



# **COGEN 3 Programme and Activities**

**2004 Cogeneration Day in Singapore  
23 April 2004  
York Hotel, Singapore**

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COGEN 3 Programme Co-ordinator**



# EC-ASEAN COGEN Programme Phase III (COGEN 3)

An economic cooperation programme between  
European Commission (EC) &

Association of South East Asian Nations (ASEAN)

- Funded by the EC (15 Mill. EURO)
- 3 year programme January 2002 – December 2004
- Coordinated by Asian Institute of Technology (AIT)  
& Carl Bro International AB



## COGEN 3 Objectives

- Promote the use of cogeneration in ASEAN
- Promote proven, clean and efficient European cogeneration technologies
- Create business opportunities for cogeneration using biomass, coal and gas as fuels



# COGEN 3 Organisation & stakeholders

## Stakeholders in Europe

Project developers  
Equipment suppliers  
Banks & financiers

## Stakeholders in ASEAN

Project developers  
Equipment suppliers  
Banks & financiers  
Policy makers



## COGEN 3

European Office  
Malmö, Sweden

## COGEN 3

Programme  
Management Unit  
Bangkok, Thailand

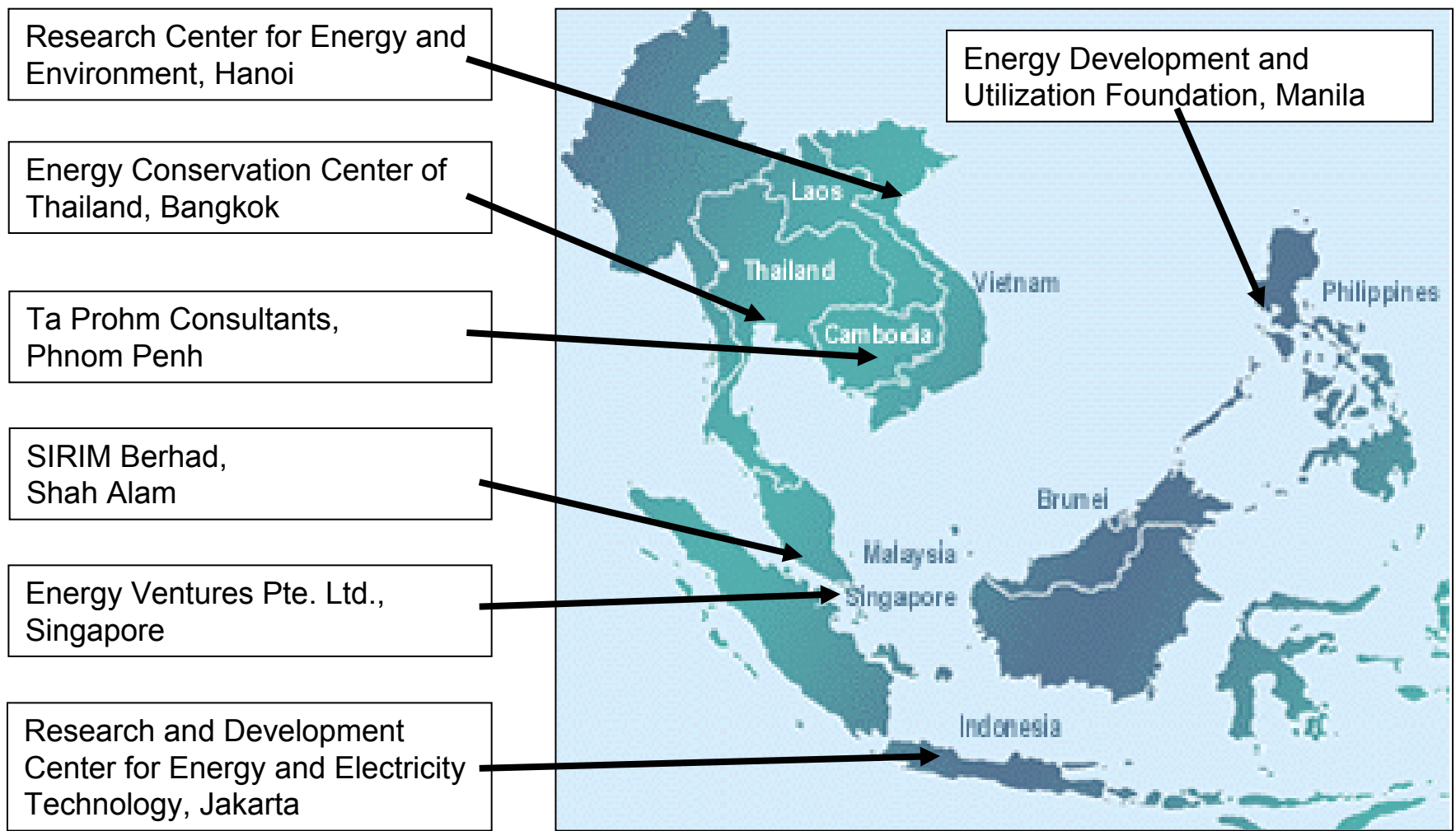
## COGEN 3

ASEAN Country  
Co-ordinators in  
7 Countries





# COGEN 3 Country Co-ordinators





## COGEN 3 activities

- Facilitation of cogeneration project development
- Capacity building, awareness & information
- Cogeneration policy guidance
- Full Scale Demonstration Projects (FSDPs)



