ANALYSIS AND PROPOSED OF PERFORMANCE MEASUREMENT SYSTEM FRAMEWORK AT MINISTRY OF ESDM

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Abstract- *Since 2010, Ministry of Energy and Mineral Resources (ESDM – Energi dan Sumber Daya Mineral) was always awarded as one of the government institutions with the best LAKIP Report. While in the real life, the Ministry of ESDM kept on received criticize by parliament and public about its national ESDM management. If the LAKIP of Ministry of ESDM was truly evaluated and considered good, then supposed to be there wont be any unrest among parliament and public response about the national ESDM Management. This situation indicating that False alarm phenomena has occurred in the ministry. False alarm phenomena is a condition where the Ministry of ESDM feels successfully achieved their KPIs, but the public and other stakeholders do not feel an improvement in the management of energy and mineral resources. This research would focused, and limited, to the area of KPI and framework analysis. The design of ESDM Ministry's Performance Measurement System (PMS) then analyzed through steps of PMS design. The ESDM Ministry's PMS was also benchmarked with other government/non-profit organization's PMS. Those analysis was resulted into the recommendation of Balanced Scorecard as the framework of the PMS.*

Keywords:PerformanceMeasurement, Balanced Scorecards, Non-Profit Organizations

1. Introduction

Performance Measurement System in Indonesian government institutions especially ministry was developed through a reporting and evaluating system called Government Institutions Performance Accountability Report (LAKIP –*Laporan Akuntabilitas Kinerja Instansi Pemerintah).* The LAKIP itself was an outcome from demand for the implementation of a clean government and the availability of better public services. The government then published *Instruksi Presiden Republik Indonesia No.7, 1999* about AKIP. The LAKIP itself was a reports about the achivment of government Institutions sets of KPI. Those KPI were sets by the Ministry based on National Development Program, and established by Ministrial Decree (*KEPMEN*). The implementation and formulation of the AKIP system were left defined in each ministries.

Since then the AKIP reports (LAKIP) was functioned as Peformance Measurement System (PMS) of Government Institutions with its main purpose was continuous performance evaluation and improvements on an ongoing basis in order to work effectively, efficiently and economically. As well as public reporting, question about national *ESDM* management continuously put ESDM ministry at spotlight, especially related to fuel subsidies, alternative energy sources, imported fuel, and electricity, as well as *BUMN* as an implementer. Fuel subsidies become a central issue, when the government plans to reduce the level of fuel subsidies, prior to the raise of world crude oil prices. Public dissatisfaction was also seen in the distribution management of fuel and energy, especially in the areas that was far from the central government, where in some places there is fuel scarcity occured. The accuracy rate of electrification is also questioned, where instability electrical operation resulted a significant loss for business operator.

One factor that enabled this contradiction, in which the Ministry gets a good rating in the *LAKIP's* evaluation, but the national *ESDM* management continued gain spotlighted and criticized, is that false alarm phenomenon occured inside Ministry of *ESDM*. This phenomena happen because the Ministry of *ESDM* have mistaken in the creation of its PMS (Performance Management System), so what was they set as a reference of evaluation and performance indicators is not represent the actual performance that should be achieved by the Ministry of *ESDM* according to their vision and mission, and their main function in a field of national energy management.

2. Business Exploration

After all those years, the performance evaluation implementation ownership was still in the top government's hand. It is shown by there is no significant evaluation about its PMS system in each government institutions. The LAKIP is still considered as external evaluation actions, rather than internal action to create a better organizations.

One of the criteria that good performance measurement system should outlined, is *A performance management system designed should be directed to the improvement not only monitoring* (*Wibisono, 2006:22).* The function as an improvement process, could explain as: *"The system should focus on how the company is currently performing, and indicate where it needs to improve. Manufacturing performance measurement as a measure of progress needs to have a reference state against which measurements are taken." (Wibisono, 2007:2)*

We try to analyze the PMS of ESDM Ministry using four basic steps in performance management systems designs *(Wibisono, 2006:26)* that is:
1. 0 Stage : Foundation
2. 1st Stage   : Basic Information
3. 2nd Stage : Design
4. 3rd Stage   : Practice
5. 4th Stage   : Refresher

