REBUS Project Impact in Regions – Hear from our partners

Buildings are among the main sectors responsible for Europe's emissions. Therefore, the building sector serves as the focus of the Interreg Europe REBUS project policy actions. Eight partners have worked for five years to improve the capacity of public authorities to undertake efficient renovation works of their public building stock. Saving energy and public resources is the shared objective of all REBUS partners.

Public authorities at all levels were involved in the Local Stakeholder Groups. Meetings, study visits, staff exchanges around Europe and the work on 13 good practices fuelled interregional exchange, helped over 150 people to increase their professional skills and made policy improvements a reality in each partner country.

Seven Action Plans detailing policy changes inspired by the REBUS project were drafted and implemented at the regional level. In 2017, in **Tuscany, ARRR** supported the Regional Government to improve the call "POR CReO FESR 2014-2020- Action 4.1.1 - Energy Efficiency Projects in public buildings". ARRR not only helped the Managing Authority to define the selection and evaluation criteria of the call, but they also contributed to the entire process by supporting local authorities wishing to apply for funding. In the Tuscan context, this call was the first ever call launched specifically targeting energy efficiency in public buildings. Out of 295 projects submitted, 266 projects were admitted for funding and 35 were financed in the first funding round of the call launched in 2017 (five from hospital services and 30 from Public Authorities). The budget available for Public Authorities and hospital services amounted to € 52 million. By the end of 2020, the 199 projects funded by the call should come to an end. These projects have involved Local Authorities and Hospital Services and were funded with grants of up to € 12.2 million, with an investment volume equal to € 35 million.

Having achieved an early policy improvement, ARRR decided to go further and plan a Pilot Action inspired by the Big Switch Off Good Practice from Durham County Council. Experience within REBUS had already shown the importance of well-trained staff dealing with energy efficiency and of well-informed building users. Thus, the REBUS pilot action tested a full capacity building programme with the Local Council of Greve in Chianti in Tuscany. Following a cycle of capacity building events, an energy team was trained to assess the status of the pilot building. Improved behaviour of building users led to energy savings amounting to 11.55% compared to 2019 and 33.68% compared to 2015.

Our partners at ARRR had this to say about the lasting impact of the REBUS project in the Tuscany Region:

> *''The REBUS project has certainly contributed to a change in Tuscany's regional policies regarding the energy efficiency of public buildings. ARRR has constantly operated on two levels: on the one hand with the exchange of the best international experiences among the project partners, with meetings, seminars, study visits; on the other hand, it contributed to the choices of the Tuscany Region (Managing Authority and Stakeholder of the project) and concretely supported the measures that have been taken by local authorities to make their real estate assets more efficient. In particular, REBUS collaborated with the Energy Office of the Tuscany Region in the drafting and dissemination of the tender which allocated resources of approximately € 53 million for local authorities.*
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> *We have drawn up the Action Plan to identify in our situation the strengths and weaknesses to be taken into account in order to optimise the procedures aimed at the energy efficiency of the entire assets of public buildings. REBUS has therefore interacted in a complex process, which began in 2016, and which will not end with the end of REBUS: having built an action that lasts over time is perhaps our greatest success.*
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> *The investment and restructuring principles that we have helped to define, combined with the change in behaviour implemented with the Pilot Action, will in fact have their effects also in the years to come.*
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> *The international experiences gained thanks to REBUS have allowed us to broaden our horizons, especially in the area of energy saving planning. The relationship with stakeholders has always been very constructive, starting with the most important, namely the Tuscany Region. It was very significant to move from regional planning to operation in a small municipality like that of Greve in Chianti, because we covered very different situations, even symbolic ones. Energy efficiency can be done anywhere!''*

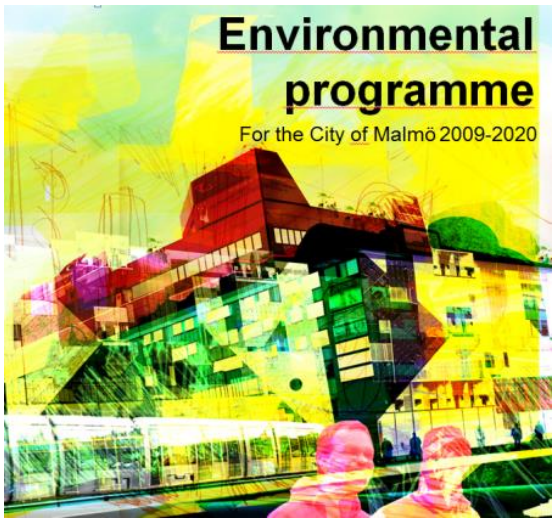
Meanwhile in **Malmö,** the REBUS project offered the chance to go beyond technical solutions and opened up new perspectives in the field of behavioural change. Malmö City Council improved its Environmental Programme, with new measures to teach consumers the importance of an active role in energy saving and help them to understand their part of the shared ownership. This new policy should attract more influencers working to fulfil its objectives and achieve better results. The Council has already successfully carried out educational programmes in smart energy behaviour for schoolchildren, involved contractors and tenants in energy analysis of a building and created a new professional profile of the production trustee, in charge of optimising building performance influencing total consumption of energy.

