

GLOBAL CHEMICAL LEASING AWARD 2021

CATEGORY II

**GENERAL
INFORMATION**

CATEGORY I



CATEGORY III



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SPECIAL AWARDS

1. Introduction and Background

- The migration to a **service-based economy** is leading to a fundamental shift in manufacturing industries toward business models in which the service component of products is becoming dominant based on the value they provide to customers.
- The main interest of chemical users is not to buy and possess chemicals products. They are interested in the best solutions for their process or application. Therefore, chemical users are paying attention on the utility of chemicals, and are attracted by services that support their businesses. This strict service orientation leads to a new logic that puts the **utility provided** by a chemical into the centre of the buying process.
- Following this shift, chemicals suppliers need to change a way of doing business and offer sophisticated solutions that will support their customers' chemical operations and profitability.
- **Performance based business model** (also called "performance-based contracting") responds to this demand: the *customer pays for the utility* of the product and not for its quantity or volume. The model is based on aligning customer and supplier incentives.
- **Chemical Leasing** is a performance-based business model applied to chemicals operations. This model is a perfect example of a business solution **for sustainable chemical management**.

Performance based business models related to chemicals **can be called and branded in companies differently**, not just as Chemical Leasing even if being identical or similar to this model.

UNIDO's Global Chemical Leasing Programme was established in 2005 to support enterprises in enhancing resource efficient and cleaner production, handle chemicals safely and establish sustainable business practices.

→ *For more information on Chemical Leasing, please visit www.chemicalleasing.org*

With the success of Chemical Leasing, UNIDO extended its activities for sustainable chemicals management and green chemistry.

→ *For more information, please visit <https://www.unido.org/our-focus/safeguarding-environment/resource-efficient-and-low-carbon-industrial-production/chemical-leasing>*

2. The Global Chemical Leasing Award

The Global Chemical Leasing Award was created and organized by UNIDO and partners in 2010, 2012, 2014 and 2018. The award aims to acknowledge best practices in Chemical Leasing implementation, science and promotion activities, and to enhance the visibility of Chemical Leasing worldwide. It is the first award of its kind and recognizes successful activities in different categories.

Based on UNIDO's wide activities for sustainable chemicals management and green chemistry, it was decided to extend the scope of the Chemical Leasing Award. For the Chemical Leasing Award 2021, other performance-based business models for sustainable chemical management, besides chemical leasing, are now eligible for the award.

3. Awarding Procedure

The Global Chemical Leasing Award will be launched December 1st 2019. Deadline for applications will be December 15th 2020 and the Award ceremony will take place within the upcoming ICCM 5 global conference in Bonn, Germany (5-9 July 2021).

4. Award Jury

The jury consists of highly recognized international experts from Industry, Science and Academia nominated by UNIDO, BMLFUW, BMK, FOEN and countries that have signed the Joint Declaration on Chemical Leasing. All jury members offer profound understanding of Chemical Leasing strategies and performance-based business models. They have first-hand experience with implementation and promotion practices.

5. Target Group/Participation

The Global Chemical Leasing Award recognizes activities in Chemical Leasing and performance-based business models for sustainable chemicals management on a global scale. Organisations, companies, research institutions and individuals are encouraged to apply.

6. Application

Application is open from December 1st. For each category, an application form and the indicator checklist for Sustainability Criteria for the assessment of specific measures are provided and available for download at: www.chemicalleasing.org. The indicator checklist provides an overview of the five Sustainability Criteria for Chemical Leasing as well as of sub-criteria and indicators. It is as well applicable for other performance-based business models and addresses a wide range of data linked to sustainability criteria. For a successful

application, all applicants are asked to fill in the checklist to the extent possible although not all sub-criteria and indicators might be applicable.

7. Award Categories

The Global Chemical Leasing Award comprises 5 categories: (1) Case Studies (distinguishing between users and suppliers), (2) the Innovation Award, (3) the Research Award, (4) a special award for “Women led initiatives” and (5) a special award for “Start-ups”. Specific evaluation criteria and weighting factors are defined for each category.

In addition, a **special jury recognition** “Chemical Leasing Champions” will be given to companies that demonstrate the long-standing commitment to Chemical Leasing (the implementation of the Chemical Leasing business model for a minimum of 5 years). See 8.6 below.

8. Evaluation Criteria

The Evaluation Criteria (see 8.1-8.3 below) will be evaluated on a 0-4 scale (0-insufficient, 4-excellent) and multiplied with a defined weighting factor. Applications need to score a minimum of 2.5 or more to be considered for the Award nomination.

For all application in this field it is an additional asset if the applicants can proof the data that are given in the form. This can be done by the NCPCs, specific trained consultants or public institutions.

8.1 Criteria for category 1: cases studies (companies)

To be eligible for application, it is necessary that the company has already started with the implementation of a performance-based business models (Chemical Leasing, etc.): a contract is signed. It is also a pre-requisite that no substitution by substances of higher risk has taken place (see the Sustainability Criteria at the end of this document). Users and suppliers can apply separately.

Former applicants of previous awards are welcome to participate in this award edition. They must prove continuity and improvement with the implementation of the model as well as updated data.

Environment and health impact (weighting factor 0.5)

The case study should significantly impact environmental and health aspects of the involved companies and furthermore set an example for best practice within the entire industrial sector. Sub-criteria and indicators that specify these aspects can be found in the indicator

checklist for the Sustainability Criteria. Please fill in the indicator checklist to the extent possible, although not all sub-criteria and indicators might be applicable in your case.

[Economic and social impact \(weighting factor 0.5\)](#)

The case study should furthermore have an impact on economic and social aspects. In addition, for the economic and social impact, the indicators are specified in the indicator checklist for the Sustainability Criteria.

