



Life cycle perspective - what ISO14001 includes

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Why include life cycle perspective?

According to ISO 14001 - *A systematic approach to environmental management can provide top management with information to build success over the long term and create options for contributing to sustainable development by controlling or influencing the way the organization's products and services are designed, manufactured, distributed, consumed and disposed by using a life cycle perspective that can prevent environmental impacts from being unintentionally shifted elsewhere within the life cycle.*

What is a life cycle?

The definition of life cycle is *'Consecutive and interlinked stages of a product (or service) system, from raw material acquisition or generation from natural resources to final disposal. Life cycle stages include acquisition of raw materials, design, production, transportation/delivery, use, end-of-life treatment and final disposal.'*

Is a life cycle assessment a requirement in ISO 14001?

No, it is not a requirement as clearly stated in Annex to ISO 14001 A6.1.2: *'When determining environmental aspects, the organization considers a life cycle perspective. **This does not require a detailed life cycle assessment**; thinking carefully about the life cycle stages that can be controlled or influenced by the organization is sufficient. Typical stages of a product life cycle include raw material acquisition, design, production, transportation/delivery, use, end-of-life treatment and final disposal. The life cycle stages that are applicable will vary depending on the activity, product or service.'*

Why consider life cycle perspective?

The reason according to ISO 14001 is that *'Some of the organization's significant environmental impacts can occur during the transport, delivery, use, end-of-life treatment or final disposal of its product or service. By providing information, an organization can potentially prevent or mitigate adverse environmental impacts during these life cycle stages. The organization considers the extent of control or influence that it can exert over activities, products and services considering a life cycle perspective.'*



Guidance from ISO 14004

Practical help – Life cycle perspective

A life cycle perspective includes consideration of the environmental aspects of an organization's activities, products, and services that it can control or influence. Stages in a life cycle include acquisition of raw materials, design, production, transportation/delivery, use, end of life treatment, and final disposal.

When applying a life cycle perspective to its products and services, the organization should consider the following:

- the stage in the life cycle of the product or service,
- the degree of control it has over the life cycle stages, e.g. a product designer may be responsible for raw material selection, whereas a manufacturer may only be responsible for reducing raw material use and minimizing process waste and the user may only be responsible for use and disposal of the product,
- the degree of influence it has over the life cycle, e.g. the designer may only influence the manufacturer's production methods, whereas the manufacturer may also influence the design and the way the product is used or its method of disposal,
- the life of the product,
- the organization's influence on the supply chain,
- the length of the supply chain, and
- the technological complexity of the product.

The organization can consider those stages in the life cycle over which it has the greatest control or influence as these may offer the greatest opportunity to reduce resource use and minimize pollution or waste.

ISO 14001 key requirements that refers to life cycle perspective are:

"6.1.2 Environmental aspects

Within the defined scope of the environmental management system, the organization shall determine the environmental aspects of its activities, products and services that it can control and those that it can influence, and their associated environmental impacts, considering a life cycle perspective. "

"8.1 Operational Planning and Control

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"Consistent with a life cycle perspective, the organization shall:

- a) establish controls as appropriate to ensure that its environmental requirement(s) are addressed in the design and development process for the product or service, considering each stage of its life cycle;
- b) determine its environmental requirement(s) for the procurement of products and services as appropriate;
- c) communicate its relevant environmental requirement(s) to external providers, including contractors;



- d) consider the need to provide information about potential significant environmental impacts associated with the transportation or delivery, use, end-of-life treatment and final disposal of its products and services.”