

4ward Energy Research GmbH
Reininghausstrasse 13A
8020 Graz
AUSTRIA
Tel: +43 (0)664/88500339
office@4wardenergy.at
www.4wardenergy.at

Invitation to tender within the framework of the Interreg CENTRAL EUROPE project "Store4HUC" (CE1344)

Graz, 06/05/2019

Invitation to bid:

For the joint implementation of the Interreg CENTRAL EUROPE project "Store4HUC" (CE1344) within the next 3 years.

Project description

Initial situation:

It is challenging to provide a low carbon energy supply in cities in a style of energy storages. Especially in historical urban centres (HUC) it is very difficult to achieve these results, because interventions in this specific area meet strict architectural protection constraints, involve higher implementation costs and often come in conflict with town planning policies.

The project objectives of the project "Store4HUC" comprise:

Therefore, the main objective is to improve and enrich energy and spatial planning strategies targeting historical city centres by focusing on integration of energy storage systems to enhance the public institutional and utility capabilities. The pilot actions implemented in specific sites will demonstrate the various energy storages that can be adapted and transferred to other local or regional environments. The storages will provide good show-cases to the local authorities which can benefit in sense of improved energy efficiency and increase usage of renewable energy sources and lower costs for energy. The transnational strategy will provide the recommendations for improving the energy and spatial planning. The energy management tool will enable to monitor all features that proof the effectiveness of the pilot installations. Additionally, the autarky rate tool will indicate the economic and reasonable utilisation of storages. By establishing the stakeholder deployment desk Store4HUC will reach the relevant players to share the knowledge and also transfer it to other additional audience. It will enable to gain wider consensus of the pilot instalment and further tool usage, especially with the signed memorandums of the future tool utilisation. The project approach foresees also peer review actions, mutual learning within project consortium and exchange of experiences and knowledge with target groups what can enhance the transnational added value. Innovative energy

storage installation and storing of renewable energy sources determines the innovative aspect of Store4HUC.

Work packages (details of the content: see attachment):

1. Project management
2. Thematic work package T1: Feasibility of energy storages in HUC and stakeholder involvement
3. Thematic work package T2: Systematic procedures for implementation of energy storages in historical urban centres based on KPI
4. Thematic work package T3: Setting up the tools for energy management and evaluation of the impact of energy storages for HUC
5. Investment / piloting, work package I1: Energy management of the Bracak Manor with PV and batteries integrated with existing energy systems
6. Investment / piloting, work package I2: Sloping elevator in Cuneo
7. Investment / piloting, work package I3: Paraffin based latent storages in connection with geothermal district heating system in Lendava
8. Communication work package

Target groups (with reference to the project topic):

- Local public authority
- Regional public authority
- Sectoral agency
- Infrastructure and (public) service provider
- Interest groups including NGOs
- Higher education and research

Project partners within project Store4HUC:

1. Razvojna agencija Sinergija, SLOVENIA (Coordinator)
2. Občina Lendava, SLOVENIA
3. Weizer Energie-Innovations-Zentrum GmbH, AUSTRIA
4. 4ward Energy Research GmbH, AUSTRIA, leader of work package T1
5. CES clean energy Solution GmbH, AUSTRIA
6. Environment Park, ITALY
7. Comune di Cuneo, ITALY
8. Regionalna energetska agencija Sjeverozapadne Hrvatske, CROATIA
9. Sveučilište u Zagrebu Fakultet elektrotehnike i računarstva, CROATIA
10. Klima-Bündnis e.V., GERMANY

Mandatory requirement profile of the participating organizations in the tender:

- Very good knowledge of Eastern Styria for the achievement of the results
- Personal access to local stakeholders, actors and political creators
- Very good English and German skills
- Experience in the implementation of energy related pilots in particular with regard to the targeted region
- Experience in project management, in the organization of events, in moderation of working meetings, as well as in the processing of EU projects

STORE4HUC

Further modalities:

Deadline for tendering:	07 th of June 2019
Form of the offer:	PDF with signature and stamp
Offer is sent to the following e-mail address:	office@4wardenergy.at
Period of validity of the tender:	15 th of June 2019
Billing:	By appointment.
Period of performance:	June 2019 – March 2022
Decision-making criteria:	Quality and price of the offer
Amount of the offer:	as a flat rate without VAT

Call for tenders / external support:

Description	Price
<p>Support for <u>work package T1</u> (04.2019 – 03.2022): Feasibility of energy storages in HUC and stakeholder involvement</p> <p><u>Content of the WP:</u> see attachment</p> <p><u>Requested support for the following deliverables:</u></p> <ul style="list-style-type: none"> • D.T1.1.1. - Support for concept development of the deployment desks • D.T1.1.2. - D.T1.1.5. – Support for the documentation of the deployment desk meetings • D.T1.1.6. - Support for preparation of the transnational report on capacity building in each participating HUC • D.T1.2.3. - Support for preparation of the feasibility study for implementing energy storages in Weiz (AT) • D.T1.2.5. - Support for the assessment of the constraints for establishment of energy storages and action plan for further steps <p><u>Amount of support:</u> Up to 86 working days</p>	

Support for work package T2 (06.2019 – 03.2022):
Systematic procedures for implementation of energy storages in
historical urban centres based on KPI

Content of the WP: see attachment

Requested support for the following deliverables:

- D.T2.1.1. - Support for the development of KPI & its implication on participating HUC via comparative analysis
- D.T2.1.4. - Support for the investment specification of the integration of an energy storage in HUCs for Weiz (AT)
- D.T2.2.1. – Support for the templates for HUC pilot action report
- D.T2.2.6. and D.T2.2.7. - Support for the Mid-term and final report of the HUC pilot actions in Weiz (AT)
- D.T2.3.1. - Support for transnational evaluation by fellow specialists of research
- D.T2.3.2. - Support for training on methods and application of innovative moderation approaches
- D.T2.3.3. – Support for transnational evaluation report on pilot actions
- D.T2.3.4. - Support for transnational strategy for the implementation and capitalisation of energy storages in HUCs

Amount of support: Up to 45 working days

Support for work package T3 (04.2019 – 03.2022):
Setting up the tools for energy management and evaluation of the impact of energy storages for HUC

Content of the WP: see attachment

Requested support for the following deliverables:

- D.T3.1.1. - Support for the concept of the adapted existing tools for energy management with energy storages in HUC
- D.T3.1.2. – Support for the design of the adapted tools for energy management with energy storages in HUC
- D.T3.1.3 - Support for the finalisation of the software tools for energy management in HUC
- D.T3.2.1. – Support for the development of a checklist to evaluate the various performance of the autarky rate of the HUC
- D.T3.2.2. – Support for the documentation of the creation process of the checklist
- D.T3.2.3. - Support for the establishment of the autarky rate tool & the checklist
- D.T3.3.1. - Support for online guide for tools
- D.T3.3.2. – Support for the workshop “Train the trainers” on the tools
- D.T3.3.3. - Support for the workshop with partners and members of the "deployment desks"
- D.T3.3.4. - Support for collecting the official acceptance of the tool

Amount of support: Up to 15 working days

STORE4HUC

<p>Support for <u>work package „Communication“</u> (04.2019 – 03.2022):</p> <p><u>Content of the WP:</u> see attachment</p> <p><u>Requested support for the following deliverables:</u></p> <ul style="list-style-type: none"> • D.C.1.1. - Support for the common communication strategy • D.C.1.2. – Support for establishing the project poster • D.C.2.1. - Support for establishing and printing of 300 pieces of leaflets • D.C.2.2. and D.C.2.3. - Support for the development of 2 infographics • D.C.2.4. – Support for establishing e-best practice data bank • D.C.2.5. - Support for scientific and professional papers on conferences and in journals • D.C.3.1. – Support for establishing of the project cotton bag • D.C.3.2. – Support for establishing of the project roll up • D.C.3.3. – Support for establishing of other promotional items (solar power bank) • D.C.4.1 – Support for establishing of the project website (preparation of the contents) • D.C.4.2. - Support for establishing of use profiles on social networks • D.C.4.3. - D.C.4.8. - Support for establishing of 6 newflash • D.C.4.10 and D.C.4.13 – Support for the production of 2 videos • D.C.5.1. – Support for establishing press release • D.C.6.1 – Support for the documentation on training on tools for additional stakeholders • D.C.6.2 – Support for the documentation on thematic regional / international seminars/conferences on energy storages • D.C.6.4. – Support for the documentation on cross fertilization opportunities/events • D.C.6.6. - Support for organising and implementation of the 2nd Webinar • D.C.6.7. – Support for the documentation on the Kick-off event <p><u>Amount of support:</u> Up to 36 working days</p>	
Total Price:	

Note: Cost-neutral shifts of the support between the performance positions and periods as well as concerning deadlines are possible in agreement between the contractor and the client.



