Roll-out of 50/50 initiative to unlock energy saving in schools and other public buildings

Energy efficiency and saving at school and non-school public buildings

Report with Euronet 50/50 max project results, impacts and guidelines for stakeholders that start or take part in a 50/50 process

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I. INNOVATIVE CONCEPT TO USE ENERGY SMARTLY IN PUBLIC BUILDINGS

Many public building users, like in schools, are not motivated to use energy more efficiently as possible savings do not benefit themselves but the municipalities which pay the bills.

The EURONET 50/50 MAX European project is an example of how this challenge can be successfully addressed thanks to an innovative concept that helps change the behaviour of public building users and enables sharing of the savings achieved on the energy bills between the municipalities and the building users. Thus, employees, and in the case of schools, the pupils and the staff have a direct incentive to save energy.

The project has helped to raise awareness and assist the collective organization of users in public buildings. In schools, teachers and pupils have come together in teams to promote energy savings in each school, working with the main aim of reducing energy consumption and CO_2 emissions. And their share of the savings is used to improve educational activities.

Co-funded by the EU under the Intelligent Energy – Europe (IEE) programme, the concept has seen a real snowball effect: it was transferred from one country, Germany, to thirteen EU countries. It was initially launched only for school buildings and is now rolled out in other types of public buildings, such as sports facilities, libraries or public offices. It started as an educational programme for pupils and is now integrated as a sustained measure in many local, regional and even national sustainable energy plans and strategies.

Thanks to EURONET 50/50 MAX, measurable energy savings and reductions in CO_2 emissions were achieved, with focused actions of behavioural change, in more than 525 schools and 45 public buildings.

This is a shining example of what EU support can trigger: the market uptake of an innovative concept by local, regional and national public authorities and its dissemination across borders.

The 50/50 methodology is now mature, institutionalised measures that can help public authorities meet their energy and climate policy objectives. It is already used as part of the Covenant of Mayors initiative as an integral part of municipalities' sustainable energy action plans. Let's now see how the snowball can further roll and be transferred to other communities.

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Head of Unit
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II. INTRODUCTION

By now is evidence the need to reduce energy consumption to achieve national and European climate and energy targets. Buildings and electrical appliances become more and more efficient, but the rebound effect very often leads to increasing demand of energy.

At the municipal level, schools and public buildings are among the largest consumers of energy, representing up to 60% of the town council's total energy consumption. To have an impact on this consumption is important focus on energy efficiency. This usually entails some investment; either to improve already existing equipment or to acquire equipping that is more efficient.

But, is also important, to act directly on demand through behavioural changes of the user of the building. The purpose of this project was to provide a simple way – the 50/50 methodology - to achieve energy savings without making large investments, basically through behavioural changes in the use of the facilities. 50/50 introduces a financial incentive for good energy management and makes people the key to success in energy savings.

The aim of the project EURONET 50/50 MAX was to mobilize energy savings in public buildings by using the 50/50 methodology in 500 schools and nearly 50 other public buildings from 13 EU countries. The 9-step methodology increases energy awareness of the building users and actively involves them in energy saving actions. Achieved financial benefits are equally shared according to the 50/50 principles.

EURONET 50/50 MAX was a continuation of a very successful EURONET 50/50 project which tested implementation of the 50/50 methodology in over 50 European schools and which won the European Sustainable Energy Award 2013! Thanks to EURONET 50/50 MAX, the idea has spread across Europe. 50/50 has been disseminated widely on the European and national level to encourage more public authorities to implement the 50/50 methodology in their buildings.

Because of the success of EURONET 50/50, EURONET 50/50 MAX has extended the implementation of 50/50 process from schools to other public buildings. Public buildings have significant energy-saving potential and implementing energy-saving measures in municipal buildings demonstrates governors' commitment to a more sustainable future and inspires the general public and local groups to follow their example and to be more efficient.

EURONET 50/50 is a good example of practical cooperation and the implementation of straightforward local initiatives to address the most internationally recognized environmental problem: climate change and the overproduction and excessive consumption of energy related to it.

Through the project we realized that cooperation between town councils and school and non-school public buildings management teams, the commitments of teachers and students, users and managers, technical and financial support from the EU through the IEE programme and the coordination of supra-local organizations promoting and coordinating the project in their territories, are all factors that combine together well, leading to a remarkable improvement in energy efficiency in public buildings.

In the territories where the project has been developed there has been a successful combination of pedagogic materials, technical knowledge on energy, awareness and public management. Some outstanding results which highlight the efforts made are the creation and continuity of energy teams at schools and non-school public buildings, energy savings and reductions achieved in CO_2 emissions and the increased resources due to the 50/50 savings.

The steps started by EURONET 50/50 MAX in April 2013 come to an end in April 2016, but this is just an administrative deadline, because the project has achieved one of its most difficult goals: to keep on going. The 50/50 NETWORK and guidance materials developed and tested within the project facilitate engaging other European schools and non-school public buildings in energy-saving projects and, in turn, promoting decision-making by pupils in the educational system. Therefore it has a clear double benefit.

The methodology is ready, and now is the time for educational communities and municipalities to continue leading 50/50 actions. We hope this document inspires and helps schools, non-school public buildings and municipalities to develop a process of energy saving and reduction of greenhouse gases emissions, and that through the experiences acquired with EURONET 50/50 MAX the efforts already made by schools and town councils come together in a common aim, to tackle climate change.

EURONET 50/50 MAX partners

III. EURONET 50/50 MAX PROJECT DETAILS

Barcelona Provincial Council has prepared this report with contributions from the partners of Euronet 50/50 MAX project in order to disseminate the results of the project and to give some guidelines that can support the implementation of other 50/50 processes that help to save energy in public buildings.

Title: Roll-out of 50/50 initiative to unlock energy saving in schools and other public buildings. Energy efficiency and saving at school and non-school public buildings

Acronym: EURONET 50/50 MAX

Project co-financed by Intelligent Energy Europe program

Contract Nº: IEE/12/989/SI2.644764

Duration: 36 months (18/04/2013 - 17/04/2016)

Budget: EUR 1 590 479 (EU contribution: 75%)

Coordinator: Barcelona Provincial Council (Catalonia- Spain)

Project partners: Diputació de Barcelona (Spain), Independent Institute for Environmental Concerns (Germany), Local Agency for Energy and Environment (Italy), University of Vaasa (Finland), Association of municipalities Polish Network Energie Cites (Poland), Region of Crete (Greece), Energy agency of Savinjjska Saleska and Koroska region (Slovenia), Kaunas Regional Energy Agency (Lithuania), City of Zagreb (Croatia), Riga Managers School (Latvia), TOP-ENVI Tech Brno (Czech Republic), Florentine Energy Agency (Italy), Climate Alliance (Austria), Huelva Provincial Council (Spain), Cyprus Energy Agency (Cyprus), Energy Agency of Vysocina (Czech Republic)

Key stakeholders: pupils aged 10 to 17; teachers; pupils' families; managers and users of public buildings; town councils; citizens

Main objective of the project:
The main objectives of the EURONET 50/50 MAX are focused on wider dissemination of the 50/50 concept to new countries around Europe and its strategy roll-out, which means uptake of the concept by local, regional and national authorities and its integration into relevant strategies or plans.

And on build a European network with 50/50 schools and non-school public buildings with the aim to foster exchange of experiences across borders and that lasts beyond the end of the action and providing a constant support for achieving the EU 2020 energy and climate objectives.

The last objective is to reach a minimum annual reduction of energy consumption of on average 8% for all public buildings involved.

IV. THE PROJECT IN A NUTSHELL

The **50/50 concept** gives schools and **other public buildings** a methodology that helps them to learn about energy and to save it, mainly **through behavioural changes** of the users of the building, but also by **creating economic incentive** both for schools/non-school public buildings and for managers of schools or buildings (usually local authorities):

- **50% of financial savings** achieved thanks to the energy efficiency measures taken by pupils and teachers is **returned to school** through a financial payment;
- **50% of financial savings** is a net **saving for the local authority** that pays the energy bills.

As a result, everybody wins! The school teaches pupils how to save energy by changing behaviours and gets additional financial resources, the local authorities have less energy costs and the local community gets cleaner local environment.

