



# **Environmental Ambition** 2030 Roadmap

A SUSTAINABLE FUTURE BY ACTING TODAY

2024 update

VB-ENV-PR-XXXX-0011



### CONTENTS

. . . . . .



| Executive Summary                             | 3  |
|-----------------------------------------------|----|
| Our Themes                                    | 4  |
| Sustainable Development Goals                 | 5  |
| Stakeholders                                  | 6  |
| Acting for the Climate                        | 7  |
| Case Study – Blackpool Offices                | 10 |
| Circular Economy                              | 11 |
| Case Study – Liverpool Festival Gardens       | 14 |
| Preserving Natural Environments               | 15 |
| Case Study - University of West England SAP 3 | 17 |
| Governance & Behaviours                       |    |







John Roberts Managing Director

I'm pleased to present our Environmental Ambition 2030 Roadmap, reflecting our commitment to responsible growth, social and environmental accountability.

We recognise the urgency of **acting for the climate** and are working hard to reduce our carbon footprint. By 2030, we will achieve a 40% reduction in our Scope 1 & 2 emissions and, by starting to measure the emissions of what we build and then with more sustainable materials choices, a 20% reduction in Scope 3. We will prefer to work with suppliers who share our vision, ensuring alignment across our value chain.

Embracing **circular economy** principles, we will optimise resources using the reduce, reuse, recycle mindset. This includes eliminating waste through design, minimising waste during construction, specifying materials with more recycled content, and planning for deconstruction to increase recyclability and reusability of resources in future.

We will **preserve and enhance the natural environments** where we deliver our projects. Responsible site management, environmentally sensitive project design, and working with the communities we work in will ensure our projects protect, respect, and enhance local ecosystems.

By aligning our **governance and behaviours** with the need to protect the planet, we will ensure compliance with environmental regulations and set new standards for ourselves. This will require new systems and procedures to be developed that support our intentions together with comprehensive training and development of our people. We will continue to refine our culture as an environmentally aware business doing its part to make a difference.

Our plans and goals set out in our Roadmap will only become reality if we effectively work with all our stakeholders. We will involve and encourage customers, our people, suppliers, communities, investors and our business units through communication and collaboration. Annual action plans from each of our business units will align with our Roadmap goals, ensuring compliance and broad adoption of sustainable practices into our work. By acting responsibly today, we help lay the foundations for a more prosperous and sustainable future for our business.

## We are acting now. Not somebody else, not tomorrow.

## OUR THEMES

# Our Roadmap uses our global parent company's common themes and goals to support the Group's Environmental Ambition.

This shared global commitment and actions toward a more sustainable future will benefit our business, society, and the environment. Our Roadmap is structured around four key themes and is aligned with the main Planet KPIs from the VINCI Building Business Plan 2024.



## SUSTAINABLE DEVELOPMENT Reflorme Hospital GOALS

Sustainability is maintaining a balance between society's economic, social, and environmental aspects. It is essential to do this in a way that satisfies the needs of the present generation without compromising the needs of future generations.

Our Roadmap aligns with with the UN Sustainable Development Goals (UNSDGs), a globally recognised framework for sustainability that is becoming increasingly important to our funders, key customers, frameworks and the people we want to join us - our staff.



University of Exeter Spreyton.

Hingston Community Schoo,

## STAKEHOLDERS

To successfully implement our Roadmap, we must work with stakeholders and encourage the entire value chain to embrace sustainability, delivering positive environmental outcomes.

#### OUR CUSTOMERS

We empower our customers to make informed choices by fostering strong relationships and a shared commitment to sustainability. We offer resources and workshops to help them understand and adopt sustainable practices into their projects. We share progress updates and seek feedback through newsletters, reports, and meetings.

#### OUR SUPPLY CHAIN

Our suppliers and manufacturers are fundamental in sourcing low carbon materials and providing environmentally positive production and designs. We build transparent relationships and encourage efficient use of resources, fostering innovation to help meet our sustainable supply chain ambitions. Through communication, collaborative platforms, and joint initiatives, we will create a resilient supply chain that supports our Roadmap and integrates sustainability at every project stage.

