

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

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Technical Report on the 50/50 Implementation in Non-school Public Buildings

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1 INTRODUCTION

Further to the schools the EURONET 50/50 max is implementing the 50/50 methodology to nonschool public buildings. The educational buildings tend to have a very similar character with each other, which is not the case for public buildings. The project is currently implemented by 16 partners from 14 different countries in 48 non-school public buildings that include a wide range of differently used facilities like sport facilities, administration and office buildings, museums, libraries, educational buildings socio-cultural and civic centers as well as other type of buildings.

The Buildings have been provided with guiding material for the successful implementation of the 50/50 methodology, from the partners, including the e-pack and brochures that have been prepared by the partners and have been adjusted to the specifics of each country. Furthermore the buildings have been provided with luxmeters, thermometers and energy meters as well as energy monitoring equipment (smart meters).

This report deals with the implementation into the non-school public buildings and their specific characteristics with regards to their area, their occupants and visitors, the different working hours as well as the expected savings that may result from the implementation of the project. The results and the experiences of this project will be transferred into a guide for the local authorities across Europe on how the 50/50 methodology should be implemented in non-educational public buildings.









List of Partners and Number of Non-school Buildings

	PARTNER	Acronym	Country	No. of Non- school Buildings
1	Barcelona Provincial Council	DIBA	Spain (Catalonia)	10
2	Association of Municipalities Polish Network "Energy Cities"	PNEC	Poland	9
3	Local Agency for Energy and Environment	ALESA	Italy	3
4	University of Vaasa	UVA	Finland	1
5	Region of Crete	CRETE	Greece	6
6	Independent Institute for Environmental Issues	UfU	Germany	1
7	Energy Agency of Savinjska, Šaleška and Koroška Region	KSSENA	Slovenia	3
8	Kaunas Regional Energy Agency	KREA	Lithuania	1
9	City of Zagreb	ZAGREB	Croatia	2
10	Riga Managers School	RMS	Latvia	3
11	TOP-ENVI Tech Brno	TOP-ENVI Tech	Czech Republic	1
12	Agenzia Fiorentina per l'Energia	AFE	Italy	3
13	Climate Alliance Austria	CAA	Austria	1
14	Province of Huelva	DIHU	Spain	1
15	Cyprus Energy Agency	CEA	Cyprus	3
16	Energy Agency of Vysocina	EAV	Czech Republic	1

TABLE 1 - LIST OF PARTNERS AND NUMBER OF NON-SCHOOL BUILDINGS





The pie-chart below shows what type of buildings are implementing the 50/50 methodology. It is important to identify as many buildings as possible for the implementation of 50/50 but also to have a good sample of those buildings so that the results extracted can be transfered into the guidelines for each type of building since every building varies in usage.

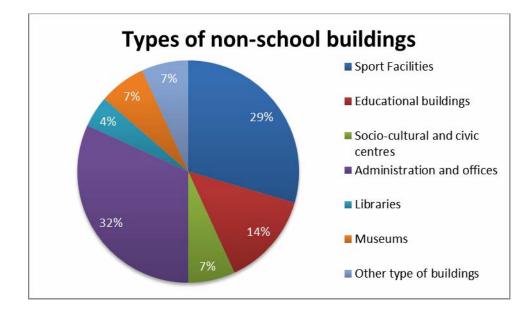


FIGURE 1 - PERCENTAGE SHARE OF THE TYPES OF PUBLIC NON-SCHOOL BUILDINGS

From the above pie-chart (Figure 1) we can deduce that the buildings that have been included in the EURONET 50/50 max are sport facilities, administration and office buildings, museums, libraries, educational buildings socio-cultural and civic centers as well as other type of buildings like multipurpose buildings.

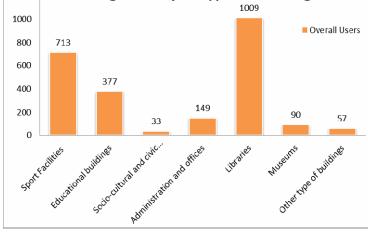
The sport facilities and the administration and office buildings are the ones that have been widely used by the partners of the project, accounting for 29% and 32% respectively, summing up to 61% of the overall buildings used for the implementation of the project. The rest of the buildings share a much smaller percentage close to 7% with only the Educational buildings standing out at 14%.

