



POWERSTEP

WP6 – Dissemination and valorization

D 6.5: Four regional workshops with municipalities



The project "Full scale demonstration of energy positive sewage treatment plant concepts towards market penetration" (POWERSTEP) has received funding under the European Union HORIZON 2020 – Innovation Actions - Grant agreement^o 641661

Deliverable 6.5	Four regional workshops with municipalities
Related Work Package:	6
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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	Four regional workshops within the POWERSTEP project were carried out during October 2017 to June 2018 presenting the concept as well as push the discussion concerning energy-positive WWTPs between different stakeholders in the water sector.

Dissemination level of this document

<input checked="" type="checkbox"/>	PU	Public
<input type="checkbox"/>	PP	Restricted to other programme participants (including the Commission Services)
<input type="checkbox"/>	RE	Restricted to a group specified by the consortium (including the European Commission Services)
<input type="checkbox"/>	CO	Confidential, only for members of the consortium (including the European Commission Services)

Versioning and Contribution History

Version	Date	Modified by	Modification reasons
v.01	2018-05-23	Riikka Pohjankoski (ARCTIK)	1 st Draft
	2018-05-28	Thekla Heinel (B.&S.U. mbH)	1 st Review
v.02	2018-06-04	Riikka Pohjankoski (ARCTIK)	2 nd Draft
	2018-06-08	Anke Mezinger (B.&S.U. mbH)	2 nd Review
v.03	2018-06-14	Riikka Pohjankoski (ARCTIK)	3 rd Draft
	2018-06-15	Christian Loderer (KWB)	3 rd Review
Final	2018-06-18	Riikka Pohjankoski (ARCTIK)	Final version

Table of Content

Dissemination level of this document	2
Versioning and Contribution History	2
Table of Content.....	3
List of figures.....	4
Executive summary	5
1. Introduction.....	6
2. First regional workshop: Döbeln, Germany, 26 October 2017	7
2.1. Promotional activities	7
2.1.1. Visuals	7
2.1.2. Webpage	8
2.1.3. Social media	10
2.1.4. Promotion at regional level	10
2.2. Workshop and results.....	11
3. Second regional workshop: Bottrop, Germany, 21 February 2018	12
3.1. Promotional activities	12
3.1.1. Visuals	12
3.1.2. Webpage	12
3.1.3. Social media	14
3.1.4. Promotion at regional level	15
3.2. Workshop and results.....	16
4. Third regional workshop: Timisoara, Romania, 17 April 2018.....	17
4.1. Promotional activities	17
4.1.1. Visuals	17
4.1.2. Webpage	17
4.1.3. Social media	19
4.1.4. Promotion at regional level	20
4.2. Workshop and results.....	20
5. Fourth regional workshop: Altenrhein, Switzerland, 13 June 2018.....	22
5.1. Promotional activities	22
5.1.1. Visuals	22
5.1.2. Webpage	22
5.1.3. Social media	24
5.1.4. Promotion at regional level	25
5.2. Workshop and results.....	25



List of figures

Figure 1: Event banner for the first regional workshop for promotion purpose via different channels	7
Figure 2: Dedicated webpage on the POWERSTEP website for the first regional workshop	8
Figure 3: 'Landing page of the regional workshops section on the website. This page always highlighted the next upcoming workshop. (Photo taken in June before final workshop in Altenrhein).	9
Figure 4:'News on the POWERSTEP webpage after the first regional workshop.....	9
Figure 5: Examples of tweets before, during and after the first regional workshop	10
Figure 6: Event banner for the second regional workshop for promotion purpose via different channels	12
Figure 7: Dedicated webpage on the POWERSTEP website for the second regional workshop	13
Figure 8:'News on the POWERSTEP webpage after the second regional workshop	14
Figure 9: Examples of tweets before and during the second regional workshop.....	15
Figure 10: Event banner for the third regional workshop for promotion purpose via different channels	17
Figure 11: Dedicated webpage on the POWERSTEP website for the third regional workshop	18
Figure 12: 'News on the POWERSTEP webpage after the third regional workshop	19
Figure 13: Examples of tweets before and during the third regional workshop	20
Figure 14: Event banner for the fourth regional workshop for promotion purpose via different channels	22
Figure 15: Dedicated webpage on the POWERSTEP website for the fourth regional workshop	23
Figure 16: 'News on the POWERSTEP webpage after the fourth regional workshop	24
Figure 17:Examples of tweets before and during the fourth regional workshop.....	25

Executive summary

Four regional POWERSTEP workshops were carried out during October 2017 and June 2018. The workshops introduced the POWERSTEP concept of energy positive wastewater treatment plant to representatives of municipalities, utilities, research institutes and civil engineering companies, all over Europe. Moreover, there was the opportunity for exchange and discussion in order to give the project team insights in the current situation, the structure and the needs of different stakeholders in the water sector.

The workshops (between 15 and 40 participants per 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.



1. Introduction

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. 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 were planned, organised and implemented mainly by subcontractor B.&S.U. mbH, except the workshop in Timisoara. Marketing activities were carried out B.&S.U. mbH, Arctic and KWB.

During the workshops the POWERSTEP concept of energy positive wastewater treatment plant was introduced to representatives of municipalities, utilities, research institutes and civil engineering companies, all over Europe. Moreover, there was the opportunity for exchange and discussion in order to give the project team insights in the current situation, the structure and the needs of different stakeholders in the water sector.

The workshops were structured in a way that the project presentation was combined with information regarding financing, practical examples, onsite visits of the local wastewater treatment plant and interactive formats, like discussions in small groups.

Between 15 and 40 participants per each workshop discussed the results of the POWERSTEP project, its technology approaches and funding possibilities in the different regions.

