



# GLOBAL CHEMICAL LEASING AWARD 2012



UNITED NATIONS  
INDUSTRIAL DEVELOPMENT ORGANIZATION



Bundesministerium  
für Umwelt, Naturschutz  
und Reaktorsicherheit



lebensministerium.at

## 1. INTRODUCTION AND BACKGROUND

In 2004, UNIDO, supported by the Government of Austria, launched its first Chemical Leasing (ChL) project. Several years later, in 2008, the German Government also joined this global Chemical Leasing initiative.

### **UNIDO official definition of Chemical Leasing**

- *Chemical Leasing is a service-oriented business model that shifts the focus from increasing the sales volume of chemicals towards a value-added approach.*
- *The producer mainly sells the functions performed by the chemical, and functional units are the main basis for payment<sup>1</sup>.*
- *Within Chemical Leasing business models, the responsibility of the producer and service provider is extended and may include the management of the entire life cycle.*
- *Chemical Leasing strives for a win-win situation. It aims to increase the efficient use of chemicals while reducing the risks of chemicals and protecting human health. It improves the economic and environmental performance of participating companies and enhances their access to new markets.*
- *Key elements of successful Chemical Leasing business models are proper benefit sharing, high quality standards and mutual trust between participating companies.*

Unlike traditional business models ChL is based on a value-oriented instead of a volume-based pricing. The chemicals user only pays for the services rendered by the chemicals (e.g. volume of water treated, number of parts painted, lengths of pipes cleaned, etc.) and not for the volume of chemicals consumed. By decoupling the payment from the consumption of chemicals, Chemical Leasing encourages better chemicals management.

### **→ Chemical Leasing brings benefits for both supplier and user**

- ✓ Innovative business approach: reducing chemicals increases the financial benefits of both partners
- ✓ Optimization of production process/less environmental impact
- ✓ Waste reduction and waste recycling is encouraged
- ✓ Long-term business relationships are formed/partnership development
- ✓ Improved competitiveness for both partners/continuous learning
- ✓ Sound technology transfer/sharing of know-how

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<sup>1</sup> Functions performed by a chemical might include: number of pieces cleaned; amount of area coated, etc.

In 2009, UNIDO and the Austrian Federal Ministry for Agriculture, Forestry, Environment and Water Management jointly launched the first Global Chemical Leasing Award.<sup>2</sup>

The Award aims at enhancing the visibility of Chemical Leasing worldwide, encouraging innovative applications of the concept and recognizing best practices in Chemical Leasing implementation, research and promotion activities.

## 2. AWARDING PROCEDURE

The Award-2012 is jointly organized by UNIDO, the Austrian Federal Ministry for Agriculture, Forestry, Environment and Water Management (BMLFUW) and the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU).

The Award Ceremony will take place in June 2012 within the AICHEMIA-Congress in Frankfurt, Germany. The first place winner in each category will receive prize money of USD 5,000; the second and the third places winners will be also awarded and invited to the Award Ceremony<sup>3</sup>.

## 3. AWARD JURY

The jury consists of 8 highly recognized international experts from Industry, Science and Academia nominated by UNIDO, BMLFUW, BMU. All jury members offer profound understanding of Chemical Leasing strategies and have first-hand experience with implementation and promotion practices.

## 4. TARGET GROUP/PARTICIPATION

The Award recognizes activities on a global scale. Organizations, companies and individuals worldwide are encouraged to apply.

## 5. APPLICATION

Application is open **from 15<sup>th</sup> November 2011 to 15<sup>th</sup> April 2012**. For each category an entry form and guidelines for participation are provided and available for download at [www.chemicalleasing.com](http://www.chemicalleasing.com)

## 6. AWARD CATEGORIES

The Award comprises four categories namely **(1) Case studies (companies)**, **(2) Consulting services**, **(3) Scientific publications** and **(4) Public relation** (reports, media, brochures, homepage). Specific selection criteria and weighting factors are defined for each category.

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<sup>2</sup> The information about the first Award ceremony, which was organized in Prague on 1 March 2010 is available under <http://www.chemicalleasing.com/sub/Award/award.htm>

<sup>3</sup> Travel costs of winners (first, second and third places) from developing and transition countries will be covered by the organizers.

