

Grant Agreement: 768936



D7.3: DISSEMINATION AND COMMUNICATION STATUS REPORT



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Grant Agreement	768936
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Topic	EE4 -2016
Type of action	IA Innovation Action
Project Duration	48 months (October 2017 - September 2021)
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Consortium partners	<ul style="list-style-type: none"> : Nodais AB (SE) – NODA : Austrain Institute of technology (AT) – AIT : Thermaflex international holding (NL) - THF : Steinbeis innovation (DE) - Solites : SMET GWT (BE) – SMET : Vattenfall Europe (DE) - Vattenfall : Enerpipe (DE) – Enerpipe : A2A Calore & servizi (IT) - A2A : Hogskolan i Halmstad (SE) – HU : Euroheat & Power (BE) – EHP
Website	www.tempo-dhc.eu
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SUMMARY

The Dissemination and communication report informs about the status of the implementation of the strategy defined in the Dissemination and Communication Plan and more in general under WP7 as Task 7.1 Communication campaign, Task 7.2 Dissemination and communication strategy plan, Task 7.3 Dissemination campaign: publications, presentations and knowledge transfer events and Task 7.4 Dissemination and contact with sister projects and with EU policy makers. This deliverable concerns the dissemination and communication activities until M24.

This report represents the first public overview of the implementation of the dissemination and communication campaign carried on until the end of the second year of the TEMPO project. The object is to have an official monitoring and evaluation of the results of the dissemination efforts made by the consortium. Lastly, this report presents for each dissemination task/action a brief description as well as a summary of their results through a quantitative and qualitative performance assessment.

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GLOSSARY / LIST OF ACRONYMS

ACRONYM	DEFINITION
DCoP	Dissemination and Communication Plan
DCoR	Dissemination and Communication Report
WP	Work package
M	Month
LT	Low temperature
DH	District heating

1 INTRODUCTION

This Dissemination and Communication Plan Status Report (DCoR) is a deliverable of the TEMPO – Temperature Optimisation for Low Temperature District Heating across Europe - Project, which is funded by the European Union’s Horizon 2020 Programme under Grant Agreement 768936. Beginning in October 2017, the dissemination and communications activities will be carried out throughout the project lifetime (until September 2021).

All activities carried out in WP7, up until M24, have been evaluated in relation to the objectives and deliverables set up. If necessary the dissemination and communication strategy can be adjusted and lessons will feed into the next wave of communication.

Dissemination consists of activities undertaken to share the knowledge that has been constructed as part of the TEMPO project. This is essential to ensure the project provides maximum benefit to the wider European community, and increases the replicability of the project.

Communication activities aim to increase awareness of the project and its outcomes particularly amongst key stakeholders, including researchers, DHC specialists, policy makers, building owners, end-users, industry actors and the general public. These activities are essential to ensure the project is visible to stakeholders beyond the project partners.

This deliverable will provide an update on the communication and dissemination activities carried out, as part of WP7, from M1 – M24. The aim is to clearly describe how the awareness of the TEMPO project has been increased and evaluate the actions taken in relation to the predefined tasks and objectives.

At month 48 (September 2021), a final report on the dissemination and communication status report will be formally submitted to the European Commission.

1.1 DISSEMINATION AND COMMUNICATION CAMPAIGN

The communication strategy consists of a series of steps. Following the outline of the aims and objectives of the project, target audiences were identified. The project messages can be communicated to these audiences in the form of two key messages and in one all-encompassing sentence. These messages will be spread through a variety of methods and material, from newsletters, events and workshops, to press activities and social media. The impact and reach of the project will be maximised through networking, presenting findings, journal articles and communicating with the European Commission. The communication and dissemination activities have been divided into four phases. The length of each phase was outlined, together with the TEMPO partners, and includes the following:

- Awareness phase (M1-M24): focus is on awareness raising before there are any project results
- Engagement phase (M25-M43): focus is on engagement and dissemination of project results
- Forward looking phase (M44-M48): focus on next steps and continuation of project results

- Sustainability phase (after the end of the grant period, M48): focus on maintaining communication channels after the end of the project

This status report concerns the Awareness phases only (M1-M24).

1.2 TIMELINE AND CALENDAR

The timeline of the different TEMPO project communication activities are described below according to the different phases (awareness, engagement, forward-looking and sustainability phases).

Table 2: TEMPO Dissemination and Communication activity schedule.

DISSEMINATION & COMMUNICATION ACTIVITIES	CHANNELS & SUPPORTS	COMMUNICATION TARGETS	RESPONSIBLE & CONTRIBUTING PARTNERS
AWARENESS PHASE: M1 – M24			
Design of the project identity (including acknowledgement of EU funding)	Project logo	Project logo ready by M3	Responsible: EHP
	Project templates	Templates (deliverables, reports) ready by M3	Responsible: EHP
	Reference PowerPoint	Template ready by M3	Responsible: EHP
Set up of the online communication channels	Website	Website for general public launched at M4 Relevant updates Monitoring of individual visits	Responsible: EHP Contributing: ALL
Set up social media account	Social media	Twitter account to general public set up at M4 LinkedIn page to be set up Relevant updates	Responsible: EHP Contributing: ALL
Announcement of the project	e-Newsletter	Bi-annual Issue 1 of the project e-Newsletter at M6 (adjustment:	Responsible: EHP Contributing: ALL

		slightly later to adapt to new legislation)	
Production of the project documentation: promotional material	Roll-up banner	To be produced by M12	Responsible: EHP
	Poster	To be produced by M12	Responsible: EHP
	Fact sheet	To be produced by M12	Responsible: EHP
ENGAGEMENT PHASE: M25 – M43			
Organisation of activities addressed to engage in exchanges with regional actors ¹ and target countries ² .	Workshops	DEMO Workshop 1 DEMO Workshop 2 DEMO Workshop 3 Policy/clustering workshops x 2	Responsible: EHP together with each DEMO Contributing: ALL
Outreach to media	News sites, websites, magazines, newspapers etc.	Articles on project outcomes	Responsible: EHP Contributing: ALL
Scientific results dissemination	Scientific peer-reviewed journals	At least 2 articles published during the project period	Coordination: EHP Technical guidance: VITO
	Present TEMPO at external conferences	At least 6 external conferences (EHP & VITO jointly) Each scientific TEMPO partner will present project results at minimum 3 conferences (national/EU level)	Coordination: EHP Technical guidance: VITO Responsible: EHP & VITO (6 conferences) Responsible: Each scientific partner (3 conferences each)
Promotion through the project communication channels	Website	Relevant updates	Responsible: EHP Contributing: ALL
	e-newsletter	Bi-annual	Responsible: EHP Contributing: ALL
	Social media	Relevant updates	Responsible: EHP

¹ Industry, investors etc.

² Germany, Austria, Italy and Scandinavia.

