ACCESSIBILITY

Doughnut State

The delivery of highway maintenance service enables road networks to be accessible and usable by all intended users, considering their diverse capabilities and needs.

	AMBITION		IMPLEMENTATION	
	Targets	**Monitoring framework**	**Systematic implementation**	**Risk mitigation**
	Do the targets in place align with the Doughnut State for accessibility?	Are there mechanisms in place to measure the effectiveness of the accessibility measures?	Is there a plan or process in place to integrate accessibility measures into road maintenance activities?	Is there a plan to address risks and overcome barriers to ensuring a road network that is accessible for all its intended users?
Score				
Justification				
Mitigation				
Re-evaluated score				
Justification				

COMMUNITY

Doughnut State

All community members are provided with equal opportunities to be engaged in and well-informed about highway maintenance activities.

	AMBITION		IMPLEMENTATION	
	Targets	**Monitoring framework**	**Systematic implementation**	**Risk mitigation**
	Do the targets in place align with the doughnut state for community engagement and communication?	Are there mechanisms in place to monitor community engagement and communication in all maintenance projects?	Is there a plan or process in place to integrate community engagement into the planning and decision-making processes of all road maintenance activities? Are NHS (National Health Service) Survey results on customer satisfaction continuously evaluated and integrated into action plans for improvement?	Is there a plan to address risks and overcome barriers to implementing strategies for community engagement and communication?
Score				
Justification				
Mitigation				
Re-evaluated score				
Justification				

HERITAGE

Doughnut State

The delivery of highway maintenance service is conducted in a manner that protects and safeguards cultural and natural heritage from negative impacts.

	AMBITION		IMPLEMENTATION	
	Targets	**Monitoring framework**	**Systematic implementation**	**Risk mitigation**
	Do the targets in place align with the doughnut state for heritage?	Are there mechanisms in place to monitor the effectiveness of cultural and natural heritage protection efforts?	Is there a plan to integrate the protection and safeguarding of cultural and natural heritage into road maintenance activities?	Is there a plan to address risks and overcome barriers to protect and safeguard cultural and natural heritage?
Score				
Justification				
Mitigation				
Re-evaluated score				
Justification				

EDUCATION

Doughnut State

All staff involved in the delivery of highways maintenance service acquire the knowledge and skills needed to promote and deliver regenerative and redistributive practices.

	AMBITION		IMPLEMENTATION	
	Targets	**Monitoring framework**	**Systematic implementation**	**Risk mitigation**
	Do the targets in place align with the doughnut state for education?	Are there mechanisms in place to monitor the training and awareness raising of staff within the authorities and supply chain?	Is there a plan, system or contractual agreement in place that ensures educational efforts are aligned with both staff and contractors?	Is there a plan to address risks and overcome barriers to implementing education, training and awareness raising?
Score				
Justification				
Mitigation				
Re-evaluated score				
Justification				

EQUALITY

Doughnut State

Road networks are maintained with equal quality and fair distribution of resources across the county, ensuring that all areas receive the same level of care and attention.

	AMBITION		IMPLEMENTATION	
	Targets	**Monitoring framework**	**Systematic implementation**	**Risk mitigation**
	Do the targets in place align with the doughnut state for equality as described above?	Are there mechanisms in place to monitor equal quality of roads and a fair distribution of maintenance resources across the county?	Is there a plan or system in place to ensure equal outcome and fair distribution of maintenance resources across the county?	Is there a plan to address risks and overcome barriers to achieving equal outcome and fair distribution of resources for highways maintenance activities?
Score				
Justification				
Mitigation				
Re-evaluated score				
Justification				

HEALTH

Doughnut State

The delivery of highway maintenance service and their supply chains contribute to mental or physical health and wellbeing by improving ecological conditions, specifically targeting ambient air quality, noise levels, light pollution, odour sources.

