

4-5 December 2019 • Tourcoing, France

NWE making an impact!

Pushing results one step further

HIGHLIGHTS



Table of contents

| | |
|--|-----------|
| Introduction | 5 |
| Thematic workshops | 9 |
| Sustainable practices in the construction industry | 10 |
| Modernising health services | 12 |
| Developing hydrogen solutions | 14 |
| Sustainability in agrofood production | 16 |
| The pathway to high-performance buildings | 18 |
| Innovating in waste water treatment | 20 |
| Unlocking the potential of marine energy | 22 |
| How can we improve Interreg North-West Europe in the future? | 24 |
| Project Posters - Innovation | 27 |
| Project Posters - Low carbon | 51 |
| Project Posters - Resource and material efficiency | 85 |





Ruut Louwers
Programme Director

Dear reader,

I am pleased to present you with this publication, highlighting the experiences from our “NWE making an impact!” event held in Tourcoing (France) in December 2019. In the current context marked by the COVID 19 crisis, I am sure this publication will help to carry the impact of the event over the end of this situation.

As you know, Interreg programmes, including our transnational branch for North-West Europe, are financial tools for the implementation of EU's Cohesion policy in European regions. Interreg funds projects which by means of transnational cooperation have a structural impact on specific issues in the chosen regions. By addressing these strategic issues jointly, cohesion between citizens of different areas in Europe will grow and disparities will diminish. Cohesion beyond national borders is needed more than ever in times of crises.

Now, that is the theory. Last December in Tourcoing, 370 participants were brought together to showcase the most advanced of our 95 projects and the impact of their transnational collaboration in the most concrete way. They organised lively and interactive site visits, they had motivated teams at their stands where they showed their projects' outputs and results. During the thematic workshops and project pitches, I was also happy to overhear different in-depth discussions and argumentations leading to cross-project insights. Projects with related themes and approaches combined their efforts to look at the bigger picture.

As the title of our event indicates, everything focused on “Making an impact!”, in other words, making sure that project results -expected and unforeseen- travel further in other thematic fields or geographic areas. Our goal is not only to deliver high-impacting results that increase the well-being of citizens, but also to push these benefits one step further and ensure that they make a difference in the long term.

In this publication, our Communication team managed to capture the highlights of this very rich and dense event. Of course, all of this was made possible thanks to people, and many of them! I especially want to thank the project teams for their enthusiastic and motivating input, the European Commission and the Managing Authority, the Hauts-de-France Region, for their support, and the whole NWE team of Contact Points and Joint Secretariat staff for all their work.

I wish you an inspiring read.

7
thematic
workshops

370
participants



2
prizes to
projects

488
votes for the most
impressive project
achievement



500
tweets with
the hashtag
#NWEimpact



Interreg
North-West Europe



Interreg
North-West Europe
ASPECT

Interreg

Interreg
North-West Europe
Machining 4.0

Increase the innovation level
of NWE machining SMEs

COTEMACO



Machining 4.0

Interreg
North-West Europe
Machining 4.0

Increase the innovation level
of NWE machining SMEs



Thematic workshops

Exploring new perspectives
for cooperation



Sustainable practices in the construction industry

What's cooking
in NWE?

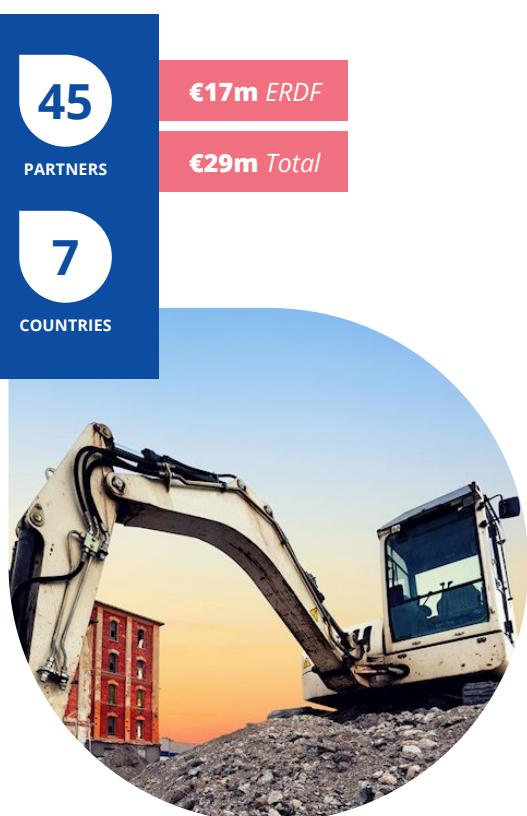
5 projects
under implementation

Projects:

AFTB
CHARM
FCRBE
SeRaMCo
URBCON

NWE projects address crucial aspects of the construction supply chain with the aim to replace primary raw materials with high quality recycled materials as well as to further develop new materials and goods, with a higher recycle and re-use potential.

The thematic workshop on “Developing more sustainable practices in the construction industry” focused on **how to exploit the reuse and recycle potential of the high value components present in Construction and Demolition Waste (CDW)**. The workshop identified a set of key barriers and opportunities for the sector that deserve further attention from stakeholders and policymakers.



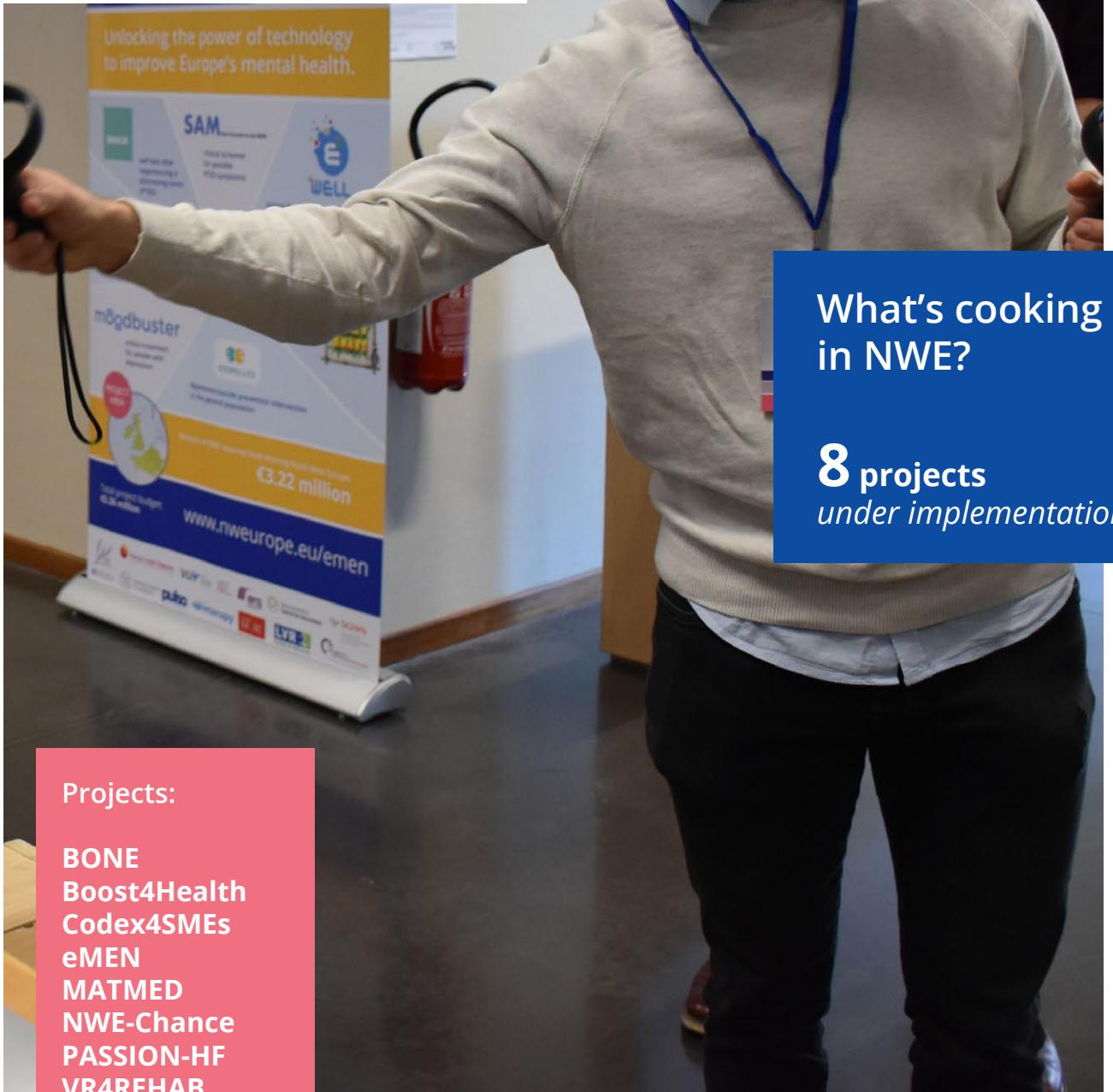
Challenges and barriers

- Strong lobby of the traditional construction industry against new and more circular practices.
- Professional education and training still do not cover sustainability and circular economy aspects: professionals are not able to deliver more sustainable solutions.
- Sustainable solutions face the myth of being weaker than traditional materials.
- Targeted communication is needed to tackle the myth.
- The standardisation of certificates throughout countries needs to be improved.
- New solutions often come associated with extra initial costs.

How can Interreg help?

- Serve as a platform to tackle these challenges by facilitating interaction with the greater public, association and policy makers via targeted circular events and through specific trainings on intercultural negotiation, cooperation and management.
- Supporting an umbrella NWE project on Green Construction to tackle common challenges from different projects is also considered of value for the long term.

Modernising health services



What's cooking
in NWE?

8 projects
under implementation

Between 2013 and 2025, health sector employment is expected to grow an average of 9% in North-West Europe (NWE). From mental health to heart failure, from bone regeneration to rehabilitation medicine, 10 NWE projects support SME growth and competitiveness, but also patient empowerment through the development of digital tools and the uptake of solutions, in line with the European Commission's eHealth Action Plan and the 2019 OECD Background Paper on the Economy of Well-being.

In this workshop, representatives from NWE projects discussed **how they are improving the technology readiness level of products and bringing them to the market** thanks to collaboration of all actors, from research institutions and enterprises to healthcare professionals and patients.



Challenges and barriers

- The different health systems throughout North-West Europe, each with their own specific obstacles.
- SMEs working with new healthcare products/services lack information about foreign markets.
- Scale-up investments for such innovations are missing.
- Privacy and ethics are sensitive issues when it comes to healthcare products.
- Change takes time and often a 3-year project is not considered long enough to make a substantial difference.

How can Interreg help?

- Offer further networking opportunities, with other regions and a wide range of actors such as universities, SMEs etc. and facilitate access to experts.
- Provide a multi-disciplinary approach for co-creation, to integrate new health care solutions in the existing systems.
- Help with access to further relevant funding sources to scale-up innovations.
- Improve harmonisation and cooperation with other Interreg programmes, especially those overlapping with NWE (including for roll-out purposes).



Developing hydrogen solutions



Hydrogen technology has a strong potential for in-land (trucks, buses) and offshore (vessels) large transportation or remote areas, since the technology allows electricity to be stored both in large quantities and for long periods. Seven Interreg NWE projects are currently exploring how to harness the potential of hydrogen, directly benefiting its regions and citizens.

Projects:

FCCP
GENCOMM
HECTOR
H2Share
H2SHIPS
ITEG
OceanDEMO

What's cooking in NWE?

7 projects
under implementation

The workshop “Supporting the development of hydrogen solutions” attracted **over 30 experts from North-West Europe to discuss the role that hydrogen technologies can play in the clean energy transition in the area.** The session worked as an exchange platform for projects. The participants presented their main activities and were eager to discuss not only hydrogen as a fuel for transition to green transportation, but also a sustainable energy source. There was also a particular interest in the legal and reglementary issues around renewable energy in general.



Challenges and barriers

- Storytelling and communication are central to demonstrate feasibility as well as to build critical mass to help convince policy makers and influence future regulations.
- Cooperation between different hydrogen stakeholders and projects needs to be further encouraged.
- Lack of infrastructure and vehicles available to demonstrate the feasibility of hydrogen as an alternative fuel and power source should be tackled.

How can Interreg help?

- Support projects to influence policy and regulations by showcasing success stories.
- Promote stronger cooperation with other funding bodies, especially for large-scale projects that need multiple funding streams to achieve the desired effects and to get some critical mass.
- Support more initiatives specifically focused on hydrogen solutions in the coming months, such as a second NWE impact event, workshops during the European Sustainable Energy Week or even a targeted call for hydrogen projects. These could help to strengthen connections with policy makers.
- Encourage a more active participation of Associated Partners in projects.

Agrofood, comprised of agriculture and food processing, is an important economic driver for many regions in North West Europe. Interreg NWE projects enable the implementation of smart data solutions which contribute to improving both food safety and animal welfare. Our projects help turn waste into a new resource with the development of bio-based products from agrowaste.

In this workshop, representatives from NWE projects discussed **solutions they are developing in the agrofood sector to strive towards more sustainability while remaining competitive**, in line with the Europe 2020 strategy for smart, sustainable and inclusive growth.



Challenges and barriers

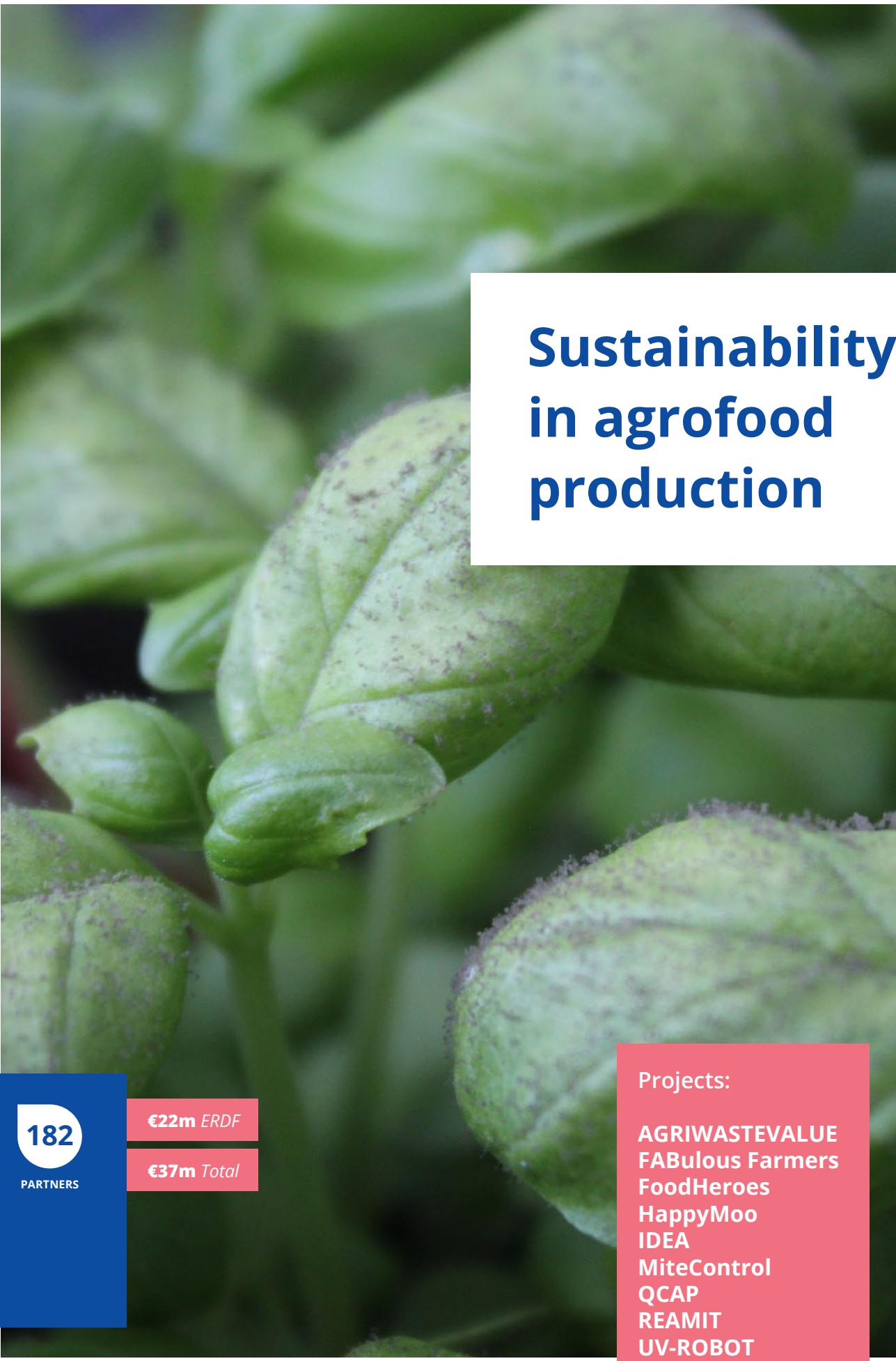
- Regulation is often lagging behind when it comes to innovation in the agrofood sector (e.g. insects for human consumption; using treated wastewater for irrigation of food crops).
- Lack of collaboration between supply chain actors.
- Insufficient data/expertise for successful implementation of new (more sustainable) business models.