			Contributing: ALL
FORWARD LOOKING PHASE: M44 – M48			
Explanation of future prospects (use in policy and future research)	Website	Main results and outcomes section added to website	Responsible: EHP Contributing: ALL
	e-newsletter	Bi-annual	Responsible: EHP Contributing: ALL
	News sites and websites	Articles on project outcomes	Responsible: EHP Contributing: ALL
Scientific results dissemination	Scientific peer-reviewed journals	At least 2 articles published during the project period	Coordination: EHP Technical guidance: VITO
Visibility	Social media	Relevant updates	Responsible: EHP Contributing: ALL
Production of the project documentation: Project brochure	Brochure	To be produced by M40	Responsible technical content: Solites Responsible layout: EHP
Present innovations, associated business models and thus commercial opportunities for all relevant stakeholders	Final conference	Q4 of 2021 before end of M48	Responsible: EHP Contributing: ALL
SUSTAINABILITY PHASE: AFTER M48			
Maintenance of the communication channels after the project end	TEMPO website	Online at least 2 years after the grant period; project results available on EHP website in parallel and beyond that period.	Responsible: EHP

1.3 COMMUNICATION CAMPAIGN IMPLEMENTATION STATUS

The communication campaign has covered the work done under, and the outputs from, all other WPs. Therefore, it has been run in parallel with the other WPs, for the duration of the project thus far. Key results have been identified and disseminated by the project coordinator and WP leaders, and then communicated in a timely manner to the leader of communication and dissemination, EHP.

1.3.1 VISUAL IDENTITY

A logo and a visual identity was created **in M3** to ensure brand consistency in all communication by EHP. The visual identity is presented in the **Project Branding Handbook**³ which guides the TEMPO partner on the visual identity and provides information about:



- Logo
- Colour palette
- Typography
- Instructions to correctly reference the funding source: outlined in PowerPoint template
- Report template was prepared by M3
- PowerPoint template was prepared by M3

Figure 1 TEMPO logo



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 768936.



Temperature Optimisation for Low
Temperature District Heating across Europe

Name Surname, Organisation

9/25/2019

www.tempo-dhc.eu

1

Figure 2 Example of Powerpoint template

1.3.2 PROMOTIONAL MATERIALS

Promotional materials, produced by EHP, will be designed to increase the project's visibility. These materials display the EU emblem, highlight Horizon2020 as the source of project funding and, in some cases, a disclaimer. These materials include:

- Factsheet
- Poster
- Roll-up banner

³ Please see the Project Branding Handbook for details

Yet, the consortium agreed to **delay the production of any promotional material** in the light of the occurring changes in the partnership and the demo sites. Significant efforts will be made to circulate project documents electronically, in order to reduce the environmental impact of dissemination activities.

1.3.3 WEBSITE

A project website for the TEMPO project was **developed by EHP in M4** and is continuously updated as the project develops. This website www.tempo-dhc.eu acts as the main source of information and the centre of dissemination activities to ensure a proactive outreach towards key stakeholders. The website has been developed in such a way that it can easily be refreshed with new images and texts during its lifetime. Moreover, it is built in such a way that it is easy to add further detailed content to it as the TEMPO project evolves. The design of the TEMPO website has been developed according to the visual identity presented in the project branding handbook, in order to give all communication material a coherent style.

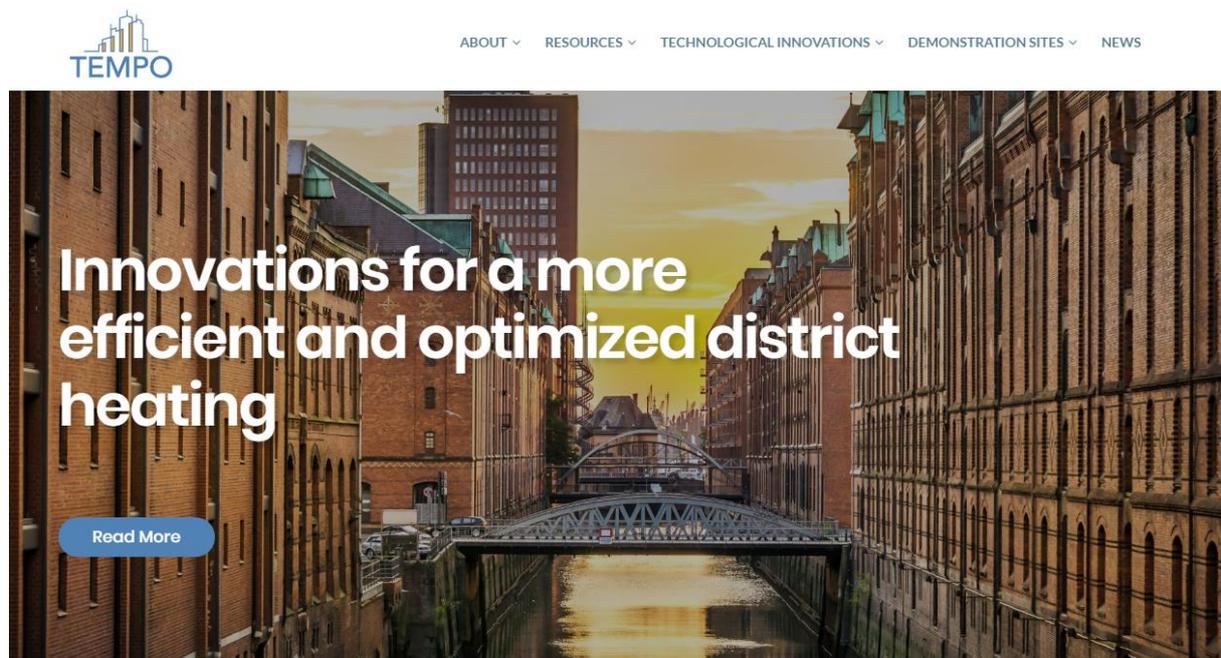


Figure 3 Screenshot of TEMPO website: www.tempo-dhc.eu

The URL of the TEMPO project website is www.tempo-dhc.eu and the website has been active as of **31 January 2018**. Since then, the website has been visited by **804 unique users, from 46 countries. 164 users have returned to the website at least once. An average of 2.57 pages are viewed in each session.** The website has been visited more times in September 2019 than any other month. The WP7 leader, EHP was responsible for setting it up and will be maintaining it until the end of the project.

