Carbon Reduction Plan

2026 - 2027 Construction, Engineering & Water Infrastructure

Document control	Details
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1. CIVCO'S COMMITMENT

CivCo Ltd is committed to achieving Net Zero greenhouse gas emissions by 2050 through the continued development of lower-carbon construction practices, improved resource efficiency and responsible environmental management.

As an established civil engineering and construction contractor delivering water and wastewater infrastructure, utilities, earthworks and environmental improvement projects throughout Northern Ireland, the UK and Ireland, CivCo recognises the carbon impacts associated with plant operations, transportation, material procurement, energy consumption and waste generation.

Carbon efficiency is already embedded within aspects of our operations, including Early Contractor Involvement (ECI), carbon-conscious design and specification recommendations, material recovery, water conservation, renewable-powered site accommodation and electric vehicle trials.

Our Carbon Reduction Plan builds on these established practices through three priorities:

- **REDUCING:** Preventing emissions at source through carbon-efficient design and construction, circular material use, water conservation and improved operational efficiency.
- **NETTING OFF:** Reducing dependence on fossil fuels through renewable energy, electrification and lower-carbon technologies.
- **OFFSETTING & RESTORATION:** Supporting environmental restoration, nature-based solutions and credible measures to address residual emissions.

CivCo will establish an organisation-wide Scope 1 and Scope 2 emissions baseline by March 2027, progressively assess relevant Scope 3 emissions and introduce measurable reduction targets informed by verified data.

We will monitor progress through defined KPI's, management reviews and annual updates to this Carbon Reduction Plan.

2. CIVCO'S CARBON REDUCTION ROADMAP

REDUCING - Prevent emissions & conserve resource
NETTING OFF – Transition to greener energy & recovery systems

OFFSETTING – Restore landscapes & address residual emissions3. OUR DELIVERY THEMES

REDUCING - Preventing Carbon at Source

CivCo prioritises preventing emissions through carbon-efficient construction, water conservation, circular material use and improved plant and transport management. Building on established practices, we will strengthen monitoring and identify further opportunities to reduce fuel consumption, material demand, waste and embodied carbon.

Theme 1 - Water Stewardship, Wastewater Infrastructure & Carbon Reduction

CivCo recognises the carbon impacts associated with water consumption, excavation, material transportation, plant operations and the construction of water and wastewater infrastructure. Through CivCos established involvement with NI Water, governmental departments (Department for Communities; Department for Infrastructure), local District Councils, Dublin City Council and Uisce Éireann projects, we actively incorporate water conservation, resource efficiency and carbon-conscious construction practices into project delivery.

CivCo has already implemented rainwater harvesting, water butts, controlled dust suppression and water-efficient cutting boxes across its construction activities. These measures support the responsible use of water, reduce unnecessary mains water consumption and contribute to more efficient site operations.

Our experience also includes the delivery of civil engineering works associated with sludge-treatment infrastructure and tertiary wastewater treatment trials, working collaboratively with NI Water and specialist technology providers.

This demonstrates CivCo's existing capability to support innovative wastewater treatment solutions through the delivery of associated civil engineering and infrastructure works.

Water stewardship is further supported by established site drainage management, pollution prevention measures and watercourse protection controls, helping to minimise environmental impacts throughout construction.

Building on these practices, CivCo will:

- Expand rainwater harvesting and non-potable water reuse across suitable construction sites, supported by improved monitoring of water consumption and recovered water volumes.
- Continue working collaboratively with clients, designers and specialist technology providers to identify carbon-efficient construction solutions for water and wastewater infrastructure, reducing unnecessary excavation, material handling, transportation and plant requirements.
- Strengthen the assessment of water and resource efficiency within project planning, identifying opportunities to reduce construction-related energy demand and associated greenhouse gas emissions.
- Build on our experience in sludge-treatment infrastructure and tertiary wastewater treatment trials by assessing further opportunities to deliver civil engineering works supporting lower-carbon treatment processes, including improved sludge dewatering, anaerobic digestion and biogas energy recovery.
- Improve the recording of water conservation measures and associated construction activities, enabling CivCo to evaluate resource savings and quantify carbon reductions where reliable data is available.

Key outputs: Reduced mains water consumption, increased rainwater harvesting and reuse, improved construction resource efficiency, reduced material handling and transportation, and measurable reductions in construction-related carbon emissions where supported by appropriate evidence.

Theme 2 - Circular Earthworks, Soil Recovery & Waste Reduction

CivCo has already invested in and implemented specialist screening equipment within its earthworks operations to support the recovery, processing and reuse of suitable excavated soils and aggregates.

This established investment strengthens our circular construction approach by reducing reliance on imported materials, minimising unnecessary disposal and reducing the transportation and associated carbon emissions involved in moving materials to and from construction sites.