How can Interreg help?

- Connect with other Interreg programmes whose projects tackle similar topics to enable collaborative work with the objective to collect data, develop shared knowledge and competencies, and engage lobbying efforts to gain policy support and eventually influence legislation.

What's cooking
in NWE?

9 projects
under implementation



Sustainability in agrofood production

182

PARTNERS

€22m ERDF

€37m Total

Projects:

AGRIWASTEVALUE
FABulous Farmers
FoodHeroes
HappyMoo
IDEA
MiteControl
QCAP
REAMIT
UV-ROBOT

The pathway to high-performance buildings



The North-West Europe area brings together some of the largest and densely populated metropolitan areas of the European Union. The challenge of improving the overall efficiency of existing buildings is therefore crucial in this area, with around 80% of the housing stock dating from before 1990. Successful transition towards a low-carbon energy system requires strong investments in energy efficiency and the smart retrofitting of buildings.

What's cooking in NWE?

7 projects
under implementation

In this workshop, representatives from the NWE projects involved in tackling this challenge **discussed the energy efficiency solutions they are developing**.

The aim to decrease the environmental impact of buildings but also help citizens reduce their energy bills and lower their dependence on external suppliers was at the heart of discussions.

Projects:

ACE-Retrofitting
Climate Active Neighborhoods
ENERGE
E=0/Mustbe0
HeatNet
H4.0E



68

PARTNERS

8

COUNTRIES

€36m ERDF

€78m Total

© European Union 2019 / Studio Arnography

Challenges and barriers

- Public acceptance remains a challenge and education to understand benefits of new solutions is key to the uptake of these solutions.
- Stakeholders involved in the building sector (technicians, developers, decision-makers...) often lack openness to innovation or show unwillingness to change the chosen path.
- Different policies and standards in the EU countries create implementation challenges. Common regulation framing the technical implementation at EU level remains limited.
- Public funding remains too limited to efficiently push products into the market.

How can Interreg help?

- Support education, communication and transfer of knowledge as these are key to uptake solutions developed.
- Encourage projects to consider the human and social dimension of change.
- Take into consideration the financial barriers of end-users: projects should look for low-tech solutions, which are affordable and easy to use/maintain.



Innovating in waste water treatment



What's cooking
in NWE?

3 projects
under implementation

Projects:

Phos4You
Water test network
WOW!

Waste water contains a number of untapped resources that can be used as raw materials for valuable products. Cellulose, Polyhydroxyalkanoates (PHA) bioplastics, phosphorus and lipids all have existing or future market opportunities that are not always exploited.

Transnational cooperation plays an important role in this sector, by linking producers of secondary raw material and users across borders, or by supporting the development of harmonized practices and regulations between countries.

In this workshop, NWE projects focusing on the **development or the optimisation of waste water treatment shared their knowledge and approaches**, as well as linking up with other projects tackling related topics, such as Re-direct and ALG-AD.

33

PARTNERS

8

COUNTRIES

€14m ERDF

€23.5m Total



Challenges and barriers

- Recovering and bringing materials to the market faster.
- The cost of testing & analysis facilities remains too high.
- A lack of harmonized practices and regulations across Europe, even if current climate change discussions have a potential to change policy and legislation.
- Involving regulators in the innovation process from the beginning.

How can Interreg help?

- Support the development of tools to encourage the sharing of information between different EU projects – e.g. activated carbon from ReDirect to be used for the removal of pharmaceuticals.
- Assist in the creation of ecosystems and deployment strategies for a product and an initial market (research on value chains).
- Support test and demonstrators within the framework of projects.
- Make the results and achievements of projects more visible in front of the right people.

Unlocking the potential of marine energy



Marine energy is of strategic importance for North-West Europe as the region is a global leader in the development of technologies such as wave energy, tidal current and range. However, these emerging devices still need targeted incentives to have their potential fully unlocked.



What's cooking in NWE?

6 projects
under implementation

The workshop “Unlocking the potential of marine energy” gathered over **20 experts who discussed how the current six NWE projects are contribute to bringing new technologies to the market.** support local SMEs and stimulate strong policies for the sector.

The participants went over the main activities and results of the projects and discussed barriers and opportunities for marine energy in North-West Europe.

Projects:

**AFLOWT
FORESEA
ITEG
NWE MEA
OceanDEMO
OPIN**



Challenges and barriers

- Lack of private capital, costly technologies that are still not mature enough to be commercialised.
- Technological uncertainties, such as mooring systems, cables, corrosion risks.
- De-commissioning of devices not sorted out, nor the re-cycling.
- Lack of data and testing.
- Low social acceptance for the technology to be installed.
- Lack of political support, lobbying so far, on national level, is not successful.
- The consenting process needed to conduct testing activities is still difficult, slow and expensive.

How can Interreg help?

- Promote policy support actions, social acceptance, collective knowledge, data collection, storage solutions.
- Support specific investments/ testing to de-risk technology, with the aim to increase the reliability of the sector.
- Bring further support to the roll-out of technologies, to have a critical mass and drive down costs and to actively consider marine energy as part of “blue economy”.

How can we improve Interreg North-West Europe in the future?

Suggestions from participants

In parallel to the ongoing negotiations between EU institutions regarding the future Multiannual Financial Framework for 2021-2027, which will determine the share of EU budget allocated to Cohesion Policy and thus to Interreg programmes, NWE has started the process aimed at designing a new programme which will run in the next 7 years.

During the event, participants contributed by sharing their suggestions for improvement. 27 proposals were submitted on sli.do and are summarised here.





- Programme priorities in the current programme period are too wide. They should have a **better and clearer focus**.
- Within the new priorities, the NWE programme and projects should **address some topics in particular**:
 - The **big data** and the **Internet of Things**
 - **Integrated systems** (combining electricity, heating & cooling and transport)
 - **Green, alternative transport**
 - **Smart and sustainable cities**
 - **Social innovation** and community support (foster people's mutual support, e.g. fighting loneliness and illnesses)
 - **Climate adaptation and mitigation** but as a cross-priority theme
- **Widen and facilitate support to enterprises**, for SMEs as well as bigger companies.
- **New output indicators** should be developed for social innovation, to better reflect the social dimension and impact of these projects
- **Improve inter-programme cooperation** especially with programmes overlapping with NWE (have the same call dates, harmonise reporting procedures, support networking for projects tackling similar topics...)
- **Give priority to the roll-out of results**, including unexpected ones, and existing technologies rather than supporting the development of new pilot sites
- **Simplify administrative procedures**:
 - a **one-step application** process with less precise deliverables
 - an **improved eMS** (electronic monitoring system)
- **increase the co-funding rate** of the NWE programme (currently 60%)

Exhibition forum

See here all the posters presented at the exhibition forum and learn more about the 83 NWE projects funded so far, what results they have reached and their expectations in the long term.

Innovation





13

NL | FR | BE | DE | CH

PARTNERS



OBJECTIVES

Bring the productivity of metal forming production lines very close to the theoretical maximum by model-based prediction and control of the temperature increase on friction



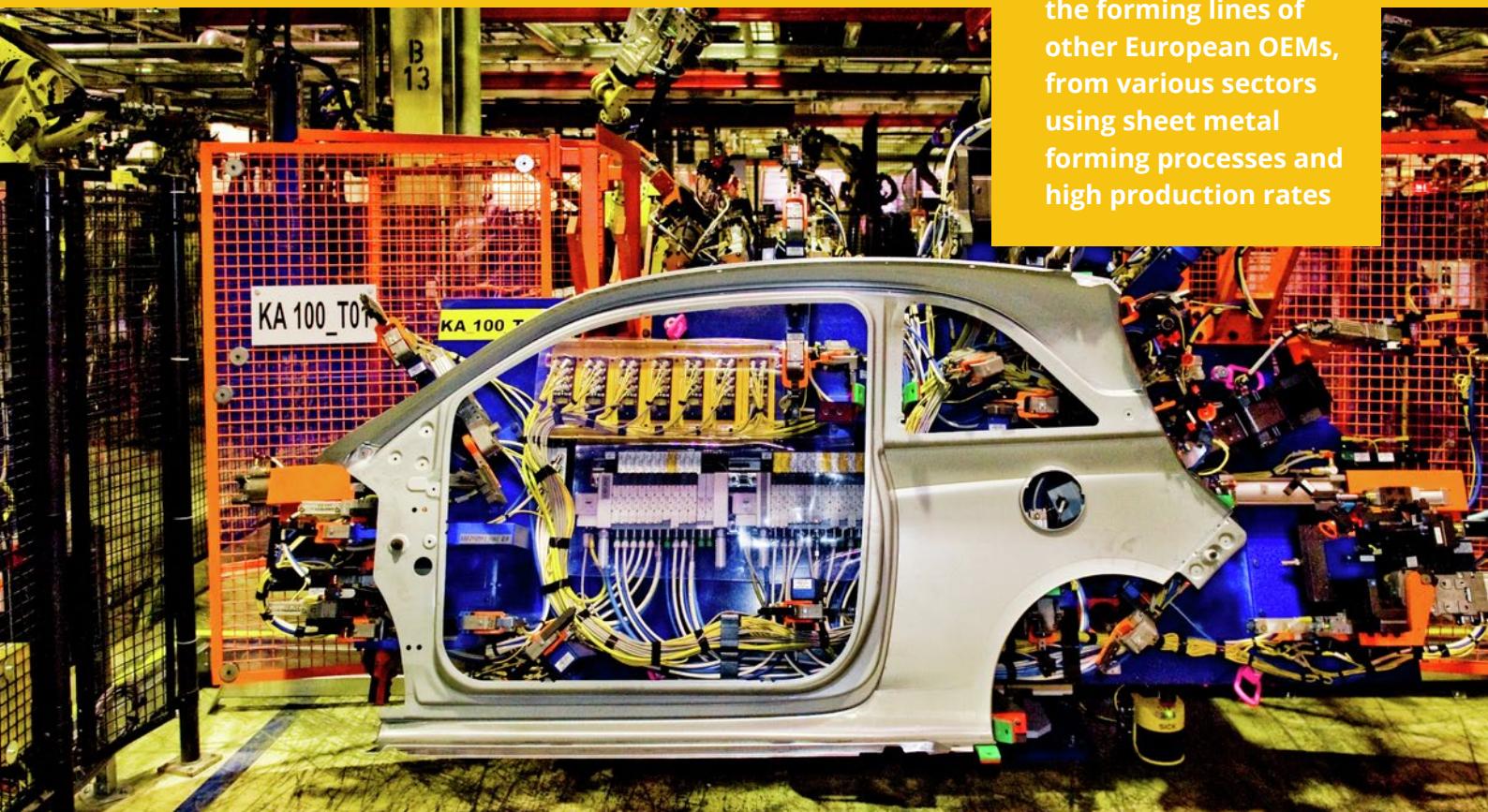
ACHIEVEMENTS SO FAR

- A set of tools (predictive simulation and adaptive control system) to reduce the loss of productivity from 25% to max.10% from the theoretical maximum
- 2 industrial-scale demonstrator tools were built and equipped with adaptive control systems



PUSHING RESULTS ONE STEP FURTHER

- The industrial end-users involved will apply the predictive model and the control system to other forming lines. The advanced simulations will be taken over in commercial software packages, enabling accurate predictions of temperature-induced tribological effects in the forming lines of other European OEMs, from various sectors using sheet metal forming processes and high production rates



Side frame from Opel production



8

NL | BE | FR | IE | UK | LU

PARTNERS



OBJECTIVES

Unlock, re-use and extract value from Public Sector Information (PSI) to develop innovative data-driven services in the area of infrastructure & environment



ACHIEVEMENTS SO FAR

- New data-driven services such as: apps to engage with citizens and support public authorities; predictive model of road accidents to improve safety; digital solution to discover natural heritage in an original way; open data to lower cyclists' and pedestrians' exposure to air pollution



PUSHING RESULTS ONE STEP FURTHER

- Transnational re-use and replicability by the BE-GOOD extended community
- SMEs developed products and services with long-term business uptake



Open Data for a Smarter Society



9

BE | DE | NL | UK | IE | FR

PARTNERS



OBJECTIVES

Improve the competitiveness of NWE entrepreneurs (mostly SMEs with a promising technology and a concrete spin-out plan) with interest in the biobased economy



ACHIEVEMENTS SO FAR

- > 40% of the services were delivered to SMEs across borders
- Transnational support network for biobased innovations manifested in a memorandum of understanding
- Overall improvement in the bio-economy since 2014
- Decreased territorial disparity between biobased innovation capacity in NWE



PUSHING RESULTS ONE STEP FURTHER

- Start-ups or SMEs new to the bioeconomy to be involved into a coupon scheme for material testing and to further define their business strategy
- Clustering for application related fields such as food, feed & health



Process technicians at the Bio Base Europe Pilot Plant, BE



8

NL | DE | UK | IE | BE | FR

PARTNERS



OBJECTIVES

Develop melt electrowriting strategies for 3D smart implants that provide affordable, curative healthcare solutions for faster recovery of bone fractures



