



Contributing to poverty Alleviation through Regional Energy Planning in Indonesia

Contributing to poverty Alleviation through Regional Energy Planning in Indonesia (CAREPI)

**Deliverable No. 7: A Guide for setting up a Regional
Technical Team**

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Abstract

This report presents an overview of the background that led to the establishment of the regional technical teams in the four regions selected by the CAREPI project. It also provides a description of the tasks and responsibilities of the technical team. These terms of reference can be used as a guideline for the establishment of similar teams in other regions in Indonesia.

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1. Background

On 25th January 2006, the Government of Indonesia launched a Government Regulation Number 5 Year 2006 regarding the National Energy Policy (NEP). NEP is aimed to give direction on measures to secure energy supply in the long term, especially through energy conservation and energy diversification measures. For the energy diversification measures, NEP targets to realize energy consumption by shifting from crude oil from 52% in 2005 to 20% of the total primary energy mix by 2025, by substituting it by coal, natural gas, geothermal, bio-fuels, and other renewable energies.

For attaining the NEP's target, it needs an inter-regional, inter-sectoral, and inter-institutional integrated energy planning. In accordance with that, the Ministry of Energy and Mineral Resources, through the Data and Information Center (DICEMR), has encouraged the establishment of a Regional Energy Forum, that is a forum for discussing regional energy issues and regional energy planning. Through the Regional Energy Forums, it is hoped that formulating an integrated and coordinated energy planning between one region and the others and between central government and regional government can be realized.

2. Institutional set up

The Regional Energy Forum is the highest institution in a region that has functions for policy formulation, program formulation, and coordination for the implementation of energy development and energy utilization in the respective region. On the national level, the energy forum is called BAKOREN (The Body for Coordination on National Energy), that is established by Presidential Decree Number 23 Year 2000.

The establishment of a Regional Energy Forum can be officially decreed by a Governor Decree (on national level, it is decreed by Presidential Decree). The membership of Regional Energy Forum is more political, with the members being Heads or high level officers of Regional Offices (Dinas) who have responsibility related with energy supply and energy utilization.

The Regional Energy Technical Team is a part of the Regional Energy Forum. The membership of a Regional Energy Technical Team is more technical, with the members being chosen based on their technical capability. Establishment of a Regional Energy Technical Team can be decreed by the Head of the Regional Energy Forum for a certain period.

3. Structure of the team

The members of Regional Energy Technical Team are experts from various area of expertise related with energy supply and energy utilization, and also representatives from regional government offices, energy companies, consumer association (industry, commercial, etc.), non government organization. The description of a Regional Energy Technical Team membership can be as follow.

Chairman:
Representative from university

Vice Chairman:
Representative from Regional Energy Office

Members:

- Representatives from universities
- Representative from Regional Industry Office
- Representative from Regional Transportation Office
- Representative from Regional Bureau of Economy
- Representative from Regional Environmental Office
- Representative from Regional Body of Development and Planning
- Representative from Regional Body of Investment Coordination
- Representative from Regional Body of Statistic
- Representative from Regional Body of Research and Development
- Representative from energy companies (PT. PLN, PT. Pertamina, PT. PGN, etc.)
- Representative from association of energy supplier (Hiswana Migas/Oil fuel Supplier, Micro hydro Association, etc.)
- Representative from association of consumer (Asosiasi Pertekstilan Indonesia/Textile Industry, Perhimpunan Hotel dan Restoran Indonesia/Hotel and Restaurant, etc.)
- Representative from association of profession (Ikatan Ahli Teknik Kelistrikan Indonesia/Electricity Expert, Asosiasi Kontraktor Listrik Indonesia/Electricity Contractor, etc.)
- Representative from non governmental organization (Wahana Lingkungan Hidup/General Environment, Jaringan Tambang/Mining Environment, Yayasan Lembaga Konsumen Indonesia/Consumer Institute, etc.)

4. Scope of work

The Regional Energy Technical Team has a function to analyze and prepare materials that will be discussed in the Regional Energy Forum. Topics of studies that are carried out by the Regional Energy Technical Team can be initialized by the Regional Energy Forum as well as the Regional Energy Technical Team itself.

The scope of work of the Regional Energy Technical Team shall consist of:

- Collect and evaluate data and information related with energy supply and energy demand.
- Formulate draft of regional energy planning as formulated by the Regional Energy Forum.
- Formulate draft of energy development priority and energy resources utilization priority as formulated by the Regional Energy Forum.
- Formulate draft of regulation and supervision guidance on the implementation of energy utilization development program as formulated by the Regional Energy Forum.
- Formulate draft of regional regulation on energy sector as formulated by the Regional Energy Forum.

- Initiate and maintain a procedure to be able to provide annual regional energy balances covering all sectors and fuels.
- Establish and maintain evaluation tool, e.g. LEAP model, in order to be able to perform regional energy planning analysis in support of the Regional Energy Forum.
- Ensure continuous collaboration between its member-representatives from the different member organizations and institutions.

5. Specific needs for a Technical team in CAREPI (like) projects

Since the bulk of the methodological and analytical work is to be performed by the local universities, the university team, being part of the Regional Technical Team, has also to be able to fulfill the tasks related to the different activities as described in the work packages of the CAREPI project. The work packages concern:

- socio economic analysis of local communities and their needs assessment (WP2);
- the establishment of energy data and energy related data collection and management procedures (WP3);
- the establishment and use of an energy analysis tool (WP3);
- the development of feasibility studies for local small scale energy supply projects (in particular, but not exclusive, micro hydro projects) (WP7);
- the maintenance of good working relationship with the Regional Energy Forum (WP4).

