

**Green Philippines Islands of Sustainability**



# ECOSWITCH

This project is funded by



**switchasia**  
PROGRAMME

The European Union's  
SWITCH-Asia Programme

# ECOSWITCH

## Towards Sustainability of the Philippine Businesses

A project implemented by



**GrAT**



**eccp**  
EUROPEAN CHAMBER OF COMMERCE  
OF THE PHILIPPINES

**PBE**

VSB, GrAT, AREC, ASSIST, PCCI, ECCP, PBE





## Project Background

**Project Title**

- **Creating Green Philippines Islands of Sustainability**

**CRIS Number**

- **C-223411**

**Domain**

- **Development - Asia**

**Keyword**

- **Climate Change**

**Geographical Zone**

- **Philippines**

**Project Authority**

- **VSB-Technical University Ostrava**

**Duration**

- **48 months( 11/2009 to 11/2013)**

# Acknowledgement



## Implementing Partners







## Project Background

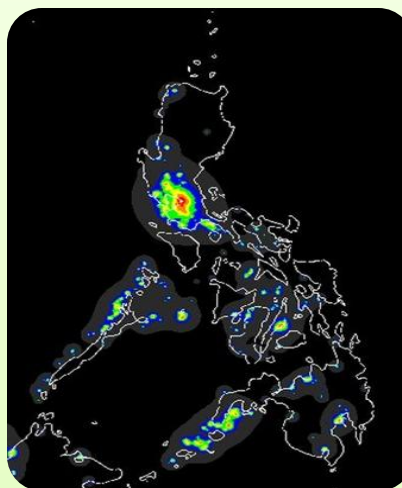
### OVERALL OBJECTIVE:

To contribute to an improved environmental and sustainable industrial development of Metro Manila and it's linked region **CALABARZON**.

Improved living conditions in these targeted regions.

### TARGET GROUPS:

SME's across all sectors within Metro Manila, CALABARZON and Subic & Clark region and their supply chain.



**Metro Manila is one of the most polluted cities in the world**

**GRANT: 1,908,776 Euro**



## PROJECT RESULTS

### ➤ PARTICIPATING COMPANIES

2009

Start  
up

2010

Phase  
1



### Some of the participating companies – Phase 1



ON Semiconductor®



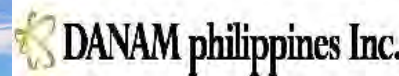
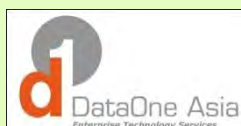




## ➤ PARTICIPATING COMPANIES

Some of the participating companies – Phase 2

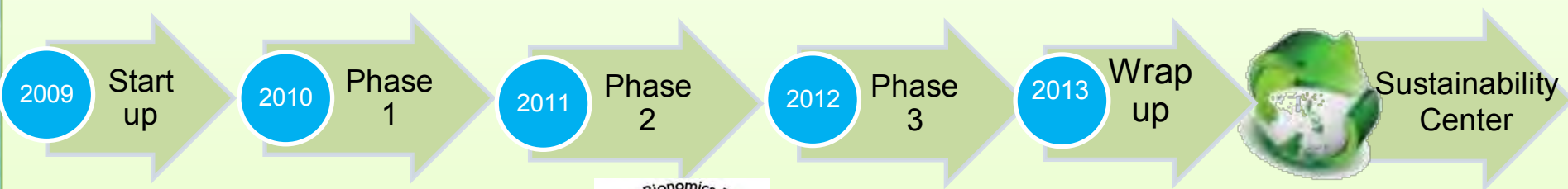
2009 Start up      2010 Phase 1      2011 Phase 2







## ➤ PARTICIPATING COMPANIES



### Some of the participating companies – Phase 3

**Barrington**  
Carpet & Flooring Design



LPS CONSTRUCTION  
GROUP, INC.  
ENGINEERS, BUILDERS & GENERAL  
CONTRACTOR









De La Salle University  
DASMARIÑAS



## PROJECT RESULTS 2010 - 2013

### ➤ ENVIRONMENTAL IMPACT by participating companies

	Savings	% Reduction*
 Electricity	66,089,132 kWh	-14%
 Fuel	270,505,822 kWh	-3%
 Hazardous waste	1,278,395 Kg	-81%
 Solid Waste	32,413,468 Kg	-43%
 Water	2,261,031,837 Liters	-32%
 Raw Materials	925,296 Kg	-33%