Involvement of **525 schools** and **45 non-school** public buildings ...

118 schools, 11 non-school buildings in Spain
139 schools, 9 non-school buildings in Poland
87 schools, 6 non-school buildings in Greece
12 schools, 2 non-school buildings in Italy
30 schools, 3 non-school buildings in Slovenia
34 schools in Germany
24 schools, 1 non-school building in Austria
19 schools, 1 non-school building in Finland
14 schools, 3 non-school building in Czech Republic
10 schools, 1 non-school building in Lithuania
18 schools, 3 non-school building in Latvia
10 schools, 2 non-school building in Croatia
10 schools, 3 non-school building in Cyprus

...that means more than **98,891 pupils** and **7,038 teachers** working together with **users of non-school public buildings**, **109 local authorities** and **29 observers** applying 50/50 methodology to reduce energy consumption…

...and **becoming more efficient** on energy use, contributing to European energy and climate change objectives…

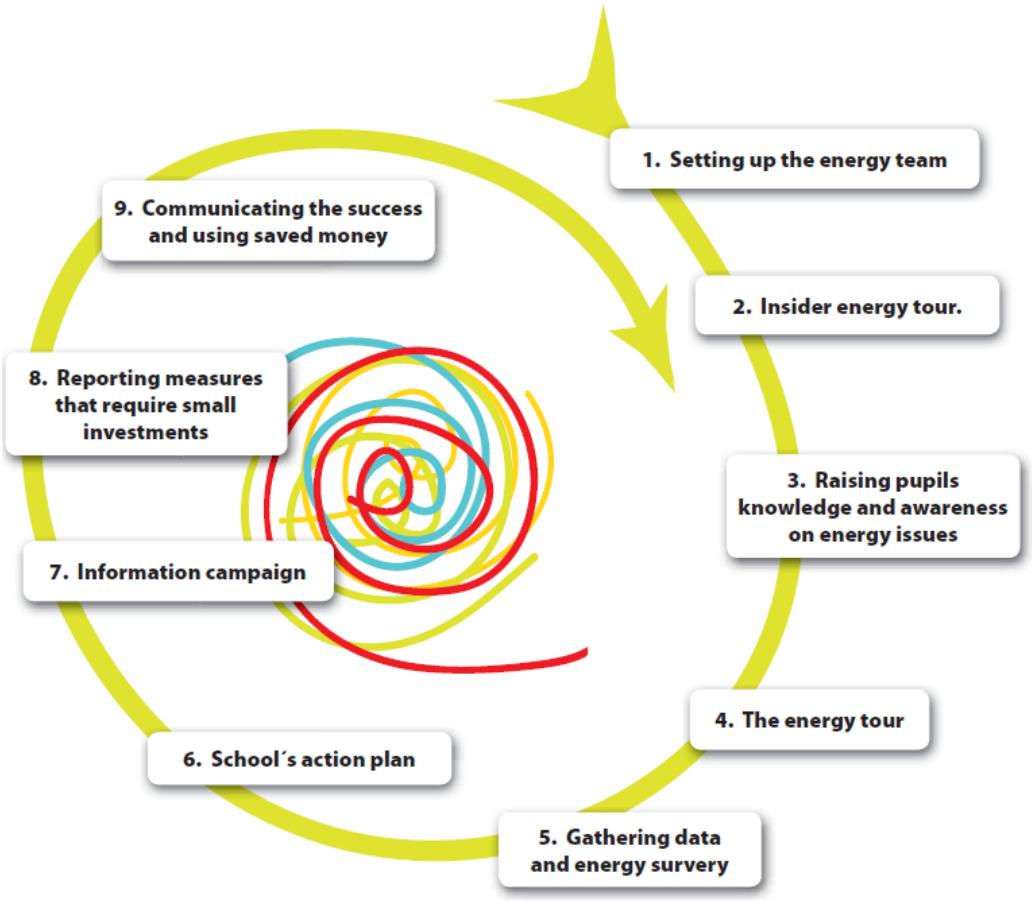
PLANNED

- Achieve an energy consumption reduction through behavioural changes of users. The goal was to achieve **minimum energy savings** of **8%** in each building involved.
- **Save money** that would have been spent on energy and use it to **finance other projects, activities or improvements in the facilities.**
- Wide dissemination of the 50/50 concept by **influencing** at least **100 local** strategies, **16 regional** strategies and **16 national strategies.**
- **500 schools** and nearly **50 other public buildings** should join the 50/50 network and apply energy-saving measures.
- New **methodological** and **educational materials** and **tools** were developed to support implementation of 50/50 methodology in schools and other public buildings.
- Raise **energy awareness** among the users and employees of the schools and public buildings and to go beyond the EURONET 50/50 MAX project: changing their own energy behaviours thereby influencing families and friends to do the same!

ACHIEVED

- The energy consumption of **all buildings** (that has savings) has been **reduced** by **11.54%** on average, and the **CO_2 emissions** have been **reduced** by **11.99%** on average.
- **All buildings** have been saved, in all **1,034,487.10** Euro that means **1,376.82** Euro on average per building. If we consider only the buildings with savings (that is the 68% of all buildings) the amount of money obtained per building increases **until 2,795** Euro on average **per building.**
- **155 local** strategies, **26 school** strategies, **10 regional** strategies and **8 national** action plans integrated 50/50 concept.
- **525 schools** and nearly **45 other public buildings** joined the **50/50 network** and apply energy-saving measures.
- Educational **materials** for **secondary schools**, methodological and educational materials for non-school public buildings.
- Dissemination documents: Guide for caretakers; brochures for families, schools, local authorities and non-school public buildings.

...following the same way …



...to tackle climate change engaging building users.

During the project development, has been created a 50/50 network of public buildings to save energy, with more than 550 schools and 50 non-school public building. This network is still running with a clear commitment: to have more energy efficient public buildings.

The closer collaboration between schools and local authorities has been a great opportunity for the students of the energy teams to learn, to discuss and to think about energy with representatives of his town council. And, as well for technicians, 50/50 has been a great opportunity to know what the educational community of his municipality thinks about energy management.

Therefore the project has had a positive impact on the mitigation of climate change.

The change on behaviours of workers and users of public buildings but also of the other stakeholders involved such families and local authorities towards a more sustainable use of energy and the reduction of energy consumption, energy bill and CO_2 emission released to the environment, demonstrate how 50/50 projects are efficient at the same time to involve citizens in projects to mitigate climate change.

V. APPLYING EURONET 50/50 MAX

Euronet 50/50 max project has a main premise: spread around Europe the 50/50 methodology to save energy with behavioural changes. With this aim the project has focused on developing educational and methodological materials, increasing capacity building at different levels and sharing good practices.

Structure

The implementation of the Project activities followed a three-stage structure involving phases of planning, execution and assessment, and extending the 50/50. They can be made consecutive but there are some of them that can be taken out of order depending on the development of the process.

- Planning and starting:

Identify schools and non-school buildings where the 50/50 concept could be applied. In this point is important identify strengths and weaknesses of each building and their users: interest and motivation, potentiality of saving, exemplariness, etc.

Twining work where the more experienced partners transferred knowledge to the less experienced ones helping them to overcome some difficulties.

Adapt and develop methodological and educational materials to the targeted audience (primary and secondary schools, managers and users of non-school buildings)

- Implementing and assessing:

After completing the preparatory work of identifying 50/50 buildings and with the materials developed started the implementation phase. At this time it was very important to identify a coordinator of the process in each building. To enable success with 50/50 process into the buildings it's important to have a person or a team that becomes the "motor" of the 50/50 inside. This figure was called "Energy team".

Also, to proceed with the success is important to increase the knowledge of all the users and workers of the building. For that, during the project several training sessions were developed and addressed to different audience: teachers, caretakers, cleaning staff, etc.

An easy tool for calculate energy savings was developed by partners in order to allow municipalities and schools could make their own calculation and permits to know the savings achieved.

During this stage, in order to know how the process is going, whether the planned goals are achieved, two assessment reports were developed, one at the end of each natural years included in the project.

