

Knox & Wells

Carbon Reduction Plan

January 2024

Introduction

In 2019 the UK Government amended the Climate Change Act 2008 1 by introducing a target of at least a 100% reduction of greenhouse gas emissions 2 (compared to 1990 levels) in the UK by 2050. This is otherwise known as the 'Net Zero' target. The Welsh Government have set their target by 2030.

Our Carbon Reduction Plan adheres to the UK Government's Procurement Policy Note (PPN) 06/21: 'Taking Account of Carbon Reduction Plans in the Procurement of Major Government Contracts'. It sets out our carbon reduction plans and our commitment to Net Zero.

Commitment to Achieving Net Zero

Knox & Wells Ltd is committed to achieving Net Zero emission by 2050. Our Carbon Reduction Plan is reviewed annually in order to measure and monitor our progress. And also with the aim of identifying actions that can bring forward our Net Zero target in order to meet the Welsh Government 'Net Zero' target.

Our Business

Knox & Wells Ltd are Main Building Contractor based in South Wales that has a respected and longstanding reputation. The company's aim is to deliver sustainable construction, building projects and property development using the latest building methods and technologies. We are committed to supporting our Communities and to offer the best value to our Clients.

Reporting Standards

Knox & Wells have taken the necessary steps to understand our environmental impact and carbon footprint relevant to the delivery of our building contracts.

This includes reporting on our Greenhouse Gas (GHG) emissions in accordance with the required reporting standard: Greenhouse Gas Protocol Corporate Accounting & Reporting Standard. We employ both PCR Global and CBN Expert in order to support our climate strategy, provide consultancy services and software to measure our GHG emissions.

Our Carbon Reduction Plan adheres to the UK Government's Procurement Policy Note (PPN) 06/21 and Technical Standard for completing a Carbon Reduction Plan. The Plan is updated annually to present our most recent data in line with PPN 06/21.

Baseline Emissions Report

Baseline Year:	Financial Year End : 31 December 2021	Financial Year End : 31 December 2023
	Baseline Year Emissions	Current Year Emissions
EMISSIONS	TOTAL (Tonnes CO2)	TOTAL (Tonnes CO2)
Scope 1	65.34 Tonnes	63.70 Tonnes
Scope 2	1.81 Tonnes	1.78 Tonnes
Scope 3	0.75 Tonnes [Select Scope 3 Emissions - increase reporting 2024]	0.74 Tonnes

Carbon Reduction Targets

Our path to reducing our carbon emissions started way back in 2006 with one of the first Envirowise Case Studies. This City Centre refurbishment project delivered a 51% reduction in our waste, 29% reduction of waste sent to landfill and the re-use of materials on site.

Since then we have undertaken many initiatives to reduce our Carbon Footprint which is summarised in our [Decarbonisation Milestone Plan - Key steps to achieving Net Zero Carbon by 2050](#) as attached overleaf.

Knox & Wells Ltd signed to the FNZ Standard with CBN Expert in 2020 and started recording our GHG emissions in 2021.

We are committed to achieving Net Zero GHG emissions for Scope 1,2 & 3 by 2050 and Net Zero GHG emissions on Scope 1 & 2 by 2045. And aim to achieve the following near term reduction targets in order to achieve this goal:

- 50% reduction in Scope 1 & 2 emissions by 2030
- 45% reduction in Scope 3 emissions by 2038

Our Carbon Reduction Plan is embedded into our accredited ISO14001 Environmental procedures that are applied to all our construction projects. This enables us to deliver on project specific targets and include environmental management measures when performing our contracts.

Decarbonisation Milestone Plan

Our Decarbonisation Milestone Plan is reviewed annually by the Board of Directors, along with specific Carbon Reduction Budgets for our Scope 1, 2 & 3 emissions. Initiatives are discussed at our annual Carbon Reduction Board Meeting, with an agreed Action Plans put in place in order to deliver an achievable pathway to Net Zero.

The Plan is also discussed with our Carbon Consultant CBN Expert that assist in our recording and regular reporting. Enabling us to monitor our Action Plan against actual results and that our carbon footprint is measured in accordance with the Green House Gas Corporate Accounting Protocol.