\* From baseline of the participating companies





## PROJECT RESULTS 2010 - 2013

### ➤ ENVIRONMENTAL IMPACT: ENERGY



**Total Energy Saving:**  
**336,594,954 kWh**

This is the power needed to light up  
**768,482 Street lamps**  
for one whole year  
12 hours each day

**This amount is equivalent to the average  
electricity consumption of NCR household  
residents for 27 days**



## ➤ ENVIRONMENTAL IMPACT: WATER

**Total Water Savings:**  
**2,261,032 cubic meter**

This amount of water can fill  
**904 Olympic sized pool**

This amount is sufficient for **approximately 2**  
**days water consumption of the whole NCR**  
**households**



Sources:

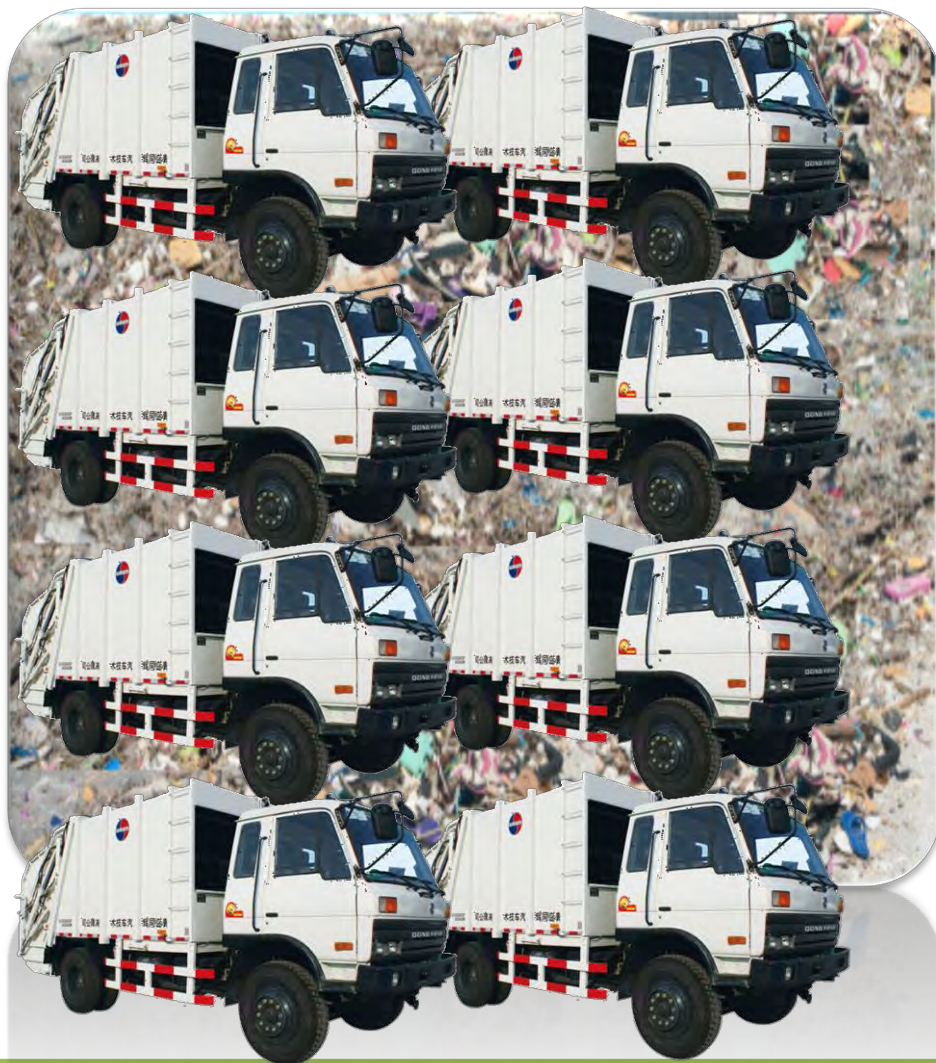
National Water Resources Board (NWRB); Local Water Utilities Administration (LWUA); Department of the Interior and Local Government (DILG), Water and Sanitation Program (WSP), World Bank. *Philippines Towns Water Utilities 2004 Data Book.*, p. 12; 36

