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ENVIRONMENTAL LAW  
NETWORK INTERNATIONAL

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Sonderforschungsgruppe  
Institutionenanalyse

elni 30th birthday conference 2021:  
The power of environmental law –  
Experiences from the past and perspectives for the future  
15.10.2021 (online)

# Zero pollution in 2050: Which measures are necessary?

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## Overview

A look back at elni forum Utrecht 2018 + online event 2020

- A. Nature of the problem + guiding goals
- B. Legal framework today
- C. Green Deal Policy Strategies:  
New CE Action Plan, Chemicals Strategy for Sustainability, Zero pollution
- D. Leverage Points for Zero Pollution in 2050:  
Stipulate change processes towards SDG 12

## A look back....

### elni forum 2018 / Invitation

We are pleased to invite you to the next “elni Forum”, which is due to be held in Utrecht on **20 April 2018**, from 3:30 to 6 pm, at the joint initiative of the Environmental Law Network International ([elni](#)) and Stichting [Natuur & Milieu](#).

The topic of the forum is

## **Circular Economy and Product Law – missing links**

With

**Alice Bernard, Client Earth, Brussels**  
**Circular Economy and chemicals legislation**

&

**Prof. Chris Backes, University of Utrecht**  
**Circular Economy and building products legislation**

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**Comments from a public administration perspective**  
**Susanne Waaijers/Martien Janssen RIVM/NL**

Introduction and conclusions by

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Utrecht Centre for Water,  
Oceans and Sustainability Law

**Circular Economy in the built  
environment  
new legal approaches needed?**

Chris Backes

tEarth

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**sofia**

Prof. Dr. Martin Führ

Darmstadt University of Applied  
Sciences/Society for  
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EU law and the tracking of  
chemicals in materials  
Environment Law Network International Forum  
20 April 2018



Utrecht Centre for Water,  
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Circular Economy in the built  
environment  
new legal approaches needed?

National Institute for Public Health  
and the Environment  
Ministry of Health, Welfare and Sport

The sharp edges of  
circular economy

CE at RIVM

Susanne Waaijers-van der Loop  
Martien Janssen

## A look back...

elni-event cycle 2020:

**Product policies for a Circular Economy**

14.10.2020 (online)

**Presentation of the outcomes of the feasibility study**

# **Information Flows on Substances of Concern (SoCs) in Products from Supply Chains to Waste Operators**

(Originally presented to the joint meeting of the CARACAL and Waste Expert Group  
July 2020, by Antonia Reihlen, Ökopol GmbH)

*Martin Führ*

Darmstadt University of Applied Sciences/Society for Institutional Analysis – sofia

<http://www.doi.org/10.2873/873130>

## A. Nature of the problem



Source: br

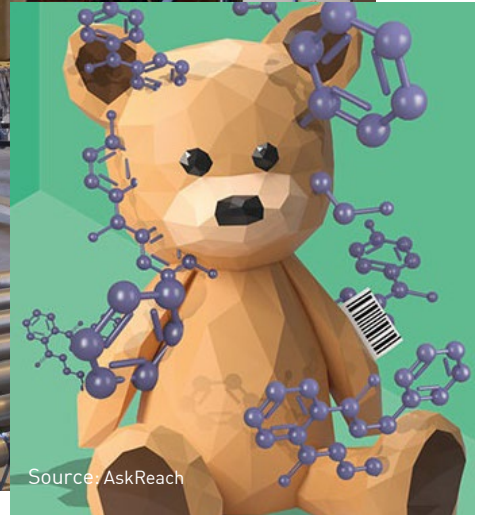
## A. Nature of the problem



Source: br



Source: Logista



Source: AskReach

Rehbinder: „total toxic situation“ – Cocktail effects + permanent stress on human health and the whole variety of species + habitats

## A. Nature of the problem: Core leverage point „products“



## A. Guiding goals and leverage points

**United Nations: Sustainable Development Goals (SDG ´s)**

SDG 12: **Ensure** sustainable consumption and production patterns (10YFP)

**European Commission: Green Deal [7/8] + subsequent strategies/legislation**

**Analysis:** From 1970 to 2017, the annual **global extraction of materials tripled** and it continues to grow, posing a major global risk. About half of total greenhouse gas emissions and more than 90% of biodiversity loss and water stress **come from resource extraction and processing of materials, fuels and food.**

### **Leverage points (yardstick)**

- Actor focused perspective: Core “change agents”?
  - Design of products (incl. services) ↔ business case
  - **Active involvement of industry actors** (not just acceptability)
  - Green Deal process as “game changer”?

