



Stratego

ENHANCED HEATING
& COOLING PLANS

Lessons and best practice from the Stratego Project Work Package 4:

International coaching to support local delivery of
heating and cooling plans



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STRATEGO (Multi-level actions for enhanced Heating & Cooling plans) is an Intelligent Energy Europe project which aims to support national authorities to draft their National Heating and Cooling Plans (NHCP), alongside developing the capacities at the local level to put these plans into practice.

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Introduction

The Stratego project aims to support the development of effective national and local heating and cooling plans. This means not only supporting development of informed and evidenced plans, but also building the capacities of local and national authorities for putting these plans into action. This report summarises lessons and best practice from activities in work package 4 of the Stratego project. Under this work package, activities focused on the latter of these challenges: capacity and skills development of local authorities for effective delivery of local heating and cooling plans through a series of international coaching sessions. The work package also worked to establish productive dialogue between local and national authorities, seeking to encourage sharing of experiences and perspectives from different levels of government.

About this report

This report aims to highlight general lessons and advice for practitioners seeking to support delivery of strategic heating and cooling plans in their own local, regional or national area. It draws on evaluations of the international coaching activities undertaken by each of the project partners, as well as experiences of partners taking part in meetings between local and national authorities.

This report focuses on lessons and best practice examples from the international coaching process. An overview of the coaching process undertaken within the Stratego project is given, followed by suggestions for practitioners wishing to deliver similar coaching sessions. These suggestions cover issues such as identifying the stakeholders that should be invited to participate in a coaching process, a suggested coaching programme, useful facilitation questions to support discussions, and potential focus topics which should be determined in partnership with participants.



International coaching to support local delivery of heating and cooling plans

In many instances, decarbonisation of heating and cooling requires strategic and coordinated action at the local level to enable utilisation of renewable heating and cooling sources and efficient supply. However, there are many **barriers faced by local authorities** seeking to support a local strategic approach, including issues of capacity, skills, experience, and gaining public and political support for new solutions.

A key part of the Stratego project activities involved a series of **international coaching sessions** for local authorities. ‘Learning’ partners in the project have been paired with ‘expert’ partners, to deliver coaching for selected local authorities. These coaching sessions have enabled local authorities to see innovative technological solutions in practice and learn from the practitioners who developed these demonstration projects.

Overview of the Stratego coaching process

Each of the Stratego project ‘learning’ cities / regions were paired with an international expert partner who acted as a key point of contact for arranging relevant site visits and meetings. Figure 1 illustrates the pairing that was made between each country. A detailed overview of the learning city / regions and their partner international ‘expert’ city / regions is also given in Table 1, along with the topics covered within the coaching sessions.

“The context of the energy system and company culture are very different in each country. It is not as easy as just implementing a solution that worked in one country into the other country.” (Austria / Sweden)

Lesson: it is important to spend time getting to know the context of each participating partner and to allow time for discussion and reflection about how a solution might be applied in the learning country context.

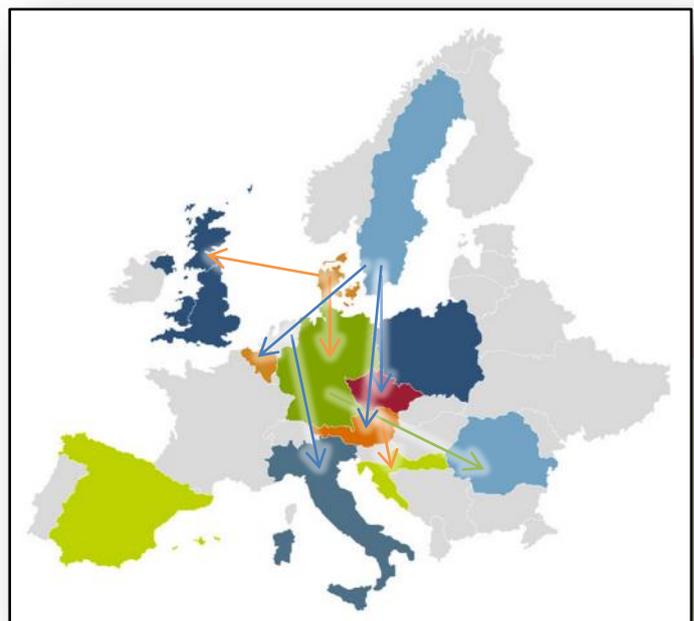


Figure 1: International pairing of project partners during the international coaching process

The coaching process was designed to take place over three sessions, with 6-9 months between each session to give participants time to put their learning outcomes into practice:



Coaching session 1

- Session 1 served as a 'getting to know you' session. It aimed to identify the drivers and objectives of the participating cities / regions, as well as the challenges they faced in delivery

Coaching session 2

- In session 2, relevant site visits , presentations and workshops were arranged in the expert country, based upon the issues identified within coaching session 1

Coaching session 3

- Session 3 aimed to build on learning from the previous coaching sessions by focusing on specific challenges experienced within learning city / region priority projects , including suitable business models.