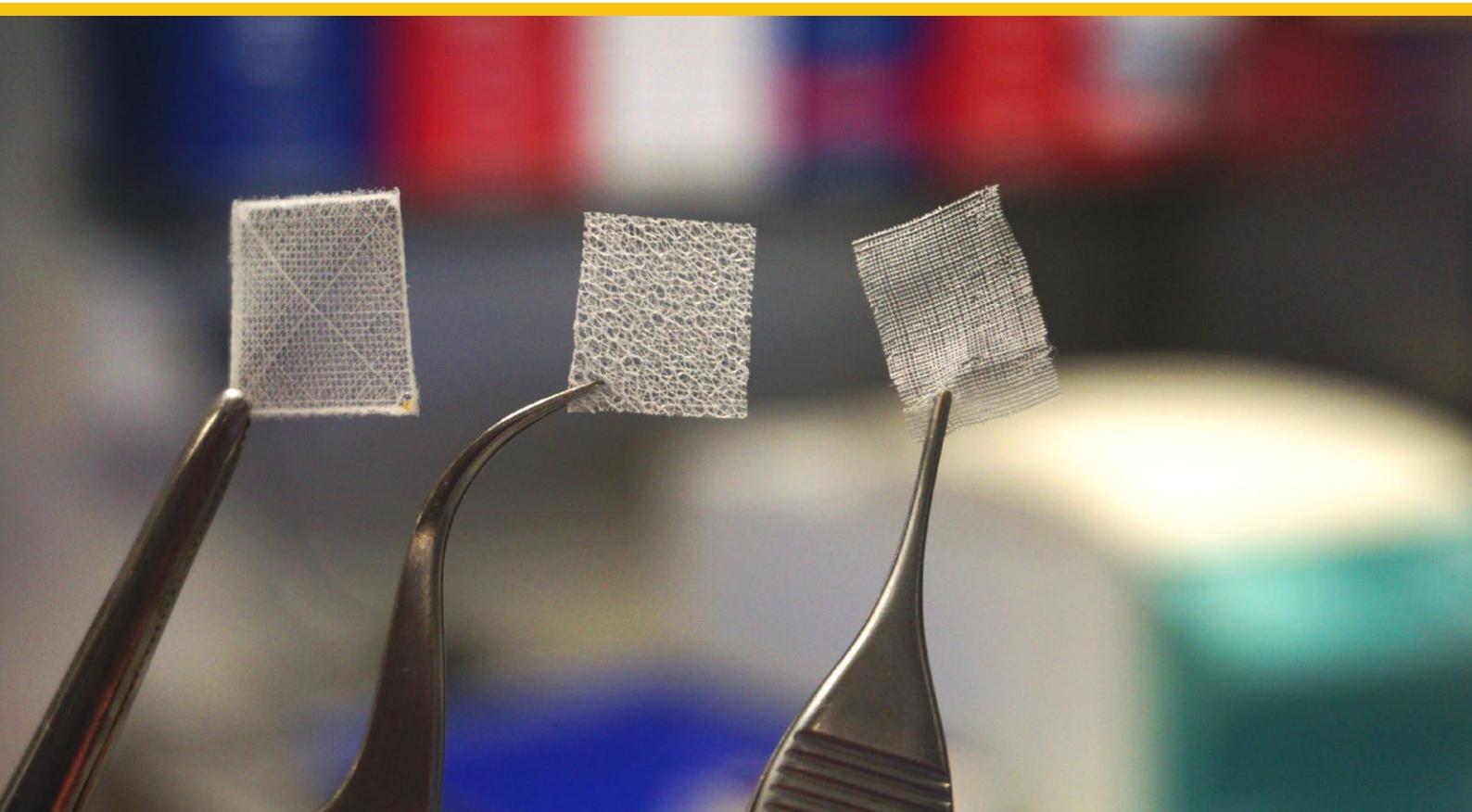
ACHIEVEMENTS SO FAR

- New melt electrowriting technology created and microfilament-based scaffolds generated. Combined with bone-specific organoids, this contributes to generating new commercialised fabrication equipment and smart scaffolds



PUSHING RESULTS ONE STEP FURTHER

- Showcase the fabrication capabilities of the new technology
- Processing new polymers via melt electrowriting and generating microfilaments scaffolds for other applications



Different microfiber scaffolds produced via melt electrowriting and designed to house stem cells for enhanced bone repair



10

NL | UK | BE | FR | DE

PARTNERS



OBJECTIVES

Build an expert community dedicated to support life science SMEs in the development of their innovation and in the internationalisation of their products



ACHIEVEMENTS SO FAR

- 360+ SMEs participated in B4H supporting activities (group coaching, individual mentoring)
- 230 SMEs applied for transnational cooperation vouchers



PUSHING RESULTS ONE STEP FURTHER

- Professionalise partners' approach to maintain and organise SME support in the long run with more partners and regions involved
- Develop international partnerships to connect with other life science expert networks



A B4H matchmaking event to foster SMEs' collaborations in Europe



8

FR | NL | BE

PARTNERS



OBJECTIVES

Develop high performance braiding for the manufacturing of lightweight composite materials with increased performance



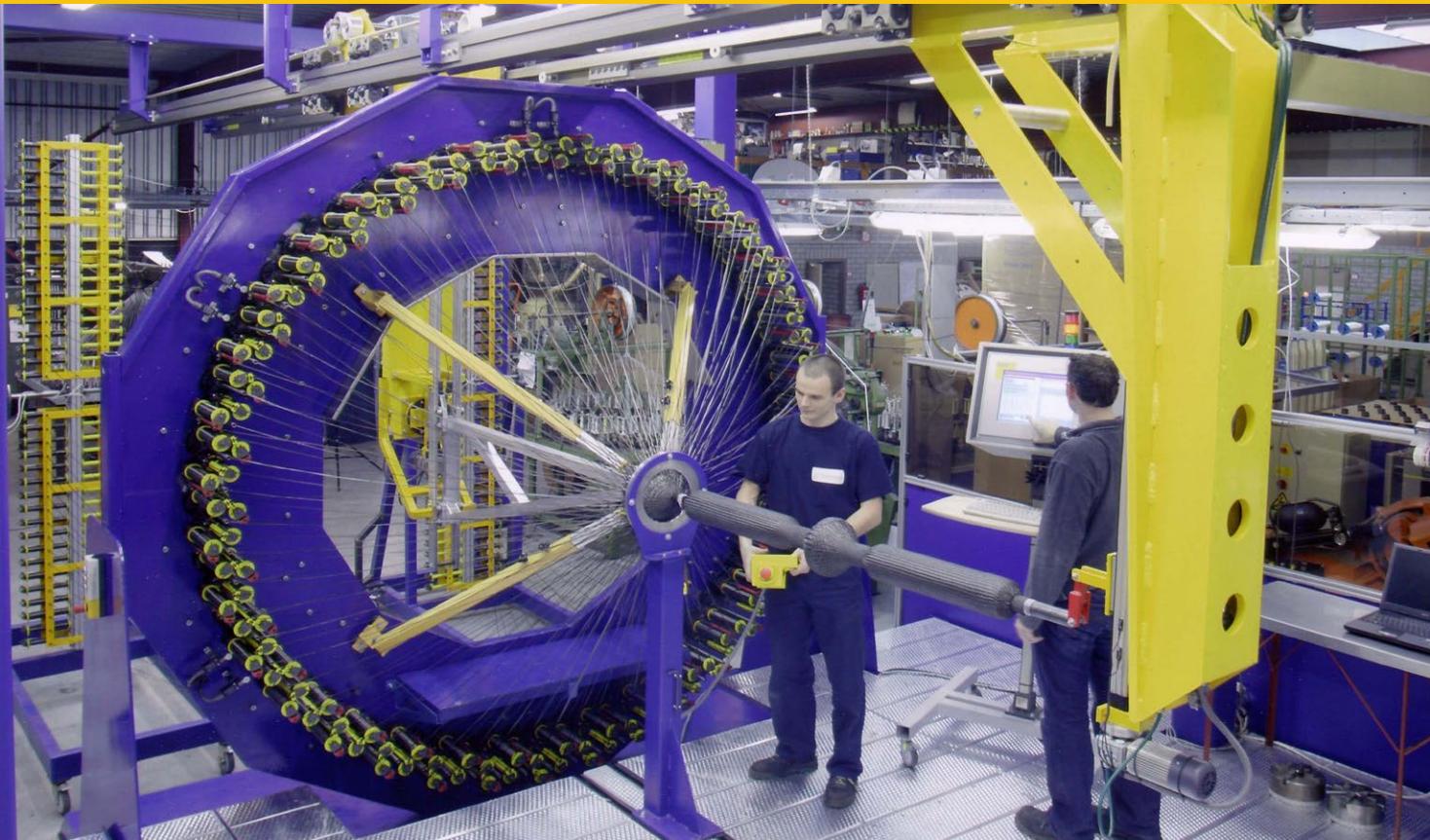
ACHIEVEMENTS SO FAR

- 2 braiding machines to manufacture innovative multilayer 3D triaxial braids
- 2 demonstrators (automotive and aerospace) to showcase and test the technology in relevant conditions
- Workshops to support companies and foster the use of braiding for composites



PUSHING RESULTS ONE STEP FURTHER

- A workgroup within a cluster dedicated to braided composites
- An investigation of other potential applications and sectors for 3D triaxial braids



An overbraiding machine



8

BE | UK | NL | DE

PARTNERS



OBJECTIVES

Support manufacturing SMEs in accelerating the adoption of novel technologies in the fields of Collaborative Robotics and Shop Floor Digitalisation



ACHIEVEMENTS SO FAR

- 4 fieldlabs with innovative collaborative robotic technology to train and educate SMEs
- 3 SMEs coached through an awareness, incubation and adoption process to develop their business case and implement robotics in their processes



PUSHING RESULTS ONE STEP FURTHER

- Collaboration with other EU clusters/ networks to bridge the gap with other EU regions



Operator and cobot assembling together an air compressor



10

NL | DE | UK | FR | BE | IE

PARTNERS



OBJECTIVES

Promote more affordable, accessible, effective and empowering mental health thanks to a transnational cooperation platform for e-mental health products



ACHIEVEMENTS SO FAR

- 'Agile' development, testing and real life implementation, through multidisciplinary cooperation, of 7 e-mental health applications (2 for depression, 2 for anxiety, 3 for post-traumatic stress disorder)



PUSHING RESULTS ONE STEP FURTHER

- Expansion of the eMEN cooperation platform which brings together relevant stakeholders in the field of e-mental health (eMH), including SMEs and policy stakeholders, to promote faster and effective implementation of eMH in NWE



Unlocking the power of technology to improve Europe's mental health



11

DE | FR | NL | BE | UK

PARTNERS



OBJECTIVES

Empower NEETs ('Not in Education, Employment, or Training') aged 15-34 to use the regular entrepreneurship and employment support schemes offered by their cities so as to (re)enter the labour market



ACHIEVEMENTS SO FAR

- A transnational coaching concept including a digital platform that reaches out to 1 000 NEETs in NWE, of which 400 will enter regular entrepreneurship/employment support schemes



PUSHING RESULTS ONE STEP FURTHER

- **Integration of the EYES approach into the labour market policies of employment agencies and local governments across NWE**
- **Adoption of the EYES curriculum and digital tool by other youth entrepreneurship and employment projects**



Co-creating the EYES tool



10

BE | DE | FR | NL | IE

PARTNERS



OBJECTIVES

Envision the development of economically viable value chains based on micro-algae



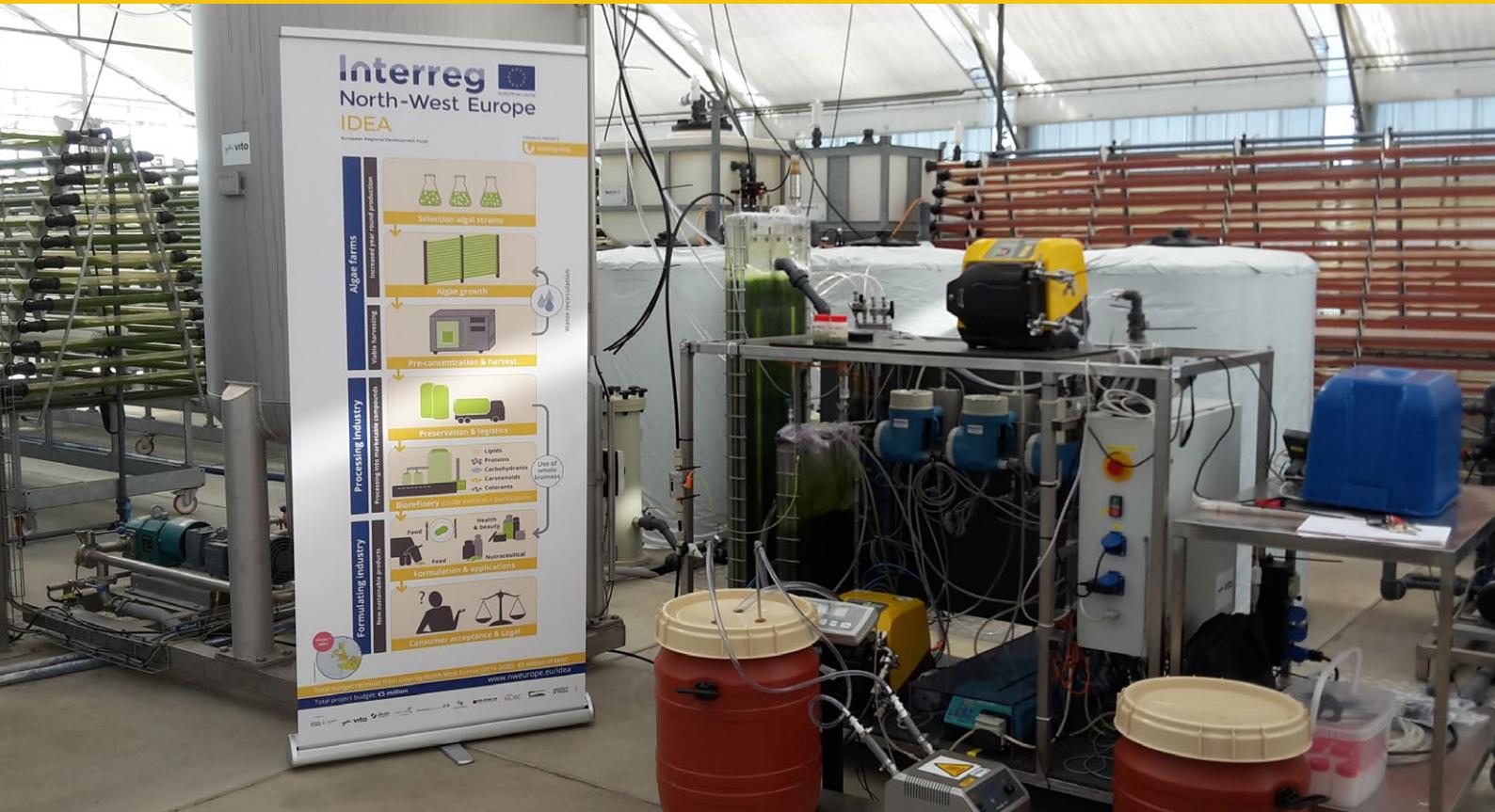
ACHIEVEMENTS SO FAR

- Selection, cultivation and evaluation of sets of algae species in 2 pilot sites
- Water reuse and CO₂ capture studied to increase algae growth sustainability
- Understanding the impact of wet preservation on algae biomass immediately after harvest



PUSHING RESULTS ONE STEP FURTHER

- Additional input on ingredient specifications for algae-based fractions that are required by end-users/markets



Algae growth location in Belgium



8

BE | UK | FR | NL | LU

PARTNERS



OBJECTIVES

Fight youth unemployment and support sustainable professional integration of low-skilled NEETS ('Not in Education, Employment, or Training') coming from densely populated core areas of NWE in the horticulture job market



ACHIEVEMENTS SO FAR

- Co-production manual to support individuals involved in the design, development and delivery of the first social innovation incubation models



PUSHING RESULTS ONE STEP FURTHER

- Extend the project's target groups to refugees. The Belgian LP will develop market gardening activities near a Red Cross refugees centre and is thinking about ways to finance training



Salad crops at Forum pour l'emploi, a project subpartner, in Luxembourg



10

BE | FR | DE | IE | CH | NL | UK

PARTNERS



OBJECTIVES

Increase the knowledge and innovation level of the machining sector in NWE with respect to Industry 4.0 (digitalisation and automation of manufacturing processes)



ACHIEVEMENTS SO FAR

- Development of several demonstrators in 7 inspirational fieldlabs for SMEs
- Launch of a voucher scheme



PUSHING RESULTS ONE STEP FURTHER

- Stepping up project promotion towards the machining SMEs
- Attracting more SMEs to the fieldlabs



Computer aided technologies for Machining 4.0



9

NL | UK | IE | FR

PARTNERS



OBJECTIVES

Progress the combined technical and commercial maturity level of SMEs in NWE developing Marine Energy Concepts (TRL 3 or 4), and reduce the risk of failure with 20% in the subsequent demonstration phase



ACHIEVEMENTS SO FAR

- A successful first Call for Support
- Ongoing delivery of a bespoke set of technical and commercial services to 21 SMEs
- Preparation of the second Call for Support