- Strategic roll-out:

The idea is to promote 50/50 concept by local, regional and national authorities and its integration into relevant strategies or plans, like local or regional climate or sustainable energy strategies or plans, educational plans at all governance levels, national energy efficiency action plans or other relevant national strategies. Furthermore, each partner had to find and engage an institutional project observer from its own country or from another EU

country, not participating in the project. These institutional project observers are organizations that facilitate spreading the 50/50 concept in their countries and throughout Europe. Also, is very important to organize dissemination events, establish links with networks or initiatives that deal also with energy efficiency and/or with environmental education.

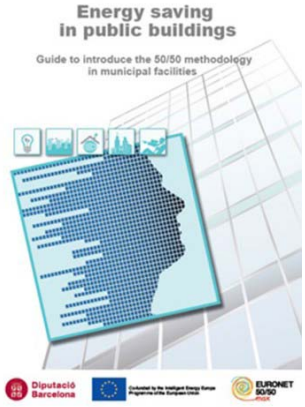
Tools and materials

To proceed with the transfer of knowledge, building capacity, sharing activities and experiences and disseminating the project, several methodological and communication tools or materials were developed within the project. All these useful materials were developed in order to inspire and provide users of the buildings guidance on how to implement 50/50 and become more energy efficient. You may download them free of charge from the project website.

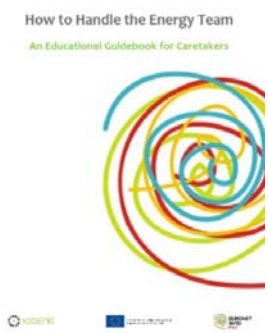
Pedagogical materials

E-pack – the educational material: three different E-packs were developed: E-pack for primary schools; E-pack for secondary schools; E-pack for non-school public buildings.
The E-packs for schools contains many useful guidelines for teachers that will help them in implementation of the 50/50 methodology and their work with the school energy team. It includes examples of worksheets and experiments that may be used to increase the pupils' knowledge of energy and climate issues.

The E-pack for non-school public buildings focuses on implementation of the 50/50 methodology in non-educational public buildings. It informs what criteria must be met by these type of buildings, if they wish to engage in the 50/50 project, what is the role of local authority and the energy team, as well as explains step by step how to implement the 50/50 methodology in order to achieve energy and financial savings.



Training for caretakers: This is a guidebook addressed to school caretakers (although also the people involved in the 50/50 project will find here many useful tips!) and will help them to prepare for the work with the energy team, including co-organisation of the energy review of the building. Caretakers play very important role in the 50/50 project as they know best the building and its energy system. Therefore, they can help the pupils and users of the building analyse energy situation of their building and implement energy-saving measures.



Methodological materials and tools

Guidebook "Benefits of applying 50/50 in public buildings"

The guidebook highlights the most important as-pects and benefits of applying the 50/50 con-cept in public buildings. It aims at encouraging and motivating European local authorities to include this concept in their local energy strategies and action plans, as well as gives some useful tips about engaging building managers and users in energy-saving actions. And such action can significantly contribute to achieving local climate & energy targets and demonstrating local authorities' commitment towards sustainable energy development. The guidebook is easy to read and focuses on illustrating the essence of the 50/50 concept in a simple way. It proves that significant energy savings can be achieved without large expenses.

Energy savings calculation tool: It is important to use a clear, simple and easy to understand method to calculate savings. The project has developed an easy tool that permits calculate energy saving after each natural year of the 50/50 implementation, including: electricity savings, heat savings, GHG savings and financial savings. You can find this tool on the EURONET 50/50 MAX website: http://euronet50-50max.eu/en/energy-savings-calculation-tool

This tool helps to facilitate and homogenise the calculation of energy and financial savings done by members of the 50/50 Network.

The tool is easy to use and consists of the following steps:
1. Enter the name of the building, name of the person doing the calculation and choose energy sources used in the building.
2. Enter the input data (electricity and heating consumption, degree-days, energy prices, etc.).
3. Submit data and calculate the savings.
4. Check the results. Create a PDF-report.

Measurement devices: to help students to know how energy is used and how it is sometimes lost at their school a set of measurement devices is loan to school. This set is composed of: a luxmeter, a thermometer and an instant electricity meter.

Dissemination tools

EURONET 50/50 MAX national versions of the project website (www.euronet50-50max.eu).

Facebook: During the project a Facebook profile was created to help to spread the project besides to offer a site to: observe most interesting activities and achievements from schools

and buildings from project partners, but also from others involved in the 50/50 Network; to post about activities; to present ideas and innovative approaches to energy saving; to share photos; to inspire others and get inspired by them. (https://www.facebook.com/EURONETMAX)

Catalogue of 50/50 schools and other public buildings

The catalogue includes profiles of all schools and other public buildings implementing the 50/50 concept. They all have different experiences with implementation of the 50/50 methodology and each of them developed many good practices that may be a source of inspiration for other educational centers that would like to follow their example. From the profiles you can not only learn about environmental actions undertaken by different facilities but also get their contact details to get in touch and exchange experience about tested energy-saving solutions.

Catalogue of good practices

The catalogue includes many interesting ex-amples of good practices developed by schools, other public buildings and municipalities from 13 countries involved in the project. You will find here many useful tips how to successfully implement 50/50 methodology in your building, how to actively engage building users in energy-saving actions and how to launch widespread awareness raising campaigns. There are also some ideas about possible ways of reducing heat, electricity and water consumption, as well as ensuring more rational waste management.

Brochures

To help to better understand how to launch a 50/50 project in a public building and what are the potential benefits of it, the project have prepared a set of thematic brochures. The **brochure for families** encourages parents and other family members to engage their children in energy-saving activities, joining education with good fun. It also includes a set of tips how to save energy at home. The **brochures for schools and other public buildings** show how to create energy teams consisting of pupils, teachers or other building users and engage them in energy management in the building. The **brochure for policy makers** shows the benefits of implementation of the 50/50 concept in municipal buildings and how it can help local and regional authorities reach the targets established in their sustainable energy strategies.

Games

Partners shared some interesting educational games and plays developed by students participating in the EURONET 50/50 MAX project and published them on the webpage. Also, some games were developed by partners and are loan to schools and municipalities.

VI. SUCCEED WITH 50/50 PROCESS

Good planning is key to success

Before beginning the implementation of 50/50 in schools or other public buildings, some things must be checked to ensure the success of the project both in reducing energy consumption as getting various groups involved:

AS A MUNICIPALITY YOU SHOULD KNOW THAT YOU HAVE TO…

- identify schools / public buildings seriously interested in the 50/50 process
- determine the duration of the implementation
- check if there have been renovations of the building in the past three years
- provide data about the school/public building consumption on heating energy and electricity
- clearly define the persons in charge of the process and their functions
- take part in the process
- return 50% of achieved savings to school / public building
- sign a collaboration agreement with school/public building

AS A SCHOOL YOU SHOULD KNOW THAT YOU HAVE TO…

- talk with the city council about your interest
- determine the duration of the implementation
- find motivated teachers to help pupils to realising the project
- set up the energy team
- motivate the caretaker to be a part of or support the energy team
- follow 50/50 methodology to save energy
- promote behaviour changes among pupils and other users of the building
- use 50% of achieved savings
- provide measurement devices (thermometer, etc.) to carry out energy survey at school
- sign a collaboration agreement with school/public building

AS A PUBLIC BUILDING YOU SHOULD KNOW THAT YOU HAVE TO…

- talk with the city council about your interest
- determine the duration of the implementation
- find motivated managers and users to help workers and users to realising the project
- motivate the caretaker to be a part of or support the energy team
- promote behaviour changes among pupils and other users of the building
- use 50% of achieved savings
- sign a collaboration agreement with school / public building

Follow 50/50 way to success in schools and non-school public buildings

A 9-step methodology helps schools and non-school public buildings users to learn about energy and how to save it. It actively involves buildings' users in the process of energy management and teaches them environmentally behaviours through practical actions.
The 9 steps can generally be extended over a whole year. However, each energy team decide the appropriate speed to develop them, and will arrange the working plan in accordance with its reality.

STEP 1 – SET UP THE ENERGY TEAM

Who?
The energy team should consist of a group of pupils (one class or representatives of different classes), one or two interested teachers and the school caretaker. It is always a good idea to have members of the town council (from environment, education, services and maintenance) in the energy team.

