ASSESSING AND ENHANCING CAPACITY FOR GREENNESS AND SUSTAINABILITY INDICATOR EVALUATION IN INDONESIA

by:

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NATIONAL DEVELOPMENT POLICY

FOCUSSED OF NATIONAL DEVELOPMENT POLICY

ENERGY AND FOOD SECURITY

EMPLOYMENT CREATION AND POVERTY REDUCTION

ENVIRONMENT

PRO JOB

PRO POOR

PRO GROWTH

PRO ENVIRONMENT

Energy and Mineral Resources for People’s Welfare
1. **Biofuel sustainability** included biofuel production chain from farm or forest up to the gas station and the final release of emissions into the air.

2. Sustainable development is a mandate of Indonesia Constitution: “*national economy based on economic democracy with the principles of togetherness, efficiency of justice, sustainability, environmental friendliness, independence, and balancing economic progress and national unity*”

3. **Biofuel sustainability in Indonesia is Indonesia Sustainable Palm Oil (ISPO);**

4. ISPO declaration on 30 of March 2011 and formally applied since March 2012;

5. Has been established by Minister of Agriculture Regulation No. 19/Permentan/OT.140/3/2011 concerning on Guidelines Indonesian Sustainable Palm Oil (ISPO);

6. The Objectives of the ISPO are:
   a. Increase awareness of the importance of producing sustainable palm oil,
   b. Improve the competitiveness of Indonesian palm oil in the world market;
   c. Indonesia's commitment to supporting sustainable of Resources and environmental functions.

7. Because ISPO is based on the laws and regulations in Indonesia, this mandatory shall be implemented for businesses plantations in Indonesia.
The principles obligation that shall be met by the sustainable palm oil development industries are:

1. Licensing System and Plantation Management,
2. Technical Guidelines for the application of Cultivation and Processing of Oil Palm,
3. Management and Environmental Monitoring,
4. Responsibilities to workers,
5. Corporate responsibility on individuals and communities,
6. Community Empowerment Economic Activity,
7. Commitment to continuous improvement Economics.

2. The main objective of this project:
   - To assess and enhance the capacity of Indonesia to measure the GBEP indicators and use them to inform bioenergy policy making.
   - To learn lessons about how to apply the indicators as a tool for sustainable development and how to enhance the practicality of the tool.
3. Scope of Work:

- CPO-based Biodiesel.
- Bioethanol from molasses and cassava.
- Biogas from manure for small-scale community and from POME (Palm Oil Mills Effluent).
- Biomass from agricultural waste.
### FINAL RESULT

- Covering all types of bioenergy (biodiesel, bioethanol, biogas, and biomass).
- Getting data from primary and secondary sources and run this project by case study.
- All 24 sustainability indicators for bioenergy has been measured using GBEP methodologist.
- Some indicators more needed considering Indonesian condition such as life-cycle GHG emissions, change in income, and productivity.
- Other indicators little bit useless in Indonesia such as soil quality, land tenure, and biological diversity.
LIMITATION

• Some data are not available in national level such as land tenure, land use history, soil carbon etc.
• Time series data are unavailable for several indicators.
• Difficulties to trace the origin of bioenergy feedstock, especially biodiesel feedstock.
• Limitation of case study, hence difficult to make generalization for national level.
NEXT STEP

- Deepening of the analysis have be done during the first phase of the project, by increasing the representativeness of the measurements.
- Propose the baseline for the establishment of a future long term monitoring platform of sustainability.
- Capacity building for all stakeholders related, how to measure GBEP sustainability indicators.
Vielen Dank

Thank You

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