

IMPACT SHEET: ZCR - Zero Carbon Resorts towards Sustainable Development of Tourism Sector in the Philippines and Thailand

Scaling up zero carbon initiatives and innovative technologies to reduce greenhouse gas emissions in the Philippines and Thailand



The ZCR project supported 870 SMEs from the tourism sector in the Philippines and 311 SMEs in Thailand to contribute to sustainable development

CHALLENGE

Tourism in the Philippines and in Thailand is receiving increasing attention as an excellent sustainable development option. Nevertheless, with the vulnerability of developing countries to climate change, one cannot neglect the negative impact that the tourism industry has on the environment. The tourism sector has a large potential to foster inclusive development, but only if operations run sustainably – preserving the environment, boosting the local economy and generating income along the whole value chain.

PROJECT BACKGROUND

To respond to the increasing environmental challenges brought by the tourism industry and support Thailand and Philippines' shift to SCP, the European Union (EU) funded the collaborative project, under the SWITCH-Asia Grants Programme, titled "Zero Carbon Reduction (ZCR)". The project was implemented by GrAT, EMCA, CIEMAT and ASSIST.

Conducted from 2014-2018 with the tourism sector in the Philippines and in Thailand, the focus of ZCR was on reduction of resource consumption and CO₂ emissions by switching to renewable energy.

PROJECT OBJECTIVES

"Zero Carbon Resorts 2.0" contributed to the sustainable development of the tourism sector and its value chain in the Philippines and in Thailand, with a focus on reduction of resource consumption and CO₂ emissions. It targeted a critical mass of SMEs, demonstrating the value of green tourism by increasing resource efficiency and using renewable resources. Specific project objectives included:

- Enabling SMEs in the tourism industry in the Philippines to become a SCP model for the tourism sector through certified Zero Carbon practices; as well as expose Thailand to efficient innovative technologies.
- Providing incentives and access to finance in both countries.
- Establishing a new generation of ZCR members in Thailand and in at least 5 additional locations in the Philippines.
- Developing a Philippine Green Hotel certification scheme based on the Thai Green Leaf standard and the ZCR principles.
- Empowering SMEs in the tourism sector by using a proven methodology to continuously improve energy efficiency and to become a model for replication in countries with similar climate conditions.

TARGET GROUPS

- **900 SMEs in the Philippines and Thailand**, including resorts, accommodations and related tourism establishments (restaurants, dive shops, among others).
- **Trainers, consultants and experts** from private sector consulting firms, academia, government bodies, industry associations and business membership organisations .
- **Business associations**: local resort and hotel associations, tourism agencies and tour operators, green suppliers network, construction companies and developers, local producers, water providers.
- **Public institutions**: Central and local government and Local Municipalities, LGUs and policy makers whose support is key to providing an enabling policy foundation.
- **Financial institutions (FIs) and national funding agencies** needed to support access to finance opportunities.

PROJECT ACTIVITIES

Developing a Green Certification Scheme

The project developed a Philippine Green Hotel certification scheme called "ANAHAW – Philippine Sustainable Tourism Certification" based on the proven technical approach of Zero Carbon Resort (ZCR) principles and the Thai Green Leaf standard. In total, 27 establishments were awarded ANAHAW certification during the final conference in the Philippines. By establishing appropriate tools for evaluating, determining and acknowledging green accommodation all over the country, the project encouraged the procurement of eco-friendly products and technologies.

Adopting the ZCR Concept in Thailand

A series of training programmes were conducted with Thai hotels and resorts, supporting a customised replication of success stories that had been achieved in the Philippines in the previous project phase. ZCR is being used as a proven methodology for SCP implementation in the tourism sector. Responsible consumption behaviour practices and low-cost technical measures to address energy consumption have been shared during events, conferences and included in handbooks, and visual materials.

Supporting SMEs to Obtain Access to Green Suppliers, Service Providers and Finance

The project increased partnerships between SMEs and organisations with SCP "pull" potential through the in-depth involvement of financial institutions (FIs). An overview of funding opportunities and concrete training sessions (loan

counselling workshops) offered by banks and FIs associated to the project increased the capacity of SMEs for green financing.

Linking National Policy and Local Actions

The project identified existing bottlenecks and opportunities to improve policy dialogue among policymakers in central and local government agencies, as well as between policymakers in the Philippines and in Thailand. In addition, dialogues between policymakers and stakeholders were facilitated through “Policy fora” at the local government unit, as well as at the national level. In both targeted countries, policy fora supported knowledge sharing and the creation of an enabling legal and regulatory environment for tourism SMEs.



