REGIONAL CLOSING WORKSHOP SEEA

MALAYSIA'S EXPERIENCE IN THE DEVELOPMENT OF SEEA – ENERGY

PRESENT BY:
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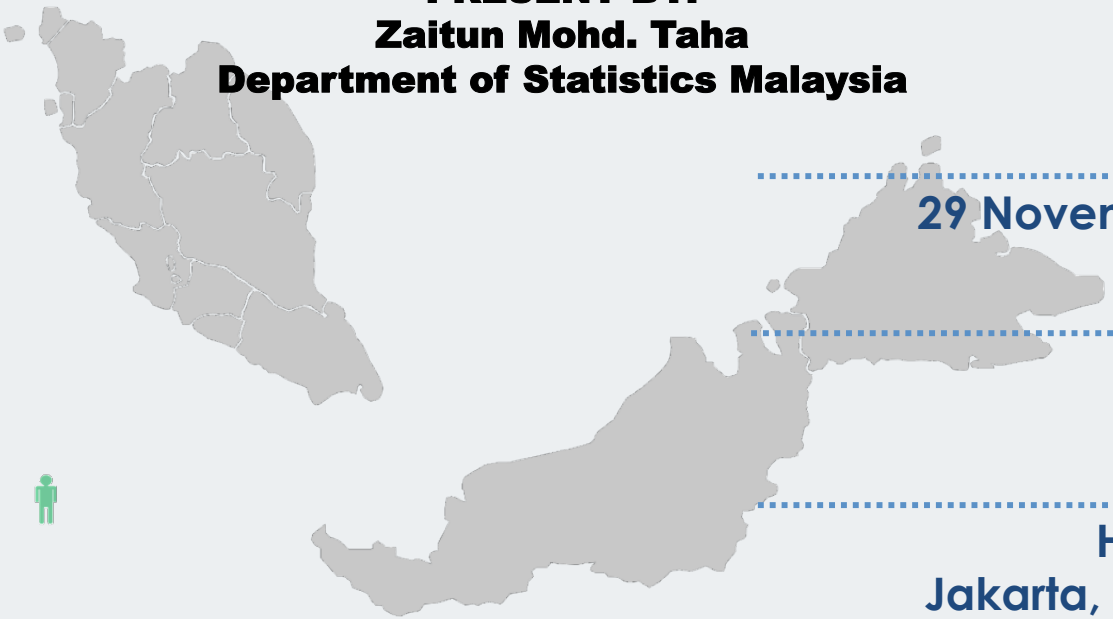


Date :

29 November 2017

10.30 a.m

Venue :

Hotel Alilia
Jakarta, Indonesia

SUSTAINABLE DEVELOPMENT GOALS

PRESENTATION OUTLINE

1. BACKGROUND

2. METHODOLOGY
   - DATA SOURCES
   - BASIC ACCOUNT STRUTURE
   - METHODOLOGY

3. FINDINGS

4. ISSUES & CHALLENGES

5. MILESTONE & WAY FORWARD

JOURNEY OF SEEA MALAYSIA

2012*
Study the Handbook of SEEA 2003[1] & NAMEA[2]

30 Sept – 1 Oct 2013
Assessment Mission on SEEA by UNESCAP/ UNSIAP /UNSD

9 July 2014
Proposed to Main User Committee (MUC)
i. PSUT Energy (2014-2015)
ii. PSUT Water (2015-2016)

19 – 23 Sept 2016
Assessment Mission on SEEA by UNSD and UNESCAP

24 – 27 Jan 2017
Technical Assistance from UNSD & Statistics Denmark
- Evaluation on MySEEA PSUT-Energy

1 — 2 — 3 — 4 — 5 — 6 — 7 — 8 — 9 — 10 — 11

2010
Parliamentary Question related to Green GDP

23 – 27 Sept 2013
The 1st Sub-Regional Course on SEEA
- Collaboration with UNESCAP/UNSIAP/ UNSD

3 April 2014
SEEA Awareness Workshop with agencies

2015 – 2016
Compilation of MySEEA PSUT-Energy
- Set up Technical Working Group (inter DOSM & inter agency)