The steps of PMS design was determined to create a PMS for an organizations. Those steps offered a wide coverage of information and analyzes to designing a PMS. those advantages would be useful in order to analyze the current PMS and recommending the new PMS. Using those steps of PMS design for ministry of ESDM, we could analyze the design of PMS and its suitability to the ministry of ESDM operational, function, and vision. The implementation of PMS design for the ESDM ministry would covers :

1. 0 Stage   (Foundation)
   The PMS design analyzes was implemented in order to recommended the more suitable PMS for ministry of ESDM

2. 1st Stage (Basic Information)
   This stage would cover information collection and analyzes. For the ministry of ESDM the information collection would covers:
   - Organizational : human resources, organizational structures, product and services
   - Organization's operational bases
     - Business Environment Surrounding the Organization, that are: energy industries, government & politics climate, comunities, and energy users.

3. 2nd Stage (Design)
   This is the core of the PMS analyzing whereas ESDM Ministry's vision, mission, strategic goals and target were analyzes. The analyzes would continue to the body of PMS which covers:
   - Framework

-    Performance variables
-    Benchmarking process

This process would determined the recommendation of framework and performance variables for the ministry of ESDM's PMS.

4. 3rd Stage (Practice)

The 3rd stage would covers the recommendation of PMS framework inplementation for the Ministry of ESDM.

5. 4th stage (refresher)

This step wont implemented in this research, whereas this step was dedicated after the PMS practiced and implemented for some period of time.

Because the 3rd stage including the implementation of PMS also, then the research limited only to design step. The steps for this PMS design was started by collecting any information about organization's physical and non-physical information.
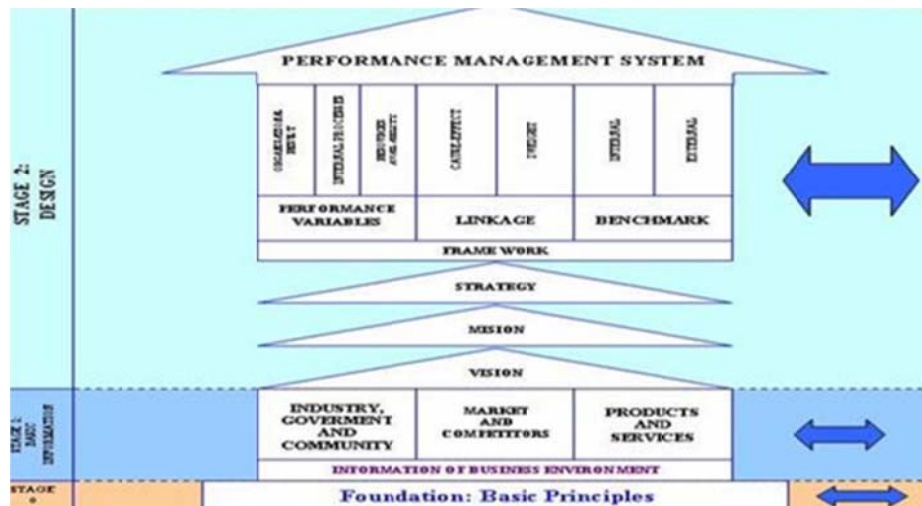

Fig 1. Steps to design PMS

After collecting the informations it is shown that the PMS of Ministry ESDM had several characteristics, that is:

1.   There is no special agency in charge of designing, implementing, and monitoring the implementation of PMS.
2.   A vision statement doesn't represent the purpose of the Ministry of *ESDM* as an organization.
3.   The mission statement is not just a translation of the vision, but also included the achievement of national development goals.
4.   Strategic goals and objectives of the Ministry of *ESDM* is not a corporate strategy, as well as the generic strategic.
5.   The SMK of the Ministry of *ESDM* doesn't have a specific framework.
6.   KPI not thorough at every level in the organization
7.   KPI just a target about national energy and mineral resources sector.

The vision and mission analysis resulted that the vision and mission of ministry is carrying only the national ESDM development, without any things related to the internal organizations. In the term of PMS implementation the focus will be pointed into framework and KPI that can adopt and translate the in-perfect vision/ mission statement and the organization's objectives.

The framework analysis shows that The Ministry of *ESDM* is not using a special framework, so KPI's result being a single perspective. The definition of single perspective is that the performance

measurements did not reach every level of organizations. The focus of performance is limited to the criteria considered important by management or government. In addition, the Ministry of *ESDM* AKIP function is only as an assessment tool, monitoring tools, and not as an improvement tool. This assessment appears because KPI emerged as a target to be met without following by variables and or KPI that measures an organization's internal processes to meet these targets. Once the misnistry couldnt reach a single KPI, the ministry doesnt have any infrastructure to analyze the problem root. One benefit if they're using a framework.