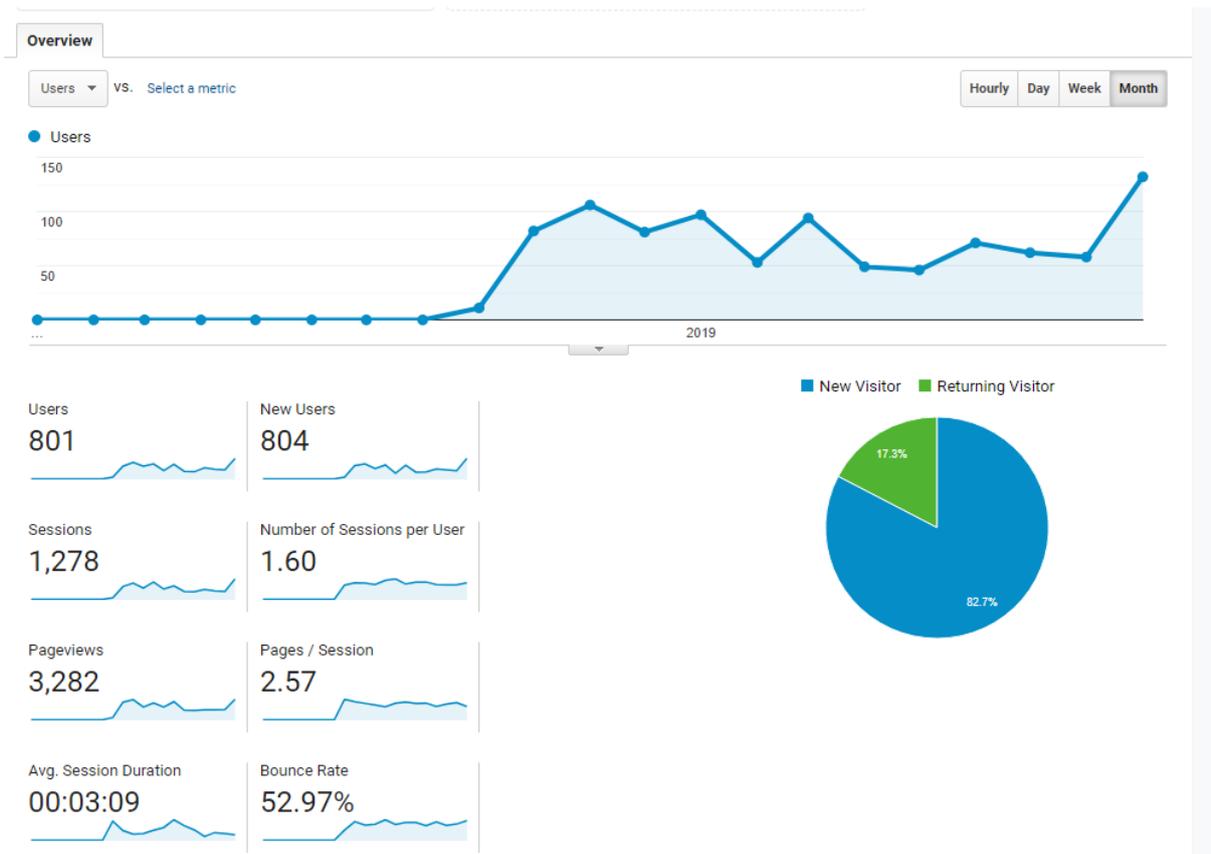


Figure 4 Screenshot of analysis of activity on TEMPO website

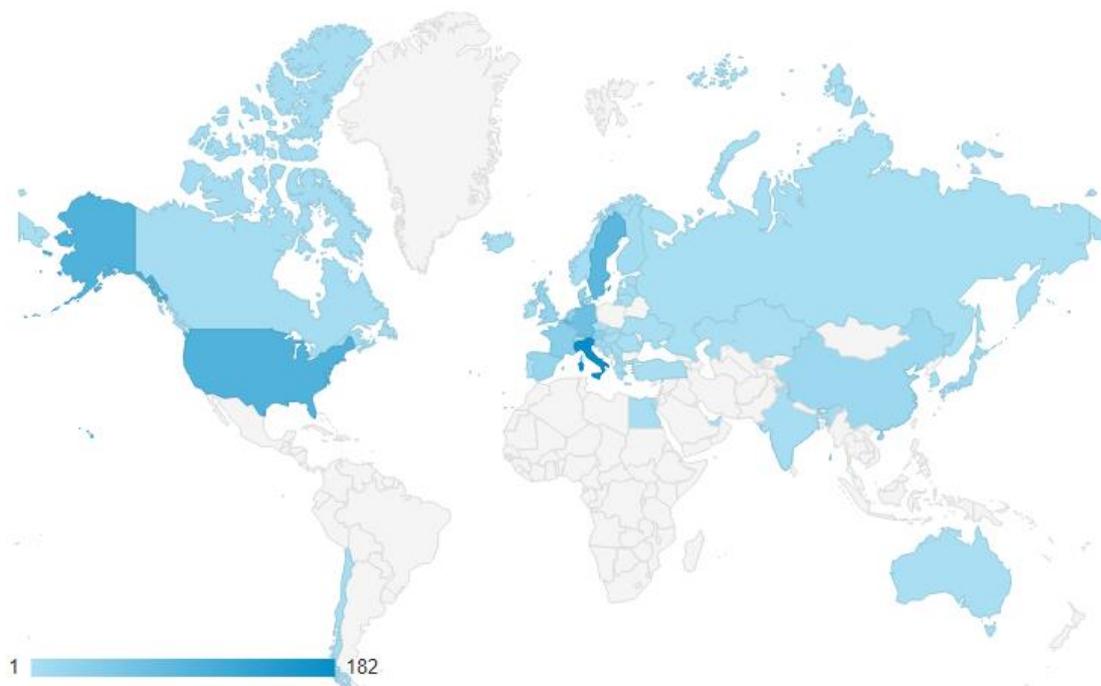


Figure 5 Map showing regional distribution of TEMPO website users

The website features, among other things, in its current version:

- A vertically flowing homepage that highlights important parts of the project
- A project outline
- Information about the consortium partners with links to their websites
- Descriptions of the demonstration sites
- Information about the deliverables
- Descriptions of the innovations
- News (A total of 10 news articles have been published on the website)
- Engagement: link to newsletter and twitter as well as a contact form or email

The website features information about the main results and outcomes of the project cycle.

The WP7 leader initiated a web-linking strategy with partner organisations and projects to raise the profile of the project. The website is available in English and will remain online at least two years after the end of the project. As WP7 leader, EHP will continue to coordinate the website, while the other partners will contribute with content, as the project evolves.

1.3.4 SOCIAL MEDIA

The TEMPO project results have been shared with a variety of different online communities, including scientific, policy-focused, business and local end-user communities. This engagement has been achieved using the social media platforms Twitter and LinkedIn. A Twitter account was set up during the awareness phase and will be maintained for the duration of the project and a LinkedIn showcase page was created. EHP is responsible for maintaining the accounts and all other partners contribute with content as the project evolves.

The dedicated **Twitter handle is @tempo_dhc**. The account is used to share updates about important developments in the project such as scientific publications and consortium gatherings. It is also used to share information about the project regularly in an effort to boost visibility and awareness, and to redirect followers back to the website. **The account has 189 followers and has posted 51 tweets. April 2019 was the best month for engagement, with 3,699 twitter impressions, 10 new followers and 25 profile visits**, following the announcement of the publication of the scientific paper titled "*Pipe Sizing for Novel Heat Distribution Technology*".

@tempo_dhc follows a total of 463 accounts, mainly consisting of key users who are active in the debate on energy, district heating and other related projects. Project partners have promoted the TEMPO project via their Twitter accounts and have retweeted information from **@tempo_dhc** regularly. The audience is mostly interested in technology and science news, in line with the expected target groups. Concerning the gender of the audience, a slight predominance of male is evident.



