

SHORT SUMMARY

Organisation: NS, www.ns.nl

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Product & sector: waste, ticket machines, permanent magnets (Infra), Public transport bike (Mobility) |

Country: The Netherlands



Sustainable tenders by NS

fiets
recycle



Train wheels have been melted down since the 1960s.

How can we extend the service life of a Public transport bike? And how can we reuse train carriage components for maintenance? NS is working on this in various circular economy projects.

Project description

NS is incorporating as many sustainable aspects as possible in the procurement of products or services. The focus lies on tenders that have an environmental impact. In the procurement of new trains, for example, it sets the requirement that components must at least be 90% recyclable. NS is also working to extend the service life of existing products and to process waste into raw materials. Multiple projects were started for this, including the reduction of consumer waste at stations, extending the service life of ticket machines and public transport bikes, and reusing permanent magnets in maintaining trains.

Approach

NS pursues a policy for Sustainable Public Procurement (SPP), comprising two pillars. The first pillar involves measuring and improving suppliers' sustainable operations, together with other international rail industry partners. This takes place using a uniform assessment tool. The second pillar involves the use of sustainable criteria for purchasing. An example of this is the Real Time Monitoring project. This system offers NS immediate information on the performance of the trains' technical components. This enables NS to optimise maintenance and structurally extend the service life of these components. In addition, all buyers follow an e-learning module for Sustainable Public Procurement, which NS has developed itself.



FACTS & FIGURES

- > **Number of FTE:** 30,565 (Annual Report 2015)
- > **Tender volume:** € 1.4 billion
- > Residual waste to 25% in 2020
- > From 2017, all NS trains will run entirely on green electricity.
From 2017 to 2020, NS will switch over completely to green gas.

Results

Partners for the consumer waste pilot are Van Gansewinkel and Suez. The objective is to reduce the percentage of residual waste to 25% by 2020. Existing ticket machines will be kept operational for longer. NS also sets a production requirement for public transport bikes, in which the components must be removable in order to extend bicycle service life.

“Select projects with real substantial environmental impact on equipment.”

Bas van Kempen, Manager NS Procurement

The pilot with the permanent magnets is very promising. These are components of train carriages that are usually replaced during maintenance by NedTrain. NedTrain has developed a method to make the magnets removable. This enables 20% reuse and savings of approximately € 250,000.

The feasibility of this is currently being investigated (November 2016). There is still no closed chain for most procurement contracts. This is mainly because of the lack of concrete take-back agreements. The wheels form an exception. These have been melted down to make new wheels since the 1960s and therefore, form an entirely closed equipment chain.

Lessons learned

- Select projects with real substantial environmental impact on equipment and in which you, as procurement party, are in the position to change the market.
- Specification could be much more functional. Why should we purchase a train? Why don't we simply purchase the kilometres that a train can travel?
- Circular procurement is complex for buyers. It is difficult to translate this process operationally and practically.
- Ensure that there is policy support.

About REBus and the Green Deal on Circular Procurement

The Green Deal on Circular Procurement (GDCP) is an initiative of MVO Nederland (CSR Netherlands), NEVI, Central government, Duurzame Leverancier, PIANOo, Kirkman Company and Circle Economy. Various pilots originating from GDCP 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
- > Website: [PIANOo](http://PIANOo.nl)

Partners: OV-fiets | NedTrain | Roetz-Bikes | Van Gansewinkel

Relevant links & documents: [Video The Public transport bike Recycle \(Dutch\)](#)

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