26 – 30 Sept 2017
Regional Course on SEEA Water by UNSD/ UNESCAP

22 Feb 2017
Present findings of MySEEA-Energy to MUC

August 2017
Released of Report on MySEEA PSUT-Energy 2010

March – Nov 2017
Communication strategy

Note:
- **SEEA CF 2012 was still draft document. It is adopted as a standard manual by UNSD at the 43rd UNSC session in 2013.**

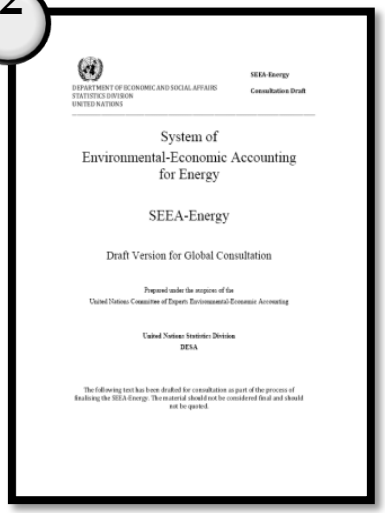
1 Handbook of National Accounting: Integrated Environmental and Economic Accounting 2003
2 National Accounting Matrix with Environmental Accounts

INTERNATIONAL MANUAL AND REFERENCE

1

SEEA – Central Framework

2

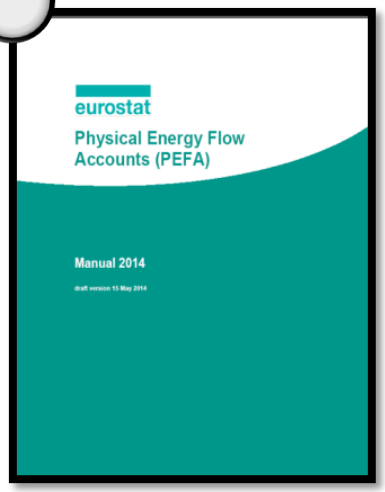


SEEA – Energy

3

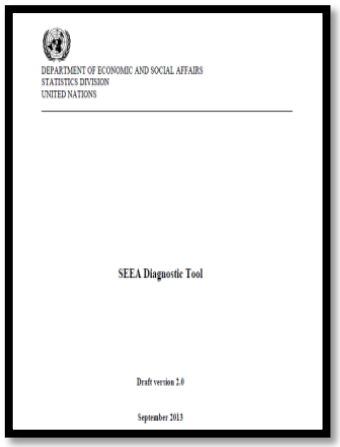
SEEA – Applications & Extensions

4

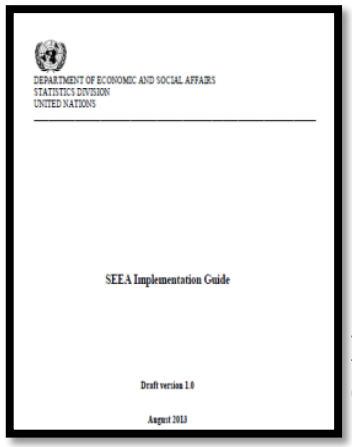


PEFA manual, Eurostats

Supporting Document



SEEA-Diagnostic Tool



SEEA-Implementation Guide

MySEEA PSUT-ENERGY

Energy Resources

NATURAL RESOURCES	RENEWABLE RESOURCES	ENERGY PRODUCTS FROM TRANSFORMATION
Natural gas	Hydro	LNG
Crude oil	Solar*	Petroleum products
Coal & coke	Bio Mass*	Electricity
	Bio Gas*	Others**

Note: * will be covered on MySEEA PSUT-Energy 2015
**Others refer to additive (which are used as refinery intake)
e.g. imported Light Diesel, Crude Residuum & Middle East Residue.

