

A new European regulatory framework for the green transformation – Implications for the machinery industry

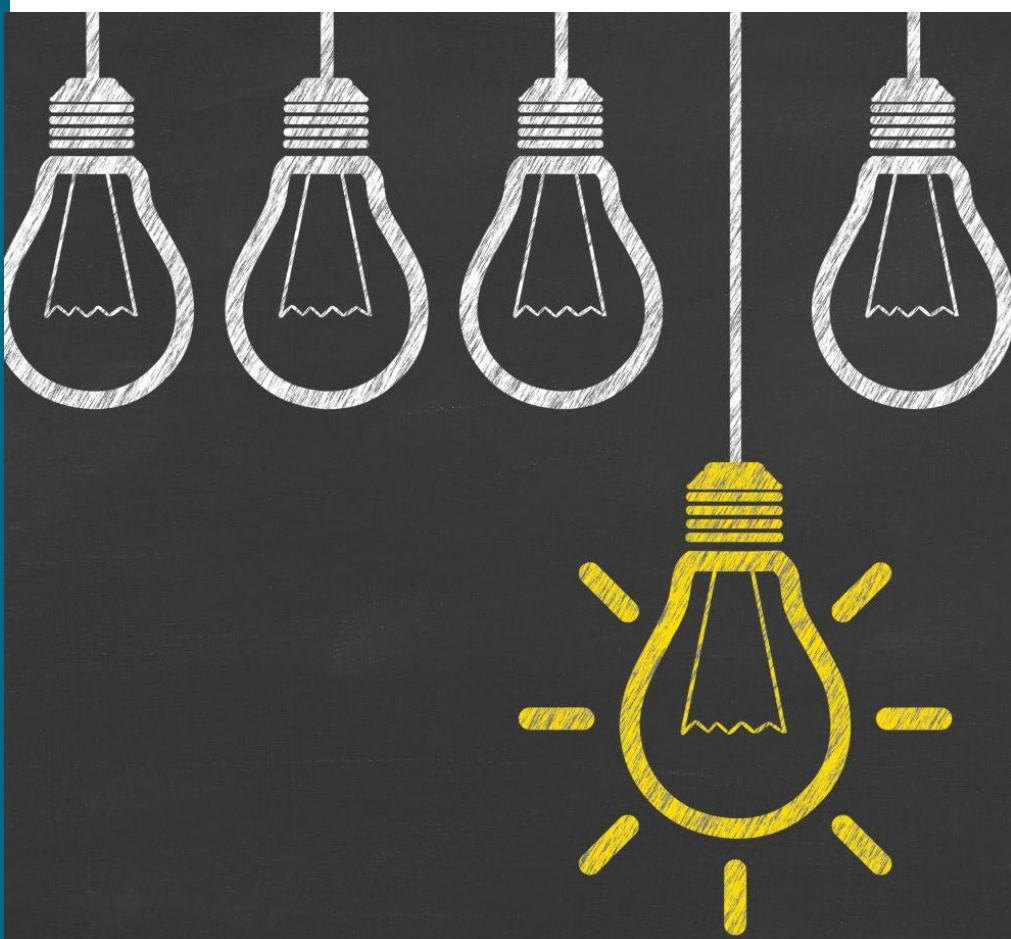
International Motion and Drives Summit, 19 April 2023, Hannover, Holger Kunze



EU Top Priority – Climate neutrality



European Green Deal
Striving to be the first climate-neutral continent



The narrative – Create first mover advantages

Global trend: Green transformation

- EU creates framework to become trendsetter in green technologies
- EU companies will benefit as first movers in global markets
- EU standards will become global standards