## 7. EVALUATION CRITERIA

**The Evaluation Criteria** (see items 7.1-7.4 below) are set up in strong alignment with UNIDO's Chemical Leasing definition (see *item 1 Introduction and Background*). Each criterion will be evaluated on a 0-4 scale. (0-insufficient, 4-excellent) and multiplied with a defined weighting factor. Only activities which total score exceeds 2,5 will be considered for the **Award nomination**.

### **Special note for categories "Case studies" and "Consulting services":**

Environmental benefits (including benefits for human health such as occupational health) as well as economic and other business benefits should be demonstrated by all involved actors according to the UNIDO definition of Chemical Leasing.

Partners should be able to provide clear evidence of improvement in their environmental performance, such as reduction of emissions, decreased consumption of chemicals/raw materials/energy and risk reduction. There should be significant reduction of costs at either or both the chemical supplier and its customer. Additionally, the partners may present other business benefits from applying Chemical Leasing such as quality improvement or compliance with legal provisions.

The status quo before Chemical Leasing consultancy and implementation will serve as the baseline for comparison.

Only applications which comply with the **Sustainability Criteria** (see *item 9*) will be reviewed and evaluated.

### **7.1 Criteria for the category 1: Case studies (companies)**

#### **Implementation status (weighting factor 0,5)**

Only projects will be given consideration which the partners have agreed upon and for which Chemical Leasing agreements have formally been finalized. The project should be in its initial implementation phase or beyond. Partners should provide assurance that the Chemical Leasing project will be sustained and developed for a certain period of time. The speed of implementation and effectiveness of cooperation between the partners will also factor into the evaluation.

#### **Impact (weighting factor 0,3)**

The project should significantly impact economic and ecological aspects of the involved companies and furthermore set an example for best practice within the entire industrial sector.

#### **Innovation/novelty (weighting factor 0,2)**

There should be substantial innovation in the way chemicals are used during the respective processes as a result of the Chemical Leasing arrangement: a shift from product-oriented to service-oriented partnership should be demonstrated inter alia by a detailed description of the functional unit the business is based on (*This unit reflects the functions or services the chemical(s) involved are performing thus replacing product base units like „barrels“. Examples for such a unit are „Square meters of surface cleaned/coated“; Hours of operation, treated pieces, etc.*). Additionally, the novelty of application with regard to chemicals and industry sectors will be taken into account.

## **7.2 Criteria for the category 2: Consulting services**

### Implementation status (weighting factor 0,2)

Only projects will be given consideration which the partners have agreed upon and for which Chemical Leasing agreements have formally been finalized. The project should be in its initial implementation phase or beyond and should build on a long-term strategy. The consultancy services should have been provided along the way from negotiations to contract and if applicable to application and monitoring.

### Innovation/novelty (weighting factor 0,2)

There should be substantial innovation in the way chemicals are used during the respective processes as a result of the Chemical Leasing arrangement: a shift from product-oriented to service-oriented partnership should be demonstrated. The focus of the consultancy service should also include applications of Chemical Leasing in new industrial sectors and for different chemicals.

### Impact (weighting factor 0,1)

The project should significantly impact economic and ecological aspects of the involved companies and furthermore set an example for best practice within the entire industrial sector.

### Multiplication potential (weighting factor 0,3)

Partners should demonstrate that the proposed Chemical Leasing project can be replicated at other companies and organizations as well. The scope of the project should reach beyond the immediate benefits for the partners who are directly involved. A description of the project management structure of the consulting work shall be part of each application.

### Consulting - Feedback from companies (weighting factor 0,2)

The consulting service should be of highest quality and to the satisfaction of all involved parties. It should build on a long-term strategy and include effective change management and project monitoring. Documented feedback from the companies involved should be part of the application.

## **7.3 Criteria for the category 3: Scientific publications**

*Scientific publications in journals, magazines and books will be considered for nomination.*

→ *Scientific publication should be peer reviewed and applications should include information on the peer review.*

### Novelty (weighting factor 0,3)

The content of the publication should contain novel experiences on Chemical Leasing in the context of innovative implementation approaches, new application fields and trans-disciplinary strategies.

### Impact (weighting factor 0,3)

The publication should be of relevance for the specific industrial sector but also be significant for the Chemical Leasing landscape in general.

