

Chemical leasing training

Introduction to the chemical leasing concept

IAMC Toolkit

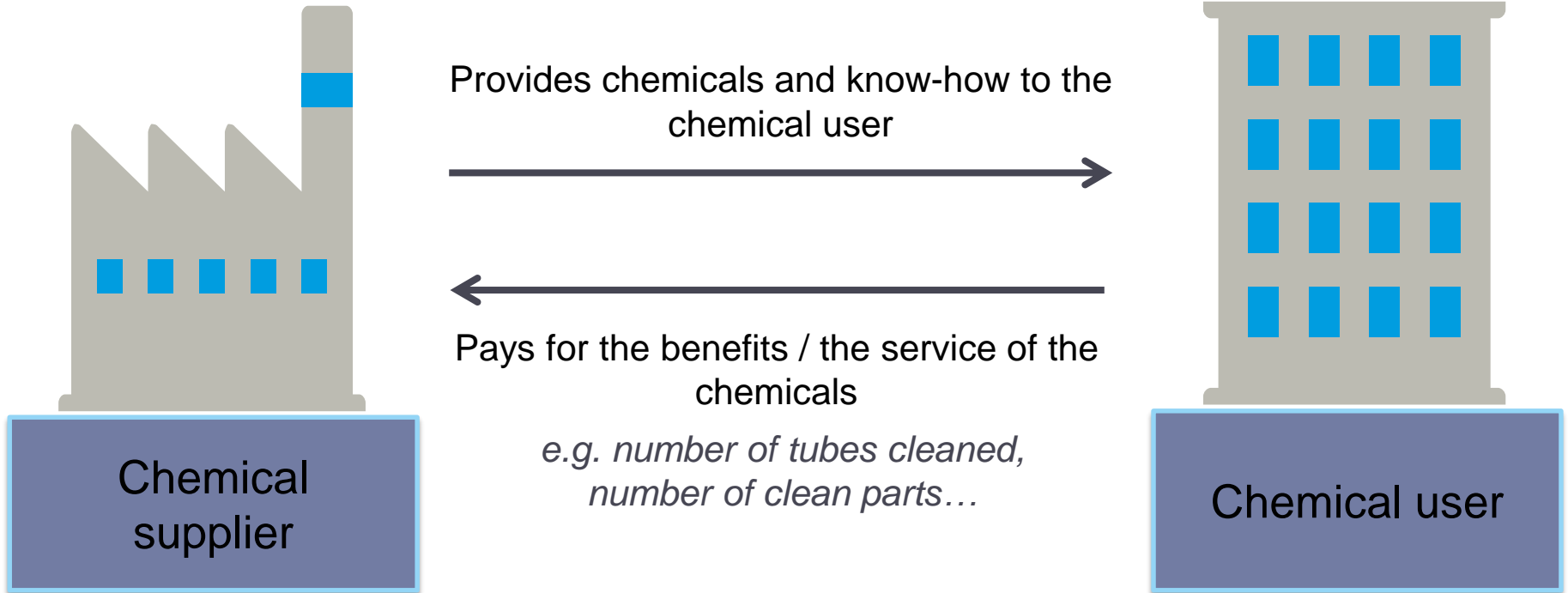
*Innovative Approaches for the Sound Management of
Chemicals and Chemical Waste*



