RAKENNUS-
TEOLLISUUS

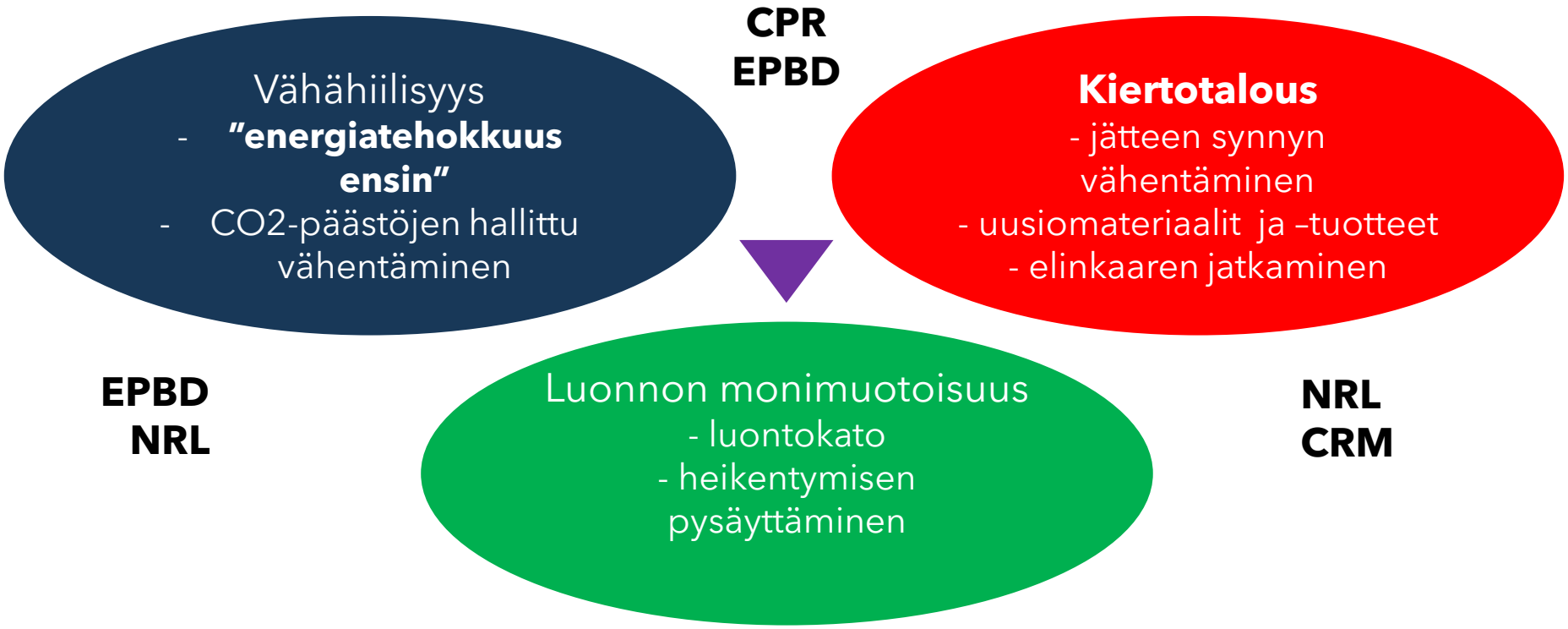
EU:n kiertotalouden säädöskatsaus

EU-taksonomian "Environmental Delegated Act" Kiertotalouden standardointi

Rakentamisen kiertotalouden ajankohtaispäivä 16.11.2023

Pekka Vuorinen
Rakennusteollisuus RT

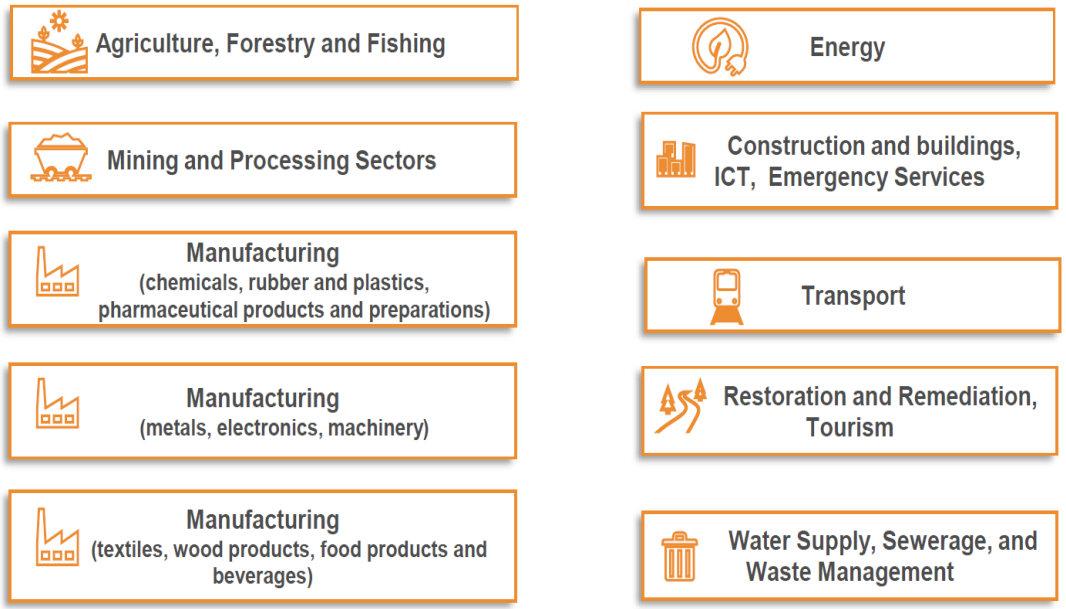
Vastuullisuutta ja kestävyyttä parantavien toimien jalkautuminen - raportointivaatimukset



Case: EU:n taksonomia-asetus ja yritysten kestävyysraportoinnin direktiivi (CSRD) sisältävät tai tulevat sisältämään kaikkiin näihin liittyviä <u>todennettavia</u> kriteerejä!

https://rateko.fi/hankkeet/taksonomian-jalkauttaminen-ja-kansallinen-tietovaranto/

EU-taksonomia – sektorit/toimialat



PLATFORM ON SUSTAINABLE FINANCE

"Taksonomiauudistuksen avulla valjastetaan ensi kertaa yritysten liiketoiminnan muskeli – rahoitus – vauhdittamaan päästövähennystavoitteiden toimeenpanoa"

Rakentaminen: keinot/kriteerit

- "Energy first" - energiatehokkuuden parantaminen läpileikkaavasti
