

CARBON REDUCTION PLAN GUIDANCE

Notes for Completion

Where an In-Scope Organisation has determined that the measure applies to the procurement, suppliers wishing to bid for that contract are required at the selection stage to submit a Carbon Reduction Plan which details their organisational carbon footprint and confirms their commitment to achieving Net Zero by 2050.

Carbon Reduction Plans are to be completed by the bidding supplier¹ and must meet the reporting requirements set out in supporting guidance, and include the supplier's current carbon footprint and its commitment to reducing emissions to achieve Net Zero emissions by 2050.

The CRP should be specific to the bidding entity, or, provided certain criteria are met, may cover the bidding entity and its parent organisation. In order to ensure the CRP remains relevant, a Carbon Reduction Plan covering the bidding entity and its parent organisation is only permissible where the detailed requirements of the CRP are met in full, as set out in the Technical Standard² and Guidance³, and all of the following criteria are met:

- The bidding entity is wholly owned by the parent;
- The commitment to achieving net zero by 2050 for UK operations is set out in the CRP for the parent and is supported and adopted by the bidding entity, demonstrated by the inclusion in the CRP of a statement that this will apply to the bidding entity;
- The environmental measures set out are stated to be able to be applied by the bidding entity when performing the relevant contract; and
- The CRP is published on the bidding entity's website.

Bidding entities must take steps to ensure they have their own CRP as soon as reasonably practicable and should note that the ability to rely on a parent organisation's Carbon Reduction Plan may only be a temporary measure under this selection criterion.

The Carbon Reduction Plan should be updated regularly (at least annually) and published and clearly signposted on the supplier's UK website. It should be approved by a director (or

equivalent senior leadership) within the supplier's organisation to demonstrate a clear commitment to emissions reduction at the highest level. Suppliers may wish to adopt the key objectives of the Carbon Reduction Plan within their strategic plans.

A template for the Carbon Reduction Plan is set out below. Please complete and publish your Carbon Reduction Plan in accordance with the reporting standard published alongside this PPN.

¹Bidding supplier or 'bidding entity' means the organisation with whom the contracting authority will enter into a contract if it is successful.

²Technical Standard can be found at:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/991625/PPN_0621_Technical_standard_for_the_Completion_of_Carbon_Reduction_Plans__2_.pdf

³Guidance can be found at:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/991623/Guidance_on_adopting_and_applying_PPN_06_21__Selection_Criteria__3_.pdf

Carbon Reduction Plan

Supplier name: ARKA EUROPE, S.A

Publication date: 17/10/2025

Commitment to achieving Net Zero

ARKA EUROPE, S.A. is committed to achieving Net Zero emissions by 2050.

Baseline Emissions Footprint

Baseline emissions are a record of the greenhouse gases that have been produced in the past and were produced prior to the introduction of any strategies to reduce emissions. Baseline emissions are the reference point against which emissions reduction can be measured.

Baseline Year: 2023	
Additional Details relating to the Baseline Emissions calculations.	
The baseline year corresponds to the submission of the ARKA 2023 Sustainability Report under the CSRD (ESRS) standards, including verifiable emission targets and annual progress updates. The ARKA ESG Report is publicly available and reflects audited environmental data, Scope 1–3 greenhouse gas inventories, double materiality assessments, and the company's long-term commitment to decarbonization and sustainable value creation across the healthcare supply chain.	
Baseline year emissions: 2023	
EMISSIONS	TOTAL (tCO₂e)
Scope 1	2,350.4
Scope 2	656.3
Scope 3 (Included Sources)	The following categories account for our Scope 3 emission figures: Category 4 – Upstream transportation and distribution: 708.6 ; Category 5 - Waste generated in operations: 28.9 ; Category 6 - Business travel: 64.9 ; Category 7 - Employee commuting: 72 ; Category 9 – Downstream transportation and distribution: 254.62 ;
Total Emissions	14,133

