



Foreword

The Annual report for the LCPC for the calendar year 2008 demonstrates our continued commitment and support to the center for a distinctive approach and for high quality environmental policy and consultancy advice to the industrial sector in Lebanon.

The LCPC has traditionally a good showing in meeting its operational targets.

Now in its fifth year of operation, the LCPC is one of the primary centers for providing environmental consultancy to the Ministry.

As the program continues to mature, more work will be done to refine its concepts and methodology to ensure that the best information is available.

We are proud of the past efforts made by the LCPC and look forward to their continued success in the future.

The Lebanese Cleaner Production Center: “Five Years in the Service of the Environment and the Industry”.

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Ghazi Zeaiter
Minister of Industry



Foreword

The Industrial Research Institute (IRI) is proud to have hosted the Lebanese Cleaner Production Center (LCPC) for almost 4 years. LCPC is considered an integral part of IRI, representing the environmental face of the industrial sector.

LCPC is doing a great job with the Lebanese Small- and Medium sized Enterprises (SME's).

LCPC seems to fit the Lebanese National political agenda and constitutes an important technical partner to both the public and private sectors.

Furthermore, LCPC addresses important issues and has finalized successful initiatives in promoting Cleaner Production in many SME's through its win-win approach to assist the industrial sector in complying with environmental standards and regulations and concomitantly achieving economic growth.

We firmly believe that LCPC is of high significance to the Lebanese Government in its constant endeavor to achieve long-term sustainability of the environmental, industrial and economic sectors in Lebanon.

It is indeed a great honor to have the LCPC presenting the environmental face of IRI and finishing the 2008 year with a great success receiving the third place among the best applications of environmental management in the Kingdom of Saudi Arabia Price for environmental management at its third session 2007-2008.

We are looking forward to have further great achievements towards a common success.

A handwritten signature in blue ink, appearing to read 'B. Frenn', with a stylized flourish at the end.

Dr. Bassam Frenn
Director General
Industrial Research Institute



Foreword

“Cleaner Production is much more oriented towards creating conditions than merely transmitting instructions”

It is with pleasure that we present the fifth Annual Report of LCPC. As in our previous reports, we have chosen to focus on the achievement of LCPC in the industrial and environmental sector. This year, we are very conscious of the challenge that providing effective results for the industry and environment in Lebanon.

2008 was another successful year for LCPC with sustained growth and achievement of targets. LCPC programmes have lead to a total yearly savings of more than **790 thousand US Dollars** through implementation of CP options in 19 SME's in different sectors.

We have continued to apply our leading expertise in Cleaner Production to the Lebanese industrial, environmental and academical sector.

The LCPC continues to be recognized through high commitment from the Ministry of Industry and the Industrial Research Institute and all our stakeholders. Such recognition further strengthens our credibility.

Over the years as we develop the Cleaner Production concept, we are confident that the LCPC will play an invaluable role in enhancing the environment and ensuring that we continue to put the needs of industry and environment at the very heart of all our work.

I would like to thank the LCPC team and stakeholders for their enduring support and look forward to continuing our positive working relationship.

Finally, from 2008 onwards LCPC will be tackling new sectors such textile, printing and metal and others for In-Plant Demonstration.

“Proud to be your trusted Cleaner Production Center”

Dr. Ali Yaacoub
Director
Lebanese Cleaner Production Center

List of Abbreviations

AUST	American University of Sciences & Technology
CDM	Clean Development Mechanism
CMPP	Centre Marocain de Production Propre
CP	Cleaner Production
EDIP	Enterprise Development and Investment Promotion Programme
EFA	Education for All
EFL	Environmental Fund for Lebanon
ELCIM	Euro-Lebanese Centre for Industrial Modernization
ESCWA	Economic and Social Commission for Western Asia
FAO	United Nations Food and Agriculture Organization
GHG	Greenhouse Gas
GTZ	German Agency for Technical Cooperation
ICOU	Islamic Civilization Open University
ICS UNIDO	International Centre for Science and High Technology, UNIDO
IRI	Industrial Research Institute
ISO	International Standard Organization
LCPC	Lebanese Cleaner Production Center
MoE	Ministry of Environment
Mol	Ministry of Industry
NCPC	National Cleaner Production Center
PME	Presidency of Metrology and Environment
RAC/CP	Regional Activity Center for Cleaner Production
RASIT	Royal Academy of Sciences International Trust U.S.A
SCP	Sustainable Consumption and Production
SECO	State Secretariat for Economic Affairs
SME	Small and Medium Enterprises
UNCT	United Nations Country Team
UNEP	United Nations Environmental Programme
UNIDO	United Nations Industrial Development Organization
UNIDO ECB	UNIDO Energy and Cleaner Production Branch
USJ	Université Saint Joseph
WTO	World Trade Organization

1 Introduction

The Lebanese Cleaner Production Center (LCPC) was established by the United Nations Industrial Development Organization (UNIDO) in 2002 with funding from the European Commission EC-Life Programme, the Austrian Government, the Ministry of Environment (MoE), the Ministry of Industry (MoI) and the Industrial Research Institute (IRI) in Lebanon.



LCPC is part of UNIDO Network which comprises National Cleaner Production Centers (NCPC) in 42 countries. After being hosted at MoE, LCPC premises moved in February 2004 to IRI in **Hadath- Baabda**.