UNITED NATIONS
INDUSTRIAL DEVELOPMENT ORGANIZATION

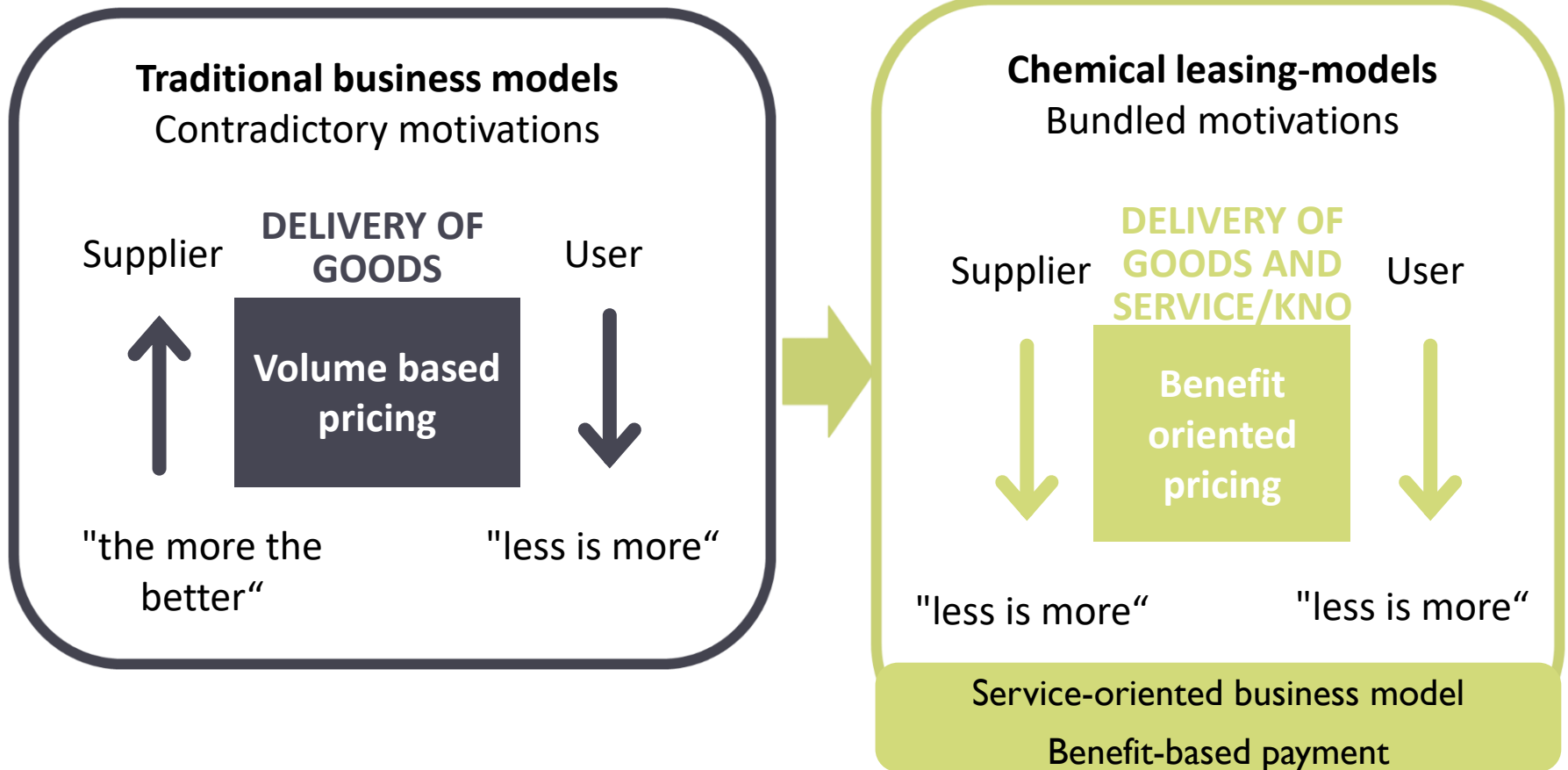


CHEMICAL LEASING IN A NUTSHELL



 **Lower amount of chemicals used**

CHEMICAL LEASING BUSINESS MODEL BUNDLES MOTIVATIONS



CHEMICAL LEASING IN A NUTSHELL - EXAMPLE

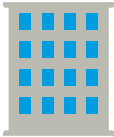
Powder coating process



Classical business model
payment per t of powder coating

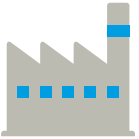
Chemical Leasing business model
payment per m² of coated surface