Considering all of those facts, it is clear that the false alarm phenomena had occured in the ministry of ESDM. While the LAKIP report, which majority filled by ESDM outcome such as oil lifting, export, etc, showing a good mark, the ESDM management and ministry itself as the enabler kept on criticized and cornered. *false alarm, and the usual suspects* as: "*the use of the wrong measure to motivate managers so they spend time improving something that has few positive consequences for the company, and perhaps even some harmful consequences*" *(Schmener and Vollman, 1994:58)*

3. Business Solution

To design the PMS of ESDM Ministry, we have to determined which framework of PMS we will use. The decision to uses *Balanced scorecards* on Bahrain's misintry of work, Indonesian's Ministry of Finance, and local authorities in UK are based on the advantage of *Balanced scorecards* summarizes in *developing balanced scorecards in local authorities: a comparison of experience (olafsson & wisniewski, 2004)*, that are:
1. Coordinated approach to ensure strategic priorities and goals are visibly linked to corporate/organizations, services, and business plans which in turn are linked for continous improvement.
2. Closing gap between vague mission and strategic goals statement and operational activities and measures.
3. Shifting the focus from individual initiatives to outcomes of intended initiatives

Despite the reason and advantage of balance scorecards mention above, its widely usage, and its continous updated and researched, the used of balanced scorecards in Ministry of ESDM considered the most realistic method were also because of reasons that are;
1. It is easier to learned and elaborated by the internal elements of the organization.
2. It is more widely used by both public and private sector organizations, making it easier to benchmarked.
3. Literature about the BSC is easy to be found
4. There are other ministries using the BSC framework, so it would be easier for benchmarking and information sharing.

Whilst the four traditional perspectives can be adequate, they frequently need re-labelling to have relevance *(Wisniewski, And Olaffson, 2004)*. So the implementation of BSC in the ministry of ESDM should considering the relevance of its organizations functions, internally and externally. The closest form of BSC, that is easier to benchmark is the BSC form of Bahrain's Ministry of Work or the Indonesian's Ministry of Finance. Both ministries have similiar form of perspectives, that is they transfrom the financial perspective which used to stay on top of the perspective hierarchy into stakeholders perspective. The different is that Bahrain's Ministry of Work put the stakeholders perspective in the same level as customer perspective. Figure 2 shows the sequenced and hierarchy of Bahrain's ministry of works as it shared in *(Creelman and Marr, 2011)*
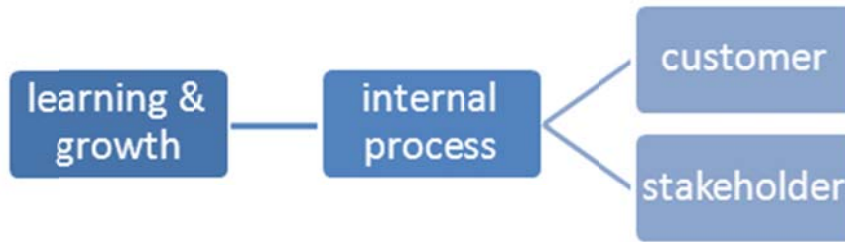
Fig.2. bahrain's mow BSC hierarchy

Other difference between those 2 ministries are that Bahrain's Ministry implemented strategic themes to grouped its objectives. Strategic themes are vertical combinations of objectives that originated in the process perspective, where the strategy is executed. This strategic themes can connect upward or downward. *(Kaplan & Norton, 2008: 70).* In other words, strategic themes are a tool in the strategy map, so that the organization can be more focused in reaching its objectives.

Results
The proposed formulation of Balanced scorecard resulted in such:
1. Transformed the financial perspective into stakeholders perspective, without changing its position.

Fig.3. ESDM ministry's BSC hierarchy

The explanation for the perspectives would be shown in table 1.
2. ESDM ministry would use 3 strategic themes that describes from the analisis and articulation of ministry's vision and mission, that is:
   a. *ESDM availability*, that is availability and energy security in the country. So no need to buy energy from abroad, create investment and grow the business climate
   b. *Public-Private Partnership (PPP)*, that is cooperation and partnership between the Organization of Private (business entities, etc.) and Public Organization (regulator, etc.) in creating and growing the business climate in the ESDM areas
   c. *Domestic Contribution*, that is the involvement of entities in the country, both organizations and individuals in the ESDM sector. So that society could play significant roles in the field of ESDM management.

