

J07

PROMEEEC for 2006 - 2007 Energy Management Project Summary Workshop



ASEAN Energy Management System - Updated Plan -

February 27th-28th, 2007

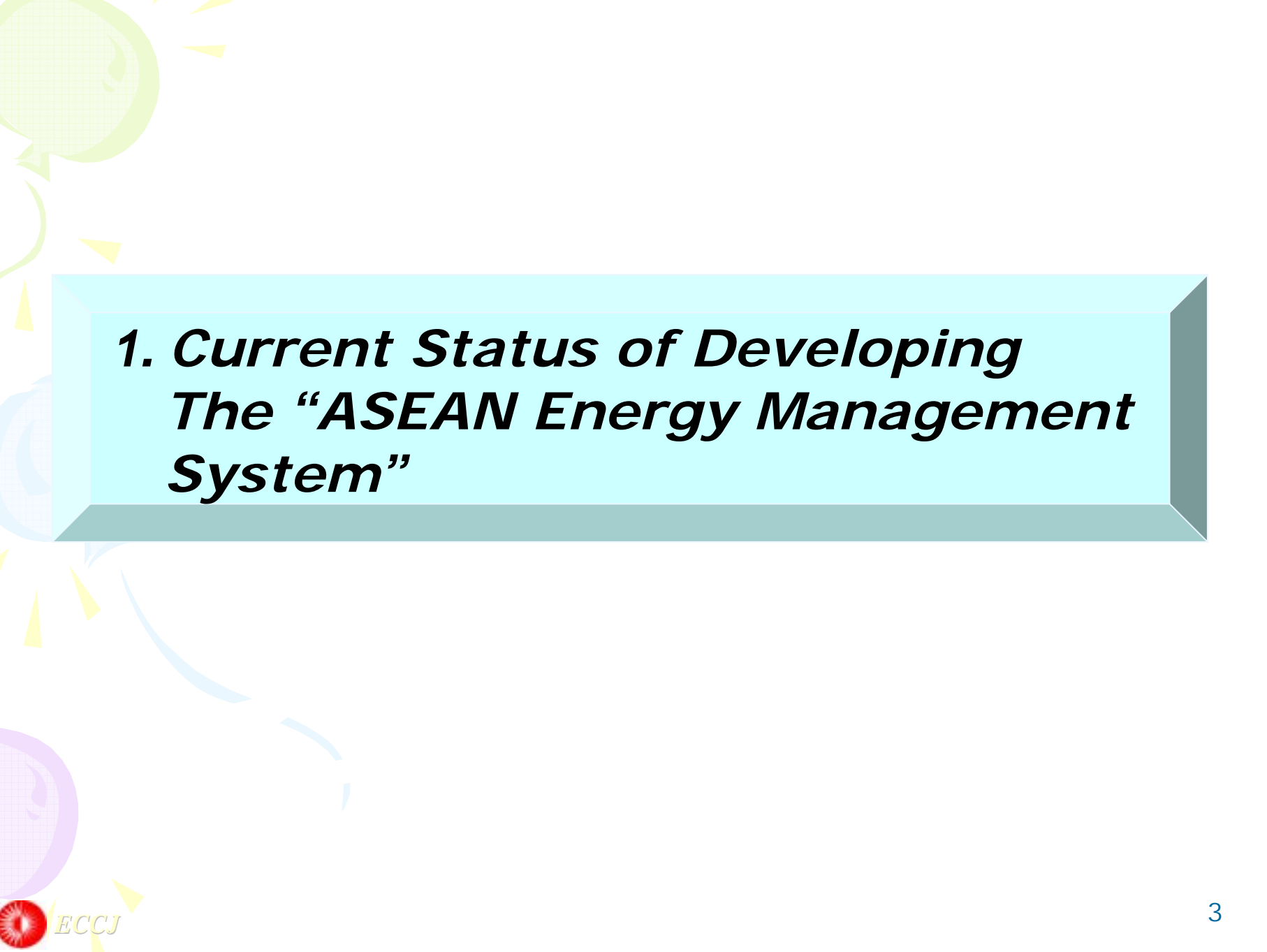
Kazuhiko YOSHIDA

**General Manager, International Engineering Dept.
The Energy Conservation Center, Japan**

Contents

- 1. Current Status of Developing
The “ASEAN Energy Management
System”***
- 2. Future Plan to Develop and Function
“ASEAN Energy Management System”***
- 3. Updated General Schedule***





***1. Current Status of Developing
The “ASEAN Energy Management
System”***

Established Plan of “ASEAN Energy Management System”

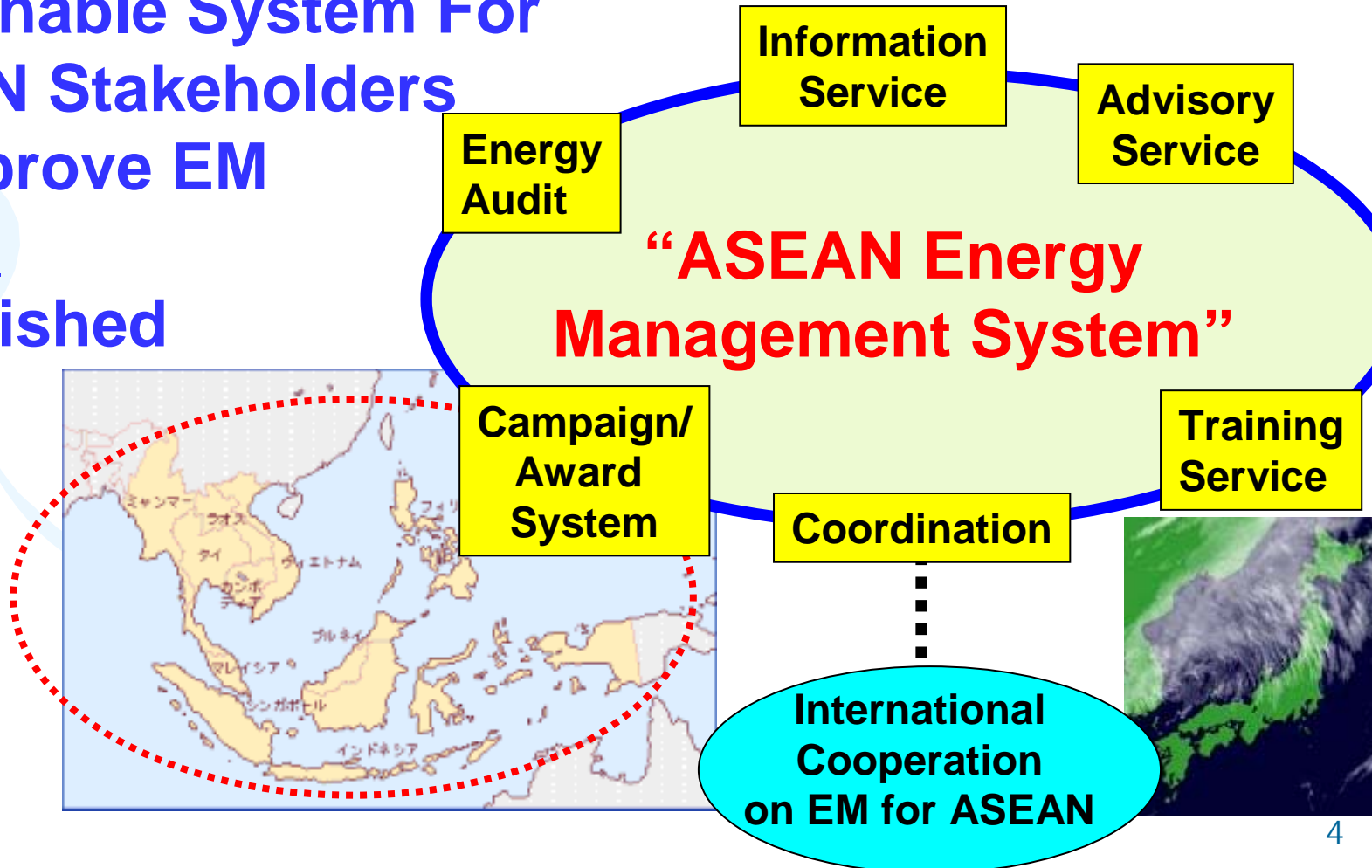
Purpose

Sustainable System For
ASEAN Stakeholders

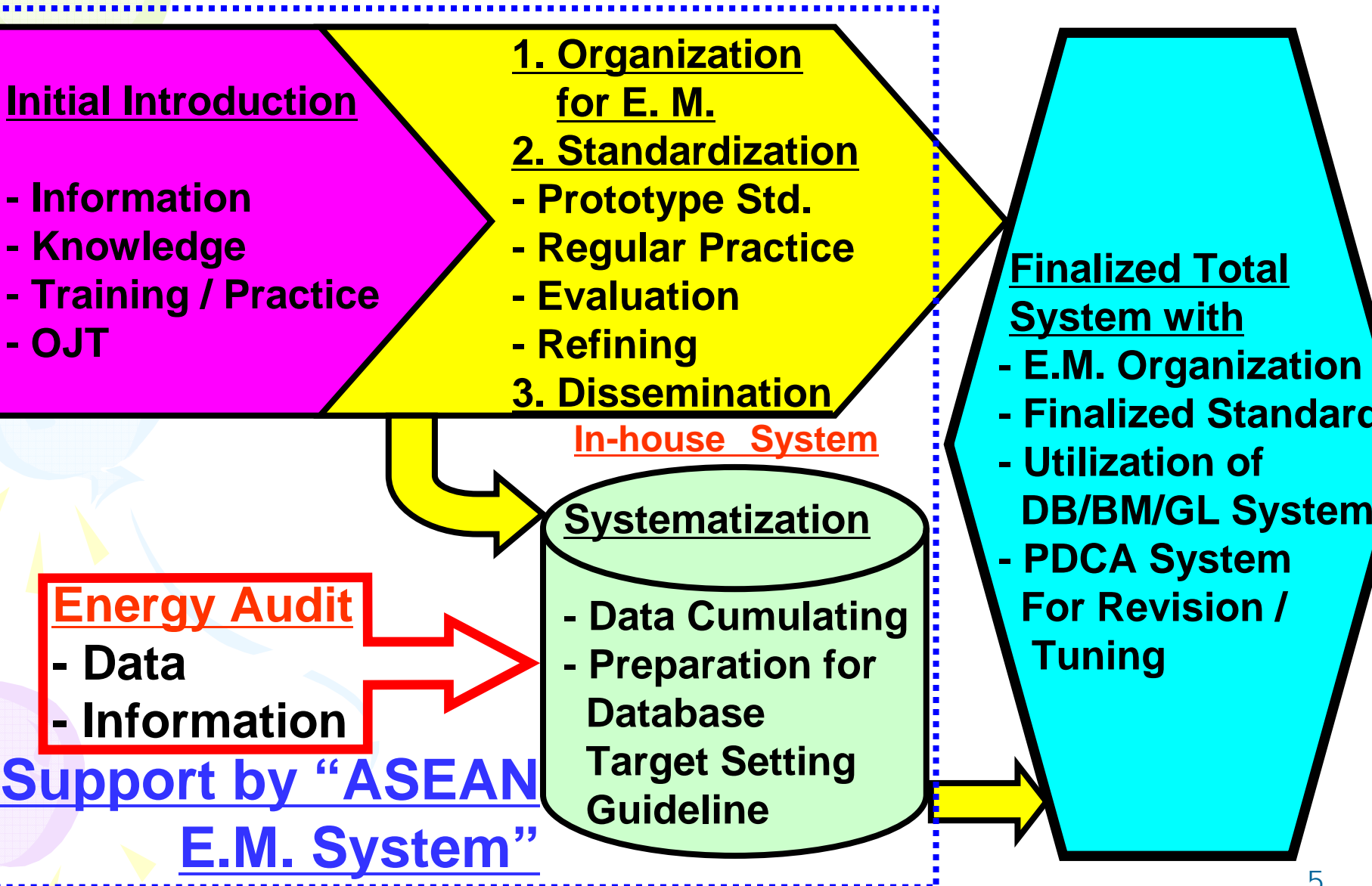
To Improve EM

Status

Established



Scope of "ASEAN E.M. System"