Information of the company offering the tender

Company name:

Address:

Contact person:

Phone number:

E-mail:

Offer number:

Description of suitability, qualification and experience (at least 3 references):

Place, Date

Name, Function, Stamp, Signature

Questions and additions:

Please send any questions regarding the invitation to the offer by e-mail to Alois Kraussler (alois.kraussler@4wardenergy.at).

We are happy to hear from them!

Best regards

Managing Director

Martin Schloffer

Managing Director

Alois Kraussler

WP type: Thematic work package (maximum 4 work packages)

WP Nr	WP title	WP start date (month)	WP end date (month)	WP budget
T1	Feasibility of energy storages in HUC and stakeholder involvement	04.2019	03.2022	
Partner				
WP responsible partner	4ward Energy Research Ltd.			
Partner's involvement				
1	Development agency Sinergija, LP, RA Sinergija			
2	Municipality Lendava, PP, Lendava			
3	Energy and Innovation Centre of Weiz, PP, WEIZ			
4	4ward Energy Research Ltd., PP, 4WARD			
5	CES clean energy solution GmbH, PP, CES			
6	Environment Park, PP, Envipark			
7	City of Cuneo , PP, COMCN			
8	North-West Croatia Regional Energy Agency, PP, REGEA			
9	University of Zagreb Faculty of Electrical Engineering and Computing , PP, UNIZGFER			
10	Climate Alliance, PP, CA			
Summary				
<p>Provide a well-written summary of what will be done in this work package. Please explain what you want to achieve (outputs), why those outputs are relevant for reaching the project specific objectives and how you plan to get there (activities and deliverables). Please also describe how partners will be involved.</p> <p>If applicable, please indicate whether any pilot investment is foreseen. Any pilot investment has to be linked to a pilot action of the work package:</p> <ul style="list-style-type: none"> • Smaller pilot investments (below EUR 15.000 total cost) should be described within this work package. • In case of pilot investments exceeding EUR 15.000 total cost a separate "Investment specification" has to be filled in and the link has to be described in this summary. 				
<p>WPT1 aims to establish the deployment desks (a group of stakeholders) in each region enabling to engage various stakeholders (local decision-makers, representatives of municipalities, infrastructure providers, sectoral agencies, independent energy experts, etc.) in the process of energy storage piloting and planning. Additionally, by involving the stakeholders and having the meetings a wider consensus will be gained on the pilot actions and get the insight of the energy storage environment to better planning the measures toward energy efficiency which is the first specific objective. By exchanging the experiences, the cooperation is ensured. Feasibility studies for pilot region (IT, AT, CRO SI) will be conducted to outline the constraints and solutions from various aspects (technical, economic, monumental protection, status quo of HUC, ensure further implementation actions) to implement the pilot at the historical sites. Main outcomes of a thematic work package are: Stakeholder concept on the deployment characterises how to involve the stakeholders, the methods, time plan, etc., and Assessment of the current constraints for the establishment of energy storages in HUCs and action plan for further steps. They contribute to achievement of the expected project results which are: increased the capacities and knowledge of the relevant stakeholders and civil servants from the municipalities, especially by exchanging the experiences and know-how within deployment desks. The results of the assessment will be exploited by PPs and stakeholders in further planning or implementation processes. Partnership consists of technical partners (PP4, PP5, PP6, PP9), which take over the theoretical part of the Store4HUC, public authorities (PP2, PP7) provide the support in implementation and sectoral agencies or companies (LP, PP3, PP8, PP10) recruit the stakeholders and moderate the meetings and linked different sides. AP11 leads the role of supervising of monumental protection aspect.</p>				

Project outputs
Please describe in more detail **the outputs of the project** that will be the outcome of the activities carried out in this work package. Explain which activities will be taken to achieve an output.
Each output should be linked to a programme output indicator (please ensure that it has the same measurement unit).
In case of investment specification, the investment as such is to be defined as output and linked to the category "investment" as included in the list of output indicators.

Output title		Please provide a brief description of the project output	Programme output indicator to which the output will contribute	Quantification / target	Delivery date
Output O.T1.1	Stakeholder deployment concept	Each Store4HUC City will establish a "deployment desk" (A.T1.1) composed of representatives and relevant stakeholders as well as selected players whose support will be needed for the future implementation of the pilot systems. These desks will be the main interface between Store4HUC & the local/regional/ national stakeholders. Once established the desks will maintain as contact with players & invite them to relevant workshops, seminars & events throughout the project duration.	S.O.2.2 - Number of strategies and action plans developed and/or implemented for improving local/regional energy performance	1,00	10.2019
Output O.T1.2	Assessment of current constraints for establishment of ES in HUCs and action plan for further steps	A.T1.2. with the feasibility studies leads to mapping and assessment of problems, needs, gaps and opportunities on EMS and energy storages in HUC. Feasibility study template will be developed and distributed in order to facilitate the collection of data with the appropriate quality, in a sound and consistent manner. On the basis of collated data, the constraints and potentials, will be listed and also the action plan for further activities toward pilot will be outlined.	S.O.2.2 - Number of strategies and action plans developed and/or implemented for improving local/regional energy performance	1,00	05.2020

Target groups

Who will use the outputs of this work package or the investment?	<ul style="list-style-type: none"> • Local public authority • Regional public authority • Sectoral agency • Infrastructure and (public) service provider • Interest groups including NGOs • Higher education and research
How will you involve those target groups (and other stakeholders including associated partners) in the development of the outputs of this work package or the implementation of the investment?	For recruiting the target groups, deployment desk meetings will be organised intended to serve as a knowledge transfer vehicle for the other work packages. The stakeholder will provide the information and give the consensus and support further pilot action implementation, cooperate in feasibility study preparation. AP 11 will provide the expertise for finalizing the assessment of HUC from the monumental protection aspect.

Sustainability and transferability of work package outputs (not applicable for investment specification)	
<p><u>Sustainability (institutional, financial and political)</u> How will the work package outputs be further used by project partners once the project has ended? Please describe concrete measures (including e.g. institutional structures, financial resources, policy improvements etc.) taken during and after project implementation to ensure the sustainability of the project outputs. If relevant, please explain who will be responsible and/or the owner of the outputs.</p>	<p>All over sustainable solutions are urgently required & needed for social, economic or environmental reasons. Corresponding feasibility studies are used to convince even more investors in the regions. The concept and assessment will be used by the cities directly involved in the consortium, therefore the sustainability is ensured. AS16 can exploit the outputs on the regional level and integrate them even in the regional planning.</p>
<p><u>Transferability (linked to the WP Communication)</u> Which work package outputs will be transferred to which additional target audiences during project lifetime and beyond? Why are these outputs the most relevant ones to be transferred? Please describe the additional target audiences (e.g. other organisations/regions/countries outside of the current partnership) and ensure links to the strategy of the communication work package.</p>	<p>Two main strategies will be transferred to the stakeholder groups within deployment desks. The concept can be used for further involvement of the players in similar process. The assessment and action plan will be exploited in the next WPs. The outputs will be communicated within D.C.6.2 regional/international seminar, D.C.6.5.-6- webinars and via social media.</p>

Activity A.T1.1	Activity title Establishment of "deployment desks" composed of representatives of each Store4HUC City	Start date 04.2019	End date 03.2022	Indicative budget [REDACTED]
Deliverables for activity A.T1.1				
Deliverable D.T1.1.1	Deliverable title Concept of "deployment desks"	Description of deliverable 5 deployment desks will be established (1 in each region) composed of relevant players for supporting in pilot systems. They will be actively engaged in development and implementation, maintain contacts with relevant players.	Delivery month 05.2019	Quantification/target 1,00
Deliverable D.T1.1.2	Deliverable title Documentation on decisions of 1st "deployment desk meeting"	Description of deliverable Documentation consists of 5 minutes on the meeting organized in each city. It demonstrates the decisions of the deployment desks connected to identification of problems, needs and opportunities on EMS and energy storage, planning.	Delivery month 09.2019	Quantification/target 1,00
Deliverable D.T1.1.3	Deliverable title Documentation on decisions of 2nd "deployment desk meeting"	Description of deliverable Documentation consists of 5 minutes on the meeting organized in each city. It demonstrates the decisions of the deployment desks connected to pilot execution.	Delivery month 07.2020	Quantification/target 1,00

