Carbon Reduction Plan for Modus Rail

Goal: Achieve Net Zero Greenhouse Gas Emissions by 2050

Introduction

This carbon reduction plan outlines the strategic steps and environmental management measures Modus Rail will implement to reduce greenhouse gas (GHG) emissions and achieve Net Zero by 2050. This plan aligns with global efforts to mitigate climate change and supports the sustainability goals of the railway industry.

Vision and Core Priorities

To deliver our vision, we have four core priorities which are aligned to Network Rail's vision:

1. **A Low-Emission Railway**

2. **A Reliable Railway Service Resilient to Climate Change**

3. **Improved Biodiversity of Plants and Wildlife**

4. **Minimal Waste and Sustainable Use of Materials**

1. Baseline Assessment

1.1 Conduct GHG Emissions Inventory

- Measure and document current GHG emissions from all operations, including direct emissions (Scope 1), indirect emissions from purchased electricity (Scope 2), and other indirect emissions (Scope 3).

1.2 Identify Major Emission Sources

- Identify and prioritise the main sources of emissions, such as vehicle fleets, equipment, energy use in offices and field operations, and supply chain activities.

2. Set Reduction Targets

2.1 Short-Term Goals (2024-2030)

- Reduce GHG emissions by 30% from the 2023 baseline by 2030.

2.2 Medium-Term Goals (2031-2040)

- Achieve a 60% reduction in GHG emissions from the 2023 baseline by 2040.

2.3 Long-Term Goals (2041-2050)

- Achieve Net Zero GHG emissions by 2050.

3. Implementation Strategies

3.1 Transition to Low-Emission Vehicles

- Replace diesel and petrol vehicles with electric or hybrid alternatives.

- Install EV charging stations at company facilities.

- Promote local sourcing to reduce fuel consumption.

- Encourage cycle-to-work / walk-to-work schemes

3.2 Energy Efficiency Improvements

- Retrofit offices and facilities with energy-efficient lighting, heating, ventilation, and air conditioning (HVAC) systems.

- Implement smart energy management systems to optimise energy use.

3.3 Renewable Energy Adoption

- Transition to 100% renewable energy sources for electricity needs.

- Install solar panels or other renewable energy systems at company-owned sites.

3.4 Sustainable Equipment Use

- Invest in energy-efficient and low-emission surveying and examination equipment.

- Schedule regular maintenance to ensure equipment operates at peak efficiency.

3.5 Biodiversity and Ecosystem Management

- Implement projects to improve the biodiversity of plants and wildlife along railway corridors and in local settings.

- Engage in habitat restoration and conservation initiatives.

- Create a 'plant a tree' charity initiative

3.6 Waste Minimisation and Sustainable Materials

- Adopt circular economy principles to minimise waste and ensure sustainable use of materials.

- Implement recycling programs and use of eco-friendly materials in all operations.

4. Environmental Management Measures

4.1 Develop an Environmental Management System (EMS)

- Establish an EMS based on ISO 14001 standards to manage and reduce environmental impacts.

- Set up an internal team to oversee the implementation and monitoring of the EMS.

4.2 Regular Monitoring and Reporting

- Conduct regular audits and assessments of GHG emissions and energy use.

- Report progress annually to stakeholders, highlighting achievements and areas for improvement.

4.3 Implement Carbon Offset Programmes

- Invest in carbon offset projects to compensate for unavoidable emissions.

- Prioritise projects that provide additional environmental and social benefits, such as reforestation and renewable energy initiatives.

5. People and Culture

5.1 Employee Communication and Engagement

- Regularly communicate sustainability goals and progress to employees.

- Create a culture that values sustainability through training, workshops, and recognition programs.

5.2 Capability Building

- Provide training programs to enhance employee skills in sustainability practices.

- Encourage employee participation in sustainability initiatives and innovation.

5.3 Employee Engagement and Training

- Educate and train employees on best practices for reducing energy use and emissions.

- Source a local workforce to reduce transportation use

- Encourage remote working and virtual meetings to reduce travel emissions.

6. Funding and Planning

6.1 Integration into Planning Processes

- Embed environmental sustainability into all planning and funding processes.

- Allocate budget specifically for sustainability projects and initiatives.

6.2 Strategic Investment

- Invest in sustainable infrastructure, technologies, and projects that support long-term environmental goals.

7. Systems and Processes

7.1 Process Optimisation

- Streamline company-wide processes to support sustainability goals.

- Implement sustainable procurement practices and develop partnerships with eco-friendly suppliers.

7.2 Supply Chain Engagement

- Work with suppliers to reduce their emissions and adopt sustainable practices.

- Include sustainability criteria in procurement processes.

8. Engagement

8.1 External Partnerships

- Collaborate with external organisations, including industry bodies, environmental groups, and local communities.

- Engage with neighbours and stakeholders to support and amplify sustainability efforts.

8.2 Stakeholder Communication

- Maintain transparent and regular communication with stakeholders about sustainability goals, progress, and challenges.

9. Technology and Innovation

9.1 Research and Development

- Invest in R&D to discover new technologies and methods for reducing emissions.

- Support innovation through partnerships with academic institutions and technology firms.

9.2 Technology Implementation

- Deploy advanced technologies that enhance energy efficiency and reduce carbon footprint across operations.

10. Measurement and Monitoring

10.1 Data Collection and Analysis

- Establish robust systems for collecting and analysing data on emissions and energy use.

- Use this data to track progress and inform decision-making.

10.2 Reporting and Transparency

- Regularly publish sustainability reports detailing progress towards Net Zero goals.

- Ensure transparency and accountability in all sustainability efforts.

Conclusion

Achieving Net Zero GHG emissions by 2050 is an ambitious but necessary goal. Through committed efforts and continuous improvement, Modus Rail can significantly reduce its carbon footprint and contribute to a sustainable future. This carbon reduction plan serves as a roadmap for our journey towards sustainability and environmental stewardship.