Current Emissions Reporting

Reporting Year: 2024	
EMISSIONS	TOTAL (tCO ₂ e)
Scope 1	1,001.9
Scope 2	294.7
Scope 3 (Included Sources)	The following categories account for our Scope 3 emission figures: Category 4 – Upstream transportation and distribution: 826.1; Category 5 - Waste generated in operations: 16.8; Category 6 - Business travel: 28.3; Category 7 - Employee commuting: 72; Category 9 - Downstream transportation and distribution: 224.07
Total Emissions	11,053.9

Emissions reduction targets

ARKA EUROPE, S.A. is committed to achieving **Net Zero emissions (Scope 1 & 2) by 2040, and full Net Zero across all Scopes by 2050.**

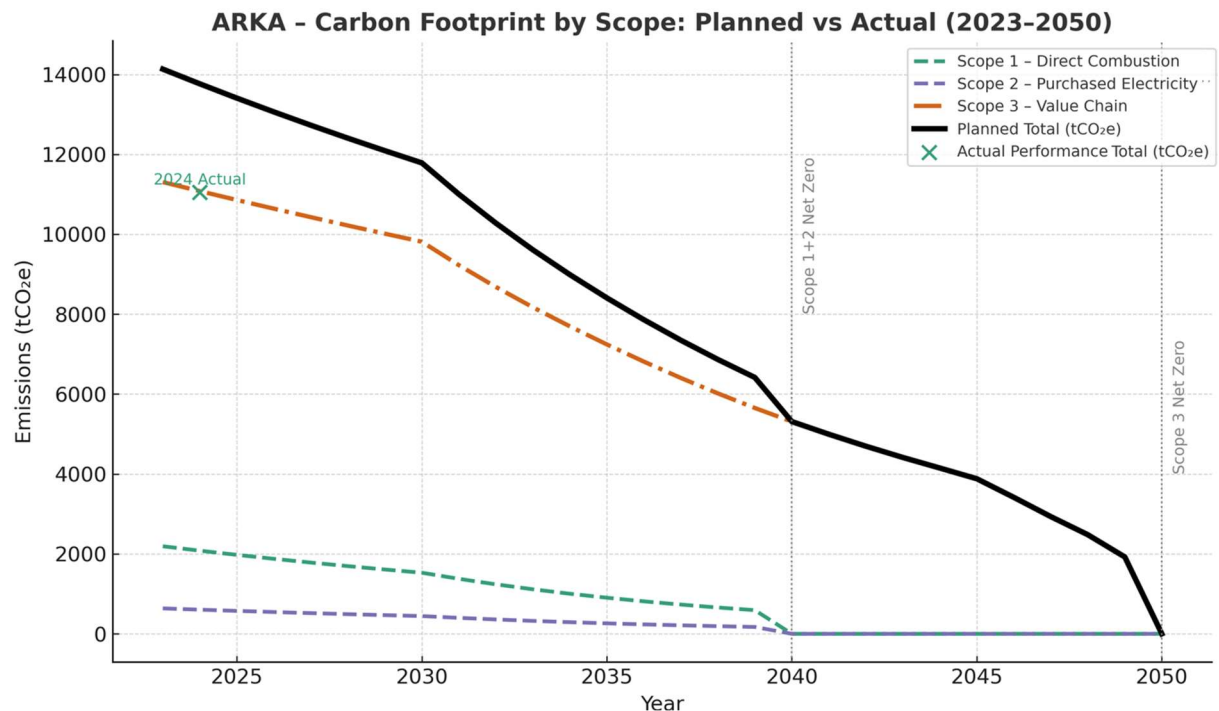
To support this commitment, we have set progressive reduction targets aligned with NHS PPN 06/21 and industry benchmarks for medical device manufacturing.

- Baseline Year (2023): 2,350.4 tCO₂e (Scope 1) + 656.3 tCO₂e (Scope 2) = 3,006.7 tCO₂e
- Current Year (2024): 1,001.9 tCO₂e (Scope 1) + 294.7 tCO₂e (Scope 2) = 1,296.6 tCO₂e
→ **-56.9% reduction in Scope 1 & 2 emissions in one year**

We project that total Scope 1 and Scope 2 emissions will further decrease to 953.1 tCO₂e by 2030, representing a 68% reduction compared with the 2023 baseline, with continued decline towards Net Zero by 2040.

