



**NOVEL ROLES OF REGIONAL AND LOCAL AUTHORITIES IN SUPPORTING  
ENERGY CONSUMERS' BEHAVIOUR CHANGE TOWARDS A LOW  
CARBON ECONOMY**

**EXPERIENCE REPORT**

January 2019

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## LOCARBO in brief

LOCARBO – “Novel Roles of Regional and Local Authorities in supporting Energy Consumers’ Behaviour Change towards a Low-carbon Economy” is an interregional cooperation project for improving low-carbon economy policies. Its overall objective is to improve 7 Policy Instruments (PI) targeting Energy Efficiency (EE) in the built environment through the support of actions promoting energy consumers’ behaviour change by regional and local authorities.

LOCARBO is unique in focusing its activities on bottom-up approach, combining innovative practices linked to three strongly interrelated thematic pillars:

- Supplementary services and products offered by local authorities;
- Innovative cooperation models;
- Innovative smart technologies.

7 project partners (PP), from Hungary, Italy, Lithuania, Portugal, Romania and the UK, are focused on exploring innovative approaches to be put into practice by regional/local authorities in supporting the change in energy consumers’ behaviour.

The strategy comprises intensive stakeholder and partnership involvement, interregional site visits and the compilation of a Good Practice (GP) inventory.

As a result of this local and interregional activities performed under the Phase 1 of the LOCARBO project, 7 fully feasible Action Plans (AP) were developed with a focus on improving 7 policy instruments (PI), influencing EUR 100M in funds.

The LOCARBO partnership is now focused on implementing the planned actions, spreading innovative initiatives to increase energy efficiency and the use of renewable energy sources in buildings, and providing innovative ways of supporting energy consumers’ behaviour change.

## Introduction

Interreg Europe is a capacity-building programme dedicated to policy learning and policy improvements. It is dedicated to the exchange and transfer of good practices to improve the effectiveness of regional development policies. Interreg Europe projects build on the good practices identified within their partnership. They are the source of inspiration when preparing the action plans and improving the performance of their policies.

The exchange of experience among partners is a fostering element of the interregional learning and cooperation process. It is the main element for generating the expected policy change in the participating regions.

The typical activities supported under interregional cooperation projects are activities such as workshops, site visits, staff exchanges and peer reviews. The learning process is based on the identification, analysis and exchange of knowledge and practices in the policy field tackled by the project.

Interregional cooperation need to analyse the experiences and/or practices exchanged within the projects and disseminate the most interesting findings.

When designing the project methodology, the rationale behind the creation of the learning and exchange of experience process should be considered at different levels to ensure a successful and directly influence of the policy frameworks of the participating regions.

Within LOCARBO project, the learning and exchange of experience process was implemented at four different levels (EU level, regional level, institutional level, and individual learning) to ensure successful knowledge transfer and positive influence on the policy frameworks of participating regions. By implementing several levels of involvement, the learning outcomes were transferred to relevant stakeholders and participating regional/local organisations.

As addressed on LOCARBO's project application form (AF), the learning and exchange of experience process was considered at different levels to ensure a successful and directly influence of the policy frameworks of the participating regions.

By implementing several levels of involvement, the learning outcomes will be transferred with relevant stakeholders and participating regional/local organisations.

Stakeholders involvement has been achieved through Local Living Lab (LLL) meetings, operating as testing grounds for local/regional governments and managing authorities (MA) involvement in initiatives that have been explored by LOCARBO.

In its turn, the organisational learning process occurred in the form of Institutional Learning Platform (ILP) meetings, thus increasing the chance that the learning gained from the cooperation will have a fruitful impact in the regions.

This report is the compilation of all the performed exchange of experience activities developed within the LOCARBO's Phase 1. It is structured in several sections, including the description of interregional thematic activities (interregional events and thematic conferences), stakeholder involvement and organisational learning activities (LLL and ILP meetings), and knowledge exchange and networking activities (study visits, peer-reviews, pilot actions, etc.).

## Interregional site visits

4 Interregional Site Visits were organized in a way to ensure that interregional exchange findings are embedded in a structured and continuous way.

### **Durham County Council, England**

Durham County Council was the hosting partner of the LOCARBO launch event and 2<sup>nd</sup> TWT meeting, held on 18-19 October 2016.

During this event, a set of 3 site visits was organized, in the thematic of supplementary services and products offered by regional and local authorities (TP1). The visits were held to the Thorn Lighting Ltd, the Brandon Primary School, and the Framwellgate Moor Community Centre.

The visit to Thorn Lighting Ltd, an energy efficient lighting solutions company from Spennymoor, County Durham, was a valuable experience for project partners, who were able to visualize and understand the extensive offer of Thorn high performance lighting solutions for outdoor and indoor contexts.

Besides the extensive area of lighting and components manufacturing and assembly, LOCARBO partners also visited the innovative Thorn Academy of Light, which aims to improve knowledge of and creativity in professional lighting and design.



Figure 1: Site visit to Thorn Academy of Light, in Durham County Council.

The site visits to Brandon Primary School offered a diverse experience of EE technologies installed, and the Framwellgate Moor Community Centre outlined its operating system by the local community (based on an agreement with Durham County Council).

### **Kaunas City, Lithuania**

When Kaunas University of Technology hosted the 3<sup>rd</sup> SG and TWT meetings of LOCARBO project, on 13-14 March, the following site visits were conducted in Kaunas City:

- Multi-apartment building, built in 1975 and renovated in 2015, as an example of advanced renovation, where the best technologies and cost-effective solutions were implemented;
- Residential quarter subjected to integrated energy rehabilitation and urban renewal actions in 2016-17. The project was funded by the City of Kaunas with the aim to stimulate complex renovation of buildings and demonstrate how this can improve its living conditions;
- Santaka Valey, the Department of Polymer Chemistry and Technology of KTU which works as a transdisciplinary research and industry collaboration institution.



Figure 2: Site visit to a multi-apartment building (build up in 1975) renovated in 2015, in Kaunas.

### **Alba Iulia Municipality, Romania**

The Municipality of Alba Iulia hosted the 4<sup>th</sup> LOCARBO project event on 7-8 September 2017. A guided site visit was carried out to a public transport company using an innovative system to increase power efficiency in fuel economy filtering, and to three public institutions (the Dorin Pavel Technical College, an elderly home and a day centre for the elderly) where Solar PV Panels were installed with the support of European funds, producing at least 50% of these buildings' energy needs.



Figure 3: Solar PV Panels installed on an elderly home at Alba Iulia municipality.

### City of Budapest, Hungary

Budapest was the stage of the 4<sup>th</sup> SG and 5<sup>th</sup> TWT meetings on 6-7 March 2018. A guided site visit to an Energy Efficiency Demo Building (Passive House) allowed the visualization and understanding of its systems and appliances.



Figure 4: Site visit to an energy efficiency demo house launched by Mi6, in Budapest.

### Interregional events and thematic seminars/conferences

The participation on Interregional/National events and thematic seminars/conferences was a relevant component of LOCARBO’s communication strategy, with the objective of promoting the project dissemination.

These external communication events aim at spreading all project’s outputs and results through the partner regions and European relevant public authorities and innovation stakeholders, thus promoting their durability and transferability.

LOCARBO’s project partners have participated in these events as speakers and/or exhibitors within the 1<sup>st</sup> phase of the project, as displayed on the table below.

