

HAZBREF



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HAZBREF – Hazardous industrial chemicals in the IED BREFs

Break-out session 4: IED and Circular Economy Stakeholder conference 23.5.2019

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HAZBREF CE work: Objectives and focus

- How are CE issues currently dealt with in the BREF process? Is there need/possibilities to add elements to promote CE?
- What are the legislative barriers and possibilities for including CE issues in BREFs more extensively than now?
- How could/should the CE aspects connected to generation of **non-toxic material circles** be addressed in BREFs?
- Focus on hazardous substances!

What does IED say?

- The IED includes the **general principle of waste hierarchy** that where waste is generated it is in order of priority prepared for re-use, recycled, recovered or where not possible disposal (Art. 11 d and e).
 - **But the issue is not explicitly linked to the avoidance of harmful substances**
- The **permit application shall include** a description of used raw and auxiliary materials, other substances used by the installation (12 1. b) as well as the description of prevention, preparation for re-use, recycling and recovery of waste generated by the installation (Art. 12.1 h).
- The Article 14 “**Permit conditions**” **requires measures for limit values for polluting substances**, which are likely to be emitted, but for waste generation the requirements are only on general level and measures to be set for the use of raw materials or auxiliaries are not explicitly mentioned.

What does BREF guidance say?

- The BREF Guidance lays down rules on collection of data and drawing up of BREFs and includes the **following points related to raw materials and waste generation and recycling aspects**:
- The chapter entitled ‘Applied processes and techniques’ should include information which might be relevant in the determination of BAT such as **use of raw materials (including secondary/recycled), consumables and auxiliary substances/materials used, as well as handling and fate of by-products and residues/wastes**. (Chapter 2.3.5)
- The chapter “Current emission and consumption levels” should address **options for the recycling and reuse of materials** within the whole process **or beyond**. (Chapter 2.3.6)
- When considering **cross media effects** in assessing potential BAT techniques the “Limitation of the ability to reuse or recycle residues/waste” is mentioned. (Chapter 2.3.7.2.5)

Three approaches studied in HAZBREF

1) Production waste approach:

- Criteria on materials, chemicals, processes affecting the quality of production waste?

2) Secondary raw material approach:

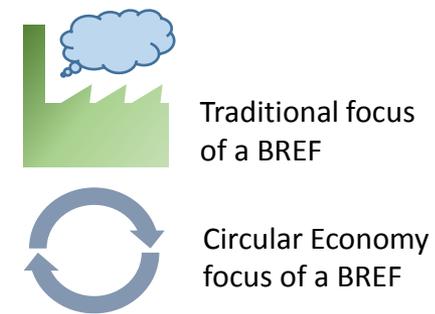
- Criteria on the secondary raw materials?

3) Product end-of-life approach:

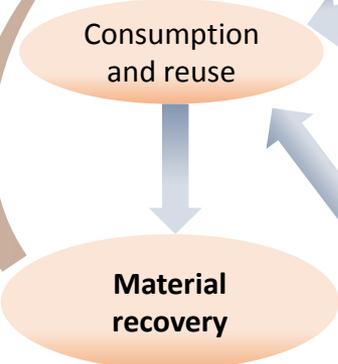
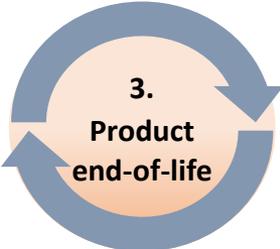
- Criteria on materials, chemicals, processes affecting the product recyclability?

Three approaches for bringing Circular Economy issues into the BREF process

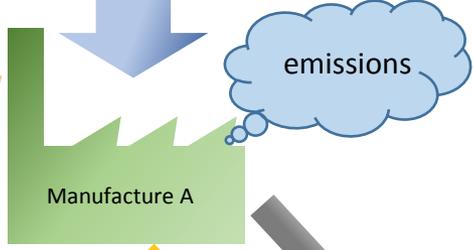
Could BATs be developed for BREF of ManufactureA regarding materials, chemicals or processes that affect approaches 1, 2 or 3?



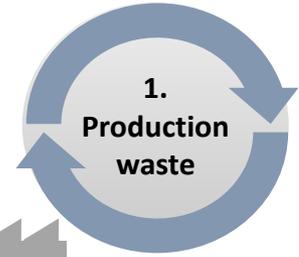
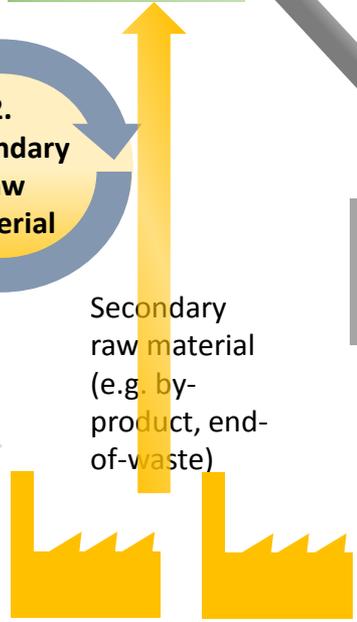
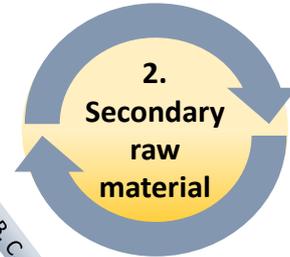
Criteria on materials, chemicals, processes affecting the product recyclability?



Raw materials Chemicals



Criteria on materials, chemicals, processes affecting the quality of production waste?



Criteria on the secondary raw materials?

A video presentation on IED & Circular Economy project by Natalia Andersson, Principal Consultant at Ricardo Energy & Environment

<https://we.tl/t-7bC5ab0Y6B>

(click the link to see the video)

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Baltic Sea Region



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Thank You!