Carbon Reduction Plan

Supplier name: **Nobisco Ltd**
Publication date: 21/09/23, V2

Commitment to achieving Net Zero

Nobisco Ltd is committed to achieving Net Zero emissions by **2050**.

Baseline Emissions Footprint

Nobisco Ltd have been seeking to reduce their environmental impact, and our generation of carbon for several years. Hence, we have been gathering and analysing relevant data for several years, and using it to identify potential reduction strategies.

As a result we are in a position to use 2021 as a baseline for the greenhouse gases that have been produced in the past, although we had already begun to develop and implement carbon reduction strategies to reduce emissions. We have therefore chosen 2021 as the reference point against which emission reductions will be measured.

Authorised by 

Mr A. Morrison
Managing Director, Nobisco Ltd
21/09/23

Scope Definitions

Scope 1 Emissions: direct GHG emission
greenhouse gas emission from *sources* owned or directly controlled by the *organization*

Note 1 to entry: This document uses the concepts of equity share or control (territorial, financial, and operational) to establish Scope 1 emission responsibility.
Note 2 to entry: Scope 1 emissions do not include those occurring from natural ecosystems owned or controlled by the organization that are not under management, or remain in a natural state and have not been modified.
Note 3 to entry: Scope 1 emissions for *governance organizations* (3.4.2) operating at a territorial level refer to GHG emissions from sources located inside the boundary of that territory.
More information on Scope 1 emissions is provided in the GHG *Global Protocol for Community-Scale Greenhouse Gas Inventories, An Accounting and Reporting Standard for Cities Version 1.1.*

Scope 2 Emissions; indirect emissions
indirect GHG emission from purchased energy *greenhouse gas emission* from the generation of purchased electricity, heat, cooling or steam consumed by the *organization*

Note 1 to entry: Scope 2 emissions for organizations operating at a territorial level refers to GHG emissions other than *Scope 1 emissions*, occurring as a consequence of the use of grid-supplied electricity, heat, steam and cooling within the territorial boundary.
[SOURCE: GHG Protocol *Corporate Accounting and Reporting Standard*]

Scope 3 emission; indirect emissions with no direct control
indirect GHG emission *greenhouse gas emission* that is a consequence of the *organization's* activities but arises from *sources* that are not owned or directly controlled by the organization.

Note 1 to entry: Scope 3 emissions include all attributable *value chain*GHG emissions not included in *Scope 1 emissions* or *Scope 2 emissions*).
Note 2 to entry: For organizations operating at a territorial level, Scope 3 emissions refer to GHG emissions that occur fully or partially outside the territorial boundary as a result of activities taking place within the boundary and include transport across boundaries. More information on Scope 3 emissions is provided in the GHG *Global Protocol for Community-Scale Greenhouse Gas Inventories, An Accounting and Reporting Standard for Cities Version 1.1.*

Origin of definitions: *ISO Document, International Workshop Guidelines, IWA 42:2022(E) Net zero guidelines*

Additional Scope 3 Guidance

(Origin: UK Cabinet Office Document, Technical standard for Completion of Carbon Reduction Plans

The Greenhouse Gas Protocol breaks emissions sources down into three categories or Scopes. All Scope 1 and Scope 2 emissions are to be included when completing your CRP, along with a subset of Scope 3 emissions.

Scope 3 emissions represent up to 80% of any organisation's carbon emissions. There are 15 categories of Scope 3 emissions defined by the GHG Protocol. In completing your CRP, suppliers are required to detail their emissions for five of these categories

When completing your CRP you should include your UK emissions for Scope 1 and Scope 2, along with a subset of five Scope 3 emissions categories.
We have selected the following five categories:

- Business travel
- Employee commuting
- Waste generated in operations
- Upstream transportation and distribution
- Downstream transportation and distribution.

