

IEE PassREg

PASSIVE HOUSE REGIONS WITH RENEWABLE ENERGY

Long-term Capacity Building Strategy (Template)

............ Region (Municipality)

Designed for use by regions involved in PassREg project

Deliverable D2.4 "Template for long-term Capacity Building Strategies with Action plans for their implementation in AR within and beyond project's duration"

Developed by EnEffect



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INTRODUCTION

It is widely accepted within project's consortium that specific knowledge and skills both at institutional and expert level will be needed for the implementation of the new success models of the aspiring regions and putting them in operation. In order to support this process, the long-term capacity building strategies will be fully incorporated in the success models, ensuring smooth process management and quality execution of the planned activities.

The long-term capacity building strategy aims to outline the proposed capacity building activities by the year 2020 in each region, providing comparability and opportunity for close monitoring of the results through a template agreed by the project consortium. An action plan, according to the template, will be developed to deploy specific capacity building activities in a coherent time frame, stretching even beyond project's duration.

The long-term strategy will be organized (according to the PassREg contract) as follows:

- (a) **Institutional building** will be needed to meet the growing demand for nearly-zero energy building in the regions, including establishing of local/national funds and/or regulatory units, certification centres, etc. Front runner experiences may provide good examples of such institutions, which will play critical role in the implementation of new models.
- (b) **Training and education** will be addressed mainly to experts in various market players' groups, such as designers, building entrepreneurs, craftsmen, facility managers, etc. The target groups to receive training will be identified in this sub-task, while specific training activities will be performed through WP5.
- (c) **Awareness raising** actions, implemented in coordination with WP6, will address end users, investors, businesses, industries, and other stakeholders' groups related to the penetration of passive building in the business-as-usual construction practice.

The long-term capacity building strategy with the action plan will be elaborated by each AR according to the template. It is supposed to contain information similar to the SM, however with a strong emphasis on trainings. As a result of the capacity building activities, local authorities as well as institutional and individual market players in less advanced regions will be familiarized and prepared to implement the newly designed models in the real conditions on their local markets.



1

INSTITUTIONAL BUILDING

This section introduces the institutional stakeholders engaged in the development and implementation of the policies to promote "nearly zero-energy" / "passive" buildings. It corresponds to the "Key Actors" section, subsection "Departments of regional and local administrations" and "Capacity for Planning, Design and Construction" section, subsection "Training of local administrations" of the SM template for AR. At this point, it is important to emphasize on the continuity of capacity building activities in the regional and local administrations beyond PassREg's duration and scope.

Departments of regional and local administrations

Specify existing regional and local (municipal) **administrative departments and professionals** who are directly involved in shaping and implementing energy efficiency in buildings and briefly describe their functions. Rate the effectiveness of these structures and experts and try to identify the main difficulties in their work. Share your views on how **existing administrative structures and professionals** should improve operations to increase their efficiency. Point out whether changes are needed in their functions and specify them.

Describe the necessary **new administrative departments and professionals,** which should be provided for the implementation of policies on climate change and "passive" buildings. Describe their functions and effects of their activities.

Pay special attention to the place, role and functions of regional (local, municipal) **energy managers**. Plan the necessary actions for their consolidation (or introduction) and include them in the Roadmap for building the Success Model of the region.

Involvement of external stakeholders

As required by the SM template for AR, in order to conduct inclusive and coherent awareness raising activities, it is critical to describe and analyse the functions of **participants outside the regional (municipal) authorities**, which contribute to the development and implementation of policies in the field of "nearly zero-energy" ("passive") buildings and assess their contribution.

In a separate chapter, specify the **interactions and conflicts** (if any) between external actors and between these actors and the departments and experts of regional (municipal) administration. Specify untapped opportunities for interaction and cooperation between actors. Specify **future roles** of current participants and opportunities to increase their contributions, including on the base of their closer interaction.

Justify the need to attract **new players** and describe their roles (functions) and expected contributions.

