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ENVIRONMENTAL LAW NETWORK INTERNATIONAL

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)

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Overview

A. A look back at Utrecht 2018: elni forum

B. Outcomes of the feasibility study

1. Basic information on the feasibility study
2. Overview of work process
3. Main outcomes
4. Recommendations

C. Policy Framework: Green Deal + New CE Action Plan

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NATUUR & MILIEU

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

&

Comments from a public administration perspective

Susanne Waaijers/Martien Janssen RIVM/NL

Introduction and conclusions by

Prof. Martin Führ, Darmstadt University of Applied Sciences (sofia, e

Prof. Gerhard Roller, Bingen University (elni)

The aim of the elni FORUM forum is to bring together, on a convivial basis and in a

EU law and the tracking of chemicals in materials

Environment Law Network International Forum

20 April 2018

Alice Bernard
Lawyer (Juriste), Chemicals

ClientEarth

Utrecht Centre for Water, Oceans and Sustainability Law

Circular Economy in the built environment new legal approaches needed?

Chris Backes

Universiteit Utrecht

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

1. Basic information on the feasibility study

- Commissioned by DG GROW
- Started 01 December 2018 Ended 31 May 2020

- Aim: assess the feasibility of options to support information flows on SoCs in products to the waste operators
  → generate benefits at the waste stage
  → no assessment of environmental impacts (i.e. LCA)

- Project focus:
  - Waste stage (not product / substitution)
  - **Information needs of the waste sector**
  - How to **transfer** the necessary **SoC information**