	AMBITION		IMPLEMENTATION	
	Targets	**Monitoring framework**	**Systematic implementation**	**Risk mitigation**
	Do the targets in place align with the doughnut state for health?	Are there mechanisms in place to monitor health implications of highway maintenance activities and ensure safe health conditions in the supply chain?	Is there a plan or process in place to systematically ensure health and wellbeing through control of air quality, noise levels, light pollution and odour sources during all highway maintenance activities?	Is there a plan to address risks and overcome barriers for highway maintenance activities to ensure health and wellbeing through control of air quality, noise levels, light pollution and odour sources?
Score				
Justification				
Mitigation				
Re-evaluated score				
Justification				

INCOME & WORK

Doughnut State

The highway maintenance staff, volunteers and associated supply chain workers are provided with employment security and fair compensation, while upholding workers' rights, and promoting local employment opportunities.

	AMBITION		IMPLEMENTATION	
	Targets	**Monitoring framework**	**Systematic implementation**	**Risk mitigation**
	Do the targets in place align with the Doughnut State for income & work?	Are there mechanisms in place to monitor that highway maintenance staff and associated supply chain workers are provided with employment security, fair compensation, upheld and promoted workers' rights, and local employment opportunities?	Is there a plan, system or contractual agreement to integrate employment security, fair compensation, worker's rights and local employment opportunities into highway maintenance and throughout the supply chain?	Is there a plan to address risks and overcome barriers to implementing employment security, fair compensation, workers' rights practices and promote local employment opportunities?
Score				
Justification				
Mitigation				
Re-evaluated score				
Justification				

LOW CARBON MOBILITY

Doughnut state

The delivery of highway maintenance service ensures that low carbon modes of transport (active mobility, shared mobility, public transport etc) are available for all and the infrastructure that supports them is enhanced.

	AMBITION		IMPLEMENTATION	
	Targets	**Monitoring framework**	**Systematic implementation**	**Risk mitigation**
	Do the targets in place align with the doughnut state for low carbon mobility?	Are there mechanisms in place to monitor the availability and quality of low carbon mobility infrastructure, such as public transport and active mobility?	Is there a plan in place to improve the availability and quality of low carbon mobility modes across all maintenance activities?	Have challenges and risks in improving the availability and quality of low carbon transportation modes been identified, including mitigation measures?
Score				
Justification				
Mitigation				
Re-evaluated score				
Justification				

SAFETY

Doughnut state

The delivery of highway maintenance service ensures that roads are maintained in a condition fit for their purpose and meet all road users' needs for safety.

	AMBITION		IMPLEMENTATION	
	Targets	**Monitoring framework**	**Systematic implementation**	**Risk mitigation**
	Do the targets in place align with the doughnut state for safety and subjective safety in traffic*?	Are there mechanisms in place to monitor both safety and perception of safety on highways?	Is there a plan or system to integrate safety and perception of safety into maintenance activities?	Is there a plan to address risks and overcome barriers to implementing safety and perception of safety?
Score				
Justification				
Mitigation				
Re-evaluated score				
Justification				

* The term 'subjective safety in traffic' refers to the personal feelings of being unsafe in traffic experienced by people, or, more generally, to the anxiety regarding hazardous traffic situations for themselves and/or others.

SOIL & LAND HEALTH

Doughnut state

The delivery of highway maintenance service ensure that land and soil health is preserved by minimising soil disturbance, mitigate manmade or natural geohazards* in local operations and avoiding land degradation (e.g. loss of productive lands, deforestation and desertification) in the supply chain.

* An object, feature or activity related to the natural or engineered ground (including geotechnical assets) that has the potential to have adverse effects or undesirable consequences.

	AMBITION		IMPLEMENTATION	
	Targets	**Monitoring framework**	**Systematic implementation**	**Risk mitigation**
	Do the targets in place align with the defined doughnut state for soil & land health?	Are there monitoring frameworks in place for the service provider to track and report progress on land & soil health targets both on the project sites and throughout the supply chain?	Are there systematic processes in place by the service provider to minimise soil disturbance and mitigate geohazards on project sites and prevent land degradation throughout the supply chain?	Are there proactive measures in place by the service provider to address risks and barriers in mitigating soil disturbances and geohazards on site?
Score				
Justification				
Mitigation				
Re-evaluated score				
Justification				

HAZARDOUS MATERIALS

Doughnut state

The delivery of highway maintenance service ensures that hazardous materials, substances, and mixtures in local operations are carefully managed thereby eliminating impacts on human health, natural ecosystems, and biodiversity.

