an SME level, the market is divided between few companies with a high level of energy culture and a majority without a figure entirely involved in energy efficiency management. It is in the second category where the effort of this project has been carried out. A great saving potential has been detected in these companies, and solutions were proposed to overcome the energy market barriers, thanks to the EMSA tool and the Energy Angels network. Part of this potential could be exploited, however, a great part is blocked by other barriers that are not in the market, but within the companies themselves, such as lack of information and resources to assess their efficiency. Based on this, one of the conclusions of the project, in addition to removing market barriers, is to carry out programmes focused on building capacities to transform people into energy managers, enabling them to increase their energy culture and access the energy market with guarantees.



Saving-E



COORDINATOR

Julián Carrera

ORGANIZATION

Universitat Autònoma
De Barcelona

Starting Date

1-oct-15

Duration

42 months

Total Costs

€ 1,169,068.00

EU Contribution

€ 672,645.00

Project reference

LIFE15 ENV/ES/000633

Number or partners

4

Website

www.saving-e.eu



What was the project about?

SAVING-E was a pilot project dealing with the transformation of the current wastewater treatment plants from being energy-consumers to energy-sufficient or even energy-producer facilities, without affecting their performance or even improving it.

What were the specific challenges the project addressed?

For many years now, the EU has been taking steps towards the reduction of nitrogen and phosphorous loads in the environment but only 6 Member States have an overall UWWT compliance higher than 90% for tertiary treatment, while the rest of Member States has less than 60% of implementation. So, there has been an urgent need for implementing cheap and efficient tertiary treatment. Currently, urban wastewater treatment plants (WWTPs) are net-energy-consumers systems and this consumption can be quantified in 8-16 kWh/person/year depending on the type of treatment, being the classical nitrification/denitrification the most consuming process. In EU, this means an energy consumption of 4000-8000 GWh/year for treating wastewater, which represents an emission of 3-6 Mtons CO₂/year. Both energy costs and greenhouse emissions are important and there is an urgent need to develop new technologies able to reduce them. Responding to this burning need, the SAVING-E project dealt with the radical re-engineering of current wastewater treatment processes in order to improve energy trades and flow of materials.

What were the key research and innovation achievements of the project and their related impact?

The main result of the SAVING-E project is that its innovative technology has significant positive impacts such as energy savings and reduction of operational costs. In addition to this, the implementation of the project's activities has resulted in bringing forward important socio-economic benefits in Spain but also in other parts of Europe. SAVING-E has succeeded in boosting employment in the water and industrial sectors through the generation of technical and specialized job profiles (engineers, technicians, operators) that are needed in granular sludge, N removal via nitrite and self-sufficient energy WWTP. The wide range of training programmes developed throughout this project has also left behind a stock of training courses, responding to the training needs of professionals of the wastewater market in advanced treatment solutions. Moreover, the children and young educational programmes offered through the project have contributed significantly to increasing the social awareness about wastewater treatment. Equally important have also been the innovation activities of the project (Open Innovation, Hackathon: challenges in the water sector, best thesis award) that set a great example of innovative approaches in the sector and motivate water utilities and their consultants to take into account innovation in public service contracts



WIDEST



COORDINATOR

Gabriel Anzaldi Varas

ORGANIZATION

Bdigital

Starting Date

1-feb-15

Duration

24 months

Total Costs

€ 1,022,030.00

EU Contribution

€ 1,022,030.00

Project reference

H2020-WATER-2014-one-stage: 642423

Number of partners

7

Website

www.widest.eu



What was the project about?

WIDEST, Water Innovation through Dissemination Exploitation of Smart Technologies, was a Coordination and Support Action funded by the EU research and innovation programme Horizon 2020. The role of ICT in contributing to the "Smart Technologies" is widely recognised by the scientific community and water business professionals. WIDEST contributed to developing a thriving and interconnected Information and Communication Technology network for the whole Water Community. WIDEST's main objective was to promote the dissemination and exploitation of the results of European Union funded activities in this area, along with all the relevant advances achieved in the sector.

What were the specific challenges the project addressed?

The project contributed strategically to overcoming several barriers for the implementation of smart water technologies such as: the fragmentation of the sector, slow adoption of new technologies, integration of domain and digital knowledge, and no holistic vision of water supply considering its whole life cycle. WIDEST has addressed its goals through a project-to-project approach and the coordination among relevant stakeholders by means of specific objectives that included: common standards approaches; strategic documents; a portfolio of effective ICT for water management technologies including the methodology to build it; and update and execute it literature reviews of relevant academic and commercial references. The project was backed by a strong consortium composed by institutions with proven track record and expertise across different facets of ICT for water research, including established connections with key stakeholders.

What were the key research and innovation achievements of the project and their related impact?

WIDEST has created the ICT for Water observatory to become a "benchmark" at European level in the application of intelligent tools in water management. The initiative fostered the transfer of knowledge among the relevant players in the water sector and has promoted events, conferences and workshops that have impacted in more than 400 companies directly. Under the umbrella of WIDEST, four roadmaps have been published, three thematic themed roadmaps, such as "Semantic Interoperability and Ontologies", "Smart City Connection" and "Smart Water Grids" and a strategy on intelligent water management available at beginnings. These roadmaps, together with other strategic materials, have contributed as reference, for the strategies developed by the ICT4Water cluster, which concluded in the Action Plan for a Digital Single Market of Water Services. The initiative, ended in February 2017, and its objectives continue being actively developed through the ICT4Water Cluster.



WATERPIPP



COORDINATOR

Natacha Amorsi



COORDINATOR

Gilles Neveu

ORGANIZATION

Office International
De L'eau - OIEAU

Starting Date

1-jan-14

Duration

36 months

Total Costs

€ 998,843.00

EU Contribution

€ 998,843.00

Project reference

FP7-ENV-2013-WATER-IN-
NO-DEMO: 619069

Number or partners

12

Website

www.waterpipp.eu

What was the project about?

Public procurement represents around 19% of the EU's GDP, an important lead market for innovators in particular in the water and climate change sectors. However, procurement of innovative water-related services and technologies is often underexploited in the public sector. The core of the WaterPiPP project was to help change this by gathering together experts and practitioners in the area of water-related public procurement to identify existing barriers and bottlenecks and issue recommendations for policy-makers and public procurers; and by acting as an information hub providing the latest and most relevant information about the procurement of innovative products and services in the water sector. The community of practitioners openly discussed the Innovation-oriented Public Procurement procedures (IOPP) in the water sector, including Pre-Commercial Procurement (PCP) and Procurement of Innovation (PPI).

What were the specific challenges the project addressed?

Despite excellent knowledge and technologies, the European innovation potential in the water sector is blocked by a number of bottlenecks. Among the challenges that WaterPiPP project addressed is first and foremost, fragmentation. The water sector is very fragmented, with many 'point solutions' and a very large number of small management bodies. That implies that public sector often lacks the necessary expertise to assess and value correctly new approaches and technologies, thus preventing existing resources to flow to these new domains. Hesitation of the public sector to act as a launching customer was another challenge of the project, as well as the risk-averse approach that prevails in the sector. The specific regulatory structure of public procurement markets, where tenders and subcontracts rely on process guarantees, tends to favour technologies which already have a tracked record of successful operations, thus making the sector cautious in new technologies.

What were the key research and innovation achievements of the project and their related impact?

The project tested new approaches to stimulate the uptake of innovation in the water sector. In March 2015, 15 recommendations were adapted, and all were validated by the WaterPiPP consortium partners as well as additional experts. Based on these practical and strategic recommendations, the EIP Water and the project consortium started their joint proposition in Fall 2015 and onwards. The accompanying measures of coaching and training made the stakeholders community knowledgeable about innovative procurement and enabled the public procurer to be more confident in undertaking PCP&PPI initiatives. A MOOC is available (FR, SP), as well as the project outputs here. It also contributed to identify, select, prioritize and prepare viable procurements, corresponding to real challenges and needs in the water sector, giving support and related training to the pilot procurers and mutualising on good practices available in other sectors. Lessons from WaterPiPP were used for defining the on-going project Smart.Met, a PCP for developing a new generation of smart meters.



ZELDA



COORDINATOR

Sandra Meca

ORGANIZATION

Fundacio Eurecat -
Eurecat

Starting Date

1-jul-13

Duration

48 months

Total Costs

€ 2,301,553.00

EU Contribution

€ 1,021,775.00

Project reference

LIFE12 ENV/ES/000901

Number of partners

4

Website

www.life-zelda.eu

ZELDA
Zero ● Liquid ● Discharge ● Desalination

What was the project about?

Seawater and brackish water desalination are currently considered one of the best options to face up the water scarcity problem. However, this technology generates high amounts of brines that must be managed. In coastal desalination plants, brines are discharged to the sea while in the inland plants, deep well injection and surface water or groundwater discharge are the most common options. These management strategies have a high environmental impact. Responding to the need of a brine management strategy that makes desalination a sustainable technology at environmental, economical and social level, ZELDA project proposed an innovative brine treatment system sustainable at all levels decreasing the environmental impact associated to desalination processes.

What were the specific challenges the project addressed?

The main objective of the project was to demonstrate the technical feasibility and economical sustainability of decreasing the overall environmental impact of desalination systems. To do so, the main challenges of the ZELDA project were to validate an innovative brine treatment system based on the use of electrodialysis metathesis (EDM) and valuable compound recovery processes with the final aim of reaching a zero liquid discharge (ZLD) process. Besides, the project aimed to promote social awareness about the environmental impact of current brine discharge strategies.

What were the key research and innovation achievements of the project and their related impact?

ZELDA project demonstrated the technical and economic viability of an innovative ZLD process based on EDM using novel monovalent membranes, physico-chemical treatments and advanced solar evaporation for recovering up to 80% of water and valuable chemical compounds ($Mg(OH)_2$, Na_2SO_4 , $NaCl$) from brines. The ZLD strategy allows to increase the overall water recovery in seawater and brackish water desalination plants and reduce the environmental impact of current brine discharge strategies. ZELDA project offers a clear benefit in Europe, and especially to those zones, as the Mediterranean region, with severe water stress, fighting against the impacts of climate change without being a threat.