This report is structured as follows:

- Chapter **Fehler! Verweisquelle konnte nicht gefunden werden.** describes the 1st regional workshop in Döbeln, Germany;
- Chapter **Fehler! Verweisquelle konnte nicht gefunden werden.** describes the 2nd regional workshop in Bottrop, Germany;
- Chapter **Fehler! Verweisquelle konnte nicht gefunden werden.** describes the 3rd regional workshop in Timisoara, Romania;
- Chapter **Fehler! Verweisquelle konnte nicht gefunden werden.** describes the 4th regional workshop in Altenrhein, Switzerland.



2. First regional workshop: Döbeln, Germany, 26 October 2017

The 1st regional workshop, entitled “Energy positive wastewater treatment plants – a sustainable solution for climate protection in municipalities”, took place in Döbeln, Germany, on 26 October 2017.

2.1. Promotional activities

2.1.1. Visuals

An event banner was created in English and German. The banners were used for the following purposes:

- POWERSTEP website
- Social media
- Partner websites (e.g. Fedarene; eea-Website)



Figure 1: Event banner for the first regional workshop for promotion purpose via different channels

2.1.2. Webpage

A **dedicated sub-page** was created on the POWERSTEP website to advertise the workshop. This page provided information about the upcoming workshop in German and in English, included a link to the event programme in German and a registration form.

After the workshop this page was updated with a short text about the workshop outcomes (English and German) and photos from the event. Links to the workshop presentations and media articles published were also provided. The updated page is available here: <http://POWERSTEP.eu/regional-events/dobeln-germany>.

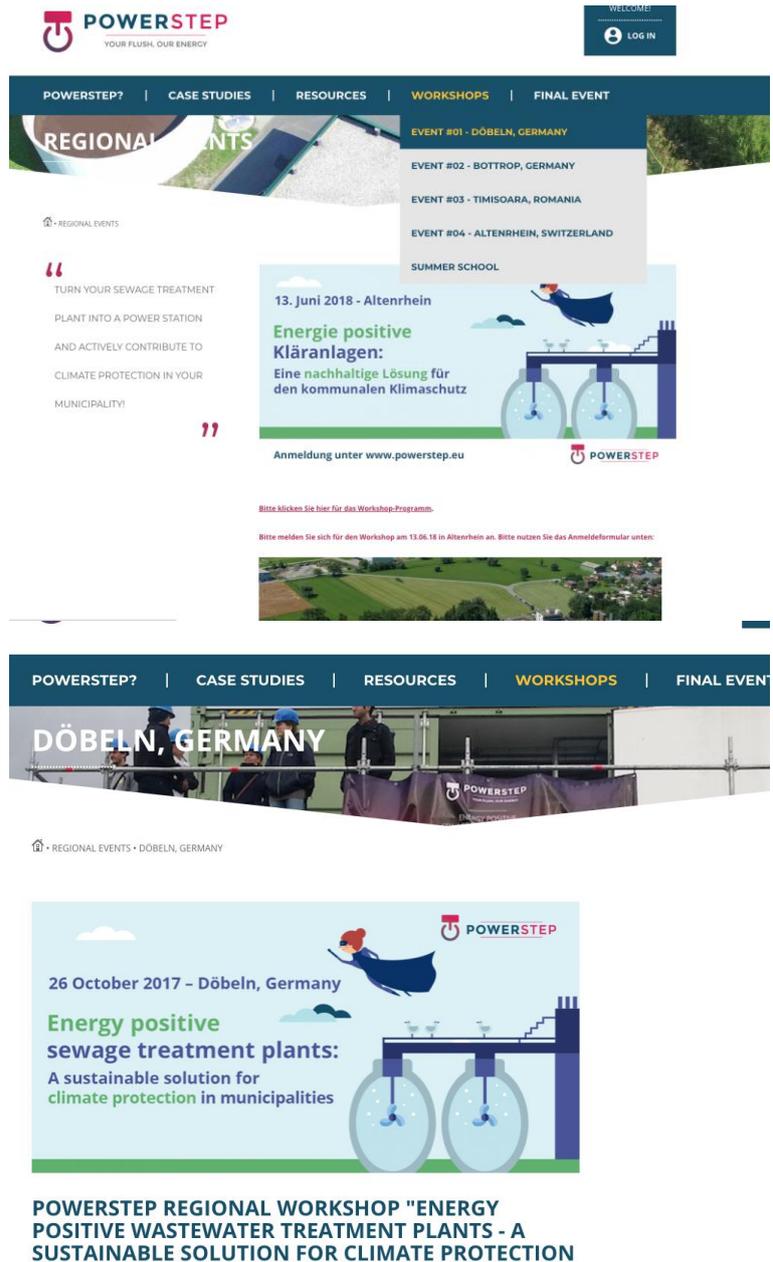


Figure 2: Dedicated webpage on the POWERSTEP website for the first regional workshop

In addition, the event and the registration form were also included on the 'landing page' of the regional workshops section of the POWERSTEP website; the purpose of this page



has been to provide an overview of the regional workshops and to highlight the next upcoming workshop.

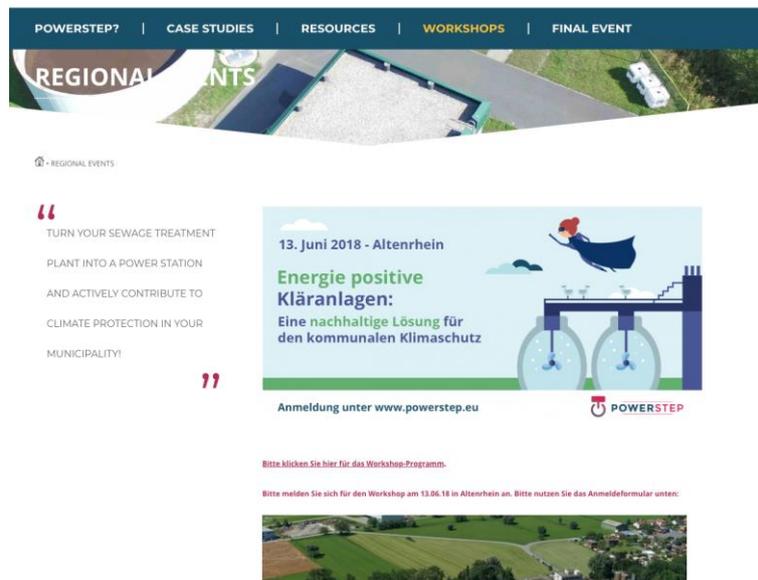


Figure 3: ‘Landing page of the regional workshops section on the website. This page always highlighted the next upcoming workshop. (Photo taken in June before final workshop in Altenrhein).

