SEEA Development in Malaysia

Sub-Regional Workshop on Environment Statistics for South-East Asian Countries
2 – 4 November 2016
Bangkok, Thailand

Presented by:
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Department of Statistics, Malaysia
OUTLINE:

1. OVERVIEW OF SEEA
2. DEVELOPMENT OF SEEA PSUT-ENERGY ACCOUNT MALAYSIA 2010 (MYSEEA PSUT-ENERGY 2010)
3. LIMITATIONS & CHALLENGES
4. WAY FORWARD
OVERVIEW OF SEEA
Moving towards an integrated statistical system

SEEA Account / Database

Policy implication and formulation

SEEA analysis/modeling

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Main Accounts & Tables of The SEEA Central Framework

1. Supply & Use Table (SUT)
   i. Energy
   ii. Water
   iii. Emission (air, waste, water)

2. Asset Account
   i. Mineral & energy resources
   ii. Land
   iii. Soil resources
   iv. Timber/forest resources
   v. Aquatic resources
   vi. Water

3. Functional account
   i. Environmental Protection Expenditure Account (EPEA)
   ii. Environmental Goods & Services Sector (EGSS)

4. Sequence of economic account

Production Account (elaborated in SUT)
Distribution and Use of Income Accounts
Capital Account
Financial Account

Less depletion of natural resources
Add back depletion of natural resources

Note: SEEA applies the accounting concepts, structures, rules and principles of the SNA to environmental information in terms of Production boundary, Definition of products and Territory/residential approach.
DEVELOPMENT OF SEEA PSUT-ENERGY ACCOUNT MALAYSIA 2010 (MySEEA PSUT-ENERGY 2010)
THE NUMBER OF OFFICERS INVOLVED, SEEA IN MALAYSIA

- **2011**: 4 Officers
- **2013**: 5 Officers
- **2014 - Present**: 6 Officers
STEP BY STEP PROCESS

1. Study the Handbook of SEEA, NAMEA & other manuals
   - Handbook of National Accounting – Integrated Environmental and Economic Accounting (UN 1993)
   - Handbook of Integrated Environmental and Economic Accounting (SEEA-2003)
   - SEEA Central Framework, 2012
   - Reading sessions every 2 weeks

2. Awareness Workshop SEEA with Agency
   - List of account

3. Engagement Session with Agency

4. Selection of SEEA Account
   - Highest priority
   - Highest availability of data
   - Highest accessibility of data

5. Main User Committee
   - Set up priority account
   - Finalising
   - Endorsement

6. Focus-group Meeting
   Technical working group (Inter Agency & Inter Division)

7. Development of SEEA Account
   - Support with academia

8. Other activity
   - Several training form UNSD(July 2014-present)
   - Involved in United Nations Committee of Experts on Environmental-Economic Accounting (UNCEEA)
   - Invited London Group Meeting

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OTHER ACTIVITY-SEEA IN MALAYSIA
(WITH INTERNATIONAL SAPPORRT)

1. **Workshop SEEA**
   - 23 – 27th Sept 2013
   - The 1st Sub-Regional Course on SEEA – Collaboration with UNSIAP/UNSD/ESCAP
   - 26 – 30 Sept 2016
   - Regional Training Workshop on the System of Environmental-Economic Accounting with a Focus on Water Accounting Collaboration with UNSD/ESCAP

2. **Assessment Mission SEEA**
   - 30 Sept – 1 Oct. 2013
   - Assessment Mission on SEEA with UNESCAP and UNSD
   - Assessment Mission on SEEA with UNESCAP and UNSD

   - Prepare project outputs: National Plan SEEA Malaysia and one selected SEEA account
MySEEA Energy
References
MySEEA PSUT - Energy Account

1. SEEA – Central Framework 2012
2. SEEA – Energy
3. SEEA – Applications & Extensions
4. PEFA Manual 2014, Eurostats
5. International Recommendations for Energy Statistics (IRES)
STAKEHOLDERS

Ministry of Energy, Green Technology & Water

Sustainable Energy Development Authority (SEDA)

Main Agencies

Economic Planning Unit

Department of Mineral & Geosciences

Malaysia Energy Commission

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## NATIONAL POLICY RELATED/PLAN TO ENERGY