Section 3

Overview of Water Europe members' water-related projects 2014-2019

3.1 H2020 funding programme

| PROJECT ACRONYM | START DATE | END DATE | PROJECT COST | EC CONTRIBUTION | PROJECT TITLE |
|-----------------|------------|------------|-----------------|-----------------|---|
| CUTLER | 01/01/2018 | 31/12/2020 | € 5.080.125,00 | € 5.080.125,00 | Coastal Urban Development Through The Lenses Of Resiliency |
| INNOQUA | 01/06/2016 | 31/05/2020 | € 8.073.725,29 | € 6.996.213,75 | Innovative Ecological On-Site Sanitation System For Water And Resource Savings |
| MADFORWATER | 01/06/2016 | 31/05/2020 | € 4.039.418,75 | € 2.910.868,75 | Development And Application Of Integrated Technological And Management Solutions For Wastewater Treatment And Efficient Reuse In Agriculture Tailored To The Needs Of Mediterranean African Countries |
| VicInAqua | 01/06/2016 | 31/05/2019 | € 2.997.710,00 | € 2.997.710,00 | Integrated Aquaculture Based On Sustainable Water Recirculating System For The Victoria Lake Basin (VicInAqua) |
| NanoFASE | 01/09/2015 | 31/08/2019 | € 11.296.701,25 | € 9.954.475,50 | Nanomaterial Fate And Speciation In The Environment |
| VALUEMAG | 01/04/2017 | 31/03/2020 | € 4.789.000,00 | € 4.789.000,00 | Valuable Products From Algae Using New Magnetic Cultivation And Extraction Techniques |
| INTEGROIL | 01/06/2016 | 31/05/2019 | € 5.794.442,50 | € 4.273.536,26 | Demonstration Of A Decision Support System For A Novel Integrated Solution Aimed At Water Reuse In The Oil & Gas Industry |
| LoTGlasSy | 01/06/2016 | 31/05/2021 | € 1.760.000,00 | € 1.760.000,00 | Low Temperature Glassy Systems |
| WATERSPOUTT | 01/06/2016 | 31/05/2020 | € 3.571.945,83 | € 3.084.351,25 | Water - Sustainable Point-Of-Use Treatment Technologies |
| AquaNES | 01/06/2016 | 31/05/2019 | € 10.720.718,13 | € 7.837.292,22 | Demonstrating Synergies In Combined Natural And Engineered Processes For Water Treatment Systems |
| Ko-Tsah-To | 01/09/2016 | 31/08/2018 | € 177.598,80 | € 177.598,80 | Temperatures, Ash And Soil Hydrology: Predicting Fire Impact From Plant Traits |
| WATERPROTECT | 01/06/2017 | 31/05/2020 | € 4.997.006,50 | € 4.997.006,50 | Innovative Tools Enabling Drinking Water Protection In Rural And Urban Environments |
| TEMPDEP | 01/05/2016 | 30/04/2021 | € 1.499.997,50 | € 1.499.997,50 | Ecological And Evolutionary Constraints On The Temperature Dependence Of The Carbon Cycle |
| STRONGRCRAFT | 01/02/2018 | 31/01/2023 | € 2.666.150,00 | € 1.957.658,75 | Safe, Technically Robust And Optical New Generation Fuel System To Be Integrated On New Rotorcraft |
| MEACTOS | 01/09/2017 | 31/08/2021 | € 4.002.645,00 | € 2.550.798,44 | Mitigating Environmentally Assisted Cracking Through Optimisation Of Surface Condition |
| FIBRESHIP | 01/06/2017 | 31/05/2020 | € 11.041.212,50 | € 8.866.322,75 | Engineering, Production And Life-Cycle Management For The Complete Construction Of Large-Length Fibre-Based Ships |

| PROJECT ACRONYM | START DATE | END DATE | PROJECT COST | EC CONTRIBUTION | PROJECT TITLE |
|------------------|------------|------------|-----------------|-----------------|---|
| TomRes | 01/06/2017 | 30/11/2020 | € 5.996.175,00 | € 5.996.175,00 | A Novel And Integrated Approach To Increase Multiple And Combined Stress Tolerance In Plants Using Tomato As A Model |
| LTPAM | 01/05/2017 | 30/04/2019 | € 172.800,00 | € 172.800,00 | Low Temperature Plasma For Applications In Medicine |
| Ground Truth 2.0 | 01/09/2016 | 31/12/2019 | € 5.755.298,45 | € 4.975.093,89 | Ground Truth 2.0 - Environmental Knowledge Discovery Of Human Sensed Data |
| AMBER | 01/06/2016 | 30/09/2020 | € 6.238.103,75 | € 6.020.172,75 | Adaptive Management Of Barriers In European Rivers |
| SIM4NEXUS | 01/06/2016 | 31/05/2020 | € 7.895.657,50 | € 7.895.657,50 | Sustainable Integrated Management For The Nexus Of Water-Land-Food-Energy-Climate For A Resource-Efficient Europe |
| CHESS-SETUP | 01/06/2016 | 31/05/2020 | € 3.718.454,57 | € 3.364.315,14 | Combined Heat System By Using Solar Energy And Heat Pumps |
| BRIGAD | 01/05/2016 | 30/04/2020 | € 8.817.445,10 | € 7.739.805,79 | Bridges The Gap For Innovations In Disaster Resilience |
| metaVir-Alp | 01/11/2016 | 31/10/2018 | € 180.277,20 | € 180.277,20 | Alpine Lakes Benthic Viral Community Structure And Diversity: A Metagenomic And Ecological Approach |
| EnergyWater | 01/02/2016 | 31/01/2019 | € 1.971.187,50 | € 1.971.187,50 | Improving Energy Efficiency In Industrial Water Processes Through Benchmarking And Benchmarking Tools In Europe Manufacturing Industry. |
| MATCHING | 01/03/2016 | 31/08/2019 | € 11.790.518,76 | € 9.706.413,77 | Materials Technologies For Performance Improvement Of Cooling Systems In Power Plants |
| SURE | 01/03/2016 | 31/08/2019 | € 6.143.415,00 | € 5.892.165,00 | Novel Productivity Enhancement Concept For A Sustainable Utilization Of A Geothermal Resource |
| OptiNanoPro | 01/10/2015 | 30/09/2018 | € 6.920.685,00 | € 5.516.910,00 | Processing And Control Of Novel Nanomaterials In Packaging, Automotive And Solar Panel Processing Lines |
| SESAME | 01/04/2015 | 31/03/2019 | € 6.643.280,00 | € 5.200.000,00 | Thermal Hydraulics Simulations And Experiments For The Safety Assessment Of Metal Cooled Reactors |
| BioSmartTra-inee | 01/10/2015 | 30/09/2019 | € 2.822.328,36 | € 2.822.328,36 | Training In Bio-Inspired Design Of Smart Adhesive Materials |
| IVMR | 01/06/2015 | 30/11/2019 | € 8.205.085,00 | € 4.831.454,00 | In-Vessel Melt Retention Severe Accident Management Strategy For Existing And Future Npps |
| VOXEL | 01/06/2015 | 31/05/2019 | € 3.996.875,00 | € 3.996.875,00 | Volumetric Medical X-Ray Imaging At Extremely Low Dose |
| SOTERIA | 01/09/2015 | 31/08/2019 | € 13.888.769,25 | € 4.971.297,00 | Safe Long Term Operation Of Light Water Reactors Based On Improved Understanding Of Radiation Effects In Nuclear Structural Materials |
| VIDA | 01/04/2018 | 31/03/2021 | € 5.031.141,25 | € 4.988.766,25 | Value-Added Innovation In Food Chains |

| PROJECT ACRONYM | START DATE | END DATE | PROJECT COST | EC CONTRIBUTION | PROJECT TITLE |
|-----------------|------------|------------|----------------|-----------------|---|
| SWS-HEATING | 01/06/2018 | 31/05/2022 | € 5.236.488,75 | € 4.994.926,25 | Development And Validation Of An Innovative Solar Compact Selective-Water-Sorbent-Based Heating System |
| PUMP-HEAT | 01/09/2017 | 31/08/2020 | € 5.904.426,25 | € 5.904.426,25 | Performance Untapped Modulation For Power And Heat Via Energy Accumulation Technologies |
| OPERA | 01/02/2016 | 31/07/2019 | € 5.741.263,75 | € 5.741.263,75 | Open Sea Operating Experience To Reduce Wave Energy Cost |
| WaterWatt | 01/04/2016 | 31/03/2019 | € 1.782.532,50 | € 1.782.532,50 | Improvement Of Energy Efficiency In Industrial Water Circuits Using Gamification For Online Self-Assessment, Benchmarking And Economic Decision Support |
| DCS4COP | 01/12/2017 | 30/11/2020 | € 2.266.538,75 | € 1.981.929,88 | Datacube Service For Copernicus |
| CLAIM | 01/11/2017 | 31/10/2021 | € 6.185.612,75 | € 5.654.786,01 | Cleaning Litter By Developing And Applying Innovative Methods In European Seas |
| LIFES 50plus | 01/06/2015 | 30/04/2019 | € 7.274.837,50 | € 7.274.837,50 | Qualification Of Innovative Floating Substructures For 10mw Wind Turbines And Water Depths Greater Than 50m. |
| BINGO | 01/07/2015 | 30/09/2019 | € 7.822.422,50 | € 7.822.422,50 | Bringing Innovation To Ongoing Water Management – A Better Future Under Climate Change |
| INCEFA - PLUS | 01/07/2015 | 30/06/2020 | € 6.140.668,75 | € 2.550.128,00 | Increasing Safety In Npps By Covering Gaps In Environmental Fatigue Assessment |
| EBBR | 01/05/2015 | 31/10/2015 | € 71.429,00 | € 50.000,00 | Commercialisation Of Expanded Bed Biofilm Reactor Technology For The Treatment Of Waste-, Used- Or Contaminated-Water And For Improved Protection Of The Aquatic Environment And Atmosphere |
| IMPREX | 01/10/2015 | 30/09/2019 | € 7.996.848,00 | € 7.996.848,00 | Improving Predictions And Management Of Hydrological Extremes |
| HPEM2GAS | 01/04/2016 | 30/09/2019 | € 2.654.250,00 | € 2.499.999,00 | High Performance Pem Electrolyzer For Cost-Effective Grid Balancing Applications |
| COREWIND | 01/09/2019 | 28/02/2023 | € 5.031.858,75 | € 5.031.858,75 | Cost Reduction And Increase Performance Of Floating Wind Technology |
| ECORISK2050 | 10/10/2018 | 09/10/2022 | € 3.596.088,24 | € 3.596.088,24 | Effects Of Global Change On The Emission, Fate, Effects And Risks Of Chemicals In Aquatic Ecosystems |
| MegaRoller | 01/05/2018 | 30/04/2021 | € 4.946.768,75 | € 4.946.768,75 | Developing The Pto Of The First Mw-Level Oscillating Wave Surge Converter |
| eSCALED | 01/04/2018 | 31/03/2022 | € 3.599.025,20 | € 3.599.025,20 | European School On Artificial Leaf : Electrodes Devices |
| MAGIC | 01/06/2016 | 31/05/2020 | € 7.457.761,25 | € 7.457.761,25 | Moving Towards Adaptive Governance In Complexity: Informing Nexus Security |
| WASTE2FUELS | 01/01/2016 | 31/12/2018 | € 5.989.743,75 | € 5.989.742,50 | Sustainable Production Of Next Generation Biofuels From Waste Streams |
| FERTINNOWA | 01/01/2016 | 31/12/2018 | € 2.999.273,40 | € 2.999.273,40 | Transfer Of Innovative Techniques For Sustainable Water Use In Fertigated Crops |
| SolHyPro | 01/06/2015 | 31/05/2017 | € 170.509,20 | € 170.509,20 | Water Splitting By Solar Energy: From Lab-Scale To Prototype Devices |

