SUPPORT
Interreg Europe

European Union
European Regional
Development Fund

LOCAL ACTION FOR ECOLOGICALLY SUSTAINABLE SOLUTIONS

Dear reader,
The fifth SUPPORT newsletter, at the end of phase 1 of the project, brings to you all the latest updates of the implementation status. The project that started with the goal of improving various policy instruments across nine EU regions, ends its first phase on June 30th this year. Still, SUPPORT has barely crossed the halfway line with the second phase intended for monitoring of actions prepared and envisaged within nine action plans to set to start on July 1st and that will last for two years. Even though this semester was mainly oriented toward the finalisation of regional action plans, activities still had transnational dimension with the last two-day Interregional seminar organised in Gozo (Malta) last March. The seminar was heavily oriented towards the presentation of various approaches to fostering EE and RES measures implementation with topics ranging from e-mobility to public buildings,and furthermore, from employees education processes to behavioural changes stimulation.The seminar also represented one of the last opportunities to discover ideas ready to be replicated in partners' regions. Partners also continued with participation to staff exchanges in order to further improve the quality of measures planned in their action plans. Phase 1 of the project was concluded with the organisation of nine final regional conferences which showcased the projects accomplishments and presented the action plans developed. During five semesters of implementation, through various regional and interregional activities, many local stakeholders were involved across nine participating regions. The project identified 26 good practices of implementation of EE and RES use measures on public buildings. It organised 8 staff exchanges which involved 23 participants.
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REPORT FOR THE STAFF EXCHANGE CONDUCTED IN MALTA – MARCH 2019 SUPPORT PROJECT

On behalf of the Region of Istria and its stakeholders, five persons participated in the staff exchange organized in March 2019 in Malta, within the Project SUPPORT Interreg Europe. Two of them were from the Region of Istria, one from the Conservation Department in Pula for the area of the Istria County, one from the Port authority Rovinj and a representative of the National Park Brijuni.

The Port authority of Rovinj is currently working on two big infrastructure projects concerning the expansions of the local harbor to the north and south parts of the city of Rovinj, the Conservation Department in Pula is overseeing every project concerning building heritage and give their approval for any construction work in old city cores or historic buildings, while the National Park Brijuni is undergoing a major change as many buildings (ex-military and heritage) will undergo renovations, one whole island will be promoted as energy passive with nature science activities for schools, etc. The Region of Istria is constantly working on renovation and construction projects, we work on energy efficiency and often advice municipalities on good practices they could use.

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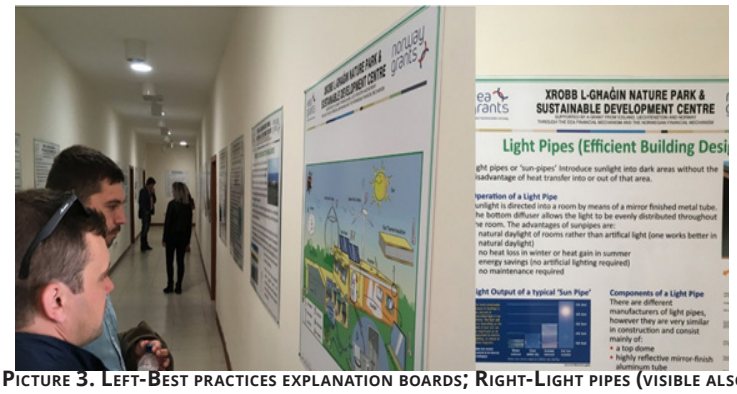

Picture 3. Left-Best practices explanation boards; Right-Light pipes (visible also in the left picture) as a interesting solution

Sustainable Development Centre X'robb l'Ghagin

The first good practice we visited was the X'robb l'Ghagin Sustainable Development Centre that is located in the locality of Marsaxlokk. It is a former military station situated inside a Nature Park, which was refurbished into the Sustainable Development Centre and hostel for school groups as a result from one EU project in 2011. The Centre conducts education and trainings on the topics of renewable energy sources, energy efficiency and innovative solutions for the use of wind and solar energy, natural lighting, recycling and the use of wastewater.

