Own Your SECAP

List of target municipalities and selected measures D2.1

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Author	Christof Amann (e7) Marie Armbruster (e7)
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Summary

This deliverable contains a list of all WP2 target municipalities as well as the selected measures for the first project year. In most municipalities the three or more measures have been selected at this point.

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1. Introduction

1.1. OwnYourSECAP concept

The basic idea of the OwnYourSECAP project is to support municipalities in developing a sustainable energy and climate action plan (SECAP). Technical partners offer knowledge, templates, feedback and capacity building but it stays in the responsibility of the municipality to establish a working group with an energy manager, environmental manager and other relevant stakeholders, closely linked to the administrative units responsible for the implementation of SECAP measures.

3 groups of municipalities are identified in the project (Figure 1): experienced municipalities, documented in this report, which already have a SECAP in place and aim for an update, less experienced municipalities which have to develop a SECAP and implement an energy management system (EnMS) and so called replication municipalities which are included in some of the communication formats allowing to share experience. Exchange between all municipalities - within the target country but also with municipalities from other countries from the project team - is one of the main benefits of the participation in the project. Learning from each other will help to increase the quality of the SECAP and the following implementation. Furthermore, this structure ensures the continuation of the process after the termination of the project in 2025.

Implementation of selected measures will be monitored and documented. For the second project year, 3 more measures will be defined.

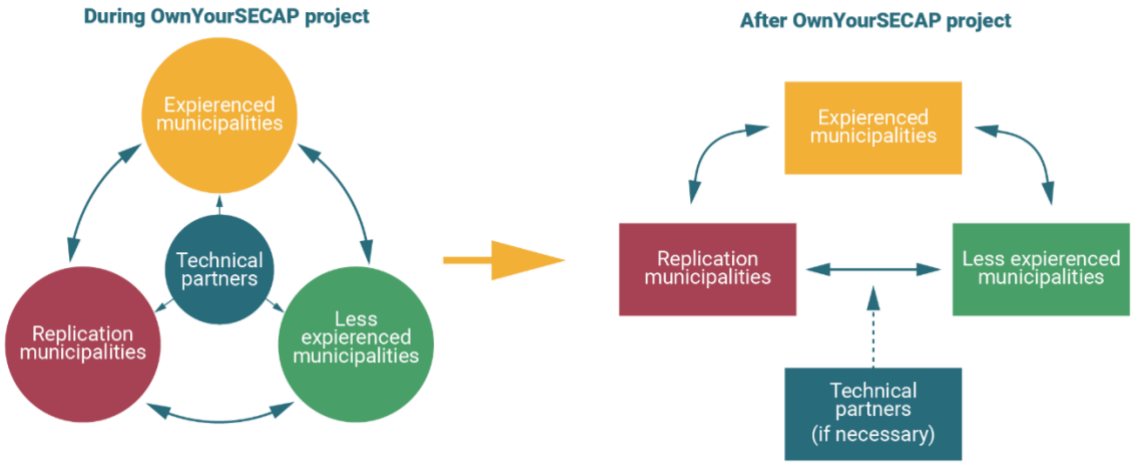

Figure 1: OwnYourSECAP concept

1.2. Project Partners

The OwnYourSECAP project is active in 11 countries, with experienced technical partners in each of them. Project partners come from (in alphabetical order):

- Austria: e7 energy innovation & engineering, Vienna
- Czech Republic: SEVEn - SEVEN, THE ENERGY EFFICIENCY CENTER Z.U., Praha
- France: MTPi - MT PARTENAIRES INGENIERIE, Bordeaux
- Ireland: TEA - TIPPERARY ENERGY AGENCY LIMITED, Co. Tipperary
- Italy: SOGESCA s.r.l. Rubano
- Latvia: EKODOMA, Riga
- Poland: PNEC - STOWARZYSZENIE GMIN POLSKA SIEC ENERGIE CITES, Kraków
- Portugal: ISR - INSTITUTO DE SISTEMAS E ROBOTICAASSOCIACAO, Coimbra
- Slovakia: ECB - ENERGETICKE CENTRUM BRATISLAVA, Bratislava
- Spain: EV - EUROVERTICE CONSULTORES SL, Murcia
- Sweden: ESS - ENERGIKONTOR SYDOST AB, Växjö