Data Sources

- National Energy Balance (NEB) 2010
- Economic Census (EC) 2011 (RY2010)
- Petroleum & Natural Gas Statistics 2011
- Input-Output Tables, Malaysia 2010
- Trade data
- Household Expenditure Survey 2009/2010
- Census of Distributive Trade
- Report on the Study of Production Cost of Selected Food Items, 2008
- Journals and selected NSO reports

Classification

Energy Products	•Standard International Energy Products Classification (SIEC)
Industry	•Malaysia Standard Industrial Classification 2008

BASIC STRUCTURE

Energy Balance

Item code	Flows	Energy products E1	E2	E3	...	Total	of which: Renewables
1.1	Primary production						
1.2	Imports						
1.3	Exports						
1.4	International Bunkers						
1.5	Stock change (closing-opening)						
1	**Total energy supply**						
2	***Statistical difference***						
3	***Transfers***						
4	**Transformation processes**						
5	**Energy Industries own use**						
6	**Losses**						
7	**Final consumption**						
7.1	**Final energy consumption**						
7.1.1	Manufacturing, const. and non-fuel mining industries, Total						
	Iron and steel						
	Chemical and petrochemical						
	Other Industries						
7.1.2	Transport, total						
	Road						
	Rail						
	Domestic aviation						
	Domestic navigation						
	Other Transport						
7.1.3	Other, total						
	Of which: Agriculture, forestry and fishing						
	Households						
7.2	**Non energy use**						

Supply | Use | Losses

SEEA PSUT-Energy Account

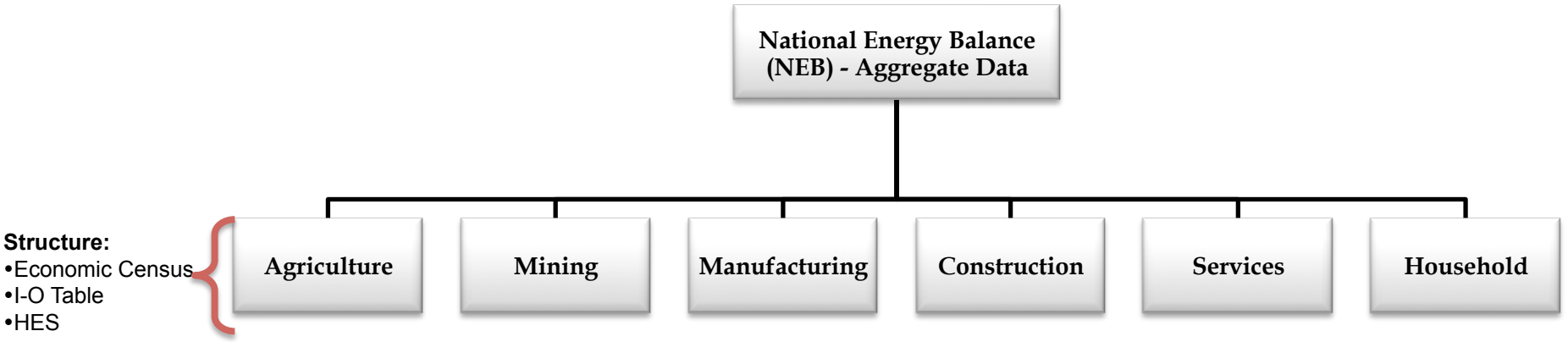
Supply	Industries	Households	Accumulation	Rest of the World	Environment	Total
Energy from natural input					Energy inputs from the environment	Total supply of energy from natural inputs
Energy product	Output			Imports		Total supply of energy products
***Conversion losses**	Conversion losses generated by industry	Conversion losses generated by household consumption	Conversion losses from accumulation	Conversion losses received from the rest of the world	Conversion losses recovered from the environment	Total supply of conversion losses

Use	Industries	Households	Accumulation	Rest of the World	Environment	Total
Energy from natural input	Extraction of energy from natural input					Total use of energy from natural inputs
Energy product	Intermediate consumption	Household consumption	Changes in inventories	Exports		Total use of energy products
***Conversion losses**	Collection & treatment of conversion losses		Accumulation of conversion losses	Conversion losses sent to the rest of the world	Conversion losses flows direct to environment	Total use of conversion losses

*Conversion losses: i) Natural resource losses are natural resource inputs that do not subsequently become incorporated into production processes and, instead, immediately return to the environment.(SEEA CF-3.98) ii) 4 types of losses i.e. losses during extraction, losses during distribution, losses during storage and losses during transformation. (SEEA CF-3.100)

METHODOLOGY

Top-down approach



Note:
Industry is based on Malaysia Standard Industrial Classification 2008 adopted from ISIC Ver.4.