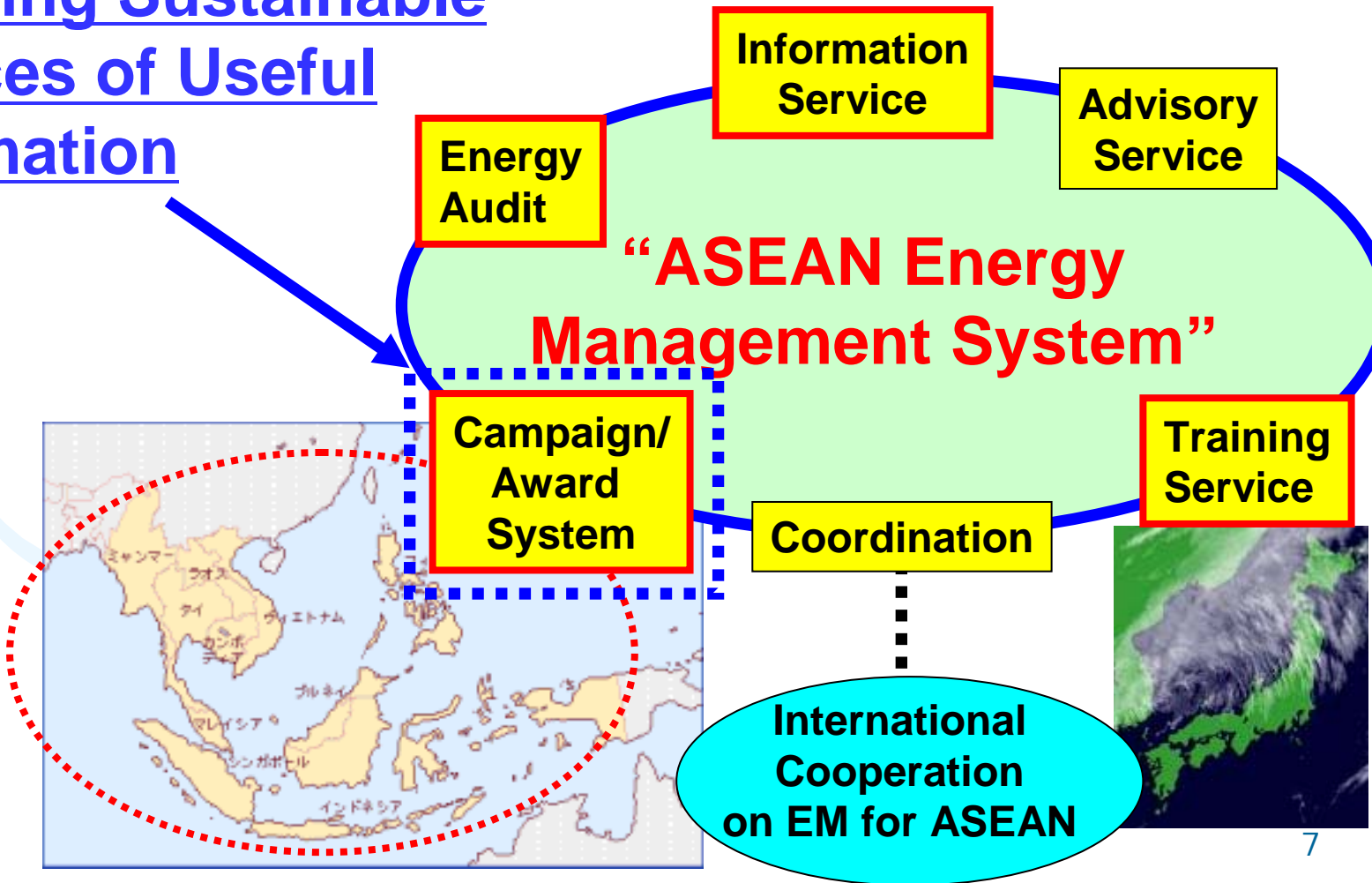


Actual Progress and Activities

- 1. Investigation of Actual Situations and Infrastructures for Energy Management in The 10 ASEAN Countries (2004)**
- 2. Develop Concept of “ASEAN Energy Management (EM) System” (2004-2005)**
- 3. Develop Plan of “ASEAN EM System”
Study Workshop in JP (July 2005)
Intensive Surveys in ASEAN (2005-2006)**
- 4. Establish Basic Plan of “ASEAN EM System” (Jan. 2006)**

Building & Started Functions of “ASEAN Energy Management System”

1. Building Sustainable Sources of Useful Information



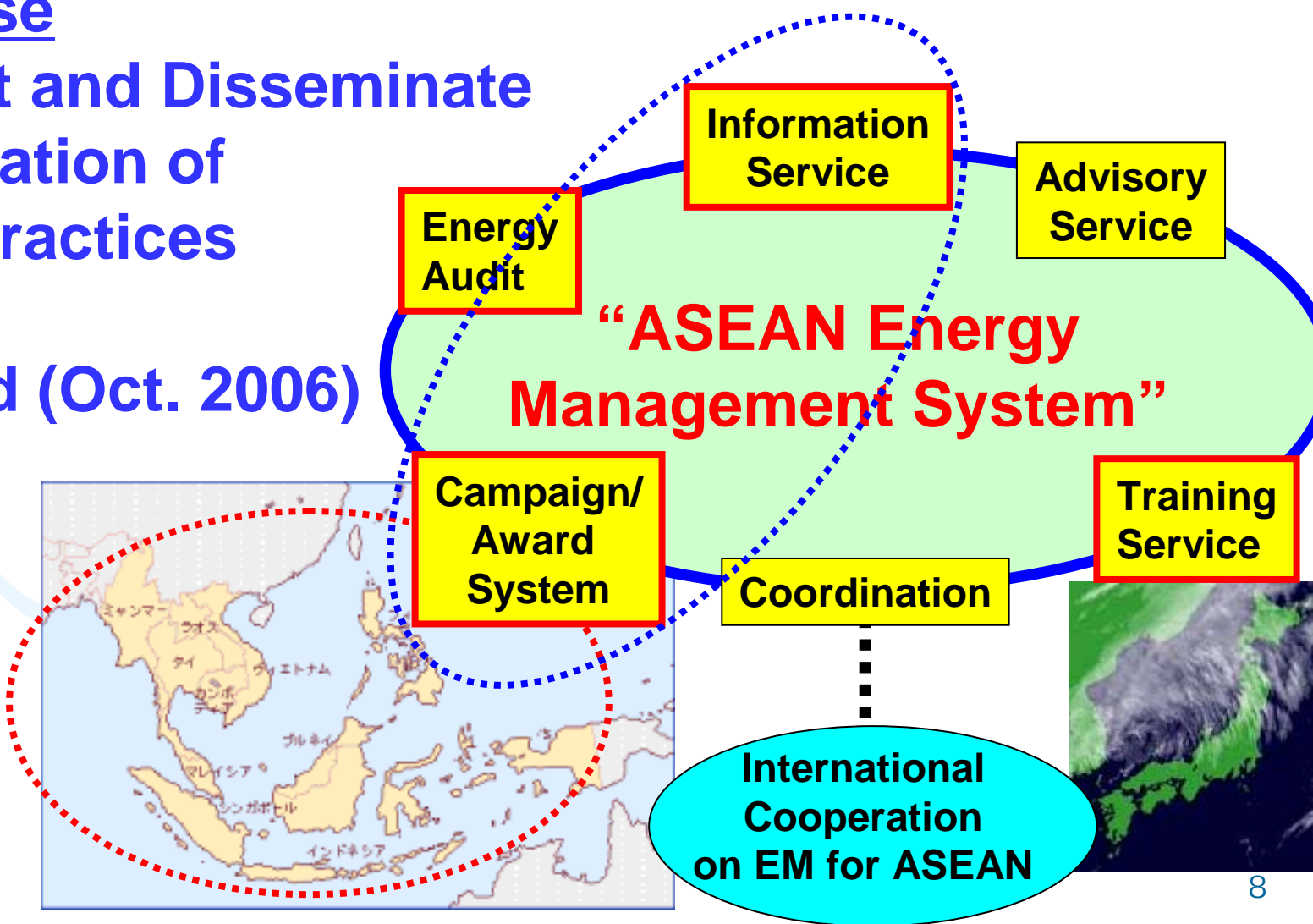
ASEAN Award System of Best Practices in E.M. for Industries & Buildings

Purpose

Collect and Disseminate Information of Best Practices

Status

Started (Oct. 2006)



Actual Progress and Activities - 1

1. Develop Basic Plan (2005-2006)

2. Authorize Basic Plan (Jan. 2006)

Summary & Post Workshops

3. Develop Application Form (March 2006)

1st Research Forum in Japan (R.F. in JP)