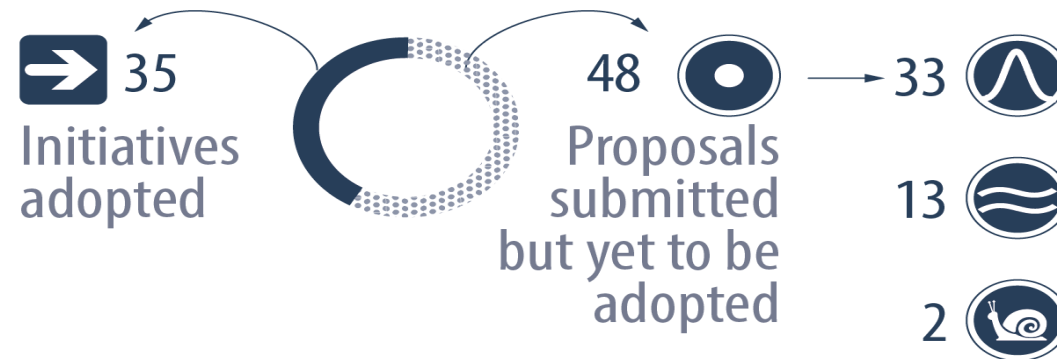
Green and digital transformation – An ambitious regulatory framework

A European Green Deal

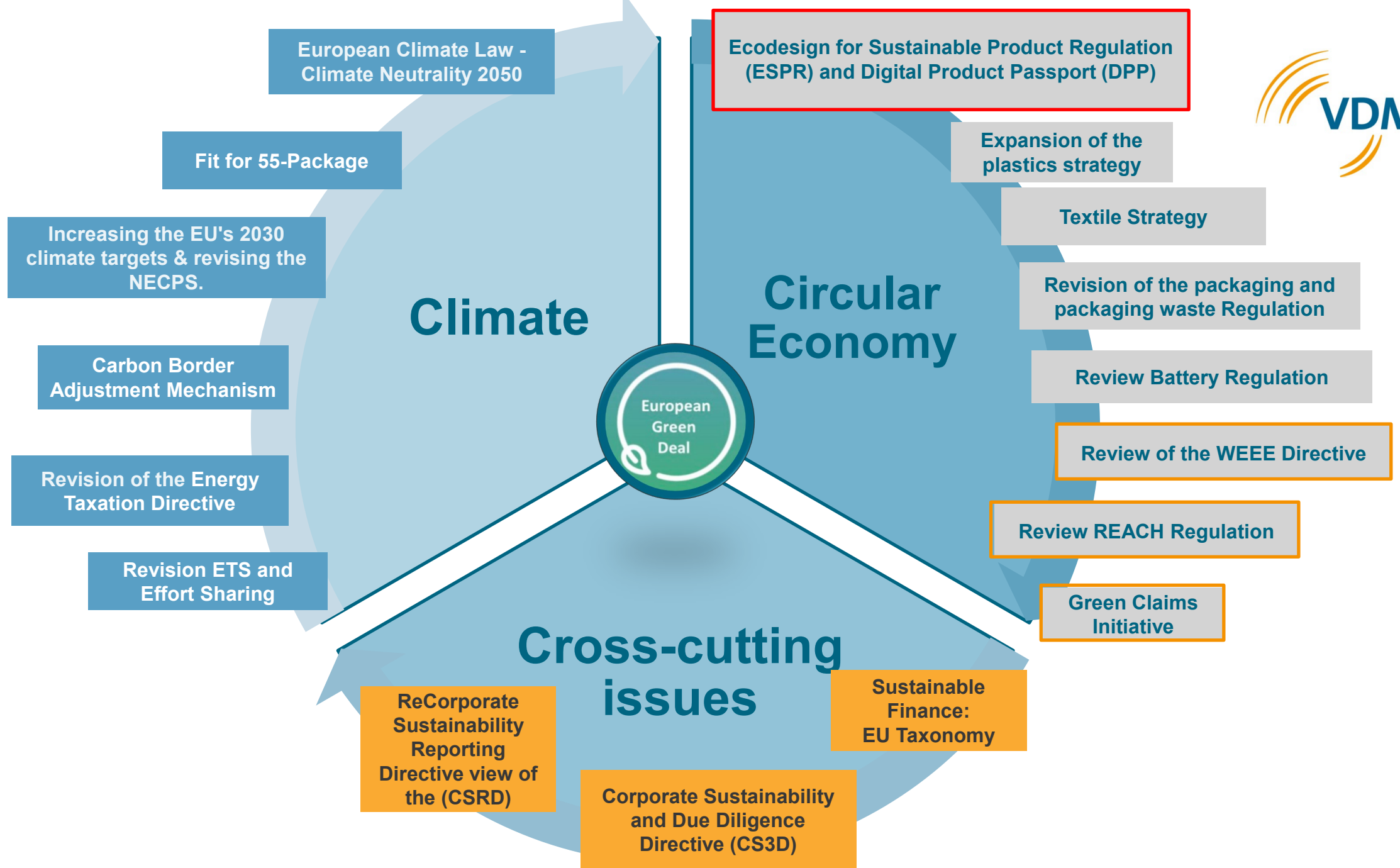
Initiatives for this term announced so far: 148