| PROJECT ACRONYM | START DATE | END DATE | PROJECT COST | EC CONTRIBUTION | PROJECT TITLE |
|-------------------|------------|------------|-----------------|-----------------|--|
| PHYSIO-POP | 01/09/2015 | 31/08/2017 | € 172.800,00 | € 172.800,00 | Physiological And Environmental Controls Of Water And Ozone Fluxes In A Short Rotation Poplar Plantation: From Leaf To Tree To Ecosystem Scale |
| NANOCARB | 15/04/2015 | 14/04/2017 | € 180.277,20 | € 180.277,20 | Self-Selection Of A Multivalent Nanosystem For Carbohydrate Recognition |
| ENERWATER | 01/03/2015 | 31/10/2018 | € 1.731.087,00 | € 1.731.087,00 | Standard Method And Online Tool For Assessing And Improving The Energy Efficiency Of Wastewater Treatment Plants |
| RE-InVEST | 01/03/2015 | 30/04/2019 | € 2.499.600,00 | € 2.499.600,00 | Rebuilding An Inclusive, Value-Based Europe Of Solidarity And Trust Through Social Investments |
| VEZ | 01/11/2014 | 31/08/2015 | € 71.429,00 | € 50.000,00 | Vez |
| DARWIN | 01/06/2015 | 30/09/2018 | € 4.998.896,25 | € 4.998.896,25 | Expecting The Unexpected And Know How To Respond |
| WIDEST | 01/02/2015 | 31/01/2017 | € 1.022.030,00 | € 1.022.030,00 | Water Innovation Through Dissemination Exploitation Of Smart Technologies |
| BlueSCities | 01/02/2015 | 31/01/2017 | € 995.918,75 | € 995.918,75 | Blueprints For Smart Cities: Developing The Methodology For A Coordinated Approach To The Integration Of The Water And Waste Sectors Within The Eip Smart Cities And Communities |
| C-CASCADES | 01/01/2015 | 31/12/2018 | € 3.112.980,61 | € 3.112.980,61 | Carbon Cascades From Land To Ocean In The Anthropocene |
| WaterWorks2014 | 01/02/2015 | 31/01/2020 | € 17.423.501,00 | € 5.749.755,33 | Water Works 2014-2019 In Support Of The Water Jpi |
| WATERINNEU | 01/03/2015 | 28/02/2017 | € 914.991,04 | € 914.991,00 | Applying European Market Leadership To River Basin Networks And Spreading Of Innovation On Water Ict Models, Tools And Data |
| ShaleXenvironmenT | 01/09/2015 | 31/08/2018 | € 3.399.201,75 | € 2.999.201,25 | Maximizing The Eu Shale Gas Potential By Minimizing Its Environmental Footprint |
| HYPERNETS | 01/02/2018 | 31/01/2022 | € 4.999.233,75 | € 4.999.233,75 | A New Hyperspectral Radiometer Integrated In Automated Networks Of Water And Land Bidirectional Reflectance Measurements For Satellite Validation |
| CarbFix2 | 01/08/2017 | 31/01/2021 | € 2.200.318,75 | € 2.200.318,00 | Upscaling And Optimizing Subsurface, In Situ Carbon Mineralization As An Economically Viable Industrial Option |
| FAirWAY | 01/06/2017 | 31/05/2021 | € 4.999.865,00 | € 4.999.865,00 | Farm Systems That Produce Good Water Quality For Drinking Water Supplies |
| SoIACE | 01/05/2017 | 30/04/2022 | € 7.192.148,75 | € 6.000.000,00 | Solutions For Improving Agroecosystem And Crop Efficiency For Water And Nutrient Use |
| STOP-IT | 01/06/2017 | 31/05/2021 | € 9.616.525,18 | € 8.255.319,50 | Strategic, Tactical, Operational Protection Of Water Infrastructure Against Cyber-Physical Threats |
| AFTERLIFE | 01/09/2017 | 31/08/2021 | € 4.180.166,38 | € 3.890.593,13 | Advanced Filtration Technologies For The Recovery And Later Conversion Of Relevant Fractions From Wastewater |

| PROJECT ACRONYM | START DATE | END DATE | PROJECT COST | EC CONTRIBUTION | PROJECT TITLE |
|-----------------|------------|------------|----------------|-----------------|--|
| SARAH | 01/10/2016 | 30/09/2019 | € 6.636.395,00 | € 6.636.393,75 | Increased Safety And Robust Certification For Ditching Of Aircrafts And Helicopters |
| MANTEL | 01/01/2017 | 31/12/2020 | € 3.056.654,16 | € 3.056.654,16 | Management Of Climatic Extreme Events In Lakes Reservoirs For The Protection Of Ecosystem Services |
| DATA4WATER | 01/01/2016 | 31/12/2018 | € 999.493,75 | € 999.493,75 | Excellence In Smart Data And Services For Supporting Water Management |
| SElySOs | 02/11/2015 | 01/11/2019 | € 2.939.655,00 | € 2.939.655,00 | Development Of New Electrode Materials And Understanding Of Degradation Mechanisms On Solid Oxide High Temperature Electrolysis Cells |
| EU-CIRCLE | 01/06/2015 | 30/09/2018 | € 7.283.525,00 | € 7.283.525,00 | A Paneuropean Framework For Strengthening Critical Infrastructure Resilience To Climate Change |
| LANDMARK | 01/05/2015 | 31/10/2019 | € 5.307.551,25 | € 4.999.663,00 | Land Management: Assessment, Research, Knowledge Base |
| MistAndClean | 01/03/2019 | 31/05/2019 | € 71.429,00 | € 50.000,00 | Upscaling Production And Adding New Product Lines To The Unique And Patented Water-To-Mist Technology That Reduces Water Use By 98% Without Loss Of Functionality And Keeping A High User Experience |
| NAVAIS | 01/06/2018 | 31/05/2022 | € 7.915.781,75 | € 6.589.361,38 | New, Advanced And Value-Added Innovative Ships |
| FotoH2 | 01/01/2018 | 31/12/2020 | € 2.578.971,25 | € 2.578.971,25 | Innovative Photoelectrochemical Cells For Solar Hydrogen Production |
| MELOA | 01/12/2017 | 28/02/2021 | € 4.694.844,75 | € 4.694.844,75 | Multi-Purpose/Multi-Sensor Extra Light Oceanography Apparatus |
| MSO4SC | 01/10/2016 | 30/09/2018 | € 2.435.064,50 | € 2.435.064,50 | Mathematical Modelling, Simulation And Optimization For Societal Challenges With Scientific Computing |
| EOMORES | 01/12/2016 | 30/11/2019 | € 2.219.318,00 | € 2.005.861,66 | Earth Observation Based Services For Monitoring And Reporting Of Ecological Status |
| EnvJustice | 01/06/2016 | 31/05/2021 | € 1.910.811,00 | € 1.910.811,00 | A Global Movement For Environmental Justice: The EAtlas |
| INTCATCH | 01/06/2016 | 31/01/2020 | € 8.770.935,00 | € 7.570.335,00 | Development And Application Of Novel, Integrated Tools For Monitoring And Managing Catchments |
| MSP-REFRAM | 01/12/2015 | 30/06/2017 | € 1.499.760,00 | € 1.499.760,00 | Multi-Stakeholder Platform For A Secure Supply Of Refractory Metals In Europe |
| MinWaterCSP | 01/01/2016 | 31/12/2018 | € 5.861.371,75 | € 5.861.371,75 | Minwatercsp - Minimized Water Consumption In Csp Plants |
| INTMET | 01/02/2016 | 31/01/2019 | € 7.834.976,25 | € 7.834.976,25 | Integrated Innovative Metallurgical System To Benefit Efficiently Polymetallic, Complex And Low Grade Ores And Concentrates |
| CERES | 01/03/2016 | 29/02/2020 | € 5.586.851,25 | € 5.586.851,25 | Climate Change And European Aquatic Resources |