Deliverable D.T1.1.4	<i>Deliverable title</i> Documentation on decisions of 3rd "deployment desk meeting"	<i>Description of deliverable</i> Documentation consists of 5 minutes on the meeting organized in each city. It demonstrates the decisions of the deployment desks connected to upscaling the results	<i>Delivery month</i> 04.2021	<i>Quantification/target</i> 1,00
Deliverable D.T1.1.5	<i>Deliverable title</i> Documentation on decisions of 4th "deployment desk meeting"	<i>Description of deliverable</i> Documentation consists of 5 minutes on the meeting organized in each city. It demonstrates the decisions of the deployment desks connected to transferring the results.	<i>Delivery month</i> 01.2022	<i>Quantification/target</i> 1,00
Deliverable D.T1.1.6	<i>Deliverable title</i> Transnational report on capacity building in each participating HUC	<i>Description of deliverable</i> The report will consist of the lessons learned within the deployment desk meetings or workshops. It will also include the finding on mutual learning within the desks. All PPs contribute to the report, WP leaders guide it and prepare the final version.	<i>Delivery month</i> 03.2022	<i>Quantification/target</i> 1,00
Activity A.T1.2	<i>Activity title</i> Feasibility for implementing EE/RES measures and energy storages in HUC	<i>Start date</i> 05.2019	<i>End date</i> 04.2020	<i>Indicative budget</i> ██████████
Deliverables for activity A.T1.2				
Deliverable D.T1.2.1	<i>Deliverable title</i> Feasibility study for implementing energy storages in Cuneo (IT)	<i>Description of deliverable</i> Feasibility study contains how to implement EE and RES measures, integration of energy storages concerning the monument protection and existing legal principles and technical frameworks, a detailed description of HUC and alternative financing models in IT	<i>Delivery month</i> 11.2019	<i>Quantification/target</i> 1,00
Deliverable D.T1.2.2	<i>Deliverable title</i> Feasibility study for implementing energy storages in Bracak (HR)	<i>Description of deliverable</i> Feasibility study contains how to implement EE and RES measures, integration of energy storages concerning the monument protection and existing legal principles and technical frameworks, a detailed description of HUC and alternative financing models in HR	<i>Delivery month</i> 11.2019	<i>Quantification/target</i> 1,00

Deliverable D.T1.2.3	<i>Deliverable title</i> Feasibility study for implementing energy storages in Weiz (AT)	<i>Description of deliverable</i> Feasibility study contains how to implement EE and RES measures, integration of energy storages concerning the monument protection and existing legal principles and technical frameworks, a detailed description of HUC and alternative financing models in AT	<i>Delivery month</i> 11.2019	<i>Quantification/target</i> 1,00
Deliverable D.T1.2.4	<i>Deliverable title</i> Feasibility study for implementing energy storages in Lendava (SI)	<i>Description of deliverable</i> Feasibility study contains how to implement EE and RES measures, integration of energy storages concerning the monument protection and existing legal principles and technical frameworks, a detailed description of HUC and alternative financing models in SI	<i>Delivery month</i> 11.2019	<i>Quantification/target</i> 1,00
Deliverable D.T1.2.5	<i>Deliverable title</i> Assessment of the constraints for establishment of energy storages and action plan for further steps	<i>Description of deliverable</i> Assessment and identif. of gaps, potentials of implem. of energy storage systems and energy manag. It provides action plan for further activities toward pilot implementation. Each PP contributes. It will serve as part of policy recommendation at the end.	<i>Delivery month</i> 04.2020	<i>Quantification/target</i> 1,00

WP type: Thematic work package (maximum 4 work packages)

WP Nr	WP title	WP start date (month)	WP end date (month)	WP budget
T2	Systematic procedures for implementation of energy storages in historical urban centres based on KPI	06.2019	03.2022	
Partner				
<i>WP responsible partner</i>	Environment Park			
<i>Partner's involvement</i>				
1	Development agency Sinergija, LP, RA Sinergija			
2	Municipality Lendava, PP, Lendava			
3	Energy and Innovation Centre of Weiz, PP, WEIZ			
4	4ward Energy Research Ltd., PP, 4WARD			
5	CES clean energy solution GmbH, PP, CES			
6	Environment Park, PP, Envipark			
7	City of Cuneo , PP, COMCN			
8	North-West Croatia Regional Energy Agency, PP, REGEA			
9	University of Zagreb Faculty of Electrical Engineering and Computing , PP, UNIZGFER			
10	Climate Alliance, PP, CA			
Summary				
<p><i>Provide a well-written summary of what will be done in this work package. Please explain what you want to achieve (outputs), why those outputs are relevant for reaching the project specific objectives and how you plan to get there (activities and deliverables). Please also describe how partners will be involved.</i></p> <p><i>If applicable, please indicate whether any pilot investment is foreseen. Any pilot investment has to be linked to a pilot action of the work package:</i></p> <ul style="list-style-type: none"> <i>Smaller pilot investments (<u>below EUR 15.000 total cost</u>) should be described within this work package.</i> <i>In case of pilot investments <u>exceeding EUR 15.000 total cost</u> a separate "Investment specification" has to be filled in and the link has to be described in this summary.</i> 				
<p>WPT2 is dedicated to pilot action implementation and mutual learning activities. Firstly, the urban key performance indicators will be established, followed by Investment specification for each pilot sites will be performed. The latter enables to specify the technical specification, define installation pilot process and conceptualizing the pilot. It will be communicated also with the deployment desk. Mid-term report for specific pilots will outline the progress on the pilot installation, launching of the tender procedure for installation on the site and taking over some preliminary energy management steps. The final report on pilots includes the evaluation of the defined KPIs, and transnational decisions on needed improvements in energy management to be done; technical conclusions for local/regional pilot upscale. The tools developed in WPT3 will be used within the pilot process. The conclusions from pilots are gathered in the transnational evaluation report and Transnational strategy for the implementation and capitalisation of energy storages in HUCs in a style of policy recommendations for improved energy planning and upscaling the results. The pilot sites will be revised and visited by PP5 internal fellow specialist which will advise in preliminary or final pilot phases. The PPs will benefit from mutual learning combined with WG meetings. The internal thematic workshops will provide exchanging experiences and knowledge. The outputs are four different pilots implemented by PP2 (WPI3-geothermal storage), PP3 – water storage, PP7 (WPI2-PV storage for elevator) and PP8 (WPI1-PV storage on castle) which reach the energy efficiency and increase of RES in HUCs. Other PPs support the pilot implementation, WP leader prepare uKPIs for monitoring. Strategy for the implementation and capitalisation of energy storages in HUCs encourage and enhance the innovative energy planning in the municipalities. The third output are trainings on EE and RES in Historical urban centres.</p>				

Project outputs
Please describe in more detail **the outputs of the project** that will be the outcome of the activities carried out in this work package. Explain which activities will be taken to achieve an output.
Each output should be linked to a programme output indicator (please ensure that it has the same measurement unit).
In case of investment specification, the investment as such is to be defined as output and linked to the category "investment" as included in the list of output indicators.

