

The UIC International Sustainable Railway Awards (ISRA) recognise and honour key stakeholders in the railway sector who are leading innovation in social ('people'), environmental ('planet'), and economic ('prosperity') sustainability.

The awards showcase transformative work from stations to trains, from economic resilience to emergency pandemic response, from social outreach to supporting the local environment.

The gala ceremony for The UIC International Sustainable Railway Awards took place on 1 June 2022 at Radisson Collection Hotel, Berlin, Germany.



presents



THE UIC INTERNATIONAL  
SUSTAINABLE RAILWAY  
AWARDS 2022

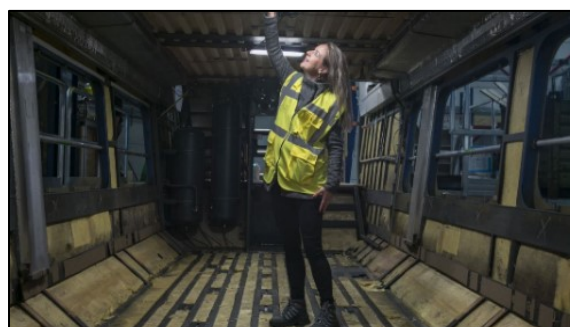


This poster provides information about the ISRA 2022 winner in the category "Environment"  
"Best Circular Economy Project"

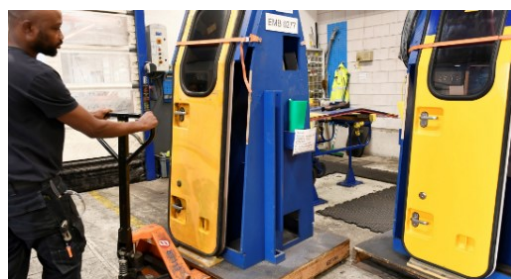
## NS – CIRCULAR TRAINS

With the project 'circular modernisation' NS gives to 656 VIRM carriages a second life after 20 years in operation so it can transport passengers for another 20 years. This prevents the disposal of trains (therefore waste) and prevents the production of new trains (therefore the use of raw materials).

- 85% of the old train is remanufactured to "as new" condition and re-installed in the modernised train.
- 14% is given a second life elsewhere. Train floors, ceilings and boarding steps become new furniture, from composite sidewalls NS produces sleepers
- 20 year lifetime extension
- 656 coaches (more to come!)
- 99% circular
- 14% new life elsewhere



NS introduces energy-saving technologies to enhance the energy efficiency of the new train. NS offers jobs for employees distanced from the labour market. Circular modernisation shows how valuable trains(components) are. That's why NS does not dispose 40-50 year-old EOL trains but 'harvest' and dismantle them in a circular way. Even after 45 years 98% of these trains remains in the cycle. A good example is the bicycle shed of 800 45-years old train windows we build!



NS uses the lessons learned from circular modernisation when purchasing new trains. NS is the first train operator in the world to ask for a detailed 'materials passport'. With renewed circular specifications NS steers towards circular inflow (use of recycled and renewable materials) and circular outflow (reusable and recyclable materials). NS is scaling these circular specifications Europe-wide by setting up an Eurospec-project. NS also works together towards a worldwide circular Rail by co-chairing UIC sector group "Circular Economy