Figure 6 Headline of the TEMPO Twitter account

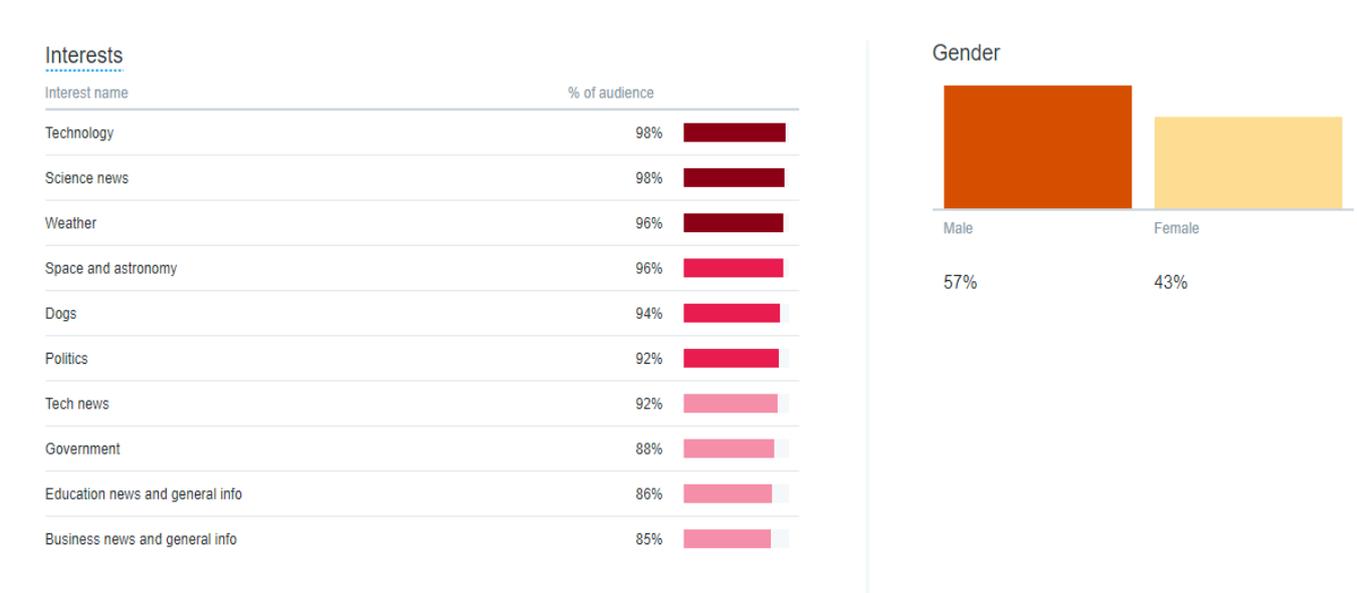


Figure 7 Main features of the TEMPO Twitter audience

EHP also created a showcase page within the DHC+ LinkedIn account. The usefulness of this page is less than it potentially could be, due to the very low number of followers. Anyway, the constant posting of the TEMPO results through the EHP and DHC+ LinkedIn accounts assured a very good level of dissemination.

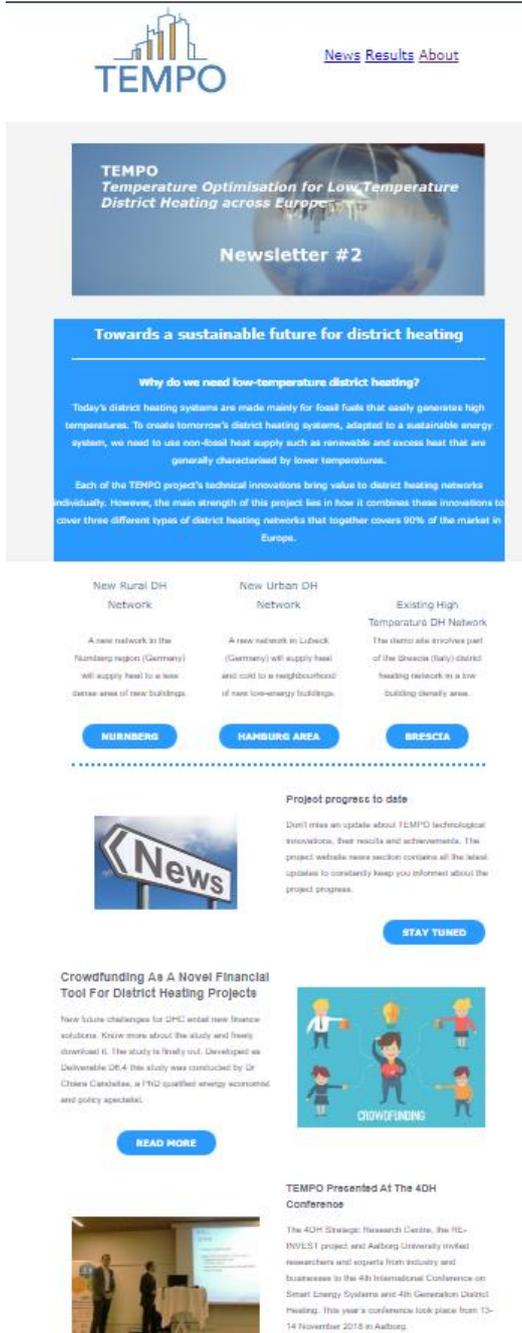


Figure 8 TEMPO Newsletter screenshot

1.3.5 NEWSLETTER

The TEMPO project website offers a newsletter 'sign-up' option for visitors who would like to receive regular project updates. To create a mailing list network, the partners provided suggestions of potentially interested stakeholders, who were then invited to sign up to the newsletter. The mailing list is managed by EHP. In the first phase of the project the publication of the newsletter was delayed due to a lack of relevant updates and the small number of registered contacts (35). For the sake of its quality and impact, the newsletter was sent out when a sufficient amount of valuable content was gathered, rather than at specific time intervals. Issue 1 was released on schedule, whereas Issue 2 was released in M16 (instead of M12). Issue 3 will be released within M25.

The content of the newsletter consists of project updates and any information and developments linked to TEMPO and low temperature district heating. The platform, CVENT was used to send the newsletter as it allows for monitoring and maintaining dynamic mailing lists and analysis of newsletter engagement, to achieve maximum impact. Issues were announced and distributed via the social media channels and through the partners' networks. The newsletter was used to increase visibility of the project among industry actors.

EHP is responsible for managing and editing the newsletter while all other partners contribute with content concerning the project.

In order to counter balance the low number of subscriptions to the TEMPO Newsletter, EHP constantly featured any relevant project-related news/updates on the much more subscribed EHP

official newsletter, as well as in the EHP's technology platform (DHC+) monthly updates (see below).

1.3.6 PRESS ACTIVITIES

Press activities consisted of sharing results via scientific and specialised media such as DHC+ and Euroheat & Power newsletters. TEMPO project results are regularly featured in DHC+ and EHP updates, which together reach an audience of around 1,500 individuals. As for magazines, TEMPO was featured in 2 articles:

An article, titled “*Digitalisation in district heating networks: the TEMPO-project*” was written by VITO and published in the Autumn 2019 edition of [European Energy Innovation](#).