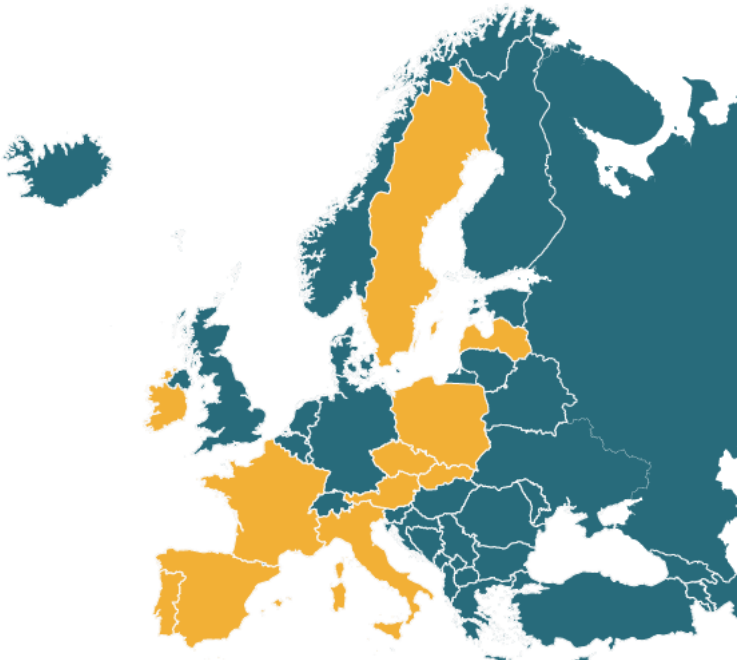

Figure 2: Overview of the project partners

2. Target municipalities and selected measures

In this chapter all target municipalities and selected measures for the first project year are listed.

2.1. Austria

Technical Partner: e7 energy innovation & engineering, Vienna

Municipality 1: Baden

Selected SECAP measures

Not fully defined yet. SECAP measures will be the development of concrete implementation projects (including funding and administrative processing). This will be done in close cooperation with an external partner commissioned by the City of Baden within the framework of a project funded by the Austrian Climate and Energy Fund.

Municipality 2: Ottensheim

Selected SECAP measures

1. Development of an energy concept for a cultural event center
2. Feasibility study for the development of an energy community
3. Energy accounting for the municipality assets
4. Development of a heat supply concept for Ottensheim (district heating) (not fully confirmed yet)

2.2. Czech Republic

Technical Partner: SEVEn - SEVEN, THE ENERGY EFFICIENCY CENTER Z.U., Praha

Municipality 1: Žďár nad Sázavou

Selected SECAP measures

1. Lighting modernisation at 2nd Elementary School (2ZS) - The measure is focused on lighting modernisation, mainly the corridors and classrooms. The old fluorescent luminaires will be changes to modern LED luminaires. There will be about 50-60% savings of electricity.
2. Insulation of winter sport hall – This is complex measure with several subtasks, each consisting of several measures. The complex insulation and modernisation was chosen because of extreme energy consumption.
3. Modernisation of kitchen equipment in elementary schools and kindergardens – The kitchen equipment is specific environment with several appliances. The measure consists of modernisation of inefficient appliances.

Municipality 2: Tábor

Selected SECAP measures

1. Thermal insulation + green roof of an apartment building (Leskovicka street). Existing insulation has been upgraded by adding 100 mm thick styrene foam panels and installing a green roof with all-year plants and low maintenance regime. Expected savings are 120 GJ/year with total costs reaching CZK 4,2 million (EUR 175 000). Implemented in 08/2023.
2. Thermal insulation + green roof of an apartment building (Ustecka street). Walls insulation by styrene foam 160 mm thick, roof insulation by 240 mm thick panels. Green roof included with all-year plants and low maintenance regime. Expected savings are 125 GJ/year with total costs reaching CZK 8,2 million (EUR 340 000). Implemented in 12/2022.
3. Windows replacement in heritage building of the Town Hall. Thermal conductivity of windows improved to U = 1,2-1,4 W/(m^2.K). Expected savings are 190 GJ/year with total costs reaching CZK 8,8 million (EUR 366 000). Implemented in 06/2023.