PROJECT ACHIEVEMENTS

Philippines

- The number of ZCR beneficiaries increased to more than 1000 hotels and resorts in the Philippines (initially there were 870 members). The ZCR Learning Centre attracted 1,400 visitors since its opening to the public.
- Reduced carbon emission of 340 companies, amounting to a total saved emission of 23.7 kt of CO₂. Energy, water and other resources from the implementation of the ZCR members accumulated savings from 1% up to 70% using the indicator (kWh/guest-night).
- The ANAHAW – Philippine Sustainable Tourism Certification was successfully launched and recognised with 27 pioneer awardees (2018 – 2020).
- 15 ANAHAW Experts received professional training.
- Contributed to the integration and mainstreaming of ZCR principles into policies (integration in Palawan’s SEP clearance, creation of the policy white book and local green building code).
- Organised 5 technical seminars all over Palawan and reached 198 policy makers, LGU and technical staff.
- Reached 592,424 web visitors through the ZCR website.

Thailand

- 311 registered ZCR member hotels, resorts and restaurants joined the ZCR community.
- Capacities of 227 hotel engineers, housekeepers and chefs were strengthened on sustainable practices in the tourism industry through capacity building training programmes.
- Organised and conducted ZCR exchange visit in Thailand and impacted 26 tourism stakeholders in Lanta, Krabi and Bangkok.
- Strengthened the relationship with the central and local governing units and tourism associations in Thailand.
- Reduced carbon emission of 70 companies, amounting to a total saved emission of 8.20 ktCO₂.

LESSONS LEARNED

The growing tourism industry in the Philippines and in Thailand proportionately leads to higher demand for energy, water, and other resources, as well as larger generation of waste, and increased carbon emissions.

Unnecessary waste of important resources will continue unless appropriate interventions are conducted both in the everyday operation of the SMEs and at the national and local policy levels.

A multi-stakeholder engagement to promoting sustainability in the tourism sector has proven to be most effective, especially when proposing tangible solutions that can be replicated across countries, in remote areas and islands, and in emerging tourism destinations.



“

The ZCR Project was a catalyst for sustainable development and innovation through the tourism sector. There is no need to wait for a big, global change to suddenly happen; every individual action matters and will make a difference.

”



Dr. Robert Wimmer

Project Lead – ZCR for Sustainable Tourism,
Executive Director - GrAT

Long-term project sustainability

SMEs will be able to generate enough cost savings to further continue their efforts to improve resource efficiency. Relative savings range from 15% to 50%, depending on the baseline and the reached individual innovation level. This enables project beneficiaries to reinvest their savings and gain higher savings. In addition, strong involvement of green suppliers creates sharing costs through sponsorship of project events; and increased access to finance enables uptake of sustainable consumption and production practices.

Project contributions to Climate Change Mitigation and SDGs



The project directly contributes to the achievement of **SDG13**: Climate Action, by annually reducing a total of 31,934.93 tonnes of CO₂ in emissions in both the Philippines and in Thailand. It also directly contributes to **SDG12**: Responsible Consumption and Production, through various measures adopted to reduce energy and water consumption, use of appropriate technology with higher efficiency and renewable energy, recycling and upcycling of waste (such as solid waste and wastewater), among other SCP practices. In addition, through educational and awareness raising campaigns, stakeholders' behaviour was highly influenced to switch to more sustainable and responsible consumption and production patterns.

