



# NEPAssist: A Web-Based Mapping Application for Environmental Reviews and Assessments

Presented by

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Next Generation Compliance in Asia  
Bangkok, Thailand  
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## NEPA Process Requirements

- National Environmental Policy Act
  - Conduct Environmental Reviews on a Broad Range of Projects
- Annually estimated 100,000 environmental review actions under NEPA
  - EISs, EA/FONSIs, and Categorical Exclusions
- Early Involvement Yields Results – the Earlier Engaged the Better
- Constraints: Time, Staff Resources, and Access to Information



# NEPAssist: Goal

## **GOAL:**

- Develop a nationally available user-friendly tool that pulls together relevant location information and related environmental data for proposed projects

## **USES:**

- Aid in the Development of NEPA Documents and Facilitate Project Planning
- Assists with Environmental Review/Screening of Proposed Projects



# NEPAssist: Benefits

- Raises Important Environmental Issues at the Earlier Stages of Project Development
- Focuses in-depth reviews to those projects likely to have significant environmental impacts
- Helps direct project location to the least environmentally-susceptible areas
- Enhances Collaboration with Other Agencies for the Review of NEPA Documents





# NEPAssist: Overview

- **Web-based GIS Tool ...** No training; No licensing; No desktop configuration; No desktop data needed
- **Distributed Geo-Spatial Application ...** via web services
- **Real-Time Geospatial Analysis ...** Using national and regional web services “On the Fly”



## Select Study Area

### NEPAssist

National Environmental Policy Act

Help

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You are here: [EPA Home](#) » [NEPAssist Home](#)

NEPAssist is a tool that facilitates the environmental review process and project planning in relation to environmental considerations. The web-based application draws environmental data dynamically from EPA's Geographic Information System databases and web services and provides immediate screening of environmental assessment indicators for a user-defined area of interest. These features contribute to a streamlined review process that potentially raises important environmental issues at the earliest stages of project development.

Visit the [Help](#) section in the NEPAssist tool.  
[Notes About NEPAssist Accessibility](#)

#### Enter New Study Area

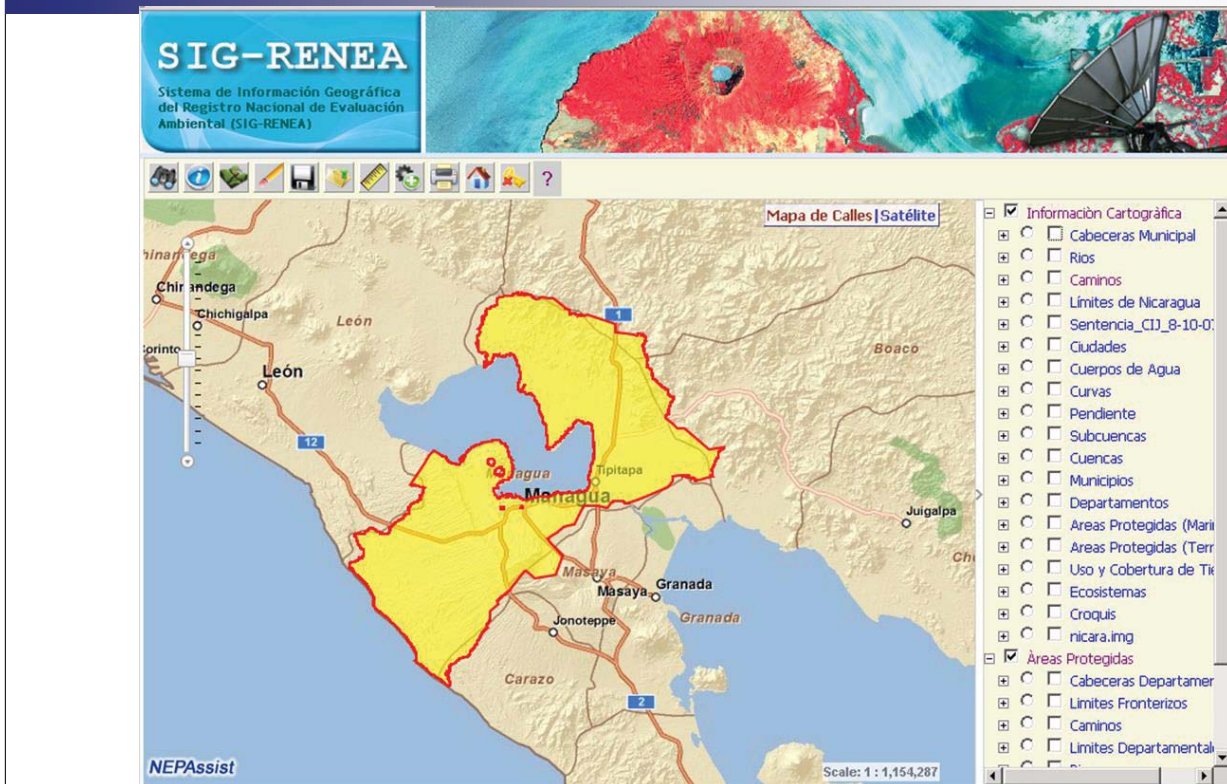
A study area can be a place or an area. To get a map of the vicinity of an area of interest, you can enter an address, ZIP code, city, county, watershed, or a pair of coordinates in the search box.

The following are examples:

- Dallas
- 77 W. Jackson Blvd, 60604
- 77 W. Jackson Blvd, Chicago, IL
- Arlington County, VA
- 60085
- LAX
- For Coordinates, enter Latitude and Longitude (in that order): 38.1,-78.2
- For *Watershed*, enter **watershed: 01020003**
- For *Congressional District*, enter **cd: CA01**

