



Vietnam: Energy and Energy Efficiency Database

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Current Energy Data Collection

- *Database by General Statistics Office*
 - General Statistics Office (GSO) of Vietnam is acting based on Statistical Law, and all the enterprises, the organizations, and individuals including the state company and the private company adjust the object of this law.
 - GSO is conducting “Annual Enterprise Survey” by questionnaire sheets every year and publishes Statistical Yearbook based on this survey.
 - GSO is conducting monthly survey of main industries including energy sector (oil, gas, coal, power, etc.) to make up IIP (Indices of Industrial Production) statistics.
- *Establishment of Socio-Economic Data and Energy Data*
 - GSO Statistics Yearbook doesn't include data on number of vehicles and floor space, which are very important to estimate energy consumption by transport and commercial sectors.
 - Energy data for oil, gas, coal, and power sectors are compiled based on energy demand survey conducted by Institute of Energy of Vietnam.

Current Energy Data Collection

- However, there are some issues as follows:
 - There is no stock change data except coal sector.
 - Energy supply data of petroleum products and electricity are not classified by sub-sector.
 - Unit of original data of petroleum products and natural gas was not unified.
 - There is no time series data on renewable energy.
 - Energy consumption data of transport sector are not classified by sub-sector such as road, rail, airplane and ship.
 - There is no briquette data such as coal consumption and briquette production It is unknown from where briquette factories obtain supply of coal.
 - Some data don't follow ISIC (International Standard Industrial Classification).

The Need and Issues of Energy and Energy Efficiency data

- Energy and Energy efficiency data are highly important for proper implementation of national energy management and energy policy making.
- The country in particular will be able to analyze energy supply and demand that is required to set out indicative targets for energy policy, environmental policy and energy efficiency policy.
- It is possible to compare energy efficiency situation at international levels. Especially database of energy consumption is very useful for energy consumption management, it plays important role in estimating of potential of EE&C, evaluation of EE&C activities, etc.
- Currently social and economic data are publicly disclosed by GSO. However, data and information in GSO included energy sector are very poor and do not meet analysing energy consumption and supply.
- There is not any organization or agency that is officially responsible for data collection and making database on energy efficiency. As a result, these activities have been developed separately by deferent organizations and each specific project.

The Need and Issues of Energy and Energy efficiency data

- Experts on energy statistics and the financial budget are insufficient for making and maintaining the energy database. Thus, it is important to provide training for statisticians by energy experts and a financial source enough for periodically implementing and maintaining all these activities.
- Monitoring and Evaluation (M&E) of energy data in Vietnam to date are the requirements specified by EE programs or projects by international donor agencies, therefore they are conducted on an ad-hoc project-based basis. Most of the past and ongoing energy data monitoring and evaluation activities are undertaken in a form of energy audit, and most energy audits conducted in Vietnam up to now are pre-EE implementation audits which aim at identifying EE potentials and measures.
- Though various EE measures have been implemented throughout the country, post-implementation monitoring is still very limited.
- Mechanisms or protocols for M&E as well as M&E roadmaps are also not available and no Vietnamese agency has been assigned for managing, coordinating or supporting this important activity.



Design and Establish of Energy Database for Vietnam

- In order to grasp the exact record of energy supply and demand for energy policy making, it is highly important to create the National Energy Database.
- For creating energy database, it is important to define the purpose of the database, necessary data items, and how to collect necessary data and create institution and organization for management and maintenance of the database.
- According to the Energy Efficiency Law (draft):
 - MOIT is, basically, in charge of specifying designated enterprises in the industry sector, Ministry of Construction (MOC) in charge of the building sector and Ministry of Transportation (MOT) in charge of the transportation sector.
 - “Five-year Plan” to be submitted by designated enterprises should be submitted to the local offices of each Ministry (DOIT, DOT and DOC) and they submit to the central Government.
 - As for “Periodical Report”, designated enterprises should submit it to the local offices of GSO (PSO or DSO) and send its copy to the local offices of each Ministry. The local offices of GSO submit to the central GSO with sending its copy to each Ministry.



