BUSINESSEUROPE

TUSIAD
Digital Product Passport, overview

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Konecranes in numbers

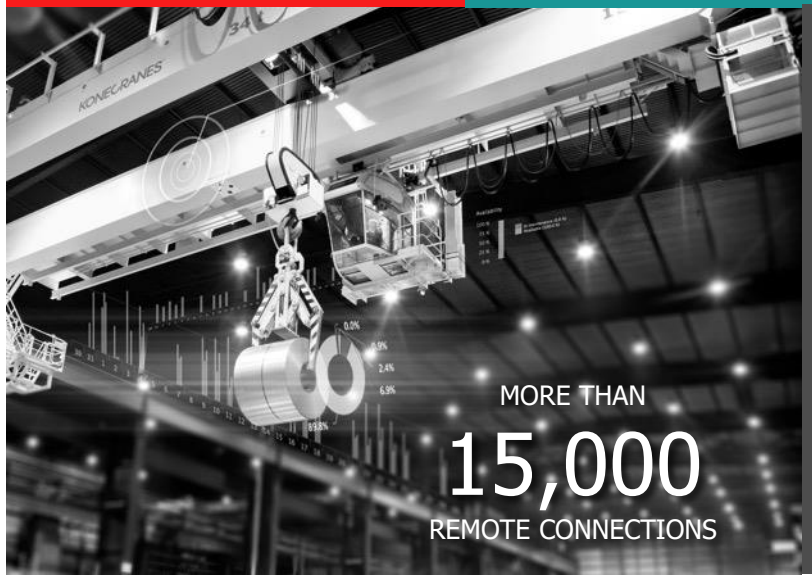
ACTIVE IN
50
COUNTRIES

EQUIPMENT IS
65%
OF TOTAL SALES

SERVICE IS
35%
OF TOTAL SALES

GROUP OPERATING MARGIN
8.2%
OF NET SALES

€3.2
BILLION IN SALES



MORE THAN
15,000
REMOTE CONNECTIONS

600,000
ASSETS UNDER SERVICE AGREEMENT

16,900
EMPLOYEES

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Some key trends driving sustainability in 2022

1. **More transparent and wider disclosures.**
   New regulations and reporting standards will demand more credible disclosures. Alongside rising pressure to ensure these metrics measure impact, not just inputs.

2. **Race to net-zero.**

   Requirement to have clear transition plan to 1,5C by 2030 and to pledge for 2050 net-zero. As the world's biggest companies work to go net-zero, downward pressure on greenhouse-gas emissions of their supply chains is high.

3. **Resource scarcity** and continuing price increase of rare earth metals used in electronics and changeable batteries. → Changes in how we value raw materials drive circularity

4. **Biodiversity**

   Assessing natural capital and biodiversity risks will continue to rise in importance.

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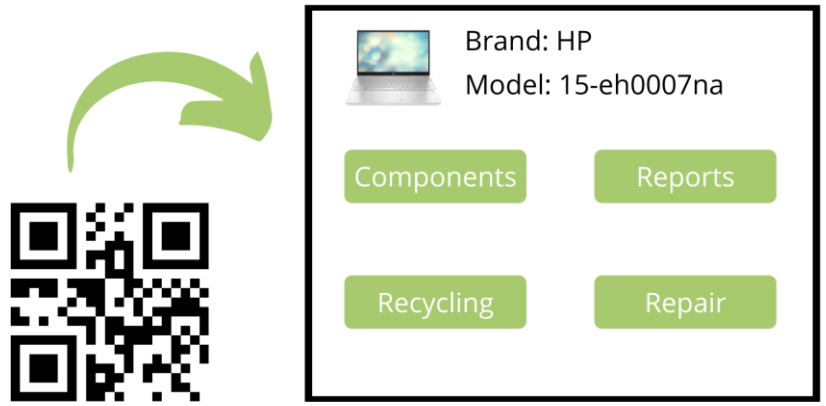
EcoDesign for Sustainable Products Regulation (ESPR)

- EU level Circular Economy Action Plan –> implemented though the EcoDesign for Sustainable Products Regulation that now cover also other than energy related products. The aim is to make the products available on the EU market more durable and sustainable.

