

**Interreg  
Danube Region**



Co-funded by  
the European Union

  
**REHEATEAST**

# **Joint stakeholder survey and analysis methodology**

Deliverable 1.1.2

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|                    |   |
|--------------------|---|
| Document title     | Joint stakeholder survey and analysis methodology |
| Specific Objective | Specific Objective 1                              |
| Date               | May 2024  |

# Version history

| No. | Date        | Version  |
|-----|-------------|--|
| 1   | 05.04.2024. | Draft version distributed to partners for their inputs |
| 2   | 10.05.2024. | Final version  |

## Acknowledgments and Disclaimer

This deliverable was supported as part of REHEATEAST, an Interreg Danube Region Programme project co-funded by the European Union.

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# Executive summary

In this report, REHEATEAST project describes the approach to obtaining feedback and opinions from stakeholders throughout the Eastern Danube region. The methodology provides a basis for conducting the surveys which will be analysed to gain a deeper understanding of the current situation of DHC systems. This is aimed to support pilot actions, communications and other relevant activities of the REHEATEAST project.

The target groups have been identified in the Deliverable 1.1.1 (D.1.1.1) Stakeholder identification and communication plan: heat producers and utilities, authorities and regulators, financiers and investors, technology suppliers, contractors, media, and consumers. Within this report, we will identify specific institutions and organisations which are planned to be contacted to fill out the surveys. Through this focused and targeted outreach approach, the partners will be able to successfully acquire data while also offering support and fostering collaborations among stakeholders. Data, information and engagement will be required both for systems optimisations and stakeholder collaboration efforts in the project.

Overall, this Joint stakeholder survey and analysis methodology establishes a foundation for conducting thorough and consistent surveys. Its primary goal is to delineate subjects, tailored in part to the characteristics of diverse target audiences (stakeholder groups), by consolidating inquiries about various aspects of heating and cooling supply, with a particular emphasis on District Heating and Cooling (DHC). Subsequently, it aims to obtain and evaluate feedback from the stakeholders, enabling the facilitation of constructive enhancements in DHC systems during subsequent stages of the project (including both supply side and demand side activities).

# Abbreviations and acronyms

|          |   |
|----------|---|
| AC-BIH   | Resource Aarhus Center in Bosnia and Herzegovina          |
| ASP      | Associated Strategic Partner                              |
| DH       | District heating  |
| DHC      | District heating and cooling                              |
| EIHP     | Energy Institute Hrvoje Požar                             |
| ENEFFECT | Center for Energy Efficiency Eneffect                     |
| GDPR     | General Data Protection Regulation                        |
| IDEFA    | International Fund Development and Coordination Agency    |
| IFI      | International financial institution                       |
| JSI      | Jožef Stefan Institute                                    |
| LP       | Lead partner  |
| LEAPOM   | Local Energy Agency Pomurje                               |
| PANNON   | Pannon European Grouping Of Territorial Cooperation       |
| PP       | Project partner   |
| RES      | Renewable energy sources                                  |
| SCTM     | Standing Conference of Towns and Municipalities           |
| SMP      | Stakeholder Management Plan                               |
| SO       | Specific Objective  |
| UTCLUJ   | Technical University of Cluj-Napoca                       |
| VIACARP  | European Grouping of Territorial Cooperation Via Carpatia |



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# 1. Introduction

The REHEATEAST project aims to **reduce district heating and cooling (hereinafter: DHC) systems' fossil energy demand by decreasing energy waste (in buildings and DHC networks) and integrating renewable energy (with a special emphasis on geothermal) and waste heat.** It encourages multi-stakeholder, cross-sectoral, public-private cooperation and develops, tests, promotes and distributes applicable (process, technical and nature-based) solutions catalysing and supporting the implementation of large-scale building and systems rehabilitation programs, as well as climate adaptation measures.

REHEATEAST aims to promote catalytic measures and adaptable solutions to reduce fossil energy demand via knowledge-sharing, awareness raising and enhanced stakeholder cooperation. The project intends to promote a holistic approach instead of silo thinking (addressing closely linked issues separately) and facilitate steps for subsequent transformative investments linked to: efficiency, waste heat, heat storage, geothermal energy, billing practices, etc. REHEATEAST also plans to raise awareness to tackle sectoral issues, e.g. financing/regulatory concerns/information dissemination, etc.

Its communications slogan and campaign title: "Over 10 under 100" summarises its demand-side ambitions and sets the long-term ambition for buildings with at least ten apartments within cities with over 10,000 DHC consumers, to decrease the specific average annual heat consumption below 100 kWh/m<sup>2</sup>. The Energy Efficiency Directive (hereinafter: EED) establishes 'energy efficiency first' as a fundamental principle. Energy efficiency must be considered in all relevant policy and major investment decisions. Target indicators for minimum energy performance requirements for buildings (MEPRs - EU EPDB Directive on the energy performance of buildings) cannot be reached with low-efficiency DHC.

The supply-side ambition is to facilitate meeting the EU Energy Efficiency Directive (EED, EU/2023/1791) criteria for 'Efficient district heating and cooling' (defined in Article 2(41) of the EED): a DHC system using at least 50% renewable energy, 50% waste heat, 75% of cogenerated heat or 50% of a combination of such energy and heat. This should be achieved in line with basic energy planning and management principles, designing capacities for sufficient (not wasteful) demand.

Specific Objective 1 (hereinafter: SO1) of the REHEATEAST project aims to gain a detailed picture of the **technical, regulatory, social and financial conditions of DHC systems** with **particular focus** on **common challenges and existing good practices** in the REHEATEAST region. The objective is intertwined with the ambition to **strengthen stakeholder engagement** in the main ambition of the project which is to overcome financial and environmental sustainability challenges of DHC systems. The regional status quo and particular challenges are explored via **intensive stakeholder involvement** enabling a better understanding of their interests, and at the same time raising their awareness.

To **understand the status quo** of DHC systems, it is essential to **engage a wide range of stakeholders**. Communication target groups of SO1 include **DHC service providers, municipalities** as owners, **construction companies** and **financial institutions** interested in and financing refurbishments of district-heated buildings, as well as **DHC consumers** - covering all major target user groups of the services. Furthermore, activities under SO1 provide opportunities

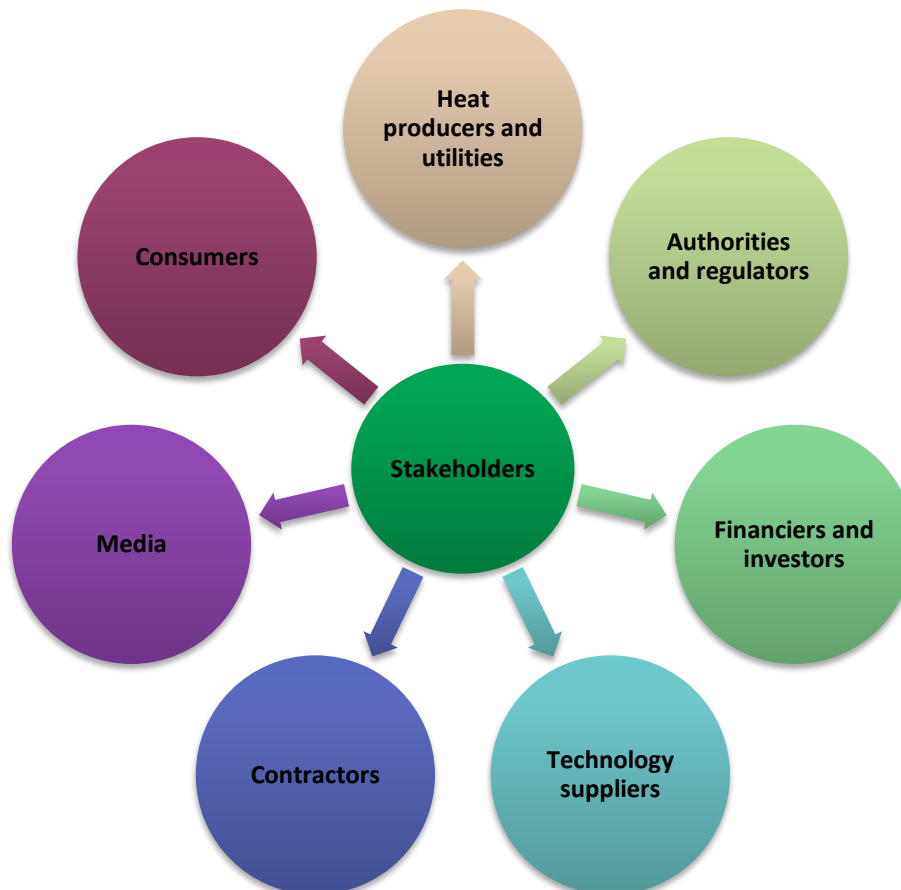
to **raise stakeholder awareness** of the multiple benefits of changing policies, behaviour, operations and making the right investments.

Within the first Deliverable D.1.1.1., REHEATEAST consortium identified the relevant stakeholders in their regions and listed possible communication methods. **This second deliverable will build on the mentioned communication plan, and prepare joint methodology for stakeholder survey and analysis**, including templates considering different types of knowledge and perspectives of stakeholder groups, and **develop stakeholder group-specific survey concept**.

This important document outlines the objectives and goals aimed at fostering synergy and cohesion among project partners. By highlighting the significance of **a unified approach** to survey methodology, we pave the way for robust data collection and insightful analysis that will inform strategic decision-making. Through the collective efforts of our consortium, this deliverable seeks to **establish a solid framework for conducting stakeholder surveys** that transcend individual perspectives and **embrace a shared understanding of stakeholder dynamics**. **By aligning our methodologies, we aim to enhance the reliability, validity, and relevance of our survey findings**, thereby maximising their impact on project outcomes.

## 2. Stakeholder groups

Recognizing the diversity of stakeholders within the REHEATEAST project, the first deliverable of the project, Stakeholder identification and communication plan, showcased different target groups. They are shown in the following figure.



*Figure 1 Target groups of stakeholders*

As can be seen, the identified groups of interest have different types of knowledge and perspectives, so the surveys need to be tailored to each target group. Group-specific surveys are designed to capture the unique insights, experiences, and priorities of specific stakeholders. By customising surveys to suit the characteristics and needs of each group, the project ensures that all voices are heard and taken into consideration.

One of the goals of the survey is to assist in stakeholder engagement by providing frontrunners opportunities to raise their image by promoting their good practices, and motivating followers to learn from peers and cooperate with other stakeholders to achieve environmental, climate, social and business goals via transformative changes.

## 2.1. Identification of key stakeholders

During the initial phase, REHEATEAST project partners (hereinafter: PPs) identify relevant stakeholders in their country. Subsequently, the objective is to gather a substantial number of stakeholders to form representative samples for each category (see classification below). Ideally, opinion leaders within each group should be pinpointed and included. Following this, a comprehensive list of stakeholders is compiled and regularly updated to ensure their ongoing and active engagement.

The groups outlined in Figure 1 can be consolidated into **five main categories, distinguished by their shared interests and areas of operation:**

- 1) The **'energy stakeholders'**, including heat producers and utilities
- 2) The **'policy makers'**, including authorities and regulators
- 3) **Technology suppliers and contractors**
- 4) **Financiers and investors**
- 5) **Consumers and media**

Due to the shared **and overlapping interests**, as well as **organisational domains** among these groups, the **surveys will be tailored to meet the specific needs and requirements of each of these five groups**. The following section will outline the customised national stakeholder engagement list created by PPs within this deliverable, specifying the stakeholders they will reach out to. This makes it possible to guarantee their dedication to the project and to have a productive conversation.

According to the Application form, "PPs conduct a stakeholder survey (via questionnaire surveys and targeted interviews), targeting all operators and cities with over 10,000 DHC clients and all DHC operators with experience in renewable and waste heat utilisation in their countries, as well as other relevant stakeholders (e.g. policy, finance, construction, buildings' operation actors)."

### 2.1.1. Classification

Compiling a list of specific stakeholders is essential to ensure effective and successful engagement. In order to facilitate this activity, the **Stakeholder Management Plan (hereinafter: SMP)** has been shared among the partners on the shared Google Drive. It is an Excel file with the list of targeted stakeholders, as seen from the screenshot below. For each stakeholder group listed in chapter 2.1.1.3, the PPs aimed to provide a minimum of two institutions/organizations.



These groups are key to the project, each offering different perspectives that contribute to a comprehensive understanding of stakeholder dynamics.

#### 2.1.1.4. Contact person within the project partner

This column has been introduced in order to simplify the administration of the contacts and make it simpler to keep track of who is in charge of each stakeholder contact.

#### 2.1.1.5. Status

Status should be updated as the surveys are distributed, and the partners receive feedback. The following are options within the Excel:

- To be contacted
- Contacted
- Survey response received

## 2.2. Statistics on the identified stakeholders

As mentioned, the Stakeholder Management Plan Excel file was completed by each partner for their respective region, and the identified stakeholder groups can be seen in Annex 7. The goal was to create a comprehensive list that can be regularly updated; hence, the Excel document has been made accessible to all project partners on the project's Google Drive. Below are statistics illustrating the identified groups at the consortium level.

In total, the REHEATEAST partners have identified 249 stakeholders, as shown in Figure 3. Slovenia stands out by identifying a notable 60 stakeholders, while majority of other partners contributed 20 to 40 institutions in this initial phase. This list remains dynamic and subject to expansion or modification during the survey implementation plan, so the data presented in the figure **may evolve** as the project progresses.