''The City of Malmö has a history of solving energy mitigation tasks with technical solutions but have a very limited knowledge of behavioural change. That was why we joined the project in the first place, to find out more of behavioral change,'' said Olle Strandberg of the City of Malmö.

He went on to say:

''At the same time our policy, the environmental programme of Malmö, says quite a lot of what shall be done, but nothing about how it shall be done. The result of this is that we tend to solve all problems with technical solutions, as we always have done. The long-term problem with this is that it is impossible to reach all the way without involving people using our facilities and letting them take their part of the responsibility.

Many of our partners in REBUS have worked for many years with behavioural change, and we have benefited much from the knowledge-based exchange rounds and visits to gain new information.



This is the reason why we also have as many as six different actions in our Action Plan — we will create a broad selection of different tools for the city to work with, when it comes to behavioural change. Today we have those tools up and running, but we have also found a way of working, where we can develop more tools by ourselves to ad.

The result of this project for Malmö, is the ability to work even more eagerly and devotedly towards the goal to make Malmö the best city in the world for sustainable urban development.''

BORA 94 worked with the **Hungarian Managing Authority** to improve management of their ERDF policy (Action 3.2.1). Specifically, they focused on a new monitoring methodology for a call that funds municipality-owned energy efficient public building renovations to achieve energy savings, mainly through infrastructural investments. The policy improvement answered a clear territorial need, in that beneficiaries had raised concerns related to difficulties in interpreting the calculation and accounting of monitoring indicators. The change (i.e. general review of indicator definition datasheets, modification and specification of indicators, introduction of partial delivery options, etc.) affected hundreds of projects at the national level and hundreds at the county level in each call round.

Katalin Hall from BORA 94 had this to share about their experiences within the REBUS project:

> *''Thanks to the interregional cooperation that the REBUS project has provided us, we are now able to obtain better energy efficiency data in our county (Borsod-Abaúj-Zemplén) and throughout the whole country, as the improvement of the targeted policy instrument (Territorial and Settlement Development Operational Programme, Measure 3.2.1.) affects not only our region, but the whole national-level operational programme monitoring process. Thus, the project has helped us a lot to progress towards a low-carbon economy by not only renovating the public buildings more effectively, but also to better monitor their resulting energy efficiency.*
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> *We are especially thankful for being part of such great partnership – both from professional and personal point of view – and we hope to continue our cooperation with the same partners soon.''*

REBUS partners and stakeholders gathered for the 4th interregional exchange event in Miskolc, Hungary

In the **Malopolska Region**, a survey had been conducted among Polish Regional Operational Programme (ROP) beneficiaries to identify the key features of their renovation projects and to what extent they follow the REBUS Energy Renovation Path (ERP). The survey also included questions on the funding instrument itself, which, in principle, met the expectations of the cities implementing energy renovation projects and served as a benefit. Although there is some room for improvement, mostly concerning the simplification of procedures and entering modifications to supported projects, the ERP is something that will be beneficial to the region. An important discovery was that energy retrofitting projects are rarely connected with awareness raising campaigns and active engagement of building users in energy saving processes. The REBUS project through the ERP decided to change that by promoting best practice via educational and user engagement tools – this has been done by training municipal employees on implementing them in practice, adding additional energy savings to those achieved through retrofitting measures.

Patrycja Płonka from the Association of Municipalities Polish Network "Energie Cités", Polish partner of the project, further elaborated on this:

> *"When we look at the building, we usually look at it as a structure that can be retrofitted. But a building is something more: it is also a place that has specific functions, is organised in a specific way and has users who spend their time there. It can be energy efficient only of all these elements are energy efficient. The practice shows, though, that the users' impact on energy consumption is still underestimated. Both the discussions during LSG meetings and the survey we have conducted showed that the building users are rarely the target group of the energy saving measures implemented by public authorities. We decided to change that by disseminating and promoting REBUS good practices on users' engagement, including PNEC's and Crete's EURONET 50/50 project and DURHAM County Council multiple initiatives, like the School Carbon Reduction programme and the Big Switch Off campaign. They were used during a training programme for municipal staff, where they have learned how to approach the building users, raise their energy awareness and actively involve them in energy management. But this is not all... the project showed that it is not only important to encourage users to use energy more efficiently, but also to get into their shoes and use the energy retrofitting project to improve their comfort. Again, we speak a lot of thermal insulations, modernisation of internal installations, but do we think about the user? One of Malmö's projects showed how to do that. By installing human-centric lighting in one of the school classrooms, they proved that well-designed lighting improves pupils' work and well-being. We are very grateful that we had an opportunity to participate in this interesting project and exchange with partners from all around Europe to learn these experiences and use them in our further work."*