Furthermore, a **news item** was published on the POWERSTEP website’s news section following the event: <http://POWERSTEP.eu/first-POWERSTEP-regional-workshop-a-success>

FIRST POWERSTEP REGIONAL WORKSHOP A SUCCESS

The first of a series of POWERSTEP regional workshops for municipalities took place on 26 October 2017 in Döbeln, Germany. The event attracted around 30 participants, including representatives of municipalities, sewage treatment plant operators, wastewater associations, decision-makers and scientists to hear about and discuss the results of the POWERSTEP project, its technology approaches and funding possibilities.



Figure 4: ‘News on the POWERSTEP webpage after the first regional workshop

RECENT NEWS

- 

31/05/2018
POWERSTEP knowledge sharing platform now live!

+
- 

18/04/2018
Successful regional workshop in Timisoara

+
- 

11/04/2018
New project deliverables online!

+
- 

28/03/2018
The Potential of the Wastewater Sector in the Energy Transition: policy brief published!

+



2.1.3. Social media

10 tweets (excluding retweets) were published about the workshop, including 5 posted by ARCTIK and KWB before and after the workshop. Some examples are shown below.

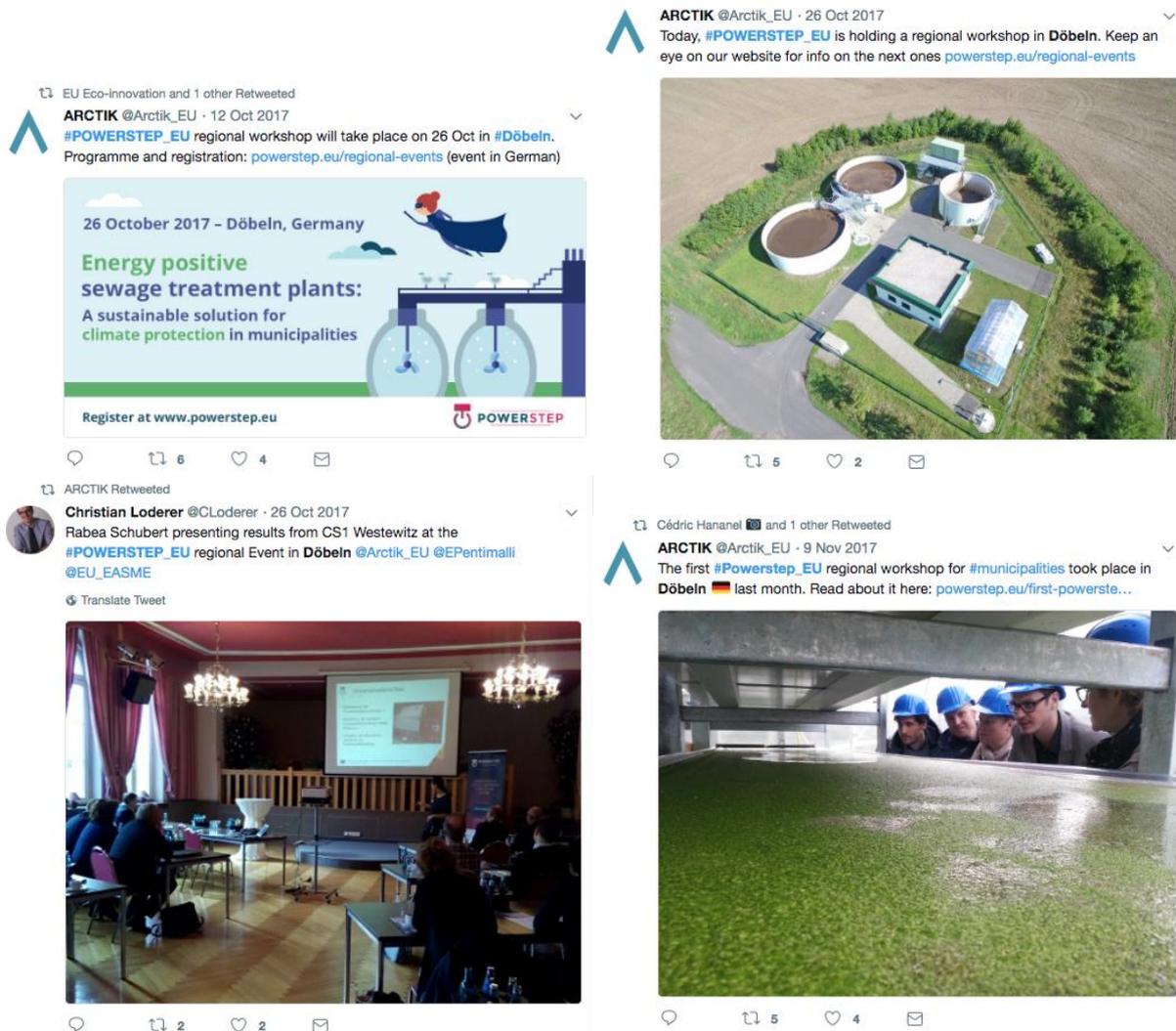


Figure 5: Examples of tweets before, during and after the first regional workshop

2.1.4. Promotion at regional level

The workshop was promoted via various channels on local, national and international level.

At local level the OEWA Wasser und Abwasser GmbH approached their stakeholders and customers. Moreover, the Sächsische Energieagentur - SAENA GmbH and the Sächsische Aufbaubank were informed about the event. On national level the press release and the invitation were published in a newsletter of the European Energy Award and were disseminated by the DWA. On European level Fedarene and ICLEI published the invitation.