| PROJECT ACRONYM | START DATE | END DATE | PROJECT COST | EC CONTRIBUTION | PROJECT TITLE |
|------------------|------------|------------|-----------------|-----------------|--|
| Blue Nodules | 01/02/2016 | 31/07/2020 | € 7.991.137,50 | € 7.991.137,50 | Breakthrough Solutions For The Sustainable Harvesting And Processing Of Deep Sea Polymetallic Nodules |
| EXCELLABUST | 01/01/2016 | 31/12/2018 | € 1.014.551,00 | € 1.014.551,00 | Excelling Labust In Marine Robotics |
| WASCOP | 01/01/2016 | 31/12/2019 | € 5.941.607,50 | € 5.941.607,50 | Water Saving For Solar Concentrated Power |
| C-FOOT-CTRL | 01/04/2015 | 31/03/2019 | € 711.000,00 | € 711.000,00 | Developing On Line Tools To Monitor, Control And Mitigate Ghg Emissions In Wwtps |
| NANOLEAP | 01/01/2015 | 30/06/2018 | € 7.679.159,25 | € 6.878.348,75 | "Nanocomposite For Building Constructions And Civil Infrastructures: European Network Pilot Production Line To Promote Industrial Application Cases" |
| PAVITRA GAN-GA | 01/02/2019 | 31/01/2023 | € 4.731.647,50 | € 3.074.821,25 | Unlocking Wastewater Treatment, Water Re-Use And Resource Recovery Opportunities For Urban And Peri-Urban Areas In India |
| ColiSense Online | 01/07/2019 | 30/06/2021 | € 2.413.375,00 | € 1.689.362,50 | Online And Automated E. Coli Monitoring For 100% Safe Drinking Water |
| PANI WATER | 01/02/2019 | 31/01/2023 | € 4.969.748,50 | € 3.576.532,50 | Photo-Irradiation And Adsorption Based Novel Innovations For Water-Treatment |
| PANTROP | 01/09/2019 | 31/08/2024 | € 2.499.895,00 | € 2.499.895,00 | Biodiversity And Recovery Of Forest In Tropical Landscapes |
| REPARES | 01/10/2019 | 30/09/2022 | € 781.856,25 | € 781.856,25 | Research Platform On Antibiotic Resistance Spread Through Wastewater Treatment Plants |
| DEEPFIELD | 01/10/2019 | 30/09/2022 | € 799.975,00 | € 799.975,00 | Deepfield- Deep Learning In Field Robotics: From Conceptualization Towards Implementation |
| Bac-To-Fuel | 01/01/2019 | 31/12/2021 | € 2.999.922,50 | € 2.999.919,00 | Bacterial Conversion Of Co2 And Renewable H2 Into Biofuels |
| WaysTUP! | 01/09/2019 | 28/02/2023 | € 11.670.317,81 | € 9.348.929,35 | Value Chains For Disruptive Transformation Of Urban Biowaste Into Biobased Products In The City Context |
| DEEP PURPLE | 01/05/2019 | 30/04/2023 | € 9.527.581,25 | € 6.983.049,99 | Conversion Of Diluted Mixed Urban Bio-Wastes Into Sustainable Materials And Products In Flexible Purple Photobiorefineries |
| AUTOSHIP | 01/06/2019 | 30/11/2022 | € 27.679.830,00 | € 20.109.109,13 | Autonomous Shipping Initiative For European Waters |
| DOGMATICC | 01/10/2019 | 30/09/2022 | € 319.400,64 | € 319.400,64 | Digestion, Osmoregulation And Metabolism In Fish Relevant To Aquaculture And In A Changing Climate |
| HACKS | 01/09/2019 | 31/08/2022 | € 2.159.045,75 | € 2.159.033,50 | Heating And Cooling Know-How And Solutions |
| LEMON | 01/01/2019 | 31/12/2022 | € 3.374.725,00 | € 3.374.725,00 | Lidar Emitter And Multispecies Greenhouse Gases Observation Instrument |

| PROJECT ACRONYM | START DATE | END DATE | PROJECT COST | EC CONTRIBUTION | PROJECT TITLE |
|---------------------|------------|------------|-----------------|-----------------|--|
| EurofleetsPlus | 01/02/2019 | 31/01/2023 | € 9.999.360,58 | € 9.999.360,58 | An Alliance Of European Marine Research Infrastructure To Meet The Evolving Needs Of The Research And Industrial Communities |
| NAIADES | 01/06/2019 | 31/05/2022 | € 5.729.753,75 | € 4.999.980,13 | A Holistic Water Ecosystem For Digitisation Of Urban Water Sector |
| APPLAUSE | 01/05/2019 | 30/04/2022 | € 34.558.714,32 | € 8.561.598,71 | Advanced Packaging For Photonics, Optics And Electronics For Low Cost Manufacturing In Europe |
| CropBooster-P | 01/11/2018 | 31/10/2021 | € 2.996.942,50 | € 2.996.942,50 | Preparatory Action To Boost Global Crop Yield For Food & Nutrition Security And Fueling A Bioeconomy |
| REFLOW | 01/01/2019 | 31/12/2022 | € 3.469.774,68 | € 3.469.774,68 | Phosphorus Recovery For Fertilisers From Dairy Processing Waste |
| NextGen | 01/07/2018 | 30/06/2022 | € 11.389.106,04 | € 9.965.230,51 | Towards A Next Generation Of Water Systems And Services For The Circular Economy. |
| SuWaNu Europe | 01/01/2019 | 30/06/2021 | € 1.999.926,25 | € 1.999.926,25 | Network For Effective Knowledge Transfer On Safe And Economic Wastewater Reuse In Agriculture In Europe |
| RESIST | 01/03/2019 | 28/02/2023 | € 1.062.600,00 | € 1.062.600,00 | Resurrection Plants Reveal Secrets Of Vegetative Desiccation Tolerance |
| Circular Agromonics | 01/09/2018 | 31/08/2022 | € 7.021.764,70 | € 6.999.795,50 | Circular Agronomics - Efficient Carbon, Nitrogen And Phosphorus Cycling In The European Agri-Food System And Related Up- And Down-Stream Processes To Mitigate Emissions |
| SUPER-G | 01/06/2018 | 31/05/2023 | € 9.994.996,83 | € 9.994.996,83 | Developing Sustainable Permanent Grassland Systems And Policies |
| SINCERE | 01/01/2018 | 31/12/2021 | € 4.237.214,13 | € 3.991.234,38 | Spurring Innovations For Forest Ecosystem Services In Europe |
| NEPTUNE | 01/02/2018 | 31/01/2021 | € 1.927.335,43 | € 1.926.221,25 | Next Generation Pem Electrolyser Under New Extremes |
| Wat-Qual | 01/01/2018 | 31/12/2019 | € 243.000,00 | € 243.000,00 | Water Quality In Drinking Water Distribution Systems |
| TWIGA | 01/02/2018 | 31/01/2022 | € 5.006.823,54 | € 4.979.622,50 | Transforming Weather Water Data Into Value-Added Information Services For Sustainable Growth In Africa |
| ROBORDER | 01/05/2017 | 28/02/2021 | € 8.997.781,50 | € 7.999.315,82 | Autonomous Swarm Of Heterogeneous Robots For Border Surveillance |
| ALICE | 01/01/2017 | 31/12/2020 | € 900.000,00 | € 900.000,00 | Accelerate Innovation In Urban Wastewater Management For Climate Change |
| TAOIDE | 01/11/2016 | 31/10/2019 | € 3.237.773,75 | € 3.237.773,75 | Technology Advancement Of Ocean Energy Devices Through Innovative Development Of Electrical Systems To Increase Performance And Reliability |
| ReWaCEM | 01/10/2016 | 30/09/2019 | € 5.781.631,25 | € 5.041.866,76 | Ressource Recovery From Industrial Waste Water By Cutting Edge Membrane Technologies |

| PROJECT ACRONYM | START DATE | END DATE | PROJECT COST | EC CONTRIBUTION | PROJECT TITLE |
|-----------------|------------|------------|----------------|-----------------|--|
| SPACE-O | 01/11/2016 | 31/12/2018 | € 2.469.948,75 | € 2.002.087,50 | Space Assisted Water Quality Forecasting Platform For Optimized Decision Making In Water Supply Services |
| INSPIREWater | 01/10/2016 | 31/03/2020 | € 7.614.000,85 | € 5.377.879,50 | Innovative Solutions In The Process Industry For Next Generation Resource Efficient Water Management |
| NAIAD | 01/12/2016 | 30/11/2019 | € 5.081.176,25 | € 4.994.370,00 | Nature Insurance Value: Assessment And Demonstration |
| SPOTVIEW | 03/10/2016 | 02/04/2020 | € 8.498.102,75 | € 6.863.359,63 | Sustainable Processes And Optimized Technologies For Industrially Efficient Water Usage |
| N2OPNA | 01/11/2016 | 31/10/2018 | € 160.800,00 | € 160.800,00 | Understanding Nitrous Oxide Production From The Mainstream Partial Nitrification And Anammox Process |
| ERN | 01/02/2015 | 31/01/2017 | € 1.489.221,25 | € 1.489.221,25 | The European Remanufacturing Network - Coordinating And Supporting European Remanufacturers |
| GRACeFUL | 01/02/2015 | 31/01/2018 | € 2.404.943,75 | € 2.404.943,00 | Global Systems Rapid Assessment Tools Through Constraint Functional Languages |
| SENTIENT | 01/02/2018 | 31/01/2023 | € 1.499.941,00 | € 1.499.941,00 | Scheduling Of Event-Triggered Control Tasks |
| EDEN ISS | 01/03/2015 | 30/04/2019 | € 4.550.867,50 | € 4.535.869,00 | Ground Demonstration Of Plant Cultivation Technologies And Operation In Space For Safe Food Production On-Board Iss And Future Human Space Exploration Vehicles And Planetary Outposts |
| FOWARIM | 01/01/2016 | 31/12/2018 | € 960.125,00 | € 960.125,00 | Fostering Water-Agriculture Research And Innovation In Malta |
| ICON-SE | 01/03/2019 | 28/02/2021 | € 183.454,80 | € 183.454,80 | Ichological Analysis Of Core And Outcrop Contourite Facies: Scientific And Economic Implications |
| POWERSTEP | 01/07/2015 | 30/06/2018 | € 5.173.854,75 | € 3.997.125,99 | Full Scale Demonstration Of Energy Positive Sewage Treatment Plant Concepts Towards Market Penetration |
| MOSES | 01/07/2015 | 31/10/2018 | € 4.249.262,50 | € 3.768.012,50 | Managing Crop Water Saving With Enterprise Services |
| SUBSOL | 01/09/2015 | 31/08/2018 | € 4.170.008,38 | € 3.460.565,24 | Bringing Coastal Subsurface Water Solutions To The Market |
| CYTO-WATER | 01/06/2015 | 31/05/2018 | € 2.368.298,75 | € 1.896.624,50 | Integrated And Portable Image Cytometer For Rapid Response To Legionella And Escherichia Coli In Industrial And Environmental Waters |
| iMETland | 01/09/2015 | 31/12/2018 | € 3.461.622,50 | € 2.924.810,25 | Imetland: A New Generation Of Microbial Electrochemical Wetland For Effective Decentralized Wastewater Treatment |
| CReScenDo | 01/06/2017 | 31/05/2019 | € 180.277,20 | € 180.277,20 | Combining Remote Sensing Technologies For Peatland Detection And Characterization |
| INSPIRATION | 01/04/2016 | 31/03/2020 | € 3.837.779,64 | € 3.837.779,64 | Managing Soil And Groundwater Impacts From Agriculture For Sustainable Intensification |
| CAT | 01/02/2016 | 31/01/2021 | € 1.499.631,00 | € 1.499.631,00 | Climbing The Asian Water Tower |