Output title		Please provide a brief description of the project output	Programme output indicator to which the output will contribute	Quantification / target	Delivery date
Output O.T2.1	Pilot actions in Historical urban centres	A.T2.2 is providing the outcomes in the form of 4 pilots. IT pilot is PV storage that is integrated in the city elevator. AT pilot refers to market appraisal of thermal storage(s) for the local district heating system. SI pilot is linked to geothermal water storage for town hall to be heated in the nights and CRO pilot demonstrates the storage for PV merged with advanced building management. The pilots are test site model which can be further used as best practices in the energy implementation and planning.	S.O.2.2 - Number of pilot actions implemented for improving local/regional energy performance	4,00	09.2021
Output O.T2.2	Transnational strategy for the implementation and capitalisation of energy storages in HUCs	A.T2.2 and A.T2.3 provide the outcomes in the sense of strategy. It contains the strategic point of view for energy piloting and implementation. It provides the recommendation for further action in energy storages, it outlines the measures and methods for transferring and upscaling of the project results. It contains the action plan how to boost the usage of energy storages in additional regions as well.	S.O.2.2 - Number of strategies and action plans developed and/or implemented for improving local/regional energy performance	1,00	03.2022
Output O.T2.3	Transnational training on the EE and RES in Historical urban centres	The output is related to the A.T2.3 which encourage the mutual learning between partners. The outcome covers all learning opportunities among PPs. Internal evaluation of the pilot sites will be done and trainings within WG meetings will be conducted to learn and exchange the knowledge on EE and RES in Historical urban centres. The knowledge will be exploited for existing or additional actions.	S.O.2.2 / S.O.2.3 - Number of trainings implemented on low-carbon solutions	1,00	03.2022

Target groups	
Who will use the outputs of this work package or the investment?	<ul style="list-style-type: none"> Local public authority Regional public authority Sectoral agency Infrastructure and (public) service provider Higher education and research
How will you involve those target groups (and other stakeholders including associated partners) in the development of the outputs of this work package or the implementation of the investment?	Stakeholders are involved via deployment desks in every HUC. The local authorities will be involved all project lifetime as they are committed to implement the HUC actions (pilot actions). They will be engaged in the whole pilot process due to the documentation providing, monitoring and evaluation. The infrastructure providers will cooperate due to permissions, researchers and agencies will benefit from new know-how.

Sustainability and transferability of work package outputs (not applicable for investment specification)

<p><u>Sustainability (institutional, financial and political)</u> How will the work package outputs be further used by project partners once the project has ended? Please describe concrete measures (including e.g. institutional structures, financial resources, policy improvements etc.) taken during and after project implementation to ensure the sustainability of the project outputs. If relevant, please explain who will be responsible and/or the owner of the outputs.</p>	<p>The administrative authorities of the HUC ensures the maintenance after the project. The strategies will be integrated in the existing or in the new regional /national strategies. The transfer of upscaling plan locally and regionally in ensured by municipalities. AP11 disseminates the outputs to wider audience. AP16 integrates the strategy in the regional policies and takes care for new measures. Pilot infrastructure will be maintained by the cities and other owners of the sites.</p>
<p><u>Transferability (linked to the WP Communication)</u> Which work package outputs will be transferred to which additional target audiences during project lifetime and beyond? Why are these outputs the most relevant ones to be transferred? Please describe the additional target audiences (e.g. other organisations/regions/countries outside of the current partnership) and ensure links to the strategy of the communication work package.</p>	<p>The results of the strategy will be presented at a final event with all the partner and additional stakeholders interesting in the topic. By using PPs networks of public authorities (PP10 is a network of 1000 municipalities), SMEs, energy agencies are invited to the WPC events. AP13 is keen on project results especially on pilots and will further disseminate the outcomes.</p>

Activity A.T2.1	Activity title Key performance indicators & Investment specification	Start date 06.2019	End date 12.2019	Indicative budget ██████████
Deliverables for activity A.T2.1				
Deliverable D.T2.1.1	<p><i>Deliverable title</i> Urban key performance indicators & its implication on participating HUC via comparative analysis</p>	<p><i>Description of deliverable</i> Urban KPIs have been developed to establish favourable conditions; a set of them will be identified giving partner HUC consolidated tool for monitoring the successfulness of the pilots. WP leader and technical PPs develop them.</p>	<p><i>Delivery month</i> 10.2019</p>	<p><i>Quantification/target</i> 1,00</p>
Deliverable D.T2.1.2	<p><i>Deliverable title</i> Investment specification of the integration of an energy storage in HUC for Cuneo (IT)</p>	<p><i>Description of deliverable</i> Every HUC representative is preparing a pre-investment concept concerning technical requirements of the storage, an intelligent load management system, and other technological requirements. Cost and risk assessment are also a part of the report.</p>	<p><i>Delivery month</i> 12.2019</p>	<p><i>Quantification/target</i> 1,00</p>

Deliverable D.T2.1.3	<i>Deliverable title</i> Investment specification of the integration of an energy storage in HUC for Bracak (HR)	<i>Description of deliverable</i> Every HUC representative is preparing a pre-investment concept concerning technical requirements of the storage, an intelligent load management system, and other technological requirements. Cost and risk assessment are also a part of the report.	<i>Delivery month</i> 12.2019	<i>Quantification/target</i> 1,00
Deliverable D.T2.1.4	<i>Deliverable title</i> Investment specification of the integration of an energy storage in HUCs for Weiz (AT)	<i>Description of deliverable</i> Every HUC representative is preparing a pre-investment concept concerning technical requirements of the storage, an intelligent load management system, and other technological requirements. Cost and risk assessment are also a part of the report.	<i>Delivery month</i> 12.2019	<i>Quantification/target</i> 1,00
Deliverable D.T2.1.5	<i>Deliverable title</i> Investment specification of the integration of an energy storage in HUCs for Lendava (SI)	<i>Description of deliverable</i> Every HUC representative is preparing a pre-investment concept concerning technical requirements of the storage, an intelligent load management system, and other technological requirements. Cost and risk assessment are also a part of the report.	<i>Delivery month</i> 12.2019	<i>Quantification/target</i> 1,00
Activity A.T2.2	<i>Activity title</i> Pilot actions to improve EE and increase the usage of RES in HUCs	<i>Start date</i> 06.2019	<i>End date</i> 09.2021	<i>Indicative budget</i> ██████████
Deliverables for activity A.T2.2				
Deliverable D.T2.2.1	<i>Deliverable title</i> Templates for HUC action report	<i>Description of deliverable</i> Two templates will be worked out due to unformed reports. The first one for is for Mid-term report and the last one for Final report. It will be prepared by WP leaders. All PPs contribute with the suggestions.	<i>Delivery month</i> 06.2019	<i>Quantification/target</i> 1,00
Deliverable D.T2.2.2	<i>Deliverable title</i> Mid-term report of the HUC pilot action in Cuneo (IT)	<i>Description of deliverable</i> Mid-term report is prepared by IT partners. It reflects the progress on the pilot installation, launching of the tender procedure for installation on the site and outlines preliminary energy management steps.	<i>Delivery month</i> 09.2020	<i>Quantification/target</i> 1,00

Deliverable D.T2.2.3	<i>Deliverable title</i> Final report of the HUC pilot action in Cuneo (IT)	<i>Description of deliverable</i> The report demonstrates IT pilot implementation. It is connected to WPI2. It includes the evaluation of the defined KPIs, and decisions on needed improvements in energy management to be done; technical conclusions for local/regional pilot upscale.	<i>Delivery month</i> 09.2021	<i>Quantification/target</i> 1,00
Deliverable D.T2.2.4	<i>Deliverable title</i> Mid-term report of the HUC pilot action in Bracak (CRO)	<i>Description of deliverable</i> Mid-term report is prepared by CRO partners. It reflects the progress on the pilot installation, launching of the tender procedure for installation on the site and outlines preliminary energy management steps.	<i>Delivery month</i> 09.2020	<i>Quantification/target</i> 1,00
Deliverable D.T2.2.5	<i>Deliverable title</i> Final report of the HUC pilot action in Bracak (CRO)	<i>Description of deliverable</i> The report demonstrates CRO pilot implementation. It is connected to WPI1. It includes the evaluation of the defined KPIs, and decisions on needed improvements in energy management to be done; technical conclusions for local/regional pilot upscale.	<i>Delivery month</i> 09.2021	<i>Quantification/target</i> 1,00
Deliverable D.T2.2.6	<i>Deliverable title</i> Mid-term report of the HUC pilot action in Weiz (AT)	<i>Description of deliverable</i> Mid-term report is prepared by AT partners. It reflects the progress on the pilot installation, launching of the tender procedure for installation on the site and outlines preliminary energy management steps.	<i>Delivery month</i> 09.2020	<i>Quantification/target</i> 1,00
Deliverable D.T2.2.7	<i>Deliverable title</i> Final report of the HUC pilot action in Weiz (AT)	<i>Description of deliverable</i> The topic of pilot is: Market appraisal of thermal storage(s) for the local district heating system within the HUC (e. g. ice, high-temperature solid-state, mobile, sensitive liquid, phase change, thermochemical or large geothermal field storages).	<i>Delivery month</i> 09.2021	<i>Quantification/target</i> 1,00
Deliverable D.T2.2.8	<i>Deliverable title</i> Mid-term report of the HUC pilot action in Lendava (SI)	<i>Description of deliverable</i> Mid-term report is prepared by SI partners. It reflects the progress on the pilot installation, launching of the tender procedure for installation on the site and outline preliminary energy management steps.	<i>Delivery month</i> 09.2020	<i>Quantification/target</i> 1,00