- **Digital Product passport** (DPP) is the tool for implementing ESPR: shall include relevant information on the product i.e. relating to its durability and recyclability



Source: 3 Key Arguments for Digital Product Passports | Re-Tek

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EcoDesign for Sustainable Products Regulation (ESPR)

- The EU wants to set EcoDesign requirements for specific product categories to significantly improve their circularity, energy performance and other environmental sustainability aspects.
  - Minimum EcoDesign and information requirements will be set for almost all categories of physical goods placed on the EU market.
  - By bringing a common approach to products in the EU will help to create a level playing field
- The EcoDesign requirements will **be tailored** to the particular characteristics of the product groups concerned.
- The ESPR will be **complementing existing product-specific EU rules**: the example of construction products, batteries, packaging and chemicals → Regarding chemicals, the ESPR's can complement existing law governing chemicals, such as REACH21 , the primary focus of which is ensuring chemical safety.

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EcoDesign for Sustainable Products Regulation (ESPR)

- The selection of **product groups and the setting of product-specific rules** will be subject to long-term planning, as well as to impact assessments and administrative burden evaluation → to avoid market distortions, reduce compliance costs and administrative burden.
- A preliminary assessment made by the Commission has identified that priority product categories could be textiles, furniture, tyres, paints, lubricants, as well as iron, steel and aluminium having have high environmental impact. **The priority groups will be decided at the end of 2022.**
- By setting a comprehensive cross-sectoral framework, the general direction and objectives will be **clear well in advance** (so the industry has time to prepare)

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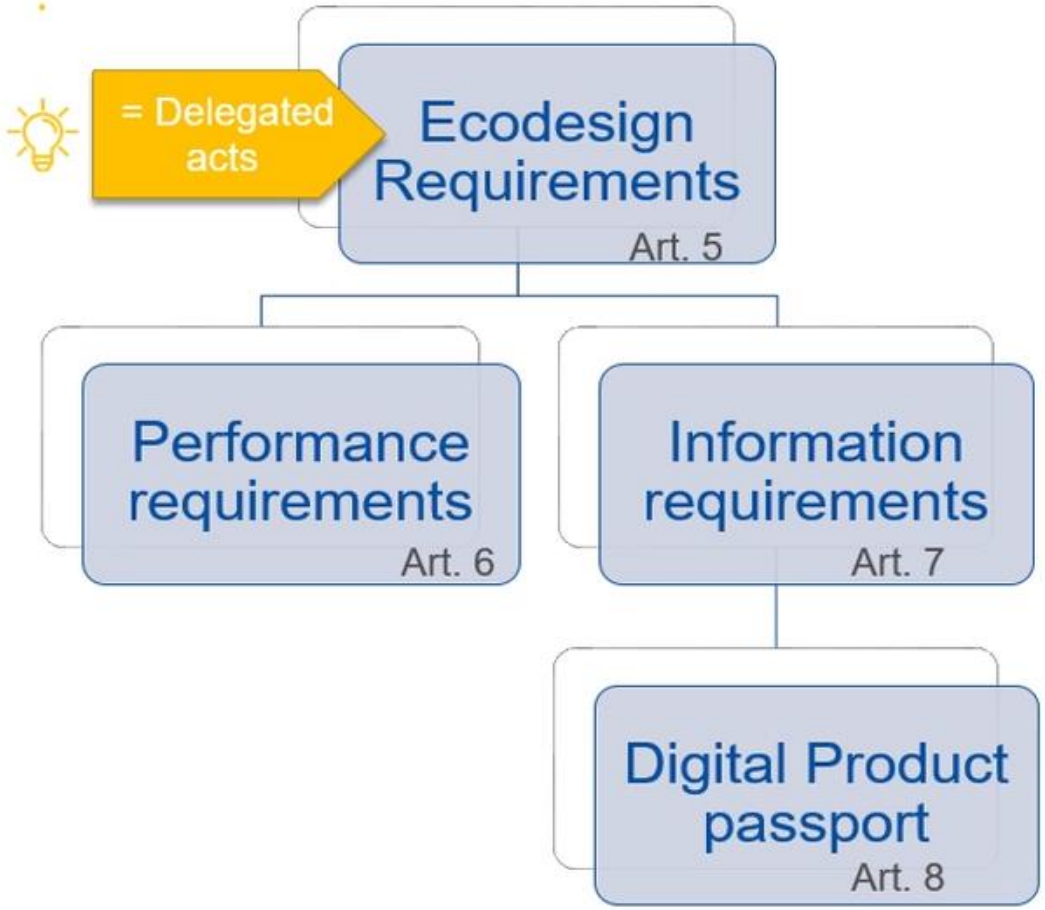
ESPR
Key Ecodesign product aspects



- **durability**, **reliability**; **reusability**; **upgradability**;
- **reparability**; possibility of **maintenance** and **refurbishment**;
- presence of **substances of concern**;
- **energy use** or **energy efficiency**;
- **resource use** or **resource efficiency**;
- **recycled content**;
- possibility of **remanufacturing** and **recycling**;
- possibility of **recovery** of materials;
- **environmental impacts**, including carbon and environmental footprint;
- expected generation of **waste** materials.