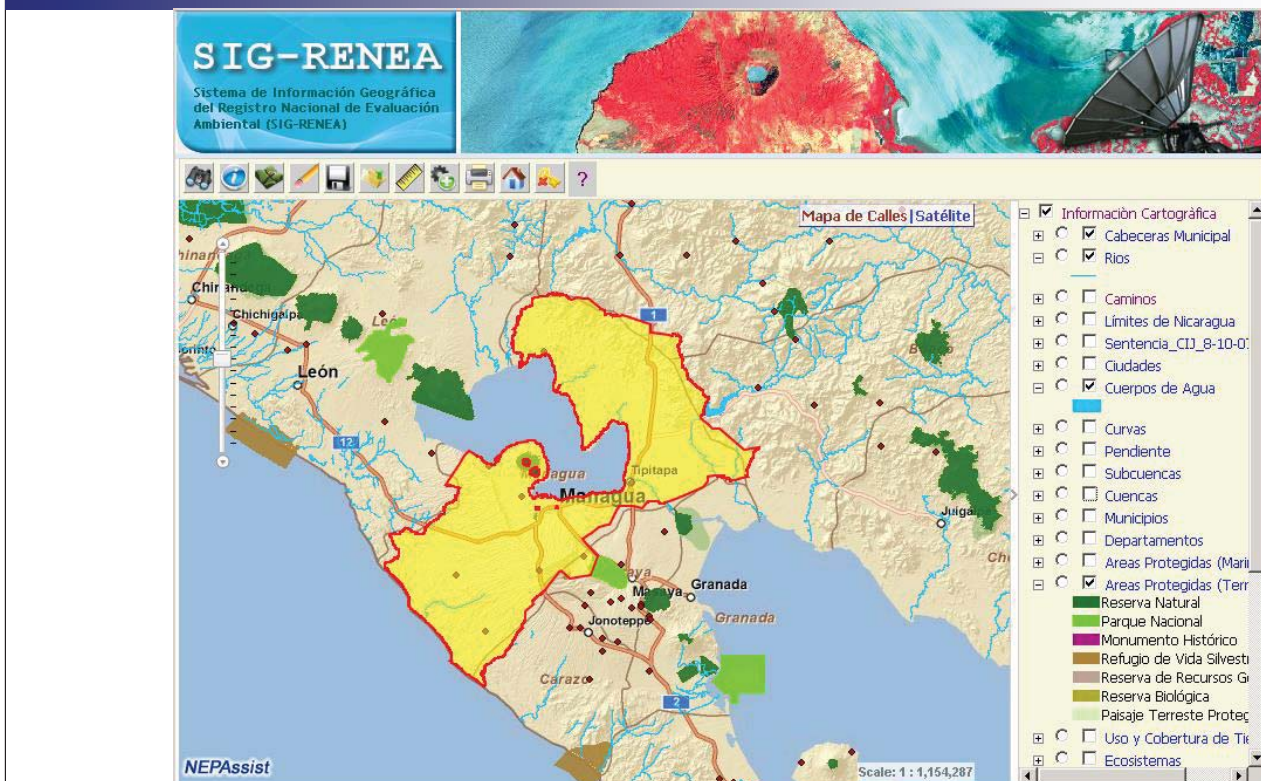


# Interactive Map



7

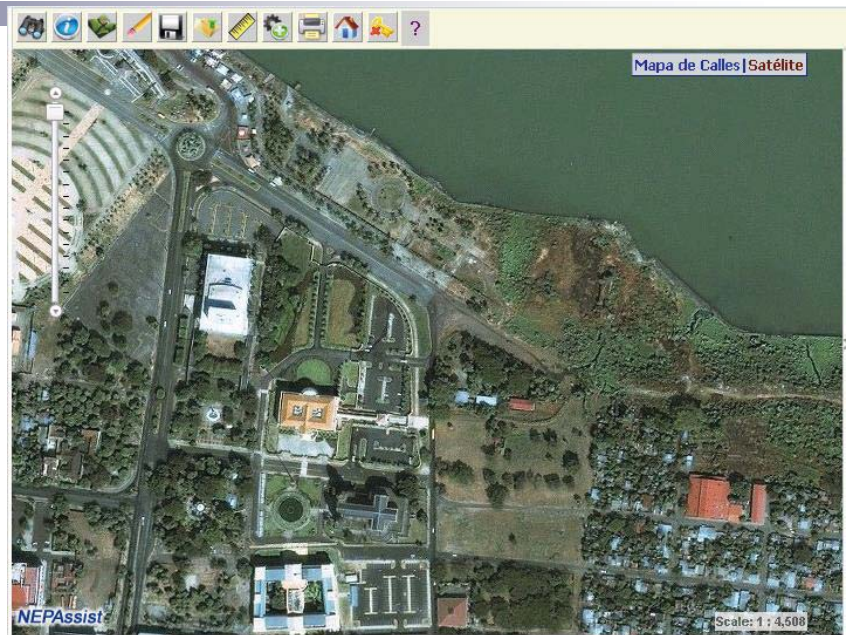
# Add Data Layers



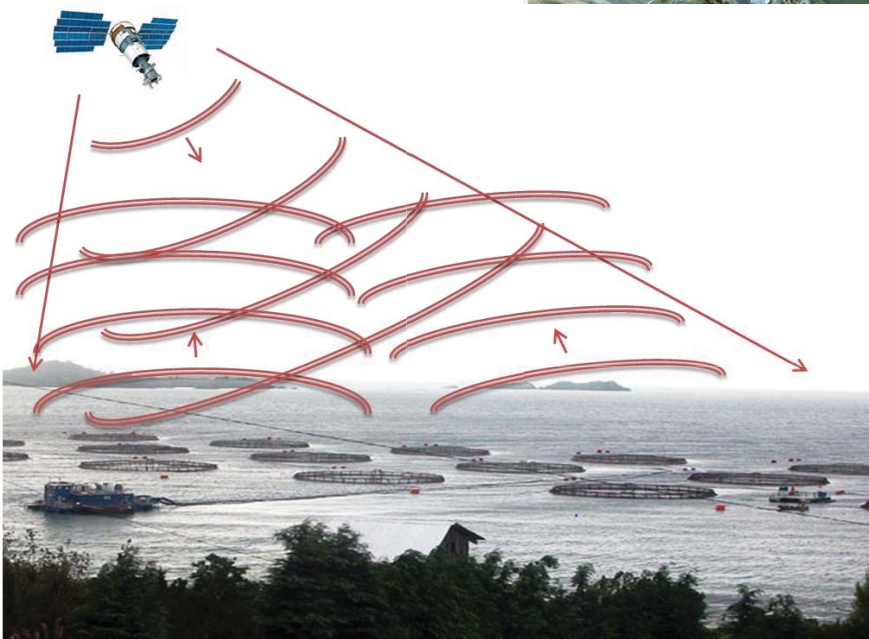
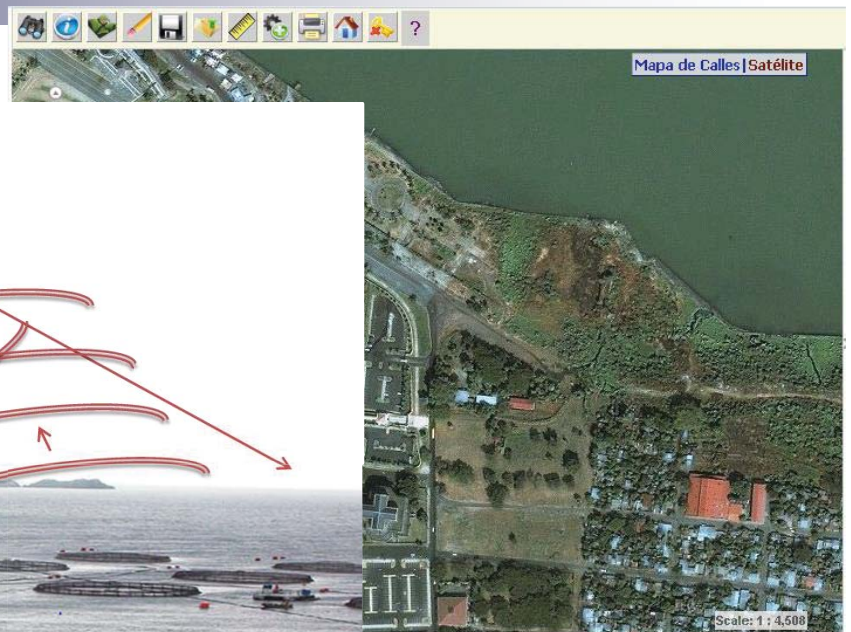
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# Remote Sensing Information



