


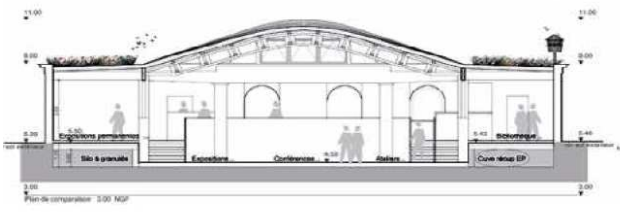


GENERAL INFORMATION	
Name of the public building renovation	Maison éco-citoyenne of Bordeaux (eco-citizen house)
Building Good Practice number	BGP n°1 – Bordeaux
Historical building sub-group	
Description	   
Address	Quai Richelieu – 33 000 Bordeaux - France
Public sector contractor	Bordeaux municipality
Architect	Architect : Olivier Lehmans - Architecture et Ecologie Mêlées (AEM)
Engineering consulting	Engineering consulting : ECCTA - M. Liovat and M. Boucard
Date of construction	1952
Legal aspects (e.g.: level of protection of building)	Unesco World Heritage classified This building is also situated in the national area of restoration and enhancement of heritage.

	Date of renovation	2010
	Nature of the work (short description)	-wood frame -inside insulation -pellets boiler -thermal solar panels -photovoltaic solar panels (150 m ²) -tank of 11 m ³ to collect rain water -green roof (with hives, nest boxes,...)
	Budget and source of financemnt	-Bordeaux : 1 081 540 € (61%) -Europe (ERDF) : 405 880 € (23%) -Bordeaux Urban Community : 150 000 € (8%) -Regional council of Aquitaine : 62 420 € (4%) -ADEME (Agency for the Environment and Energy Management) : 62 410 € (4%) TOTAL : 1 762 250 €

AVAILABLE RESULTS	
What were the big problems (in terms of energy efficiency) to tackle?	To renovate an historical building and reach the level of energy consumption BBC
Has this building been already analysed and certified?	The objective was to reach the level of the BBC certification, but the building is not certified.
What are the key innovative energy efficiency measures undertaken through the renovation?	To optimize equipment uses To use a pellet boiler
What are the measurable improvements in terms of energy efficiency in electricity and heating (kWh saved)?	We can't have these figures because before renovation the use of the building was completely different.
<ul style="list-style-type: none"> • kWh saved, kWh before/after, kWh given in the studies/real kWh) • carbonated energy kWh substituted by REN • kg CO2 saved 	

ENERGY EFFICIENT MEASURES	
Energy efficient measures of the building envelope	Roof : polyurethane + waterproof membrane Wall : hemp and linen wool Floor : polystyrene + heating system + concrete screed
Energy efficient measures of the heating system	Wood boiler
Energy efficient measures of monitoring energy	
Energy efficient measures regarding behaviour	
Stakeholders' involvement in the energy efficient measures	
Others?	

SUSTAINABILITY OF THE RENOVATION	
Design and choice of sustainable materials?	-Internal walls painted with natural lime -Roof structure in local species of pine -Floor with recycled wood cobblestone
Sustainable building site management? (sorting waste, water...)	
Application of a valuation method (BREAM? HQE? Others?) Carrying out consultation process with dwellers? Concerted choice on the work program? Which external partners?	HQE : 10 targets on 14

BUILDING MAINTENANCE: life of the building after the renovation	
Is the building following an energy monitoring? Is there a responsible manager?	Monitoring is made by the municipality of Bordeaux. There is a screen display of the energy production of the house.

Who is in charge of the maintenance of the heating system of the building?	The company SPIE
Who is in charge of the day to day energy management?	The municipality of Bordeaux. An employee of the house will be trained to realise energy consumptions measures and analyses.
Are there some specific measures to raise energy awareness and to implicate users in energy efficiency?	The concept of an eco-citizen house is to be a think factory. The aim is to highlight good practices for everyday life and to persuade people to renovate their own habitation with energy efficiency measures, even if it concerns an historical building or a stone house. There is also an energy and water information centre.

FUNDING	
What is the financing plan?	
Innovative or specific aspects in the method of financing (European funds or loan, energy performance contract,...)	European funds ERDF (23% of the total investment)
What is the balanced budget for each stakeholder <ul style="list-style-type: none"> • Energy costs for tenant before /after • Increase in the rent 	
Is there any specific economical indicators (payback time on investment, global cost, ...)?	There are not specific economical indicators because it is a demonstrator building.

TRANSFERABILITY	
Transferable aspects according to the partner in charge of this example of good practice	Transferability of planning (forming a partnership, choosing priorities, setting up a renovation building teams, etc.)?
	Transferability of the process of renovation (management structure, monitoring system, implication of end users, participation, etc.)
	It is an historical stone building renovation with walls humidity treatment, respect of architecture, solar panels on the roof.

	<p>Transferability of results (good solutions, adaptability, change of behaviour, etc.)?</p> <p>Not measurable because before renovation the use of the building was completely different.</p>
<p>Transferable aspects according to all the partners of Serpente project</p>	<p>The other partners will analyse and validate these good practices. During the process of validation the partners will take on the role of auditors because they will assess and improve the effectiveness and portability of good practices in their context.</p> <p>The validation process will promote a systemic approach in local competent public administrations. Moreover, this process of selection and validation is a peer review and entails the mutual role of experts and auditors depending on typology of buildings and partner's expertise.</p>

<p style="text-align: center;">SOURCES</p>	
<p>Publications</p>	
<p>Website</p>	<p>http://www.bordeaux.fr/o35008</p> <p>http://www.blog-habitat-durable.com/article-maison-ecocitoyenne-a-bordeaux-60209218.html</p> <p>http://olivierlehmans.com/projet.php?id=156</p>
<p>Interviews</p>	<p>Anaïs NOEL, organiser at the eco-citizen house.</p>