2.2. Workshop and results

The workshop attracted around 30 participants, including representatives of municipalities, sewage treatment plant operators, wastewater associations, decision-makers and scientists to hear about and discuss the results of the POWERSTEP project, its technology approaches and funding possibilities.

Following the conference, the participants had an opportunity to take part in an on-site visit to the Westewitz wastewater treatment plant, one of the POWERSTEP pilot plants, operated by the Veolia subsidiary OEWA Wasser und Abwasser GmbH on behalf of the Abwasserzweckverband Döbeln-Jahnatal.

An article about POWERSTEP and the workshop was published in the regional daily newspaper *Sächsische Zeitung* following the event: "*So holt man Energie aus dem Abwasser*" (*Sächsische Zeitung*, 27.10.2017).

Following presentations were given:

- POWERSTEP, Christian Loderer (KWB)
- The energy transition in the water sector from an operators perspective, Thiebould Mittelberger (OEWA)
- Financing innovative in the municipal wastewater sector, Frank Hoppe (Sächsische Aufbaubank)
- POWERSTEP Case Study 1 - Westewitz, Rabea-Luisa Schuhbeck (KWB)
- POWERSTEP for municipality wastewater treatment plants, Wolf-Thomas Hendrich (OEWA Döbeln)



3. Second regional workshop: Bottrop, Germany, 21 February 2018

The 2nd regional workshop, "Energy positive wastewater treatment plants – a sustainable solution for climate protection in municipalities", took place in Bottrop, Germany, on 21 February 2018. The workshop was organised in cooperation with the EnergyAgency NRW.

3.1. Promotional activities

3.1.1. Visuals

An event banner was created in English and German. The banners were used on the website and for social media advertising.

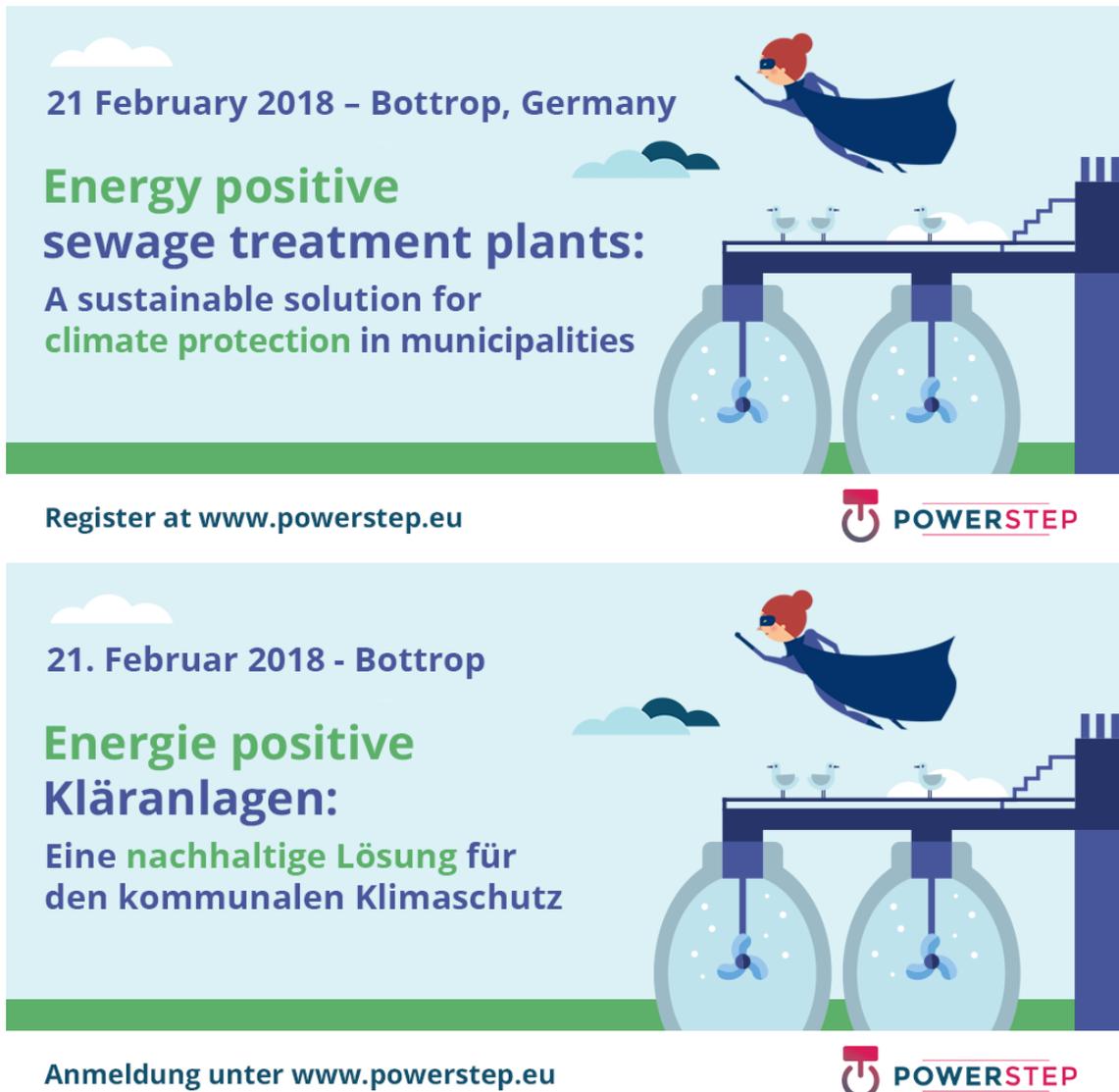


Figure 6: Event banner for the second regional workshop for promotion purpose via different channels

3.1.2. Webpage

Similarly, to the 1st workshop, a **dedicated page** was created on the POWERSTEP website to advertise the workshop. This page provided information about the upcoming



workshop in German and in English, included a link to the event programme in German and a registration form.