- Hiilijalanjäljen pienentäminen
- **Kiertotalouden edistäminen**
  - Raaka-aineiden kulutuksen vähentäminen
  - Jätteiden synnyn vähentäminen
  - Kierrätyksen/uudelleenkäytön lisääminen
  - Käyttöiän pidentäminen ja pitkäaikaiskestävyyden parantaminen – elinkaaren jatkaminen
- Biodiversiteetin heikentymisen hidastaminen ja pysäyttäminen???

➢ **KIRA-sektorin merkittävä potentiaali talonrakentamisessa sekä maa- ja vesirakentamisessa**

EU-taksonomian ympäristöä koskeva delegoitu asetus (Environmental Delegated Act)

→ odotetaan astuvan voimaan 1.1.2024

Transition to a circular economy

"Kiertotalouteen siirtyminen mahdollistaa ekologisen kestävyyden, joka tuottaa merkittäviä hyötyjä kestävälle vesienhoidolle, luonnon monimuotoisuuden suojelulle ja säilyttämiselle, saastumisen ehkäisemiselle ja vähentämiselle sekä ilmastonmuutoksen hillinnälle. Kiertotalous kuvastaa taloudellisen toiminnan tarvetta edistää resurssien tehokasta käyttöä resurssien asianmukaisen uudelleenkäytön ja kierrätyksen avulla.