Decarbonisation Milestone Plan - Key steps to achieving Net Zero Carbon by 2050

Key Steps – Net Zero Carbon Plan	2006	2008	2010	2011	2013	2015	2020	2025	2030-50
	Achieved							Targets	
Envirowise Case Study, Cardiff City Centre Refurbishment case study project 51% waste reduction	Envirowise	Help established KPIs and waste reduction targets, leading to 51% reduction in waste and 29% reduction of waste sent to landfill. Now achieve +90% on all construction projects.							
K&W in-house system for recording Waste by Volume and Type	Waste Recording	Resulting from our Case Study with Envirowise, K&W developed their first in-house procedures for recording waste by type and volume							
Site Waste Management Plans (SWMP) – used on all construction projects from 2008		SW MP	Adopted well ahead of Welsh regulations, enabling us to train all our Site Managers in WRAP procedures and toolkits, now adopted into ISO14001						
Net Zero Plan documented with on-going Action Plan Reported and reviewed annually		Net Zero Plan	Actions included: Low energy light fittings, upgrading boiler; water systemisers on toilets; water filters replacing bottled; hybrid cars						
SOFTWARE use: - WRAP Waste to Landfill Reporting Portal - WRAP Net Waste Toolkit		S/W - Waste WRAP	Used to measure, analyse and target waste reduction. Now embedded into environmental procedures enabling us to achieve 90-100% recycled waste on all construction projects.						
SOFTWARE use: - Construct CO2 - Get-On-Site (on-line site induction platform)		S/W - Go Construct	Used to reduce and minimise our travel journeys	S/W Get-On-Site	Greater efficiency, reducing wasted travel				
WRAP: The Construction Commitments: Halving Waste to Landfill. First SME in Wales to sign up to this commitment		Halving Waste to Landfill							
Collaboration with Pure Wafer – Joint Partnership in Solar PV Installation		Solar PV collaboration	Joint venture with leading Welsh Solar PV manufacturer						
Solar PV Arrays installed via Joint Partnership with Pure Wafer [37% Net Zero Carbon Achieved]. In-house Solar PV Team established & remains unchanged		Solar PV In-House Solar PV	Solar PV Team with 7 years management and installation experience and qualifications						
ISO 14001 Accreditation – Net Zero Carbon Plan embedded into our ISO14001 procedures		ISO 14001	All procedures now adopted within our ISO14001 standards						
EV Charging Points & Solar PV Battery Storage Unit. Scope 1,2,3 Emissions recorded 2021 & Green Energy Tariffs used for all energy needs in 2023.		EV Charging PV Battery Storage Unit	Renewable energy source for EV charging & storage						
Ground Source Heat Pump or Alternative [Currently reviewing best options in order to meet current energy usage gap of 63%]								Ground Source Heat	
EV Fleet – replace MV Fleet from 2025							EV Fleet	EV Fleet	
Carbon Offsetting – To be Considered, if certain criteria met (see Note below), and if required to fill any shortfall in our net zero targets by 2030-2050								Net Zero Target	

Milestone Plan & Planned Carbon Reduction Initiatives

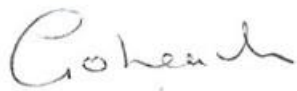
- 2024
- Widen our Scope 3 emissions reporting
 - Engage with Key Subcontractors through our in-house Supply Chain Training Seminars
 - Encourage our Suppliers to sign up to the Welsh Government's 'Green Growth Pledge'
 - Develop Draft NZC Subcontract Clauses for our Supply Chain
 - Increase our range of Fully EV and Hybrid EV Fleet
 - Introduce HVO (Hydrotreated Vegetable Oil) in certain selected plant & machinery
 - Monitor HVO performance
 - Continue expanding our use of Solar PV powered Site Cabins and Eco Cabins aiming to make this our standard across all our construction sites
 - Conduct research into suitable Green Energy and Woodland initiatives where we can provide investment and donations that can support our local Biodiversity, Trees & Mycelium Network
 - Research use of lower embodied Carbon material products
 - Review further opportunities to contribute to a circular economy and engage/procure with these suppliers, particularly with regards to our waste and re-use of our materials
 - Review and widen our list of reused materials and widen use of grey water for mixing aggregates
 - Target set for all sites with Considerate Constructors Score of 45/45 (minimum 40)
- 2025
- Provide investment and donations to suitable local Green Energy and Woodland initiatives
 - Where possible use Battery Storage Units alongside generators to reduce generator usage
 - Review and trial the use of hydrogen fuel cell powered generators
 - Review and consider options for Wind Battery Storage Units
- 2026
- Replace diesel Forklift Truck with EV powered Forklift that can be run through renewable electricity that is generated by our two Solar PV arrays and via our Solar PV Battery Storage Unit during daker and shorter daylight periods
- 2028
- Replace Gas Boiler with Ground Sourced Heat pump or alternative
- 2030
- 50% reduction in Scope 1 & 2 emissions
 - 100% Net Zero for all Site Set Up use on all projects
 - Targets set on the use of carbon intensive materials such as concrete and steel
- 2035
- 100% of Fleet consisting of Fully EV or Hybrid EV vehicles
- 2038
- 45% reduction in Scope 3 emissions
- 2040
- Consider and Review any **viable** Carbon Offsetting initiatives, prioritising those that benefit our communities and only used as a last resort in order to meet any shortfalls

Declaration

This Carbon Reduction Plan has been completed in accordance with the UK Government's Procurement Policy Note (PPN) 06/21: 'Taking Account of Carbon Reduction Plans in the Procurement of Major Government Contracts'.

Our Emissions have been reported in accordance with the GHG Reporting Protocol, using appropriate UK Government emission conversion factors.

The Carbon Reduction Plan has been reviewed and signed off by the Board of Directors.



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Guy Leach

Managing Director

25 January 2024