Deliverable D.T2.2.9	<i>Deliverable title</i> Final report of the HUC pilot action in Lendava (SI)	<i>Description of deliverable</i> The report demonstrates SI pilot implement. It is connected to WPI3. It includes the evaluation of the defined KPIs, and decisions on needed improvements in energy management to be done; technical conclusions for local/regional pilot upscale.	<i>Delivery month</i> 09.2021	<i>Quantification/target</i> 1,00
Activity A.T2.3	<i>Activity title</i> Transnational mutual learning concerning HUC actions	<i>Start date</i> 06.2019	<i>End date</i> 03.2022	<i>Indicative budget</i> ██████████
Deliverables for activity A.T2.3				
Deliverable D.T2.3.1	<i>Deliverable title</i> Transnational evaluation by fellow specialists of research	<i>Description of deliverable</i> During project meetings every HUC will be visited by PPs and undertake a transnational peer review by PP5. Perceptions & results of evaluation are edited in three reports giving the feedback pilot HUC action by PP5 and technical PPs.	<i>Delivery month</i> 03.2021	<i>Quantification/target</i> 3,00
Deliverable D.T2.3.2	<i>Deliverable title</i> Training on methods and application of innovative moderation approaches	<i>Description of deliverable</i> Together with WG meetings, 6 trainings on mutual learning will be organized by PP using at least 5 innovative moderation approaches ("Iceberg", "Climate-Hospital", "World cafe", etc) and according to different aims: to design, to improve, to learn.	<i>Delivery month</i> 02.2022	<i>Quantification/target</i> 6,00
Deliverable D.T2.3.3	<i>Deliverable title</i> Transnational evaluation report on pilot actions	<i>Description of deliverable</i> The report will be jointly prepared by all involved PPs. It will present the evaluation of the pilot by using the uniformed template. The evaluation will show what shall be replaced, improved or intact. It will be parallelly performed along pilot process.	<i>Delivery month</i> 11.2021	<i>Quantification/target</i> 1,00
Deliverable D.T2.3.4	<i>Deliverable title</i> Transnational strategy for the implementation and capitalisation of energy storages in HUCs	<i>Description of deliverable</i> Results and perceptions of the reports are the basis for strategical envisage of the transfer of HUC actions & to give recommendations and inspiration in planning improvement for monumental protection and implementation of energy storages.	<i>Delivery month</i> 01.2022	<i>Quantification/target</i> 1,00

WP type: Thematic work package (maximum 4 work packages)

WP Nr	WP title	WP start date (month)	WP end date (month)	WP budget
T3	Setting up the tools for energy management and evaluation of the impact of energy storages for HUC	04.2019	03.2022	
Partner				
<i>WP responsible partner</i>	University of Zagreb Faculty of Electrical Engineering and Computing			
<i>Partner's involvement</i>				
1	Development agency Sinergija, LP, RA Sinergija			
2	Municipality Lendava, PP, Lendava			
3	Energy and Innovation Centre of Weiz, PP, WEIZ			
4	4ward Energy Research Ltd., PP, 4WARD			
5	CES clean energy solution GmbH, PP, CES			
6	Environment Park, PP, Envipark			
7	City of Cuneo , PP, COMCN			
8	North-West Croatia Regional Energy Agency, PP, REGEA			
9	University of Zagreb Faculty of Electrical Engineering and Computing , PP, UNIZGFER			
10	Climate Alliance, PP, CA			
Summary				
<p><i>Provide a well-written summary of what will be done in this work package. Please explain what you want to achieve (outputs), why those outputs are relevant for reaching the project specific objectives and how you plan to get there (activities and deliverables). Please also describe how partners will be involved.</i></p> <p><i>If applicable, please indicate whether any pilot investment is foreseen. Any pilot investment has to be linked to a pilot action of the work package:</i></p> <ul style="list-style-type: none"> • <i>Smaller pilot investments (<u>below EUR 15.000 total cost</u>) should be described within this work package.</i> • <i>In case of pilot investments <u>exceeding EUR 15.000 total cost</u> a separate "Investment specification" has to be filled in and the link has to be described in this summary.</i> 				
<p>In WP the objective is to present the impact of integration of energy storage systems in HUC. Based on the technical & legal framework of integrating efficiently energy storage systems in HUC affordable solutions will be used to demonstrate the matured combination of renewable energy sources & energy storages. Both will be controlled via adapted EMS tool able to maintain & to balance the overall system. Available experiences of selected case study sites and of other running projects will be used in a consolidated way. This foremost relates to energy management software tools inherited by partners from previous projects like e.g. Interreg Danube 3Smart which is coordinated by this WP leader – PP9. The tools adaptation will be conceived, realized and finalized through pilot verifications and interactions, by development PPs (PP9, PP4). After that the establishment of a software tool to interpret autarky rates due to the integration of RES in HUC occurs. The autarky rate is interpreted with an additional checklist. Economical, technical and ecological impacts of the calculated autarky rate are evaluated. Furthermore, it will be examined which performance effects are generated from different renewable energy sources. The gathered information will then be presented via the online tool which will be available for the public for free. An online guide will be elaborated guiding the users through the relevant functions of the tool. Every partner will be trained in the use & all partners will afterwards organize training sessions with members of the deployment desks & invited external experts to educate them on the use & to show corresponding benefits. The acceptance and further usage of the tool will be agreed within the deployment desks and officially committed with the signed memorandum of understanding for the future use of the tools. It is anticipated to engage 8 additional institutions (public institutions, public utilities,) applying for the tools via deployment desk.</p>				

Project outputs

Please describe in more detail **the outputs of the project** that will be the outcome of the activities carried out in this work package. Explain which activities will be taken to achieve an output.

Each output should be linked to a programme output indicator (please ensure that it has the same measurement unit).

In case of investment specification, the investment as such is to be defined as output and linked to the category "investment" as included in the list of output indicators.

Output title		Please provide a brief description of the project output	Programme output indicator to which the output will contribute	Quantification / target	Delivery date
Output O.T3.1	Finalized software tools for energy management in HUC validated through pilot activities	Immediately follows from the deliverable for the finalized software tool for energy management in HUC. Important is that the final tool version is created through close interaction with pilots. The tool will be used in the pilot process which will allow to monitor the efficiency of the pilot instalment and to enable the comparison between different pilots.	S.O.2.2 - Number of tools developed and/or implemented for improving local/regional energy performance	1,00	10.2021
Output O.T3.2	Autarky rate tool to evaluate the impact of energy storage on HUC	The autarky rate due to the integration of different renewable energy sources and the integration of smart storage systems be interpreted with the online tool. Therefore, the benefit of the implementation is quantifiable. Additionally, a checklist is created to evaluate the economical, technical and ecological performance of the HUC concerning the autarky rate.	S.O.2.2 - Number of tools developed and/or implemented for improving local/regional energy performance	1,00	07.2020
Output O.T3.3	Online guide for the software tool & checklist to evaluate the autarky rate	In order to promote the tools elaborated in the Store4HUC project a guide will be performed. The compendium includes the description of every function, guiding documents & empirical analysed examples to illustrate the functions of the online calculator available for the public at the end. The language of the online tool respectively of the manual will be EN. Intention is to make investors and citizens aware that the integration of sustainable storage solutions are meaningful & understandable.	S.O.2.2 - Number of tools developed and/or implemented for improving local/regional energy performance	1,00	10.2021
Output O.T3.4	Capacity building for tools usage	A workshop in a style of Train the trainers will be realised to show the trainers the structure & the use of the software tool and autarky rate tool. In the course of the workshop the online guide will be introduced. All partners will appoint the seconded "trainer" for this workshop. Later on, these trainers will educate the targeted actors in their own HUC within the deployment desks and WPC event called training on tools for additional stakeholders.	S.O.2.2 / S.O.2.3 - Number of trainings implemented on low-carbon solutions	2,00	09.2020

Target groups	
Who will use the outputs of this work package or the investment?	<ul style="list-style-type: none"> • Local public authority • Regional public authority • Sectoral agency • Infrastructure and (public) service provider • Higher education and research • Business support organisation
How will you involve those target groups (and other stakeholders including associated partners) in the development of the outputs of this work package or the implementation of the investment?	The deployment desk groups are involved as advanced test users of the online tools to be discussed among each participating city during the meetings by considering all kinds of relevant information like user interfaces & functionalities. They will be further participating at the workshops of D.T.3.3.3 to learn how to use the tools. AS12 (bank foundation), AS13 (city of Maribor), AS 15 (biomass district heating company) will test the tools, each of them for different purposes.