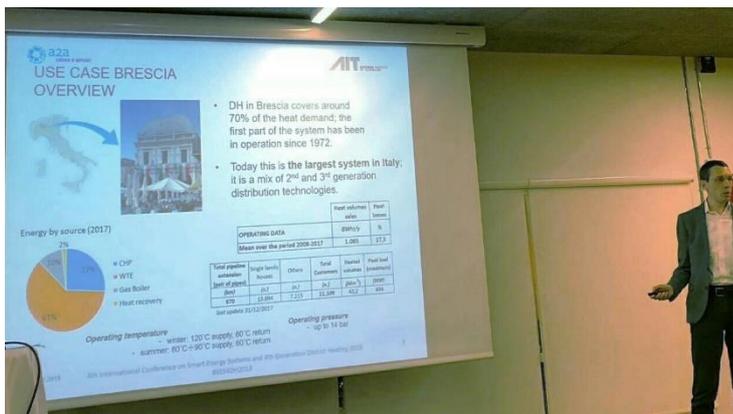
A second article “*New Management Systems for DHC Networks*” featured the TEMPO Project in the specialised article [HOT | COOL Spring 2019 issue](#).



Digitalisation in district heating networks: the TEMPO-project

Figure 9 Title of the magazine article featuring TEMPO

1.3.7 EVENTS, CONFERENCES AND WORKSHOPS



As part of the events attendance strategy, all partners have participated in external events. EHP, in its role as WP7 leader, has been responsible for tracking relevant events, with input from the other partners. These relevant events were then shared with project partners to encourage attendance.

The TEMPO project has been presented at a variety of external events, namely: **5 conferences** (including Sustainability Day 2019; Smart Energy Systems Conference; International Conference on Smart Energy Systems and 4th Generation District Heating (pictured below); Conference of the International Building Performance Simulation Association), **2 seminars** (Lösungswege für Niedertemperatur Fernwärme am Beispiel TEMPO x2) and **2 workshops** (District Heating



Workshop; COOL DH European Technical Workshop); **reaching an audience of over 890 individuals, through 4 different languages**. These individuals consisted of academics, industry players, DHC specialists, politicians and researchers. The first TEMPO workshop on digitalisation and the related demo site visit is planned for M26 in Brescia at A2A Calore & Servizi headquarter.

1.3.8 COOPERATION WITH OTHER EU PROJECTS

A network has been established to connect the consortium with existing projects, relevant policy actors and initiatives in the field for better dissemination impact. The main identified projects and initiatives who offered a potential collaboration are:

- [STORM](#)
- [Arrowhead](#)
- [SDHp2m](#)
- [ADA-EE - Advanced Data Analytics for Energy Efficiency](#)
- [COOL DH](#)
- [LowUP](#)
- [PLANHEAT](#)
- [InDeal](#)
- [FLEXYNETS](#)
- [E2District](#)
- [MPC-GT](#)

TEMPO is linked to the EU project STORM which ended in March 2019. A webinar entitled *Can artificial intelligence (AI) create every-day value in district heating and cooling networks?* Was jointly organised with this project. Furthermore a range of topics related to the TEMPO project were presented during the COOL DH Technical Workshop in the framework of the EUSEW (European Sustainable Energy Week), including “*Innovative piping system in TEMPO*”; “*TEMPO Digital tool for non-expert users*” and “*TEMPO solution packages*” (25 attendees).

1.3.9 JOURNAL ARTICLES

The TEMPO project has published one article to date, to disseminate the project outcomes to the scientific community. Activities have been coordinated by EHP, with VITO providing technical knowledge. Two scientific articles have been published under open access. The first was written by Halmstad University, titled “[Pipe Sizing for Novel Heat Distribution Technology](#)” and published on 2 April 2019, in *Energies* 2019, 12(7), 1276. A second journal article is set to be published later in the project.

2 EVALUATION AND PERFORMANCE INDICATORS

Evaluation is an important part of the communication and dissemination strategy and of the project objectives and project periodic reporting. The WP leader, EHP, will make sure that all activities will be evaluated and follow up in relation to the objectives and deliverables set up. Evaluation will take place to guarantee both timeliness and quality of communications but also their effectiveness. Thanks to the results of the evaluation, if necessary the dissemination and communication strategy can be adjusted and lessons will feed into the next wave of communication.

In order to measure the quality and success of the TEMPO communication and dissemination efforts, a continuous monitoring of deliverables and other quantitative results will be done. Whenever required, the TEMPO partners will thus be able to make adjustments. EHP will set up a document where all partners can insert information about the communication or dissemination activity they have engaged in. This document will

collect the information such as type of activity, type of target groups reached (if possible) and the number of people reached etc.

Table 3: Deliverables and expected results for communication and dissemination tools and activities (Objectives in cells highlighted green have been delivered on time).

DISSEMINATION COMMUNICATION EFFORT	EXPECTED RESULT	DELIVERABLE(S) IF EXISTENT & STATUS
Project logo	Delivered by M3	Achieved
Project templates	Delivered by M3	Achieved
Social media	No date defined Monthly updates Report on activity and followers	Twitter activated by M4 LinkedIn showcase page created
TEMPO website	Website delivered at M4	Achieved
Newsletter	Issue 1 at M6 issue 2 at M12 issue 3 at M18 issue 4 at M24 issue 5 at M30 issue 6 at M36	Delayed Issue #2 of the project, e-Newsletter at M16 and 3rd issue at M25
Roll-up Banner Poster Factsheet	To be delivered Report on distribution results	In Progress
Brochure	To be delivered Report on distribution results	In Progress
Dissemination and Communication Plan	Dissemination and Communication Plan ready by M6. Plan updated and evaluated regularly at	D7.2

	the General Assembly meetings.	
Dissemination and Communication status report	First update of the dissemination and communication status report at M24.	D7.3
Dissemination and Communication status report	Final update of the dissemination and communication status report at M48	D7.4
News sites and websites	Articles on project outcomes Report on outcome	In Progress, 1 magazine article published
Scientific peer-reviewed journals	At least 2 articles published during the project period Report on outcome	In Progress, 1 article published
Workshops	1 workshop x 3 demos 2 policy workshops Report on attendance	In Progress
External events: conferences	At least at 6 external conferences (EHP & VITO jointly) Each scientific TEMPO partner will present project results at minimum 3 conferences (national/EU level) Report on outcome according to table to be created	In Progress
Final conference	M48 Report on attendance	D7.5

3 CONCLUSIONS

In light of the above, a fair estimate of the dissemination and communication efforts carried out in the first two years of the TEMPO project is that their reach was satisfactory, considering that all tools and technologies were in their early stages. These results improved as the project matured, with good results highlighted in the later stages of the awareness phase of the dissemination strategy. Most D&C KPIs of the first awareness phase of the DCoP were met at the end of M24, with a slight delay in issuing the newsletter.

The design of the project visual identity was timely delivered along with a comprehensive Project Branding Handbook containing the logo, templates and all the graphic and visual rules to be respected during the implementation of the dissemination strategy. All of the consortium members constantly refer to the document for their communication and dissemination activities. Concerning the setting up of the online communication channels, the website has a good average consultation rate even though we expect an increase of its relevance within the overall dissemination effort, in line with the developments of the upcoming results and deliverables of public interest. The social media coverage is satisfactory, although the number of Twitter and LinkedIn followers should be increased. Even in this case, an increase of this data is expected in the second phase of the dissemination phase, starting at M25.