2.3. France

Technical Partner: MTPi - MT PARTENAIRES INGENIERIE, Bordeaux

Municipality 1: Brest Metropolis

Selected SECAP measures

1. Integrate climate into the local authorities' budget. Brest Métropole and the Municipality of Brest have common budgets for most climate energy actions. The Local Authority wishes to implement an identification and analysis of their climate budget in order to assess the efficacy of their action. The action will incorporate experience gained from project partners project-wide.
2. Optimise the energy management system. Brest Métropole's EnMS is somewhat restricted as regards its scope (street lighting and fleet only) and has lost speed lately. The LA wishes to assess the causes of this and reinforce it by expanding it gradually to the LA's buildings.
3. Mobilise operational departments to take renewable energy into account. The action focuses on fluid collaboration between the LA's departments in order to help implement REs onto LA legacy.

Municipality 2: Lorient

Selected SECAP measures

1. Optimise the energy management system. The action aims at assessing the EnMS and assisting the municipality to renew its ISO certification.
2. Develop the heating network. The RE goals of the City rely mainly on the development of its DHN. The action deals with the programming and concept of the extension of the network and its sources.
3. Develop a master plan for the renovation of school buildings. Based on the EnMS, a masterplan of renovation will be set up, in order to bring city schools to a high performance level and lower thus energy consumption and GHG emissions.

2.4. Ireland

Technical Partner: TEA - TIPPERARY ENERGY AGENCY LIMITED, Co. Tipperary

Municipality 1: Tipperary County

Selected SECAP measures

1. **Decarbonisation of transport fleet using HVO - Pilot project**
   County Council is planning to use HVO as an alternative to diesel for a set of chosen vehicles as a pilot phase between January-December 2023. If successful, it will be extended to other vehicles which has no EV option available.
   Major KPI to monitor the success of the measure is the reduction in council's diesel energy consumption and emissions. Expected savings of 9.1 tCO2/year with an increased cost of €36,905/annum. Implementation of €106,400 expected.
2. **Smart Lighting upgrade for Thurles public lighting**
   County Council is planning to retrofit 12,000 public lights to LED over the next two years in the county of Tipperary in conjunction with the RMO (Roads Management Office). This will reduce the consumption of PL by half.
   Major KPI to monitor the success of the measure is the reduction of PL energy and emissions. Expected savings of €449,507/year and 831 tCO2/year with an implementation cost of €8,000,000.
3. **Thurles walking and cycling scheme to provide connectivity between all the schools in town**
   Thurles Walking & Cycling Scheme is to create a pedestrian and cyclist shared path between Thurles Train Station and Bohernamona Road that provides connectivity to all schools and a crossing over the River Suir north of the existing bridge; it will provide a facility for parents to drop-off children at the end of the shared path nearest to them (or at some intermediate point away from the town centre) and allow the children to walk to school in safety.
   Expected reduction of 180 tCO2/annum from private vehicles and improvement in air quality around the town centre.

Municipality 2: Takes now part in the project as a third WP3 municipality.

2.5. Italy

Technical Partner: SOGESCA s.r.l. Rubano

Municipality 1: Abano Terme

Selected SECAP measures

1. Tax relief on the taxes paid by citizens and businesses in the tertiary sector for the building re-development of existing assets
2. Bike-Bus in cooperation with Municipal police and Schools
3. New Urban Traffic Plan + New Limited Traffic Zones
4. New Roundabouts
5. Water Management Plan
6. Resetting and cleaning Consortial drainages and private ditches

Municipality 2: Vicenza

Selected SECAP measures

1. Via della Scienza Project: depaving, extension of the cycle path, flowerbeds with trees, rain garden
2. Via della Tecnica Project: depaving with draining parking lots and cycle path, trees, lane reduction.
3. The 3rd Measure has not been defined yet.

2.6. Latvia

Technical Partner: EKODOMA, Riga

Municipality 1: Tukums

Selected SECAP measures

1. **Inspection of all municipal buildings and follow up activities with responsible technicians.**
   Municipality has 118 public buildings. It has started to make go-through audits to assess the use and maintenance of the buildings. 20 of the buildings have been inspected so far and show at least 10-15% of potential energy savings (with minimal investments). This measure includes inspection of all buildings and meetings with responsible technical staff of these buildings to discuss the results and further actions. Municipality plans to rate the buildings based on 7-8 criteria to choose the next ones for renovations.

2. **Modernisation of street lighting.**
   Municipality needs to change the public lighting in different areas of the municipality. This measure includes public procurement, installation of the energy efficient lighting and monitoring.