In particular, experience has to be found or acquired in the following areas:

- Technical energy knowledge (mechanical, electrical as well as energy systems)
- Data management and statistical analysis capacity
- Energy data and system analysis and modeling capacity
- Business economy analysis capacity
- Socio economic analysis capacity
- Clear reporting and advice formulating capacity (towards Regional Energy Forum).

Appendix A Example of Regional Energy Technical Team Membership

Appendix : Decree of the Head of Mining and Energy Office of Central Java Province
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MEMBERSHIP OF TECHNICAL TEAM OF ENERGY MANAGEMENT IN CENTRAL JAVA PROVINCE

No	N a m e	Institution	Position
1.	Ir. Eddy Haryono, Dipl. Eng	Head of Mining and Energy Office of Central Java Province	Penanggung Jawab
2.	Ir. Sujarwanto Dwiatmoko, M.Si.	Mining and Energy Office of Central Java Province	Chairman
	Ir. Donald Armand Sundah	Mining and Energy Office of Central Java Province	Vice Chairman
3.	Akhmad Iriyanto, SST.	Mining and Energy Office of Central Java Province	Sekretaris
a.	Dr. Ir. Hermawan DEA.	University of Diponegoro Semarang	Coordinator I
	Ir. Dwi Lestari Novianti	Mining and Energy Office of Central Java Province	Member
	Ir. Achmad Gunawan	Mining and Energy Office of Central Java Province	Member
	Ir. Moch. Sofyan	PT. PLN Central Java and Yogyakarta Distribution	Member
	Endro Haryono	PT. Indonesia Power	Member
	Ir. R. Pradoto Mahardjono, MMA	Plantation Office of Central Java Province	Member
	Ir. E.F.Awignam Astu	Agriculture Office of Central Java Province	Member
	Ir. Titien Sri Rahayu	Husbandary Office of Central Java Province	Member
b.	Abdul Muhar	PT. Pertamina Region Jawa Area Cepu.	Coordinator II
	Suhardi, ST, M.Si	Mining and Energy Office of Central Java Province	Member
	Dra. RAS. Subagya	BPPE Solo Area of Mining and Energy Office of Central Java Province	Member
	Budi Susetyo, ST.	BPPE Serayu Area of Mining and Energy Office of Central Java Province	Member
	Agus Sugiharto, ST	Mining and Energy Office of Central Java Province	Member
	Siswanto, B.Sc.	Fishery Office of Central Java Province	Member

	Anggadewi Widyastuti, SH.	PT. Pertamina Region Jawa Area Cepu	Member
	Ir. Bambang Haryoko, MT.	Oil and Gas Training and Education Center - Cepu	Member
	Agus Heriyanto, ST. MT.	School of Energy and Mineral - Cepu	Member
	Otniel P.S. Moeda, SW, M.Si.	Trade Office of Central Java Province	Member
	Winarto	PT. Pertamina (Persero) Marketing IV Central Java - Yogyakarta.	Member
	Dadi Sugiana	PT. Pertamina (Persero) Processing IV Cilacap.	Member
c.	Ir. Teguh Dwi Paryono	Mining and Energy Office of Central Java Province	Coordinator III
	Ir. Bambang Mandala Putera	BPPE Serayu Area of Mining and Energy Office of Central Java Province.	Member
	Ir. Teguh Widharto	Mining and Energy Office of Central Java Province	Member
	Ir. Edy Sucipto	Mining and Energy Office of Central Java Province	Member
	Pudji Supajitno, S.T. M.Si.	BPPE Kendeng Area Muria of Mining and Energy Office of Central Java Province.	Member
	Wahyudi Djoko Maryanto, SH. M.Si.	Environmental Office of Central Java Province	Member
	Ir. Dono Kusudiono, MM.	Research and Development Office of Central Java Province	Member
d.	Drs. Zuber Zaenal	Mining and Energy Office of Central Java Province	Coordinator IV
	Ir. Budiono Kardiman	BPPE Kendeng Muria Area of Mining and Energy Office of Central Java Province	Member
	Ir. Soeseno	BPPE Solo Area of Mining and Energy Office of Central Java Province	Member
	Sudaryadi, SH.	Mining and Energy Office of Central Java Province	Member
	Ir. Hendro Patomo	BAPPEDA Propinsi Jawa Tengah	Member
	Ir. Sri Purwati Asriningsih	Economic Bureau of the Secretariat of Central Java Province	Member
	Drs. Suryanto	Development Bureau of the Secretariat of Central Java Province	Member
	Ir. Sugiyanto, M.Eng.	University of Diponegoro Semarang	Member
	Ir. Hasan Basri, MM	Investment Office of Central Java Province	Member

Note:

Coordinator I : Electricity, Renewable Energy, and Alternative Energy

Coordinator II : Oil and Gas

Coordinator III : Mining and Geology

Coordinator IV : Policy Analysis

Appendix B Example of Regional Energy Technical Team Activity

1. Formulation of Energy Profile

Regional energy profile is a database containing energy demand and supply condition in a region. Following is an illustration of regional energy profile contents.

- a. Energy consumption
- b. Energy Supply
- c. Energy Balance
- d. Energy Price
- e. Socio-economic Indicator
- f. Energy Economy Indicator

2. Formulation of Energy Planning

Energy planning is an analysis about energy supply development in the future to fulfill the increasing of energy demand. Following is an illustration of regional energy planning contents.

- a. Formulation of Planning Objectives and Targets
- b. Policy Direction and Law Justification
- c. Development Scenario/ Macroeconomic Projection
- d. Projection of Energy Demand
- e. Analysis of Energy Resources
- f. Analysis of Energy Technology
- g. Energy Supply Planning
- h. Analysis of Environmental Impact
- i. Funding Arrangement
- j. Implementation Strategy