

Improving the performance of District Heating Systems in Central and Eastern Europe

**Work package N°6:
Dissemination, Communication and Exploitation**

Deliverable 6.4: Marketing materials

**Horizon 2020 (H2020-EE-2017-PPI)
Project N°784966**



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement N°784966.



This project received co-funding from the German Federal Ministry of Economic Cooperation and Development.

PROJECT INFORMATION

Lead partner for the deliverable	ICLEI Europe
Document type	report
Dissemination level	public
Date of submission	30 June 2020 (as in the upcoming GA amendment, postponed from original date: M25 – April 2020)
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List of Abbreviations

AT	Austria
CEE	Central and Eastern Europe
CoM	Covenant of Mayors for Climate and Energy
CZ	Czech Republic
DH(S)	District Heating (System)
EU	European Union
ExH	Excess heat
GA	Grant Agreement
GHG	Greenhouse Gas
HR	Croatia
LV	Latvia
RES	Renewable Energy Source(s)
SI	Slovenia
SRB	Serbia
UKR	Ukraine

Summary of the project

The project “KeepWarm - Improving the performance of district heating systems in Eastern Europe” is funded under the EU Horizon 2020 programme. Its objective is to accelerate cost-effective investments in the modernisation of District Heating Systems (DHS) in Central and Eastern Europe (CEE). KeepWarm is most active in seven countries: Austria (AT), Croatia (HR), Czech Republic (CZ), Latvia (LV), Serbia (SRB), Slovenia (SI) and Ukraine (UKR). The project focuses on this region, and these particular countries, because in most cases DHSs are frequently still inefficient and for the most part overly reliant on fossil fuels (especially gas, coal or oil).

The aim of this initiative is to modernise DHSs around the whole region in a more sustainable manner. By improving system operations and promoting a switch to less-polluting sources, like renewable energy sources (RES), KeepWarm will contribute to reducing greenhouse gas (GHG) emissions. The eleven project partners strive to ensure that best practices for environmentally-friendlier heating and cooling will be taken up across Europe, replicating KeepWarm’s approach in other countries and regions, even beyond the end of the project in September 2020.

Project objectives

KeepWarm’s specific objectives are:

- At least 450 **relevant stakeholders** with **increased capacities** on technical, organisational, financial and managerial aspects – includes 150 DHS operators;
- At least 95 **DHS operators** are able to **develop business plans** and to identify the most suitable **financial model** for modernisation of their own DHS;
- At least 23 **business plans for the modernisation** of DHSs have been developed and **sources for investment** have been identified;
- DHS network **retrofitting** is addressed in at least 10 local **energy plans** and 7 regional or **national strategies** or plans;
- At least 23’300 **relevant stakeholders** (directly) and 125’000 (indirectly) **reached** across Europe in order to **replicate the project outputs** in primary and secondary target regions and ensure the project’s impact;
- **Support EU policies and initiatives**, such as the Covenant of Mayors for Climate and Energy (CoM) and DecarbHeat, by exploiting key lessons from KeepWarm activities and pilots to disseminate best practices across Europe.

KeepWarm consortium partners

LOGO	PARTNER NAME	SHORT	COUNTRY
 Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH	Deutsche Gesellschaft für internationale Zusammenarbeit (GIZ) GmbH	GIZ	Germany
	University of Zagreb Faculty of Mechanical Engineering and Naval Architecture	UNIZAG FSB	Croatia
	Landeskammer für Land- und Fortwirtschaft in Steiermark	LWK	Austria
	Regionalna Energetska Agencija Sjeverozapadne Hrvatske	REGEA	Croatia
	Jožef Stefan Institute Energy Efficiency Centre	JSI	Slovenia
	ICLEI European Secretariat GmbH	ICLEI Europe	Germany
	Teplarenske Sdruzeni České Republiky	TSCR	Czech Republic
	Biedriba Zemgales Regionala Energetikas Agentura	ZREA	Latvia
	Zavod Energetska Agencija za Savinjsko Salesko in Korosko	KSENA	Slovenia
	LLC KT-Energy Consulting	KT-Energy	Ukraine
	Institut za Nuklearne Nauke Vinca	VINCA	Serbia

