

WP6 – Dissemination and valorization

D 6.9: Final communication towards selected interest groups



Deliverable 6.9	Final communication towards selected interest groups
Related Work Package:	6
Deliverable lead:	ARCTIK
Author(s):	Riikka Pohjankoski (ARCTIK)
Contact for queries	riikka.pohjankoski@arctik.eu
Grant Agreement Number:	n° 641661
Instrument:	Horizon 2020 Framework Programme
Start date of the project:	01.07.2015
Duration of the project:	36 months
Website:	www.powerstep.eu
Abstract	This deliverable provides a summary of activities
	undertaken to promote the POWERSTEP project and its
	results to various stakeholder groups (local authorities,
	planners and operators, general public, etc).

Dissemination level of this document

Χ	PU	Public
	PP	Restricted to other programme participants (including the Commission Services)
	RE	Restricted to a group specified by the consortium (including the European Commission Services)
	СО	Confidential, only for members of the consortium (including the European Commission Services)

Versioning and Contribution History

Version	Date	Modified by	Modification reasons
v.01	2018-06-11	Riikka Pohjankoski (ARCTIK)	1st Draft
	2018-06-13	Ulf Miehe (KWB)	1st Review
v.02	2018-06-14	Riikka Pohjankoski (ARCTIK)	2 nd Draft
	2018-06-14	Cedric Hananel (ARCTIK)	2 nd Review
v.03	2018-06-15	Riikka Pohjankoski (ARCTIK)	3 rd Draft
		Christian Loderer (KWB)	Final Version



Table of Content

Dissemination level of this document	2
Versioning and Contribution History	2
List of figures	4
List of tables	4
Executive summary	5
1. Introduction	6
2. POWERSTEP stakeholder groups	7
3. Revisiting the communication strategy	8
4. Know-how translation and targeted brokerage	9
4.1. Communication towards municipalities: regional workshops	9
4.2. Communication towards European policy-makers: POWERSTEP policy brief 1	0
4.3. Communication towards the scientific community and industry2	<u>2</u> 4
4.3.1. Knowledge transfer website	24
4.3.2. POWERSTEP summer school	26
5. Large-spectrum communication	27
5.1. Communication towards the media, general public and policy-maker Innovative website and animated video2	
5.2. Communication towards the scientific community, industry, policy-makers an media: Final conference	

#POWERSTEP_EU

List of figures

Figure 1: Regional workshops on the POWERSTEP website	10
Figure 2: News about the policy brief on POWERSTEP website	11
Figure 3: Home page banner on the policy brief	12
Figure 4: Video interview with Director General of DG Energy, Dominique Ristori	12
Figure 5: Screenshot of the twitter scheduling table	13
Figure 6: Examples of tweets promoting the policy brief	13
Figure 7: POWERSTEP press release on the policy brief	
Figure 8: Mass mailing	22
Figure 9: POWERSTEP mailing campaign report	22
Figure 10: Ulf Miehe presents POWERSTEP policy brief at the final conference at IFAT	23
Figure 11: Knowledge transfer website	25
Figure 12: POWERSTEP summer school	26
Figure 13: Final mock-up of a conventional WWTP	28
Figure 14: Final mock-up of an energy-positive WWTP	28
Figure 15: POWERSTEP final conference at IFAT	29
List of tables	
Table 1: Published tweets about the policy brief	13



Executive summary

A range of communication actions have been undertaken over the course of the project to install, develop and widespread the POWERSTEP brand, values and messages to the water, wastewater and energy communities. All of the actions taken have been tailored and targeted at a specific audience group.

As laid out in the dissemination strategy, the main POWERSTEP target audiences consist of regional and local-level actors; European policy-makers; industry players; the scientific community; general and specialised media; as well as, to some extent, citizens who are the ultimate beneficiaries of the technologies developed by POWERSTEP and therefore indirect targets.

A wide a range of dissemination activities have taken place over the course of the project, however, the final communication efforts – the focus of this report – undertaken by the POWERSTEP project towards these key interest groups include four regional workshops, POWERSTEP policy brief, knowledge transfer website and summer school as well as the interactive website and animated video.

These efforts fit into the second and third communication steps as outlined in the strategy: "know-how translation and targeted brokerage" and "large-spectrum communication".

1. Introduction

A range of communication actions have been undertaken over the course of the project to install, develop and widespread the POWERSTEP brand, values and messages to the water, wastewater and energy communities. All of the actions taken have been tailored and targeted at a specific audience group.

This report details our final major communication efforts towards the main target groups of the project: regional and local-level actors; European policy-makers; industry players; the scientific community; general and specialised media; as well as, to some extent, citizens who are the ultimate beneficiaries of the technologies developed by POWERSTEP and therefore indirect targets.