Teknisillä kriteereillä, joilla määritetään, millä edellytyksillä taloudellisen toiminnan katsotaan edistävän merkittävästi siirtymistä kiertotalouteen, olisi sen vuoksi varmistettava, että toiminnanharjoittaja ottaa suunnittelu- ja tuotantovaiheessa huomioon tuotteen arvon säilyttämisen pitkällä aikavälillä ja jätteen vähentämisen sen elinkaaren aikana. (...)

Tällä lähestymistavalla voidaan rajoittaa unionin talouden riippuvuutta kolmansista maista tuoduista materiaaleista, mikä on erityisen tärkeää kriittisten raaka-aineiden osalta. Sen vuoksi on aiheellista keskittyä ensin niihin taloudellisiin toimintoihin ja aloihin, joilla on suurimmat mahdollisuudet saavuttaa nämä tavoitteet"

(luonnos delegoiduksi säädökseksi, johdanto-osan 11 kappale)

1. Construction of new buildings

The use of primary raw material in the construction of the building is **minimised through the use of secondary raw materials**. The operator of the activity ensures that **the three heaviest material categories** used to construct the building, measured by mass in kilogrammes, **comply with the following maximum total amounts of primary raw material used:**

(a) for the combined total of concrete, natural or agglomerated stone a maximum of 70% of the material come from primary raw material;

(b) for the combined total of brick, tile, ceramic, a maximum of 70% of the material come from primary raw material;

(c) for biobased products, a maximum of 80% of the total material come from primary raw material;

(d) for the combined total of glass, mineral insulation, a maximum of 70% of the total material come from primary raw material;

(e) for non-biobased plastic, a maximum of 50% of the total material come from primary raw material;

(f) for metals, a maximum of 30% of the total material come from primary raw material;

(g) for gypsum, a maximum of 65% of the material come from primary raw material.

The thresholds are calculated by subtracting the secondary material from the total amount of each material category used in the works measured by mass in kilogrammes. Where the information on the recycled content of a construction product is not available, it is to be counted as comprising 100% primary raw material. Where a construction product is re-used, it is to be counted as comprising zero primary raw material. Compliance with this criterion is demonstrated by reporting in accordance with the Level(s) common EU framework for indicator 2.1.

2. Renovation of existing buildings

The use of primary raw material in the renovation of the building is **minimised through the use of secondary raw materials**. The operator of the activity ensures that **the three heaviest material categories** that have been newly added to the building in the renovation of the building, measured by mass in kilogrammes **comply with the following thresholds regarding the maximum amount of primary raw material used**:

(a) for concrete, natural or agglomerated stone a maximum of 85% of the material come from primary raw material;

(b) for brick, tile, ceramic, a maximum of 85% of the material come from primary raw material;

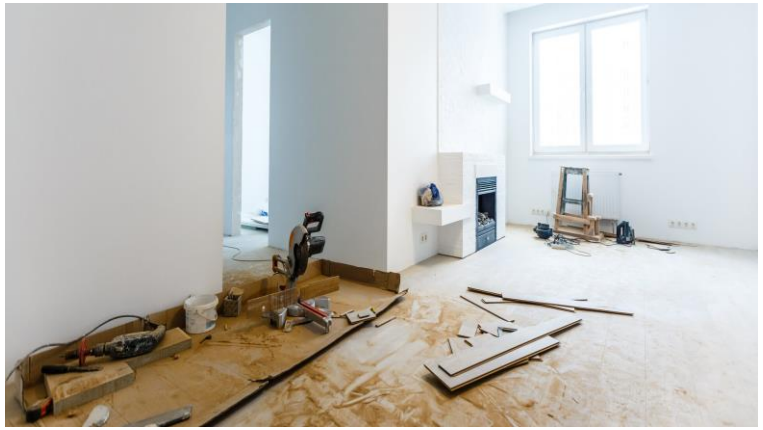
(c) for biobased products, a maximum of 90% of the material come from primary raw material;

(d) for glass, mineral insulation, a maximum of 85% of the material come from primary raw material;

(e) for non-biobased plastic, a maximum of 75% of the material come from primary raw material;

(f) for metals, a maximum of 65% of the material come from primary raw material;

(g) for gypsum, a maximum of 83% of the material come from primary raw material.