**How?** Future perspective (vision: SDGs → “Zero Pollution”)  
– status quo legislative framework (incentives/impediments)  
= Delta (Gap)

## B. Legal framework today

Yardstick: Provide competitive advantage of „zero pollution“ solutions

Originary Substance Law („rectify at source“): REACH

burden of „proof“ shifted → concept of „self-responsibility“ of industry in order to tackle „toxic ignorance“ (‘The dose alone makes the poison’, *Paracelsus*)

– **Substances and Mixtures: Registration Regime**

– Data requirements + data transparency (ECHA database)  
indirectly support “benign by design” (*in theory*)

– Entire life cycle of a substance (*in theory*), however  
- **EoL** not really covered in registrations  
- **Sourcing** not included at all

→ Risk management (reactive) rather than (proactive) risk prevention

– **Substances in Articles: Authorisation Regime + Supply chain information**

– Focus on SVHC: Substitution of problematic substances

– Art 33: Legal uncertainties + 100% enforcement deficit

→ Lack of incentives for product producers to comply with „duty to organise“

→ Supply chain actors: not in a position to „detox“ their products (toxic ignorance)

→ Lack of market pull for less problematic substances/mixtures

## B. Legal framework today: bigger picture

Original Substance Law: REACH Regulation

Directive 2010/75/EU on Industrial Emissions (IED)

Directive 2009/125/EC on Ecodesign

Directive 2008/98/EC on waste (Waste FD)

Directive 2000/60/EC framework water policy (Water FD)

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Sonderforschung  
Institutionenanalyse

Integrating "Green Chemistry"  
into the Regulatory Framework of  
European Chemicals Policy