Table 1. Perspectives definitions

Perspectives	Definition
Customer	Customer-oriented perspective as a user of the product/ service produced by organization
Stakeholder	Stakeholders oriented

	perspective that indirectly related to the outcome of the organization or its multiplier effects.
Internal Business Process	Process series that the organization need to do, to create the products/services in order to meet customer's expectation
Learning & Growth	The series of activities of the organization to create improvements and changes by enforce the organization's internal resources

Organizations outcomes, then the strategic initiative would be enabled on the other three perspectives. Strategic themes *ESDM Avaibility* and *PPP* will be placed since the perspective of business processes, while *Domestic Contribution* will be placed on the Learning & Growth perspective as the basis for the achievement of those objectives.

3. The ministry would use 16 objectives, to grouped KPI's/ measurements. All of those objectives were formulated to be read bottom-up like any other BSC formulation.

This 16 objectives was less than the previous 21 objectives of ESDM ministry. Those objectives was connected one to another, and the approach was bottom-up. The objectives also could be cascaded into lower level inside the ESDM organisations

2 of the objectives from the top hierarchy would be shown here. The objectives are:
1. Stakeholder's value growth
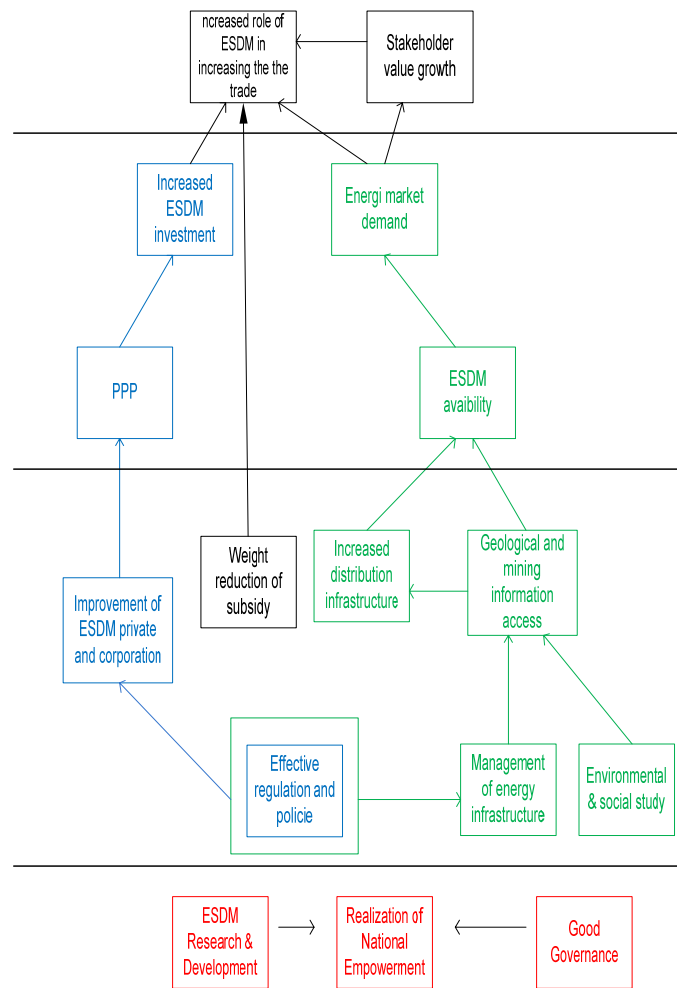2. ESDM contribution to national income

Fig.4. ESDM Strategy Map

Table.2 Growth of National Trade Balance

KPI	Measurement
Contribution ESDM sector in state income	Total crude oil exports to the APBN target
	Ratio of increase in crude oil exports
	Total of imports value of fuel to the APBN target
	Decreased bbm import ratio
	ESDM sector debt to asset ratio
	ESDM profit to asset ratio

Both of the objectives stand on the top of hierarchy as a representation of ESDM vision that is Increased value-added energy and mineral and Energy utilization for the welfare of the people. After the formulation of framework, KPI, and targets for the ESDM ministry was set, the next stage are define and developing strategic initiatives. Strategic initiatives were translated as sets of activities to

implement in order to achieve the targets of the KPI. The strategic initiatives for the objectives for the stakeholder perspectives will be shown in Table. 5.