National Statistics Office (2010) [www.census.gov.ph](http://www.census.gov.ph) Last accessed 26 Sept 2013





## ➤ ENVIRONMENTAL IMPACT: WASTE



**Total Waste Reduction  
(solid + haz waste):  
32,715,574 Kg**

**This amount of waste  
is equivalent to  
4,089 Garbage Trucks  
With 8 tons capacity**

## ➤ ENVIRONMENTAL IMPACT: CO<sub>2</sub> REDUCTION

Total Saved Energy  
**102,142,531 Kg CO<sub>2</sub>**

This is equivalent to filtered CO<sub>2</sub> of  
**8, 472 Mango Trees**  
one 5-year old mango tree  
(4-6 inches trunk in diameter) can filter and convert  
33 Kg CO<sub>2</sub> into oxygen per year



Reference: National Mango Board (2010).








[www.mango.org/media/100746/executive\\_summary\\_sustainability.pdf](http://www.mango.org/media/100746/executive_summary_sustainability.pdf) Last accessed 25 Sept 2013





## PROJECT RESULTS 2010 - 2013

### ► ECONOMICAL IMPACT

	Savings (Php)	Investment(Php)
 Electricity	619,628,940	294,549,680
 Fuel	150,088,906	10,420,080
 Hazardous waste	198,051,894	6,852,640
 Solid Waste	172,562,889	10,841,024
 Water	134,268,567	10,060,241
 Raw Materials	14,859,036	654,349
 Others	164,417,956	11,462,571
<b>Total:</b>	<b>€ 26,434,149</b>	

72% of savings  
came from  
**No Investment  
Options**

**Savings are over 10  
times higher than the  
actual project cost**

**Total ECOSWITCH  
Project Cost  
€ 2,385,970**

(80% funded by EU SWITCH Asia)



## Social Impact

- Better working conditions
- More responsible and motivated employees
- Better cooperation with authorities
- Enhanced image
- Better legal compliance
- People benefits spread all over the news!

### September 2011 | EcoSwitch Award for Luen Thai Philippines

Luen Thai Philippines (LTP) green programs have gained the attention of international sustainability groups for two consecutive years, and this year, it was recognized with a distinct EcoSwitch Club Program Award.

Industry, business, government representatives and foreign dignitaries were present in the awarding ceremonies held on September 22 at the Asian Institute of Management. Other top companies who also received recognition on the said date were: Lufthansa Technik Philippines, Ford Motors, Philippine Airlines, Panasonic, Kraft Food Inc., Asia Brewery Complex, Mapua Institute of Technology and Toyota.

Director for human resources and administration, Leo Benitez and engineering department manager, Reynaldo Suriga attended the said affair and received the award on behalf of the company.

LTP's programs range from simple collective employee initiatives that lower utility costs to big company undertakings such as installation of water-less urinals, construction of a wastewater treatment facility, setting-up of industrial fans and alternative cooling system for cost-effective ventilation and similar investments all sum up to great environmental impact and realized savings on the business side.

The EcoSwitch Program is a project funded by the European Union's SWITCH Asia Program and co-implemented by Asia Society for Social Improvement and Sustainable Transformation (ASSIST). Partner organizations include: Asia Society for Social Improvement and Sustainable Transformation (ASSIST), GATF Austria, Czech Republic's University of Ostrava (USE), Austria Recycling (AREC), Philippine Chamber of Commerce Inc. (PCCI), European Chamber of Commerce of the Philippines (ECCP), Philippine Business of the Environment (PBE) and STENIM.



L & T International Group (Philippines) Inc is recognized with an EcoSwitch's Club Program Award.

### Other Stories

#### Awards and Recognitions

##### ASIAN HUMAN CAPITAL AWARD

Manila Water became the very first Filipino company to receive the title honor from the Singaporean Ministry of Manpower when it captured the grand award for harmonizing its people in transforming from a struggling utility into a world-class water and wastewater service provider. The Company was cited not only for its accomplishments but also for the way it has turned around its business using its human resources.

