CONSTRUCTING EXCELLENCE PRESENTATION

WINVIC CONSTRUCTION LIMITED | MARCH 2023

WINVIC ATTENDEES

Neave Thompson
Sustainability Manager

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AGENDA

1. SUSTAINABILITY STRATEGY
2. OPPURTUNITIES FOR COLLABORATION
3. NET ZERO CARBON BUILDINGS
4. ACHIEVING NET ZERO
5. GREEN SUPPLY CHAIN

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OUR SUSTAINABILITY STRATEGY

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OUR APPROACH AND VISION

We want to raise the bar for delivering sustainable buildings and infrastructure for our clients, while also leaving a lasting positive, social, environmental, and economic legacy.

“We remain committed to our ambition to become a Net Zero business by 2025”

NET ZERO

With this in mind, we are rolling-out our updated Sustainability Strategy. This renewed roadmap builds upon our progress, impact to date and lessons learned.

It has been designed to deliver year on year progress across four key pillars which form the framework of our strategy and our business approach to sustainability.

SOCIAL

ENVIRONMENTAL

ECONOMIC

Sustainability strategy launched Dec 2022

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OUR VALUES

The four core pillars at the centre of our strategy are:

PEOPLE
Putting People First

INNOVATION
Leading Through Innovation

PLANET
Protecting The Planet

COMMUNITY
Partners In Communities

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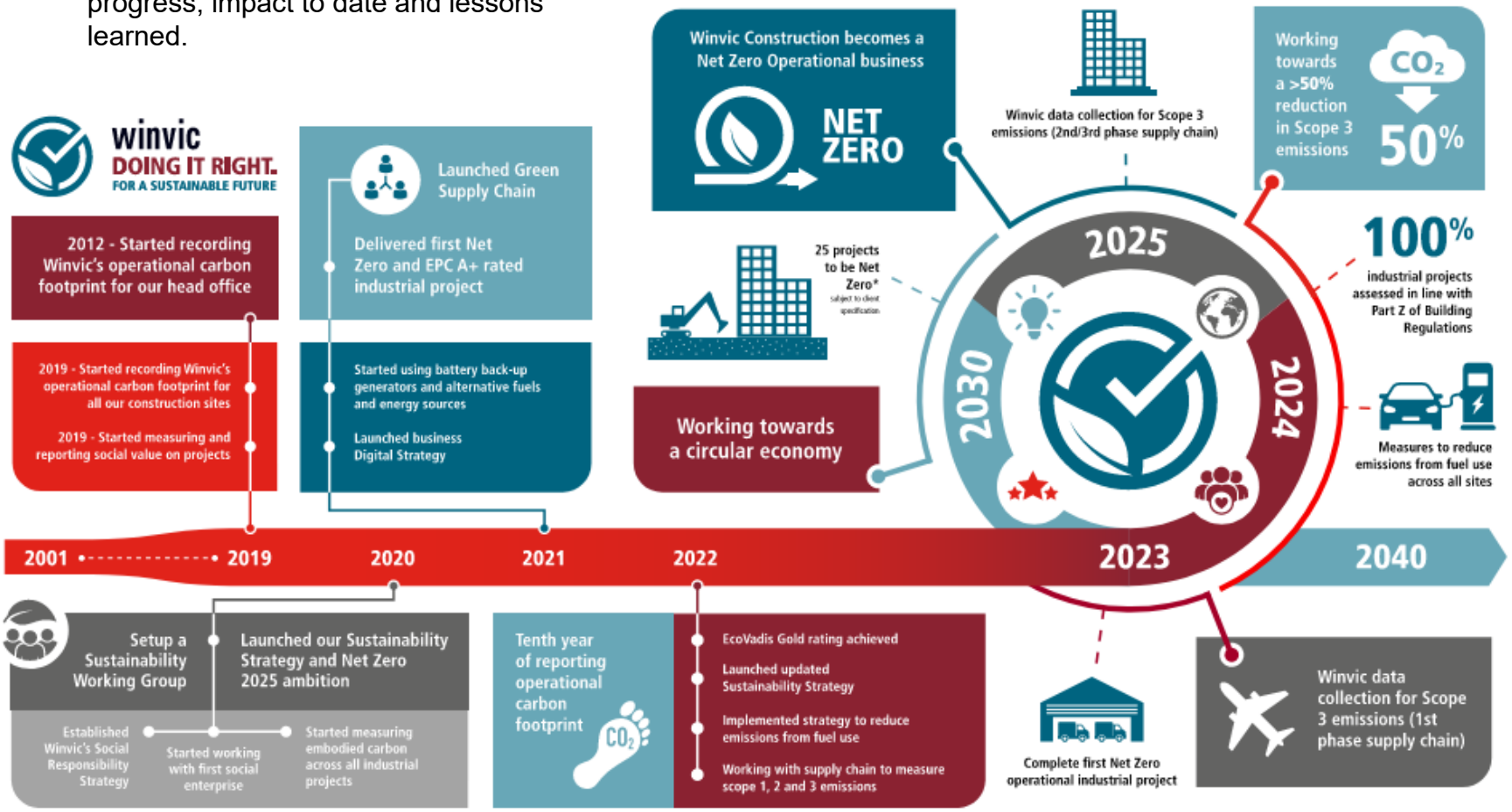
OUR SUSTAINABILITY ROADMAP