The stage before implementation is just cascading and alignment the objectives into lower level in the organisations, in this case into directora-generale level and directorate level. Once it was all full setup, the ministry could tracking down the *bottleneck* if one or more KPI didnt achieved.

4. Recommendation

In order to implement balanced scorecard as the framework of its PMS, and strategic management tools, the ministry of ESDM should conduct trainings, especially to the managerial and supervisor level to get understanding in the field of BSC implementation. Wahington state governence *(Mary campbell, bringing performance excellent to the public sector,2005)* using BSC course to equip its employee with PMS understanding. After the employee's basic understanding reached, it easier for the organizations to expand its PMS framework and strategic road-map.

The implementation itself should implemented through development stages that could summarizes as:
1. OSM and PMS infrastructures
2. Cascaded scorecards for directorate-generale level
3. Strategic measurement, target, and initiatives
4. Aligning budget with initiatives
5. Step 2 untill step 4 for each level below dir-gen level.

Office of Strategy Management (OSM) is a significant infrastructure in the implementation of BSC. OSM which is an agency within the organization in charge of formulating and interpreting BSC to fit the organization's strategy and can be implemented at any level in the organization (*Harvard Business Publishing, 2011*). This OSM upgraded the BSC, thus no longer only serve as a performance measurement system, but it has become a strategic performance management system. The presence of OSM makes the related organization can consistently improve, implementing internal development, and develop the level of its organization and management, so that the organization is not only able to provide quality services, but also capable of being a world-class organization that equipped with qualified long-term plan and management system.

All of the development for PMS of ESDM ministry, whether physical or not, could only smooth implemented if the ministry itself realize the function and purpose of PMS. If the PMS still viewed as external organizations interest, then the PMS would lose its function as improvement tools, and wont be developed well

Table 3. Stakeholder Value Growth

KPI	Measurement
Increased employment absorbtion	Ratio of increased ESDM national employment
	The ratio of foreign workers to the national labor
	The ratio of employment growth of new job creation
	Ratio of regional increased ESDM employment
Increased role of ESDM in	The percentage of growth of state ESDM revenues to

national revenue	previous year growth
	The percentage of growth of state ESDM revenues to previous year growth on each sectors
	The growth percentage of state ESDM revenues on each sectors
	The growth percentage of state ESDM revenues
ESDM sector role in regional area revenues	The percentage of increased revenue per region
	Percentage of increase in the regional revenues to the previous year's growth
	Number of areas with growth more than targeted percentage
	Number of areas with growth below than targeted percentage

Table 4. Strategic Initiatives for stakeholder perspective

Objectives	Strategic Initiatives
Increased role of ESDM in increasing the trade surplus	Ensuring smoothness of exploration and production
	Reporting and oversight mechanisms
Employment absorption	Encouraging business growth
	Encouraging increased exploration
	Improving the quality of human resources
Increased role of ESDM in national revenue	Reporting and oversight mechanisms
ESDM sector role in regional area revenues	Reporting and oversight mechanisms

REFERENCES

Campbell, Mary., 2005, Bringing Perfomance Excellent to the Public Sector: Washinton State's Odyssey, ASQ World Conference on Quality and Improvement Proceedings, 2005, pg.279

Creelman and Marr, 2011, *Creating and Implementing Balanced Scorecard: The Case of The Ministry of Works-Bahrain,* the Advance Performance Institute

Harvard Business Publishing, 2011, Balanced Scorecard Reports, Vol. 13, Jan-Feb ed,

Kaplan, Robert S. and David P. Norton., 2008, *Execution Premium*, Boston, USA, HBS publishing corp,

Schmener and Vollman,1994 quoted in Wibisono, D., 2007, *Performance Management: Reading Materia II,* Bandung, INA, SBM-ITB

Wibisono, D., 2006, *Manajemen Kinerja*, Jakarta, INA, Erlangga

Wibisono, D., 2007, *Performance Management: Reading Material,* Bandung, INA, SBM-ITB

Wisniewski, M. And Olaffson, S.,2004, Developing Balanced Scorecards in Local Authorithies: A Comparison of Experience, International Journal of Productivity and Performance Management, 2004, pg. 602