Pay **special attention** in attracting:

- Regional and local energy agencies
- Industry organizations (professional chambers, unions and associations)

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- Local legal entities liable to contribute to energy savings targets under the national legislation, including energy companies
- Municipal and private companies
- Civil associations
- Educational institutions (kindergartens, schools, universities, training centers)
- Banks and other local financial institutions
- Regional and local media and others.

Complete the list according to the regional specificity and the targets set in the strategy.

Use the information gathered for the elaboration of the Success Models.

2

TRAINING AND EDUCATION

This section builds on the "Training of designers and builders" and "Other measures for education and training" subsections of "Capacity for Planning, Design and Construction" section of the SM template for the AR. However, it is expected to be much more detailed and precise and to feed in directly to the Capacity Building Action Plan. Synergy effects are sought with other EU initiatives as additional information sources are listed for reference (see below).

Background information for the strategy on trainings and education should be provided, mostly derived from the baseline descriptions. However, additional data and information extracted also from official statistic sources on regional, national and EU level, as well as from the sources cited below, since this is the basis for the development of the regional action plan. Information could cover the following areas:

- Latest developments in the building sector (e.g. share of passive buildings, share of low-energy renovations, etc.)
- National and regional policies and supporting measures for education and training of:
 - Designers
 - o Construction workers
- Quantified data (approximation if relevant sources are not available) related to:
 - o 2020 energy targets for the country
 - o Number of designers in the region / number of certified PH designers
 - Number of building workers (employed/unemployed) / number of certified PH tradespersons
 - Number of designers to be trained in order to achieve the 2020 energy targets



 Number of building workers to be trained in each sub-sector/profession in order to achieve the 2020 energy targets

Training of designers

Please describe if there are **training courses for passive house design** conducted in the region and how many designers have passed through them? How many local designers in the region are prepared to apply the principles of passive building in urban planning and building design? How many designers have **certificates for passive house designers**? What part of the buildings, designed by trained / certified (or untrained and non-certified) designers meet the requirements of Class A or the "passive house" standard?

Indicate the need for targeted **training of local designers** from the region (municipality), specify the range of educational programmes and the number of trainees. Identify measurable indicators of the effectiveness of these trainings, e.g. issued certificates for passive house designers, number and quality of passive buildings designed by trained professionals and others.

Pay specific attention to:

- Qualification needs: required qualification courses and schemes, number of required trainers, training institutions
- Barriers to the achievement of the 2020 targets

What **other actions** are necessary for the preparation of local designers - development of training materials and specialized software, exchange of experience with advanced regions of the country or with other European countries, etc.? Describe the scope and content of these activities in accordance with the needs of the region (municipality).

Training of builders

Describe how many **construction companies and professionals** employed with them are familiar with the specifics of the construction of passive houses, are they prepared to carry out such projects and to what extent? Indicate the need for targeted **training of managers and professionals from local construction companies** - specify the range of educational programmes and the number of trainees. Identify measurable indicators of the effectiveness of this training, e.g. number of issued diplomas and certificates to builders of passive buildings, number and quality of passive buildings built by companies with trained specialists, etc.

Pay specific attention to:

- Qualification needs: required qualification courses and schemes, number of required trainers, training institutions
- Barriers to the achievement of the 2020 targets

What **other actions** are necessary for the preparation of local builders - development of training materials and specialized software, exchange of experience with advanced regions of the country or with other European countries, etc.? Describe the scope and content of these activities in accordance with the needs of the region (municipality).

Base your strategy on the findings of your national BUILD UP Skills project (see below).



Training of local authorities

Describe what part of the local administration is now **prepared (capable)** to apply the principles of passive building ("nearly zero-energy buildings") in sustainable development planning, urban planning and building design. Are there specialists in the region (municipality) who have certificates for passive house designers or have undergone specialized training?

In a separate section, describe to what extent the principles and requirements of passive house planning are leading in the design and development of settlements and buildings in the region and are they **observed and evaluated**? To what extent these principles are respected when approving projects for new construction or for renovation of existing buildings and neighbourhoods?

