#### Sustainable Tourism

Case study

Koh Samui..Green Hotel & Green Network to Green Island

by

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Samui Municipality start green network in 2005 by had connection to some green hotel ( by hotel policy )



Green hotel 1 Green hotel 2 Green hotel 3 (THA Green) meeting inspection share knowledge technical



Set Green Team



Set Green network Green procedure



# THA Green & Samui Municipality analysis the problems

Garbage

Waste water

More chemical

More Energy consumption, electric, water, gasoline

Air pollution

Lack of Awareness

# Green Procedure By THA Green & Samui Municipality

- 1. environmental presentation, training
- 2. garbage management (separation, reduction, reform, recycle product )
- 3. EM effective micro organism fermentation from leftover fruit, vegetable
- 4. Compost (by leftover food + leave, organic garden)
- 5. energy saving (electric, water, gasoline)
- 6. green purchasing
- 7. less pollution
- 8. Corporate Social Responsibility CSR

# July 2007 – big meeting with many hotels for present the green procedure



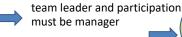




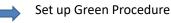




Set the green team



procedure



garbage separation, EM, compost, organic garden recycle product or etc.

inspect

at

green

action



Spot check , audit, evaluate

#### How to set green project in your hotel?

#### summary report

- Pros & Cons , weakness
- reduce cost per year
- revenue from sale the recycle garbage

Next project

Calculation CO<sub>2</sub> emission ton equivalent / year

# Green Procedure







## **Garbage Separation**









### **Garbage Reduction**







Cloth bag or basket substituting plastic bag

### Garbage Reduction – reduce plastic







Cloth bag for room amenity and glass bottle ( reuse )

Ceramic bottle ( refill )



Use white cloth protect dust substitute plastic bag



# EM(Effective Microorganisms) – substitute chemical

# Less chemical → use bio product



Pineapple, lime EM



for Bio washing detergent



Biological fertilization



Pour EM in grease tank or septic tank

# Organic garden use bio compost & EM → organic menu



# Water Saving

Sign in room



For turning off the tap



For towel



For bed sheet

# Water Saving



Sticker & water saver faucet



Saving flush toilet



Placing rock or water bottle in flushing toilet

## **Energy saving**



Sticker for awareness



ปิดไฟ



ปลดปล**ั๊ก** เมื่อไม่ใช้งาน



Change to energy saving bulb

ปรับแอร์

26 °c

## Hot water from condensing air ( heat exchange )







Solar hot water



Bio Gas From leftover



**Bio Diesel** 



Green Purchasing













CSR











#### Benefit to be Green Hotel

- reduce cost fertilizer, organic veggi, handicraft, etc
- reduce electric and water cost
- reduce CO<sub>2</sub> emission reduce global warming effect
- more awareness
- CSR cooperate social responsibility
- · one of the selling point



# Greener Designation - Samui

#### The success stories

Green hotel network, Samui = 40 hotels

Green Leaf Certificate = 20 hotels by Greenleaf Foundation

Greener Choice = 50 hotels (by Municipality)

Green Room = 5 hotels ( pilot project) by Energy Ministry

Green Hotels Standard = 20 hotels by DEQP ( Department of Environment Quality Promotion )

Green Globe Standard = 2 hotels





TAT will support for Road Show (TAT - Tourism Authority of Thailand)

#### Carbon emission calculation from each activity in hotel

activity	unit	Factor ( kg CO <sub>2</sub> e / unit )
electric	kw-h	0.5610
diesel	1	2.7446
benzene	1	2.1896
LPG	kg	3.11
Sent to incinerator	ton	$41 \text{ g NO}_2 \text{ (} = 310 \text{ of CO}_2 \text{)}$
Aluminum can	kg	-3.70
glass	kg	-0.08
paper	kg	-0.80
Plastic	kg	-0.42

We can calculate CO<sub>2</sub> emission = 50 - 100 kg CO<sub>2</sub>e / room

Keep record

→ set % reduce



Low Carbon destination



Green Network





Thanks you