#### POLICYMAKERS & TRADE ASSOCIATIONS

We actively engage with policymakers and industry bodies to understand upcoming regulations and input into new policies. By integrating policy drivers into our thinking, we ensure regulatory compliance and position ourselves as thought leaders. This allows us to anticipate changes, adapt swiftly, and advocate for policies that support our goals, and create more sustainable and resilient projects while contributing positively to the broader regulatory environment.

#### LOCAL COMMUNITIES

We work with residents, businesses, and authorities to ensure our projects respond to community needs and environmental priorities. By holding regular meetings, workshops, and consultations, we will gather feedback and foster shared ownership over sustainability. This helps us build strong, positive relationships, ensuring our sustainability efforts are locally supported and contribute to the overall benefit of the areas in which we work.

#### OUR BUSINESS UNITS

Each of our Business Units are responsible for preparing and updating an annual action plan that aligns with our Roadmap. This includes setting local targets, identifying initiatives, and monitoring progress throughout the year. Regular meetings and workshops supported by our central team ensures that all Business Units are coordinated and share best practices. By fostering accountability and continuous improvement, we empower each Business Unit to contribute to our overall ambition whilst reflecting their local requirements.

## ACTING FOR THE CLIMATE



The built environment contributes to over 40% of the UK greenhouse gas emissions annually. We have set ambitious targets to cut direct and indirect emissions and are taking action to achieve these throughout our business.

#### DECARBONISE OUR MATERIALS AND BUILDINGS

Purchased goods and services equate to over 95% of our emissions as most of the work and material that goes into our buildings is delivered through subcontracting. To reduce this core aspect of our carbon footprint, we will:

- Establish a clear and efficient way for our sites to centrally report the quantities and specifications of key materials such as concrete, steel and aggregates. This will establish a more accurate and transparent material-based approach to our emissions reporting.
- Promote, then mandate early use of wholelife carbon assessments to understand our proposed buildings' baseline embodied carbon. With our design teams and clients, we will use this information to reduce emissions by choosing materials with lower carbon footprints.
- Engage with our suppliers to promote products with Environmental Product Declaration (EPD) data which will support better decision-making over lower carbon materials in design and improve accuracy/transparency of project and business reporting.
- Reduce operational emissions of the buildings we deliver. Whilst the grid will continue to decarbonise we will drive for fabric first thinking and set energy targets with integrated on-site renewable generation building services strategies for the buildings we provide.

#### OBJECTIVES

- **Decarbonise** our materials and buildings
- Achieve Net Zero Carbon sites and offices
- Transitioning our fleet and plant
  - Build climate resilience into the way we work



#### ACHIEVE NET ZERO CARBON SITES AND OFFICES

We have made good progress on Scope 1 and 2, having reduced our emissions by 42% against the 2019 baseline, but we can do more.

Through energy efficiency, renewable energy use, and sustainable practices, we will further reduce our carbon footprint and the impact of our sites, accommodation, and offices.

We will focus on:

- Fabric upgrades of offices, investing to improve our owned offices thermal performance to reduce the energy required to heat them.
- On site generation: Incorporate solar panels, wind turbines, or biomass energy solutions to reduce reliance on fossil fuels and generate clean energy on site.
- Energy storage systems: Use battery storage systems to capture excess renewable energy for use during peak demand times or when renewable sources are not generating.
- Alternative fuels: Transition to fuels like Hydrotreated Vegetable Oil (HVO Green D+) for generators and site machinery, which significantly reduces emissions compared to conventional diesel. The plant and fleet department are also exploring hydrogen as an alternative fuel for use in generators paired with battery storage units and solar arrays.

- Efficient generator setup: Invest in high-efficiency generators for backup power, choosing models with lower emissions and better fuel efficiency. We will seek to use generators that are designed to work seamlessly with renewable energy sources.
- Energy efficient cabins: We will select units that combine several energy saving features. These can typically achieve an A grade energy rating.