This report is not an exhaustive list of the communication activities undertaken towards the project's target groups, i.e. all actions listed in this report have been complemented with a wide range of other communication and dissemination activities (website publications, media relations, events, social media, scientific papers, to mention a few) throughout the project.

While each communication action or development has its principal target groups, some activities, such as the animated video and interactive website, can address and be interesting to several stakeholder groups at once.

In the next chapters we will first briefly revisit the main stakeholder groups and the communication strategy, after which the principal project outputs for the main target groups will be outlined.



2. POWERSTEP stakeholder groups

The stakeholder groups for the POWERSTEP project have been listed in the proposal. These are:

- o Members of POWERSTEP: Members of the consortium and related (demo site)
- Funding partner and EU members: EU project management team, EU members, DG Environment, DG Research, Horizon 2020, EU arena (EC and EP)
- Demand side, policy and regulation: Policy-makers, regional and local authorities and decision-making organisations that will decide the funding and the implementation of WWTP.
- Supply side: Industries, SMEs will be active in market uptakes and replications (utilities, B2B brokers, etc.)
- Science: Researchers and specialists will use and exchange about water management challenges. They will be the best ambassadors of POWERSTEP and bring their scientific endorsement.
- Community: Medias and networks primarily specialised on water, energy and environmental issues and general media will bring awareness to policy makers, utilities and more generally, citizens.
- o Individuals: Citizens will be ultimate beneficiaries from technologies developed by POWERSTEP and indirect communication targets.

3. Revisiting the communication strategy

The communication strategy drafted at the beginning of the project divided the communication actions into 3 steps:

- 1. Information and knowledge management
- 2. Know-how translation and targeted brokerage
- 3. Large-spectrum communication

The first step – information and knowledge management – aimed at establishing a well-working communications process among the consortium members. With know-how translation and targeted brokerage, the project has aimed at establishing strong relationships with the primary target groups, i.e. municipalities, policy makers, and recognised experts. Finally, with the third step, large-spectrum communication, the project has aimed at reaching primarily the interest of the media as well as the public more generally.



4. Know-how translation and targeted brokerage

4.1. Communication towards municipalities: regional workshops

The use of the available chemical energy represents a great opportunity for municipalities, wastewater associations and operators of sewage treatment plants to evolve from an energy user to an energy producer and thus, on the one hand, to reduce costs and, on the other hand, provide an important contribution to climate protection and energy transition. Therefore, this group of regional and local-level actors actors has been one of the primary target groups of POWERSTEP.

To introduce the concept of energy positive wastewater treatment plant to representatives of municipalities, four regional workshops with municipalities, titled "Energy positive wastewater treatment plants – a sustainable solution for climate protection in municipalities", have been organised during 2017 and 2018. These workshops targeted innovative municipalities with ambitious environmental and climate goals. The workshops took place in Germany (Döbeln – 26 October 2017; Bottrop – 21 February 2018), Romania (Timisoara – 17 April 2018) and Switzerland (Altenrhein – 13 June 2018).

The workshops attracted between 15-40 participants and introduced the POWERSTEP concept of energy positive wastewater treatment plant to representatives of municipalities, utilities, research institutes and civil engineering companies, all over Europe. The workshops were structured in a way that the project presentation was combined with information regarding financing, practical examples, site visits and interactive formats, like discussions in small groups.

A number of marketing actions, including dedicated web pages on the POWERSTEP website and social media activities as well as direct contacting of stakeholders and press relations at the local level, were undertaken to promote each workshop.

The four different workshops as well as the related promotional activities have been reported in detail in **Deliverable 6.5 – Four regional workshops with municipalities**. Information, photos and presentations have been published on the POWERSTEP website following the workshops: http://powerstep.eu/regional-events

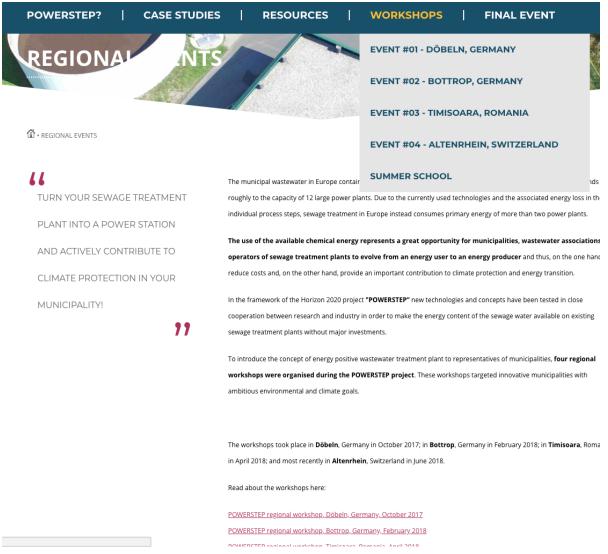


Figure 1: Regional workshops on the POWERSTEP website

4.2. Communication towards European policy-makers: POWERSTEP policy brief

As a main targeted action towards policy-makers, in particular the EU officials and MEPs, and other actors active within the EU arena and EU-level policy-making processes, a policy brief (**D6.7**) was drafted.

