

The EU wants to give products a sustainable passport: is this realistic?

Isabel Rutten - 13 October 2025

If the EU has its way, every product sold in Europe will soon have a QR code. When a consumer scans it, they'll see everything needed for repairing and recycling that product. Convenient - or is it?

If we better understand how our products are made, we can handle waste more responsibly - even before it ends up in the bin. Sjoerd Rongen, researcher at knowledge institute TNO, believes that a structured QR code, a 'Digital Product Passport', is an essential part of a sustainable lifestyle. This passport should contain relevant information, obtained from every organization involved in developing the product. It's precisely this large number of stakeholders that makes it complex. Hence, Rongen came up with the idea for the Digital Product Passport festival, which took place on October 9 in the Hague.

Circular

The Digital Product Passport, abbreviated DPP, is part of the European Union's green policy package, 'the Green Deal'. Each product has its own digital file, which contains information that helps with sustainability. The EU hopes this will keep products and materials in use as long as possible, for example by repairing, refurbishing, and eventually recycling them. In addition, consumers can make an informed choice. Together, this leads to a so-called 'circular economy'.

The EU is trying to make the European market circular in phases. From 2027, electric (car) batteries and clothing must have a digital product passport, while for furniture and toys this applies from 2028 and later. Thus, progress differs between industries.

Diverse parties are involved surrounding the Digital Product Passport. Policymakers, both from the EU and the Netherlands, must clarify what key information companies should include in a DPP. They also need to explain how the passport can be created and shared. The EU has set up working groups to clarify this, with TNO researchers also participating.

Moreover, software companies are trying to develop an ICT solution so organizations can easily share their data. This could be a platform where companies manually create a DPP, or software that automatically extracts the required data from the organization's information system.

Furthermore, there are parties that want to read the shared data, such as recycling and repair companies. This allows them to know which materials are in the product and can work more efficiently. Next to that, reparations can be recorded and tracked with the DPP.

Online wardrobe

Also indispensable at the DPP festival were, of course, the companies that must supply data to the DPP. Through panels, they discussed expected opportunities and challenges. Participants noted that the DPP can lead to more efficient business processes, thanks to improved supplier transparency. Moreover, greenwashing can be countered, as truly green companies are rewarded with proof of their extra efforts.

Sustainability manager Laura Koedijk from fashion company Studio Anneloes also sees the potential of the DPP and already has an ambitious plan in mind. She views it as an extra service for their customers, who can quickly find information about washing instructions and materials used. They can also easily sell their items on Studio Anneloes's second-hand platform Retravel. Additionally, the fashion company can suggest matching outfits to customers, for even closer after sales contact. Koedijk even mentions the innovative idea of an online wardrobe.

The DPP festival brings together a broad group of enthusiastic companies. These frontrunners believe it's better not to wait until the EU clarifies its requirements, and that they should just start experimenting. This includes Studio Anneloes, where around 80% of the collection already has a Digital Product Passport - and that's just the beginning.

This difference in sustainability ambition between companies is a problem: without financial incentives, most companies aren't motivated to fully implement the DPP. Once they want to start, they also find the lack of European standards and their dependence on digitalization to be challenging. Additionally, some companies don't want to share their information, fearing loss of competitive advantage.

Koedijk recognizes the challenges in implementing the DPP. She's fortunate to have long-standing supplier relationships, but Studio Anneloes still had to explain the concept, including its benefits and requirements. Collecting data from different organizations is complicated. Because different information systems are often used, some data must be collected manually instead of automatically.

'The right goal'

In the Netherlands, we're far along in developing pilots and technical solutions for the Digital Product Passport. According to Rongen, the next step is to connect these ideas, so European countries can grow towards a standard together. With the United Nations as coordinator, this initiative could even have a global reach, combining efforts in countries like China and the US.

At the end of the DPP festival, it's clear that the ambitious EU plan is only possible if parties work together. According to research presented by INNOPAY, the fruits (with traceable origin) of the Digital Product Passport will only be reaped in about three years, so companies should see it as a long-term investment. Participants agree that this is something we must accept: for a sustainable planet, organizations must digitize, share information, and work circularly. As football player Johan Crujff, quoted at the DPP festival, once said: 'The right goal is not your own goal.'