Sustainability and transferability of work package outputs (not applicable for investment specification)	
<p><u>Sustainability (institutional, financial and political)</u> How will the work package outputs be further used by project partners once the project has ended? Please describe concrete measures (including e.g. institutional structures, financial resources, policy improvements etc.) taken during and after project implementation to ensure the sustainability of the project outputs. If relevant, please explain who will be responsible and/or the owner of the outputs.</p>	Tools will be updated & maintained also after the project duration. Together with the urban key performance indicators of WPT2 calculated values support to decide about investments according to clearly defined criteria. The online guide will be adapted on demand by the responsible administrator even beyond the project duration to ensure full user conveniences. PP9 will provide two person as new employment working on tool after the project lifetime.
<p><u>Transferability (linked to the WP Communication)</u> Which work package outputs will be transferred to which additional target audiences during project lifetime and beyond? Why are these outputs the most relevant ones to be transferred? Please describe the additional target audiences (e.g. other organisations/regions/countries outside of the current partnership) and ensure links to the strategy of the communication work package.</p>	The online tools will be disseminated in the frame of partner meetings respectively at events with the deployment desks & those that are organized by the WPC team. Every HUC will demonstrate the online tools for its city to show the particular impacts of the integration of energy storage systems, intelligent load management & smart energy systems. Being published on the web will allow the stakeholders' engagement based on tool result information.

Activity A.T3.1	Activity title Adapting the legacy tools for energy management in HUC	Start date 04.2019	End date 09.2021	Indicative budget [REDACTED]
Deliverables for activity A.T3.1				
Deliverable D.T3.1.1	Deliverable title Concept of the adapted existing tools for energy management with energy storages in HUC	Description of deliverable Development PPs (PP4, PP9) together with cultural heritage protection experts (AP11) will work on the concept of tools for EManage. based on the needs of pilots, it will be reviewed by all deployment desks to improve tool replication potential across CE.	Delivery month 09.2019	Quantification/target 1,00

Deliverable D.T3.1.2	<i>Deliverable title</i> Designed adapted tools for energy management with energy storages in HUC	<i>Description of deliverable</i> Based on the delivered concept development PPs will merge/combine/adapt the individual modules of the tool for energy management in HUC. All modules of the tool will be verified through simulation scenarios acquired from individual deployment desks.	<i>Delivery month</i> 03.2020	<i>Quantification/target</i> 1,00
Deliverable D.T3.1.3	<i>Deliverable title</i> Finalized software tools for energy management in HUC	<i>Description of deliverable</i> After the tools are deployed on pilot sites to perform energy manag. they will be tested throughout the pilots' duration and possible problems will be fed back to update the tool and distribute it transn. Finalized versions will stem at the piloting end.	<i>Delivery month</i> 09.2021	<i>Quantification/target</i> 1,00
Activity A.T3.2	<i>Activity title</i> Checklist for evaluation of the economical, technical and ecological performance of autarky rate	<i>Start date</i> 04.2019	<i>End date</i> 09.2021	<i>Indicative budget</i> ██████████
Deliverables for activity A.T3.2				
Deliverable D.T3.2.1	<i>Deliverable title</i> Development of a checklist to evaluate the various performance of the autarky rate of the HUC	<i>Description of deliverable</i> The checklist consists of 3 main parts. The economical, technical and the ecological impact of the autarky rate is interpreted with the checklist. This list could be the base of further reflections in the following implementations.	<i>Delivery month</i> 10.2019	<i>Quantification/target</i> 1,00
Deliverable D.T3.2.2	<i>Deliverable title</i> Documentation of the creation process of the checklist	<i>Description of deliverable</i> The creation process of checklist is documented briefly by PP4. Each used parameter should be explained. It will be explained why exactly these parameters have been selected. 3 different categories of the autarky rate are planned: 0-32%; 33-65%; 66-100%.	<i>Delivery month</i> 03.2020	<i>Quantification/target</i> 1,00
Deliverable D.T3.2.3	<i>Deliverable title</i> Establishment of the autarky rate tool & the checklist	<i>Description of deliverable</i> PP4 established and finalized the autarky rate tool and checklist. Which will be during the pilots also validated.	<i>Delivery month</i> 04.2020	<i>Quantification/target</i> 1,00
Deliverable D.T3.2.4	<i>Deliverable title</i> Validation report and establishment of the autarky rate tool & the checklist	<i>Description of deliverable</i> After implementing and testing the tool with partners experiences within pilots are described in a validation report with recommendations for improvements where necessary.	<i>Delivery month</i> 09.2021	<i>Quantification/target</i> 1,00

Activity A.T3.3	Activity title Training on using the tools	Start date 01.2020	End date 03.2022	Indicative budget ████████
Deliverables for activity A.T3.3				
Deliverable D.T3.3.1	<i>Deliverable title</i> Online guide for tools	<i>Description of deliverable</i> An online guide to introduce the work of the tools (EM, autarky rate) will be elaborated. The guide includes the description of the main functions. Some tutorials are available to improve the knowledge- The guide will be available in EN.		<i>Delivery month</i> 06.2020 <i>Quantification/target</i> 1,00
Deliverable D.T3.3.2	<i>Deliverable title</i> Workshop "Train the trainers" on the tools	<i>Description of deliverable</i> The PP6 organizes a Workshop to train the trainers. Every country/ partner city sends at least one person that assumes the role of the trainer for its HUC and associated partners. The use of the tools as well as the use of the online guide is shown.		<i>Delivery month</i> 08.2020 <i>Quantification/target</i> 1,00
Deliverable D.T3.3.3	<i>Deliverable title</i> Workshop with partners and members of the "deployment desks"	<i>Description of deliverable</i> The "trainer" organizes a training session with stakeholders from deployment desks to train them in using accurately the tools. Aim is to transfer the tool to wider audience. 1 training is organized per partner region.		<i>Delivery month</i> 04.2021 <i>Quantification/target</i> 5,00
Deliverable D.T3.3.4	<i>Deliverable title</i> The official acceptance of the tools	<i>Description of deliverable</i> The acceptance and further usage of the tool will be agreed within the deployment desks and officially committed with the signed memorandum of understanding for the future use of the tools. At least 1 per country should be obtained.		<i>Delivery month</i> 02.2022 <i>Quantification/target</i> 5,00

