

Module 5: Organisational Structure for Energy Management

The placement of responsibility for energy management within the organisational structure is an important decision. However, there is no one right answer to this question; rather, there are some guiding principles—energy accountability centres being an example—that can be taken from successful energy managing organisations. This Module develops those principles based on the style of organisation and the nature of its business.

Learning Objectives: Module 5

After completing this module, you will be able to:

- ◆ Provide guidance on how best to place responsibility in the organisational structure for energy management.

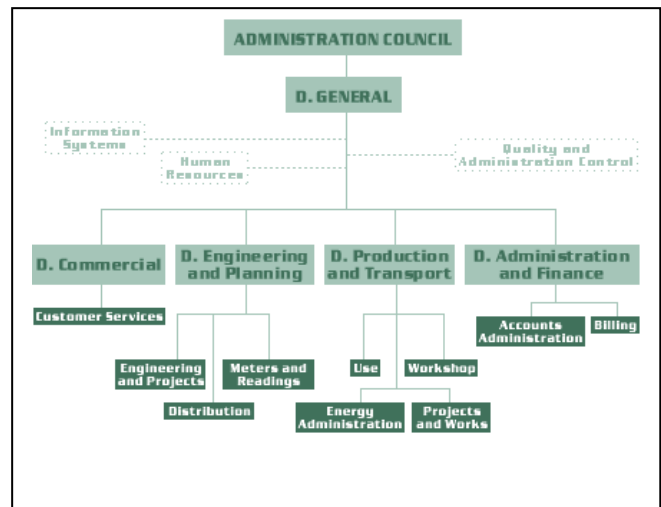
5.1 Organising for Energy Management

(Reference - General Information Report 12: Aspects of energy management, UK Best Practice Programme).

Energy management impacts on the whole organisation; to be effective as an energy manager, you need access to all parts of the organisation. But energy management has to be located somewhere. How this is resolved depends on the structure of the organisation and its maturity in terms of energy management practices.

Some points to consider are:

- ◆ Whether responsibility should be concentrated or distributed
- ◆ Energy management is more than a technical function—it is management too
- ◆ All managers are responsible in some way for energy
- ◆ Accountability for energy use should be distributed to those who control it.



The critical issue in organising for energy management is its integration into the overall management structure and process. While leadership may be placed in the hands of an individual or group of individuals, just like other management functions, energy management needs to be incorporated into the roles and responsibilities of all line managers.

5.2 Location of Energy Management Leadership

The energy management function, whether vested in one “energy manager or co-ordinator” or distributed among a number of middle managers, usually resides somewhere in the organisation between senior management and those who control the end-use of energy. Exactly how and where that function is placed is a decision that needs to be made in view of the existing corporate structure.

Saving energy has tended to be seen as a technical activity and you may now find yourself located in a technical section within your organisation. This may be a good base for gaining control in Phase 1 of an energy management programme but it is less appropriate for training or energy information activities.

Human Resources may be a suitable location for the motivation and training activities and a finance section may, in the long term, be a good base from which to operate the financial control and accounting procedures required in Phase 3. But both locations have disadvantages in terms of technical support and credibility.

The chief executive's office may provide the high profile and access required to kick-start energy management initially. But, in the longer term, if you want energy management to be integrated into mainstream management throughout the organisation, then this may not be the best location.

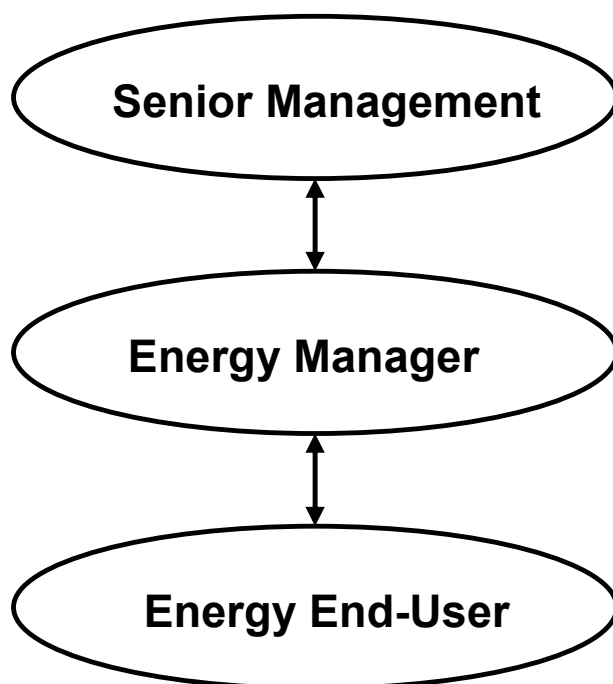


Figure 5.1: Locating Energy Management

Another option is to employ outside consultants who can provide wide experience and expertise. This may be the best option in technical situations when consultants can be used to support internal personnel but it lacks the network of relationships and day-to-day contact that is crucial for informing and motivating staff.

In practice, there may be no single ideal home for all energy management activities and the optimum location may need to reflect this, altering over time as the organisation moves from one phase of its energy management programme to the next.

Each option has its own advantages and shortcomings. An important question concerns the *concentration* of the energy management function:

- ◆ Should all energy staff be kept together in a combined unit?
- ◆ Or is it more appropriate for them to be dispersed across the organisation?

A single unit within a particular section of the organisation has the shortest chain of command and it may also offer esprit de corps and economies of scale. But dispersed locations with responsibilities delegated between sections may be more useful in the longer term as a way of integrating energy management across the organisation's activities.