SERVICE-BASED BUSINESS STRATEGIES : BASIC IDEAS



User

Does not pay to own a chemical, but spends money for the benefits provided by a chemical



Producer

Sells the function of a chemical, including know-how on efficiency and risks, adding management services like production management and logistics



**Amount of
chemicals**

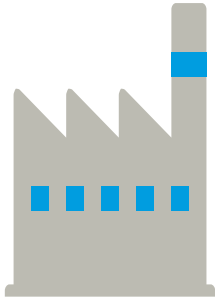
Will decline as chemicals volume turns from a factor for earnings to a cost driver



Added value

Will be shared in a fair way among the involved partners

HOW TO REALISE THE ADDED VALUE ? EXAMPLE FOR CHEMICAL PRODUCERS



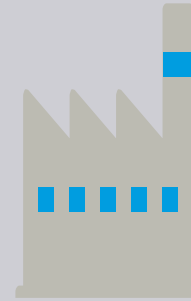
Chemical producers Traditional business model

100 t solvents sold = 100,000 \$ turnover

100 t production = 80,000 \$ var. costs

= 10,000 \$ fix costs

Result 10,000 \$ net profit



Chemical producers Chemical Leasing business model

Process optimization: only 60 t solvents needed
Leasing rate 0.04\$ per tube

Leasing income = 80,000 \$ turnover

60 t production = 48,000 \$ var. costs

= 10,000 \$ fix costs

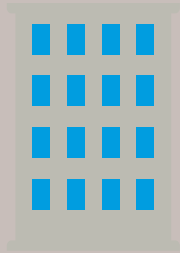
Result 22,000 \$ net profit

Added value: 12,000 \$ net profit



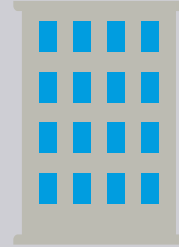
How to realise the added value ?

EXAMPLE FOR CHEMICAL USER



Chemical user
Traditional business model

Cost to buy 100t solvents = 100,000 \$



Chemical user
Chemical Leasing business model

Cost for leasing of 60t solvents = 80,000 \$

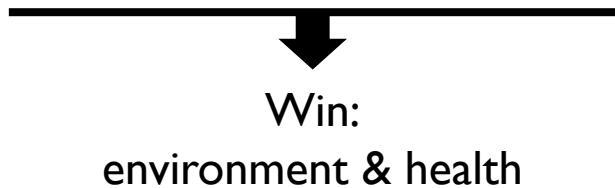
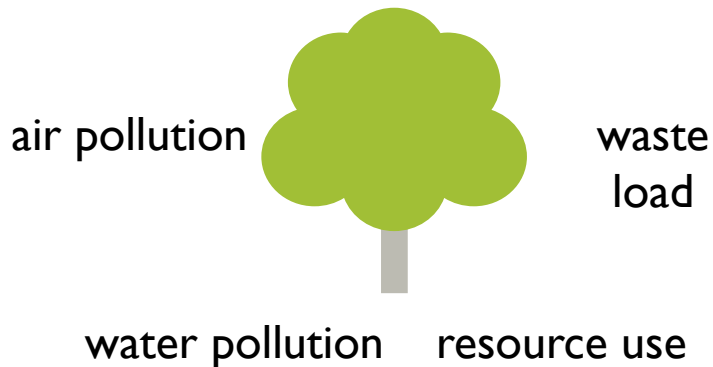
Added value: 20,000 \$