The local authorities spend a large amount of their budget on energy use of their buildings and the schools, the administration and offices and the sports facilities are the ones that take the biggest chunk of this energy usage. They also have the biggest number of users. The Figure 1Figure 2 below gives an indication on the average number of users per day for each type of building, both staff and visitors.

The sport facilities have the second biggest number of users with the educational buildings coming next with about half the users. The Administrations and offices also hold a significant amount of users. Since this project deals with user behavioral changes, buildings with a large number of users are likely to benefit with bigger energy savings. The sample for the libraries cannot be taken for a fact since it only represents the users of one library and therefore could be neglected from the observations on the number of users. Figure 3 provides the numbers of users as a percentage excluding the libraries.







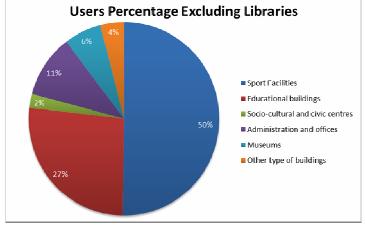


FIGURE 2 - AVERAGE USERS PER DAY FOR EACH TYPE OF PUBLIC BUILDING



Further to the users of the buildings it is important to distinguish between the occupants of the building and the visitors. Some types of buildings tend to have a larger amount of visitors, while other might only have their staff and a negligible amount of visitors. It is important when targeting behavioral changes to know if a building fits one of the two descriptions or if it sits somewhere at the middle in order for the implementation to be as successful as possible.

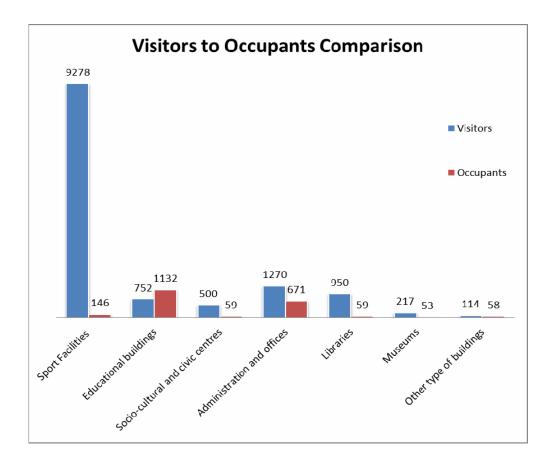
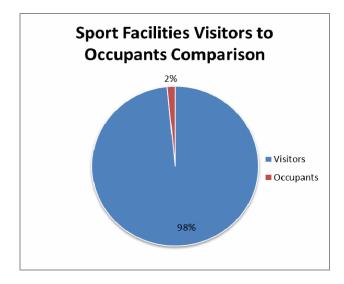


FIGURE 4 - VISITORS TO OCCUPANTS COMPARISON FOR THE VARIOUS BUILDING TYPES





The overall number of visitors compared to the occupants on each type of building is demonstrated at Figure 4. The sport facilities top the list with the most visitors and number of users in general. Administration offices and educational buildings come behind. It is notable that only the educational buildings appear to have more permanent occupants than visitors. The Figures 5-11 below demonstrate the relationship in percentages of the visitors to occupants ratio.



Educational Buildings Visitors to Occupants Comparison

Figure 5 - Sport facilities visitors to occupants comparison

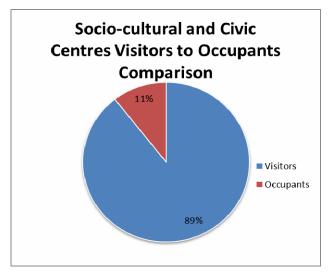


FIGURE 7 - SOCIO-CULTURAL AND CIVIC CENTERS VISITORS TO OCCUPANTS COMPARISON

FIGURE 6 - EDUCATIONAL BUILDINGS VISITORS TO OCCUPANTS COMPARISON

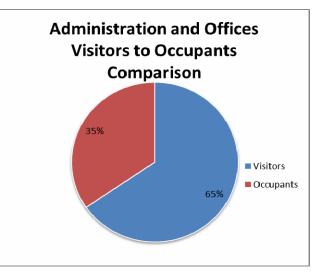
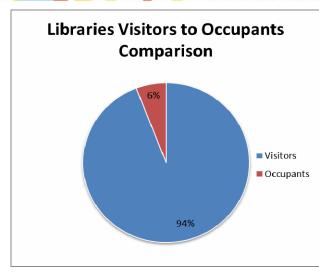