	AMBITION		IMPLEMENTATION	
	Targets	**Monitoring framework**	**Systematic implementation**	**Risk mitigation**
	Do the targets in place align with the doughnut state for hazardous materials, substances, and mixtures?	Are there monitoring frameworks in place for the service provider to track and report progress on meeting doughnut targets for hazardous materials, substances, and mixtures - both on the project sites and throughout the supply chain?	Are there systematic processes in place by the service provider to minimise the use and ensure the proper handling of hazardous substances, materials, and mixtures both on project sites and throughout the supply chain?	Are there proactive measures in place by the service provider to address risks, barriers, and ensure regulatory compliance for the use and handling of hazardous substances, materials, and mixtures?
Score				
Justification				
Mitigation				
Re-evaluated score				
Justification				

WASTE

Doughnut state

The delivery of highway maintenance service follows the Waste Hierarchy principles which gives top priority to waste prevention followed by reuse, recycling recovery and final disposal.

	AMBITION		IMPLEMENTATION	
	Targets	**Monitoring framework**	**Systematic implementation**	**Risk mitigation**
	Do the targets in place align with the doughnut state for waste?	Are there monitoring frameworks in place for the service provider to track and report progress on waste management both on the project sites and throughout the supply chain?	Are there systematic processes in place by the service provider to apply the waste hierarchy principles on project sites and ensure it is being followed throughout the supply chain?	Are there proactive measures in place by the service provider to address risks and barriers in applying waste hierarchy principles on the project site?
Score				
Justification				
Mitigation				
Re-evaluated score				
Justification				

MATERIAL FOOTPRINT

Doughnut state

The delivery of highway maintenance service use materials that meet the three fundamental principles of a circular economy: 1) Use regenerative resources 2) Implement reuse and recycle practices 3) Maximise resource efficiency

	AMBITION		IMPLEMENTATION	
	Targets	**Monitoring framework**	**Systematic implementation**	**Risk mitigation**
	Do the targets in place align with the doughnut state for materials?	Are there monitoring frameworks in place for the service provider to track and report progress on material footprint targets both on project sites and throughout the supply chain?	Are there systematic processes in place by the service provider to purchase materials that meet the three fundamental principles of the circular economy?	Are there proactive measures in place to address risks and barriers in using materials that meet the three fundamental principles of the circular economy?
Score				
Justification				
Mitigation				
Re-evaluated score				
Justification				

WATER

Doughnut state

The delivery of highway maintenance service minimises water consumption through increased water use efficiency, recycling, and reuse.

	AMBITION		IMPLEMENTATION	
	Targets	**Monitoring framework**	**Systematic implementation**	**Risk mitigation**
	Do the targets in place align with the defined doughnut state for water?	Are there monitoring frameworks in place for the service provider to track and report progress on water consumption, efficiency, recycling and reuse both on the project site and throughout the supply chain?	Are there systematic processes in place by the service provider to minimise water consumption through increased water use efficiency, recycling, and reuse both on project sites and across the supply chain?	Are there proactive measures in place to address risks and barriers in minimising water consumption through increased water use efficiency, recycling and reuse?
Score				
Justification				
Mitigation				
Re-evaluated score				
Justification				

ENERGY

Doughnut state

The delivery of highway maintenance service uses energy that comes predominantly from renewable energy sources while energy consumption is minimised and energy efficiency is maximised.

	AMBITION		IMPLEMENTATION	
	Targets	**Monitoring framework**	**Systematic implementation**	**Risk mitigation**
	Do the targets in place align with the doughnut state for energy?	Are there monitoring frameworks in place for the service provider to track and report progress on minimising energy consumption, maximising energy efficiency and sourcing energy from renewable sources both on the project site and throughout the supply chain?	Are there systematic processes in place by the service provider to minimise energy consumption, maximising energy efficiency and sourcing energy from renewable sources both on project sites and throughout the supply chain?	Are there proactive measures in place to address risks and barriers in minimising energy consumption, maximising energy efficiency and sourcing energy from renewable sources?
Score				
Justification				
Mitigation				
Re-evaluated score				
Justification				

CLIMATE CHANGE

Doughnut state

Climate change is mitigated in the delivery of highway maintenance service by limiting the global temperature increase to well below 1.5 degrees Celsius above pre-industrial levels, by drastically reducing greenhouse gas emissions (Co2, CH4, N2O, HFCs), achieving carbon neutrality, and actively striving towards carbon positivity through carbon sequestration methods.