Facilitation of cogeneration project development:

## Services to project developers & end-users

Technical / Financial / Environmental Analysis

Advice on technology selection & investment decisions

Financial packaging

Announcement of identified cogeneration projects in ASEAN

Tools for development & evaluation of cogeneration projects

- Technical – Financial Analysis model (ver. 2) for free distribution
- Several advanced tools for advisory services



Facilitation of cogeneration project development:

## Technical, Business & Market Information

Directories on European & ASEAN equipment suppliers & service providers

Report on Cogeneration Technologies:

- Part 1: Definitions and Systems
- Part 2: Technologies and Products

Cogeneration Project Development Guide (2<sup>nd</sup> Edition)

- Guidance for development of cogeneration projects

Applicability of European Technologies in ASEAN Market

- Cogeneration equipment status in the ASEAN market
- Sector overview: Suitable applications and equipment

National Cogeneration Policy Reviews (7 country reports)

- Overview of existing policies
- Guidance for policies promoting cogeneration

Capacity building, awareness & information:

## 2003 COGEN 3 events

Cogeneration Weeks in 7 countries *(1,200 participants)*

Training courses in cogeneration project development  
*(5 events, 143 participants)*

Seminars on financing of cogeneration projects  
in Thailand, Malaysia & Indonesia *(85 participants)*

Clean Development Mechanism seminar in Malaysia  
*(80 participants)*

Major exhibitions & conferences

- Power Gen Asia (Ho Chi Minh City)
- Sustainable Energy Asia (Singapore)

Site visits to 8 cogeneration plants *(183 Participants)*

Policy forum & study tour in Thailand & Policy maker  
study tour to Europe *(25 high ranking ASEAN policy makers)*





Capacity building, awareness & information:

## 2004 Cogeneration Weeks

<b>Thailand</b>	<b>23 – 25 March</b>	<b><i>Bangkok</i></b>
<b>Vietnam</b>	<b>6 – 9 April</b>	<b><i>Hanoi &amp; Ho Chi Minh City</i></b>
<b>Singapore</b>	<b>23 April</b>	<b><i>(Cogeneration Day)</i></b>
Indonesia	18 – 21 May	<i>Jakarta &amp; Balikpapan</i>
Cambodia	8 – 11 June	<i>Phnom Penh &amp; Battambang</i>
Philippines	21 – 24 June	<i>Manila &amp; Isabela Province</i>
Malaysia	6 – 8 July	<i>Kuala Lumpur &amp; Johor Baru</i>

- Opening ceremony: Policy and financing
- Forum & Mini-exhibition with European cogeneration suppliers
- Cogeneration project development seminar
- Site visit & individual consultations



Capacity building, awareness & information:

## Other 2004 COGEN 3 events

### Major exhibitions & conferences:

- World Conference & Technology Exhibition on Biomass (Rome, May)
- Power Gen Europe (Barcelona, May)
- Asian Energy Business Forum (Manila, June)
- Power Gen Asia (Bangkok, October)

Clean Development Mechanism seminars in Thailand & Indonesia

Visit to Full Scale Demonstration Projects



# Cogeneration policy guidance

## Objective:

Improve financial and regulatory conditions to enhance further cogeneration development

## Activities:

- National energy policy reviews & guidance for each country
- ASEAN Policy maker study tours to Europe
- Seminars & meetings
- Cogeneration Weeks




# Full Scale Demonstration Projects (FSDPs)

## Objective:

Demonstrate the technical reliability and economic viability of proven European cogeneration technology to ASEAN end-users

- 24 FSDP Candidates selected
- Capacity: 0.3 – 41 MW (Total: 174 MW)
- Total Amount of EC support: 8.6 mill. EURO
- Total Investment: 209 mill. EURO
- 17 projects is expected to be implemented by end of 2004



4 projects in Thailand

1 project in Cambodia

7 projects in Malaysia

2 projects in Singapore

2 projects in Indonesia

1 project in Philippines

- **Palm oil waste** : 4
- **Rice husk** : 4
- **Bagasse** : 2
- **Wood waste** : 3
- **Biogas** : 3
- **Bio-oil** : 1





For more information,  
please visit COGEN 3 Website at:

<http://www.cogen3.net>

**Thank You !**