

## Reaction of the EIPRO project team on comments by SP

**1. Extract of comments:** [*...In the EIPRO-report, April -05 we can not find any data or discussion about the environmental impact of building materials. Last year we issued the report Environmental evaluation of exterior building materials in an European perspective - case history studies, laboratory investigations and regulations (In Swedish), SP-report 2004:20, (116 p.) ISBN 91-7848-933-8. At the moment we are preparing an English edition. Please find the Abstract below. Our question: Is there evidence that the importance of certain products has been significantly overestimated or underestimated with respect to the size of their environmental impacts? Answer: Generally the environmental impact from modern and durable building materials seems to low during their working life.*]

**Abstract:** An international review has been performed focused on the release of environmentally relevant substances to the ambient outdoor environment from building materials during their working life. The number of technically well-documented case history studies covering leaching of chemical substances from building and construction seems to be rare. In contrast, there are several laboratory investigations where the potential for leaching of substances is estimated. However, such investigations are more seldom performed under experimental conditions corresponding to actual release scenarios. Generally, the lack of applied scenarios makes the environmental impact of building products difficult to interpret. The case studies and laboratory investigations are reviewed in main chapters covering metals, cementitious materials and polymer materials, but also in substance specific chapters focusing on polycyclic aromatic compounds and functional chemicals such as flame retardants and biocides. The potential for leaching or emission of dangerous and regulated substances from building products to the ambient environment is considered in the EC construction products directive, CPD [1989/106/EEG]. The report therefore gives an introduction to the essential requirements regarding hygiene, health and environment as outlined in CPD with focus on the prerequisites for CE-marking of building products based on harmonised and horizontal European standards. The introduction also includes an overview of the EC legislation with focus on risk assessment of substances with potential for leaching from building materials. Some notified national regulations for building materials are reviewed with focus on experience from Germany and especially the Netherlands. Based on current EC- regulations and existing qualified European voluntarily schemes for the environmental assessment of building materials, a condensed risk oriented checklist for the procurement and use of building materials is presented. The report contains 190 literature references and several references to current EC-directives and European standards related to building materials and environment. Key words: chemical substances, release, leaching, exterior building materials, construction products directive (cpd)

**Reaction:** The environmental data on building materials are highly aggregate, not specifying specific building materials, with a few small exceptions. Mostly, the materials used are intermediate product flows for the construction of dwellings (3 types distinguished) and for their maintenance. In this way, the overall environmental impacts of housing construction are covered. In due time, we hope to deliver a contribution analysis focussing on specific sectors. The sectoral level involved in CEDA EU25 is still quite coarse however, hardly giving data on variants of products, as your publication does. Moreover, our data pertain to the production activities only; no emissions in the use stage of building materials have been included. Specification of emissions in the use stage has been restricted to combustion related activities and pesticide use. Adding data as you have collected might be a useful addition, but cannot be done in the nearly finished EIPRO project.