MINISTRY OF ENERGY AND NATURAL RESOURCES

ENERGY COMMISSION SUSTAINABLE ENERGY DEVELOPMENT AUTHORITY MALAYSIA

THE MANAGEMENT OF RENEWABLE ENERGY DEVELOPMENT PROGRAMME

Main Points

What we examined?

- According to the Renewable Energy Act (Act 725), Renewable Energy (RE) is electricity generated or produced from renewable sources. Act 725 also defines, renewable resources are natural resources that are recurring and will never run out. In 1999, the Malaysian Government recognized RE as the country's fifth source of energy, especially in electricity generation. The Audit was carried out to evaluate the management of the RE Development Programme as of September 2021. It covered two main areas, namely the programme performance and programme management.
- The programme performance was assessed based on the achievement of output and outcome. The evaluation of output was based on the work progress of RE. While the evaluation of outcome was based on three aspects; contribution of RE programme in the national power generation mix; contribution of RE programme to Carbon Dioxide (CO₂) avoidance; community awareness and understanding of the use and implementation of RE programmes.
- The programme management was evaluated based on five aspects: tax incentives; application and approval process; RE generation; Feed in Tariff (FiT) programme management and programme monitoring.
- The Audit was conducted at the Ministry of Energy and Natural Resources (KeTSA), Energy Commission and Sustainable Energy Development Authority (SEDA Malaysia) which were responsible for the policy, regulatory and implementing of the RE programmes.

Why it is important?

- The energy sector contributed 80% of greenhouse gas (GHG) emissions to the atmosphere hence was the largest contributor amongst other sectors.
- The implementation of an integrated and planned RE strategy could reduce GHG emissions into the atmosphere because the electricity generated from RE produced zero emissions. Lack of RE management may cause the following issues:
 - The goals of national Renewable Energy policy documented under the National Renewable Energy Plan and Policy (NREPAP) may not be achieved.
 - May affect the renewable energy generation that are supposed to be distributed across the national grid.
 - May affect the planning and financial position of the Renewable Energy Fund (KWTBB) collected from electricity consumers.

What we found?

- Development Programme was good in terms of achieving the installed capacity of RE as set out in the Green Technology Master Plan 2017 to 2030. In addition, the contribution of RE in the national energy generation mix is good based on achievements generation against the targets set out in the National Renewable Energy Policy and Action Plan. Weaknesses in aspects of program management that need attention were as follows:
 - A total of 333 out of 482 public respondents (69.1%) were unclear about the purpose of the 1.6% KWTBB tariff charged in the electricity bills. A total of 371 respondents (77%) thought that renewable energy was still not widely used in Malaysia.
 - The notification system for reminding the RE producers if the milestone/actual date exceed the original completion date, was not activated. In addition, the usage of the milestone function that displayed project progress was not optimally used.

- The FiT programme performance for the period of 2017 to 2020 was lower between 65.7% to 69.8% compared to the minimum performance target.
- The number of RE producers under the FiT programme that generated below 35% RE of the Declared Annual Availability (DAA) has increased almost annually. The difference between actual RE generated and the minimum 35% targeted was 91,312.95 MWh (36.3%) as compared to the minimum target of 251,524.81 MWh. Subsequently no electricity generation from RE sources will be channelled to the national grid.
- There was a significant shortage of feedstock supply of wood chips. RE producers experienced an inadequate supply around 29.9% to 98.9% from the actual requirements.
- The project installation work was slow in progress, up to 2,006 days which resulted in the usage of generated quotas becoming less optimal.
- The remaining equipment of solar photovoltaic under the MySuria Programme worth RM16.77 million were not utilised and has been stored since December 2018 as the installation location was not finalized.
- There was a wastage of RM9.57 million as the solar photovoltaic equipment was incompatible with a newly proposed installation location.

What do we recommend?

- To overcome the weaknesses highlighted and to ensure that this will not recur in the future, the National Audit Department recommends the following actions:
 - KeTSA needs to cooperate with ministries/departments at the federal, state and local levels to support the development of the RE industry.
 - KeTSA, Energy Commission and SEDA Malaysia should enhance their monitoring activities to ensure that the RE programmes are implemented as planned. In addition, a post-mortem review should be carried out on the RE producers that had performed poorly in accordance with the

established policies/procedures so that the goals of the national RE policy are not affected.