

## SHORT SUMMARY

**Organisation:** GEA Group: [website](#), [Twitter](#)

**Contact person:** John van Rooijen (Technology & Innovation Manager), [LinkedIn](#)

**Product & sector:** Workwear (Textiles) | **Country:** global



Rijkswaterstaat  
Ministerie van Infrastructuur en Milieu



# GEA safety jacket



*The jacket is 98% reusable.*

How do you develop a safety jacket that can be reused and at the same time is protective and comfortable? GEA took on the challenge in a process that took two years.

## Project description

GEA is supplier of process technical solutions for industries including the food industry. The project comprises the development of a safety jacket for field staff, which can be at least 90% reusable. There was a requirement for an improved safety jacket that did not only offer protection against rain and wind, but also against low and high temperatures, chemical substances and for welding and electrical engineering activities. The current jackets were also not very comfortable to wear. This desired innovation was used as an opportunity to develop a circular economy jacket, together with colleagues from procurement and safety, and those wearing the jacket.

## Approach

GEA already had a strong focus on sustainability. But they had no experience with circularity; GEA saw this as an interesting development in the market. User support for the pilot came via the company's safety and workwear committee. The jacket was developed with chain manager Dutch aWEARness as specialist in circularity. The producer is Latino Group from Portugal. The users were involved in every step, for example in the form of feedback on the prototypes. Particularly the individual certification of all basic materials and the coating took a lot of time. The development took over two years.



## FACTS & FIGURES

### 160 GEADA safety jackets with accompanying vests as well as:

- > 250 T-shirts
- > 100 Polo shirts
- > 20 fire-retardant safety vests
- > 10 sets of workwear (pilot for workwear, which needs to be replaced in 2017 (approx. 200 sets))

**Contract form:** purchase

**Global budget:** € 33,000 (ex VAT)

## Results

The pilot resulted in a safety jacket that is 98% reusable, which is even better than the goal of 90%. The jacket also satisfies all safety requirements. An important point of attention during issue was the washing process. Employees are not allowed to wash the jacket at home as this affects

*“A nice wearable jacket, that protects and saves on raw materials.”*

John van Rooijen of GEA

the coating.

Dutch aWEARness supplied a CCMS system with this. This track and trace system, comprising a QR code in every jacket, enables GEA to see, among other things, where all the raw materials originate, where the jacket has undergone treatment and when a jacket has reached its technical service life. This is expected to be three years. Technical requirements meant that no recycled materials were used for this first round.

This means that circularity only comes into play when the components of the collected jackets are reused. The GEA ambitions in the area of circularity do not end with this pilot. A tender for circular workwear will be issued in 2017.

## Lessons learned

- Expect a long process, in this case, two years. Particularly the individual certification of all basic materials, the coating and engaging users took a lot of time.
- Involve the right market parties. Ensure that you have specialist knowledge in-house, for example about the jacket's safety criteria.
- Start the first pilot with a relatively easy product group, which does not immediately affect the primary process, such as workwear; experience has already been gained with this. Or select a product that has a low investment value, but is often used. The end customers first need to be convinced about the result.
- A certain level of standardisation is needed if you want to reuse your products easily or return these to the chain in another way.

## About REBus and the Green Deal on Circular Procurement

The Green Deal on Circular Procurement (GDGP) is an initiative of MVO Nederland (CSR Netherlands), NEVI, Central government, Duurzame Leverancier, PIANOo, Kirkman Company and Circle Economy. Various pilots originating from GDGP are partly financed by the European REBus project, implemented in the Netherlands by Rijkswaterstaat (Directorate-General for Public Works and Water Management). They are working together to support businesses and government organisations in their circular procurement ambitions.

### Contact information

- > E-mail: [Circulair@rws.nl](mailto:Circulair@rws.nl)
- > Website: [PIANOo](http://PIANOo)

**Partners:** Dutch aWEARness | Latino Group | Wiltec

**Relevant links & documents:** [Jacket design](#) (specifications in Dutch) | [GEA leaflet](#) (in Dutch) | [Article Circular clothing GEA](#)

This publication is financed by Rijkswaterstaat