Were there **training courses** conducted in the region addressed to the local administration and how many employees have gone through? How many passive buildings are actually planned and promoted by the municipal administration and how many of them are implemented, monitored, evaluated and certified by municipal participation or under its supervision?

Indicate the **need for targeted training** of specialists in municipal administration - define target groups, the scope of the curriculum and the number of trained local leaders and experts. What **other steps** are necessary to prepare the employees of local administration - development of training materials and specialized software, exchange of experience with advanced regions of the country or from other European countries and others. Describe the scope and content of these activities in accordance with the needs of the region (municipality).

Suggest how capacity building actions to promote passive buildings might be included in the **Capacity Building Action Plan** of the region (municipality).

Other measures for education and training

Describe what other educational programmes and initiatives **have been conducted** in the municipality, e.g. for students, children from kindergarten or specialists in heating units of municipal and other buildings. Describe the scope and content of these programs and initiatives and the degree of their effectiveness.

Explain whether it is necessary to implement **specialized educational programs** related to passive buildings in the future, and to whom they should address. For example:

- Energy managers and experts in energy agencies outside municipal staff
- Financiers
- Facility managers
- End users and investors
- Managers at final energy consumption directors of municipal buildings (schools, kindergartens)
 - Specialists involved in the maintenance of heating systems engineers, stokers



- Traders and distributors of building materials, products and technologies for passive buildings
 - Journalists from local media
 - NGO activists and others
 - Professional high schools and university students

Describe what should be the scope and content of these educational programs and how to measure their effectiveness.

3

AWARENESS RAISING

Communication strategy

This section is intended to present the long-term communication strategy on energy efficiency in buildings – in the best case, as a part of the local strategy for sustainable urban development. It is elaborated within the success models (SM) of the aspiring regions (AR). At this point, it is important to outline its projections beyond project's lifetime, using the institutional infrastructure set out at the beginning.

The long-term communication strategy is supposed to run in two stages: 2013-2016 and $2017-2020^1$, and to take into account the major policy developments on EU level as transposed in the respective national legislation, covering their expected market impact. In order to facilitate the work, you can complete the following tables with events expected to take place in each respective country or region, to project market and political developments according to the resulting timeline, and to centre your communication strategy around the respective focal points and events.

1st stage:²

2013:	2014:	2015:	2016
NZEB – MS report on progress	EPBD – MS list of measures and instruments	NZEB – MS report on progress	Europe 20-20-20: MS report on progress
EPBD – Application between 9/01/2013 and 9/07/2013	RES Directive – Minimum levels of RES	End of PassREg project	Beginning of PassREg 2? Or a new initiative of your organization?
EED – National implementation	EED – Assessment of national transposition		

¹ 2016 is a key year, as member states will report on the progress of implementation of Europe 20-20-20:Strategy according to predetermined qualitative indicators; reported successes and failures will determine new policies. In many cases, this will heavily affect success models. A revision of the strategies could be expected.

² The dates cited in the tables, excluding those related directly to PassREg project, are retrieved from official EU sources (further reference at http://ec.europa.eu/energy/intelligent/)



2nd stage:

<u>2017:</u>	<u>2018:</u>	<u>2020:</u>
EPBD – MS updated list of measures and instruments	NZEB – All new public buildings	NZEB – All new/refurbished buildings
	NZEB - MS report on progress	New strategic objectives of the EU

<u>Do not create a new strategy – use the one prepared for the SM!</u> Show the positives of engagement in IEE-financed projects and entertain the possibility for continuation of PassREg activities after 2015. For detailed descriptions of the steps and the corresponding actions, please refer to the template for the SMs of the ARs or use the guidelines below:

Describe **current or previously implemented communication strategies** (if any), aimed at changing public attitudes towards low-energy and passive buildings. Evaluate their performance and results. Describe existing capacity and organizational resources.