Cleaner Production is: "The continuous application of an integrated preventive environmental strategy applied to processes, products, and services to increase overall efficiency and reduce risks to humans and the environment" UNEP.

LCPC work is to **improve the environmental performance of products, processes and services** by focusing on the causes of environmental problems rather, while encouraging economic development and industrial growth through saving costs and facilitating the access of local products to international markets.

LCPC seeks to assist the national industries, especially SME's, in the **adoption of Sustainable Production modes** through the application of Cleaner Production and the transfer of Environmentally Sound Technologies.

LCPC is supporting industrial establishments in enhancing their productivity and facilitating their access to new and more demanding markets, while at the same time improving their environmental and social performance.



- **Cleaner Production** means increasing production efficiency while at the same time minimising waste and the pollution of our environment.
- **Cleaner Production** entails no cost/low cost measures and is applicable and useful to SME's, as well as to large enterprises.
- In most cases **Cleaner Production** can be achieved with no costs or very small costs and with savings of 40-60% in energy and waste consumption.

CP is closely linked to:

- Environmental Management Systems.
- Total Quality Management.
- Health and Safety Management.

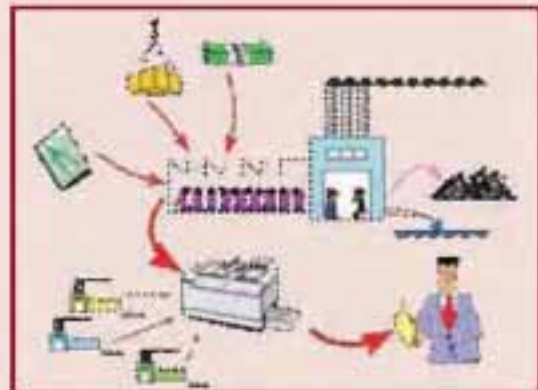
Benefits from utilizing Cleaner Production principles and methods

- Increasing productivity and achieving cost effectiveness.
- Encouraging improvement in the production process.
- Increasing export opportunities.
- Coping with globalization movement by improved competitiveness.
- Reducing environmental degradation.
- Improving the work environment.
- Improving production efficiency.
- Increasing export opportunities.



CP principles and methods considers your:

- Technologies;
- Employees;
- Raw materials;
- Processes;
- Emissions;
- Partners;
- Products.



2 Objectives

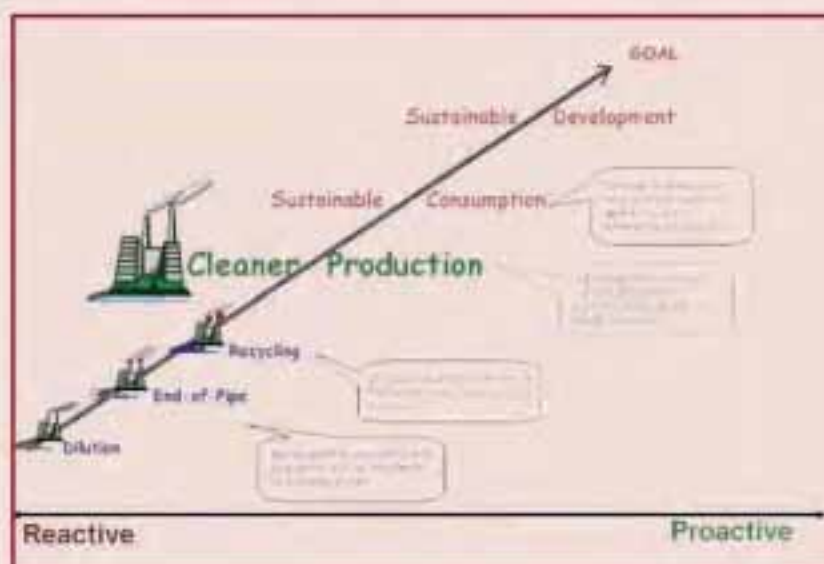
As a national institution, the LCPC aims at being a center of excellence in Lebanon for Cleaner Production (CP) in order to facilitate the transfer of Lebanese SME's to cleaner processes in the wake of Lebanon's efforts to join the World Trade Organization (WTO). LCPC objective is to enhance CP activities contributing to the Sustainable Development in Lebanon through focusing on the following points:

The main objectives of the LCPC are:

- Empower SME's to manufacture products that meet consumers' demand for environmentally friendly products.
- Facilitate the access of local products to international markets thus encouraging economic growth.
- Increase competitiveness among industries.
- Increase constructive & productive competition among industrial establishment.
- Reduce the negative environmental impacts of industrial production.
- Help industries getting ISO 14001 certification.
- Reduce adverse environmental impacts of industrial production thus responding to the requirements of Sustainable Development.
- Help industries to implement Environmental Management System.
- Stimulate public-private partnerships.
- Promote CP investments, technology development and transfer.