ENERGY PHYSICAL FLOW

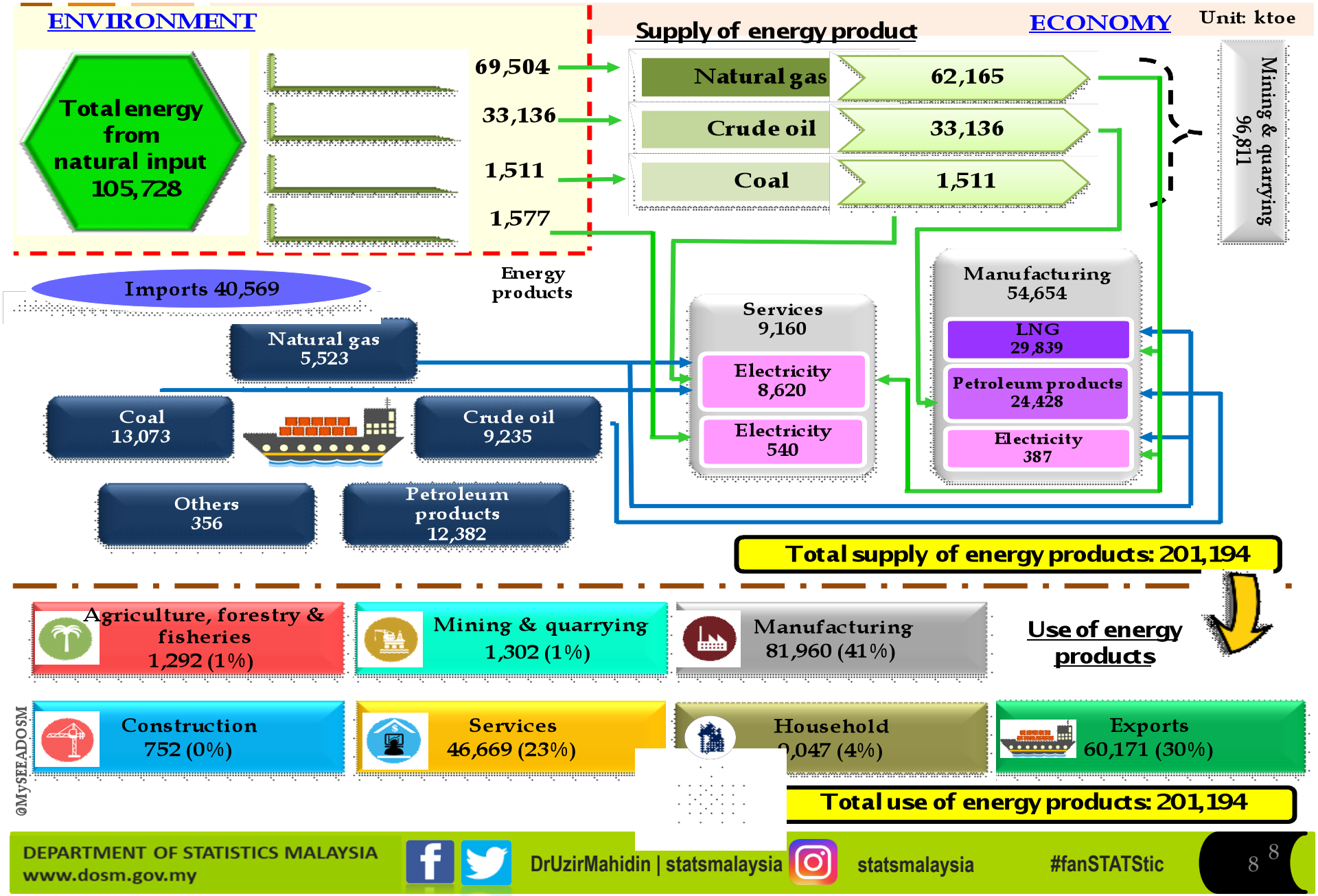