Lesson: Projects can take several years to be developed from conception to operation. The coaching process should allow sufficient time between sessions for participants to develop their work (6 – 9 months).



Coaching participants from Scottish local authorities visit a suburb of Aalborg, Denmark, where district heating is being installed for the first time.

Setting up an international coaching series

Who should take part?

Delivering heating and cooling projects requires involvement of multiple stakeholders from both inside and outside local authorities. Ensuring that a range of local stakeholders take part in the coaching process is important for ensuring capacity building and buy-in is present across all relevant parties, and not just in isolated pockets of stakeholders.

“Developing a greater range of staff with an understanding about district heating challenges and solutions has meant that we have been able to develop more joined-up working in our local authority.” (Scotland – Denmark)

Lesson: Involve a range of stakeholders as coaching session participants to enable a shared vision to develop across key people in the local area.

The range of attendees of the Stratego coaching events are listed below:

- | | |
|--|----------------------------------|
| ✓ Local authorities (planning, engineering, housing, energy, sustainability, economic development) | ✓ Utility companies |
| ✓ Regional authority | ✓ Funding organisations |
| ✓ National authority (relevant energy ministry) | ✓ Manufacturers |
| ✓ Public bodies (e.g. Centre for energy saving) | ✓ Research institutes / academia |
| ✓ Energy agency | ✓ NGOs |
| ✓ District heating companies | ✓ Trade Associations |
| | ✓ Local politicians |
| | ✓ Potential financiers |
| | ✓ Industry representatives |
| | ✓ Waste processing industry |



Stakeholders from Antwerp and Kortrijk, Belgium, take part in a group discussion during their visit to Gothenburg, Sweden.

Devising a coaching programme

This section suggests content for an international coaching programme, drawing on experiences and lessons from the project coaching partners. It is important that the details of such a coaching programme are tailored to the specific context and challenges of the learning cities / regions in focus.

Lesson: Plan each session at least three to four months in advance. It can be difficult to organise a suitable date for a large gathering of stakeholders, especially if one is targeting specific individuals or departments.

The proposed programme involves **three coaching sessions**, reflecting the set up used in the Stratego coaching process. The section below suggestions recommended objectives for each session. In addition, a number of facilitation questions are provided to support useful discussions between coaching participants.

Lesson: Build in time to an international visit for reflecting on how lessons from the site visits and presentations can be translated into actions by participants in their home context.

Session 1: (Month 4) – To be held in a learning city / region

Suggested objectives:

- 1) To identify common objectives and challenges experienced by coaching participants – these should form the focus of later coaching sessions.
- 2) To introduce the energy system context and approaches to strategic heating and cooling planning in the expert country.

Session 2: (Month 12) – To be held in an expert city / region

Suggested objectives:

- 1) To see relevant examples of innovative low carbon heating and cooling technologies applied in practice (e.g. seasonal thermal storage, use of renewable heat sources, cooperative business models)
- 2) To explore business models and delivery approaches used in the expert country to overcome delivery challenges experienced by stakeholders in the learning country.
- 3) To identify how lessons from the expert coaching country could be applied in the learning country.

Session 3: (Month 20) – to be held in a learning city / region

Suggested objectives:

- 1) For participants to share progress on their work on heating and cooling planning and delivery;
- 2) For participants to receive advice from international experts on key challenges in their work;

Allowing time for discussion and reflection within your coaching programme is just as important as hearing from speakers and visiting case studies. We suggest that for every 1 hour of presentations, you allow 1 hour for questions and discussion between coaching participants and expert partners.

“High interaction between the participants during the coaching process is crucial.” (Germany – Denmark)

Lesson: Include discussion sessions and group activities in your coaching programme to ensure that participants have an opportunity to share experiences with each other.

Lesson: Not all participants are used to working and talking in English on a regular basis. Consider hiring an interpreter to support participants who would find it difficult to take part in English.

Useful facilitation questions for group discussions:

- What are the policy drivers in both countries? How do these compare?
- What are the objectives of each of the stakeholders needed for successful project delivery?
- Are the roles of local, regional and national governments clearly defined for heating and cooling planning?
 - How is communication facilitated between the levels of government?
- How can lessons from an international speaker be applied in the context of the local city / region?