The image to the right was taken during one of PNEC's virtual trainings for municipal staff on building users' engagement. PNEC has hosted three of such trainings, during which they presented the key conclusions from REBUS, guidelines from ERP and relevant good practices identified throughout the course of the project. The first training focused on the overall building users' role and energy saving potential, as well as the need to ensure them sufficient comfort of work — here PNEC presented Malmö's human-centric lighting project. The second training focused on users' engagement

methods and tools that can be used in school buildings, and the last training was centred on the methods and tools that can be used in non-educational buildings. The third training, a screenshot of which is pictured on the previous page, featured an insightful presentation and discussion by Bartłomiej Smenda on Durham's Big Switch Off project and potential replication in Poland.

English partners from County Durham visit Bielsko-Biala, a city south of Krakow that is an award-winning for its energy efficiency work, during a staff exchange (Pictured: Eco-team of pupils at a Polish primary school, where REBUS partners learned about their energy saving work as part of the 50:50 programme)

In **South-Eastern Romania**, the policy change related to the development of new and improved guidelines for the calls addressing energy efficiency in public buildings. This referred specifically to 2014-2020 ROP, Priority Axis 3.1: "Supporting energy efficiency, intelligent energy management and renewable energy use in public infrastructures, including in public buildings and in the housing sector". New eligibility and selection criteria, new administrative and compliance criteria and new technical and financial evaluation criteria were integrated into improved guidelines for applicants. As a result, an additional call was opened for energy efficiency measures in public buildings with a regional allocation of € 27.5 million (ERDF and National Budget).

In South-Eastern Romania, energy efficiency is seen as a driver for competitiveness and circular economy. The policy change had a territorial impact since the new call addressed the integrated investments in the area consisting of 38 administrative-territorial units within the Danube Delta Biosphere Reserve, Tulcea County and Northern part of Constanța County, localities that are situated in the South-Eastern Region of Romania and identified as target areas in accordance with the Integrated Strategy for Sustainable Development of the Danube Delta.

The REBUS consortium at the 9th Project Meeting held in Buzau City, Romania (6-7 November 2019)

"People come first and health continues to be a priority for us. It is a desideratum that we follow, no matter how difficult is the period we are going through. The general objective of the project is to implement energy efficiency measures that will lead to improved hygiene and indoor thermal comfort, reduction of heat loss and energy consumption, reduction of maintenance costs for heating and hot water consumption, reduction of pollutant emissions generated by production, transport and energy consumption."

- Mr. Horia Teodorescu, President of the Tulcea County Council, the beneficiary of the project "Energy efficiency of Tulcea Ambulance building" financed under the new improved call - 2014-2020 ROP, Priority Axis 3.1.

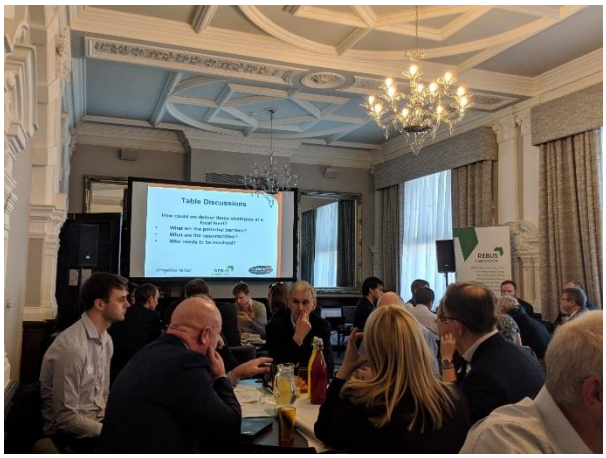
The **Region of Crete** has presented to its Managing Authority the results, benefits and experience gained by the REBUS project and has delivered the Regional Action Plan. The Greek partner supported its Managing Authority in defining new selection and evaluation criteria for the call for Proposals on Priority Axis 2: "Sustainable Development in terms of improving the environment and tackling the impacts of Climate Change in Crete". It related specifically to Action 4.c.1: "Energy saving in public buildings". The call was launched in 2018 with total budget of € 12,125,575.00. Criteria included in the call and resulting from REBUS experience referred, for instance, to ex ante and ex post energy audits to measure the impact of the renovation works. Moreover, the Region of Crete contributed to the whole process by supporting local authorities wishing to apply for funding and building their awareness and skills in the field of energy efficiency.