FIGURE 8 - SOCIO-CULTURAL AND CIVIC CENTERS VISITORS TO OCCUPANTS COMPARISON







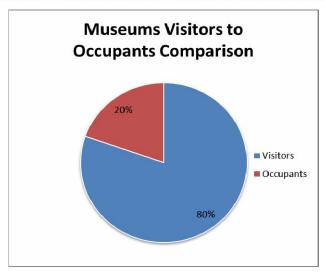


FIGURE 9 – LIBRARIES VISITORS TO OCCUPANTS COMPARISON

FIGURE 10 - MUSEUMS VISITORS TO OCCUPANTS COMPARISON

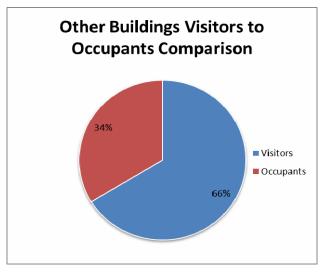


FIGURE 11 - OTHER BUILDINGS VISITORS TO OCCUPANTS COMPARISON

From the above figures 5-11 we can identify the three types of buildings and therefore three kinds of strategies to follow in implementing the 50/50 methodology. The buildings with the least permanent users and more visitors are the sport facilities, the socio-cultural and civic centers, the libraries and the museums. The buildings with mostly permanent users are the educational buildings and the buildings with a shared amount of permanent users and visitors are the other types of buildings along with the administrations and offices.

Whilst the buildings with the largest amount of permanent users and the ones that have a balance between the two can take more hands on actions in implementing the EURONET 50/50 max project methodology, the buildings with more visitors will need to find different ways to integrate the 50/50 methodology and tend to find it harder to educate their users on the projects objectives, especially the ones dealing with unique visitors everyday like museums.

Another important factor that needs to be taken into consideration when implementing the 50/50 methodology, is the time the users spend in the buildings. Some of the visitors may spend less time in the buildings to have an effect on the energy profile than others. The permanent users can therefore





have a much bigger effect even though they might have a small percentage of the total users of the building.

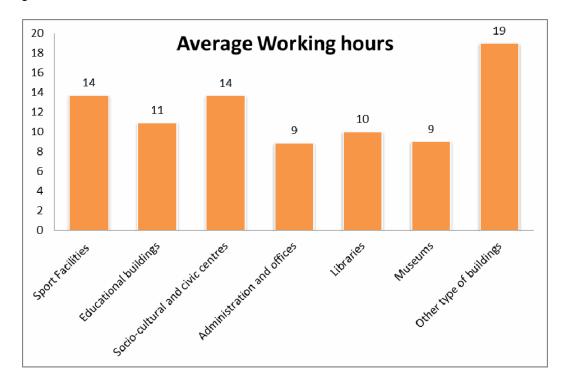


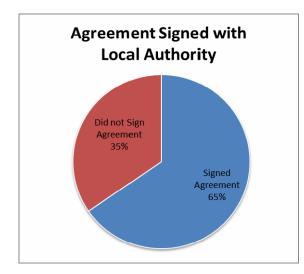
FIGURE 12 - AVERAGE WORKING HOURS PER TYPE OF BUILDING

From Figure 12 we can deduce that not all the buildings are working the same hours. The other types of buildings had some buildings working 24 hours and average 19 hours per day. We therefore don't expect those buildings to have a constant amount of visitors through the whole day and therefore the permanent users are the ones that we would expect to target for changing their energy behavior. Some other facilities like the sport facilities that have 14 working hours are expected to have various groups of visitors that use the facilities for a given amount of time and are renewed every 2hours. In the implementation it is important to approach all those groups that could be of any age and the methodology may need to be adjusted specifically or generally to appeal to all of them.

