



The Challenge

- Increasing energy consumption along the fast growing Tourism economy
- Frequent power shortfalls
- Operation of generators based on fossil fuel - inefficient and expensive way to meet the given energy demands
- Hotel and resort buildings with low energy standards
- Lack of guidelines and legal regulations for buildings and facilities for SMEs

The Path to Improvements

- Reduce carbon footprint of the tourism industry by increasing energy efficiency and changing guest behaviour
- Replace inefficient energy supply devices with renewable energy-based ones with higher efficiency
- Redesign an energy-autonomous showcase cottage
- Build capacity of SME owners, managers, and local engineers and consultants for greener solutions
- Develop and implement policy and guideline
- Stimulate local economy by producing and using renewable materials and green technologies for buildings & appliances

In a Nutshell

The SWITCH-Asia “Zero Carbon Resorts” project seeks to enable tourism SMEs, such as hotels and resorts, to provide their energy services in an energy efficient, cost effective, and environmentally sound way. By providing the SMEs in Palawan and other parts of the Philippines with the access to energy-saving measures and new green technologies, the dependence on fossil fuels will be lessened.

The project applies the 3R strategy: Reduce-Replace-Redesign. The first step is to reduce the energy consumption in hotels and resorts, the second step is to replace inefficient fossil-based devices with better, greener technologies. In the Redesign stage, a showcase “Zero Carbon Cottage” will be built in Palawan, which will operate using solar- and biomass-based energy generation systems.

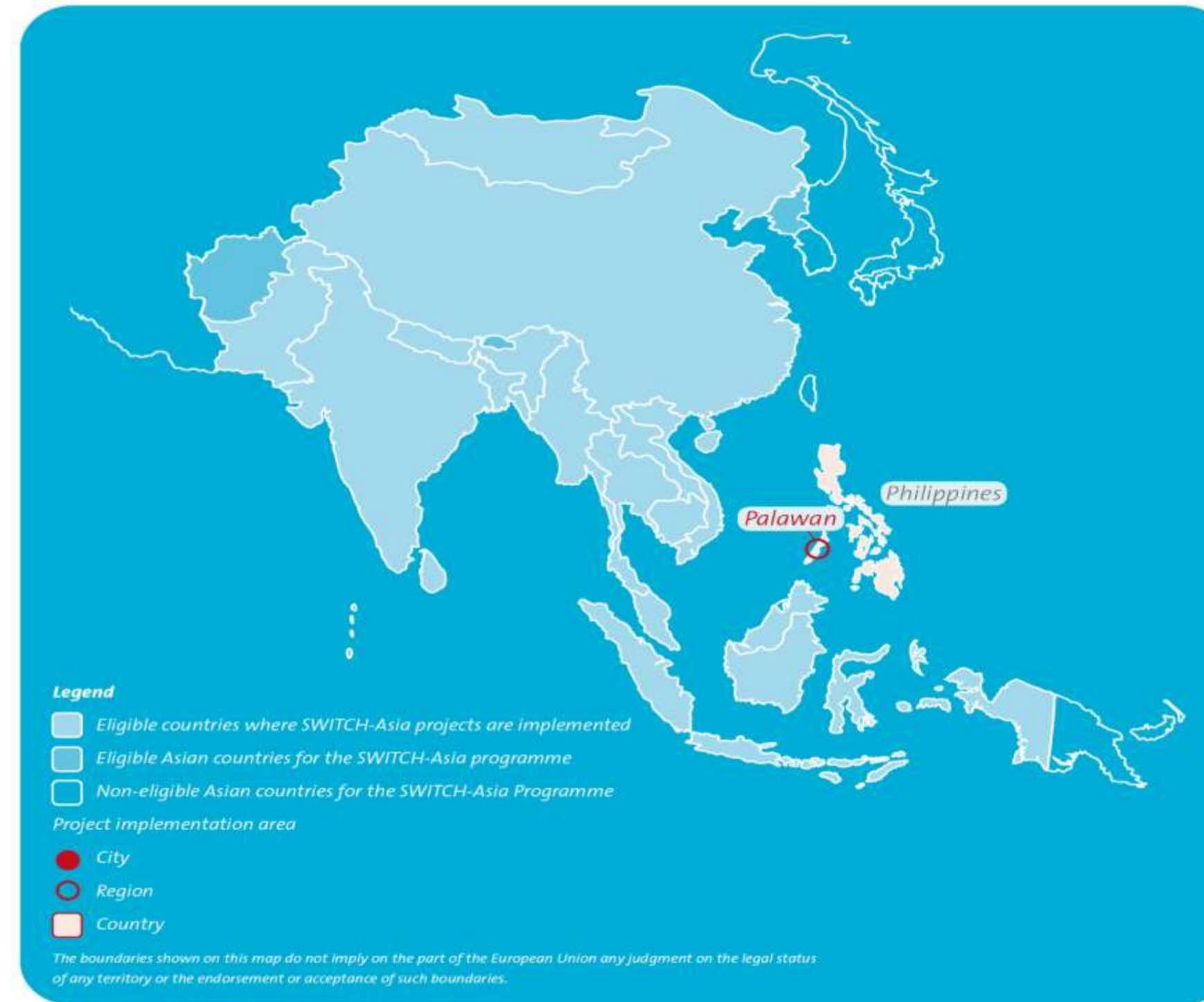
Engineers, building and facility managers, environmental consultants, as well as hotel/resort staff members will get chances to increase their capacities and knowledge through a series of trainings. In parallel, local production of renewable materials and green technologies will be promoted.



