Lesson 3
Developing Energy Management Programs

QEM 570
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Learning Objectives

After this presentation you will be able to:

- Identify corporate structures and characteristics that promote successful energy management programs
- List typical functions of an energy manager
- Identify characteristics of effective corporate energy policies
- Recognize key factors in energy auditing and program planning
Developing an Energy Program

Key factor to success → Top management support

Position of top energy manager position important to program success

Must be high enough to:

- Secure access to financial and personnel resources
- Have knowledge of company events and industry strategic trends

Developing an Energy Program

Corporate Structures

- President
  - VP
    - VP
      - VP
        - Energy Manager
          - Coordinator
            - Coordinator
              - Coordinator
                - Employees
Functions of Energy Manager

Set Policy

Effective policy includes authority to:
- Make business plans
- Locate facilities
- Select production equipment
- Acquire metering and measurement equipment
- Develop reporting and training

Develop Audit Plans

Plan specific audit types: e.g. motors, compressors, lightning

Education

Match training to need at each level

Reporting System

Fit to corporate needs. Simple is better

Strategic Plans

Gather info from all levels. Group ideas

Setup plans and policies

Establish energy accounting and baselines

Engage outside assistance

Determine future energy needs

Secure financing for projects

Make and implement energy system recommendations

Evaluate plans’ effectiveness
Promoting Successful Programs

**Key factor**  
Employee Ownership

- Enlist input from all organizational levels

**Tips for success**

**Have/Work Plans**
- Time events to keep program alive

**Share Energy Savings Ideas**
- Vest others in program success

**Be Aggressive**
- Energy team most knowledgeable
- Make efficiency and energy issues part of management decisions

Promoting Successful Programs

**Tips for success**

**Use Proven Technologies**
- Failure of technology could stop program
- Keep solutions simple

**Cultivate Interested Parties and Departments**
- Report progress up corporate ladder
- Reward participation

**Recognize All That Contribute**
- Give credit where credit is due
- Acknowledge all participation and ideas
Early Project Selection

Select projects with low impact on personnel (HVAC, lightning) fast payback, high probability for success

Examples

Fix Leaks

- Boiler
  - Stream leaks
- Compressor
  - Air leaks
- Building Envelope
  - Cold air
  - Hot air

Add Insulation

- Building Envelope
  - Heat flow
  - Insulation
Early Project Selection

Examples

Install high efficiency motors

Efficiency > 95% for large machines

END LESSON 3