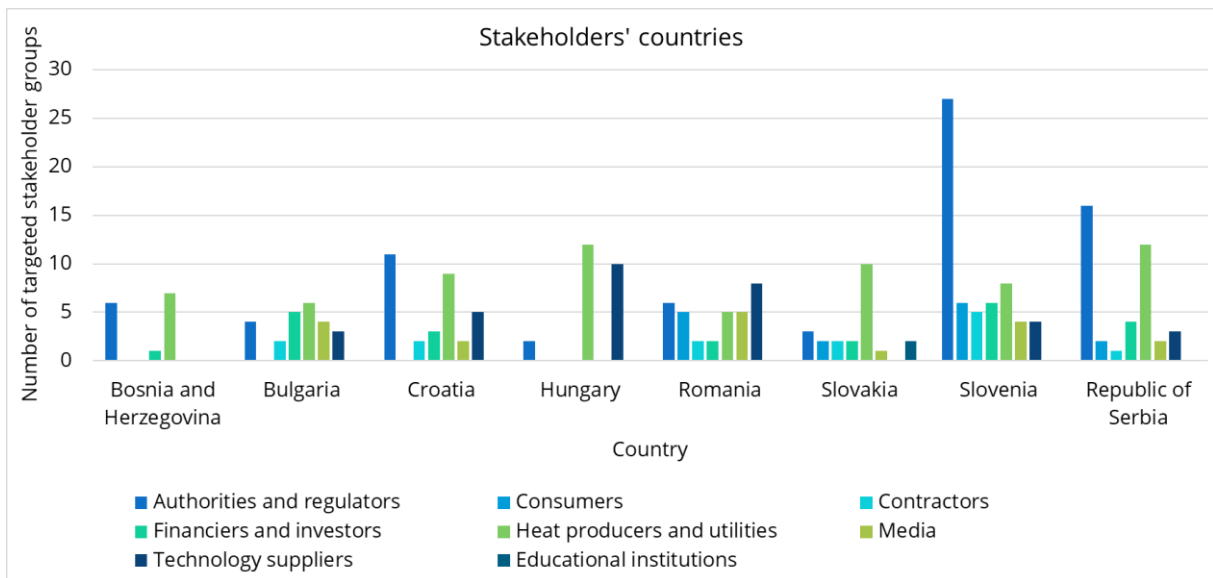


Figure 3 Stakeholder's countries

Figure 4 illustrates the distribution of organizations by type. It reveals a predominant presence of heat producers and utilities, authorities and regulators, and technology suppliers. Other stakeholder categories encompass between 14 and 33 identified stakeholders. Notably, the "educational institutions" group, identified as an additional category by VIA CARPATIA due to an established collaborative relationship represents the smallest group and is present only in VIA CARPATIA's region.

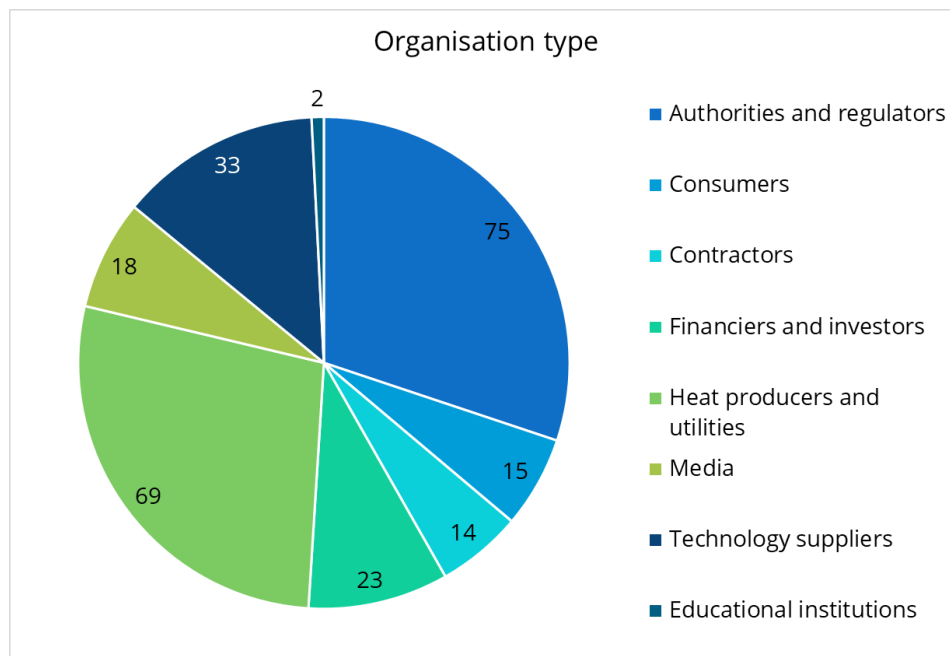


Figure 4 Organization type



The following figure shows the importance of stakeholder identification and approach to them, as well as survey benefits for the REHEATEAST project.

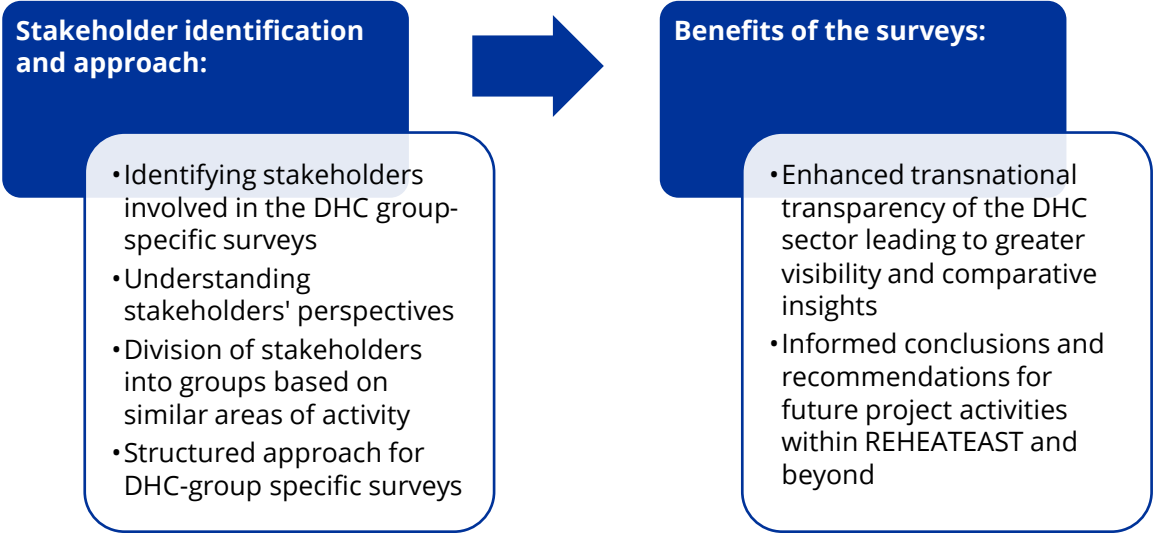


Figure 5 Stakeholder identification and key benefits of surveys

# 3. Methodology

The purpose of this joint methodology is to provide a comprehensive overview, establish a harmonised understanding of the survey process and facilitate its implementation. This chapter outlines the strategies for engaging stakeholders. Moreover, it offers the approach for GDPR implementation, and provides standardised templates to ensure **a cohesive and inclusive approach to data collection and analysis**. Various groups of stakeholders must be involved in the **survey to gather data on the current status and challenges within the heating sector, including DHC, and to identify good practices**. Based on the results, the **consortium will conduct an analysis** to better understand the present status and future prospects of DHC systems, thereby setting the stage for the following phases of the project. Surveys serve as effective communication instrument for gathering feedback, insights, and data from stakeholders. They offer stakeholders the chance to **voice their opinions, exchange experiences, and provide valuable feedback** on various aspects of DHC, including regulatory frameworks and financial challenges. By primary research, project partners can efficiently gather and analyse stakeholder perspectives, informing decision-making processes and shaping targeted interventions to address identified challenges and capitalize on opportunities within the REHEATEAST project scope.

The methodology adopted in the REHEATEAST project emphasises cooperation among project partners. This approach is important to guarantee transparency and to ensure that the methodology encompasses the diverse needs, priorities, and perspectives of all stakeholders involved. To streamline data collection and ensure consistency, standardised templates have been developed in Annexes 2 to 6 of this report. Survey templates outline the structure and content for conducting surveys across various stakeholder groups and geographic regions. By adhering to these standardized procedures, the project safeguards the **reliability, comparability and validity of survey data**.

## 3.1. Templates

To gather comprehensive insights from stakeholders across diverse sectors of DHC, detailed templates for survey questions have been developed. They are designed to ensure **consistency in data collection, thereby facilitating further analysis and comparison of results**.

These templates encompass a wide range of topics relevant to DHC systems, including current challenges, anticipated advancements, use of renewable energy sources, application of new technologies, key changes needed for improvement, and more. The survey questions are **structured to gain specific and actionable responses from stakeholders**, providing valuable data for analysis.

In Annex 1, we provide **the GDPR Statement which is to be signed/confirmed by the participant**. After that, the survey questions and their structure are outlined in Annexes 2 to 6, tailored for specific stakeholder groups: 1) The 'energy stakeholders' group (heat producers and utilities), 2) The 'policy makers' group (authorities and regulators), 3) Technology suppliers and contractors, 4) Financiers and investors and 5) Consumers and media. Therefore, the Annexes contain detailed information regarding the surveys themselves.

We have carefully curated the surveys to **focus on questions** that we expect will raise interest of stakeholders (needed for engagement) and yield the most **valuable insights and actionable information**. By **prioritizing impactful questions**, we aimed to optimize the surveys and make them more manageable for stakeholders, **ultimately increasing the likelihood of their participation**. In case of missing data, the **project partners are encouraged to use publicly available sources to fill in the gaps** where possible.

The questions and structure of the surveys have been carefully crafted to enable **comparison** in subsequent project steps, while **consistency in survey structure** is maintained to **enable meaningful analysis of the survey findings**. By **adhering to standardized templates and procedures**, the REHEATEAST project ensures reliable data collection and facilitates accurate assessment of stakeholder perspectives across the Danube region's DHC sector. Flexibility provided and stakeholder needs shall be important in stakeholder motivation and engagement. The suggested formats of surveys, built from the templates in the annexes, are the following:

- Microsoft or Google Survey Form
- Microsoft Word document, to be sent and filled by stakeholders.

It is beneficial that the surveys are **translated to the national languages**. However, translating surveys into multiple languages can incur additional costs. As there is no budget allocated for translation purposes for this activity, it is recommended that **each project partner translates the surveys into their respective national languages**. Partners may consider **utilizing online translation tools** such as Google Translate, followed by **manual checking and verification to ensure accuracy**. By providing surveys in national languages, we aim to eliminate language barriers and motivate stakeholders to participate actively, thereby maximizing the representativeness and reliability of the survey data.

## 3.2. General Data Protection Regulation

The REHEATEAST project will ensure the security of personal data throughout the implementation of surveys in accordance with the General Data Protection Regulation (hereinafter: GDPR). Personal information about stakeholders will only be gathered with their express consent and for justifiable purposes of providing answers to the surveys. Stakeholders can exercise their rights under GDPR, which include the ability to access, correct, and remove their personal data.

The GDPR compliance **will be emphasized at the beginning of the surveys**. For surveys conducted via an **online Microsoft or Google Form**, **GDPR information will be clearly shown at the beginning** to ensure participants are aware of their data protection rights and obligations. It will be put together with the instructions at the beginning of the online form, and by moving on with the questionnaire, the interviewees imply that they give their consent. The template is shown in Annex 1 of this report. For **in-person interviews**, participants will be required to **sign a consent form** acknowledging their understanding and acceptance of GDPR regulations. With **online interviews**, the interviewers will **emphasize the participants' rights from the GDPR Statement after which the interviewees will indicate their agreement with it**.

In summary, the REHEATEAST project places a high priority on compliance with GDPR requirements, demonstrating a commitment to responsible data processing. In addition to

adhering to legal requirements, in this way the project promotes responsibility and trust with stakeholders by placing a **high priority on their privacy** and data protection.

### 3.3. Country-specific communication strategy

Due to differences among regions and the stakeholders within them, it is important to recognize that a **one-size-fits-all approach may not be suitable** for effectively engaging stakeholders across different countries of REHEATEAST region. The consortium also recognises that some stakeholders may be reluctant to fill out the survey. It is therefore beneficial for **each project partner to determine the approach** to engaging stakeholders, as a **single method may not suffice** for the whole region.

As such, in the following subchapters, each partner describes their approach to specific stakeholder groups based on their experience and knowledge in their respective regions. This tailored approach considers the unique characteristics, challenges, and opportunities present within each partner's geographic area.

**It is crucial to remember that, for the sake of unification of the surveys, each partner will use the same set of questions for the respective stakeholder category, regardless of the approach (communication method or tool) they use. This approach ensures consistency in the questions, enabling analysis and comparison of the results across the entire region effectively.**

#### 3.3.1. Bosnia and Herzegovina

In Bosnia and Herzegovina (hereinafter: BiH) the survey will focus on key stakeholder groups in our opinion. Namely, we identified a representative sample of heat producers and utilities, authorities, and financiers (IFIs), whose feedback will allow us to better understand the current situation of DHC systems and the most appropriate future steps for improvement.

We have already completed the initial step of the survey and listed the specific organizations and institutions in the Annex 7. The stakeholder groups comprising technology suppliers and contractors are similar to those in Croatia, hence they have been omitted from the list of contacts for Bosnia and Herzegovina. This is the initial list that may be expanded, based on the information we get from the already identified stakeholders. The next step will be to contact the selected stakeholders and agree on the timetable for in-person meetings/interviews. In case we do not complete the questionnaires during the initial in-person meetings, we will make arrangements with the stakeholder representative to complete the questionnaire, either during a follow-up in-person meeting/interview or via e-mail.

Having in mind the diversity of DHC systems (supply side) in Bosnia and Herzegovina, and the limited time for a resource-intensive research, a comprehensive survey in the consumers stakeholder group does not look realistic. We have also considered engaging an external company to conduct sampled surveys, but due to the diverse nature of this stakeholder group, and time and resources available that consequently limit the number of interviews, most probably it would not

bring tangible and relevant results. To get at least some feedback from this stakeholder group, depending on the time and available resources, we are looking at potentially targeting a limited number of DHC consumers that could be directly contacted to acquire information.

### 3.3.2. Bulgaria

Our strategy for engaging stakeholders is carefully developed to ensure effective participation and collaboration. The specific organizations and institutions are listed in Annex 7. Our focus is shifted to defining the format for the survey itself and on the approach to stakeholders, as follows:

- **Survey format** – Based on our previous positive experience, the questions defined in Annexes 2 to 6 will be transferred into the **Google Forms survey**. Google Forms is user-friendly and easy to navigate, making it accessible for both survey creators and respondents. Also, it can be accessed from any device with an internet connection, making it convenient for respondents to complete surveys anytime, anywhere. Responses are automatically collected and stored, providing real-time access to survey data.
- **Approach to stakeholders** - The primary stakeholders are categorized into two main groups based on their accessibility. Firstly, institutional stakeholders, including national and local authorities, district heating providers, financial institutions, energy agencies, etc. are identified and analysed, considering their relevance to the topic. Secondly, district heating service users will be approached, with the goal of studying the end user perspective and attitudes to the dedicated market services. This target group is much more challenging to pinpoint and engage, due to its dispersed nature and different types of experience with the service.