	AMBITION		IMPLEMENTATION	
	Targets	**Monitoring framework**	**Systematic implementation**	**Risk mitigation**
	Do the targets in place align with the doughnut state for climate change?	Are there monitoring frameworks in place for the service provider to track and report progress on reducing greenhouse gas emissions and achieve carbon neutrality both on the project site and throughout the supply chain?	Are there systematic processes in place by the service provider to reduce carbon emissions, achieve carbon neutrality, implement climate adaptation measures, and work towards carbon positivity through carbon sequestration both on project sites and across the supply chain?	Are there proactive measures in place to address risks and barriers to reduce carbon emissions, achieve carbon neutrality, implement climate adaptation measures, and work towards carbon positivity through carbon sequestration?
Score				
Justification				
Mitigation				
Re-evaluated score				
Justification				

BIODIVERSITY

Doughnut state

The delivery of highway maintenance service ensures that biodiversity is maintained and enhanced, ensuring healthy ecosystems and resilient habitats.

	AMBITION		IMPLEMENTATION	
	Targets	**Monitoring framework**	**Systematic implementation**	**Risk mitigation**
	Do the targets in place align with the doughnut state for biodiversity?	Are there monitoring frameworks in place for the service provider to track and report progress on maintaining and enhancing biodiversity both on project sites and across the supply chain?	IAre there systematic processes in place by the service provider to maintain and enhance biodiversity both on project sites and throughout the supply chain?	Are there proactive measures in place to address risks and barriers in maintaining and enhancing biodiversity on project sites?
Score				
Justification				
Mitigation				
Re-evaluated score				
Justification				

AIR QUALITY

Doughnut state

The delivery of highway maintenance service ensures that the quality of air is always maintained, preserved and restored, when necessary, by eliminating the generation of pollutants at the source. Regenerative measures are actively promoted to restore and maintain clean air.

	AMBITION		IMPLEMENTATION	
	Targets	**Monitoring framework**	**Systematic implementation**	**Risk mitigation**
	Do the targets in place align with the doughnut state for air quality?	Are there monitoring frameworks in place for the service provider to track and report progress on maintaining, preserving and restoring air quality both on project sites and across the supply chain?	Are there systematic processes in place by the service provider to maintain, preserve and restore air quality both on project sites and across the supply chain?	Are there proactive measures in place to address risks and barriers in maintaining, preserving and restoring air quality?
Score				
Justification				
Mitigation				
Re-evaluated score				
Justification				

ACCESSIBILITY

Doughnut state

The delivery of highway maintenance service enables road networks to be accessible and usable by all intended users, considering their diverse capabilities and needs.

	Q1: Road accessibility **Does the maintenance activity integrate accessibility and usability measures for all users, including people with disabilities, by providing physical accessibility, visual and auditory accessibility, ease of navigation, and comfort*?** ***Physical Accessibility:** ensures that paths, crossings, and facilities are designed to accommodate wheelchair users and those with other mobility impairments, allowing them to navigate public spaces safely and independently. **Visual and Auditory Accessibility:** involves providing tactile paving, audible signals, and clear signage to assist users with visual and hearing impairments in navigating public spaces effectively. **Ease of Navigation:** ensures that the layout of public spaces is intuitive and straightforward, with clear routes and wayfinding aids that help all users, including those with cognitive impairments, to move around easily. **Comfort:** includes providing amenities such as rest areas, seating, and shelter, enhancing the overall user experience by catering to the needs of individuals who may require frequent breaks or protection from the elements.	Scoring scale **5** **Positive impact:** The project maintains or enhances all aspects of accessibility, with comprehensive mitigation measures in place. **4** **Mid positive impact:** Between netural and positive impact **3** **Neutral Impact:** The project neither significantly enhances nor severely disrupts accessibility. **2** **Mid negative impact:** Between neutral and negative impact. **1** **Negative Impact:** The project severely affects accessibility for any of the aspects, implementing no effective mitigation measures. **N/A**	Q2: Accessibility during works **Will the scheduled work impact road accessibility during the construction phase?**	Q3: Accessibility to services during works **Will the construction phase impact accessibility to services or businesses?**	Scoring scale **5** **Positive impact:** The construction phase is expected to maintain accessibility for road users and access to services, with comprehensive mitigation measures in place. **4** **Mid positive impact:** Between neutral and positive impact. **3** **Neutral Impact:** The construction phase neither significantly improves nor worsens accessibility or service access. **2** **Mid negative impact:** Between neutral and negative impact. **1** **Negative Impact:** The construction phase is expected to severely disrupt accessibility and access to services, implementing no effective mitigation measures. **N/A**
Score					
Justification					
Mitigation					
Re-evaluated score					
Justification					