# Remote Sensing Information



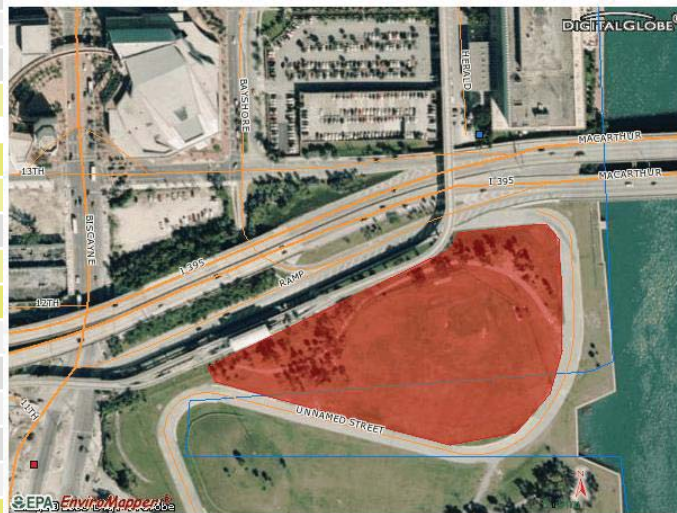




# Preliminary Environmental Assessment

*A GIS tool that assists with the review process of Environmental Impact Statements and Environmental Assessments*

Sites	
Within 400 meters of a school?	<a href="#">yes</a>
Within 400 meters of a hospital?	<a href="#">no</a>
Within 400 meters of a port?	<a href="#">yes</a>
Nonattainment	
Within 400 meters of a SOx nonattainment area?	<a href="#">no</a>
Within 400 meters of a lead nonattainment area?	<a href="#">no</a>
Within 400 meters of a CO nonattainment area?	<a href="#">no</a>
Within 400 meters of an ozone nonattainment area?	<a href="#">yes</a>
EcoSystem	
Within 400 meters of an area of level 4 ecoregions?	<a href="#">yes</a>
Within 400 meters of a designated sole source aquifer?	<a href="#">yes</a>
Within 400 meters of a designated priority watershed?	<a href="#">no</a>
Within 400 meters of a major river?	<a href="#">yes</a>
Within 400 meters of a designated 100-year FEMA floodplain?	<a href="#">yes</a>
Within 400 meters of a National, State, or Local forest or park?	<a href="#">no</a>
Within 400 meters of a National wildlife refuge?	<a href="#">no</a>
Within 400 meters of a managed land/conservation area?	<a href="#">no</a>
Within 400 meters of a wild and scenic river?	<a href="#">no</a>
Within 400 meters of a designated AL NWM wetlands area?	<a href="#">no</a>
Within 400 meters of a designated FL NWM wetlands area?	<a href="#">yes</a>
Within 400 meters of a designated GA NWM wetlands area?	<a href="#">no</a>



# Data Drill Downs

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Name	Distance	Units
Casino Princessa Mooring.	0	meters
City of Miami, Miamarina at Bayside Outer Wall Mooring.	50.44	meters
Marine Spill Response Corp., Bays 201 to 204.	250.65	meters
DuPont Plaza Hotel Wharf.	257.86	meters
City of Miami, Miamarina at Bayside Basin.	260.08	meters



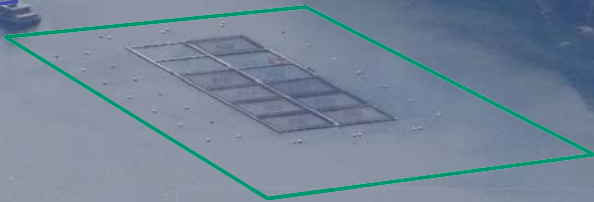
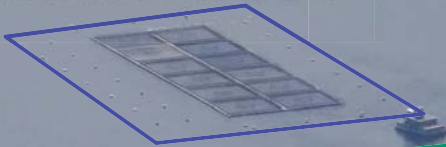
Name	Distance	Units
Biscayne NP	11.07	kilometers
Thompson Park	28.46	kilometers
Everglades NP	31.21	kilometers
South Beach Park	37.76	kilometers
Holiday Park	39.43	kilometers
Hugh Taylor Birch State Park	40.70	kilometers
John Pennekamp Coral Reef Stat	47.87	kilometers