PUSHING RESULTS ONE STEP FURTHER

- Preparing marine energy (ME) concept developers for testing and demonstration
- Build synergies with the Ocean Energy Scale-up Alliance to accelerate the market introduction of ME pilots
- Make use of Interreg 2 Seas MET-CERTIFIED project outcomes to ensure ME Concept development aligns with best practices in certification

Discover the potential of Marine Energy

Discover the potential of marine energy

www.nweurope.eu/MEA



7

UK | DE | NL | BE

PARTNERS



OBJECTIVES

Create a sustainable NWE cross-regional online-enabled ecosystem bringing innovative solutions closer to the market in the areas of Advanced Materials and Regenerative Medicine/ Medical Devices



ACHIEVEMENTS SO FAR

- Development and launch of an online platform
- By project end, 300+ matches between AdvMat & RegMed players, leading to 40+ crossover collaborations and 20+ products reaching a technology validation phase (TRL 4-5)



PUSHING RESULTS ONE STEP FURTHER

- **Collaboration could be widened and deepened by expanding the online platform usage beyond NWE, to EU level and potentially beyond**



Developing cross-border partnerships to boost innovation in advanced MATerials for MEDical applications



6

BE | NL | FR | UK

PARTNERS



OBJECTIVES

Raise awareness and change behaviour of poultry farmers so that Integrated Pest Management (IPM) programmes will become the standard, sustainable approach to control Poultry Red Mites



ACHIEVEMENTS SO FAR

- Promising results on automated monitoring and non-chemical treatment of Poultry Red Mites which will feed the development of IPM programmes to improve profitability as well as animal welfare and health



PUSHING RESULTS ONE STEP FURTHER

- **Development of action plans - based on tested IPM strategies - for poultry advisors and veterinarians so that farmers can learn to control Poultry Red Mites in a sustainable way**



Experimental Poultry Centre in Geel, BE



10

NL | BE | UK

PARTNERS



OBJECTIVES

Support the industry in the NWE region to develop, improve & validate new eHealth based technologies for the transition of 24/7 hospital care for heart failure patients to a home environment



ACHIEVEMENTS SO FAR

- A blueprint of the operational organisation plan to start small scale pilots
- A paper prototype for the integrated home hospitalisation platform



PUSHING RESULTS ONE STEP FURTHER

- An innovation hub will ensure continuity and further growth of co-creation between industry and hospitals to roll out innovations into tangible and evidence based eHealth products which support hospitalisation at home



Innovating 'hospital at home' for heart failure patients



5

UK | NL | IE | FR | BE

PARTNERS



OBJECTIVES

Drive innovation across the ocean energy supply chain and scale technologies up to multi-machine readiness by providing free access to Europe's world-leading test centres



ACHIEVEMENTS SO FAR

- 1st successful call to access test sites to perform tests and validate low carbon technologies, with 12 selected applicants
- 2nd call open until January 2020, with many interested international developers



PUSHING RESULTS ONE STEP FURTHER

- **Strong collaboration between international partners to work towards the progression and commercialisation of the marine energy sector**



Magallanes Renovables ATIR installation at EMEC's Fall of Warness test site



12

NL | DE | FR | BE | IE | UK

PARTNERS



OBJECTIVES

Establish an open access pilot line for SMEs to benefit from the innovation potential of Photonic Integrated Circuits (PICs) in NWE



ACHIEVEMENTS SO FAR

- Establishment of a transnational network of existing clusters and networks for SMEs, which acts as first contact point for the emerging pilot line, and thus reduces the inhibition threshold for SMEs to use the pilot line



PUSHING RESULTS ONE STEP FURTHER

- **Include further partners in the transnational network, in particular from the user industries of PICs, in order to increase awareness of the pilot line and to receive feedback to keep the pilot line attractive for SMEs**



Inspection of PICs during manufacturing



8

IE | UK | BE | FR | NL | DE

PARTNERS



OBJECTIVES

Accelerate the growth of the ocean energy sector and its supply chains across the partner regions of Ireland, UK, Belgium, France, the Netherlands and Germany



ACHIEVEMENTS SO FAR

- The cross-sectoral collaborative network counts close to 150 members from 15 countries. It plans to support 100+ companies over the lifetime of the project and to establish a sustainable network of 200+ members



PUSHING RESULTS ONE STEP FURTHER

- Self-supporting network which should be delivering activities to 400+ member organisations 10 years after the project ends**
- 10 of the original cohort of SMEs supported should be amongst the EU's top ocean energy companies**



Accelerating the growth of the ocean energy sector and its supply chains across NWE



7

NL | BE | DE | UK

PARTNERS



OBJECTIVES

Boost a laser-based interactive storage system and process control for fresh agro products (potatoes, apples, pears, blueberries)



ACHIEVEMENTS SO FAR

- Successful tests of the storage system performed, enabling a 3-5% loss reduction in apples, pears and blueberries, leading to a 60-100 M€/yr gain for farmers in NWE



PUSHING RESULTS ONE STEP FURTHER

- Commercialisation of the interactive storage system by 3 companies, using the H2020 FastTrack to Innovation programme



Long-term storage of fruit under low temperature and low oxygen conditions



6

FR | BE | UK

PARTNERS



OBJECTIVES

Support the establishment of more successful Community Land Trusts (CLT) and *Organismes de Foncier Solidaire* (OFS) in cities across the NWE region



ACHIEVEMENTS SO FAR

- 4 CLT pilots in Lille, Brussels, London and Ghent, with 186 housing units completed or under construction and around 400 under study
- 30+ CLTs and OFS supported across NWE through a start-up fund
- Work on the creation of a supportive policy, funding and regulatory environment for CLTs in NWE



PUSHING RESULTS ONE STEP FURTHER

- Expansion of the project to the whole EU
- Broadening the topics tackled: access to land, non-housing components, sustainable construction materials, energy performance...



Visit of London's first 23 CLT homes on 8 November 2019 at St Clements, UK



10

UK | NL | IE | FR | CH | LU

PARTNERS



OBJECTIVES

Develop a transnational network of replicable social innovation hubs, which will be used to establish innovative approaches to social business support in geographically excluded areas experiencing market failure



ACHIEVEMENTS SO FAR

- Individual support hubs up and running in partner countries, trialling and testing approaches to support
- A transnational network to exchange knowledge and expertise in order to internationalise the idea of social entrepreneurship



PUSHING RESULTS ONE STEP FURTHER

- Creating new links and contacts by attending events to further widen our transnational support network
- Meeting projects with similar objectives and innovative support mechanisms that we could learn from and link with



Inspiring individuals to develop and grow their own social business ideas



7

NL | BE | DE | UK | FR

PARTNERS



OBJECTIVES

Enable the co-creation of rehabilitation tools based on Virtual & Augmented Reality technologies to accelerate patients' recovery (esp. children with chronic diseases and disability + adults stricken with fatigue and pain)



ACHIEVEMENTS SO FAR

- To put into market the VR & AR applications developed and to create tools to optimise rehabilitation protocols. VR4REHAB blueprint and the Online Library will respond to the demand for innovative solutions and modern VR/AR protocols for therapy



PUSHING RESULTS ONE STEP FURTHER

- Set-up of a business plan to define how to put the applications developed on the market during the project and to establish future cooperation and enlarge the network, e.g. by joining the EuroVR association**



Hacking for solutions

Low Carbon





9

FR | BE | NL | UK | DE

PARTNERS



OBJECTIVES

Increase the number of shared energy retrofitting measures in privately owned condominium building blocks thanks to a governance arrangement linking demand and supply, facilitated by local authorities



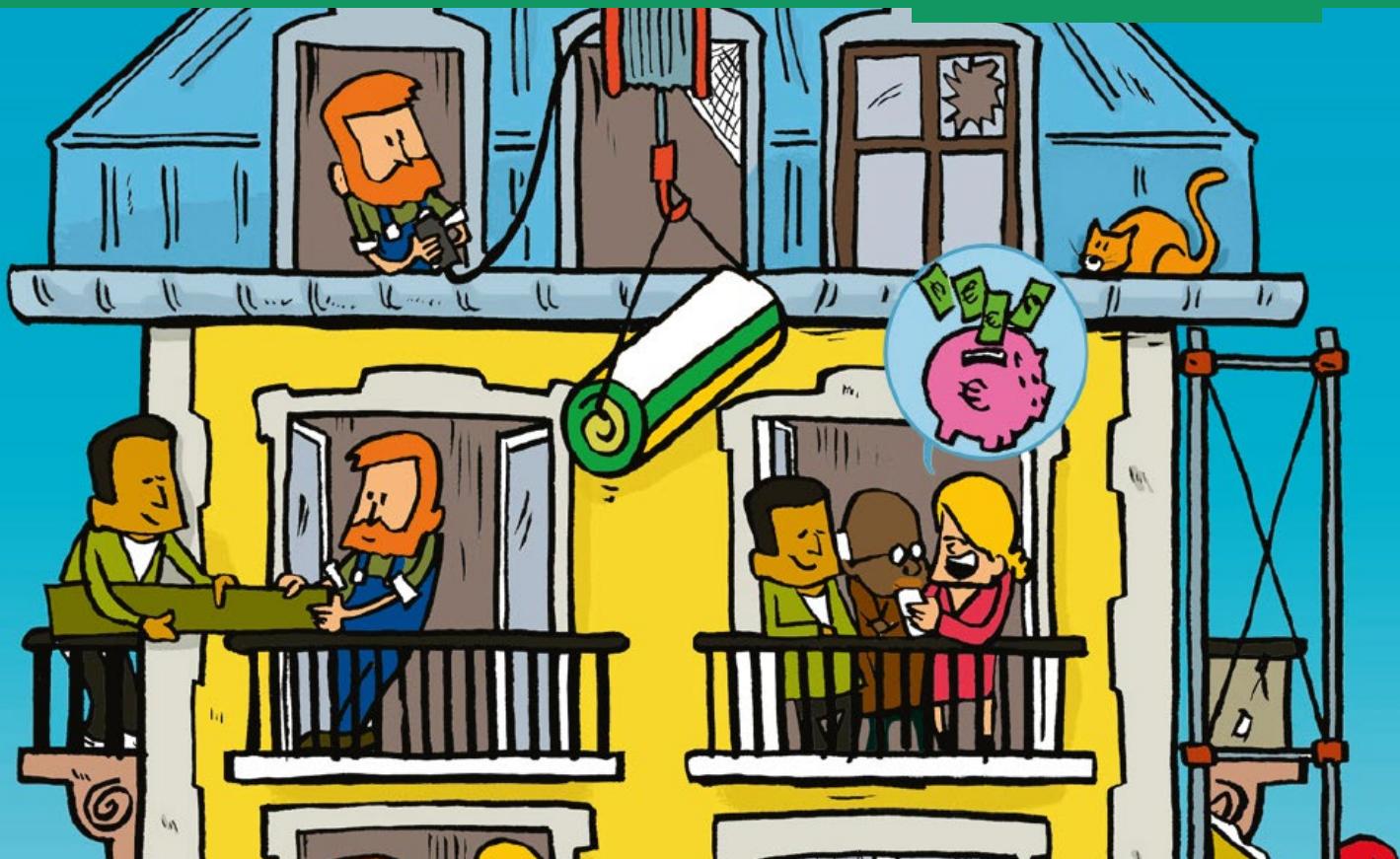
ACHIEVEMENTS SO FAR

- A set of facilitation methods for the retrofitting of condominiums
- An online platform adapted to cities' local context
- Identified pitfalls and gaps to help local authorities who engage in similar action



PUSHING RESULTS ONE STEP FURTHER

- An ACE charter to attract other European cities working with condominiums and who want to learn and share their experience beyond NWE (e.g. In Spain, Italy)
- Synergies with similar projects such as INNOVATE (H2020)



Accelerating Condominium Energy Retrofitting – Facilitation methods for local authorities



8

UK | IE | FR | NL | DE

PARTNERS



OBJECTIVES

Accelerate market uptake of floating offshore wind by demonstrating its cost competitiveness and survivability in a severe open-sea environment



ACHIEVEMENTS SO FAR

- Support from the supply chain and investor community for the construction of the Floating Offshore Wind Prototype
- A detailed plan for the consenting of the Atlantic Marine Energy Test Site off the coast of Ireland



PUSHING RESULTS ONE STEP FURTHER

- Increasing the maximum capacity of the turbine to allow more renewable energy onto the grid
- Opening barriers for the floating offshore wind sector in NWE
- Expertise from key research institutes in the offshore wind and oil & gas sector, allowing them to diversify



SAIPEM turbine & floating platform

Interreg North-West Europe

Climate Active Neighbourhoods

European Regional Development Fund



10

DE | UK | NL | FR | BE

PARTNERS



OBJECTIVES

GHG reduction in residential buildings of deprived neighbourhood thanks to local authorities implementing climate action strategies more effectively, involving residents



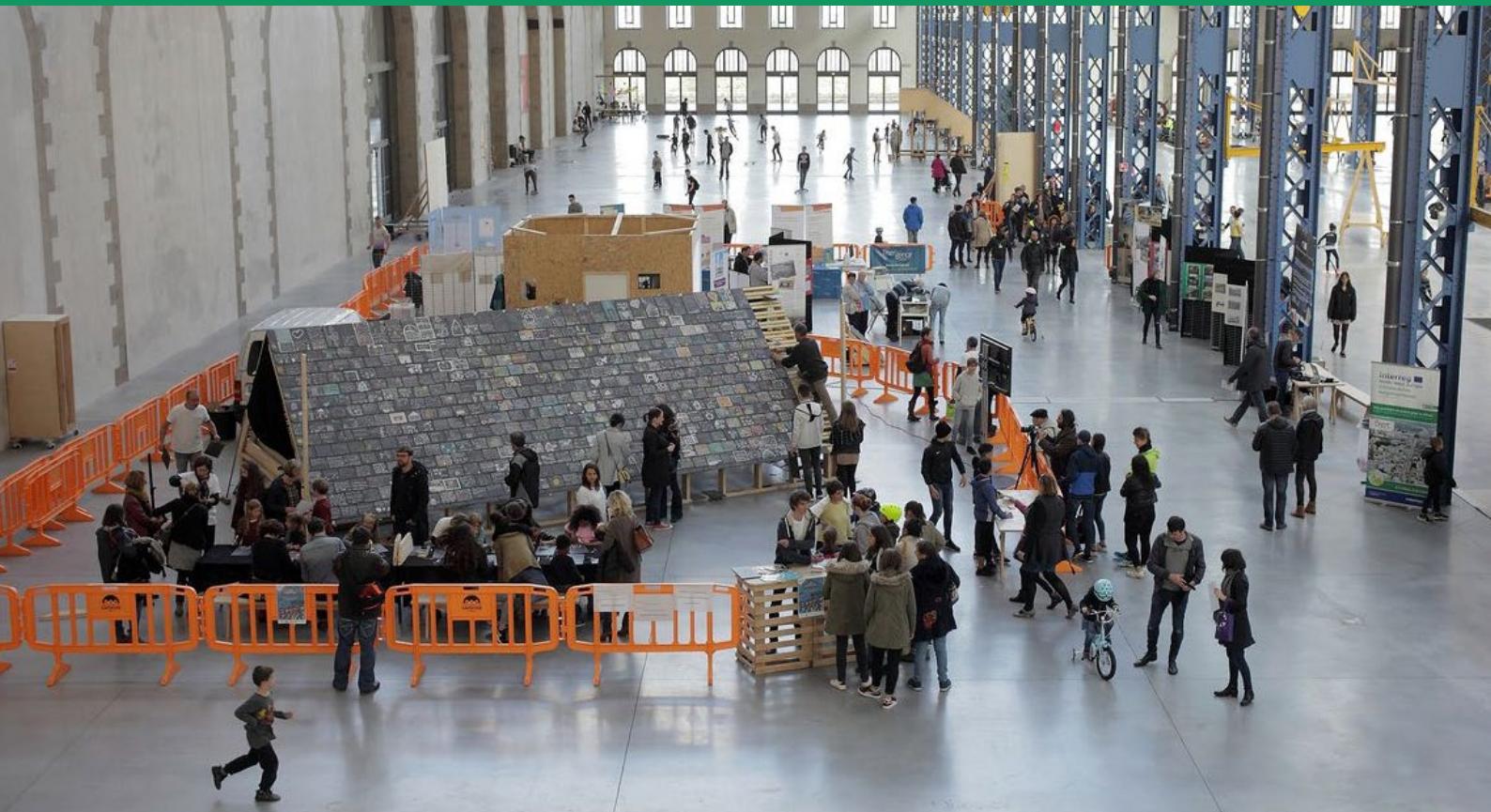
ACHIEVEMENTS SO FAR

- 1922 households with improved energy standards
- 2 669t GHG savings
- €13.5 M funding leveraged
- Energy savings and health benefits