| PROJECT ACRONYM | START DATE | END DATE | PROJECT COST | EC CONTRIBUTION | PROJECT TITLE |
|-----------------|------------|------------|-----------------|-----------------|--|
| EoCoE | 01/10/2015 | 30/09/2018 | € 5.689.521,11 | € 5.403.491,00 | Energy Oriented Centre Of Excellence For Computer Applications |
| ANSWER | 01/10/2015 | 30/09/2019 | € 3.708.689,76 | € 3.708.689,76 | Antibiotics And Mobile Resistance Elements In Wastewater Reuse Applications: Risks And Innovative Solutions |
| METAL-AID | 01/07/2016 | 30/06/2020 | € 3.716.533,44 | € 3.716.533,44 | Metal Oxide Aided Subsurface Remediation: From Invention To Injection |
| WU TANG | 01/11/2017 | 31/10/2022 | € 2.000.000,00 | € 2.000.000,00 | Selective Conversion Of Water And Co2 Using Interfacial Electrochemical Engineering |
| REvived water | 01/05/2016 | 30/04/2020 | € 9.781.826,25 | € 7.633.672,01 | Low Energy Solution For Drinking Water Production By A Revival Of Electrodialysis Systems |
| GEOTeCH | 01/05/2015 | 30/04/2019 | € 9.025.458,75 | € 7.136.662,88 | Geothermal Technology For €Conomic Cooling And Heating |
| PROTECT | 01/01/2017 | 31/12/2020 | € 9.441.862,50 | € 7.478.985,00 | Pre-Commercial Lines For Production Of Surface Nanostructured Antimicrobial And Anti-Biofilm Textiles, Medical Devices And Water Treatment Membranes |
| BIOWYSE | 01/01/2016 | 31/12/2018 | € 3.000.000,00 | € 3.000.000,00 | Biocontamination Integrated Control Of Wet Systems For Space Exploration |
| TIME SCALE | 01/02/2015 | 30/04/2018 | € 3.871.209,36 | € 3.871.209,00 | Technology And Innovation For Development Of Modular Equipment In Scalable Advanced Life Support Systems For Space Exploration |
| LiNaBioFluid | 01/07/2015 | 30/06/2018 | € 3.024.827,50 | € 3.024.827,00 | Laser-Induced Nanostructures As Biomimetic Model Of Fluid Transport In The Integument Of Animals |
| SHERPACK | 01/06/2017 | 30/11/2020 | € 2.589.095,00 | € 1.294.445,00 | Innovative Structured Polysaccharides-Based Materials For Recyclable And Biodegradable Flexible Packaging |
| FutureEUAqua | 01/11/2018 | 31/10/2022 | € 7.083.501,25 | € 6.000.000,00 | Future Growth In Sustainable, Resilient And Climate Friendly Organic And Conventional European Aquaculture |
| URBAN GreenUP | 01/06/2017 | 31/05/2022 | € 14.777.185,67 | € 13.970.642,25 | New Strategy For Re-Naturing Cities Through Nature-Based Solutions |
| NoAW | 01/10/2016 | 30/09/2020 | € 7.816.232,50 | € 6.887.570,00 | Innovative Approaches To Turn Agricultural Waste Into Ecological And Economic Assets |
| 5TOI_4EWAS | 01/05/2016 | 30/04/2019 | € 1.949.914,00 | € 1.949.644,00 | Quintuple Helix Approach To Targeted Open Innovation In Energy, Water, Agriculture In The South Mediterranean Neighborhood |
| ambliFibre | 01/09/2015 | 31/08/2018 | € 4.735.941,25 | € 4.735.941,25 | Adaptive Model-Based Control For Laser-Assisted Fibre-Reinforced Tape Winding |
| SOLENALGAE | 01/03/2016 | 28/02/2021 | € 1.441.875,00 | € 1.441.875,00 | Improving Photosynthetic Solar Energy Conversion In Microalgal Cultures For The Production Of Biofuels And High Value Products |

| PROJECT ACRONYM | START DATE | END DATE | PROJECT COST | EC CONTRIBUTION | PROJECT TITLE |
|-----------------|------------|------------|-----------------|-----------------|--|
| MOTOR | 01/09/2015 | 31/08/2018 | € 4.302.875,00 | € 4.302.875,00 | Multi-Objective Design Optimization Of Fluid Energy Machines |
| AQUALity | 01/10/2017 | 30/09/2021 | € 3.897.678,24 | € 3.897.678,24 | Interdisciplinary Cross-Sectoral Approach To Effectively Address The Removal Of Contaminants Of Emerging Concern From Water |
| BASE-LiNE Earth | 01/01/2015 | 31/12/2018 | € 3.749.331,24 | € 3.749.331,24 | Brachiopods As Sensitive Tracers Of Global Marine Environment: Insights From Alkaline, Alkaline Earth Metal, And Metalloid Trace Element Ratios And Isotope Systems |
| BASE-platform | 01/12/2015 | 30/11/2017 | € 2.222.394,95 | € 1.781.326,25 | Bathymetry Service Platform |
| MIDES | 01/04/2016 | 31/03/2020 | € 8.019.583,04 | € 6.328.164,13 | Microbial Desalination For Low Energy Drinking Water |
| POLIS | 01/12/2015 | 30/11/2017 | € 168.277,20 | € 168.277,20 | Studying The Bricks Of Microbial Cities: Characterization And Structural Properties Of Exopolysaccharides And Their Interaction With Proteins And Cations In Anammox Granular Sludge |
| SWARMs | 01/07/2015 | 31/07/2018 | € 17.168.626,68 | € 6.389.046,38 | Smart And Networking Underwater Robots In Cooperation Meshes |
| POWER | 01/12/2015 | 30/11/2019 | € 3.747.937,50 | € 3.747.937,50 | Political And Social Awareness On Water Environmental Challenges |
| EpiAnodes | 01/10/2015 | 30/09/2017 | € 170.509,20 | € 170.509,20 | Heteroepitaxial A-Fe ₂ O ₃ Photoanodes For Solar Water Splitting |
| NEPTUNE | 01/07/2016 | 31/12/2018 | € 4.199.821,61 | € 4.158.735,25 | New Cross Sectorial Value Chains Creation Across Europe Facilitated By Clusters For Sme's Innovation In Blue Growth |
| DAFNE | 01/09/2016 | 31/08/2020 | € 5.420.222,68 | € 3.408.658,75 | Dafne: Use Of A Decision-Analytic Framework To Explore The Water-Energy-Food Nexus In Complex And Trans-Boundary Water Resources Systems Of Fast Growing Developing Countries |
| SMART-Plant | 01/06/2016 | 31/05/2020 | € 9.768.806,09 | € 7.536.300,02 | Scale-Up Of Low-Carbon Footprint Material Recovery Techniques In Existing Wastewater Treatment Plants |
| INCOVER | 01/06/2016 | 31/07/2019 | € 8.432.456,43 | € 7.209.032,01 | Innovative Eco-Technologies For Resource Recovery From Wastewater |
| DEMOGRAV3 | 01/01/2016 | 31/12/2019 | € 26.523.602,50 | € 19.037.465,51 | Demonstration Of The Gravi3 Technology – Innovative Gravity Foundation For Offshore Wind |
| RAVE | 01/06/2015 | 01/11/2017 | € 168.277,20 | € 168.277,20 | Rotifers As Vehicles For Epibiotic Bacteria |
| NANOREMO-VAS | 01/01/2015 | 31/12/2018 | € 688.500,00 | € 688.500,00 | Advanced Multifunctional Nanostructured Materials Applied To Remove Arsenic In Argentinian Groundwater |
| C-LEAK | 01/07/2016 | 30/06/2018 | € 183.454,80 | € 183.454,80 | Rivers As Leak In The Terrestrial C Sink |

3.1 H2020 funding programme

| PROJECT ACRONYM | START DATE | END DATE | PROJECT COST | EC CONTRIBUTION | PROJECT TITLE |
|--------------------|------------|------------|-----------------|-----------------|--|
| CZ-SK SOUTH LIFE | 01/09/2017 | 30/06/2024 | € 7.024.703,00 | € 5.085.000,00 | Optimization Of Natura 2000 Sites Management Delivery In The South Bohemia Region And The Territory Of South Slovakia |
| FRESHABIT | 01/01/2016 | 30/09/2022 | € 24.431.249,00 | € 11.976.286,00 | Towards Integrated Management Of Freshwater Nature 2000 Sites And Habitats |
| Green Foundry LIFE | 01/07/2018 | 30/06/2021 | € 2.088.998,00 | € 1.216.781,00 | Inorganic Binder System To Minimize Emissions, Improve Indoor Air Quality, Purify And Reuse Of Contaminated Foundry Sand |
| Hg-rid-LIFE | 01/09/2016 | 31/08/2019 | € 1.701.112,00 | € 1.019.766,00 | Mercury Decontamination Of Dental Care Facilities |
| Hydrology LIFE | 01/08/2017 | 31/12/2023 | € 8.874.132,00 | € 5.324.481,00 | Restoring The Hydrological Integrity Of Wetland Habitats In Finland |
| LIFE - MER-MAIDS | 01/07/2014 | 31/12/2016 | € 1.287.123,00 | € 643.561,00 | Mitigation Of Microplastics Impact Caused By Textile Washing Processes |
| LIFE ADAPT-2CLIMA | 01/10/2015 | 29/02/2020 | € 1.497.060,00 | € 898.236,00 | Adaptation To Climate Change Impacts On The Mediterranean Islands' Agriculture |
| LIFE AGRICLOSE | 02/07/2018 | 01/07/2022 | € 2.203.843,00 | € 1.315.021,00 | Improvement And Disclosure Of Efficient Techniques For Manure Management Towards A Circular And Sustainable Agriculture. |
| LIFE ALGAECAN | 02/10/2017 | 31/12/2020 | € 1.728.018,00 | € 1.033.569,00 | Adding Sustainability To The Fruit And Vegetable Processing Industry Through Solar-Powered Algal Wastewater Treatment |
| LIFE APEX | 01/09/2018 | 31/08/2022 | € 3.353.413,00 | € 2.012.047,00 | Systematic Use Of Contaminant Data From Apex Predators And Their Prey In Chemicals Management |
| LIFE BELINI | 01/10/2016 | 31/12/2026 | € 17.699.504,00 | € 9.752.311,00 | Belgian Initiative For Making A Leap Forward Towards Good Status In The River Basin Of The Scheldt |
| LIFE BEWARE | 03/09/2018 | 30/06/2022 | € 2.103.964,00 | € 1.188.160,00 | Better Water-Management For Advancing Resilient-Communities In Europe |
| LIFE CELSIUS | 01/10/2015 | 30/09/2018 | € 732.049,00 | € 436.377,00 | Sustainable And Low Energy Wastewater Treatment For Warm Climates |
| LIFE CLEAN UP | 01/10/2017 | 30/09/2020 | € 1.492.512,00 | € 895.506,00 | Validation Of Adsorbent Materials And Advanced Oxidation Techniques To Remove Emerging Pollutants In Treated Wastewater |
| LIFE CO2FORMARE | 01/06/2014 | 30/11/2017 | € 4.064.144,00 | € 1.953.422,00 | Use Of Co2 As A Substitute Of Chlorine-Based Chemicals Used In O&M Industrial Processes For Macrofouling Remediation |
| LIFE DeNTreat | 01/07/2017 | 30/06/2020 | € 1.391.893,00 | € 835.133,00 | Decentralized Innovative Treatment Of Ammonium-Rich Urban Wastewater |
| LIFE DREAMER | 01/09/2017 | 31/12/2020 | € 1.626.410,00 | € 975.845,00 | Demonstration Of An Environmentally-Friendly Desalination System Concept: Transforming Seawater Into Valuable Resources |
| LIFE EBRO-ADMICLIM | 02/06/2014 | 01/06/2018 | € 2.260.960,00 | € 1.124.341,00 | Adaptation And Mitigation Measures To Climate Change In The Ebro Delta |

