



International Regulatory Trends and Chemical Leasing

Plenary 1

12th Annual Chemical Management Services Conference
San Francisco, 13 November 2008

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Elements of the Presentation

- Background on United Nations Industrial Development Organization (UNIDO)
- The Chemical Leasing Approach
- UNIDO's Global Chemical Leasing Programme
- Major regulations affecting Chemical Leasing and Chemical Management Services
- GHS, REACH, SAICM
- Conclusions





UNIDO Background

- As part of the United Nations common system, United Nations Industrial Development Organization UNIDO has responsibility for promoting sustainable industrial development throughout the developing world, in cooperation with its 171 Member States.
- Its headquarters are in Vienna, and it is represented in 35 developing countries.



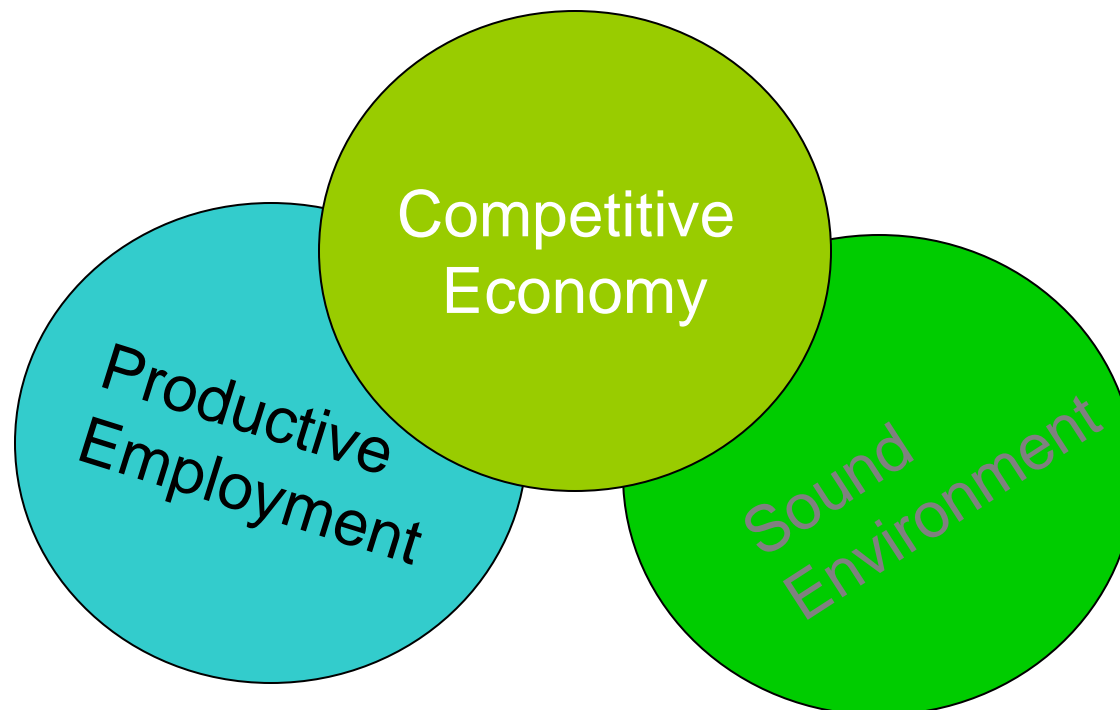
UNIDO Vision

To improve the living conditions of people and promote global prosperity through offering tailor-made solutions for the sustainable industrial development of developing countries and countries with economies in transition.