PUSHING RESULTS ONE STEP FURTHER

- Disseminate the project results to Climate Alliance network members (1 700 member municipalities and districts from 26 European countries)



© Image - Sébastien Durand/Brest métropole

Toit par toi - Event at the Capucins on 21/10/2017 in Brest, FR



9

BE | FR | UK | IE | NL

PARTNERS



OBJECTIVES

Reduce carbon emissions and restore the carbon storage capacity of different types of peatlands



ACHIEVEMENTS SO FAR

- Restoring peatland has gained attention, especially in the UK and Ireland
- Set up and demonstrate innovative technologies for new restoration and carbon measurement techniques with the involvement of local and regional stakeholders



PUSHING RESULTS ONE STEP FURTHER

- Increase cooperation with peatland organisations across NWE, other Interreg or LIFE projects, and (local) governments for more peatlands to be restored



Valley of the Black Creek, BE



18

NL | UK | BE | FR | DE | IE

PARTNERS



OBJECTIVES

Change traditional high GHG-emitting land management practices to sustainable low carbon alternative practices in the main peatland containing regions of NWE



ACHIEVEMENTS SO FAR

- A report to evaluate potential business models of low carbon alternative practices
- Set-up of pilot sites to fieldtest such practices



PUSHING RESULTS ONE STEP FURTHER

- **A farmer-to-farmer learning programme showcasing the benefits of alternative land management approaches and promoting the adoption of sustainable low carbon farming practices**
- **Policy proposals to governments across NWE**
- **Cooperation with other low-carbon projects**



Wet agriculture in Kamp, DE



9

BE | NL | DE | UK

PARTNERS



OBJECTIVES

Demonstrate how cycle highways can be a cost efficient low-carbon mobility solution thanks to a manual with best practices in planning, designing and building



ACHIEVEMENTS SO FAR

- Important increase in usage of cycle highways, leading to CO₂ reduction of 1 000 t/year
- Additional infrastructure
- Establishment of a trans-national learning network



PUSHING RESULTS ONE STEP FURTHER

- Strengthening the learning network in and outside NWE
- Involving more authorities and companies through further Cycle Highway Academies



A cycle highway in North-West Europe



9

NL | BE | LU | UK | DE | FR

PARTNERS



OBJECTIVES

Integrate various renewable energy systems, storage devices, electric vehicles & optimisation of energy usage via an interoperable Energy Management System (iEMS) in 4 city pilots



ACHIEVEMENTS SO FAR

- Replacement of 500 000 l diesel generators by grid connection (~750 t CO₂/yr reduced) in the Arnhem Harbour via cold ironing
- 138 kWp solar photovoltaics installed in Nottingham (~60-70 t CO₂/yr reduced)



PUSHING RESULTS ONE STEP FURTHER

- Project synergy & networking with other EU projects (Interreg Europe EV Energy), plus industry & local political actors



CleanMobilEnergy combines various RES, storage devices, EVs and controlled energy consumption through one unique smart energy management system



8

NL | IE | BE

PARTNERS



OBJECTIVES

Joint testing of the concept of a community-based virtual power plant (cVPP) in 3 different markets of BE, NL and IE, which offers a community the opportunity to provide to its energy needs with small-scale, distributed low-carbon technologies with participation from individual consumers, local energy companies or SMEs



ACHIEVEMENTS SO FAR

- Joint conceptualisation & testing of the cVPP concept in 3 different markets
- Implementation in a deprived neighbourhood of Ghent (BE), Loenen (NL) and in Ireland
- Replication process in 9 communities in BE, IE and NL



PUSHING RESULTS ONE STEP FURTHER

- **Combining insights from other Interreg NWE projects and take the next step in the decarbonisation process by means of (i) upscaling of the frontrunner cVPPs, (ii) replicating the insights to follower community energy initiatives, and (iii) preparing newcomer communities for the potential deployment of cVPP**



cVPP, a novel model of radical decarbonisation



13

NL | UK | LU | FR | BE | DE

PARTNERS



OBJECTIVES

Increase the share of renewable energy in the NWE heating and cooling sector by accelerating the roll-out of demand-driven smart grids delivering low-temperature heating and cooling to cities



ACHIEVEMENTS SO FAR

- Test drillings in the municipality of Brunssum
- Promoting 5th generation district heating & cooling network standards towards the industry and attracting investors, public authorities and project developers



PUSHING RESULTS ONE STEP FURTHER

- **5 years after the project's end, increase of share of renewable energy sources (RES) used for heating and cooling to 17%**



Test drilling at the Brunssum site of the D2Grids project



10

DE | NL | BE | FR

PARTNERS



OBJECTIVES

Reduce CO₂ emissions by replacing fossil fuels with an increased use of Deep Geothermal Energy (DGE) for large-scale infrastructures requiring high-temperature heat supplies to cover their basic energy loads



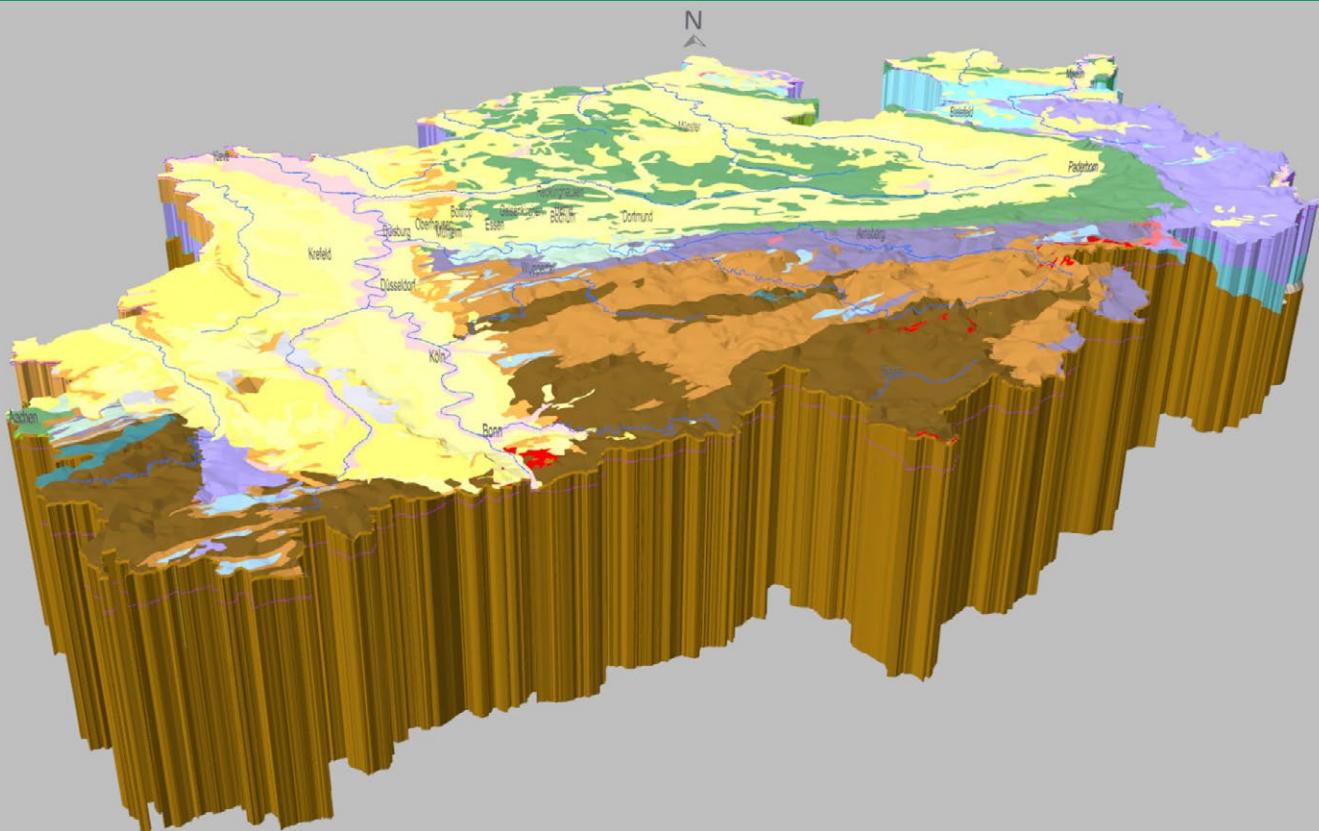
ACHIEVEMENTS SO FAR

- Assessment of the geothermal resources in the different countries
- Development of a network of future pilot sites that will learn from the transnational optimisation of the current techniques in 2 existing pilots



PUSHING RESULTS ONE STEP FURTHER

- DGE network and guidance will allow spin-offs to reach the private sector
- Provide renewable DGE solutions for existing power plant heating grids, leading to great GHG reduction



3D model of North Rhine-Westphalia, DE



10
16

PARTNERS

NL | LU | UK | FR
NL | FR | UK | DE



OBJECTIVES

Address poor energy performance of residential buildings (houses and apartments) by generating a new mass market for net zero energy retrofits across NWE, through the successful Dutch EnergieSprong approach



ACHIEVEMENTS SO FAR

- 4 pilots completed: 12 houses in Longueau, 10 in Hem (FR); 10 in Nottingham, 5 in Maldon (UK), proving the feasibility of long-term performance guaranteed net zero energy retrofits of residential houses through the EnergieSprong approach



PUSHING RESULTS ONE STEP FURTHER

- Many other actors are now collaborating together to scale up the approach and improve pre-industrialised solutions: DE has joined MUSTBEO to test the approach on apartment buildings; in FR, 100+ actors have signed a volume deal to collectively retrofit 6600 homes; NL continue to scale up the solution with more than 5000 homes delivered



Pilot houses in Longueau, FR



11

BE | IE | DE | NL | FR | UK

PARTNERS



OBJECTIVES

Rally knowledge, experiences and expertise to develop energy community cooperatives (ECCO) thanks to an ECCO accelerator network



ACHIEVEMENTS SO FAR

- Development of an ECCO lifecycle supporting 75+ local communities which have started their own energy community
- 50 additional ECCOs planned, producing +600 MWh renewable energy



PUSHING RESULTS ONE STEP FURTHER

- **Gaining policy makers support (for building permits and exploitation of renewable energy installations)**
- **Clustering with projects working on community energy, virtual power plants, renewable energy technologies**



Creating new energy community cooperatives



15

NL | BE | DE | UK | FR

PARTNERS



OBJECTIVES

Create a critical mass of shared mobility options of light electric vehicles (LEVs) and EVs, leading to behaviour change and contributing to less congestion and CO₂ emissions in cities



ACHIEVEMENTS SO FAR

- A functioning prototype of an interactive eHUB mobility dashboard in Vilvoorde (BE), giving its users access to real time information about public transport options and alternative mobility modes in the vicinity



PUSHING RESULTS ONE STEP FURTHER

- The eHUBS analog will be digitalised via a web-based interface so that other partner cities can use it



An eHUB pillar prototype showcased at the car-free Sunday in Leuven, BE



8

IE | FR | NL | DE | LU | UK

PARTNERS



OBJECTIVES

Engage and empower the school community in the reduction of energy-related GHG emissions in NWE post-primary schools



ACHIEVEMENTS SO FAR

- 12 schools in 6 NWE countries as demonstration sites with the set-up of committees comprising staff and students



PUSHING RESULTS ONE STEP FURTHER

- **Connecting with school authorities and building management bodies to ensure the ENERGE final methodology is efficiently replicated across NWE and beyond**



Reducing GHG emissions, it's my concern!



13

DE | NL | FR | UK | BE

PARTNERS



OBJECTIVES

Develop a fuel cell range extender for cargo pedelecs in order to increase the attractiveness of this distribution solution and allow new applications for the use of the cargo pedelecs in urban logistics so as to reduce CO₂ emissions and traffic jams



ACHIEVEMENTS SO FAR

- Development of a liquid cooled fuel cell system, combined with a preheater for sub-zero temperatures. The fuel cell cargo pedelecs will be tested by logistic companies specialised in goods distribution by bikes (in cities with different climates and topographies)



PUSHING RESULTS ONE STEP FURTHER

- **Collaboration between cities and logistic companies to create favorable conditions for successful use of the cargo pedelecs**
- **New applications for cargo pedelecs will be identified thanks to an increased capacity of the fuel cell electrical system combined with fast refueling**



Fuel Cell Cargo Pedelecs



5

UK | NL | IE | FR | BE

PARTNERS



OBJECTIVES

Help bring offshore renewable energy technologies to the market by providing free access to NWE world-leading network of test centres



ACHIEVEMENTS SO FAR

- 28 technologies successfully deployed across 4 test centres
- + €64M leveraged into EU economy
- Orbital Marine Power, pioneering floating tidal turbine generated over 3GWH of energy



PUSHING RESULTS ONE STEP FURTHER

- Share lessons learnt from real sea deployments between test centres and technology developers
- Leveraging existing test sites to share data will create the right momentum for the industry



SR2000 testing at EMEC's Fall of Warness test site



10

UK | IE | DE | FR | BE

PARTNERS



OBJECTIVES

Validate and model the renewable hydrogen value chain and adapt it to a Decision Support Tool (DST) that leads NWE communities into sustainable, local and autonomous energy matrixes



ACHIEVEMENTS SO FAR

- Launch of the Community Hydrogen Forum (CH2F) to help stakeholders understand the opportunities and benefits of hydrogen technologies (energy sustainability, decarbonisation...).
- Set-up of a biomass to hydrogen plant in the Scottish Outer Hebrides



PUSHING RESULTS ONE STEP FURTHER

- **Release of a white paper for policy makers throughout NWE to open up opportunities for collaboration**
- **Establishment of Hydrogen Ireland, a new national association that will act as a forum for the hydrogen community**

- Energia PP has secured OLEV (UK Office for Low-Emission Vehicles) funding for hydrogen-powered buses and a refuelling station in Belfast



Inauguration of the Hydrogen bus in Belfast, UK



6

UK | IE | NL | BE | FR

PARTNERS



OBJECTIVES

Trial & demonstrate new low carbon water pumping technologies and systems that organisations can adopt to reduce their energy use and CO2 emissions



ACHIEVEMENTS SO FAR

- Building (ongoing) of a test tank at Université de Liège to test pump equipment/configurations. Lessons will drive 'greener pumping' elsewhere and predict CO2 reductions and energy savings



PUSHING RESULTS ONE STEP FURTHER

- Team up with 'waterway related' projects to promote achievements



Pumping station at Eefde, NL



11

LU | BE | DE | FR

PARTNERS



OBJECTIVES

Combine the construction and agricultural sectors' skills to reduce CO₂ emissions and energy waste by creating a European market for integrated rooftop greenhouses



ACHIEVEMENTS SO FAR

- Implementation of 4 pilot rooftop greenhouses to reduce CO₂ emissions in NWE
- Partners coaching 10 early adopters



PUSHING RESULTS ONE STEP FURTHER

- **Raising awareness among stakeholders on rooftop greenhouse implementation**
- **Seeking experience of experts in energy, plant production, rooftop construction**



Greenhouses to reduce CO₂ on roofs



8

BE | NL | DE

PARTNERS



OBJECTIVES

Facilitate the development of a market for low-carbon heavy-duty vehicles on hydrogen for logistic applications