Period	Events	Project Partners	Outputs
Semester 1	Not applicable due to initial delay on project implementation		
Semester 2	Participation in 4 International events: <ul style="list-style-type: none"> <li>• European Week of Regions and Cities (Brussels, Belgium, 11-13 October 2016) – LP;</li> <li>• COP 22 (Marrakech, Morocco, 7-18 November 2016) – LP;</li> </ul>	LP – Province of Potenza PP3 – Municipality of Vila Nova de Gaia PP6 – Mi6 PP7 – Alba Iulia Municipality	The LP participated as a presenter in 2 events organized by INTERREG Europe. PP6 participated as a presenter in an International Conference and Exhibition, and on two National events.

Period	Events	Project Partners	Outputs
	<ul style="list-style-type: none"> <li>• KLENEN'17 XII. Internat. Conference &amp; Exhibition (Gárdony, Hungary, 07 March 2016) – PP6;</li> <li>• Europe, let's cooperate (Malta, 22-23 March 2017) – PP7.</li> </ul> <p>Participation in 5 National events:</p> <ul style="list-style-type: none"> <li>• Interreg Europe Information Day 2017 (Catanzaro, Italy, 22 February 2017) – LP;</li> <li>• Energy, Environment &amp; Built environment (Évora, Portugal, 22 February 2017) – PP3;</li> <li>• Green Business Week (Lisbon, Portugal, 15-17 March 2017) – PP3;</li> <li>• BKV II. Energy Efficiency Professional Forum (Budapest, Hungary, 26 October 2016) – PP6; SZJE Forum (Székesfehérvár, Hungary, 27 October 2016) – PP6.</li> </ul>		<p>PP7 participated as a presenter in a roundtable in an International event.</p> <p>PP3 participated as a presenter and exhibitor in two National events.</p>
<b>Semester 3</b>	<p>Participation in 2 International events:</p> <ul style="list-style-type: none"> <li>• 4<sup>th</sup> Open European Day (Bonn, Germany, 03 May 2017) – LP;</li> <li>• 17<sup>th</sup> International Conf. on Computational Science and Its Applications (ICCSA), (Trieste, Italy, 3-6 July 2017) - PP5.</li> </ul> <p>Participation in 2 National events:</p> <ul style="list-style-type: none"> <li>• Community Energy Conference (Manchester, England, 24 June 2017) – PP4;</li> <li>• Workshop “Development and implementation of energy-efficiency improvement programmes in residential quarters” (Birštonas, Lithuania, 28 June 2017) – PP5.</li> </ul>	<p>LP – Province of Potenza PP4 – Durham County Council PP5 – KTU</p>	<p>The LP participated as an exhibitor in one International event.</p> <p>PP4 participated as an exhibitor in one National event.</p> <p>PP5 participated as a presenter in one International event and attended one National event to disseminate the LOCARBO's briefing brochures.</p>
<b>Semester 4</b>	<p>Participation in 2 National events:</p> <ul style="list-style-type: none"> <li>• A National LLL was organized by PP4 in November 2017. In the context of peer-teams and pilot action, PP6 was invited to this event to present their GP, the Virtual Power Plant (VPP) Programme;</li> </ul>	<p>PP4 – Durham County Council  PP5 – Kaunas University of Technology</p>	<p>PP4 participated as a presenter in one National event.</p> <p>PP5 participated as a presenter in one National event.</p>



Period	Events	Project Partners	Outputs
	4 <sup>th</sup> International Scientific Conference Ecological Architecture 2017 (Kaunas, Lithuania, 23–24 November 2017) – PP5.		
<b>Semester 5</b>	<p>The LP attended one transnational event <i>peer-to-peer</i> exchange for the Twinning Program 2017/2018 “Covenant of Mayors” (Granada, Spain, 12-13 April 2018), authorised by the JS.</p> <p>Participation in 3 Interregional events:</p> <ul style="list-style-type: none"> <li>• Participation in one Interreg Europe exchange of experience event – Experience Fair, journey through project implementation (Sofia, Bulgaria, 24-25 April 2018) – LP and PP6;</li> <li>• Participation in one Interregional Thematic Event – Interregional Cooperation for Energy Transition (Florence, Italy, 27 June 2018) – PP3;</li> <li>• Participation in one Interreg Europe Policy Learning Platform event – Thematic workshop on Energy Efficiency in buildings (Florence, Italy, 28 June 2018) – PP6.</li> </ul>	<p>LP – Province of Potenza PP3 – Municipality of Vila Nova de Gaia PP6 – Mi6</p>	<p>LP attended one transnational event <i>peer-to-peer</i> exchange (authorised by the JS), and one interregional event organized by INTERREG Europe.</p> <p>PP3 participated as a presenter in one interregional event.</p> <p>PP6 participated as a presenter in two interregional events organized by INTERREG Europe.</p>

## Interregional peer-reviews

The mentoring process constitutes a continuous and cyclical activity during the entire project. Under LOCARBO’s project management perspective, the peer-review methodology is very useful to facilitate the exchange of experience between project partners. Having this in mind, a comprehensive mentoring programme (including mentor match-making, a continuous peer-reviewing in peer-teams, helpdesk by Thematic and TP Leaders, and supervision & validation by the LP) was planned and made available to all PPs.

The most effective events of the mentoring process included the Mentor match-making workshop and the parallel mentor consultations.

Mentor match-making workshop (month 12) brought partners with similar challenges and ambitions to form smaller peer-teams, delivering peer-reviewing during the AP development process. The following peer-teams were formed: LP-PP2-PP5, PP3-PP7, and PP4-PP6.

During the parallel mentor consultations, the peer-teams, supported by Thematic and TP Leaders, dived into each-others’ draft APs and advised each-other on how to proceed with

the elaboration. The mentoring process continues on an ongoing basis. Next to the available help desk support by Thematic and TP Leaders, peer-teams worked together using online channels on incorporating the selected GPs into their APs.

As a distinctive sign of the peer-team's cooperation, Durham County Council (PP4) and Mi6 (PP6) have agreed on a thematic cooperation for the potential adaptation of the Virtual Power Plant (VPP) Programme in Durham, and the exchange of knowledge in terms of school programmes managed by these entities.

## Thematic Working Team meetings

To ensure high quality outputs and efficient cooperation along the implementation of the LOCARBO project, all thematic activities were coordinated by Thematic Leaders.

Thematic Leaders ensured a smooth proceeding in all activities by playing a strong coordinative, mentoring and quality controlling role. Under their leadership, the TWT meetings were set up to ensure an efficient implementation of all thematic activities. The TWT meeting cycle started in the Internal Kick-Off Meeting and included five more meetings, held during Phase 1 of LOCARBO project, as outlined in the following table.