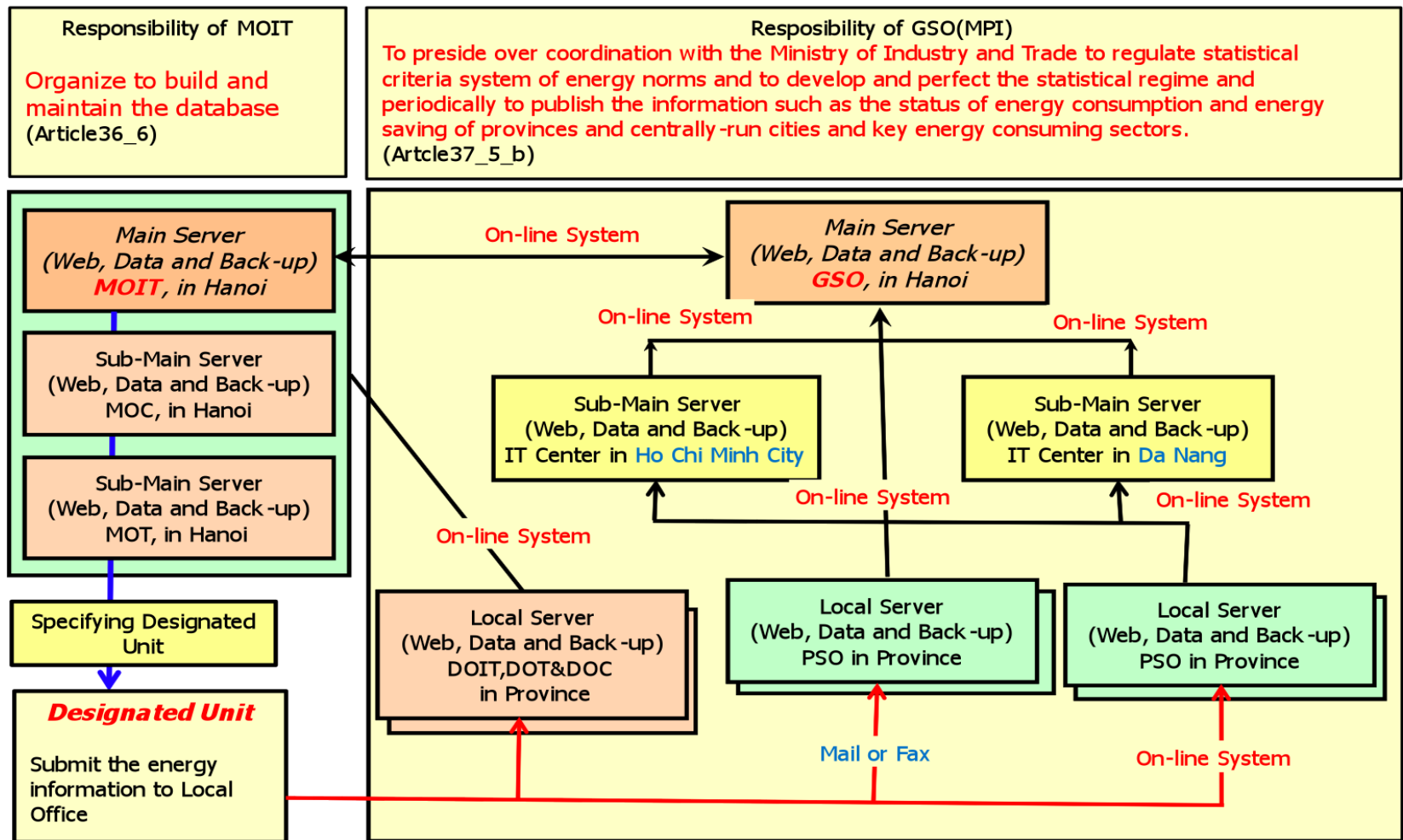
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Organization	Role
GSO	- Issue "Periodical Report" for industry sector - Collect "Periodical Report", Disclose statistic data
PSO/DSO	- Input "Periodical Report"
MOIT	- Finalize data collection mechanism - Finalize EE&C database - Make designated enterprises list (every year) - Make sample form for "Periodical Report", "Five-year Plan", and "Implementation Report of Five-year Plan" - Feed back "Periodical Report" and "Five-year Plan" to designated enterprises
DOIT	- Input "Five-year Plan" - Input "Implementation Report of Five-year Plan"
MOC	- Make designated buildings list (every year) - Make sample form for "Periodical Report", "Five-year Plan", and "Implementation Report of Five-year Plan" - Feed back "Periodical Report" and "Five-year Plan" to designated building
DOC	- Input "Periodical Report" - Input "Five-year Plan" - Input "Implementation Report of Five-year Plan"
MOT	- Make designated transport business enterprises list (every year) - Make sample form for "Periodical Report", "Five-year Plan", and "Implementation Report of Five-year Plan" - Feed back "Periodical Report" and "Five-year Plan" to designated transport business enterprises
DOT	- Input "Periodical Report" - Input "Five-year Plan" - Input "Implementation Report of Five-year Plan"
Designated enterprises	- Submit "Periodical Report" - Submit "Five-year Plan" - Submit "Implementation Report of Five-year Plan"
MOIT (IPSI)	- Maintain online system and database

Implementation Organizations and their roles for "Periodical Report" and "5 year Energy Efficiency plan" are as follows (Prepared by JICA Study Team based based on Draft Energy Efficiency Law)

Design and Establish of Energy Database for Vietnam

Data collection Routes



Conclusion

- Vietnam should establish an Energy Database Center including the Energy Efficiency team to encourage collection of data required for establishing energy efficiency indicators and monitoring improvements in energy efficiency. In addition, an energy efficiency data and monitoring system covering all sectors included decisions on financing should be established to overcome the lack of energy data, particularly end-use data at subsector level.
- It is necessary to designate major industries and enterprises in the list for the designated statistics on energy and legally oblige them to report based on the Law of Energy Efficiency or the Law on Vietnam Statistics.
- Ministry of Industry and Trade (Energy Efficiency and Conservation Office) should evaluate capacity of EE related to organizations in Vietnam and assign a lead role for M&E to a well-qualified organization. This could be a different organization from the one collecting general energy data.
- The international could provide technical assistance to establish the processing and procedure of energy statistics; developing an infrastructure for monitoring energy consumption and evaluating efficiency performance in key energy-consuming sectors and end-uses, thus help government design well targeted policy interventions and being able to track the progress.



THANK YOU



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