
Performance Audit

**Renewable Energy Sources
and
Energy Efficiency in Malta**

EUROSAI – WGEA Meeting
Texel



October 2010

Purpose of presentation

This presentation discusses the NAO report Renewable energy sources and energy efficiency in Malta (published September 2009)

- ❑ the focus of the audit
- ❑ main audit findings and causes
- ❑ overall conclusions
- ❑ difficulties experienced by the audit team

Audit focus

Audit Concerns

- The exploitation of RES and the adoption of energy efficient practices are still in their infancy in Malta
- Despite that Malta has abundant potential for solar and wind energy generation, there are still no significant infrastructures in place to exploit these renewable energy sources
- The attainment of EU obligations may be problematic if current state of affairs prevails

Audit Objectives

The audit particularly sought to evaluate whether:

- the appropriate processes were adopted in the development of Malta's energy policy
- Malta's progress with regards to the renewable energy program, the energy efficiency action plan and the implementation of biofuel
- the effectiveness of the energy efficiency incentives provided by the government

Methodology

In order to attain the above objectives, the NAO:

- reviewed the legislative framework
- examined the relative records and data, maintained by various organisations
- conducted interviews with key officials at various entities

The policy process (1 of 2)

The study revealed that:

- Malta lacks an officially approved energy and renewable energy policy
- the policy process effectively commenced following Malta's EU membership in 2004
- energy and renewable energy policies are still largely in their development stage
- the non-official approval of policies is considered as a potential barrier to reaching EU targets

The policy process (2 of 2)

- The audit concluded that the situation discussed in the preceding slide was mainly attributable to the following:
 - the extent of information available
 - continuous progress and evolution of EU policies delaying the approval of energy and RE policies
 - stakeholder involvement and extensive feedback
 - administrative capacity weaknesses
 - the timeliness of policy initiatives
- The study did not attempt to comment on any policy decisions since this is beyond the NAO's mandate

The Implementation of Renewable Energy Policies (1 of 2)

- **Malta's physical limitation and potential environment impact delayed the implementation of wind-farms**
 - Limited availability of land and deep waters around Malta constrained the development of wind-farms
 - Uncertainty in the decision-making process about the scale of on-shore and off-shore of wind-farms
 - Significant stakeholders' resistance to proposed wind-farm site
 - Weak public response to government rebates measures related to micro-wind energy

The Implementation of Renewable Energy Policies (2 of 2)

- **There has been marginal exploitation of solar energy, with respect to the generation of electricity, due to various constraints**
 - High initial costs may discourage public response
 - Drawbacks related to the net metering system may have discouraged the public response
 - Spacial, legal, and planning constraints do not appropriately consider the utilisation of solar energy by residential, commercial and industrial users
 - A number of government departments installed PV systems

- **The infrastructure is being developed to exploit waste energy**
 - Facilities for waste management with the possibility of electricity generation are still being developed
 - No comprehensive plans were drawn up with regards the development of a 'waste' management infrastructure that generate electricity through RES

Biofuel in Malta

- The recent drop in biofuel sales raises concerns about reaching the indicative target 2010
 - Retail prices of biofuel closely related to fossil fuels despite excise duty exemption
 - Potential for further penetration of biofuel not fully exploited
- There exists a lack of comprehensive planning to further encourage market penetration of biofuels
 - Biofuels market regulations are being drafted by the MRA
 - A restricted awareness/educational campaign limited further penetration of biofuel
 - The non availability of pre-blended bio fuel mixes may negatively impact the demand for biofuel. This situation is expected to be remedied in the very near future
- The opportunity exists for more robust monitoring by the regulator
 - Regulator monitoring and reporting is dependant on the data submitted by the biofuel producers

Encouraging Energy Efficient Practices (1 of 2)

- **Measures to encourage energy efficiency are being implemented but are not being evaluated against EU targets**
 - The National Energy Efficiency Action Plan identifies 33 energy-efficient measures
- **The Malta Resources Authority deemed it impracticable to evaluate the energy efficiency measures**
 - Limited data has been collected by the MRA to enable the assessment of energy efficient measures
 - The MRA is not appropriately resourced to perform its monitoring function

Encouraging Energy Efficient Practices (2 of 2)

NAO case studies relating to measures undertaken within the 'Domestic' and 'Green Leader' indicate that the opportunity exists to improve on results to date

- **There was a steady progress in the implementation of the 'Domestic' measures**
 - Uptake of 'Rebates on Energy Efficient Domestic Appliances' measure was significant
 - High initial capital costs were considered as a significant barrier in the purchases of more expensive energy generating systems
 - Cost per unit of energy saved indicate that measures are weighted in favour of social benefit

- **Impact of 'Green Leaders' could improve through enhanced planning**
 - Various energy efficient measures and energy savings awareness within government have been introduced by the Green Leaders
 - A lack of strategic planning impinges on the Green Leaders initiatives
 - Green leaders' impact is not being quantified

- **Monitoring of energy efficiency initiatives have not commenced.**

Overall Conclusions

- Delays in the commencement of the policy making process
- Policy still in its developing stage
- Strategic and operational planning was not always appropriate
- Piecemeal implementation of initiatives
- Monitoring of the implementation of the various projects was not always robust

Public Accounts Committee discussions

- Report generated substantial interest, particularly with regards to the scope and methodology adopted
- PAC requested that the NAO determines the contingent liability in the event that Malta's EU targets are not attained
- The PAC also requested that the NAO undertakes a follow up audit

Difficulties encountered

- audit scope was too broad
- expertise of audit team
- the appointment of experts to assist the NAO proved difficult
- renewable energy policies were still in draft
- limited data and information relating to the local situation
- devising effectiveness criteria of the various initiatives undertaken
- continuously changing circumstances

Thank you for your attention

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