Effectively reaching out to these diverse groups necessitates tailored approaches that acknowledge their distinct characteristics. This ensures that the research efforts are both effective and efficient. The engagement approaches for each of these two groups are described in the table below.

*Table 1 Approach to stakeholder groups in Bulgaria*

| Stakeholder  | Communication approach  |
|--|---|
| <b>Heat producers and utilities, authorities and regulators, technology suppliers, contractors, financiers and investors</b> | <p>For the purposes of the survey, the questionnaires in Google Forms will be distributed primarily via email. This would be the approach especially for the stakeholders that we already have an established partnership with.</p> <p>For representatives of authorities and regulators, a more formal approach will be chosen given their established institutional practices. In this case, formal letters will be sent, and face-to-face meetings will be offered if necessary, during which we will have the opportunity to brief stakeholders in more detail on the objectives of the project and the survey in particular.</p> |

| Stakeholder                       | Communication approach   |
|-----------------------------------|--|
|                                   | <p>Depending on the engagement achieved, we could involve the key associated partners from Bulgaria in order to overcome some of the communication barriers, as the representatives of Plovdiv DHC would be extremely useful in terms of technological stakeholders, and through the EcoEnergy municipal network we have the opportunity to involve local authorities.</p> <p>Last but not least, EnEffect maintains a well-developed professional network on LinkedIn, which is another opportunity to spread the word and reach a wide range of stakeholders for the needs of the survey.</p>  |
| <p><b>Consumers and media</b></p> | <p>The consumers' target group includes households, commercial businesses, industrial heat consumers and municipal institutions. These are a broad group of representatives that may be the most challenging for the survey to cover. In this respect, in addition to the logical communication channels such as social media, website and the networks of the associated partners, it is envisaged to seek professional support from specialised polling agencies to conduct a dedicated survey among the target group. As a result of our previous experience with similar target groups, this approach has been taken into account in the preparation of the project proposal, with appropriate budget allocations.</p> |

Throughout the stakeholder engagement endeavours, EnEffect remains committed to monitor participation levels in the SMP Excel, feedback received, and any shifts in stakeholder attitudes or behaviours towards DHC systems in Bulgaria. Based on the results of the monitoring, corrective actions could be taken regarding the approach, to ensure the completeness of the data and the commitment of the stakeholders. After completing the collection and analysis of the information from the questionnaires, the communication tools described in D1.1.1 will be used for subsequent communication of results with relevant stakeholders in an easy-to-understand and accessible manner.

### 3.3.3. Croatia

In the Croatian region, our approach to engaging stakeholders is carefully crafted to ensure effective participation and collaboration. The initial step, which is to list the specific organizations and institutions, has already been noted in the Annex 7. This leaves the definition of the form of: 1) the survey itself and 2) the approach to the stakeholders, all described in the following paragraphs.

The survey format will be a unified one - **a Microsoft or Google Form survey**. These interactive, user-friendly platforms are convenient for creating and distributing surveys electronically. The

questions defined in Annexes 2 to 6 will be transferred into one of those tools and distributed to the stakeholders.

EIHP has divided the stakeholders into two main groups for which the approach will be as described in the following table.

*Table 2 Approach to stakeholder groups in Croatia*

| Stakeholder   | Communication approach  |
|---|---|
| <p><b>Heat producers and utilities, authorities and regulators, technology suppliers, contractors, financiers and investors</b></p> | <p>In our engagement with these institutions and organizations, particularly those with whom we have established longstanding partnerships, we plan to leverage <b>e-mail as our primary mode of communication</b>. The institutions identified in the SMP Excel have a good understanding of DHC sector and EIHP expects them to cooperate with our initiative. We will send them the Microsoft/Google surveys through e-mail.</p> <p>In the event that stakeholders <b>don't provide responses to the surveys sent via email</b>, EIHP will use alternative approach for engagement: we will contact the stakeholders <b>to set up and conduct an online or in-person interview</b> with them. The questions will be the same, but of course verbally communicated during the interview. In this way, EIHP aims to maximize the collection of data.</p>   |
| <p><b>Consumers and media</b></p>   | <p>Engaging consumers presents unique challenges, primarily due to the diverse nature of this group, where only DHC users are a viable option. While the survey format is planned to be the same - <b>Microsoft/Google survey</b> - effective communication remains a challenge.</p> <p>To overcome this, a portion of our stakeholder engagement budget will be allocated to <b>outsourcing an external company to conduct sampled surveys</b>. The available budget is described in chapter 4. By leveraging the knowledge and existing networks of reputable companies specializing in sampled surveys, e.g. Ipsos<sup>1</sup>, we aim to reach a representative cross-section of DHC consumers.</p> <p>Furthermore, EIHP will <b>utilize media channels</b> such as Zgradonačelnik or Energetika Marketing. Zgradonačelnik has a database of tenants and co-owners, in addition to their various communication channels such as social media platforms and newsletters. This also allows for an extended outreach through collaboration.</p> <p>Furthermore, EIHP will <b>use its own media outlets</b> to distribute the survey on its website and social media (LinkedIn), emphasizing that the target group eligible to complete the survey are DHC users.</p> |

<sup>1</sup> <https://www.ipsos.com/hr-hr/o-nama>

| Stakeholder | Communication approach  |
|-------------|---|
|             | If these methods don't succeed, EIHP will <b>explore obtaining contacts from other stakeholders</b> included in REHEATEAST activities. GDPR rules will be respected during such process. Subsequently, DHC consumers can be directly contacted to gain information. |

During communication efforts with stakeholders, EIHP recognizes the value of utilizing existing tools such as heat maps and videos (outlined in Deliverable 1.1.1). These visual tools help convey complex information about DHC systems. Heat maps offer insights into the spatial distribution of DHC systems, while videos are an engaging medium to showcase successful DHC projects and provide educational content, which can be beneficial for e.g. consumers who are unfamiliar with its operation. These tools can be shared with stakeholders at the end of the surveys as guidance or useful material to enhance their understanding.

Throughout our stakeholder engagement endeavours, EIHP remains committed to evaluating our impact. Throughout this process, EIHP will monitor participation levels in the SMP Excel, feedback received, and any shifts in stakeholder attitudes or behaviours towards DHC systems in Croatia.

### 3.3.4. Hungary

In Hungary, we have identified 37 municipalities (district heating systems) which need to be approached in the market survey phase based on the criteria defined in the Application form. These are:

- 12 cities in which there are over 10,000 DHC clients: Budapest, Miskolc, Debrecen, Kecskemét, Győr, Szeged, Pécs, Dunaújváros, Kaposvár, Nyíregyháza, Székesfehérvár and Tatabánya.
- 25 other municipalities in which renewable energy is utilised in district heating: Almásfüzitő, Ajka, Baja, Mohács, Salgótarján, Mátészalka, Oroszlány, Cserkeszőlő, Csongrád, Nagyatád, Komló, Pornóapáti, Körmend, Vasvár, Szarvas, Szentes, Szolnok, Szentlőrinc, Szigetvár, Szombathely, Tata, Oroszlány, Keszthely, Záhony and Paks.

We have also identified some technology suppliers and contractors, for instance, Thermowatt in urban waste heat utilisation or Techem and ISTA in cost allocation that we intend to approach. In terms of financiers, we will consider primarily the largest corporate banks in Hungary, e.g. OTP, K&H or Raiffeisen.

Hungarian partners of REHEATEAST project, Pannon EGTC (LP) and IDEFA (PP2) will jointly execute the survey by sharing the tasks among their respective experts, in line with their budgeted time and resources. The questions outlined in Annexes 2 to 6 are going to be translated to Hungarian and will be available in online (Microsoft or Google Form – using the templates in the mentioned annexes) and in Microsoft Word format too.

Stakeholders will be contacted primarily via e-mail and in certain cases directly by phone. We will approach relevant associations (MATÁSZSZ, MJVSZ) to talk about potential collaboration in conducting the survey among their members.



In the event that not enough stakeholders provide responses to the surveys sent via email, Pannon EGTC and IDEFA will use an alternative approach for engagement: the experts will contact the stakeholders to set up and conduct an online or in-person interview with them. The questions will be the same, but of course verbally communicated during the interview. In this way, Hungarian PPs aim to maximise the collection of data. Publicly available DHC statistics and consumer research information will be used where possible.

A portion of our stakeholder engagement budget will probably be allocated to outsourcing an external company to conduct surveys, leveraging their knowledge and existing networks.

### 3.3.5. Romania

The engagement of relevant stakeholders is essential in the transition to affordable and sustainable district heating and cooling systems, and in knowledge sharing and capacity building.

In the Romanian region, the systematic approach to stakeholder engagement started with the identification of key stakeholders (stakeholder mapping) that are listed in Annex 7. The profiles of the most important stakeholders are: DHC operators, policy and decision-makers, financiers and investors, technology suppliers, contractors, consumers, and the media.

Once stakeholders have been identified, a targeted stakeholder survey, containing specific questions for each stakeholder category was prepared within the consortium in English version, in the Annexes 2 to 6. These questionnaires will be translated into Romanian and sent and discussed with the stakeholders.

To ensure GDPR compliance, respondents will be informed about the REHEATEAST project and the scope of the survey. A GDPR statement is included at the beginning of the survey (Annex 1).

To overcome the possibility of non-response from the stakeholders, two main approaches of survey data gathering are considered:

- Email messages carrying questionnaires as attachments (Microsoft Word);
- Email messages with a link to a web platform to complete the questionnaires; Online survey tool Google Forms will be used to create questionnaires (transposed from the Annexes 2 to 6) and to facilitate the completion process.

Drawing upon our previous professional interactions with some of the DHC operators, technology suppliers and contractors, policymakers, and decision-makers, identified in Annex 7, we expect their commitment to completing the survey.

Some alternative methods to email surveys, which are specifically addressed to consumers, the media, financiers and investors, contractors, have been identified in Table 3.

*Table 3 Alternative methods of collecting survey data in Romania*

| Methods of collecting survey data | Format   | Stakeholder  |
|-----------------------------------|--|--|
| <b>1. Conducting interview</b>    | <b>(in-person or online</b> using a platform: Zoom, Microsoft Teams or | Consumers, media, financiers and investors, authorities and regulators |

| Methods of collecting survey data  | Format  | Stakeholder                                  |
|------------------------------------|---|--|
|                                    | Google meet)  |  |
| <b>2. Paper surveys</b>            | Printed format  | Consumers, contractors, technology suppliers |
| <b>3. Telephone surveys</b>        | Phone calls   | Consumers                                    |
| <b>4. Social media or websites</b> | Sharing, promoting, and targeting the survey through LinkedIn or ENTREC Website | Consumers                                    |

In addition to the strategies mentioned above, structured feedback will be implemented at various stages of our survey to ensure ongoing engagement.

Various tools developed within the framework of other European projects (mapping and planning tools for heating and cooling) and guidelines on the topic of district heating and cooling can be shared with the stakeholders at the end of the survey to enhance their knowledge and awareness.

A long-term engagement strategy will be developed to maintain and build stakeholder relationships beyond the initial survey phase. Monitoring UTCN stakeholders' engagement throughout the project lifecycle will involve regular checks, updates and feedback.

### 3.3.6. Republic of Serbia

In line with the proposal and contract, all cities and DHC companies with over 10,000 DHC clients or renewable energy utilisation in DHC need to be approached in the survey stage. Therefore, all such parties are planned to be approached in Serbia. Out of 59 municipalities with DHC systems in Serbia, at least 12 fall into the above categories:

- 10,000 DHC clients: Belgrade, Novi Sad, Kragujevac, Nic, Bor and Subotica.
- DHC systems using renewable energy: Pancevo (solar), Priboj (biomass), Bogatic (geothermal), Sabac (biomass), Novi Pazar (biomass), Majdanpek (biomass).

As consumption-based billing is a key issue in Serbian DHC, we will try to uncover as much as possible concerning that topic. It is closely linked to DHC network (substations) automation and control, so we'll also try to look into existing network SCADA solutions (used). This will be in line with the focus on digital (enabling) solutions in the REHEATEAST project.

An example of a relevant Serbian good practice can be found on the following link: <https://www.undp.org/serbia/news/how-both-environment-and-citizens-sabac-pay-lower-price-heating>.

We will work particularly collaborate closely with Serbian ASPs of the REHEATEAST project (from Kragujevac and Priboj). We will focus on analysing topics of potential pilots. Two potential Serbian REHEATEAST project pilots have been identified so far: wastewater waste heat utilisation for heating buildings in Kragujevac and deep neighbourhood (multi-apartment) building retrofits in Priboj.

Municipalities and DHC companies owned by them are planned to be approached by SCTM, being an association of municipalities. We will also try to create collaboration with the Serbian Association of District Heating Companies. They did not join REHEATEAST as an ASP, so their interest is questionable. We will also approach contractors and technology providers that have worked on relevant projects, such as the biomass DHC heating plant in Priboj. EBRD will be an important party to talk to, given their concentrated efforts to transform DHC in Serbia (and Bosnia and Herzegovina). We will also try to approach leading corporate banks operating in Serbia, especially those with meaningful activities in the energy sector (e.g. Erste Bank, Unicredit, Banca Intesa or OTP). Examples of relevant energy sector financing deals of these banks can be found on the following links:

- <https://www.schoenherr.eu/content/serbia-schoenherr-advises-otp-group-on-project-finance-facilities-for-development-of-six-biogas-power-plants-in-serbia>
- <https://www.ebrd.com/news/2023/ebrd-and-eu-finance-serbian-businesses-via-otp-banka-serbia.html>
- <https://balkangreenenergynews.com/serbias-dso-elektrodistribucija-srbije-to-invest-eur-50-million-in-grid-modernization/>
- <https://balkangreenenergynews.com/ggf-deepens-cooperation-with-unicredit-bank-serbia-with-eur-50-million-renewables-loan/>
- <https://ebrdgeff.com/ebrd-and-unicredit-boost-energy-efficiency-in-serbia/>
- <https://ebrdgeff.com/ebrd-partners-with-erste-bank-serbia-to-finance-energy-saving-home-improvements/>
- <https://www.eib.org/en/press/all/2023-478-eib-global-and-banca-intesa-beograd-to-boost-serbian-companies-access-to-finance-and-green-investments-with-a-eur100-million-credit-line>
- <https://www.bancaintesa.rs/en/stanovnistvo/kredit/kredit-za-unapredjenje-energetske-efikasnosti.html>

We will also approach regulators on the national (the Ministry of Mining and Energy, and the Ministry of Construction Transport and Infrastructure) and local level (towns and municipalities). Furthermore, we will approach locally active energy-saving companies like RESALTA, Mechanical Faculties in Belgrade and Niš, and consumer associations with national coverage.

