Acting Sustainably together

Ballast Nedam offers its customers optimum solutions throughout a building's lifecycle. We want to offer our customers added value, and thus distinguish ourselves, in everything we do. As a result, innovation, safety and sustainability have become deeply embedded within our organisation. Our motto in this respect is that the best idea is one that you come up with together. Our solutions are compelling, future-proof (sustainable) and consistent with their context.

We recognise that our actions can have an effect on both the present and the future. This is a responsibility we carry out with all due care and integrity. We fully support the UN Sustainable Development Goals (SDGs) and thus take an integral approach to sustainability, so that it is no longer simply an ambition, but a real framework for action.

Sustainability is part of our daily activities, of our philosophy, and of our actions.

Examples of some sustainable projects in which Ballast Nedam is involved are:

- The cradle to cradle municipal office in Venlo;
- The building and operation of 'The Green House', a circular hospitality and meeting pavilion in the Utrecht station area. A circular/reusable pavilion, built such that it can be dismantled and reused;
- Development of reflective asphalt for use in the A9 tunnel (Gaasperdammerweg), enabling enormous energy savings for the lighting (energy reduction);
- The Dutch province of Noord-Brabant is doing a pilot together with Ballast Nedam, as the general contractor, for reusing roadside grass cuttings as new products. Separating roadside grass into grass fibres and grass juice. The juices can be used in animal feed or for potash fertiliser, and the fibres can be used as a raw material to produce cardboard or insulation material;
- Pilot together with Attero: Creating energy from fermenting roadside grass.

Ballast Nedam CO2 organisation

Ballast Nedam is a knowledge-intensive project organisation. We will use our projects to improve our energy performance. Our objective is to reduce our CO2 by at least 30% by 2020 compared to the reference year, related to the turnover of our Dutch activities.

Carbon footprint								
	2008	2014	2015	2016	2017	2018	2019	2020
CO2 (kilotonnes) including green electricity)	73	44	33	28				
Turnover (the Netherlands) (EUR x 1 million)	1,349	949	770	740				
CO2 emission (T) by turnover (EUR x 1 million)	54	47	43	38				
Percentage compared to the base year (2008)	100%	86%	79%	70.4%				
Reduction objective by the end of the year		18%	20%	22%	24%	26%	28%	30%
Reduction achieved	0%	14%	21%	29.6%				

So far, Ballast Nedam has achieved its CO2 objective. This is due to the initiatives implemented during projects and by the various companies. Central purchasing of green electricity has contributed a lot to the reduction obtained. The past year, 2016, was the first year in which we did not need to buy any green certificates in order to enable us to achieve our objective.

Projects awarded to us with sustainability requirements

CO2 reduction, no traffic jams and no nuisance in the form of construction vehicles at the Mall of The Netherlands

Besides having an insight into our own carbon footprint, it is important that we have an insight into the carbon footprint of the supply chain. We work together a lot with fellow-contractors, subcontractors and suppliers. How can we reduce our carbon footprint together? In order to reduce nuisance, traffic jams and CO2, a building ticket system is used at the Mall of The Netherlands. All the freight traffic has to gather in one location near the mall before being given permission to drive to the mall. The building site staff use alternative transportation to travel to the building site (public transport, etc.). The mall's envisaged BREEAM score is VERY GOOD (***). This most beautiful, largest and most modern shopping mall in the Netherlands will be opened in 2019.

Mall of The Netherlands – Leidschendam	
	
	

'The Green House' for maximum results for circularity

Ballast Nedam is part of Consortium R Creators for the sustainable renovation of the former Knoop military barracks. The building will be opened in 2018 and will have a green roof, solar panels, an energy system based on recirculation and heat recovery (energy management), presence detection controlled lighting, CO2 measurement for the climate control system, and energy monitoring in order to reduce operational energy consumption.

Besides the Knoop building, the 'The Green House' circular hospitality, work and conference pavilion will be constructed. This pavilion will be dismantled after 15 years to then be reused as a pavilion in another location or as raw material components. The area thus released will then be put to a different use.

The 'The Green House' pavilion will be a source of inspiration for a new circular economy for 15 years.

