Country Experience on Energy Statistics Compilation

Dean Joseph A. Villanueva
Production Accounts Division (PAD)
Macroeconomic Accounts Service (MAS)

International Workshop on Energy Efficiency and Renewables Statistics
Beijing, China
23 May 2018

Outline of Presentation

I. Framework for Compiling Energy Statistics in the Philippines

II. Coordination Mechanisms in the Compilation of Energy Statistics

III. Sources of Energy Statistics

IV. Plans in Energy Statistics Compilation

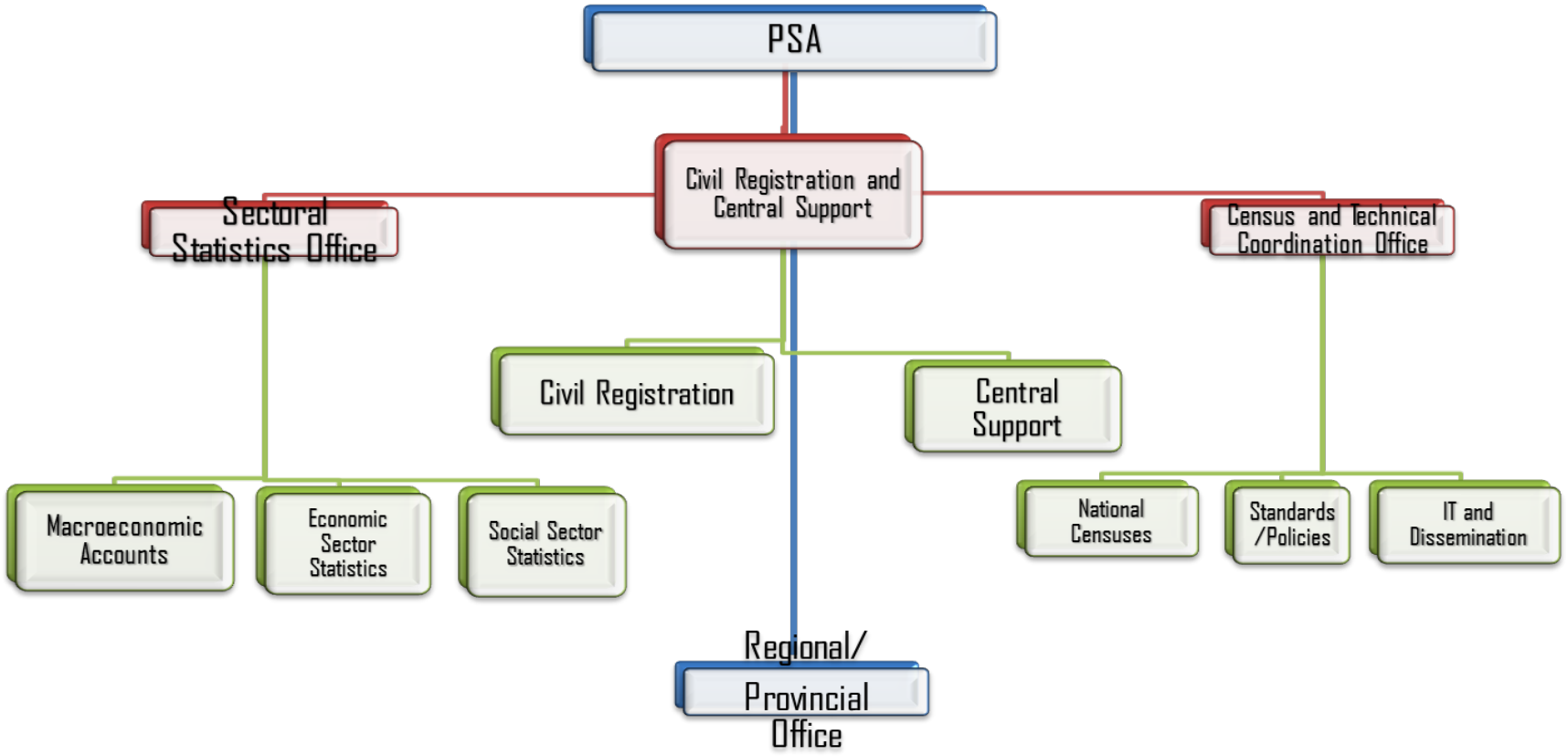
I. Framework for Compiling Energy Statistics

The Philippine Statistical System

- The Philippine Statistical System is composed of policy-making bodies, data producers, users, research and training institutions, and data providers.
- It is a government-wide system of providing statistical information and services to the public.
- The Philippine Statistical Act of 2013 creates the Philippine Statistics Authority, for the purposes of policy coordination on sectoral statistics, censuses and technical coordination, civil registration and central support and field statistical services.