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Executive summary

KeepWarm’s marketing materials – a **Service Pitch Book** and a **Marketing Brochure** – are meant to do more than just mere “marketing” of the project, which is more the function of the project’s previously-published promotional materials. These two newer documents serve a more concise purpose beyond more generally ensuring that the project and its goals become more common knowledge, namely for disseminating more detailed messages towards certain stakeholder groups of particular importance to project goals. The Service Pitch Book is aimed especially at DHSs and investors to inspire replication and investment of DH-retrofits. Meanwhile, the Marketing Brochure focuses more on encouraging DHSs, public authorities, investors, etc. to implement a switch to more sustainable energy sources for DH. However, in the end, both of these actually serve the same function, broadly speaking: to **inspire particular stakeholders to take on certain roles for targeted action contributing to a sustainable energy transition for DH.**

Introduction

The objectives of work package 6 are to disseminate targeted information to multiple audiences in a strategic and effective manner and to communicate its results to a wider audience across the (CEE) region and on a European level. However, its ultimate aim is to systematise the replication of the services from all other work packages, even beyond the project duration. These marketing materials are one of the means to not only attract interest among a wider audience towards KeepWarm activities, but also to concentrate attention onto specific messages and target groups.

At an operational level, this deliverable has two key components, as defined already within the original GA (Task 6.2): the **Service Pitch Book** and the **Marketing Brochure**. They are a logical follow-up to the Promotional materials (i.e. flyer, roll-up banner and business cards) already developed early on in the project (submitted as planned in M8, November 2018), whose purpose was to enable partners to adequately disseminate broader messages and establish a groundswell of awareness among all target audiences. In contrast, and despite their name within the GA as “marketing materials”, their purpose was always meant to be more concise than general “marketing” of the project.

Within the GA, it was already stated that these would “focus on specific messages and target groups” and the project’s “replicable services”. Generally speaking, this orientation has not changed, and both produced materials still emphasise **targeted messages** and promote **exploitable services** which the KeepWarm consortium is ready to provide to stakeholders. Even so, during project implementation the precise needs and content for each of these marketing materials of course needed to evolve so as to ensure meaningful impact which the consortium could use to further project goals. For example, though the GA suggested one possibility of the brochure would be to “overcome any poor reputation” of DH, in the end the consortium felt that this perspective was not as urgent as the need to stimulate stakeholder to switch their DHSs to more sustainable sources. However, rather than continue providing such examples here, further details about each of these two components can be found in the following chapters.

1. KeepWarm Service Pitch Book

Introduction

The overall purpose of this Service Pitch Book is to relay to target audiences the availability of **replicable, bankable examples of DH-retrofits** for both energy efficiency (EE) and integrating more sustainable energy sources (i.e. RES and/or excess heat, ExH), as well as providing some information about **national contexts** especially useful to audiences outside a particular country. It highlights the pilot DHSs which have been actively participating in KeepWarm's activities, thereby giving them some well-deserved **visibility**, as well as perhaps **stimulating networking opportunities** for certain target groups to reach out to them directly for improving DH even further. Likewise stakeholders have been encouraged within the document to contact the KeepWarm consortium for expert guidance, in an effort to ensure the successfully **exploitation of project activities** as valuable services which project partners are eager to provide for contributing to the energy transition at large.