Develop a communication strategy for the municipality in low-energy buildings as part of sustainable urban development. Follow the steps in these directions, but do not forget that in the end you will again return to the first step:

- i. **Ensuring sustainable management**: Define the scope and duration of the communication strategy. Ensure sufficient time and financial resources to collect and process the information needed to carry out planned activities and to monitor the implementation of the strategy. Consider the need to attract external consultants or to undertake additional training for local experts. Ensure consistency of the message and link it to the municipal communication strategy (if available). Develop a plan and set resources for risk management and conflicts.
- ii. **Defining goals and objectives**: Define clear and specific goals what will be achieved through the implementation of the communication strategy? Put tasks according to defined objectives with expected results that can be quantified.
- iii. **Selection of target groups**: Identify key target groups according to specific criteria based on the goals (e.g. "designers with experience in the design of buildings of Class" A"). Do not use general descriptions (e.g. "the general audience"). Do not limit yourself with groups that can contribute directly in achieving the objectives, and include those who will become the users (direct or indirect) of the results. Do not forget internal audiences: municipal counsellors who have connection with the problem area concerned, experts in administration, municipal officials and others.
- iv. **Select the appropriate message**: Consider the different motivating factors attracting each of defined target groups. On this basis, develop a unifying message that can serve as a rallying point for all communication activities in the future. Every public event should work in support of the crafted message. Since this is one of the most difficult elements of the communication strategy, do not be discouraged if you encounter difficulties in the beginning. Describe in detail what you can offer to your target audiences and develop specific messages for each of them. Organize focus groups and brainstorming sessions in the team. If necessary, try to find support by a professional consultant.
- v. **Choice of media and communication tools**: Determine the most appropriate communication channels for each target group and, if necessary, consult with



representatives of the groups. Prepare appropriate materials for each of these channels. Create a database of media contacts and organizations whose support you will need. Pay particular attention to local media. Try to "tell stories" with their own storyline, climax and moral, rather than recite facts. Create news that directly affect the daily lives and work of members of the target groups.

vi. **Monitoring and evaluation**: According to the tasks and the benchmarks for their achievement, develop a monitoring and evaluation scheme with periodic reports. Ensure sufficient time resource for data collection and analysis of the feedback generated by communication activities. If necessary, adjust the communication strategy according to target groups' reactions.

Communication plan

Describe **existing communication plans**, programmes and specific activities related to sustainable urban development with a focus on low-energy (passive) buildings. Evaluate the results and discuss the mistakes. Identify experts who will be responsible for planning, implementation and monitoring of communication activities. If necessary, identify "faces" of the campaign, acquaint them in detail with the strategy and ensure their active and ongoing commitment. Develop a database of existing contacts, traditional conferences and events planned in the region.

Develop an **annual plan** of the envisaged communication activities:

- (i) Plan 4 to 6 major events organized by you or conducted by external organizations, each of which have specific objectives and expected results. These events, although individually targeted to specific groups, by the end of the planning period should be extended to all defined target audiences.
- (ii) Organize communication activities about the events, trying **to plan specific results of any of them** that build on previous achievements. Plan preparatory activities before each event, e.g. dissemination of information materials, articles and reports in the local media, publications, social media, forums, etc., designed especially for the event audience in order to create a basis for informed discussion.
- (iii) Provide sufficient resources to **disseminate the results** after each event and to account for the reaction of the participants. Use and seek active participation in events, which directly affect the target groups (often organized by their branch associations), but do not spend too many resources in specific activities that are not directly related to the tasks at the specific stage of the plan. Do not commit to specific business interests.
- (iv) Seek **synergies with other projects** in the municipality. Look for opportunities to reach out to groups that are often overlooked (e.g. children, students, women, the unemployed, etc.), but in certain situations can affect the decision making process.
- (v) Determine periods for **monitoring and analyzing** the performance of the communication plan, defining responsible officers and allocating available resources. In the event of unexpected situations and the availability of new information, changes in the plan are required.
- (vi) The development of a **communication plan for the next year** should begin at least two months before the end of current one.