European Commission

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DPP
Data carriers and Unique Product Identifiers

The EU DPP shall be connected through a **data carrier** to a **unique identifier**

Data carrier

Barcodes, watermarks, fluorescent markers, RFIDs are some other examples of data carriers

Unique identifier

https://id.example.com/01/09506000134352/10/ABCDEF/21/1234?17=221225

Any domain name | The product ID (GTIN) | Batch | Serial No | Expiry

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What do we want to accomplish with the DPP?

- It strives to **give relevant information** regarding the sustainability metrics of a product
- Improve circularity and reparability of a product throughout its lifecycle. The passport itself will not help extend the life cycle of the product, but it can **help extend the lifespan by sharing data for re-use and enabling access to repair**
- The DPP is also an **opportunity** for developing new circular markets and business services to achieve a functioning EU market for secondary raw materials → contributing to a climate neutral future
- Inform about the sustainability of materials used and also all other sustainability aspect relevant for this product → share information to **support better decision making on every level**. We need to make the **climate and circularity impact visible** to cut the emissions and promote the sustainable use of natural resources
- We want to extend the **knowledge of Design for Circularity** in the product development field across EU, enhance and build new ecosystems around the data and improve information exchange
- Help build a **secondary material market**, to enable recycled content to replace virgin content

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What data points are relevant and critical?

- **Material breakdown** - Providing more transparency on the materials *can enable* the *re-use* of products at the end of life and at the end of life, enhance *recycling processes and create secondary markets* for the recycled content
- **Repair information** - Allowing customers and manufacturers to access *repair services* / e-commerce for spare parts more easily
- **Life span data on some key components/ substance data** - helping retain critical raw materials and strategic components in the market
- <u>The information requirements will be adjusted separately to each product category</u>

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What data can we share easily that enhances circularity?

- European companies will gladly deliver data necessary to facilitate circular economy - but the value of data in the **DPP should be proportionate to its costs** (i.e. investments in knowledge-based assets, software solutions and administrative burdens) and tailored to each product group.
- The disclosure of data should be **limited to circular purposes** and tailored according to specific product groups and recipients' needs.

- "Low hanging fruits" always depend on the product category but usually **environmental data** is required in so many other places so it would be easy to share

- Energy consumption
- Means of produced energy
- Water consumption
- Water waste treatment
- CO2 emissions

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ESPR
Digital Product Passport (DPP)

There are 3 ‘milestones’ introduced ahead of the full operalisation of the DPP:

1. Regulation: Introduction of the DPP **concept**, description of the **scope**, identification of some **key features.**

2. Identification of **essential technical requirements** to be developed through standardisation process. A safety clause is introduced in case of delays or if the quality of the standards is not ‘fit for purpose’. In such case the Commission shall adopt **common specifications** with the technical requirements needed.

3. Delegated acts: Identification of the **specific information** to be included in the DPP for each product or product group.

DPP mandatory for all products for which there is a delegated act

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Views from the technology companies: Pro´s

- Expanding criteria setting for product sustainability (EcoDesign)
- Regulation instead of directive – faster and applied to all at the same time
- Product level performance and information requirements (not article)
- By bringing a common approach to products in the EU will help to create a level playing field
- Sharing information (DPP) to enhance circularity, improving legislations (i.e. waste)
- Supporting the SME sector (trainings)
- Setting up the EcoDesign forum where all stakeholders can inluence
- Increasing transparency
- Fight greenwashing
- Responding to consumer demand for sustainability
- Improving risk management
- Creating commercial partnerships, business opportunities

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Views from the technology companies: Concerns

- Giving the Commission such power over product design and life span impacts (delegated Acts)
- Admin burden– dynamic passports
- Data gathering: global nature of supply chains
- Using current standardizations as much as possible for data
- Social data per product will be hard to get
- Substances of concern: There will be overlaps (REACH, RoHS and ESPR), adding a lot of additional layers to data reporting:
  - → the **tracking of all substances of concern** throughout the life cycle of products.
  - There are plans to ban and restrict a wide range of substances – the trade off could lead to a shorter life span. Where will the trade off´s be discussed?
- Data sharing: access rights? Confidentiality? Does the company hold the rights to its own data?
- Information requirements: their validity and transparency? Need for verification. Market surveillance has a strong role…?
- Resourcing: Big and small companies, member states training
- The details: definitions-> what is a manufacturer, what is meant by destroying goods
- How to take the level of ambition to a practical level that serves circularity