##### IN COIN AWARD

Manila Water was the only Philippine company to be selected by the World of the Top 10 "Most Inspiring" companies from the world. This is a fitting gesture it received as one of the Top 10.

##### TOYOTA CITED FOR ENVIRONMENTAL EXCELLENCE

Toyota Philippines Corporation (TPC) recently received the EcoSwitch Award which recognized its commitment to environmental protection and sustainable development. The award was presented to TPC by the European Union's SWITCH Asia Program, a project funded by the European Union's SWITCH Asia Program and co-implemented by Asia Society for Social Improvement and Sustainable Transformation (ASSIST). Partner organizations include: Asia Society for Social Improvement and Sustainable Transformation (ASSIST), GATF Austria, Czech Republic's University of Ostrava (USE), Austria Recycling (AREC), Philippine Chamber of Commerce Inc. (PCCI), European Chamber of Commerce of the Philippines (ECCP), Philippine Business of the Environment (PBE) and STENIM.







**What is the  
formula to achieve  
these results?**

```
graph LR; A[Company Selection] --> B[Initial Assessment and On-site Consultation/Implementation]; B --> C(( )); C --> D[Workshops]; D --> E[Validation]; E --> F[Certification]; C --> B; C --> D; C --> E; C --> F; C --> A
```

The diagram illustrates a process flow for establishing a business incubator. It begins with a box labeled "Company Selection". An arrow points from this box to a box labeled "Initial Assessment and On-site Consultation/Implementation". From this box, an arrow points to a circular loop. The loop is divided into two sections: "Base Companies" (top) and "Club Companies" (bottom). Arrows indicate a clockwise flow within the loop. From the "Club Companies" section, an arrow points to a box labeled "Workshops". An arrow then points from "Workshops" to a box labeled "Validation", which finally points to a box labeled "Certification".





# ECOSWITCH



switchasia  
PROGRAMME

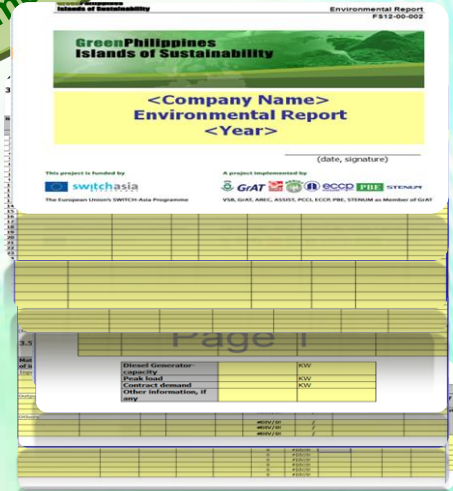
## The Approach



INITIAL ASSESSMENT (IA)



IA REPORT



ENVIRONMENTAL REPORT



ON-SITE CONSULTATION





**Cleaner Production**  
**Material Flow Analysis**  
**Team Building and Motivation**  
**Energy Efficiency Techniques**

**Hazardous Waste Management**  
**Ecological Purchasing**  
**Environmental Legal Compliance**  
**Environmental Marketing**