Ellesmere Port



#### TRANSITIONING OUR FLEET AND PLANT

We will continue to shift towards low-emission vehicles and machinery. By investing in electric and hybrid technology, we will reduce the emissions of our operational equipment. This transition is a crucial step in aligning our operations with our ambition.

We will focus on:

- Fleet electrification: Continue to invest in electric vehicles (EV) for company owned cars, vans, and Light Commercial Vehicles (LVCs) and the installation of EV charging at offices and sites.
- Hybrid and alternative fuel vehicles: For heavy-duty vehicles and machinery where electrification may not be feasible yet, we will consider hybrid models or alternative fuels such as biodiesel and hydrogen fuel cells.
- Fuel efficiency measures: Implement fuel management systems to monitor and optimise fuel use in conventional vehicles and machinery to reduce unnecessary fuel consumption.

- Green procurement policies: Adopt procurement policies that prioritise the purchase or lease of low-emission vehicles and equipment.
- Telematics: Gather data on vehicle and equipment usage, helping to identify areas for efficiency improvements and reduce idle times. Telematics can be used to identify drivers that would benefit from training, based on excessive consumption and/or idle times. Telematics can also be useful to identify when vehicles could be switched to EV based on their mileage and use patterns.

#### CLIMATE RESILIENCE

As extreme weather events become more frequent and intense, the way we work and the buildings we deliver must adapt to protect lives, investments, and ecosystems. Resilience in the built environment is no longer an option; it is a necessity that demands identification of the risks and action from clients, designers and ourselves. We will seek to implement the Task Force on Climate-related Financial Disclosures (TCFD) recommendations and the PAS2080 standard "Carbon Management in the Built Environment" into our way of work to help ensure climate change risks and resilience is considered in our work.

l'm 100% electric



## **CASE STUDY - BLACKPOOL OFFICES**

Working with our partners during the early stages, we used whole life and upfront embodied carbon assessments to eliminate inefficiencies and reduce the building's carbon footprint.

We used an innovative concrete technology called ultra high performance fiber-reinforced concrete facade (UHPFRC) by Thorp Precast that delivered significant emission savings. This is a good example of decarbonising the materials we use incorporating Modern Methods of Construction (MMC).

UHPFRC is a unique, gravity-based façade system that is stacked and distributes its dead loads through each stack to the foundations. This means that it exerts much less force on the building frame compared to conventional unitised, stick or rainscreen systems. The UHPFRC system is only restrained to the building, rather than being supported by it.

Unlike traditional reinforcement, it does not require concrete cover on each side, which reduces its width and has 20% less CO2e/m<sup>2</sup> than traditional concrete panels. As a result, the system is much lighter, exerts lower loads on the foundations, allowing them to be smaller, saving further emissions associated within the piling.

During the building's inception, the team worked to lower the building's whole carbon footprint. As a result, the overall embodied carbon intensity reduced to 800 kgCO2e/m<sup>2</sup>, compared to the typical 1100 kgCO2e/m<sup>2</sup> for office development (27.28%).



UHPFRC Facade saved 20%

## CIRCULAR ECONOMY

#### OBJECTIVES



Relevant UN SDGs:



15 LIFE ON LAND

WAST

CONSUMPTION

The built environment is responsible for 30% of UK waste and is the largest consumer of natural resources. Our work can be extremely NATERIAL resource intensive, so we need to find new ways to use natural resources more sustainably.

#### DIVERT ALL AVOIDABLE WASTE FROM LANDFILL

We have seen a change from conventional waste management (a linear takemake-dispose model) to a circular economy, where materials are regenerated and flow around a closed-loop system. We intend to limit the impact of our activities by moving towards a circular economy, adopting waste hierarchy principles. Above all, this means improving our design and production processes, reducing the volume of virgin material extracted, and reusing/recycling.