Picture 1. Left-Main entrance to the Sustainable Development Centre; Right-demonstration of the RES around the Centre

One of the activity of the project "Novo Ruho Brijuna" implemented by the National Park Brijuni is the refurbishment of ex-military buildings on the island of Mali Brijun into habitable spaces for school lessons in nature, scientists and artists that will use these facilities in the future. The idea of the X'robb l'Ghagin Centre about teaching biology/ecology lessons along with the importance of energy efficiency and RES could perfectly blend in future school programs which will be implemented on the island Mali Brijun.

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Picture 2. Left-types of RES and EE systems in use; Right-Area of the Development Centre

FLASC Offshore Energy Storage

The second good practice we visited was the Grand harbor and the FLASC Offshore Energy Storage (Floating Liquid-piston Accumulator using Seawater under Compression) which represents a floating platform with an integrated energy storage system. FLASC uses compressed air for energy storage, but it's not your average compressed air energy storage system.

Picture 4. Left-The FLASC system in the Grand Harbour; Right-University of Malta representative explains the working principle

The FLASC dual-chamber technology allows the operating pressure range to be established independently
of the deployment depth. It exploits existing resources and infrastructure, resulting in a cost-effective solution, beating batteries at their own game.

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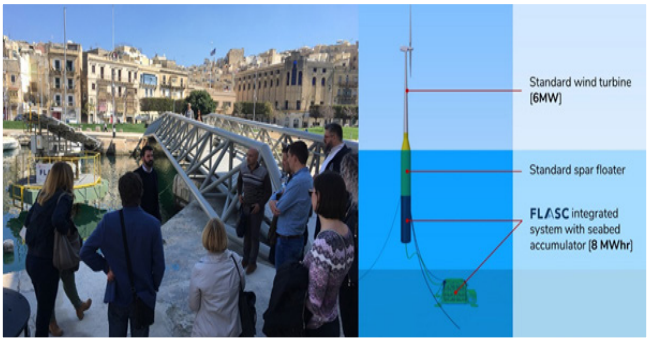
FLASC working principle

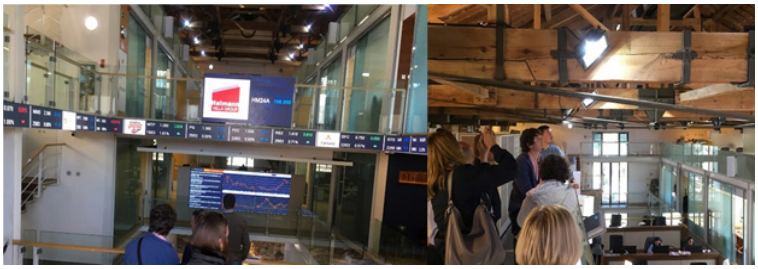
The University of Malta is developing this technology since 2017. as a pilot project that exploits sea and solar resources and, at a later stage, even wind to generate and store energy.
Renewable source deliver a power output that oscillates with time. However, grid operators can only accept small variations in supply. The FLASC technology can be used to convert intermittent renewable energy supply into a stepped output. This facilitates grid integration by allowing the operator to schedule operations at specific intervals. The FLASC technology can also be used in applications requiring large volumes of cold pressurized seawater like liquefaction of natural gas (LNG), liquefaction of CO2 for carbon capture and storage, seawater desalination or water injection for oil extraction from subsea wells.
Both Port authority of Rovinj and the National Perk Brijuni representatives found this technology very interesting. Since there are many applications for this type of technology, it could be used in ports in combination with floating docks (free energy for boat owners that use the port) or even on islands where the energy grid is not present. Malta Stock Exchange.



Picture 5. Left-Stakeholders listening to the presentation; Right-The working principle of large-scale operation FLASC integration

Picture 6. The Malta Stock Exchange (former British chapel)

The last good practice we visited was the refurbished chapel from 1885 in the centre of Valletta, which is today the Malta Stock Exchange. The outer shell of the building is completely preserved and even expanded with the excavation of underground floors that revealed archeological findings. As a result of the insertion of a steel lightweight ridge housing an innovative cooling system, a drop of approximately seven degrees Celsius has been achieved in the internal environment without the use of conventional air-conditioning systems. Air blowing through the ridge is showered with nebulized particles of water, losing latent heat and sinking into the centre of the building. When the scirocco winds blow and RH values rise above 65%, cooling coils along the ridge swing into action and cool the incoming air. At night, bottom vents are opened and the system is reversed allowing hot air to escape from the ridge. Although the enclosed offices remain air-conditioned, the naturally driven cooling system inserted at the ridge is effectively the only way the central open spaces could be utilized as open offices. The effect is one of natural coolness and provides a welcome relief from the hot stifling heat that characterizes Valletta throughout the summer months. Read more



