

Reference Guidelines for the Energy Efficient Rehabilitation of the Porto's Historical Centre - Porto, Portugal

Rehabilitation of buildings Energy Efficiency Historical Centre

Key words

Objectives



The City Council of Porto, through Porto Vivo, SRU (Urban Rehabilitation Society of the Downtown and Historical Centre of Porto), supported by the Energy Agency of Porto and the Construction Institute of the Faculty of Engineering of the University of Porto, and in close cooperation with the North Regional Directorate for Culture, has published a guide for energy efficiency rehabilitation in the historical centre to help promoters find viable solutions compatible to both the economics and the comfort requirements as well as the historic values to be preserved. This context also poses a big challenge for the installations of solar panels and for this issue there have also been set rules so that solar panels can be installed without interfering with the landscape and patrimonial heritage.

Description

The Reference Guidelines for the Energy Efficient Rehabilitation of the Porto's Historical Centre has the ambition to create the conditions to the promotion of better technical solutions in correspondence with the values of comfort and environmental sustainability in the City of Porto, signatory of the Covenant of Mayors, bearing in mind the specific urban conditions and thus contributing to new practices in the rehabilitation process of buildings.

This document values the energy-environmental issues of the rehabilitated buildings striving for improvement of comfort conditions from well-judged intervention at the constructive conditions level, pointing solutions resulting in less CO2 emissions, and also by energy vector shift (e.g. thermal solar and natural gas for heating purposes), while respecting the cultural values of an area classified by UNESCO as World Heritage.

Achievements

This document, although not covering all the issues that could be addressed in this very specific area, is presented as an expression of the integrated reading of prospects considered (patrimonial, energetic and environmental) under a complex process such as the Urban Renewal and Rehabilitation of the Historical Centre of Porto. It is the ambition of the open exercise induced through these Guidelines to reply at once to



policies on heritage and the sustainability of the City by suggesting the adoption of best practices that, being integrated and integrative, are, therefore, strongly innovative in methods and results.

As practical example of the principles laid out in this document, *Porto Vivo*, SRU has promoted building rehabilitations achieving an energy label of A+ (best performance), with a marginal building overcost of 10%.

Advice for replication

Urban Renewal and Rehabilitation are traditionally complex and multidisciplinary processes, furthermore in UNESCO World Heritage classified Historical Centres. Therefore, in the interest of energy sustainability and sought historical heritage conservation, it is of the utmost importance to join the interested stakeholders to find integrative solutions.

Online information

http://www.portovivosru.pt/ http://www.culturanorte.pt/en/ http://adeporto.eu/fotos/editor2/guia_termos_referencia.pdf https://paginas.fe.up.pt/~icfeup/

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