Finally, to include a wider range of customer stakeholders in the survey, an external specialised company could be engaged using funds provided by the project.

All the identified stakeholders will be contacted via email, which will contain a cover letter with relevant information about the REHEATEAST project, the goal of the survey, and the link to the online questionnaire. A reasonable deadline of 10 to 15 days will be given for stakeholders to respond. Those who for any reason don't reply will be contacted by phone or a meeting will be scheduled.

### 3.3.7. Slovakia

In the Kosice region, our approach to engaging stakeholders is carefully crafted to ensure effective participation and collaboration. The initial step, which is to list the specific organizations and institutions, has already been noted in Annex 7. This leaves the definition of the form of 1) the survey itself and 2) the approach to the stakeholders, all described in the following paragraphs.

The survey format will be a unified one - **a Google Form survey**. This interactive, user-friendly platform is convenient for creating and distributing surveys electronically. The questions defined in Annexes 2 to 6 will be transferred to those tools and distributed to the stakeholders.

Via Carpatia has divided the stakeholders into six main groups for which the approach will be as described in the following table.

*Table 4 Approach to Stakeholder Groups in Slovakia*

| Stakeholder   | Communication approach   |
|---|--|
| <b>Heat producers and utilities, technology suppliers and contractors</b> | <p>In our engagement with these institutions and organizations, particularly those with whom we have established longstanding partnerships, we plan to leverage e-mail as our primary mode of communication. The institutions identified in the SMP Excel have a good understanding of the DHC sector, and Via Carpatia expects them to cooperate with our initiative. We will send them the Microsoft/Google surveys through e-mail.</p> <p>If stakeholders don't respond to the surveys sent via email, Via Carpatia will use an alternative approach for engagement: we will contact the stakeholders to set up and conduct an online or in-person interview with them. The questions will be the same, but of course, verbally communicated during the interview. In this way, Via Carpatia aims to maximize the collection of data.</p> |
| <b>Authorities and regulators</b>   | <p>Engaging authorities poses a challenge since the government and its ministries are the only regulators and policymakers in the country. We consider reaching out to them by sending out the survey directly to their representatives via e-mail. If it is necessary, we are preparing to communicate in-person meetings. In this way, Via Carpatia aims to maximize the collection of data from this group as well.</p>   |
| <b>Media</b>  | <p>Furthermore, Via Carpatia will utilize media channels such as Korzár SME or the Marketing division of the Municipality of the Kosice region. The marketing division of the municipality has a database of the buildings of organizations under their administrations and they also have various communication channels such as social media platforms and newsletters. This also allows for an extended outreach through collaboration.</p>   |

| Stakeholder                     | Communication approach  |
|---------------------------------|---|
|                                 | <p>Furthermore, Via Carpatia will use its own media outlets to distribute the survey on its website and social media (LinkedIn), emphasizing that the target group eligible to complete the survey are DHC users.</p> <p>If these methods don't succeed, Via Carpatia will explore obtaining contacts from other stakeholders included in REHEATEAST activities. GDPR rules will be respected during such a process. Subsequently, DHC consumers can be directly contacted to gain information.</p>   |
| <b>Consumers</b>                | <p>Engaging consumers presents unique challenges, primarily due to the diverse nature of this group, where only DHC users are a viable option. While the survey format is planned to be the same - Microsoft/Google survey - effective communication remains a challenge if we talk about average people as common users.</p> <p>But in the case of the Kosice region, more consumers are being directly connected to Via Carpatia EGTC. One of them is the Municipality of Kosice region as one of our members, also they are our Associated Strategic partner in the project of the REHEATEAST. Our main goal is to provide them with all of the information, send them out the survey, or get all the relevant information that they can provide us. Also, we are considering putting them as a main partner for a pilot action in this project.</p> |
| <b>Financiers and investors</b> | <p>We identified in the SMP Excel a group of investors and financiers in the Kosice region, who have a big aim to build and develop new and sustainable forms of using renewable energy.</p>  |
| <b>Educational institutions</b> | <p>Since we have a very good relationship with the universities in technical and environmental studies, we can't skip the opportunity to involve them in this survey as well. This could help the project be seen through professional lenses.</p>  |

During communication efforts with stakeholders, Via Carpatia also recognizes the value of using existing tools such as **heat maps and videos**, used in the Slovak Republic as well. These visual tools help convey complex information about DHC systems. Heat maps offer insights into the spatial distribution of DHC systems, while videos are an engaging medium to showcase successful DHC projects and provide educational content, which can be beneficial e.g. consumers who are unfamiliar with its operation. These tools can be shared with stakeholders at the end of the surveys as guidance or useful material to enhance their understanding.

Throughout our stakeholder engagement endeavours, Via Carpatia EGTC remains committed to evaluating our impact. Throughout this process, Via Carpatia will monitor participation levels in the SMP Excel, feedback received, and any shifts in stakeholder attitudes or behaviours towards DHC systems in the Kosice region.

### 3.3.8. Slovenia

Designing a communication strategy specific to Slovenia involves considering the country's unique and tailored approach. By tailoring our communication strategy to align with Slovenia's distinctive characteristics and preferences, we will enhance engagement and build meaningful relationships with our Slovenian stakeholders. The first step in creating a group of stakeholders is the preparation of the list of identified stakeholders which was done in the Annex 7.

Depending on the specifics of the region, the second step should be an initial phone call, which will be based on an e-mail sent a few days earlier. Based on this contact, we will try to establish trust and encourage the person to cooperate. Then there will be a personal visit and the completion of a questionnaire, which can be conducted as a guided interview, where we will write key data and information and then later enter them into the e-version. We will also have available a Google Form survey as an online questionnaire, suitable for use where appropriate conditions regarding online connectivity will be available.

If it seems necessary during the implementation of the project/completion of questionnaires, we will also conduct a focus group with the inclusion of specific stakeholders. This approach will be used if there will be a lack of responses from personal contacts.

We intend to include the following stakeholders:

- a) Heat producers and utilities (energy companies, renewable energy producers, power plants, distribution network operators)
- b) Authorities and regulators (governmental institutions, municipalities, local/regional energy agencies)
- c) Financiers and investors (national funds, local communities)
- d) Technology suppliers (designers, service providers)
- e) Contractors (maintenance and service providers)
- f) Consumers (DHC residents, residential households)
- g) Media (television, online media)

To achieve maximum effect when communicating and conducting interviews with stakeholders, we will use different communication channels and methods: we will publish information on specific activities that are underway in the project, include news about the project in the newsletters, promote videos developed within other projects to inform and raise awareness on DHC system, etc.

For successful implementation and obtaining maximally relevant and credible data from the perspective of regional stakeholders and local energy agencies we will use the support of external experts. We will engage an external agency to perform surveys for the specified number of stakeholders.

Finally, it is important to note that **project partners with Associated Strategic Partners (ASPs) from other countries are only required to conduct surveys in their home country.** Conducting surveys in multiple languages presents logistical challenges, hence focusing efforts within each partner's respective country ensures effective implementation. Therefore, LP partner PANNON does not have to conduct the survey in Bosnia and Herzegovina, PP6 partner VIACARPATIA does not have to conduct it in Moldova and Ukraine, and PP8 partner JSI does not have to conduct it in the Czech Republic.

In summary, the surveys were developed by harnessing the collective experience of all partners. This inclusive approach is important to ensure that the methodology is reflective of the diverse perspectives and expertise within the consortium. The methodology of this deliverable within the REHEATEAST project is characterized by a collaborative, transparent, and inclusive approach, facilitated by standardized templates. By adopting this methodology and conducting the surveys, REHEATEAST will be able to gain insights important for subsequent project stages.

## 4. Resources and budget

In this chapter, we explain the budget for survey activities, specifically within the “External expertise” category. In addition to the amounts listed below, each partner has staff resources planned in the REHEATEAST budget for this action. The partners can use the budget based on their approach to the stakeholders. The following table shows the resources for the “External Expertise” category according to the detailed budget of the project.

Table 5 “External expertise” resources for conducting the stakeholder surveys

| Description of the item   | Name of the PP  | PP abbreviation | Assigned amount in € |
|---|---|-----------------|----------------------|
| <b>Fee of external experts involved in stakeholder survey (regional stakeholders)</b> | Pannon European Grouping Of Territorial Cooperation       | PANNON          | 6,000                |
|   | Local Energy Agency Pomurje                               | LEAPOM          | 7,000                |
| <b>Fee of external experts involved in stakeholder survey (national stakeholders)</b> | International Fund Development and Coordination Agency    | IDEFA           | 3,000                |
| <b>Fee of external experts involved in stakeholder survey</b>                         | Energy Institute Hrvoje Požar                             | EIHP            | 6,000                |
|   | Technical University of Cluj-Napoca                       | UTCLUJ          | 8,000                |
|   | European Grouping of Territorial Cooperation Via Carpatia | VIACARP         | 9,000                |
|   | Standing Conference of Towns and Municipalities           | SCTM            | 7,000                |
|   | Resource Aarhus Center in Bosnia and Herzegovina          | AC-BIH          | 3,000                |
|   | Center for Energy Efficiency Eneffect                     | ENEFFECT        | 7,000                |
| -   | Jožef Stefan Institute                                    | JSI             | -                    |
|   | ABE Renewable   | ABE             | -                    |



As visible from the table, the budget varies from 3,000 to 9,000 €.

This budget could be used, for example, for the compensation of the professionals or consultants who would be hired to assist with various aspects of conducting the stakeholder surveys. Their fees could cover services such as administration support or conducting surveys. Additionally, these experts might provide guidance on best practices for engaging stakeholders and ensuring the effectiveness of the survey process. For example, as was described in the previous chapter, EIHP in Croatia plans to use these funds to engage an external agency to perform surveys on a sampled group of DHC consumers to get representative results for that group.

The hiring process for external experts should adhere to all relevant regulations of the funding Programme, internal organisational procedures and any national legislation on procurement. Detailed information can be found in Procurement procedures at the Manual on eligibility of expenditures page 31, and in the Project Management Handbook page 47.

Also, it is visible in Table 5 that two of the partner institutions don't have allocated budget. This is because both institutions have counterparts within the same country. Specifically, in Slovenia, Local Energy Agency Pomurje (LEAPOM) has allocated funds for "External expertise", while Jožef Stefan Institute (JSI) does not. Similarly, in the Republic of Serbia Standing Conference of Towns and Municipalities (SCTM) has allocated budget for "External expertise" while ABE Renewable doesn't. However, this does not imply that JSI and ABE Renewable will not contribute to the survey process, as these partners have staff budgets planned for this. Both of those partners have extensive knowledge of the DHC sector and will therefore coordinate with the PPs in the same country for the survey process.

The outlined allocation of funds for external expertise in stakeholder survey activities demonstrates the project's commitment to obtaining credible data. The project aims to enhance the quality and reliability of survey outcomes by utilizing the experience and knowledge of external experts. Through this strategic resource allocation, the project aims to maximize the effectiveness of stakeholder engagement efforts and produce actionable results that contribute to the achievement of project objectives.

# 5. Implementation plan

The monitoring framework within the REHEATEAST project, and consequently this deliverable, plays a crucial role in evaluating progress, identifying challenges, and ensuring effective stakeholder engagement. In this way, the project partners will be able to track progress and perform analysis of data, ensuring that any deviations are addressed on time. By using these steps, the project hopes to optimize survey value and ultimately accomplish its objectives.

With the finalization of this report, the project will proceed with **conducting surveys** throughout the months of **May and June**. It is important to acknowledge potential multiple challenges posed by this timing. Therefore, it is essential to **execute the surveys** as soon as feasible, **preferably during May** to mitigate any potential delays and to ensure stakeholder focus - motivating them by clearly specifying their potential benefits from cooperating with REHEATEAST. By adhering to this timeline and implementing proactive strategies, the project aims to achieve timely stakeholder engagement. To emphasize, **every partner is tasked with engaging their targeted audience effectively**. This entails getting in touch with stakeholders within their respective regions, coordinating communication efforts, and ensuring that the survey instructions are clear to all of them. Before commencing the survey, it is imperative to develop a comprehensive and carefully curated list of stakeholders from all key groups. This ensures that each project partner gains a clear understanding of the breadth and diversity of the target audience and can assess the time and resources required to successfully conduct the survey within the allotted timeframe.

Following the **conclusion of surveys**, planned **by the end of June**, all feedback collected will be **thoroughly examined in a report**. EIHP will make a template for this report, while all the project partners will conduct the analysis of their data. This analytical stage is crucial as it aims to offer insightful information about the current situation of DHC systems, serving as a foundation for guiding the project's following activities. With this analysis, the project partners will be better equipped to make decisions and strategies in the subsequent project stages. The survey activities are summarized in the following figure.

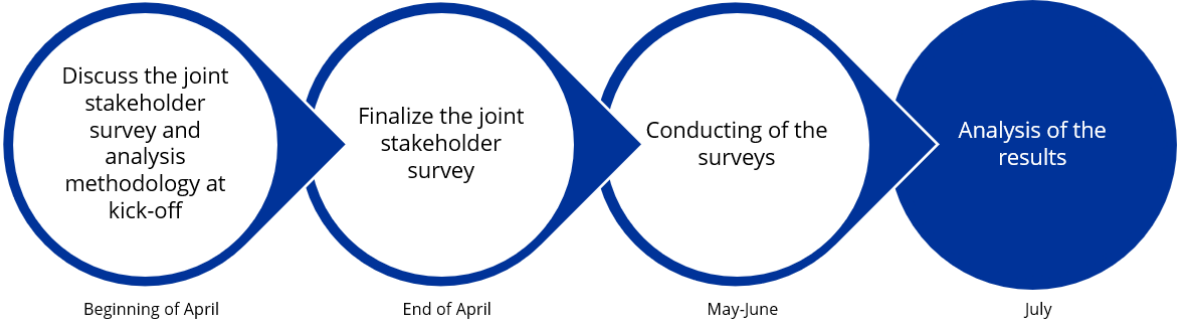


Figure 6 Implementation plan

## 6. Conclusion

This methodology and templates for surveys **provide a thorough strategy for involving stakeholders**. Grouping stakeholders into five distinct categories ensures comprehensive coverage of all relevant areas and facilitates the **development of survey questions tailored to the specific interests and concerns** within each group: the 'energy stakeholders' group (heat producers and utilities); the 'policy makers' group (authorities and regulators); technology suppliers and contractors; financiers and investors; consumers and media. **Each partner compiled a comprehensive list of specific organizations and institutions** within those stakeholder groups, as seen in Annex 7. This serves the dual purpose of **tracking and timely identification** of relevant entities. The surveys will **adhere to GDPR regulations** at all times to guarantee compliance and protect participants' rights.