The Project and its Impact

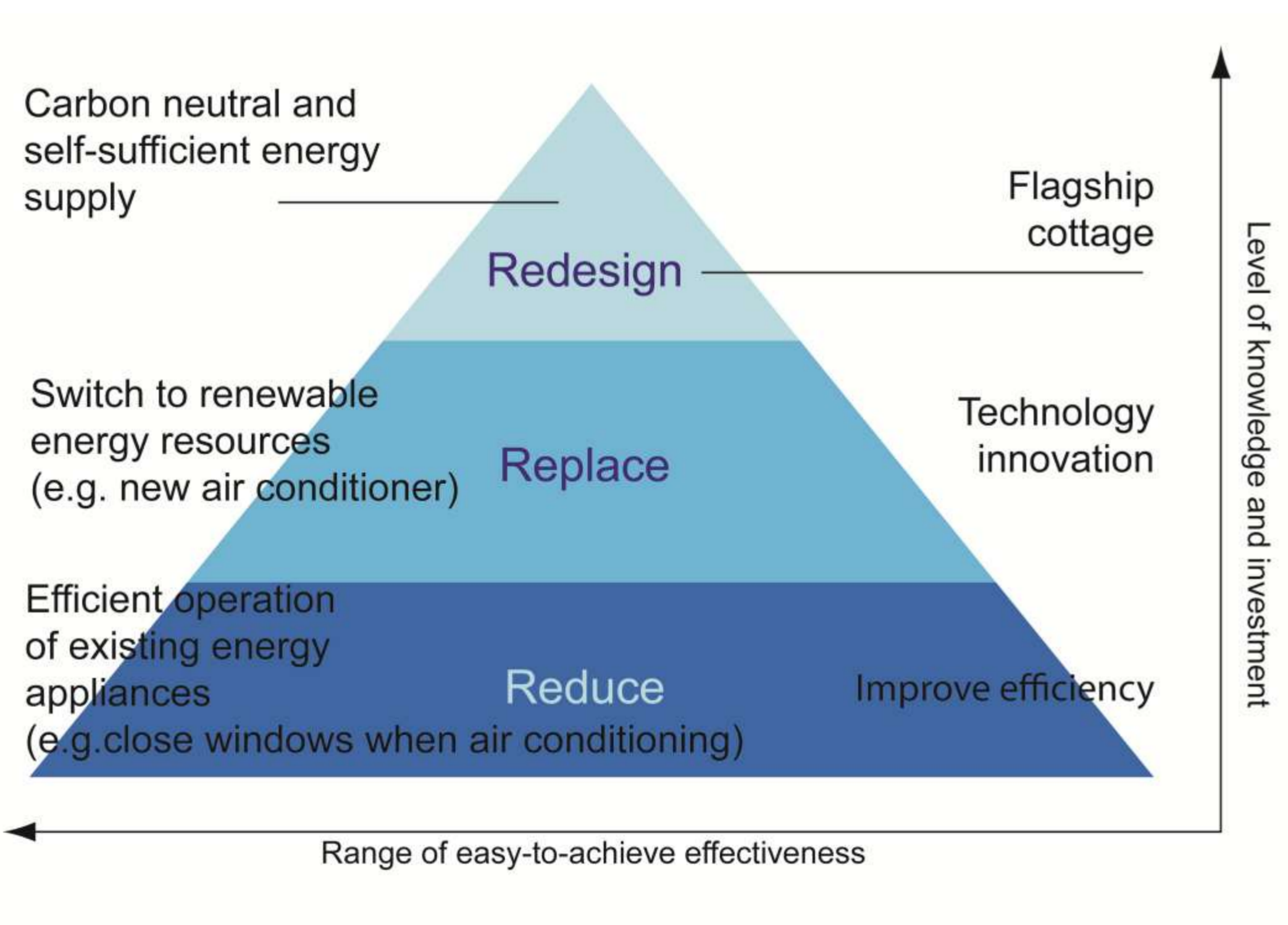
The project adopts a practical and step-wise approach. First, baseline analysis of tourism SMEs diagnoses problems in their energy management and suggests solutions to maintain the peak load demand and to increase efficiency of existing devices, directly in the companies. In parallel, campaigns for environmentally conscious behaviour of the guests will address the sustainable consumption side.

As the second step, greener and more efficient alternative technologies will replace the outdated and fossil-based devices by using the savings from the previous improvement. At last, an energy autonomous resort will be designed and constructed as a showcase for multiplication. The project demonstrates that the tourism industry can significantly reduce its carbon emission and be independent from fossil fuel. Use of locally available renewable materials and energy sources will stimulate the local economy, and the Strategic Environmental Plan for Palawan will be updated and implemented.



The Outreach Strategy

The actions will be first implemented in Palawan with the selected front runner SMEs. Their success stories will be disseminated to other regions through handbooks and technical videos showing the energy conservation measures and their effects. 4-time conferences will take place in different locations over the Philippines. The training programmes target not only engineers, consultants, and architects from Palawan but also those from other regions in order to spread knowledge and know-how. The online platform functions as an information centre and as a tool for the multiplication of solutions.



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