Chemical leasing, a triple win situation

Environment

emission and resource use reduction



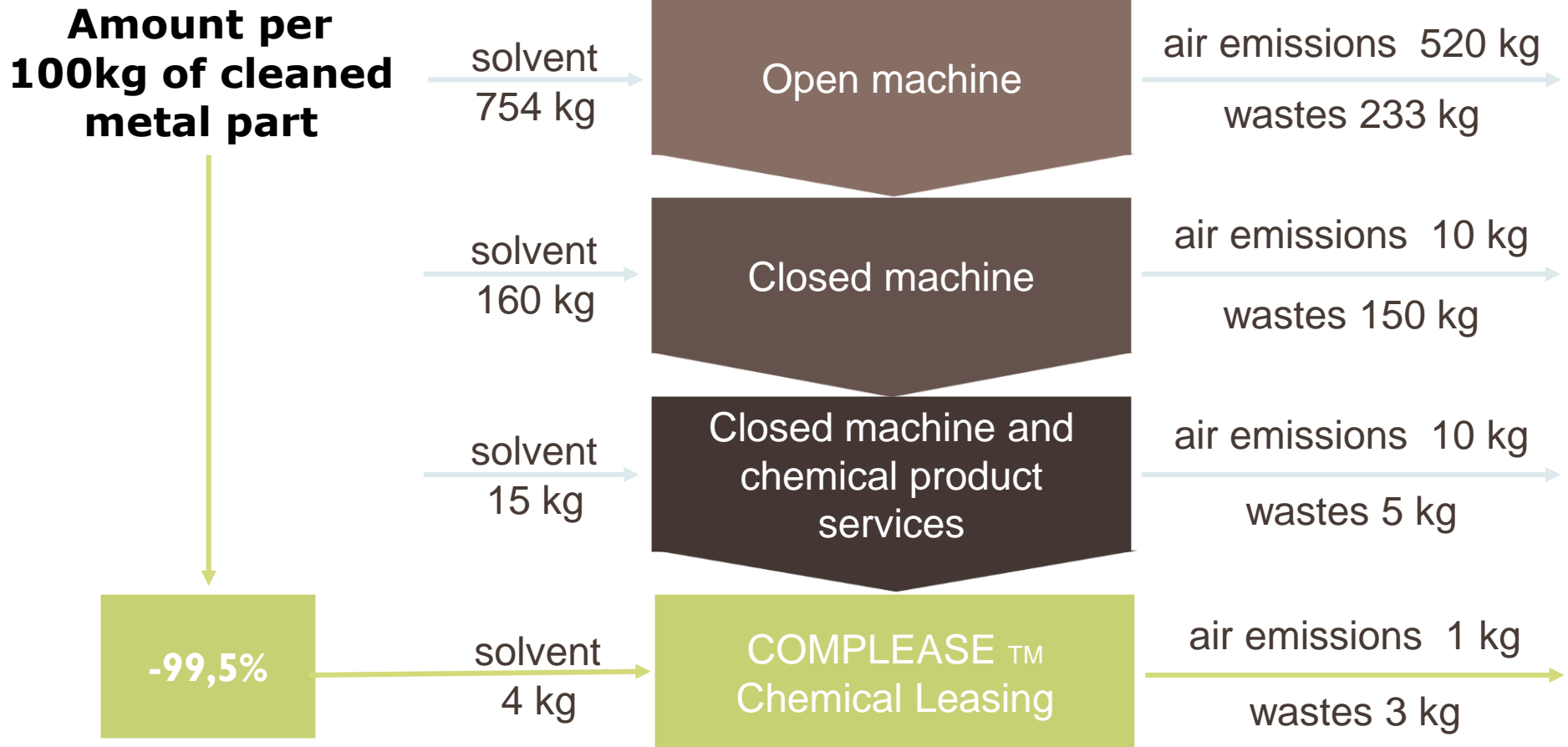
Economy

cost reduction and added value



Environmental benefits of bundled motivations

CHEMICAL LEASING APPLICATION IN METAL PARTS CLEANING AT SAFECEM



UNIDO DEFINITION OF CHEMICAL LEASING

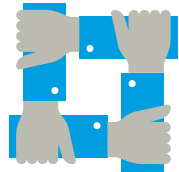
Chemical Leasing is a service-oriented business model that shifts the focus from increasing sales volume of chemicals towards a value-added approach.