Photo: Christia Alexandrou (CEA)

What?
Its task is to explore current energy situation of the school/building and to propose and implement energy saving measures. The team will also organize an information & education campaign addressed to the rest of the school society or other building users, plan tasks, propose actions, coordinate and disseminate the project.

When?
As the energy team will be the project's driving force, it should be set up right at the beginning of the 50/50 project

Step 1. Setting up the energy team: In other public buildings, the energy team is the management team or persons that want to promote the project. Involving members of the town council (from environment, education, services and maintenance) is a good idea.

STEP 2 – INSIDER ENERGY TOUR

Who? The management team; teachers involved in the project; maintenance personnel, the headmaster of the school

What?

The so-called “Insider energy tour” will prepare the headmaster together with involved teachers and school caretaker for future tasks. Before starting work with the pupils, the school caretaker will lead the tour around the school showing heating and electricity systems. The aim of the tour is to:

Photo: Climate Alliance Austria

- learn about the energy situation in the school/ building and make an initial assessment of the energy characteristic of the school building (including assessment of the heating system, technical state of the building, etc.)
- identify aspects for potential savings and the elements, to which pupils’ attention should be drawn to.

When? At the beginning of the project.

Step 2. **Signing a commitment agreement**: We recommend to sign an agreement, specifying responsibilities, the method to calculate the savings and how to refund the savings achieved. These should be equally shared between the building and the city council according to the 50/50 scheme.

STEP 3 – RAISING PUPILS KNOWLEDGE AND AWARENESS ON ENERGY ISSUES

Who? The energy team.

What?

First step for the energy team is to raise the pupil’s knowledge and awareness of issues related to climate and energy. They get acquainted with such issues as:

- forms of energy, using energy in everyday life and its impact on the environment,
- greenhouse effect, climate change and climate protection,
- energy saving, energy efficiency, use of renewable energy sources.

This could be during regular classes and/or during additional meetings with pupils (i.e. meetings of school environmental clubs, meetings of energy team). The projects didactic guide “Energy Saving at schools” for primary and secondary schools might help you with this task!

Photo: P. Zieliński

You can download it on the EURONET 50/50 MAX website:
www.euronet50-50max.eu/en/50-50-library/methodological-guidelines-how-to-implement-the-50-50-methodology

When? Right after setting up the energy team it can start with this step can be started with.

Step 3. **Monitoring the energy consumption of the building**: It is good to know how much energy the building uses and when it is used. You can follow-up of the monthly bills, read the meter regularly or install measuring devices. When monitoring the energy consumption you see the impact of the actions taken. Best is to appoint someone in the building to be responsible for this task.

STEP 4 – ENERGY TOUR
Who? The energy team.

What?
This is an energy tour carried out by the energy team. The school caretaker will lead a tour around the school showing the heating and electricity systems. Supervised by the teachers, the pupils inspect the whole school building and evaluate different aspects influencing energy consumption in school, including:

- technical state of the building
- heating system
- lighting
- use of electronic equipment
- use of water


Photo: Climate Alliance Austria

All school rooms should be checked (classrooms, corridors, staircases, gyms, toilets, teacher's room, storage rooms, etc.), to learn how energy gets to the school, how it is used and how it is sometimes lost. The energy team can use the working sheets of the didactic guide "Energy Saving at Schools" (Download: http://www.euronet50-50max.eu/en/50-50-library/methodological-guidelines-how-to-implement-the-50-50-methodology) to collect all the data.

When? After the energy team learned more about energy saving and climate change it can do the energy tour.
This step should be finished during the first two months of implementation.

Step 4. **The energy audit**: Now we know how much energy is used and when it is used, this step tells us HOW we consume. Carrying out this initial energy audit in the facility should require special attention to the management and behavioural elements of the building.

STEP 5 – GATHERING DATA AND ENERGY SURVEY

Who?
The energy team; Pupils that take part in the project

What?
At this stage of project implementation, the energy team has to make an energy survey at school including an instant temperature profile and a survey of the use of electricity during class time. The team observes how other pupils, teachers and other building users' behaviours influence energy consumption in school and pays attention especially to such behaviours as airing rooms, regulating the heating, use of electrical and electronic equipment, etc. This step includes surveys among other pupils regarding their opinion about the temperatures and air quality in school, use of electrical equipment and other energy-related issues.

Photo: City of Zagreb

If the energy team wants to make a long time temperature profile of the school, they can measure temperatures in all schoolrooms for 2 weeks and check, if they correspond to the established standards. It might be interesting to do the measures at a later stage or in the following year to check the results of the project.
For this step, the energy team needs some measurement devices like a thermometer, luxmeter and an instant electricity meter.

When?
After the start of the heating season. Do the measuring during class time, so that the entire school community learns about the energy project.

Step 5. **Energy tour**: The energy tour is an accompanied visit to discover how energy is managed in the building. This visit must allow the members of the energy team to get an idea of the principal strong and weak points of the building in order to start proposing actions for improvement. The tour can also be used for the energy audit, steps 4 and 5 being dealt with simultaneously.

STEP 6 – SCHOOL´S ACTION PLAN

Who?
The energy team, the teachers, the headmaster and the caretaker.

What?
Now the energy team is ready to discuss its findings and to develop solutions to reduce energy consumption at school (change of behaviours and small investments).


Photo: Region of Crete

The team also identifies "target groups" of the proposals, as well as ways to approach them with the energy-saving message. At this stage, the team might need the help of the adults to put some of the proposals into action.

When? As soon as possible to go on with step 7

Step 6. **Information to the users of the building**: From conclusions arisen from the energy tour, the energy team may start planning communication actions to inform the rest of the users. Parallel to that, the energy team can collect ideas, comments, opinions, etc. from the rest of users, to be used when preparing the proposals for the action plan (step 7).

STEP 7 – INFORMATION CAMPAIGN

Who?
The energy team.

What?
At this stage, the energy team shares what they have learned during project implementation as well as what all energy users in school can do to save energy with the rest of the school. The team may use different communication channels, like posters, wallpapers, bulletin board displays, presentations during classes and school events, workshops, organization of an Energy Saving Day, articles on the website of the school, leaflets for all users, etc. Everyone at school should know how they can take part!

Photo: Independent Institute for Environmental Issues (UfU)

When?
As soon as the action plan is ready, the energy team can start with the information campaign.

Step 7. Defining the action plan: Develop solutions to reduce energy consumption in the building (like the energy teams in schools).

STEP 8 – REPORTING MEASURES THAT REQUIRE SMALL INVESTMENTS

Who? The energy team, the headmaster, parent´s associations and the municipality.

What?
Sometimes even small amounts of money can make a big difference! Although the main aim of the 50/50 methodology is non-investment energy savings through a change of the behaviour, the energy team can also propose things that require small investments. These proposals can be communicated to the municipality, the school authority and/or other potential sponsors, asking them for support.


Photo: Primary School Menéndez y Pelayo

When?
As soon as the action plan is ready, the energy team can start creating a list with all measures that require small investments.

Step 8. Calculation of the energy savings

STEP 9 – COMMUNICATING THE SUCCESS AND USING SAVED MONEY

Who?
The energy team, the teachers and the headmaster.

What?
After each year of 50/50 implementation, it is necessary to calculate, how much energy, CO2 and money has been saved. It is important to involve the energy team in the discussion of what can be done with the money returned to the school with

Photo: Montsenyor Gibert Primary School

the energy savings. This way the pupils will really feel that their actions have positive and measurable results.
A funny part of this step is to disseminate the results among the school public, parents and other citizens with posters, articles in newspapers, etc.

When?
The duration of the project should be at least one calendar year. Normally the energy team will get the first results after about one or two months later.

Step 9. Dissemination of the results

VII. RESULTS AND IMPACTS

The savings in schools

67,63% of the 426 schools obtained savings (67,8 % in 2014, the first year, and 67,4% in 2015, the second year of the project).

- Schools with savings
- Schools without savings

The savings in other public buildings

85% of the 43 non-school buildings obtained savings in 2015.

