

Project TwoPager | EuroTeQaThon III

Our third EuroTeQathon will be hosted in Prague (CTU) from Saturday June 10th until Monday June 12th 2023. In preparation of this event every (selected) Collider project is asked to submit a TwoPager on their project according to the locally communicated deadline and procedure. This document will be used by the jury to complement the final presentation on Monday and have a good overview of all the different projects

PROJECT DETAILS

Challenge Collaborator: Westwing

Team name: Compliance Allianće

Team slogan: Allianće is our name; Compliance is our game

Team members (full name | study program | university)



Susan Wolf	Politics & Technology	03768984	TUM
Visesh Murali	Sustainable Management & Technology	03765386	TUM
Julian Rittmayer	Sustainable Management & Technology	03752030	TUM
Srivatsa Nagaraja	Environmental Engg.	03765811	TUM
Soumyaranjan Bal	Environmental Engg.	03769468	TUM
Eduardo Perdomo	Sustainable Management & Technology	03767238	TUM

What is the target problem for your project (in one sentence)?

Current laws do not provide a guideline on how to calculate recyclability which leads to a lack of comparability and confusion for the customer and producer on how to make sustainable choices.

How do you solve it (in max. three sentences)?

We provide a recyclability index in which components of recyclability are weighted/categorised in order to give the EU commission a tool to compare the recyclability of textile products. This can be implemented in the guidelines for the Digital Product Passport. It will allow companies to use a single method rather than methods to calculate recyclability and will be based on the French AGEC directive (a law on anti-waste that mandates waste disclosures by companies) and other scientific based categories.

Potential for impact

How does it contribute to a more sustainable future from an environmental, social and/or economic perspective? On what scale and what range of the population could your project have an impact? (regional, national, European, only a small group of people, a wide range of the population etc.)

Through our solution, the EU commission, the customers and producers will have a tool that allows them to compare different textile products regarding their recyclability on the same basis. This will increase the trustworthiness of the Digital Product Passport and can influence the decisions that customers and producers are taking and may lead to improvements on the recyclability and circularity of products.

Innovation

How is the solution innovative comparing to existing ones (if exist) from an application area, business model, technological and/or customer experience perspective? Who are the main competitors?

Our solution closes the uncertainty-gap that consumers, the EU commission and producers have to face when they rely on external private companies that provide a recyclability calculation method.

- *For the EU commission* this index is ideal to compare the true recyclability of a product and guarantees fair competition between the companies due to standardisation.
- *For Consumers* it's valuable because it includes a well known scale to ensure easy adoption and comprehension and therefore allows them to make sustainable choices more easily.
- *Producers* can save time and money because they do not have to get in contact and pay an external company/organisation to do the calculation for them. In the long run, they can also design products that are more recyclable thereby reducing waste.

Finally, our solution is unique because the Digital Product Passport is still in the making and we contribute to its success. In general, the entire society can benefit from a reduced amount of textile waste.

Feasibility

To what extent can your project be self-sustainable? Are the means available to realize your innovations? What would be your ambition/the next steps with the project?

Since the AGECE directive is already in place in France it would be helpful to include some experts in the process who worked on this law. As soon as we hand our tool to the EU-commission it can be easily implemented in the development process of the Digital Product Passport and is therefore self-sustainable.

Inclusivity

Are the stakeholders (industry partners, governmental bodies, societal stakeholders, potential users, etc.) involved in the process of the solution development? How did you take them and their feedback into account? What disciplines (engineering perspective, sociological perspective, etc.) are taken into consideration in the development of the solution?

Yes, our challenge collaborator Westwing is included since our solution involves them as a case study. We incorporated their feedback especially while dealing with data limitations as well as supplier disclosures. However, the recyclability categories are based on a variety of scientific sources and therefore not connected to private interests. A legal perspective was taken into account while designing the overall solution and a mathematical perspective for weights of the index.