

THE LINDE GROUP

*Linde*

# Product Stewardship



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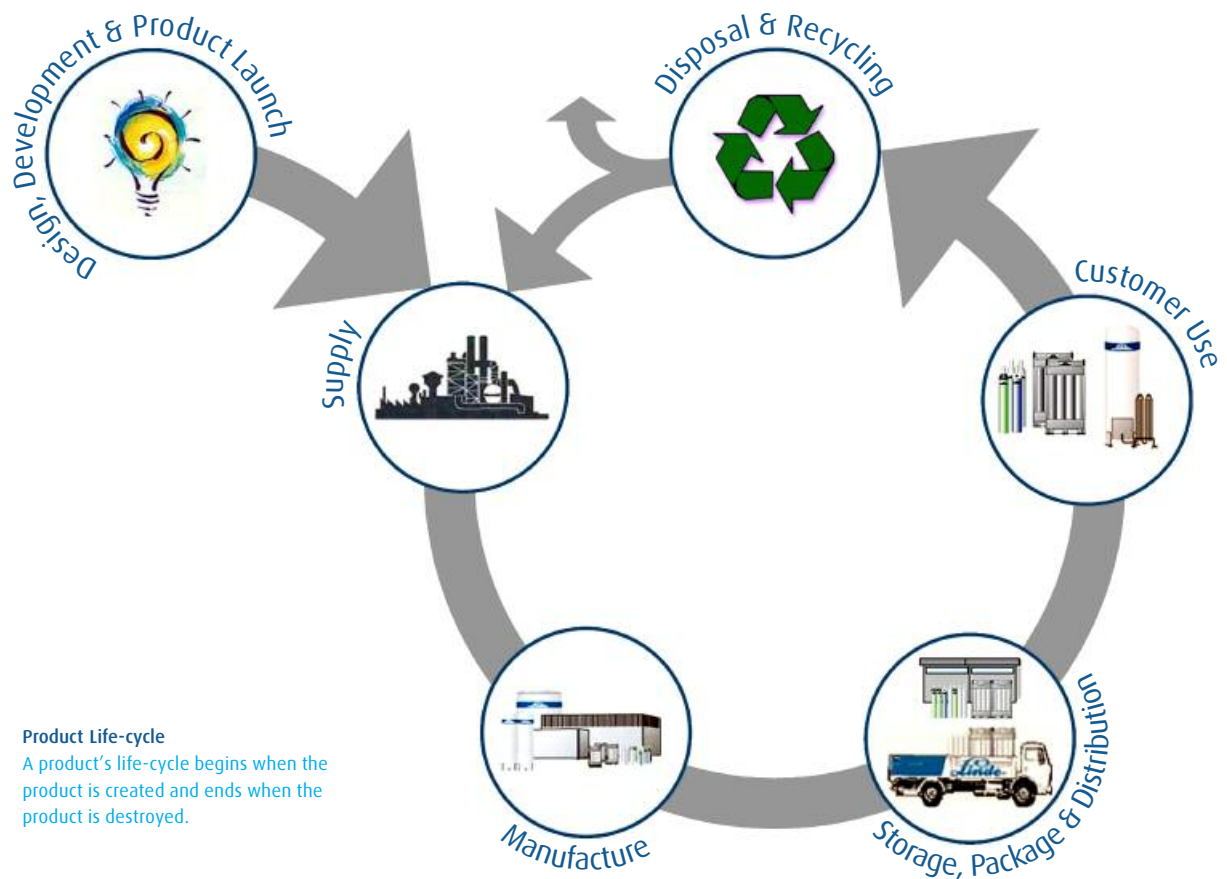


Product Stewardship is the responsible and ethical management of the safety, health and environmental risks of our products throughout their product life-cycle.

Product Stewardship is a product-centered approach that directs all participants involved in the life-cycle of a product, to take shared responsibility for the impacts on:

- human health and safety
- the environment

that result from the production, use, and end-of-life management of the product.