In December 2022 we launched our updated Sustainability Strategy. This renewed roadmap builds upon our progress, impact to date and lessons learned.



OPPORTUNITIES FOR COLLABORATION

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OPPORTUNITIES FOR COLLABORATION CLIENTS

NET ZERO CARBON BUILDINGS

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NET ZERO CARBON

Ascent Logistics Park

Tungsten, Warrington

BACKGROUND

- Efficiently delivering low carbon and energy efficient developments
- Offsetting the residual carbon emissions

OPERATIONAL CARBON EMISSIONS

- The greenhouse gas emissions from the energy consumption in the day-to-day running of a property (Stage B).

EMBODIED CARBON EMISSIONS

- The greenhouse gas emissions during the construction process from producing, procuring, and installing the materials and components that make up the structure of a building and beyond (Stage A-D).

Whole life carbon = **Operational carbon** + **Embodied carbon**

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PART Z – WHOLE LIFE CARBON

CARBON ASSESSMENT - Z1.

Whole life carbon emissions shall be assessed and reported for the building and any other parts of the project where Building Regulations apply.

CARBON EFFICIENCY - Z2

Reasonable provision shall be made for the minimisation of whole life carbon emissions by:

a) Minimising upfront embodied carbon; and

b) Where an item provides whole life carbon benefit, this is taken into account

Requirements Z1 and Z2 only apply to projects with a gross internal area of more than 1000m2 or that create more than 10no. Dwellings

Z1 will apply to buildings other than dwellings from 1 January 2023 and dwellings from 1 January 2025

Z2 will apply to all buildings from 1 January 2027

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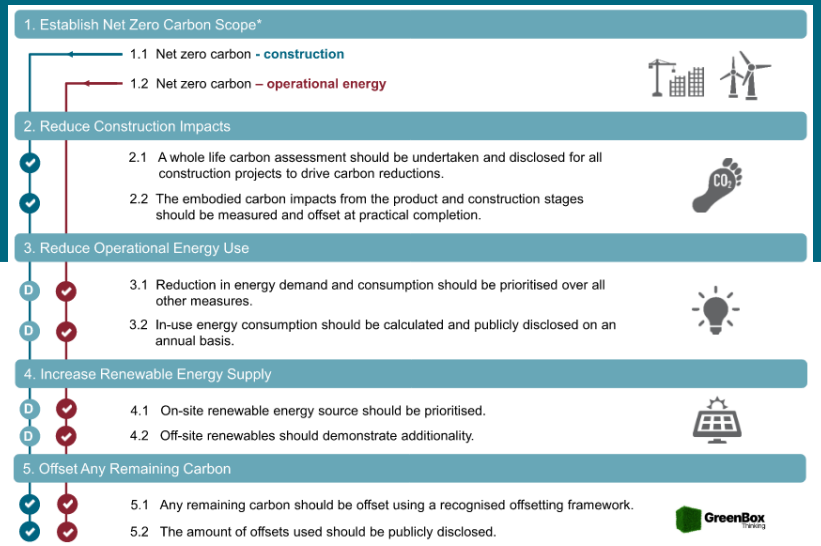
NET ZERO CARBON BUILDINGS

The purpose of a Net Zero Carbon Assessment is to develop a pathway to a Net Zero Carbon footprint. 'Net Zero Carbon' indicates the success of effectively delivering zero emissions from a project through residual carbon reduction and then carbon offsetting the remaining carbon emissions.



UK GBC

UKGBC FRAMEWORK

- Winvic is a member of the UK Green Building Council
- Verifying Net Zero projects with UKGBC

Winvic follow the UKGBC framework for Net Zero carbon for operational energy and in construction.