In conclusion, this methodology provides customized templates tailored to diverse expertise and knowledge of various stakeholder groups involved in the REHEATEAST project. All their **interests and perspectives** have been **carefully considered in the surveys** which are to be distributed to get responses and after that analysed. Ultimately, this approach will provide invaluable guidance for the subsequent project phases.

# Annex 1: GDPR Statement

The survey process will commence with brief instructions, followed by the inclusion of a GDPR Statement. Following that, the survey questions themselves are provided in Annexes 2 to 6, so the project partners will select the appropriate one tailored to specific stakeholder group for which they are conducting the survey. Depending on the approach to the stakeholders, adjustments may be made to the survey content:

- In the case of online survey conducted through platforms like Microsoft or Google Forms, the survey will begin with short instructions and the GDPR Statement. It is presumed that when the survey is filled, the participants have accepted the survey terms (meaning GDPR as well). By completing the survey, participants implicitly accept the terms outlined, including those related to GDPR compliance.
- In the case of in-person interviews, the GDPR Statement from this Annex will be utilized, requiring signature from the participant(s). The instructions for the interview, as well as the interview itself, will be verbal.
- In the case of online interviews, the process will commence with emphasizing and outlining the GDPR conditions (in this Annex), after which interviewees will confirm their agreement with the terms verbally before proceeding, or in written form. As with in-person interviews, both the instructions and the interview itself will be conducted verbally.

In the following is outlined the template for the GDPR statement which is to be included at the beginning of the survey. For online surveys (Microsoft/Google Forms), it will be included in the first part, before the survey questions. The section with signatures is not necessary, as it is implied that the participants are compliant with the GDPR rules by continuing with the survey. For in-person interviews, the statement can be put on project partners memorandum (along with the logo of the REHEATEAST project) and must be signed. For online interviews, the participants must also give their consent, either verbally during the interview or in written form.

## Data protection statement

[Name of project partner organization] is committed to the protection of personal data, in accordance with the General Data Protection Rules. The personal data collected during the surveys that is required for the purpose of collecting data on status quo, challenges and good practices of DHC systems in the target regions of the Interreg Danube Programme REHEATEAST will be stored on [Name of project partner organization] servers. The results of the interviews will be analysed and reported in a public report, and used for other REHEATEAST project activities. The legal basis for data gathering, processing and publication of overall results is the consent to this statement. The data will be used exclusively for the purposes described in the statement. Any other use will always be subject to further consent. Your data will not be used for advertising purposes. [Name of project partner organization] uses appropriate technical and organisational measures to secure data against unintentional or intentional falsification, destruction, loss or access by unauthorised persons.

[Name of project partner organization] is authorised to forward your data to the following organisations/entities to be processed for the purposes of follow-up contacts, reports and documentation: Managing Authority and Joint Secretariat of the Danube Region Programme. The legal basis for processing is Article 6 (1) (c) - processing is necessary for compliance with a legal obligation to which the controller is subject, which is the Subsidy Contract (Project Code: DRP0200401) and the obligation to submit deliverables (including list of participants) and reports. Before passing data to other persons or institutions outside the REHEATEAST Consortium and the above-mentioned organisations/entities – even in anonymised form – the individual responsible will personally contact the people involved.

With this statement, you consent to your personal data being stored for a period of [insert information on the duration of data storage according to your organization’s policies] years duration or criterion for determining this duration following the completion of the purpose for which it was collected so that [Name of project partner organization] can contact you for the purpose of further use. Furthermore, you consent to [Name of project partner organization] storing and using your personal data. This consent will remain valid even if no use took place, for a period of [insert information on the duration of data storage according to your organization’s policies] years after it was signed.

Name and surname: \_\_\_\_\_

Date: \_\_\_\_\_

Signature: \_\_\_\_\_

### Rights of data subjects

You are entitled to enquire about your personal data, have the data corrected if necessary, and ask for processing to be restricted or data to be erased. The data will then be removed from our system. The consent given to use personal data can also be revoked at any time. This does not affect the lawfulness of processing up to the time of revocation. In the case of revocation, it is not possible to participate in the survey and follow-up activities. To revoke consent, please send an email to: [Contact details of person responsible for handling the collected data within partner organization, e.g. email address]. Should you have any questions or complaints relating to this statement or the processing, you can contact [Contact details of person responsible for handling the collected data within partner organization, e.g. email address]. You have the right to approach the data protection authorities with complaints. The authority responsible is the European Data Protection Supervisor [**Attention:** European Organizations (PANNON, IDEFA, EIHP, UTCLUJ, LEAPOM, VIACARP, JSI and ENEFFECT) have to change this information to their responsible Data Protection Authority (DPA) within their country. E.g. for EIHP this would be: Croatian Personal Data Protection Agency. See the list and contact details for each country here: [https://edpb.europa.eu/about-edpb/board/members\\_en.8](https://edpb.europa.eu/about-edpb/board/members_en.8)].

# Annex 2: Survey template for energy stakeholders

*Your participation in this survey is significant for the REHEATEAST project and would be greatly appreciated. The survey is dedicated to enhancing district heating and cooling (DHC) systems through integrating local renewable energy sources and waste heat and optimising DHC systems. As a crucial prerequisite, the project emphasises cross-sectoral collaboration among stakeholders to stimulate and bolster the implementation of large-scale building and system renovation programs, along with neighbourhood-level rehabilitation efforts.*

*This initiative seeks to explore the relevance and importance of various aspects to different stakeholder groups and to understand your expectations. Consequently, as part of our endeavour, we are gathering insights on stakeholders' perspectives regarding the current situation and future expectations concerning heating solutions, explicitly focusing on DHC and any exemplary practices you may be aware of.*

*Please be assured that all your responses will be treated confidentially and will not be shared with any external parties. Your input is invaluable to the success of this project, and we are deeply grateful for your participation.*

---

*The questionnaire consists of four parts.*

- 1) Your opinions and interests*
- 2) Current situation*
- 3) Where do we want to be in 2030 and 2050? How will we get there?*
- 4) Example of good practice*

*Please give concise answers.*

*Name of the organisation*

*Name of the person/position*

Location (city/region)

Contact (e-mail/phone no).

### Part 1 - Your opinions and interest

Please provide us with your opinion in each case by selecting the appropriate category from the single-choice menus with the following marks: 1= not relevant for us; 2= not important; 3= important; 4= very important; 5= I do not know.

| Activity  | Importance of this topic to your firm | Opportunity for you to talk to/learn from peers (through the REHEATEAST project), and cooperate in EU projects |
|---|---------------------------------------|--|
| <i>1. Technical fields</i>  |                                       |  |
| Decrease heat losses in heat generation   |                                       |  |
| Decrease heat losses in network operation   |                                       |  |
| Replace DH pipes to decrease heat losses  |                                       |  |
| Install digital technologies to decrease heat losses and operational costs of DH networks   |                                       |  |
| Install or improve consumption heat metering of buildings supplied with DH  |                                       |  |
| Assist consumers in improved heat regulation and control, (building) heat cost allocation within apartment buildings supplied                       |                                       |  |
| Assist consumers in other building energy efficiency measures (other than heat regulation, control and building heat cost allocation to apartments) |                                       |  |
| Increase heat storage capacities  |                                       |  |
| Start or enhance the usage of geothermal energy (shallow or deep geothermal)  |                                       |  |
| Start or enhance the usage of waste heat or ambient heat sources (e.g. with heat pumps)   |                                       |  |
| Create sector coupling projects (with the electricity sector)   |                                       |  |
| Other (please specify)  |                                       |  |
|   |                                       |  |
| <i>2. Financing, communications, strategy</i>   |                                       |  |
| Utilising EU funding for energy efficiency projects in DH   |                                       |  |

| Activity  | Importance of this topic to your firm | Opportunity for you to talk to/learn from peers (through the REHEATEAST project), and cooperate in EU projects |
|---|---------------------------------------|--|
| Utilising EU funding for projects aimed at integrating renewable energy sources into DH |                                       |  |
| Engage consumers in energy saving activities  |                                       |  |
| Prevent DH consumers from leaving DH and using other types of heating                   |                                       |  |
| Billing consumers based on the actual metered heat consumption of their building        |                                       |  |
| Improve the image of DH and consumer satisfaction                                       |                                       |  |
| Advocate for more favourable regulations, financing conditions on the national level    |                                       |  |
| Other (please specify)  |                                       |  |

## Part 2 – Current situation

1) Number of DH clients (single choice):

- Above 10,000
- Between 3,000 and 10,000
- Below 3,000

2) Existing utilisation of renewable energy in your DH system (including waste heat):

- Yes
- No

3) Share of heat utilised purchased from third parties:

- 0%
- <25%
- 25-75%
- >75%

4) General numbers for 2023

Heat sales volume and breakdown (in GWh<sub>th</sub>):

|                                  | Residential | Municipal institutions | Other non-residential | Total |
|----------------------------------|-------------|------------------------|-----------------------|-------|
| Heat sales in the heating season |             |                        |                       |       |



|  |  |  |  |  |
|--|--|--|--|--|
| Heat sales outside of the heating season |  |  |  |  |
| Total heat sales                         |  |  |  |  |

Heat supply volume (in GWh<sub>th</sub>):

|   | Fossil fuel based | Renewables based | Waste heat utilisation | Total |
|---|-------------------|------------------|------------------------|-------|
| Heat supply in the heating season – hot water         |                   |                  |                        |       |
| Heat supply outside of the heating season – hot water |                   |                  |                        |       |
| Heat supply – steam                                   |                   |                  |                        |       |
| Total heat supply                                     |                   |                  |                        |       |

Heat customers volume and breakdown:

|  | Residential | Public and services | Industry and other non-residential | Total |
|--|-------------|---------------------|------------------------------------|-------|
| Total number of clients  |             |                     |                                    |       |
| Total number of buildings supplied   |             |                     |                                    |       |
| Total heated floor area (m <sup>2</sup> ) or air (m <sup>3</sup> )                   |             |                     |                                    |       |
| Total number of buildings with building-level heat consumption measured              |             |                     |                                    |       |
| Total number of buildings with (measured building) consumption-based billing         |             |                     |                                    |       |
| Total number of flats billed based on cost allocation (within residential buildings) |             |                     |                                    |       |
| Total number of flats supplied owned by the municipality                             |             |                     |                                    |       |

Key district heating capacities (assets) statistics:

|  |  |
|--|--|
| Total installed DH generation capacity (in MW <sub>th</sub> )                    |  |
| Length for transport and distribution network – hot water system (one way in km) |  |
| Length for transport and distribution network – steam system (one way in km)     |  |

|  |                        |
|--|------------------------|
| Available heat pump capacity in DH networks (in MW <sub>th</sub> )   |                        |
| Available thermal storage in DH networks (in MWh <sub>th</sub> )     |                        |
| Typical supply/return temperature levels (in °C) – hot water systems |                        |
| Typical forward flow steam parameters (in bar, °C) – steam systems   |                        |
| Heating substations by category (number of substations)              |                        |
|  | Compact                |
|  | Indirect               |
|  | Direct                 |
| Heat sold to customer group (in MWh <sub>th</sub> )                  |                        |
|  | Residential            |
|  | Municipal institutions |
|  | Other non-residential  |

5) How often are maintenance, repairs, and upgrades performed on the network?

|     |                                   |  |
|-----|-----------------------------------|--|
| i.  | Annual number of supply outages   |  |
| ii. | Typical duration of outage (days) |  |

6) What is the primary energy mix of thermal energy (heating and hot water), in percentage? What is the origin of these primary energy carriers (e.g. heat is produced from Russian imported gas etc.<sup>2</sup>)?

7) What is the carbon footprint (CO<sub>2</sub> equivalent) of the total heat production? In the case of cogeneration how much CO<sub>2</sub> is produced for heat energy?

8) What is the average energy rating/status of district-heated buildings?

9) Describe any ongoing initiatives to reduce heat loss and improve system efficiency.

---

<sup>2</sup> Each project partner should specify for their respective country and primary source. Additional examples include: heat is produced in a locally mined Bosnian coal fired power plant; heat is produced from landfill gas; heat is produced from straw biomass etc.

10) How is heat consumption measured and monitored within the DH network? To what extent is the accuracy of heat metering ensured, and how transparent is the billing process for customers? Are there ongoing initiatives aimed at enhancing these aspects?

11) How are digital technologies utilised for system monitoring, control, and optimisation?

12) In your opinion, how do these groups perceive DH (mark A-E):

a.

|   |               | Existing consumers       | General public           | Policy creators          |
|---|---------------|--------------------------|--------------------------|--------------------------|
| A | very positive | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| B | positive      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| C | neutral       | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| D | negative      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| E | very negative | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

b. If negative, what are the reasons for this, and what steps can be taken to address and improve the situation?

c. If positive, what factors contribute to this success, and how can these practices be replicated in other countries?

13) Is there sufficient knowledge and capacities for successful development of DH? If the answer is no, what specific skills need to be developed?

14) What advancements do you anticipate in DH within your company's operations? (you can mark more than one)

- Improved energy efficiency
- Increased use of renewable energy sources
- Enhanced digitalisation
- Other (please specify) \_\_\_\_\_

15) What fundamental changes are needed: technical, organisational, or financial, to improve existing DH systems? (you can mark more than one)

- Technical upgrades (if possible, specify: \_\_\_\_\_)
- Organisational restructuring (if possible, specify: \_\_\_\_\_)
- Financial investments (if possible, specify: \_\_\_\_\_)
- Other (please, specify) \_\_\_\_\_

16) Which individual heating solutions or technologies are currently considered more appealing than DH and why?

17) What are the primary drawbacks of DH systems compared to individual heating solutions? Why are potential consumers hesitant to connect to DH systems?