- o Introduce resource efficiency workshops: Work with clients and suppliers to design out waste. This cannot be achieved by on site activities alone, and requires input from designers and supply chain. Explore and implement processes to avoid waste creation.
- o Avoid over-ordering materials: Correct storage and care of materials will reduce waste - we will implement a zero tolerance for damaged goods. Weatherproof storage areas should be allocated on sites and "just in time" deliver of materials will become standard practice for all projects.
- o Identify reuse schemes: Leftover material on site may be of use on another. Where we can reuse materials, we should. Leftover material on one site may be of us to another. We should seek opportunities to reuse material where we can.
- o Explore supply chain closed loop schemes: Favouring suppliers who take back or recycle materials will significantly reduce our waste. Hosting resource efficiency workshops with suppliers will help us identify opportunities for waste reduction and alternative materials
- o Digitalise waste transfer notes: Currently the waste brokers and carriers we use are not consistent in their approach when it comes to issuing waste transfer notes (WTNS). Most waste carriers have the ability to issue digital WTNs and we should opt for these where we can.

- Divert all avoidable waste from landfill
- Improve resource efficiency through waste & material recovery
- Design buildings for retrofit and deconstruction
  - Maximise procurement of sustainable products

CIRCULAR ECONOMY

FCTION

Δ

#### IMPROVE RESOURCE EFFICIENCY THROUGH WASTE AND MATERIAL RECOVERY

Resource scarcity is one of the largest risks to our sector. Increasing resource efficiency reduces environmental impacts, risk and cost.

We will:

- Work with our supply chain partners to explore options to prefabricate materials off site. This reduces the amount of material delivered to site, shortens construction times, reduces travel and waste emissions and ultimately increases the Pre-Manufactured Value (PMV %).
- Mandate resource efficiency management plans: We already apply the waste hierarchy to manage our materials efficiently but we must streamline the process across our business for maximum effectiveness. We must prioritise not producing waste followed by reuse, recycling and disposal as a last resort.

#### DESIGN BUILDINGS FOR RETROFIT AND DECONSTRUCTION

When designing new buildings, we should be evaluating and establishing if existing assets can be reused or retrofitted to maximise their inherent value, and as a last resort, focus on deconstruction away from demolition to retain elements that can be repurposed and reused. During the design and procurement process, we should ensure that sustainable materials can be reused and recovered fully in the future whilst also allowing for deconstruction and disassembly through modular construction. The benefits of applying circularity to our design process as well as how we operate will see reductions in construction waste, cost, and the overall whole life environmental impacts of the project. We will focus on:

o Design for deconstruction and disassembly:

Through our design and operations, we will need to rethink our model of construction and demolition to ensure existing resources are maximised to their full value and that new materials or components introduced to buildings are considerate of the future resource constraints and opportunities. One Click LCA Building Circularity Tool captures and tracks the circularity of materials sourced and used during a buildings life cycle, but also captures the circularity of materials at the end of building life. • Understanding the benefits: There are clear savings to be made, but it is integral to first learn the value of deconstruction. Not all elements in construction are recyclable at this point in time. It becomes increasingly difficult to "design out waste" the further along in the process we are. This is why it is important to consider waste at the earliest opportunity. On

Off

X Rat

X-Ray

• Improving the service we deliver: By improving services at the design and planning stages, consciously selecting sustainable materials and following the waste hierarchy, we can avoid unnecessary waste.

(12)

Sat 9



#### MAXIMISE PRODUCTION AND PROCUREMENT OF RECYCLED PRODUCTS

We work closely with our clients and supply chain to procure sustainable materials wherever possible. We need to limit the resources that we use, manage our materials carefully and minimise the waste we generate, to move towards a circular economy.

We will:

- Redefine waste: Where waste has a purpose and can be used it should be redefined as a key material. This can be done on our sites by retaining soil or crushing demolition material into aggregate with the correct consents and permits.
- Engage with local charities and communities: Where we cannot avoid waste we should explore options to offer excess materials and services to local charities and community projects. Community Wood Recycling is a good example, a commercial waste wood collection service that is used on many of our projects across the UK.
- Implement resource efficient initiatives: Every region faces different challenges, so specific resource efficiency initiatives should be explored.
- Favour sustainably sourced materials: Choose suppliers that offer materials that have been recycled or can be easily repurposed. By specifying materials with a higher recycled content it reduces the amount of raw materials extracted. Steel is a good example of a material used on our sites that has a high content of recycled material.