Type: Communication

WP Nr	WP title	WP start date (month)	WP end date (month)	WP budget
C	Communication	04.2019	03.2022	
Partner				
<i>WP responsible partner</i>	Climate Alliance			
<i>Partner's involvement</i>				
1	Development agency Sinergija, LP, RA Sinergija			
2	Municipality Lendava, PP, Lendava			
3	Energy and Innovation Centre of Weiz, PP, WEIZ			
4	4ward Energy Research Ltd., PP, 4WARD			
5	CES clean energy solution GmbH, PP, CES			
6	Environment Park, PP, Envipark			
7	City of Cuneo , PP, COMCN			
8	North-West Croatia Regional Energy Agency, PP, REGEA			
9	University of Zagreb Faculty of Electrical Engineering and Computing , PP, UNIZGFER			
10	Climate Alliance, PP, CA			
<i>Summary description and objectives of the work package (including activities and deliverables) and how partners will be involved.</i>				
<p>PP10 will lead WPC, involving all PPs' communication managers. The main objective of the WPC is dissem. of the project results to wider audience and to engage additional stakeholders that are keen on the project topic. Following start-up activities, which includes elaborating of commun. strategy, setting up the project's website to be updated regularly, mostly via storytelling, photos & video clips. The digital activities, considered to be the modern up-to-date tool for connecting to the target group will play a crucial role. Social media accounts will be opened and short (1-2 minutes) thematic video clips will be uploaded to touch the users. Specific targeted events will be organized, e.g. tool trainings, webinars and Kick-off event in every HUC to involve additional stakeholders. The project results will be also promoted through presence at relevant thematic cross-fertilization events. Media coverage will be ensured by regular press contacts (accompanied by Infographics that reflects data in more visual presence). 3 promotional materials (office and thematic promotional items) are to be produced and disseminated. A project leaflet will be created and also e-Best Practice Data Bank. All project results will be put on the webpage. The wider audience will be informed also through 6-monthly newflashes and gain a new knowledge by 2 thematic webinars to connect more scientific audience. Since the consortium consist also from the university team (PP9) 3 conference publications and 1 journal publication will be released. General Feedback measurement form will be prepared to evaluate the satisfaction of the participants at the events. PP10 will prepare the design templates which will be later on produced by PPs. All PPs provide the content for website, newflashes and profiles. LP, PP4, PP6, PP8 and PP10 organize the seminar on energy storages for additional stakeholder, additionally also the tool training is organized by them. LP organizes the final conference in SI.</p>				

Project key outputs for communication (choose up to five outputs)	Communication objectives What can communication do to increase the sustainability of the selected output? Please choose at least one of the communication objective(s)	Approach/Tactics Briefly summarise your approach to reaching the communication objective: To which target audiences will the selected key output be transferred? Which communication tactic(s) will you use?
O.T1.1	Raise awareness and increase knowledge	The stakeholder deployment concept will be transferred to additional stakeholder that are daily dealing with the project topic. This is to be sectoral agencies, municipalities and energy companies. They strive for the knowledge how to involve the stakeholder and they can benefit out of this output. Some of the target groups will be already involved in the deployment desks, some of them will be targeted by partners internal communication channels. Mostly through project newflashes, and targeted events with the possibilities to present the stakeholder involvement process within pilot actions.
O.T2.1	Raise awareness and increase knowledge	The pilot will be transferred to other municipalities, sectoral agencies, energy experts and practitioners, infrastructure providers, business companies. By visiting the pilot sites, the target groups can learn more, so having the kick off events at the sites enhance and raise awareness and increase the knowledge of the interesting audience. The pilots will be presented at the seminars, final conference, via website and newflashes which will ensure wide dissemination. The video clips will animate the additional target groups. Webinars spread the info to exact target groups (e.g. experts).
O.T2.2	Influence attitude and behaviour	The strategy for implementation and capitalisation of energy storages in HUCs will be transferred to the local and regional authorities to be integrated to the existing or updating strategies. They are implementers of the strategies, and with the implementation of the policies and measures they can influence on attitude of the people and change behaviour, e.g. when they want to decrease the energy usage of inhabitants. The strategy will be presented within deployment desks, directly to associated partners what can results in speeding the integration of the strategy.
O.T3.2	Influence attitude and behaviour	Software tools for energy management in HUC will be transferred to infrastructure providers, energy companies, regional and local authorities. They will practically use it in their daily work. The tool will be firstly presented at the internal tool training and later on also to the additional target groups. The tool will be announced on website and social profiles, newflashes and final conference.

Activity A.C.1	<i>Activity title</i> Start-up activities including communication strategy and website	<i>Start date</i> 04.2019	<i>End date</i> 09.2019	<i>Indicative budget</i> ██████████
Deliverables for activity A.C.1				
Deliverable D.C.1.1	<i>Deliverable title</i> Common Communication strategy	<i>Description of deliverable</i> It will be developed based on JS template and will indicate a strategic view of communication activities during the project and beyond. Document will list promotional, dissemination & capitalizing activities from regional and transnational point of view.	<i>Delivery month</i> 09.2019	<i>Quantification/target</i> 1,00

Deliverable D.C.1.2	<i>Deliverable title</i> Project poster	<i>Description of deliverable</i> Based on program template all partners will print a project poster with basic information. The content can be translated into national languages.	<i>Delivery month</i> 06.2019	<i>Quantification/target</i> 10,00
Activity A.C.2	<i>Activity title</i> Publications	<i>Start date</i> 08.2019	<i>End date</i> 03.2022	<i>Indicative budget</i> ██████████
Deliverables for activity A.C.2				
Deliverable D.C.2.1	<i>Deliverable title</i> Project leaflet	<i>Description of deliverable</i> The project leaflet will be general promotional material for awareness raising activities translated into 4 national languages (CRO, SI, IT, AT/DE). 300 pieces produced by each country.	<i>Delivery month</i> 10.2019	<i>Quantification/target</i> 1.500,00
Deliverable D.C.2.2	<i>Deliverable title</i> 1st Infographic	<i>Description of deliverable</i> The data for Infographic will be provided by all PPs, design will be provided by WP leader. Infographic will serve as a visualisation of the project contents and forecasts and will be used for enriching the social media.	<i>Delivery month</i> 05.2020	<i>Quantification/target</i> 1,00
Deliverable D.C.2.3	<i>Deliverable title</i> 2nd Infographic	<i>Description of deliverable</i> The data for Infographic will be provided by all PPs, design will be provided by WP leader. Infographic will serve as a visualisation of the project results and will be used for enriching the social media and general dissemination.	<i>Delivery month</i> 09.2021	<i>Quantification/target</i> 1,00
Deliverable D.C.2.4	<i>Deliverable title</i> E-Best practice data bank	<i>Description of deliverable</i> In e-shape and smart design (by WP leaders) will be delivered and appropriate for target groups, prepared in EN. The collection will contain best practises collected by all PPs. Dissemination ensured by project internal and external channels.	<i>Delivery month</i> 10.2021	<i>Quantification/target</i> 1,00
Deliverable D.C.2.5	<i>Deliverable title</i> Scientific and professional papers on conferences and in journals	<i>Description of deliverable</i> Developments and results of scientific partners will be published on scientific conferences and in journals. Targets: PP9 will publish the articles in 3 conference publications and 1 in journal publication	<i>Delivery month</i> 03.2022	<i>Quantification/target</i> 4,00
Activity A.C.3	<i>Activity title</i> Promotional materials	<i>Start date</i> 04.2019	<i>End date</i> 10.2019	<i>Indicative budget</i> ██████████
Deliverables for activity A.C.3				

Deliverable D.C.3.1	<i>Deliverable title</i> Project cotton bag	<i>Description of deliverable</i> Producing 300 pieces of project cotton bags per each country. It aims to promote projects and serve as a supporting office material for project events.	<i>Delivery month</i> 10.2019	<i>Quantification/target</i> 1.500,00
Deliverable D.C.3.2	<i>Deliverable title</i> Project roll up	<i>Description of deliverable</i> 1 Project roll up to be produced by each country for promotional purposes at the targeted and other thematic events. WP leader prepare the design idea and template for producing.	<i>Delivery month</i> 10.2019	<i>Quantification/target</i> 5,00
Deliverable D.C.3.3	<i>Deliverable title</i> Other promotional items (solar power bank)	<i>Description of deliverable</i> Purchasing of 100 pieces of project solar power bank per each country. It aims to promote projects and serve as a supporting promotional item for project events.	<i>Delivery month</i> 10.2019	<i>Quantification/target</i> 500,00
Activity A.C.4	<i>Activity title</i> Digital activities including social media and multimedia	<i>Start date</i> 07.2019	<i>End date</i> 03.2022	<i>Indicative budget</i> ██████████
Deliverables for activity A.C.4				
Deliverable D.C.4.1	<i>Deliverable title</i> Project website	<i>Description of deliverable</i> Website will be created on the programme portal and it will be used as informational and promotional tool to raise awareness and increase knowledge of the identified target groups, it will be constantly updated by WP leader and is linked to PPs websites.	<i>Delivery month</i> 10.2019	<i>Quantification/target</i> 1,00
Deliverable D.C.4.2	<i>Deliverable title</i> Use profiles on social networks	<i>Description of deliverable</i> Management of social media on Facebook and LinkedIn. Monitoring of on line presences. Interaction on website. Update of information and daily management of content. WP leader manages the sites, PPs provide the input and content.	<i>Delivery month</i> 10.2019	<i>Quantification/target</i> 2,00
Deliverable D.C.4.3	<i>Deliverable title</i> 1st Newsflash	<i>Description of deliverable</i> Newsflash will be elaborated in collaboration with all PPs, only in EN. It will be uploaded on the website and disseminated by all PPs via their institutional channels to reach and push a wider target groups. An advanced newsletter tool will be used.	<i>Delivery month</i> 10.2019	<i>Quantification/target</i> 1,00