The long timescales of project development necessarily means that it is useful to leave 6-9 months between coaching sessions. In order to maintain relationships and momentum between coaching sessions it is useful to set up follow up sessions between coaching participants

“We got each participant to commit to an action that they would undertake before the next coaching session. This was written on a postcard and posted to them as a reminder 3 months after the coaching session.” (Scotland – Denmark)

Lesson: Keep participants engaged with the process between sessions using newsletters, phone calls and meetings



Participants from Croatia take part in a site visit to a CHP plant in Vienna, Austria

Identifying topics to focus on in the coaching process

An important objective of the first coaching session was to identify the challenges and skills / knowledge gaps experienced by the coaching participants. The outcomes of discussions from the first coaching sessions are then used as a basis for setting the agenda of the later sessions. Table 1 summarises the topics focused on in the coaching sessions for each partner.

“Real life examples and study visits can elevate a training exercise to a higher level and give a better feel for a certain project to the participants” (Croatia - Austria)

Lesson: Identify the key challenges and any knowledge gaps of stakeholders in the learning country and tailor the coaching agenda to meet these

Table 1: Summary of the topics that were focused on in each of the coaching programmes developed within the Stratego project.

Learning City / Region	Expert City / Region	Topics in focus
Vienna, Austria	Gävle District Heating Company, Sweden Fortum, Stockholm, Sweden Profu, Mölndal, Sweden	<ul style="list-style-type: none"> • Open district heating • Large scale surplus heat utilization, • Business and price models • Reduction of return temperature – organisational and technical possibilities.
Ostrawa, Moravian-Silesian Region, Czech Republic	Linköping, Sweden Tekniska Verken Linköping, Sweden Profu, Mölndal, Sweden	<ul style="list-style-type: none"> • Strategic plans for energy companies and local authorities • Cost-effective substitution of fossil fuels with renewable energy (in the context of no national action plan for heating and cooling), in particular: <ul style="list-style-type: none"> ○ Surplus heat from industry ○ Energy from waste • Public perceptions of renewable technologies (energy from waste) • Penetration of heat pumps in district heating areas • Use of district heating for grid balancing • Heat losses in networks • Geothermal energy installations • Public / private cooperation • Capacity market solutions on national / EU level.
Milano, Regione Lombardia, Italy	Rotterdam, The Netherlands	<ul style="list-style-type: none"> • Environment protection • Recovering waste heat from power plants • Recovering waste heat from industrial sites • Heat transport networks to connect heat sources to heat consumers • Heat accumulator for balancing networks • Heat accumulator as a buffer for multiple heat recovery sources • Cooperation of different parties • Planning of developments

Learning City / Region	Expert City / Region	Topics in focus
City of Zagreb, City of Velika Gorica, City of Osijek, Karlovac County, Municipality of Topusko, Croatia	Vienna, Austria	<ul style="list-style-type: none"> • The energy planning process • Data gathering processes • Geothermal potential • Heat losses • Lowering heat supply temperatures in networks • Financing of projects • Implementation challenges.
Alsdorf, Germany	Odense, Denmark (plus an additional contribution from Kortrijk, Belgium to the third coaching session)	<ul style="list-style-type: none"> • Decision making processes for energy projects; • Heating and cooling planning; • Local business models for district heating; • Wood-fuel boilers, gas-fuel boilers or wood-fired boilers, gas-fired boilers; • Replacement of the gas supply system to district heating system; • Small district heating with CHP unit running on gas.
Tulcea and Alba-Iulia, Romania	Frankfurt, Germany	<ul style="list-style-type: none"> • Decision making process • Key elements for developing a successful H&C plans • Business Model for local projects • Energy storage • Power-to-heat installations • Interconnections between separate district heating systems. • maintenance of DH systems, rehabilitation strategies and determination and assessment of water losses
Antwerp, Belgium Kortrijk, Belgium	Gothenburg, Sweden Odense, Denmark	<ul style="list-style-type: none"> • how to map supply and demand of heating and cooling • The design of district heating networks when its deployment is at an early stage • Waste heat supply from (petrochemical) industry • Development of the small schemes • The market structure for heat supply, • Business models for heat supply, the role of the local and the port authorities, heat supply from the industry.
Aberdeen, Dundee, Edinburgh, Glasgow, Inverness, Perth, Stirling, Scotland	Aalborg, Denmark	<ul style="list-style-type: none"> • Energy planning and associated powers • Seasonal and short-term thermal storage • Use of renewable heat and industrial waste heat sources – business models and technical challenges • Cooperative business models • Stakeholder engagement

Case study: Coaching between the Czech Republic and Sweden

*“Our **first session** was dedicated to analysing of the Czech DHC system, its technical and economical parameters, description of decision making process, political environment, barriers and opportunities in the Czech Republic. **The second coaching session** was held in Linköping, Sweden. We presented the results of the mapping process and discussed priority areas for intervention. We also presented the first round of concrete projects that had been identified. We visited the famous waste to energy incinerator and biogas station in Linköping. The coaching partners helped us to set up relationships among the stakeholders as the project focused on utilization of industrial excess heat. At **the third coaching session** we discussed business models and implementation of our projects.*

*We have initiated many **discussions** among the local/regional authorities and heating and cooling industries and looked for more effective solutions for heat generation and reduction of emissions in Moravian-Silesian Region. We learned how the DHC system works in Sweden and how this was created.*

Our Swedish partners guided us through each phase of the project. We held regular conference calls to discuss how to evaluate individual projects and then we agreed on the next steps of implementing our concrete projects.