Cleaner and Sustainable Industrial Development

Productivity Enhancement for Social Advance



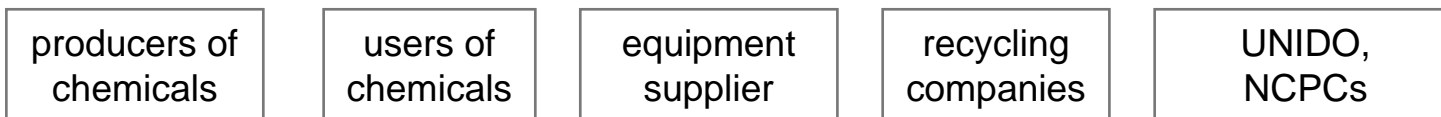


The Chemical Leasing Approach

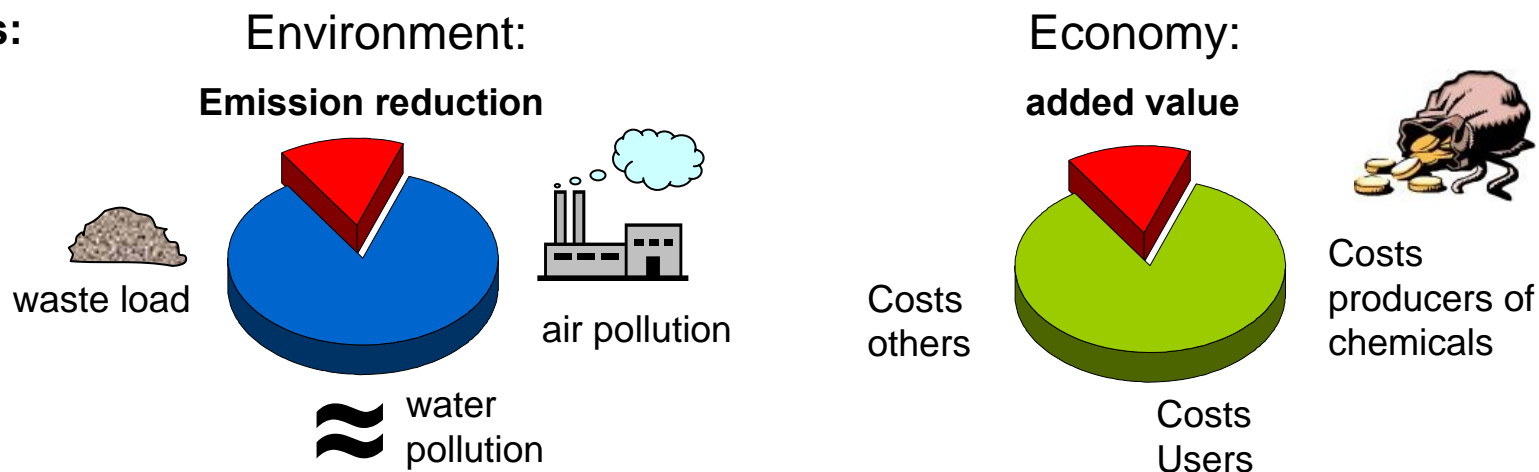
What is it:

Chemical Leasing is a service oriented business model to enhance efficient use of chemicals

Players:



Objectives:

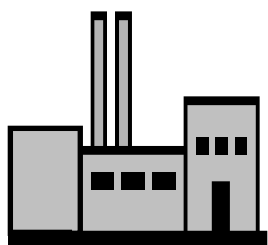


Principle:

Chemical Leasing suggests new forms of payments for chemicals that direct the economic interests of all partners towards process optimisation and reduction of chemicals consumption.



Payments on the Benefits of Chemical Leasing



Chemical producer



provides chemicals to
(no sales)



the user

payment not for the chemical itself, but for the benefits of the chemical
(e.g. not for tons of solvents used, but for number of pieces cleaned!)



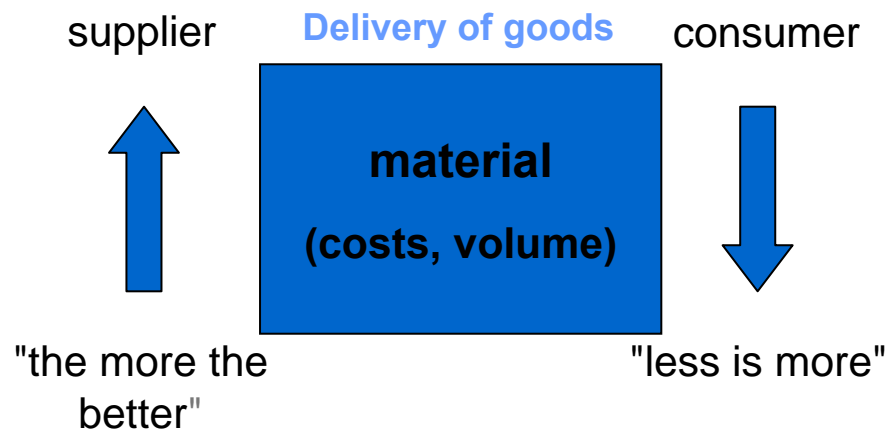
amount of produced chemicals will decline as chemicals
volume turns from a factor for earnings ("*the more you sell
the more you earn*") to a cost driver ("*less is more*")



