## The EU promotes energy savings and resource efficiency in the Philippines



# SMEs introduce cleaner and more efficient production practices under the EU-funded Switch Asia Programme

WE INSPIRE EACH OTHER.

## THE SWITCH-ASIA PROGRAMME

## switchasia





It supports small and medium enterprises and consumer organisations in their efforts to **promote sustainable consumption and production**.



Currently, **eight grant projects are being implemented in the Philippines** benefitting directly more than 1,000 SMEs.

## SWITCH-ASIA POLICY SUPPORT

## The Philippines is one of the five pilot countries in Asia receiving assistance under the programme to implement an ambitious clean production regulatory framework.

The Philippines is recognised for having adopted a comprehensive clean production regulatory framework. In a country with a booming economy, however, the Government is faced with the relatively new challenge of curbing existing environmentally harmful practices and moving towards cleaner modes of production and consumption. enforcing existing clean production laws remains a challenge.

The SWITCH-Asia Policy Support Project will support the Department of Energy develop an ambitious energy efficiency agenda. It will also strengthen collaboration between the public and private sector in the implementation of Green Public Procurement and Eco-labelling in selected government agencies. Finally, the Project will assist in the implementation of the Clean Air Act.

The Project runs until December 2016. It is implemented by a Steering Committee chaired by the Department of Environment and Natural Resources. The Department of Energy, the Department of Trade and Industry, the Climate Change Commission and the National Economic Development Authority are key partners of the project. The SWITCH-Asia Programme is implemented both through grants to business associations and other non-profit organisations as well as technical assistance to national governments. To date, eighty grant projects have been implemented in sixteen countries. Five pilot policy support components are on-going in partnership with the governments of Indonesia, Malaysia, the Philippines, Sri Lanka and Thailand. A Network Facility based in Wuppertal, Germany, connects all SWITCH-Asia partners during regional thematic events. The Facility also manages information produced within the programme and shares lessons learnt among partners. It produces reference documents and maintains an information platform for the public at *www.switch-asia.eu*.

Take time to read through this leaflet and find out what SWITCH-Asia Projects are doing to support clean production in the Philippines!

- Resorts in Palawan are receiving training on how to use abundant renewable energy sources and promote green tourism in the Philippines' last frontier!
- Small and Medium Enterprises in and around Manila are joining the ECOSWITCH revolution and discover the potential of resource efficiency!
- A network of environmental NGOs are advocating for a toxic-free future for children in the Philippines!
- Sugar factories re-think the way they use energy in their processes and team up with energy professionals to boost efficiency!
- Three lead Departments receive technical assistance to improve the existing clean production regulatory framework!

## EU CONTRIBUTION PHP 200 million

WHEN?

July 2012 – December 2016

## SOME EXPECTED RESULTS

- Philippines National Energy Efficiency Roadmap ... towards 10% energy savings by 2030
- DTI Green Procurement Plan ... to create a green procurement champion in government
- Philippines Air Quality Status Report 2008- 2013 ... to inform the public on air quality status in and outside the Metro

### CONTACT

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## **GREEN PHILIPPINES – "ISLANDS OF SUSTAINABILITY" (GPIOS)**

Energy savings recorded among beneficiaries since 2010 amount to 148 million KWh – about the annual production of a 20 MW power plant.

The project follows the "ECOSWITCH" approach which comprises of three steps:

*One:* a resource efficiency audit is conducted in the premises of the target company.

*Two:* a set of recommendations is shared with the management of the company.

*Three:* implementation of recommendations starts and monitoring is conducted jointly.

Companies who benefitted from the project were able to lower their production costs – usually through lower utility bills – while improving their environmental performance. Project experts distill mostly "zero investment" advice. About 75% of savings achieved by beneficiaries have come from small, zero cost improvements in their operations (such as good housekeeping measures or streamlining of processes). In cases where investment is needed, the average pay-back

> The benefits of joining Green Philippines mean a lot for a small business like mine. I am now considering acquiring clean generation equipment using a loan from Plantersbank. This will help a lot in the community I am working with because with electricity they can still be active during night time.

period under the project has been just over five months. Although the project targets primarily SMEs, some of its beneficiaries are large companies which have the potential to generate positive spillovers among suppliers. The project has also built partnerships with local government units who volunteered to share the project's recommendations with companies located in their jurisdiction.