LCPC offer six basic services:

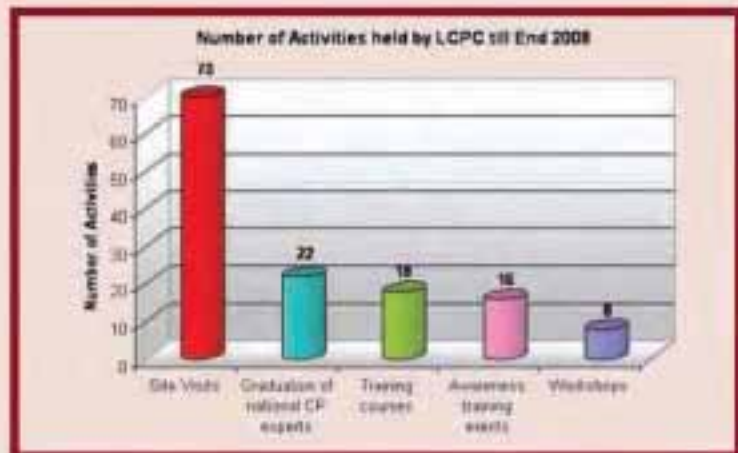
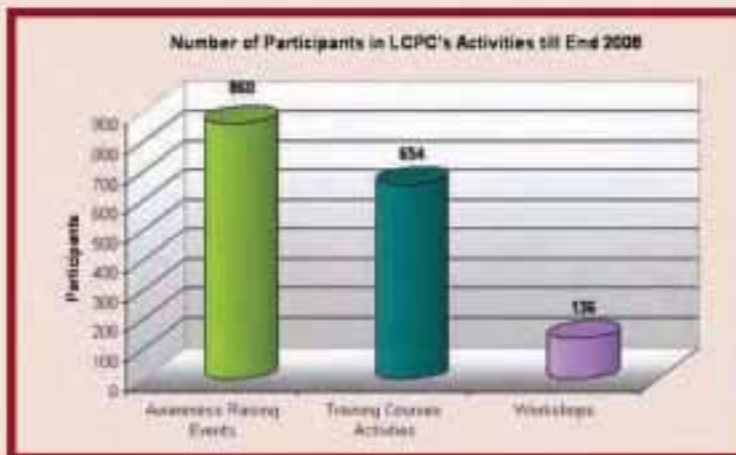
- Raise awareness of the benefits and advantages of CP.
- Training local experts and build local capacity for CP.
- Offer individual enterprises technical assistance in CP.
- Help in preparing project proposals for CP investments.
- Disseminate technical information.
- Provide policy advice to national and local governments.
- Help industries to get the ISO 14001 certification.



3 Activities

The year 2008 was rewarding, the LCPC achieved the targets set in its business plan.

Since its establishment, LCPC has been undertaking three core activities namely the awareness-raising events, In-plant demonstrations and training and capacity building.



3/1 Awareness-raising events

Since its establishment, LCPC is raising CP awareness campaigns in Lebanon through seminars, conferences, meetings, media interviews and CP publications in order to introduce the concept and benefits of CP in the industrial sector in Lebanon.



Dissemination seminar and consultation meeting with the media

The dissemination seminar for the Plastic Production and Recycling sector was held at the Meridian Commodore Hotel, Hamra on the 7th of January 2008.

It was organized jointly with the Environmental Fund for Lebanon Project (EFL) which is a project funded by the German Government through GTZ and coordinated by the CDR and aiming at reducing environmental risks and economic impacts caused by July 2006 war in Lebanon.

The objectives of the seminar were to raise awareness about the advantages of Cleaner Production, establish data bases on the environmentally-friendly technologies and serve as a forum for the exchange of experiences as well as introducing the EFL project to all SME's that have applied the CP options as assessed by the LCPC from one side, and the media from the other side.





The collaboration between the EFL and LCPC is a clear indication for the private sector, who has committed time and money in conducting environmental audits, that their efforts can be implemented and sustained, through various initiatives such as the Project of the Environmental Fund.

In fact, the meeting brought together the private sector and the media to collaborate in addressing environmental pollution problems in Lebanon...

During the seminar, In-plant demonstrations of the Plastic Production and Recycling sector were presented and relative manuals were distributed to the participants.

The manuals detailed the CP methodology and techniques in general and their application at the Plastic Production and Recycling SME's in particular. In addition they summarized the successful stories of the SME's that participated with the LCPC, shedding the light on the savings they achieved in energy, water and other raw materials consumption.

During the ceremony, certificates were distributed to the SME's that applied the CP concept in their industries as well as two CP experts that have participated in latest In-plant demonstration organised by the LCPC.



3/2 In- Plant demonstration

Through the demonstration projects, LCPC attempts to explain and demonstrate, in a particular way, the concept and application of CP in any industrial sector in the country. LCPC has collaborated with the following industrial sectors: Agro-food Canning, Dairy Processing, Paper & Cardboard and Plastic sectors. The selection of the sectors was done based on preset evaluation criteria.

The success achieved in these four sectors was reflected in the cumulative yearly savings achieved. In fact, the CP options implemented in each SME that participated in the LCPC programmes have lead to a total yearly savings of more than 790 thousand US Dollars.

Therefore, the LCPC has helped to recover part of the deficit in the Lebanese Economy and that by proving to the industrialists that Cleaner Production Process, when applied, is able to save their money and their resources.

The graph shows the cumulative yearly savings achieved in each of the following sector: Dairy Processing, Agro-food Canning, Paper & Cardboard and Plastic Sectors



In the next stage, LCPC will target the Textile and Printing industrial sectors due to its immediate need regarding the introduction of CP processes.