Initiatives submitted to date



EPRS | European Parliamentary Research Service





Fit for 55% package: Climate protection becomes concrete

"Fit for 55" package – Changing EU energy supply



Goal: Achieve the new 2030 targets

- Revision of the **EU Emissions Trading Scheme**
- Revision of the **Energy Taxation Directive**
- Proposed **CO2- Pricing** mechanism adjustment
- **Burden Sharing Regulation**
- Revision of the **Renewable Energy Directive**
- Revision of the **Energy Efficiency Directive**
- **Targets for EU Member States**
- **Regulation on Emissions and removals of greenhouse gases from land use, land use change and forestry**
- Legislative proposal against **methane emissions in the energy sector**
- Revision of the Regulation setting **CO2 emission standards for passenger cars and light commercial vehicles**
- Revision of the **Intelligent Transport Systems Directive** and the **Alternative Fuels Infrastructure Directive**.



The green transformation - sustainability and transparency



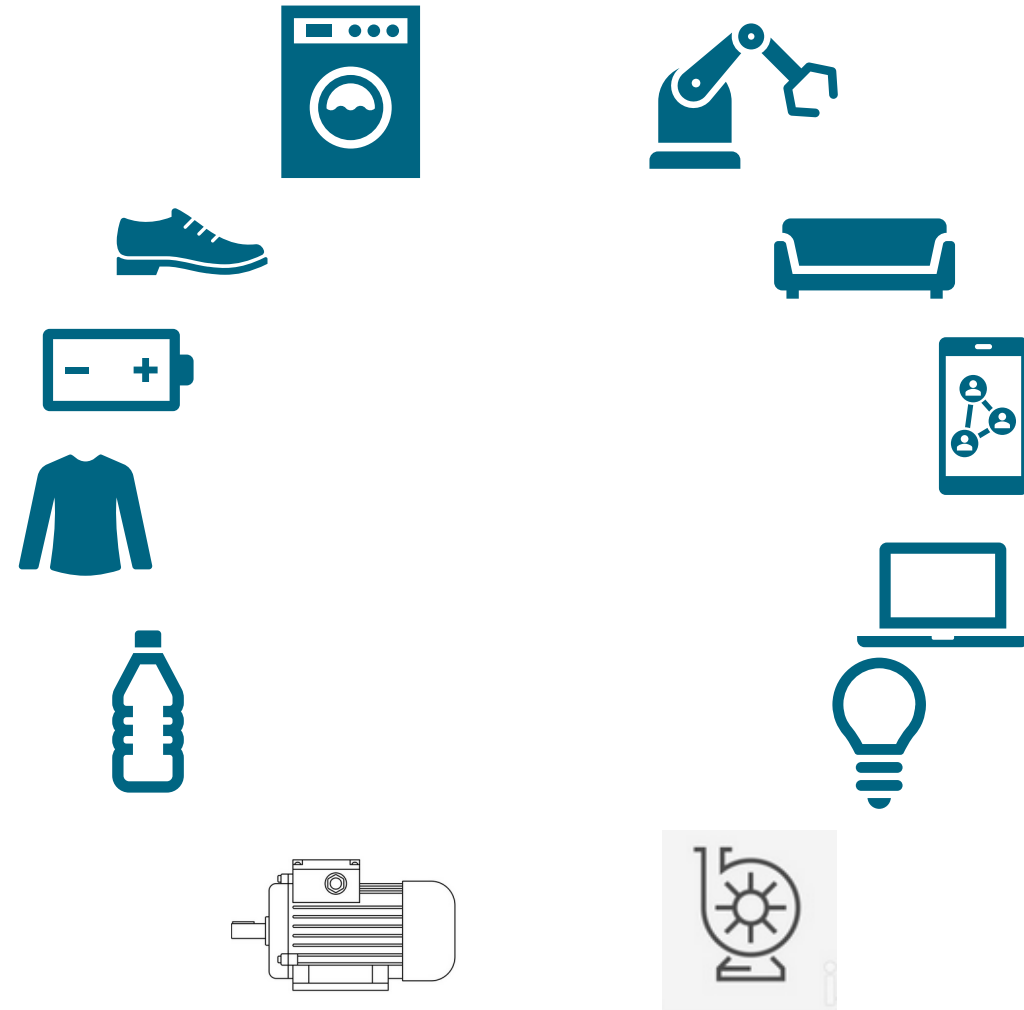
- **EU Sustainable Due Diligence Directive**
 - Transparency in the value chain re. human rights, compliance with international environmental and social standards
 - Entire value chain, mandatory for all EU companies with +500 employees
- **Corporate Sustainability Reporting Directive (CSRD)**
 - Non-financial reporting obligations for all companies \geq 250 employees
 - Implementing rules are being defined
- **Sustainable Finance (EU taxonomy)**
 - Link to CSRD
 - Possible problems with banks
- **Initiative to ban PFAS**