| PROJECT ACRONYM | START DATE | END DATE | PROJECT COST | EC CONTRIBUTION | PROJECT TITLE |
|------------------------|------------|------------|-----------------|-----------------|--|
| LIFE ECAP | 07/09/2015 | 31/12/2019 | € 3.539.877,00 | € 2.123.926,00 | European Sustainable Clothing Action Plan |
| LIFE ECORKWASTE | 01/09/2015 | 31/12/2018 | € 1.903.898,00 | € 1.087.756,00 | Integrated And Sustainable Management Of Cork Waste Generated In The Cork Industry. |
| LIFE EFFIDRAIN | 01/10/2015 | 29/03/2019 | € 2.169.735,00 | € 1.286.691,00 | Efficient Integrated Real-Time Control In Urban Drainage And Wastewater Treatment Plants For Environmental Protection |
| LIFE ELECTRO-SLUDGE | 01/09/2015 | 31/12/2018 | € 1.475.110,00 | € 863.464,00 | Innovative Electro Dewatering System For The Maximisation Of The Urban Sludge Dry Solid Content |
| LIFE ENRICH | 01/09/2017 | 28/02/2021 | € 2.770.781,00 | € 1.662.467,00 | Enhanced Nitrogen And Phosphorus Recovery From Wastewater And Integration In The Value Chain |
| LIFE FOODPRINT | 01/09/2014 | 30/04/2018 | € 1.874.864,00 | € 891.182,00 | Development Of An Integrated Strategy For Reducing The Carbon Footprint In The Food Industry Sector |
| LIFE for Acid Whey | 03/07/2017 | 30/06/2021 | € 4.439.001,00 | € 2.622.435,00 | Reuse Of Waste Acid Whey For Extraction Of High Added Value Bioactive Proteins |
| LIFE FRANCA | 01/07/2016 | 31/12/2019 | € 1.058.242,00 | € 630.383,00 | Flood Risk Anticipation And Communication In The Alps |
| LIFE iBATHWATER | 01/09/2018 | 31/12/2021 | € 2.274.164,00 | € 1.364.497,00 | Advanced Urban Water Management To Efficiently Ensure Bathing Water Quality |
| LIFE IP RICH WATERS | 01/10/2016 | 31/03/2024 | € 30.030.380,00 | € 9.736.678,00 | Integrated Approach To Mobilise Resources For Resilient Ecosystems And Rich Waters In The North Baltic Sea River Basin |
| LIFE LEACHLESS | 01/10/2016 | 31/12/2019 | € 1.775.805,00 | € 1.041.237,00 | Low Energy Treatment Technology For Leachate Valorisation |
| LIFE LESSWATT | 01/10/2017 | 31/03/2021 | € 1.267.708,00 | € 760.624,00 | Innovative Wireless Tool For Reducing Energy Consumption And Ghgs Emission Of Water Resource Recovery Facilities |
| LIFE Local Water Adapt | 01/07/2018 | 31/12/2023 | € 5.741.574,00 | € 2.405.024,00 | Life Local Water Adapt; Innovative Collective, Adaptive Water Management |
| LIFE MATHER | 01/07/2017 | 31/12/2020 | € 1.580.774,00 | € 935.521,00 | Life Mather - Full Material And Chemical Monitoring Data And Disclosure For The Protection Of The Human Health And Environment |
| LIFE MIGRATOEBRE | 01/07/2014 | 30/06/2018 | € 1.568.574,00 | € 784.285,00 | Life Migratoebre - Migratory Fish Recovery And Improved Management In The Final Stretch Of The Ebre River |
| LIFE PHOENIX | 01/09/2017 | 31/03/2021 | € 2.176.493,00 | € 1.264.369,00 | Perfluorinated Compounds Holistic Environmental Interinstitutional Experience |
| LIFE PRIMED | 02/07/2018 | 30/06/2023 | € 2.136.775,00 | € 1.602.581,00 | Restoration, Management And Valorisation Of Priority Habitats Of Mediterranean Coastal Areas |
| LIFE PRIMES | 01/10/2015 | 31/12/2018 | € 2.366.767,00 | € 1.085.761,00 | Preventing Flooding Risks By Making Resilient Communities |

| PROJECT ACRONYM | START DATE | END DATE | PROJECT COST | EC CONTRIBUTION | PROJECT TITLE |
|-----------------------|------------|------------|-----------------|-----------------|--|
| LIFE PureAgroH2O | 02/07/2018 | 31/12/2021 | € 2.145.822,00 | € 1.279.435,00 | Pollutant Photo-Nf Remediation Of Agro-Water |
| LIFE RAMSES | 16/07/2015 | 15/07/2018 | € 1.158.391,00 | € 694.906,00 | Enhanced Reclaimed Water Quality Through Mainstream Anaerobic Treatment Using Supported Biomass Growth. |
| LIFE REMoPaF | 07/07/2016 | 30/06/2021 | € 1.810.566,00 | € 965.391,00 | Recovery Of Endangered Mollusc Patella Ferruginea Population By Artificial Inert Mobile Substrates In Mediterranean Sea |
| Life RESAFE | 01/01/2014 | 31/12/2015 | € 1.354.887,00 | € 672.023,00 | Innovative Fertilizer From Urban Waste, Bio-Char And Farm Residues As Substitute Of Chemicals Fertilizers |
| LIFE REWATCH | 01/09/2016 | 31/12/2019 | € 2.645.765,00 | € 1.586.556,00 | Demonstration Of An Innovative Recycling Scheme To Increase The Water Efficiency In The Petrochemical Industry |
| LIFE SUSTAIN-HUTS | 01/07/2016 | 30/06/2020 | € 1.976.885,00 | € 1.116.543,00 | Sustainable Mountain Huts In Europe |
| LIFE TRANSFO-MEM | 01/06/2014 | 30/06/2018 | € 956.077,00 | € 477.488,00 | Transformation Of Disposed Reverse Osmosis Membranes Into Recycled Ultra-And Nanofiltration Membranes |
| LIFE TTGG | 03/07/2017 | 30/06/2021 | € 2.148.987,00 | € 1.270.869,00 | The Tough Get Going |
| LIFE UR-BAN-ADAPT | 16/07/2015 | 31/12/2021 | € 10.362.411,00 | € 2.767.982,00 | Demonstrating Urban Climate Adaptation And Resilience In Inner City Rotterdam |
| LIFE UrbanProof | 01/10/2016 | 31/05/2020 | € 1.854.000,00 | € 1.104.599,00 | Climate Proofing Urban Municipalities |
| LIFE ViVaCCA-dapt | 01/07/2016 | 30/06/2021 | € 869.028,00 | € 520.516,00 | Adapting To The Impacts Of Climate Change In The Vipava Valley |
| LIFE+ SOIL4WI-NE | 01/01/2017 | 31/12/2019 | € 1.613.328,00 | € 914.999,00 | Innovative Approach To Soil Management In Viticultural Landscapes |
| Life4MarPiccolo | 01/01/2016 | 30/09/2020 | € 2.512.171,00 | € 1.325.473,00 | A New Life For Mar Piccolo |
| LIFE-AGESCIC | 01/09/2018 | 30/09/2021 | € 3.737.597,00 | € 2.227.556,00 | Life-Agescic - Achieve Good Environmental Status For Coastal Infrastructures Construction |
| LIFE-BRAINY-MEM | 01/07/2014 | 30/06/2017 | € 506.367,00 | € 253.183,00 | Advanced-Control Mbr For Wastewater Reclamation |
| LIFE-EMPORE | 01/09/2016 | 31/12/2019 | € 1.783.824,00 | € 1.030.407,00 | Development Of An Efficient And Sustainable Methodology For Emerging Pollutants Removal In WWTPs(Empore) |
| LIFE-IP RBMP-NWRBD UK | 01/01/2015 | 31/12/2019 | € 20.031.040,00 | € 11.988.811,00 | Integrated Water Management Approach To Delivery Of The North West England River Basin Management Plan |
| LIFE-IREPRO | 01/07/2017 | 28/02/2020 | € 2.930.153,00 | € 1.692.729,00 | A Innovative Industrial Process For Production Of Low-Gwp Refrigerants For Industrial Refrigeration And Air Conditioning |
| LIFE-NEWBIES | 01/07/2018 | 30/06/2021 | € 1.249.375,00 | € 747.602,00 | Nitrogen Extraction From Water By An Innovative Electrochemical System |
| LIFE-RENEWAT | 01/07/2014 | 30/06/2017 | € 1.366.044,00 | € 621.362,00 | Optimised Renewable Mix For Energy Saving In Waste Water Treatment Plants |
| LIWE LIFE | 01/07/2018 | 30/06/2023 | € 7.581.807,00 | € 2.991.076,00 | Lidköping Innovation Wastewater Eco-Hub |

| PROJECT ACRONYM | START DATE | END DATE | PROJECT COST | EC CONTRIBUTION | PROJECT TITLE |
|--|------------|------------|-----------------|-----------------|--|
| MIDWOR-LIFE | 01/09/2015 | 31/08/2018 | € 931.850,00 | € 554.608,00 | Mitigation Of Environmental Impact Caused By Dwor Textile Finishing Chemicals Stud- ying Their Non-Toxic Alternatives |
| Soil4Life | 01/10/2018 | 31/03/2022 | € 2.919.769,00 | € 1.751.861,00 | Soil4life |
| SU-EATABLE LIFE | 01/09/2018 | 31/08/2021 | € 1.672.056,00 | € 1.003.232,00 | Reducing Carbon Emissions In The Eu Through Sustainable Diets |
| CIRCWASTE | 01/10/2016 | 31/12/2023 | € 18.521.507,00 | € 11.112.904,00 | CIRCWASTE - LIFE IP on waste - towards circular economy in Finland |
| Wetlands International - Wetlands International | 01/01/2018 | 31/12/2019 | € 1.437.888,00 | € 853.468,00 | Wetlands International - Wetlands International - European Association |