COMMUNITY

Doughnut state

All community members are provided with equal opportunities to be engaged in and well-informed about highway maintenance activities.

	Q1. Community engagement **Does this project invite the community to actively engage and influence the planning and decision-making process?**	**Q3. Community information** **Will the scheduled work be communicated to the public well in advance and through multiple outlets (online and offline alike)?**
Score		
Justification		
Mitigation		
Re-evaluated score		
Justification		

Scoring scale

5 **Positive impact:** The project fully integrates community participation through local platforms, offering extensive influence in planning and decision-making. It excellently communicates scheduled work well in advance through comprehensive online and offline outlets.

4 **Mid positive impact:** Between neutral and positive impact

3 **Neutral Impact:** The project provides a balanced level of community involvement—neither minimal nor extensive. It offers some opportunities for participation and influence and communicates planned works with reasonable notice through a few channels.

2 **Mid negative impact:** Between neutral and negative impact.

1 **Negative Impact:** The project does not involve the community, offering no participation or influence in planning and decision-making. It fails to communicate scheduled work in advance.

N/A

HERITAGE

Doughnut state

Highway maintenance activities are conducted in a manner that protects and safeguards cultural and natural heritage from negative impacts.

	Q1: Cultural heritage safeguarded Is this project expected to contribute to the safeguarding or the understanding of the cultural or natural heritage? ***Cultural heritage:** • Monuments: architectural works, works of monumental sculpture and painting, elements or structures of an archaeological nature, inscriptions, cave dwellings and combinations of features; • Groups of buildings: groups of separate or connected buildings (recognised for their architecture, homogeneity or their place in the landscape); • Sites: material remains resulting from the works of humans or the combined works of nature and humans, and areas including archaeological sites. UNESCO 1972 **Natural heritage:** • Natural features • Geological and physiographical formations • Delineated areas that constitute the habitat of threatened species of animals and plants • Natural sites of value from the point of view of science, conservation of natural beauty.	**Scoring scale** **5** **Positive impact:** The project fully integrates the safeguarding and enhancement of cultural or natural heritage, with comprehensive and proactive measures to protect, preserve, and promote understanding of all relevant aspects. **4** **Mid positive impact:** Between neutral and positive impact. **3** **Neutral Impact:** The project has a neutral impact on cultural or natural heritage. **2** **Mid negative impact:** Between neutral and negative impact. **1** **Negative Impact:** The project does not consider cultural or natural heritage, and there are no measures in place to safeguard or understand it. **N/A**
Score		
Justification		
Mitigation		
Re-evaluated score		
Justification		

EDUCATION

Doughnut state

All staff involved in the delivery of highways maintenance service acquire the knowledge and skills needed to promote and deliver regenerative practices.