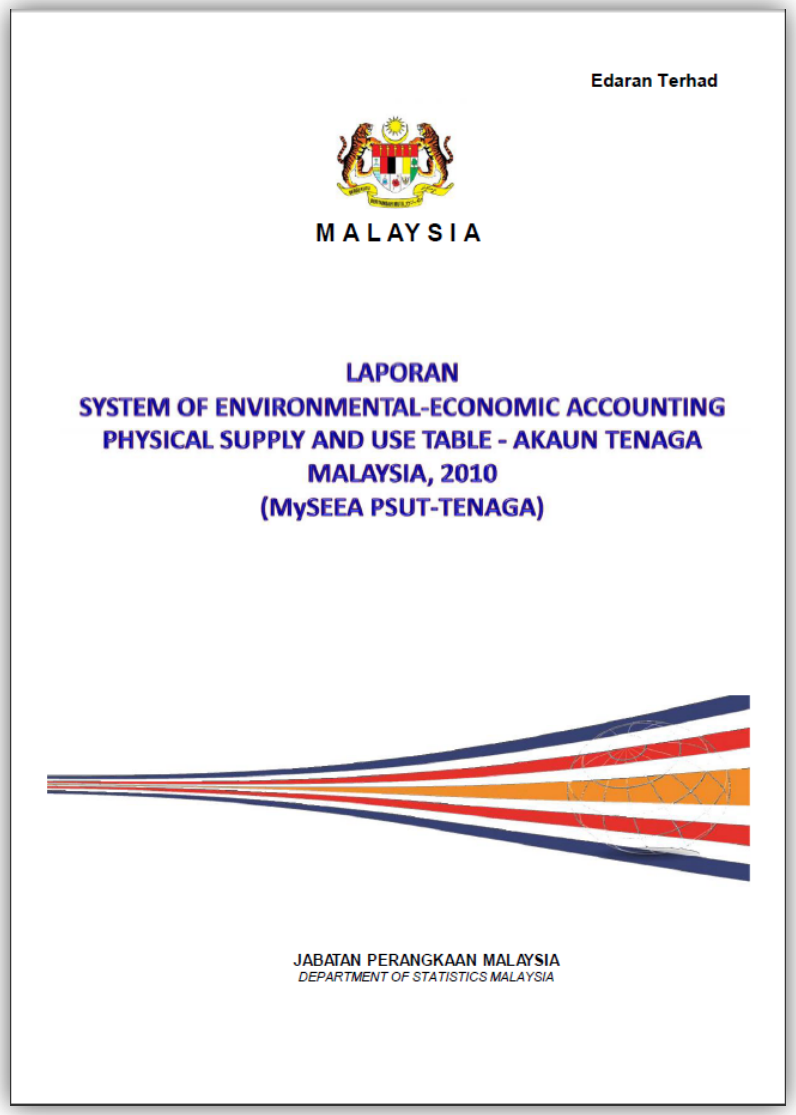


