



## HOW TO IMPLEMENT CLEANER PRODUCTION?

CP implementation involves the following steps:

- Prioritizing waste streams.
- Causal analysis.
- Developing option for waste reduction, reuse or recycling.
- List options for improvement.
- Assess the options and prioritise them.
- Developing action plans and timelines.
- Establishing monitoring programme.
- Implementing the plan.

## BENEFITS OF CLEANER PRODUCTION (CP)

Some visible benefits of CP include the following:

- Reduction of waste quantity.
- Reduction of raw material consumption.
- Reduction of waste treatment cost.
- Reduction of energy.
- Improvement of working conditions
- Improvement of process efficiency and product quality.
- Reduce potential environmental hazards.
- Improve workers health and company image.



# CLEANER PRODUCTION

## Brief Info



DEPARTMENT OF ENVIRONMENT

[www.doe.gov.my](http://www.doe.gov.my)



# CLEANER PRODUCTION

United Nations Environment Programme (UNEP) defines Cleaner Production (CP) as the continuous application of an integrated preventive environmental strategy applied to processes, products and services in order to improve eco-efficiency and reduce risks to humans and the environment.



## CLEANER PRODUCTION SPECIFICALLY FOCUSES ON:

**PROCESSES:** Conserving raw materials and energy, eliminating toxic raw materials and reducing the quantity and toxicity of all emissions and wastes before they leave the process;

**PRODUCTS:** reducing negative impacts along the life cycle of a product from raw material extraction to its ultimate disposal; and

**SERVICES:** incorporating environmental concerns into designing and delivering services.



## CLEANER PRODUCTION IS ACHIEVED BY:

- **Changing attitudes** (finding a new approach to the relationship between industry and environment).
- **Modification of the product:** product design changes that reduce the product's environmental impact in manufacturing, use and / or disposal.
- **Substitution of input materials:** using environmentally benign materials in products and processes.
- **Good housekeeping:** adopting sound operation and maintenance procedures, to avoid leaks, spills, etc.
- **On-site recycling:** recovery and reuse of waste materials, water and heat on site.

## WHY NEED TO IMPLEMENT CLEANER PRODUCTION?

While there is an apprehension of the costs of implementing Cleaner Production, experience of actual application has shown that:

- Many improvements can be made to the production process at no or low cost.
- This can improve a company's profitability and its environmental performance, which would enhance its reputation and public image.