- The framework defines ‘Net Zero Carbon’ buildings
- Sets standards and process to ensure Net Zero carbon buildings remain credible
- Gives guidance on renewable energy procurement and carbon offsetting
- Outlines a methodology to measure and ensure accountability
- Recognises the need to limit global warming to 1.5 degrees

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NET ZERO CARBON BUILDING ASSESSMENTS

Whole Life Carbon Assessment | Life Cycle Stages EN 15978

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EMBODIED

Stage A1	Stage A2	Stage A3	Stage A4	Stage A5
Raw Material Extraction and Supply	Transport to Manufacturing Plants	Manufacturing and Fabrication	Transport to Project Site	Construction and Installation

Manufacturers, Suppliers, Stockholders

OPERATIONAL

Stage B - Client	Stage C	Stage D
B1. Use **B2**. Maintenance **B3**. Repair **B4**. Replacement **B5**. Refurbishment **B6**. Operational energy use **B7**. Operational water use	**C1**.Deconstruction / Demolition **C2**. Transport to disposal facility **C3**. Waste processing for reuse, recovery or recycling **C4**. Disposal	Benefits and loads beyond the system boundary • Reuse • Recovery • Recycling Potential

25 YEARS — 60 YEARS

Product Stage

Construction Process Stage

Use Stage

End of Life Stage

Beyond Project Life Cycle

Cradle to Gate

Cradle to Practical Completion (Handover)

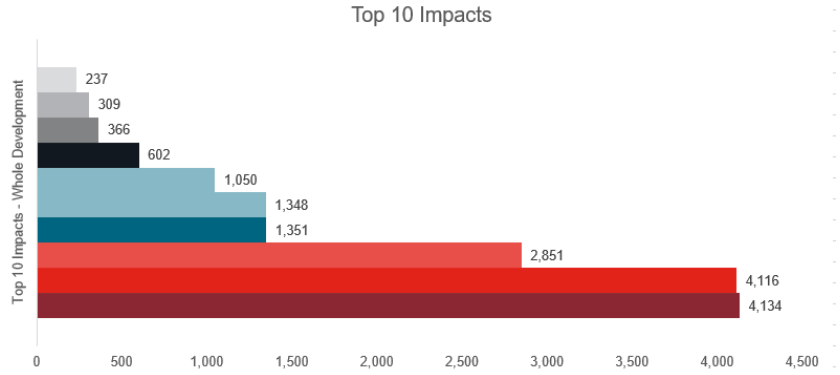
Cradle to Grave

Cradle to Grave Including Benefits and Loads Beyond the System Boundary

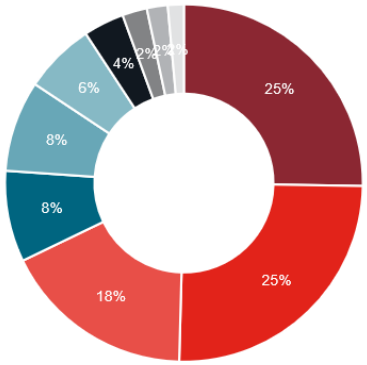
CARBON CALCULATOR

As a business Winvic has committed to reducing the CO2 emissions in our constructed projects in our Updated Sustainability Strategy and so have developed a method of measuring the embodied carbon associated with stages A1 to A5 to enable us to deliver ‘Net Zero Carbon buildings’.

- Assessments at 3 key stages – concept design to practical completion
- Final calculations breakdown the whole life carbon emissions of a building



Top 10 Impacts – Whole Development (Materials represented in kgCO2 eq per m2)



Top 10 Impacts – Whole Development (Overall development compared to the rest of the model)

TOP 10 CARBON INTENSIVE ELEMENTS

1. Lower floor construction
2. Steel frames
3. Special surfaces and pavings
4. Local electricity generation systems
5. Unclassified / other
6. Roofs
7. Space heating and airconditioning
8. Standard foundations
9. External and enclosing walls above ground level
10. Roads, Paths and pavings

ACHIEVING NET ZERO

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ACHIEVING NET ZERO

TRANSPORT
Shift to zero emission vehicles, both on site and employee commuting

ENERGY
- Improve energy efficiency with greener buildings from concept and design stages
- Winvic will be installing renewable energy on-site to be used for the construction phase for elements such as cabins, welfare facilities and tenant requirements (as required)

INNOVATION
Green technology and innovation

WASTE
Reduce, reuse, recycle

CONSTRUCTION
- Invest in low carbon materials
- Design out carbon
- Invest in the circular economy, by procuring recycled and reused materials where possible
- Avoid idling
- Source materials locally to reduce transport emissions
- Source plant and equipment that operate on renewable energy
- Reduce plastic used for deliveries to sites