Which of these options will prove to be best, not just in the short term but in the long run, will depend on the organisation's specific circumstances. If energy management is based in a technical section, then there is a danger that 'saving energy' may be marginalised as a specialised technical activity. Energy is an organisation-wide management issue, not a technical speciality. It is essential that:

- ◆ all managers understand that controlling energy consumption is one of their managerial responsibilities
- ◆ they accept and act on this 'new' understanding and are made accountable for their own energy consumption.

5.3 Top Management Support

The status and authority of the person charged with energy management responsibility is often limited. To achieve corporate objectives, those in positions of authority need to be persuaded of the need to change the ways in which their units operate. The backing of top management is needed to accomplish this.

Without this endorsement from top management, energy management is likely to remain a low-level activity. As a result, it will not be accepted by mainstream managers and by their staff as something that needs to be treated as part of their everyday actions and activities.

The energy manager or co-ordinator, can increase his influence by building an alliance with a person within the organisation who holds a position of power and who will support energy management. However, influence acquired in this way is informal and transient. It is not an integral part of the organisation's energy management structure. If that person leaves or turns his or her attention elsewhere, then the influence is lost and the energy management effort may be in jeopardy.

Top management should be approached:

1. to get agreement for major spending on staff or energy measures
2. to provide a summary of progress
3. to gain recognition and prestige for energy management activities.

5.4 Roles and Responsibilities

Above all, energy management is a *managerial* function. It is for this reason that this Manual focuses almost entirely on management issues. Of course, the energy manager or co-ordinator must also be knowledgeable about technical concerns. Other workshops in this series provide that technical knowledge base.

Your tasks and responsibilities as energy manager are clearly wide ranging and may even vary over time as energy management becomes established. It may be helpful therefore to provide a sample job description for the role of energy manager.

Among the responsibilities often assigned to energy managers are:

1. overseeing the formulation and implementation of an energy policy
2. introducing and maintaining cost-effective ways of providing management information about energy consumption and attendant environmental pollution
3. reporting such information appropriately and regularly to the staff accountable for this consumption and to senior managers
4. introducing and maintaining efficient and environmentally benign policies and practices for the purchase and combustion of fuels
5. raising and maintaining energy awareness throughout your organisation
6. introducing and maintaining effective 'good housekeeping' and plant operating practices throughout your organisation
7. identifying your organisation's training needs for energy-related skills and understanding
8. identifying cost-effective opportunities for increasing energy efficiency whether in new or existing premises
9. formulating an investment programme for reducing energy consumption and environmental pollution
10. introducing and maintaining review procedures for establishing the value for money of energy management activities, both to top management and other relevant staff.

The integration of energy management into the regular management functions involves identifying the activities that need to be carried out and determining who should be responsible for them. A matrix like the one shown in Figure 5.2 is a useful way of doing this.

Function	Responsible Person				
	Director	Mgr A	Mgr B	Asst. C	Asst. D
Measure consumption	▲		■		●
Identify energy cost centres			▲	*	■
Track performance					
Set targets for energy usage					
Develop conservation programme	▲	■		●	
Inspect equipment					
Select projects for improvement					
Allocate budget and resources					
Prepare documentation					
Provide training					
Review new projects for energy efficiency					
Carry out energy management audits					

Key: ▲ Approval Authority ■ Responsible for Work ● Perform Work * Provide Technical Support

Figure 5.2: Roles and Responsibilities Matrix

5.5 Accountability

Good line management is as important as location. What is needed is:

- ♦ unambiguous delegation of responsibility for controlling energy consumption to appropriate budget holders in each section in the organisation
- ♦ one person assigned overall responsibility for co-ordinating all energy management activities and reporting regularly on how well each section is controlling the amount of energy it consumes
- ♦ clear lines of reporting and accountability to that person from energy users
- ♦ clear lines of reporting and accountability for energy management activities leading from that individual right up to top management

- ◆ a clear inter-departmental committee structure for managing energy.

Regular reporting through the normal management structure is important. In the case of energy management reporting, some companies find it helpful to create an inter-departmental energy management committee. If this is the case in your company, the committee also would expect to receive regular reports. The advantage of such a committee is that it provides access to areas of decision-making affecting energy consumption otherwise denied you. Finally, periodic reports would normally be filed with senior management—the CEO and/or the company board.

It is also desirable to separate two key functions within energy management so that one set of individuals is responsible for making investments in energy saving measures and another for auditing the return on those investments.

5.5.1 Energy accountability centres

(Reference: Good Practice Guide 112 – Monitoring & Targeting in Large Companies)

Many companies that are successful in managing energy have adopted an “energy accountability centre” (EAC) structure that places responsibility for energy budgets in the hands of line managers. The EAC structure is based in the principle that, if a manager responsible for a department in a plant is made accountable for the energy costs of the department, and is supplied with the required information on costs and consumption, there is an incentive to find ways of improving performance.

Implementing an EAC structure involves identifying where management accountability is defined by location, installing meters on energy utilities at the point of entry to the area or department, and providing information on consumption and activity on a routine (daily, weekly or monthly) basis. Energy metering schemes are mapped on to the organisational structures.

In this way, energy consumption is managed in the same way that finances are. EACs are also integral to the implementation of energy MT&R; indeed, management responsibility for energy performance demands that the techniques associated with MT&R be employed.

Worksheet 5-1: An Energy Management Action Plan – Organising

Item No.	Action	Measured Outcome	Accountability	Resource Needs	Start	End