ACHIEVEMENTS SO FAR

- 27-t rigid hydrogen truck developed and built
- Hydrogen mobile refueler developed and built
- Development of a demonstration programme for the organisation of 6 demos in 4 countries with 4 end-users



PUSHING RESULTS ONE STEP FURTHER

- **Continuous outreach efforts to stakeholders in other NWE regions**
- **Invite shippers/logistic operators to demo events and discuss learnings and next development steps**



The H2-Share heavy-duty hydrogen truck and mobile refueler will be demonstrated in several cities in NWE



13

DE | FR | UK | NL | BE

PARTNERS



OBJECTIVES

Foster the creation of a hydrogen supply chain for water transport in NWE, spur behavioral change, highlight opportunities for industry stakeholders and ensure public acceptance



ACHIEVEMENTS SO FAR

- Expected final results: a hydrogen passenger ship in Amsterdam; a demonstrator of maritime H2 bunkering in Ostend



PUSHING RESULTS ONE STEP FURTHER

- Close collaboration with other projects dealing with shipping, ports and hydrogen within NWE



Greening shipping with hydrogen in North-West Europe

www.nweurope.eu/H2SHIPS



8

BE | DE | NL | IE | UK

PARTNERS



OBJECTIVES

Enable access to new, affordable low carbon homes for small households, thanks to changes in the construction industry linked to digitisation, new materials & adapted techniques



ACHIEVEMENTS SO FAR

- 6 pilots started in BE, NL, DE & IE where 54 affordable low-carbon demonstration houses will be built, backed by regional stakeholder groups, leading to significant CO2 reduction and lower costs



PUSHING RESULTS ONE STEP FURTHER

- Increasing communication efforts to reach the social housing sector, building sector and self-builders
- Replication/adaptation of demonstration houses
- Updated and improved digital H4.0E building platform



Construction of the first Dutch WikiHouse in Almere Poort



13

IE | UK | BE | FR | NL

PARTNERS



OBJECTIVES

Overcome political, organisational and economic barriers to 4th generation district heating and cooling (4DHC) in NWE by harmonising policy and regulation and developing 6 pilot investments



ACHIEVEMENTS SO FAR

- 2 pilots nearing completion and soon to be commissioned
- Production of 6 transition roadmaps mapping out how 4DHC will continue to grow, showing how the concepts developed in the HeatNet model guide are put into practice



PUSHING RESULTS ONE STEP FURTHER

- The HeatNet online platform, designed to guide decision makers through the process of deciding if 4DHC is a solution for their municipality



Mijnwater, a HeatNet NWE pilot



9

BE | UK | NL | DE | FR

PARTNERS



OBJECTIVES

Demonstrate that fuel cell garbage trucks provide an effective solution to reduce emissions from road transport in North-West Europe



ACHIEVEMENTS SO FAR

- Joint work, exchange of experience and learning between more and less advanced partners to efficiently purchase fuel cell garbage trucks through public procurement



PUSHING RESULTS ONE STEP FURTHER

- **Cost reductions and simplification of the procurement process made possible if a group of several users orders the exact same garbage truck with the exact same features**



Fuel cell garbage truck in operation since April 2019 in Groningen, NL



9

UK | FR | NL | BE

PARTNERS



OBJECTIVES

Develop and validate an integrated tidal energy and hydrogen production solution for clean energy generation in remote areas



ACHIEVEMENTS SO FAR

- Detailed design of Areva H2Gen Electrolyser, design and start of the build programme for the O2 tidal turbine
- Development of a whole energy system model of the Orkney Islands to assess impact and replicability of the ITEG solution



PUSHING RESULTS ONE STEP FURTHER

- Huge potential to be replicated in other remote areas across NWE and beyond, where grid constraints are an issue and a renewable energy resource is present



EMEC Hydrogen production plant on the island of Eday, Orkney



10

NL | BE | UK

PARTNERS



OBJECTIVES

Reduce CO2 emissions of festivals thanks to a hybrid unit which only uses renewable energy sources (wind and sun) to provide safe, reliable, and cost-effective energy as alternative to diesel generators



ACHIEVEMENTS SO FAR

- Development of a hybrid, easily foldable tower made of attractive colourful solar panels, with a wind turbine on top
- The tower already has attracted media attention, beyond NWE



PUSHING RESULTS ONE STEP FURTHER

- **50+ requests from festivals and events relying on off-grid energy to use the tower**
- **Interest of construction companies for off-grid energy supply at their building sites**



GEM-tower, presented at the Dutch Design Week in October 2019, Eindhoven, NL



OBJECTIVES

Reduce NWE homes CO₂ emissions by promoting the uptake of 3 existing low-carbon solutions: batteries (IE), electric storage heaters (UK) and solar panels (FR)



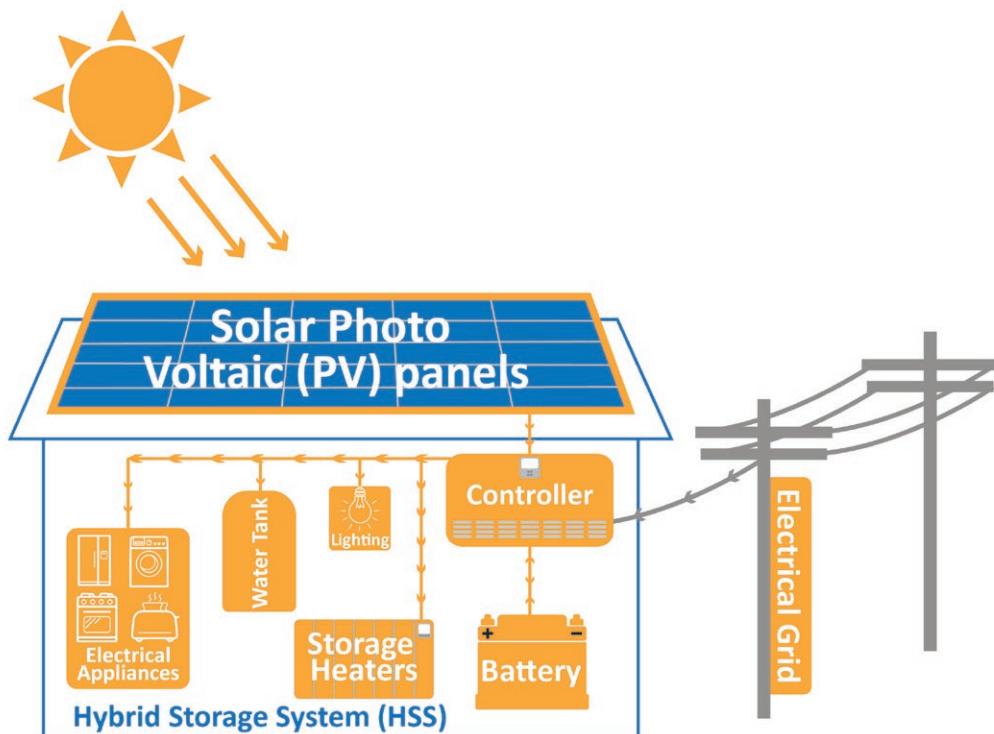
ACHIEVEMENTS SO FAR

- An algorithm undergoing numerical simulations which maximises usage of locally photovoltaic-generated power, combining it with grid electricity. The algorithm will be installed in pilot houses



PUSHING RESULTS ONE STEP FURTHER

- Extending RED WoLF to commercial buildings, hospitals, and to areas with a warmer climate and heavy air conditioning usage**
- Collaborations with projects on EVs to create a single energy management tool**



RED WoLF and the Hybrid Storage System



9

DE | FR | BE | UK | NL | IE | CH

PARTNERS



OBJECTIVES

Create renewable energy demand-supply partnerships between urbanised and surrounding rural territories so as to reduce GHG emissions



ACHIEVEMENTS SO FAR

- A preliminary strategy to set up urban-rural partnerships on an increased use of renewable energy
- Viable models will be developed to match renewable energy supply and demand in urban-rural areas



PUSHING RESULTS ONE STEP FURTHER

- The lead partner Climate Alliance is using its network of around 1 700 member municipalities and districts from 26 European countries to disseminate the experience of the RegEnergy project partners beyond the NWE borders



Plymouth City Council working with an energy community, UK



9

FR | UK | NL | LU | DE

PARTNERS



OBJECTIVES

Reduce or eliminate vessel engines pollutants by applying an oxyfuel combustion technology for diesel engines that eliminates NOx so as to capture, store and transform CO2 into biosolvent



ACHIEVEMENTS SO FAR

- Production of a gel from vessels diesel engines fumes
- Simulation of oxyfuel combustion results with a professional software
- 3D modeling of the equipment (generator, engine, tanks, compressor, pipes, etc...) which will be installed inside the narrowboat



PUSHING RESULTS ONE STEP FURTHER

- Potential collaboration with cosmetics companies, inland navigation authorities
- Replication for +30 t heavy trucks
- Cooperation with Brno (CZ) University of Technology regarding oxyfuel combustion



© Image - @ CFT

Zero carbone emission for future inland waterway barges



11

BE | NL | IE | FR

PARTNERS



OBJECTIVES

Facilitate the uptake of smart public lighting with high energy-saving potential in mid and small size municipalities to move towards energy-efficient, sustainable and demand-oriented municipalities across NWE



ACHIEVEMENTS SO FAR

- An interoperable smart sensor platform installed on existing light poles in the 4 pilot municipalities
- A transition roadmap to help other municipalities implement innovative smart lighting technologies



PUSHING RESULTS ONE STEP FURTHER

- Engage other municipalities to increase awareness on the potential of smart public lighting
- Increase citizen acceptance of smart lighting to facilitate its adoption as a low-carbon solution
- Build upon previous and current intelligent lighting and smart city projects



Intelligent lighting systems contribute to increasing energy efficiency in cities



12

BE | FR | NL | DE | UK

PARTNERS



OBJECTIVES

Facilitate pallets transport modal shift from road to waterway thanks to IT tools interconnection enabling an end-to-end seamless visibility between supply chain actors



ACHIEVEMENTS SO FAR

- A mid-term version of the ST4W IT platform; pilots under preparation to show how far a seamless cooperation along the supply chain will facilitate modal shift to waterway
- Expected final result: 8 shippers posting their pallets on 60 barges, representing 400 t of CO2 saved



PUSHING RESULTS ONE STEP FURTHER

- **From mental shift to modal shift: cost-benefit + governance-oriented analysis, behaviour change management, dissemination workshops will foster logistics actors to replace stand-alone organisational practices by collaborative logistics engineering**



ST4W pallets on a barge



7

FR | NL | DE | UK | BE

PARTNERS



OBJECTIVES

Position straw as the premium biobased building material by stimulating and facilitating the application of straw in urban, public and private buildings



ACHIEVEMENTS SO FAR

- An EU database encompassing scientific data and training programmes to change the perception of straw
- Training on the use of straw as building material for 1 700 students and professionals
- 5 pilot buildings to be made of or renovated with straw in the UK, NL, BE, DE and FR



PUSHING RESULTS ONE STEP FURTHER

- **Development of an online course to reach more people, beyond the project partnership**
- **Disseminating knowledge thanks to the database**
- **Integrating straw specification in the 3D programme Building Information Modeling**



Izuba Energie office building, Fabrègues, FR

Resource and materials efficiency



Interreg North-West Europe

Adhesive Free Timber Buildings

European Regional Development Fund



6

UK | IE | FR | DE | LU | BE

PARTNERS



OBJECTIVES

Invent and develop for market, sustainable construction methods using only softwood timber, reducing the use of less sustainable metals and glues



ACHIEVEMENTS SO FAR

- Construction of 3 'demonstrator' structures, providing industry with confidence and real-world experience in the technology



PUSHING RESULTS ONE STEP FURTHER

- **Work with industry to gain mass adoption of the technology: streamline the mass production of highly compressed timber; include it in existing automated dowelled engineered wood products production systems; determine where compressed wood enables new products**



All-natural, load-bearing dowel laminated timber panels



11

UK | BE | DE | FR

PARTNERS



OBJECTIVES

Develop technology to optimise reuse of resources by growing high value algae using food and farm waste, therefore creating a true circular economy in the process



ACHIEVEMENTS SO FAR

- 3 pilot investments (BE, FR, UK) demonstrating that algae can successfully grow on digestate. Results from characterisation of biomass grown on digestate show interesting levels of protein content, particularly relevant for animal feed



PUSHING RESULTS ONE STEP FURTHER

- Develop collaborations to resolve policy and regulation challenges
 - identify people, processes
- Find other projects working in AD/food and farming/circular economy areas for our dissemination activities



Reactor installation at Langage, Devon, UK



6

UK | DE | NL | FR

PARTNERS



OBJECTIVES

Increase reclamation of Critical Raw Materials (CRM) from data centres; develop a secure sectoral CRM supply chain; increase product refurbishment/reuse; reduce e-waste



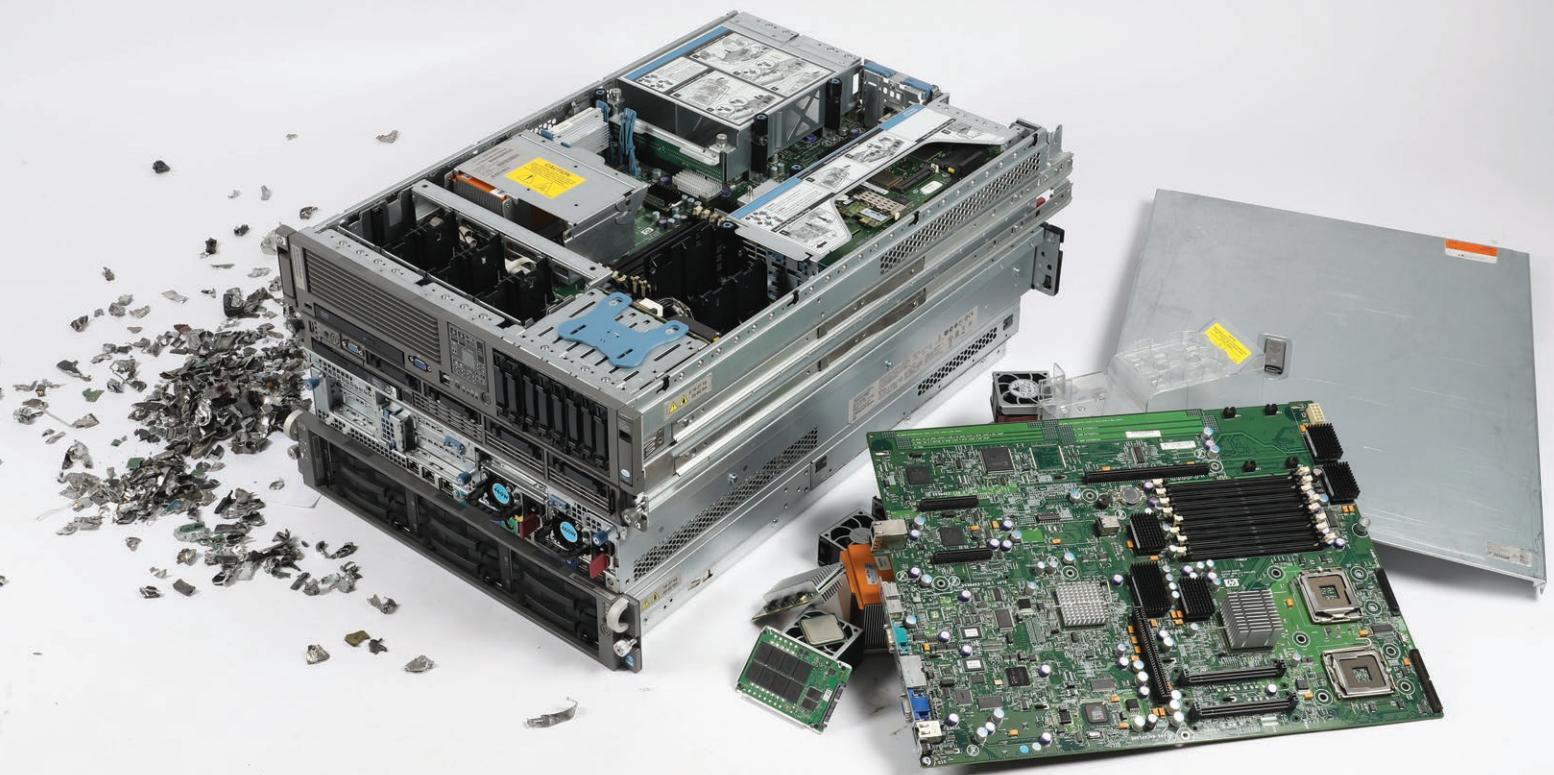
ACHIEVEMENTS SO FAR

- A cross-sectoral network of industry experts supporting pilot activities which will increase CRM reclamation