# Optimizing Field Inspections

## Who do you inspect first?

Unlicensed Fish Pens



Approved aquaculture

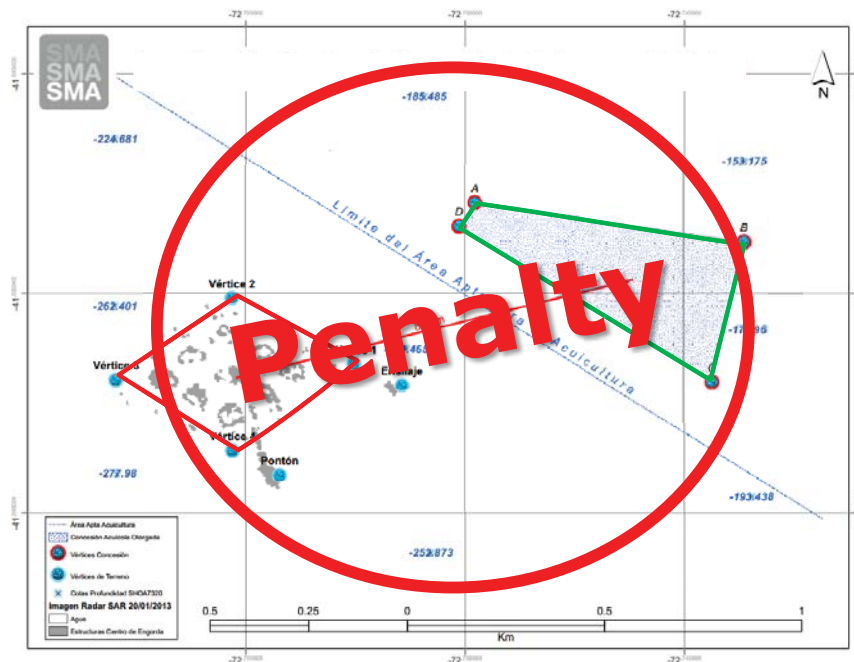


15



# Enforcement Impacts

## Chilean Example from Aquaculture







# Strengthening Environmental Impact Assessments in the Lower Mekong

U.S. Environmental Protection Agency

U.S. AID Regional Development Mission for  
Asia

October 2014 – October 2018





**INDUSTRIAL ESTATE AUTHORITY OF THAILAND**

# Welcome to Map Ta Phut Industrial Estate



Industrial Estate Authority of  
EA-T

Thailand : I-



**State Enterprise Founded in 1972**



**Attached to the Ministry of Industry**



**Develop and Manage Industrial Estates**



**Promote & Regulate all Industrial Estates**



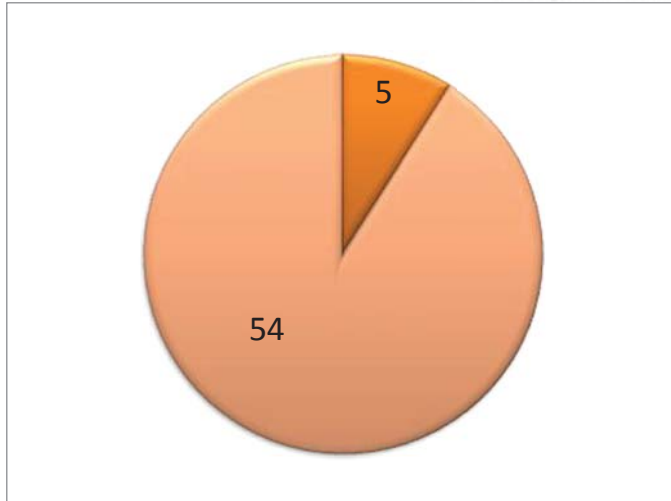
**Industrial Port Development**



# Industrial Estates in Thailand

## Thailand

- ❖ 59 Industrial Estates
- ❖ 3,976 Factories
- ❖ Investment 2.8 Trillion Baht
- ❖ 517,279 workers



## Map Ta Phut Complex

- ❖ 5 Industrial Estates and 1 Port
- ❖ 151 Factories
- ❖ Investment 1 Billion Bath
- ❖ 30,000 workers



