Talk Mireille Reijme – Q&A

Q: How does it relate to the Critical Materials Act?
A: The CRMA also includes goals to reduce the supply risks of raw materials. Specifically, by 2030, the EU aims to extract at least 10% of its annual consumption of critical raw materials from within its own borders, process 40% domestically, and recycle 15% (European Parliament and Council 2024a). Furthermore, the EU should not be more than 65% dependent on any single country for each of the processing stages. To enhance the availability of critical raw materials, there must be a focus on circular design, reuse of components, and the development of high-quality recycling infrastructure for critical raw materials.

Q: How much is needed? Is there not more effort or larger efforts in capacity building needed to get this implemented?
A: More effort is indeed needed: *National Innovation Agenda Critical Raw Materials presented – ChemistryNL* and *Processing of Critical Raw Materials in the Netherlands*.

Q: What are your suggestions to us academics? What kind of research would there be needed to support this further? What kind of knowledge are you still looking for?
A: I would focus on strategies to use less through longer product lifespans, improving repairability, developing recycling technologies, and enhancing knowledge about product design. Furthermore, much more knowledge is needed across the four clusters identified in the *National Innovation Agenda Critical Raw Materials presented – ChemistryNL*.

Q: You mentioned quite a number of standards in your presentation, and with standards you try to set a norm that can only be accessed for a fee. Does that help in making sure that people have the same incentives in the end?
A: Currently, the set of standards *Material efficiency aspects for products in scope of Ecodesign legislation* (CEN - CEN/CLC/JTC 10) is being used by frontrunners in the EEA sector to achieve greater material efficiency. Even though the standards are not freely available, the fact that frontrunners are using them is driving significant change in the industry. Moreover, the Ecodesign Directive is evolving into the *Ecodesign for Sustainable Products Regulation (ESPR)*. The EN45552x to EN45560 standards will facilitate the implementation of the ESPR.

Q: Follow-up/Reaction to the answer: So, the fact that I have to pay already tells me that it is not yet embedded in law as far as the standard itself is concerned.A: There is a special offer for educational institutions to access the standards: *Education and Standardization*.

Q: What can be done to move from subsidized research projects—where companies across the supply chain collaborate—to a next phase of broader, more resilient implementation, especially given the challenges of scaling non-commodity, specialized products like those in textiles?
A: The hidden costs of negative externalities (such as mining, pollution, and waste) could be

taken into account. Due to the availability and price of resources, it remains difficult to shift away from the current linear system.

Q: What batteries must be replaceable?
A: There is a relevant text from the Battery Regulation, Article 11, see below.

Article 11
Removability and Replacement of Portable Batteries and Batteries for Light Means of Transport

1. A natural or legal person placing products with built-in portable batteries on the market shall ensure that end-users can easily remove and replace those batteries at any time during the product's lifespan. This obligation applies only to complete batteries and not to individual cells or other components of such batteries.
   A portable battery is considered easily removable if it can be removed from a product with commercially available tools, without requiring specialized tools—unless provided free of charge with the product—, proprietary tools, thermal energy, or solvents for disassembly.
   A natural or legal person placing products with built-in portable batteries on the market must ensure that these products are accompanied by instructions and safety information regarding the use, removal, and replacement of the batteries. These instructions and information must also be made permanently available online on a public website and must be easily understandable for end-users.
   This paragraph is without prejudice to specific Union legislation concerning the removability and replacement of portable batteries by end-users, which provides a higher level of protection for human health and the environment, particularly in legislation concerning electrical and electronic equipment as defined in Article 3(1)(a) of Directive 2012/19/EU.
2. By way of derogation from paragraph 1, the following products with built-in batteries may be designed so that the battery can only be removed and replaced by an independent professional:
   a) devices specifically designed to be mainly used in environments regularly exposed to splashing water, water streams, or immersion and intended to be washable or rinsable;
   b) professional medical imaging equipment and radiotherapy devices as defined in Article 2 (1) of Regulation (EU) 2017/745, and in-vitro diagnostic medical devices as defined in Article 2 (2) of Regulation (EU) 2017/746.
   The exemption under point (a) only applies if it is necessary to ensure the safety of the user and the device.
3. The obligations set out in paragraph 1 do not apply if the continuity of power supply is necessary and a permanent connection between the product and the respective portable battery is required for reasons of user or device safety, or, in the case of products that mainly collect and provide data, for reasons of data integrity.
4. The Commission is empowered to adopt delegated acts in accordance with Article 89 to amend paragraph 2 of this Article by exempting additional products from the

removability and replacement requirements set out in paragraph 1. Such delegated acts shall only be adopted based on market developments and technological and scientific progress, and where there are justified concerns about the safety of end-users removing or replacing portable batteries, or if removal or replacement could risk non-compliance with applicable Union safety laws.

5. A natural or legal person placing products with built-in batteries for light means of transport on the market shall ensure that an independent professional can easily remove and replace those batteries, including the individual cells of a battery pack, at any time during the product's lifespan.
6. For the purposes of paragraphs 1 and 5, a portable battery or a battery for a light means of transport is considered easily replaceable if, once removed from a device or light means of transport, it can be replaced with another compatible battery without impairing the functioning, performance, or safety of the device or light means of transport.
7. A natural or legal person placing products with built-in portable batteries or batteries for light means of transport on the market must ensure that such batteries are made available as spare parts to independent professionals and end-users for at least five years after the last unit of the product model has been placed on the market, at a reasonable and non-discriminatory price.
8. Software must not be used to prevent the replacement of a portable battery or a battery for light means of transport, or their main components, by another compatible battery or main component.

Note:
I understand that this can be quite heavy reading, especially for non-lawyers. I found a link that might be helpful (though I have not verified the Danish Intertek source myself):
Intertek Blog on EU Battery Regulation (August 2023).