Period	Events	Outputs
Semester 1	<b>Internal Kick-off Meeting (KOM)</b> 31 August - 1 September 2016 Potenza, Italy	<p>The 2<sup>nd</sup> day of KOM was entirely dedicated to thematic tasks and organisation.</p> <p>The LP provided an introductory overview of the project's thematic organisation, addressing the following components: TWT members; rules of procedure; work plan; division of tasks, and foreseen outputs.</p> <p>In line with the thematic tasks, several sessions were held: a Regional Analysis and Ambition Setting Workshop, a workshop/brainstorming on GP collection, a Stakeholder Involvement &amp; Institutional Knowledge Sharing Training, and a Brainstorming session on Action Planning.</p> <p>RAIS is a report in which each PP summarizes the local context analysis in terms of general framework description and specific need or expectations to be addressed by LOCARBO activities.</p> <p>During the RAIS Workshop, TWT members examined the following main aspects:</p> <ul style="list-style-type: none"> <li>- the analysis and description of the implementation context (quantitative and qualitative);</li> <li>- the time frame to be considered for the strategic policy perspectives;</li> <li>- the geographical scale of the assessment.</li> </ul> <p>The Workshop/brainstorming on GP collection was an important step for determining that the GP assessment should consider the criteria of transferability, feasibility and replicability, according with the specific objectives and actions that each PP considers in the AP. After discussion, all PPs approved the use of a specific template and the pursuit of the GP's selection and assessment activities accordingly to the AF prevision.</p> <p>During the Stakeholder Involvement &amp; Institutional Knowledge Sharing Training, Mi6 presented a 5-step methodology on how to identify, sort, plan, do and follow-up on stakeholders and their</p>

Period	Events	Outputs
		<p>engagement in project implementation. A handful of tools was presented to be used by PPs after LP approval.</p> <p>There was also a session focusing on step 2 "sort" of the methodology where each partner was asked to mark the three most relevant stakeholders on the joint project-level power map (a tool previously demonstrated for mapping stakeholders).</p> <p>In the third section, Durham County Council presented a proposed methodology for institutional learning that holds a strong emphasis on maintaining a regular communication and information feedback.</p> <p>The fourth section consisted of an open discussion moderated by the trainers on other relevant aspects of stakeholder involvement and answering questions raised.</p> <p>Action Planning brainstorming session consisted of a preliminary discussion regarding the assumption that the APs represent the main outputs of LOCARBO and the whole project activity should be oriented to effectively define those operative documents which should respect the instance to influence the PIs identified in the project design phase.</p>
Semester 2	<p><b>2<sup>nd</sup> TWT meeting (linked to SG meeting and launching conference)</b> 18-19 October 2016 Durham, UK</p>	<p>The 2<sup>nd</sup> day of this event was mainly dedicated to interregional thematic activities, namely the Stakeholder Café, the Ambition Sharing Workshop, the Good Practice Fair, and the Action Plan Warm-Up Workshop.</p> <p>The Stakeholder Café introduced the BEEP project as a remarkable regional initiative.</p> <p>The Ambition Sharing Workshop consisted of a roundtable discussion (moderated by the LP and the TP Leaders) to analyse each PP's RAIS results.</p> <p>The Good Practice Fair focused on the presentation of TP1 GPs collected by each PP and on a few points linked to the site visits conducted in Durham County.</p> <p>The Action Plan Warm-Up Workshop included the Action Plan Guide presentation and a roundtable discussion to collect PP's expectations and constraints.</p>
	<p><b>3<sup>rd</sup> TWT meeting (linked to SG meeting)</b> 13-14 March 2017 Kaunas, Lithuania</p>	<p>This event included the 2<sup>nd</sup> Stakeholder Café. Stakeholder representatives presented GPs and experiences gained so far in Lithuania, namely:</p> <ul style="list-style-type: none"> <li>• "BETA" Housing Energy Efficiency Agency, with the main task of administrating and implementing energy efficiency programmes and projects;</li> <li>• The experience gained with the implementation of the ESCO model in Lithuania was presented by the JSC "Energy solution centre - ESC". The representative from ESC presented their main activities and new financial opportunities for the modernization of industrial companies and municipal streets and lighting;</li> <li>• Stakeholder representative from the company of Real Estate Housing JSC "CITUS" presented the Aerohouses and Energy Efficiency Projects. The aim of this company is to implement more and more innovative solutions, influencing energy efficiency, economy, as well as the life comfort. Therefore, the company developed an open innovation project that includes an Expert Lab - a team of around 10 Real Estate market experts from partner companies – to promote the sharing of experience;</li> <li>• A representative from JSC "ESO" provided a presentation on the Green Protocol and Social Responsibility initiative</li> </ul>

Period	Events	Outputs
		<p>related to energy efficiency. This initiative unites more than 200 organizations and companies every year for the ESO Award competition for energy efficiency activities.</p> <p>The meeting proceeded with a Good Practice Fair where each partner was invited to present the TP2 GPs. Then, a discussion of the presented GPs was useful to compare and understand the potential of its transferability.</p> <p>KTU launched and moderated a round-table discussion on the main evidences resulting from the study visits and the Stakeholder Café, where the following aspects were highlighted:</p> <ul style="list-style-type: none"> <li>• The influence of private properties in the process of energy requalification of multi-apartment buildings, as a common situation in all PPs' context/experience;</li> <li>• ESCO approach representing a transversal operational mean to promote energy renovation, even when the share of energy costs doesn't allow short return of investment periods;</li> <li>• Building networks of operators, stakeholders, and beneficiaries as a fundamental precondition to stimulate EE programmes;</li> <li>• The administrative/burocratic procedures for energy renovation in multi-apartment and public buildings are excessive and represent a critical factor of the process;</li> <li>• The importance of clearly understanding business models to the decision-making process;</li> <li>• The Kaunas case doesn't include social housing or public residential buildings, since all residential houses are private properties. The EE renovation model is based on this specific condition. In multi-apartment buildings, the decision to engage energy renovation is based on 50% + 1 vote majority system. The system connects households, administrator/technical structures and bank in the renovation process;</li> <li>• Climatic conditions characterize the technical approach in EE regeneration. The comparison between Kaunas City and Vila Nova de Gaia Municipality cases highlighted several structural differences.</li> </ul> <p>The 1<sup>st</sup> day agenda ended with the presentation of the main findings of the partners' regional analysis and an Action Plan Workshop.</p> <p>The LP presented the Action Plan guide, which includes all the methodological and technical information supporting the AP design. After a wide discussion among partners, the methodology was approved and recognized as useful for the AP design.</p>
Semester 3	<p><b>4<sup>th</sup> TWT meeting (linked to SG meeting)</b> 7-8 September 2017 Alba Iulia, Romania</p>	<p>The 1<sup>st</sup> day of this event was dedicated to interregional thematic activities, comprising several working sessions directed to the partnership and engaged stakeholders.</p> <p>A Stakeholder Café gathered representatives from the Regio Local Development Agency, the Alba Local Energy Agency (ALEA) and the City Hall. These entities presented projects developed in the municipality, namely related to the implementation of nZEB buildings and smart public lightning and with the development of apps that, among others, allow citizens to report incidents to the City Hall. Of note is the Alba Iulia Smart City 2018 project, under</p>