Scope 3 Categories to be monitored	***Category description***	***Minimum boundary***
1. Business travel	*Transportation of employees for business related activities during the reporting year (in vehicles not owned or operated by the reporting company)*	*The scope 1 and scope 2 emissions of transportation carriers that occur during use of vehicles (e.g., from energy use) Optional: The life cycle emissions associated with manufacturing vehicles or infrastructure*
2. Employee commuting	*Transportation of employees between their homes and their worksites during the reporting year (in vehicles not owned or operated by the reporting company)*	*The scope 1 and scope 2 emissions of employees and transportation providers that occur during use of vehicles (e.g., from energy use) Optional: Emissions from employee teleworking*
3. Waste generated in operations	*Disposal and treatment of waste generated in the reporting company's operations in the reporting year (in facilities not owned or controlled by the reporting company)*	*The scope 1 and scope 2 emissions of waste management suppliers that occur during disposal or treatment Optional: Emissions from transportation of waste*
4. Upstream transportation and distribution	*Transportation and distribution of products purchased by the reporting company in the reporting year between a company's tier 1 suppliers and its own operations (in vehicles and facilities not owned or controlled by the reporting company) Transportation and distribution services purchased by the reporting company in the reporting year, including inbound logistics, outbound logistics (e.g., of sold products), and transportation and distribution between a company's own facilities (in vehicles and facilities not owned or controlled by the reporting company)*	*The scope 1 and scope 2 emissions of transportation and distribution providers that occur during use of vehicles and facilities (e.g., from energy use)* *Optional: The life cycle emissions associated with manufacturing vehicles, facilities, or infrastructure*
5. Downstream transportation and distribution	*Transportation and distribution of products sold by the reporting company in the reporting year between the reporting company's operations and the end consumer (if not paid for by the reporting company), including retail and storage (in vehicles and facilities not owned or controlled by the reporting company*	*The scope 1 and scope 2 emissions of transportation providers, distributors, and retailers that occur during use of vehicles and facilities (e.g., from energy use) Optional: The life cycle emissions associated with manufacturing vehicles, facilities, or infrastructure*

Baseline Year: 2021

Additional supporting information relating to the Baseline Emissions calculations.

Nobisco Ltd has operated from the same premises for approximately 10 years. We have been monitoring our emissions and seeking to reduce them since moving into the property.

Scope 1 emissions; our direct emissions have two main sources:

1. Consumption of oil based fuels (diesel)
   We operate a fleet of diesel powered vans for making deliveries, and a number of company cars for sales staff. We have recently purchased our first electric car, and are in the process of having chargers fitted. We continue to give consideration to electric delivery vehicles but at this point have not found a commercially viable option.
2. Consumption of gas
   Our premises are heated by a single gas boiler. The boiler was installed in October 2019, and has been subject to annual services ever since. We had noted abnormalities in our gas usage figures in 2019 and 2020. After investigation by the provider, this resulted in a new meter being fitted in mid-2020. We have chosen 2021 as the baseline year as we believe data for the previous years may not be reliable.

Scope 2 emissions are limited to our consumption of electricity. Nobisco do not consume the other defined energy sources, i.e. heat, cooling or steam

Scope 3 emissions; there is limited availability of data relating to these emissions at this point, but this will become an area of focus over the next reporting period.

Emissions for the Baseline Year (2021)

Scope 1 Emissions: direct GHG emission

greenhouse gas emission from sources owned or directly controlled by the organization

Baseline year emissions:

1. **Vehicles**

   Nobisco's fleet is comprised of 14 vehicles, all Mercedes Sprinters. Nine are category 6 diesel engine generating up to 98g/km. the remainder are category 5 generating 200g/km.

   So on average the fleet generates 134.4 g of CO_2 per km

   Records suggest that the fleet covered 3355km in 2021, which would generate 450.868 kg CO_2.

   In 2022 the fleet covered 3247km, producing 436.334 kg CO_2

2. **Gas Boiler**

   Nobisco have a Baxi 600 boiler which was installed new in 2019. It is an A class boiler, which means its emissions are up to 215g of CO_2 per kWh of use.