TABLE OF MySEEA PSUT – ENERGY 2010

KTOE

Item	Total Supply	Domestic Supply	Imports	Total Use	Industry	Household	Change in inventory *(Accumulation)*	Exports
Total	201,194	160,625	40,569	201,194	132,333	9,047	(359)	60,171
Crude Oil	42,370	33,136	9,235	42,370	25,358	-	337	16,676
Natural Gas	67,688	62,165	5,523	67,688	66,266	82	-	1,340
Coal & coke	14,584	1,511	13,073	14,584	14,777	-	(255)	62
Liquified Natural Gas	29,839	29,839	-	29,839	-	-	-	29,839
Petroleum Product	36,810	24,428	12,382	36,810	18,115	7,028	(441)	12,108
Hydropower	540	540	-	540	540	-	-	-
Electricity	9,007	9,007	-	9,007	7,056	1,937	-	13
Others	356	-	356	356	222	-	-	133

REPORT OF MySEEA PSUT-ENERGY

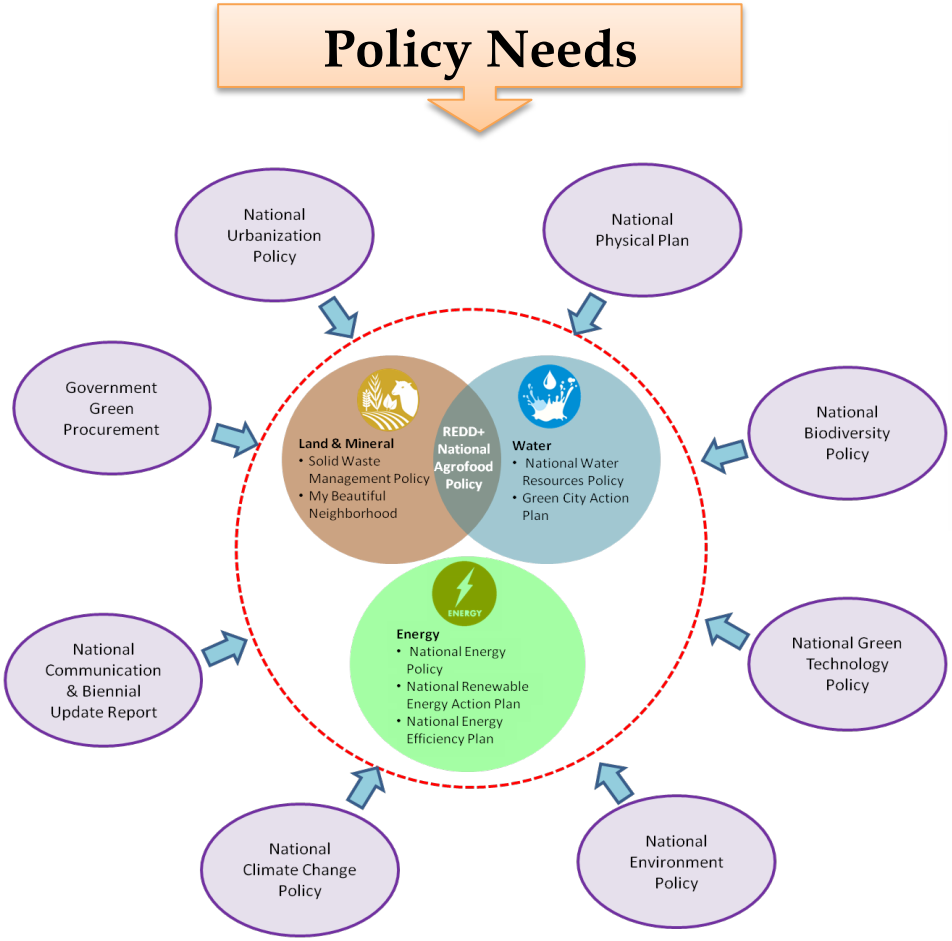


Main contents:

1. • Methodology
2. • Strategic Plan for the Development of SEEA Malaysia
3. • Issues & Challenges
4. • Findings

Purpose:
To document experience as a reference & guideline for the future reference

POLICIES RELATED TO ENVIRONMENT



4

Pursuing green growth for sustainability and resilience

Green growth refers to growth that **is resource-efficient, clean, and resilient. It is a commitment to pursue development in a more sustainable manner from the start**

.....

ELEVENTH MALAYSIA PLAN 2016-2020
ANCHORING GROWTH ON PEOPLE

5

Strengthening infrastructure to support economic expansion

Infrastructure development ensures that the *rakyat* **have access to essential amenities and services such as transport, communications, electricity and clean water**. Better integration.....

ISSUES & CHALLENGES

Issues & challenges

Knowledge

- SNA and IO concept
- Biophysical/environmental subject & term
- NEB concept, compilation methods & coverage

Data

- Data scattered at the various agencies
- Different scope, coverage & classification

Technical matters

To identified best estimation methods and techniques on:

- Losses
- Balancing
- Rearrange of supply & use data from NEB to SEEA

Exchange of focal person in agencies

Communication Strategy

- Convincing the policy makers on the relevance of SEEA for development planning in Malaysia
- How to present SEEA in a simple and informative way to the public/user

