



The Challenge

China's economic boom has spurred enormous capital investment in construction that accounts for **1/3** of the country's energy consumption. The challenges:

- Low-energy efficiency in buildings;
- Poor quality of construction materials;
- Poor installation techniques;
- The mindset that good quality is not worth paying for.

The Path to Improvements

The objective of the project is the incorporation of energy efficiency measures in the design and construction of buildings, through a practical training program for Chinese construction sector SMEs and representatives of key related government agencies. The activities:

- Providing training courses to Chinese construction SMEs;
- Promoting European building standards and best practices
- Contributing to the development of an "enabling policy environment", i.e. to create a setting that reinforces and/or stimulates enterprises to change their behaviour.

In a Nutshell

The SWITCH-Asia "Train the Trainers" project aims to promote sustainable production in the Chinese construction industry by sharing international experiences in energy efficiency, building material standards and installation techniques in order to curb unnecessary growth in energy demand, concurrent increases in GHG and other generation-related emissions. The Project covers Shanghai and four neighbouring provinces that constitute one of the country's most vibrant economic zones and is looked at as a show-case of state-of-the-art development and modernization in the country. By providing Chinese construction SMEs with training in current European best practices, the project is linking Chinese and European efforts to improve energy efficiency and reduce green house gas emissions.

Turning the 'train the trainers' concept into practice, it sets in place a multiplier effect that allows for ongoing know-how dissemination and local ownership. This paves the way for a long-term self-sustainable approach to reduce the severe environmental impact of the local construction industry, which accounts for half of the world's yearly new builds.

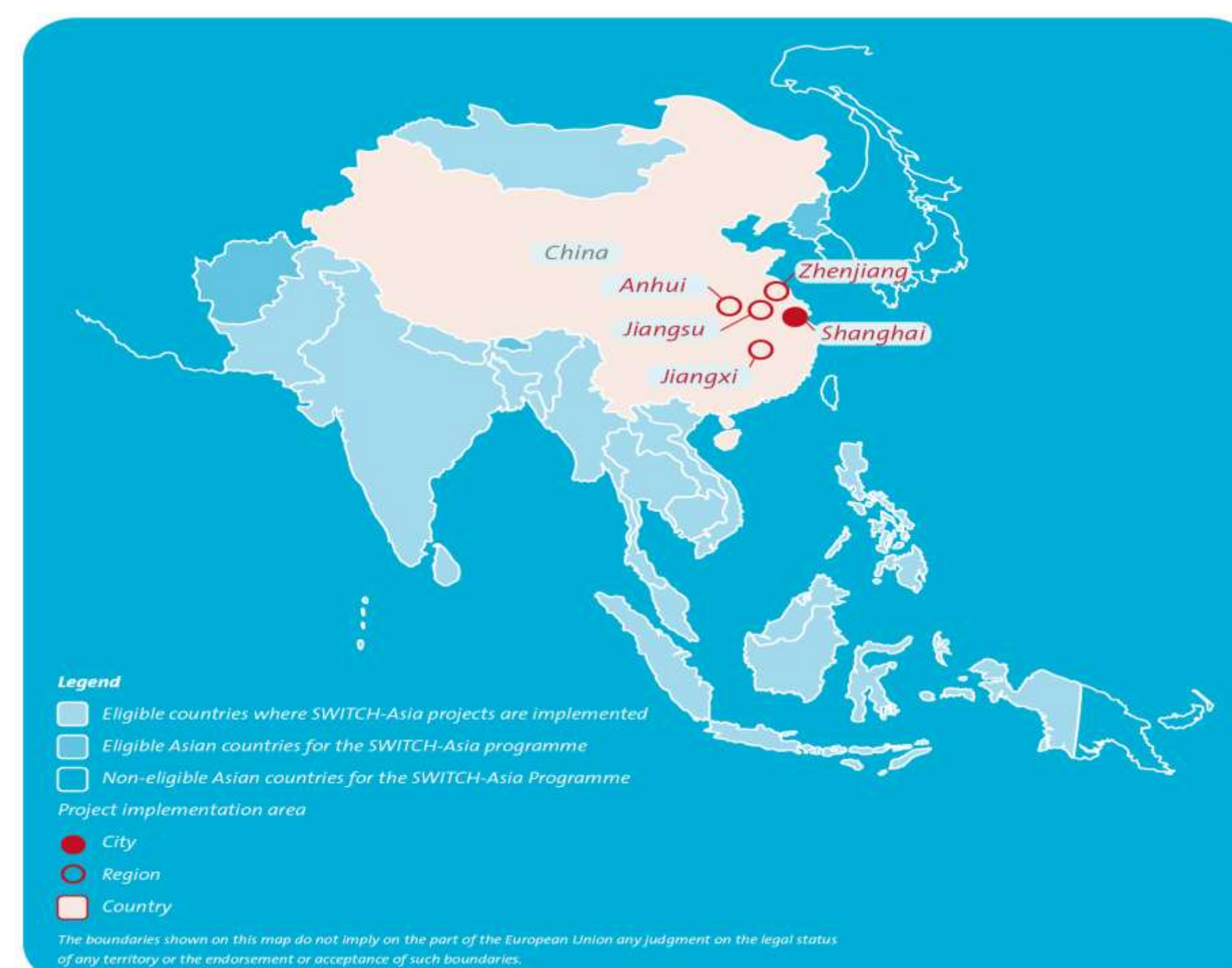


The Project and its Impact

The project will achieve its results by means of a training program to be conducted by project partner Tongji University in Shanghai. The training focuses on ETICS (External Thermal Insulation Composite Systems) and other energy saving techniques and includes both research-based classroom and hands-on practical application work. The project will have significant, positive impact on Chinese domestic energy efficiency through education and sharing of project results with a broad spectrum of stakeholders groups, including policy makers at both local and national level.



Throughout eastern China, at least **1,100 SMEs** are planned to be trained within four years.



The Outreach Strategy

Construction of quality, high efficiency buildings involves not only the SMEs that build them but also designers, architects, real estate developers, construction material supply companies as well as inspection authorities, technical institutes, universities and ultimately the government. Developers and end-users (i.e. occupants) all benefit from improved quality, a more comfortable and healthier domestic environment, lower operating costs and longer durability.

The project addresses all groups mentioned above on a management level to assure that the managers bring the knowledge back to their own setting and replicate the training there.