4. Apply BOJ (E. M.) Members (Sept. 2006)

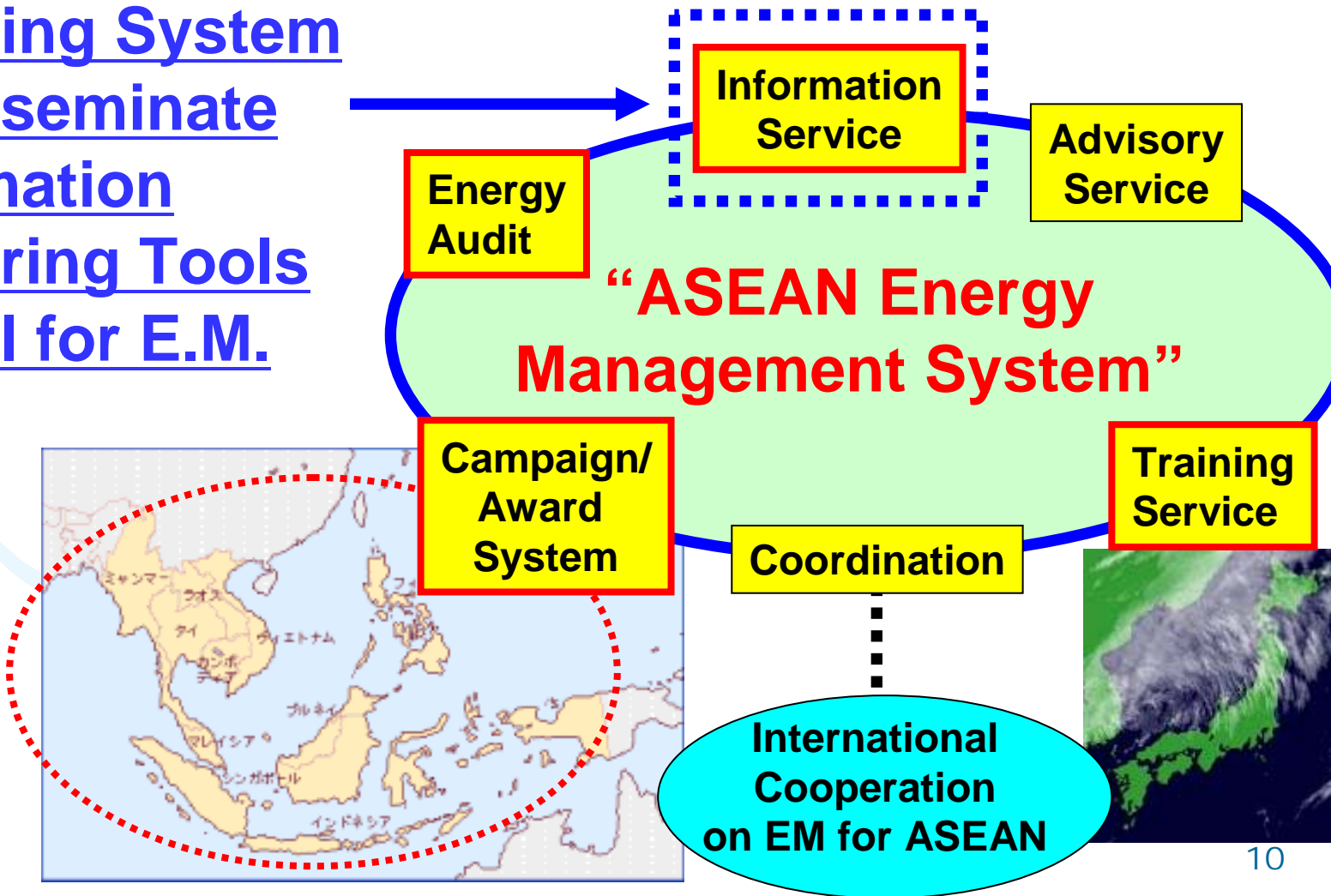
**Finalize & Approve Plan for 2006 - 2007
in 1st BOJ Meeting**

5. Call 1st Application (Oct. 2006)

Refine Evaluation Criteria in 2nd RF in JP

Building & Started Functions of “ASEAN Energy Management System”

2. Building System to Disseminate Information
Preparing Tools Useful for E.M.



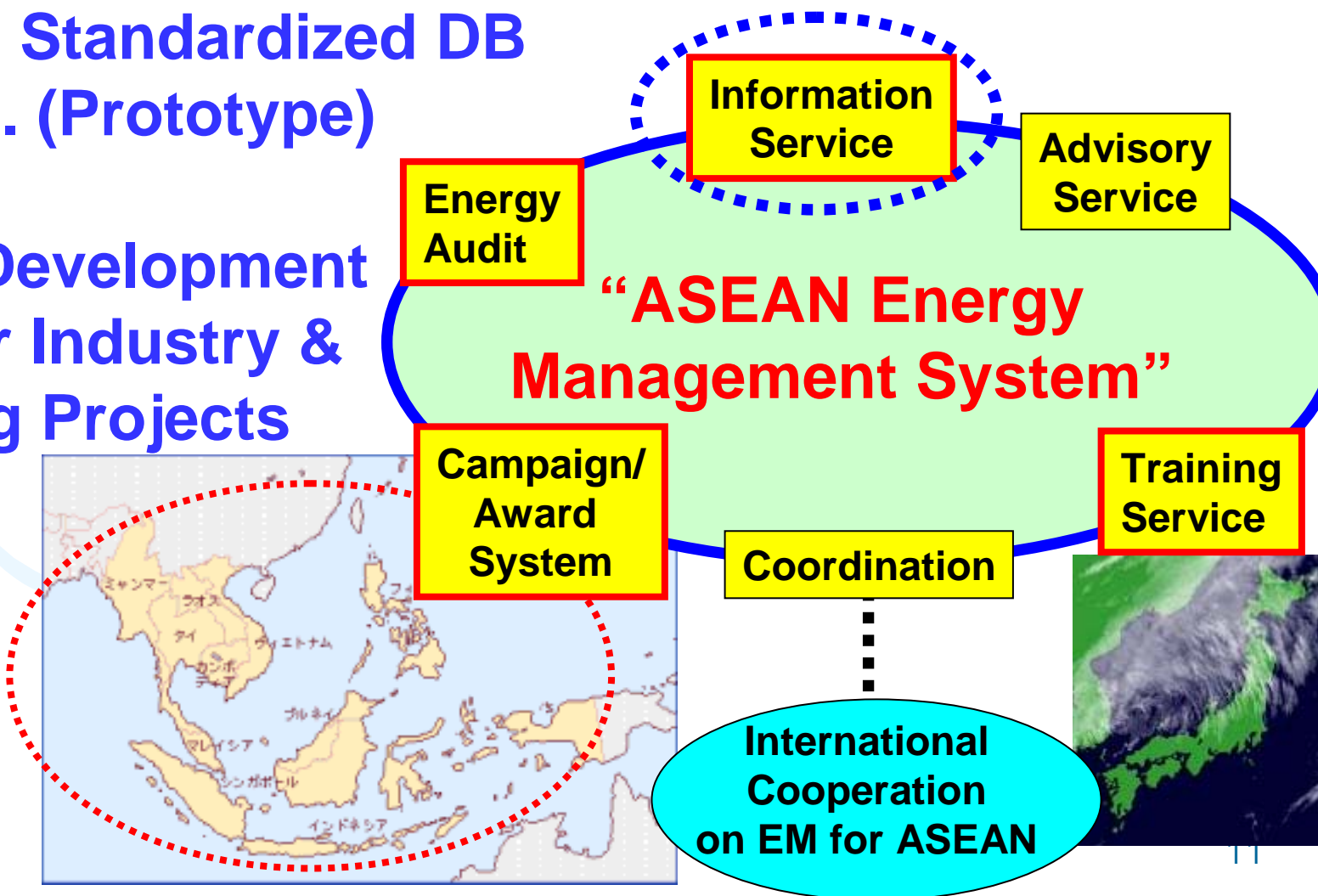
System to Disseminate In-house Database for Industries & Buildings

Purpose

Provide Standardized DB
For E.M. (Prototype)

Status

Under Development
In Major Industry &
Building Projects



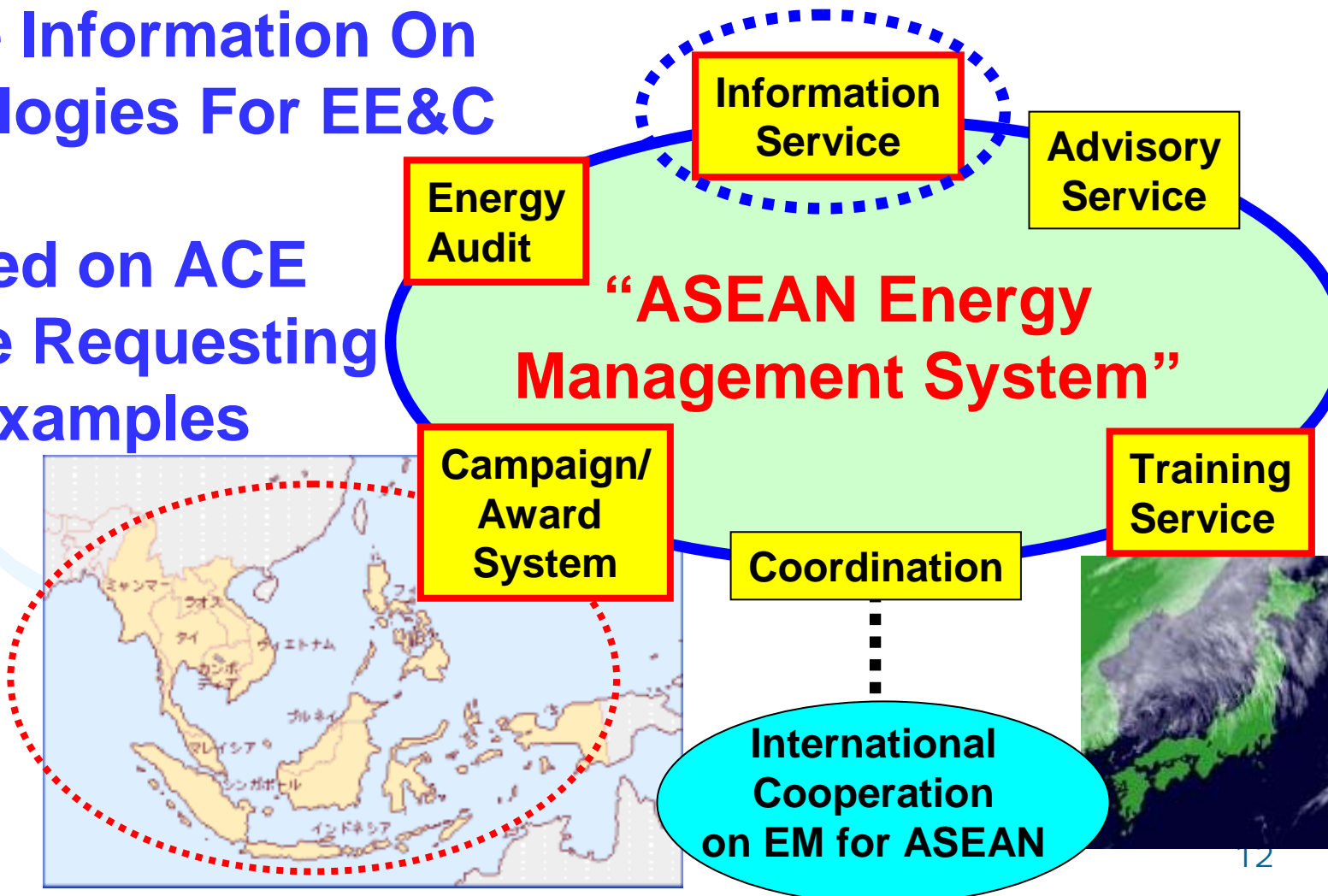
System to Disseminate Technical Directory for Industries & Buildings

