

Construction circular workwear



Key facts

- Dura Vermeer is a construction and engineering firm, Alliander is an energy network company and Croonwolver&dros (TBI) is an electrical engineering company.
- All three company's set themselves a target to make 40% of its workwear circular by 2017.
- REBus supported by providing project management, adding expert advice to the team and helping to create and disseminate learning documents.
- Whilst not in a formal partnership, the three companies were able to learn from each other and share experiences of the REBM.
- Two company contracts were awarded for the supply of workwear in which 85% of the material could be re-used.

Company: Dura Vermeer, TBI Croon and Alliander

Innovative business model type: Circular procurement

Sector & company type/size: Large

Service: Procurement of circular work wear

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Case Study



Rijkswaterstaat
Ministry of Infrastructure and the
Environment

Introduction

Dura Vermeer is a construction and engineering firm with 160 years' experience in the market, Alliander is an energy network company and Croonwolver&dros (TBI) has been operating for more than 140 years in the electrical engineering business.

Why REBus

All three companies set a target to make 40% of its workwear circular by 2017.

REBus supported them by providing project management, delivered through MVO Nederland. They worked together to create an aspirational document to inform the market of their ambition to purchase robust workwear which optimised re-usability of raw materials, energy consumption and avoided wastage of raw materials. A plan was made to achieve this through a joint purchasing route.

With so many organisations involved in the design and manufacture of clothing items – often spanning national boundaries – the path to circularity was not clear without extensive research. REBus was able to offer expert advice to creating this pathway.

"At first, I thought we just had to inform the market and they would do their job, but we had to really take the cart and pull it to market."

Bjorn Smeets, Former Procurer, Dura Vermeer

The pilot

The project started by producing a joint statement of aims, designed to start the discussion of opportunities for circular workwear in the market, followed by holding a market engagement meeting.

Originally focussing on safety vests, thought to be the simplest product, it was quickly realised that they were the most difficult items of all, due to the safety requirements. In response to this, the rest of the safety wear was developed first, followed by the safety vests. The new safety vests are made from polyethylene terephthalate (PET) bottles, with a reflective lining for higher visibility.

"We are on a learning curve together."

Arco Vroeg in de Weij, Senior Category Buyer, TBI Croon

In the Netherlands, construction workers who are placed along roads are required to wear orange high-visibility clothing, whilst those placed near railway tracks are required to wear yellow.

Since many construction occurs both along railway tracks and roads, employees often have to carry two pairs of safety jackets.

The pilot encouraged us to question this practice with contractors. As a result, Rijkswaterstaat, ProRail and other contractors decided to use just one colour, leading to an immediate reduction in material used.

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Pilot stages

The three organisations found the process of obtaining suitable workwear slow and diverse. Fabric sourcing, design for re-use and other complex elements all had to be navigated. Further complexity often occurred through location, with many suppliers located remotely, often in the Far East.

Driving the project forward required frequent contact and a high level of input from all parties to encourage movement in the market.

Designing garments for re-use involved multiple decisions:

- Will a garment be re-manufactured into a new item?
- Will it be re-used elsewhere in the clothing chain?

Results

The companies completed an essential part of the project together; collecting the knowledge required to move towards circular procurement of workwear, however they chose separate paths and timelines in continuing to deliver circular procurement.

- Dura Vermeer awarded a three-year contract with the option to extend for three years. It also included incentives for hitting targets, with an ultimate target for 40% circularity. The contractors continue to supply soft shell and parka jackets, as well as rain trousers, in which 85% of the material used is re-usable.

- At the time of writing, TBI had not made any solid agreements with the consortium (consisting of Intersafe, Dutch aWEARness, and Tricorp) as they considered themselves to have embarked on an open learning route.
- Alliander is aiming for 100% circularity and to issue an invitation to tender for a package of workwear in 2017.

Whilst the result was that the parties started out on different purchasing routes, they are still sharing their experiences and knowledge with one another.



Pilot jacket (above)

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Lessons learned

Although the three partners had a clear commitment to circularity and to building sustainability into their supply chains, they quickly found that this was not enough to ensure success. The market was still in its infancy and finding suitable manufacturers proved problematic.

A key learning point was the importance to have a project manager to organise the whole process, provided by REBus. Furthermore a supply chain director was crucial in navigating the complexity of the supply.



A safetyvest (left) and a parka jacket (right)

When it came to specifically procuring circular workwear, it became clear that:

- Safety vests represented a challenging product with which to begin the project, given the high safety requirements involved.
- Organising product returns is complex and expensive.
- Costs were not clear enough.
- At the time of publication, there were no circular solutions for multi-standard clothing. Alliander, above all, saw this as a drawback.
- Collaboration is key for a successful pilot

Differences in circularity requirements have become a barrier to the joint purchasing path. Alliander, for example, uses a wide range of multi-standard clothing, hoping to procure 100% circular contract for its entire workwear range. This did not correspond with the consortium contract, so the organisations decided to follow their own path.

"You need to immerse yourself in your contract partner's business case completely."

Bjorn Smeets, Former Procurer, Dura Vermeer

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REBus is a project delivered in partnership with:



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KTN
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Case studies were generated as a result of pilots carried out for REBus by WRAP or RWS and the named organisations from 2013 to 2016.

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