Make sustainable products the norm in the EU

Ecodesign Sustainable Product Regulation (ESPR)

- **Today: Ecodesign Directive** as main instrument for EU circular products
- **ESPR = Extension of the scope of the Ecodesign Directive to ALL products.**
- **Future: Horizontal Product Directive** for the European Single Market
- **First focus:** textiles, furniture & ICT
- **Mid- long term:** also B2B products and services



Upcoming EU initiatives on sustainable product policy

Ecodesign Sustainable Product Regulation (ESPR)

➤ **Goal:** Address products along their entire life cycle, key aspects:



- Improving the **durability, reusability, upgradability and repairability of products**



- Increasing the **recycled content in products** while ensuring their performance and safety



- Reduction of **substances of concern**
- Enabling **remanufacturing and refurbishment**



- High quality **recycling**
- Reduction of the **CO2 and environmental footprint**
- Increasing **energy and material efficiency**
- Exploiting the potential of digitizing product information, including a **Digital Product Passport (DPP)**.

Digital product passport

Flagship under the new product regulation

What:

Structured collection of product-related data with predefined scope and agreed data ownership and access rights, transmitted by a unique identifier

Like:

Decentralized system connected to a European data room
Based on harmonized standards

Content:

Information/data on the individual product ecodesign requirements



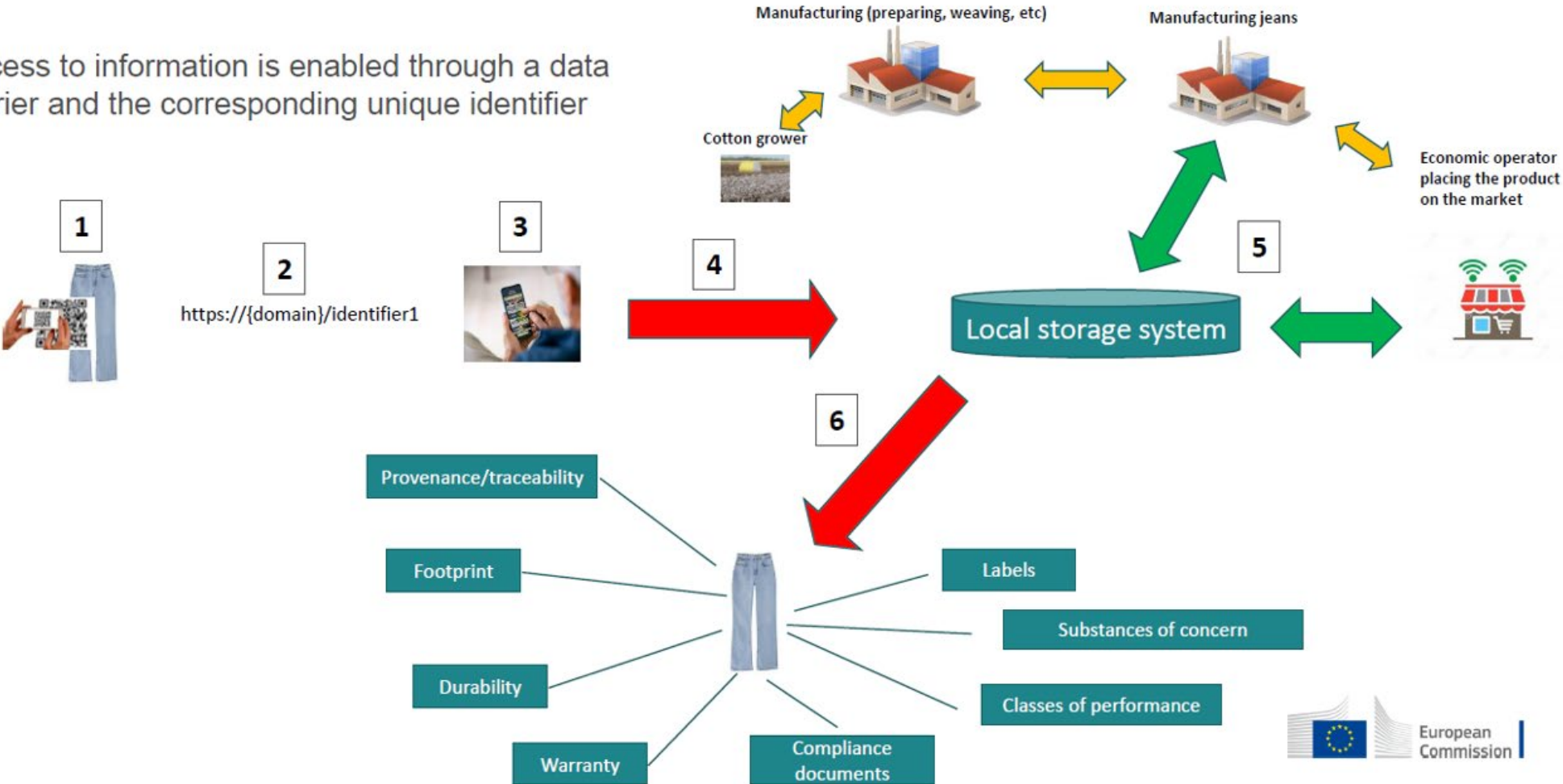
Digital product passport

Latest considerations of the EU-COM



Working principles

Access to information is enabled through a data carrier and the corresponding unique identifier



Digital product passport

Latest considerations of the EU-COM

The DPP business case



Tracking of **raw materials extraction/production**, supporting due diligence efforts



Enable **manufacturers** to create products **digital twins**, embedding all the information required either by or by customers in B2B transactions



Tracking the life story of a product, enabling services related to its **remanufacturing, reparability, second-life, recyclability**, new business models



Benefit **market surveillance authorities and customs authorities**, by making available information they

SORO Stefano (GROW) carry out their



Make available to **public authorities and policy makers** reliable information. Enable to link **incentives** to **sustainability performance**



Allow **citizens** to have access to **relevant and verified information** related to the characteristics of the products they own or are considering to **buy/rent** (e.g. using apps able to read the identifier)