Period	Events	Outputs
		<p>which private companies apply to test their smart city solutions in Alba Iulia, with their own funding.</p> <p>A guided site visit was carried out to a public transport company using an innovative system to increased power efficiency at fuel economy filtering and to three public institutions (the Dorin Pavel Technical College, an elderly home and a day centre for the elderly) where Solar PV Panels were implemented with the support of European funds, producing at least 50% of these buildings' energy needs.</p> <p>After that, a Good Practice Fair took place and each partner presented the collected GPs related with TP3, including temperature, humidity, brightness and energy consumption smart monitoring systems and databases, a smart street lighting control system and a hybrid solution (PV + active water cooling) that prevents the heating of the solar cells and its effectiveness loss.</p> <p>The 1<sup>st</sup> day agenda ended with a Transfer and Adaptation Workshop and a Parallel Mentor Consultation. Both sessions were moderated by the LP in cooperation with the TP leaders.</p> <p>The Transfer and Adaptation Workshop aimed at discussing the transferability and adaptation of the GPs in the context of the PPs' PIs, while the Parallel Mentor Consultation intended to promote PPs' feedback to each other within their peer teams on the draft of their APs and the discussion of further steps in the elaboration process.</p>
<b>Semester 4</b>	<b>5<sup>th</sup> TWT meeting (linked to SG meeting)</b> 6-7 March 2018 Budapest, Hungary	<p>Stakeholders from all PP regions attended this event, among them representatives of the MAs. The event was organised back-to-back with the annual VPP award ceremony, thus, PPs had a first-hand experience about the programme. This ceremony was followed by the MA café, where MAs' representatives shared their visions on the respective APs, and a discussion on the GP Inventory and steps to conclude the validation process. Day 2 started with a visit to the passive house operated by PP6. During the AP status &amp; fine-tuning training PPs presented the state of the art of APs and exchanged visions on the problems encountered, while the workshop on ILP experiences promoted knowledge exchange between the PPs. As part of the workshop on regional mid-term events organization, preparatory steps for organising the events were reviewed.</p>
<b>Semester 5</b>	<b>6<sup>th</sup> TWT meeting (linked to SG meeting)</b> 25-26 September 2018 Vila Nova de Gaia, Portugal	<p>The last TWT meeting's agenda included a session dedicated to the experiences of LOCARBO Mid-term events and an Action Plan Workshop and roundtable discussion.</p> <p>The presentation of the experiences of LOCARBO Mid-term events was shorter than originally planned, since PPs have chosen to display only their meeting's outcomes and evidences (participants, photos, etc.).</p> <p>Then, the Action Plan Workshop provided the opportunity for all PPs to briefly present the objectives, targets and innovative action lines to be undertaken within the Phase 2 of the project.</p>

## Participation in Interreg Europe policy learning platform events

Policy learning platforms are a new and challenging initiative from the Interreg Europe programme to ensure a continuous EU-wide policy learning and knowledge management. To ensure a clear communication and visibility, one policy learning platform was designed per each thematic objective, i.e. Research & innovation, Competitiveness of SMEs, Low-carbon economy, Environment & resource efficiency, thus completing four platforms in total. Each policy learning platform provides an extensive service for all PPs and for all other organisations involved in regional policy around Europe. The extensive service offers a technical support from an international team of experts, and an interactive web interface designed to share information and analysis on the thematic policy fields addressed by the programme's investment priorities, thematic reports and publications, as well as a database of the relevant practices and results from interregional cooperation projects.

During LOCARBO's Phase 1, two participations in Interreg Europe policy learning platform events were accounted.

On 24-25 April 2018, almost 300 representatives of Interreg Europe projects came together at the Experience Fair, in Sofia, Bulgaria, for a journey through project implementation.

LOCARBO project, represented by Dr. Mezősi Balázs, from MI6, was invited to share tips and tricks on how to mobilize project stakeholders, one of the most essential (and difficult) issues in the development of a project. Dr. Mezősi Balázs gave advice on how to do it in a structured way: identify, sort, plan, involve and monitor.

LOCARBO project made its contribution to this event objective and reached an active involvement on the exchanging of experiences among projects.



Figure 5: LOCARBO represented by Mi6 at the Experience Fair, in Sofia, Bulgaria, on 24-25 April 2018.

On the 28<sup>th</sup> of June 2018, the Interreg Europe Policy Learning Platform organised a ‘Thematic workshop on the topic of energy efficiency in buildings’, in Florence, Italy, bringing together 28 representatives of fourteen Interreg Europe projects.

This thematic workshop focused on how low-carbon projects can work together and maximize the impact. Group discussions on how the Policy Learning Platform can assist Interreg Europe projects took place and participants discussed the good practices identified by other projects.

Zoltan Oletics, from Mi6, represented LOCARBO and presented the VPP Programme.



Figure 6: LOCARBO represented by Mi6 at the Interreg Europe Policy Learning Platform event – Thematic workshop on Energy Efficiency in buildings – on the 28<sup>th</sup> of June, in Florence, Italy.

This event was complemented by an extensive interregional agenda, which included the ‘Interregional cooperation for energy transition’ day, organised on the 27<sup>th</sup> of June 2018, by the REBUS project, in cooperation with the VIOLET and SET-UP projects.

The event, designed by Resolvo and supported by the European Institute for Innovation, was organised within the framework of the Interreg Europe programme. Moreover, the event was organised among the Energy Days in the framework of the EU Sustainable Energy Week (EUSEW) 2018.

The ‘Interregional Cooperation for Energy Transition Day’ agenda, using a mix of interactive panels, keynote speeches and a competition, encouraged partners to discuss their common challenges to energy transition. Challenges were established according to a co-creational approach, where each project was consulted in advance for their definition. This inter-project collaboration initiative gathered 14 different low carbon Interreg Europe projects in a Business Case competition.

Carla Pires from GAIURB, the municipal company of urbanism and housing of the Municipality of Vila Nova de Gaia, presented an Energy Transition Business Case on New Collaborative and Adaptive Controls for Personalized and User-Friendly Energy Audits.



Figure 7: LOCARBO represented by the PP from Vila Nova de Gaia Municipality at the Interregional Thematic Event – Interregional Cooperation for Energy Transition, on the 27<sup>th</sup> of June, in Florence, Italy.

## Local Living Lab meetings

As addressed on LOCARBO's project proposal, stakeholders are an essential element for the project, as most of the national and regional policy makers have the means to implement LOCARBO's results. Getting stakeholders to implement the project's results is essential for long-term success. They will have a crucial role in transmitting project's results both to potential end users of the improved measures, and to third party local/regional governments to get involved in EE and RES initiatives by making use of the novel roles that have been explored by LOCARBO.

This involvement takes form in LLL meetings, operating as testing grounds for regional bottom-up approach. The process is supported by Interregional Stakeholder Cafés organised during joint partner meetings. During these meetings, partners and invited stakeholders can meet each other and the local stakeholders of each TP Leader and share their experiences and expectations.



During the project’s Phase 1, local stakeholder groups were set up in a very early stage and regular meetings (at least two per semester, completing a total of 6 LLL meetings) were held.

Due to schedule constraints, not all PPs were able to meet the AF timeline originally stipulated, as set out in the following table.

However, each PP sought to streamline the frequency of these events in accordance with a timely stakeholder engagement.

Project Partners	Semester 1	Semester 2	Semester 3	Semester 4	Semester 5
LP		1 <sup>st</sup> meeting 2 <sup>nd</sup> meeting		3 <sup>rd</sup> meeting	4 <sup>th</sup> meeting 5 <sup>th</sup> meeting 6 <sup>th</sup> meeting
PP2		1 <sup>st</sup> meeting 2 <sup>nd</sup> meeting		3 <sup>rd</sup> meeting	4 <sup>th</sup> meeting 5 <sup>th</sup> meeting 6 <sup>th</sup> meeting
PP3		1 <sup>st</sup> meeting	2 <sup>nd</sup> meeting	3 <sup>rd</sup> meeting	4 <sup>th</sup> meeting 5 <sup>th</sup> meeting 6 <sup>th</sup> meeting
PP4		1 <sup>st</sup> meeting	2 <sup>nd</sup> meeting	3 <sup>rd</sup> meeting 4 <sup>th</sup> meeting 5 <sup>th</sup> meeting	6 <sup>th</sup> meeting
PP5		1 <sup>st</sup> meeting 2 <sup>nd</sup> meeting	3 <sup>rd</sup> meeting	4 <sup>th</sup> meeting 5 <sup>th</sup> meeting	6 <sup>th</sup> meeting
PP6		1 <sup>st</sup> meeting 2 <sup>nd</sup> meeting	3 <sup>rd</sup> meeting	4 <sup>th</sup> meeting 5 <sup>th</sup> meeting	6 <sup>th</sup> meeting
PP7		1 <sup>st</sup> meeting	2 <sup>nd</sup> meeting 3 <sup>rd</sup> meeting 4 <sup>th</sup> meeting		5 <sup>th</sup> meeting 6 <sup>th</sup> meeting

Each LLL session had its own purposes and objectives. In general, the 1<sup>st</sup> LLL meetings provided general information on the project as a starting point for the stakeholder involvement process, while in 2<sup>nd</sup> LLL meetings initial inputs were collected from stakeholders on possible ways to improve the targeted policy instruments.