8.2 Criteria for category 2: Innovation

Awarded to case studies with technical solutions that have the potential to or have already defined a new state of the art for a certain use of chemicals, e.g. considering Industry 4.0 elements.

Applicants must fill in the indicator checklist for the Sustainability Criteria to the extent possible, although not all sub-criteria and indicators might be applicable.

[Level of innovation \(weighting factor 0.4\)](#)

Substantial innovation should be visible in the way chemicals are used during the respective processes as a result of the business model arrangement. A shift from product-oriented to a performance-oriented partnership should be demonstrated by a detailed description of the performance unit. This unit reflects the functions of services and thus replaces the product-based 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 within an industry sector as well as within a country will be taken into account.

[Level of improvement \(weighting factor 0.6\)](#)

Improvements in the application of chemicals will be assessed based on the indicator checklist for the Sustainability Criteria. Please fill in the checklist to the extent possible for all indicators relevant in your application.

8.3 Criteria for category 3: Research

This category is addressed for innovative as well as applied research and comprises papers, lectures, curricula, etc. to bring performance-based business models forward. Not only academia but also companies with their R&D departments are especially encouraged to apply.

The topics are widespread and can comprise Green and Sustainable Chemistry, Sustainable Industrial Parks, Sustainable Cities, but also business management and legal issues, etc., but have to have a clear link to performance-based business models, e.g. to Chemical Leasing.

Scientific publications in journals, magazines and books will be considered for nomination. PhD and other theses can also be submitted.

The criteria are as follows:

[Level of novelty \(weighting factor 0.3\)](#)

The contributions can contain novel experiences on performance-based business models (Chemical Leasing, etc.) in the context of innovative implementation approaches, new application fields and trans-disciplinary strategies. Contributions can also provide ideas to spread performance-based business models (Chemical Leasing, etc.), giving analysis of the model, etc.

[Level of quality \(weighting factor 0.4\)](#)

Contributions should be of highest quality in content, research, methodology and communication. For papers, peer review is not obligatory but an asset.

[Level of potential outreach/impact \(weighting factor 0.3\)](#)

This criterion aims at assessing the potential outreach of different scientific contributions, including the number of attendants at conferences, number of students in lecture, number of publications, etc.

8.4 Criteria for the special award: "Women-led initiatives"

Applicants need to demonstrate that their case is a "women led initiatives". For this purpose, they should provide e.g. information for the following topics:

- Role of women in the implementation of the performance-based business model
- Name(s) of leading women and their involvement in decision processes

Based on the data provided, the jury will decide whether the application is a "women led" activity. Women led activities that did not win an award in category 1, 2 or 3 have the chance to win the category 4 special award. In order to assess women led activities the evaluation result of category 1, 2 or 3 will be applied. The application with the highest score receives the award for women led activities.

8.5 Criteria for the special award: "Start-ups"

Applicants need to demonstrate that their case belongs to a start-up. For this purpose, they should provide e.g. information for the following topics:

- Number of employees
- Date of foundation
- Involvement of founders

- Sustainability of the company
- Level of innovation/technology use
- Customer value proposition
- Scalability and market reach

Based on the data provided, the jury will decide whether the application is a start-up. Start-ups that did not win an award in category 1, 2, 3 or 4 have the chance to win the category 5 special award. In order to assess start-up applications, the evaluation result of category 1, 2 or 3 will be applied. The application with the highest score receives the award for start-ups.

8.6 *SPECIAL RECOGNITION – Chemical Leasing Champions*

This “Special Recognition” will be given to companies for their long-standing commitment to Chemical Leasing. Companies that have been applying Chemical Leasing for a minimum of 5 years and submitted applications for the Award 2021 are eligible for this recognition. No specific application is required.

9. Successful Participation in the Global Chemical Leasing Award 2021

Applications of companies (category 1: case studies) that fulfil the Sustainability Criteria and obtain a minimum score of 1 (“sufficient”) for each evaluation criterion (refer to 8.1) will be acknowledged with a Successful Participation Declaration. This is to confirm that the case presented by the company is in-line with UNIDO’s basic requirements for a performance-based business model for sustainable chemical management.

10. Sustainability Criteria

All applications need to fulfil the 5 Sustainability Criteria for performance-based business models. 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 to implement performance-based business models (Chemical Leasing, etc.);*
- *Protection of the positive image of performance-based business models (Chemical Leasing, etc.), prevention of misuse of the term, e.g. for activities which are not beneficial to health or the environment.*

Criterion I – Reduction of adverse impacts for environment, health, energy and resource consumption caused by chemicals and 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. For the overall balance, it is important to consider the manufacture of chemicals and the impact of equipment and machinery.

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 – No substitution of chemicals by substances with a higher risk

If chemicals are substituted by substances with higher risk for the environment and health, contradictions in terms of sustainability can occur.

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 III – 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 partners) might also be relevant. This can be checked in the contract.

Criterion IV – Economic and social benefits are generated; a contract should contain the objective of continuous improvements and should enable a fair and transparent 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 the performance-based business models. Economic improvements are relatively easy to quantify.

Typical social benefits include better working conditions, knowledge sharing and training, etc. It is not the aim of the performance-based business model (Chemical Leasing, etc.) 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 contract.

Criterion V –Monitoring of improvements need to be possible

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.

Indicator checklist for the Sustainability Criteria

The Sustainability Criteria have been specified and made operational by developing sub-criteria and indicators available in form of a checklist. The checklist is available at <http://www.chemicalleasing.com/concept/sustainability-criteria>.

This indicator checklist shall support to conduct an assessment of the indicators of performance-based business model activities and more specifically aims to document the UNIDO Global Chemical Leasing Award application and support in quantifying sustainability performance regarding the five sustainability criteria.

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