<table>
<thead>
<tr>
<th><strong>Policy</strong></th>
<th><strong>Objective</strong></th>
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<tbody>
<tr>
<td><strong>National Green Technology Policy 2009</strong></td>
<td>To ensure sustainable development &amp; conserve environment for future generations</td>
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<tr>
<td><strong>National Renewable Energy Policy and Action Plan 2008</strong></td>
<td>Enhancing the utilisation of indigenous renewable energy resources to contribute towards national electricity supply security and sustainable socioeconomic development.</td>
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<tr>
<td><strong>National Biofuel Policy 2006</strong></td>
<td>To reduce the country’s dependence on depleting fossil fuels, promoting the demand for palm oil as well as stabilising its prices at a remunerative level.</td>
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<tr>
<td><strong>Five – fuel Policy (2001)</strong></td>
<td>Encourage the utilization of renewable resources such as biomass, solar, mini hydro etc. Efficient utilization of energy</td>
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<tr>
<td><strong>Four-fuel/Diversification Policy (1981)</strong></td>
<td>Ensuring reliability and security of supply through diversification of fuel (oil, gas, hydro and coal)</td>
</tr>
<tr>
<td><strong>National Depletion Policy (1980)</strong></td>
<td>To prolong the life span of the nation's oil and gas reserves</td>
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<tr>
<td><strong>National Energy Policy 1979</strong></td>
<td>To ensure adequate, secure and cost-effective energy supply. To promote efficient utilization of energy and eliminate wasteful and non-productive usage</td>
</tr>
<tr>
<td><strong>National Petroleum Policy 1975</strong></td>
<td>Efficient utilization of petroleum resources. Ensuring the nation exercises majority control in the management and operation of the industry</td>
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**Data Sources**

1. National Energy Balance (NEB) 2010
2. Economic Census (EC) 2011 (RY2010)
3. Petroleum & Natural Gas Statistics 2011 (including MTJA)
4. Journals and selected NSO reports
6. Census of Distributive Trade
8. Trade data

**MySEEA PSUT-Energy Account 2010**

**Energy Resources**

**NATURAL RESOURCES**
- Natural gas
- Crude oil
- Coal & coke

**RENEWABLE RESOURCES**
- Hydro
- Solar*
- Bio Mass*
- Bio Gas*

**TRANSFORMATION OF ENERGY PRODUCTS**
- LNG
- Petroleum products
- Electricity
- Others**

**Note:**
1. Excluding reserve of energy resources
2. * will be covered on 2015
3. **Others refer to additive (which are used as refinery intake) e.g. imported Light Diesel, Crude Residuum & Middle East Residue.
Development of MySEEA PSUT-ENERGY 2010

Methodology: Top-down approach

Structure:
- Economic Census
- I-O Table
- Household Expenditure Survey

National Energy Balance (NEB)- Data Aggregate

Agriculture  Mining  Manufacturing  Construction  Services  Household

EXPENDITURE
A. Fuel, lubricants and gas consumed
B. Water and Electricity

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Main User Committee (MUC)
- Provide direction/request on required data collection initiatives in line with the policy / plan / programme and initiatives
- Chair: EPU
- Secretariat: DOSM
- Members: Stakeholders

Frequency of the meeting:
- At least twice a year

Technical working group
(Inter Agency & Inter Division)
- To advice on technical matters
- To compile
- Chair: DOSM
- Secretariat: DOSM
- Members: Stakeholders (Energy Commission, Economic Planning Unit EPU)

Members will be reviewed based on requirement

Frequency of the meeting:
- At least twice a year
Limitations & Challenges

**HUMAN RESOURCE**
- Needs for capacity building
- Maintaining trained staffs in DOSM

**THE AVAILABILITY OF DATA**
- No detailed breakdown for NEB data on petroleum products
- Decentralized data from various sources - scattered data and needs coordination
- Quality of administrative data
- Determining the methodologies to fill data gaps
- Harmonisation & classification of data

**GOVERNANCE**
To enhance understanding between and within the ministry & stakeholders
Pre-requisite for SEEA Development

1. Commitments from top management
2. Commitment from agencies
3. Supporting documents
4. Stability and quality of data
5. Basic knowledge for the compiler - SNA
Way Forward

Department Transformation Plan (2015 – 2020)

Guidelines “step by step” on compilation of SEEA PSUT Energy and Water accounts (Malaysia’s Experience)

Share the findings of SEEA to obtain feedback and inputs - agencies, international bodies, NGOs, Industries & academia

Detailed breakdown items – EC2016

Set up the Steering Committee

Collaborate with academia to produce journals related to SEEA

SEEA awareness programme in Public/university

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THANK YOU
TERIMA KASIH