The policy brief analyses the existing national and European regulations and puts forward a set of policy recommendations at the EU level aimed at enabling the full potential of energy neutral or energy positive wastewater treatment plants using the PowerStep concept. The Brief highlights some of the major prospects and benefits the PowerStep concept can deliver for Europe, if EU policies are adapted and shaped to enhance the uptake of innovative wastewater technologies.

The policy brief has been published and is available on the POWERSTEP website at: http://powerstep.eu/potential-of-wastewater-sector-energy-transition-policy-brief-published.



The policy brief has been advertised via a range of channels:

1. A **news item** was published on the POWERSTEP website providing a short introduction and a link to the policy brief.

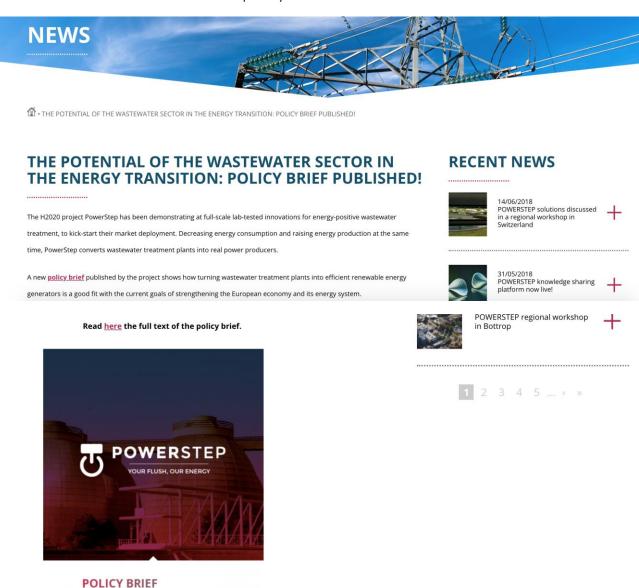


Figure 2: News about the policy brief on POWERSTEP website

THE POTENTIAL OF THE WASTEWATER SECTOR IN THE ENERGY TRANSITION

In addition, to increase the visibility and to create a quick access to the policy brief from the website, a **banner** has been published on the home page, which provides a direct link to the policy brief.





Figure 3: Home page banner on the policy brief

2. An **interview was conducted with the Director-General of Dominique Ristori** to raise awareness of POWERSTEP and the policy brief. The Director-General was approached with a letter and once the interview was confirmed, a set of interview questions were prepared by ARCTIK in collaboration with a freelance journalist Hughes Belin who also interviewed the Director-General. The interview took place on 30 April at the European Commission's studio in the Berlaymont building, after which time coding and final editing of the video were organised by ARCTIK.

The interview can be watched on the POWERSTEP website at: http://powerstep.eu/interview-dominique-ristori-director-general-of-dg-energy. The final product has been uploaded on the POWERSTEP website, promoted on social media and shown at the POWERSTEP final conference at IFAT.

INTERVIEW WITH DOMINIQUE RISTORI, DIRECTORGENERAL OF DG ENERGY



WATCH: Exclusive interview with Dominique Ristori, Director-General of DG Energy, European Commission, on the contribution of the PowerStep project to the EU's Energy Union goals.

Figure 4: Video interview with Director General of DG Energy, Dominique Ristori



3. A large-scale **social media promotional campaign** was undertaken to promote the policy brief. A table of 19 tweets was prepared and scheduled, covering each of the topics addressed by the policy brief. Specific attractive visuals were created for the tweets to generate engagement.



Figure 5: Screenshot of the twitter scheduling table

Examples of the tweets posted and the visuals used in the tweets are provided below.

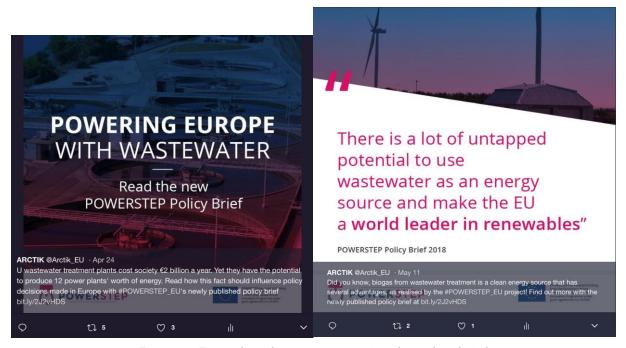


Figure 6: Examples of tweets promoting the policy brief

The list below shoes the tweets that were published about the policy brief. The list includes only tweets which use #POWERSTEP_EU hashtag and does not include retweets.

