

# Novi digitalni potni list izdelka

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## **Digital product passport regulation**

Digital Product Passport or DPP, is an initiative by the European Commission and is a part of the Circular Economy Action Plan proposed in the European Sustainable Product Regulation (ESPR) in March 2022. In a strategy that aims at a greener and economically more transparent Europe, the European Commission has proposed that the majority of product categories be subjected to the regulation.

Digital Product Passports, therefore, represent a way to gather data on a specific product, and its supply chain journey and allow sharing of these data with all actors, including customers. DPPs will require all the brands selling and producing for the EU market to comply with the EU regulations, with an effort to create more sustainable and transparent supply chains, with the conscious and environmentally friendly product and material usage.

This will allow for a better understanding of the materials and products the consumers use and for better control of the product's effect on the environment.

A digital product passport is a digital record of all the data about a product, which will be available until the end of the product's life. To ensure compliance with EU law, all the products will have to have a link to the product passport on the product itself.

The links will likely be carried in a form of a QR code, an RFID tag, or both. By scanning the codes, product consumers will be able to see the full product journey, from the beginning of the supply chain until the product was purchased.

Hence, the adoption of the DPPs will extend product lifespans, help customers make well-informed and environmentally friendly purchasing decisions, and promote the more spread circular economy business practices. Finally, DPPs aim at enhancing transparency throughout the entire value chain, from production to consumers.

## **What are the benefits of DPP**

The introduction of the digital product passport will equally benefit consumers, businesses, and governments.

### **BENEFITS FOR CONSUMERS: Ability to make informed purchasing decisions**

By scanning the product QR code and accessing the DPP, the consumers will obtain the information that will help them learn about the product as well as see the ways to repair and recycle the purchased item.

### **BENEFITS FOR BUSINESSES: Access information to enhance environmental performance, sustainability claims and decisions and ESG**

Through the DPP, businesses will have the opportunity to access granular information that can guide them toward a more environmental performance, supply chain visibility, etc. Businesses can also play a part in creating more accurate sustainability claims and decisions.

### **BENEFITS FOR GOVERNMENTS: Support enforcement and surveillance work**

The implementation of DPPs will allow regulatory and law enforcement agencies to monitor for compliance in a way that will cover a number of legislative requirements. Hence, a digital product passport can be seen as a solution for digital compliance that will allow end-to-end traceability and transparency.



## What are the benefits of DPP

Implementing Digital Product Passport will require a time-consuming and costly data management process that may deter companies from pursuing it. Nonetheless, creating the digital form of a product's end-to-end supply chain journey can bring a number of financial and reputation benefits for businesses. Here are some of the main benefits:

- Gain a competitive edge

New product offerings that include strong sustainability assurances backed by digital product passport data can provide supply chain players with a competitive advantage. Products can then be marketed with credible and quantifiable sustainability claims. This traceability data will extend value beyond the supply chain level and incentivize a shift towards sustainability across the chain. Some products will need to provide product life data, which will also encourage innovation and competition in product durability and life.

- Introduce circular business models

Digital product passports can provide the opportunity to explore new business models while retaining product ownership. Designing system waste will also create new revenue streams. Facilitating more efficient end-of-life processes will unlock the value currently lost in end-of-life materials and waste streams. This can also diversify material sourcing options and strengthen supply chain security within the organization as business models become more circular.

- Become a sustainability leader

If end-of-life disposal options need to be displayed with the product, this will encourage simpler cases of material reuse where possible. These tighter loops offer simple and cost-effective solutions to sustainability issues and avoid the accumulation of valuable materials in the environment.

- Use legislation compliance to your advantage

Early compliance and adoption of voluntary certification will also allow companies to gain greater market share. Establishing an effective method of tracking supply chain impacts will put companies in a head start as traceability information becomes a fundamental requirement for material sourcing.

- Increase transparency for your consumers

Consumers generally don't have easy access to product information. With the DPP this could be changed. Thanks to DPPs, consumers will now have access to enhanced product transparency. Ultimately, this will help businesses as the customers will be more satisfied with the brand with which they have control over their choices and feel safe and confident using that brand's products. For these reasons, companies should invest in and implement solutions that allow end-to-end traceability and product transparency.