Martin Führ, Julian Schenten und Silke Kleihauer

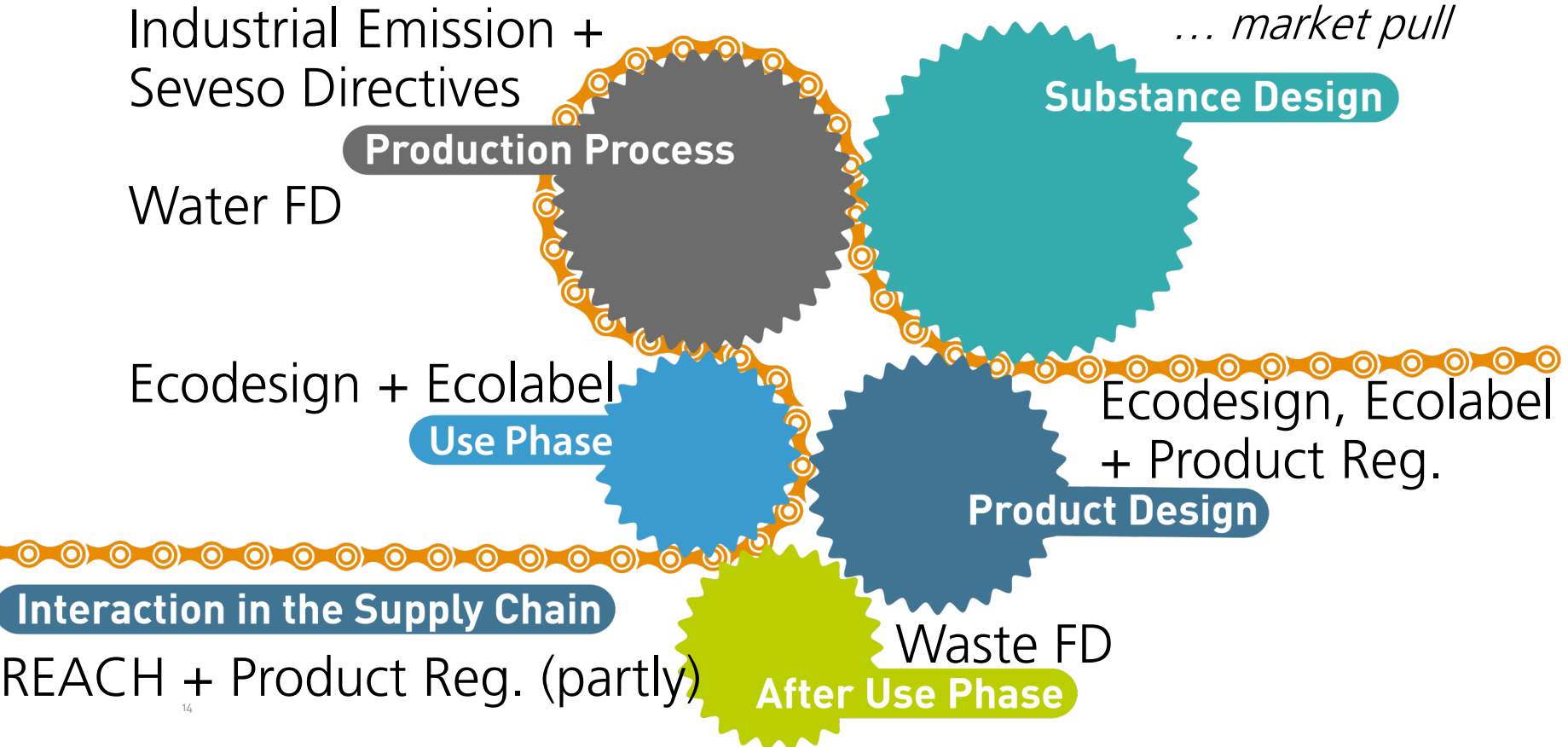
sofia-Studien 19-2,  
Darmstadt 2019

ISBN: 978-3-941627-72-7

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## C. Green Deal policy strategies: New CE Action Plan

New CE Action Plan [COM(2020) 640 98 final, p. 5]

As part of this legislative initiative, and, where appropriate, through complementary legislative proposals, the Commission will consider establishing **sustainability principles** and other appropriate ways to regulate the following aspects:

- improving product **durability, reusability, upgradability and reparability**, addressing the presence of **hazardous chemicals** in products, and increasing their **energy and resource efficiency**;
- increasing **recycled content in products**, while ensuring their performance and safety; Reliable, comparable and verifiable information (...)
- mobilising the potential of **digitalisation** of product information, including solutions such as **digital passports, tagging and watermarks**;

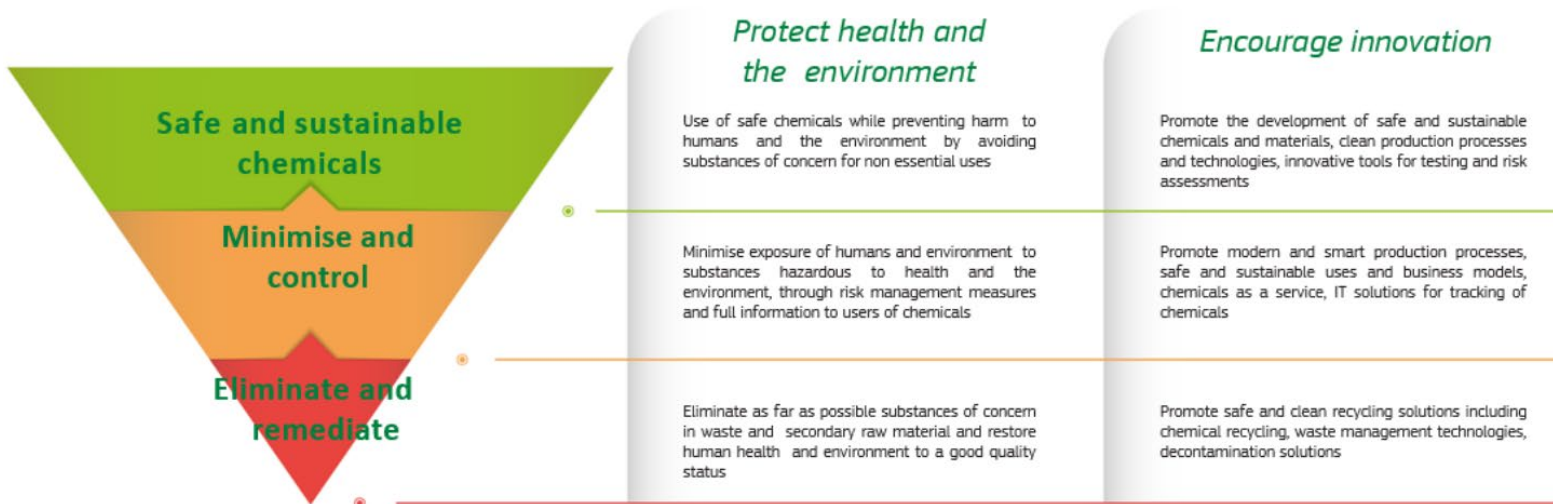
The **European data space for smart circular applications** referred to in section 2 will provide the architecture and governance system to drive applications and services such as product passports, resource mapping and consumer information.[p. 18]

