EU Green Week 2013

Green Industry for Improved Air Quality – BAT/BEP examples
INCOME DRIVES RESOURCE CONSUMPTION

Metabolic rate \( \text{t/cap/yr} \)

The Challenge

Challenge

- Decouple economic growth from the use and consumption of natural resources and energy
- *Do more with less* – provide more value with less environmental impact and better economic and ecological efficiency

Response

Sustainable industrial development

Increase

Health, income, quality of life

Reduce

Resource use, pollution, waste, impact on nature
## Green Industry Initiative

### Greening of Industries

*Helping enterprises improve resource productivity and environmental performance*

- Efficient use of materials, energy and water
- Reduction of wastes and emissions
- Safe and responsible management of chemicals, renewable raw materials
- Phasing out toxic substances
- Substituting fossil fuels with renewable energy sources
- Product and process redesign, Green Chemistry

### Creating New Green Industries

*Establishing new operations delivering environmental goods and services*

- Reduce, reuse and recycle (3R) industries
- Pollution control technology and equipment
- Renewable and energy-efficient technologies
- Waste management and resource recovery
- Environmental advisory and analytical services
BENEFITS OF GREEN INDUSTRY

<table>
<thead>
<tr>
<th>Economic</th>
<th>Social</th>
<th>Environmental</th>
</tr>
</thead>
<tbody>
<tr>
<td>More Innovation and Growth; Increased Resilience...</td>
<td>More Employment, Rising Incomes and Empowerment...</td>
<td>More Efficient Resource Use; Less Waste and Pollution...</td>
</tr>
<tr>
<td>✓ Increase resource productivity</td>
<td>✓ Create new jobs and make existing jobs more secure</td>
<td>✓ Reduce environmental pollution</td>
</tr>
<tr>
<td>✓ Bring down production costs</td>
<td>✓ Reduce poverty</td>
<td>✓ Counteract resource depletion</td>
</tr>
<tr>
<td>✓ Foster technology development and innovation</td>
<td>✓ Develop new skills and capacity</td>
<td>✓ Prevent degradation of ecosystems</td>
</tr>
<tr>
<td>✓ Improve competitiveness</td>
<td>✓ Improve occupational health and safety conditions</td>
<td>✓ Mitigate climate change</td>
</tr>
<tr>
<td>✓ Open up new markets</td>
<td>✓ Safeguard health and safety of communities</td>
<td>✓ Combat water scarcity</td>
</tr>
<tr>
<td>✓ Develop new businesses</td>
<td>✓ Lower risks to consumers</td>
<td></td>
</tr>
</tbody>
</table>
Resource efficiency and Technology transfer

RE provides the inputs for clean technology transfer

A. Good Housekeeping
   - No Investments required
   - Implemented with Company resources
   - (PBP < 6 months)

B. Low investment measures
   - Implemented with Company resources
   - (PBP < 6 months)

C. High investment measures
   - External financial resources required
   - Tech./fin. analysis for new technology

Bankable projects

End of Pipe
MED TEST – UNIDO initiative

- Participating countries
  - Morocco
  - Tunisia
  - Egypt

- Funded by GEF & Italian Government
  1.95 M USD

- Duration: 2009-2011
Project’s achievements in industries

Return on investment of identified measures
- 23%
- 54%
- 23%

Number of measures implemented, retained for study, discarded

- Discarded
- Retained for study
- Implemented

Private sector Investment portfolio > 20 MUSD for industrial processes upgrades & cleaner technology
Beverage industry — Société Nouvelle de Boissons (SNB), Tunisia

## Saving opportunities

<table>
<thead>
<tr>
<th>Measure</th>
<th>Economic key figures</th>
<th>Resource savings per year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expired, damaged and out of specs products</td>
<td>66 000</td>
<td>-</td>
</tr>
<tr>
<td>CO2 supply and distribution system</td>
<td>35 000</td>
<td>2 700</td>
</tr>
<tr>
<td>CIP and water savings</td>
<td>53 400</td>
<td>10 000</td>
</tr>
<tr>
<td>Heat recovery in syrup preparation</td>
<td>6 600</td>
<td>3 300</td>
</tr>
<tr>
<td>PET bottle blowing</td>
<td>1 100</td>
<td>-</td>
</tr>
<tr>
<td>Distribution pumps, compressed air</td>
<td>32 500</td>
<td>13 200</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>194 600</strong></td>
<td><strong>29 200</strong></td>
</tr>
</tbody>
</table>
Sound management of chemicals under the Stockholm convention on POPs and mercury Issues

Best Available Technologies/Best Environment Practices:

- unintentional POPs production (dioxins/furans);

- non-combustion POPs destruction technologies;

- mercury emissions
Thank you