

# Sustainable cleaning technologies sought preventing disposal of cleaning cloths by Dutch-Belgian wholesaler

## Summary

Profile type	Company's country	POD reference
<b>Technology request</b>	<b>Netherlands</b>	<b>TRNL20220815007</b>
Profile status	Type of partnership	Targeted countries
<b>PUBLISHED</b>	<b>Commercial agreement with technical assistance</b> <b>Research and development cooperation agreement</b>	<b>• World</b>
Contact Person	Term of validity	Last update
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## General Information

### Short summary

A Dutch-Belgian wholesaler supplying cleaning utilities to cleaning organizations in several European countries wants to make its cleaning solutions more circular. Therefore it is looking for technologies or solutions that prevent cleaning cloths to be disposed and incinerated. A pilot project showing the potential of the technology within the framework of a commercial agreement is aimed for. This technology request refers to an innovation challenge published on an open innovation platform.

### Full description

Developing towards a circular economy applies for all sectors and also for the cleaning services industry. What catches the eye most in professional cleaning of offices and hospitals is that a lot of disposable cleaning cloths are used. They are thrown away after use and end up in an incinerator. The disposable clothes are cleverly designed so no or hardly any water and detergent are needed for cleaning. Disposing the clothes also reduces the risk of cross contamination. Since no good end-of-life options are available this company is searching for the best possible and sustainable solution for these cleaning cloths ultimately making them circular. Annually the company sells more than 25 million disposable clothes to cleaning service companies that use them at various locations throughout the Benelux. Locations such as hospitals, health care organizations, schools, airports, rail way stations and offices.

Taking a closer look at the cloths used there are 2 sort of cloths. 1. Dust binding cloths which are used dry. These cloths are currently made of viscose with a coating technology enabling that the dust sticks to the cloth. 2. Microfiber cloths which are used for moisture cleaning. These microfiber cloths are currently made of a blend of polyester and

polyamide fibers and combined in such a way that the fibers are split. This creates porous cloths and more fiber surfaces ensuring the best cleaning results. These type of cloths remove more than 99% of micro organisms and are generally used in professional cleaning with only an addition of water and no (or very little) detergents. In applications where cross contamination is not critical, the company already uses washable microfiber cloths.

For both kind of cloths the company is looking for more sustainable solutions that provide at least the same quality as the current one, so that still the minimal amount of water and detergent is used and the same cleaning quality is achieved. Because the company so far has not been able to find a solution for the disposable cloths with and without help of their suppliers and partners, they are open to a broad spectrum of solutions: such as changes in cleaning processes, use of other (biobased) raw materials or alternative end-of-life options. Therefore they are looking for organizations that can help them find the best sustainable and circular solution for the disposable cleaning cloths. The organization will be invited to set up and execute, in close cooperation, a feasibility project showcasing the possibilities of more circular cleaning solutions within the framework of a commercial agreement with technical assistance or possibly a research and development agreement.

This technology request refers to an innovation challenge published on an online open innovation platform till Oct 3rd 2022. Organisations are invited to express their interest before the closing date. Interested parties can get additional information on the platform and browse free through other submissions. However to contribute to online discussions registration is necessary. All submissions on the platform will get feedback by the company. Mind that posts on this platform are not confidential. Besides open discussions on the platform, sharing of confidential information will be made possible on demand.

After closing of the challenge, the company will select some organisations from the ones that have presented themselves on the platform for an online meeting in October to explore cooperation possibilities. In case there is still need for additional solutions after closing of the challenge, expressions of interest will be treated in the usual way.

#### Advantages and innovations

The advantages the company can offer to potential partners are:

- support in introduction of a new circular cleaning method in the professional cleaning market in the Benelux
- the ability to scale up quite easily when a proven sustainable solution is realized.
- an interesting network of cooperation partners, which can also be used to spread the sustainable solution further.
- the possibility of a long term partnership.

#### Stage of development

#### Sustainable Development goals

- **Goal 12: Responsible Consumption and Production**
- **Goal 13: Climate Action**

#### IPR Status

**No IPR applied**

## Partner Sought

#### Expected role of the partner

Type of partner: company, research organisation, university or combination of these organisations.

Areas of activity / disciplines needed:

- cleaning technology
- sustainability and circularity
- blended textile or non-woven materials and the end of life possibilities
- waste and recycle systems in the Netherlands and Europe

Task to be performed: set up and execute a feasibility project showcasing the possibilities of more circular cleaning solutions.

Cooperation with one or more partners, such as SME's and/or academia, is foreseen within the framework of a technical cooperation agreement or possibly a research and development cooperation agreement.

#### Type of partnership

**Commercial agreement with technical assistance**

**Research and development cooperation agreement**

#### Type and size of the partner

- **SME 11-49**
- **Big company**
- **SME <=10**
- **SME 50 - 249**
- **R&D Institution**

## Dissemination

#### Technology keywords

- **10003004 - Recycling, Recovery**
- **10003001 - Biotreatment / Compost / Bioconversion**
- **10002015 - Life Cycle Assessment**
- **10002013 - Clean Production / Green Technologies**
- **10003006 - Waste disinfection / detoxification**

#### Targeted countries

- **World**

#### Market keywords

- **05007001 - Disposable products**
- **08004004 - Other pollution and recycling related**
- **05007005 - Hospital and other institutional management**
- **09008004 - Other utilities and related firms**

#### Sector groups involved

- **Environment**
- **Textile and Fashion**
- **Creative Industries**
- **Materials**

## Media

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### Images



[Cleaning trolley.jpg](#)

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[Dust binding cloth attached.jpg](#)

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[Microfiber cloths in package.jpg](#)

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[Dust binding cloth on roll.jpg](#)

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[Overview cleaning trolley.jpg](#)

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[Drawer with microfiber cloths.jpg](#)

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[Cleaning with dust binding cloth.jpg](#)

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[Disposal of microfiber cloths.jpg](#)

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