3/3 Training and capacity building

The LCPC has organized a series of trainings targeting industrial, environmental and educational stakeholders. The cumulative number of persons that attended such activities has surpassed the 650 persons by the end of 2008.

Training course and capacity building events were held on subjects related to industrial and environmental issues namely the following:

- 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.

Training sessions on CP for Université Saint Joseph (USJ)

Among its core activities, the LCPC organizes training sessions for educational sector in Lebanon. In January 2008, a series of training sessions on CP methodology were given by the LCPC director to the USJ students mastering in Industrial Technology.



The Joint Programme LCPC – Environmental Fund for Lebanon (EFL):



The dissemination seminar for the plastic sector and consultation meeting with the media jointly organized with the Environmental Fund for Lebanon – EFL, this meeting allows EFL to have closer contact with the press and ensure good presence at their coming up launching meeting. The meeting was also an opportunity to EFL to link up with the private sector and mobilize them for applying to the Fund.

The LCPC participated effectively in the Launching Meeting of the Project of the EFL and invited all SME's that applied CP in their enterprises.



The eligible areas of intervention for which an applicant may be submitted included: "Environmental investments with economic benefits to Small and Medium Enterprises.

These include pollution prevention through Cleaner Production measures with clear economic impacts".

Therefore the LCPC offered consultancy and joint proposal for three applicants to the EFL project:

- **Industrial Research Institute:**
Cleaner Production Enhancement in Textile Sector in Lebanon, CPET in Lebanon Textile sector.
- **Municipality of Aytaroun:**
Reconstruction and Implementation of environmental measures at Aytaroun Recycling center due to Israeli war on Lebanon on July 2006.
- **Agripole:**
Cleaner Production for SME's in the Bekaa region.

Effect of Industrial Development on Human and Environment

The American University of Sciences & Technology (AUST), the Royal Academy of Sciences International Trust U.S.A (RASIT) and the Islamic Civilization Open University (ICOU) in collaboration with LCPC organized a training session on the “Effect of the Industrial Development on Human and Environment”.

This training took place on July 31st 2008 at City Café – Beirut.

During the training, Dr. Ali Yaacoub, the LCPC Director was awarded from the Science Café a Certificate of Merit for his outstanding contribution to the popularization of sciences in the Arab World.



4 LCPC participation in national and international events

The Lebanese Cleaner Production Center has participated in several national events in the field of environment, industry, and quality management. LCPC had also honourably presented Lebanon in several international events including exhibitions, conferences, trainings and workshops during which LCPC team shared its experience with European, African and Arab consultants.

In 2008, a list of seminars and conferences held on the national and international level were attended by LCPC team in order to:

- Spread the word about the CP concept and its application.
- Share and exchange experiences and expertise.
- Enhance capacity building of the LCPC staff.

Meeting of the contracting parties of Barcelona Convention and its Protocols, Almeria, Spain, January 2008



The primary objective of the meeting of the Contracting Parties, organized by the Secretariat of the Convention and the Spanish Government's Ministry of Environment, is to analyze and recommend the adoption of a new Integrated Mediterranean Coastal Area Management Protocol, to present the declaration known as the Almeria Declaration and finally, to improve and facilitate transfers of information on actions, as well analyzing the different aspects of the evident threats that effects of climate change are already causing the Mediterranean.



The Regional Activity Center for Cleaner Production (RAC/CP) organizes a side event and launched an innovative initiative under the name of GRECO that focuses on boosting green competitiveness in the Mediterranean Region by enhancing the visibility of the financial opportunities generated by the environment.



The GRECO Programme adopts an environmental approach in re-thinking the way business is carried out and in so doing takes on the challenge of dismissing the erroneous idea that implementing environmentally-friendly technologies has a negative impact on the economic prosperity of undertakings wishing for foster Cleaner Production.

A presentation on the profits that companies can make when introducing Cleaner Production was presented. The Lebanese case study was on Pollution Prevention in agro-food industry, the case of Bonjus Co., the environmental benefits were a considerable decrease of the water consumption as well reduction in pollution load and volume of wastewater generated. A reduction of energy consumption was also achieved. A better management of waste products has been carried out, thus implying not only environmental benefits, but also economical benefits for the company.

Regional Conference for the Arab States on Mid-Term Review of Education for All, Doha, Qatar, February 2008

This conference was organized by the most senior and influential people in Qatar's educational reform program, representing Qatar Foundation, Qatar University, George town University School of Foreign Service in Qatar, Supreme Education Council, and General SECRETARIAT For Development Planning.



This interactive event aims to stimulate debate on some of the fundamental educational questions facing both Qatar and the Arab world today.



The objective of the conference was to review what has been achieved since Dakar 2000 EFA Forum and to propose a regional strategy to accelerate the pace of EFA PROGRESS.

The overall objective of the conference is to enable the countries of the Arab Region to:

- Review the progress made towards achieving the six EFA Dakar goals.
- Identify the critical issues and challenges: economic, social, political, demographic, environmental, etc; obstructing the pace of progress.
- Explore priority areas and promising strategies to overcome shortfalls and obstacles and to accelerate progress.
- Review and revise their National EFA plans of Action corresponding to these priorities and strategies.
- Reaffirm, revitalize and reinvigorate the national commitments and efforts aiming at meeting the basic learning needs.
- Suggest ways and means for strengthening further the regional and international cooperation and support for the realization of EFA goals.