After the workshop this page was updated with a short text about the workshop (English and German) and photos from the event. Links to the workshop presentations and media articles published were also included. The updated page is available here: <http://POWERSTEP.eu/event-02-bottrop-germany>

Figure 7: Dedicated webpage on the POWERSTEP website for the second regional workshop

In addition the event and the registration form were also included on the 'landing page' of the regional workshops section of the POWERSTEP website; the purpose of this page has been to provide an overview of the regional workshops and to highlight the next upcoming workshop (See Figure 3).

Furthermore, a **news item** was published on the POWERSTEP website's news section: <http://POWERSTEP.eu/POWERSTEP-regional-workshop-bottrop>



Figure 8: 'News on the POWERSTEP webpage after the second regional workshop

3.1.3. Social media

9 tweets were published (excluding retweets) on the workshop. 7 tweets were posted by ARCTIK, B&SU and KWB before and during the workshop. Some examples are shown below.



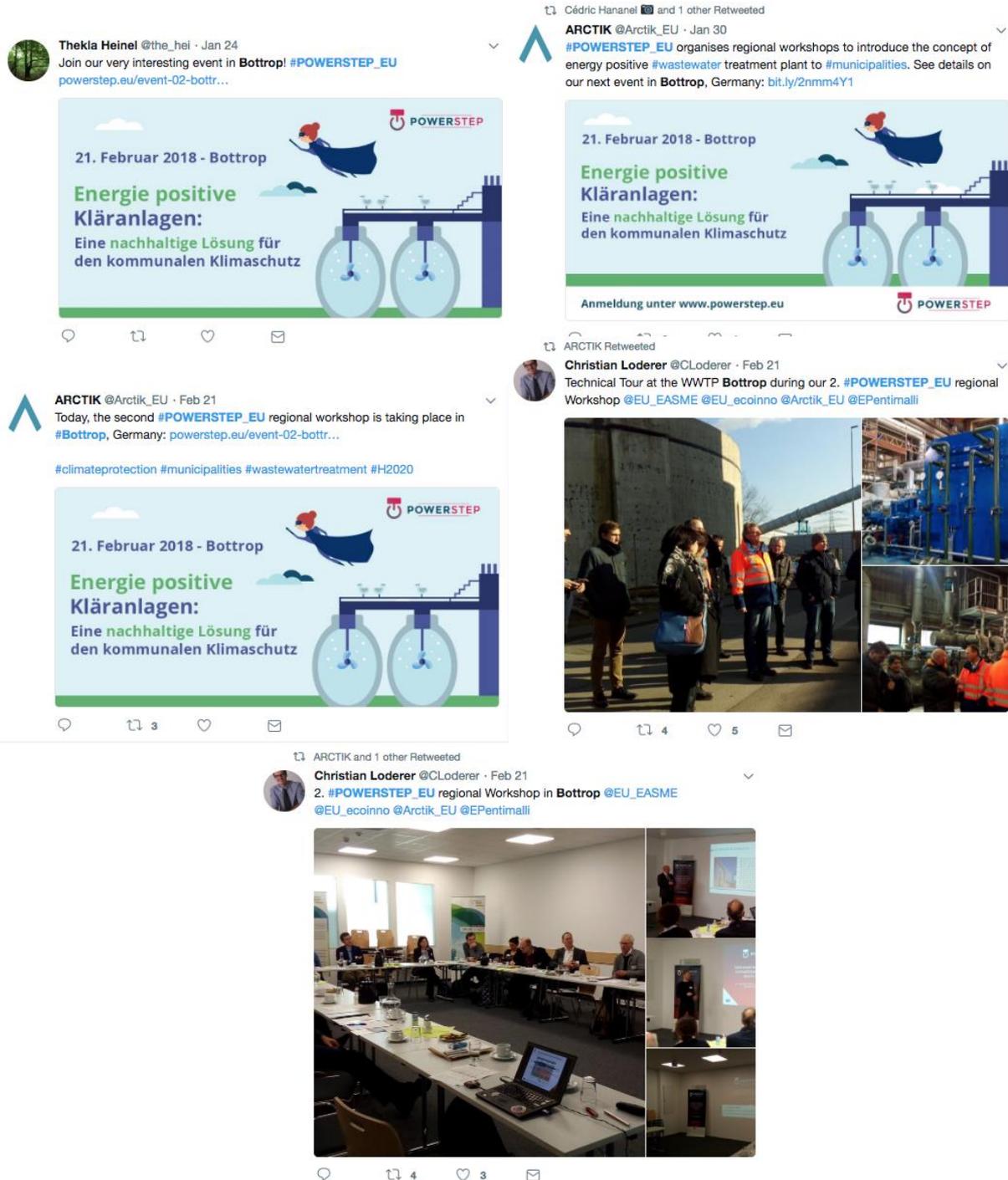


Figure 9: Examples of tweets before and during the second regional workshop

3.1.4. Promotion at regional level

In cooperation with the Energy Agency of North Rhine Westphalia the workshop in Bottrop was promoted on local level. Municipalities were approached directly, the workshop was published via event calendars and the local press was approached and informed. In addition the event was promoted via WIN Emscher Lippe, Klima EXPO NRW, Ruhrverband and the City of Bottrop. On European level the European Innovation Partnerships (EIP) informed about the workshop.



3.2. Workshop and results

25 representatives from politics, science and practice discussed how to improve the energy balance of wastewater treatment plants and learned about the results of the POWERSTEP project as well as funding possibilities.

Following presentations were given:

- POWERSTEP - concept of an energy-positive wastewater treatment plant (Christian Loderer, KWB)
- Improvement of the energy and environmental balance of a wastewater treatment plant by POWERSTEP (Christian Remy, KWB)
- Financing innovative solutions in the municipal sewage treatment sector (Ralph Ishorst, NRW Bank)
- From the sewage treatment plant to the power plant - the hybrid sewage treatment plant Bottrop (Dr. Ing. Torsten Frehmann, sewage treatment plant Bottrop).