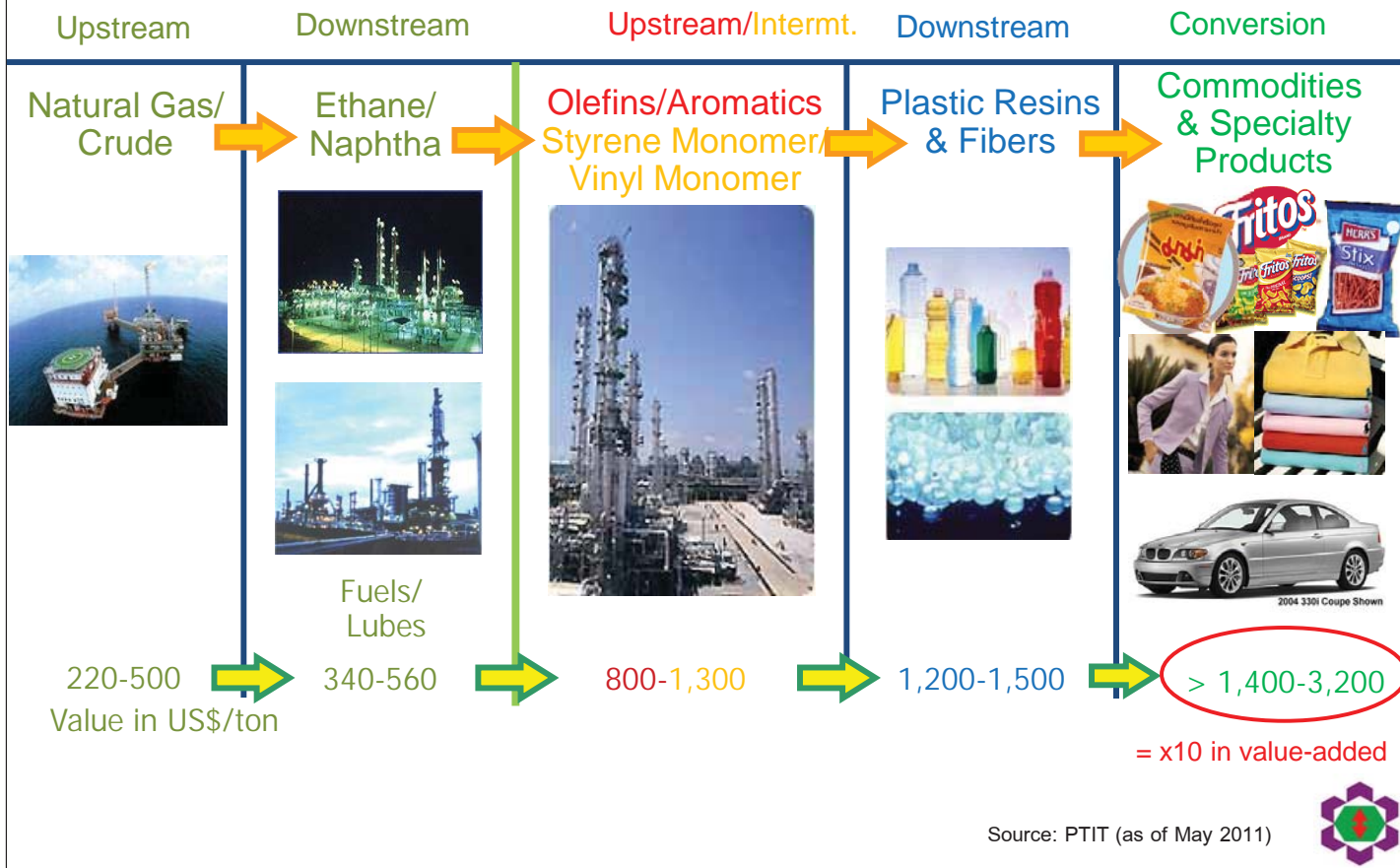
# Map Ta Phut Complex



# Petroleum & Petrochemical Value Chain

## Petroleum

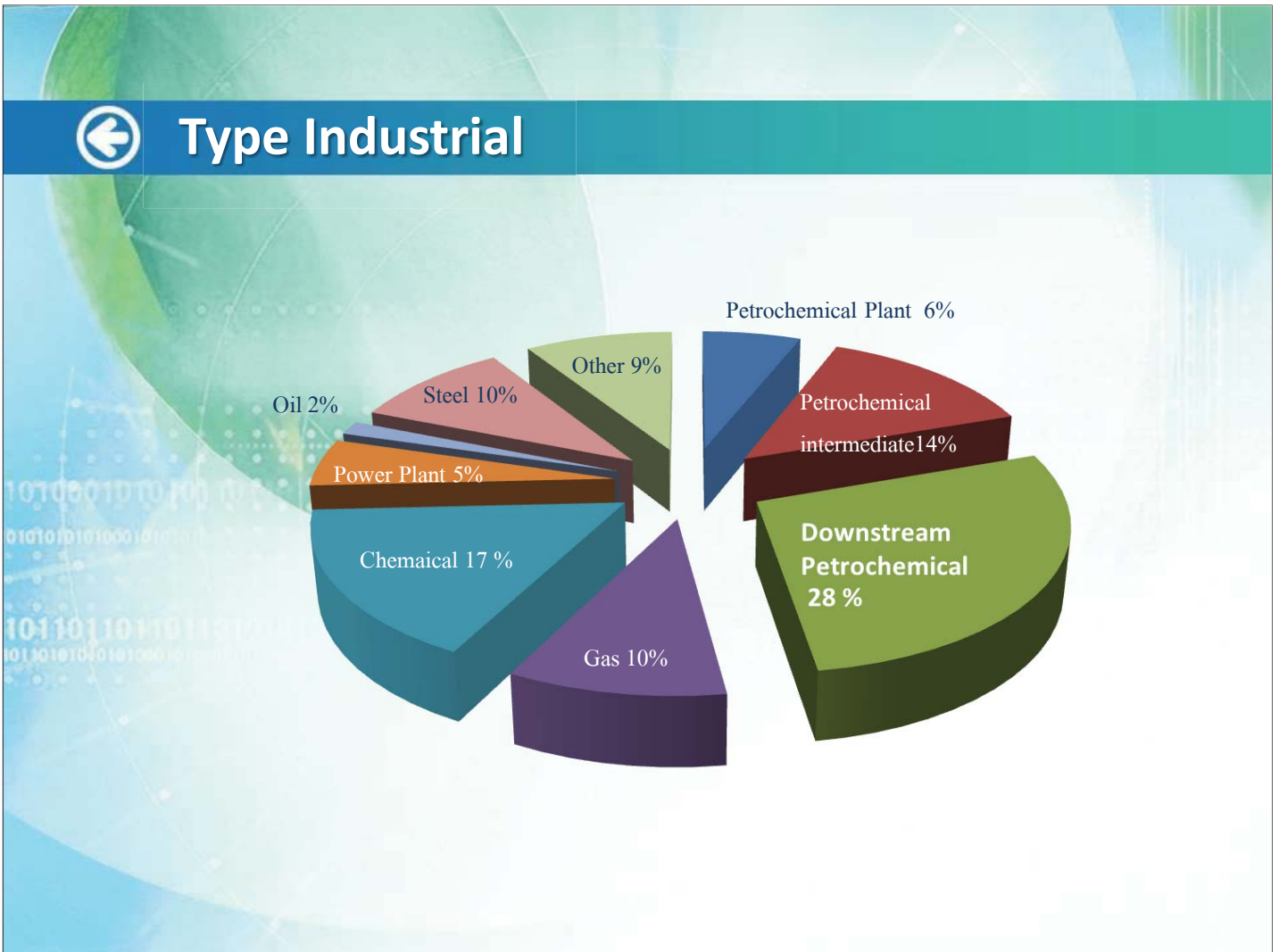
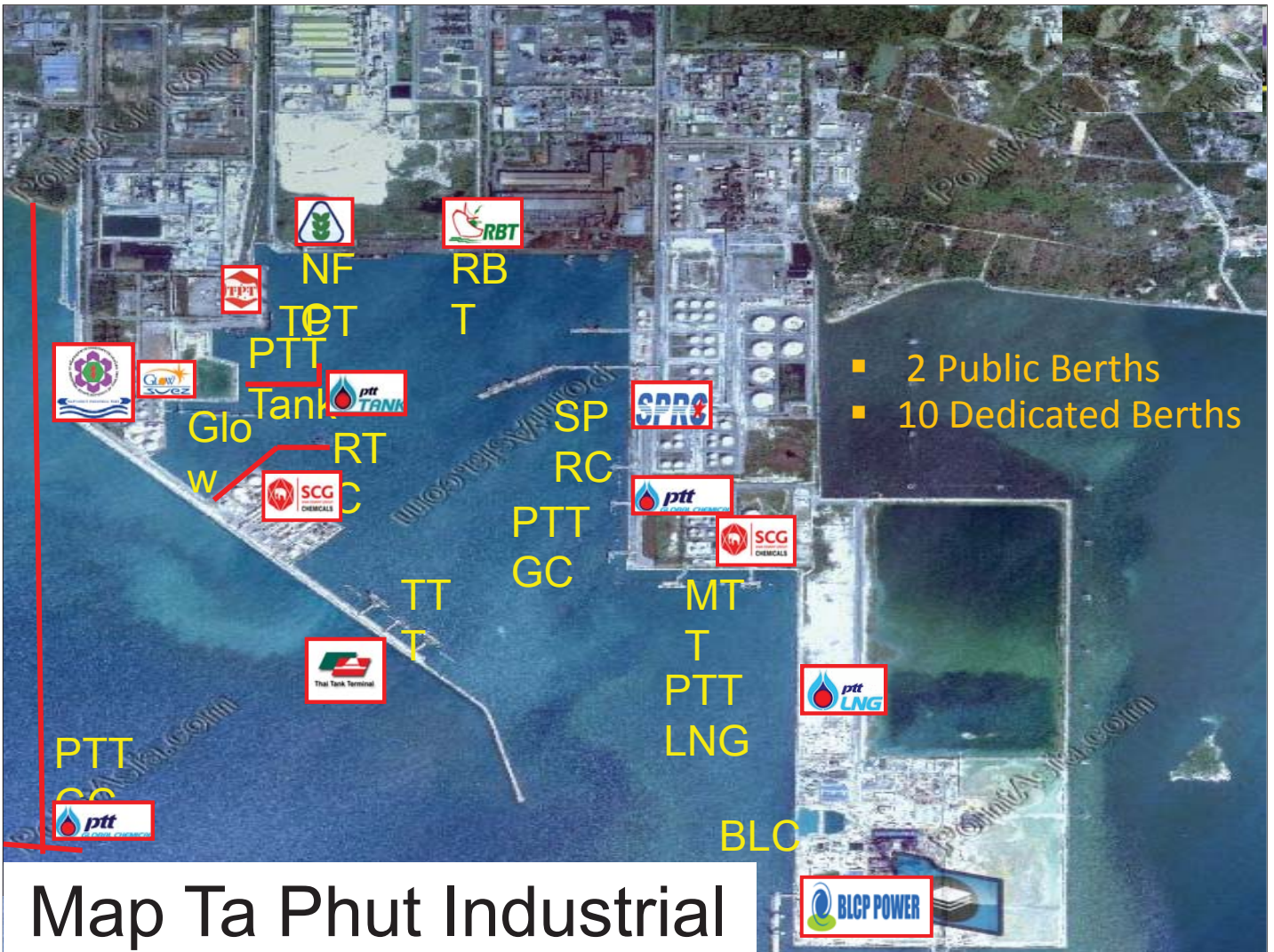
## Petrochemical



# MTP COMPLEX

## MAP TA PHUT AREA







# Utilities and Facilities



## Road System

Main road 40 meter width and 5.8 km. Length with steel reinforces concrete.