VINCI BUILDING ENVIRONMENTAL AMBITION 2024 ROADMAP | VB-ENV-PR-XXXX-0011

Green wall at Chester Northgate

### CIRCULAR ECONOMY - CASE STUDY



## CASE STUDY - LIVERPOOL FESTIVAL GARDENS

This award-winning remediation of a former landfill site created a unique 24-acre recreational area called Southern Grasslands.

The work included sorting and moving 800,000 tonnes of waste from a landfill site. Through excavation and processing, we generated 155,000 tonnes of earth that would typically go to landfill. Instead, we used it to create landform mounds planted to create an eco-haven for wildlife.

This project shows VINCI Building's ability to influence and support the transition to the circular economy by diverting all avoidable waste from landfill. The majority of the surplus material was processed for direct recycling or recovered to be transformed into energy.



WHAT HAPPENED TO THE WASTE TAKEN FROM LANDFILL?

2023 BROWNFIELD AWARDS: WINNER

> environmentanalyst Brownfield Awards 2023

WINNER OF Best Sustainable Re-Use of Materials



Best Sustainable Re-Use of Materials







## PRESERVING NATURAL ENVIRONMENTS



Relevant UN SDGs:





4 LIFE BELOW WATER

Preserving our natural environment is vital as it houses critical reservoirs for biodiversity, housing over 70,000 species. It plays a vital role for water management, wildlife and the human population.

Positive action in this area ensures the health and resilience of ecosystems and significantly contributes to climate change mitigation.

#### WATER PRESERVATION

Our water supply is under increasing pressure from climate change, population growth, and urbanisation, which increase water scarcity and stress natural habitats and our communities.

- Conserve water: Our sites and offices must consume water for our activities but using water recycling and rainwater harvesting systems will allow for an overall reduction in consumption and reduce our reliance on mains water supplies.
- Install water-efficient fixtures: Ensure fixtures are regularly checked for leaks and introduce leak detection systems within our offices.
- Optimise construction processes: Use less water in our activities and educate our people on conservation best practices (eg. dust suppression and wheel washing).

- Monitor water usage: Installing better meters and reporting accurately will allow for targeted incremental improvements.
- Explore water-efficient technologies: Ensure water-efficient solutions and practices are integrated at design stage such as low water-use fixtures, efficient landscaping and irrigation, grey water harvesting opportunities.

#### OBJECTIVES

- Water preservation
- **Protect** the natural environment
- Enhance biodiversity



#### PROTECTING THE NATURAL ENVIRONMENT

We take our obligations seriously to prevent site-based damage, such as watercourse pollution, harming rare species and air/noise pollution.

Our procedures safeguard against disruption to natural habitats and ecosystems, ensuring our projects do not detrimentally impact the surrounding environment. This sensitivity is central to our work, through responsible construction and operational practices.

We will:

- Identify pollution pathways: To protect the natural environment, we must first understand what is present on our sites. This could include watercourses and any present biodiversity, including invasive and protected species. Any areas of risk should be captured within the Environmental Assessment and Risk Register.
- Prevent pollution: Our activities often include working with hazardous materials in sensitive areas. Where significant risks are present, we must implement mitigation measures to prevent pollution and environmental incidents.

#### ENHANCING BIODIVERSITY

Prioritising biodiversity supports ecosystem resilience, enhances our projects' sustainability, and improves the wellbeing of those using the spaces and places we create.

Integrating greater biodiversity into our work is important for us to comply with planning and environmental regulations. This can help mitigate the impacts of climate change, support pollination and water management, and preserve our natural heritage.

#### We will:

- Achieve at least +10% Biodiversity Net Gain: across all sites in line with planning requirements.
- Promote greater diversity: Focus on planting native fauna to provide habitat, shelter and food for native animals. Participating in the workplace in bloom competition, VINCI Environment Day and the Environmental Awards help to promote biodiversity.
- Design Sustainable Drainage Systems: Manage storm water naturally to reduce the impact of flooding following periods of excessive rainfall and promote biodiversity.
- Ensure long term management plans become standard for projects to ensure that any intervention with the natural environment is managed correctly.