Table 1: Published tweets about the policy brief



#POWERSTEP_EU

	DATE	TWITTER	IMPRESSIONS	ENGAGEMENTS (clicks, retweets, likes)
	29.03.2018	The Potential of the Wastewater Sector in the Energy Transition: #POWERSTEP_EU policy brief published! https://bit.ly/2pOvrjS	2473	28
	24.04.2018	U wastewater treatment plants cost society €2 billion a year. Yet they have the potential to produce 12 power plants' worth of energy. Read how this fact should influence policy decisions made in Europe with #POWERSTEP_EU's newly published policy brief https://bit.ly/2J2vHDS	1778	24
		Giving power to wastewater. Find out how #POWERSTEP_EU aligns with and strengthens the priorities of the Commission with its newly published policy brief! http://powerstep.eu/resources/policy	213	1
	26.04.2018	Security, affordability and sustainability. The EU's goal of an #EnergyUnion is more reachable with projects like #POWERSTEP_EU. Find out more by reading the new policy brief https://bit.ly/2J2vHDS	272	1
ARCTIK ACCOUNT	27.04.2018	Did you know, biogas from wastewater treatment is a clean energy source that has several advantages, as realised by the #POWERSTEP_EU project! Find out more with the newly published policy brief at http://powerstep.eu/resources/policy	301	4
∢	30.04.2018	#POWERSTEP_EU can help make Europe a renewable energy leader! Discover just how at the with the newly published policy brief ➡□https://bit.ly/2J2vHDS □	302	8
	30.04.2018	This morning we interviewed @ristori20, Director- General of @Energy4Europe on the #POWERSTEP_EU project, which fits into many of the #EnergyUnion dimensions. Find out more in the new policy brief: https://bit.ly/2J2vHDS	8798	65
		With #POWERSTEP_EU, wastewater treatment plants have a great potential to support green job growth in Europe & push for more efficient use of resources. Discover more with the newly published policy brief at https://bit.ly/2J2vHDS	320	5
	01.05.2018	Flexible and reliable. Discover the opportunities technologies developed by #POWERSTEP_EU can offer EU energy markets, with the newly published policy brief https://bit.ly/2J2vHDS	304	2



	#POWERSTEP_EU latest policy brief explores how the project will support the 5 pillars of the European #EnergyUnion. Get informed read the publication here https://bit.ly/2J2vHDS	319	3
	#POWERSTEP_EU will help EU deliver simultaneously on all 3 of its climate 20-20-20 targets by making WWTP carbon neutral. Discover more from the latest policy brief at https://bit.ly/2J2vHD	263	4
03.05.2018	Flexible and reliable. Discover the opportunities technologies developed by #POWERSTEP_EU can offer EU energy markets, with the newly published policy brief http://powerstep.eu/resources/policy	286	2
03.05.2018	As securing Europe's energy resources becomes increasingly important, #POWERSTEP_EU can offer innovative solutions to bridge the gap between coal & renewables. Find out exactly how with the newly published policy brief at https://bit.ly/2J2vHDS	280	1
04.05.2018	#POWERSTEP_EU will help EU deliver simultaneously on all 3 of its climate 20-20-20 targets by making WWTP carbon neutral. Discover more from the latest policy brief at http://powerstep.eu/resources/policy	320	1
07.05.2018	By decreasing energy consumption & at the same time raising energy production, #POWERSTEP_EU transforms wastewater treatment plants into real power producers for the can projects like PowerStep influence future EU energy policy? Find out at https://bit.ly/2J2vHDS	343	1
07.03.2010	A climate neutral water sector becomes more possible with eco-innovative projects such as #POWERSTEP_EU. Discover how this transformation can take place by reading the new policy brief https://bit.ly/2J2vHDS	303	2
08.05.2018	#POWERSTEP_EU will provide opportunities for a flexible and adpatable European energy market. Biogas produced by PowerStep WWTP can be stored and used during times of lacking ☀□ or € energy! For more insights read the new policy brief at https://bit.ly/2J2vHDS	315	1
	By rethinking waste as a resource, #POWERSTEP_EU brings to light the great potential Europe has to accelerate the #CircularEconomy! Read the new policy brief to discover what the future can hold for PowerStep and EU policy https://bit.ly/2J2vHDS	303	1