Target groups

As mentioned above, the Service Pitch Book itself has two primary target groups:

- **DHS companies**, especially those in CEE countries (but not exclusively so), and regardless of ownership (e.g. private, public, community-owned, partnerships, etc.)
 - In particular, their **managers and decision-makers**, rather than their technicians
 - Targeted for their ability to make strategic decisions to **replicate KeepWarm's DHSs'** efforts for their own DH companies
- **Private/public financial institutions/programmes** (e.g. banks, funds and other types of investors) across Europe, especially those already active in in CEE countries, or interested to work there
 - Especially their **investment managers** working closely with clients
 - Targeted for their ability to guide DH companies towards **concrete investments**, as well as to **influence their own internal policies** to become more favourable to sustainable DHS-retrofits

Additional secondary target groups include **public authorities, energy agencies** and other key actors supporting/influencing the above groups, in an effort to create ripple-effects positively affecting sustainable DH transitions.

Content

In the end the final document itself has actually been re-named as “**KeepWarm Showroom of replicable and bankable DHS pilot projects**” (or just the “Showroom” for short) as a means of emphasising its idea as a kind of replicability-portfolio. The Showroom’s content (71 pages in total) has four main elements to its structure:

- **Introduction** (6 pages) to describe KeepWarm’s context/goals and state the document’s purpose, as well as provide a summary of later content (see *Figure 1*).

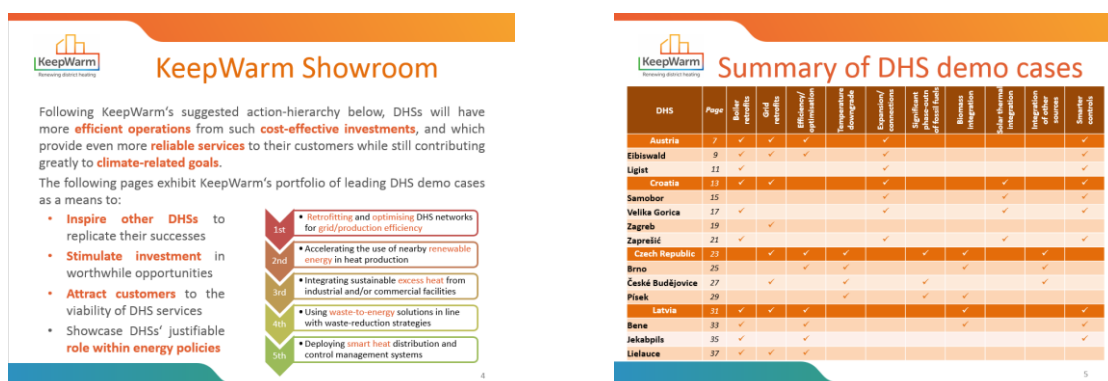


Figure 1. Sample pages from the introductory section of the KeepWarm Showroom, in this case describing the document’s purpose (l) and a summary of some of the content found later in the document (r).

- **National context** (14 pages total, but distributed 2 pages per country) to provide useful contextual information about DH in each of KeepWarm’s seven target countries (see *Figure 2*): AT, HR, CZ, LV, SI, SRB and UKR
 - DH situation
 - Challenges
 - Energy mix
 - Framework trends
 - Policy stance
 - Investment conditions
 - Recommended actions

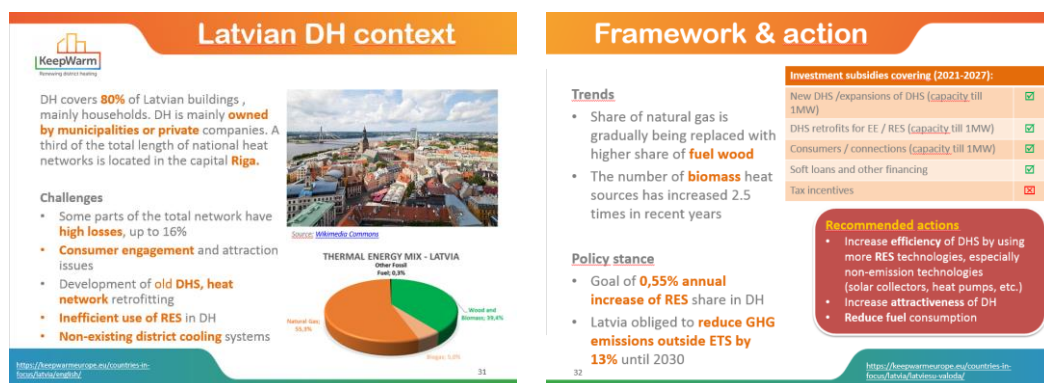


Figure 2. Sample national-context pages from the KeepWarm Showroom, in this case describing the situation in Latvia relevant to DH.

