

# GREEN PHILIPPINES

Greening the Philippine Industries with the **ECOPROFIT** Approach



A project funded by  
The European Union's Asia-Pro Eco Programme

## Pollution Prevention, Massflow analysis and Waste Management

### STENUM Ltd.



[www.stenum.com](http://www.stenum.com)

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## CLEANER PRODUCTION versus End of Pipe

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## End of Pipe thinking: Common Waste Treatment :

**Waste is generated !**

What has to be done with it ?

## Cleaner Production idea:

**Waste is generated !**

Where does it come from ?

What can be done to avoid ?

## Cleaner Production is ...

- a preventive strategy to minimize the impact of production and products on the environment:
- good housekeeping with materials and energy
- substitution of raw and auxiliary materials causing problems
- modifications of products
- process modification
- internal recycling

### PREPARE:

since 1991, individual consulting

### ECOPROFIT:

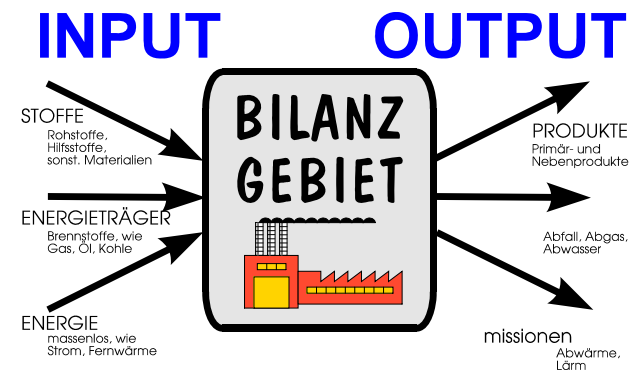
since 1993, workshops together with  
the environmental office, club

## Cleaner Production

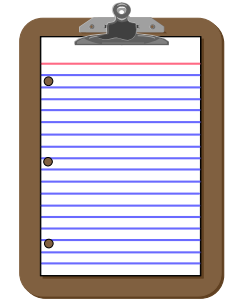
the solution:

**consistant analysis of the materials form input to output**

- with:
- **Input / output - analysis**
- **Material flow analysis**
- **Energy analysis**