The public authorities have a very important role to play in the smooth implementation of the 50/50 methodology. They are the ones that manage the energy bills of the buildings and are more interested in the results of the 50/50 methodology. Also they are the ones to invest in more energy efficient equipment and overall their opinion is the one that matters the most. Their involvement also matters as the users tend to look up to them and follow their lead.







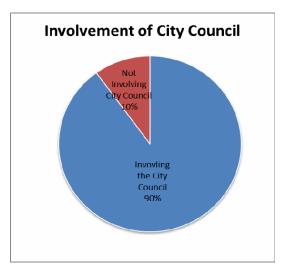


FIGURE 13 - SIGNED AN AGREEMENT WITH THE LOCAL AUTHORITY

FIGURE 14 – IS THE LOCAL AUTHORITY INVOLVED IN THE ENERGY TEAM

65% of the Energy Teams of the EURONET 50/50 max project as indicated by Figure 13 have found it useful to sign an agreement between the local authorities, the users of the building and the partner of the EURONET 50/50 max project. This was done to make sure that the local authority is aware of the project and is involved, but also to make sure that the building will get the 50% of the money savings from the local authority.

Having a good working relationship with the local authority, as well as getting them as much involved as possible benefits both and this is strongly implied by Figure 14 since 90% of the buildings involve in their Energy Team a member of their City council. They can be of great help when pushing things to happen and they can easily disseminate the results to the decision makers so that the implementation is better and is adopted to other facilities as well. Some of the buildings that did not involve the City council are themselves the city council and therefore are already part of the Energy Team.

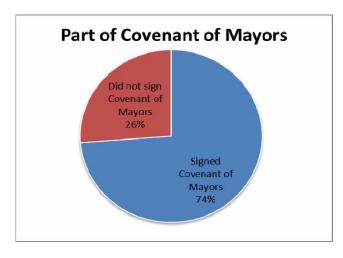


FIGURE 15 - HOW MANY OF THE BUILDINGS ARE ALSO PART OF THE COVENANT OF MAYORS





The implementation of the 50/50 methodology becomes a lot easier and faster when the local authorities are part of the Covenant of Mayors and a SEAP is already in action. A number of the steps can be avoided by buildings since they would have an already good working relationship with the local authorities with regards to energy efficiency and will also have the Energy Team ready with a lot of background knowledge on the buildings energy systems. The 74% of the buildings are from local authorities that have already signed the Covenant of Mayors and the buildings are way ahead in the implementation compared to the ones that have not.



Selected Public Non-School Buildings per Partner

DIBA (BARCELONA PROVINCICAL COUNCIL)

The implementation of the EURONET 50/50 max project by DIBA is being carried out at 10 non-school public buildings. These buildings include 7 sport facilities, 2 educational buildings and 1 socio-cultural and civic centre. DIBA has started the implementation in public buildings in the beginning of the project as an experienced partner from EURONET 50/50. The list of the buildings implementing the 50/50 methodology in Barcelona can be seen at Table 2 below.

	Building name	Type of building	Municipality
1	Pavelló Esportiu, La Gamba	Sports facilities	Vilafranca del Penedès
2	Pavelló Poliesportiu	Sports facilities	Súria
3	Escola Bressol	Educational buildings	Santa Coloma de Cervelló
4	Camp mpal de futbol Mariano	Sports facilities	Sant Boi de Llobregat
5	Centre de promoció econòmica	Educational buildings	Viladecans
6	Piscina Municipal	Sports facilities	Mataró
7	Centre Cívic Francesc Macià	Socio-cultural and civic centres	Terrassa
8	Poliesportiu	Sports facilities	Vacarisses
9	Pavelló Municipal	Sports facilities	L'Ametlla del Vallès
10	Pavelló Municipal	Sports facilities	Vilanova del Vallès

TABLE 2 - LIST OF NON-SCHOOL BUILDINGS IMPLEMENTED BY DIBA

Municipal Swimming Pool of Mataro

One of the buildings implementing the 50/50 methodology is the Municipal swimming pool of the

Mataro municipality. The area of the building is $2108.94m^2$ and it has about 3500 visitors per week. The building includes a café-bar, changing rooms, a fitness room, a stretching room, a sauna and the pool with dimensions 25x12m. The steps 1-4, 8 and 9 have been completed by the Energy Team. They have signed an agreement between the different departments of the City council and since they are the City council, they are directly involved with the implementation. The energy audit was not fully carried out but monitoring is being carried out by the facility.





