

Workshop (Module 3)

“Green Architecture & Building Materials”

Place: AGOhub, Hanoi

Time: 25 May 2018

Overall concept:

In the framework of the MAREX project, Module 3 analysed mineral building material flows between the metropolitan area Hanoi as material consumer and the supply oriented hinterland province Hoa Binh based on methods of material flow analysis (MFA). Since the demand for construction materials is primarily induced by buildings, an in-depth analysis of local building types and construction methods has been carried out. In order to get an idea about potentials on alternative building materials and thus about potential future building material demand scenarios, a workshop on “Green Architecture & Building Materials” was organized in AGOhub, Hanoi.

The objective was to introduce a concept that suggests a comprehensive understanding of “true” green architecture considering urban-rural linkages induced by building material flows. Building materials account for around half of all materials extracted from all biological ecosystems for human activities, while at least 40% of what society deems to be waste comes from construction and demolition activities. Within a regional approach, the demand of building materials will be linked with corresponding supply of materials taken from the hinterland. Material flow calculations of building activities are combined with approaches assessing land consumption due material mining and harvesting activities. This approach shall contribute to understand the impact of building materials not just within the building itself, but rather to show the impact of extracting materials from the hinterland area. It will provide new theme for architects and planners to consider ways to build the city in a resource-efficient manner.

In addition to that, Mr. Tran Thanh Vu, a Vietnamese architect and building performance specialist, took up this thread and introduced an approach to analyse resource related aspects in the Vietnamese building stock based on building typologies. He focused on energy aspects but also highlighted existing links to construction methods and therewith to material aspects and reflected existing interdependencies between urban patterns and the scope of options to shape building forms and construction methods.

The topics met great interest among the numerous architects and urban planners who attended the workshop. In the discussion it became clear that it is quite conceivable to establish alternative material-saving construction methods also in urban space, although such approaches have so far only existed in niches. It would be desirable and also very exciting for innovative architects and urban planners to establish corresponding approaches more consistently in the urban context. The presented approaches could help to follow this line more systematic and to assess resulting sustainability effects in the urban-regional context.

Participants: ≈ 50 architects and urban planners

Photo gallery



Source: AGOhub (<https://www.facebook.com/agohub/photos>)