Recovered materials are assessed against relevant project specifications and Northern Ireland environmental requirements before reuse, ensuring that material recovery does not compromise engineering performance or environmental compliance.

Building on these practices, CivCo will:

- Continue to maximise opportunities for the recovery and reuse of suitable excavated soils, aggregates and recycled construction materials, reducing demand for virgin resources and associated embodied carbon.
- Strengthen monitoring of recovered material quantities, imported aggregate requirements and transportation movements to identify and quantify carbon savings.
- Expand opportunities for approved soil reuse in land reinstatement and environmental restoration, subject to appropriate testing and consideration of soil structure, contamination, compaction and infiltration performance.
- Continue to improve waste segregation, recycling and recovery across construction activities, working with subcontractors and waste management providers to minimise avoidable waste sent to landfill.
- Review material recovery performance across projects to identify opportunities for further improvements in resource efficiency and lower-carbon construction practices.

Key outputs: Increased volumes of recovered materials (tonnes/m^3), reduced imported aggregates, fewer unnecessary haulage movements, improved waste diversion rates and measurable reductions in material-related carbon emissions where supported by reliable data.

Theme 3 - Early Contractor Involvement, Carbon-Efficient Construction & Transport

Early Contractor Involvement (ECI) is an established and integral part of CivCo's project delivery approach. Working collaboratively with clients, designers, specialist subcontractors and other stakeholders, CivCo actively contribute to design development, material specifications and construction methodologies, recommending practical, carbon-efficient alternatives that maintain the required standards of quality, safety, durability and performance.

Through this collaborative approach, CivCo identifies opportunities to optimise excavation volumes, drainage configurations, pumping requirements, temporary works, material selection, utility interfaces and construction sequencing. By addressing these considerations during early design development and pre-construction planning, we can reduce unnecessary material consumption, transportation, plant operation and associated embodied and operational carbon.

This is particularly relevant to water and wastewater infrastructure, where construction methodologies, excavation requirements, pumping arrangements and maintaining operational continuity can significantly influence carbon performance.

Alongside our ECI capabilities, CivCo implements established operational measures including preventive plant maintenance, anti-idling practices, efficient route planning, consolidated material deliveries and coordinated deployment of plant, equipment and site resources.

Building on these practices, CivCo will:

- Strengthen carbon assessment within our existing ECI and design review processes, comparing alternative specifications, construction materials and methodologies to identify opportunities for reducing embodied and operational emissions.
- Continue working with clients, designers, suppliers and specialist subcontractors to recommend lower-carbon products, recycled materials and efficient infrastructure solutions, considering whole-life performance and project requirements.
- Improve monitoring of plant fuel consumption, transport movements, material quantities and equipment utilisation to identify further opportunities for reducing emissions during construction.
- Develop a more structured approach to recording carbon-efficient design recommendations and alternative construction solutions, using appropriate emissions factors and verified data where available to quantify potential carbon savings.
- Use findings from completed projects to inform future design reviews, procurement decisions and construction methodologies, supporting continuous improvement across CivCo's operations.

Key outputs: Reduced embodied carbon, improved material efficiency, lower plant fuel consumption, fewer unnecessary transport movements and documented carbon-efficient design recommendations, supported by fuel records, material quantities, transport data and carbon option appraisals.

NETTING OFF - Renewable Energy & Lower-Carbon Alternatives

CivCo is already investing in renewable-powered site accommodation (solar) and electric vehicle trials. We will build on these measures to reduce dependence on fossil fuels and improve the carbon performance of site operations and transport.

Theme 4 - Renewable Energy, Electrification & Energy Recovery

CivCo has introduced solar-powered portable site offices and is actively trialling electric vehicles, currently representing 5% of its van fleet.

Building on these practices, CivCo will:

- Assess opportunities to expand solar-powered site accommodation and introduce suitable battery storage and hybrid power systems.
- Evaluate the wider adoption of electric vehicles and battery-powered small plant.
- Monitor solar electricity generation, generator operating hours and fleet energy consumption.
- Explore opportunities to deliver civil engineering infrastructure supporting renewable energy and resource recovery within water and wastewater treatment facilities.

Key outputs: Increased renewable energy use, reduced diesel consumption, lower generator operating hours and improved fleet carbon performance.

OFFSETTING & RESTORATION - Environmental Recovery & Long-Term Sustainability

Alongside direct carbon reduction, CivCo recognises the importance of environmental restoration, biodiversity enhancement and climate resilience in supporting long-term sustainability.

Building on our established experience in drainage, earthworks, public realm and environmental infrastructure, we will continue to identify opportunities to improve land condition, soil health, sustainable surface-water management and biodiversity through our construction activities.

Where residual emissions cannot reasonably be eliminated, CivCo will assess credible carbon removal and offsetting options, ensuring that any claimed carbon benefits are appropriately evidenced and verified. Environmental restoration outcomes will be reported separately from verified carbon reductions and removals.