500 local companies benefited from this project. Companies having successfully completed the full cycle of audit and implementation were awarded the ECOSWITCH Certificate during an annual ceremony held in Manila.

### WHERE? "CALABARZON" Region

WHEN? 11/2009 - 05/2014

#### GREEN PHILIPPINES IN NUMBERS (2010 – 2013)

Total electricity savings (kWh)	148,000,000
Electricity consumption reduction up to	44 %
Total fuel saving (Litres)	13,000,000
Total water savings (m3)	1 597 166
Water consumption reduction up to	31 %
Data covering 410 companies from January 2010 to May 2013	

#### CONTACT

Ms. RND. Alena Labodova Email: alena@greenphilippines.com.ph

Ms. Leah, RULA Paperbayong Bags

## **ZERO CARBON RESORTS**

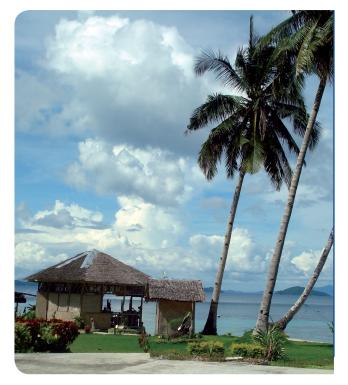
## Energy consumption is down up to 60% among beneficiary resorts.

With the tourism industry growing year on year, hotels in the Philippines are looking to reduce their costs as they welcome more visitors. The limited availability of power in off grid areas is a major constraint that pushes electricity prices – and carbon footprints – higher. The Zero Carbon Resorts offers energy management advisory services tailored to the needs of small hotels operating in areas where power availability is an issue.

The project adopted a dual approach by working with hotel managers while sensitising clients to the sound management of electricity during their stay. Solutions proposed to hotels ranged from harnessing solar power to conserving energy in the first place. Obsolete technologies for cooking or water heating were replaced with simple and more efficient ones. Air ventilation was given priority to reduce the use of airconditoners where possible. The project even launched a competition among local architects to develop a zero carbon flagship resort that would be energy neutral. The winning entry's proposed unit is currently under construction in Puerto Princesa for demonstration purposes.

Local engineers, technical consultants, architects and even students at Palawan State University were trained and stand ready to replicate energy saving practices in future tourism establishments.

Energy consumption among participating hotels and resorts has decreased by up to 60% as a result of project activities. The Project started replicating its approach in Thailand in 2014.



We have had a lot of improvements in our electricity and water consumption translating into cost saving. (...) We foresee there will be much bigger success in the coming years, once we adopt all of the recommendations of the ZCR project. Slowly but surely, we are moving towards the end goal of being a totally Zero Carbon Resort.

Mr. Rene Suarez , Manager of Microtel Inn & Suites



**ASEAN Green Hotel Awardees 2014-2016 from the Philippines; three of the awardees are from the Zero Carbon Resorts project.** Source: Ruben (Butch) F. Tan Jr., Daluyon Beach & Mountain Resort (Zero Carbon Resorts project)

## WHERE? Philippines + Thailand (starting 2014)

WHEN? November 2009 – April 2018

#### ZERO CARBON RESORTS IN NUMBERS

- Electricity and water costs up to 60% lower
- Fuel consumption down 50% in beneficiary resorts
- Four Zero Carbon Resorts beneficiary hotels bagged the prestigious ASEAN Green Hotel Award in 2014.

CONTACT

Dr. Robert Wimmer Email: ZCR@grat.at

## **SMART CEBU**

Green products "Made in the Philippines" increase their market share in Europe. Water savings up to 390,000 litres/year.

The SMART Cebu Project was implemented with the objective to develop and market greener furniture, jewellery and lifestyle products made in Cebu. The project supported three leading business associations in Cebu in their bid to capture the growing demand for sustainable products.

### WHERE? Cebu City

WHEN? February 2010 – July 2013

#### **SMART CEBU IN NUMBERS**

- 20-30% energy savings per SME
- Water saved per SME up to 390,000 litres/year
- CO2 emissions avoided per SME up to 7.9 tonnes/year
- 35 Cebu companies take part in European Trade Fairs generating new orders up to €150,000

#### CONTACT

Mr. Thomas Ritter, Email: Thomas.Ritter@sequa.de



Member SMEs received training services and underwent audits with qualified resource efficiency specialists with the support of the Department of Science and Technology. Marketing experts were also tapped to design innovative lines of products that would blend "green" and "trendy".