Advanced Seminar on Reduction of Pollutant Emissions in Urban Production Activities, Lebanon, March 2008

The advanced seminar on Reduction of Pollutant Emissions in Urban Production Activities was organized by the RAC/CP in Barcelona, in collaboration with AZAHAR and the Urban Community AL FAYHAA.





The seminar aims to transfer knowledge and experience that were being developed in Spain in improving production processes in the industrial sectors, and to provide information to participants on lessons learned in the development of specific projects in this area, highlighting the major needs in this regard in Tripoli to be a starting point to build future cooperation projects.



The seminar contributed more knowledge with respect to the following:

- Improvement of the air quality in urban zones, limiting the increase of the emissions of greenhouse effect gases, as well as of the air pollution.
- Promotion of the rational use of the productive resources.
- Cleaner production processes.

Lebanese case studies on CP “A great CP initiative in Lebanon”; a presentation by Dr. Yaacoub, shows the environmental achievements and the economical savings of LCPC in different industrial sectors in Lebanon.

Roundtable Meeting of Experts on Sustainable Consumption and Production in the Arab Region, Al Ain, United Arab Emirates, March 2008



The Roundtable was organized jointly by the Arab League, Minister of the environment and waters for the United Arab Emirates Dr. Rached Ahmed Bin Fahad, Economic and Social Committee for West of Asia and United Nations Economic and Social Administration.

The main objectives of the meeting were to:

- Identify the regional priorities, needs and challenges to promote SCP with particular focuses on energy, water, and waste related issues.
- Identify existing initiatives/projects on SCP in the three focal areas.
- Share the experiences and best practices in this area and the benefits of integrating the SCP approach in these 3 sectors.
- Develop recommendation for action that could be reflected in the regional action plan on SCP.

Sustainable Plastics from renewable resources and from Agro-Food waste, Cairo, Egypt, March 2008

The workshop on “Sustainable Plastics from renewable resources and from Agro-food waste” was organized by the ICS-UNIDO in cooperation with the National Cleaner Production Center of Egypt, Plastic Development Center, Alexandria, Egypt, UNIDO Regional office and UNIDO ECB Branch.



The objectives of the workshop were to:

- Build institutional capacities in the fields of Degradable Plastics and chemicals from renewable resources, and plastic waste management in African and Arab countries;
- Evaluate state of the art, needs, opportunities and risks related to the development of the above mentioned fields in African and Arab countries;
- Stimulate research and new technology development and strengthen international cooperation in the field, including identification of joint initiatives and of possible partners from the African and Arab region.



Energizing Cleaner Production – A Guide for Trainers, Cairo, Egypt, March, April 2008

UNIDO in cooperation with InWent – Capacity Building International, Germany and the Egypt National Cleaner Production Center organized a training course on “Energizing Cleaner Production – A Guide for Trainers”.



The overall purpose of this course was to improve energy efficiency in industry. The specific objectives of the course were to enable participants to:

- Become aware of the importance of energy efficiency and its potential benefits for industry and the environment;
- Understand how to improve energy efficiency in industry in a systematic way and integrate continuous improvement into business processes;



- Obtain a basic understanding of the Clean Development Mechanism (CDM) under the Kyoto Protocol and be able to assess a particular project's eligibility and feasibility under CDM;
- Identify barriers to energy efficiency in industry and how to overcome them, including: an improved ability to measure energy use and greenhouse gas emissions, the potential role of government policies to facilitate energy efficiency, and of the available mechanisms to help finance energy efficiency projects;
- To be able to calculate GHG emissions of companies using the GHG Indicator.



Global Classrooms Programs – UN Day, Beirut, Lebanon, April 2008



Global Classrooms is an innovative educational program that engages public middle school and high school students in an exploration of current world issues through interactive and curricular materials. Global Classrooms cultivates literacy and leadership as students explore important topics such as peacekeeping, Sustainable Development and human rights.



The Program included important topics such as on Global Warming presented by Dr. Anhar Hegazi the Chief Sustainable Development and Productivity Division at ESCWA, the Energy for Sustainable Development presented by Dr. Ali Yaacoub and other topics with relations to Human Rights and Social Responsibility.

Dr. Yaacoub represented UNIDO in the conference and presented the objectives and the projects of UNIDO in Lebanon especially the success stories of the LCPC and its achievement and savings in different industrial sectors.

MESO International Symposium, Damascus, Syria, June 2008



The MESO study is an economic evaluation of environmental degradation at the level of an economic sector or an urban community.

The principal objectives of the MESO Programme are to convey the notions and analytical principles of environmental economics in order to advance the resolution of environmental problems in Maghreb and Mashreq countries.



The Symposium aims at:

- Bringing together decision makers, industries leaders and key academia.
- Providing an overview of elaborated MESO studies in the MENA region.
- Disseminating and exchanging experiences.
- Enabling benchmarking.
- Facilitating further partnerships.
- Exploring future trends.



SIAL Exhibition, The Global Food Marketplace, Paris, France, October 2008

SIAL is the key event for food world. SIAL's success lies in its ability to keep pace with the fast changing market and to highlight emerging trends.