- **DHS pilots** (46 pages total, but distributed by country with 2 pages per DHS) to provide detailed information specific to each of the 23 DHSs active in KeepWarm (see Figure 3).
 - Basic details about operations (e.g. age, ownership, size, capacities, production, fuels, etc.)
 - Investment plans/timeline
 - Primary work-steps/ drivers
 - Strategic documents
 - Stakeholder involvement
 - Required resources
 - Results
 - Contact details for follow-up

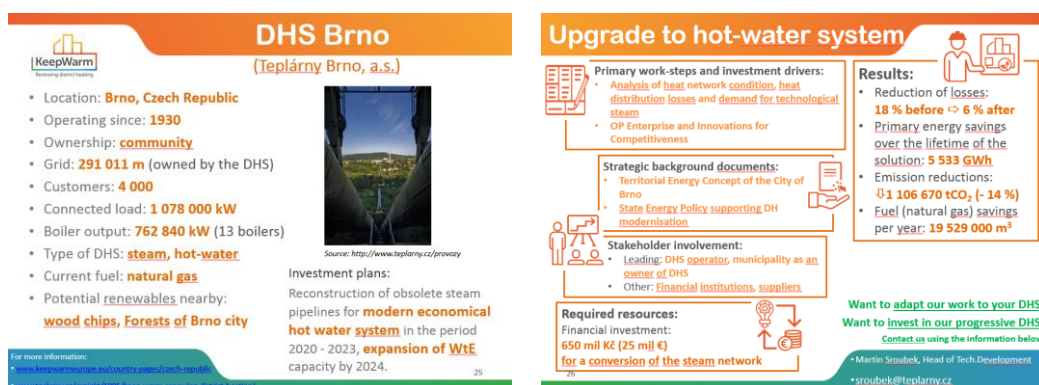


Figure 3. Sample DHS pilot pages from the KeepWarm Showroom, in this case describing the DHS Brno, CZ.

- **Conclusions** (5 pages) to wrap-up previous content and encourage stakeholders to take action themselves and take advantage of KeepWarm's [Learning Centre](#) and other online resources, as well as stimulating exploitation of expert-services which the project consortium is eager to provide them, even beyond the project lifetime (see Figure 4).



Figure 4. Sample pages from the conclusions section of the KeepWarm Showroom, in this case encouraging stakeholders to find resources on KeepWarm's website (l) and exploit our consortium's expertise (r).

The introductory and conclusions content were drafted by ICLEI Europe staff. The national context pages were also created by ICLEI Europe staff (with grateful contributions from partner JSI), but strongly based on materials created by other project partners, especially D5.2, who also provided confirmations and edits of that content. Likewise the design of the templates used for the DHS pilot pages was created by ICLEI Europe (again, with grateful contributions from partner JSI), but then filled in by respective project partners in each country.

Availability

The KeepWarm consortium agreed that its full Showroom only needed be made available as **digital versions** without the need for printing hard copies, accessible in various parts of the website (e.g. Learning Centre and country pages), but always available at least here as well: <https://keepwarmeurope.eu/project-materials>. The format used for its design was actually PowerPoint in order to allow more flexibility of use of its content (e.g. for public presentations), as well as streamlining readability with somewhat minimalistic content (but still maintaining a strong KeepWarm project-branding).

The project consortium decided that having the Showroom primarily in **English** would suffice for most purposes. Nonetheless, it was agreed to make **tailored versions** of the Showroom specific to each country, both in English and **translated** into each of project's seven target languages (see *Figure 5*). National partners have already completed adapting and translating the pages most relevant to their own contexts, namely all pages for the core sections about their own national context and each of their DHSs. These are also all available at the above link, but also can be found on their respective country pages (English and local language), as appropriate.