Finally, the project increased the visibility of Cebu manufacturers globally. Dozens of companies based in Cebu were invited to international fairs in Europe where green products "made in the Philippines" were presented to potential buyers. Sales to European clients increased and Cebu's furniture and lifestyle industries developed a distinctive "green label" that adds value to Cebu's exports on world markets.

## HIGH EFFICIENCY MOTORS (HEMS) IN THE PHILIPPINES

A gradual replacement of inefficient motors in energy intensive industries such as sugar milling could save the Philippines 1% of its annual electricity consumption.

The Department of Energy estimated that total electricity consumption of industry accounted for 27% of total electricity consumption in the Philippines in 2010 – of which 65 -70% can be attributed to motors. Anecdotal evidence indicates that the efficiency of most motors currently used by industry in the Philippines can be improved. The Project envisages to promote high efficiency motors and drive systems. Targeting a conservative 10% efficiency gains in motors the project has the potential to contribute to a reduction of about 600,000 tonnes of CO2 emitted per year.

The project will work with energy intensive industries – more specifically with sugar mills in the Philippines. It will use a dual approach that includes technical training of plant operators and access to financing through specific funding windows and ESCOs intermediaries. The Project will be implemented by the Institute of Integrated Electrical Engineers of the Philippines in close collaboration with the Sugar Milling Association of the Philippines, ESCOs and government.

## WHERE? Philippines

WHEN? December 2013 - December 2017

#### SOME EXPECTED RESULTS

- 20,000 high efficiency motors to be installed by the end of the Action
- Market share of high efficiency motors up 10% one year after the project
- 90% of ESCOs in the Philippines trained to implement energy performance contracts
- A 200 strong Alliance for High Efficiency Motors in the Philippines created

#### CONTAC

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## SWITCH-ASIA PROJECTS IN THE REGION

## LEAD PAINT ELIMINATION PROJECT

OBJECTIVES Reduce childhood lead poisoning by working towards the elimination of lead in decorative paints.
WHERE? Bangladesh, India, Indonesia, Nepal, Philippines, Sri Lanka and Thailand.
WHEN? December 2011 – June 2015
CONTACT Mr. Manny C. Calonzo,

Email: manny@ipen.org

## **ENERGY EFFICIENT AIR CONDITIONERS IN ASEAN**

 OBJECTIVES Increase the market share of higher efficiency ACs in the ASEAN region to reduced electricity consumption and greenhouse gas emissions while promoting regional market integration.
 WHERP: ASEAN
 WHEN? January 2013 – December 2016
 CONTACT Pierre Cazelles, International Copper Association,

Email: pierre.cazelles@copperalliance.asia

## HAND-WOVEN TEXTILES: FEMALE ENTREPRENEURSHIP IN INDONESIA AND THE PHILIPPINES

**OBJECTIVES** To contributes to economic prosperity and poverty reduction in Indonesia and the Philippines through the promotion of sustainable hand-woven eco-textile products.

WHERE? Indonesia and the Philippines

WHEN? February 2013 – February 2017

**CONTACT** Ms. Ruth P. Canlas, Non-Timber Forest Products Exchange Programme (NTFP-EP), Email: ruthpcanlas@yahoo.com

## ESTABLISHMENT OF THE ASEAN ENERGY MANAGER ACCREDITATION SCHEME (AEMAS)

**OBJECTIVES** To increase the energy efficiency and reduce greenhouse gas emissions of industries in ASEAN through the establishment of the ASEAN Energy Management Scheme (AEMAS). **WHERE?** ASEAN

NTIEKE: AJEAN

WHEN? February 2010 – January 2014

**CONTACT** Engr. Ernesto J. Casis, c/o Energy Efficiency Practitioners Association of the Philippines (ENPAP), Email: ernie\_casis@yahoo.com



"Small businesses are at the centre of SWITCH-Asia funded projects. The support they receive is used to boost resource efficiency. More efficient companies are more competitive and are likely to create more jobs. SWITCH-Asia is about green and inclusive growth."

H.E. Mr Guy Ledoux, EU Ambassador to the Philippines

## **MORE INFORMATION**

## The SWITCH-Asia Programme: www.switch-asia.eu European Commission Directorate General for Development and Cooperation: http://ec.europa.eu/europeaid/where/asia/regional-cooperation/environment/switch\_en.htm

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