Purpose

Provide Information On Technologies For EE&C

Status

Uploaded on ACE Website Requesting Good Examples



Actual Progress and Activities – 2A

- 1. Discuss Draft Concept (2004-2005)
Local Workshops in Projects for
Buildings and Major Industries**
- 2. Develop Technical Directory and Data-
base Including Discussion in Local
Workshops for Buildings and Major
Industries Projects (2005-2006)**
- 3. Establish Plan in 2006**
- 4. Edit Tech. Directory & In-house DB by
ACE-ECCJ (2006-)**

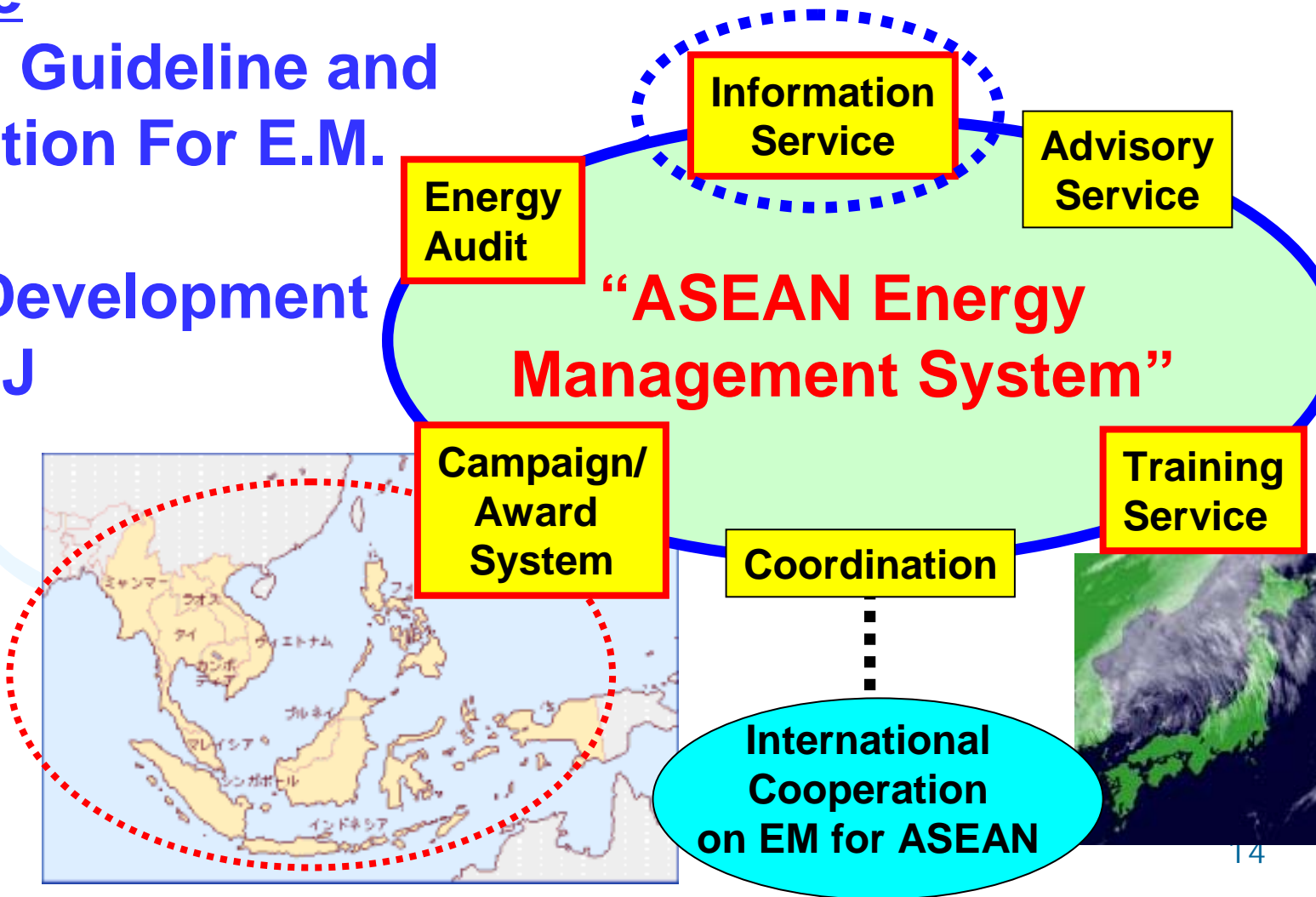
Preparation of Tools for Energy Management

Purpose

Provide Guideline and Information For E.M.

Status

Under Development
By ECCJ



Actual Progress and Activities – 2B

**1. Introduce & Discuss Concept (2006)
Intensive Seminar-Workshops**

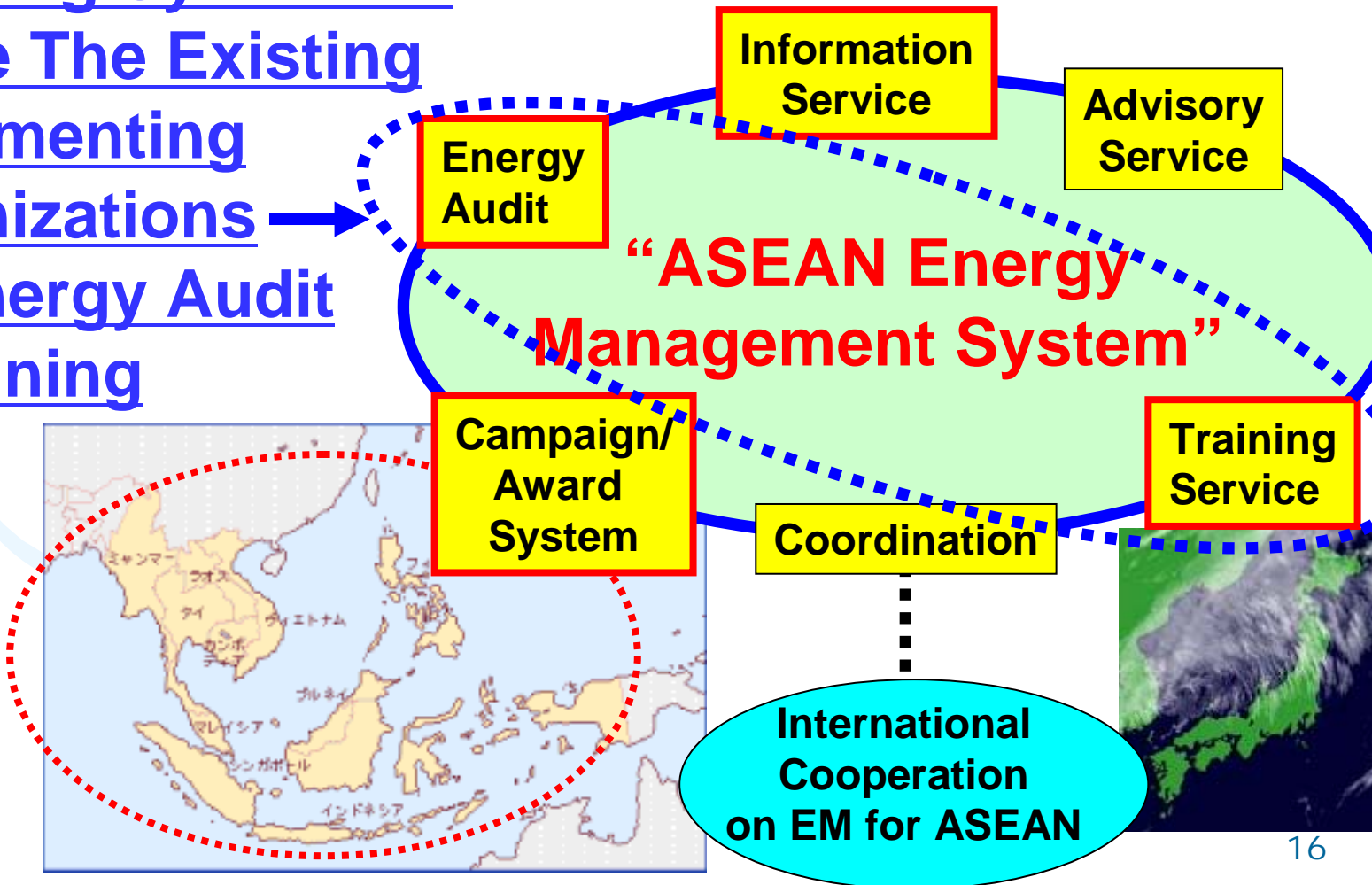
**2. Prepare “Energy Management Handbook for ASEAN” (Draft) by ECCJ (2006-2007)
(Based on Total Energy Management (TEM) Handbook Developed in Thailand)**

3. Upload Useful Handbooks & Reports on ECCJ Website (2007-)

4. Study Other Directories & Handbooks by ECCJ (2006-)

Building & Started Functions of “ASEAN Energy Management System”