Поточний стан та план дій

Тренди

- Зростання кількості **біомаси** для теплопостачання
- Інвестиції в **енергоефективність** зростають, але потребують значно більшого масштабу
- Цілі державної політики**
 - 40% частка ВДЕ** у ЦТ до 2030 року
 - Заходи зі **скорочення споживання природного газу та збільшення ефективності** у ЦТ та будівлях
 - Скорочення викидів** парникових газів відповідно до НВБ

Наявна інвестиційна підтримка:

Нові СЦТ / розширення СЦТ	✓
Модернізація СЦТ (ЕЕ та ВДЕ)	✓
Споживачі / приєднання	✓
Пільгові позики та фінансування	✓
Податкові стимули	✓

Рекомендовані дії

- Затвердити стратегію сектору з цілями розвитку ефективного ЦТ та декарбонізації
- Розробити план управління боргами
- Збільшити державні інвестиції у модернізацію систем ЦТ
- Підтримувати нові бізнес-моделі

<https://keepwarmeurope.eu/countries/ukraine/>

CTS Zagreb
(HEP Toplinarstvo – Pogon Toplinske Mreže)

- Lokacija:** Zagreb, Republika Hrvatska
- U pogonu od:** 1954
- Vlasništvo:** HEP Toplinarstvo
- Duljina mreže:** 271 395 m (u vlasništvu HEP Toplinarstva)
- Broj korisnika:** 99 004
- Zakupljena snaga:** 1 186 815 kW
- Jačina proizvodnih jedinica:** 1 378 000 kW
- Vrsta medija:** Vrela voda i para
- Trenutno proizvodno gorivo:** Prirodni plin (kogeneracija)
- Potencijalni obnovljivi izvori energije:** geotermalna i solarna energija

Optimizacija kogeneracijskih postrojenja, povećanje energetske učinkovitosti u distribucijskoj mreži, rekonstrukcija toplinskih podstanica

Timeline

kraj 2019 – detaljne studije isplativosti
Travanj 2020 – osiguravanje sufinanciranja
2021 – 2023 – Investicija

Izvor: Andrej Malen, Razvoj izvora CTS grada Zagreba
Investicijski planovi:

Za dodatne informacije, posjetite:
keepwarmeurope.eu/countries/croatia/
https://www.hep.hr/toplinarstvo/

Figure 5. Sample pages showing KeepWarm Showroom pages, in this case from Ukraine's national context in the Ukrainian language (l) and DHS Zagreb in the Croatian language (r).

Additionally, special shortened versions of the Showroom are considered useful materials to provide even more concise, directed content. Already KeepWarm's country pages on the website have earlier versions of separate files for each DHS (on both English and local language pages, see *Figure 6*). ICLEI Europe intends to continue this practice by uploading updated DHS pages, as well as national context pages, onto online country pages.



Figure 6. Sample pages showing current availability of country-specific elements taken from the KeepWarm Showroom, in this case on the [Serbian page in English](#) (l) and [Slovenian page in Slovenian](#) (r).

The KeepWarm Showroom, though already available, as mentioned above on the project website (e.g. under the [Project materials](#) section), will be officially launched publicly as part of an upcoming webinar on July 10 “**Keeping our cities efficiently warm**”, which ICLEI Europe is organising, and will feature project partners LWK, TSCR and KTE.

Finally, our intention is to update the Showroom as needed. This means that the consortium will continue to reflect on its exploitation and seek out improvements to ensure it continues to be used, and maintains a positive impact, **even beyond the project lifetime**.