→ **Sustainable Product Initiative**: Introducing a digital product passport, widening the scope of the Ecodesign Directive

## C. Green Deal policy strategies: Chemicals Strategy

### Chemicals Strategy for Sustainability: Towards a Toxic-Free Environment [COM(2020) 667 final, p. 3]

In line with the European Green Deal, the strategy strives for a **toxic-free environment**, where **chemicals are produced and used in a way that maximises their contribution to society including achieving the green and digital transition, while avoiding harm to the planet and to current and future generations.**



## C. Green Deal policy strategies: Towards Zero Pollution

### EU Action Plan: 'Towards Zero Pollution for Air, Water and Soil' [COM(2021) 400 final]

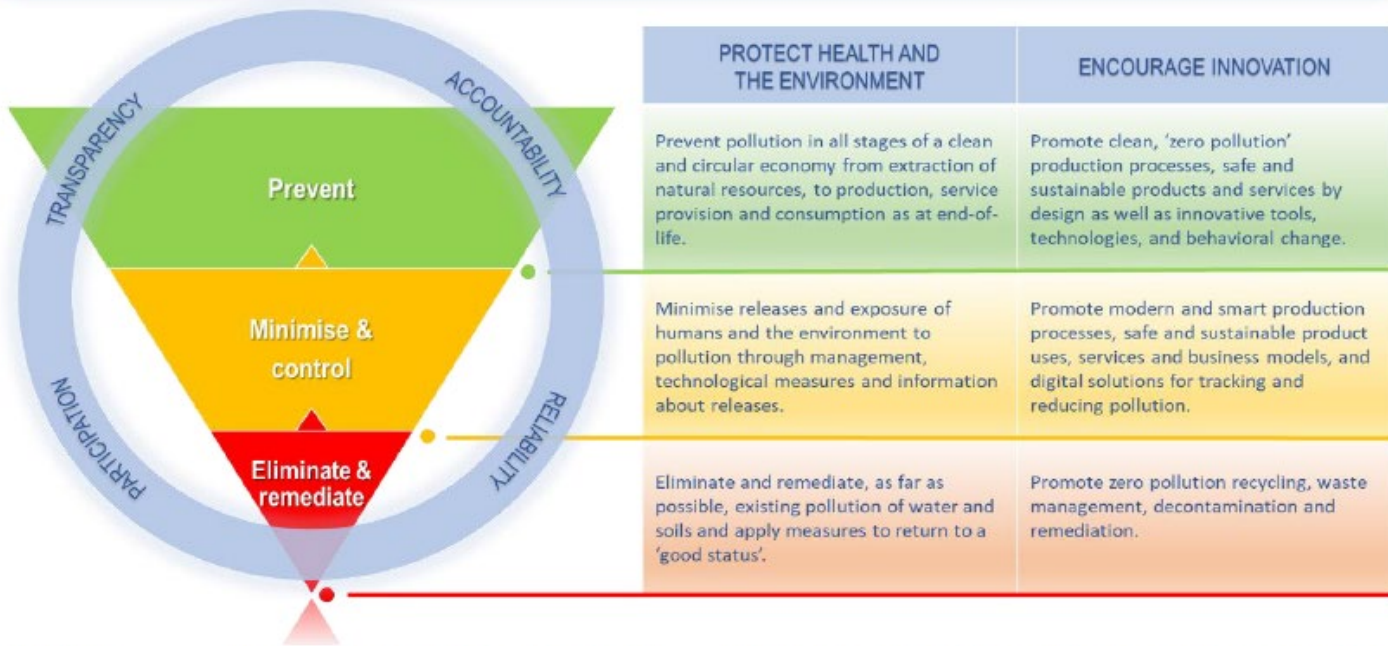
- The fight against pollution<sup>1</sup> is also a fight for fairness and equality.
- Pollution also threatens our biodiversity and significantly contributes to the on-going mass extinction of species.
- **The economic case for acting on pollution is clear and the benefits for society far outweigh the costs, just as the costs of inaction hugely outweigh the costs of action.**
- **Now is the time to be ambitious**, to deliver on people's legitimate aspirations to have their health, environment and livelihoods protected – and to make peace with our planet.  
**The zero pollution vision for 2050: a Healthy Planet for All.**
- Investments in clean and sustainable design, circular economy business models, cleaner transport and mobility, low-emission technologies, nature-based solutions and sustainable digitalisation offer strong opportunities