The 3<sup>rd</sup> and 4<sup>th</sup> LLL meetings were mainly dedicated to the exchange of inputs gathered on interregional workshops, consultations and peer-review sessions, and the progress achieved on the AP elaboration process.

A continuous stakeholders’ involvement proceeded on the 5<sup>th</sup> LLL meetings, where stakeholders worked together to narrow down the range of their proposals towards the most effective integrated solutions for improving their PIs.

The final semester of Phase 1 comprised the performance of the 6<sup>th</sup> LLL meetings where PPs in cooperation with the stakeholders summed up and finalised their set of proposals for improving their PI. Participation of MAs was vital in this last LLL meeting to strengthen the plausibility of APs by incorporating their comments.

## Institutional Learning Platform meetings

When designing the LOCARBO project methodology to carry out the interregional exchange of experience, it was decided that partners should pay attention to multidimensional aspects/levels of the learning process.

Partners should understand how the exchange of experience process can directly influence the policy frameworks of the participating regions. Learning at the individual level alone is not sufficient to achieve a policy change. Instead, learning outcomes need to be transferred and integrated effectively into the participating organisations, assigned it as organisational or institutional learning. Such learning occurs when the new knowledge does not remain at the level of individuals alone but is also shared within the organisations these individuals are working for. Organisational learning increases the chance that the learning gained from the cooperation will have an impact in the regions. This can be achieved through internal reporting meetings where the staff members directly involved in the cooperation report back to the relevant colleagues, managers and elected representatives of the organisation.

This involvement takes form in ILP meetings. As happened with LLL meetings, ILP meetings were set up in a very early stage of the project, and 3 regular meetings were held by each PP (as set out in the following table).

Project Partners	Semester 1	Semester 2	Semester 3	Semester 4	Semester 5
LP				1 <sup>st</sup> meeting	2 <sup>nd</sup> meeting 3 <sup>rd</sup> meeting
PP2				1 <sup>st</sup> meeting 2 <sup>nd</sup> meeting	3 <sup>rd</sup> meeting
PP3			1 <sup>st</sup> meeting		2 <sup>nd</sup> meeting 3 <sup>rd</sup> meeting
PP4					
PP5		1 <sup>st</sup> meeting		2 <sup>nd</sup> meeting 3 <sup>rd</sup> meeting	
PP6	1 <sup>st</sup> meeting	2 <sup>nd</sup> meeting		3 <sup>rd</sup> meeting	
PP7		1 <sup>st</sup> meeting		2 <sup>nd</sup> meeting	3 <sup>rd</sup> meeting

In general, the 1<sup>st</sup> ILP meetings were dedicated to introducing the main features of the project to internal colleagues and providing them with update on current developments.

The 2<sup>nd</sup> ILP meetings' objectives were to share a variety of new information and project results (e.g. validated GPs from all TPs, site visit experiences, AP progress and the related visual materials), allowing internal colleagues to learn about the improvements of the project.

Finally, the 3<sup>rd</sup> ILP meeting exposed the project's results in Phase 1 in terms of the PI improvement and the interregional knowledge gained.

## Good practices

According to the Interreg Europe programme manual, a GP is defined as “an initiative (e.g. project, process, technique) undertaken in one of the programme’s priority axes which has proved to be successful in a region, and which is of potential interest to other regions. Proved successful means that the GP has already provided tangible and measurable results in achieving a specific objective.

Since Interreg Europe is dedicated to regional development policy improvements, a GP is usually related with a public intervention. A private initiative may be considered as a GP only if there is evidence that this initiative has inspired public policies.

During an intensive mutual learning and knowledge transfer process, LOCARBO’s PPs collected and shared with each other their GPs and examined their transferability and possible adaptation methods in the context of the targeted PIs.

According to the project thematic tasks, each PP had to select a GP stock referring to the three TPs of the project:

- TP1: Supplementary services and products offered by authorities;
- TP2: Innovative cooperation models;
- TP3: Innovative smart technologies.

The collection of GPs (as displayed in the table below) by the PPs exceeded the indicator (21 GPs) initially set for this activity.

At the end of GP selection and validation, TP and Thematic Leaders developed a GP Inventory including good practices selected according to previously set principles.

Thematic Pillar	Project Partners	Good Practices	Aim
TP1	LP - Province of Potenza	<b>Municipal building heating system powered by woody biomass (wood chips)</b>	For facing the raising of energy costs, the Municipality of San Chirico Raparo (Potenza Province) has identified the opportunity to install a heating system plant based on wood chips in its city hall building. Local stakeholders are involved in an effective cooperation model, delivering positive impacts on the local system: energy saving and CO <sub>2</sub> reduction; energy costs reduction; new job opportunities and economic development in the biomass production sector.
		<b>Province of Potenza as Covenant Coordinator for the Covenant of Mayors for Climate and Energy</b>	The Province as a public authority provides strategic guidance and technical support to Covenant of Mayors signatories and municipalities willing to sign up to it. The main objective of the Province is to promote decarbonised and resilient territories, where citizens have access to secure, sustainable and affordable energy. In this activity, the Province of Potenza has capitalized its wide territorial network including all the 100 municipalities of its territory through a statement of commitment aiming at developing a common territorial development strategy covering in particular climate change contrasting policies.
	PP2 – Basilicata Region	<b>Improve the management of the process of supply of energy</b>	The Basilicata Regional Energy Company (SEL S.P.A.) proposes to improve the management of the entire energy supply process of the region through energy consumption management. The company acts as a Central Purchasing Body for reducing the costs of electricity and natural gas by aggregating the consumption of regional public bodies. The adoption of an awarding policy for tenders allows participating organizations significant savings on energy costs. The main beneficiaries are all public bodies of the Basilicata Region, namely La Regine Basilicata, the municipalities, the provinces, and the public health companies.
	PP3 – Vila Nova de Gaia Municipality	<b>Vila d’Este Housing Refurbishment</b>	Vila d’Este Housing Refurbishment is a large-scale rehabilitation project which was coordinated by the Vila Nova de Gaia Municipality under the period of 2009-2015. The main strategic objectives of the energy rehabilitation of the Vila d’Este neighbourhood were the elimination of the existing anomalies, ensuring compliance with current energy and indoor air quality requirements, and the rehabilitation of the entire neighbourhood on an architectural and aesthetics perspective.
	PP4 - Durham County Council	<b>Durham District Energy Study</b>	Feasibility study to assess the potential for retrofit, energy efficiency, district heating/cooling and electricity generation in the Durham County.
		<b>Schools Carbon Reduction Programme</b>	Coordinated strategic approach to improve energy use and energy efficiency in schools across Durham County by enabling them to access their energy data through an online portal. The Programme also provides support for teachers, pupils, school caretakers and business managers.
		<b>Business Energy Efficiency Project (BEEP)</b>	BEEP aims to promote the use of energy efficient technologies in the SME sector. It provides free guidance and energy audits, and grants for installing energy efficient technologies.
		<b>SystemsLink energy management software at Durham County Council</b>	Energy Management software designed to provide a cost-effective way of implementing an Energy Monitoring and Targeting system.
PP5 - KTU	<b>Housing Energy Efficiency Agency</b>	This GP represents an example of successful cooperation between stakeholders, coordinated by the national agency for EE.	