# ECOSWITCH



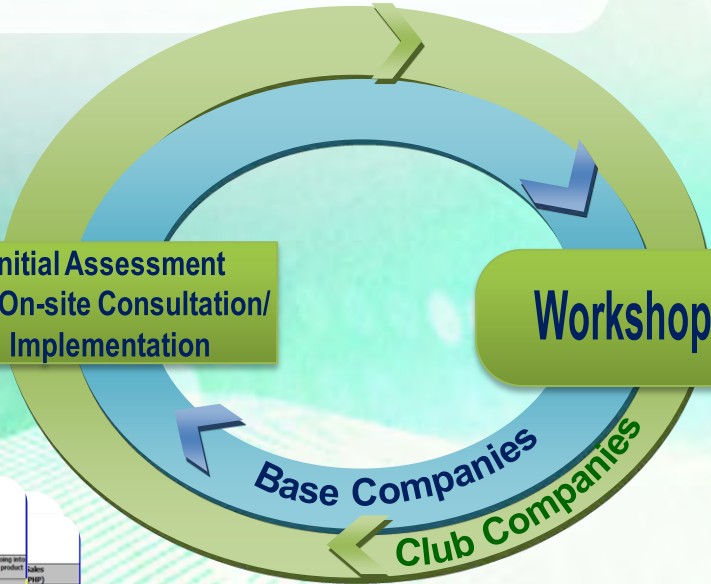
Company Selection

Initial Assessment  
and On-site Consultation/  
Implementation

Workshops

Validation

Certification



GreenPhilippines Islands of Sustainability

Environmental Report  
FS12-00-002

GreenPhilippines Islands of Sustainability

<Company Name>  
Environmental Report  
<Year>

(date, signature)

This project is funded by

A project implemented by

GrAT ECOP PBE STENUP

The European Union's SWITCH-Asia Programme

**DATABASE & ENVIRONMENTAL REPORT CROSS VALIDATION**

13 Please fill in the area of your company (company name, address, etc.)

14 Please check the list of products and services and indicate the volume of production in your permit

15 Please check the list of products and services and indicate the volume of production in your permit

16 Please check the list of products and services and indicate the volume of production in your permit



ON-SITE VALIDATION



22/08/2012 10:26



08/29/2013 16:39

PANEL VALIDATION









## SUCCESS FACTORS

1. **“WORKING WITH YOU – FOR YOU”**
2. ECOSWITCH Environmental Report – a common document that consolidates the baseline data and results
3. Mixed expertise of the team members
4. Real accounted results as showcase used for marketing and communication
5. ECOSWITCH Certification Ceremony to recognize companies' performance, venue for networking, and good public relations





## CHALLENGE ENCOUNTERED DURING IMPLEMENTATION

The challenge to convince SMEs to implement environmental measures

### **SCP as a self-propelling business case for the SMEs**

Convincing SME owners by explaining business case and presenting facts and figures of show cases.

We encourage companies to follow the steps below:

**Implement  
first the “No  
Investment”  
options and  
make  
substantial  
savings**

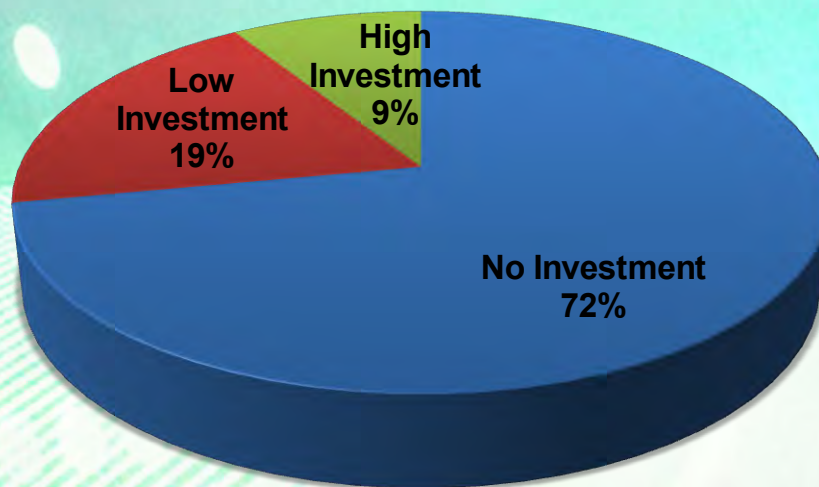
**Invest the  
savings in  
the “Small  
Investment  
” options  
and save  
more**