As for the newsletter, we deem the numbers of subscribers to be too low. More efforts should be done by all of the consortium to increase this number. Moreover, the delayed issuing is another aspect to be improved and to be more aligned with the DCoP. However, with regard to the dissemination of the scientific results of TEMPO, there is an expectation that some of the tasks outlined under the Engagement phase (M25-M43) of the Dissemination and Communication Strategy, have already been carried out. Namely a large number of presentations of TEMPO in external events and conferences, and clustering initiatives (webinar) with similar projects. This shows that the dissemination and communication efforts of the consortium are paying off.

Finally, as detailed in the KPI report, the overall dissemination and communication activities of the consortium have respected the KPIs set at the onset of the project. The partners will naturally continue to promote the outputs of the project in order to ensure the widest possible reach and adoption of the various tools and technologies developed under TEMPO.

4 ANNEX 1: LIST OF DISSEMINATION AND COMMUNICATION ACTIVITIES (EXCLUDING SOCIAL MEDIA)

Beneficiary	Date of publication	Type of activity	Title	Type of audience	Approximately size of audience
EHP	Nov-17	Newsletter	TEMPO Project Kicked off	Technical/ Industrial	797
EHP	Jan-18	Newsletter	Request for proposals for study on crowdfunding	Technical/ Industrial	797
EHP	Feb-18	Newsletter	TEMPO website launch	Technical/ Industrial	797
EHP	Feb-18	DHC+ Newsletter	TEMPO website launch	Technical/ Industrial	610
EHP	Mar-18	DHC+ Newsletter	TEMPO Meeting	Technical/ Industrial	610
EHP	Sep-18	Newsletter	TEMPO project questionnaire on business models for district heating networks & components	Technical/ Industrial	797
EHP	Sep-18	DHC+ Newsletter	TEMPO project questionnaire on business models for district heating networks & components	Technical/ Industrial	610
EHP	Oct-18	Newsletter	TEMPO project questionnaire still available	Technical/ Industrial	797
EHP	Oct-18	DHC+ Newsletter	TEMPO updates	Technical/ Industrial	610
AIT, A2A	14/11/2018	Conference presentation, 4rd International Conference on Smart Energy Systems and 4th Generation District Heating, Aalborg (Denmark)	The TEMPO project: Challenges and Opportunities for Implementing Innovative Solutions for lowering the Temperatures in the District Heating Network of Brescia (Italy)	Researcher and experts from research institutions, industry, business (in the overall conference, from 27 different countries)	80 people in the specific session, 320 people in the entire conference

VITO	22/11/2018	Conference/workshop	Workshop Heating (Belgium) District Antwerp	Professionals, industries, communities, politicians	204
THF	30/11/2018	Seminar on DH	Lösungswege für Niedertemperatur Fernwärme am Beispiel TEMPO	DHC specialists	> 100
EHP	Dec-18	Newsletter	Crowdfunding as a novel financial tool for district heating projects		797
EHP	Dec-18	DHC+ Newsletter	Crowdfunding as a novel financial tool for district heating projects		610
EHP	Mar-19	DHC+ Newsletter	TEMPO Meeting		610
THF	07/03/2019	Seminar on DH	Lösungswege für Niedertemperatur Fernwärme am Beispiel TEMPO	DHC specialists, designer, research institutes	50-60
Halmstad University	02/04/2019	Peer-reviewed Journal Paper	Pipe Sizing for Novel Heat Distribution Technology	Academic/Industry	Unlimited
VITO	29/04/2019	Workshop Frankfurt	Presentation of the DHC+ roadmap on Digitalisation	Academic/Industry	~30
Halmstad University	08/05/2019	Conference	Sustainability day 2019	Academic	100+
Vattenfall	17/06/2019	Cool DH Workshop Brussels	TEMPO Digital tool for non-expert users	European Technical Workshop	40
VITO	17/06/2019	Cool DH Workshop Brussels	General presentation of TEMPO	Academic/Industry	30
EHP	Aug-19	DHC+ Newsletter	Webinar: Can artificial intelligence create every-day value in DHC networks? TEMPO Workshop in Brescia		610
AIT	01/09/2019	Conference presentation, Conference of the International Building Performance Simulation	Coupled Building and System Simulations for the Investigation of High District Heating Return Temperatures	Researcher and experts from research institutions.	About 50 people in the specific session, 600 people in the entire conference.

		Association, Rome (Italy)			
Halmstad University	10/09/2019	Conference	Smart Energy Systems Conference	Academic/Industry	300+
VITO	26/09/2019	Webinar BACS Academy	Can artificial intelligence create every-day value in DHC networks?	Academic/Industry	~250
VITO	autumn 2019	Magazine publication	Digitalisation in DH networks: the TEMPO project	TechnicalIndustry	
VITO	spring 2019	Magazine publication	New Management Systems for DHC Networks	TechnicalIndustry	
UPCOMING EVENTS					
VITO	24/10/2019	Conference: Global Energy Days Reykjavik	General presentation of TEMPO	Academic/Industry	~400
VITO	07/11/2019	TEMPO workshop	General presentation of TEMPO	Academic/Industry	~200

5 ANNEX 2: SOCIAL MEDIA COVERAGE

You Retweeted

Smart Living+Working @SmartLiveWork · Sep 23
#BACSAcademy course 14 tells us how #ArtificialIntelligence can create every-day value in #districtheating and cooling. Speakers @dirk_vanhoudt from @EnergyVille and Christian Johansson from @NodaAB.
Close to 250 people registered - you're next?
events.r20.constantcontact.com/register/event...



You and 3 others

TEMPO Project DHC @tempo_dhc · Sep 24
Can artificial intelligence (AI) create every-day value in district heating and cooling networks? Don't miss @STORM_DHC and #TEMPOproject joint webinar on 26 September [conta.cc/2llsCs9!](https://conta.cc/2llsCs9)

You Retweeted

DHC+ @DHCPlus · Sep 17
2 days to the 1st #cool_dh European Technical Webinar!
Don't miss the chance to learn about one of the most innovative initiatives in Europe about #lowtemperature #districtheating!
Tune in on 19 September at 10:00:
euroheat.org/events/cool-dh...



You Retweeted

DHC+ @DHCPlus · Jun 11
Had a good long weekend? Great! 😊 Now it's time to plan the coming week. What about to register for the #cool_dh Workshop on 17 June in Brussels?
tinyurl.com/y6r2bmpc
Policy and technical issues in use of #surplusheat and #lowtemperature #DH @euenergyweek #EUSEW19



You Retweeted

Euroheat & Power EHP @EuroheatPower · Jun 5
Support for lower temperatures in #districtheating systems can provide benefits including improvements in #energyefficiency & the potential to integrate #renewables & #excessheat 🌞
This month, we highlight #lowtemperature #districtheating #HeatingEU #smartcities #cool_dh



- Improvements in efficiency - The benefits are even greater when connected to buildings with strong energy performance.
- Potential to recover excess heat and increase the share of renewables.

