Performance Audit:

Renewable Energy Sources and Energy Efficiency in Malta

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Auditing Energy Issues
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National Audit Office
MALTA
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Audit context (I)

- The audit focused on programmes and measures which:
  - aimed to minimise the dependency on fossil fuel
  - were mostly co-financed through EU funds
  - were intended to contribute to the attainment of EU targets
Audit context (II)

- At the time of the audit:
  - the exploitation of RES was still in its infancy in Malta
  - despite its potential there were still no significant infrastructures in place to exploit renewable energy sources
  - the relevant RES national policy framework was not in place
  - the attainment of EU targets appeared problematic
Audit context (III)

RES programmes and measures focus

Solar energy

Wind energy

Bio–fuel

Biomass
Audit objectives

Against this background, the audit particularly sought to evaluate the extent to which:

- the appropriate processes were adopted in the development of Malta’s energy policy
- progress was being registered in accordance with the renewable energy program
Audit criteria

- In the case of this audit there were only global and general pre-determined criteria rather than the outputs and outcomes related to each programme and measure.

- Consequently, audit criteria was developed by the audit team after consultation with auditees.

- Such criteria included:
  - penetration rates of energy efficient appliances
  - uptake of grants related to photovoltaic panels and solar water heaters
  - market penetration of bio-fuel
  - progress in the implementation of major projects such as an off-shore wind farm and biomass related projects
  - the contribution of each scheme to the attainment of EU targets

- This approach proved too optimistic to realise fully namely due to a lack of reliable information and unstructured evaluations by auditees.
The non-approval of policies was considered as a potential barrier to reach EU targets.

The audit concluded that delays in the approval of policies were mainly attributable to:

- limitations of information available
- continuous progress and evolution of EU policies also delayed the approval of energy and RE policies
- extensive feedback from stakeholders
- administrative capacity weaknesses
Audit findings – wind energy

- Malta's physical limitation and potential environmental 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 wind-farms
  - significant stakeholders' resistance to proposed wind-farm site
  - weak public response to government rebates measures related to micro-wind energy
Audit findings – solar energy

- There was marginal exploitation of solar energy, with respect to the generation of electricity, due to:
  - high initial costs discouraged public response
  - drawbacks related to the net metering system may have discouraged the public response
  - space, legal, and planning constraints
Audit findings – biofuel

- At the time there were concerns about reaching the EU set indicative target for 2010. This was mainly due to:
  - retail prices of biofuel being closely related to fossil fuels despite excise duty exemption
  - biofuels market regulations were not in place
  - 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
  - regulator monitoring and reporting is dependant on the data submitted by the biofuel producers
Audit findings – biomass

- 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
Audit conclusions

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

- Report generated substantial interest particularly with regards:
  - the scope and methodology adopted
  - the contingent liability in the event that Malta’s EU targets are not attained
  - a follow-up audit
Recent developments – shifting towards solar energy


- Policy Area 1: Energy Efficiency
- Policy area 2: Reducing reliance on imported fuels
- Policy Area 3: Security of supply
- Policy Area 4: Reducing emissions from the energy sector
- Policy Area 5: Delivering energy economically, efficiently and effectively
- Policy Area 6: Ensuring the energy sector can deliver

- Wind energy projects have been reviewed
- Pre-blended biofuels were introduced
- Solar farms set to cater for half of Malta’s 2020 renewable energy targets
- Construction works of a new mechanical and biological treatment plant, incorporating waste to energy, in the north of Malta are on-going
Lessons learned

- The implementation of this audit was in some instances problematic
  - audit scope was too broad
  - expertise of audit team
  - draft renewable energy policies
  - limited information
  - devising effectiveness criteria of measures undertaken
  - continuously changing circumstances
Thank You

The reports

Renewable Energy Sources and Energy Efficiency in Malta

and

Renewable Energy in Malta

are available at

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