3. Building System To Utilize The Existing Implementing Organizations for Energy Audit & Training



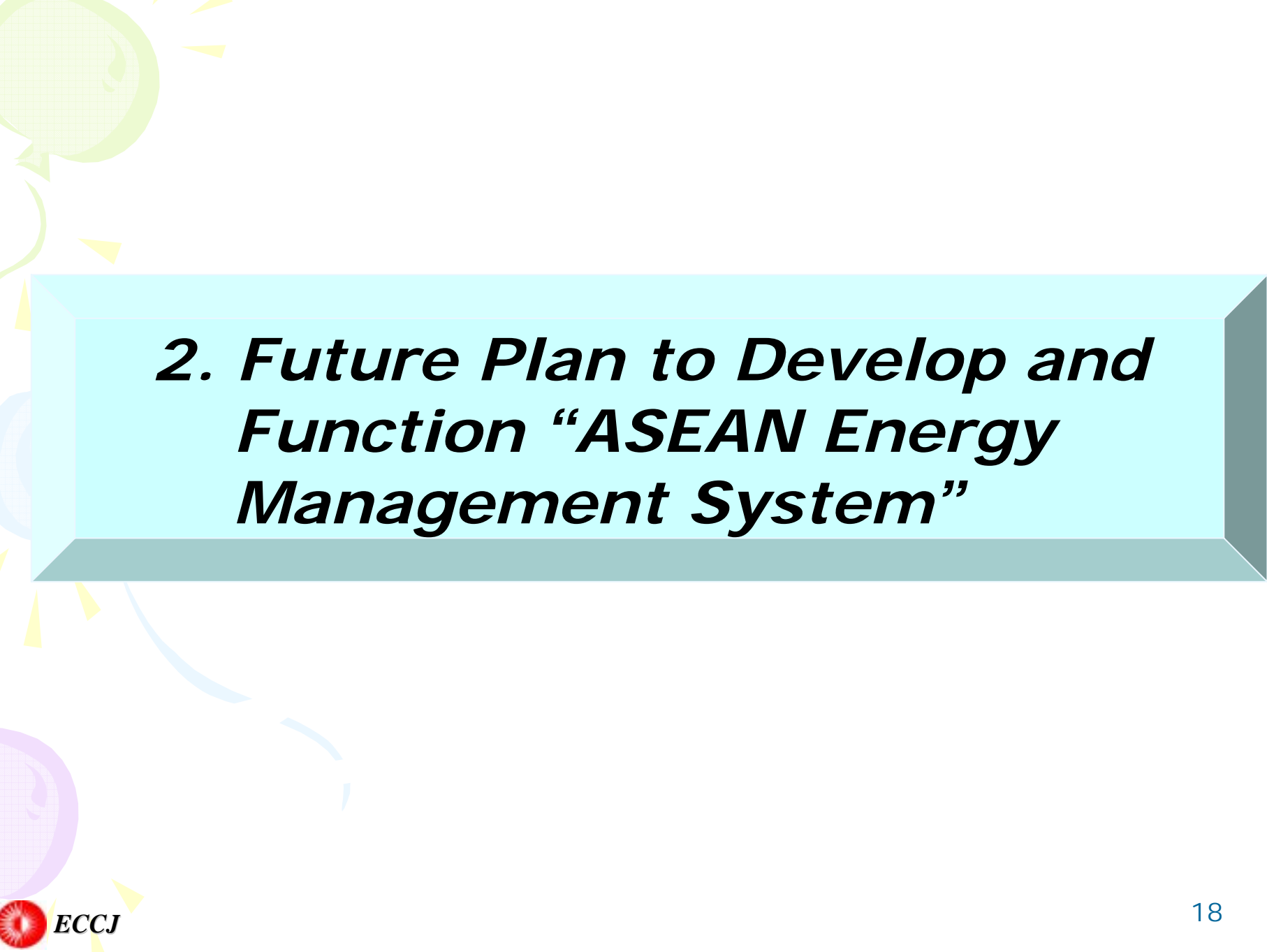
Actual Progress and Activities - 3

1. Develop Basic Concept by ECCJ (2005)


2. Investigate Possibility (2005)
Intensive Surveys of 20 Implementing Organizations in The 6 ASEAN Countries

3. Develop Basic Plan (2006)
PR & Discussion in Intensive Seminar-Workshop in the 7 ASEAN Countries

4. Prepare Preliminary System Plan by ECCJ and System for Trial by ACE



2. Future Plan to Develop and Function “ASEAN Energy Management System”



***2-1. Continuation & Completion of
Development of / Working
Functions and Programs***

System to Collect and Disseminate Best Practices in Energy Management

1. “ASEAN Award System of Best Practices in EM for Industries / Buildings”

- 1) Smooth Completion of The 1st Award**
- 2) Improvement of System Plan / Operation**

2. Establish Information System to Publish / Disseminate Awarded Best Practices

- 1) Consideration of Comprehensive Guide-line to Ease Dissemination**
- 2) Compilation of Excellent Cases in E.M Handbook / Technical Directory**

Points of Comprehensive Guideline to Ease Dissemination - (1)

Grouping “Best Practices” in EM Applicable for Inter-sector

Energy Management

- Other Sectors
- Other Issues
(Environment, etc.)

Industries

Buildings

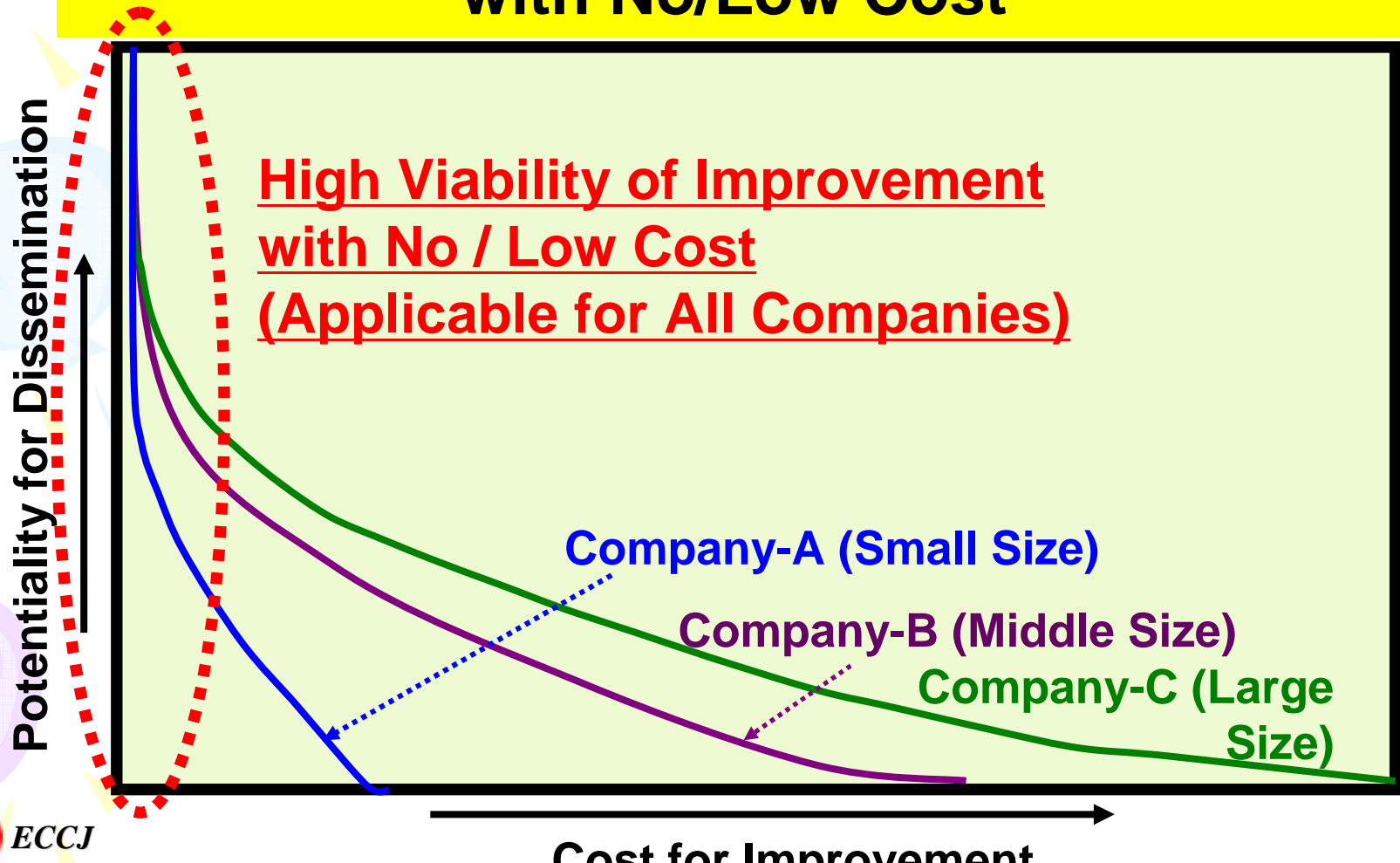
Collection of Excellent Cases

Useful for Both Industry and Building

Large Potentiality of Dissemination

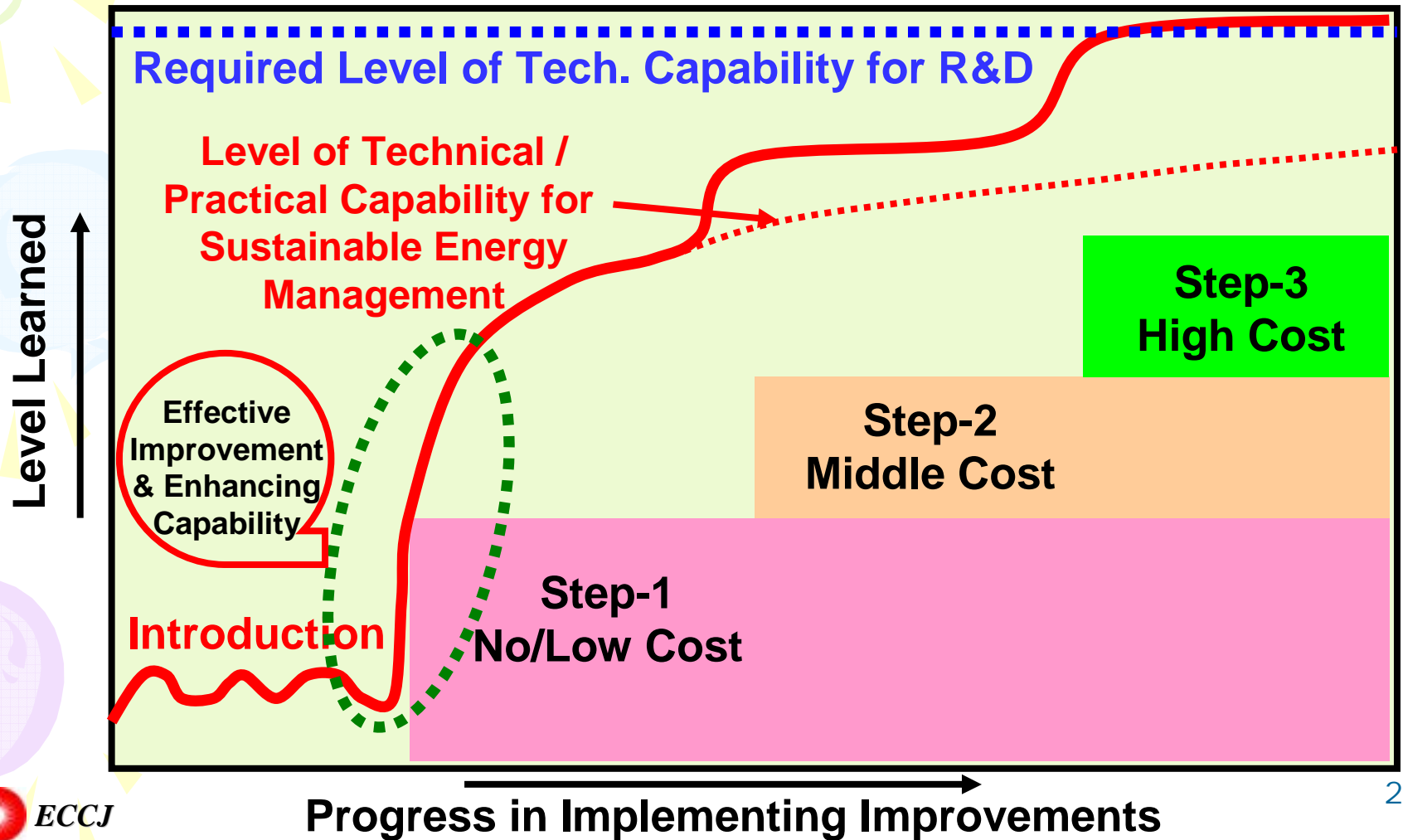
Points of Comprehensive Guideline to Ease Dissemination - (2)