3. **Purchase of environmentally friendly municipal fleet (10 cars).**
   Municipality has decided to change step-by-step their municipal fleet. It has decided to procure and buy ten environmentally friendly vehicles to change existing vehicles of more than 15-20 years.

4. **Create pupil transportation plan.**
   Municipality provides transportation services to those families (pupils) living outside the cities and towns to reach their educational institutions (schools and kindergartens). Currently there is no clear monitoring introduced and criteria for selection of vehicles and their efficiency. Municipality plans to prepare a clear guideline for selection of vehicles for transportation of the pupils on daily basis.

5. **Fuel switch projects.**
   There are some areas of the municipality where district or local heating services are provided using fossil fuel. The measure includes switching from fossil fuel to biomass.

6. **Update of District Heating Development Plan for Tukums.**
   Municipality owns a district heating company *Tukuma siltums* who ensures district heating services to several areas of the municipality, including city of Tukums. To understand the future plans and investments needed, municipality requires to update District Heating Development Plan for Tukums.

Municipality 2: Saldus

Selected SECAP measures

1. **Creation of Energy Efficiency Competence Centre.**
   Municipality has joined LIFE Rehabita project and will create an Energy Efficiency Competence Centre to assist inhabitants and especially energy poor households to introduce energy efficiency measures in their buildings and reduce their energy bills. This measure includes creation of the Centre by setting its objectives, tasks and responsibilities.

2. **Develop energy certificates for public buildings.**
   Building Energy Efficiency Law defines that all public buildings of area above 50 m^2 should have an energy certificate. Most of the public buildings in Saldus have not previously been certified. This measure includes development of at least 10 energy certificates per year, presentation of the results and identification of next steps, including building renovation.

3. **Develop Public Building Optimisation Plan.**
   Municipality owns more than 120 public buildings. Some of the buildings are only partly used and optimisation of the space is needed to also reduce energy costs. This measure includes preparation of the list of the buildings based on their consumption and rating based on 8-9 different criteria. This will allow administration and politicians to make their decisions on data provided by energy management.

2.7. Poland

Technical Partner: PNEC - STOWARZYSZENIE GMIN POLSKA SIEC ENERGIE CITES, Kraków

Municipality 1: Bydgoszcz

Selected SECAP measures

1. **Comprehensive thermal refurbishment of public facilities in Bydgoszcz.**

The aim of the project is to improve energy efficiency in the public buildings of the City of Bydgoszcz, which will contribute to improving the environment by reducing CO2e emissions and air cleanliness, thereby accelerating the progress of measures supporting the transition to a low-carbon economy. The measure includes public schools and kindergartens, as well as public buildings (museums, cinemas, theatres, hospitals, etc.) whose technical condition, due to outdated technological solutions for the construction of walls, windows, door openings, roof structures, generates energy losses. These facilities are characterised by high heat demand, which translates into high levels of greenhouse gas emissions.

2. **Implementation and development of the municipal energy management system - energy monitoring of buildings**

The action consists of introducing monitoring of electricity and heat consumption in the authority's buildings and educational establishments. As a result of data collection and analysis, the buildings with the greatest potential for savings are identified. This is followed by measures to reduce the thermal power supplied, regulation of energy consumption and investments to improve energy efficiency.

3. **Implementation of the low emission reduction programme in accordance with the Air Protection Programme**

The measure includes the removal of coal-fired boilers and connection to the municipal heating network, replacement of old coal-fired boilers with low-emission, primarily using renewable energy sources.

Municipality 2: Sztum

Selected SECAP measures

1. **Installation of Building Energy Management System in municipal buildings**

This activity includes specific tasks related to energy management (systems and organisational activities). These include the following tasks:
(a) introduction of an energy management system in the thermo-modernised public buildings belonging to the municipality,
b) efficient energy management, monitoring of energy consumption,
c) installation of an energy management system in the buildings of: District Family Assistance Centre in Sztum, the sports hall of the School Complex in Sztum, the District Office in Sztum.

2. **Energetic efficiency improvement and retrofitting of heating systems in residential buildings**

The measure consists of: insulation of building partitions, installation of new heat sources, preferred RES, installation of PV panels on the roofs of single-family buildings that have been insulated, replacement of windows, external doors, energy audit, project documentation, expertise related to the scope of the modernisation.

3. **Low emission vehicles in municipal fleet**

Replacement of the municipal vehicle fleet (4 vehicles) with low-emission vehicles (CNG, LPG, electric).