- Other Buildings with savings
- Other Buildings without savings

Total savings achieved in terms of primary energy is 15,348,697 kWh. These kWh are the same as the energy consumed by more than 1.300 houses in the Mediterranean area. Total saving in CO2 emissions are 3.997 tn.

Buildings engaged in the project also have saved 1.034.847€. Is a huge amount of money!

If we focus in the schools and buildings that have saved energy, the results are bigger than we expected. Each of these buildings saved:

- 11,54% in terms of energy
- 11,99% in terms of CO2 emissions.
- 44,728 kWh (primary energy savings) and 37.959 kWh (final energy savings).
- 2.767 EUR
- 11,99 t CO2

The most outstanding impacts of the project implementation are:

The change on behaviours of workers and users of public buildings but also of the other stakeholders involved such families and local authorities towards a more sustainable use of energy.

The reduction of energy consumption, energy bill and CO_2 emission released to the environment. Therefore the project has had a positive impact on the mitigation of climate change.

The closer collaboration between the school and its local authority. The opportunity for the students of the energy team to learn, to discuss and to think about energy with representatives of his town council is enriching. And the same for technicians, is a great opportunity for know what the educational community of his municipality thinks about energy management.

Increasing energy awareness of workers and users of public buildings

Development of an easy methodology, tools, guidelines, advises that can be applied in many different types of public buildings such: schools, sport facilities, municipal offices, libraries, museums, civic centres, etc. that want to start implementing 50/50 process.

Makes possible to achieve energy savings without making large investments

Successful 50/50 process in public buildings can be a lighthouse for other public or private buildings in the municipality or region. It inspires citizens and local stakeholders to follow the example and become more energy efficient.

A 50/50 process can help to reduce CO_2 emissions and to achieve local climate and energy targets.

VIII. RECOMMENDATIONS FOR THE ATTENTION OF KEY DECISION MAKERS

The experience of the schools and non-school public buildings involved in Euronet 50/50 max project allowed to detect many needs or strengths and barriers that have to be considered when developing a 50/50 process. The following graphic summarizes the most important issues identified.

Strengths

- **Euronet 50/50 max** enhances the possibilities of **public buildings to save energy** with **just changing behaviors** and **increases their knowledge and motivation** on climate change action
- **Strong potential** of public buildings to achieve energy savings with just changing behaviors.
- **High possibilities to extent an integrated approach, such as 50/50,** bringing stakeholders together
- **50/50 as an effective tool to save energy at school and increase** awareness on energy and climate change
- **50/50 is a motivating** methodology that empowers pupils and users of buildings to get energy smart.

Weaknesses

- Lack of time
- Motivation, knowledge
- Obtaining consumption data
- How to return savings (administrative and legal barriers)
- Include 50/50 in regional and/or national strategies and plans.

Good project managing includes regular checking on where the project implementation is going and whether all the necessary actions have been taken. It is good to take a systematic approach on this. The following check lists might be useful:

Level of implementation of the 9 project steps

	Done	Partially done	In process	Not done
STEP 1 – Set up the energy team				
✓ Choosing the energy team members				
✓ Introducing the project to all energy team members				
✓ Deciding the working methods, meeting frequencies etc.				
STEP 2 -Insider energy tour (adult members of the energy team)				
✓ Making the tour of the whole school building				
✓ Listing things that the energy team should pay attention to				
STEP 3 – Raising pupils knowledge and awareness on energy issues				
✓ Discussing general issues (energy, energy saving, environment)				
✓ Teaching about the greenhouse effect, climate change etc.				
✓ Defining the tasks to be done during the energy tour				
✓ Preparing the work sheets				
✓ Delegating tasks amongst energy team members				
✓ Preparing a check-list of things to be analyzed				
STEP 4 – Energy tour				
✓ Examining the entire school building				
✓ Preparing a memo of the observations during the tour				
✓ Preparing a proposal of data to gather and areas to analyze				
STEP 5 – Gathering data and energy survey				
✓ Making temperature measurements and documenting the results				
✓ Gathering information on the experiences and habits of the users				
STEP 6 – School's action plan				
✓ Discussion about the findings made during the previous steps				
✓ Making a plan to disseminate the results and propose actions				
STEP 7 –Information campaign				
✓ Explaining all the actions executed				
✓ Informing all users of the building on how they can participate				
STEP 8 - Reporting measures which require small investments				
✓ Preparing a list of measures needing investment				
✓ Preparing a list of organizations/persons to be approached				
✓ Deciding the working methods				
✓ Undertaking the necessary actions				

STEP 9 – Communicating the success and using saved money				
✓ Explaining to the school public the achievements of the project				
✓ Deciding how to use the money returned to the school				

Level of stakeholders' involvement in the project

	High	Medium	Low	None
Level of communicating with the project partner (or similar)				
✓ Reporting the school's activities				
Level of communicating with the facility managers				
✓ Going through the school's consumption figures monthly together with the facility managers				
✓ Reporting problems found with the school building or the energy use				
✓ Reporting the results of the long-term temperature measurement				
✓ Reporting the measures needing investments				
Level of communicating with the educational community				
✓ Other pupils				
✓ Teachers				
✓ Principal				
✓ Other staff of the school (caretaker, cleaning staff, secretaries etc.)				
✓ Other users of the school building (e.g. evening and weekend users)				
✓ Parents' association				
Level of communicating with other stakeholders				
✓ Pupils' families				
✓ Citizens				
✓ Town Council (or similar)				
✓ Other stakeholder, which one?				

IX. SOME EASY AND SIMPLE BEST PRACTICES IMPLEMENTED BY THE 50/50 NETWORK SCHOOLS TO SAVE ENERGY

In the project EURONET 50/50 MAX, more than 500 schools and 48 other public buildings tested the 50/50 method in their facilities. Some developed ideas and measures showed great results. The following best practice examples can be used as a pool or ideas for the implementation of 50/50 in a public building. If you want to know more about a best practice, please use the following link:

➢ www.euronet50/50max/best-practices

Austria

Primary school Barwitzius (Wiener Neustadt) expanded the 50/50 project to waste and water:

Photo: Primary School Barwitzius (Wiener Neustadt)

The Primary school Barwitzius saved 846.41 € (waste) and 669.5m³ of water (1,119.40 €) by improving the waste separation concept, evaluation of the watering system, no provision of hot water on Saturday and Sunday in the gym and installing economy buttons in the toilets.

Croatia

Big children for small children

The Primary school Ivana Filipovića has recognized the value of the project and has organized classes where the children from higher grades came to work with the children from first grades in order to teach them about energy. These lessons were both fun and educational.

Photo: City of Zagreb

Cyprus

Energy awareness to the local community

The energy team of the **15th Primary School of Kato Polemidia** decided that they should do something to raise energy awareness among the local community. Therefore, they prepared a three-page brochure with simple energy saving tips and advice and they distributed it to all community members, from parents and citizens, other schools of the area, bookshops, organizations and the municipality. They distributed a total number of 70 brochures and spread the message of "energy savings!"

Photo: Natasa Soteriadou • Aristos Markakis • Christoforos Christoforou • Andri Georgiou

Czech Republic (EAV)

Primary and Secondary school Čáslavice - Pass the baton

Teachers and pupils from primary and secondary school Čáslavice (Vysočina region) decided to ensure project dissemination and continuation in their school for the future pupils. This is based on forwarding energy knowledge and experience between pupils themselves. Older pupils, who graduate at the end of the school year forward their experience and knowledge to younger pupils about 10 years old.

Photo: Marie Kružíková Primary and Secondary School Čáslavice

Czech Republic (TOP ENVI)

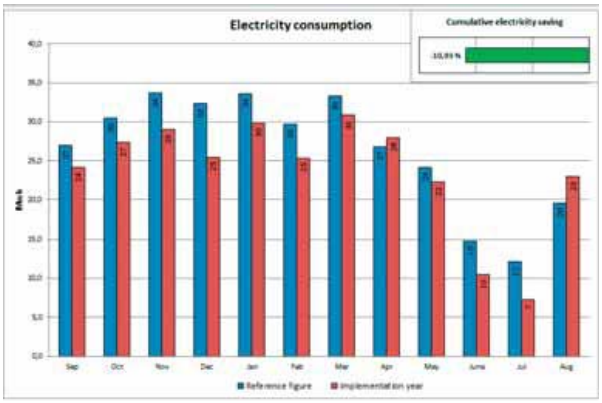
Energy saving activity cup

In this competition, the activities of the energy teams are evaluated according to (in advanced given) criteria allowed for a provable output: e.g. web, Facebook, press and other media.