## CASE STUDY - UNIVERSITY OF WEST ENGLAND SAP 3

The site layout, planting plan and lighting strategy were carefully designed based on the ecological consultation to ensure the retention and protection of the most important ecological features on the site, namely semi-mature trees.

Retention of these habitats with the additional habitat creation and enhancement ensured the favourable conservation status of protected/priority species was maintained and that the scheme delivered a 51.24% biodiversity net gain, exceeding the 10% change recommended in line with relevant national and local planning policy.





## **GOVERNANCE & BEHAVIOURS**



# Relevant UN SDGs:





Effective governance and responsible behaviours are at the core of our Roadmap success, ensuring that strategic decisions and daily practices in our offices and sites are aligned.

Our approach will foster accountability and continuous improvement, which is crucial for achieving positive, long-term impact across our business.

#### ENVIRONMENTAL AWARENESS FOR OUR PEOPLE

We need to train our people and equip them with the knowledge and skills to contribute to sustainability and mitigate environmental impacts. By embedding knowledge across our people, we ensure every decision and action supports our goals. A comprehensive approach is key to fostering environmental stewardship across all the roles within our business.

- Carbon Literacy: We will develop and implement a programme of training to ensure that our people are appropriately trained on the key themes and goals of our Roadmap.
- as a business continues to embrace our environmental ambition.
- Annual Performance Reviews: We will insist that our Roadmap is an anchor in our peoples annual reviews and goal setting practices to help ensure our culture
- Promote and provide easy access to regular continual professional development (CPD) training sessions that are aligned to our goals.

#### IMPROVING SYSTEMS, PROCEDURES & ACCREDITATIONS

Enhancing our environmental management systems and procedures, particularly around reporting, is needed to accurately measure and communicate our performance and sustainability impacts. This will help ensure regulatory standards compliance and foster accountability. It supports our Roadmap by providing a clear framework for continuous improvement and demonstrating our commitment.

#### OBJECTIVES

- **Develop** our people's environmental awareness
- Improving systems, procedures and accreditations
  - Communicating successes and challenges

North View

### GOVERNANCE & BEHAVIOURS



We will:

- Standardise Carbon Reporting: Carbon accounting right now is hard and sometimes unclear. We will continue to find ways to account for carbon in ever increasing degrees of accuracy and transparency whilst also exploring how to do so in more efficient ways for our people.
- Create a dual cost and carbon methodology: We are already moving towards an internal "cost and carbon" accounting method. We want to ensure that the accuracy of these measurement and reporting approaches are valid first and then start to offer this externally as a service, thereby supporting our customers on their own net zero journeys.
- Implement PAS 2080 framework: This is an emerging standard in the broader built environment market but one that will likely be

a key requirement for future work for VINCI Building. We will ensure we obtain the required accreditation to support our pipeline.

- Report on Environmental Performance: We will only help make a difference if we are seen to be doing so in a transparent and clear way. We will therefore engage with key industry reporting platforms and bodies to help the whole sector address the environmental challenges we all face.
- Obtain accreditations: We will address sector specific accreditations and recognitions, such as BREEAM, that are required or expected by our key frameworks and customers to ensure continuity in our work winning potential.

#### COMMUNICATING SUCCESSES AND CHALLENGES

By sharing insights and strategies more openly, we harness our collective strength within VINCI Building and across the Group to address sustainability obstacles and convert opportunities into better outcomes.

We will:

- Knowledge share: Our ability to operate as a learning organisation will extend into the field of our environmental performance. We will ensure all the best practice that our business delivers is captured and shared. We will do this in a way that's easy to access and supports a culture of environmental respect.
- Awards and recognition: Where we have gone beyond the current best practice we will be proud to tell everybody about it. That should involve regional and national awards submissions as a business but also more local, project specific, individual rewards for supporting this Roadmap.

Hellesdon Hospital Rivers Health Centre

VB-ENV-PR-XXXX-0011 /REV1/AUG 2024/8890





**Environmental Ambition** 2030 Roadmap















Excellence

Entrepreneurship

Integrity