





#### **About Us**

AT-Verband is an association that stands for an advanced, socially and environmentally-sound technology practice. AT-Verband has been based in Germany since 1988 and its members are independent consultants, researchers, trainers, institutes, and consultancy companies.

**emplement!** is a joint R&D project within the Sustainable Development of Urban Regions program, sponsored by BMBF and facilitated by DLR Project Management Agency. The project is coordinated by AT-Verband and implemented by the following partners:



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# The Challenges of Rapid Urbanization



The Goal: Empowerment for Collaborative Thinking & Concrete Action

By 2050, the world's population will have grown to about 10 billion people, with around 70 percent of them living in cities. This poses enormous challenges for infrastructure systems. Whether it is water or energy supply, waste or wastewater disposal, housing or food supply, time is of the essence to develop and implement sustainable structures, procedures, and solutions. An important prerequisite for this is to treat a given city and its surroundings as a cross-functional socio-economic and environmental unit, and to put the learnings gleaned from this integrated perspective into practice.

The emplement! team develops transferable methods, programmes, and concepts to foster the relevant players in a given city, and in the region, to support them in turning overarching strategies and visions into efficient and sustainable measures.

The development of the tools and methods for empowering the actors takes place on three levels – system, technology, and implementation. The team then selects suitable technologies to aid in this development. When it comes to the third level – the implementation itself – emplement! identifies challenges and obstacles, and works on implementation procedures according to their research.





### Contribution to the development of sensitive/ecologically-compatible tourism

German-Vietnamese summer school program aimed at building upon ideas for a "Green river valley" tourism and appreciation concept



# Enhanced measures for resource-efficient agriculture

Improvement measures and training units for farmers to aid in the sustainable utilisation of resources, fertilisers, and pesticides to set the basis for "safe food" production



## Development of action plans for industrial parks to improve sustainability

Implementation of a German management data collection tool analysing waste generation and safe disposal practices



## Analyses of resource consumption and reduction options of buildings

Analysing buildings (offices, hotels) with respect to consumption (energy, water) and generation patterns (waste, wastewater) and the related potential for improvement

Photo credit: Marcus Mangeot; Title photo credit: Felix Vollmann



One area of focus for the emplement! project is the Vietnamese city of Da Nang, and the adjacent region, Quang Nam Province. Adapted to the needs of the area, the focus of the activities relates to the four fields in which we work – tourism, agriculture and forestry, industry, and buildings/existing environment.

In this current definition phase, the emplement! team and participating actors will define showcases which can be implemented as prototype projects within our four fields of action for the subsequent detailed scientific analyses. For proper design, the emplement! team is applying tools like questionnaires, obstacle analysis, summer schools and practical trainings.