The thresholds are calculated by subtracting the secondary material from the total amount of each material used in the works measured by mass in kilogrammes. **Where the information on the recycled content of the construction product is not available, it is to be counted as comprising 100% primary raw material**. Where a construction product is re-used, it is to be counted as comprising zero primary raw material. Compliance with this criterion is demonstrated by reporting in accordance with the Level(s) common EU framework for indicator 2.1.

3. Demolition or wrecking of buildings and other structures

The operator of the activity conducts a **pre-demolition audit in line with the EU Construction and Demolition Waste Management Protocol.**

All demolition waste generated during the demolition or wrecking activity is treated in accordance with **Union waste legislation** and the **full checklist of the EU Construction and Demolition Waste Protocol.**

At least 90 % (by weight) of the non-hazardous demolition waste generated on the demolition site is prepared for re-use or recycling. This excludes naturally occurring material referred to in category 17 05 04 in the European List of Waste established by Commission Decision 2000/532/EC. The operator of the activity **demonstrates compliance with the 90% threshold by reporting on the Level(s) indicator 2.2 using the Level 3 reporting format for different waste streams**. Alternatively, at least 95% for mineral fraction and 70% for the non-mineral fraction for non-hazardous demolition waste is separately collected and prepared for reuse or recycled.

4. Maintenance of roads and motorways

Where main road elements (binder course, surface course or concrete slabs) are demolished or removed, **100% (by mass in kilogrammes) of the non-hazardous waste generated onsite is prepared for re-use or recycling**. This excludes naturally occurring material referred to in category 17 05 04 in the European List of Waste established by Commission Decision 2000/532/EC.

Where road elements are newly installed after demolition or removal, **at least 50% (by mass in kilogrammes) of the structural road elements used are re-used or recycled materials.**

The re-used or recycled materials **are not moved over distances greater than 2.5 times the distance between the construction site and the nearest production facility** for equivalent primary raw materials, to avoid that the use of re-used or recycled materials leads to higher CO2 emissions than the use of primary raw materials.

4. Maintenance of roads and motorways

Where newly installed, **the binder course has a service lifetime no shorter than 20 years.**

The use of primary raw material for road furniture is minimised **through the use of re-used or recycled products**. The operator of the activity ensures that for metals, such as steel barriers, a maximum of 30% of the material come from primary raw material.

5. Use of concrete in civil engineering

All generated construction and demolition waste is **treated in accordance with Union waste legislation** and **the full checklist of the EU Construction and Demolition Waste Management Protocol,** in particular by setting sorting systems.

At least 90 % (by weight) of the non-hazardous construction waste deriving from concrete products is prepared for re-use or recycling. This excludes naturally occurring material referred to in category 17 05 04 in the European List of Waste established by Commission Decision 2000/532/EC.

The operator of the activity demonstrates compliance with the 90% threshold by reporting on the Level(s) indicator 2.2 using the Level 2 reporting format for different waste streams.

5. Use of concrete in civil engineering

The **use of primary raw material is minimised through the use of recycled products. For concrete, a maximum of 70% of the material comprises primary raw material**. This criterion applies to in-situ poured concrete, pre-cast products, and all constituent materials, including any reinforcement.

The re-used or recycled materials is not moved over distances **greater than 2.5 times the distance between the construction site and the nearest production facility** for equivalent primary raw materials, to avoid that the use of re-used or recycled materials leads to higher CO2 emissions than the use of primary raw materials.

EU-komission nettisivuja

- Komissio ehdotus taksonomian ympäristöä koskevasta delegoidusta asetuksesta (27.6.2023): https://finance.ec.europa.eu/publications/sustainable-finance-package-2023_en
- "EU taxonomy stakeholder request mechanism", taksonomiaan liittyvän palautteen antamiseen:
  - https://finance.ec.europa.eu/sustainable-finance/overview-sustainable-finance/platform-sustainable-finance/stakeholder-request-mechanism_en
- Päivitetty EU Taxonomy Navigator: *a new website to help users better understand the EU Taxonomy in a simple and practical manner, including supporting companies with implementing their taxonomy disclosures.*
  - https://ec.europa.eu/sustainable-finance-taxonomy/
  - Navigator'ista löytyy uusi työkalu "Calculator" (yläpalkki):
    - https://ec.europa.eu/sustainable-finance-taxonomy/wizard

Kiertotalouden standardisointi

Eurooppalaisten arviointijärjestelmien ja -menetelmien yhdenmukaistaminen – standardoinnin merkitys

Kasvava ympäristötietojen kysyntä ja vaatimus!