**Part 3 - Where do we want to be in 2030 and 2050? How will we get there?**

1) What will be the biggest challenges for DH in the [Name of the country]. Use marks from 1 to 9, where 1 represents the highest significance.

|   |  |
|---|--|
| A. Future lower demand                            |  |
| B. Transition from fossil fuels                   |  |
| C. Contribution to EU energy policies             |  |
| D. Setting the appropriate legal framework        |  |
| E. Persuasion of policymakers                     |  |
| F. Attracting new consumers, extension of network |  |
| G. Ensuring consumer loyalty                      |  |
| H. Transition/change of technologies              |  |
| I. Other (please specify): _____                  |  |

2) Which renewable energy sources are most suitable for use in the [Name of the country]'s DHC systems in your region?

3) What DHC development do you expect by 2030? And by 2050? (E.g. increase or drop of heat sale by \_\_\_%; share of renewables above \_\_\_ %, temperature levels supply/return \_\_\_ °C / \_\_\_ °C, etc.)

- 4) Name the most significant barriers to adopting new technologies in the DH sector.
- 5) What strategies are envisioned for adapting the DH infrastructure to accommodate forthcoming technological advancements?
- 6) Is there a need for regulatory or legislative support to accommodate the future expansion of the DHC sector? Please, describe.
- 7) Is there a need for additional incentive mechanisms for DHC? If the answer is yes, what form should these mechanisms take?

#### **Part 4 - Example of good practice at the local and/or regional level**

If you know of a successful district heating initiative in your area, please share it with us. We are seeking examples of good practices at the local and/or regional level that have positively impacted society, whether through environmental protection, economic development, enhanced user comfort, employment opportunities, or other means. These examples may involve developing, expanding, revitalising, or integrating renewables within DH. We're particularly interested in initiatives accelerating development, such as local community policies or plans, private-public partnerships, European/international programs, and similar endeavours. The initiative or system should ideally demonstrate outstanding qualities and have been operational after 2020. Additionally, we welcome information about specific local community plans or policies that have not yet been implemented in practice but hold promise for future positive impact.

# Annex 3: Survey template for policy makers

*Your participation in this survey is significant for the REHEATEAST project and would be greatly appreciated. The survey is dedicated to enhancing district heating and cooling (DHC) systems through integrating local renewable energy sources and waste heat and optimising DHC systems. As a crucial prerequisite, the project emphasises cross-sectoral collaboration among stakeholders to stimulate and bolster the implementation of large-scale building and system renovation programs, along with neighbourhood-level rehabilitation efforts.*

*This initiative seeks to explore the relevance and importance of various aspects to different stakeholder groups and to understand your expectations. Consequently, as part of our endeavour, we are gathering insights on stakeholders' perspectives regarding the current situation and future expectations concerning heating solutions, explicitly focusing on DHC and any exemplary practices you may be aware of.*

*Please be assured that all your responses will be treated confidentially and will not be shared with any external parties. Your input is invaluable to the success of this project, and we are deeply grateful for your participation.*

---

*The questionnaire consists of three parts.*

- 1) Your opinions and interests*
- 2) Where we are, where we strive and how to get there?*
- 2) Example of good practice*

*Please give concise answers.*

*Name of the organisation*

*Name of the person/position*

Location (city/region)

Contact (e-mail/phone no).

## Part 1 - Your opinions and interest

Please provide us with your opinion in each case by selecting the appropriate category from the single-choice menus with the following marks: 1= not relevant for us; 2= not important; 3= important; 4= very important; 5= I do not know.

| Activity  | Importance of this topic to your firm | Opportunity for you to talk to/learn from peers (through the REHEATEAST project), and cooperate in EU projects |
|---|---------------------------------------|--|
| <i>1. Technical fields</i>  |                                       |  |
| Decrease heat losses in heat generation   |                                       |  |
| Decrease heat losses in network operation   |                                       |  |
| Replace DH pipes to decrease heat losses  |                                       |  |
| Install digital technologies to decrease heat losses and operational costs of DH networks   |                                       |  |
| Install or improve consumption heat metering of buildings supplied with DH  |                                       |  |
| Assist consumers in improved heat regulation and control, (building) heat cost allocation within apartment buildings supplied                       |                                       |  |
| Assist consumers in other building energy efficiency measures (other than heat regulation, control and building heat cost allocation to apartments) |                                       |  |
| Increase heat storage capacities  |                                       |  |
| Start or enhance the usage of geothermal energy (shallow or deep geothermal)  |                                       |  |
| Start or enhance the usage of waste heat or ambient heat sources (e.g. with heat pumps)   |                                       |  |
| Create sector coupling projects (with the electricity sector)   |                                       |  |
| Other (please specify)  |                                       |  |
|   |                                       |  |
| <i>2. Financing, communications, strategy</i>   |                                       |  |
| Utilising EU funding for energy efficiency projects in DH   |                                       |  |
| Utilising EU funding for projects aimed at integrating  |                                       |  |

| Activity   | Importance of this topic to your firm | Opportunity for you to talk to/learn from peers (through the REHEATEAST project), and cooperate in EU projects |
|--|---------------------------------------|--|
| renewable energy sources into DH   |                                       |  |
| Engage consumers in energy saving activities   |                                       |  |
| Prevent DH consumers from leaving DH and using other types of heating                |                                       |  |
| Billing consumers based on the actual metered heat consumption of their building     |                                       |  |
| Improve the image of DH and consumer satisfaction                                    |                                       |  |
| Advocate for more favourable regulations, financing conditions on the national level |                                       |  |
| Other (please specify)   |                                       |  |

## Part 2 – Where we are, where we strive and how to get there?

- 1) Are there any specific policies or incentives to promote the expansion or improvement of DH systems?
- 2) Are there any regulatory barriers or challenges hindering the development of DH infrastructure? Describe.
- 3) What fundamental changes are needed, technical, organisational, or financial, to improve existing DH systems? (you can mark more than one)
  - Technical upgrades (if possible, specify: \_\_\_\_\_)
  - Organisational restructuring (if possible, specify: \_\_\_\_\_)
  - Financial investments (if possible, specify: \_\_\_\_\_)
  - Other (please, specify) \_\_\_\_\_
- 4) Is there a need for regulatory or legislative support to accommodate the future expansion of the DHC sector? Please describe.
- 5) Is there a need for additional incentive mechanisms for DHC? If yes, what form should these mechanisms take?
- 6) What emerging technologies do you anticipate will have the most significant impact on the DH sector?



7) In your opinion, how do these groups perceive DH (mark A-E)

a.

|   |               | Existing consumers       | General public           | Policy creators          |
|---|---------------|--------------------------|--------------------------|--------------------------|
| A | very positive | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| B | positive      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| C | neutral       | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| D | negative      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| E | very negative | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

b. If negative, what are the reasons for this, and what steps can be taken to address and improve the situation?

c. If positive, what factors contribute to this success, and how can these practices be replicated in other countries?

8) What will be the biggest challenges for DH in the [Name of the country]? Write the numbers from 1 to 9, where 1 represents the highest significance.

|   |  |
|---|--|
| A. Future lower demand                            |  |
| B. Transition from fossil fuels                   |  |
| C. Contribution to EU energy policies             |  |
| D. Setting the appropriate legal framework        |  |
| E. Persuasion of policymakers                     |  |
| F. Attracting new consumers, extension of network |  |
| G. Ensuring consumer loyalty                      |  |
| H. Transition/change of technologies              |  |
| I. Other (please specify): _____                  |  |

9) Which renewable energy sources are most suitable for use in the [Name of the country]'s DHC systems in your region?

10) What DHC development do you expect by 2030? And by 2050? (E.g. increase or drop of heat sale by \_\_\_%; share of renewables above \_\_\_ %, temperature levels supply/return \_\_\_°C / \_\_\_°C, etc.)

11) How are the DH systems financed and sustained?

12) Are there any financial challenges or constraints impacting the operation and maintenance of the system?

### **Part 3 - Example of good practice at the local and/or regional level**

If you know of a successful district heating initiative in your area, please share it with us. We are seeking examples of good practices at the local and/or regional level that have positively impacted society, whether through environmental protection, economic development, enhanced user comfort, employment opportunities, or other means. These examples may involve developing, expanding, revitalising, or integrating renewables within DH. We're particularly interested in initiatives accelerating development, such as local community policies or plans, private-public partnerships, European/international programs, and similar endeavours. The initiative or system should ideally demonstrate outstanding qualities and have been operational after 2020. Additionally, we welcome information about specific local community plans or policies that have not yet been implemented in practice but hold promise for future positive impact.

# Annex 4: Survey template for technology suppliers and contractors

*Your participation in this survey is significant for the REHEATEAST project and would be greatly appreciated. The survey is dedicated to enhancing district heating and cooling (DHC) systems through integrating local renewable energy sources and waste heat and optimising DHC systems. As a crucial prerequisite, the project emphasises cross-sectoral collaboration among stakeholders to stimulate and bolster the implementation of large-scale building and system renovation programs, along with neighbourhood-level rehabilitation efforts.*

*This initiative seeks to explore the relevance and importance of various aspects to different stakeholder groups and to understand your expectations. Consequently, as part of our endeavour, we are gathering insights on stakeholders' perspectives regarding the current situation and future expectations concerning heating solutions, explicitly focusing on DHC and any exemplary practices you may be aware of.*

*Please be assured that all your responses will be treated confidentially and will not be shared with any external parties. Your input is invaluable to the success of this project, and we are deeply grateful for your participation.*

---

*The questionnaire consists of three parts.*

- 1) Your opinions and interests*
- 2) Where we are, where we strive and how to get there?*
- 2) Example of good practice*

*Please give concise answers.*

*Name of the organisation*

*Name of the person/position*

Location (city/region)

Contact (e-mail/phone no).

## Part 1 - Your opinions and interest

Please provide us with your opinion in each case by selecting the appropriate category from the single-choice menus with the following marks: 1= not relevant for us; 2= not important; 3= important; 4= very important; 5= I do not know.

| Activity  | Importance of this topic to your firm | Opportunity for you to talk to/learn from peers (through the REHEATEAST project), and cooperate in EU projects |
|---|---------------------------------------|--|
| <i>1. Technical fields</i>  |                                       |  |
| Decrease heat losses in heat generation   |                                       |  |
| Decrease heat losses in network operation   |                                       |  |
| Replace DH pipes to decrease heat losses  |                                       |  |
| Install digital technologies to decrease heat losses and operational costs of DH networks   |                                       |  |
| Install or improve consumption heat metering of buildings supplied with DH  |                                       |  |
| Assist consumers in improved heat regulation and control, (building) heat cost allocation within apartment buildings supplied                       |                                       |  |
| Assist consumers in other building energy efficiency measures (other than heat regulation, control and building heat cost allocation to apartments) |                                       |  |
| Increase heat storage capacities  |                                       |  |
| Start or enhance the usage of geothermal energy (shallow or deep geothermal)  |                                       |  |
| Start or enhance the usage of waste heat or ambient heat sources (e.g. with heat pumps)   |                                       |  |
| Create sector coupling projects (with the electricity sector)   |                                       |  |
| Other (please specify)  |                                       |  |
|   |                                       |  |
| <i>2. Financing, communications, strategy</i>   |                                       |  |

| Activity  | Importance of this topic to your firm | Opportunity for you to talk to/learn from peers (through the REHEATEAST project), and cooperate in EU projects |
|---|---------------------------------------|--|
| Utilising EU funding for energy efficiency projects in DH                               |                                       |  |
| Utilising EU funding for projects aimed at integrating renewable energy sources into DH |                                       |  |
| Engage consumers in energy saving activities  |                                       |  |
| Prevent DH consumers from leaving DH and using other types of heating                   |                                       |  |
| Billing consumers based on the actual metered heat consumption of their building        |                                       |  |
| Improve the image of DH and consumer satisfaction                                       |                                       |  |
| Advocate for more favourable regulations, financing conditions on the national level    |                                       |  |
| Other (please specify)  |                                       |  |

## Part 2 - Where we are, where we strive and how to get there?

- 1) Are there any ongoing or planned technological innovations in the DH sector?
- 2) How are digital technologies being utilized to optimize DH operations and efficiency?
- 3) Are there any barriers to adopting new technologies in the DH sector?
- 4) What strategies are envisioned for adapting the DH infrastructure to accommodate forthcoming technological advancements?
- 5) Are there any research and development initiatives focused on advancing DH technologies?
- 6) What emerging technologies do you anticipate will have the most significant impact on the DH sector?
- 7) Are there any regulatory barriers or challenges hindering the development of DH infrastructure? Describe.
- 8) What fundamental changes are needed, technical, organisational, or financial, to improve existing DH systems? (you can mark more than one)
  - Technical upgrades (if possible, specify: \_\_\_\_\_)

- Organisational restructuring (if possible, specify: \_\_\_\_\_)
- Financial investments (if possible, specify: \_\_\_\_\_)
- Other (please, specify) \_\_\_\_\_

9) Is there a need for regulatory or legislative support to accommodate the future expansion of the DHC sector? Please describe.

10) Is there a need for additional incentive mechanisms for DHC? If the answer is yes, what form should these mechanisms take?

11) In your opinion, how do these groups perceive DH (mark A-E)

a.

|   |               | Existing consumers       | General public           | Policy creators          |
|---|---------------|--------------------------|--------------------------|--------------------------|
| A | very positive | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| B | positive      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| C | neutral       | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| D | negative      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| E | very negative | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

a. If negative, what are the reasons for this, and what steps can be taken to address and improve the situation?

b. If positive, what factors contribute to this success, and how can these practices be replicated in other countries?

12) What will be the biggest challenges for DH in the [Name of the country] in 2030? Write the numbers from 1 to 9, where 1 represents the highest significance.

|  |  |
|--|--|
| A. Future lower demand                     |  |
| B. Transition from fossil fuels            |  |
| C. Contribution to EU energy policies      |  |
| D. Setting the appropriate legal framework |  |

|   |  |
|---|--|
| E. Persuasion of policymakers                     |  |
| F. Attracting new consumers, extension of network |  |
| G. Ensuring consumer loyalty                      |  |
| H. Transition/change of technologies              |  |
| I. Other (please specify): _____                  |  |

13) Which renewable energy sources are most suitable for use in the [Name of the country]'s DHC systems in your region?

14) What DHC development do you expect by 2030? And by 2050? (E.g. increase or drop of heat sale by \_\_\_%; share of renewables above \_\_\_ %, temperature levels supply/return \_\_\_°C / \_\_\_°C, etc.)

15) How do you collaborate with industry partners, research institutions, and other stakeholders to drive technical innovation?