Theme 5 - Living Landscapes, Soil Health & Nature Based Solutions

CivCo has established experience delivering drainage, public realm and environmental infrastructure, including works associated with sustainable drainage systems, attenuation, landscape reinstatement and nature-based solutions. These capabilities support effective surface-water management, environmental resilience and the integration of green infrastructure within construction projects.

Our existing earthworks operations and investment in specialist screening equipment also support the recovery and reuse of suitable excavated soils, reducing reliance on imported materials and associated transportation emissions while creating opportunities for responsible land restoration.

Building on these practices, CivCo will:

- Continue working collaboratively with clients, designers and environmental specialists to deliver Nature Based Solutions, including raingardens, detention and attenuation features, permeable surfaces and sustainable drainage systems where appropriate to project requirements.
- Strengthen land restoration and soil management practices, using suitable recovered materials for approved reinstatement and landscape rehabilitation, subject to appropriate testing and consideration of soil condition, contamination, compaction and infiltration performance.
- Identify opportunities for native tree and hedgerow planting, taking account of local biodiversity objectives, species suitability, Northern Ireland/ Ireland site conditions and long-term maintenance requirements.
- Improve monitoring of environmental restoration outcomes, including areas reinstated, soil condition, infiltration performance and planting establishment and survival.
- Assess opportunities to quantify the carbon benefits of material reuse and relevant restoration activities, distinguishing verified emissions reductions or carbon removals from wider environmental improvements.

Key outputs: Increased land restoration, improved soil health, enhanced biodiversity, improved surface-water management, reduced reliance on imported materials and measurable environmental outcomes. Verified carbon benefits will be recorded separately from wider restoration achievements.

Theme 6 - Research, Supply Chain Collaboration & Environmental Leadership

CivCo recognises that achieving meaningful carbon reductions requires continued collaboration across the construction and water infrastructure sectors. Our established relationships with clients, designers, specialist subcontractors and suppliers provide a strong foundation for identifying lower-carbon solutions, improving resource efficiency and sharing industry best practice.

Building on these relationships, CivCo will:

- Research & Innovation: Explore collaboration with the Centre for Competitiveness to undertake research and benchmarking into lower-carbon construction methodologies, sustainable materials, resource recovery and emerging technologies. Relevant practices from Northern Ireland, Ireland, Great Britain and international markets will be assessed for their practical application to CivCo's operations.
- Supply Chain Carbon Management: Strengthen engagement with suppliers and subcontractors to improve the availability and accuracy of emissions data associated with purchased materials, transportation, waste and subcontracted activities, supporting the progressive assessment of Scope 3 emissions.
- Lower-Carbon Procurement: Encourage priority suppliers to provide Environmental Product Declarations (EPDs), verified embodied-carbon information and suitable lower-carbon alternatives. Procurement decisions will consider material performance, recycled content, transportation requirements and whole-life carbon impacts, including opportunities for local sourcing where beneficial.
- Industry Collaboration & CO_2nstructZero: Align CivCo's carbon management activities with the Construction Leadership Council's CO_2nstructZero programme and its priorities for reducing emissions across the construction industry. Building on our existing investment in renewable-powered site offices, electric vehicle trials, material recovery and carbon-efficient construction, we will use these priorities to inform further improvements in low-carbon transport, plant efficiency, sustainable procurement and construction methodologies.
- Community & Environmental Engagement: Continue to support relevant environmental and community initiatives, including WaterAid fundraising and partnership opportunities, recognising their contribution to water, sanitation and community wellbeing. These activities will be reported separately from verified greenhouse gas emissions reductions.

CivCo will progressively incorporate findings from research, supplier engagement and industry collaboration into its carbon assessments, procurement decisions and project delivery practices. Progress will be monitored through supplier carbon information, documented lower-carbon alternatives, research outcomes and annual Carbon Reduction Plan reviews.

Key outputs: Improved Scope 3 emissions data, increased availability of supplier carbon information, lower-carbon procurement opportunities, research and benchmarking outcomes, strengthened industry collaboration and evidence-based improvements in construction carbon performance.

4. EMISSIONS, MEASUREMENTS & TARGETS

CivCo will monitor and measure greenhouse gas emissions to assess the effectiveness of its existing carbon reduction measures, identify further opportunities for improvement and demonstrate progress towards its commitment to achieving Net Zero by 2050.

CivCo will establish its organisation-wide Scope 1 and Scope 2 emissions baseline by March 2027, using a clearly identified financial-year reporting period, documented organisational boundaries and relevant UK Government greenhouse gas conversion factors.

The baseline reporting year will be confirmed during data validation. Relevant Scope 3 categories and data gaps will be assessed progressively, prioritising construction materials, waste, transport and subcontracted activities.

