

Pulling down or ecological renovation – the ecological quick check for buildings

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Abridged Version

The most popular Quick Checks for the renovation of buildings are the IP – construction diagnosis (Switzerland 1992) and the further development to the computer programme epiqr (www.epiqr.de). To decide to pull a building down or to renovate it by using quantitative ecological criteria seems to be very easy.

The eco index for a new building or renovating the old building has to be calculated and these two indexes are compared. The project with the better eco index has to be realised. But when putting this into practice one has to solve some problems. Which of the numerous indexes are to be taken into consideration and what is the decisive criterion of these indexes ?

In this article the OI3 method is suggested to be used in the decision process and this process is shown in an example with a building. The OI3 index is calculated from the greenhouse category, the acidification category and the primary energy. This method is also used for assessing the ecological quality of a building before providing financial aid by the government of the provinces of Vorarlberg and Salzburg. The OI3 method could also be integrated in the quick check renovation tool epiqr and could be used for an ecological optimising of a renovation.

It should be said, however, that an ecological optimising using quantitative indexes can only cover a part of all the impacts on the environment. An overall assessment of alternative actions would have to consider all impacts which at the moment can only be considered in a qualitative or semi quantitative way. (for example: impacts on health, ecotoxic aspects). These factors have to be considered in a detailed analysis.