The producer mainly sells the functions performed by the chemical and functional units are the main basis for payment.

Within Chemical Leasing business models the responsibility of the producer and service provider is extended and may include management of the entire life cycle.

Chemical Leasing strives for 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.

SUSTAINABILITY CRITERIA FOR CHEMICAL LEASING



1. Reduction of adverse impacts for environment, health, energy and resource consumption caused by chemicals and their application and production processes
2. Improved handling and storage of chemicals to prevent and minimize risks
3. No substitution of chemicals by substances with a higher risk
4. 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
5. Monitoring of the improvements needs to be possible

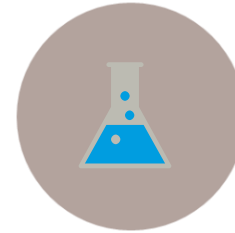
Practical indicators and an electronic tool for the 5 sustainability criteria will be available by the end of the year

DIFFERENTIATION OF TO RELATED BUSINESS MODELS



Classical Leasing

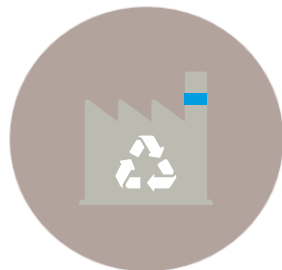
- Prime focus on financial issues (pay small monthly rates instead of full sum at the beginning)
- Second focus on keeping equipment/cars up to date as long as lasting business relation
- Ownership remains at the supplier



Chemical Leasing

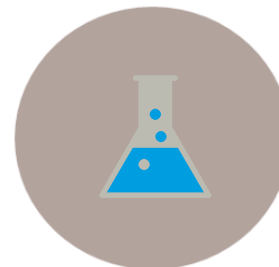
- Financial issues can be addressed but are not the focus
- Prime focus on process optimization and reduced chemicals consumption
- Second focus on exchange of know-how, intensified cooperation and a long lasting business relation
- Ownership can remain at the supplier but can also change

DIFFERENTIATION OF TO RELATED BUSINESS MODELS



Chemical Management Services (CMS)

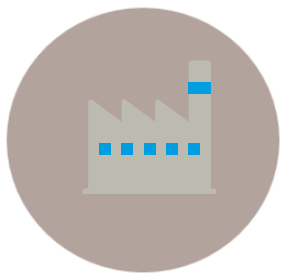
- Focus on management of chemicals for a user, typically considering storage, recycling and disposal options
- Process optimisation can but is not necessarily included
- Services are provided by suppliers or third parties



Chemical Leasing

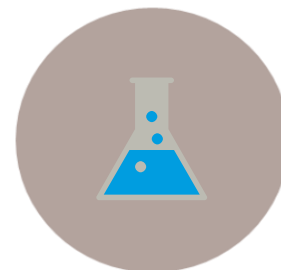
- Focus on process optimisation, further storage, handling, recycling and disposal options can be included
- Service is typically provided by suppliers of chemicals, not by third parties

DIFFERENTIATION OF TO RELATED BUSINESS MODELS



Outsourcing

- Process responsibility is completely transferred to third party, typically no process optimisation between supplier and user
- Outsourced production typically takes place outside the original production site
- Suppliers of chemicals typically do not accept complete outsourcing



Chemical Leasing

- Shared responsibility for process, optimisation between supplier and user
- Chemical Leasing typically takes place on site of the original production
- Suppliers of chemicals with application know-how accept this business model