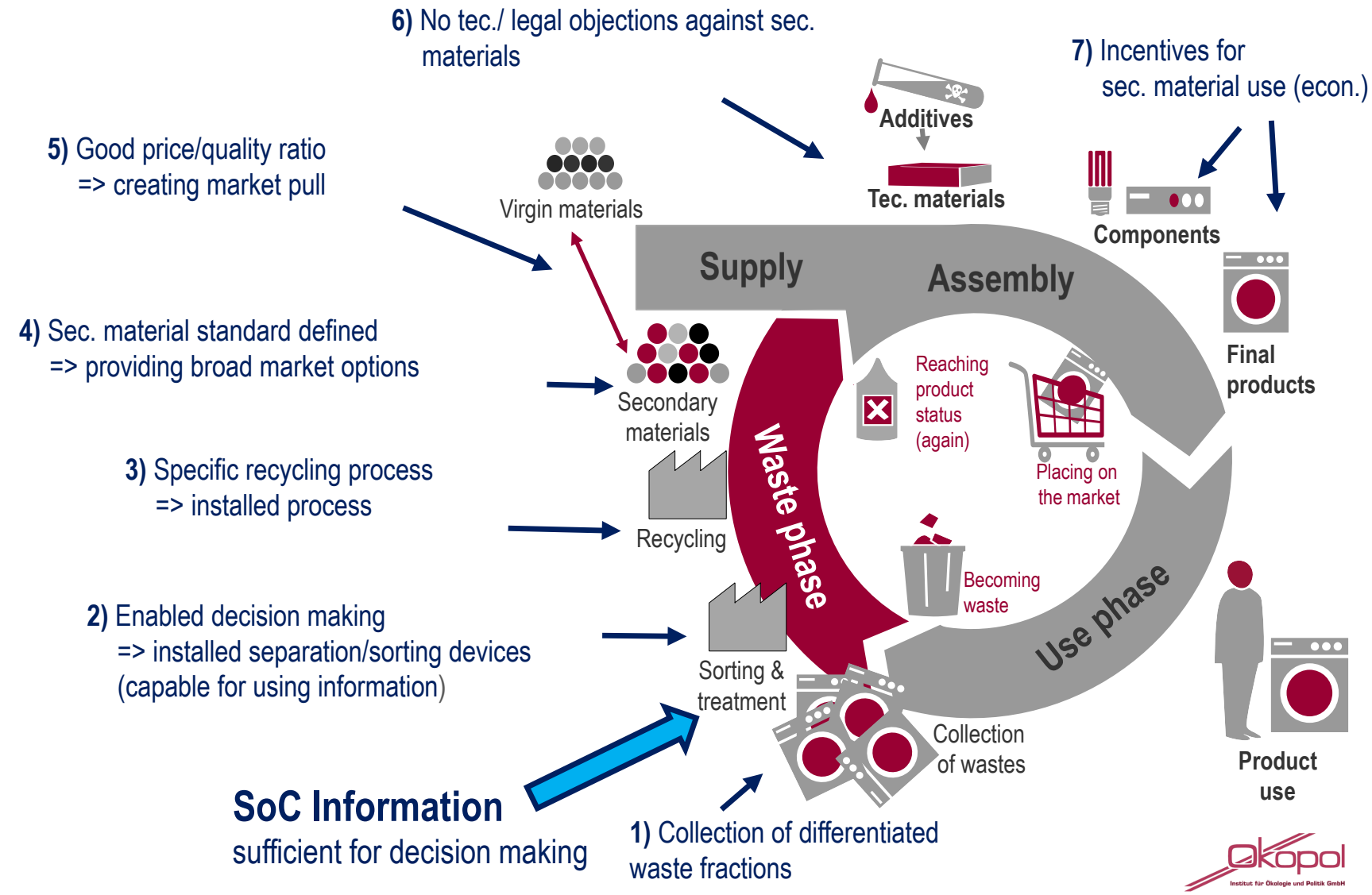
The project team

- Ökopol project lead

- Partners:
  - RPA UK
  - RPA Europe

  - sofia
    research Group
    Darmstadt University for Applied Sciences

Role of SoC information



Work process and results

Assess
Existing Legislation and tools on SoC communication

Develope
Criteria for case selection; work methodology

Perform Case studies (12)

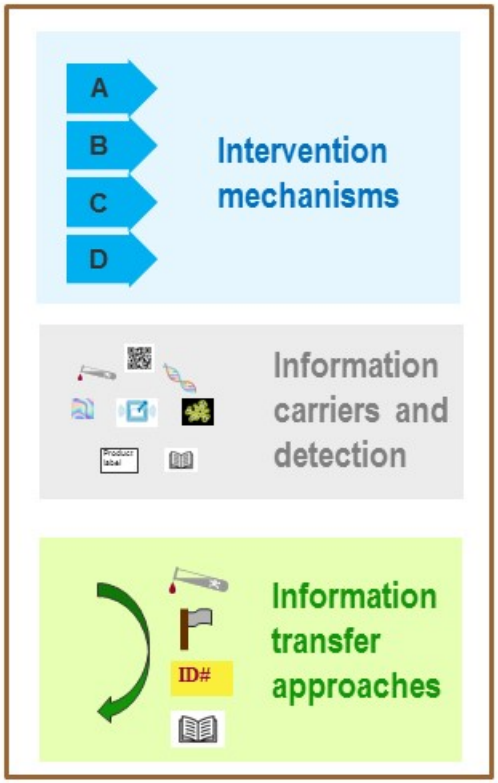
- Small EEE
- Fitted carpets
- Large household appliances
- EPS insulation
- Clothing textiles
- Plastic construction products
- Paper food packaging
- Passenger vehicle parts
- Aircraft parts
- Child safety seats
- Furniture
- Aluminium products

Assess Implementation options
different product examples and approaches to transfer information

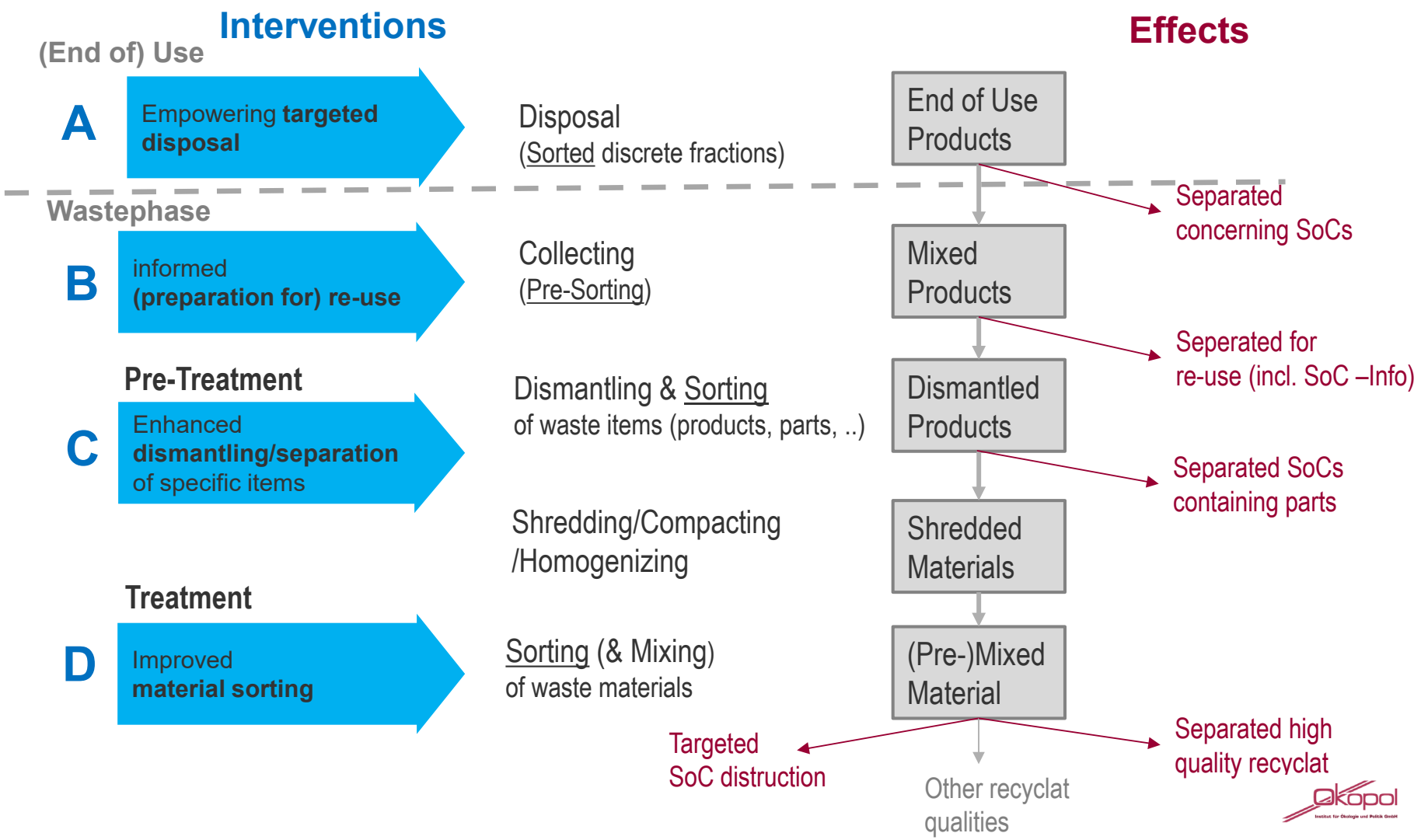
Cost assessment
for main cost drivers of different implementation options