It is very important to define these criteria in advance, to evaluate the participation of the school energy team's afterwards and to announce in advance given prizes for 1st, 2nd and 3rd place. This gives the same chances to all teams even though they have very different start conditions of buildings operation and it can significantly activate them in their participation on energy saving searching.

Finland

Monthly energy consumption figures



When the building users receive monthly feedback on their consumption figures, it helps and motivates them to implement the project. The figures need to be in a format that is very easy to understand (even for pupils), such as bar charts comparing the monthly energy use to the reference months.

Germany

Peer Teaching and Learning – School Students instruct the whole school

The science course of the 13th grade realized the energy saving project at their school together with their teacher. As the pupils will leave school in summer 2016, they need a new energy team to continue the project. Therefore, they prepared a final presentation for the whole school. They presented their energy saving activities as one means to cut the emission of CO2. The students prepared a "world game" asking about climate facts in relation to the continents. The classes had 30 seconds to discuss, answer a question and lift a poster with the name of one continent. Representatives of the district administration took part. The winner group of the world game was invited to sandwiches and pizza.

Photo: Jugenddelegierte für Nachhaltige Entwicklung DBJR)

Image: Eleni Geronimaki, Serafim Dimaras and pupils of Primary School of Boroi

Greece

Primary School of Boroi Poster use and official letters to Principles

The Primary School of Boroi did an amazing job in promoting the building energy saving issue outside the school premises. To specify, the participating pupils created a best practices energy saving poster as well as relevant flyers and several thematic blog entries in the school's blog. They also sent official letters to both the school Principle and the Mayor of Municipality of Faistos, suggesting ways to achieve energy saving and consequently minimizing energy related costs.

Blog: http://blogs.sch.gr/dimvoron/category/εξοικονόμηση-ενέργειας

Photo: Riga Managers School

Latvia

Excursions on energy efficiency

Latvenergo Energy Efficiency Centre, with whom we have signed an agreement on cooperation in the project Euronet 50/50 max, had prepared a program of excursions for pupils.

The program includes (duration 2 hours 30 minutes) demonstration with detailed comments as virtually all instruments used in Latvia, which are consumers of heat, electricity, water and gas. Under this program, a seminar was organized for four schools from Jurmala.

The Seminar is included in the plan of the Centre and will be regularly conducted.

Lithuania

50/50 from schools to families

During the implementation of the project in several schools, pupils were taking energy-measuring devices at home for weekends in order to do measurements and try to reach for energy savings.

In this way, they have found out the most energy consuming devices at home and tried to use it more rationally. Some of pupils even made agreements with their parent similar to 50/50 methodology. This is good practices on educating and motivating young generation.

Photo: Kaunas Regional Energy Agency

Poland

Travels of energy-saving bulb

Photo: P. Nosal • M. Najdek

Pupils from the Primary School no 9 in Dzierżoniów decided to share knowledge gained within EURONET 50/50 MAX with their younger colleagues. They contacted the city council with the proposition to organise energy-saving classes in municipal kindergartens. Together with the teacher and the municipal coordinator of the project, they developed an educational programme addressed to small children and started visits in the neighbouring kindergartens.

Slovenia

Solar system used for teaching purposes

Photo: P. Nosal • M. Najdek

Energy team's actions helped with the school board decision to put a small solar system on the roof of Primary School Šmartno ob Dreti in partnership with a private investor. Pupils are now allowed to collect data and use the solar System for teaching and demonstrational purposes.

Spain (DIBA)

Energy training for the cleaning staff

The City Council of Cardedeu and Barcelona Provincial Council organized a briefing session to the cleaning staff of the municipality's schools to help them to agree the best way to save energy.

The cleaning staff was introduced to what Euronet 50/50 max is about. The 12 workers participants were able to learn the basics of energy consumption in schools and reflect on their role in making a more responsible use of energy while doing their work in schools of Cardedeu.

Photo: City Council of Cardedeu

Spain (DIHU)

How to control the temperature of classes at all moments!

Photo: María Antonia Barceló Martínez (Primary School Menéndez y Pelayo)

Making a small investment the project team gave 2 liquid crystal thermometers (those used in home aquariums) at 12 participating schools, personalized with the image of the project. These placed on the walls of classes allow you to control the temperature at all times for each class. These thermometers can also be customized by the students as an educational activity.

X. LESSONS LEARNT

Euronet 50/50 max has managed to involve many people in energy savings in public buildings which has generated huge savings. 500 schools of 13 European countries means a great network that during the development of the project learnt a lot about what climate change is and about how they can save energy in their public facilities. And all of us have been learned that:

With **enthusiasm** of teachers, students, managers and users of the building**, Euronet 50/50 max goes on!**

The 50/50 methodology is a **powerful tool** to raise awareness on energy use and save energy in public buildings. Euronet 50/50 max enhances the possibilities of public buildings to save energy with just changing behaviours and increases their knowledge and motivation on climate change action.

Co-responsabilty is a **key factor** to achieve energy savings

Public buildings need much more **motivation** and **support** than schools. In non-school public buildings it's necessary to adapt the methodology according with the objectives and interests of workers and users of the buildings. When we are working with adults sometimes it's more difficult to maintain the motivation than with young student. But when the organizers of the 50/50 projects can get that, the potential of public facilities to achieve good results is enormous.

Economic incentive has been just incentive, not the main goal

Difficulties to arrive (influence) on **regional and national level strategies**: Strategic roll-out has proven to be difficult to conducts, due to several reasons. Depending on the specific situations in each country or on the kind of each partner, these problems occurred on local, regional and/or national level. Partners as NGOs or universities has more difficulties to reach the targets, they don't have direct channels and methods to influence strategies. But for public authorities, it was supposed to be easier.

Is very important **ensure wide dissemination of the 50/50 benefits** on the national and regional level to motivate more public authorities to implement 50/50 concept in their buildings.

XI. SUCCESS STORIES

Great potential to save energy as 50/50 methodology is integrated in energy management of public buildings

50/50 projects are based in a clear methodology that allows getting good results and savings.

In this sense, we like to talk about 50/50 project as a process where everybody wins. 50/50 methodology allows getting energy savings without big expenses of money. The actions proposed by Euronet 50/50max wants to change the bad behaviours of the users of the buildings with the aim to help them to improve the energy management of their facilities.

We have the objective to get the best comfort ability with the less energy expenses.

With a simple approach, the 50/50 is able to introduce changes in the perception of people about their relation with spaces that they use and with the environment. We have an enormous margin to apply this methodology depending on the characteristics of each building, and, depending on the needs and illusions of the users of the public facilities. So, since this point of view, we have an enormous field of game to improve our work about how introduce changes in the behaviours of our societies to save energy.

So, one of the most important things, maybe the real key to be success, is to get an energy team that feels very engaged with the objectives of the project. So, we have to try that all the work that we are developing with the pupils and teachers of the schools and also with the stakeholders and users of the buildings, will be fun, interesting and based in the own experiences of the people that are using the school or the spaces of the buildings.

Thus, to go in depth with this idea, in the buildings when we are working with the 50/50 methodology, we need to have clear that the students or the users of the public facilities, are who will be the leaders of the change, so we have to help them to discover, investigate and learn about energy issues and concepts.

An easy and funny way to contribute to the common objective to fight against climate change.

Many municipalities have the interest on find easy ways to tackle climate change, to improve their energy policies with actions based on energy efficiency that helps them to become more sustainable cities and accomplish with EU energy and climate change commitments.

Most municipalities engaged on Euronet 50/50 max are also members of Covenant of Mayors and are designing or implementing their SEAPs (Sustainable Energy Action

Plans). 50/50 methodology is added in SEAP allowing municipalities to save energy in schools and non-school public buildings. The energy saving results achieved by the schools involved in Euronet 50/50 max project show that important improvements on energy use can be done with 50/50 processes.