### Part 3 - Example of good practice at the local and/or regional level

If you know of a successful district heating initiative in your area, please share it with us. We are seeking examples of good practices at the local and/or regional level that have positively impacted society, whether through environmental protection, economic development, enhanced user comfort, employment opportunities, or other means. These examples may involve developing, expanding, revitalising, or integrating renewables within DH. We're particularly interested in initiatives accelerating development, such as local community policies or plans, private-public partnerships, European/international programs, and similar endeavours. The initiative or system should ideally demonstrate outstanding qualities and have been operational after 2020. Additionally, we welcome information about specific local community plans or policies that have not yet been implemented in practice but hold promise for future positive impact.

# Annex 5: Survey template for financiers and investors

*Your participation in this survey is significant for the REHEATEAST project and would be greatly appreciated. The survey is dedicated to enhancing district heating and cooling (DHC) systems through integrating local renewable energy sources and waste heat and optimising DHC systems. As a crucial prerequisite, the project emphasises cross-sectoral collaboration among stakeholders to stimulate and bolster the implementation of large-scale building and system renovation programs, along with neighbourhood-level rehabilitation efforts.*

*This initiative seeks to explore the relevance and importance of various aspects to different stakeholder groups and to understand your expectations. Consequently, as part of our endeavour, we are gathering insights on stakeholders' perspectives regarding the current situation and future expectations concerning heating solutions, explicitly focusing on DHC and any exemplary practices you may be aware of.*

*Please be assured that all your responses will be treated confidentially and will not be shared with any external parties. Your input is invaluable to the success of this project, and we are deeply grateful for your participation.*

---

*The questionnaire consists of two parts.*

- 1) Where we are, where we strive and how to get there?*
- 2) Example of good practice*

*Please give concise answers.*

*Name of the organisation*

*Name of the person/position*

*Location (city/region)*



Contact (e-mail/phone no).

|  |
|--|
|  |
|--|

**Part 1 – Where we are, where we strive and how to get there?**

- 1) Is your institution interested in DHC sector as a financial market?
- 2) How are the DH systems financed and sustained?
- 3) What kind of DHC projects can be considered for your financing (new facility, reconstruction, significant decarbonization benefits, investment size, large infrastructure project etc.)?
- 4) What types of securities or collateral would projects need to be eligible for financing?
- 5) Are there any regulatory barriers or challenges hindering the development of DH infrastructure? Describe.
- 6) What fundamental financial investments are needed to improve existing DH systems?
- 7) Is there a need for regulatory or legislative support to accommodate the future expansion of the DHC sector? Please describe.
- 8) What will be the biggest challenges for DH in the [\[Name of the country\]](#)? Write the numbers from 1 to 9, where 1 represents the most tremendous significance.

|   |  |
|---|--|
| A. Future lower demand                            |  |
| B. Transition from fossil fuels                   |  |
| C. Contribution to EU energy policies             |  |
| D. Setting the appropriate legal framework        |  |
| E. Persuasion of policymakers                     |  |
| F. Attracting new consumers, extension of network |  |
| G. Ensuring consumer loyalty                      |  |
| H. Transition/change of technologies              |  |

|                                  |  |
|----------------------------------|--|
| I. Other (please specify): _____ |  |
|----------------------------------|--|

## Part 2 - Example of good practice at the local and/or regional level

If you know of a successful district heating initiative in your area, please share it with us. We are seeking examples of good practices at the local and/or regional level that have positively impacted society, whether through environmental protection, economic development, enhanced user comfort, employment opportunities, or other means. These examples may involve developing, expanding, revitalising, or integrating renewables within DH. We're particularly interested in initiatives accelerating development, such as local community policies or plans, private-public partnerships, European/international programs, and similar endeavours. The initiative or system should ideally demonstrate outstanding qualities and have been operational after 2020. Additionally, we welcome information about specific local community plans or policies that have not yet been implemented in practice but hold promise for future positive impact.

# Annex 6: Survey template for consumers (and media)

*Your participation in this survey is significant for the REHEATEAST project and would be greatly appreciated. The survey is dedicated to enhancing district heating and cooling (DHC) systems through integrating local renewable energy sources and waste heat and optimising DHC systems. As a crucial prerequisite, the project emphasises cross-sectoral collaboration among stakeholders to stimulate and bolster the implementation of large-scale building and system renovation programs, along with neighbourhood-level rehabilitation efforts.*

*This initiative seeks to explore the relevance and importance of various aspects to different stakeholder groups and to understand your expectations. Consequently, as part of our endeavour, we are gathering insights on stakeholders' perspectives regarding the current situation and future expectations concerning heating solutions, explicitly focusing on DHC and any exemplary practices you may be aware of.*

*Please be assured that all your responses will be treated confidentially and will not be shared with any external parties. Your input is invaluable to the success of this project, and we are deeply grateful for your participation.*

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*The questionnaire consists of two parts.*

- 1) Where we are, where we strive and how to get there?*
- 2) Example of good practice*

*Please give concise answers.*

*Name and surname*

*Location (city/region)*

*Contact (e-mail/phone no).*

## Part 1 – Where we are, where we strive and how to get there?

- 1) Do you have an interest in learning more about DHC?
- 2) Are you interested in being informed about ongoing initiatives and refurbishments of DHC?
- 3) Is there a need for additional incentive mechanisms for DHC? If yes, what form should these mechanisms take?

- 4) How do you perceive the service of DH (mark A-E)

a.

- |   |               |                          |
|---|---------------|--------------------------|
| A | very positive | <input type="checkbox"/> |
| B | positive      | <input type="checkbox"/> |
| C | neutral       | <input type="checkbox"/> |
| D | negative      | <input type="checkbox"/> |
| E | very negative | <input type="checkbox"/> |

b. If negative, what are the reasons for this, and what steps can be taken to address and improve the situation?

c. If positive, what factors contribute to this success?

- 5) As a user of DHC services, are there any particular issues or worries you have?
- 6) Have you ever experienced any disruptions or outages in your DHC services? If yes, how were they addressed and resolved?
- 7) How would you rate the accessibility and transparency of information provided by your DHC service provider?

a.

- |   |           |                          |
|---|-----------|--------------------------|
| A | excellent | <input type="checkbox"/> |
| B | good      | <input type="checkbox"/> |
| C | neutral   | <input type="checkbox"/> |

D      poor     

E      very poor     

b. If poor or worse, why is that so and how can it be improved?

8) How important is it for you that DHC systems utilize renewable energy sources?

## **Part 2 - Example of good practice at the local and/or regional level**

If you know of a success story in the field of district heating, please share it with us. We are looking for examples of successful initiatives or advancements in the district heating and cooling systems that have been beneficial for you or someone in your community. Describe how such good example(s) improved daily life, comfort, the environment, or community development. The described example needs to be in operation after 2020.

# Annex 7: List of stakeholders

| Country                | Name of the organization                                | Stakeholder group            |
|------------------------|---|------------------------------|
| Bosnia and Herzegovina | Centralno grijanje d.d.Tuzla                            | Heat producers and utilities |
| Bosnia and Herzegovina | JP "Grijanje" d.o.o. Kakanj                             | Heat producers and utilities |
| Bosnia and Herzegovina | KJKP „Toplane - Sarajevo“ d.o.o.                        | Heat producers and utilities |
| Bosnia and Herzegovina | Eko toplane Banjaluka                                   | Heat producers and utilities |
| Bosnia and Herzegovina | JP "Rad" d.o.o. Lukavac                                 | Heat producers and utilities |
| Bosnia and Herzegovina | Javno preduzeće "GRIJANJE" d.o.o. Zenica                | Heat producers and utilities |
| Bosnia and Herzegovina | JP Elektroprivreda BiH d.d. Sarajevo                    | Heat producers and utilities |
| Bosnia and Herzegovina | City of Tuzla   | Authorities and regulators   |
| Bosnia and Herzegovina | City of Kakanj  | Authorities and regulators   |
| Bosnia and Herzegovina | City of Banja Luka                                      | Authorities and regulators   |
| Bosnia and Herzegovina | City of Lukavac   | Authorities and regulators   |
| Bosnia and Herzegovina | City of Zenica  | Authorities and regulators   |
| Bosnia and Herzegovina | Sarajevo Canton   | Authorities and regulators   |
| Bosnia and Herzegovina | European Bank for Reconstruction and Development (EBRD) | Financiers and investors     |
| Bulgaria               | EVN Toplofikatsia                                       | Heat producers and utilities |
| Bulgaria               | EVN Toplofikatsia                                       | Heat producers and utilities |

| Country  | Name of the organization                          | Stakeholder group            |
|----------|---|------------------------------|
| Bulgaria | Veolia Energy Varna                               | Heat producers and utilities |
| Bulgaria | Toplofikatsia Sliven                              | Heat producers and utilities |
| Bulgaria | Toplofikatsia Sofia*Municipality is the owner     | Heat producers and utilities |
| Bulgaria | Bansko District Heatig *Municipality is the owner | Heat producers and utilities |
| Bulgaria | Energy and Water Regulatory Commission            | Authorities and regulators   |
| Bulgaria | BULGARIAN DISTRICT HEATING ASSOCIATION            | Authorities and regulators   |
| Bulgaria | Sofia Municipality/ Municipal Council             | Authorities and regulators   |
| Bulgaria | Shneider electric                                 | Technology suppliers         |
| Bulgaria | Siemens   | Technology suppliers         |
| Bulgaria | Danfoss   | Technology suppliers         |
| Bulgaria | Ruvex   | Contractors                  |
| Bulgaria | Eurosys   | Contractors                  |
| Bulgaria | Bulgarian Development Bank                        | Financiers and investors     |
| Bulgaria | EIB   | Financiers and investors     |
| Bulgaria | Energy Efficiency and Renewable Sources Fund      | Financiers and investors     |
| Bulgaria | Fund manager of financial instruments in Bulgaria | Financiers and investors     |
| Bulgaria | Energy Management Institute (EMI)                 | Financiers and investors     |
| Bulgaria | Energy Management Institute (EMI)                 | Authorities and regulators   |
| Bulgaria | 3e-news - online media                            | Media                        |

| Country  | Name of the organization                                       | Stakeholder group            |
|----------|--|------------------------------|
| Bulgaria | Capital  | Media                        |
| Bulgaria | Capital  | Media                        |
| Bulgaria | Publics / Utilities - magazines                                | Media                        |
| Croatia  | TE-TO Zagreb   | Heat producers and utilities |
| Croatia  | EL-TO Zagreb   | Heat producers and utilities |
| Croatia  | TE-TO and BE-TO Osijek   | Heat producers and utilities |
| Croatia  | TE and BE-TO Sisak   | Heat producers and utilities |
| Croatia  | Toplana Cara Hadrijana   | Heat producers and utilities |
| Croatia  | HEP Group (Hrvatska Elektroprivreda)                           | Heat producers and utilities |
| Croatia  | HEP Toplinarstvo   | Heat producers and utilities |
| Croatia  | HEP-ESCO Ltd   | Heat producers and utilities |
| Croatia  | Croatian Energy Market Operator Ltd. (HROTE)                   | Heat producers and utilities |
| Croatia  | Government of the Republic of Croatia                          | Authorities and regulators   |
| Croatia  | Croatian Chamber of Economy; Association for Energy Efficiency | Authorities and regulators   |
| Croatia  | Ministry of Economy and Sustainable Development                | Authorities and regulators   |
| Croatia  | Ministry of Physical Planning, Construction and State Assets   | Authorities and regulators   |
| Croatia  | City of Zagreb   | Authorities and regulators   |
| Croatia  | City of Rijeka   | Authorities and regulators   |
| Croatia  | City of Osijek   | Authorities and regulators   |



| Country | Name of the organization                                | Stakeholder group            |
|---------|---|------------------------------|
| Croatia | City of Sisak   | Authorities and regulators   |
| Croatia | Croatian Energy Regulatory Agency (HERA)                | Authorities and regulators   |
| Croatia | Regional Energy Agency Kvarner                          | Authorities and regulators   |
| Croatia | North-West Croatia Regional Energy and Climate Agency   | Authorities and regulators   |
| Croatia | Croatian Bank for Reconstruction and Development (HBOR) | Financiers and investors     |
| Croatia | The Environmental Protection and Energy Efficiency Fund | Financiers and investors     |
| Croatia | Croatian Financial Services Supervisory Agency          | Financiers and investors     |
| Croatia | Siemens Energy d.o.o.                                   | Technology suppliers         |
| Croatia | Mitsubishi Power Europe GmbH                            | Technology suppliers         |
| Croatia | Vaillant Croatia  | Technology suppliers         |
| Croatia | ABB Croatia   | Technology suppliers         |
| Croatia | Danfoss Croatia   | Technology suppliers         |
| Croatia | Končar Group  | Contractors                  |
| Croatia | Dalekovod Group   | Contractors                  |
| Croatia | Zgradonačelnik  | Media                        |
| Croatia | Energetika Marketing                                    | Media                        |
| Hungary | Komlói Fűtőerőmű Zrt.                                   | Heat producers and utilities |
| Hungary | Régióhő Kft.  | Heat producers and utilities |
| Hungary | Sárvári Városgondnokság Nonprofit Kft.                  | Heat producers and utilities |

| Country | Name of the organization   | Stakeholder group            |
|---------|--|------------------------------|
| Hungary | Kaposvári Önkormányzati Vagyonkezelő és Szolgáltató Zrt. (Kaposvári Távhő)     | Heat producers and utilities |
| Hungary | Magyar Távhőszolgáltatók Szakmai Szövetsége                                    | Heat producers and utilities |
| Hungary | Megyei Jogú Városok Szövetsége   | Authorities and regulators   |
| Hungary | Budapesti Műszaki és Gépészeti Egyetem   | Technology suppliers         |
| Hungary | ABUD Mérnöki Iroda   | Technology suppliers         |
| Hungary | ÉMI Építésügyi Minőségellenőrző Innovációs Nonprofit Kft.                      | Technology suppliers         |
| Hungary | FEAK Független Energetikai Adatközpont   | Technology suppliers         |
| Hungary | Veresegyházi Városgazda Kft. (Veresegyházi Hőszolgáltató)                      | Heat producers and utilities |
| Hungary | Bóly Város Önkormányzata (önkormányzati épületek geotermikus fűtési rendszere) | Heat producers and utilities |
| Hungary | Pannergy   | Technology suppliers         |
| Hungary | SzeTáv - Szegedi Távfűtő Kft.  | Heat producers and utilities |
| Hungary | SzVSz Kft - Szentes Városi Szolgáltató KFT                                     | Heat producers and utilities |
| Hungary | Nyírtávhő - Nyíregyházi Távhőszolgáltató Kft.                                  | Heat producers and utilities |
| Hungary | Techem Kft. (cost distribution)  | Technology suppliers         |
| Hungary | ista Magyarország Kft. (cost distribution)                                     | Technology suppliers         |
| Hungary | Intherm Kft.   | Technology suppliers         |
| Hungary | MEHI Magyar Energiahatékonysági Intézet Közhasznú Nonprofit Kft.               | Authorities and regulators   |
| Hungary | Pannon Hőerőmű Zrt.  | Heat producers and utilities |
| Hungary | PÉTÁV  | Heat producers and utilities |