EU initiatives on sustainable product policy - **Assessment**



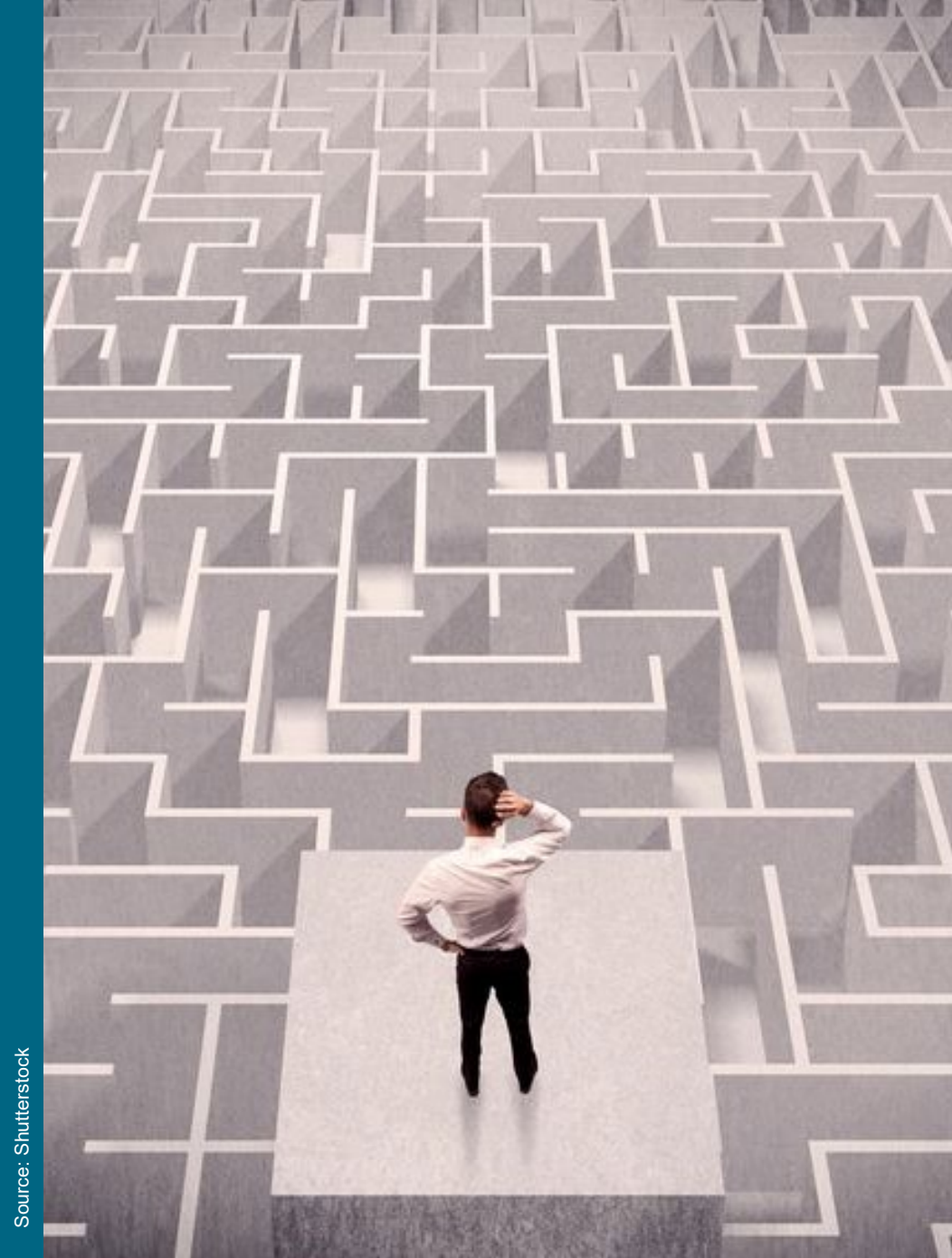
Indirectly affecting mechanical engineering, in the **short term**:

- **ESPR**:

