



# Curriculum

For

An Energy Management Module for Micro and Small Business in the  
Caribbean



## **1.1 Description**

The proposed course will focus on energy management in SMEs. It seeks to equip persons in micro, small and medium size companies with the skills and tools to effectively manage their energy efficiency activities and renewable energy opportunities. Other areas like monitoring and evaluation are also included.

## **1.2 Objectives**

The objectives of the course are confined to the scope of MSMEs to improving the business environment for export-oriented companies. In order to make the course holistic and multidimensional, the following learning domains will be targeted by a few key objectives.

### **1.2.1 Cognitive Domain**

These objectives refer to knowing and remembering, understanding and applying, analysing and creating. The specific objectives targeting this area are to:

- 1) Understand the role of energy in businesses
- 2) Learn how to use tools to optimise energy resources
- 3) Understand how renewable energy technologies work
- 4) Learn about relevant standards and services
- 5) Learn about energy efficiency and conservation
- 6) Understand how to evaluate projects and monitor performance
- 7) Learn how to effectively monitor energy consumption

### **1.2.2 Affective Domain**

These objectives refer to receiving and responding, valuing and organizing. The specific objectives targeting this area are to:

- 1) Receive new information on available technologies
- 2) Appreciate the importance of energy in businesses

- 3) Identify opportunities for energy conservation and energy efficiency
- 4) Accept the importance of standards
- 5) See energy management as a valid management function
- 6) Appreciate the need for evaluation and monitoring

### **2.2.3 Application Domain**

These objectives refer to taking action and applying. The specific objectives targeting this area are to:

- 1) Evaluating supplier proposal for energy efficiency and renewable energy implementation
- 2) Applying learnt energy standards to activities
- 3) Assigning specific responsibilities for management energy
- 4) Monitoring the consumption level of energy
- 5) Commit to creating a cleaner energy environment

### **1.3 Outcomes**

The expected outcomes from delivering the proposed training are:

- Create a more informed businesses community in the Caribbean as it relates to energy use and associated activities
- Equip businesses and entrepreneurs with tools to optimise their use of energy services
- Provide information to help companies make decisions to improve profitability
- Improve global competitiveness of businesses within the Caribbean

## **2.0 Course Content**

### **2.1 Introduction**

EE and conservation  
RE and sustainability  
Clean Energy and Environmental Impact

### **2.2 Data Collection**

Electricity Utility  
Gas Utility  
Other  
Frequency  
Training  
Recording  
Estimation

### **2.3 Analysis**

Tabulating  
Graphing  
Trends  
Approaches to creating a consumption profile

### **2.4 Solutions - Energy Saving Opportunities**

Lighting  
Large Acs  
Small Acs  
Office Equipment  
Special Equipment  
Water Heating

## **2.5 Implementation**

Capital Costs

Savings

Payback

Energy Performance Indicators

Project Selection Criteria

Evaluation of an energy proposal

## **2.6 Monitoring**

Baselines consumption

Business as Usual consumption

Target Consumption

New Consumption

Consumption Performance

EPI Tracking

Cost Tracking

Results Publication

Reporting

## **2.7 Energy Managements standards**

An introduction and overview of ISO 50001

Application and role of standard

## **2.8 Outsourcing the Energy Managements function**

To whom?

How much?

Deliverables (Reports, Training, consultation, Recommendations)

## **2.9 Energy Managers/Entrepreneurs**

Availability (Retainer)

Qualifications (SE background)

Entrepreneurship (Startup, advertising, client acquisition, servicing)