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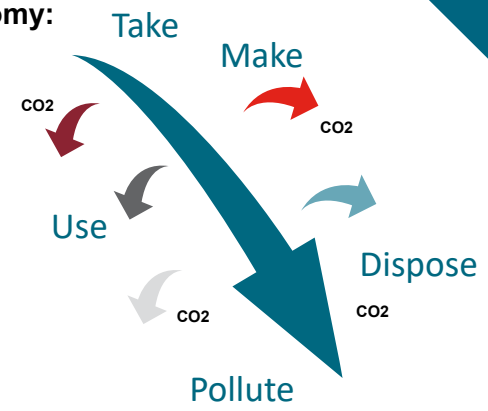
CIRCULAR ECONOMY

As a business we encourage our supply chain partners to invest in the circular economy, where materials and resources are used in circulation and waste is kept to a minimum.

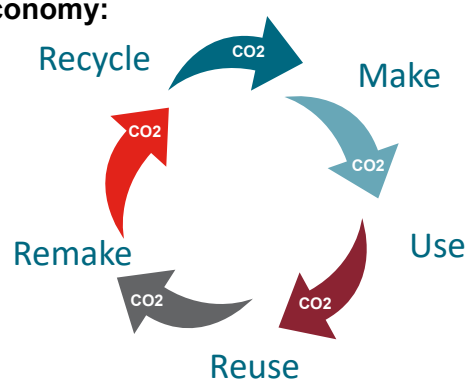
Promoting a circular economy and decarbonisation through following the **five stages of waste reduction**:

1. Reduce – Assess the environmental impact of all operations, implement reductions in through design and manufacture where possible to eliminate unnecessary materials or waste being brought to site.
2. Reuse – Incorporate sustainable, environmental considerations through design and end of life. Prolonging the life of whole items/ materials or parts of it.
3. Recycle – Firstly, minimise waste on site and then appropriately segregate and dispose of recyclable materials.
4. Recover – Regeneration or reclaiming materials
5.Disposal – Most waste items should have found suitable solutions via the above stages. Disposal stage comprises anything that cannot be recovered.

Linear Economy:



Circular Economy:



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GREEN SUPPLY CHAIN

We rolled out our updated Sustainability Procurement Framework (SPF), which assists us to source materials more sustainably, ethically and where possible locally.

Going beyond this, we have created a Green Supply Chain (GSC) forum in which the sustainability team work collaboratively with a set of suppliers whose carbon reduction is crucial to us achieving our Net Zero ambitions.

COLLABORATION IS KEY

We are working collaboratively with our Green Supply Chain partners to develop innovative and sustainable product solutions through researching new methods of construction and technologies with carbon and energy efficient materials.

The ultimate goal is to have the lowest embodied carbon emissions throughout the life cycle of a project, considering design, labour, and instalment techniques.

May 2022 Green Supply Chain Workshop hosted by Winvic

WORKSHOPS

Through workshops we are exploring ways we can work together to drive down operational and embodied carbon emissions with our Green Supply Chain.

These workshops look at how we can make significant progress towards ensuring Net Zero becomes reality by focusing on procuring sustainable, renewable and recycled materials and work with our supply chain to develop innovative and sustainable product solutions.

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ENVIRONMENTAL PRODUCT DECLARATION (EPDS)

- A document that transparently communicates the environmental performance or impact of any product or material over its lifetime.
- EPDs are used in lifecycle assessments and detail carbon factors for element of a building from extraction, installation to end of life.
- EPDs are based on calculations from ISO 14040 and 14044.
- Verification of an EPD must go through an independent third party. Winvic accept EPDs which are supported by the BRE covering all stages from Life Cycle Stages (EN 15378) A1- D.
- Data must be based on any 12-month period within the last five years.


bre

Statement of Verification

BREG EN EPD No.: 000367 Issue 01

This is to verify that the

Environmental Product Declaration

provided by:

Kingspan Insulation Ltd

is in accordance with the requirements of:

EN 15804:2012+A1:2013

and

BRE Global Scheme Document SD207

This declaration is for:

1m³ of Kingspan Kooltherm Pipe Insulation

BRE Global Verified EPD

Company Address

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HR6 9LA

Kingspan

Laura Critien

Operator

02 November 2021

Date of this Issue

02 November 2021

Date of First Issue

01 November 2026

Expiry Date

BRE Global Verified EPD

EPD

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QUESTIONS?

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