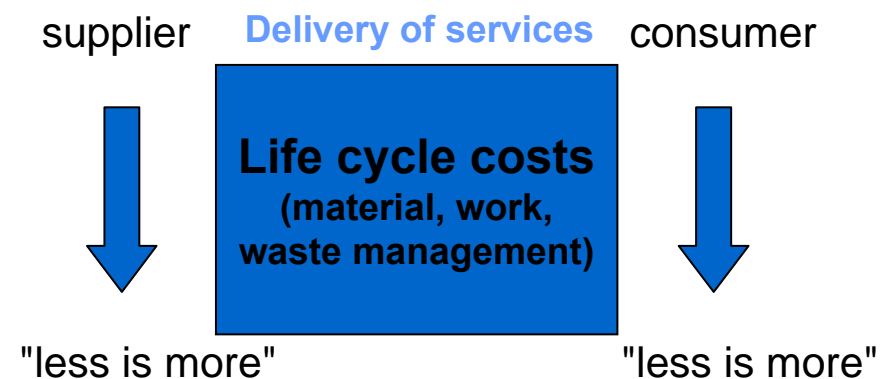
Chemical Leasing Business Models

Bundle Motivations

Traditional business models:
Contradictory motivations



Chemical leasing models:
Bundled motivations



Willingness and culture of cooperation is required



Definition Chemical Leasing - I

- Chemical Leasing is a service-oriented business model that shifts the focus from increasing sales volume of chemicals towards a value-added approach. The producer mainly sells the functions performed by the chemical and functional units^[1] are the main basis for payment.

- 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.

^[1] Functions performed by a chemical might include: number of pieces cleaned; amount of area coated , etc.



Definition Chemical Leasing - II

- Chemical Leasing strives a win-win situation. It aims at increasing 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.



Objectives of UNIDO's Chemical Leasing Programme

- To increase the efficient use of chemicals while reducing the risks of chemicals and protecting human health.
- To improve the economic and environmental performance of participating companies in developing countries and countries with economies in transition and to enhance their access to new markets.



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UNIDO's Chemical Leasing Approach

- In 2004, UNIDO – with the support of the Austrian Government – launched its Global Chemical Leasing Programme.
- In 7 countries (Colombia, Egypt, Mexico, Morocco, Russia, Serbia and Sri Lanka) national projects to promote Chemical Leasing Business Models in industry are on-going in close cooperation with the Global UNIDO/UNEP Cleaner Production Network that has 45 member countries and started in 1994.



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Major Regulations Affecting Chemical Leasing



1- GHS - Globally Harmonised System

- **GHS is a Global Initiative for a harmonised labelling system in the “world of chemical substances”**
- *(decided in Rio-Conference, 1992 – Chapter 19 of UNCED Agenda 21)*
- promote worldwide common, consistent criteria for classifying chemicals according to their health, physical and environmental hazards;
- develop compatible labelling, safety data sheets for workers, and other information based on the resulting classifications;
- facilitate the international trade.

EU and also non-EU countries need to implement GHS for their world-wide trade activities

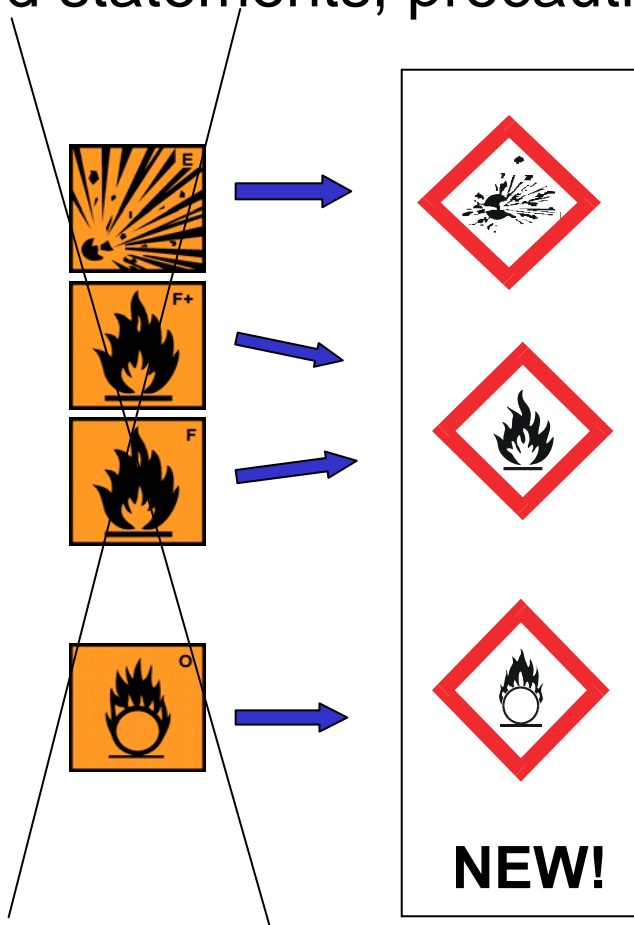


GHS – what is new and what is different (1)