TEMPO Project DHC @tempo_dhc · Jan 23
#TEMPO was presented last November in Aalborg during the @4DHresearch Conference. Download for free the presentations and discover more about #TEMPO results tempo-dhc.eu/tempo-presente...
@gruppo_a2a @AllTomorrow2day @VITObeigium @DHCPlus #H2020 #H2020_EU #LTDH

5 4

TEMPO Project DHC @tempo_dhc · Dec 5, 2018
The #crowdfunding study as #innovativefinance tool for #districtheating is finally out! Future #DHC will face new challenges entailing new #financesolutions. Download now the study, #H2020 #H2020_EU #LTDH #TEMPO
tempo-dhc.eu/crowdfunding-a...

1 6

You Retweeted
Euroheat & Power EHP @EuroheatPower · Dec 4, 2018
NEW: check this study by @tempo_dhc project

#crowdfunding as a novel financial tool for #districtheating projects
#H2020EE #ResearchImpactEU #CleanEnergyEU #EnergyTransition #HeatingEU

3 6

TEMPO Project DHC @tempo_dhc · Nov 6, 2018
The first Newsletter of #TEMPOproject is finally out! Subscribe it and don't miss an update #H2020_EU #lowtemperaturedh #DHCPlus #EuroheatPower bit.ly/25Qk8p0

7 3

TEMPO Project DHC @tempo_dhc · Oct 29, 2018
#TEMPOproject 4-line Innovative piping system is being installed in the New Urban Network in Lubeck. The aim is to deliver heating, cooling and domestic hot water to row houses and apartment blocks from renewable sources. tempo-dhc.eu/an-innovative-... @ThermafexDACH @ChristianEngel13

2 5

TEMPO Project DHC @tempo_dhc · Oct 26, 2018
More info on the last #TEMPOproject project meeting? Read more on the project website tempo-dhc.eu/tempo-project-...

4 3

TEMPO Project DHC @tempo_dhc · Apr 3
The first scientific paper of #TEMPO is finally out! "Pipe Sizing for Novel Heat Distribution Technology" by @HogskolanHstd. This paper assesses pipe sizing aspects for previously low heat distribution technology with three pipes. Discover more here

Pipe Sizing for Novel Heat Distribution Technology
This paper assesses pipe sizing aspects for previously proposed, novel, low heat distribution technology wi...
mdpi.com

5 7

TEMPO Project DHC @tempo_dhc · Apr 2
#TEMPO consortium gathered last week in Nuremberg hosted by #Enerpipes to take stock of the project implementation. Three #tempo solution packages on #DHDigitalisation #LTDH and #networkoptimisation. Lot of updates are coming and this year many promising results to come... 📢💡📊

3 6

You Retweeted
Euroheat & Power EHP @EuroheatPower · Mar 29
An exciting outcome from the @STORM_DHC testing is the demonstrated potential for the smart controller to significantly reduce CO2 emissions!

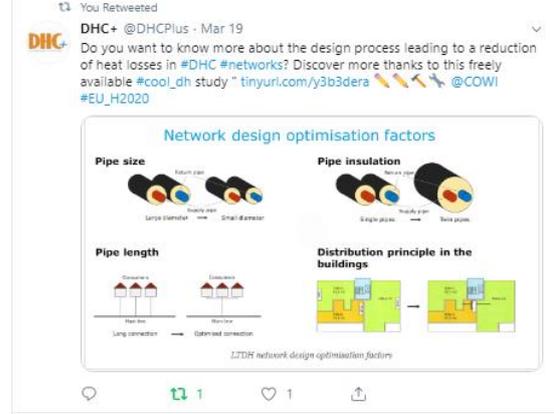
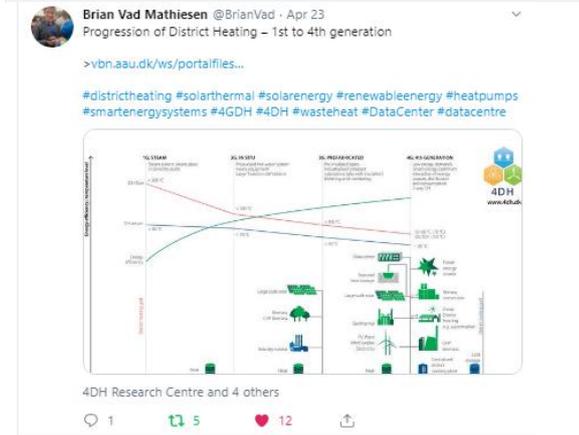
How? By increasing the capacity of the #districtenergy systems at both demo sites 📢

THE POTENTIAL OF STORM

- More connections to the highly sustainable Hvarna (V&Bp Energy) network, potentially saving 10,840 tonnes in CO2 emissions every year!
- Network capacity of the Hvarna (Mjølneren) site could expand by 52%, allowing additional connections and an annual CO2 reduction of 11,237 tonnes!

(The combined reduction potential is equivalent to the CO2 emissions produced by 400 flights from Madrid to Barcelona - Every Year!)

#DigitalHeating #ResearchImpactEU



DHC+ @DHCPlus · Nov 22, 2018

The **#cool_dh** report "Solutions for avoiding risk of Legionella" is finally out. @lunduniversity, @Krafrtingen and @COWI have worked together to investigate solutions for avoiding Legionella when using #lowtemperature #districtheating. bit.ly/2PML9M7 @EuroheatPower

Year	Sweden	Denmark	Norway	Finland	Germany	France
2009	1.2	2.2	0.8	0.4	0.6	1.8
2010	1.0	2.4	1.0	0.5	0.8	2.0
2011	1.4	2.2	0.7	0.4	0.8	1.8
2012	1.1	2.3	0.6	0.4	0.8	1.9
2013	1.3	2.0	0.8	0.4	0.9	1.7
2014	1.4	2.8	0.9	0.4	1.0	1.9
2015	1.5	3.2	1.2	0.4	1.1	2.1

DHC+ @DHCPlus · Nov 14, 2018

@tempo_dhc presentation at #SES4DH2018 by @AITtomorrow2day and @gruppo_a2a. Many innovations on ICT platform, visualisation tool and smart DH controller

TEMPO Project DHC @tempo_dhc · Oct 17, 2018

@Noda8 @Enerpipe @ThermaflexDACH @gruppo_a2a @Vattenfall_De

One year of #TEMPOproject and the whole consortium gathers again in Vienna at @AITtomorrow2day premise to take stock of the progress and achievements of the initiative. It's time of TEMPO again. #EU_H2020 #H2020 #lowtemperaturedh #districtheating @DHCPlus @VITobelgium

Euroheat & Power EHP @EuroheatPower · Sep 25, 2018

Welcome to #18DEdays!

We'll be covering this year's best #districtenergy event live from Helsinki over the next couple of days.

Follow us, engage, share your experience!

Energateoilisuus and Adato Energia Oy

DHC+ @DHCPlus · May 23

Are you in Brussels for #EUSEW19 #EnergyDays?