SIAL 2008 focused in four major themes:

- Innovation, trends, design and lifestyle.
- Well-being, natural products, nutrition.
- Sustainable development and fair trade.
- Wines and innovation.

The LCPC participated in this event and represented the Ministry of Industry in this study tour in:



- Exploring different products sectors and discover products from all over the world in the national and region of the world pavilions all under one roof.
- Discovering the trends & innovations that will influence tomorrow's consumer markets.
- Gathering information by attending talks and workshops.
- Meeting with UNIDO – Paris to enhance and collaborate future Joint Programme, and to develop research issues concerning CP with the LCPC.



- Participating in all meetings of the Lebanese SME's damaged from July war 2006 with investors; those meetings were prepared by LAISER Project and UNIDO – Paris in order to help Lebanese industry to find new investor, new resources and new market.

Arab Forum: “The new role of the private sector in development and operation”, Rabat, Morocco, October 2008



The forum was organized by the Arab Labor Organization, Ministry of Employment and Vocational Training, Morocco, Arab Organization for Development and Mining, Economic sector, Secretariat of the League of Arab States, United Nations Development Fund for Women.



The main objectives of the forum were to:

- Clarify the responsibilities of the private sector, and its new role due to the economic and social changes imposed by globalization.
- Identify the difficulties facing the private sector and the factors that limit its role in the development and operation and ways to address these difficulties.
- Identify the private sector role in harmonization between the outputs of education, training and labor market needs and its role in human development.
- Highlight the correlation of Arab integration in the development of the private sector and support this integration.
- Tackle the economic contribution of Arab women in economic activity, and the role of some women organizations of entrepreneurs in supporting operating in general and the employment of women in particular.
- Set a global framework of national and regional policies that could contribute to the strengthening of the private sector and increase its effectiveness and its role in the economic and social development, particularly in the area of operation.
- Identify the Arab and international experiences in supporting the operation, and the experience of major private sector institutions and business leaders in support of employment initiatives.



In order to improve the communication of the LCPC, Dr. Yaacoub held an interesting meeting with Mr. Mehdi El Idrissi the Managing Director of the General Confederation of Moroccan Enterprises.

In parallel of the Arab forum, Dr. Ali Yaacoub LCPC Director visited the Moroccan Cleaner Production Center (CMPP) and had meeting with the CMPP team and fruitful discussion concerning common issues were elaborated in order to empower and enhance the collaboration between the two NCPC's.



International Conference: "Working together on Education for Sustainable Development", Bordeaux, France, October 2008

This conference was organized by the French national committee for the United Nations Decade of Education for Sustainable Development.



The main objective of the Bordeaux events was to bring together French and foreign specialists in Education for Sustainable Development, both in order to review the progress made during the 2005-2008 period and to define the strategies to be implemented for the 2009-2014 period.

On side of the conference, in order to exchange point of view with UNEP, a satisfying reunion was held with Dr. Arab Hoballah, the Chief of the SCP of UNEP.





Another important meeting took place with Prof. Michel Ricard the President of the National Council of Sustainable Development & President of the French Committee of the Decade of the United Nations in order to enhance mutual and future cooperation and collaboration on SD.



Mediterranean Roundtable on Sustainable Consumption and Production, Barcelona, Spain, November 2008


The first Mediterranean Roundtable on Sustainable Consumption and Production was organized by the RAC/CP with the support of the Division of Technology, Industry and Economy of UNEP, which leads the Marrakech Process, the global framework for programmes on SCP.





Continuation of the launching of the GRECO Initiative on the meeting of the Contracting Parties of Barcelona on Almeria, Spain on January 2008, the RAC/CP continue in involving the private sector in the necessary shift towards SCP requires triggering a change in attitude in Mediterranean companies from a reactive to a proactive approach to environmental management and creating the conditions for them to move towards green competitiveness. Therefore, it is essential to enhance the visibility of the financial opportunities generated by investing in green competitiveness and multiply the efforts promoting Cleaner Production, eco-efficiency and energy efficiency as methods enabling companies to optimize water, material and energy flows and reduce pollution and CO2 emissions while obtaining economics, social and corporate benefits.

Study Tour to France and Switzerland, November 2008




The Lebanese delegation visited the IPA and EMBALLAGE 2008 exhibition that took place in Paris from November 17-20, 2008.

IPA, World Food Process Exhibition: Technological innovation beyond all to support the industry's dynamism, cater to their real investment needs and meet the sector's specific demands.

EMBALLAGE, a packing trend revealing exhibition it offers:

- A forecasting vision of tomorrow's processes and innovations.
- A sector-based display of exhibits to provide solutions to all markets.
- An international showcase of all packaging developments.
- A venue: Paris, the world capital of creation, trends and package design for a truly business exhibition.



The Lebanese delegation was invited to visit Switzerland. The program intends to provide better market access to Lebanese companies by improving packaging in its functionality and design, according to their target export markets, and the program gives some inside view about Swiss packaging industry and the challenges in this field.

The visit to Switzerland included different cities.