## Electricity System

115 KVA, 22 KVA, 245 MW, supplied by EGAT and  
1,300 MW supplied by private power plants.



## Telecommunication

ISDN system, teleconference, fiber optics, internet,  
E-mail.





## Raw Water System

Capacity of 100 million  
 $\text{m}^3/\text{year}$  , current industrial  
consumption 72 million  $\text{m}^3/\text{year}$



## Water Supply

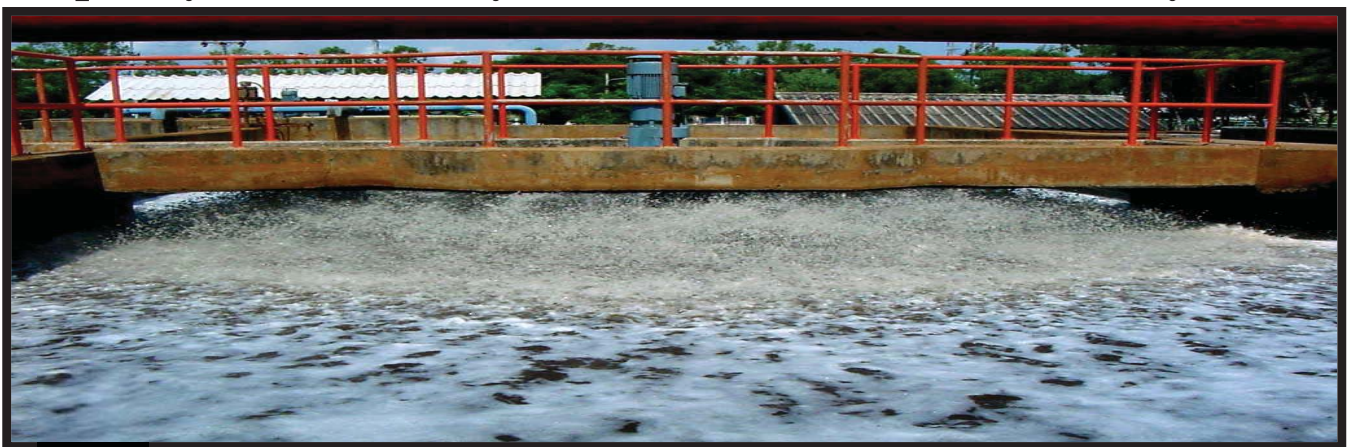
Capacity of 15,300  $\text{m}^3/\text{day}$  ,  
current industrial consumption  
5,000  $\text{m}^3/\text{day}$



## Waste Water Treatment System

(General Industrial Zone)

Capacity 4,000  $\text{m}^3/\text{day}$  , current service 1,000  $\text{m}^3/\text{day}$





## PIPE RACK



## Deep Sea Port

Major service for general goods, chemicals, liquid products, iron and steel, fertilizer and petroleum.



# Environmental and Safety Management

Plant Integrity Audit

Pollution Control & Abatement Plan

Env. Monitoring & Control Center (EMCC)

Emergency Response Plan



Green Star Award

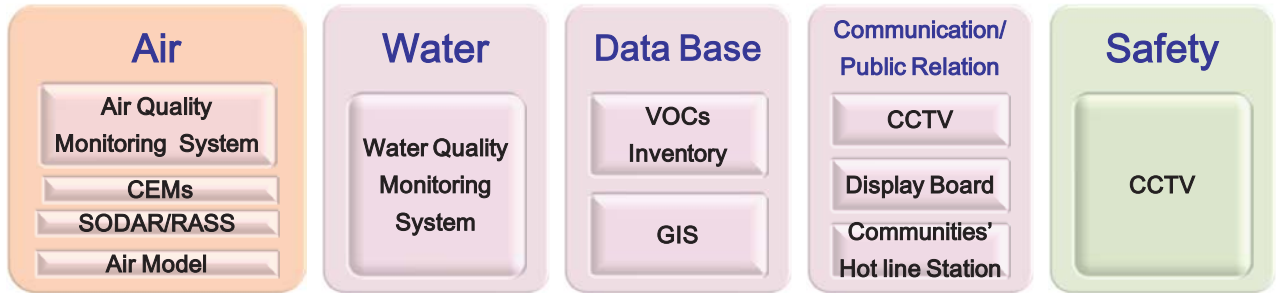
EIA Monitoring

CSR

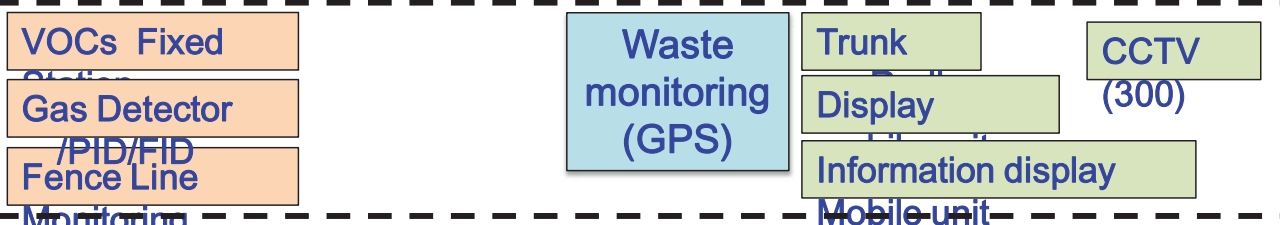


## (Environmental Monitoring and Control Center : EMCC)

2007-2009



2010



2011-2013



2014-2015



Walk through and Evaluate Factories with Local Communities

# Green Star Awards and Gold Star Awards

Year 2007: 32 factories were in great criteria.  
 Year 2008: 49 factories were in great criteria.  
 Year 2009: 47 factories were in great criteria  
 Year 2010: 56 factories were in great criteria  
 Year 2011: 86 factories were in great criteria  
 Year 2012: 96 factories were in great criteria  
 and 18 factories were in great criteria  
**Gold Star award**  
 Year 2013: 91 factories were in great criteria **TWICE A YEAR**



## Eco Industrial Estate & Networks

Ultimate Goal : Industry is a part of Community and living together with happiness and sustainability

### 5 Aspects 22 Areas

#### Physical Aspect

landscape/Land use/Green Area/Zoning

Eco Design for Common Utility & Infrastructure

Energy Efficiency & Environmental Friendly Building / Green Building

#### Economic Aspect

Provincial and Country Economic growth from industrial sectors

Economic growth of local area

Economic growth of community ( Good job makes better living of life)

#### Environmental Aspect

Resource & Material Management

Energy Management

Production Process & Product

Water pollution

Air pollution

Waste management

Responding to the complaints

Safety & Health

Industrial Symbiosis Networks

#### Social Aspect

Quality of life of employee (Happy Workplace)

Quality of life of the people surrounding (Happy Community)

#### Management Aspect

Management by cooperation & Participation

Enhancing of Factory Audit

Promotion of Mang. system (ISO Series) , including risk management and BCM.Plan

Promotion of new technology /system/ innovation to the Industry

Public disclosure/ Sustainable Report.