- Päällekkäiset ja ristiriitaiset ympäristöluokitukset ja toimijoiden kannalta kestämättömät kelpoisuus-/vaatimustenmukaisuusarvioinnit
- Tavoitteena tietojen tuottaminen vain kerran yhteisesti sovitulla läpinäkyvällä tavalla
  - Kaupan teknisten esteiden poistaminen → rakennustuotteiden ja -materiaalien vapaa liikkuminen Euroopan talousalueella
  - perusta kaikkien tuotekelpoisuuden ja vaatimustenmukaisuuden arviointien ja luokitusten yhdenmukaistamiselle
- case CEN/TC 350: Rakennustiedon ympäristöluokitus, Joutsenmerkki, LEED, BREEAM, DGNB, HQE...
  - Komission harmonisointimandaatti M/350 (2004)
- case CEN/TC 351: luokkaa 36 rakennustuotteiden päästöluokitusjärjestelmää EU:ssa; Suomessa Rakennustiedon M1-päästöluokitus
  - Komission harmonisointimandaatti M/366 (2005)

CEN/TC 350/SC 1 Circular economy in the construction sector

Scope

- *Standardization in the field of circular economy in the built environment specifying circular principles and guidelines and requirements to facilitate the transition to a more sustainable circular economy including tools and processes to achieve this; covering design to de-construction and end-of-life scenarios in all stages of current and subsequent life cycles. This applies to new and existing construction works (buildings and civil engineering works), including their products, materials and components. The Subcommittee deals both with technical issues on circularity, as well as environmental, economic and social challenges. This work will take into account standards of CEN/TC 350 and consider the work of existing committees on subjects that may support the circular economy in the construction sector, such as ISO/TC 323 and CEN-CLC/JTC 10, including initiatives of the European Commission.*