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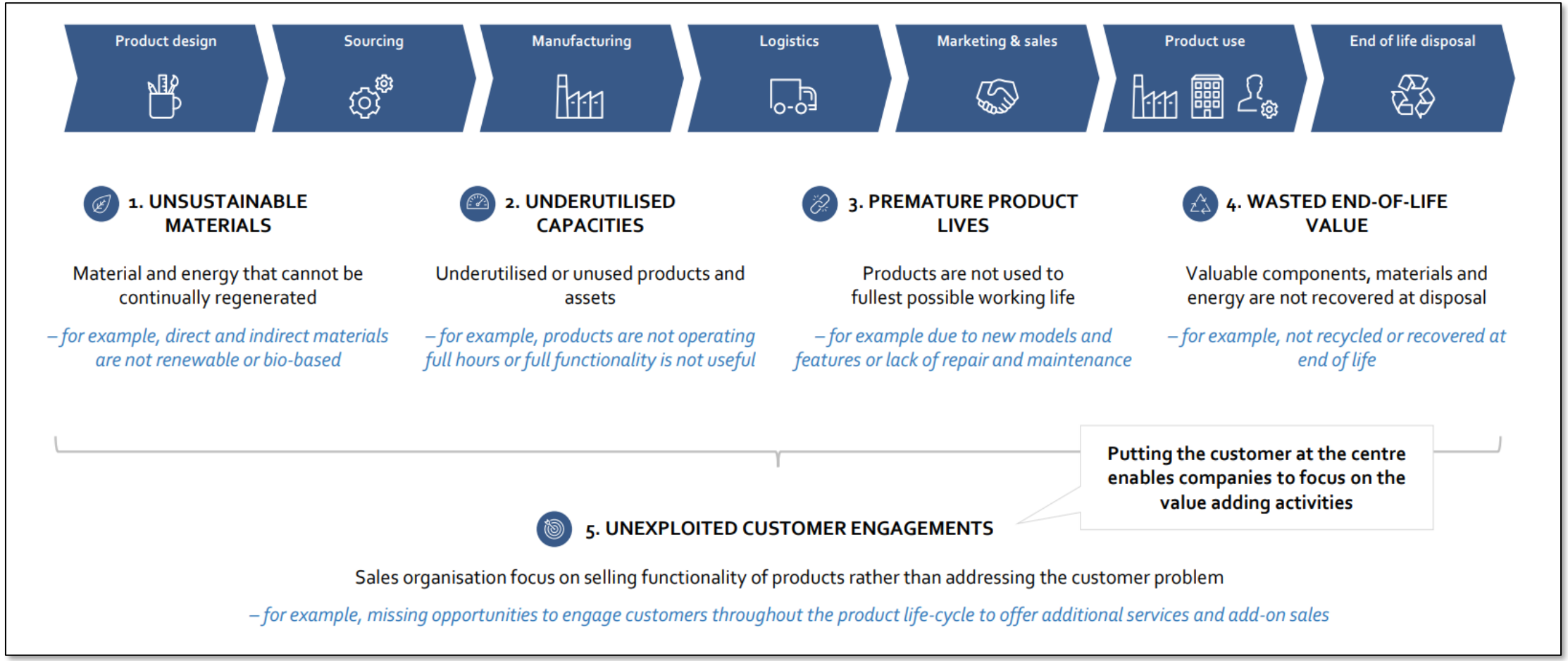
Inefficiencies create business opportunities across the value chain



Source: Nordic Circular Economy Playbook, © Nordic Innovation, 2021

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ESPR and DPP: Next steps

Timing

Proposal released on 30.3.2022. Will be set into force according the EcoDesign and energy labelling working plan for 2022-2024. First set of categories of products will be defined end of 2022. Needs Commission´s approval.

The technical characteristics of the passport and the identification of the specific content per product family will take place after the adoption. Once its framework is in place, the product requirements will be rolled out following multiannual working plans.

Impact

No immediate impact

The ESPR requires each product to have a separate, dynamic database (Digital Product Passport, DPP) where required info must be shared

- Possible data requirements:
  - Product durability, reusability, upgradability and repairability
  - Maintenance activities
  - Material breakdown, amount of recycled material used
  - SVHC in products
  - Energy and resource efficiency
  - Carbon and environmental footprints (and claims)
- The DPP will require the end product manufacturers to gather and distribute data when these specific products have an approved Category of Products framework.

Next steps

- The Commission will launch a public consultation on the categories of products to be selected under the first EcoDesign for Sustainable Products Regulation working plan by the end of 2022.
- DPP prototypes are currently being drafted.

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