Thematic Pillar	Project Partners	Good Practices	Aim	
TP2		<b>(BETA)</b> <b>Inventive promotion of complex renovation</b>	The main objective of this project, initiated by the Kaunas Municipality, is to stimulate complex renovations of tenement houses. Projects integrating the energy renovation of more than five buildings will have a bonus service of complex planning and management of the urban environment from the municipality.	
		<b>PP6 - Mi6</b>	<b>Virtual Power Plant Programme Hungary</b>	The VPP programme is designed to collect experience and practices, transform them into knowledge, motivate and award the best actors, and cooperate with the relevant authorities.
			<b>Energy Conscious School Programme</b>	Awareness raising programme for students and schools in energy efficiency, motivating, supporting and awarding role models.
	<b>County Climate Protection Platforms</b>		The general aim of this programme is to establish county-level platforms with the involvement of local stakeholders and elaborate climate protection APs.	
	<b>LP - Province of Potenza</b>	<b>Province of Potenza Resilient Municipalities and Communities' Network – WeResilient</b>	Province of Potenza has constituted a network of its 100 Municipalities for developing a common sustainable territorial strategy based on community involvement. The Province of Potenza outlined the #weResilient strategy for pursuing territorial development through a structural combination of environmental sustainability, territorial safety and climate change contrasting policies.	
		<b>Calvello energetic village</b>	Municipality of Calvello has activated a territorial development strategy, based on its SEAP, with a strong community involvement, in the field of EE and RES.	
		<b>Melfi Sustainable Energy Strategy</b>	Melfi Municipality has put in place integrated actions (planned in its SEAP) based on a diversified use of existing technologies and an active community involvement.	
	<b>PP2 – Basilicata Region</b>	<b>The ERMES integrated agricultural monitoring system for greenhouse gas emissions reduction</b>	ERMES (An Earth observation Model based on RicE Information Service) project purpose is to implement some services on precision farming. ERMES is a European Union - FP7 SPACE project coordinated by the IREA/CNR Institute. ERMES ambitious objective is to create an integrated system allowing to exploit information from different sources and different levels of spatial and temporal granularity (Earth Observation data, crop modelling, and user-collected data), to provide useful information for various crop monitoring/management applications.	
		<b>Promoting low and medium - enthalpy geothermal energy exploitation in the northern sector of Basilicata</b>	This project aims to promote low-and medium enthalpy geothermal energy exploitation in the northern sector of Basilicata. Moreover, it provides training and information to technical and administrative operators to increase their skills on the various aspects of geothermal energy.	
<b>PP3 – Vila Nova de Gaia Municipality</b>	<b>Schools and Sports communities engagement on energy building rehabilitation and retrofitting</b>	This GP arises from the strategic ambition of Vila Nova de Gaia Municipality to ensure that all municipal schools and sports equipment follow the design principles associated with the nZEB and CO <sub>2</sub> Zero building concepts by 2020. Vila Nova de Gaia Municipality has started an energy rehabilitation process to turn all municipal schools and sports facilities into neutral CO <sub>2</sub> equipment.		
<b>PP4 -</b>	<b>Durham District Energy Study</b>	Feasibility study to assess the potential for retrofit, energy efficiency, district heating/cooling and electricity generation in the		

Thematic Pillar	Project Partners	Good Practices	Aim	
	Durham County Council		Durham County.	
		<b>Schools Carbon Reduction Programme</b>	Coordinated strategic approach to improve energy use and energy efficiency in schools across Durham County by enabling them to access their energy data through an online portal. The Programme also provides support for teachers, pupils, school caretakers and business managers.	
		<b>Business Energy Efficiency Project (BEEP)</b>	BEEP aims to promote the use of energy efficient technologies in the SME sector. It provides free guidance and energy audits, and grants for installing energy efficient technologies.	
	PP5 - KTU	<b>Initiative of Energy Supply Company SC ESO Encouraging Energy Efficiency Practices</b>		The Energy Efficiency initiative developed and implemented by ESO aims to encourage energy using companies to increase energy efficiency.
		<b>ESCO model in Lithuania</b>		ESCO model implementation in Lithuania is based on the practice of one company (Energy Solution Center ESC), including financial opportunities for the modernization of industrial companies and street and area lighting. The company providing ESCO services is part of the Lietuvos Energija Group, therefore their activity is based on many areas related to innovative energy solutions, for example: EV charging, solar energy, reactive power, compensation, and stable electricity.
		<b>Housing Energy Efficiency Agency (BETA)</b>		This GP represents an example of successful cooperation between stakeholders, coordinated by the national agency for EE.
	PP6 - Mi6	<b>Virtual Power Plant Programme Hungary</b>		The VPP programme is designed to collect experience and practices, transform them into knowledge, motivate and award the best actors, and cooperate with the relevant authorities.
		<b>Energy Conscious School Programme</b>		Awareness raising programme for students and schools in energy efficiency, motivating, supporting and awarding role models.
	PP7 - Alba Iulia Municipality	<b>County Climate Protection Platforms</b>		The general aim of this programme is to establish county-level platforms with the involvement of local stakeholders and elaborate climate protection APs.
		<b>"Recycle with tricycle" Campaign</b>		This campaign aims to improve the quality of the environment in the local community through educating citizens on the importance of selective waste collection and recycling. The collection of paper and cardboard waste is for free and those who lead the collecting tricycles are people with social problems and low incomes.
<b>Air quality measurement solution, uRadMonitor</b>			An important first step for the Alba Iulia Smart City 2018 pilot project was taken through a cooperation agreement approved by Orange Romania and the Municipality of Alba Iulia. With the support from Orange Romania, 15 uRADMonitor model A3 detectors were installed in public transportation. Thanks to this technology, it is now possible to monitor precise, real time indications on pollution affecting the city and nearby regions.	
<b>Sustainable Energy Action Plan (SEAP)</b>			The SEAP, conducted together with the Alba Local Energy Agency (ALEA) and integrated in the "Development Strategy Alba Iulia", was developed in 2005 and updated in 2016 and is the key document defining energy policies for the local government and a period of 10 years, with the aim of reducing CO <sub>2</sub> emissions throughout the city.	
		<b>ANERGO – Alba Energy</b>	ANERGO was established in the framework of an European project, as a structure within Alba Energy Agency (ALEA).	

