

Climate Change

Research roadmap for climate change mitigation and climate adaptation in German Vietnamese cooperation





Which bottlenecks for effective climate protection actions can be addressed by cooperative research between Germany and Vietnam? Which research questions will be relevant in 2030, 2040 and 2050 for construction, urban development, energy and climate adaptation in light of the Paris Agreement commitments in Vietnam and in Germany?



How could a research-to-implementationroadmap be drafted to guide effective research towards climate-change mitigation and climate adaptation in Vietnam and in Germany? Q4

How does bilateral cooperation contribute to Vietnam's and Germany's respective science and innovation strategies?



Which bottlenecks for effective climate protection actions can be addressed by cooperative research between Germany and Vietnam?

- →data availability
- \rightarrow missing trust in advanced solutions
- \rightarrow limited funding for science







Which research questions will be relevant in 2030, 2040 and 2050 for construction, urban development, energy and climate adaptation in light of the Paris Agreement commitments in Vietnam and in Germany?

- →integrated planning / transport / new materials / more ressource-efficient
- \rightarrow business models
- →research on data utilisation and pathways / tracking of GHG goals





Q3

How could a research-to-implementationroadmap be drafted to guide effective research towards climate-change mitigation and climate adaptation in Vietnam and in Germany?

- →coordination between ministries and other stakeholders
- \rightarrow integration of interest groups
- \rightarrow multi stakeholder perspective
- \rightarrow long-term phased projects



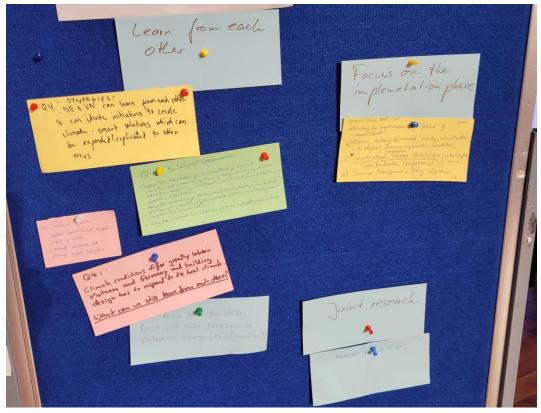




How does bilateral cooperation contribute to Vietnam's and Germany's respective science and innovation strategies?

- \rightarrow more joint research
- \rightarrow facilitate learning from each other
- \rightarrow focus on implementation

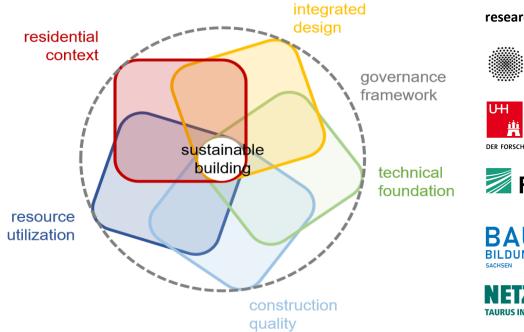




Climate-Adapted Material Research for the Socio-Economic Context of Vietnam (CAMaRSEC) - CLIENT II Enabling Research and Development for Sustainable Buildings in the socio-economic context of Vietnam



1.7.2019 - 31.8.2023



research consortium:













Hanoi University of Civil Engineering Hanoi, Vietnam



Ton Duc Thang University HCMC, Vietnam

Vietnamese Institut for Building Materials Hanoi, Vietnam



VIBM

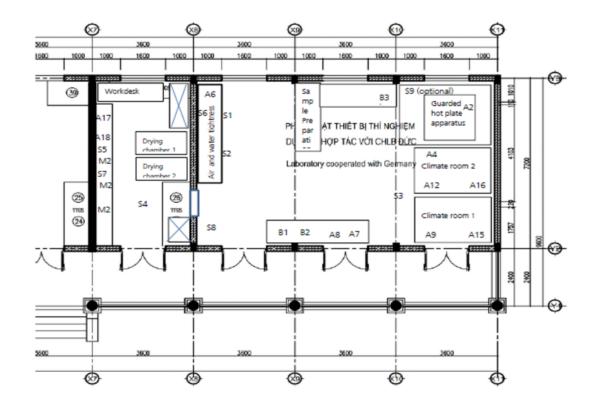
College of Urban Works and Construction Hanoi, Vietnam

Climate-Adapted Material Research for the Socio-Economic Context of Vietnam (CAMaRSEC) - CLIENT II Enabling Research and Development for Sustainable Buildings in the socio-economic context of Vietnam

- Laboratory was planned and test equipment was defined
- Testing at different materials at VIBM lab and at Fraunhofer IBP to compare results
- Feasibility study for building physics test facilities infrastructure in Vietnam







Climate-Adapted Material Research for the Socio-Economic Context of Vietnam (CAMaRSEC) - CLIENT II Enabling Research and Development for Sustainable Buildings in the socio-economic context of Vietnam

- Development of an outdoor test concept for wall testing at VIBM
- Definition of wall systems together with VIBM & WEBER
- Sensor and data acquisitions system developed as plug and play version was calibrated and sent to VIBM
- Test building has been setup by VIBM and measurements are running
- Comparison of different wall constructions allow valuable insights in real life performance
- Results prove that fired bricks can be successfully replaced by selected materials.