Grouping “Best Practices in EM” Realized with No/Low Cost



Points of Comprehensive Guideline to Ease Dissemination - (3)

Important Learning Process Started with Step - 1



Tools for Energy Management - Preparation & Activity to Disseminate -

1. Basic 3 Tools for Energy Management

- 1) Energy Management Handbook**
- 2) In-house Database**
- 3) Technical Directory**

2. Proposed Trial Use These Basic Tools in Factories and Buildings in ASEAN (Especially at Companies Awarded (EM))

- 1) Trial Use for 6 Months**
- 2) Regular Visit by ECCJ-ASEAN Experts**
- 3) Reflecting Results for Improvement**

Effective Use of Developed Tools for Energy Management

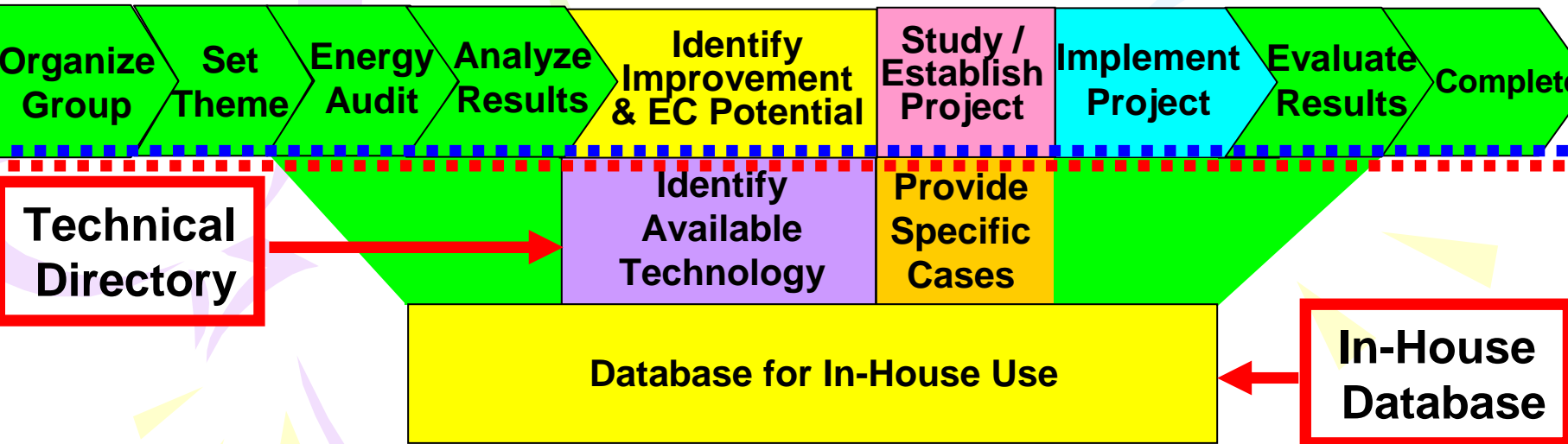
Energy Management Handbook

Sustainable Energy Management System

with Enhanced Voluntary Activities

Organization / Motivation & Incentive / Management

Participation / Technical & Practical OJT / Standardization



Draft Contents of EM Handbook – 1

Part I. Purpose and Usage of TEM Handbook

Ch-1 Introduction

Ch-2 Purpose of TEM Handbook

Ch-3 Usage of TEM Handbook

Part II. Total Energy Management “by Participation” with Key Step Approach

Ch-1 Key Step Approach for Energy Management

Ch-2 Policy & Planning for Energy Conservation

Ch-3 Organization & Structure for E.C. Promotion

Ch-4 Principles and Methods of S.G.A. (Small Group Activities) for Energy Management

Draft Contents of EM Handbook – 2

Ch-5 Building Awareness, Motivation and Training

Ch-6 Evaluation of Total Energy Management

Part III. Implementation of E. C. Projects

Ch-1 Procedures of Energy Audit

Ch-2 Data Collection and Analysis

Ch-3 Planning, Targeting & Benchmarking for E.C.
Projects

Ch-4 Implementation of E.C. Projects

Ch-5 Evaluation of E.C. Projects

(Including Guideline to Effectively Utilize In-House
Database and Technical Directory)

Draft Contents of EM Handbook – 3

Appendix – 1

**Successful Examples of E.C. by Small Group Activities
(Samples of Winners for ASAEN E.M. Award System)**

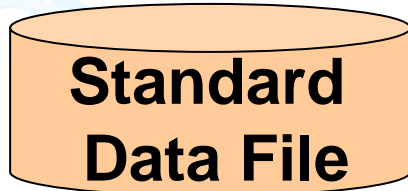
Appendix – 2 Related Information

**Access to the Existing Manuals / Data / Information
Available for E. C. Activities**

- **In-House Database / Technical Directory**
- **Statistics Data on Energy, etc.**
- **Websites of Related Energy / Industrial Organizations**
- **Available Training Courses**
- **Available Technical Manuals etc.**
- **Manual of Tools for TQM and TPM**

Prototype Database for In-house Use

Initial Introduction
Prototype Database
- Data Required for E.M.
- Data Format
- Typical Data Processing
- Typical Data Analyses

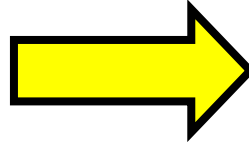


Prototype DB for
Industry / Building

ASEAN E.M. System

Customer's In-house System

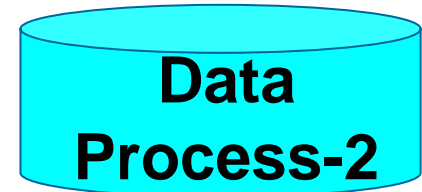
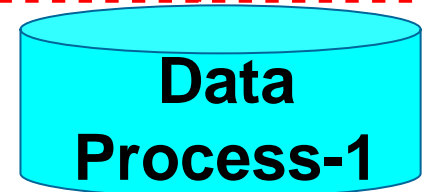
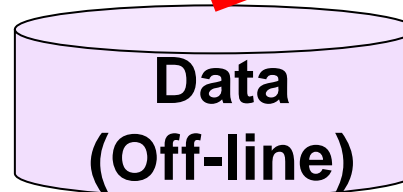
Download
Develop
Tune



System for E.M.

- Data Cumulating
- Data Processing
- Data Analyses
- Target for G.L.

Data for
E.M.