- Address greenwashing

To make a positive impact on the environment and improve climate issues, manufacturers should ensure that the products are circulating for as long as possible. Therefore, to prevent greenwashing from occurring, there should be standards for the durability and repairability of products on the market. The implementation of DPP can improve the access to this information.

- Centralized information flow

Governments are requiring several informational flows for different products including energy efficiency ratings and WEEE (Waste from Electrical and Electronic Equipment) reporting. A Digital Product Passport is a way to enter all information into one central channel, allowing both the end users and the actors in the supply chain to see the product's lifecycle.

- Information on customer behaviour

The Digital Product Passport will be able to provide on customer behaviour information on consumer behaviour allowing for the opportunity to further optimize products.

Reference:

[All You Need To Know About the EU Digital Product Passport \(psqr.eu\)](https://psqr.eu)

[Ecodesign for sustainable products \(europa.eu\)](https://europa.eu)



## CircThread: appliances recyclability, increase lifespan and reuse

<https://circthread.com>



This project has received funding from the H2020 programme under Grant Agreement No. 958448



# CircThread: sustainable appliances

The objective is to interconnect the information along the life of a product, from concept to retirement, so that it can be easily accessed and shared. This will allow you and others to make decisions at all stages to shift to a circular economy.

To achieve this, we want to swiftly increase appliance lifespan, repairability and reuse. And we want products to be properly recycled when they are no longer repairable.



# H2020 funded project

 4 years

 31 partners

 8 M€ fundings

 3 Real-life cases  
(tested in Slovenia, Spain and Italy)

## Partners



ALTROCONSUMO

Atos

beCommons

B/S/H/

CARTIF

CEGASA



DOMUSA  
TEKNIK



ecolllwise

ekodenge



gorenje



SABANCIDx



# Objectives (1)

1. Development of new businesses related to the transition to a circular economy, and related value-adding consulting services
2. Effective use of both primary and secondary resources in Europe, strengthening geopolitical resource independency, facilitating the market for secondary raw materials, closing material cycles, and reducing waste generation, environmental pollution and greenhouse emissions.
3. Achieving the targets of the EIP (EU Innovation Partnership) on Raw Materials, particularly in terms of feeding secondary raw materials knowledge into the EC Raw Materials Information System (RMIS)



# Objectives (2)

4. Better insights into the material composition of products and the amount of secondary raw materials in circulation, increasing circularity of relevant material streams, and strengthening the use of PEF as the standard means for the assessment of the materials efficiency and overall environmental performance of products.
5. Streamlined social life cycle assessment ensuring comparability and validity, allowing to critically review green claim and enabling consumers to take environmentally informed purchasing decisions, as well as allowing product designers and developers to take environmentally informed decisions at an early stage.
6. Better insights on how to transfer successful information management approaches to businesses and sectors.

# Impacts (1)



1. advance the boundaries of secure product tracing across the life cycle with physical-digital product linkages
2. ability to exchange product information to all life cycle actors and 3rd parties using a product catalogue as a governing tool for the CircThread product data Marketplace
3. advance Circular Economy Evaluations covering both CE product status and forward looking scenario end-use recommendations, CE repair information and CE design scenarios
4. integrated Life Cycle Sustainability & Circularity assessment to provide holistic economic, environmental, social and circularity decision information

# Impacts (2)



3. advance Circular Economy Evaluations covering both CE product status and forward looking scenario end-use recommendations, CE repair information and CE design scenarios
4. integrated Life Cycle Sustainability & Circularity assessment to provide holistic economic, environmental, social and circularity decision information



# Use cases

7 use cases in Spanish, Slovenian and Italian pilots

The seven circular economy product uses cases focus on home appliances and home energy sectors.

There are use case variants for:

- construction,
- electronic products (Washing machine, Dish washer, House heating) and
- packaging sector

where replication will take place





**Thank you for  
your attention :)**



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