CEDRIC	15.05.2018	#Powerstep_eu #PolicyBrief - "Powering Europe with #Wastewater" has just been released! @Arctik_EU @EU_H2020 bit.ly/2J2vHDS	n/a	3 likes 4 retweets
CHRISTIAN	29.03.2018	#POWERSTEP_EU Policy brief ready to read!! Find out more here: powerstep.eu/potential-of-w @EPentimalli @EU_EASME @EU_ecoinno @wsstpeu @eureau @menaabela	n/a	4 likes 4 retweets
CHRISTIAN LODERER	16 June 2017	Great '#POWERSTEP_EU Teclo do discuss your policy brief	n/a	2 likes 1 retweet
	17.05.2018	Time for market and policy discussions! @Hananel_EU moderating a panel with representatives from industry, politics, utilities and research at #POWERSTEP_EU Conference @IFATworldwide. Read the project's policy brief at http://powerstep.eu/potential-of-wastewater-sector-energy-transition-policy-brief-published	643	16
	17.05.2018	Ulf Miehe from KWB explains at #POWERSTEP_EU conf at #IFAT2018 how #POWERSTEP_EU aligns with and strengthens the priorities of the @EU_Commission. Find out more in the new policy brief http://powerstep.eu/potential-of-wastewater-sector- energy-transition-policy-brief-published	727	14
	11.05.2018	Did you know, biogas from wastewater treatment is a clean energy source that has several advantages, as realised by the #POWERSTEP_EU project! Find out more with the newly published policy brief at https://bit.ly/2J2vHDS	606	5
	10.05.2018	#POWERSTEP_EU has the potential to push Europe towards increasing green energy production & clean energy technologies. The most recent policy brief gives recommendations to how this can be done at https://bit.ly/2J2vHDS	329	5
	09.05.2018	Energy resources for Europe, from Europe: #POWERSTEP_EU shows us exactly how EU can enhance its energy production & therefore energy security. Read the new policy brief at https://bit.ly/2J2vHDS	639	5



MENA ABLEA	16.05.2018	Within its final conference at #IFAT2018 our #H2020 #Powerstep_eu project just released the #PolicyBrief "The potential of the #wastewater sector in the #EnergyTransition" - #DOWNLOAD it here: https://bit.ly/2J2vHDS	n/a	7 likes, 7 retweets
CARMEN M	17.05.2018	#POWERSTEP_EU #PressRelease at #IFAT2018- #wastewater treatment plant can become #energy neutral, even energy positive! https://bit.ly/2L6xxoP @CLoderer @Arctik_EU @EPentimalli @E_Achilleos @EU_ecoinno	n/a	5 likes, 6 retweets

4. A **press release** was drafted and a **mass mailing** to advertise the press release and the policy brief was prepared by ARCTIK and sent to 4,191 recipients using Campaign Monitor. The recipients included over 1,000 media contacts. To make the mailing appealing, the content of the mailing combined 3 interlinked topics: the press release on the policy brief, the video interview with the Director-General of DG Energy Dominique Ristori as well as an announcement about the final conference.

A screenshot of the press release can be found below. The full press release is available online at: http://powerstep.eu/resources/press-releases-0

The news about the policy brief was picked up by different media and websites, including Energy Post, the Brussels Times, and EUWID. A comprehensive review of the media coverage for POWERSTEP can be found on the POWERSTEP website at: http://powerstep.eu/resources/media-coverage. Copies of the press release were also printed for the POWERSTEP final conference at IFAT and were available for attendees.



PRESS RELEASE Brussels, 14 May 2018

Policy Brief: The potential of the wastewater sector in the energy transition

A newly released Policy Brief from the EU-funded project PowerStep demonstrates that turning wastewater treatment plants into efficient renewable energy generators firmly complements the current goals of strengthening the European economy, coupled with securing its energy system and making a significant contribution to Europe's international climate and sustainable development commitments. The Brief puts forward a set of policy recommendations at the EU level aimed at enabling the full potential of energy neutral or energy positive wastewater treatment plants using the PowerStep concept.

Today, European wastewater treatment plants consume the equivalent of more than two power plants' worth of energy every year and consume a considerable chunk (a fifth) of municipalities' electricity bills. The costs incurred by society equate to approximately €2 billion a year. Nonetheless, these plants could be producing up to twelve power plants' worth of efficient, renewable, flexible energy to contribute towards a low-carbon, circular development of the European economy.

The PowerStep project has demonstrated a range of full-scale lab-tested innovations for energypositive wastewater treatment. At its heart, the concept is based on the extraction of increased organic matter from wastewater which is converted into biogas and subsequently applied to new or existing plants at a similar cost to conventional treatment, resulting in a reasonable payback time.

Boris Lesjean, Innovation Director of Veolia Germany, said: "PowerStep has demonstrated the energy potential of wastewater as a local renewable energy. The industry is prepared to support European countries that wish to embrace this forward-thinking concept. Appropriate and stable European and national policy frameworks are required to fully exploit this potential."

By detailing exactly which factors should be considered in influencing and directing future EU policy, the Brief explores and outlines the benefits of facilitating projects such as PowerStep. For example, the recognition of biogas from sewage as a renewable energy source and prioritising public support for it, the European Union can bolster the adoption of PowerStep technologies in wastewater treatment plants to support Europe in becoming a renewable energy leader.

The Brief also touches upon the necessary changes needed to be made vis-à-vis green public procurement criteria for wastewater treatment plants as well as investments and public subsidy policy. If extended and access simplified, the pair can unlock the full potential of energy neutral or energy positive wastewater treatment plants using the PowerStep concept.