Among the 3 years lasted with Euronet 50/50 max 155 local strategies have adopted 50/50 concept as an action or a process to be developed. In the same way 10 regional plans and 8 national plans had included 50/50 concept as a useful tool to reduce energy consumption and therefore helps on the reduction of CO_2 emissions.

At the same time 50/50 creates stronger links between schools, non-school public buildings and municipalities that is mutually beneficial. On one hand energy teams of buildings received technical support from municipalities, that helped to increase knowledge about energy use in the building, but also financial support, obtained from the energy savings achieved, that allowed making some small investments to improve the energy efficiency of the building.

On the other hand, municipalities benefit also from 50/50 process as the buildings save energy and money in the electricity and heating bills. These savings permit municipalities to invest in actions that allow achieve higher savings or going on more sustainable buildings.

Finally, reduction of energy consumption, of the energy bill and of the CO_2 emission released to the environment meaning that the project has had a positive impact on the mitigation of climate change.

Schools and other buildings spread 50/50 and engage new ones

The results achieved after 3 years of implementation of the EURONET 50/50 MAX have been impressive, as well as the involvement of teachers, pupils, caretakers and representatives of municipalities. 525 schools, 45 facilities and 13 countries involved form a big 50/50 community. And the replicability of this network and its experience is another important point to consider. We like to imagine that in 5 or 10 years the number of schools implementing the 50/50 concept will grow from 500 to 50.000, and the group of 45 facilities will expand to 500.

We believe that we have planted and cultivated the seed that will now successfully grow and allow involvement of more and more public buildings, which will be working to adopt new energy culture based on its more responsible use. About the results, the work of schools and other public buildings has been awesome.
During the project municipalities and schools from other territories than partners ones have been interested on 50/50 methodology and process. A lot of them asked how they could be members of 50/50 Network and the steps that they need to follow to start with 50/50 process.

Creativity and pro-activity of people, who have been involved in the energy-saving actions, have been amazing and the results achieved are the testimony of their efforts: 23.560.103,89 kWh (primary energy) and 1.515.609,92 EUR saved and 6.304,04 tons of CO_2 less emitted to the atmosphere – these numbers are the best summary of the EURONET 50/50 MAX actions. At the beginning of the project our objective was to obtain energy savings of 8% and finally we have acquired 11,5%! EURONET 50/50 MAX has also worked to raise people's knowledge about energy issues and to increase their awareness about the necessity of not wasting energy and other resources. In this sense we think that results achieved have been great and we congratulate all people involved in the project implementation.

XII. EVALUATION OF THE EURONET 50/50 PROJECT

The opinions and experiences of the users of the schools and the non-school buildings were evaluated twice during the project. This was done by developing two different e-forms and translating them to all project languages. More than 300 responses from the schools and almost 30 responses from the non-school buildings were received. The opinions and experiences of the project partners were gathered via e-form as well. This was based on open questions and included also partners' views on the municipalities' experiences.

It was very valuable to collect feedback during the project, because this helped the project to understand different stakeholders' viewpoints. This is also useful for the future project planning as well as for the strategic roll-out of 50/50. When we know what are the major benefits and challenges, we can focus on them.

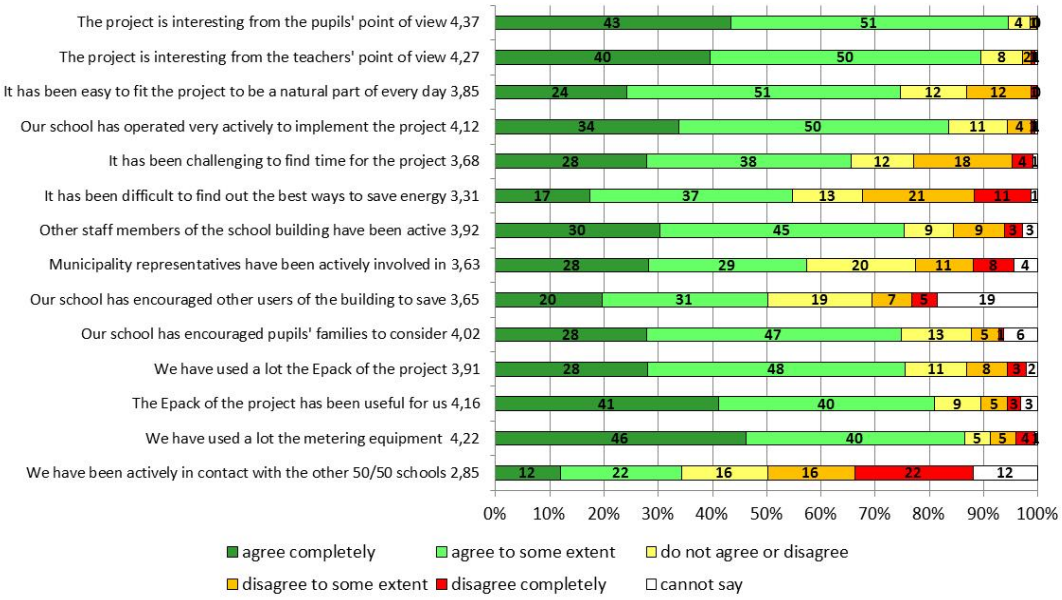
Regarding collecting the feedback from different stakeholders, the process went mostly as planned. It is very important to collect information from the stakeholders in their own language to make sure they understand the questions correctly and are able to express themselves. We think that gathering feedback also from the partners was an excellent idea, as the partners are the experts in their country and know a lot about the challenges, best experiences and opinions of different stakeholders.

Evaluation from schools

The schools were mainly satisfied with the provided material and information received from project partners and other organizations involved.

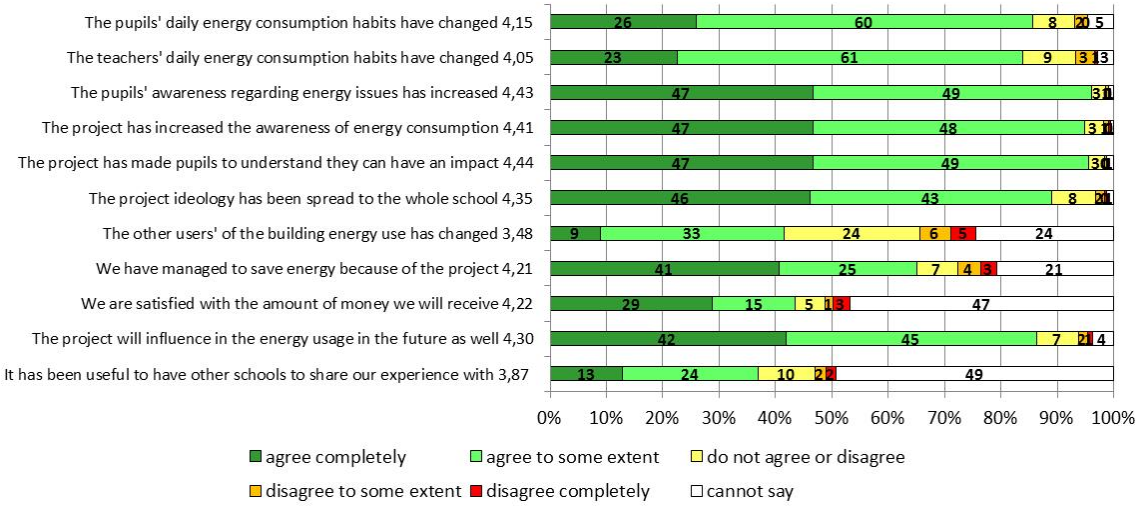
However, there are still other things they would have needed: More time to do the project; more involvement and commitment from the municipalities; more education in energy issues; expert involvement needed; more sharing of experiences and ideas with other schools; more support from other teachers of the school.

Regarding the materials, in general, teachers and pupils felt that they were interesting and useful, but they miss some more materials such as: more simple materials for smaller pupils; more lesson scenarios that could be used on different subjects (etc. maths, natural science, history, languages, art, etc.); educational movies in national



language (e.g. concerning use of RES, explaining benefits of energy saving, etc.); more materials about other environmental aspects of school's operation, e.g. water consumption and waste management; training materials and information to be distributed to the parents as well.