3.3 INTERREG funding programme

| PROJECT ACRONYM | START DATE | END DATE | PROJECT COST | EC CONTRIBUTION | PROJECT TITLE |
|--------------------|------------|------------|-----------------|-----------------|--|
| @BluePortS | 01/09/2017 | 29/04/2020 | € 2.959.900,00 | € 2.219.925,00 | Atlantic Blue Port Services - Discharge polluted water in port, not at sea |
| AFLOWT | 25/10/2018 | 24/12/2022 | € 31.173.591,08 | € 14.119.567,14 | Accelerating market uptake of Floating Offshore Wind Technology |
| APP4SEA | 01/05/2017 | 30/04/2020 | € 1.414.143,47 | € 868.922,76 | Arctic Preparedness Platform for oil Spill and other Environmental Accidents |
| AQUA-VLAN 2 | 01/10/2016 | 30/09/2019 | € 3.499.537,95 | € 1.749.768,98 | AQUA-VLAN 2 |
| ARCWIND | 01/11/2017 | 31/10/2020 | € 3.920.146,54 | € 2.940.109,90 | Adaptation and implementation of floating wind energy conversion technology for the Atlantic region |
| AT-VIRTUAL | 01/01/2019 | 31/12/2021 | € 1.888.308,72 | € 1.416.231,54 | Open innovation to improve response in maritime security and safety in the Atlantic Area |
| BaltGas (seed) | 01/09/2016 | 31/12/2016 | € 40.000,00 | € 32.400,00 | Regional Sustainable Biogas Solutions |
| BEGIN | 01/09/2016 | 31/07/2020 | € 7.525.000,00 | € 3.462.500,00 | Blue Green Infrastructure through Social Innovation |
| BE-GOOD | 25/02/2016 | 31/05/2020 | € 6.450.167,47 | € 3.870.100,48 | Building an Ecosystem to Generate Opportunities in Open Data |
| BIGDATA 4RIVERS | 01/08/2019 | 31/07/2023 | € 1.320.345,00 | € 1.106.506,25 | Improving the European Rivers Water Quality through Smart Water Management Policies |
| BIOVAC | 01/10/2018 | 30/11/2018 | € 43.775,98 | € 28.454,39 | Bioprocess value chain |
| BLUEISLANDS | 01/11/2016 | 31/10/2019 | € 2.755.320,41 | € 2.342.022,35 | Seasonal variation of waste as effect of tourism |
| boDEREC-CE | 01/04/2019 | 31/03/2022 | € 2.328.140,81 | € 1.938.208,25 | Board for Detection and Assessment of Pharmaceutical Drug Residues in Drinking Water - Capacity Building for Water Management in CE |

| PROJECT ACRONYM | START DATE | END DATE | PROJECT COST | EC CONTRIBUTION | PROJECT TITLE |
|---------------------------------------|------------|------------|-----------------|-----------------|--|
| BWN | 01/12/2015 | 01/07/2020 | € 6.840.000,00 | € 3.400.000,00 | Building with Nature |
| C5A | 01/01/2019 | 31/12/2021 | € 1.925.150,00 | € 962.575,00 | Cluster for Cloud to Coast Climate Change Adaptation |
| ČIGRA | 01/09/2017 | 29/02/2020 | € 579.177,41 | € 478.982,00 | Preserving the population of terns in Sava and Drava basin |
| Circulair onderhoud | 01/04/2019 | 31/03/2022 | € 1.464.543,46 | € 710.000,00 | Circulair onderhoud |
| COCOON | 01/01/2017 | 31/12/2021 | € 1.268.505,00 | € 1.060.328,25 | Consortium for a Coherent European Landfill Management Strategy |
| Concert-Eaux | 25/04/2017 | 24/04/2020 | € 1.998.634,00 | € 1.698.838,90 | Cross-Border Consultation of the Roya Valley to strategies of adaptation at climate changes |
| CrossRoads 2 | 01/03/2016 | 30/11/2020 | € 20.625.876,30 | € 8.699.628,27 | CrossRoads 2 |
| CWPharma | 01/10/2017 | 30/09/2020 | € 3.724.448,36 | € 2.879.898,08 | Clear Water from Pharmaceuticals |
| De blauwe keten | 01/01/2016 | 31/12/2018 | € 2.748.751,73 | € 1.374.375,86 | De blauwe keten |
| DIADeM | 01/01/2017 | 31/12/2019 | € 2.326.040,88 | € 1.163.020,41 | Development of an integrated approach for the diagnosis of the water quality of the River Meuse |
| DOC2C's | 01/01/2016 | 31/12/2019 | € 4.189.804,05 | € 2.513.882,43 | DOC2C's: Innovative technologies for DOC removal in drinking water treatment |
| DTP1-005-2.3 - DANUBE parks-CONNECTED | 01/01/2017 | 30/06/2019 | € 3.085.412,49 | € 2.622.600,62 | Bridging the Danube Protected Areas towards a Danube Habitat Corridor |
| DTP1-096-2.1 CAMARO-D | 01/01/2017 | 30/06/2019 | € 2.588.138,36 | € 2.199.917,61 | Cooperating towards Advanced Management Routines for land use impacts on the water regime in the Danube river basin |
| DTP2-064-2.1 - DAREFFORT | 01/06/2018 | 31/05/2021 | € 1.351.898,63 | € 1.149.113,84 | Danube River Basin Enhanced Flood Forecasting Cooperation |
| Eco-AlpsWater | 17/04/2018 | 16/04/2021 | € 1.804.494,95 | € 1.447.666,58 | Innovative Ecological Assessment and Water Management Strategy for the Protection of Ecosystem Services in Alpine Lakes and Rivers |
| EERES4WATER | 01/01/2019 | 31/12/2021 | € 3.130.993,08 | € 2.348.244,81 | Promoting energy-water nexus resource efficiency through renewable energy and energy efficiency |
| ELMAR (seed) | 01/09/2016 | 31/12/2016 | € 40.000,00 | € 34.000,00 | Promoting the production and use of electric boats and ships in the South Baltic area |
| F2AGRI-effluent to agriculture | 01/10/2016 | 30/09/2019 | € 6.350.772,61 | € 2.960.516,13 | F2AGRI-effluent to agriculture |
| FAIR | 01/12/2015 | 30/06/2020 | € 4.593.750,00 | € 2.276.875,00 | Flood infrastructure Asset management and Investment in Renovation, adaptation and maintenance |
| FanPLESStic-sea | 01/01/2019 | 30/06/2021 | € 2.968.068,80 | € 2.090.961,49 | Initiatives to remove microplastics before they enter the sea |
| Food Pro.tec.ts | 01/07/2016 | 30/06/2020 | € 9.984.334,89 | € 4.992.167,45 | Food Pro.tec.ts |
| FRAMES | 01/10/2016 | 31/01/2020 | € 6.924.911,00 | € 3.462.454,00 | Flood Resilient Areas by Multi-layered Safety |