I. Framework for Compiling Energy Statistics

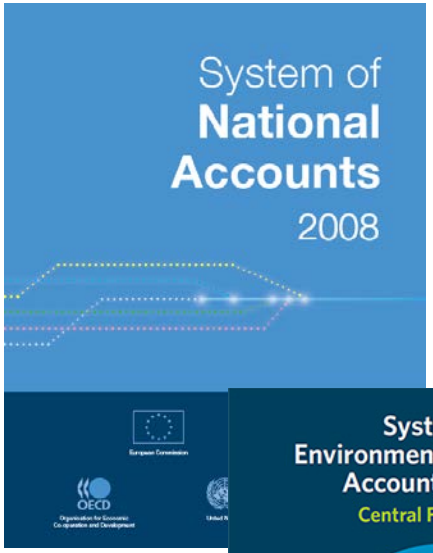
The Philippine Statistics Authority



I. Framework for Compiling Energy Statistics

National Accounts of the Philippines

- Unified framework compiling main economic aggregates; provides information on economic interactions taking place between different sectors of the economy.
- The Philippine System of National Accounts currently adopts the 2008 System of National Accounts



System of Environmental and Economic Accounting

- Accounting framework that integrates economic and environmental data to provide a view of the interrelationships between the economy and the environment.

I. Framework for Compiling Energy Statistics

Philippine Statistical Development Plan (PSDP)

- The PSDP is a mechanism for setting the directions, thrusts and priorities of the Philippine Statistical System in the medium term for the generation and dissemination of relevant, timely and quality official statistics.

Interagency Committee on Environment and Natural Resource Statistics (IAC-ENRS)

- The committee shall serve as a forum for the exchange of expertise to resolve technical issues on environment and disaster statistics
- One of the Technical Working Groups of IAC-ENRS is on Energy Resource Statistics

II. Coordination Mechanisms

Functions of the TWG-ERS

- Serves as a forum of discussion and resolution of concerns
- Review and enhance concepts, techniques, and methodologies
- Identify and recommend statistical measures, strategies, and policies
- Address statistical requirements in the Philippine Statistical Development Program

III. Sources of Energy Statistics

Census and Annual Survey of Philippine Business and Industries (CPBI and ASPBI)

- The data from establishment-based surveys can yield economic indicators such as value added, labor productivity, average compensation, among others.
- These indicators are used to evaluate the performance of the industries for national and regional development planning and monitoring.
- The establishment census and survey could generate information on the level of energy consumption as well as the production activities of establishments primarily engaged in the generation, transmission and distribution of energy resources.

III. Sources of Energy Statistics

Compendium of the Philippine Environment Statistics

- The Philippine Framework for the Development of Environment Statistics (PFDES) bridged the lack of an organized and integrated framework in the collection and utilization of environment statistics
- The PFDES provided a systematic approach for the development of environment statistics
- It served as a framework for data collection institutions to make their data more usable in socioeconomic and environmental programs and policies
- The Compendium of Philippine Environment Statistics (CPES) was first published in 2000

III. Sources of Energy Statistics

Component 2 of CPES: Environmental Resources and Their Use

- This component covers subcomponents non-energy mineral resources, energy resources, land, soil resources, biological resources, and water resources

Energy Resources

- FDES includes commercially recoverable stocks, production, and use of energy resources as priority statistics
- The Department of Energy (DOE) has been mandated to monitor energy supply and demand but it only assesses potential resources upon requests of local government units

III. Sources of Energy Statistics

Energy Balance Sheet

Table 2.3.10
ENERGY BALANCE TABLE
2015
(In thousand tons of oil equivalent (kTOE))