PUSHING RESULTS ONE STEP FURTHER

- Critical mass, collaboration and investment to a secure CRM supply chain
- Keeping e-waste in NWE to develop CRM recycling and reclamation business consortia and supply plants



Server disassembly and shredded components



8

NL | UK | FR | BE

PARTNERS



OBJECTIVES

Demonstrate innovative approaches for housing renovation and asset management that prevent downcycling; secure the adoption of these approaches within housing organisations and the social housing industry



ACHIEVEMENTS SO FAR

- Developing of plastic free houses (Accord Housing)
- Inspiring housing project Caserne de Reuilly (Paris Habitat)
- Circular houses in Eindhoven (Woonbedrijf)



PUSHING RESULTS ONE STEP FURTHER

- More social housing organisations (and their construction partners) to join so that they adapt circular management strategies



The partners of CHARM during a project meeting in Paris, FR



7

DE | NL | LU

PARTNERS



OBJECTIVES

Develop and implement tools that enable complete documentation and quality assurance of recycled plastics material (rPM) flows and increase the uptake of rPM in production



ACHIEVEMENTS SO FAR

- A system of tools that start at different points in the value chain
- The digital tools are to be tested and refined in 4 pilot projects



PUSHING RESULTS ONE STEP FURTHER

- Once developed, the digital tools can be used by the plastics industry across Europe
- To ensure dissemination, uptake managers will be trained, and associations and chambers involved



Recycled plastic - a valuable resource



12

BE | UK | NL | FR | LU

PARTNERS



OBJECTIVES

Reduce farmers' reliance on external inputs by encouraging practices that increase farms' Functional AgroBiodiversity (FAB)



ACHIEVEMENTS SO FAR

- Aim: 10 custom-made FAB solutions in 315 farms with 12 collective FAB action plans covering 25000 ha
- Improved functioning of agro-ecosystems resulting in an average 30% decrease of chemical input



PUSHING RESULTS ONE STEP FURTHER

- Policy papers to spread the message to a wider number of relevant EU policy makers and to embed FAB in the new EU Common Agricultural Policy



Farmers exchange experiences during a field visit



8

BE | UK | FR

PARTNERS



OBJECTIVES

Increase by +50 % the amount of reclaimed building elements being circulated in the NWE territory by 2032



ACHIEVEMENTS SO FAR

- Identification and documentation of 200 reuse professionals
- Methods and publications for the reuse of reclaimed material



PUSHING RESULTS ONE STEP FURTHER

- Adoption by stakeholders (including another Interreg NWE project, CHARM) in the construction industry of FCRBE pre-demolition audit and specification methods



Heap of reclaimed bricks being cleaned and sorted to be reused



6

NL | BE | UK

PARTNERS



OBJECTIVES

Reduce the environmental impact of virgin textile materials; develop new business models and open markets for the growing amounts of recyclable textiles



ACHIEVEMENTS SO FAR

- An operational technology sorting textiles based on their composition; it will soon be able to sort based on colours as well, and operate continuously using an automated feed-in system



PUSHING RESULTS ONE STEP FURTHER

- Policy recommendations formulated showing the legislative, economic and soft instruments policy makers have at their disposal to allow automated sorting technologies to live up to their full potential



The Fibersort technology, sorting used textiles based on their composition and colour



13

NL | BE | FR | DE | IE | UK

PARTNERS



OBJECTIVES

Reduce food waste in the first parts of the food chain by developing high impact solutions



ACHIEVEMENTS SO FAR

- 19 joint solutions delivering at least 4 500 tons food waste reduction and reducing needless killing of male chicks and goats by at least half a million
- 76 candidates for the Food Heroes Awards and 3 inspiring winners



PUSHING RESULTS ONE STEP FURTHER

- Interest raised among high-level policy makers (EU Health and Food Safety Commissioner)
- Involvement in relevant national networks to maximise impact, roll out and scale up our developed solutions



Food products from oyster mushroom stalks



12

DE | BE | FR | IE | CH | UK | NL PARTNERS



OBJECTIVES

Phosphorus recovery from municipal waste water to guarantee food security in NWE by reducing the EU dependence on imported phosphorus rock



ACHIEVEMENTS SO FAR

- Scaling-up of 7 technologies to recover phosphorus from waste water, including optimisation of existing processes
- Waste waster treatment providers equipped to improve their recovery strategy
- Knowledge transfer across NWE



PUSHING RESULTS ONE STEP FURTHER

- **Further scale-up of selected technologies by operating a recovery plant focusing on the production of high-quality phosphoric acid using sewage sludge ashes and needed by many industries (also beyond the fertiliser sector)**



EuPhoRe plant, producing phosphorus rich ashes usable for fertilisers



8

BE | DE | FR | UK

PARTNERS



OBJECTIVES

Provide knowledge & tools to screen landfills and demonstrate in real conditions the methodology to select profitable landfill mining projects, thus recovering huge amounts of dormant raw materials, energy carriers & land resources



ACHIEVEMENTS SO FAR

- Enhanced landfill inventory structure including: a 1st decision support tool + 2nd one ongoing for smart decision and launching landfill mining projects;
- A cost-effective landfill characterisation method using the geophysical multi-methods prospection tested on 7 pilot sites



PUSHING RESULTS ONE STEP FURTHER

- Train RAWFILL ambassadors on how to use the project results and to replicate them in other regions
- Technical rollout: combining the RAWFILL decision support tool with the SMARTGROUND decision support tool



Supporting a new circular economy for RAW materials recovered from landFILLS



11

DE | UK | FR | IE | BE

PARTNERS



OBJECTIVES

Increase the efficient use of natural resources and materials by converting residual biomass into activated carbon at smart regional decentralised units



ACHIEVEMENTS SO FAR

- 2 plants (small and large scale) producing biochar
- 5 regional product chains, value chains and development plans
- Involvement of several potential investors + a large number of multistakeholders



PUSHING RESULTS ONE STEP FURTHER

- A follow-up project to create regional product development structures, i.e. innovation hubs and incubators
- Development of a quality lab for active charcoal products based on waste material
- Creation of a European supply platform



Enabling circular economy in NWE through clever use of low value biomass resources for new products



11

UK | FR | IE | NL

PARTNERS



OBJECTIVES

Utilise sensing and Internet of Things technologies to assist the EU in its goal of halving food waste by 2030 and 35% of food waste occurring in supply chains



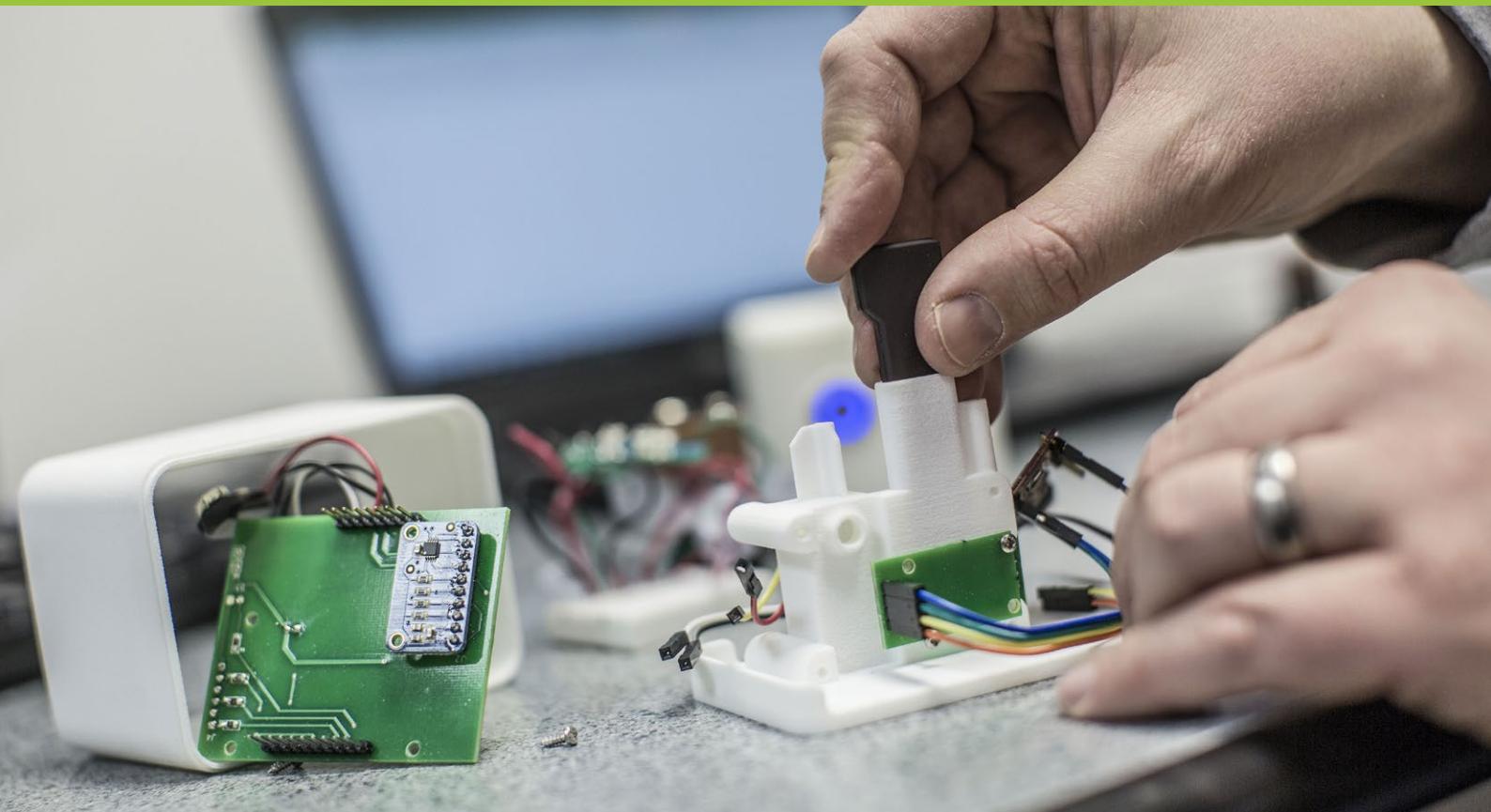
ACHIEVEMENTS SO FAR

- Set-up of a trial at a working farm relating to meat transportation, waste analysis and reduction
- Acquisition of Volatile Organic Compound sensors, environmental sensors and a Wide Area Network device for transmission of sensor data to the Cloud



PUSHING RESULTS ONE STEP FURTHER

- Based on the data captured, modification of the conditions in which animals are kept, including changes to air flow, which may result in higher quality meat being produced



IoT Sensor technology to track food quality



11

DE | BE | FR | LU | NL

PARTNERS



OBJECTIVES

Increase the use of the construction and demolition waste as secondary raw materials for cement and concrete precast products



ACHIEVEMENTS SO FAR

- A network with international science and industry members to develop and share know-how in large scale production of precast concrete products using recycled raw materials



PUSHING RESULTS ONE STEP FURTHER

- **Changing the behaviour of enterprises, public authorities and builders by using products from recycled materials**



Recycled materials in building constructions



11

FR | IE | NL | UK

PARTNERS



OBJECTIVES

Increase sediment reuse for erosion and flood protection, providing authorities, port and waterway managers as well as erosion experts with new large-scale solutions for sediment reuse in NWE ports, waterways and coastlines



ACHIEVEMENTS SO FAR

- Reallocation of approx. 200 000 m³ of dredged sediments in the Port of Rotterdam (NL), following the principle of building with nature and of circular economy applied to bank erosion protection



PUSHING RESULTS ONE STEP FURTHER

- Providing SURICATES expertise beyond its partnership, with different stakeholders and for various sediment reuse cases: Rance tidal powerplant (FR), the Castle of Chantilly (FR), the Brandon River (IE)



Baseline monitoring (February 2019) before sediment reallocation in the Port of Rotterdam, NL



13

BE | NL | UK | FR | DE

PARTNERS



OBJECTIVES

Apply by-products (such as metallurgical slags and combustion ashes) as alternative raw materials to concrete in the urban NWE region



ACHIEVEMENTS SO FAR

- Different by-products (aggregates) characterised and tested to evaluate their applicability to be used in concrete
- First URBCON mixtures prepared using recycled aggregates to test mechanical properties
- Web-platform structure developed and data providers identified



PUSHING RESULTS ONE STEP FURTHER

- Other places in NWE where demonstration projects with URBCON concrete can be set up (e.g. urban constructions)



By-products for sustainable concrete in the urban environment



12

NL | DE | LU | BE | FR | UK

PARTNERS



OBJECTIVES

Contribute to the transition towards circular use of raw materials from sewage



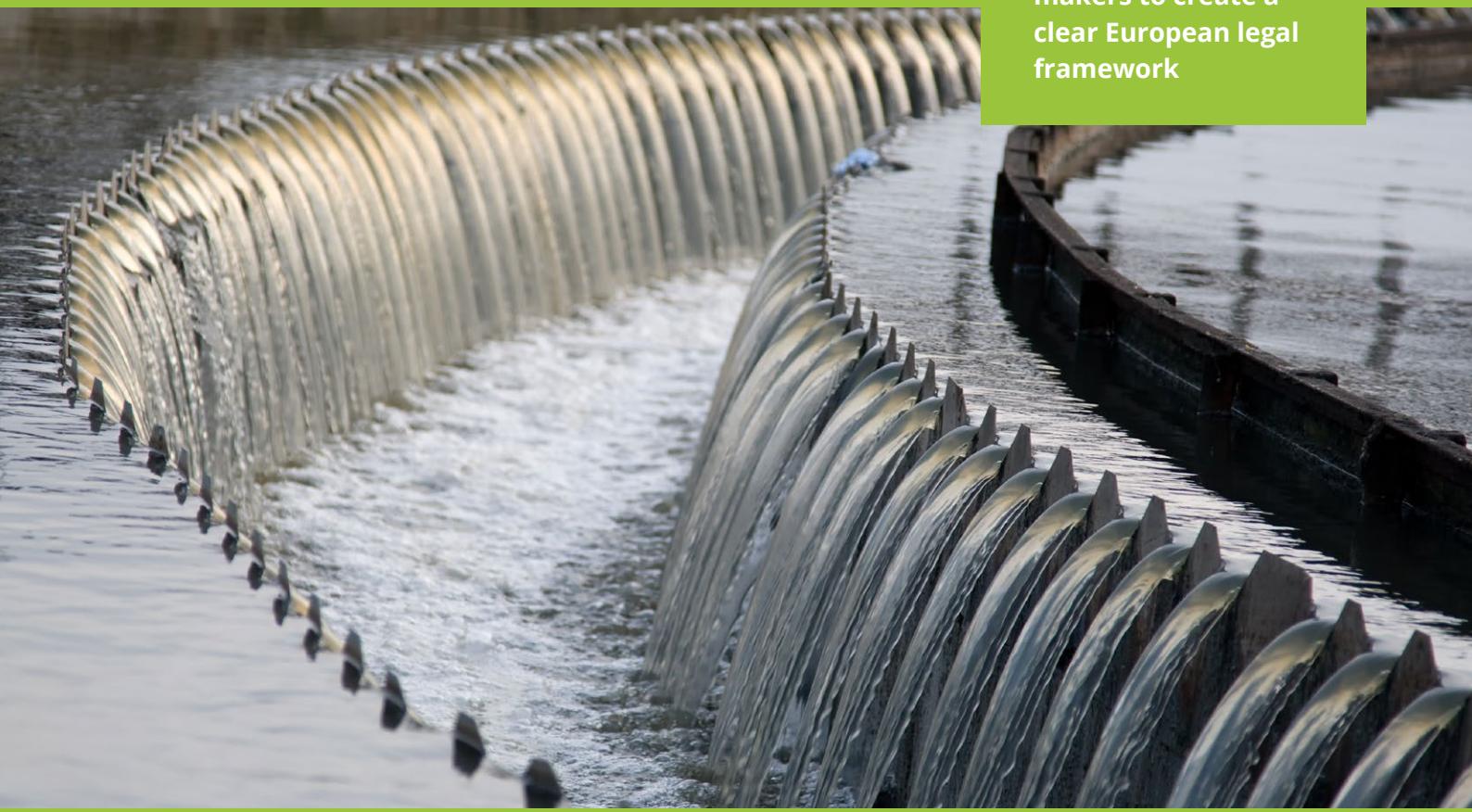
ACHIEVEMENTS SO FAR

- Insight in current market potential of bioproducts from sewage water
- Insight in current legal status of raw materials from sewage water
- Lab setup for lipids pilot, polyhydroxyalkanoate pilot and start of the construction of a cellulose/pyrolysis installation



PUSHING RESULTS ONE STEP FURTHER

- Getting more waste water treatment operators interested in the circular approach of using sewage water as a source
- Getting more companies interested to use our raw materials
- Encouraging policy makers to create a clear European legal framework



Wow! A new business approach for resource recovery from sewage

List of Interreg NWE projects

The Interreg NWE programme is financing 95 projects as of March 2020

The 95 projects funded by Interreg NWE

As of March 2020

Please see below the full list of projects, which comprise projects from the VB period (2014-2020) that are currently either under implementation, closed or that started in January 2020.