Following the workshop, the participants visited the wastewater treatment plant in Bottrop.

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4. Third regional workshop: Timisoara, Romania, 17 April 2018

The 3rd regional workshop, "Energy positive wastewater treatment plants – a sustainable solution for climate protection in municipalities", took place in Timisoara, Romania, on April 17, 2018. The workshop was organised by KWB in cooperation with Aquatim and Business Development Group and supported by the European Innovation Partnership on Water (www.eip-water.eu).

4.1. Promotional activities

4.1.1. Visuals

An event banner was created in English and was used on the website and for social media advertising.



Figure 10: Event banner for the third regional workshop for promotion purpose via different channels

4.1.2. Webpage

Similarly to the 1st and 2nd workshops, a **dedicated page** was created on the POWERSTEP website to advertise the workshop. This page provided information about the upcoming workshop in English, included a link to the event programme in Romanian and a registration form.



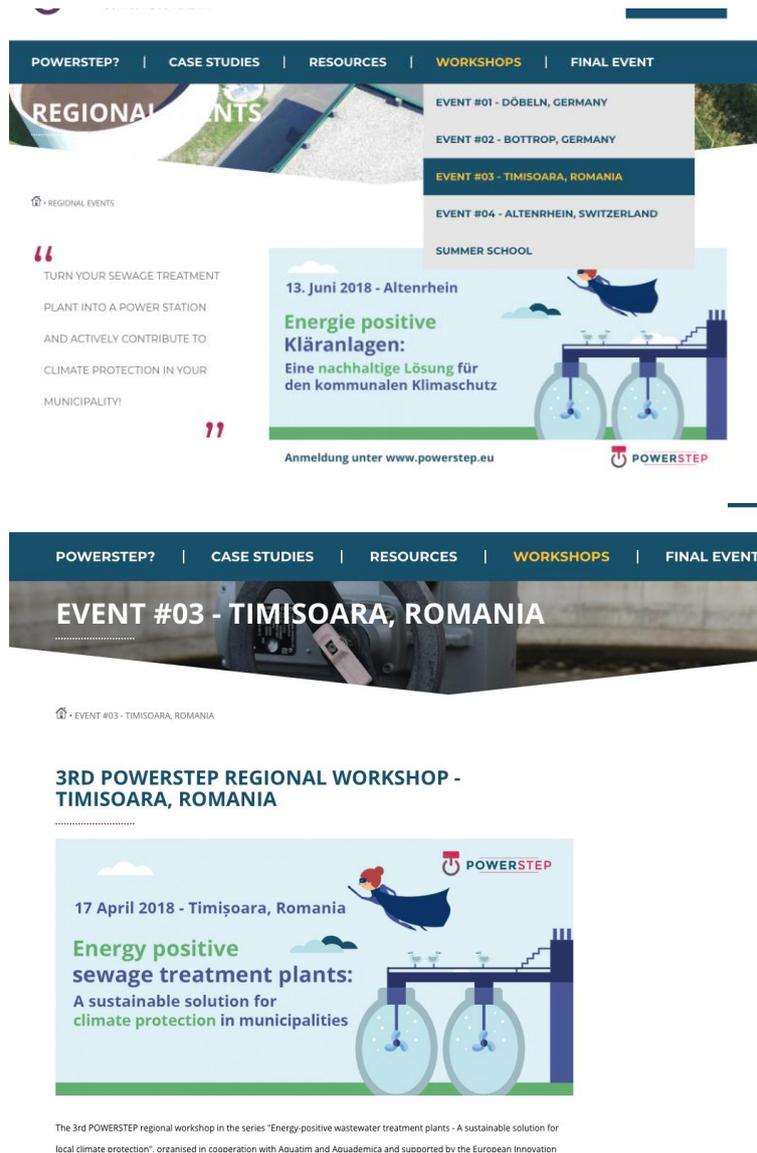


Figure 11: Dedicated webpage on the POWERSTEP website for the third regional workshop

After the workshop this page was updated with a short text about the workshop in English and photos from the event. Links to the workshop presentations and media articles published were also provided. The updated page is available here: <http://POWERSTEP.eu/workshops/event-03-timisoara-romania>.

In addition, similarly to the 1st and 2nd workshops, the event and the registration form were also included on the 'landing page' of the regional workshops section of the POWERSTEP website; the purpose of this page has been to provide an overview of the regional workshops and to highlight the next upcoming workshop (see Figure 3).

Furthermore, a **news item** was published on the POWERSTEP website's news section: <http://POWERSTEP.eu/successful-regional-workshop-timisoara>



Figure 12: ‘News on the POWERSTEP webpage after the third regional workshop

4.1.3. Social media

8 tweets were published (excluding retweets) on the workshop. 7 tweets were posted by ARCTIK and KWB, before and during the workshop. Some examples are shown below.



Jaroslav Mysiak liked
ARCTIK @Arctik_EU · Mar 17
The programme for the next **#POWERSTEP_EU** regional workshop in **Timisoara** is now online! Have a look and register to the event at powerstep.eu/regional-event...



Carmen Mena Abela and 1 other liked
Christian Loderer @CLoderer · Apr 17
Finally a great and informative Tour through the WWTP in **Timisoara** during our 3. Regional **#POWERSTEP_EU** Workshop. Thanks to Aquatim vor the Tour. @menaabela @EPentimalli @EU_ecoinno @EU_EASME @Arctik_EU



EU Eco-innovation liked
ARCTIK @Arctik_EU · Apr 19
A successful 3rd **#POWERSTEP_EU** regional workshop was held in **Romania** earlier this week 🇷🇴🇵🇱🇷🇺 powerstep.eu/successful-reg...



