

Challenges:

One of the foremost challenges Tunnelcraft Ltd faces is integrating sustainability into all facets of its operations, especially in specialist tunnelling projects which demand significant resource use and can impact the environment. To address this, the company has identified several key areas for development:

Developing Climate Action Knowledge: Tunnelcraft Ltd aims to enhance the understanding among its workforce regarding the environmental impacts of tunnelling activities. This includes educating teams about direct and indirect emissions (scope 1, 2, and 3) and equipping them with the skills to implement effective emission reduction strategies. Particular focus is given to the sustainable use of personal protective equipment (PPE) on site, promoting reusable and recyclable materials.

Re-educating on the Circular Economy: It is crucial to instil a deep understanding of the waste hierarchy within Tunnelcraft Ltd's teams to minimise environmental impact. This effort includes training engineers and site workers on the benefits of using recycled materials for PPE and other tunnelling supplies and advocating for the use of equipment that embodies lower carbon footprints through innovative, modular designs.

Improving Resource Management: Effective resource management is vital due to the extensive and complex nature of tunnelling projects. Tunnelcraft Ltd is committed to optimising the lifecycle management of PPE and other materials, aiming to reduce the consumption of virgin resources and enhance recycling efforts. This involves meticulous tracking and reduction practices that align with the company's broader sustainability objectives.

Through these initiatives, Tunnelcraft Ltd is dedicated to not only achieving but surpassing its sustainability targets, ensuring that its projects positively influence both the environment and communities.



Fact box



Company

Tunnelcraft Ltd

No of employees

500+

HQ

Basildon, Essex

Website

tunnelcraft.co.uk

Main contact

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Services

Specialist Tunnelling Labour Supply

About

Tunnelcraft is a leading UK supplier of specialist tunnelling labour. Delivering for international blue-chip clients on projects like HS1, HS2, Lee Tunnel, Thames Tideway, and the Silvertown Tunnel. They take pride in being a good employer and valued supply chain partner.

Impact:

Leveraging resources from the School, Tunnelcraft Ltd has significantly enhanced its grasp of key sustainability topics, leading to substantial improvements in operational practices. These insights have been pivotal in the development and execution of the company's Environmental Sustainability Strategy, which concentrates on four core areas:

Environmental Sustainability Strategy: Tunnelcraft Ltd's strategy encompasses Environmental Protection & Biodiversity, Resource Management and Circular Economy, Climate Action, and Supply Chain & Ethical Procurement. Tailored learning pathways crafted through the school have equipped the workforce with essential knowledge, enabling them to actively contribute towards sustainability aims.



Innovative Sustainable Practices: Participation in the School's initiatives has spurred the company to capitalise on innovative sustainable practices within client operations. Where possible, Tunnelcraft Ltd integrates biodegradable products in Tunnel Boring Machines (TBMs) to lessen environmental impact. Moreover, the use of newer, more fuel-efficient excavators and battery-operated multi-service vehicles emphasizes the commitment to reducing carbon emissions and enhancing energy efficiency across projects.

Identifying Knowledge Gaps: The assessments provided by the School have been invaluable for conducting a comprehensive review of the workforce's understanding. Tools such as spider graphs help visually identify knowledge gaps and steer training efforts, ensuring focused and effective skills development.

Enhancing Expertise: The action plans from the school have highlighted areas for improvement and provided resources to boost capabilities. Assigning specific courses and modules to relevant staff members has fostered specialized knowledge within departments, significantly contributing to strategic environmental goals. The concise and manageable format of the e-learning modules facilitates easy integration into busy work schedules, promoting continuous professional development.



These targeted initiatives ensure that Tunnelcraft Ltd not only meets but exceeds its environmental and sustainability targets, delivering positive impacts on both the environment and the communities it serves.

Value gained:

Increased Knowledge of Climate Change and Carbon Management: Tunnelcraft has prioritized enhancing the workforce's understanding of climate change and carbon management. Utilizing the School, the company has effectively educated its staff on energy consumption and emissions reduction. This initiative aims to promote behavioral changes and improve decision-making across the company, leading to more sustainable operations.

Encouraging Energy Efficiency and Behavioral Change: Focused specifically on its plant operators, Tunnelcraft has implemented targeted training to manage engine usage more efficiently, including protocols to turn off engines when not in use. Additionally, the adoption of clients' electric tunnel transport fleet further underscores the company's commitment to reducing carbon emissions. These practices have collectively contributed to a 12% reduction in the carbon footprint.



Demonstrating Commitment to Sustainability: By engaging with the Supply Chain Sustainability School, Tunnelcraft has continuously promoted and assessed its understanding of sustainability. The company is immensely proud of its commitment to sustainable construction and firmly believes that it improves its business image, making it more profitable and attractive to clients.

Future proofing:

Tunnelcraft is committed to further leveraging the School as a key resource to enhance sustainability across its workforce. This initiative will ensure that the entire team is equipped with the knowledge and skills necessary to contribute to the company's sustainability goals from the outset of their careers. This strategic approach not only prepares Tunnelcraft for future environmental challenges but also enables the company to proactively deliver projects with sustainability at the forefront of its operations.