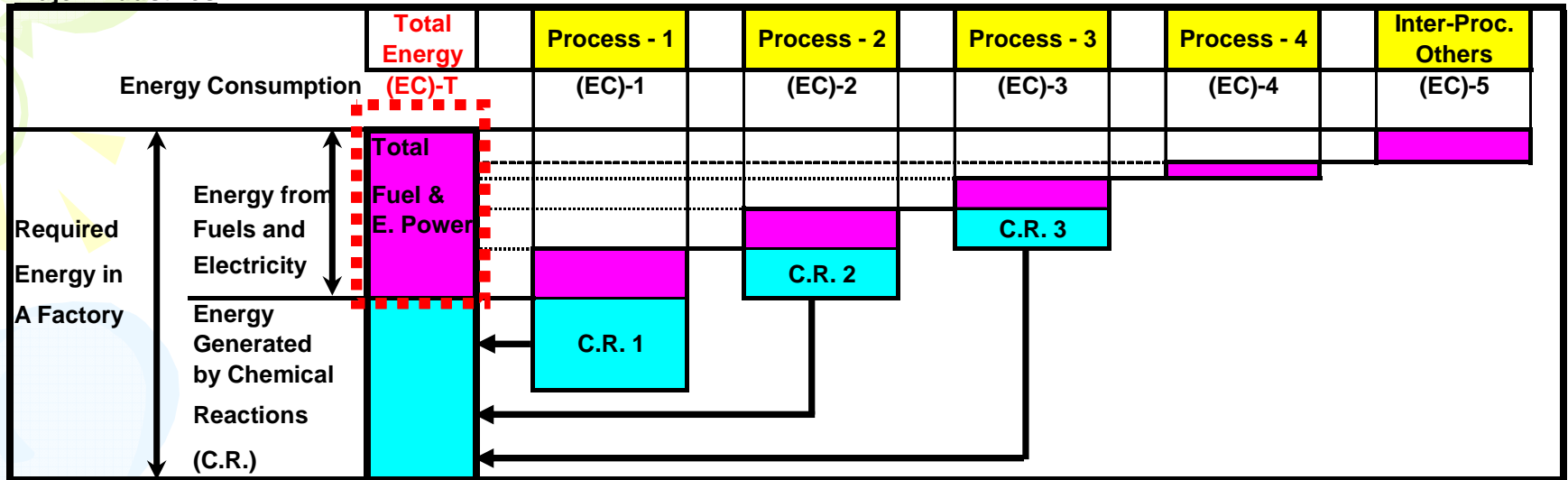
Energy Audit

- Data
- Information

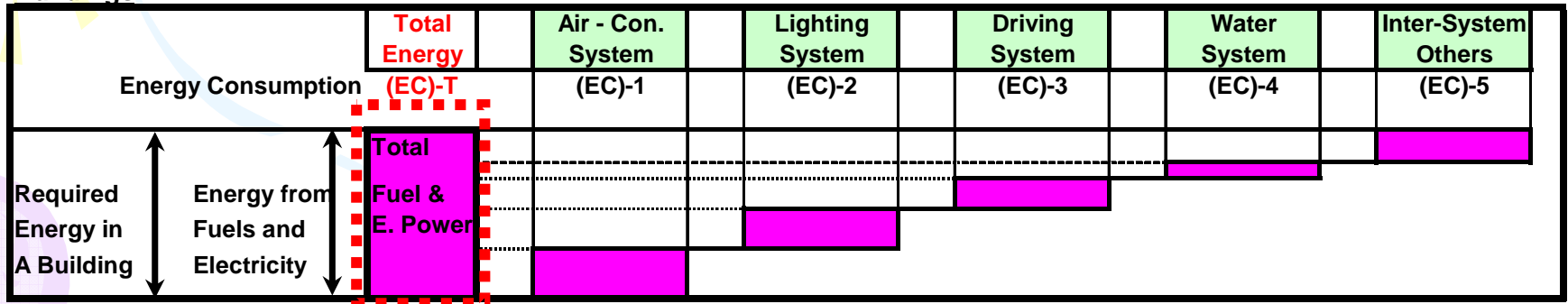
On-line Process
Data

Database for E.M. : Comprehensive Design

Major Industries



Buildings



System to Utilize The Existing Implementing Organizations

1. Plan Based on Surveys / Discussion

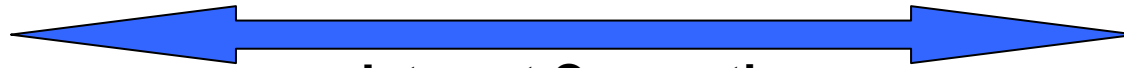
System Concept : Type & Procedure

- 1) Cyber Search for Stakeholders to Meet**
- 2) Comparison of Scope & Key Conditions of Service Providers and Customers**

2. Prepare and Start Trial Operation

- 1) Prepare The System in ACE Website
(With Guidance & Conditions to Use)**
- 2) Open Registration of Stakeholders
(Service Providers and Customers)**

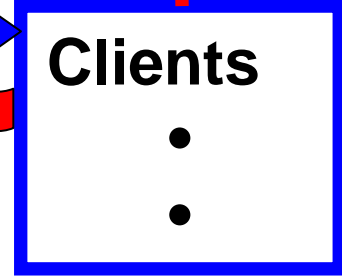
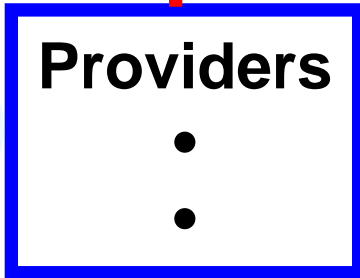
System Concept



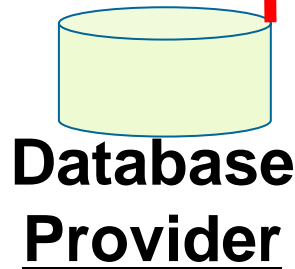
Internet Connection

ACE Website & ACE Server

Comparison of Scope & Conditions



Services
Scope
Spec.
Reference
Provider's Info.

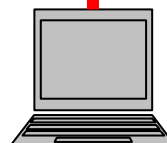


Database
Provider



Database
Client

Requirement
Scope
Spec.
Fee, etc.
Client's Info.



Information & Data

Information for Mutual Contact

Service Provider

Customer

Name of Organization or Company

1. General Information

Address

Operation (Governmental / Private, etc.)

Capital

Number of Employees

Branch / Liaison (Country and City)

Business Specifics

2. Services Possible to Provide

2-1. Energy Audit

(1) Buildings

Typical Scope (Categories, etc.)

Typical Specifications

(2) Factories

Typical Scope (Categories, etc.)

Typical Specifications

(3) Conditions Required to Provide Services

2-2. Training

(1) Energy Management Course

Typical Scope (Categories, etc.)

Typical Curriculum / Specifications

(2) Specific Technological Course

Typical Scope (Categories, etc.)

Typical Curriculum / Specifications

(3) Specific Practical Course

Typical Scope (Categories, etc.)

Typical Curriculum / Specifications

(4) Conditions Required to Provide Services

2-3. Educational Course

Typical Scope (Categories, etc.)

Typical Curriculum / Specifications

Conditions Required to Provide Services

2-4. Consultation / Engineering

Typical Scope (Categories, etc.)

Typical Curriculum / Specifications

Conditions Required to Provide Services

2-5. Others

Typical Scope (Categories, etc.)

Typical Curriculum / Specifications

Conditions Required to Provide Services

Reference (Lists of Actual Services in 5 Years)
(Year / Customer (with name if possible) / Specifics)

2-1. Energy Audit

2-2. Training

2-3. Educational Course

2-4. Consultation / Engineering

2-5. Others

Name of Organization or Company

1. General Information

Address

Operation (Governmental / Private, etc.)

Capital

Number of Employees

Branch / Liaison (Country and City)

Business Specifics

2. Services Required

2-1. Energy Audit

(1) Buildings

Typical Scope (Categories, etc.)

Typical Specifications

(2) Factories

Typical Scope (Categories, etc.)

Typical Specifications

(3) Conditions for Services

2-2. Training

(1) Energy Management Course

Typical Scope (Categories, etc.)

Typical Curriculum / Specifications

(2) Specific Technological Course

Typical Scope (Categories, etc.)

Typical Curriculum / Specifications

(3) Specific Practical Course

Typical Scope (Categories, etc.)

Typical Curriculum / Specifications

(4) Conditions for Services

2-3. Educational Course

Typical Scope (Categories, etc.)

Typical Curriculum / Specifications

Conditions for Services

2-4. Consultation / Engineering

Typical Scope (Categories, etc.)

Typical Curriculum / Specifications

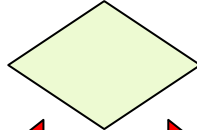
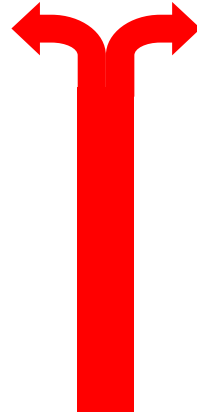
Conditions for Services

2-5. Others

Typical Scope (Categories, etc.)

Typical Curriculum / Specifications

Conditions for Services



Comparison

***2-2. Further Development /
Preparation / Study of
Enhanced Functions to
Improve The System***

Proposal to Prepare Additional Tools for Energy Management (1)

- 1. Technical Handbooks for Industries**
 - 1) Thermal Energy Efficiency Improvement (TEEI) Handbook (Tentative Name)**
 - 2) Electrical Energy Efficiency Improvement (EEEEI) Handbook (Tentative Name)**
- Application of Handbooks Developing by METI / ECCJ – Thai MOI Cooperation**

Handbooks to Supplement Energy Management Handbooks for ASEAN

Proposal to Prepare Additional Tools for Energy Management (2)

2. Directories to Provide Information of Business

1) Directory of ESCOs

2) Directory of Technology / Equipment Suppliers for EE&C

Development of e-Directory

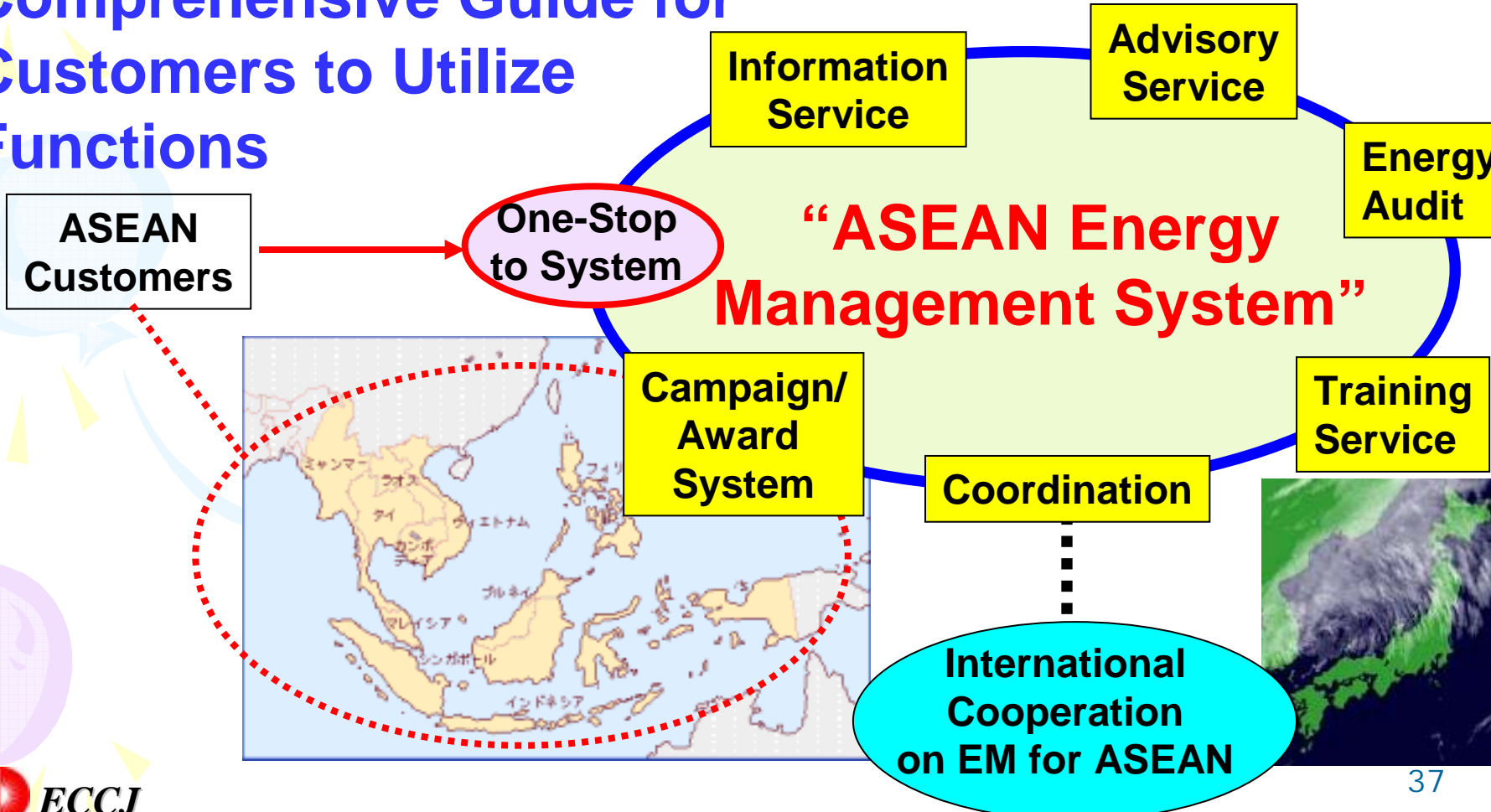
(1) Self Registration & Maintenance Type