2.8. Portugal

Technical Partner: ISR - INSTITUTO DE SISTEMAS E ROBOTICAASSOCIACAO, Coimbra

Municipality 1: Cascais

Selected SECAP measures

1. **Energy Community I**

Cascais municipality is launching the Energy Community I initiative, aiming to promote sustainable energy practices and community engagement by encouraging residents and businesses to participate in renewable energy projects and adopt energy-efficient technologies.

2. **Fundo AdaptCascais**

Cascais municipality has established Fundo AdaptCascais, a fund dedicated to supporting climate adaptation measures and resilience-building projects in the region, providing financial resources for initiatives such as infrastructure upgrades, natural resource conservation, and community education.

3. **Energy Fund for families and stakeholders**

Cascais municipality is launching the Energy Fund for Families and stakeholders, a program that offers financial incentives and support to encourage households and key stakeholders to adopt renewable energy solutions, such as solar panels and energy-efficient appliances, to reduce their carbon footprint and contribute to the overall sustainability goals of the municipality.

Municipality 2: Guimarães

Selected SECAP measures

1. **District C**

Guimarães municipality is implementing District C, a comprehensive initiative aimed at promoting sustainable practices, reducing energy consumption, and improving the overall

environmental performance of the district. In addition to measures such as energy-efficient buildings, renewable energy integration, and smart city technologies, District C also prioritizes effective waste management and the principles of circular economy, sustainable mobility, and responsible land use. The initiative focuses on minimizing waste generation, maximizing resource efficiency, and fostering collaboration with local businesses to promote recycling and the reuse of materials. Furthermore, District C invests in pedestrian-friendly infrastructure, cycling lanes, and efficient public transportation systems to reduce reliance on private cars and promote alternative transportation modes. Responsible land use planning, including compact and mixed-use development, is also emphasized to preserve natural habitats and agricultural land while minimizing urban sprawl. Through its multifaceted approach, District C aims to create a sustainable and resilient district that serves as a model for other municipalities, contributing to the broader goal of environmental consciousness and sustainability.

2. **2030 Biowaste Management Plan**

Guimarães municipality has developed a 2030 Biowaste Management Plan, which outlines a strategic roadmap for efficient and sustainable management of biowaste in the region. The plan includes measures such as promoting composting, implementing separate collection systems, and raising awareness about the importance of recycling organic waste.

3. **ESCO – Public Lightning**

Guimarães municipality has partnered with an Energy Service Company (ESCO) to implement an energy-efficient public lighting project. Through this initiative, the municipality aims to upgrade and optimize the public lighting infrastructure, incorporating energy-saving technologies and smart controls to reduce energy consumption, enhance lighting quality, and contribute to the city's sustainability goals.

2.9. Slovakia

Technical Partner: ECB - ENERGETICKE CENTRUM BRATISLAVA, Bratislava

Municipality 1: Spišská Nová Ves

Selected SECAP measures

1. Energy management measures – not defined in detail yet.
2. Other measures are to be decided on in July.

Municipality 2: Kežmarok

Selected SECAP measures

1. Energy management measures – not defined in detail yet
2. Other measures are to be decided on in July.

2.10. Spain

Technical Partner: EV - EUROVERTICE CONSULTORES SL, Murcia

EUROVÉRTICE

Municipality 1: Lorquí

Selected SECAP measures

1. **Creation of healthy and safe routes**

Two different healthy and safe routes will be created:

1. Pedestrian and cycle route from the Los Mateos farmhouse to the Los Palacios de Lorquí hamlet.
2. Health unites: Healthy itinerary between the town centre and the hamlet of Los Palacios Blancos.

Both will be developed with climate change adaptation criteria, and nature will be a pillar for their development. In this sense, they will be a way to reduce emissions while adapting the municipality to climate change and increasing its resilience.

2. **Awareness and sensitization for the reduction of energy demand in homes**

Everyday behaviour in the home can have a significant influence on a home's energy consumption. Setting the right temperature in air conditioning equipment, ventilating at the right times or not leaving equipment and lights on can reduce our electricity bill considerably.
The measure aims to achieve energy savings and a considerable reduction in CO2 emissions through the actions that the Lorquí Town Council will coordinate in terms of energy saving and climate change.

In addition, the activities will be complementary with sustainability awareness as recycling habits or saving water techinques.