In summation, the Brief highlights some of the major prospects and benefits the PowerStep concept can deliver for Europe, if EU policies are adapted and shaped to enhance the uptake of innovative wastewater technologies. By adhering to the 'Juncker Plan' as well as the Energy Union's five pillars,





PowerStep fully aligns with the EU's Energy Efficiency First commitment and it has the potential to aid the EU in reaching its renewable energy targets along with ensuring a flexible, affordable and secure energy system. This will lead Europe towards having a climate neutral water sector which produces greener, more sustainable energy as well as fostering innovation, green job growth and a circular economy.

"The POWERSTEP Policy Brief is a strong statement from the project consortium to policy-makers that energy-neutral or even energy-positive WWTPs are no longer a dream."

Christian Loderer, PowerStep Project Coordinator, Berlin Centre of Competence for Water

Contact:

Riikka Pohjankoski, PowerStep Communications, ARCTIK – Communication for Sustainability, riikka.pohjankoski@arctik.eu, tel. +32 (0)2 646 58 81

Notes to Editors:

Join the final PowerStep conference at IFAT 2018, 16 – 17 May 2018, Munich, Germany. Find out more about the event at http://powerstep.eu/powerstep-final-conference

Download the full policy brief 'THE POTENTIAL OF THE WASTEWATER SECTOR IN THE ENERGY TRANSITION' at http://powerstep.eu/potential-of-wastewater-sector-energy-transition-policy-brief-published

The new policy brief published by the project shows how turning wastewater treatment plants into efficient renewable energy generators is a good fit with the current goals of strengthening the European economy and its energy system.

To enable the full potential of energy neutral or even energy positive wastewater treatment plants using the PowerStep concept, the main recommendations of the policy brief are that EU policymakers:

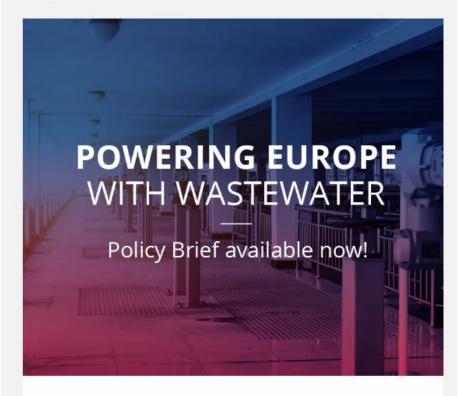
- #01 Recognise biogas from sewage as a renewable energy with a lower environmental footprint than other forms of biogas and biofuels.
- #02 Prioritise renewable energy from sewage for public support.
- #03 Extend green public procurement (GPP) criteria for wastewater treatment plants so that
 they promote energy neutral or energy positive plants as well as energy efficiency.
- #04 Grant access to cohesion/structural funds contingent on energy efficiency investments, including in wastewater treatment plants.
- #05 Make public subsidies for energy production at wastewater treatment plants contingent on the application of energy management systems.
- #06 Define power-to-gas (P2G) as a form of energy storage.

Figure 7: POWERSTEP press release on the policy brief





No Images? Click here



The potential of the wastewater sector in the energy transition

A newly released <u>Policy Brief</u> from the EU-funded project PowerStep demonstrates that turning wastewater treatment plants into efficient renewable energy generators firmly complements the current goals of strengthening the European economy, coupled with securing its energy system and making a significant contribution to Europe's international climate and sustainable development commitments. The Brief puts forward a set of policy recommendations at the EU level aimed at enabling the full potential of energy neutral or energy positive wastewater treatment plants using the PowerStep concept.

Press release

Policy Brief



WATCH: Exclusive interview with Dominique Ristori, Director-General of DG Energy, European Commission, on the contribution of the PowerStep project to the EU's Energy Union goals.



PowerStep is hosting a 2-day conference at IFAT 2018 in Munich, Germany on 16-17 May.

Join us and discover the opportunities technologies developed by PowerStep can offer EU energy markets!

Find out more about the event and register your interest at <u>bit.ly/2lwBCEx</u>