# Thank you



[www.ieat.go.th](http://www.ieat.go.th)



# Welcome to SCG Chemicals

## Rayong, Thailand

23 September 2015



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- 1 -

## Rayong Province



**Area : 3,552.0 sq km**

**8 districts :-** Muang Rayong, Ban Chang, Klaeng, Wang Chan, Ban Khai, Pluak Daeng, Khao Chamao, and Ni-khom Pattana.

**54 sub districts (440 villages)**

**Population :** Native : 600,000 / Immigrants : 400,000

**Economy Bases :**

1. Agriculture
2. Tourism & Services
3. Industry



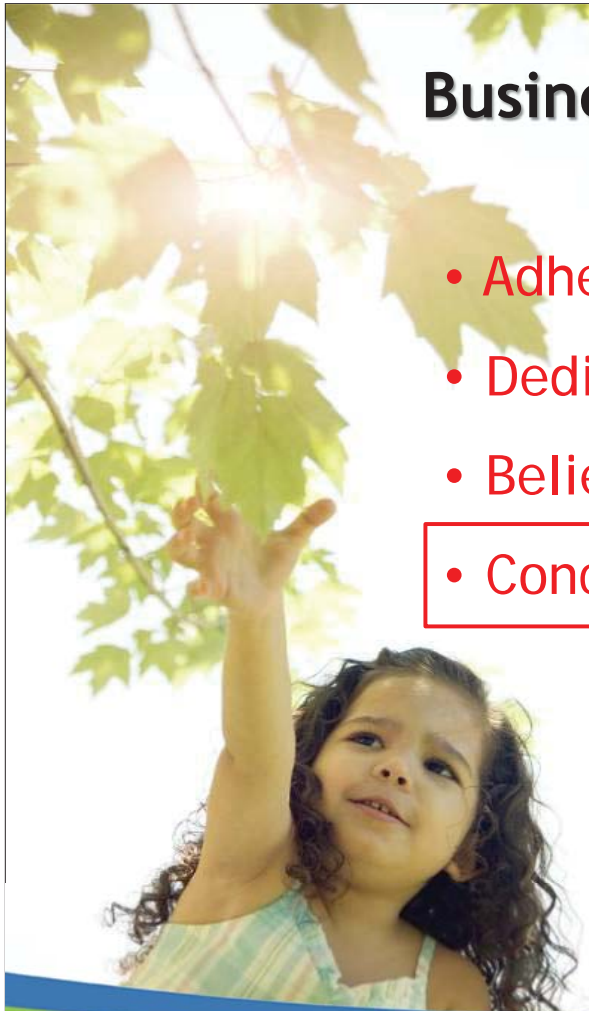
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- 2 -

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# Business Philosophy

- Adherence to Fairness
- Dedication to Excellence
- Belief in the Value of the Individual
- Concern for Social Responsibility



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## Our **SUSTAINABLE DEVELOPMENT**

SCG Chemicals is committed to doing business along with building sustainable success for the country and the communities that it does business with.



To balance 3 factors which are

- Economy
- Society
- Environment

under good governance for *Sustainable development*.

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- 4 -

A-252



# CSR

Corporate Social Responsibility



**SCG Chemicals**  
cover these 3 areas

Economy

Environment

Social

Collaboration

Employees

Communities

Government  
sectors & Other  
Stakeholders

SCG Chemicals is involved in numerous activities dedicated to enhancing the quality of life for communities in the province of Rayong, Thailand where most of its plants are located.



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- 5 -

## Good Governance

Economy



Environment



Social

## Economy :

Support community enterprises to create income  
35,000 USD/Year



## Economy

### Open Market in Factory





## Economy :

Local income support - Support community enterprises about 0.6 Million US\$



Landscaping & green area



Community Enterprises - Products



Food & Beverage



Car rent service

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- 9 -



## Good Governance



Economy



Environment



Social

# Increasing green area by check dam



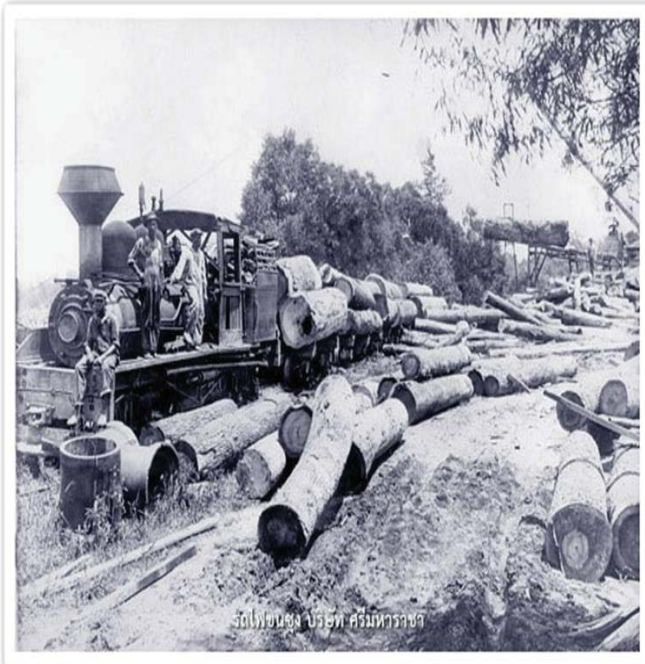
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- 11 -

## Outcome impact

Before

After





# Fish Home by testing product



# Cleaning the beach



# Good Governance



Economy



Environment



Social

## Social – Engage relationship

### Engage relationship with communities



## Social - Health

### SCG Chemicals Football Camp



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- 17 -



## Social - Health

### SCG Chemicals Youth League



SCG Chemicals held “the 5<sup>th</sup> year HRH Princess Sirindhon’s Cup Youth League” which had been organized for 5 years continually. There are under 15 year-old football players from 10 teams in Rayong join the tournament to promote health and develop skills of young football players in Rayong for professional level.

