



## ANNEX 2 Best practice Identified and transferred

Section	Indication of content
<b>1 Title of the best practice</b>	Analysis and validation of comfort conditions
<b>2 Precise theme/issue tackled by the practice</b>	Analysis and validation of comfort conditions before releasing any proposal to reduce the energy demand/consumption
<b>3 Objectives of the best practice</b>	<p>The methodology of building energy audit should include several aspects of comfort analysis. The main terms of public building comfort are: indoor temperature range, humidity, air flow conditions.</p> <p>It is essential that the analysis of the energy audit has been carried out for the conditions of the national regulations also specific conditions assumed by the building user or public building manager. The user often specifies higher requirements of conditions than those stipulated by the regulations, such as raising the minimal indoor temperature in the winter or lowering the maximal temperature in the summer.</p> <p>Analyses of building comfort conditions should be based on an interview carried out among building staff, building customers, also can be carried out on monitoring data or on the basis of measurements made by the energy auditing team.</p> <p>The main objective of this best practice is to ensure the comfort conditions analyses will be applied in energy audits. The approach will enable consulting firms to apply the methodology in order to achieve optimal reductions of energy demand and energy consumption in public buildings taking in the account optimal economical effects / investment costs and operating costs accounts/.</p>
<b>4 Location</b>	This best practice applies to all partner regions – Modena (Italy), South East England (UK), Andalucía (Spain) and Malopolska (Poland).
<b>5 Detailed description of the best practice</b>	The state of art analysis shows the consulting firms often do not introduce the energy audit comfort conditions which leads to failure of energy audit results related to the reduction of

	<p>energy consumption and energy demand. Omitting comfort conditions can result in deterioration of comfort standards compared with user requirements or contrariwise - maintaining to high comfort conditions such as oversizing the energy system /for example increase the power of thermal heating devices, or electrical power of cooling devices.</p> <p>In this case, this leads to an unjustified increase in capital expenditures of the building modernization assumed in the energy audit, or increase in the operating costs of energy equipment at work with lower than nominal power range.</p> <p>The consulting firms will find the evidence of possible improvement of building energy efficiency introducing the comfort condition analysis in the energy audit methodology before releasing any proposal of the energy demand and consumption reduction proposals.</p>
<p><b>6 Evaluation</b></p>	<p>The activity should lead to a new methodology of energy audit in public buildings created by partnership based on a procedure including the comfort conditions.</p> <p>Analysis of building comfort conditions can result the optimisation of energy demand and energy consumption. As the result the energy audit will precise an optimal technical solutions of the building modernisation in the conditions of rational investments and reduction of energy operating costs.</p> <p>Analysis of the state of the art shows consulting firms often analyse the energy reductions proposals without considering the comfort requirements.</p>
<p><b>7 Lessons learnt from the best practice</b></p>	<p>The energy audits in GENEGRATION partner regions often omit the aspect of comfort conditions in the building and its elements. Consulting firms often do not introduce to the energy audit comfort conditions which leads to failure of energy audit results related to the reduction of energy consumption and energy demand.</p>
<p><b>8 Contact information</b></p>	<p><a href="mailto:marek.drozdz@gmail.com">marek.drozdz@gmail.com</a></p>
<p><b>9 Other possible interesting information</b></p>	
<p><b>10. Best practice transferred</b></p>	<p>The “Analysis and validation of comfort conditions” will be promoted at project events, to partners’ local authority contacts, through the project Advisory Board and on the website.</p>