Deliverable D.C.4.4	<i>Deliverable title</i> 2nd Newsflash	<i>Description of deliverable</i> Newsflash will be elaborated in collaboration with all PPs, only in EN. It will be uploaded on the website and disseminated by all PPs via their institutional channels to reach and push a wider target groups. An advanced newsletter tool will be used.	<i>Delivery month</i> 04.2020	<i>Quantification/target</i> 1,00
Deliverable D.C.4.5	<i>Deliverable title</i> 3rd Newsflash	<i>Description of deliverable</i> Newsflash will be elaborated in collaboration with all PPs, only in EN. It will be uploaded on the website and disseminated by all PPs via their institutional channels to reach and push a wider target groups. An advanced newsletter tool will be used.	<i>Delivery month</i> 10.2020	<i>Quantification/target</i> 1,00
Deliverable D.C.4.6	<i>Deliverable title</i> 4th Newsflash	<i>Description of deliverable</i> Newsflash will be elaborated in collaboration with all PPs, only in EN. It will be uploaded on the website and disseminated by all PPs via their institutional channels to reach and push a wider target groups. An advanced newsletter tool will be used.	<i>Delivery month</i> 04.2021	<i>Quantification/target</i> 1,00
Deliverable D.C.4.7	<i>Deliverable title</i> 5th Newsflash	<i>Description of deliverable</i> Newsflash will be elaborated in collaboration with all PPs, only in EN. It will be uploaded on the website and disseminated by all PPs via their institutional channels to reach and push a wider target groups. An advanced newsletter tool will be used.	<i>Delivery month</i> 10.2021	<i>Quantification/target</i> 1,00
Deliverable D.C.4.8	<i>Deliverable title</i> 6th Newsflash	<i>Description of deliverable</i> Newsflash will be elaborated in collaboration with all PPs, only in EN. It will be uploaded on the website and disseminated by all PPs via their institutional channels to reach and push a wider target groups. An advanced newsletter tool will be used.	<i>Delivery month</i> 03.2022	<i>Quantification/target</i> 1,00

Deliverable D.C.4.9	<i>Deliverable title</i> 1st Video Clip	<i>Description of deliverable</i> 1st Video Clip (on SI pilot) will be elaborated in collaboration with all SI PPs, and supported by WP leaders. It will be uploaded on the website and disseminated by social media as can easily pass our marketing messages more effectively.	<i>Delivery month</i> 08.2021	<i>Quantification/target</i> 1,00
Deliverable D.C.4.10	<i>Deliverable title</i> 2nd Video Clip	<i>Description of deliverable</i> 2nd Video Clip (on AT pilot) will be elaborated in collaboration with all AT PPs, and supported by WP leaders. It will be uploaded on the website and disseminated by social media as can easily pass our marketing messages more effectively.	<i>Delivery month</i> 08.2021	<i>Quantification/target</i> 1,00
Deliverable D.C.4.11	<i>Deliverable title</i> 3th Video Clip	<i>Description of deliverable</i> 3th Video Clip (on IT pilot) will be elaborated in collaboration with all IT PPs, and supported by WP leaders. They will be uploaded on the website and disseminated by social media as can easily pass our marketing messages more effectively.	<i>Delivery month</i> 08.2021	<i>Quantification/target</i> 1,00
Deliverable D.C.4.12	<i>Deliverable title</i> 4th Video Clip	<i>Description of deliverable</i> 4th Video Clip (on CRO pilot) will be elaborated in collaboration with all CRO PPs, and supported by WP leaders. It will be uploaded on the website and disseminated by social media as can easily pass our marketing messages more effectively.	<i>Delivery month</i> 08.2021	<i>Quantification/target</i> 1,00
Deliverable D.C.4.13	<i>Deliverable title</i> 5h Video Clip	<i>Description of deliverable</i> 5th Video Clip on how to implement innovative and sustainable energy solutions pro-active at historical urban sites. WP leader develops the video, it is 1-2 minutes long clip, it will be disseminated via social media, website and PPs channels.	<i>Delivery month</i> 03.2022	<i>Quantification/target</i> 1,00
Activity A.C.5	<i>Activity title</i> Media relations	<i>Start date</i> 04.2019	<i>End date</i> 03.2022	<i>Indicative budget</i> ██████████
Deliverables for activity A.C.5				

Deliverable D.C.5.1	<i>Deliverable title</i> Press release	<i>Description of deliverable</i> PPs will identify topics for Press releases. WP leader will support development, editing and dissemination. Offers/Give interviews and/or photo opportunities will be checked out Each country to be sent out at least 2 press releases in national language.	<i>Delivery month</i> 03.2022	<i>Quantification/target</i> 10,00
Activity A.C.6	<i>Activity title</i> Targeted events	<i>Start date</i> 08.2019	<i>End date</i> 03.2022	<i>Indicative budget</i> ██████████
Deliverables for activity A.C.6				
Deliverable D.C.6.1	<i>Deliverable title</i> Documentation on training on tools for additional stakeholders	<i>Description of deliverable</i> AT PPs organize it in the combination of the project meeting, PPs attend it and bring the associated partners or other externals, at least 20 participants. For promoting of the features and operation of the tools.	<i>Delivery month</i> 08.2021	<i>Quantification/target</i> 1,00
Deliverable D.C.6.2	<i>Deliverable title</i> Documentation on thematic regional / international seminars/conferences on energy storages	<i>Description of deliverable</i> Documentation will consist on regional/international conference (each country prepares 1). Topic of seminar: energy storages, recommendations, tool dissemination, etc. WP leader prepares a template for report (list of participants, pictures, etc.).	<i>Delivery month</i> 05.2021	<i>Quantification/target</i> 1,00
Deliverable D.C.6.3	<i>Deliverable title</i> Documentation on final project conference	<i>Description of deliverable</i> Documentation will consist of information and data on final conference organized. All PPs and APs will attend it. International audience will be invited and exploit from obtaining new knowledge. SI partners are the organizer.	<i>Delivery month</i> 03.2022	<i>Quantification/target</i> 1,00
Deliverable D.C.6.4	<i>Deliverable title</i> Documentation on cross-fertilization opportunities/events	<i>Description of deliverable</i> Documentation will consist of information on cross-fertilization events. All PPs can participate at other events and make presentations. At least 2 other events (regional, national or international) per country to be attended with the own presentations.	<i>Delivery month</i> 03.2022	<i>Quantification/target</i> 10,00

Deliverable D.C.6.5	<i>Deliverable title</i> 1st Webinar	<i>Description of deliverable</i> WP leader organizes the 1st webinar, PPs attend it, the content: proposed based on the needs, all PPs recruit the participants. The webinar serves for exploiting the knowledge to other and wider audience.	<i>Delivery month</i> 04.2021	<i>Quantification/target</i> 1,00
Deliverable D.C.6.6	<i>Deliverable title</i> 2nd Webinar	<i>Description of deliverable</i> WP leader organizes the 2nd webinar, PPs attend it, the content: proposed based on the needs, all PPs recruit the participants. The webinar serves for exploiting the knowledge to other and wider audience.	<i>Delivery month</i> 02.2022	<i>Quantification/target</i> 1,00
Deliverable D.C.6.7	<i>Deliverable title</i> Documentation on Kick-off event in every HUC	<i>Description of deliverable</i> Kick off events for launch the pilots for target groups, promote and demonstrate show character of investments to raise awareness of EE/RES measures. Each country organizes 1 event (in the style of dissemination event), WP leader provides the guidelines.	<i>Delivery month</i> 10.2019	<i>Quantification/target</i> 1,00