<sup>1</sup> 'Pollution': Directive 2010/75/EU, Article 3(2)

# C. Green Deal policy strategies: Towards Zero Pollution

## 2.1 The zero pollution ambition (SDG targets 3, 6, 11, 12, 14, 15)

Union policy on the environment shall be based on the **precautionary principle** and on the principles that **preventive action** should be taken, that environmental damage should as a priority be **rectified at source** and on the **polluter pays principle**.



*Figure 2: The zero-pollution hierarchy – reversing the pyramid of action, prioritising the approaches for tackling pollution*

# C. Green Deal policy strategies: Ongoing processes

Survey in support of the Commission services' work on the definition of Safe and Sustainable by Design criteria for chemicals and materials

Fields marked with \* are mandatory.

## About this Survey

This survey is addressed to all interested parties, including European and civil society. Your feedback will inform the European Commission on the

The deadline for replies is 30-06-2021

If you have any questions, please contact the European Commission via [DESIGN@ec.europa.eu](mailto:DESIGN@ec.europa.eu)

Your voice matters and we are grateful to you for taking the time to complete

I acknowledge that I have read the Data Protection Notice attached (please see [Data protection notice.pdf](#))

[Data protection notice.pdf](#)

## Introduction

With the European Green Deal (COM 2019/640), the European Commission aims to make the European economy and society more sustainable. Great attention is given to environmental neutrality, circular economy, biodiversity protection, and a zero-pollution environment. One of the priorities is to protect citizens and the environment from hazardous chemicals, materials and products and to encourage

In October 2020, the Commission adopted the Chemicals Strategy for a toxic-free environment. In October 2020, the Commission adopted the Chemicals Strategy for a toxic-free environment of the steps towards a zero-pollution ambition for a toxic-free environment

## Public Consultation on the Sustainable Products Initiative

Fields marked with \* are mandatory.

### Public Consultation for the impact assessment supporting the review of the Directive 2000/53/EC on end-of-life vehicles and of the Directive 2005/64/EC on the type-approval of motor vehicles with regard to their reusability, recyclability and recoverability

Fields marked with \* are mandatory.

#### Introduction

#### Context of the Consultation

##### What is the Directive 2000/53/EC on end-of-life vehicles about?

Every year, millions of vehicles in Europe reach the end of their life. If end-of-life vehicles (ELV) are not managed properly, they can be a threat to the environment as well as a lost source of millions of tonnes of materials. Directive 2000/53/EC on end-of-life vehicles ("ELV Directive" or ELVD) was adopted in 2000 to minimise the impact of end-of-life vehicles on the environment and to improve the environmental performance of all the economic operators involved in the life cycle of vehicles. This Directive contains provisions on the collection, treatment, recovery and recycling of end-of-life vehicles.

##### What is Directive 2005/64/EC on the type-approval of motor vehicles with regard to their reusability, recyclability and recoverability about?

This Directive (thereafter "3R type-approval" Directive) lays down conditions under which vehicles are authorised to be put on the EU market (through the type-approval procedure), with a view to ensuring that their component parts and materials can be reused, recycled and recovered in conformity with the minimum percentages of the targets set out in the ELV Directive. The Directive lays down specific provisions to ensure that the re-use of component parts does not give rise to safety risk or environmental hazards.

##### Why is the Commission performing a consultation?

The Commission completed an evaluation of Directive 2000/53/EC on end-of-life vehicles in 2021<sup>[1]</sup>. It identified various shortcomings of the ELV Directive. Following up on the evaluation, the European Commission is now working on an impact assessment in support of a possible revision of the ELV

Policy Initiative as a key part of the [Circular Economy Action Plan](#) for a Green Deal (CEAP)<sup>[1]</sup> is one of the main flagships of the [European Green Deal](#)<sup>[2]</sup> and the [Strategy for Europe](#)<sup>[3]</sup>. This legislative initiative will aim to make products fit for a circular economy, reduce waste and ensure that the performance of products progressively becomes the norm.