Government office, De Knoop - Utrecht	Pavilion, The Green House - Utrecht
	

Forerunner in the hospital and parking garage sector

VUmc Imaging Center is one of the first hospitals with a bespoke BREEAM programme and an envisaged BREEAM score of VERY GOOD (***). This makes this project a forerunner in the development of BREEAM for the Dutch healthcare sector. The building has been designed as flexibly as possible and the installations are constructed as sustainably as possible. The rooms and installations have been designed such that the installations can be replaced by more up to date versions without causing any nuisance or interruptions to the business operations. The hospital will be opened in 2019.

The new, energy-neutral parking garage will generate twice as much energy as it consumes. The energy generated will be used to charge electric bikes, cars and buses and will also be supplied back to the grid.
The parking garage will feature motion sensors to control the lights. It will have 1100 parking spaces, 240 bike parking spaces, 1500 solar panels, etc. The parking garage will be opened in 2018.

VUmc Imaging Center – Amsterdam	Deutersestraat Transferium – 's Hertogenbosch
	

Ballast Nedam also constructs sustainable projects outside of the Netherlands

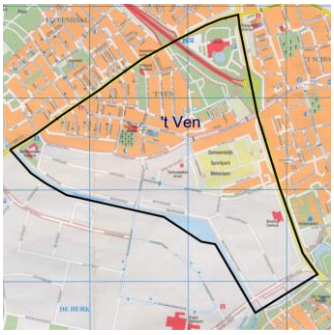
Ballast Nedam is not only active in the Dutch market, but it is also active internationally with many interesting projects in which sustainability plays an important role. The LEED sustainability method, i.e. the American sustainability label, is often chosen internationally. Examples of current ongoing projects are the hospital on the Netherlands Antilles and the new-build Nacelle factory for Siemens AG in Germany. They both have an envisaged LEED score of 'GOLD'. The hospital will be opened in 2018 and the new-build Siemens factory will be put into use this year.

Nobo Otrobanda Hospital - Curacao	New-build Nacelle factory - Cuxhaven
	

Regional Ballast Nedam building companies are engaged in sustainability as well

The regional LAUDY Bouw & Ontwikkeling building company is very much engaged in sustainability. LAUDY is part of !MPULS which will work on the sustainable renovation of the buildings housing the municipal offices of Eindhoven for the next 10 to 15 years. The assignment consists of renovating and maintaining seven office buildings, the interiors and grounds of which should be updated to maximum sustainability standards. The sustainability aspects are: the demolition work carried out in accordance with 'The Natural Step', designing the buildings with attention being paid to liveability and people's health, 50% energy neutrality in these buildings, CO2 reduction, more green, attention to people who are distanced from the job market and sustainable commuting.

This year, LAUDY Bouw & Ontwikkeling will also start renovating the first 40 homes in 't Ven in Eindhoven. A total of 364 homes that were built after World War II will be renovated in a sustainable way. They will be converted from energy label C, B and A buildings into 'zero on the meter' homes.

Renovation of municipal offices – Eindhoven	Renovation of the first 40 homes (zero on the meter) - Eindhoven
	

Carbon footprint for the first six months of 2017

Ballast Nedam typically consumes energy for commuting, transportation, using building equipment, production in factories, and on the building sites. We keep CO2 records divided into scope 1, scope 2 and scope 3:

The carbon footprint up to and including week 20, period 5 of 2017, consists of the emission of:

- Scope 1 = 4,203 tonnes (natural gas, diesel, petrol, cokes, CNG and other fossil fuels);
- Scope 2 = 1,770 tonnes (electricity and district heating where Ballast Nedam N.V. pays the bill);
- Scope 3 = 607 tonnes (emissions come from commuting payments pursuant to the job contracts with employees).

Scopes 1 & 2							
	2014	2015	2016	2017	2018	2019	2020
Offices	1,354	1,262	1,339	1,460			
Building sites	5,737	3,352	2,699	1,545			
Production sites	6,857	4,349	4,320	324			
Mobility	5,172	3,059	4,000	3,267			
Total	19,120	12,022	12,358	6,596			

The footprint for the first six months of 2017 is much lower than in previous years. This is mainly due to the divestment of some production locations that are therefore no longer included in these figures. But consumption rates on the building sites and for mobility have become lower as well. This is due to a small decrease in the number of ongoing projects in 2017 and a reduction in the number of staff, as well as the acquisition of smaller and relatively more economical cars, thus reducing the consumption rates for mobility.

Winning projects that are awarded from a CO2-aware perspective, or projects for which BREEAM or LEED certification are requisites, are our priorities and offer opportunities for improving Ballast Nedam's energy performance.