## Product Legislation and Minimum Requirements

Product Legislation compliance is the pre-requisite for Product Stewardship.

Product Legislation aims to improve protection of people, the environment and properties from hazards introduced by a product.

In all aspects of our products life-cycle, Linde complies with international and local regulatory requirements, internationally recognised standards and Linde global standards.

## The Aim of Product Stewardship

The aim of Product Stewardship is to go beyond legislative obligations and minimise product risk by the responsible care of our products throughout their life-cycle.

Product Stewardship is a key guiding principle of Responsible Care® programmes applied to products. Responsible Care® is an international programme that has been adopted in the chemical industry and is used to demonstrate a company's commitment to continual improvement in health, safety and environmental performance.

## Management of Product Life-cycle Risks

Linde applies effective Product Stewardship by systematically identifying the hazards and assessing/minimising the potential product life-cycle risks:

- of our existing product portfolio
- before we introduce a new product
- before we sell a product to a new customer or for a new application.

Product Stewardship ensures that risk assessment is an integral part of designing, marketing, supplying, manufacturing, packaging, distributing, using, recycling and disposing of a product.

# From Product Responsibility...

## Increasing Importance of Product Stewardship

All manufacturing industries face increasing expectations from the community, customers, legislation, media and other non-government organisations to continuously improve the safety, health and environmental performance of their products.

Product Stewardship provides processes that enable Linde to meet or exceed these expectations and it adds value to the Linde Corporate Responsibility commitment.

# ...to Corporate Responsibility.



## Corporate Responsibility Policy Principles

“Linde undertakes to behave responsibly towards its shareholders, business partners, employees, society and the environment – in every one of its business areas, regions and locations across the globe.

Linde is committed to technologies and products that unite the goals of customer value and sustainable development.

Linde secures its future by investing in staff, research and development and by tackling the problems and challenges facing the world today.”

# Customers, Suppliers and the Community.



## Partnerships with our Suppliers and Customers

Effective Product Stewardship involves not only Linde and its employees, but also requires that we work closely with:

- **our suppliers** – to ensure they understand the safety, health, environmental and quality issues relating to the materials and products they provide to Linde
- **our customers** – to ensure they understand the safety, health and environmental issues related to the use of our products
- **others** in the supply chain (e.g. distributors, waste contractors) – to ensure they understand the safety, health and environmental issues related to dealing with our products.

## Benefits to our Customers

An effective Product Stewardship programme benefits our customers by providing:

- products which are safer and more environmentally sustainable
- product information, training, support and help to our customers to meet their obligation towards managing the risks associated with their products.

## Benefits to the Community

An effective Product Stewardship programme benefits the communities in which we operate by:

- reducing the risk of harm to both people and the environment
- encouraging a higher level of safety and environmental performance from our suppliers and our customers that reduces the overall risks
- minimising the risk of marketing and selling a defective product.



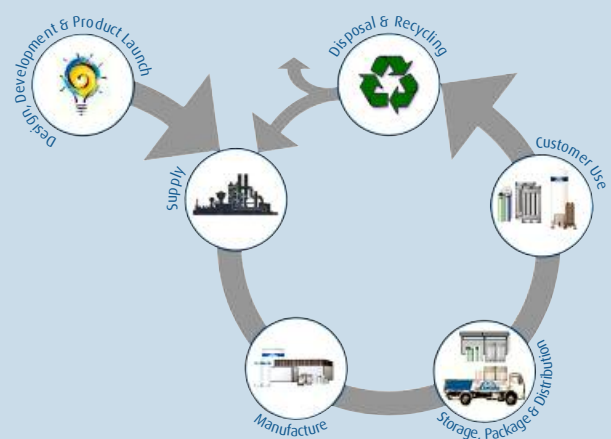
# Product Life-cycle.

## Design, Development & Product Launch

## Supply

## Manufacture

## Storage, Packaging & Distribution



Considering **life-cycle risks** during the design and development stage of a new product enables safety, health and environmental considerations to be designed into the product.