Picture 7. Left-Steel construction and offices; Right-Under-roof construction

Save@Work

Another good practice that was presented during the conference caught our attention. The EU project SAVE@WORK, implemented by our Swedish partners (www.saveatwork.eu). Funded as part of the European Commission's Horizon 2020 programme, the save@work project is taking place in 78 cities, with 180 public sector buildings, over 9,000 employees and looks to save 3,100 tonnes of CO2. This project, which is designed to be fun as well as beneficial, is about engaging with staff and enlisting their help to reduce the carbon emissions of their building by learning about how much energy they use and how they use it. Under the guidance and encouragement of their in-house Energy Team, staff are given the help and support they need to make a difference be it turning off the printer before they go home or changing the settings on their computer. These are small changes to our everyday working energy consuming behaviors but when multiplied by all the people taking part, they can have considerable impact. The results was that on a yearly bases 73% of buildings was saving 8% energy. The best team from Belgium managed to save 25% energy in a 2700 m2 building with 65 employees.

INTERVIEW BULGARIAN SMALL AND MEDIUM ENTERPRISES PROMOTION AGENCY

Introduction

Eng. Antoniya Novakova, Head of Climate and Energy Department, Sofia Municipality, Bulgaria.
Experience - Expertise in Green European Policies and Programs.
The department activities are related on creation and upgrading of plans, programs, strategies and regulations of the municipality focused on energy sector, limitation, maintenance and adaptation to climate change.

Sofia Municipality: Ecological and energy efficiency

As with most of the major European cities, Sofia faces the challenges of Climate change and its impact on every field of our lives. The Sofia Municipality policies on Climate change are focused on two main areas - Climate change mitigation by implementing measures to limit CO2 emissions and Adaptation to the ongoing and irreversible Impact of Climate change.
As a part of Covenant of Mayors Community for Climate and Energy, Sofia is committed to reducing CO2 emissions by 20% by 2020 and 40% by 2030. Since 2011, Sofia Municipality has been implementing a number of projects and measures in order to increase energy efficiency in municipal buildings as well as other areas of significance as transport, street lighting and waste management. Change of the energy end-users behavior, along with raising awareness and engagement of civil society, remain one of the most significant challenges related to the local authority's commitments. This is the reason these two are among the main priorities of the Municipality in the field of energy consuming efficiency. In order to overcome the challenges, the municipality has planned and implemented a number of information activities and demonstration projects.

Good practices and its potential for implementation in Sofia Municipality Save@work is a practice with great potential for multiplication in the local conditions context. The concept of achieving energy savings without investment costs but by modification of the building users` behavior and habits has a great added value. The initiative demonstrates how the personal example could have a positive impact on society, achieving a higher level of efficiency and quality of life. Read more

LOCAL ACTION PLAN

Bulgarian Small and Medium Enterprises Promotion Agency is a governmental institution with the Minister of Economy of Republic of Bulgaria. All the activities, provided through the Agency are strongly connected with the national based strategies related to the government policy for improving the competitiveness of the industry, which are:

The National Strategy for Promotion of SMEs

The Innovation Strategy for Intelligent Specialisation of the Republic of Bulgaria
Operational programme 'Innovation and Competitiveness' (OPIC) is the main program document at national level outlining the support for the Bulgarian SMEs. The Programme follows the objectives set out in the strategies above. Since the Political instrument is created on the basis of the both strategies, our suggestions are for changing the strategies in order to influence the instrument.
After discussions with the stakeholders involves the Managing Authority of the OPIC (the Political Instrument), taking into account the good practices of the projects, three action points were outlined:

1.Establishment of RIS3 Monitoring Unit charged with monitoring of the implementation of the strategy in 2018
2.Creation of National Energy Management Information System
3.Elaboration of National Strategy for Promotion of Small and Medium-sized Enterprises 2021 - 2027

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