MILESTONE

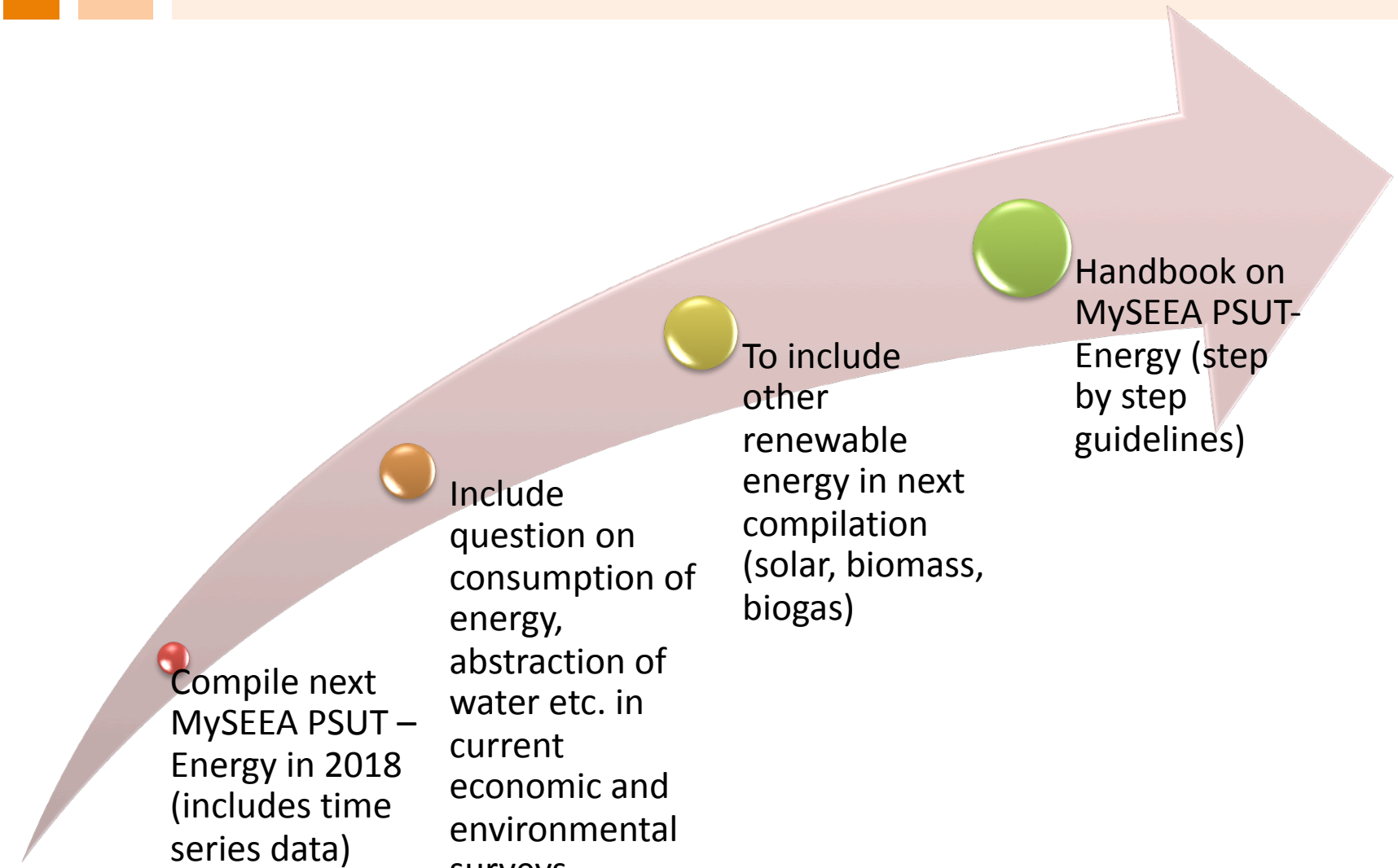
Publication on MySEEA PSUT-Energy was released in August 2017

Recognition by international by inviting DOSM to share experience in compiling the account

- 2nd APES Week in Bangkok Thailand, May 2017
- Inter-regional Workshop in Latin America, the Caribbean & Asia-Pacific Countries, Santiago, Chile, July 2017

Additional officers to compile SEEA account in DOSM has been approved by government

WAY FORWARD


Compile next MySEEA PSUT – Energy in 2018 (includes time series data)
Include question on consumption of energy, abstraction of water etc. in current economic and environmental surveys
To include other renewable energy in next compilation (solar, biomass, biogas)
Handbook on MySEEA PSUT-Energy (step by step guidelines)

"Statistics are the barometer that reflects the pulse of the country"

Dr. Mohd Uzir Bin Mahidin, The Star, 14th July 2016

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