EU Eco-innovation liked
ARCTIK @Arctik_EU · Apr 19
A successful 3rd **#POWERSTEP_EU** regional workshop was held in **Romania** earlier this week 🇷🇴🇵🇱🇷🇺 powerstep.eu/successful-reg...



Figure 13: Examples of tweets before and during the third regional workshop

4.1.4. Promotion at regional level

In cooperation with the local water utility Aquatim and the company Business Development Group the workshop in Timisoara was promoted on local level. Municipalities were approached directly, the workshop was published via event calendars and the local press was approached and informed. On European level the European Innovation Partnerships (EIP) informed about the workshop as well as the IAWD.

4.2. Workshop and results

40 representatives of water operators, public administration, universities together with the Regional Development Agency learned about the results of the POWERSTEP project and discussed the technical solutions and funding possibilities on how to improve the energy efficiency of wastewater treatment plants.



Following presentations were given:

- POWERSTEP - Energy positive wastewater treatment plants, just a dream? Christian Loderer (KWB)
- Financing innovative solutions at wastewater treatment plants in Romania, Raluca Cibu (Regional Development Agency West-Romania)
- POWERSTEP - Results on Energy Audits, LCA and other important analysis, Christian Loderer (KWB)

The workshop included a visit of the Aquatim Waste Water Treatment Plant in Timisoara.



5. Fourth regional workshop: Altenrhein, Switzerland, 13 June 2018

The 4th regional workshop, “Energy positive wastewater treatment plants – a sustainable solution for climate protection in municipalities”, took place in Altenrhein, Switzerland, on 13 June, 2018.

5.1. Promotional activities

5.1.1. Visuals

An event banner was created in German and was used on the website and for social media advertising.



Figure 14: Event banner for the fourth regional workshop for promotion purpose via different channels

5.1.2. Webpage

Similarly to the previous workshops, a **dedicated page** was created on the POWERSTEP website to advertise the workshop. This page provided information about the upcoming workshop in German and English, included a link to the event programme in German and a registration form.

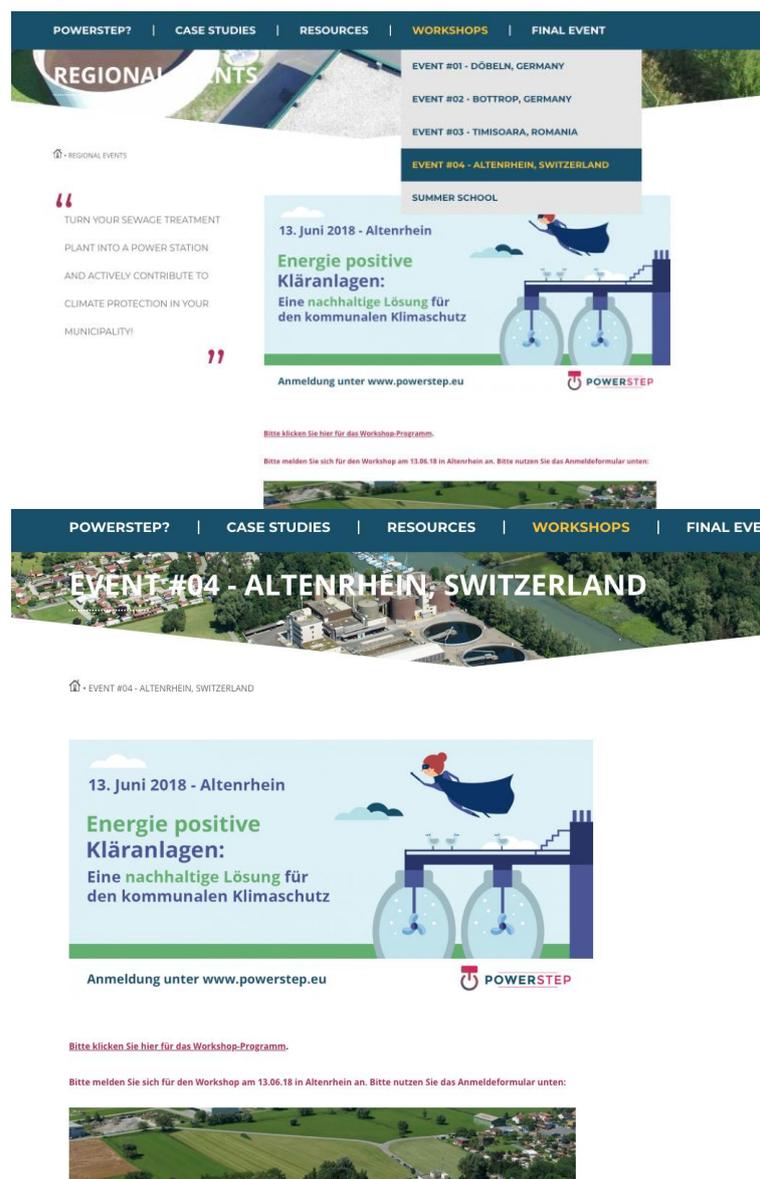


Figure 15: Dedicated webpage on the POWERSTEP website for the fourth regional workshop

After the workshop this page was updated with a short text about the workshop in both English and German and photos from the event. Links to the workshop presentations and media articles published were also provided. The updated page is available here: <http://POWERSTEP.eu/workshops/event-04-altenrhein-switzerland>

In addition, similarly to the 1st, 2nd and 3rd workshops, the event and the registration form were also included on the 'landing page' of the regional workshops section of the POWERSTEP website; the purpose of this page has been to provide an overview of the regional workshops and to highlight the next upcoming workshop (see Figure 3).



Furthermore, a **news item** was published on the POWERSTEP website's news section: <http://powerstep.eu/powerstep-solutions-discussed-a-regional-workshop-switzerland>

POWERSTEP SOLUTIONS DISCUSSED IN A REGIONAL WORKSHOP IN SWITZERLAND

The last POWERSTEP regional workshop in the series "Energy-positive wastewater treatment plants - A sustainable solution for local climate protection" took place on the 13th of June 2018 in Altenrhein, Switzerland. The workshop was organised in cooperation with EAWAG and the Altenrhein wastewater treatment plant.