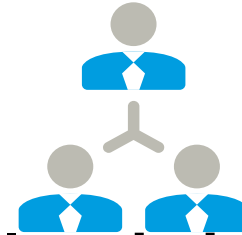
MAIN ACTORS IN CHEMICAL LEASING



Main actors

Chemical suppliers/producers

Chemical users



Additional stakeholders and know-how carriers

Equipment/plant suppliers

Recycling/disposal companies

Retailing companies

Quality assurance institutes

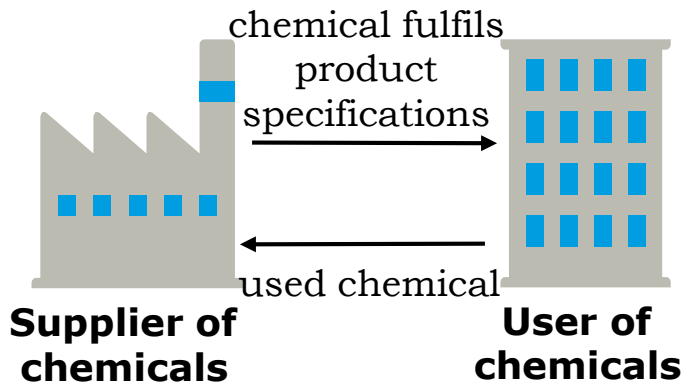
Financial institutions

Consultancies; mediators

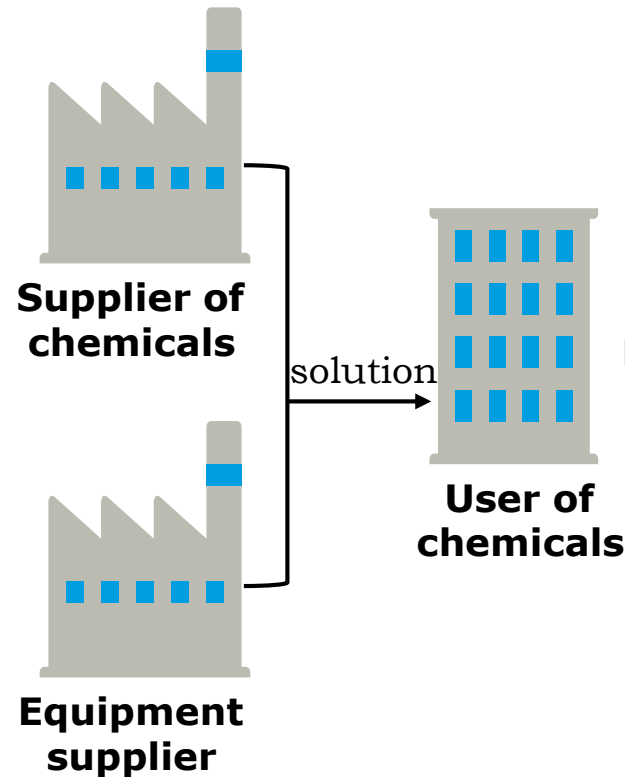
National governments; international organizations (e.g. UNIDO)