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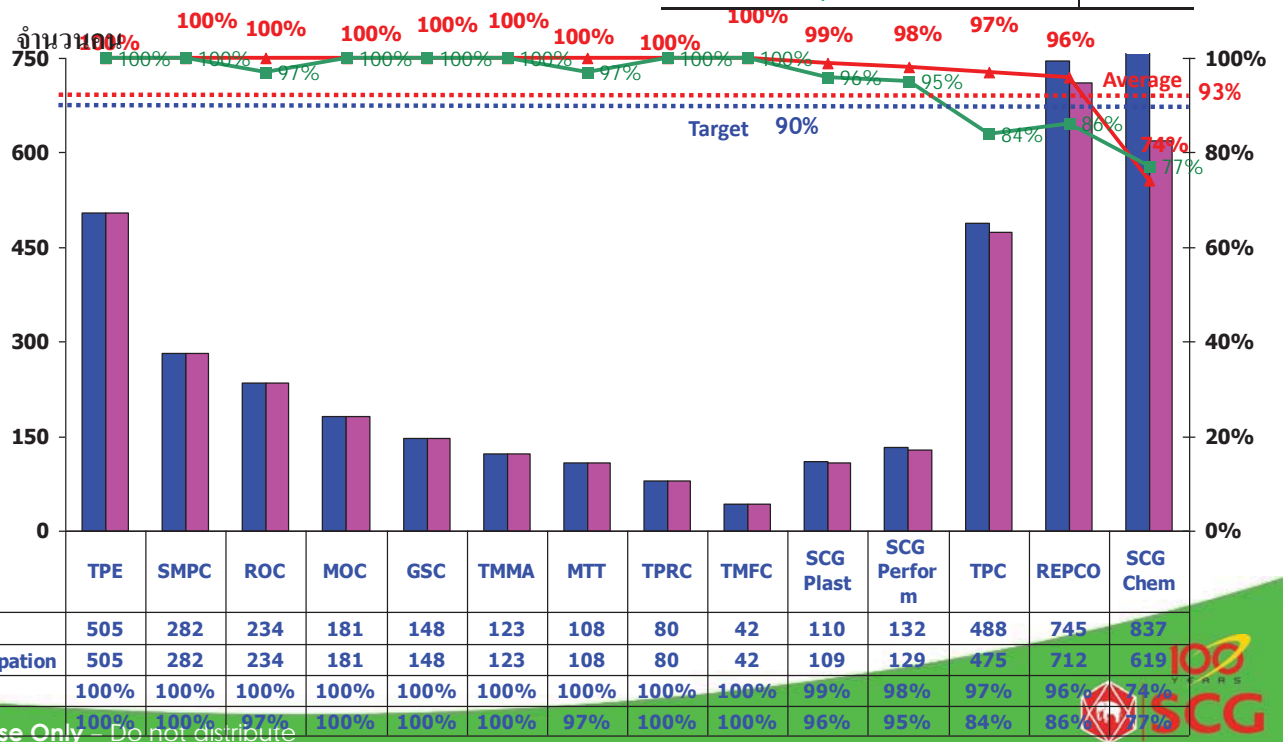
- 18 -

A-259



# CSR Participation in 2014 (As of 31 Dec)

Employee		Total
■	Total	4,015
■	Participation	3,747
—	% Participation - as of Dec'14	93%
—	% Participation - as of Dec'13	90%



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## Employees Participation

### One Manager One Community (OMOC) Project

The main purpose of this activity is to build up good relationship between **SCG Chemicals** and **communities**, and also listen to the communities' voices.

Nowadays : we specific assigned employees (\$ level in Rayong and their teams) in each company to take care nearby communities

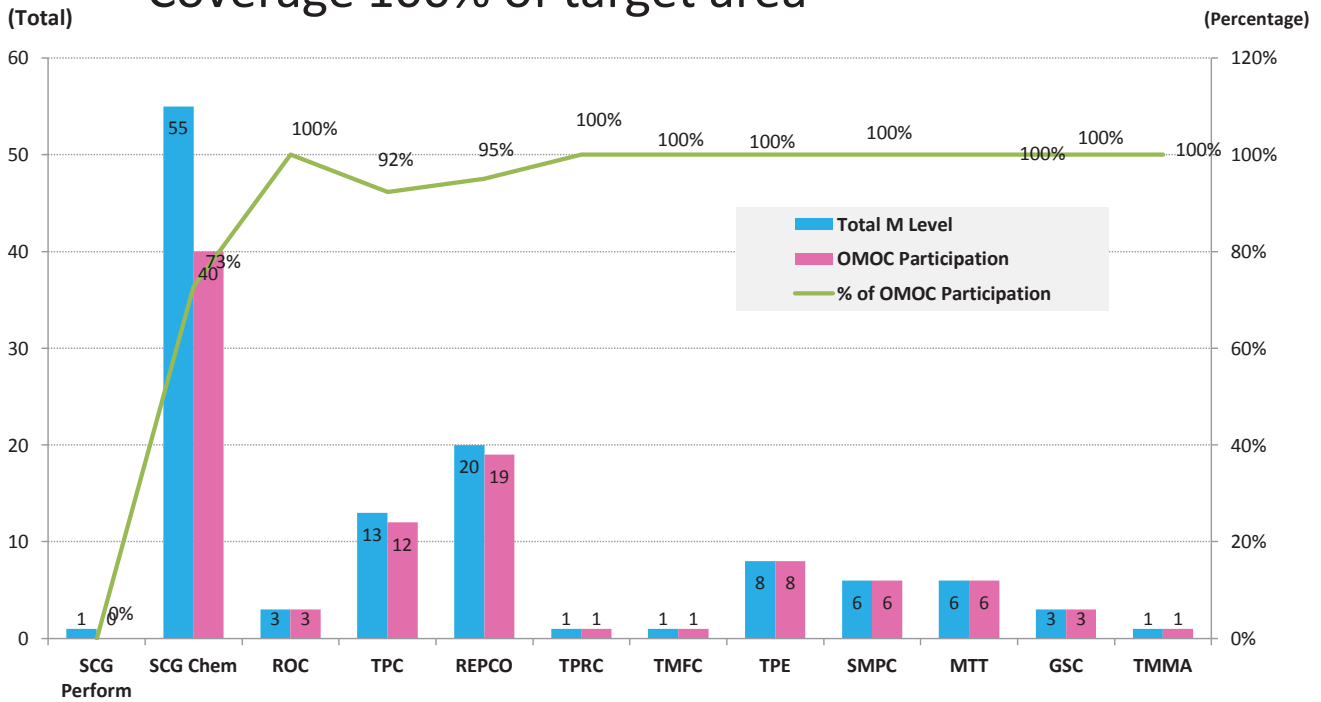


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# OMOC Participation in 2014 (As of 31 Dec)

Coverage 100% of target area



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## Community Partnership Association



### Key projects

#### Health

1. Mobile Clinic 37 times/year for people in Rayong
2. Doctors & Nurses Employment
3. Nurse scholarships
4. Master program Scholarships in Occupational Health Science
5. Support & Encourage Village Health Volunteers

#### Education

1. English & Science Camps for Undergrad students in Rayong
2. Bachelor Scholarships in Engineer, Environmental Science, and Education programs
3. Education planning Seminar for Parents

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# Q & S



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