Marianao Football Field

The facility of the Mariano football field is mainly used by the Marianao Poblet football club and the main activities that are carried out are related to football. The team that uses the facility has 22 teams and 250 players. Its facilities include a 90x65m football field with artificial grass and artificial lighting, 6 changing rooms for players and 1 for referees and technicians, a bar, 3 offices, 2 storerooms and one room with technical systems. Furthermore its stands can accommodate 800 spectators. All the steps of the 50/50 methodology have been implemented. The agreement has been signed and it was furthered to a four years agreement. The City council has leaded the



implementation and helped the Energy Team through the project implementation. The energy audit was the basis for developing the action plan and the information to the users was done through posters and occasional information on good practices. The board of directors and the maintenance staff are the ones carrying out the information sessions. One of the biggest problems faced by the facility was the fact that users come for a short time to the facility since they mainly use the training area. They have managed to save 69.038 kWh of electricity but the consumption of Natural Gas has increased as a result by 23.461kWh. The total savings that the facility has managed rise to €7.780. The dissemination of the results has been done by mail to all the users.

Rojas Feliu Nursery

The Rojas Feliu nursery has a useful area of 461,92m² and is a one floor building with not many different areas of use. All the steps have been carried out by the Energy Team and the City council has taken the implementation very seriously, changing all the lighting of the building to LED. The person involved from the City council is actively taking part at the meetings and carries out the energy saving calculations. The Energy Team but mainly the Barcelona Provincial Council have found the energy audit very useful since they can reflect on the poor interior and exterior element of the installation and moving forward avoid the same mistakes. The Energy Team tried to involve the families as well but the response wasn't always promising. Most of the dissemination of both the project and the results



has been carried out through mail and various activities to raise awareness. The behavioural changes are although limited due to the young age of the users and therefore no further improvement is expected in energy behaviours, even though initially the implementation was easy and the changes visible. The savings from January 2014 to April 2014 have been close to **2.000kWh** equating to 496Kg of CO_2 emissions saved.





Josep Fàbrega i Tort Sports Centre

This facility operates for 10-11 hours per day and has an area of 2.112m². The building has two floors and a basement and includes changing rooms, the court, a gym, offices, a bar and toilets. Steps 1-5 have been completed and steps 6-8 have been initiated. The Energy Team has found it difficult to



reach out to the users since they are short time visitors. The agreement with the City council is that the returns should be reinvested into more energy efficient equipment and the City council was strongly involved in the energy audit, the meetings, the energy tour and the calculation of the energy savings. The energy audit was useful into developing the action plan and identifying the zones that actions are needed by the Council. The information sessions have been carried out to explain mainly to the trainers who are the end users about the project, with the presence of the coordinators.

President Macià Social Centre

This social centre has an area of 1.602,96m² and is located in the Terrassa area. The steps for the implementation of the EURONET 50/50 max project have all been carried out successfully. The manager of the building is the City council so the Energy Team felt no need to sign an agreement. The staff of the building have helped with proposals and have all been very receptive of the project. The energy audit has been done by the staff of the building and helped a lot with the development of the action plan, as well as with the investment of the savings since it has all been reinvested in improving the lighting and



kitchen equipment. The dissemination was done by posters and other graphical material. The users seemed to find it difficult to change their habits into turning off the lights when leaving their offices. The savings that were made rose to **45.384 kWh/year** of energy savings which calculated to 10.915Kg per year of CO_2 emissions and therefore **5.521 Gyear**.

Vacarisses Sports Centre



This is a sports facility covering 2.417,3m² and hosting around 200 visitors per day. The implementation steps have been completed up to step 5. A lack of involvement from the facility's managers meant that the implementation has progressed slower than expected for the facility. An agreement was signed between the facility and the local authority and the municipal energy manager has helped develop the energy audit and develop the action plan, although the audit was not presented to the energy team yet. The savings from

the project are planned to be spent in making the building more energy efficient.





Can Calderon

This administration building has an area of 3.767m² and is the municipal service for the econimic development of the city. The steps 1-6 have been completed for this facility and the rest of the steps have already started. The agreement has been signed by the building and the municipality to ensure that the savings will be returned to the building. The members of the Energy Team include members of the Environmental department of the municipality as well as the buildings maintenance department.