The activities will specially target vulnerable groups, so they will be one of the main recipients of the activity. This is a political conviction in order to promote equity and leave no one behind in the energy transition.

3. **Improvement in the design and management of parks and gardens**

Two new green areas will be created in the framework of this measure:

1. Public space of the Chimenea Matías Martínez integrated in the pedestrian and cycling itinerary of the Paseo de la Acequia de Lorquí.
2. Health unites: creation of an accessible and inclusive green area in Los Palacios Blancos de Lorquí.

Both green areas be developed with climate change adaptation criteria, including sustainable drainage systems, biodiversity improvement, or contribution to the urban heat island reduction.

The development of new green areas also creates climate shelters for vulnerable people and allow them to make sport in public spaces and spend time with family and friends in nature areas. They usually do not have a house conditioned to climate change nor possibility to go to private sports clubs, so they will directly get benefit from the action.

Municipality 2: Cieza

Selected SECAP measures

1. **Increase of trees in pedestrian areas to provide shade**

Cieza's Juan XXXIII Avenue will be renovated in terms of naturalization and the increase of trees which provide shade. The current trees are small and need pruning as they generate a lot of fruits that fall on the street. These trees will be renovated by new ones which will be able to grow and to generate shaded areas in the avenue. They will just need minimal dedication of pruning, so saving in human resources will be also obtained.
It is one of the priorities of the municipality to increase gradually the size of the pavements to allow the establishment of big trees.

2. **Renovation of public lighting to LED technology in the old town**

Public lighting one of the largest energy consumers in municipal buildings. In some cases, the lamps used for indoor lighting comprise almost all the types that were used a few years ago (incandescent, halogen, fluorescent, etc.). Inefficient models that should no longer be used.
The measure will address the renovation of the public lighting, including over 380 lanterns and 52 luminaires.

3. **Pedestrianization of streets in the city center**

According to the emissions inventory, private and commercial transport is responsible for the highest percentage of overall emissions in the municipality.
One of the pillars on which the SUMP of Cieza is based is the Soft Modes Plan, consolidating walking in the urban area, promoting the potential of cycling and in general increasing the quality and habitability of the urban environment.
The objective of this action is to pedestrianise several streets in the city center to achieve this transition gradually.

2.11. Sweden

Technical Partner: ESS - ENERGIKONTOR SYDOST AB, Växjö

Municipality 1: Mörbylånga

Selected SECAP measures

1. Electric car pool

The target sector for this action is private transportation. The municipality will organise an electric carpool in order to decrease the use of fossil cars, to encourage the use of electric car and sharing, not owning your own car. Visitors, citizens and public officials may pay for a membership in the carpool. There are a lot of holiday homes in the municipality and hence crowded by cars in summertime. The carpool will support people who do not bring their own car to their holiday home.

2. Sustainability / Downpour

This is a climate adaptation action, which concerns a plan to facilitate proactiveness in case of downpour. It will start during 2023.

3. Sustainability / Water recycling

The municipality located to the next biggest island at the Eastcoast of Sweden has suffered several summers of weak availability of water. Actions for reuse of water are prioritised by the local authority. This is an action concerning reuse of water, in cooperation with private industry. The water will be used for irrigation at the farm “Risinge Hereford”.

Municipality 2: Uppvidinge

Selected SECAP measures

1. Change of ventilation system from F/T to FTX at health center in Lenhovda

The municipality owned housing company prioritize this as an action to reduce energy use and at the same time upgrade to a better (robust, modern) system. There is political support for the action in terms of granted fundings. The funding was secured in April –23. Procurement is underway and tenders to be submitted during the summer.

2. New shunt group, tank and pump

New shunt group, tank and pump at the school in Norrhult (one small community in the municipality). The action also includes change of radiator valve inclusive adjustment. The old equipment is old and for that resaon it is prioritized to upgrade with new equipment. The investment will make it possible to lower the temperature on the water on the way to the building. Today they are pumping hot water long distances with great losses of heat in the process.

3. Change of lights

Exchange of fluorescent fixture and lights in the Åseda school sport hall building. Another sport hall will also be upgraded as well as 30 offices, hopefully this year as well. The municipality owned housing company prioritize this as an action to reduce energy use. In addition, the lights today (T8) will not be manufactured after August

2025. There is political support in terms of funding. Today the fittings use 280W/fitting and the new ones will use only 100W/fitting. For the entire building, the savings are foreseen to be 68 % by exchange of all lamps.