Different / additional label elements, e.g. pictograms, signal words, hazard statements, precautionary statements

examples:

- explosive
- extremely flammable
- highly flammable
- flammable
- oxidising





GHS – what is new and what is different (2)

- GHS introduces new labelling elements



"Serious health hazards"

e.g.
carcinogenicity cat. 1A, 1B, 2
aspiration hazard, Cat. 1



"Health hazards"

e.g.
acute toxicity (oral, dermal,
inhalation), Cat. 4
Skin irritation, Cat. 2

- Besides the pictogramms additionally the following signal words will be introduced
 - "Danger"
 - "Warning"



GHS and Chemical Leasing

Chemical Leasing supports the following important objectives of GHS:

- To ensure minimization of risks to human health and environment by giving more information on the chemicals by suppliers to users
- The risks from unintended releases of chemicals are minimized by showing adequate labels on chemicals
- To ensure that knowledge and information on chemicals and chemicals management are sufficient to enable chemicals to be adequately assessed and managed safely throughout their life cycle



2 - REACH

European Regulation concerning **R**egistration, **E**valuation, **A**uthorisation and Restriction of **C**hemicals

- Entry into force 1 June 2007
- REACH provisions will be implemented step by step
- All provisions in force by 11 years from entry into force



Objectives of REACH

As stated in Article 1, the purpose of the REACH regulation is to ensure:

- a high level of protection of human health and the environment, as well as
- the free circulation of substances on the internal market while enhancing competitiveness and innovation

In addition to that, REACH

- asks for a better communication along the supply chain
- gives more responsibility to industry to manage the risk of chemicals



Manufacturers and Importers

- (pre-)Registration of substances
- Applications for authorisation
- Supply of information for downstream users

Downstream Users

- Provide information down and up supply chain
- Own safety assessment where needed
- Applications for authorisation, where needed

European Commission

- Implementing legislation
- Decisions on granting authorisation, on restrictions, and harmonised C&L

REACH Actors and main roles

European Chemicals Agency (ECHA)

- Managing the implementation of REACH
- Assessment of applications for authorisation and proposed restrictions
- Advise and support for Member States and Industry

Member States Authorities

- Helpdesk for companies
- Evaluation of substances in cooperation with ECHA
- Participation in ECHA Committees
- Proposals for restrictions, inclusion of substances to authorisation, harmonised C&L
- Enforcement and control



REACH and Chemical Leasing

- **REACH is mandatory along the supply chain:**
 - Information exchange
 - Monitoring procedures
 - Patterns for Sharing and Cooperation
 - Documentation and assessment procedures
- ***Chemical Leasing*** is making use of these requirements and is turning them into economic advantages while at the same time catalyzing REACH



REACH and Chemical Leasing

- **Chemical Leasing** secures compliance with the duty of care (mandated by REACH Recital. 16, Art 1 para 3)
- **Chemical Leasing** is the tool to demonstrate “adequate control” (REACH Para 60).
- **Chemical Leasing** is the ideal business environment to identify and apply the use and exposure category concept in particular within the Ch. Safety Report – jointly by suppliers and users.
- **Application of Chemical Leasing** implies measures for monitoring the quality/condition of the chemical, their applications and emissions – identical measures will be required by REACH (Art 14.6. for manufacturers; Art 37.5. Down Stream Users).



3 - SAICM

- It stands for Strategic Approach to International Chemicals Management.
- SAICM is a global policy framework to support efforts to achieve the Johannesburg Plan of Implementation goal that, by 2020, chemicals should be produced and used in ways that lead to the minimization of significant adverse effects on human health and the environment.
- SAICM aims to coordinate, catalyse and facilitate all efforts for better international chemicals management system.
- SAICM is not a legally binding instrument.
- SAICM is not a new organization.
- SAICM does not replace existing institutions and mechanisms.



SAICM and Chemical Leasing

Applying Chemical Leasing helps to achieve some of the global SAICM objectives on the level of the individual business or production plant:

- To minimize risks to human health, including that of workers, and to the environment throughout the life cycle of chemicals.
- The risks from unintended releases of chemicals are minimized.
- To ensure that knowledge and information on chemicals and chemicals management are sufficient to enable chemicals to be adequately assessed and managed safely throughout their life cycle.



Conclusions

- Chemical Leasing is an efficient tool to respond to international trends and regulations concerning e.g REACH, GHS, SAICM
- Chemical Leasing is a supporting tool along the supply chain of chemicals management system
- Chemical Leasing is making use of REACH requirements and is turning them into economic advantages while at the same time catalyzing REACH as a regulatory tool



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Thank you for your attention



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