	2021	2022	Units	Notes
Gas used (meter readings)	3426.34	2778.53	M^3	
This converts to	38932.4	31571.5	kW/hrs	calculation see : https://www.theener-gyshop.com/guides/how-to-convert-gas-units-to-kwh
	215	215	g of CO_2	A Baxi 600 is A rated, meaning it emits 215g of CO_2 per kWh
So Nobisco's boiler has generated	8370.5	6787.9	Kg's of CO^2/annum	

EMISSIONS	**SUB-TOTAL (tCO_2e)** 2021 – 8, 821 kg CO_2 2022 – 7, 224 kg CO_2

Scope 2 Emissions: indirect GHG emission

indirect greenhouse gas emission from the generation of purchased electricity consumed by the organization

Note: *heat, cooling or steam are not consumed by the organization and hence not purchased*

Scope 2

Definition: Nobisco's only other source of energy is from electricity, which is classified as an indirect greenhouse gas emission.

Electricity use includes: Computers, servers and peripherals, lighting, charging of fork lifts, car charging, kitchen water heaters

	2021	2022	Units
Electricity used	45369	41793	
Emissions factor	.85	.85	
	385.64 kg CO_2	355.24 kg CO_2	Kg CO_2/annum

Scope 3 Emissions: indirect emissions with no direct control

indirect GHG emission greenhouse gas emission that is a consequence of the organization's activities but arises from sources that are not owned or directly controlled by the organization.

Categories to be Monitored	Category Description	Baseline Performance (2021)
1. Business travel	*Transport of employees for business related activities (in vehicles not owned or operated by Nobisco)*	**Data unavailable at 21/09/23 but is being compiled.**
2. Employee commuting	*Transport of employees between their homes and their worksites (in vehicles not owned or operated by Nobisco)*	**Data unavailable at 21/09/23 but is being compiled.**
3. Waste generated in operations	*Disposal and treatment of waste generated by Nobisco's (in facilities not owned or controlled by the Nobisco)*	All carboard and plastic "waste", mostly packaging from suppliers products, is either re-used when we despatch the products or recycled. Records for the quantities recycled (**in 2021**) show: **Waste plastic recycled 4030kg** **Waste paper recycled 5230kg** **Waste:** Little 'waste' is generated by Nobisco. The current removal agreement is for Birmingham City Council to empty one 1100Ltr euro-bin per week. The council do not weight the bin or give feedback on its content. This agreement has remained unchanged for approx. 10 years, so despite growth in turnover and employees during this period waste has remained lower than 1100Ltrs per week.
4. Upstream trans-portation and distribution	*Transport & distribution of products purchased by Nobisco between tier 1 suppliers and its own operations (in vehicles and facilities not owned or controlled by the Nobisco). Transport and distribution services purchased by Nobisco, including inbound logistics, outbound logistics (e.g., of sold products), and transportation and distribution between Nobisco's own facilities (in vehicles and facilities not owned or controlled by Nobisco.)*	**Data unavailable at 21/09/23 but is being compiled.**
5. Downstream transportation and distribution	*Transport & distribution of products sold by the Nobisco in the reporting year between the reporting company's operations and the end consumer (if not paid for by the reporting company), including retail and storage (in vehicles and facilities not owned or controlled by the reporting company*	**Data unavailable at 21/09/23 but is being compiled.**

Total Emissions for Baseline Year (2021)					
Total Emissions	**845.37 kg CO_2**				
Emissions per scope 1	Vehicle generated **450.868 kg CO_2** Boiler generated **8.370 kg CO_2**				
Emissions per scope 2	Caused by 3rd party electricity generation **385.64 kg CO_2**				
Emissions per scope 3	2021	2022	2023	2024	2025
1. Business travel	Under Compilation				
2. Employee commuting	Under Compilation				
3. Waste generated in operations	Under Compilation				
4. Upstream transportation and distribution	Under Compilation				
5. Downstream transportation and distribution	Under Compilation				