### Quality (weighting factor 0,4)

The development and selection of content will strongly factor into the evaluation. The publication should be of highest quality in content, research, methodology, structure and communication.

#### **7.4 Criteria for the category 4: Public relation (reports, media, brochures, homepage)**

*Newspaper articles, documentaries, interviews, brochures, web pages as well as pioneering PR activities will be considered for nomination.*

##### Impact (weighting factor 0,3)

The activity should contribute to the dissemination of Chemical Leasing and raise awareness for Chemical Leasing on a grand scale.

##### Novelty (weighting factor 0,3)

The activity should convey new experiences or findings on Chemical Leasing or be in itself a new dissemination activity.

##### Quality (weighting factor 0,4)

The activity and material should be of high quality in content, design, communication and dissemination.

## **8. CHEMICAL LEASING CONFORMITY DECLARATION – COMPANIES**

Applications of companies (category 1-Case studies) that fulfill the Sustainability Criteria and obtain a minimum score of 1 (“sufficient”) for each Evaluation Criterion (refer to item 7.1) will be acknowledged with a *Chemical Leasing Conformity Declaration*. This is to outline that the case presented by the company is in line with UNIDO’s basic Chemical Leasing requirements.

## **9. SUSTAINABILITY CRITERIA**

All applications for the Award categories 1 and 2 need to fulfill the Chemical Leasing Sustainability Criteria.

The Sustainability Criteria serve three main purposes:

- *Measurable and concrete environmental improvements as a key element to sustainability;*
- *Measurable and concrete economic improvements as lasting motivation for Chemical Leasing partners to implement Chemical Leasing;*
- *Protection of the positive image of Chemical Leasing, prevention of misuse of the term “Chemical Leasing”, e.g. for activities which are not beneficial to health or the environment.*

**Criterion I – Reduction of energy and resource consumption and minimization of adverse impacts on the environment and health caused by chemicals, their application and production processes**

- Reduced environmental impact measurable by reduced material flows (including waste and emissions generated and energy savings) and compared to the situation before Chemical Leasing. For the overall balance, the manufacture of chemicals and the impact of equipment and machinery also need to be considered.
- Reduced impact on health (reduced exposure to chemicals and/or reduced hazardousness of chemicals used) measurable by material flow analyses and hazardousness classification (GHS).

**Criterion II – Improved handling and storage of chemicals to prevent and minimize risks**

- Reduced risks due to improved handling and storage as a consequence of the increased collaboration between user and supplier. Since measurements are difficult to perform, a qualitative description is necessary for actions regarding the prevention and/or reduction of risks. This can be carried out by means of classical risk assessment, i.e. describing the probability of accidents and their potential impacts.
- Apart from improvements of the environmental situation and health issues, economic impacts (change of liability for Chemical Leasing partners) might also be relevant. This can be checked in the contract.

**Criterion III – No substitution of chemicals by substances with a higher risk**

- Contradictions in terms of sustainability can occur if chemicals are substituted by substances that pose a higher risk for the environment and health.
- Experience has shown that this criterion does not apply to many pilot projects (no substitution intended).
- In cases where chemicals are substituted, it needs to be determined at which level higher risks occur for the environment and health (references might be REACH/GHS classifications and exposure data). For the risk assessment, the exposure (real and potential) as well as the hazardousness of the substance need to be considered.

**Criterion IV – Generation of economic and social benefits, continuous improvement and fair sharing of the benefits between the partners**

- Economic benefits for both partners are essential if the contract is to continue and for the success of Chemical Leasing as a business model. Economic improvements are relatively easy to quantify.
- Typical social benefits include better working conditions. It is not the aim of Chemical Leasing to increase the efficiency of processes by reducing the number of jobs involved.
- The objective of continuous improvement as well as the fair and transparent sharing of benefits between the partners should be included in the Chemical Leasing contract.

#### **Criterion V – Providing for the possibility to monitor improvements**

- Highly relevant for most pilot cases;
- Easy to check whether the data corresponds to that fixed in the contract; important to check whether fully implemented.

#### *Challenges:*

- Agreeing on specific monitoring measures with sufficient transparency and acceptable levels of work involved;
- Preservation of confidentiality when monitoring sensitive data.