Thematic Pillar	Project Partners	Good Practices	Aim
		<b>Observatory</b>	Its main role is to fulfil the need to aggregate energy consumption data at local and regional level, per sector and territorial administrative unit.
TP3	LP - Province of Potenza	<b>EE-SMS: Energy Efficiency Smart Monitoring System</b>	EE-SMS is a pilot action developed within Interreg IVC RENERGY, based on an ICT Platform, connected with local sensors network, allowing a new approach and model for monitoring energy consumption and energy performance in public buildings.
		<b>At school for energy efficiency. EE of Public Lighting Networks of the Industrial Zone of Balvano</b>	This GP represents how a local school community could promote the development of technical contribution for local administration on energy renovation.
		<b>ATER (Territorial agency for residential buildings) Sustainable Public Housing</b>	This GP represents a model of “sustainable design” promoted by ATER (public agency) for social housing. The project has been developed in a peri-urban residential area of a municipality in the Province of Potenza (Filiano) and consists of the construction of buildings applying the Green Building and Sustainable principles, methods and architectural techniques with reference to energy saving and RES production systems.
	PP2 - Basilicata Region	<b>Photo-Voltaic system with active fluid cooling (PVFC)</b>	This GP consists of a research work studying an innovative technology regarding renewable energy. The idea is to combine classical PV technology with an active fluid cooling system to strongly reduce the operative cells’ temperature, resulting in an increase in the PV-cell electrical energy production efficiency. Furthermore, heat absorbed by the cooling fluid can be used in solar thermal collectors even if temperatures are lower.
	PP3 – Vila Nova de Gaia Municipality	<b>Sustainability Observatory</b>	The Sustainability Observatory is a web-based accessible platform that allows a real-time monitoring of the energy consumption of several municipal equipment. The platform, promoted by Energaia (Regional Energy Agency) with the strong support of its six associated municipalities, is fundamentally based on the concept of sharing a common support platform for managing and monitoring energy consumption and intends to become a reference model for other municipalities allowing them to monitor the impact of sustainable energy measures and to motivate the continuous search for opportunities to improve territorial sustainability.
	PP7 - Alba Iulia Municipality	<b>“Recycle with tricycle” Campaign</b>	This campaign aims to improve the quality of the environment in the local community through educating citizens on the importance of selective waste collection and recycling. The collection of paper and cardboard waste is for free and those who lead the collecting tricycles are people with social problems and low incomes.
		<b>Air quality measurement solution, uRadMonitor</b>	An important first step for the Alba Iulia Smart City 2018 pilot project was taken through a cooperation agreement approved by Orange Romania and the Municipality of Alba Iulia. With the support from Orange Romania, 15 uRADMonitor model A3 detectors were installed in public transportation. Thanks to this technology, it is now possible to monitor precise, real time indications on pollution affecting the city and nearby regions.
		<b>Ensuring sustainable alternative energy sources for public institutions</b>	The overall objective of this project is to ensure sustainable alternative energy sources for the following public institutions in Alba Iulia: Technical College “Dorin Pavel”, Home for the Elderly, Day Centre for Elderly, and Programmes Directorate.

## Action Plan workshops

The action planning process started at the 2<sup>nd</sup> TWT meeting, held in Durham County on 18-19 October 2016, and intensified with the development of the Action Plan methodology, prepared by the LP, under the guidance of Thematic Leaders and *peer* teams.

The 2<sup>nd</sup> TWT meeting included an Action Plan warm-up Workshop where PPs discussed on how action planning should be carried on and agreed on the need to develop a common template including relevant issues such as PI influence, objectives, activities, key actors, and performance indicators.

PPs also agreed on the importance of involving the LLL members (stakeholders) in the APs development and decided that they should actively participate in the AP common template development.

From month 8, PPs started elaborating their APs supported by a continuous mentoring process including continuous supervision and helpdesk support by Thematic and TP Leaders and, from month 12 expanding almost to the end of Phase 1, peer-reviewing within peer-teams. The objective was to ensure high quality of APs and facilitate the maximum efficiency of knowledge transfer.

On 13-14 March 2017, the 3<sup>rd</sup> TWT meeting, in Kaunas, included a new Action Plan Workshop and a mentor match-making workshop.

On the Action Plan Workshop, the LP and Thematic Leaders introduced the proposed Action Plan methodology and guide, which was discussed and approved by the PPs. The document was sent to PPs after this meeting.

Additionally, PPs revealed their initial ideas on the main features of their APs and jointly discussed subsequent steps to be taken in the elaboration process.

The mentor match-making workshop brought partners with similar challenges and ambitions (reflected in the AP workshop) to form smaller peer-teams delivering peer-reviewing during the AP development process. As a result of this workshop, the following peer-teams groups were set up: LP, PP2 and PP5; PP3 and PP7; PP4 and PP6.

During the 4<sup>th</sup> TWT meeting in Alba Iulia, on 7-8 September 2017, the adaptability of GPs to PIs was analysed and the next steps in action planning were discussed in a parallel mentor consultation.

The parallel mentor consultation enabled peer-teams (supported by Thematic and TP Leaders) to dive into each-others' draft APs and give advice on how to proceed with the elaboration.

The mentoring process continued on an ongoing basis. Parallel to the available help desk support by Thematic and TP Leaders, peer-teams worked together using online channels on incorporating the selected GPs into their APs.

The 5<sup>th</sup> TWT meeting, in Budapest, on 6-7 March 2018, included an AP finetuning training and a MA Café.

At the AP finetuning training, all partners introduced their draft APs and provided a status update on their progress. In addition, Thematic Leaders offered guidance for finetuning the APs. At the MA Café, all the MAs of the 6 SF PIs targeted by the PPs' Action Plans were invited to discuss their experience and prospects related to the APs, as well as to confirm if the planned changes for the respective PIs were in line with their expectations.

During the 5<sup>th</sup> semester, partners advanced with their draft APs incorporating all the results of LLL and ILP meetings along with suggestions received from the Thematic Leaders and during peer reviews and mentoring. The presentation of the final APs was carried out at the 6<sup>th</sup> TWT meeting, in Vila Nova de Gaia, on 25-26 September 2018.



The Action Plan Workshop included in this meeting provided the opportunity for all PPs to briefly present the objectives, targets and innovative action lines to be undertaken within the Phase 2 of the project. The conclusion of this workshop was conducted by the LP, who underlined a general evidence at project level deriving from the comparison of PP's APs: the importance of users' behaviour.

The actions included in the APs are characterized by a common interest in final users' involvement. Final users are represented by several categories: citizens, SMEs, young people. Such users are grouped according with specific needs and are addressed by "empowerment" actions (formation, knowledge sharing, participation, etc.).

PPs look at achieving cultural innovation as precondition for better effectiveness in Low Carbon investment policies.

## Action Plans

Although distinctive in terms of intervention domains/focus, all 7 Local/Regional APs are coherently linked to LOCARBO's TPs.

Most of them address the involvement of communities on awareness-raising sessions, then deploying in more focused actions related with energy efficiency and smart energy management in public buildings/infrastructures and the residential sector, while others exploit a SMEs and new industrial services/markets approach.

The Province of Potenza's AP is based on the involvement of communities on energy efficiency and climate change awareness-raising sessions and networking building initiatives, anchored on the Provincial Territorial Coordination Master Plan and the Strategic Framework to Combat Climate Change.

The AP of the Basilicata Region is focused on the application of a Pre-Commercial Procurement (PCP) related to the purchase of Public Administration Services and innovative goods which are not available on the energy efficiency market, thus supporting the transition to a low carbon economy.

The Municipality of Vila Nova de Gaia's AP transposes the strategic aim for the municipal transition towards a low-carbon economy, through the promotion of energy efficiency measures on specific target groups, such as schools/sports communities, municipal building's managers, and domestic consumers. The promotion of energy efficiency in buildings and equipment under municipal management will stimulate the use of innovative smart solutions/technologies, and awareness-raising measures will promote energy conscious behaviours.

Durham County Council's AP focuses on supporting the North-East Business Energy Efficiency Support with advice and good practices. This is an ERDF funded project the Durham County Council supported partners to bid for, through experience gained with LOCARBO.