**Supplier evaluation and selection process** aims to ensure that raw materials and products brought into the Linde supply chain are of the highest standard and are packaged and delivered to us safely. Additional appraisal of suppliers may focus on their management of safety, health and environmental risks to support our Product Stewardship programme.

**The safety, health and environmental impacts** associated with our production sites require detailed and carefully planned systems and processes in order to ensure that potential problems during manufacture are minimised. Our management systems and processes are well documented and cover the:

- safety, health and environmental hazards and controls associated with our manufacturing processes
- product specifications and quality control requirements
- minimum requirements and Best Operating Practice – our procedures and processes reflect current global or regional practices and continuously move towards globally consistent standards
- implementation of safety, health, environmental and quality systems, for example according to OSHAS 18001, ISO 14001 and EMAS, ISO 9001.

**Linde product and package labelling** comply with international and local regulatory requirements, internationally recognised standards and Linde global standards.

Packages are always clearly identified and if they are hazardous, such hazards are properly highlighted.

Toxic gas cylinders.



### Product Information and Support

In handling Linde products, our customers face many of the same safety, health and environmental issues as we do when manufacturing, storing and transporting the products.

Linde provides support, advice and information to help customers understand our products as well as helping them to implement high standards of safety, health and environmental performance practices. We endeavour to ensure that such advice is both accurate and up-to-date through continuous assessment of all new information and data.

Linde complies with the extensive international, regional and national laws/regulations in place, which govern the provision of product information (e.g. Safety Data Sheets).

### Training

Linde offers specific safety training packages, concerning gases properties, hazards and relevant precautions.

### Sensitive Chemicals

Linde has processes in place to ensure sensitive chemicals are used for legitimate purposes.

### Emergency Response

The provision of an effective emergency response capability reflects the concern of Linde for employees, customers, the public and the environment.

**It is the aim of Linde** to create safe and environmentally friendly products designed for waste avoidance and to facilitate recycling or re-use wherever possible.

Maximising recycling and the responsible disposal of waste involves us working closely with customers and with trade associations.

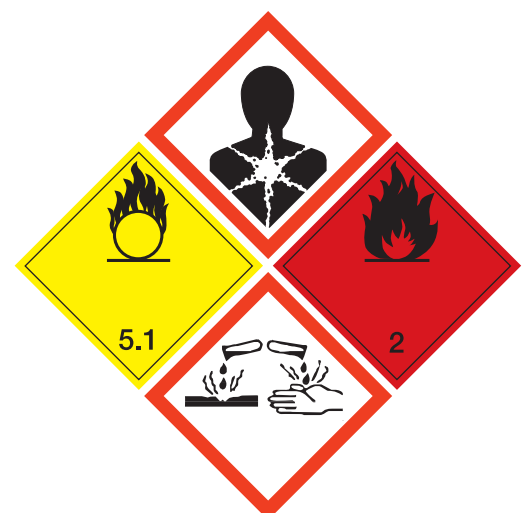
Where waste is generated that cannot be recycled it must be disposed of responsibly and in accordance with any applicable regulatory requirement.

Examples of pictograms used to identify substances' hazards, according to the Transport of Dangerous Goods regulation & the new GHS regulation.

GHS: Globally Harmonised System for classification and labelling of chemicals.

## Customer Use

## Disposal & Recycling



# Getting ahead through innovation.

With its innovative concepts, Linde is playing a pioneering role in the global market. As a technology leader, it is our task to constantly raise the bar. Traditionally driven by entrepreneurship, we are working steadily on new high-quality products and innovative processes.

Linde offers more. We create added value, clearly discernible competitive advantages, and greater profitability. Each concept is tailored specifically to meet our customers' requirements – offering standardized as well as customized solutions. This applies to all industries and all companies regardless of their size.

If you want to keep pace with tomorrow's competition, you need a partner by your side for whom top quality, process optimization, and enhanced productivity are part of daily business. We define partnership not merely as being there for you, but being with you. After all, joint activities form the core of commercial success.

**Linde – ideas become solutions.**

## **Linde AG**

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