2. KeepWarm Marketing Brochure

Introduction

The overall purpose of this Marketing Brochure is to stimulate all relevant actors to enable widespread **decarbonisation of DH** all across Europe, and especially in the CEE region. For the KeepWarm project, this means DHSs should switch to, or at least to **integrate, more sustainable energy** production (i.e. **RES and/or ExH**). Our project consortium debated about what kind of a brochure would prove most useful, concluding it was important to not overly “demonise” fossil fuels, mainly because it will still (unfortunately) continue to play a strong role in DH across the CEE region, and too sharp a **criticism could actually turn away those actors** most needing to be brought into the fold of sustainability. In the end it was agreed that all countries could benefit from a document touting the distinct **benefits of DH based on RES/ExH**, because many of the key stakeholders (e.g. DHSs, policy-makers, funders, etc.) **lacked clear knowledge about options** for sustainably-sourced DH, and also what roles each of them could play to **implement/support the DH transition**.

Target groups

Though it has a distinct focus towards engaging DH companies as the primary audience, the brochure targets a somewhat broader swath of relevant (secondary) stakeholders, each with an important role to play in this transition:

- **DHS companies**, especially those in CEE countries (but not exclusively so), and regardless of ownership (e.g. private, public, community-owned, partnerships, etc.)
 - In particular, their **managers and decision-makers**, although their technicians can gain useful (technical) insights as well
 - Targeted for their ability to make **strategic decisions for switching their DHSs** to more sustainable pathways
- **Local public authorities**, especially those in CEE countries (but not exclusively so)
 - Especially those which **(co-)own their DHSs**, but also even for those who don't
 - **Technical staff to support** these DHS switches, and their **managers/politicians to prioritise in policies** and enable **funding**
- **Regional/national public authorities**, especially those in CEE countries (but not exclusively so)
 - **Policy-makers to prioritise sustainable DH** in policies and establish

funding mechanisms

- **Private/public financial institutions/programmes** (e.g. banks, funds and other types of investors) across Europe, especially those already active in in CEE countries, or interested to work there
 - Particularly their **investment managers** working closely with clients
 - Targeted for their ability to guide DH companies towards **concrete investments**, as well as to **influence their own internal policies** to become more favourable to sustainable DHS-retrofits
- **Companies supplying RE technology/fuel or ExH sources**, especially local, or at least already active in in CEE countries, or interested to work there
 - To make concerted efforts to engage DHSs and offer best sustainable solutions to them
- **Real estate owners/developers** and construction companies, especially local
 - To ensure the buildings/neighbourhoods where they work are **prepared to connect to sustainably-sourced DH**
- **Energy agencies**, especially local or regional
 - To act as general **advisors and liaisons** to DHSs and all other stakeholders (e.g. integration of sustainable DH into SECAPs)
- **Researchers**, universities, think-tanks and (private) **consultancies**, especially local or regional, or at least already active in in CEE countries
 - To be key **experts and provide studies/data** needed for public and private decision-making related to sustainable DH sources

Content

In the end the final document itself has actually become more of a booklet, meaning longer and more comprehensive in content than originally anticipated for a “marketing brochure”. Its full name is “**Keeping our cities sustainably warm – Facilitating a switch towards sustainable district heating**” and its content (26 pages in total, including covers, in A5 format) has three main elements to its structure (a total of 12 double-page chapters):

• Introduction (8 pages):

- It begins with a Foreword providing a bit of context hinting briefly that **sustainable DH fits into larger (European) initiatives** (e.g. like the Paris Agreement, EU Green Deal, Just Transition and Smart Regional Specialisations), followed by a table of contents (see *Figure 7*).



Figure 7. Pages from the introductory sections of the KeepWarm booklet, in this case the Foreword and Table of Contents (l) and the chapter “Why switch to sustainable energy systems?” (r).

- The next chapter dives into multiple reasons why a DH-switch is so important, of course emphasising its contributions towards **climate** goals, but also reducing other environmental pollution (and related/hidden health costs), bolstering a **circular** economy, stimulating **job** growth, lowering costs/prices (thereby also de-intensifying energy poverty) and enhancing **operational resilience** (see *Figure 7*).
- The booklet then seeks to make a **business-oriented case for decarbonisation** by outlining financial arguments which favour DHSs based on RES/ExH. The text also points out emerging trends which make fossil fuelled-DH untenable (e.g. **removed subsidies** and banks starting to restrict fossil fuel investments), as well as trends stimulating RES/ExH (e.g. energy action plans and **sustainability prerequisites from investors**) instead (see *Figure 8*).



