

Semi-annual report on CO₂ performance ladder

The latest UN Intergovernmental Panel on Climate Change (IPCC) report shows that temperatures rise by more than 1.5 to 2 degrees this century. This will lead to more extreme weather (more intense and frequent droughts, heat waves, and heavy rainfall), along with other consequences. To reduce climate change, greenhouse gas emissions need to be significantly curtailed, with the achievement of zero net CO₂ as a minimum. The European Commission is therefore striving to achieve climate neutrality for Europe by 2050. In order to reduce CO₂ emissions by 55% by 2030, the EU, led by Commissioner Frans Timmermans, recently presented a huge package of climate-related proposals. This 'Fit for 55' plan will be under discussion and development in the coming months.

We will be following this closely, but not waiting until it has been finalised. Ballast Nedam owes it to future generations to put CO₂ reduction at the heart of everything we do. At Ballast Nedam we believe that every project offers us the opportunity to make a positive contribution, not only to today's world, but tomorrow's world too. We see this as an economic opportunity rather than a threat.

We challenge you to proactively help us seek solutions. You can share any opportunities for CO₂ savings you identify by emailing us at duurzaamheid@ballast-nedam.nl

Ballast Nedam has already exceeded its target of achieving a 30% CO₂ reduction by 2020 compared to 2008, having reduced emissions by 57.4% in 2019. This is why, in 2020, we set a new target for 2030, namely a reduction of 56% compared to the base year of 2019. Now, a year on (2021), we have revised the target once more. The new figure applies to Ballast Nedam's own CO₂ emissions (scope 1 and 2) resulting from energy consumption in our offices, at our construction and production sites, and in relation to mobility.

New target for 2021 - 2030

The targets for both scope 1 (natural gas, diesel and other fuels) and scope 2 (electricity, district heating and business travel) are a 100% CO₂ reduction by 2030. We are aiming for full carbon neutrality by that year, with the reduction in the intervening years expressed as a percentage reduction compared to 2019.

To achieve this objective, the following measures need to be taken:

- Purchase of 100% renewable energy (Hollandse Wind) from 2021 for all Ballast Nedam connections (at offices, construction sites and production sites);
- Offsetting of carbon emissions for any flights we take;
- Fully electric vehicle fleet by 2030;
- Carbon-neutral company vans by 2030;
- Maximum use of emission-free equipment;
- Creation of a carbon-neutral construction site by 2023 and fully carbon-neutral construction sites by 2030.

Where full carbon neutrality is not possible by 2030 (e.g. for heavy equipment), emissions will be offset.

Year	2021	2022	2023	2025	2030
CO ₂ reduction percentage	8%	16%	24%	56%	100%

Also, we have set a target for the CO₂ emissions caused by the activities we carry out and organise (scope 3, purchase and sale of services and products). The environmental impact of services and products is determined using life cycle analysis (LCA). The reduction objective for 2021 is to work with our suppliers and subcontractors to carry out LCAs on at least three products.

This is because we won't achieve energy savings by looking at our own consumption alone. We will need to examine where actual reductions can be made by working with the chains within which we operate. For Ballast Nedam, the opportunities lie in reducing the carbon emissions of its own vehicle fleet and optimising sustainability measures on construction sites.

CO₂ – Footprint in first six months of 2021

Our projects are helping us to improve our energy performance. The target for 2021 is to achieve an 8% CO₂ reduction compared to the reference year of 2019. This applies to our own CO₂ emissions (scope 1 and 2) resulting from energy consumption in our offices, at our construction and production sites, and in relation to mobility, with 'business travel' associated with scope 3 being counted in scope 2 for emissions inventory purposes.

For the most part, Ballast Nedam's energy consumption relates to mobility, the use of construction equipment, and production at plants and on building sites. CO₂ reporting is divided into scope 1, scope 2 and scope 3.

The CO₂ footprint set out below for up to week 24, period 6, 2021 comprises the emission of:

- Scope 1 = 6,505 metric tons (natural gas, diesel, petrol, CNG and other fossil fuels)
- Scope 2 = 257 metric tons (electricity, district heating and business travel)
- Scope 3 = 1,077 metric tons (emissions originating from commuting)

The footprint for the first half of 2021 has decreased slightly for scope 1 (5%) and significantly for scope 2, with the latter decreasing by more than 90% compared to 2020. This sharp decline is due to the purchase of 100% renewable energy, with this immediately being reflected in the figures as zero emissions. The increase in scope 3 emissions is due to the allocation of consumption at two sites (PI Zaanstad and Rijksgebouw De Knoop) that are managed by Ballast Nedam Asset Management but are not part of our own scope.

Scope 1 & 2							
	2016	2017	2018	2019	2019**	2020	2021*
Offices	1,339	2,205	1,203	1,195	632**	1,027	449*
Building sites	2,699	2,477	3,239	4,935	3,779**	5,624	3,507*
Production sites	4,320	393	1,153	1,101	805**	997	552*
Mobility	4,000	3,847	3,529	3,443	3,443	2,606	2,254
Total	12,358	8,922	9,124	10,674	8,659	10,254	6,762

*Emission values already periodically corrected for renewable energy

**Emission values for mid 2019 corrected in proportion to REGOs purchased before year end

The decline in mobility two years in a row can be attributed to Covid-19, as a result of the requirement for employees to work from home much more. This significantly reduced the number of kilometres driven. Without any correction for the renewable energy, the combined energy consumption of all the construction sites did increase slightly, but this can be explained by the increase in turnover.

The priorities and opportunities for improving Ballast Nedam's energy performance lie in reducing emissions relating to mobility and on the construction sites. To reduce those, Ballast Nedam is making full use of electric equipment, electric lease cars and HVO fuels, as on the Amaliahaven project. See the section below.

Electric equipment and passenger transport at Ballast Nedam

As part of our sustainability policy, further steps were taken in 2021 to make our equipment more sustainable. The leasing of electric cars was also promoted. No fewer than 150 new electric lease cars have been or will be purchased this year. This is more than 30% of the total number of cars being replaced. This means we have exceeded our own expectations and also shows that our employees are thinking about sustainability.

In 2021, the first two fully electric passenger busses will also be delivered to be used on the project Quay walls Princess Amalia Harbour

There is more to the purchase of an electric vehicle fleet than purely delivery of the cars. Employees can have a charging point installed at their home and new and additional charging points are also made available at office and construction sites. This involves a lot of work and keeps Ballast Nedam Materieel very busy.

Materieeldienst (Equipment Service) is also becoming more sustainable. A total of 2405 solar panels were installed on the roofs of its premises in Almere and investments are being made in emission-free equipment, which includes:

- A mobile site unit with a solar film roof;
- Four electric tower cranes;
- Fifty 600-watt LED bulbs to replace 50 2000-Watt units, resulting in an energy saving of 70%;
- A new, environmentally friendly Euro 6 asphalt and emulsion truck equipped with a green energy package consisting of solar panels on the roof and an indirect cooling water heater.
- And finally, we expect that we will soon be able to present our first fully electric HAMM roller.

These sustainable investments, combined with the 100% renewable energy contract entered into with Vattenfall on 1 January 2021, form the basis for Ballast Nedam's CO₂ reduction target. In the first half of the year, we achieved a 22% reduction compared with the base year of 2019.