15 representatives from public administrations, research institutes and engineering companies learned about the results of the POWERSTEP project. During the workshop, latest technical solutions and concepts on how to realise energy-positive wastewater treatment plants, as well as their use in practice, were presented.

Read more about the workshop and check out the presentations [here](#).



Figure 16: 'News on the POWERSTEP webpage after the fourth regional workshop

RECENT NEWS



14/06/2018
POWERSTEP solutions discussed in a regional workshop in Switzerland



31/05/2018
POWERSTEP knowledge sharing platform now live!



18/04/2018
Successful regional workshop in Timisoara



11/04/2018
New project deliverables online!



28/03/2018
The Potential of the Wastewater Sector in the Energy Transition: policy brief published!



5.1.3. Social media

4 tweets were posted by ARCTIK and KWB, before and during the workshop. Some examples are shown below.

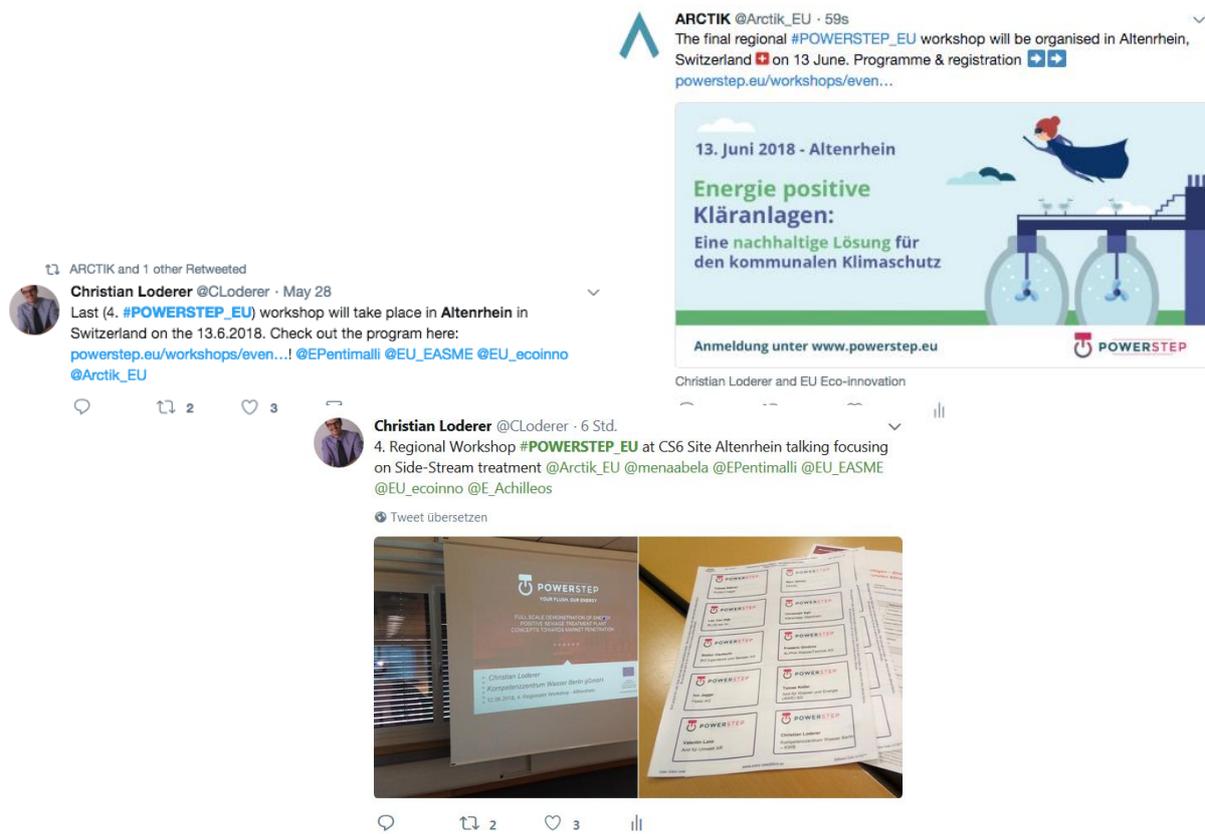


Figure 17: Examples of tweets before and during the fourth regional workshop

5.1.4. Promotion at regional level

The event was promoted via various networks and direct contacts at national and regional level. The workshop announcement was sent to the following actors: German Association for Water, Wastewater and Waste (DWA), German Association for Water, Wastewater and Waste (DWA), Association of Swiss sewage and water conservation experts (VSA), State Bank of Baden-Wuerttemberg (L-Bank), eea-cities in Switzerland and Baden-Wuerttemberg, Energy Agency of Switzerland, Energy Agency Bodenseekreis, Energy Agency Ravensburg, Energy Agency Biberach, Energy Agency St. Gallen, e5 Voralberg cities and their networks and FEDARENE. A press release was published.

5.2. Workshop and results

14 representatives from public administrations, engineering companies and research institutes discussed how to improve the energy balance of wastewater treatment plants and learned about the results of the POWERSTEP project.

Following presentations were given:

- The sewage treatment plant Altenrhein, Christoph Egli (sewage treatment plant Altenrhein)
- POWERSTEP: Wastewater treatment plant of the future & results from 3 years of research, Christian Loderer (KWB)

- Nitrogen in By-Stream - From Treatment to Recycling, Marc Böhler (Eawag)
- Membrane technology as a possibility of nitrogen stripping - prior art and future developments, Lex van Dijk (BLUE-tec bv)
- Experience of a large-scale nitrogen stripping plant in Switzerland, Frédéric Gindroz (ALPHA WasserTechnik AG)

Due to heavy rain the side visit of the sewage treatment plant in Altenrhein was cancelled.