**(2) Future Access to Directory by ECCJ
(Currently Only Japanese Version)**

Comprehensive One-Stop Guidance of “ASEAN Energy Management System”

Purpose

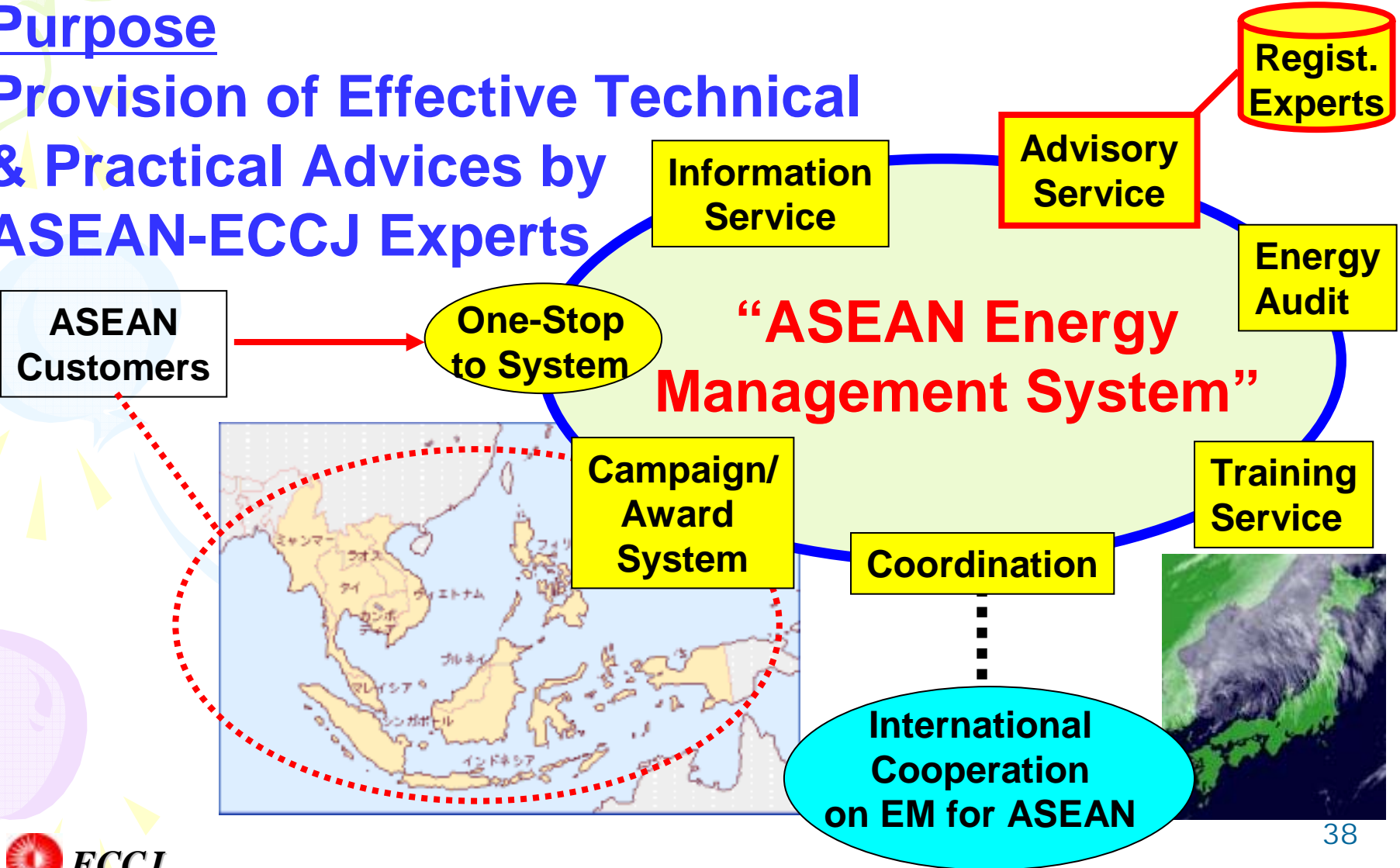
Comprehensive Guide for Customers to Utilize Functions



“ASEAN Energy Management System” - Advisory Services by Experts -

Purpose

Provision of Effective Technical
& Practical Advices by
ASEAN-ECCJ Experts



Preparation of Further Functions of “ASEAN Energy Management System”

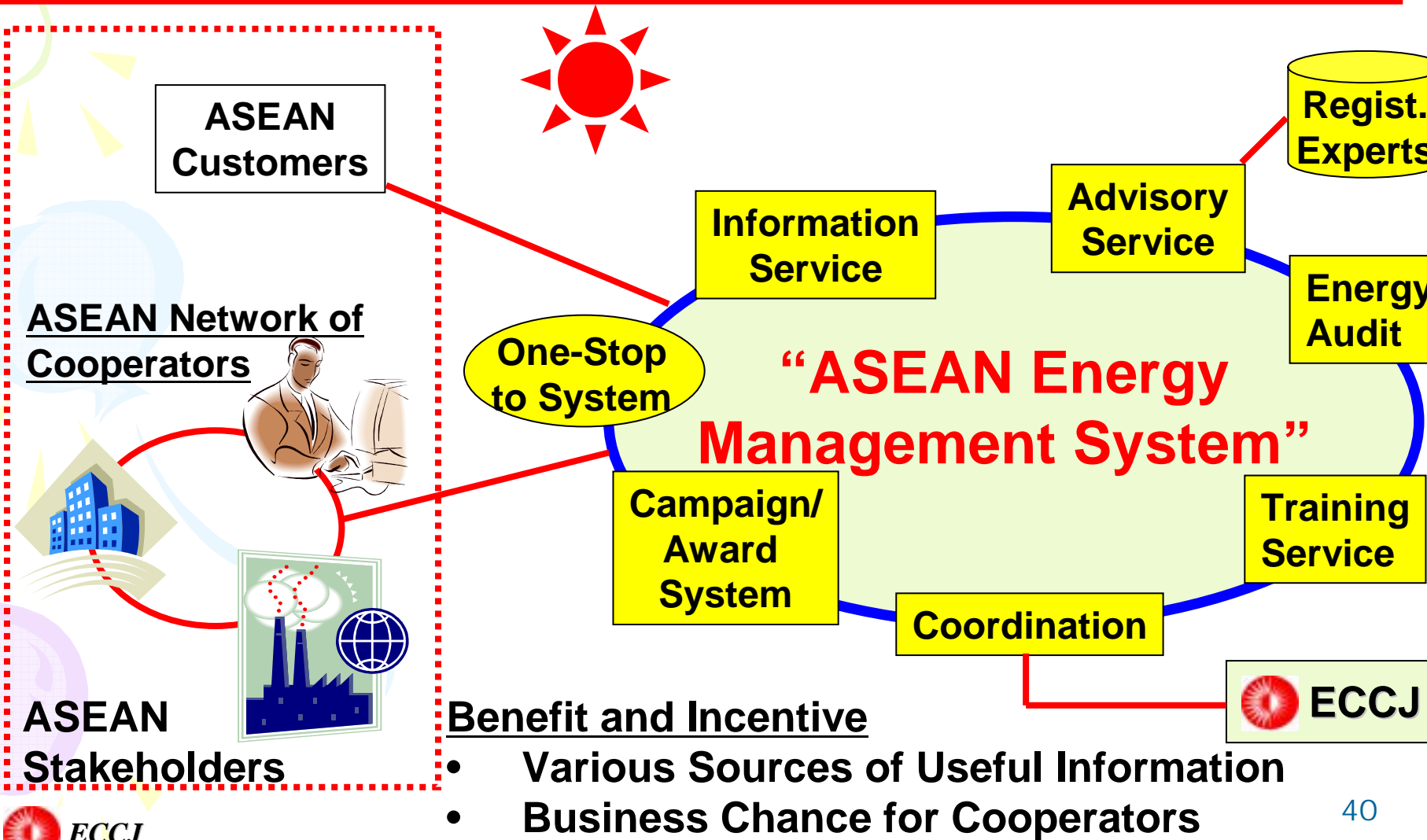
1. One-Stop Guidance to Access Functions

- 1) Specific of Requirements from Customer**
- 2) Interactive e-Guidance Logic to Access Appropriate Functions In Accordance with Item 1)**

2. Advisory Service

- 1) Scope Related to ASEAN E.M. System**
- 2) Contacting Registered Experts by e-mail**
- 3) Voluntary Reply by Some Experts**
- 4) Open System for Experts to Register**

Continued Activities to Expand Network of Cooperating Companies and Persons





3. Updated General Schedule

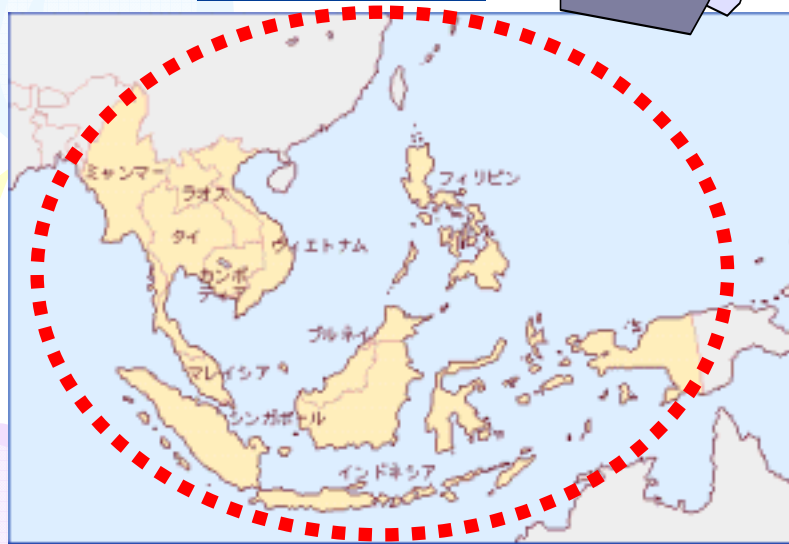
Updated General Schedule (As of February 2007)

Phase	Main Activities	2004	2005	2006	2007	2008	After 2009
Phase - 1	Investigation / Study Concept						
Prepare Basic Functions	Develop Specific Plan						
	Prepare / Work Functions						... ▶
	Verification of Result						
Phase - 2	Study / Prepare / Add Functions					... ▶	

On Schedule !!
As of Feb. 2007

Thank You

Very Much



The Energy Conservation Center, Japan