- In Basel, the Lebanese delegation met the Swiss Packing Institute (SVI) and the Swiss Import Promotion Programme (SIPPO), and visited Amann & Partner for the design of packaging and joins the Swiss Packaging Fair “Fair & Move”.
- In Bern – Luzerne, they visited the Karton Deisswil for Raw material production for packaging and the Limmatdruck Zeiler & Amcor for the processing and packaging production (carton & plastic). A lunch meeting took place with State Secretariat for Economic Affairs (SECO) and the Swiss Accreditation Service (SAS).
- In Bern – Lausanne, a site visit to the Nestlé Suisse and Headquarter for packaging strategy and to Bobst Group for packaging machines and instruments.



International Conference on Sharing Innovative Agribusiness Solutions, Cairo, Egypt, November 2008

UNIDO in cooperation with the Government of Egypt and the SEKEM Initiative organized the international conference on Sharing Innovative Agribusiness Solutions. The conference was supported by the Food and Agriculture Organization of the United Nations (FAO), and co-financed by the Italian Development Cooperation and SECO, as well as by private sponsors.



The conference aims at inspiring new approaches to interactions throughout the agribusiness value chain by sharing innovative agribusiness solutions and best practices that can potentially be scaled up and/or transferred to other countries or regions.



The conference objectives were to:

- Present a large number of innovative agribusiness solutions and best practices.
- Provide opportunities for matchmaking and networking.
- Allow participants to observe applied solutions first-hand.
- Follow-up on the successful “Global Agro-Industries Forum.
- Improving Competitiveness and Development Impact.
- Feature interactive panel discussions in Davos format.

Lebanese Delegation to Vienna, Austria





The Lebanese delegation included Dr. Bassam Frenn, Director General, Industrial Research Institute; Dr. Ali Yaacoub, Director, Lebanese Cleaner Production Center; Mr. Raja Habre, Director, Euro-Lebanese Center for Industrial Modernization and Ms. Ghada El Khelly, Assistant to the Delegation.

The purpose of the visit was to meet with UNIDO partners in different Programmes and the Austrian Government in order to collaborate and join forces to help the Lebanese industries after the critical situation in Lebanon in past 3 years.

Several fruitful meetings took place during the visit, starting with Mr. Yoshiteru Uramoto, Mr. Cheikh Tidiane Sakho, Ms. Lamis Kabalan and H.E. Mr. Kozhaya Khoury, the Lebanese delegation requested the reactivation of the cooperation with UNIDO in all previous activities as well as coming ones with the IRI and the Lebanese industries and pointed out the importance of the LCPC.



A Meeting with the Research & Statistics Branch in UNIDO represented by Dr. Ludovico Alcorta and Mr. Valentin Todorov explained the issue of funding and sustainability for the SMEs.



A presentation of the EDIP Programme by Mr. Joseph Moongananiyil followed by a discussion on the method and the ability to link this Programme to ELCIM.



Back to Cleaner Production, Dr. Heinz Leuenberger and Dr. Azza Morssy highlighted the Cleaner Production concept.

Dr. Dhaoui and Mr. Albaladejo presented the PSD Programme and talked about cooperation between UNIDO and ELCIM, IRI & LCPC.





During the Meeting with Mr. Gerardo Patacconi, Ms. Ulvinur Muge Dolun and Mr. Ali Badarneh, three main subjects were discussed for further collaboration:

- i) Laboratories in Africa,
- ii) Energy,
- iii) Food Safety.

The Meeting with H.E. Mrs. Maria Rotheiser Scotti, the Federal Ministry for European and International Affairs, stressed on getting funds for financing the second phase of LCPC in order to reach sustainability.

Mr. Stadler presented the WIFI, its objectives and activities and talked about the potential of collaboration with ELCIM, IRI & LCPC.

The FFG representatives Ms. Mariana Karepova, Ms. Sabine Mayer, Ms. Brigit Mayer and Mr. Michael Binder talked about the experience of the FFG in assisting the SME's to reach sustainability.



**Visit of the UNIDO Director General,
Dr. Kandeh Yumkella to Lebanon**





The visit of the UNIDO Director General, Dr. Kandeh Yumkella to Lebanon took place on 22-23 August 2008; the official delegation accompanying the Director General was composed of Mr. Mohamed El Gallaf Chief Arab Bureau, Mr. Khaled El Mekwad UNIDO representative, Head of Regional office, Beirut, and Mr. Hashem Hussein, Head of UNIDO ITPO, Bahrain with note that the delegate of the Ministry of Industry in charge of the visit of H.E. was Dr. Ali Yaacoub the LCPC Director.



The Director General attends several meetings started with UNIDO Office Staff, than with UNCT. H.E. met the concerned Ministers connected to UNIDO projects in Lebanon, he assemble the Ministre of Industry H.E. Ghazi Zeaiter, the Minister of Economy & Trade H.E. Mohamed El Safadi, the Minister of Environment H.E. Antoine Karam and the Minister of Agriculture H.E. Elias Skaf.



After meeting the Ministers, The Director General visits the President of the Republic H.E. Michel Sleiman, the Head of Parliament H.E. Nabih Berri and the Prime Minister H.E. Fouad Saniora.

The UNIDO Director General, Dr. Kandeh Yumkella signed with the Minister of Industry H.E. Ghazi Zeaiter the Memorandum of Understanding.