A specialized external company was used in order to complete the energy audit and the results of the audit have been taken into account and been published to the users of the building during the information sessions. The users have also agreed with the results and are happy that some of the actions they have already proposed in the past years will be taking place in the framework of the project. The cleaning staff were also involved in the information



sessions and now the Energy Team is looking into ways to inform the rest of the users that sporadically use the building. The savings resulting from the implementation rise to **43.600kWh** equating to 11,64 tons of CO_2 emissions saved and **3.740** \in The Energy Team is planning in investing the money saved in an energy bank they want to set up.

PNEC (Association of MUNICIPALITIES POLISH NETWORK "ENERGY CITIES")

PNEC is another partner that was member of the initial EURONET 50/50 project and therefore has started the implementation with the beginning of this project. The buildings involved by PNEC are 3 administration and offices, 5 sport facilities and one childrens home. The Table 3 below is a list of all the non-school public buildings implementing the 50/50 methodology.

	Building name	Type of building	Municipality
1	City Hall	Administration and offices	Bielawa
2	Administration & office building	Administration and offices	Bydgoszcz
3	City Hall	Administration and offices	Ciechanowiec
4	Chldren's home of J. Korczak	Other type of buildings	Lublin
5	Sports center "ACTIVE WARSAW" - Polonia	Sports facilities	Warszawa
6	Sports center "ACTIVE WARSAW" -"Rozbrat- Jutrzenka"	Sports facilities	Warszawa
7	Sports center "ACTIVE WARSAW" - Szczęśliwice	Sports facilities	Warszawa
8	Sports center "ACTIVE WARSAW" - Inflancka	Sports facilities	Warszawa
9	Sports center "ACTIVE WARSAW" - Grzybowska	Sports facilities	Warszawa

TABLE 3 - LIST OF NON-SCHOOL BUILDINGS IMPLEMENTED BY PNEC





The University of Vaasa is implementing the 50/50 methodology in one Library, the Vaasa City Library. UVA have also been partners to the first EURONET 50/50 and therefor have started their implementation in the beginning of the project.

Vaasa City Library

The Vaasa City Library is open for everyone and its use is free of charge, accomodating 950 visitors per day with an area of 7.435m². All the steps have been completed with the exception of the energy audit which wasn't completed due to the lack of budget by the project, however the City of Vaasa has indicated that they will execute a full technical energy audit which is planned in autumn 2015. An Agreement was signed with the City council and they have also been involved through their facility management department which also monitors the energy consumption monthly for the



facility. The staff members of the building have been informed through various sessions carried out several times during the project. The information to the public that use the library came through a photo exhibition regarding energy use, a drawing contest for the children with regards to energy saving and open information sessions regarding the energy projects in Vaasa. The library managed to save **72.1MWh** of electricity and **12.8MWh** of district heating accounting to 13.4 tons of CO_2 emissions saved.

CRETE (REGION OF CRETE)

CRETE have also been involved in the EURONET 50/50 project and have therefore started the implementation in non-school public buildings in the beginnign of this project. The buildings involved by the region of Crete include 6 administration and offices. Table 4 shows the buildings selected by CRETE.

	Building name	Type of building	Municipality
1	Region of Crete Building 1	Administration and offices	Heraklion
2	Region of Crete Building 2	Administration and offices	Rethymno
3	Region of Crete Building 3	Administration and offices	Chania
4	Town Hall	Administration and offices	Hersonisos
5	Town Hall	Administration and offices	Oropediou Lasithiou
6	Adele Building	Administration and offices	Rethymno

TABLE 4 - LIST OF NON-SCHOOL BUILDINGS IMPLEMENTED BY CRETE





KSSENA (ENERGY AGENCY OF SAVINJSKA, ŠALEŠKA AND KOROŠKA REGION)

KSSENA is another partner that started at the beginning of the project the implementation. The public buildings implementing the 50/50 methodology include one Administration and office building, one socio-cultural and civic center and one museum. The Table 5 below shows the buildings the project is implemented in.