Current Emissions Reporting

Total Emissions for Current Year (2023)					
Reporting Year: 2023 (as of 28/07/23)					
EMISSIONS	**TOTAL (tCO_2e)**				
Scope 1	Fleet – 1894 km x 134.4 CO2/km = **254.00kg CO_2** Boiler – **3.96Kg CO_2**				
Historic performance					
	2021	**2022**	**2023**	**2024**	**2025**
Fleet	**450.868 kg CO_2**		**254.00kg CO_2**		
Boiler	**8.370 kg CO_2**		**3.96Kg CO_2**		

Scope 2	Electricity		**207.00kg CO_2**		
Historic performance					
	2021	**2022**	**2023**	**2024**	**2025**
Electricity	**385.64 kg CO_2**		**207.00kg CO_2**		

Scope 3	1. Business travel 2. Employee commuting 3. Waste generated in operations 4. Upstream transportation and distribution 5. Downstream transportation and distribution	Not yet known

Historic performance					
Emissions per scope 3	2021	2022	2023	2024	2025
1. Business travel	Under Compilation	Under Compilation	Under Compilation		
2. Employee commuting	Under Compilation	Under Compilation	Under Compilation		
3. Waste generated in operations	Under Compilation	Under Compilation	Under Compilation		
4. Upstream transportation and distribution	Under Compilation	Under Compilation	Under Compilation		
5. Downstream transportation and distribution	Under Compilation	Under Compilation	Under Compilation		

Total Emissions (2023) to date	**465.00 kg CO_2**

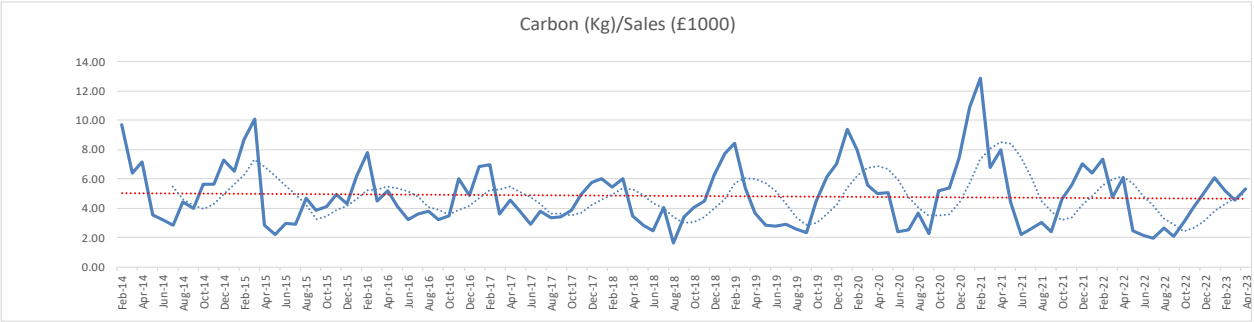
Emissions reduction targets

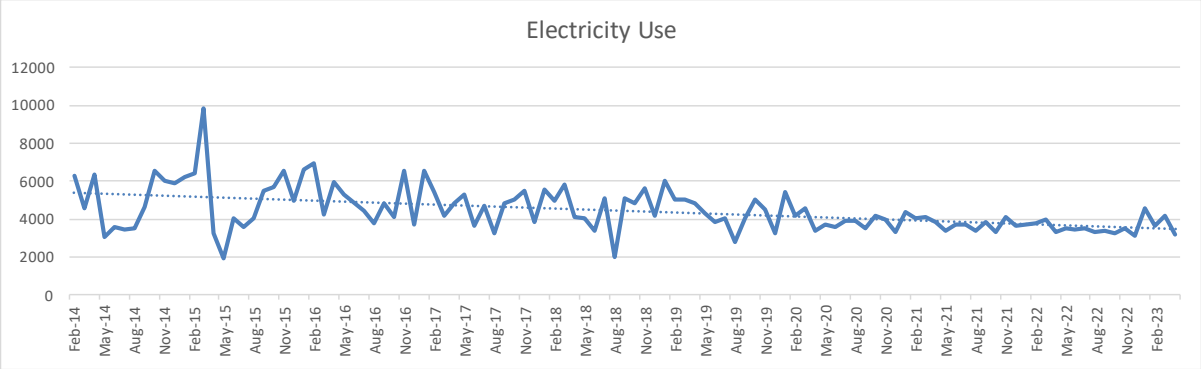
In order to continue our progress to achieving Net Zero, we have adopted the following carbon reduction targets.

