Green Industries and its Role in the Economical and Social Development in the Arab Countries

CP Activities in Lebanon

Dr. Ali Yaacoub
LCPC Director
RECP West Asia Representative

ESCWA, Beirut
29 October 2011
INTRODUCTION

• Lebanese Cleaner Production Center (LCPC) was established by the Ministry of Environment (MoE) in May 2002.
• After being hosted at MoE, LCPC premises moved in February 2004 and are now located at Industrial Research Institute (IRI) in Hadath- Baabda.
• LCPC is part of the UNIDO/UNEP RECP Global Network which comprises National Cleaner Production Centres (NCPC) in 41 countries.
• LCPC is now the representative of West Asia Countries in the RECP.
LCPC Role:

- Improve the environmental performance of products, processes and services;
- Assist SMEs in the adoption of sustainable production modes;
- Support SMEs in enhancing their productivity and facilitating their access to new markets,
What is CP?

“CP is the continuous application of an integrated preventative environmental strategy to processes, products and services to increase efficiency and reduce risks to humans and the environment” - UNEP
What is Not CP?

- Diluting hazardous or toxic constituents to reduce hazard or toxicity;
- Concentrating hazardous or toxic constituents to reduce volume (which do not reduce the absolute amount of hazardous constituents entering the environment);
- Transferring hazardous or toxic constituents from one environmental medium to another;
- Off-site recycling (a waste management option which creates pollution during transport);
What is RECP?

RECP: three sustainability dimensions

• Production Efficiency
• Environmental management
• Human Development

RECP recognizes that CP generate benefits:

• Mitigation of GHG emissions and adapting to climate change;
• Responding to increasing scarcity of water, fuels and other materials;
• Providing decent jobs;
• Halting environmental degradation
RECP is implemented through 4 modules

- RECP Service Delivery Network
- Thematic RECP Applications
- RECP Incentives
- RECP Innovation
Green Economy

• The Green Economy aims to address the business needs in term of profitability and competitiveness, by introducing the environment as a relevant element in the company’s strategy.

• The implementation and diffusion of RECP is critical to advance Green Industry and Green Economy.

• This achieves a reduction of the overall ecological footprint (carbon, water, etc.) while at the same time improves productivity and competitiveness.
**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
What is Responsible Production?

It is a systematic and continuous improvement approach aimed at SMEs for:

• Chemical safety along the value-chain;
• Understanding hazards;
• Controlling chemical exposure;
• Reducing accident risks;
• Engaging stakeholders;
• Promoting chemical product stewardship through risk communication aimed at preventing exposure and accidents with hazardous substances along the value chain.
Focus of Responsible Production

• From reaction to **prevention**
• From the cost of compliance to **benefits** to the core business
• From large companies to **SMEs**
• From a site operational focus to a **value-chain** focus
• From single focus to an **integrated approach** (integrating Safer Production, APELL, and CSR)
Responsible Production Framework Model

- Identifying and understanding the hazards and risks
- Identifying opportunities for reducing risk and costs;
- Improving safety and preparedness for accidents with chemical products;
- Promoting risk communication and product risk information along the value chain;
- Training workers and business partners in chemical safety
- Improving procurement systems to include chemical safety management;
- Measuring and communicating performance.
LCPC Objectives

LCPC aims at being a centre of excellence in Lebanon for Cleaner Production (CP)

LCPC offer six basic services:

- Raise awareness of the benefits and advantages of CP;
- Training local experts and build local capacity for CP;
- Offer individual enterprises technical assistance in CP;
- Help in preparing project proposals for CP investments;
- Disseminate technical information;
- Provide policy advice to national and local governments;
- Help industries get the ISO 14001 certification.
1. In-Plant demonstration
2. Awareness raising events
3. Training and capacity building
LCPC Activities till End of 2010

- Site Visits: 83
- Graduation of national CP experts: 30
- Training courses: 28
- Awareness training events: 25
- Workshops: 11
Number of Participants in LCPC Activities till end of 2010

- Awareness Raising Events: 1192
- Training Courses Activities: 1029
- Workshops: 185
1. In-Plant Demonstration

1. Dairy sector
2. Agro-food canning sector
3. Paper and Cardboard sector
4. Plastic Production and Recycling sector
5. Aluminium
6. Ceramic
7. Textile
8. Olive Oil
In-Plant Demonstrations/ Savings achieved

Yearly Savings

USD per year

<table>
<thead>
<tr>
<th>Industry</th>
<th>Savings (USD/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dairy</td>
<td>217000</td>
</tr>
<tr>
<td>Agro-food</td>
<td>252342</td>
</tr>
<tr>
<td>Cardboard</td>
<td>274264</td>
</tr>
<tr>
<td>Plastic</td>
<td>52273</td>
</tr>
<tr>
<td>Textile</td>
<td>182772</td>
</tr>
<tr>
<td>Others</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>1028251</td>
</tr>
</tbody>
</table>
Outputs of the In-Plant Demonstration

6 CP Manuals
38 CP Reports
25 Factsheets
2. Awareness-raising

- Conferences
- Lectures
- Seminars
- Radio interviews
- TV interviews
- Brochures
- Newsletters
- Annual Reports
- CD Rom
- Text book on CP “Half is enough”
3. **Training & capacity-building**

**Subjects:**
- Performance of energy audits in the industrial sector
- Implementation of environmental management systems based on CP
- Advantages of CP in industry
- CP assessments and their implementation
- CP methodology and CP options

**Target:**
- NGO’s
- Environmental Sector
- Industrial Sector
- SME’s
- Consulting Companies
- Private and Public sector
- Academic Sector
- Financial Sector
Invest In Med Program – UNIDO Marseille

LCPC in collaboration with UNIDO Marseille, CMPP and E-NCPC were dedicated a project entitled:

“Med Competitiveness - Fostering Competitiveness for South-Med Products”

which aims at assisting SMEs to manufacture products which are compliant with European environmental directives, and thereby gain more potential in order to export to the European markets.
Greco Program – RAC/CP

• GRECO is a Mediterranean initiative designed to promote green competitiveness in the region by demonstrating the economic benefit that the environment can offer companies.
• The goal is to encourage companies to include the environment as a strategic profitable element.
• The initiative aims to give SMEs the assistance and financial resources needed to discover the best techniques for their situation to prevent pollution, to calculate the profitability of implementing projects and to evaluate the environmental benefit yielded.
SERVICES OFFERED BY LCPC RELATED TO FINANCING CP

- Borrower enterprise
- Technology provider or supplier
- Financial institutions

LCPC
THANK YOU FOR BEING HERE!

TOGETHER
WE CAN
MAKE A DIFFERENCE!