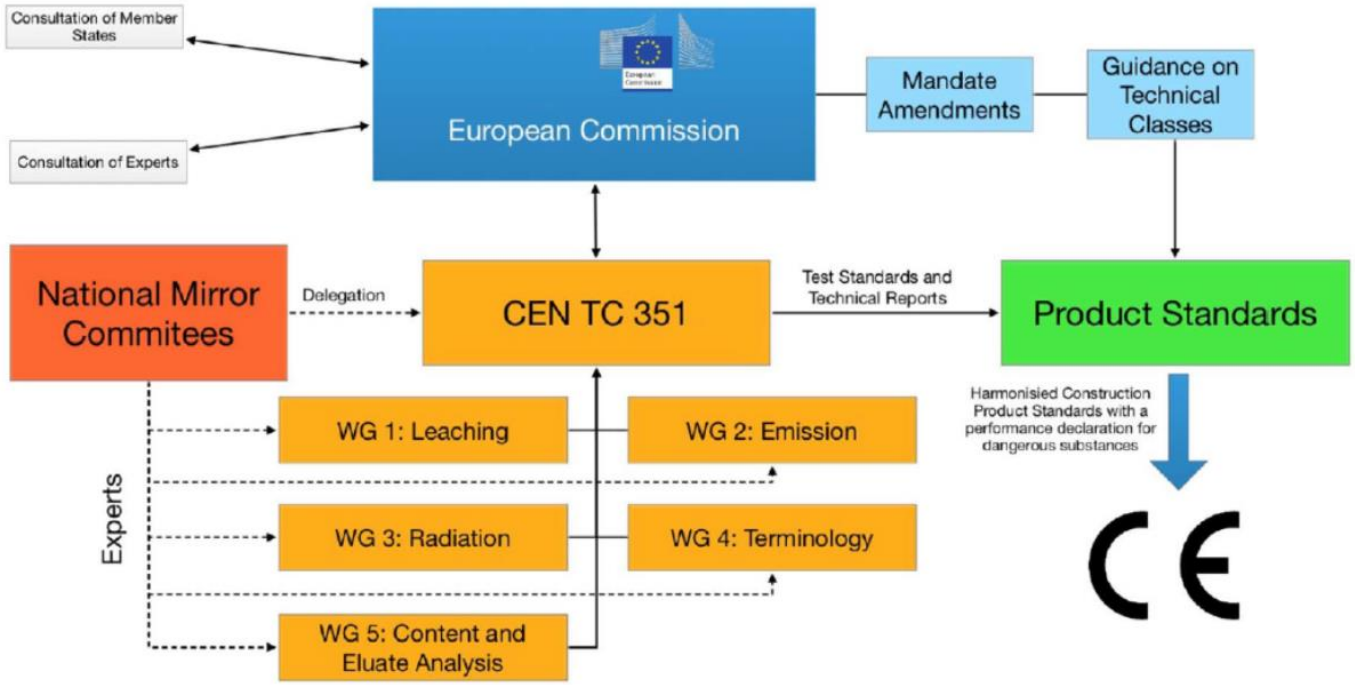
Työryhmät

- CEN/TC 350/SC 1/WG 1 - Framework, principles and definitions
- CEN/TC 350/SC 1/WG 2 - Gap analysis, conclusions and recommendations
- CEN/TC 350/SC 1/WG 3 - Chair Advisory Group (CAG)

- Task Group 1 "Circularity related parts to a product, material and building passports/log-books“
- Task Group 2 "Circularity assessment“
- Task Group 3 "Pre-demolition and pre-redevelopment audits and evaluation“
- Task Group 4 "Horizontal standard/Technical Report for re-use of construction, products, and materials"
- Task Group 5 "Horizontal standard/standards for design for circularity at all levels for construction

CEN/TC 351 Construction products: Assessment of release of dangerous substances (established 2006)

-the aim to harmonize assessment methods for CE marking purposes (Declaration of Performance) under CPR (Mandate M/366)



- WG1 Päästöt maaperään ja vesiin
- WG2 Sisäilmaemissiot
  - EN 16516:2017+A1:2020
- WG3 Ionisoiva säteily
- WG4 Terminologia
- WG5 Pitoisuus ja eluaattien analysointi

SFS

ISO/TC 323 Circular Economy:

Tulevat kiertotalousstandardit

Tunnus	Otsikko	Julkaisu
ISO 59004	Circular economy – Terminology, principles and guidance for implementation	Huhti-touko 2024
ISO 59010	Circular economy – Guidance on the transition of business models and value networks	Huhti-touko 2024
ISO 59020	Circular economy – Measuring and assessing circularity	Huhti-touko 2024
ISO 59040	Circular Economy – Product Circularity Data Sheet	Helmikuu 2025
ISO 59014	Secondary materials – Principles, sustainability and traceability requirements	Marraskuu 2024

"FINLAND has pushed back its goal of achieving a recycling rate of 70 per cent for construction and demolition waste from 2020 to 2027, after seeing only a three-percentage-point increase to 57 per cent between 2018 and 2021, reports YLE" → Suomi ei saavuttanut EU:n jätepuitedirektiivin tavoitteita!

Creating a good circular economy environment for the building sector in Netherlands
A. van Zomeren / Helsinki, December 1st 2016 (RaMaTe-seminaari)

ECN

Conclusions

- High percentage of C&DW recycling in NL (>95%)
- Construction industry is still far from being circular
- Hesitation in new markets hampers circularity of industry
- Clear and workable regulations and quality assurance system is important
- Equal treatment of primary and secondary materials creates level playing field
- Policy instruments enable sustainable developments for industry

'Paradigm shift' needed for circular economy

- *"Pietikainen says the circular economy requires rules" (Photo: European Parliament)*

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Kiitos mielenkiinnostanne!

Lisätietoja kiertotalousstandardisoinnista
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