

Chemical Leasing

A service – based business model implementing
resource efficiency within chemicals policy

Chemicals policy Program of the AT–Presidency – 2018

Expected key messages:

- The EU has a clear picture as to how chemicals themselves, concepts such as „Green chemistry“ as well as Chemicals policy can contribute to achieving a „circular economy“
- It is established knowledge that „renewable resource – based“, „eco efficient processes“, „substitution as part of innovation“, „service based business models (chemical leasing)“ are pillars of that approach





- Beyond the role played by technology, **innovations in business models** can be an important driver for the green transition of the industry producing and using chemicals.
- Opportunities to shift from traditional production and use of chemicals to **chemicals as a service** should be explored and promoted.
- Such innovations could optimise the use of expertise and ensure resource efficiency during the entire life cycle, as well as encourage place-based innovation and the involvement of SMEs.
- „Chemicals as a service“ includes **chemicals leasing** but also the leasing of services such as logistics, development of specific chemical processes and applications, and waste management.

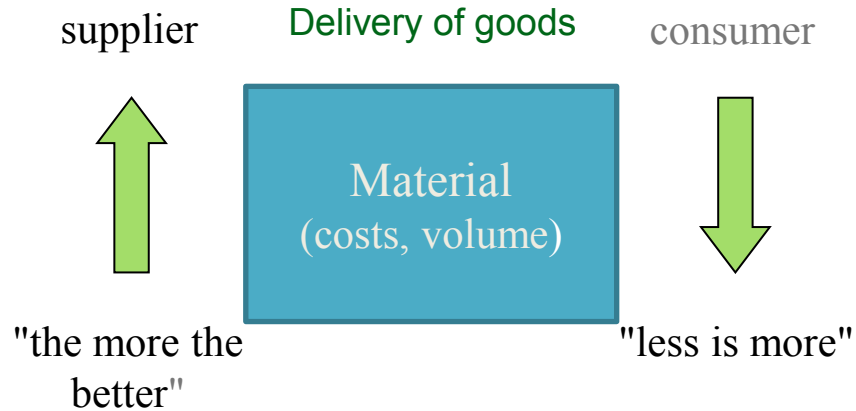
„Chemical Leasing“ - - the message in a nutshell

- Chemical products provide a broad variety of services (cleaning, coating, greasing...)
- The focus of economic interests is currently on the volume of products rather than on services.
- Shifting the focus more toward the “service-part” stimulates economically driven “care”
- It is in the interest of all the parties involved to use the substances with maximum efficiency.
- It represents the only business model that makes it an economically driven goal for the manufacturer or producer to use less.

Chemical Leasing: Motivations

Traditional business models:

Contradictory motivations



Chemical leasing models:

Bundled motivations



Willingness and culture of corporation is required

„Chemical Leasing“ is put into practice

| Pilot I | Pilot II | Pilot III |
|---|--|--|
| Egypt (UNIDO CPC) Electrostatic Powder Coating | Egypt (UNDIO CPC) Cleaning Equipment with Hydrocarbon Solvent | Russia (UNIDO CPC) Wastewater Purification |
| Supplier: Akzo Nobel Powder Coatings S.A.E, electrostatic powder coating User: ABB ARAB, electrical technology, producer of high and low voltage equipment Unit: coated m² of final product | Supplier: Dr Badawi Chemical Work, chemicals producer used in metal finishing User: GM Egypt, Automotive Company Unit: produced vehicle | Supplier: ERG, development of waste purification and disposal processes User: Henkel-ERA Unit: cubic meters of purified water |

Synergies – Economic Experiences from Case Studies

- Combines know-how gained in product design and process design of manufacturer and applicant (Example: joint venture of manufacturer of furniture/paints)
- Enables business partners to offer solutions on the market which would otherwise remain on the research and development stage - boost in competitiveness (Example: metal cleaning for car industry)
- The enhanced interlinking know-how exchange establishes long-term co-operation along the supply chain (Example: paint stripping for furniture industry)

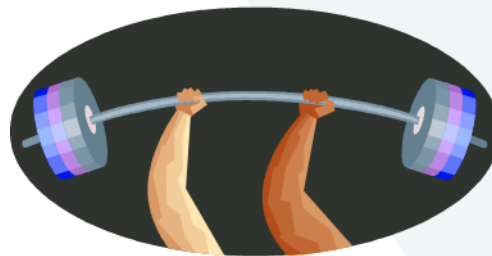
Focus on the Automotives – Industry

- Metal cleaning (Magna/Safechem; General Motors/Dr. Badawi): -80% solvent consumption; Unit of Payment: Cleaned object
- Anti – corrosion treatment (Renault/Polikem); - 75% consumption of cleaner; Unit of payment: Square meter of treated area; “If all car manufacturers in the world were able to achieve similar savings, the global impacts would be 5,1 million kg emissions of CO2 equivalents prevented per year, a decreased water footprint of 13 million m3 per year”

REACH and *Chemical Leasing* – share the same philosophy

REACH is going to mandate along the supply chain:

- Information exchange
- Monitoring procedures
- Patterns for Sharing and Co-operation
- Documentation and assessment procedures
- Case studies result: Chemical Leasing is supportive to REACH implementation



REACH and *Chemical Leasing*

Main Conclusion:

- Chemical Leasing makes use of REACH structures and turns them into economic advantages while at the same time catalysing REACH-compliance!



The Award – a perfect tool to

- enhance the visibility of Chemical Leasing on a global scale
- present successful Chemical Leasing implementation projects
- encourage innovative application of Chemical Leasing
- acknowledge contributions to disseminate Chemical Leasing



Global Chemical Leasing Award



Five categories: **Three main categories** (**Case studies, Innovation, Research**) and **two special awards** (**Women-led initiatives, Start-ups**). In addition, a special jury recognition “**Chemical Leasing Champions**”

<https://chemicalleasing.org/global-chemical-leasing-award-2020>

Many Thanks for your kind Attention!

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