Figure 8. Pages from the introductory sections of the KeepWarm booklet, in this case the chapter “Why does phasing out fossil fuels make business sense?” (l) and the chapter “How do sustainable energy sources stack up against coal, oil and gas?” (r).

- The final chapter of the booklet’s introductory section seeks to setup a case for the clear advantages RES/ExH about **technical** characteristics, **financial** costs, **environmental** considerations and **socio-economic** factors. Through a desk review we have compiled the best-available data related to these categories for the main fossil fuels used in DH, namely **coal**, **natural gas** and **heating oil** (see Figure 8).
- **RES/ExH descriptions (10 pages):**
 - The middle “core” of the booklet consists of five chapters discussing in detail each of the more sustainable options viable for DHSs, namely **biomass**, **solar thermal**, **geothermal**, **heat pumps** and **ExH**. Each of these chapters follows a similar structure with an introductory section describing the source, its technologies and insights into the benefits each can provide to DH. Thereafter follow comparable **technical**, **financial** and **environmental data**, as well as suggested roles for **stakeholder engagement** specific to a given source (see Figure 9).

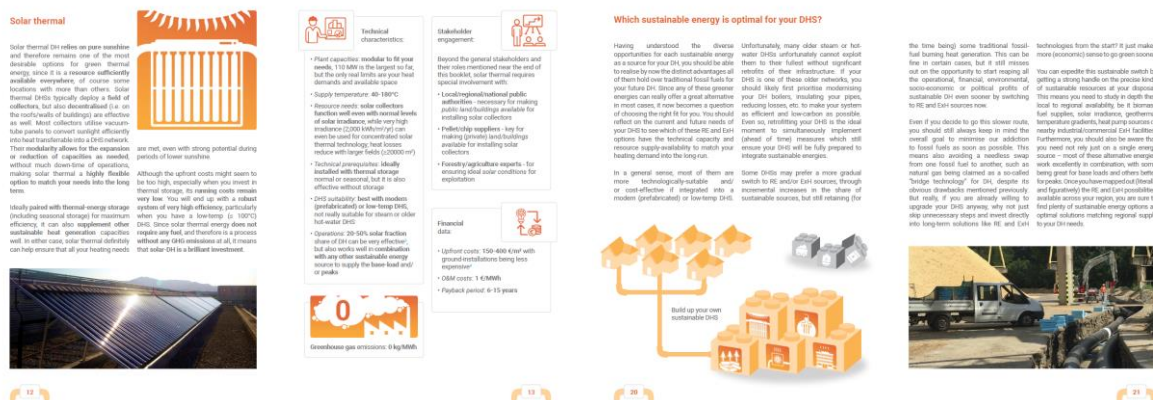


Figure 9. Sample chapter from the RES/ExH sections of the KeepWarm booklet, in this case for Solar thermal (l) and a chapter from the final sections of the booklet “Which sustainable energy is optimal for your DHS?” (r).

• Conclusions (6 pages):

- The final section of the booklet seeks to wrap-up previous content by beginning with a chapter focused on RES/ExH selection, including **arguments favouring a full-switch** to RES/ExH. while still acknowledging the (unfortunate) reality that many DHSs will instead opt for a more gradual decarbonisation (see *Figure 9*).
- The next chapter provides suggestions for **stakeholder engagement/roles in general** (as opposed to the specific roles found previously in each RES/ExH chapter). This text serves a double purpose: on the one hand that DHSs can reduce the perceived burden on them for a DH-switch by cooperating with other actors, while on the other hand, other motivated stakeholders can understand how they should **pro-actively contribute to the DH transition**, or even enable DHSs to do so (see *Figure 10*).