ACE-Retrofitting

<https://www.nweurope.eu/projects/project-search/accelerating-condominium-energy-retrofitting-ace-retrofitting/>

AFLOWT

<https://www.nweurope.eu/projects/project-search/aflowt-accelerating-market-uptake-of-floating-offshore-wind-technology/>

AFTB

<https://www.nweurope.eu/projects/project-search/towards-adhesive-free-timber-buildings-aftb/>

AGRIWASTEVALUE

<https://www.nweurope.eu/projects/project-search/agriwastevalue/>

ALG-AD

<https://www.nweurope.eu/projects/project-search/alg-ad-creating-value-from-waste-nutrients-by-integrating-algal-and-anaerobic-digestion-technology/>

ASPECT

<https://www.nweurope.eu/projects/project-search/advanced-simulation-and-control-of-tribology-in-metal-forming-processes-for-the-north-west-european-consumer-goods-and-transport-sectors-aspect/>

B4H

<https://www.nweurope.eu/projects/project-search/boost4health-the-life-sciences-hub-of-nwe-b4h/>

BE-GOOD

<https://www.nweurope.eu/projects/project-search/begood/>

BioBase4SME

<https://www.nweurope.eu/projects/project-search/bio-innovation-support-for-entrepreneurs-throughout-nwe-regions/>

BioWILL

<https://www.nweurope.eu/projects/project-search/biowill/>

BONE

<https://www.nweurope.eu/projects/project-search/bone-bio-fabrication-of-orthopaedics-in-a-new-era/>

BSTART

<https://www.nweurope.eu/projects/project-search/blockstart/>

CAN

<https://www.nweurope.eu/projects/project-search/climate-active-neighbourhoods-can/>

Care-Peat

<https://www.nweurope.eu/projects/project-search/care-peat-carbon-loss-reduction-from-peatlands-an-integrated-approach/>

CConnects

<https://www.nweurope.eu/projects/project-search/cconnects-carbon-connects/>

CEDaCI

<https://www.nweurope.eu/projects/project-search/cedaci-circular-economy-for-the-data-centre-industry/>

Certification-D

<https://www.nweurope.eu/projects/project-search/certification-d-certification-of-technological-products-for-people-with-dementia-to-support-smes-in-innovation-and-business-growth/>

CHARM

<https://www.nweurope.eu/projects/project-search/charm-circular-housing-asset-renovation-management/>

CHIPS

<https://www.nweurope.eu/projects/project-search/cycle-highways-innovation-for-smarter-people-transport-and-spatial-planning/>

CircTex

<https://www.nweurope.eu/projects/project-search/circtex-innovation-towards-a-circular-future-for-nwe-textiles/>

CleanMobilEnergy

<https://www.nweurope.eu/projects/project-search/cleanmobilenergy-clean-mobility-and-energy-for-cities/>

COBRACOMP

<https://www.nweurope.eu/projects/project-search/cobracomp-braided-textiles-to-improve-the-competitiveness-of-composite-materials-industry-in-nwe/>

Codex4SMEs

<https://www.nweurope.eu/projects/project-search/codex4smes-companion-diagnostics-expedited-for-smes/>

COTEMACO

<https://www.nweurope.eu/projects/project-search/cotemaco-increased-nwe-competitiveness-through-efficient-man-machine-collaboration/>

cVPP

<https://www.nweurope.eu/projects/project-search/cvpp-community-based-virtual-power-plant/>

D2Grids

<https://www.nweurope.eu/projects/project-search/d2grids-increasing-the-share-of-renewable-energy-by-accelerating-the-roll-out-of-demand-driven-smart-grids-delivering-low-temperature-heating-and-cooling-to-nwe-cities/>

DGE-ROLLOUT

<https://www.nweurope.eu/projects/project-search/dge-rollout-roll-out-of-deep-geothermal-energy-in-nwe/>

Di-Plast

<https://www.nweurope.eu/projects/project-search/di-plast-digital-circular-economy-for-the-plastics-industry/>

DigitalDeConstruction

<https://www.nweurope.eu/projects/project-search/digitaldeconstruction-advanced-digital-solutions-supporting-reuse-and-high-quality-recycling-of-building-materials/>

E=0

<https://www.nweurope.eu/projects/project-search/e-0-desirable-warm-affordable-homes-for-life/>

ECCO

<https://www.nweurope.eu/projects/project-search/ecco-creating-new-local-energy-community-co-operatives/>

eHUBS

<https://www.nweurope.eu/projects/project-search/ehubs-smart-shared-green-mobility-hubs/>

eMEN

<https://www.nweurope.eu/projects/project-search/e-mental-health-innovation-and-transnational-implementation-platform-north-west-europe-emen/>

ENERGE

<https://www.nweurope.eu/projects/project-search/energe/>

EYES

<https://www.nweurope.eu/projects/project-search/eyes-empowering-youth-through-entrepreneurial-skills/>

FABulous Farmers

<https://www.nweurope.eu/projects/project-search/fabulous-farmers/>

FCCP

<https://www.nweurope.eu/projects/project-search/fccp-fuel-cell-cargo-pedelecs/>

FCRBE

<https://www.nweurope.eu/projects/project-search/fcrbe-facilitating-the-circulation-of-reclaimed-building-elements-in-northwestern-europe/>

Fibersort

<https://www.nweurope.eu/projects/project-search/bringing-the-fibersort-technology-to-the-market/>

Food Heroes

<https://www.nweurope.eu/projects/project-search/food-heroes-improving-resource-efficiency-through-designing-innovative-solutions-to-reduce-food-waste/>

FORESEA

<https://www.nweurope.eu/projects/project-search/funding-ocean-renewable-energy-through-strategic-european-action/>

GenComm

<https://www.nweurope.eu/projects/project-search/gencomm-generating-energy-secure-communities/>

Green WIN

<https://www.nweurope.eu/projects/project-search/greenwin-greener-waterway-infrastructure/>

GROOF

<https://www.nweurope.eu/projects/project-search/groof/>

H2Share

<https://www.nweurope.eu/projects/project-search/h2share-hydrogen-solutions-for-heavy-duty-transport/>

H2SHIPS

<https://www.nweurope.eu/projects/project-search/h2ships-system-based-solutions-for-h2-fuelled-water-transport-in-north-west-europe/>

H4.0E

<https://www.nweurope.eu/projects/project-search/h40e-housing-40-energy/>

HappyMoo

<https://www.nweurope.eu/projects/project-search/happymoo/>

HeatNet NWE

<https://www.nweurope.eu/projects/project-search/heatnet-transition-strategies-for-delivering-low-carbon-district-heat/>

HECTOR

<https://www.nweurope.eu/projects/project-search/hector-hydrogen-waste-collection-vehicles-in-north-west-europe/>

ICaRE4Farms

<https://www.nweurope.eu/projects/project-search/icare4farms-increase-the-capacity-of-renewable-energies-re-in-farms-in-the-north-west-europe-region-by-using-solar-thermal-energy/>

IDEA

<https://www.nweurope.eu/projects/project-search/idea-implementation-and-development-of-economic-viable-algae-based-value-chains/>

IMAGINE

<https://www.nweurope.eu/projects/project-search/imagine-inclusive-market-agriculture-incubator-in-north-west-europe/>

IT4Anxiety

<https://www.nweurope.eu/projects/project-search/it4anxiety-managing-anxiety-via-innovative-technologies-for-better-mental-health/>

ITEG

<https://www.nweurope.eu/projects/project-search/iteg-integrating-tidal-energy-into-the-european-grid/>

LOGiC

<https://www.nweurope.eu/projects/project-search/low-carbon-off-grid-communities-logic/>

Machining4.0

<https://www.nweurope.eu/projects/project-search/machining40-towards-the-machining-shop-floor-of-the-future/>

MATMED

<https://www.nweurope.eu/projects/project-search/matmed-advanced-materials-for-regenerative-medicine-and-medical-devices-in-contact-with-the-human-body/>

MiteControl

<https://www.nweurope.eu/projects/project-search/mitecontrol-ensuring-food-safety-animal-health-and-welfare-standards/>

MUSTBEO

<https://www.nweurope.eu/projects/project-search/mustbe0-multi-storey-building-e-0-refurbishment/>

NWE – REGENERATIS

<https://www.nweurope.eu/projects/project-search/regeneratis-regeneration-of-past-metallurgical-sites-and-deposits-through-innovative-circularity-for-raw-materials/>

NWE MEA

<https://www.nweurope.eu/projects/project-search/nwe-me-a-north-west-europe-marine-energy-alliance/>

NWE-Chance

<https://www.nweurope.eu/projects/project-search/nwe-chance-development-and-validation-of-promising-integrated-ehealth-applications-combined-with-nanotechnology-for-hospitalisation-of-heart-failure-patients-at-home/>

OceanDEMO

<https://www.nweurope.eu/projects/project-search/oceandemo-demonstration-programme-for-ocean-energy-pilot-farms-and-supporting-technologies/>

OIP4NWE

<https://www.nweurope.eu/projects/project-search/oip4nwe-open-innovation-photonics-pilot-for-nwe/>

OPIN

<https://www.nweurope.eu/projects/project-search/opin-ocean-power-innovation-network/>

PASSION-HF

<https://www.nweurope.eu/projects/project-search/passion-hf-patient-self-care-using-ehealth-in-chronic-heart-failure/>

Phos4You

<https://www.nweurope.eu/projects/project-search/phos4you-phosphorus-recovery-from-waste-water-for-your-life/>

PowerVIBES

<https://www.nweurope.eu/projects/project-search/powervibes-sustainable-solution-for-the-festival-market/>

QCAP

<https://www.nweurope.eu/projects/project-search/powervibes-sustainable-solution-for-the-festival-market/>

RAWFILL

<https://www.nweurope.eu/projects/project-search/supporting-a-new-circular-economy-for-raw-materials-recovered-from-landfills/>

RE-DIRECT

<https://www.nweurope.eu/projects/project-search/regional-development-and-integration-of-unused-biomass-wastes-as-resources-for-circular-products-and-economic-transformation-re-direct/>

REAMIT

<https://www.nweurope.eu/projects/project-search/reamit-improving-resource-efficiency-of-agribusiness-supply-chains-by-minimising-waste-using-big-data-and-internet-of-things-sensors/>

RED WoLF

<https://www.nweurope.eu/projects/project-search/red-wolf-rethink-electricity-distribution-without-load-following/>

RegEnergy

<https://www.nweurope.eu/projects/project-search/regenergy-renewable-energy-regions/>

ReNu2Farm

<https://www.nweurope.eu/projects/project-search/renu2farm-nutrient-recycling-from-pilot-production-to-farms-and-fields/>

RIVER

<https://www.nweurope.eu/projects/project-search/river-non-carbon-river-boat-powered-by-combustion-engines/>

SeRaMCo

<https://www.nweurope.eu/projects/project-search/seramco-secondary-raw-materials-for-concrete-precast-products/>

SHAREPAIR

<https://www.nweurope.eu/projects/project-search/sharepair-digital-support-infrastructure-for-citizens-in-the-repair-economy/>

SHICC

<https://www.nweurope.eu/projects/project-search/shicc-sustainable-housing-for-inclusive-and-cohesive-cities/>

Smart Circular Bridge (SCB)

<https://www.nweurope.eu/projects/project-search/smart-circular-bridge-scb-for-pedestrians-and-cyclists-in-a-circular-built-environment/>

SMART TRACK 4 WATERWAY (ST4W)

<https://www.nweurope.eu/projects/project-search/st4w-smart-tracking-data-network-for-shipment-by-inland-waterway/>

SMART-SPACE

<https://www.nweurope.eu/projects/project-search/smart-space-smart-sustainable-public-spaces-across-the-nwe-region/>

SuNSE

<https://www.nweurope.eu/projects/project-search/sunse-support-network-for-social-entrepreneurs/>

SURICATES

<https://www.nweurope.eu/projects/project-search/suricates-sediment-uses-as-resources-in-circular-and-territorial-economies/>

THREE C

<https://www.nweurope.eu/projects/project-search/three-c-creating-and-sustaining-charcoal-value-chains-to-promote-a-circular-carbon-economy-in-nwe-europe/>

TRANSFORM-CE

<https://www.nweurope.eu/projects/project-search/transform-ce-transforming-single-use-plastic-waste-into-additive-manufacturing-and-intrusion-extrusion-moulding-feedstocks-and-creating-a-new-circular-economy-model-for-nwe/>

UNEET

<https://www.nweurope.eu/projects/project-search/uneet-professional-integration-of-nw-european-young-adults-into-the-hotel-restaurant-and-catering-sector/>

UP STRAW

<https://www.nweurope.eu/projects/project-search/up-straw-urban-and-public-buildings-in-straw/>

URBCON

<https://www.nweurope.eu/projects/project-search/urbcon-by-products-for-sustainable-concrete-in-the-urban-environment/>

UV – ROBOT

<https://www.nweurope.eu/projects/project-search/uv-robot-innovative-uv-robotics-to-improve-existing-ipm-strategies/>

ValuSect

<https://www.nweurope.eu/projects/project-search/valusect/>

VR4REHAB

<https://www.nweurope.eu/projects/project-search/vr4rehab-virtual-reality-for-rehabilitation/>

Water Test Network

<https://www.nweurope.eu/projects/project-search/water-test-network/>

WOW!

<https://www.nweurope.eu/projects/project-search-wow-wider-business-opportunities-for-raw-materials-from-wastewater/>



Investing in Opportunities

Visit: www.nweurope.eu
and follow us on
Twitter: @Interreg_NWE
LinkedIn: Interreg North West Europe (NWE)
YouTube: INTERREGNWE

Interreg NWE
Les Arcurielles | 45, rue de Tournai, 6/D
F-59000 Lille, France
Tel : +33 3 20 78 55 00 | Fax : +33 3 20 55 65 95
Email: nwe@nweurope.eu