DIFFERENT CONSTELLATIONS OF CHEMICAL LEASING BUSINESS MODELS

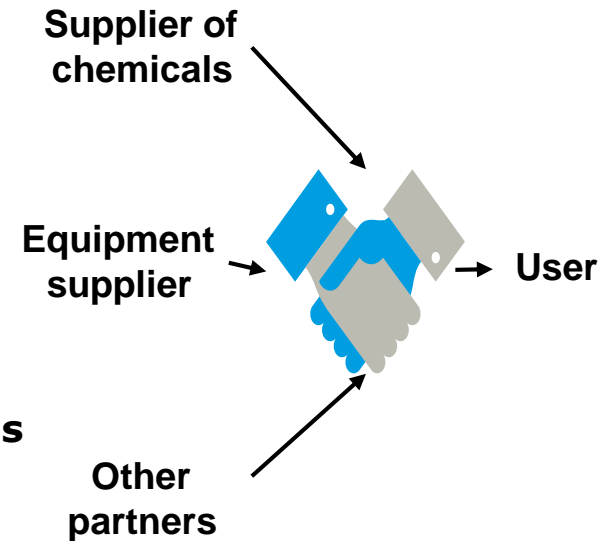
Model A



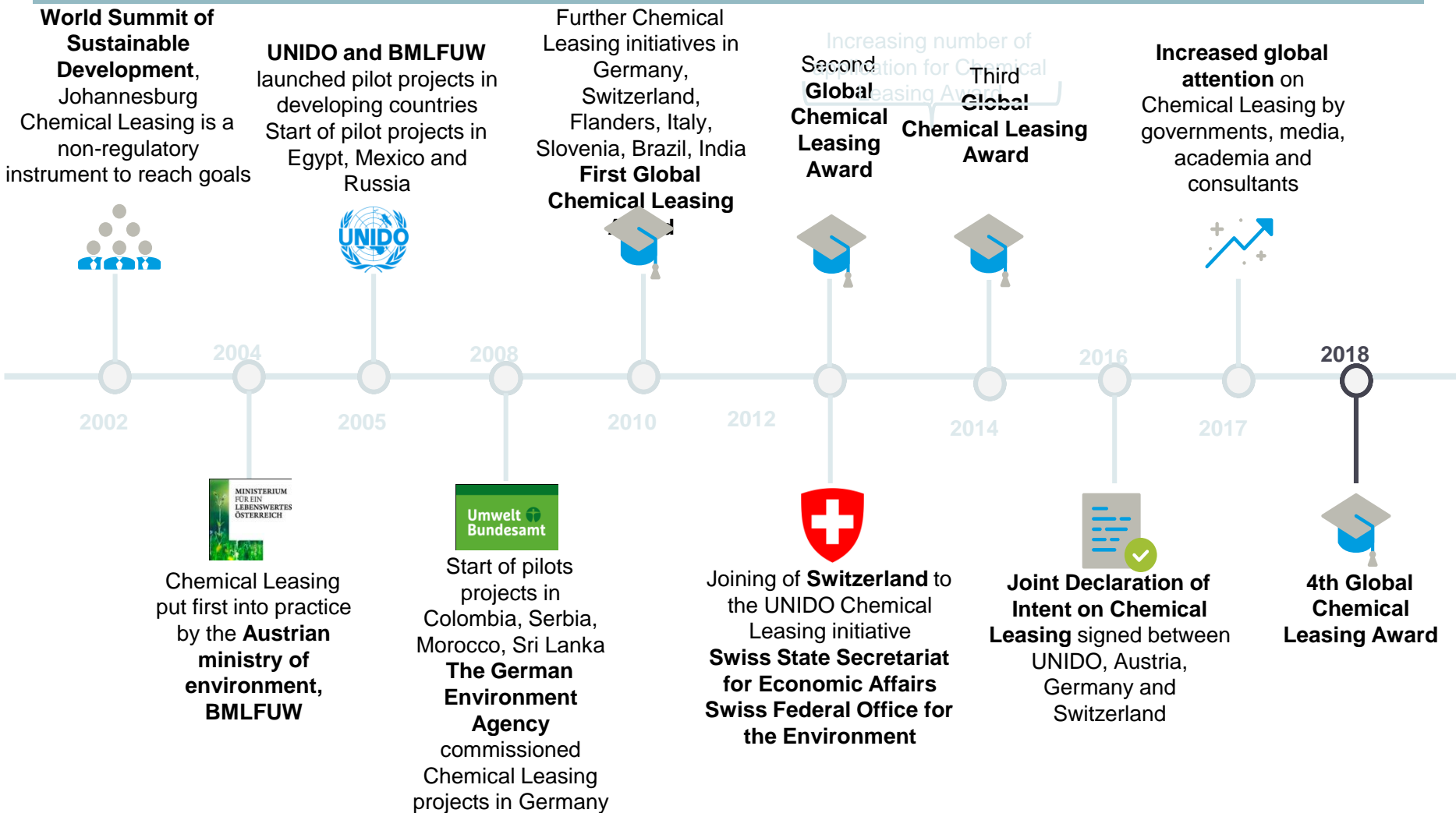
Model B



Model C



DEVELOPMENT OF CHEMICAL LEASING AND WAY FORWARD



INTERNATIONAL PUBLICATIONS AND CHEMICAL LEASING IN MEDIA

Websites and videos

UNIDO Chemical Leasing Website
<http://www.chemicalleasing.org/>

German Chemical Leasing
Website (UBA D)
www.chemikalienleasing.de

Video Chemical Leasing
<https://www.youtube.com/watch?v=Dst2PMreujc>

Selection of reports and research articles

See also: <http://www.chemicalleasing.com/publications>

[Chemical Leasing in the context of sustainable chemistry](#)

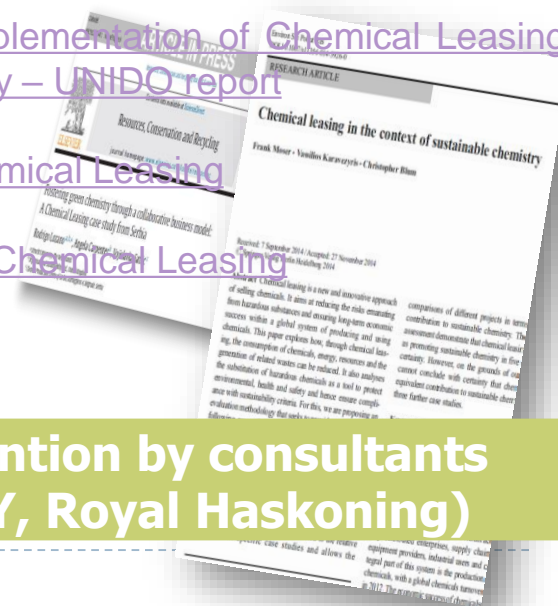
[Chemical Leasing as a model for Sustainable Development](#)

[Resource efficient businesses in practice by applying the alternative business model Chemical Leasing](#)

[Global promotion and Implementation of Chemical Leasing Business Model in Industry – UNIDO report](#)

[Economic features of Chemical Leasing](#)

[“The Guardian” article on Chemical Leasing](#)



**Increased attention by consultants
(Accenture, EY, Royal Haskoning)**



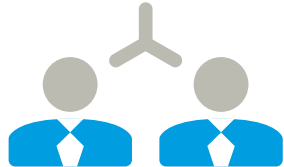
INTERNATIONAL INITIATIVES AND ACTIVITIES

International Working Group on Chemical Leasing - including representatives from industry, associations, governments, EC, UNIDO, NCPCs, academia, consultants



National working groups and **regional network initiatives**

Global Chemical Leasing Award



“Joint Declaration of Intent on Chemical Leasing“ signed by the UNIDO, Austria, Germany and Switzerland in November 2016

<http://www.unido.org/news/press/joint-declaration-of.html>

Workshop in Vienna on Chemical Leasing, jointly organized by Ministry of Environment and associations of the Austrian Chemical Industry in April 2017

The SMART 5 tool

Development of a standardized methodology for the evaluation of ChL projects.

Further development of sustainability criteria for chemicals leasing with concrete indicators for measuring success.

- ✓ A support for companies to easily document their chemical leasing projects, to apply for the Global Chemical Leasing Award.
- ✓ A support for the authorities and the UNIDO to evaluate Chemical Leasing projects.



ANY QUESTIONS ?



Leasing Award 2014

The next Global Chemical Leasing Award will take place in 2018



EXERCISE

- 1) Who are suitable clients to target for a Chemical Leasing projects?
- 2) Imagine a relevant case where Chemical Leasing could be implemented:
Think about the process, potential partners, unit of payment, ...
- 3) What arguments could you use to convince the company?
- 4) What constraints will you probably have to overcome?

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