

Challenges to Renewable Energy in the Caribbean

In 2005 on the Environmental Science paper, Question 6 examined candidates' understanding of renewable energy sources and their applicability in the Caribbean.

In Part (c) candidates were required to suggest two reasons for the source they identified not being used more effectively in their country. Some candidates suggested appropriate reasons such as those listed below in relation to solar energy.

- The start-up capital to implement this technology is quite high especially for the equipment needed.
- There is still a great reliance on traditional non-renewable energy sources.

It was apparent that the majority of candidates had the requisite knowledge, but some had difficulty in applying this knowledge in Part (c).

In this issue for EFYM, we will share some more barriers as a result of our past research in the Caribbean:

Policy

- Delayed approval of National Energy Policies;
- Absence of sustainable energy plans;
- Absence of sub-policies to support national energy policy (geothermal, bio-fuels, water resources, etc.);
- Lack of incentives for renewable energy initiatives/technologies;
- Existing electricity acts in most countries do not promote the use of Renewable Energy;
- Conflicting policies regarding use of renewable energy sources such for water bodies/watershed;
- Slow changes in traditional and cultural behaviour, especially among utilities regarding use of RE and net-metering;
- Absence of subsidies to support and promote non-carbon energy generation;
- Inability to retain a skilled workforce required to build a modern low-carbon economy;
- Inadequate government incentives to facilitate the purchase and installation of renewable energy technologies.

Capacity:

- Limited land space available for large scale renewable energy projects;
- Economies of scale in some country, do not facilitate increased capacity in some RE technologies;
- Limited technical and human capacity for conceptualization, development and implementation of low carbon technologies;
- Lack of proper infrastructure and equipment to allow development and installation of large scale RE systems e.g. Roads are too narrow to transport large wind turbines and equipment (cranes 40- 50 ft) required for installation of systems are not locally available;
- No designated local agency with responsibility for energy information in most countries hence no locally accessible central energy information source to facilitate planning and decision making.

Finance

- Most countries were faced with high initial capital investments required for renewable energy and found it difficult to access financing to start large projects.
- Most of the financing provided for energy initiatives were through multi-nationals.
- Some countries were unable to follow through with recommendations from various feasibility reports and energy audits due to lack of financing.

Awareness

- Countries still identify the absence of awareness/public education programme as a barrier.