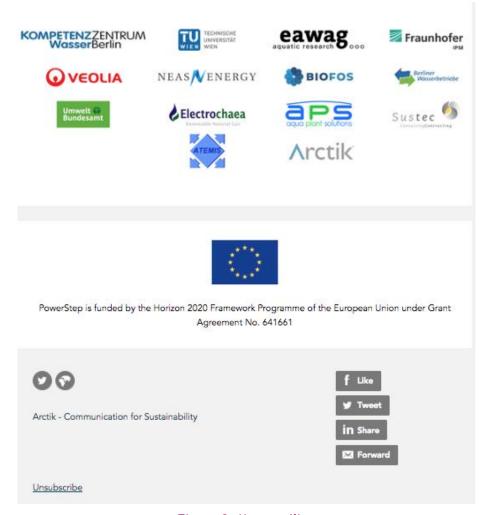


Figure 8: Mass mailing

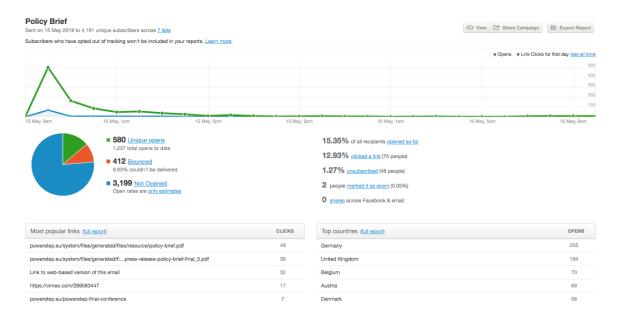


Figure 9: POWERSTEP mailing campaign report



5. The policy brief was introduced at the POWERSTEP final conference which was held on the 16-17 May at IFAT 2018 in Munich. Around 200 participants in total attended the conference over the 2 days. The policy brief was introduced to the participants by Ulf Miehe from KWB with a presentation, entitled "How policy can promote energy-positive WWTPs – POWERSTEP Policy Brief". In addition to the final conference, the organisation of a small meeting with European policy makers in Brussels is being planned in order to have further in-depth discussions with policy-makers.



Figure 10: Ulf Miehe presents POWERSTEP policy brief at the final conference at IFAT



4.3. Communication towards the scientific community and industry

4.3.1. Knowledge transfer website

The POWERSTEP knowledge-sharing platform provides detailed information about the POWERSTEP technologies and concepts to the scientific community working on the topics of wastewater and energy, but also the wastewater industry, WWTP operators and planners, for possible market replication. The knowledge transfer portal was the 3rd development stage of the POWERSTEP website and was published in May 2018.

The website provides a virtual library to increase the awareness of the concept of energy-positive wastewater treatment plant (WWTP) and related approaches and technologies.

It provides information in an interactive user-friendly way on:

- 7 wastewater treatment processes
- o 5 purposes for an energy-positive wastewater treatment plant
- o 10 approaches
- 24 technologies
- 6 case studies showcasing best practices

The home page of the website features three main sections:

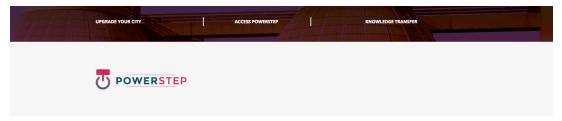
- o Illustration of an energy-positive WWTP
- A list of five purposes for an energy-positive WWTP
- o An interactive map with case studies

Each of these sections contains interactive elements (clickable images, clickable links) which allow the web visitor to continue browsing the website and to access further information.

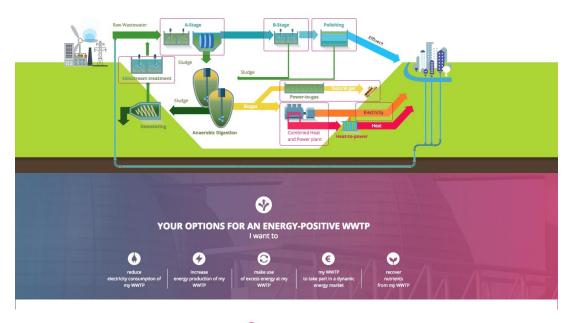
A detailed description of the website, the process of building it and the dissemination activities to promote the website has been provided in Deliverable 6.6 – Knowledge transfer website.

A screenshot of the home page of the knowledge transfer website is provided below. The platform can be accessed via the POWERSTEP landing page at www.powerstep.eu or is directly available at: http://powerstep.arctik.tech/.





ENERGY POSITIVE WASTEWATER TREATMENT PLANT



0

FIND THE DIFFERENT ENERGY-POSITIVE WWTP



Figure 11: Knowledge transfer website



4.3.2. POWERSTEP summer school

On 6-7 July 2017, the POWERSTEP project, in collaboration with the TU Wien (Vienna University of Technology), organised a **Summer School** in Vienna, Austria. The POWERSTEP Summer School aimed at distributing expertise from innovative and cutting-edge research in the field of energy-positive wastewater treatment to early career scientists.

Speaking at the POWERSTEP Summer School, experts coming from research institutions and industry illustrated the four distinct but interconnected strategies investigated in POWERSTEP to turn wastewater treatment plants into net energy producers.

The demonstrated strategies include:

- #01 Caron extraction for energy recovery into biogas
- o #02 Nitrogen removal in the main stream
- o #03 Biogas valorisation and efficient energy management
- #04 Nitrogen management in side stream

The summer school attracted over 70 students from around Europe to follow lectures and to learn about cutting-edge research in the field of wastewater treatment.