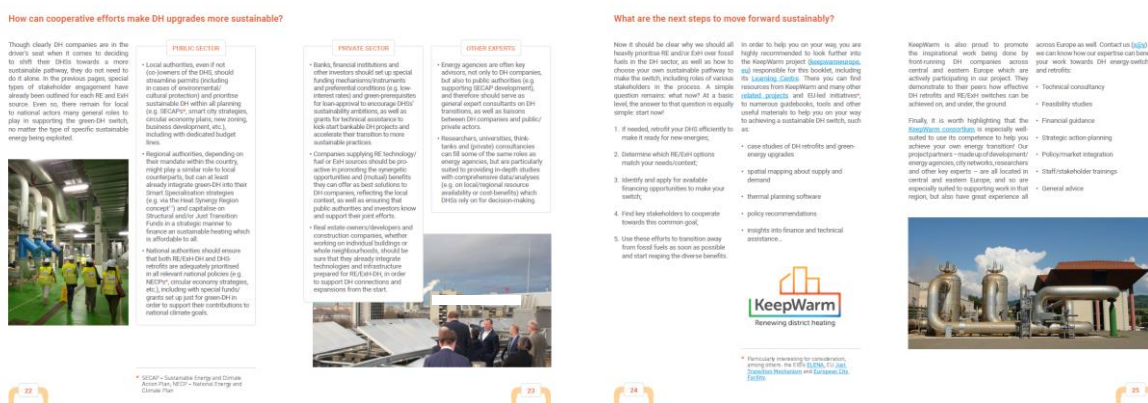


Figure 10. Pages from the final sections of the KeepWarm booklet, in this case the chapter “How can cooperative efforts make DH upgrades more sustainable?” (l) and the chapter “What are the next steps to move forward sustainably?” (r).

- The final chapter of the booklet outlines concrete **steps which DH decision-makers should make to switch** their DHSs to more sustainable energy options. It includes links to useful **resources/tools** accessible on the KeepWarm website, in particular its [Learning Centre](#) and webpage devoted to related (H2020) projects and EU initiatives. Furthermore, this chapter stimulates the **exploitation of the KeepWarm consortium’s expert-services** which we are eager to provide, even beyond the project lifetime (see *Figure 10*).

The entire content and design was created by ICLEI Europe staff, though there were many very-appreciated contributions of data and other insightful feedback from certain KeepWarm partners, namely: UniZagreb FSB, Vinca, KTE and LWK.

Availability

The KeepWarm is now available as a **digital version** accessible in various parts of the website (e.g. Learning Centre and country pages), but always available at least here as well: <https://keepwarmeurope.eu/project-materials>. It is **foreseen to print** hard copies of the booklet, but a final (likely positive) decision will be made in the near future, also of course taking into consideration current restricted conditions due to the pandemic, and therefore a limited chance to actually distribute physical copies of the booklet.

The project consortium decided that having the booklet first and foremost done in **English** would be the first step. But also it is foreseen that each country's partners will from it create **tailored versions** of the booklet specific to each country. This means not just **translations** of the content, but also possibly adapting it somewhat to suit their own needs in each country. Unfortunately, translations have not yet been completed at this time (partially due to general delays with the pandemic situation), but nonetheless will be done soon. Once they are done, ICLEI Europe will apply text to the layout for printable versions in seven additional languages. Once complete, they will be accessible at the same above link, but also will certainly be uploaded onto their respective country pages (English and local language) as well.

As mentioned before with the KeepWarm Showroom, the KeepWarm booklet will likewise be officially launched publicly as part of an upcoming webinar on July 10 "**Keeping our cities efficiently warm**", which ICLEI Europe is organising, and which will feature project partners LWK, TSCR and KTE.

Finally, also as with the Showroom, our intention is to update the booklet as needed. This means that the consortium will continue to reflect on its exploitation and seek out improvements to ensure it continues to be used, and maintains a positive impact, **even beyond the project lifetime**.