	Building name	Type of building	Municipality
1	Občina Velenje	Administration and offices	Velenje
2	Kulturni dom Velenje	Socio-cultural and civic centres	Velenje
3	Muzej Vrbovec	Museums	Nazarje

TABLE 5 - LIST OF NON-SCHOOL BUILDINGS IMPLEMENTED BY KSSENA



Municipal Building of the Municipality of Velenje







The Vrbovec Museum Nazarje

KREA (KAUNAS REGIONAL ENERGY AGENCY)

KREA are implementing the EURONET 50/50 max project in a library of the Municipality of Kaunas.

ZAGREB (CITY OF ZAGREB)

ZAGREB are implementing the EURONET 50/50 max project in two non-school public buildings, a Museum and a socio-cultural and civic centre. The Table 6 below shows in which buildings the 50/50 methodology is implemented.

	Building name	Type of building	Municipality
1	Narodno sveučilište Dubrava	Socio-cultural and civic centres	Zagreb
2	Hrvatski prirodoslovni muzej	Museums	Zagreb

TABLE 6 - LIST OF NON-SCHOOL BUILDINGS IMPLEMENTED BY ZAGREB





Croatian Natural History Museum

The Croatian Natural History Museum is the central national institution which collects, professionally and scientifically analyses and presents its holdings, which testifies to the development of nature and man in the Croatian region. It has an area of $3.585m^2$ and accommodates around 100 visitors. The steps that have been undertaken are 1-6 and 8 while step 7 is under development. An agreement has been signed with the local authority and there is a constant contact with the City's office who also are monitoring consumption and are helping with the calculation of the savings. The



information on the project is disseminated by e-mails and one information session has been conducted. Due to the old construction of the building all the equipment needs to be upgraded and the money saved by the project will be used for purchasing more energy efficient equipment. The savings that have resulted with the implementation of the 50/50 methodology rise to **79.622kWh**, saving 15.49 tons of CO_2 emissions and **€4.744,45**.

Dubrava Cultural Centre

One of the biggest cultural institutions in Zagreb, the Dubrava cultural centre has an area of 900m² and accomodates over 100.000 people per year. The steps 1-6 and 8 have already been implemented



and steps 7 and 9 are currently under development. The building has signed an agreement with the local authority and the local authority provides expert support to the Energy Team helping them find optimal solutions and answers to any questions arising. The results of the energy audit served as a starting point to monitor the effects and consider the ways to save energy. The building employees have all participated to the meetings and two information sessions have been carried out. The energy savings since

the implementation of the project rose to **8.115kWh**, saving 3.67 tons of CO₂ emissions and therefore **€1.083,07** which will be spent in improvin the buildings energy efficiency.

RMS (RIGA MANAGERS SCHOOL)

RMS is implementing the 50/50 methodology in three non-school public buildings which are all educational building (kindergardens). The Table 7 below shows in which buildings the EURONET 50/50 max is implemented.

	Building name	Type of building	Municipality
1	Pirmsizglitibas iestade Liesmina (kindergarten)	Educational buildings	Liepaja
2	Pirmsizglitibas iestade Delfins (kindergarten)	Educational buildings	Liepaja
3	Pirmsizglitibas iestade Kristiga (kindergarten)	Educational buildings	Liepaja





TOP ENVI TECH (TOP-ENVI TECH BRNO)

TOP ENVI Tech is implementing the 50/50 methodology in one non-school public building, the Municipal authority of Velké Opatovice which is an old castle of the 18th century. Steps 1, 2, 4 and 6 have already been implemented whereas the rest of the steps are under preparation. The building has signed an agreement with the local authority and a councillor from the municipality is helping in the implementation of the project. The information to the users has been carried out in their normal meetings and two information sessions have been carried out.



AFE (FLORENCE ENERGY AGENCY)

The Implementation of the EURONET 50/50 max project by AFE is being carried out in two nonschool public buildings, one museum and one sport facility. The Table 8

	Building name	Type of building	Municipality
1	San Marcelino Sport and Swimming Pool	Sport facilities	Florence
2	Bardini Museum	Museums	Florence

TABLE 8 - LIST OF NON-SCHOOL BUILDINGS IMPLEMEN	TED BY AFE
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about the project using brochures.