All presentations from the summer school can be downloaded from the POWERSTEP website at: http://powerstep.eu/workshops/powerstep-summer-school



Figure 12: POWERSTEP summer school



5. Large-spectrum communication

5.1. Communication towards the media, general public and policy-makers: Innovative website and animated video

An innovative and interactive website explaining the concept of an energy positive wastewater treatment plant was published February 2017 (Month 20). The interactive website presents the concept of energy-positive WWTP in more detail and has been aimed at reaching the most interested audiences, while also attracting interest from the general public and media.

This second development phase of the POWERSTEP website has aimed at increasing the dissemination of the concept of energy-positive wastewater treatment plant (WWTP). The overall objective is to stimulate visitors' interest to learn about the concept of energy-positive WWTP, POWERSTEP technologies and to visit the institutional website, and more generally to increase the awareness around the potential of energy-positive WWTPs to become net energy providers for European cities. Although meant for the general public, ARCTIK wanted to address primarily policy-makers and, more importantly, the local decision makers.

The choice was made to communicate about the concept of energy-positive WWTP in a fun, interactive and educational way using an animated video that can circulate on social media and attract visitors to the new POWERSTEP interactive website. The video acts as an in-bound marketing tool to 'catch' the attention outside the website and attract visitors to the innovative website. The overall objective was to offer a multichannel user journey that strengthens the capacity of POWERSTEP to reach out from the general public to the expert community.

In practice, visitors are invited to navigate through the different stages of the operation of a WWTP. The purpose is to make them become knowledgeable on the main features that distinguish an "energy-positive WWTP" from a "conventional WWTP".

Additional modifications to the institutional POWERSTEP website were implemented so as to complete the overall communication purpose: new entry doors for instance. Finally, a communication strategy was put in place to make sure that the tools were watched and used by the target audiences (social media activities, press releases, mailing, etc.).

The interactive website and animated video have been described in detail in **Deliverable 6.4 – Innovative website.** The website can be accessed via www.powerstep.eu or directly at: http://euaffairs.brussels/powerstep/

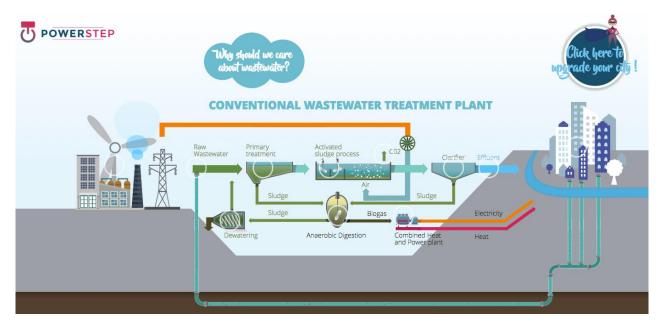


Figure 13: Final mock-up of a conventional WWTP

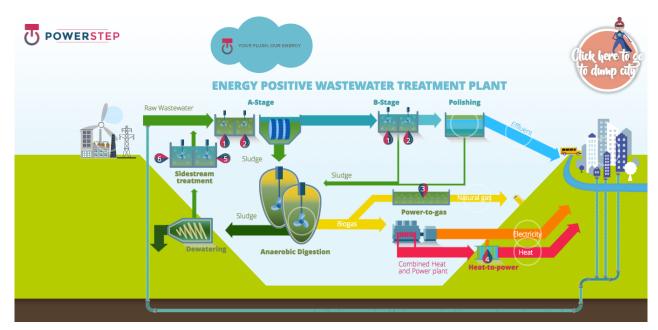


Figure 14: Final mock-up of an energy-positive WWTP

5.2. Communication towards the scientific community, industry, policy-makers and media: Final conference

The POWERSTEP final conference, entitled "Wastewater treatment plants as resource recovery factories – No longer a dream", was organised on 16-17 May at the IFAT Trade Fair in Munich, Germany. IFAT is the world's leading trade fair for water, sewage, waste and raw materials management.

The conference was aimed at a wide audience and therefore, the topics of the conference ranged from technical to market and policy related.



Discussions around innovations that enable new Resource Recovery Factories were at the core of this two-day conference which featured POWERSTEP project partners who presented their state-of-the-art research, representatives of related H2020 research and innovation projects working on the circular water economy, and recognised experts from the field of wastewater treatment.

The participants learned about the European and energy framework in which the WWTP as a renewable energy source operates, whilst also investigating the market deployment potential. Each topic was developed and shaped to meet the IFAT audience expectations: to learn, be questioned and challenge the discussions.

Around 200 stakeholders in total attended the two-day event. An intensive marketing campaign, including social media activities, creation of marketing materials and contacting of relevant organisations, was undertaken to promote the conference. The speakers' presentations have been published on the POWERSTEP website following the conference: http://powerstep.eu/powerstep-final-conference



Figure 15: POWERSTEP final conference at IFAT