| PROJECT ACRONYM | START DATE | END DATE | PROJECT COST | EC CONTRIBUTION | PROJECT TITLE |
|--------------------------|------------|------------|-----------------|-----------------|---|
| FramWat | 01/07/2017 | 30/06/2020 | € 1.611.621,80 | € 1.362.704,89 | Framework for improving water balance and nutrient mitigation by applying small water retention measures |
| FRESH4Cs | 15/02/2019 | 30/09/2022 | € 5.621.915,43 | € 2.958.041,07 | Alternative FRESH water resources for saline Coastal Areas |
| From the Tatras to Tisza | 01/09/2017 | 31/12/2018 | € 308.632,00 | € 262.337,20 | From the Tatras to Tisza |
| GeoPLASMA-CE | 01/07/2016 | 30/09/2019 | € 2.896.081,25 | € 2.388.495,26 | Shallow Geothermal Energy Planning, Assessment and Mapping Strategies in Central Europe |
| Green WIN | 31/05/2018 | 30/05/2021 | € 2.454.783,00 | € 1.472.869,80 | Greener Waterway Infrastructure |
| H2SHIPS | 11/01/2019 | 10/07/2022 | € 6.333.985,89 | € 3.466.501,76 | System-Based Solutions for H2-Fuelled Water Transport in North-West Europe |
| HEAWATER | 01/03/2018 | 28/02/2021 | € 1.898.348,65 | € 1.488.788,70 | Achieving healthier water quality in urban small rivers of the Baltic Sea catchment by restoration of water bodies and preventing of nutrients and hazardous substances inflow from watersheds |
| HyTrEc2 | 02/10/2016 | 10/10/2021 | € 5.246.271,00 | € 2.197.940,00 | Hydrogen Transport Economy in the North Sea Region2 (Call 2) |
| IDEA | 20/09/2017 | 19/12/2020 | € 4.981.632,00 | € 2.988.979,20 | Implementation and development of economic viable algae-based value chains in NWE |
| IMMERSE | 01/10/2018 | 30/09/2021 | € 3.764.138,00 | € 1.882.069,00 | Implementing Measures for Sustainable Estuaries |
| IMPAKT! | 01/09/2016 | 31/08/2020 | € 5.924.350,77 | € 2.962.175,39 | IMPAKT! |
| IMPROVED | 01/01/2016 | 31/12/2019 | € 4.596.678,85 | € 2.298.339,42 | IMPROVED |
| I-QUA | 24/04/2017 | 23/04/2020 | € 1.796.694,44 | € 894.097,37 | I-QUA |
| ISHY | 01/02/2019 | 30/06/2022 | € 15.984.446,91 | € 9.206.068,30 | Implementation of Ship Hybridisation |
| I-STORMS | 01/01/2018 | 31/12/2019 | € 1.405.787,45 | € 1.194.919,33 | Integrated Sea Storm Management Strategies |
| Jomopans | 01/01/2018 | 31/12/2020 | € 3.475.357,00 | € 1.567.344,00 | Joint Monitoring Programme for Ambient Noise North Sea |
| JONAS | 01/01/2019 | 31/12/2021 | € 2.800.403,92 | € 2.100.302,94 | Joint framework for Ocean noise in the Atlantic seas |
| LESS is MORE | 01/01/2018 | 30/09/2020 | € 2.299.325,00 | € 1.752.399,75 | Energy-efficient technologies for removal of pharmaceuticals and other contaminants of emerging concern |
| LIVES | 01/08/2018 | 31/07/2021 | € 1.470.614,83 | € 735.307,42 | Litter Free Rivers and Streams |
| LL4WIDE | 07/03/2018 | 06/12/2021 | € 6.069.503,96 | € 3.641.702,38 | Living Labs For Water Innovation Demonstration Exchange - A North West Europe collaboration to create a network of water and wastewater test and demonstration facilities for SMEs to develop new water related innovative technologies |
| MED Greenhouses | 01/02/2018 | 31/07/2019 | € 1.171.400,00 | € 995.690,00 | Green Growth through the capitalization of innovative Greenhouses |

| PROJECT ACRONYM | START DATE | END DATE | PROJECT COST | EC CONTRIBUTION | PROJECT TITLE |
|-----------------|------------|------------|-----------------|-----------------|---|
| MORPHEUS | 01/01/2017 | 31/01/2017 | € 1.597.591,85 | € 1.310.706,12 | Model Areas for Removal of Pharmaceutical Substances in the South Baltic |
| NANOCULTURE | 01/01/2019 | 01/01/2022 | € 1.470.040,88 | € 1.102.530,66 | Risk assessment and mitigation of the presence of engineered Nanomaterials in Atlantic aquaculture |
| NEREUS | 01/10/2017 | 31/12/2020 | € 7.007.863,54 | € 3.394.737,38 | New Energy and Resources from Urban Sanitation |
| NuReDrain | 03/10/2016 | 29/09/2020 | € 2.674.405,00 | € 1.337.201,00 | Nutrients Removal and Recovery from Drainage Water |
| PEFMED | 01/11/2016 | 31/07/2019 | € 2.438.360,51 | € 2.072.606,43 | Uptake of the Product Environmental Footprint across the MED agrofood regional productive systems to enhance innovation and market value |
| Phos4You | 15/09/2016 | 14/09/2020 | € 11.019.067,69 | € 6.611.440,61 | Phosphorus Recovery from Wastewater For Your Life |
| PROLINE-CE | 01/07/2016 | 30/06/2019 | € 2.750.209,47 | € 2.267.296,09 | Efficient Practices of Land Use Management Integrating Water Resources Protection and Non-structural Flood Mitigation Experiences |
| PROWATER | 01/09/2018 | 31/08/2022 | € 5.526.623,70 | € 3.315.974,22 | Protecting and restoring raw water sources through actions at the landscape scale |
| QUALIFY | 14/08/2017 | 31/07/2020 | € 3.781.577,25 | € 2.268.946,35 | Protecting and restoring raw water sources through actions at the landscape scale |
| RECENT | 01/09/2015 | 31/08/2018 | € 1.730.066,82 | € 1.092.028,61 | Renewable Community Empowerment in Northern Territories |
| REDAWN | 01/09/2017 | 31/08/2020 | € 2.915.599,00 | € 2.186.699,25 | Reducing energy dependency in Atlantic Area water networks |
| REEF 2W | 01/06/2017 | 31/05/2020 | € 2.300.298,81 | € 1.878.304,71 | Increased renewable energy and energy efficiency by integrating, combining and empowering urban wastewater and organic waste management systems |
| REFEC | 01/12/2017 | 30/11/2020 | € 728.192,93 | € 569.664,43 | Reinforcing Eastern Finland-Estonia Transport Corridor |
| RESANAT | 01/05/2019 | 30/04/2022 | € 2.240.278,14 | € 1.092.129,46 | RESANAT |
| REVALPET | 01/10/2016 | 30/09/2019 | € 1.258.999,06 | € 818.349,39 | Recycling and regeneration of bottles of milk in innovative materials |
| RockTheAlps | 01/11/2016 | 31/12/2019 | € 2.246.416,50 | € 1.856.844,42 | Harmonized Rockfall natural risk and protection forest mapping in the Alpine Space |
| SalFar | 12/06/2017 | 30/06/2022 | € 6.147.375,00 | € 2.760.633,00 | Saline Farming - Innovative agriculture to protect the environment and stimulate economic growth |
| SAMARCH | 01/04/2017 | 31/07/2022 | € 7.790.262,40 | € 5.375.281,06 | Salmonid Management Round the Channel |
| SaveSafeWater | 02/04/2018 | 31/03/2020 | € 901.583,26 | € 766.345,77 | Networking for Reciprocal Safe Cross Border Water Supply towards a Worth Living Environment |
| SCALE-UP | 01/12/2015 | 31/12/2019 | € 5.007.076,00 | € 2.503.535,00 | Supporting Clean-tech innovators in Accessing Large Enterprises through Unlocking Procurement |

| PROJECT ACRONYM | START DATE | END DATE | PROJECT COST | EC CONTRIBUTION | PROJECT TITLE |
|---------------------------------|------------|------------|----------------|-----------------|---|
| Smart tooling process industry | 01/09/2016 | 31/05/2020 | € 3.488.275,83 | € 1.719.634,78 | Smart tooling process industry |
| Smart sediment | 01/09/2016 | 30/11/2020 | € 7.582.687,68 | € 3.791.343,84 | Smart sediment |
| SOILCOM | 01/02/2019 | 31/01/2023 | € 3.406.136,00 | € 1.703.068,00 | Sustainable soils by quality compost with defined properties |
| SPECTORS | 01/09/2016 | 31/08/2020 | € 9.884.989,00 | € 4.942.494,00 | SPECTORS |
| Sullied Sediments | 03/10/2016 | 27/03/2020 | € 4.086.826,00 | € 2.043.412,00 | Sullied Sediments - Sediment Assessment and Clean Up Pilots in Inland Waterways in the North Sea Region |
| SUMANU | 01/10/2018 | 31/03/2021 | € 997.958,45 | € 768.110,02 | Sustainable manure and nutrient management for reduction of nutrient loss in the Baltic Sea Region |
| SURICATES | 20/09/2017 | 19/03/2021 | € 5.718.690,68 | € 3.431.214,41 | Sediment Uses as Resources In Circular And Territorial Economies |
| Sustainable Gateways | 01/02/2018 | 30/04/2020 | € 1.730.630,66 | € 1.297.973,00 | Small ports - sustainable gateways to coastal national parks |
| T.R.I.G - Eau | 01/01/2017 | 01/01/2020 | € 2.091.370,21 | € 1.777.664,68 | Cross-border cooperation, Resilience, Innovation & Governance for the prevention of Hydrogeological Risk |
| The Green & Blue Rhine Alliance | 01/05/2017 | 30/04/2020 | € 3.545.380,81 | € 1.772.690,40 | The Green & Blue Rhine Alliance |
| VALSE | 01/10/2016 | 31/12/2019 | € 4.157.724,61 | € 2.078.862,28 | New cross-border resources: towards validation of recovery scenarios for sediments and other materials |
| VillageWaters | 01/03/2016 | 28/02/2019 | € 3.007.536,10 | € 2.424.615,36 | Water emissions and their reduction in village communities – villages in Baltic Sea Region as pilots |
| WATenERgy CYCLE | 01/09/2017 | 30/08/2019 | € 1.346.400,00 | € 1.144.440,00 | Urban water full cycle: from its source to its end-users and back to the environment |
| WATER RESCUE | 10/11/2017 | 09/11/2019 | € 789.574,56 | € 671.138,38 | Water resources efficiency and conservative use in drinking water supply systems |
| Water Test Network | 07/03/2018 | 06/12/2021 | € 6.069.503,96 | € 3.641.702,38 | A North West Europe collaboration to create a network of water and wastewater test and demonstration facilities for SMEs to develop new water related innovative technologies |
| WATERCHAIN | 01/10/2015 | 30/09/2018 | € 2.574.249,86 | € 2.029.057,39 | Pilot watersheds as a practical tool to reduce the harmful inflows into the Baltic Sea |
| WaVE | 01/08/2019 | 31/07/2022 | € 1.521.007,00 | € 1.277.785,25 | Water-linked heritage Valorisation by developing an Ecosystemic approach |
| WOW! | 07/03/2018 | 06/09/2021 | € 6.479.130,76 | € 3.887.478,46 | Wider business Opportunities for raw materials from Wastewater |

Colophon

Original title: Analysis & overview of Water Europe members' European projects

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Given the different data reporting structures (e.g. data categories) observed in the projects datasets and data reporting/dissemination systems of the LIFE, H2020, and Interreg funding programmes, a number of dataset limitations were observed in some of the datasets used for the present research analysis.

With reference to the LIFE programme (approved) projects dataset, multilingual textual data (i.e. use of different languages in the self-reported organizational entity names of the projects participants) created limitations related to the cross-language alignment of different textual data. Furthermore, the lack of data categories in the current, downloadable and public LIFE (approved) projects dataset, such as the sectorial affiliation and the project participation role of the LIFE projects participants, limited the data analysis dimension and process of the LIFE projects.



ANALYSIS & OVERVIEW OF WATER EUROPE MEMBERS' EUROPEAN PROJECTS