**Invest on  
“Higher  
Investment”  
options**





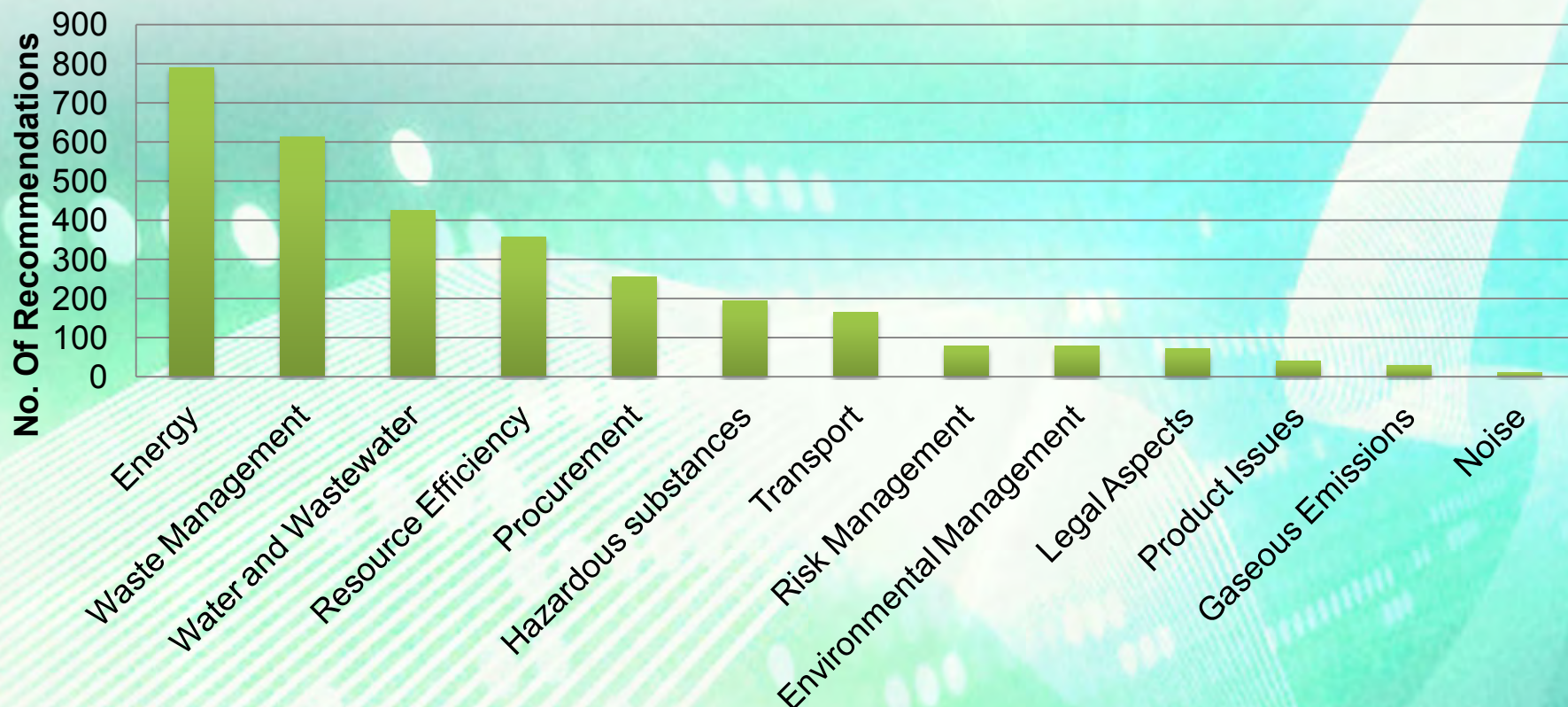
## IMPLEMENTED MEASURES



**72% of the implemented measures are from No Investment or Good Housekeeping Options**



## RECOMMENDATIONS PER TOPIC



**Total of 3117 recommendations with  
an average of 22 per certified company.  
80% of these recommendations are implemented**





## What's next?



## ➤ MOVING TOWARDS SUSTAINABILITY OF THE ECOSWITCH PROJECT



# ECOSWITCH

Sustainability Center

ECOBONUS	ECOLOAN
ECOFOCUS	ECOPERFORM
ECOSENSE	ECOAEms
ECOCLUB	ENERGYSWITCH

Network: 500 companies

314 implementing companies

114 certified companies



**PLANTERSBANK**

*The SME Bank*



**STENUM®**



**eccp**  
EUROPEAN CHAMBER OF COMMERCE  
OF THE PHILIPPINES

**PBE**





**Make your way towards  
sustainability ...**

**ECOSWITCH now!**

***Thank you for your participation!***