The core of the Sustainable Product legislative Initiative will widen the scope of energy-related products so as to make it applicable to the broadest possible range of products (where appropriate) and make it deliver on circularity.

The Initiative will consider such amendments to the Ecodesign Directive, and, where appropriate, to the ELVD, to regulate the following sustainability aspects: product durability, reparability; the presence of hazardous chemicals in products; energy and resource efficiency; remanufacturing and high-quality recycling; carbon and environmental footprint; and premature obsolescence; a ban on the destruction of unsold durable products; and the digitalisation of product information and ways to reward the most sustainable products.

The Initiative will also require manufacturers to identify and establish a digital product passport that gathers data on a range of other things on environmental characteristics, repair and upgradeability, reparability, reusability, recycled material content, recycling, and correct disposal, so as to enable consumers and businesses to understand the environmental footprint of products, and enable compliance authorities to better fulfil their duties.

The Sustainable Product Policy legislative initiative identified in the CEAP are electronics, textiles, and other intermediary products such as steel, cement and chemicals. (The list of products.) Further product groups are to be identified based on their environmental footprint. The Commission will also seek to increase the effectiveness of energy-related products, including through the Ecodesign and Energy

The Initiative aims primarily at advancing sustainability at the design phase. As

## D.1 Leverage Points for Zero Pollution in 2050: Stipulate change processes towards SDG 12

**Yardstick:** Provide competitive advantage of „zero pollution“ solutions

1. Additional **legal incentives** (macro level) are necessary to stimulate
  - Design for “durability, reusability, upgradability and reparability” (NCEAP) ...
  - extension of the service life
  - joint usage concepts
  - based on **materials without “problematic substances”** [SoC]
  - allowing at EoL reprocessing into **high quality secondary raw material**
2. Additional **measures at “meso-level”** are necessary to **address impediments**
  - Supply networks and sectoral/cross-sectoral cooperation, e.g. ...
  - Standardization of data structure and exchange format
  - ...
3. Measures **within companies** (micro level): develop new business models ...

## D. Legal framework tomorrow

### 1. Advancing REACH: Substances in Articles

Yardstick: supply chain transparency → competitive advantage

- Art 33: Clarification needed + obligatory response
- Open SCIP notifications for articles without SVHCs
- Obligatory Response in the context of Art. 33
- Inducing: standardised data structure and exchange format
- Basis for Digital product passport  
(→ Proactive Alliance proposal)



EUROPEAN  
COMMISSION

Brussels, 14.1  
SWD(2020) 2

COMMISSION STAFF WORKING DOCUMENT

Review of certain provisions of Regulation (EC) No 1907/2006 on the  
Registration, Evaluation, Authorisation and Restrictions of Chemicals (REACH), as laid  
down in its Article 138



The reports and reviews summarised in the previous section can help explain why there **has been little improvement in the implementation** [of Article 33 REACH] during the last decade. These include

- lack of awareness of duty holders,
- absence of adequate information management systems in certain companies,
- technical difficulties derived from the complexity of articles and their chemical content and
- scarce information on imported articles. (p. 34)

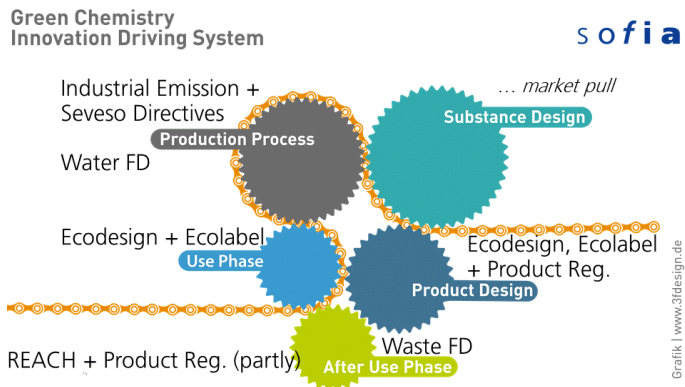
## D.2/3 Legal framework tomorrow

### 2. Advancing REACH: Registration Regime

Tackle “freerider” problem + increase data quality

- Completeness check
- Enhancing + enforcing the update requirement
- (Eco)Toxicology dashboard WikiREACH enhancing dossier update processes
- Increased transparency

### 3. Bigger picture: Innovation driving system



# Thanks for your attention!

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