In Bulgaria, a very high proportion of the housing stock consists of apartments in multistory buildings. The very high proportion of owner-occupied housing prevents the urgently needed thermal renovation of buildings, as it is often difficult for the numerous parties to reach an agreement. The standard solution of external insulation is therefore only very difficult to achieve. A suitable alternative is internal insulation. It does not depend on the co-owners’ willingness to reach a consensus and can be installed in individual apartments.

The aim of the project is to evaluate the economically viable, decentralized production of an innovative, sustainable insulating material for thermal renovations from regionally available renewable raw materials. So-called cattails (Latin name Typha) have the characteristics necessary for use as insulation material. The project aims to draw research-based conclusions on whether Bulgaria can meet the natural space requirements for the Typha plant to a sufficient extent. In addition, the project was to evaluate the product „Typhaboard“, developed by German company typha technik, in terms of its suitability for internal insulation measures in apartment blocks in Bulgaria. The steam permeable boards are currently undergoing a long-term test as an insulation material.
The Fraunhofer Center Leipzig (MOEZ) analyzes the project-relevant socio-economic framework conditions at the regional (“oblast”) level. It is charged with drawing key conclusions, and with finding answers to the unresolved questions of whether a decentralized production in certain regions would be economically viable, and whether the construction material would be accepted locally. The experts from the Leipzig Fraunhofer Center are taking the lead when it comes to the identification and target group specific approach of potential buyers for Typha who would subsequently use the plant as a feedstock for the production of construction materials. They are analyzing the user acceptance levels for Typhaboard.