Join us for the **#cool_dh** workshop on #Lowtemperature #districtheating #innovations!

17 June 2019
12:30-17:30
Martin's Brussels EU Hotel

Register today as places are limited: event.com/surveys/Welcom...

DHC+ @DHCPlus · May 15

The **#cool_dh** project will host its first European Technical Workshop on 17 June 2019, in Brussels as part of #EUSEW19 #EnergyDays!

Come to debate about the future of #DistrictHeating, the use of #excessheat and local resources for #tdh.

euroheat.org/events/cool-dh...

#H2020Energy

DHC+ @DHCPlus · Jun 3

2 weeks to the first **#cool_dh** EU Workshop! Seats are running out! Register now to know more about the true pioneer of low-temperature #districtheating. #3tingeneration is already here! @tempo_dhc @COWI @lunduniversity #EUSEW19 @euenergyweek #H2020EE bit.ly/2JPLVLA

DHC+ @DHCPlus · May 27

#cool_dh - The pioneer of #Lowtemperature #DistrictHeating is officially part of #EUSEW19 #EnergyDays 🎉

Kick off the week by joining our workshop on 17 June! Register now to secure your seat! euroheat.org/events/cool-dh...

#energyefficiency #HeatingEU #innovations

#EUSEW @euenergyweek · May 23

#EUSEW19 makes the people come together! 🌍 Don't miss the chance to register your event as part of the #EnergyDays to make EU citizens join the debate on #climatechange and #energyefficiency! bit.ly/EnergyDays2019

TEMPO Project DHC @tempo_dhc · Jun 6
Nurnberg area demosite of #TEMPO is one of the candidate to be in the 2050 Vision for 100% Renewable #Heating & #Cooling as one of the best example of new rural #lowtemperature #DistrictHeating. @Enerpipe @VITObelgium @EtipRhc

DHC+ @DHCPlus · Jun 6
Today, we are at the @EtipRhc horizontal working group to develop and document our 2050 Vision for 100% #Renewable #Heating & #Cooling in districts 🌱🌿.



You Retweeted

DHC+ @DHCPlus · Jun 6
Sure you don't want to miss the "Pimp my Pipe" 🤪 session at the #cool_dh workshop on 17/06. @LOGSTORGroup and @Thermafex will showcase their own different innovative solutions for low-temperature #districtheating networks. Register now 📅 bit.ly/2WPBqHA #EUSEW19



2 3

6 ANNEX 3: NEWSLETTERS

DHC+ Newsletter February 2018

Research Projects

- [TEMPO website launch](#)
- [Video: Digitalisation in District Heating & the STORM controller](#)
- [Registrations are open for the Digital Heat conference!](#)
- [Heat Roadmap Europe Workshop in Amsterdam](#)
- [Heat Roadmap Europe webinar series](#)
- [SDHp2m coaching webinar on solar and biomass district heating is now online!](#)
- [Upgrade DH - new project in the profile of DHC+](#)

Research Projects

TEMPO website launch

The TEMPO project launches website to share its story about how technical innovations will enable district heating networks to operate at lower temperatures, a key component to adapt these systems to a future sustainable energy system. The newly launched website www.tempo-dhc.eu features basic information about the project, technical innovations and demonstrations sites.



[Visit the website](#)

[Top](#)

EHP Newsletter January 2018

DHC+ Research & Innovation News

- [ReUseHeat: 25 Cases Of Urban Waste Heat Recovery](#)
- [Digital Heat: Save the date for the STORM final conference](#)
- [Investor Confidence Project seeks DHC experts](#)
- [Request for proposals for study on crowdfunding](#)

Request for proposals for study on crowdfunding

Euroheat & Power launches a request for proposal to subcontract a research study on crowdfunding as a new financial tool for district heating within the TEMPO project. The study will be carried out within the work package on replication and business models and the aim is to make an external funding assessment and determine to what extent crowdsourcing can be used as a viable option for business model funding.

More information can be found in the [request for proposals](#) and deadline for submission by bidders is 2 February 2018.

[Top](#)

Euroheat and Power Newsletter November 2017

DHC+ Research & Innovation News

- › [TEMPO project kicked off](#)
- › [Major enhancements made to European energy planning tool](#)
- › [Big Solar SDHo2m interview](#)
- › [IEA Executive Committee meeting in Vienna](#)

DHC+ Research & Innovation News

TEMPO project kicked off

Another Horizon 2020 project just kicked off! The aim of TEMPO is to increase the viability of district heating in less dense areas or in combination with low-energy buildings. The project also aims at maximizing the share of renewable or excess heat and reducing the installation and operational costs of these networks. TEMPO brings together 8 DHC+ members and is coordinated by VITO.



For more information, contact Kersin Elgert at ke@euroheat.org.



[News Results About](#)



Towards a sustainable future for district heating

Why do we need low-temperature district heating?

Today's district heating systems are made mainly for fossil fuels that easily generates high temperatures. To create tomorrow's district heating systems, adapted to a sustainable energy system, we need to use non-fossil heat supply such as renewable and excess heat that are generally characterised by lower temperatures.

Each of the TEMPO project's technical innovations bring value to district heating networks individually. However, the main strength of this project lies in how it combines these innovations to cover three different types of district heating networks that together covers 90% of the market in Europe.

New Rural DH Network

A new network in the Nurnberg region (Germany) will supply heat to a large dense area of new buildings.

MUNBERG

New Urban DH Network

A new network in Lubeck (Germany) will supply heat and cool to a neighbourhood of new low-energy buildings.

HAMBURG AREA

Existing High Temperature DH Network

The demo site involves part of the Brescia (Italy) district heating network in a low building density area.

BRESCIA



Project progress to date

Don't miss an update about TEMPO technological innovations, their results and achievements. The project website news section contains all the latest updates to constantly keep you informed about the project progress.

STAY TUNED

Crowdfunding As A Novel Financial Tool For District Heating Projects

New future challenges for DHC entail new finance solutions. Know more about the study and freely download it. The study is freely out. Developed as Deliverable D6.4 the study was conducted by Dr Chiara Cardelino, a PhD qualified energy economist and policy specialist.

READ MORE



TEMPO Presented At The 4DH Conference

The 4DH Strategic Research Centre, the HE-INVEST project and Aalborg University invited researchers and experts from industry and business to the 4th International Conference on Smart Energy Systems and 4th Generation District Heating. This year's conference took place from 13-14 November 2018 in Aalborg.

READ MORE

TEMPO Solution Can Reduce Substations Faults in Future DH Networks

On 22 November 2018 in Antwerp took place the "Workshop on District Heating" organised by a joint effort between the Danish and Flemish organisations DSDH, Energyville and ISVAG. The aim was to underline the importance that DH can have for the future energy transition in Europe in particular to highlight how the lessons-learned from the most advanced networks can help the growth of District Heating in the rest of Europe.



[READ MORE](#)

APPROVED

More approval for energy transition through Crowdfunding

TEMPO's study on crowdfunding could be one first step towards a better understanding of the social approval dynamics in the field of energy transition. The article (in German) explains how socially participated energy projects could be better accepted and supported by local communities.

[READ MORE](#)