Derive Conclusions Recommendations

Core elements
Information flow



Outcomes - Intervention mechanisms



Outcomes – Information transfer and carriers

Information carriers (examples)

SoC – PC Characteristics

Hologram

Label

Product label with infos on SoCs

QR-code

RFID

„Tags“

Organic molecules

Fluorescent molecules

„Tracer“

Documentation-System
(e.g. Building Pass)

Information transfer approaches

Establish an automated link to a central database

SoC detection

Flag

Yes/No decision

Unique identifier

Docume

Universally Unique Identifier (UUID)
ECHA-SCIP

Outcomes – Findings

- Improved SoC information could generate benefits => increased volumes of less contaminated materials enter recycling/reuse (few exceptions, e.g. aircraft, aluminium)
- No “one-fits-all system” *(for the time being)*
- Different combinations of intervention mechanism, information transfer approach and information carrier
  - Consideration of particularities of the sectors
  - Abilities and trends of waste treatment, including collection
  - Simple approaches may be useful for some product types (e.g. construction products)

Outcomes – Findings (2)

- Type of SoC information depends on waste sorters' decision needs
- Under current conditions → simple (Yes/No) is sufficient
  - Exception: informed (preparation for) re-use
- In the future if differentiated dismantling and re-manufacturing takes place → detailed material composition more important
- At present, waste operators do not see opportunities that justify investments in sophisticated sorting → no information demand

Outcomes – Findings (3)

- Qualitative cost assessment for two scenarios
- Costs only related to information transfer

- Carriers enabling transfer of large volumes of information and updating have highest implementation and operating costs (esp. unique identifier)

- Carrier type determines the cost distribution between:
  - supply chain
  - waste chain

Outcomes – Recommendations

- Market actors should combine approaches
  - Material-specific → create amounts (across sectors) and
  - Product-specific → efficient sorting early in the waste chain
- Standards on secondary materials are key to guide sorting targets:
  - Waste actors have to define required info (SoCs, …)
  - need (authority/*legislative*) support
  - Information flow elements may facilitate discussion on solutions *which are not used today*
- SCIP could contribute to improved re-use, but:
  - Collected information is not sufficient for that purpose
  - Extend to include all regulated substances and require updating?
- Do not forget the simple solutions
- Existing IT-technologies could support any option

Policy Framework: Green Deal + New CE Action Plan

European Green Deal [COM(2019) 640 final, p. 7]

- **The circular economy action plan will include a 'sustainable products' policy** to support the circular design of all products based on a common methodology and principles. It will prioritise reducing and reusing materials before recycling them. It will **foster new business models** and set minimum requirements to prevent environmentally harmful products from being placed on the EU market. **Extended producer responsibility** will also be strengthened.
- **Reliable, comparable and verifiable information** also plays an important part in enabling buyers to make more sustainable decisions and reduces the risk of 'green washing'. Companies making 'green claims' should substantiate these against a standard methodology to assess their impact on the environment. The Commission will **step up its regulatory and non-regulatory efforts** to tackle false green claims. Digitalisation can also help improve the availability of information on the characteristics of products sold in the EU. For instance, an **electronic product passport** could provide information on a product's origin, composition, repair and dismantling possibilities, and end of life handling.

Policy Framework: Green Deal + 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]

Policy Framework: Future Perspectives

Conclusions: Feasibility study + policy framework.

- Additional incentives are necessary to stimulate
  - Design for "**durability, reusability, upgradability and reparability**"
  - …
  - …
- Additional measures are necessary to address impediments
  - Standardization of data structure and data content
  - …
  - …

Thanks for your attention

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