CivCo's emissions monitoring will cover:

- **Scope 1 - Direct Emissions:** Fuel consumption from company-controlled plant, machinery, vehicles and applicable heating systems.
- **Scope 2 - Indirect Energy Emissions:** Emissions associated with purchased electricity consumed by CivCo.
- **Scope 3 - Other Indirect Emissions:** Relevant emissions associated with purchased construction materials, waste disposal, subcontracted haulage, business travel and supply chain activities.

Organisational emissions and project-level avoided emissions will be reported separately to prevent double counting. Water, biodiversity and restoration outcomes will not be treated as carbon offsets without appropriate verification. Following baseline validation, CivCo will approve interim reduction targets and report progress annually.

Metric	Baseline / Target	Evidence
Scope 1 (tCO_2e)	Baseline by March 2027; interim target after validation	Fuel, plant & fleet records
Scope 2 (tCO_2e)	Baseline by March 2027; interim target after validation	Electricity bills, kWh
Relevant Scope 3 (tCO_2e)	Priority categories & gaps identified by March 2027	Supplier, materials, waste & haulage records
Water Conservation	Expand existing harvesting & reuse	Water used/reused (litres or m^3)
Material Recovery	Increase suitable recovery & reuse	Recovered quantities (tonnes or m^3)
Waste Diverted from Landfill	Establish baseline; reduce avoidable disposal	Waste transfer records, diversion %
ECI/ Design Alternatives	Record carbon-efficient recommendations	Option appraisals, estimated/verified tCO_2e
Plant & Transport	Improve fuel & journey efficiency	Fuel litres, plant hours, mileage
Solar Site Accommodation	Monitor existing installations; assess expansion	Solar kWh, generator hours
EV Van Trial	Currently stated as 5%; verify fleet counts	EV and total van register, mileage

5. IMPLEMENTATION ACTION REGISTER

Theme / action	Delivery measure	Owner	Timing	Evidence
Governance	Approve, publish and annually review plan	Directors / HSEQ	On approval; annually	Signature, URL, review
Carbon Baseline	Calculate Scope 1/2; map relevant Scope 3	HSEQ / Office	By Mar 2027	tCO_2e, boundary, data gaps
Water	Expand existing rainwater harvesting and efficient controls	Site Managers	Ongoing / project	Water/reuse volumes
Nature	Deliver and monitor suitable SuDS and restoration	Engineering / Site	Project-specific	Areas, tests, aftercare
Circular Materials	Monitor established screening and approved reuse	Contracts / Plant	Ongoing	m^3/tonnes, testing
Waste	Track diversion and reduce avoidable landfill	Site / HSEQ	Quarterly	Waste records, diversion %

Fleet	Evaluate existing EV trial; verify 5% figure	Plant / Procurement	2026–27	Fleet counts, mileage, kWh
Site Power	Monitor solar offices; assess expansion/storage	Contracts / Plant	2026–27	Solar kWh, generator hours
ECI	Quantify options within established design/specification input	Contracts / Engineering	Suitable projects	Appraisals, carbon evidence
Plant/Transport	Monitor fuel, plant use and vehicle movements	Contracts / Plant	Ongoing	Fuel, hours, mileage
Suppliers	Seek EPDs and lower-carbon alternatives	Procurement	Annual review	EPDs, responses
Research	Explore Centre for Competitiveness collaboration	Directors	2027 proposal	Scope or feasibility
Innovation	Build on NI Water trial infrastructure experience; assess new opportunities with NI Water, Uisce Eireann governmental departments, local District & City Councils	Contracts / Engineering	Subject to project	Design reviews, proposals
CO_2nstructZero	Align applicable measures with programme priorities	Directors / HSEQ	Annual	Action/review records
Engagement	Evidence WaterAid/community activities separately from offsets	Directors	As applicable	Contribution records

6. GOVERNANCE, ASSURANCE & ANNUAL REVIEW

Directors are accountable for resources, approval and performance. The SHEQ Manager coordinates emissions accounting, the action register and annual review; Contracts Managers, Engineers and Site Managers implement project controls; Procurement obtains supplier data; and the Office Manager maintains utility and fleet records. Progress will be reviewed quarterly where data is available and annually at Director level. Reporting will distinguish measured emissions, estimated project savings and wider environmental benefits. Interim reduction targets will be established after baseline validation.

7. DIRECTOR APPROVAL & APPLICATION

I confirm CivCo Ltd's commitment to achieving Net Zero by 2050, developing and maintaining an organisation-wide Carbon Reduction Plan, and reviewing and updating it annually. If this plan is not published at the time of framework appointment, CivCo commits to develop and publish it within 120 days of appointment.

Approved by	Role	Signature	Date
Paul McFlynn	Director		31.03.2026

Published plan URL: [insert once published]