Impacts at a Glance

| | |
|--------------------------------|--|
| Economic Impact | <ul style="list-style-type: none"> • PHP 1,381,846.23/SME/year 22,160.22 EUR/SME/yr.) was saved by implementing SCP practices in SMEs. • Increased uptake of local produce through promotion of Locavore – consuming local food • Some hotels and resorts are growing their own vegetables and herbs in their backyard. • Green Suppliers from the Green Supplier’s Network provided technical training to hotel owners and engineers, as well as competitive prices, offers and services to ZCR. • Adoption of DIY technologies such as Solar water Heater, Biogas, improved cooking stoves, heat recovery from generator set. |
| Environmental Impact | <ul style="list-style-type: none"> • 746,516,040 and 722,428,960 litres resource reduction in Philippines and Thailand (69.87% and 52.50% reduction). • 596,412,832 and 223,065,774 litres waste water discharge reduction in Philippines and Thailand. • 0.58 and 0.26 tonnes reduction of solid waste in Philippines and Thailand (33.33% and 10% reduction). • 23,731,340 and 3,477,327 kg of CO₂ reduction in Philippines and Thailand. |
| Social Impact | <ul style="list-style-type: none"> • 330 students and professors benefitted from the seminars conducted in partner universities in the Philippines. • 497 out of 972 tourism stakeholders benefitted from the ZCR sharing sessions all over the Philippines. • 1,501 tourism stakeholders benefitted from the 4 organised conferences in Philippines and Thailand. • 4 out of 5 winners of the ASEAN Green Hotel Awards 2018 – 2020 for the Philippines are members of the ZCR. • 8 out of 11 winners of the local ASEAN Green Hotel Awards 2018 – 2020 are ZCR members. • 7 out of 11 winners of the local ASEAN MICE category 2018 – 2020 are ZCR members. • 1 ZCR Frontier Group member and ASEAN Green Hotel Award Hall of Fame from the Philippines (together with its local partners on their “Walk on the Wild Side” campaign) won the ASEAN Sustainable Tourism Award (ASTA) in 2018. • 2 out of 5 of the winners of the ASEAN Green Hotel Awards 2018 – 2020 for Thailand are members of the ZCR. • The project ensured gender equality throughout its activities and approaches. • Through academic partnerships, the project was able to disseminate technical know-how to students, professors, and academic officials on the basic process of energy audits and technological development (e.g. improved cooking stoves). |
| Climate Benefits | <ul style="list-style-type: none"> • 340 companies reduced electricity use in Philippines equal to 38,396,936.69 kWh (51.11% reduction), 26 companies reduced electricity use in Thailand equal to 6,691,956.08 kWh (28.58% reduction). • 340 companies reduced fuel use in Philippines equal to 2,185,299.05 L (53.06% reduction). • 26 companies reduced electricity use in Thailand equals to 1,232,293.88 L (41.11% reduction). • 379,073 and 1,117,313 kWh of renewable energy used in Philippines and Thailand. |
| Target Group Engagement | <ul style="list-style-type: none"> • 870 ZCR members participated in the project in the Philippines. • 311 ZCR members participated in the project in Thailand. • 365 outreach activities organised (e.g. business associations, media) |
| Policy Development | <ul style="list-style-type: none"> • 3 events / fora with policymakers (with 1 National) organised. • 5 technical seminars in Palawan, Philippines organised. • 2 Regulations defined based on recommendations from project: inclusion in the SEP Clearance System and Green Building Policy in Palawan, Philippines • Forum, Individual meetings, Technical trainings and workshops, development of a white book for policy makers (policy processes engaged). • Provincial and municipal resolutions have been passed urging tourism establishments in Palawan to adopt ZCR (policy recommendations put forward). • Contributed to the integration of ZCR principles in policies (integration in Palawan’s SEP clearance, creations of the policy white book and local green building code). |
| Europe-Asia cooperation | <ul style="list-style-type: none"> • 12 sharing sessions, 3 technical trainings (3R Reduce, Replace and Redesign), 4 conferences, 3 policy forum (1 national), 2 exchange visits organised. • EU Visits to ZCR Palawan (project updates and presentations and visit to ZCR Learning Centre). • 8 Memorandum of Understanding with Universities in the Philippines and Thailand established. • 1 Memorandum of Understanding with the national agency, Department of Tourism (DOT) established. |



FUNDING

EUR 2,286,283
EU Contribution: 80%



DURATION

May 2014 - August 2018



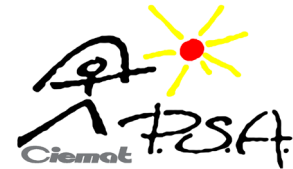
PARTNERS



Gruppe Angepasste Technologie
(GrAT)



ESCO Association of China Energy
Conservation Association, China (EMCA)



Centro de Investigaciones Energéticas,
Medioambientales y Tecnológicas
(CIEMAT)



Green Leaf Foundation

Healthy Public Policy Foundation (HPPF)



CONTACT

Project Manager

Dr. Robert Wimmer

Center for Appropriate Technology (GrAT)

Wiedner Hauptstr. 8-10, A-1040 Vienna, Austria

Telephone: +43-1-58801-49523

Email: rw@grat.at; zcr@grat.at

Website: <http://zerocarbonresorts.eu/>

This impact sheet is developed together with SWITCH-Asia SCP Facility

switchasia
SCP FACILITY