

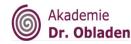
# Discussion of appropriate indicators of financial and economic aspects for measuring sustainability in the international chemicals management

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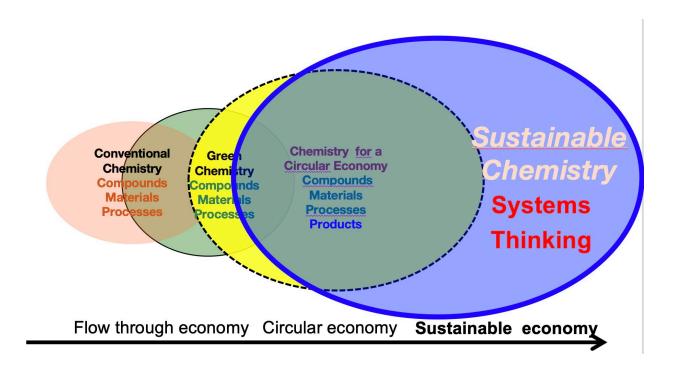








## Sustainable Chemistry - the big picture













## **Hypotheses**

#### FINANCE AND ECONOMY ARE CROSS-CUTTING ASPECTS:

We regard financial and economic indicators as cross-cutting that could be used to support measuring progress towards Sustainable Chemistry and are useful for all Strategic Objectives. In almost all MEA some kind of financial/economic indicators are included.

FINANCIAL AND ECONOMIC INDICATORS NEED TO CONSIDER TWO INTERDEPENDENT ECOSYSTEMS: BUSINESS AND POLITICS.

The political environment enables or hinders progress, and the burden of transition costs should be shared.

INDICATORS NEED TO BE PRECISELY AND UNAMBIGUOUSLY DEFINED.

To unfold impact and hinder whitewashing, a common understanding of the definitions is mandatory.











## **Hypotheses**

#### SYSTEM CHANGE AS A CONSEQUENCE OF SYSTEMS THINKING:

Indicators that reflect financial and economic aspects for business and research could support to monitor progress of the transformation of the international economic ecosystem that supports and enables the achievement of the fundamental objectives of the SAICM Initiative - and the SDGs.

#### USEFULNESS OF INDICATORS IS DEPENDING ON RELIABLE DATA.

European and UN statistics provide many data that can be used to measure progress towards sound management of chemicals and waste and sustainable chemistry - but low and middle income countries' (LMIC) concerns need to be given Center Stage to capacitate them to built data reporting systems.

#### IMPACT AND FEASIBILITY AS NORTHSTARS FOR INDICATOR DEFINITION

All indicators should be checked for their suitability to foster and support the transformation, acknowledging that the cost for the transition and the establishment of adequate reporting systems have to be feasible and do not overburden the stakeholders responsible for implementation.











## SAICM: Relevance of finance and economy in the targets under discussion

#### Objective D

D. Safer alternatives and innovative and sustainable solutions in [relevant] product value chains are in place so that benefits to human health, and the environment are maximized and risks are prevented or, where not feasible, minimized

- R&D, process innovation, value chain innovation need to be financed.
- Measuring the money that is put to these areas is an indication of progress made by business.

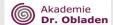
#### **Objective E**

E. The sound management of chemicals and [associated] waste is [transparently and accountably] integrated in[all] relevant decision-processes [by stakeholders] [for] [sustainable development, financing and business]

- The political environment must complement the business endeavours.
- Subsidies, tax benefits and sanctions could be used to measure the suitability of the system to foster change.
- Detection and reduction of illicit financial flows could indicate progress on good governance of the SMCW











# **Examples for Indicators: Incentives**

### Objective D5

Indicator	General Criteria				Sustainability Criteria			
Number of Countries that have positive incentives, including subsidies, taxes and public funding for the conservation and sustainable use of biodiversity.*	А	Specific		Н	11	Precautionary principle		
	В	Established	999	Н	12	Systems thinking		
	С	Determinable	933	Н	13	Social responsibility		
	D	Measurable	333	Н	14	Transparency &		
	Reliable & transparent	Reliable &				collaboration		
			Н	15	Resource management			
	F	Dynamic			*Aichi Target No.3			
	G	Pertinent	000					











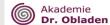
# **Examples for Indicators: Economic loss**