Targets:

- **Scopes 1 & 2:** Net zero by **2040**
- **Scope 3:** Net zero by **2050**



ARKA targets are aligned with the decarbonization pathway for the **pharmaceutical and medical device industries**, where emissions from direct operations (Scopes 1–2) are reduced earlier through energy efficiency, electrification, and renewable energy sourcing, recycled and recyclable packaging and product components while Scope 3 reductions take longer due to supply chain dependencies.

Reduction Dynamics

- Scopes 1 & 2:**
 - 5% per year until 2030 (industrial process efficiency, energy efficiency, renewable sourcing, packaging materials and size optimization, product formulations)
 - 10% per year from 2030 to 2040 (process electrification, ISO 50001)
- Scope 3:**
 - 2% per year until 2030 (supplier engagement, logistics optimization)
 - 6% per year from 2030 to 2040 (eco-design, material innovation – R.Green® and R.Advance®)
 - approx 12% per year from 2040 to 2050 (deep supply chain decarbonization, circularity)

This results in a realistic, sector-aligned trajectory toward **carbon neutrality in Scopes 1 & 2 by 2040** and **full net-zero (all scopes) by 2050**.

- 2023–2030 | Rapid Reduction Phase**
 A significant drop in Scope 1 & 2 emissions (>60%) demonstrates investment in energy efficiency, fuel switching, on-site renewable sourcing, and industrial/operational optimization. Scope 3 reductions begin progressively, mirroring early supplier engagement.
- 2030–2040 | Value Chain Transformation**
 Scope 3 emissions become the main driver. This phase reflects supplier compliance with ESG requirements, sustainable procurement, packaging redesign, and logistics decarbonisation. By 2040, Scope 1 & 2 reach **zero**, meeting **NHS PPN 06/21** alignment for operational Net Zero.

- **2040–2050 | Final Net Zero Stretch**

Remaining emissions are exclusively in Scope 3, representing hardest-to-abate areas (upstream raw materials, end-of-life). These will require innovation, circular economy integration, and high-standard offsetting initiatives.

ARKA Targets are in full alignment with Healthcare & EU ESG Benchmark

- **2040** – Net Zero Scope 1 & 2 (ahead of European Green Deal target 2050)
- **2050** – Full Net Zero with Scope 3 addressed

Compliant with **NHS Net Zero Supplier Roadmap** and **EU CSRD (EFRAG VSME)** frameworks.

Completed Carbon Reduction Initiatives

Since establishing its 2023 emissions baseline, ARKA has implemented several operational, governance, and product-level initiatives that collectively resulted in an estimated **3,079.1 tCO₂e reduction (–22%)**, primarily across Scope 1 & 2, with measurable Scope 3 benefits:

- **ISO 14001 Certified Environmental Management System (EMS)**
ARKA has achieved ISO 14001 certification, embedding a structured and audited framework for environmental governance, risk control, legal compliance, and continuous improvement across all manufacturing operations.
- **Annual ESG Reporting (Since 2023)**
ARKA publishes an independently prepared ESG Report on an annual basis, disclosing Scope 1, 2, and 3 emissions, resource efficiency indicators, waste treatment data, water stewardship practices, and long-term sustainability targets. This transparent reporting ensures alignment with the EU Taxonomy, CSRD/ESRS standards, and NHS Carbon Reduction obligations.
- **100% Automated Quality Inspection in Production Line**
ARKA operates a fully automated inspection system across its nitrile glove production line. This technology significantly reduces product rejects, raw material loss, and reprocessing cycles, thereby lowering direct energy use (Scope 1) and preventing defective products from being transported and discarded by healthcare systems, contributing to downstream Scope 3 reduction.
- **Technology Reliability Improvement Projects (Operational Efficiency & Emission Reduction)**
Targeted engineering and maintenance optimisation programmes are being deployed to increase equipment reliability and minimise unplanned stoppages. Reduced downtime prevents idle energy consumption—particularly in high-energy equipment such as gas furnaces and electrically powered curing systems—and lowers scrap rates during production. These initiatives enhance operational efficiency and reduce the carbon emissions per glove produced, contributing directly to Scope 1 and 2 decarbonisation.
- **Optimisation of Transport Packaging (Circularity & Logistics Efficiency)**
ARKA has redesigned its transport packaging using fully recycled and recyclable monomaterial cardboard, with reduced ink use and simplified print patterns. Packaging optimisation has increased glove capacity from 51,200 to 70,000 gloves per Euro-pallet, representing a 37% improvement in load efficiency. This reduces packaging waste, improves pallet density, and lowers downstream Scope 3 emissions associated with transport and logistics.
- **Circular Economy Pilot – Rejected Glove Recovery Stream**
A dedicated recovery stream has been established for non-medical rejected gloves, enabling