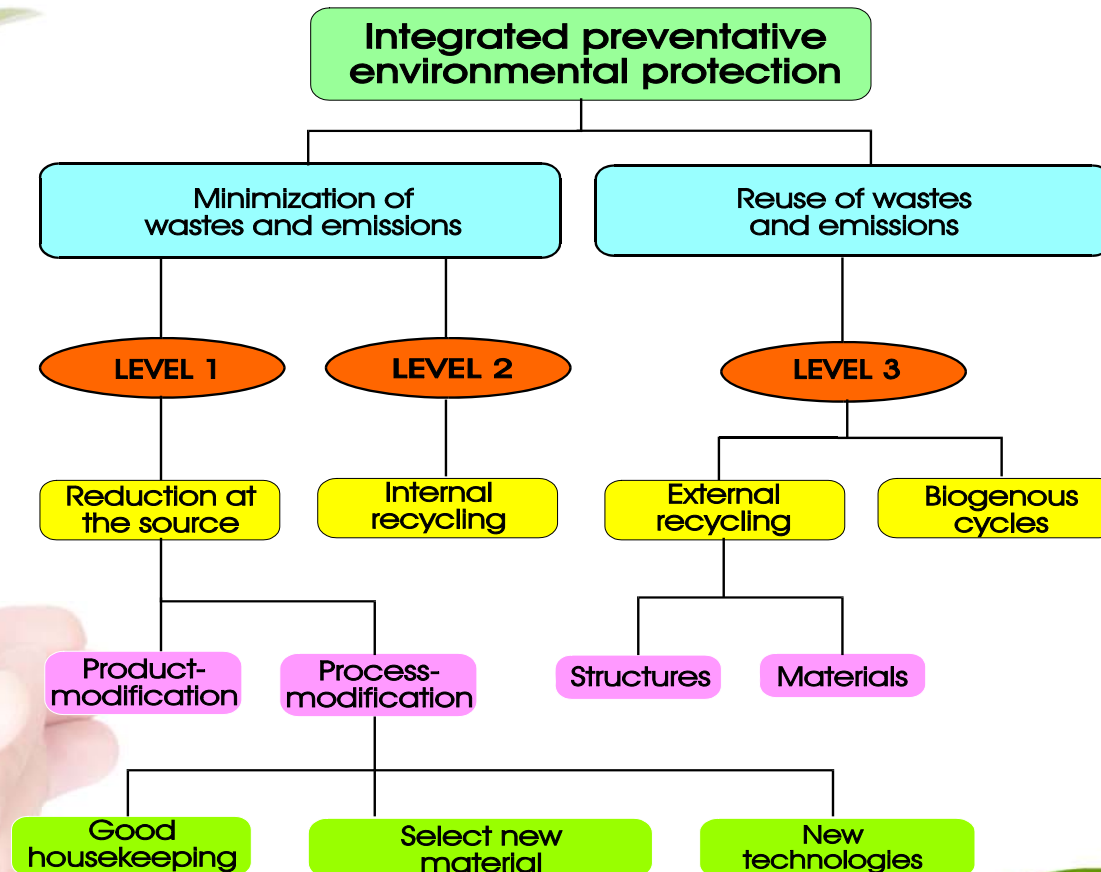
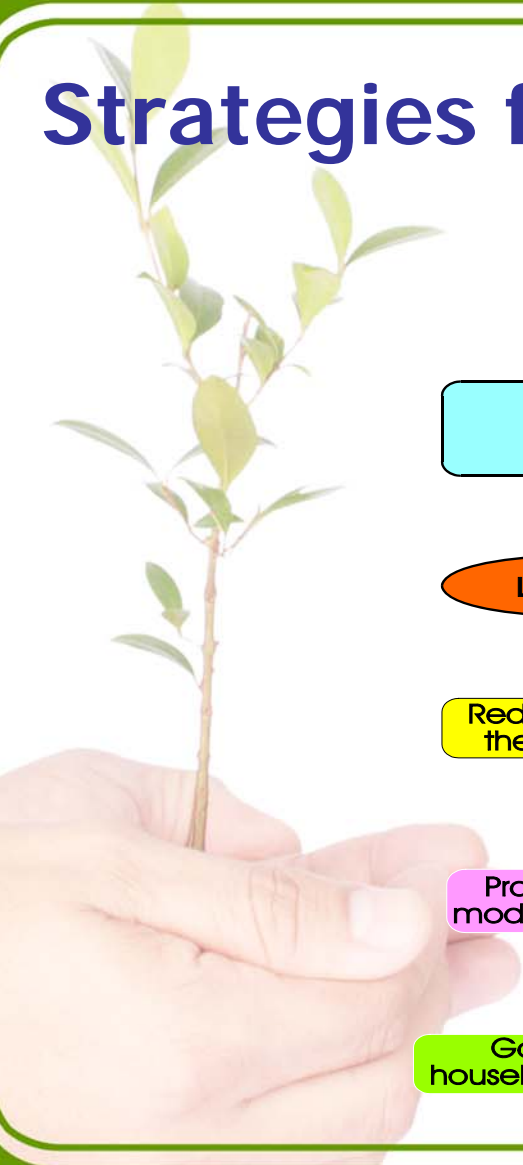


## Elements of a CP-Project



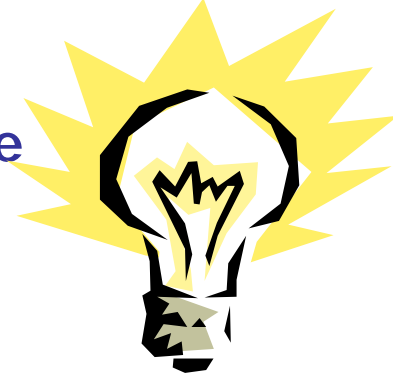
- **Data Collection**
  - mass flow
  - energy flow
  - costs and safety
- **Reflection:**  
**Where and why do we generate waste?**
- **Option generation**
- **Feasibility**
- **Implementation**
- **Controlling, continuation, EMS**

## Strategies for Cleaner Production Options



## Your Task

- Evaluate the **following** measures in the light of these items:
  - **Which CP strategy** has been chosen?
  - **In your opinion, does the measure make sense**
    - from a technical point of view
    - from an ecological point of view
    - or else: under what circumstances would it make sense?
  - **Which strategy would you suggest**, if you were production manager or CP consultant of the company?
- Prepare a short **presentation** of the results
- **Present** your results to the **management**





## Your Resources

- **20 minutes** for group discussion and preparation of the presentation
- **5 minutes** for presentation
- **1 exercise form**
- **1 flip chart**
- **2 markers**



**Good luck!**