Through LOCARBO's LLL meetings, the County Council worked with the National Department for Business, Energy & Industrial Strategy (BEIS) to explore different models of energy efficiency to be applied after Britain leaves the European Union, as part of the Shared Prosperity Fund and the National Clean Growth Strategy. Through this AP, Durham will also

continue to support the Huddle tool, by working with LLL partners to ensure that the benefits are maximised. Durham is also exploring a pilot of a National VPP in the UK, incorporating learning from partner Mi6, in Hungary. This will enable tracking greenhouse gases reduction resulting from all Priority Axis 4 projects delivered across England from 2014 to 2020, analysing these and calculating the impact in terms of a virtual power station.

University of Kaunas' AP is oriented to influencing the implementation of specific projects, incorporating the promotion of complex renovations, reaching high energy efficiency standards, and integrating the end users as proactive actors, ensuring the sustainability of the renovation.

Mi6's AP aims at further strengthen the bridgebuilding and matchmaking capacity between policymakers (supply side) and SME applicants (demand side). MI6 has already accomplished a change in the PI in Phase 1, so the AP is now focused on monitoring the progress of the PI and preparing for the post-2020 period.

The main objective of the Alba Iulia Municipality's AP is to improve energy efficiency, smart energy management and renewable energy use in public infrastructures.

## Pilot actions

Pilot actions are implementation-related activities dedicated to test a new approach. This usually refers to the transfer of existing practices between partner regions, but, it can also relate to a new initiative jointly designed by the partner regions during Phase 1 and jointly implemented in Phase 2.

There may be cases where the good ideas discovered during Phase 1 in a specific region will first need to be tested in another region before being rolled out. If this testing requires funding and the 'importing' region does not have this funding for different reasons, the project may apply to the Interreg Europe programme before the end of Phase 1 to carry out a pilot action.

Pilot actions need to be formally approved by the Interreg Europe programme's monitoring committee. To comply with the programme requirements, a pilot action proposal should be submitted through a request for change procedure before the end of Phase 1, justifying why programme funding is required for its implementation. This procedure may lead to the involvement of additional partners, if these partners are needed to carry out the pilot actions.

The opportunity to support pilot actions depends on the results of the exchange of experience process. Consequently, pilot actions represent an exception in the framework of Interreg Europe which is not dedicated to finance the implementation of any lessons learnt in the exchange of experience process. Therefore, the JS must examine if the pilot activities proposed by the project can be considered as state aid relevant, if the pilot action is policy relevant (e.g. will have a crucial contribute to improve the addressed PI), and if it is linked to the interregional exchange of experience process.

LOCARBO partners recognise that the EU policy framework needs to continue to drive progress towards a low-carbon economy development and identified an opportunity to

make this happen through an innovative pilot action – widening the Hungarian VPP programme scope - which proposes an EU wide visualisation tool that presents complex energy data in an accessible format.

The Hungarian VPP Programme collects energy saving data and recognizes and awards their contributors. The programme closely links a non-profit scheme and motivational system with for-profit activities and market network building, allows the participation of stakeholders at several levels, and uses social innovation and gamification methods. In 8 years, this programme has scaled up to becoming the 7<sup>th</sup> largest power plant in Hungary and, in 2015, was selected by the EU Commission and EASME for the top 3 energy efficiency programmes in Europe.

The VPP programme methodology has been recognised by Interreg Europe as well, being highlighted as a GP, which was presented at many Interreg events during 2018 (Sofia Experience Fair, Florence Workshop, etc.).

The VPP programme is well-known among the LOCARBO partners as well and, based on several internal discussions, four partners are positive that its methodology – after certain adaptation – could provide solutions for challenges identified in their own local context.

Therefore, it is the mutual intention of four PPs to develop and carry out a joint pilot action plan, taking advantage of available synergies and efficiency of coordination.

Partner roles are planned as follows:

- (1) MI6 (PP6), as the methodology owner, provides the baseline methodology, context and support for VPP programme adaptation piloting. MI6 will provide professional support through its own experts (staff) throughout the entire process to provide a genuine interpretation of the VPP programme. Also, MI6 will learn and adapt the VPP programme in Hungary based on the jointly piloted solutions;
- (2) Durham County Council (PP4) will adopt this methodology to support, collect and visualize CO<sub>2</sub> saving data and potentially benefit from other opportunities coming from ESIF co-funded projects;
- (3) Province of Potenza (PP1) will use this methodology to collect and visualise CO<sub>2</sub> saving data coming from SECAPs;
- (4) Alba Iulia Municipality (PP7) will use this methodology to SECAP design and implementation.

For simple and transparent coordination, two work packages (WP1 for Durham and WP2 for the Province of Potenza and Alba Iulia) were defined, to be complemented by the overall project management, knowledge sharing and communication activities.

The overall coordination of the Pilot Action will be under the responsibility of the LP (Province of Potenza) while technical supervision will be provided by MI6.

Each partner will use its own remaining budget from Phase 1 of the LOCARBO project to finance the pilot activities.

The proposed pilot action embodies what the mentioned PPs perceive to be expected from a pilot action. It relies on close cooperation of PPs, aims at the interregional transfer of a previously identified and validated GP, actively involves the GP owner, and creates added value not only at the partner regions level, but at the European scale as well.

## Mid-Term events

All 7 PPs held their regional Mid-Term events to present LOCARBO’s interregional learning phase balance.

Most of the event agendas included an interregional learning phase experiences review, a synthetic overview of municipal good practices, a detailed overview of the APs and pilot projects, and a brief introduction to the monitoring phase challenges.

Most of the events occurred on the last month of the project’s 1<sup>st</sup> phase (September), apart from the Mid-Term events of LP (Province of Potenza) and PP2 (Basilicata Region) that occurred in mid-October.

Wide participation levels on these successful events included not only representatives from regional associations, technical employees from municipal enterprises, research institutes, managing authorities, and business/enterprise organizations, but also high-level representatives from the national and regional governments.

These events represent regional milestones of the project’s 1<sup>st</sup> phase and the work developed over the past two years within LOCARBO’s partnership.



Figure 7: Mid-Term event of the Province of Potenza and Basilicata Region



Figure 8: Mid-Term event of the Vila Nova de Gaia Municipality



Figure 9: Mid-Term event of the Durham County Council



Figure 10: Mid-Term event of the Kaunas University of Technology



Figure 11: Mid-Term event of the Mi6



Figure 12: Mid-Term event of the Alba Iulia Municipality

### Increased professional capacity due to interregional cooperation activities

This exchange of experience target is related to assessing the organizational/institutional and individual learning occurred due to activities developed during LOCARBO's Phase 1. It is represented by an indicator proposed by the project itself (in the AF) to measure the number of people whose competences have increased as a result of the interregional learning process developed within the project's activities.

The target defined for this indicator was 463 people with increased professional capacity (competence in the field in question) due to their participation in interregional cooperation activities. It only considers people actively involved in the exchange of experience process (e.g. staff members of the partners, active members of the stakeholder group).

At the end of Phase 1, surveys were filled by the partnership and involved stakeholders reaching 243 people with increased professional capacity, 52% of the target set.

## Conclusion

This report illustrates the result of 2,5 years of intense interregional learning experiences, within which useful information and suggestions have been collected together with a productive exchange of experiences and analysis of existing best practices.

The active role of PPs, as well as local communities and stakeholders played a fundamental role for the success of the LOCARBO project until this phase and will constitute an important added value for the implementation of the APs and the expected policy change in the participating regions.