But in general the schools were happy to have this opportunity to learn more about energy and environmental issues. Many of them will continue the project and teaching energy issues to the pupils in the future as well. Pupils liked the project very much and eagerly participate in all project activities and brought their experience back to home.

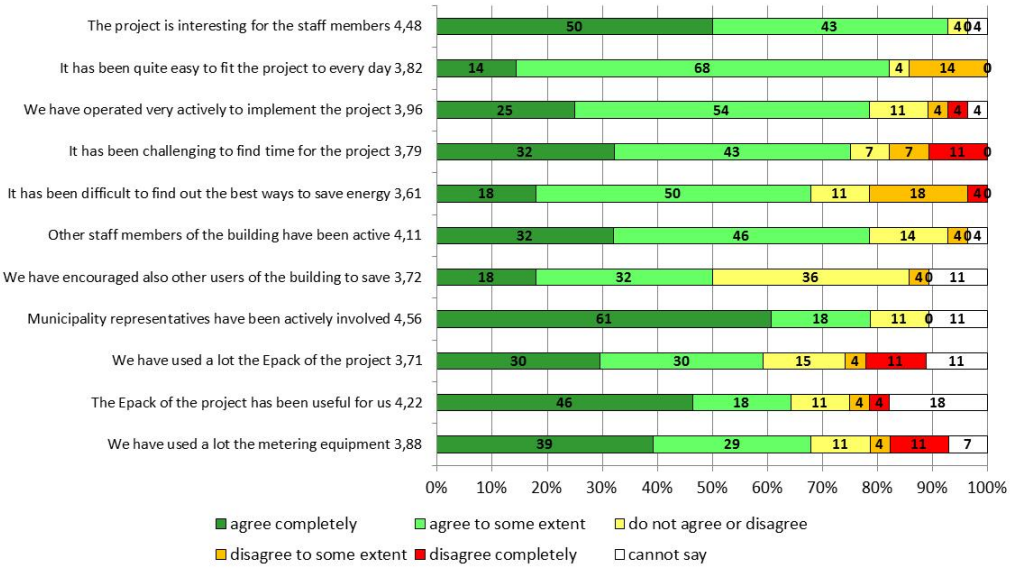


And one of the things that pupils liked most about the project was significant level of independence (they could plan and carry out many of the activities themselves) and that the project helped to establish stronger relations with other institutions (schools, kindergartens, etc.) residing in the same building.

Evaluation from non-school public

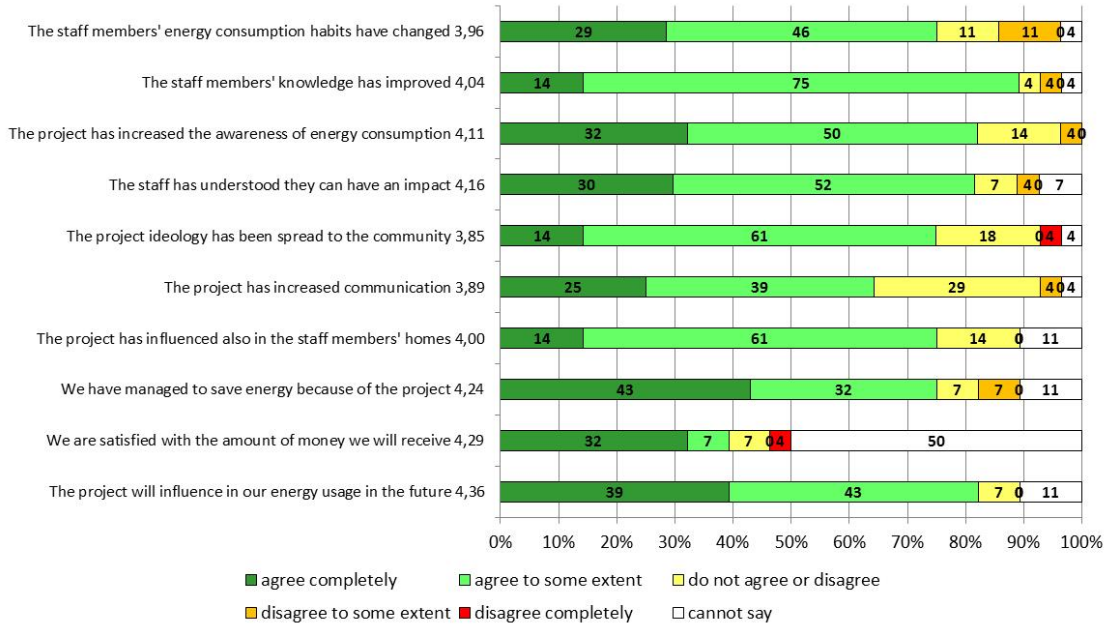
In this case the opinions are quite different than in schools, each public buildings runs in a different way and with different results. In general municipalities were interested but they didn't explain the project to the staff members of the buildings, then there was a lack of information. And on the other hand, there was a lack of more professional and technical materials, it wasn't enough the adaptation of materials developed for schools. To implement 50/50 concept in non-school public buildings needs a different approach than schools.

The biggest challenge was to motivate employees for implementation of certain energy efficient actions. Also, there was some lack of time and lack of people working with the project.



But, in spite of the difficulties the staff members felt that now they are more aware of the need to save energy and are looking forward to similar projects in the future; they are starting to pay attention to different things, which have previously not thought to be important; new clarity and better practices were brought to the daily routines.

And also, another thing highlighted is that the role and the involvement of the municipality (facility management) are significant and very important to guarantee the success of 50/50 process.



And finally, they think that it was a good opportunity to speak with employees about energy saving and that the experience of the project was an opportunity to learn more about practical ways of energy saving in their buildings.

Evaluation from partners

The factor mentioned most often as a good experience is the increased awareness of pupils and teachers as well as their engagement, enthusiasm, creativity and the efforts they were willing to make in order to save energy and promote the project. But also the increased awareness of energy and environmental issues of other people like facility managers, caretakers, workers and users of non-school public buildings.

On the other hand, partners say that it was difficult to motivate the staff members of other public buildings; they have no interest, time or motivation to do 50/50 activities, and usually many different user groups. It was much more difficult than in schools!

XIII. STAKEHOLDERS INVOLVED

We would like to thank all the schools, non-school public buildings and town councils that have enthusiastically participated in the Euronet 50/50 max project, sharing and learning together to save and improve energy use. We specially thank people who have led the actions showing us that great results can be achieved if we are careful every day.

If you want to know who have been involved you can see:
List of schools involved and List of non-school buildings involved.

XIV. CONTACTS

The EURONET 50/50 MAX project is implemented by a consortium of 16 motivated partners from 13 European countries, with great experience in the fields of energy saving and energy education. Should you have any questions regarding this project or the 50/50 methodology – feel free to contact us!

More information about EURONET 50/50 Max you can find on our website: www.euronet50-50max.eu

Our 50/50 Networking Platform is based on Facebook. You will find a EURONET 50/50 MAX profile and 12 national Facebook pages there with posts about our most interesting activities as well as activities and achievements of other schools, public buildings and municipalities. Get inspired and share your experience and opinions!

Barcelona Provincial Council (ES)
Project coordinator
www.diba.cat

City of Zagreb (HR)
www.zagreb.hr

Association of Municipalities
Polish Network 'Energie Cités' (PL)
www.pnec.org.pl

Riga Managers School (LV)
www.rms.lv

Local Agency for Energy
and Environment (IT)
www.alesachieti.it

TOP-ENVI Tech Brno (CZ)
www.topenvi.cz

University of Vaasa (FI)
www.uva.fi

Florence Energy Agency (IT)
www.firenzenergia.it

Region of Crete (EL)
www.crete.gov.gr

Climate Alliance Austria (AT)
www.klimabuendnis.at

Independent Institute
for Environmental Issues (DE)
www.ufu.de

Huelva Provincial Council (ES)
www.diphuelva.es

Energy Agency of Savinjska,
Šaleška and Koroška Region (SI)
www.kssena.si

Cyprus Energy Agency (CY)
www.cea.org.cy

Kaunas Regional Energy Agency (LT)
www.krea.lt

Energy Agency of Vysočina (CZ)
www.eav.cz

Project coordinator:

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