Memorandum of Understanding:



As follow-up to the Director-General's visit to Lebanon and taking into consideration the UNIDO proposal entitled "UNIDO Cooperation and Technical Assistance For The Republic of Lebanon, August 2008", and the priorities expressed by the Lebanese Government, it was agreed that the UNIDO will undertake a field mission in order to formulate a comprehensive technical assistance Programme in line with the re-evaluation of the Integrated Programme.



The formulation mission will address the key challenges facing the manufacturing sector in Lebanon. The formulation of the Programme will involve the Government, Ministries, Private Sector (such as Association of Lebanese Industrialists, Federation Chambers Commerce, Industry and Agriculture), Research Institutions (such as Industrial Research Institute, Universities, etc), development programmes and donors. The Programme will aim at supporting the Government efforts to establish sustainable industrial, economical and social development.

In this context, it will cover the following priorities and issues raised by the Lebanese Authorities:

1. Promote public and private sector dialogue and partnership leading to formulation of a national industrial and competitiveness policy;
2. Support of Ministry of Industry and in collaboration with the Ministry of Agriculture in establishing pilots projects for Agro-Food Industries and Export Board for Agro-Food Industrial Products;
3. Enhance the capacity of the Lebanese industries and strengthen the national capability for a better and cleaner industrial environmental management through the well recognized Cleaner Production Center (LCPC);
4. Mobilize funds for industrial environmental projects through the Lebanese Cleaner Production Center – LCPC, especially on Energy Efficiency and implement a pilot project on Solar and Renewable Energy, CDM and industrial waste management;
5. Support Business Environment, Competitiveness, and Innovation in particular relates to SMEs and industrial modernization and upgrading;

6. Expansion of the existing Support to the economic recovery of SMEs after July 2006 war in the main damaged areas in Lebanon (Southern Lebanon, Southern Suburbs of Beirut and Bekaa) in order to increase the Labour Market in the industrial sector, particularly in South and Bekaa Region;
7. Finalization of the Enterprise Development and Investment Promotion Programme (EDIP) for Lebanon in consultation with the involved national institutions, whereas the Ministry of Industry is the counterpart;
8. Develop a Franchising Programme for integrating Lebanese SMEs in national, regional and international supply chains;
9. Supporting the private sector, in establishing a SME support center in order to improve competitiveness of SMEs through providing a range of useful information and services, such as compliance regulations, credits schemes, and business plan preparation;
10. Continue supporting the National Quality and Conformity system to ensure increase market access and protection of consumers and of the environment through assistance and cooperation with the key national IRI, LIBNOR, COLIBAC etc., focusing on packaging and a national Quality Seal, Consumer Protection; Food Traceability and Safety; Laboratory Accreditation; TBTs and SPS. The trade capacity building Programme will also cover the strengthening and promotion of Lebanese traditional products (such as Honey, Kechek...) in the national, regional and international market;
11. Promote the exchange of experiences in areas of common interest on both regional and interregional levels with special emphasis on South Cooperation, with a view of strengthening regional cooperation activities and programmes.
12. Pledge money and mobilize funds to support and assist to arrange an International Investment Conference in Lebanon for the recovery and rebuilt the damaged SME's due to July 2006 war.

**Award of the Kingdom of Saudi Arabia for
Environmental Management 2007-2008**





Under the patronage of His Royal Highness Prince Turki bin Nasser bin Abdul Aziz, the General President of Meteorology and Environmental Protection and Chief Executive Officer of the Council of Arab Ministers Responsible for the Environment and under the auspices of the Arab Organization for Administrative Development, the Lebanese Cleaner Production Center awarded the third place among the best applications of environmental management in the private sector out of 95 research presented to the Kingdom of Saudi Arabia Price for environmental management at its third session 2007-2008.

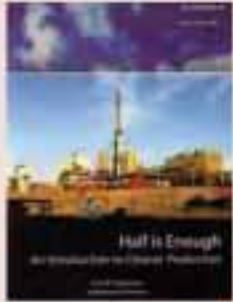
The awards ceremony was held to the winners at the Sheraton Hotel – Cairo, Egypt on 22-24 December 2008.

This award aims to:

- Consolidate and build the concept of environmental management across the Arab world.
- Contribute efforts to achieve a high level of quality of life of the Arab peoples and the right of all Arab generations to live in a clean environment.
- Stimulate and guide scientific research on the environmental management for the benefit of the Arab Countries.
- Strengthening mechanisms for joint Arab cooperation in the field of environmental management.



5 Public recognitions



LCPC has produced a text book for educational purposes which shall be launched soon in all the universities in Lebanon. The book is called "Half is Enough"

Issues 10 and 11 of the LCPC newsletters were distributed to partners and beneficiaries and are checked online on the LCPC website: www.lebanese-cpc.net.



Many local and regional newspapers talked about the LCPC and its activities in 2007 for instance An- Nahar, Al- Safir, Al- Akhbar, Al- Mustakbal, Qamar magazine, Al Biaa wal tanmia, Al Liwa, Al- Anwar, Al- Sharek, etc.



6 Future Proposals

- Launching the GRECO Programme in Lebanon.
- Introduce ISO 14001 to SMEs by initiating and preparing a workshop.
- Prepare Joint proposals on environment and CP.
- Joint forces with the "Project of the Environmental fund for Lebanon"- GTZ.
- Collaboration with the Italian Cooperation on Waste Management Programme.