	Primary energy sources									
	Non-renewable energy sources			Renewable energy sources						
	Coal	Natural gas	Crude oil and condensate	Hydro	Geo-thermal	Solar	Wind	Biomass	Biodiesel	Ethanol
Indigenous	3,893.9	2,854.0	715.0	2,157.1	9,495.9	11.9	64.4	7,430.8	164.3	91.4
Imports (+)	9,119.8	-	10,471.3	-	-	-	-	-	-	173.6
Exports (-)	(1,639.1)	-	(719.2)	-	-	-	-	-	-	-
International Marine Bunkers (-)	-	-	-	-	-	-	-	-	-	-
International Civil Aviation (-)	-	-	-	-	-	-	-	-	-	-
Stock Change (+/-)	240.4	-	(35.8)	-	-	-	-	-	(11.7)	15.9
Total Primary Energy Supply	**11,615.0**	**2,854.0**	**10,431.2**	**2,157.1**	**9,495.9**	**11.9**	**64.4**	**7,430.8**	**152.6**	**281.0**
Refinery (Crude Run)	-	-	(10,180.9)	-	-	-	-	-	-	-
Power Generation	-	-	-	-	-	-	-	-	-	-
Transmission/Dist. Loss (-)	-	-	-	-	-	-	-	-	-	-
Energy Sector Use & Loss (-)	-	(136.9)	(232.0)	-	-	-	-	-	-	-
Net Domestic Supply	**2,350.1**	**20.4**	**18.2**	-	-	-	-	**7,290.9**	**146.7**	**281.0**
Statistical Difference										
% Statistical Difference										
Total Final Energy Consumption	**2,350.1**	**49.8**	-	-	-	-	-	**7,290.9**	**146.6**	**281.5**
Industry	2,217.9	49.8	-	-	-	-	-	1,152.0	12.0	-
Transport	-	-	-	-	-	-	-	-	116.3	281.5
Residential	-	-	-	-	-	-	-	5,802.4	-	-
Commercial	-	-	-	-	-	-	-	336.5	14.5	-
Agri., Fishery & Forestry	-	-	-	-	-	-	-	-	3.8	-
Others, Non-Energy Use	132.1	-	-	-	-	-	-	-	-	-
Self-Sufficiency (%)										

Values that do not exceed 0.05 have been rounded off to and appear as 0.0. Zero values appear as -.
Self sufficiency was derived as the ratio of net domestic supply by the total primary energy supply
Source: Department of Energy

Table 2.3.10
ENERGY BALANCE TABLE
2015
(In thousand tons of oil equivalent (kTOE))

	Secondary energy sources		Total
	Oil products	Electricity	
Indigenous	-	-	26,878.6
Imports (+)	9,899.6	-	29,664.2
Exports (-)	(1,320.3)	-	(3,678.5)
International Marine Bunkers (-)	(27.1)	-	(27.1)
International Civil Aviation (-)	(1,215.6)	-	(1,215.6)
Stock Change (+/-)	(83.3)	-	125.4
Total Primary Energy Supply	**7,253.3**	**-**	**51,747.0**
Refinery (Crude Run)	9,672.2	-	(508.8)
Power Generation	-	-	-
Transmission/Dist. Loss (-)	-	(643.3)	(643.3)
Energy Sector Use & Loss (-)	-	(612.6)	(981.5)
Net Domestic Supply	**15,512.3**	**5,830.4**	**31,449.9**
Statistical Difference			462.0
% Statistical Difference			1.5
Total Final Energy Consumption	**15,038.6**	**5,830.4**	**30,987.9**
Industry	1,382.5	1,935.8	6,750.0
Transport	10,151.0	8.5	10,557.3
Residential	973.1	1,955.9	8,731.3
Commercial	1,291.7	1,727.0	3,369.7
Agri., Fishery & Forestry	193.6	203.2	400.6
Others, Non-Energy Use	1,046.8	-	1,178.9
Self-Sufficiency (%)			**51.9**

Values that do not exceed 0.05 have been rounded off to and appear as 0.0. Zero values appear as -.
Self sufficiency was derived as the ratio of net domestic supply by the total primary energy supply
Source: Department of Energy

IV. Plans in Energy Statistics Compilation

Major Statistical Development Programs, 2018-2023

- Institutionalization of the conduct of Household Energy Consumption Survey (HECS) and the Survey of Energy Consumption of Establishments (SECE)
- Conduct of cross-sectoral energy consumption surveys
- Inclusion of the Energy Balance Table (EBT) in the System of Designated Statistics (DOE, 2018-2023)
- Compilation of a complete set of Energy Accounts based on the 2012 SEEA
- Preparation of the Manual on Energy Statistics for the Philippines
- Dissemination of key energy statistics and energy report publications

http://www.psa.gov.ph

/PhilStatAuthority

@PSAgovph

PHILIPPINE STATISTICS AUTHORITY

Solid • Responsive • World-class