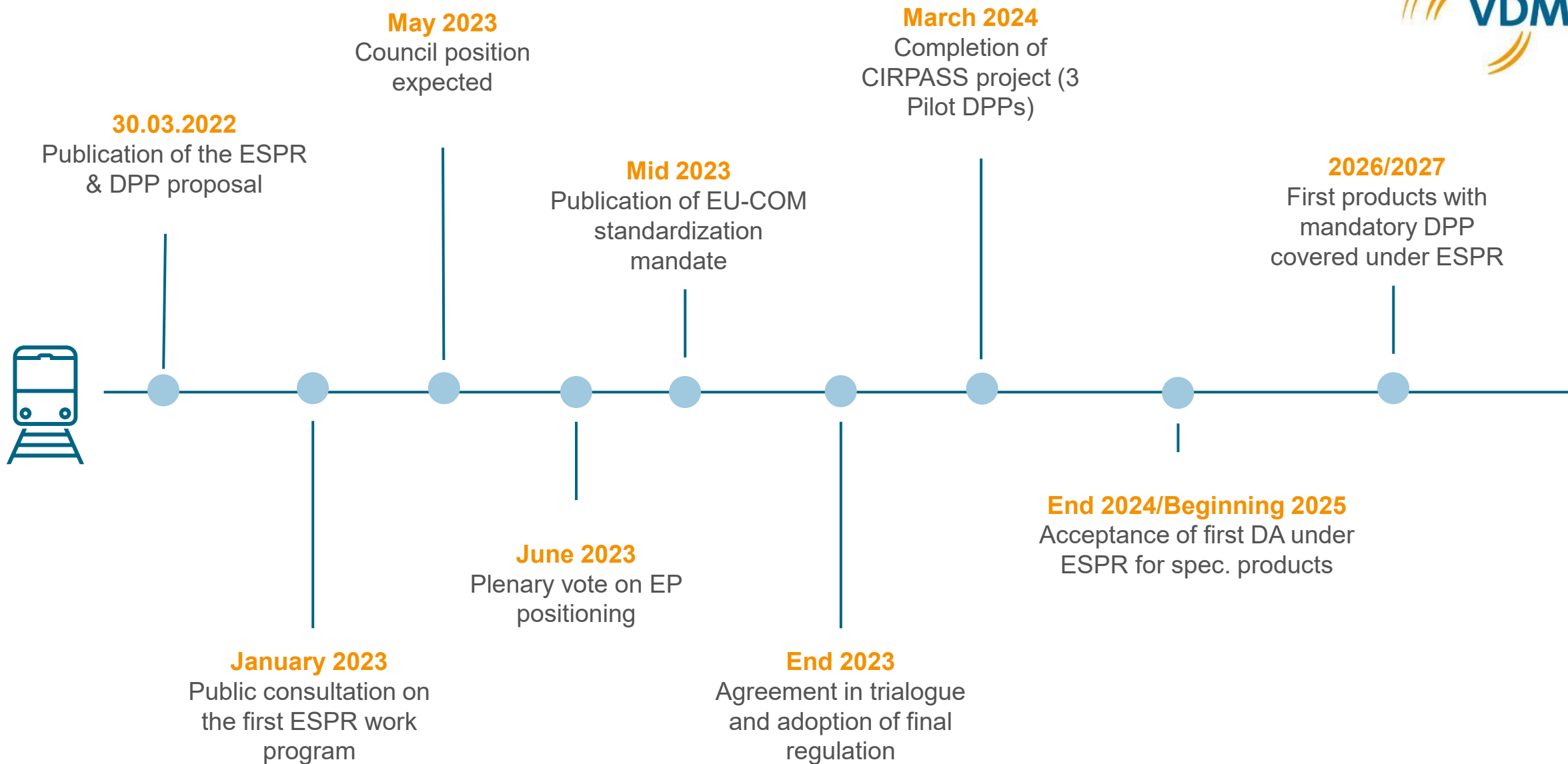
- for products that are manufactured, processed and recycled on and with mechanical engineering technologies
- For products/components used by the mechanical engineering industry and for which ecodesign requirements apply
- **DPP** -> Transfer of information and its processing in the value chain

Direct impact on mechanical engineering, medium to long term:

- **ESPR** -> direct circular economy and sustainability requirements for B2B products.
- **DPP** -> Transparency over the entire life cycle also for B2B products and services so far considered



Timeline



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Holger Kunze
VDMA European Office

Phone +32 2 706 8213
e-mail holger.kunze@vdma.org