San Marcelino Sport and Swimming Pool

The San Marcelino sport and swimming pool has an area of 5.000m² and is a sport activities building. Steps 1-4, 6 and 7 have been carried out by the Energy Team while its still early for the completion of the rest of the steps. The energy audit highlighted the need of correct use of the facilities by its visiting users. A cover was also purchased to avoid heat lodd during winter from the pool. The agreement was signed with the local authority although the local authority is using an independent manager to manage the pool and therefore are not engaged in the energy Team. The users have been informed





It is an old classic building in the centre of Florence with an area of 3.800m². Steps 1, 2, 4, 6 and 7

have been implemented for the building while the rest are under development. The local authority is both the owner and the manager of the museum therefeore is directly involved in the implementation of the project and have also signed the agreement with AFE and the building. Although the audit is not yet completed there is enough data srom the constant monitoring of the building. The information to the users and visitors is done by a brochure-game and the permanent staff have been informed in their general meeting.



FURONET

CAA (CLIMATE ALLIANCE AUSTRIA)

CAA is implementing the EURONET 50/50 max project in the City Hall of Jundenburg which is an administration office with 3.406m² area, with 60 permanent users and around 60 visitors per day.

DIHU (PROVINCE OF HUELVA)

DIHU is implementing the 50/50 methodology in one educational building, the Sustainability department of the University of Huelva. The department has an area of 7.500m² and its main activities are educational. No steps of the methodology have been completed besides step 3 which is already done by the University. An agreement has not been signed with the City council and the City council is not involved in the Energy Team. The Energy Team has held 5



meetings with DIHU and the information sessions have not been successful due to the low attendance.





CEA (CYPRUS ENERGY AGENCY)

CEA is implementing the EURONET 50/50 max project in three non-school public buildings, two administration offices and one multipurpose building. The Table 9 below shows the buildings the 50/50 methodology is implemented.

	Building name	Type of building	Municipality
1	Aglantzia Town Hall	Administration and offices	Aglantzia
2	Strovolos Town Hall	Administration and offices	Strovolos
3	Nicosia Multipurpose Building	Other type of buildings	Nicosia

TABLE 9 - LIST OF NON-SCHOOL BUILDINGS IMPLEMENTED BY CEA

Aglantzia Town Hall



The Aglantzia Town Hall is an administration office building with an area of 868.36 m^2 that has 33 permanent users and around 100 visitors per day. The steps 1-3 and step 5 have already been implemented. The facility is run by the local authority, the agreement has been signed and members from the board of management are

actively involved with the Energy Team. The Energy audit is still on-going and information material has been handed out to the users of the building. One information session has been carried by CEA to the users of the building.

Multipurpose Building of Nicosia Municipality

The Multipurpose Building is an old classic building with an area of 645.28m² and it is being used for providing support to vulnerable citizens of Nicosia, accommodating people from all age groups. The steps 1-3 and step 5 have already been implemented. The facility is run by the local authority, the agreement has been signed and members from the board of management are actively involved with the Energy Team. The Energy audit is still on-going and information



material has been handed out to the users of the building. One information session has been carried by CEA to the users of the building. The money saved from the project will be reinvested at the building for better energy efficient equipment.







Aglantzia Town Hall is The an administration office building with an area of 6.500 m² that has 33 permanent users and around 100 visitors per day. The steps 1-3 and step 5 have already been implemented. The facility is run by the local authority, the agreement has been signed and members from the board of management are actively involved with the Energy Team. The Energy Team of the facility was already formed as part of the SEAP and the users are already familiar with actions for energy saving. The energy audit is still on-going and information material has been handed out to the users of

EURONET

50/50 max

the building. One information session has been carried by CEA to the users of the building.



EAV (ENERGY AGENCY OF VYSOCINA)

EAV is implementing the 50/50 methodology in one nonschool public building, the care centre Stonařov. This provides accommodation and nursing services for elder people and has an area of $375m^2$. Steps 1, 4 and 5 have been implemented and since the building has been recently introduced to the project an agreement wasn't signed yet but is on the process. Some suggestions have been made by the City council and they are ready to support and cooperate with the Energy Team. The investment suggestions arising from the energy audit will be carried out once some savings are made. The building is finding it difficult to change the habits of the elderly and therefore the implementation will have its challenges.