Participants appreciated the good practices provided by experienced partners and possibility to ask about the approaches used in delivery. It was necessary for partners to understand the situation in the Czech Republic and to seek a solution in politically and economically different environment.

It was very useful to show to our regional authorities how a complex heating and cooling system in another country can be coherent and effective. During the third coaching session our Swedish partners participated at our DHC conference and presented their approach to the waste management issue in Sweden which was very beneficial for the participants.” (Association for district heating of the Czech Republic)



Participants of the first Stratego coaching session between representatives from the Moravian-Silesian Regional Authority and Profu, which took place in Ostrava, Czech Republic in October 2014

Lessons for running an international coaching process

Throughout this report we have highlighted key lessons that have arisen during the Stratego project coaching process. A compilation of these lessons is included below, as well as further advice from the partners about what not to do when running an international coaching process.

Lessons for running an international coaching process:

- It is important to spend time getting to know the context of each participating partner and to allow time for discussion and reflection about how a solution might be applied in the learning country context;
- Projects can take several years to be developed from conception to operation. The coaching process should allow sufficient time between sessions for participants to develop their work (6 – 9 months);
- Involve a range of stakeholders as coaching session participants to enable a shared vision to develop across key people in the local area;
- Plan each session at least three to four months in advance. It can be difficult to organise a suitable date for a large gathering of stakeholders, especially if one is targeting specific individuals or departments;
- Build in time to an international visit for reflecting on how lessons from the site visits and presentations can be translated into actions by participants in their home context;
- Include discussion sessions and group activities in your coaching programme to ensure that participants have an opportunity to share experiences with each other;
- Not all participants are used to working and talking in English on a regular basis. Consider hiring an interpreter to support participants who would find it difficult to take part in English;
- Keep participants engaged with the process between sessions using newsletters, phone calls and meeting;
- Identify the key challenges and any knowledge gaps of stakeholders in the learning country and tailor the coaching agenda to meet these

Advice on what not to do when running an international coaching process:

- Avoid speakers story telling only about their own situation;
- Do not think, as a coaching partner, your own measures / solutions from your contexts are directly transferable. Be aware that each country / city / region has its own background (e.g. legal frameworks, funding systems, political issues)
- Avoid detailed technical presentations. The most useful parts of the coaching sessions were mostly the presentations related to the local planning and national financing options. The primary reason for this is most likely the mixed nature of the participants, which included both engineers and economist (or other participants of similar backgrounds). The technical shortcomings are often well known by the learning countries and do not need a coaching process.
- Don't forget to talk about the user perspectives – how are customers involved in decision making?

Impacts and successes from the Stratego coaching sessions

The main objective of this report has been to share lessons for others to use when developing an international coaching process of their own. This section focuses on the specific experiences of the Stratego coaching sessions and highlights some key successes and impacts that were observed thanks to partners taking part in this aspect of the project.

Influencing national government policy

“The Ministry of Industry and Trade takes note of our findings and recommendations as for example requirement to replace obsolete fossil fuel boilers for the efficient district heating installations, increasing share of cogeneration and recovery of excess heat from industrial production, attention should be paid to the generation from renewable sources and also it is necessary to set motivational economic conditions for the energy recovery of sorted municipal waste. Our comments were incorporated into the studies „Comprehensive assessment of the potential for the application of high-efficiency cogeneration and efficient district heating and cooling in Czech Republic”. (Czech Republic – Sweden)

Embedding Stratego lessons into long-term capacity building programmes for local authorities

“During the Stratego project, the Scottish Government launched a District Heating Strategy Support Programme, aiming to support all local authorities in Scotland to develop and publish district heating strategies, making use of data from [the Scotland Heat Map](#). The Stratego project activities were able to complement this work and the learning from Stratego has been embedded into this programme of support going forward.” (Scotland – Denmark)

Collaboration between learning local authorities

“Thanks to the internal contact between the STRATEGO partners, a representative of the Council of Falkirk, UK was invited to this coaching session as well. Falkirk, just like Antwerp, has the ambition to valorise the excess heat of the petrochemical industry in the port and faces similar challenges.” (Belgium – Sweden)

Inspiring further international site visits

“The coaching process has contributed to that Austrian stakeholder already in June this year will visit Stockholm municipality and Fortum Heating to learn more about Open District Heating and seasonal heat storage.” (Austria - Sweden)