| Country            | Name of the organization                               | Stakeholder group            |
|--------------------|--|------------------------------|
| Hungary            | PTE MIK  | Technology suppliers         |
| Hungary            | Magyar Geotermális Egyesület                           | Technology suppliers         |
| Republic of Serbia | Energetika Kragujevac doo                              | Heat producers and utilities |
| Republic of Serbia | Public Utility "Toplana" Priboj                        | Heat producers and utilities |
| Republic of Serbia | Public Utility Company „Majdanpek“                     | Heat producers and utilities |
| Republic of Serbia | Public Utility Company "Toplana" Šabac                 | Heat producers and utilities |
| Republic of Serbia | Public Utility Company "Grejanje" Pančevo              | Heat producers and utilities |
| Republic of Serbia | Public Utility Company "Gradska toplana" Novi Pazar    | Heat producers and utilities |
| Republic of Serbia | Public Utility Company "Gradska toplana" Niš           | Heat producers and utilities |
| Republic of Serbia | Public Utility Company "Beogradske elektrane" Beograd  | Heat producers and utilities |
| Republic of Serbia | Public Utility Company "Novosadska toplana" Novi Sad   | Heat producers and utilities |
| Republic of Serbia | "Subotička toplana" ad Subotica                        | Heat producers and utilities |
| Republic of Serbia | Public Utility Company "Toplana" Bor                   | Heat producers and utilities |
| Republic of Serbia | Public Utility Company "Bogatić" Bogatić               | Heat producers and utilities |
| Republic of Serbia | Ministry of Mining and Energy                          | Authorities and regulators   |
| Republic of Serbia | Ministry of Construction, Transport and Infrastructure | Authorities and regulators   |
| Republic of Serbia | City of Kragujevac                                     | Authorities and regulators   |
| Republic of Serbia | Municipality of Priboj                                 | Authorities and regulators   |
| Republic of Serbia | Municipality of Majdanpek                              | Authorities and regulators   |

| Country            | Name of the organization                                | Stakeholder group          |
|--------------------|---|----------------------------|
| Republic of Serbia | City of Šabac   | Authorities and regulators |
| Republic of Serbia | City of Pančevo   | Authorities and regulators |
| Republic of Serbia | City of Novi Pazar                                      | Authorities and regulators |
| Republic of Serbia | City of Niš   | Authorities and regulators |
| Republic of Serbia | City of Belgrade  | Authorities and regulators |
| Republic of Serbia | City of Novi Sad  | Authorities and regulators |
| Republic of Serbia | City of Bor   | Authorities and regulators |
| Republic of Serbia | Municipality of Bogatić                                 | Authorities and regulators |
| Republic of Serbia | City of Subotica  | Authorities and regulators |
| Republic of Serbia | Serbian Chamber of Commerce and Industry                | Authorities and regulators |
| Republic of Serbia | Business association "Toplane Serbia"                   | Authorities and regulators |
| Republic of Serbia | European Bank for Reconstruction and Development (EBRD) | Financiers and investors   |
| Republic of Serbia | UNDP  | Financiers and investors   |
| Republic of Serbia | GEFF Serbia   | Financiers and investors   |
| Republic of Serbia | KfW office Serbia                                       | Financiers and investors   |
| Republic of Serbia | Efektiva - Consumer organization                        | Consumers                  |
| Republic of Serbia | National consumer organization of Serbia                | Consumers                  |
| Republic of Serbia | Resalta Serbia  | Contractors                |
| Republic of Serbia | Faculty of Mechanical Engineering Niš                   | Technology suppliers       |

| Country            | Name of the organization   | Stakeholder group            |
|--------------------|--|------------------------------|
| Republic of Serbia | Faculty of Mining and Geology Belgrade   | Technology suppliers         |
| Republic of Serbia | PET - Platform for Energy Transition   | Technology suppliers         |
| Republic of Serbia | Balkan Green Energy News   | Media                        |
| Republic of Serbia | Energy Portal  | Media                        |
| Romania            | S.C. Termoficare Napoca S.A  | Heat producers and utilities |
| Romania            | S.C. BEPCO SRL Brasov  | Heat producers and utilities |
| Romania            | S.C. Goscom SA Miercurea Ciuc  | Heat producers and utilities |
| Romania            | The Public Thermal Energy Supply Service in the Centralized System in the Municipality of Făgăraș (S.P.A.E.T.) | Heat producers and utilities |
| Romania            | Colterm SA Timisoara   | Heat producers and utilities |
| Romania            | Oradea City Hall   | Authorities and regulators   |
| Romania            | AIIR - Romanian Association for Installations Engineers  | Authorities and regulators   |
| Romania            | Alba Loca Energy Agency (ALEA)   | Authorities and regulators   |
| Romania            | Beius City Hall  | Authorities and regulators   |
| Romania            | Cluj -Napoca City Hall   | Authorities and regulators   |
| Romania            | Romanian Energy Regulatory Authority (ANRE)  | Authorities and regulators   |
| Romania            | RVS Energy Romania SRL   | Technology suppliers         |
| Romania            | TBE Technology SRL   | Technology suppliers         |
| Romania            | Transgex SA  | Technology suppliers         |

| Country | Name of the organization                                    | Stakeholder group        |
|---------|---|--------------------------|
| Romania | Unicool Instalatii frig SRL                                 | Technology suppliers     |
| Romania | Hoval Romania   | Technology suppliers     |
| Romania | Kan-Therm Romania   | Technology suppliers     |
| Romania | Danfoss Romania   | Technology suppliers     |
| Romania | Alpha Innotec   | Technology suppliers     |
| Romania | S.C. Intelterm Consulting S.R.L                             | Contractors              |
| Romania | S.C. Megamix ComImpex SRL                                   | Contractors              |
| Romania | Banca Transilvania SA                                       | Financiers and investors |
| Romania | Nova Power and gas SRL                                      | Financiers and investors |
| Romania | Plastor SA  | Consumers                |
| Romania | Colegiul De Muzică „Sigismund Toduță” Cluj-Napoca           | Consumers                |
| Romania | The National Pedagogical College Gheorghe Lazar Cluj-Napoca | Consumers                |
| Romania | Technological Lyceum Alexandru Borza Cluj-Napoca            | Consumers                |
| Romania | Little Prince Kindergarten Cluj-Napoca                      | Consumers                |
| Romania | Press One   | Media                    |
| Romania | Buzz Reporter   | Media                    |
| Romania | Energynomics  | Media                    |
| Romania | Energy report   | Media                    |
| Romania | Economedia  | Media                    |

| Country  | Name of the organization   | Stakeholder group            |
|----------|--|------------------------------|
| Slovakia | MH Teplárenský holding, a.s.   | Heat producers and utilities |
| Slovakia | Slovenský plynárenský priemysel, a.s.  | Heat producers and utilities |
| Slovakia | Ekofond SPP, n.o.  | Heat producers and utilities |
| Slovakia | Košičká energetická spoločnosť, a.s.   | Heat producers and utilities |
| Slovakia | EMKOBEL, a. s.   | Heat producers and utilities |
| Slovakia | Bytové hospodárstvo Sečovce, s.r.o.,   | Heat producers and utilities |
| Slovakia | Tepelné hospodárstvo Moldava, a.s.   | Heat producers and utilities |
| Slovakia | TEPELNÉ HOSPODÁRSTVO s.r.o. Košice   | Heat producers and utilities |
| Slovakia | Veolia Energia Východné Slovensko, s.r.o.  | Heat producers and utilities |
| Slovakia | Veolia Energia Kráľovský Chlmec, s.r.o.  | Heat producers and utilities |
| Slovakia | Ministry of Investments, Regional Development and Informatization of the Slovak Republic | Authorities and regulators   |
| Slovakia | Ministry of Economy of the Slovak Republic   | Authorities and regulators   |
| Slovakia | The Regulatory Office for Network Industries (URSO)                                      | Authorities and regulators   |
| Slovakia | CASSOVIA BIO ENERGY, s.r.o.  | Financiers and investors     |
| Slovakia | ECONS ENERGY, a.s.   | Financiers and investors     |
| Slovakia | Marketing division of the municipality of Košice   | Media                        |
| Slovakia | Municipality of Košice   | Consumers                    |
| Slovakia | City of Košice   | Consumers                    |
| Slovakia | Technical university in Košice   | Educational institutions     |

| Country  | Name of the organization  | Stakeholder group            |
|----------|---|------------------------------|
| Slovakia | Pavol Jozef Šafárik university in Košice                        | Educational institutions     |
| Slovakia | Robert Bosch, spol. s r.o.                                      | Contractors                  |
| Slovakia | KOSIT a.s.  | Contractors                  |
| Slovenia | ENERGETIKA LJUBLJANA d. o. o.                                   | Heat producers and utilities |
| Slovenia | KOMUNALA MS, d.o.o.   | Heat producers and utilities |
| Slovenia | Petrol d.d.   | Heat producers and utilities |
| Slovenia | Municipality Kuzma  | Authorities and regulators   |
| Slovenia | Municipality Murska Sobota                                      | Authorities and regulators   |
| Slovenia | Municipality Moravske Toplice                                   | Authorities and regulators   |
| Slovenia | Municipality Lendava  | Authorities and regulators   |
| Slovenia | Municipality Dobrovnik  | Authorities and regulators   |
| Slovenia | Municipality Beltinci   | Consumers                    |
| Slovenia | Municipality Cankova  | Consumers                    |
| Slovenia | Local Energy Agency Dolenjska, Posavje, Bela krajina (LEAD)     | Authorities and regulators   |
| Slovenia | Goriška Local Energy Agency (GOLEA)                             | Authorities and regulators   |
| Slovenia | Energy and Climate Agency of Podravje (ENERGAP)                 | Authorities and regulators   |
| Slovenia | Energy Agency of Savinjska, Šaleška and Koroška region (KSSENA) | Authorities and regulators   |
| Slovenia | Local Energy Agency Spodnje Podravje (LEA Spodnje Podravje)     | Authorities and regulators   |
| Slovenia | Local Energy Agency of Gorenjska (LEAG)                         | Authorities and regulators   |



| Country  | Name of the organization   | Stakeholder group            |
|----------|--|------------------------------|
| Slovenia | TV AS  | Media                        |
| Slovenia | TV IDEA - kanal 10 d.o.o.  | Media                        |
| Slovenia | Development Council of the Pomurje region (RSR)                  | Authorities and regulators   |
| Slovenia | Council of Pomurje region (Svet Regije Pomurja)                  | Authorities and regulators   |
| Slovenia | Association of Municipalities and Towns of Slovenia (SOS)        | Authorities and regulators   |
| Slovenia | Ministry of the Environment, Climate and Energy                  | Authorities and regulators   |
| Slovenia | FISA d.o.o.  | Consumers                    |
| Slovenia | Solar cooperative, green energy                                  | Contractors                  |
| Slovenia | RE ing - Rational Energy engineerING                             | Technology suppliers         |
| Slovenia | REŽONJA d.o.o.   | Technology suppliers         |
| Slovenia | Borzen d.o.o.  | Financiers and investors     |
| Slovenia | Biohica d.o.o.   | Heat producers and utilities |
| Slovenia | Dom Kuzma d.o.o.   | Consumers                    |
| Slovenia | Ministry of Infrastructure                                       | Authorities and regulators   |
| Slovenia | Eco Fund, Slovenian Environmental Public Fund                    | Financiers and investors     |
| Slovenia | Agencija za energijo   | Authorities and regulators   |
| Slovenia | Energetika Celje   | Heat producers and utilities |
| Slovenia | Sekcija za daljinsko ogrevanje pri Energetski zbornici Slovenije | Authorities and regulators   |
| Slovenia | Občina s SDO - Železniki   | Authorities and regulators   |

| Country  | Name of the organization                               | Stakeholder group            |
|----------|--|------------------------------|
| Slovenia | Občina s SDO - Velenje                                 | Authorities and regulators   |
| Slovenia | Občina s SDO - Nova Gorica                             | Authorities and regulators   |
| Slovenia | Občina s SDO - Maribor                                 | Authorities and regulators   |
| Slovenia | Association of Urban Municipalities of Slovenia (ZMOS) | Authorities and regulators   |
| Slovenia | Občina s SDO - Kranj                                   | Authorities and regulators   |
| Slovenia | Občina s SDO - Hrastnik                                | Authorities and regulators   |
| Slovenia | Javni stanovanjski sklad MOL                           | Authorities and regulators   |
| Slovenia | The Association of Municipalities of Slovenia          | Authorities and regulators   |
| Slovenia | Stanovanjski sklad RS                                  | Consumers                    |
| Slovenia | TABOR upravljanje in vzdrževanje d.o.o.                | Consumers                    |
| Slovenia | Biomasa d.o.o.   | Contractors                  |
| Slovenia | Resalta d.o.o.   | Contractors                  |
| Slovenia | ELES, d.o.o.   | Contractors                  |
| Slovenia | ADDIKO Banka   | Financiers and investors     |
| Slovenia | SKB Banka  | Financiers and investors     |
| Slovenia | NKBM   | Financiers and investors     |
| Slovenia | SID Banka  | Financiers and investors     |
| Slovenia | Komunala Slovenj Gradec d.o.o.                         | Heat producers and utilities |
| Slovenia | Interenergo d.o.o., Ekoenergo d.o.o.                   | Heat producers and utilities |

| Country  | Name of the organization  | Stakeholder group            |
|----------|---|------------------------------|
| Slovenia | Domplan   | Heat producers and utilities |
| Slovenia | Montel Energetika.NET d.o.o.  | Media                        |
| Slovenia | Kronoterm   | Technology suppliers         |
| Slovenia | Knauf Insulation  | Technology suppliers         |
| Slovenia | Gospodarska zbornica Slovenije - Zbornica gradbeništva in industrije gradbenega materiala | Contractors                  |
| Slovenia | Umanotera - Slovenska fundacija za trajnostni razvoj                                      | Media                        |