4

ACTION PLAN

The **Action plan** for the implementation of the long-term capacity building strategy should present a list of concrete actions along a coherent timeframe, covering (at least) the following issues:

- Timeline (at least until 2020);
- Proposed capacity building activities and measures;
- Actors/institutions and costs (where applicable) to implement the identified measures;
- Accompanying activities (e.g. communication, etc.);
- Incentive measures by regional/municipal authorities;
- Measures for monitoring of the implementation of the action plan
- Structural measures to monitor developments in skills.

To facilitate your work, you can use the following table (feel free to modify) or some other mean for visualization.

Year	Activity / measure	Responsible institution	Success indicator (e.g. number of trained designers)	Incentive measures / support by regional authorities	Resources to be allocated / opportunities for financing	Accompanying activities



5

USEFUL RESOURCES³

Passive House information

Passive House user experiences

http://www.passipedia.org/passipedia en/operation

Passive Houses worldwide

http://www.passipedia.org/passipedia en/basics/passive houses in different clim ates

Certification criteria for Passive Houses

http://www.passiv.de/en/03 certification/02 certification buildings/01 benefits-of-certification/01 benefits-of-certification.htm

Certification criteria for EnerPHit projects

http://www.passiv.de/en/03 certification/02 certification buildings/01 benefits-of-certification/01 benefits-of-certification.htm

Passipedia

www.passipedia.org

iPHA events calendar

http://www.passivehouse-international.org/index.php?page_id=75

iPHA homepage

http://www.passivehouse-international.org/index.php

Passive House project database

http://www.passivhausprojekte.de/projekte.php?lang=en

Passive House trainings

Certified Passive House Designer

http://www.passivhausplaner.eu/englisch/index e.html

Certified Passive House Tradesperson

http://www.passivehouse-trades.org/

Passive House Basics courses

http://www.passipedia.org/passipedia en/education training

Passive House train the trainer courses

http://www.passipedia.org/passipedia en/education training

³ Courtesy of BUILD UP Skills Initiative. Feel free to add more.



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Statistics and research

EUROSTAT Construction statistics

http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Construction_statistics_-NACE_Rev. 1.1

EUROSTAT Lifelong learning statistics

http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Lifelong_learning_statistics_s

Greening of the building sector is held back by skill shortages

http://www.ilo.org/wcmsp5/groups/public/---ed emp/---

ifp skills/documents/publication/wcms 168353.pdf

Skills and Occupational Needs in Green Building

http://www.ilo.org/wcmsp5/groups/public/---ed emp/---

ifp skills/documents/publication/wcms 166822.pdf

Skill Needs on the Labour Market in Transition to the Low Carbon Economy

http://www.ilo.org/wcmsp5/groups/public/---ed emp/---

ifp skills/documents/publication/wcms 166824.pdf

Skills for green jobs

http://www.ilo.org/wcmsp5/groups/public/---ed_emp/---

ifp skills/documents/publication/wcms 143855.pdf

Information on future needs for skills and competences in the EU construction sector http://ec.europa.eu/enterprise/sectors/construction/studies/skills_en.htm

EU Policies and Initiatives

Europe 2020

http://ec.europa.eu/europe2020/index_en.htm

EU Social Fund

http://ec.europa.eu/esf/home.jsp

BULD UP portal

www.buildup.eu

BUILD UP Skills initiative, including links to national pages

www.buildupskills.eu

Energy performance of buildings

http://ec.europa.eu/energy/efficiency/buildings/buildings_en.htm

Renewable energy in Buildings

http://europa.eu/legislation summaries/energy/renewable energy/en0009 en.htm

European Centre for the Development of Vocational Training (CEDEFOP)

http://www.cedefop.europa.eu/EN/identifying-skills-needs/index.aspx

International Labour Organization (ILO)

http://www.ilo.org/skills/lang--en/index.htm