#### Objective B1

Indicator	General Criteria			Sustainability Criteria			
Direct economic loss attributed to chemical disasters in relation to global GDP.*	Α	Specific		H1	Precautionary principle	556	
	В	Established		H2	Systems thinking	CCC	
	С	Determinable		Н3	Social responsibility	<b>666</b>	
	D	Measurable		H4	Transparency &	66	
		Reliable &	6		collaboration		
	Ε	transpare nt		H5	Resource management	666	
	F	Dynamic	6	*SDC     4 5 2			
	G	Pertinent			*SDG Ind. 1.5.2		











# **Examples for Indicators: Illicit financial Flows**

### Objective D2 (+ A4)

Indicator	General Criteria			Sustainability Criteria			
Total value of inward and outward illicit financial flows related to chemical products and waste (in current US-\$).*	Α	Specific		H1	Precautionary principle	999	
	В	Established	9	H2	Systems thinking	222	
	С	Determinable		Н3	Social responsibility	333	
	D	Measurable		H4	Transparency &	99	
		Reliable &			collaboration		
	Е	transpare nt		H5	Resource management	202	
	F	Dynamic		4	*5001.144.44		
	G	Pertinent	00		*SDG Ind. 16.4.1		



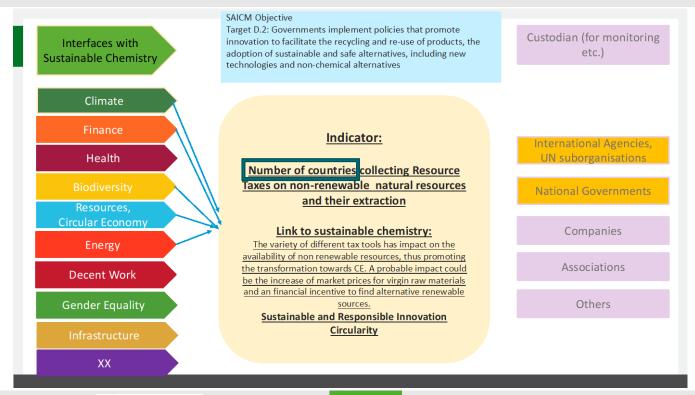








## Example of indicator on national level













# **Example of the Evolution of the Indicator**

#### Objective E5

Indicator		General Criteria			Sustainability Criteria			
Sum of Resource Taxes on non-renewable natural resources and their extraction collected by countries.	Α	Specific	933	H1	Precautionary principle	999		
	В	Established		H2	Systems thinking	999		
	С	Determinable	993	Н3	Social responsibility	999		
	D	Measurable		H4	Transparency & collaboration	<b>(2)</b>		
		Reliable &			collaboration	3		
	Е	transpare nt		H5	Resource management	333		
	F	Dynamic						
	G	Pertinent		]				











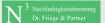
## Issues in the discussion of indicators

Glad you're asking

- Currently most indicators used in multilateral environmental agreements (MEAs) are process indicators - is it an issue?
- Internationally agreed indicators are highly political can it be changed? •
- The financial capacities for the transformation and the underlying data collection and reporting systems are a challenge for LMIC - how to build a global level playing field?
- Is it enough to aggregate financial Indicators on national level or are company level indicators needed?

"Facts are stubborn things, but statistics are pliable." — Mark Twain

























# Discussion of appropriate indicators of financial and economic aspects for measuring sustainability in the international chemicals management

#### Backup

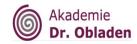
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## Targets (not yet agreed)

Target D1 - Companies consistently invest in and achieve innovations toward advancing green and sustainable chemistry, cleaner production, and the deployment of life cycle management approaches for chemicals.

Target D2 - [...] implement policies that encourage production using sustainable and safe(r) alternatives including cleaner production technologies and facilitate re-use and recycling of products (circular economy).

Target D4 - In research and innovation programs priority is given to sustainable solutions and safer alternatives to harmful substances in products and mixtures, including in consumer products.

[Target E3 - Financial and non-financial resources needed to achieve [support] the sound management of chemicals [and waste] are identified and mobilized in all sectors by and for all stakeholders.

[Target E4 - Gaps between developed and developing countries the implementation of sound management of chemicals [and wastel are identified and narrowed.1

Target E5 - regarding internalization of costs/cost recovery mechanism











## Interfaces with Sustainable Chemistry

SAICM Objective:

Custodian (for monitoring etc.)

Climate

Finance

Health

Resources, Circular Economy

Energy

**Decent Work** 

Gender Equality

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**Indicator:** 

International Agencies, **UN** suborganisations

**National Governments** 

Companies

Associations

Others