Our partners in Crete highlighted the lasting positive impact of REBUS project results in their region:

> *"Through the REBUS project, the technical staff of the Region of Crete and our stakeholders increased their professional skills for effective renovation work, recognised the significant role of building users and had the opportunity to know the possibilities of improving strategic decisions to promote energy efficiency measures in public buildings for optimising their energy behaviour."*

The second REBUS partner meeting at the Technical University of Crete

Durham County Council was successful in changing the national ESIF Low Carbon Guidance (Priority Axis 4: ''Supporting energy efficiency, smart energy management and renewable energy use in public infrastructure, including public buildings and in the housing sector'') and the specific wording in the North East region for ESIF PA4C call launched in October 2018. This change reflected the importance of providing training and encouraging behaviour change, in conjunction with energy efficiency capital works. Guidance was changed for capital investment proposals, which should now encourage measures to promote energy awareness and behavioural change to ensure that maximum benefit is made of energy efficiency technologies. Having achieved the above, Durham County Council through its Climate Emergency Response Action Plan focussed on exploring the potential of renewable heat retrofit projects (e.g. minewater, ground and air source), as well as establishing a new schools comprehensive LED lighting retrofit project, called Enlighten, across the County.

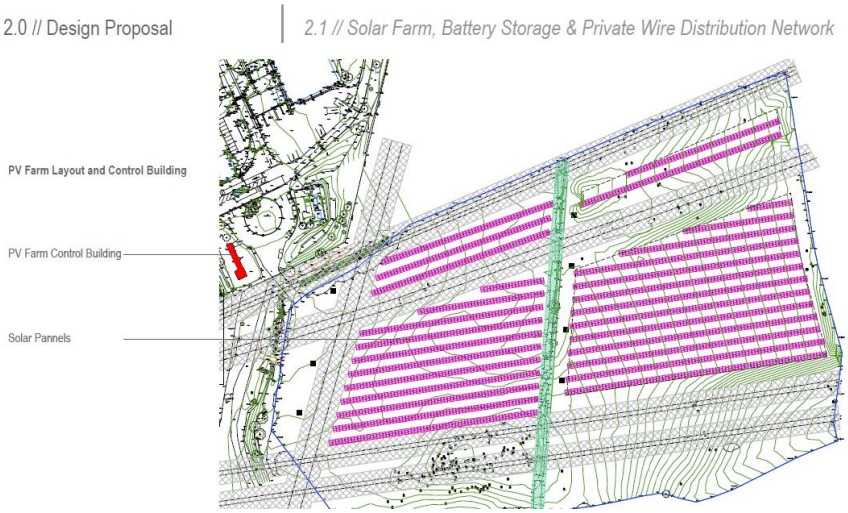


REBUS Midterm Event in Durham in January 2019

Durham REBUS Team at the Community Energy England Conference 2018

''Being a partner in REBUS has enabled Durham County Council to reflect on its own practice and learn from partners across Europe, which has directly benefitted our practice. It has challenged our thinking and has been helpful in the development of our Climate Emergency Response Plan that we will continue to drive forward and adapt over the coming years. The instigation of our REBUS Local Stakeholder Group has been hugely beneficial, with stakeholders bringing national, regional and local perspectives as well as specialist public, private and voluntary sector perspectives supporting our ambition in County Durham, and we have built this model into our partnership approach to climate action across the County.''

- Cllr John Clare- Cabinet Support Member for Economic Regeneration and Climate Change Lead



(Left) The new solar farm & battery storage layout at the Morrison Busty Low Carbon Depot retrofit in Durham, funded by ERDF through the REBUS Action Plan

(Right) The drilling for the ground source heat pump boreholes in Durham has begun

(Below) The extended and refurbished Durham History Centre and archives will be heated by ground source heat pumps

REBUS learnings throughout the years and across partner countries are collected in the comprehensive Energy Renovation Path (ERP). This guide intends to inform strategic decisions of public policy makers dealing with energy efficiency renovations in public buildings.

The REBUS ERP, developed on the base of an interregional exchange, also helps public authorities to improve the following aspects of their energy policy content and management:

- Raise awareness on potential savings & efficient use of resources
- Collect feedback and streamline data on energy efficiency needs in the public buildings
- Draft tenders for renovation works that include energy efficiency baselines, targets and monitoring measures
- Manage the buildings in a more efficient way after renovation

Local administrations, contractors, building managers, staff responsible for building maintenance and building end users can all refer to useful tips and guidelines on planning, implementing and monitoring renovation works in public buildings. The ERP is also available in Italian, Swedish, Hungarian, Polish, Romanian and Greek.

REBUS through the years: BORA 94 of Hungary provided snapshots of their work with the REBUS project

The REBUS international partnership