redirection to secondary applications or recycling partners. This initiative reduces end-of-life disposal volumes and positions ARKA as an early leader in nitrile circularity.

- **Energy Optimisation & Renewable Energy Sourcing**
Migration to electricity suppliers with a higher renewable energy mix, combined with energy efficiency improvements in furnaces and curing processes, has delivered measurable reductions in Scope 2 emissions.
- **Advanced Water and Wastewater Management**
Upgraded water treatment systems and closed-loop recycling programmes have increased water reuse rates while reducing chemical and energy requirements in wastewater operations.
- **Hybrid Workforce & Low-Travel Policies**
Implementation of hybrid work models and strict travel optimisation policies has reduced the carbon intensity of commuting and business travel, contributing to reductions in organisational Scope 3 emissions.
- **Downstream Scope 3 Impact – Hospital Consumption Efficiency**
Independent UK hospital trials confirmed that R.Green® and R.Advance® glove technologies achieve a 40% reduction in glove consumption and a 53% reduction in glove waste. This materially reduces procurement volumes, material usage, transport, and waste-treatment emissions throughout healthcare supply chains.

In the future we hope to implement further measures such as:

No.	Measure	Category / Scope Impact
1	Achieve ISO 50001 integration for energy performance tracking	Scope 1 & 2 Governance
2	Install photovoltaic solar power at Vila Nova de Famalicão	Renewable Energy – Scope 2
3	Real-time energy & emissions monitoring linked to ERP	Scope 1 & 2 Tracking
4	Supplier Decarbonisation Programme with ESG criteria audits	Scope 3 – Supply Chain
5	Full-scale Circular Glove Programme (recovery & recycling of off-spec nitrile)	Scope 3 – End-of-Life
6	EV charging infrastructure expansion & sustainable mobility incentives	Mobile Combustion / Commuting
7	Low-carbon travel policy (rail, digital meetings, air reduction)	Business Travel – Scope 3
8	Expand treated water reuse to >30% by 2030	Resource Efficiency
9	Eco-design packaging (100% recyclable / FSC-certified by 2028)	Packaging – Scope 3
10	Public disclosure of emission intensity per 1,000 gloves	Transparency – Scope 3
11	ARKA Academy – ESG and eco-efficiency training	Culture / All Scopes
12	ARKA Green Ambassadors Group	Employee Engagement (Scope 3)
13	Research partnerships on bio-based polymers	Innovation / R&D
14	Annual CSRD-aligned ESG Reporting with third-party verification	Governance & Disclosure

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 standard⁴ and uses the appropriate Government emission conversion factors for greenhouse gas company reporting⁵.

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) Standard⁶.

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:

A handwritten signature in blue ink, appearing to read 'Pedro Menezes'.

Pedro Menezes, CEO

Date: 17th October 2025

⁴<https://ghgprotocol.org/corporate-standard>

⁵<https://www.gov.uk/government/collections/government-conversion-factors-for-company-reporting>

⁶<https://ghgprotocol.org/standards/scope-3-standard>