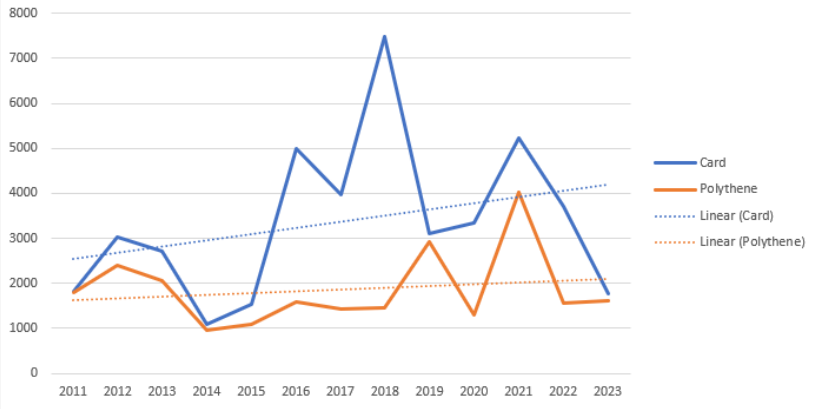
1. **Monitor and minimise the level of carbon generated per £1k of sales, with a target of maintaining the 6-month rolling average to below 4kg.**
2. **To reduce the 6 monthly rolling average of electricity consumption to below 4000 Kw per month by March 2024.**
3. **Maintain volumes of waste generated at one 1100 ltr wheelie bin emptied per week**

We project that carbon emissions will decrease over the next five years to 676 kg tCO2e by 2028. This is a reduction of 20%

Progress against these targets can be seen in the graph below:







Carbon Reduction Projects

Completed Carbon Reduction Initiatives

Since changing properties approximately ten years ago we have completed the following initiatives. Unfortunately we do not have the necessary data to show the quantities of CO2 saved during these improvements:

1. Van fleet – we are moving to all category six vehicles as a minimum, as funds allow
2. Boiler – we have replaced the boiler on our premises with a more modern boiler with increased efficiency and reduced carbon generation
3. Lighting – we operate a large warehouse with attached offices. All lighting has been replaced with lower power LED fittings. Day light saving technology is used wherever possible
4. Electric vehicles – we have begun to move our fleet toward electric vehicles, and as technology improves we will look to move ALL of the fleet to low-carbon vehicles.

Current Carbon Reduction Initiatives

1. Electricity Supply – we are actively seeking a supplier who can justifiably claim zero carbon generated power.
2. We are investigating the viability and practicality of fitting solar panels to the roof of our main building.

Declaration and Sign Off

This Carbon Reduction Plan has been completed in accordance with PPN 06/21 and associated guidance and reporting standard for Carbon Reduction Plans.

Emissions have been reported and recorded in accordance with the published reporting standard for Carbon Reduction Plans and the GHG Reporting Protocol corporate standard[1] and uses the appropriate Government emission conversion factors for greenhouse gas company reporting[2].

Scope 1 and Scope 2 emissions have been reported in accordance with SECR requirements, and the required subset of Scope 3 emissions have been reported in accordance with the published reporting standard for Carbon Reduction Plans and the Corporate Value Chain (Scope 3) Standard[3].

This Carbon Reduction Plan has been reviewed and signed off by the board of directors (or equivalent management body).

Signed on behalf of the Supplier:

21 September 2023

[1] https://ghgprotocol.org/corporate-standard
[2] https://www.gov.uk/government/collections/government-conversion-factors-for-company-reporting
[3] https://ghgprotocol.org/standards/scope-3-standard