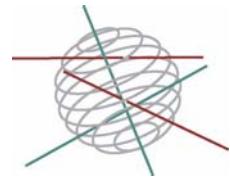


SCIENCE FOR A SUSTAINABLE DEVELOPMENT (SSD)



Transversal actions

FINAL REPORT ANNEX 2: MINUTES OF THE FOLLOW-UP COMMITTEE MEETINGS

SUSTAINABILITY, FINANCIAL AND QUALITY EVALUATION OF DWELLING TYPES “SuFiQUAD” SD/TA/12

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- i. The follow-up committee stressed the importance of the choice of the functional unit. When using 1m² of floor area as functional unit, larger dwellings will score better than smaller dwellings. This was the result of a comparative study between dwellings in Belgium and The Netherlands. Therefore it could be important to additionally take one inhabitant as functional unit. This was included in the analysis.
- ii. Some members of the follow-up committee were convinced that the environmental impact of water consumption should be included in the analysis. This was not intended in the approach since water consumption is seen as an aspect which is not building related. This means that the design of the building will not influence the water consumption. However, since the follow-up committee puts a lot of importance to water consumption, the financial and environmental external cost of the water use during the use phase of the dwelling was included in the assessment.
- iii. Based on the presentation of the methodology for the quality assessment of the dwellings, the members of the follow-up committee realized the importance of the choice of weighting factors when calculating a single score. Therefore they urged to look at these weighing factors critically. The idea was to set up a 'limited' inquiry in collaboration with the "Orde van Architecten" since architects are seen as important experts concerning the opinion of their clients. However, it was not possible to execute this inquiry within this project since the "Orde van Architecten" could not collaborate and there was no budget foreseen in this project. However four different household profiles were defined with different priorities and thus different weighting factors. This enabled to stress the subjectivity and divergence of household priorities in reality.
- iv. Some members stated that extreme transportation cases should not be overlooked. Both the import of natural stone from Asia and the import of hard- and softwood were analysed in detail and included in the overall building assessment.
- v. It should be more clearly mentioned in the research reports how construction, maintenance and repair of infrastructure for transport and energy supply is incorporated in the assessment. This was elaborated in detail in the reports.

- vi. The follow-up committee advised to consult a very recent survey executed on quality of social housing in the Walloon region. This was included in the literature study.
- vii. The quality of the size of dwelling units (in relation to family size) should be described more clearly in the reports. This is included by changing the functional unit from 1 m² floor area to 1 inhabitant for the comparison of the dwellings.
- viii. It should be stressed more in the reports that the developed tool is only to be used by the partners and not by the general public. This was clearly stated in the internal research reports and the publically available final report of the first phase.
- ix. BELSPO requested to further elaborate on the current policy and initiatives concerning sustainable building. In follow-up of this request, an additional note on Belgian policy was prepared (July 2008).
- x. Indoor Air Quality (IAQ) could not be included in the assessment although it would be interesting to combine this with the LCA. Current research focussing on IAQ is under full development and therefore not ready for integration within this research.
- xi. The request of the follow-up committee to consider rebound-effects on average indoor temperature is taken into account. This means that the indoor temperature of 18°C (as assumed by EPB) is not fixed but adjusted to the insulation level. For poorly insulated houses the indoor air temperature is on average lower, while for very well insulated houses (passive) the average indoor air temperature is higher. The rebound effect is incorporated based on the research results of Hens et al (2010).
- xii. The proposal for analysing of a number of specific ("bio-ecologic") building materials could not be answered within this research. A selection of materials (very extensive) is made and analysed. However, the methodology can be used to compare specific building materials in future projects.
- xiii. The request to include conclusions regarding specific emissions, e.g. CO₂-equivalents, was addressed by incorporating these more detailed results both for the analysis at the element and building level. However, the focus of the research remained the assessment of a single aggregated score.

- xiv. The interest in detailed studies on water use at the dwelling level compared to alternatives at the higher levels (neighbourhood, city) was not added to the analysis, because it did not belong to the research aim of the SuFiQuaD project. However, the flexibility of the tool allows adding such studies in future when desired.
- xv. The request to consider a building life span of 30, 60 and 120 years instead of 60, 90 and 120 years was accepted.
- xvi. The follow-up committee was convinced that the developed assessment tool should be used for the selection of subsidies by the government in future.
- xvii. Several members of the follow-up committee were convinced that organisations might be interested in the tool. The tool however is not developed for use by third persons. If there is interest in the use of the tool by others, this is a possible further development.