	Q1: Education of workers What percentage of staff involved in the highway maintenance project have participated in education, training or awareness raising activities within the last 12 months?	**Scoring scale** **5** **Positive impact:** 80-100 % of all workers in preparation or execution of the project have completed educations, training or awareness raising activities within the last 12 months. **4** **Mid positive impact:** Between neutral and positive impact. **3** **Neutral Impact:** 40-60 % of all workers in preparation or execution of the project have completed education, training or awareness raising activities within the last 12 months. **2** **Mid negative impact:** Between neutral and negative impact. **1** **Negative Impact:** 0-20 % of all workers in preparation or execution of the project have completed educations, training or awareness raising activities within the last 12 months. **N/A**
Score		
Justification		
Mitigation		
Re-evaluated score		
Justification		

SAFETY

Doughnut state

The delivery of highway maintenance service ensures that roads are maintained in a condition fit for their purpose and meet all road users' needs for safety.

	Q1. Safety inclusion **Does this project contribute to enhanced safety and perception of safety for all road users once completed?**	Q2. Safety during works **Does this project include safety measures to ensure the safety of all road users during road maintenance activities?**
Score		
Justification		
Mitigation		
Re-evaluated score		
Justification		

Scoring scale

5 **Positive impact:** The project significantly enhances safety and perception of safety for all road users after completion. Comprehensive safety measures are in place during the maintenance activities, ensuring minimal risks for all road users.

4 **Mid positive impact:** Between neutral and positive impact.

3 **Neutral Impact:** The project maintains existing safety conditions for road users, with standard measures in place that neither significantly improve nor worsen safety during maintenance activities.

2 **Mid negative impact:** Between neutral and negative impact.

1 **Negative Impact:** The project does not enhance safety or perception of safety for road users, and the maintenance activities lack safety measures, posing significant risks.

N/A

HEALTH

Doughnut state

The delivery of highway maintenance service and their supply chains contribute to mental or physical health and wellbeing by improving ecological conditions, specifically targeting ambient air quality, noise levels, light pollution, and odour sources.

	Q1: Health mitigation Does this project mitigate negative mental or physical health impacts from any of the following aspects? a. ambient air pollution b. ambient noise pollution c. light pollution d. odour e. other contamination	**Scoring scale** **5** **Positive impact:** The project has a significant positive impact on health, with the majority of activities contributing greatly to eradicate all health impacts locally and in the supply chain, with any negative impacts being negligible. **4** **Mid positive impact:** Between neutral and positive impact. **3** **Neutral Impact:** The project results in no significant positive or negative change, maintaining current health conditions both locally and across the supply chain. **2** **Mid negative impact:** Between neutral and negative impact. **1** **Negative Impact:** The project has a severe negative impact on health locally or in the supply chain, with the majority of activities resulting in substantial mental or physical health implications, and any positive impacts are negligible. **N/A**
Score		
Justification		
Mitigation		
Re-evaluated score		
Justification		

INCOME & WORK

Doughnut state

All workers have decent, safe and equal working conditions locally and across the supply chain.

	Question 1: Are there processes in place to monitor and ensure that employment security, fair compensation, and worker's rights are secured for all site personnel related to the project, in line with statutory requirements*?	*Statutory requirements: **Employment Rights Act 1996:** This Act establishes the fundamental rights of employees, including the right to fair compensation, protection against unfair dismissal, and entitlement to redundancy payments. It sets the standards for employment contracts, notice periods, and compensation for unfair dismissal, ensuring employees are treated fairly in terms of job security and compensation **Employment Act 2002:** This Act enhances workers' rights by providing statutory rights to parental leave, adoption leave, and flexible working. It also outlines procedures for dispute resolution and protects employees against unfair dismissal, thereby promoting a safe and respectful working environment **Equality Act 2010:** This legislation ensures that workers are protected from discrimination based on age, disability, gender reassignment, marriage and civil partnership, pregnancy and maternity, race, religion or belief, sex, and sexual orientation. This promotes a workplace where workers' rights are upheld and respected. **Working Time Regulations 1998:** Night workers must not work more than an average of eight hours in any 24-hour period. Employers must also offer free health assessments before assigning night work and periodically thereafter.	**Scoring scale** **5** **Positive impact:** The project has comprehensive and well-documented processes in place to monitor and ensure employment security, fair compensation, and workers' rights for all site personnel. These processes are regularly audited, fully align with statutory requirements, and go beyond compliance by actively promoting worker welfare. **4** **Mid positive impact:** Between neutral and positive impact **3** **Moderate Impact:** The project meets statutory requirements for employment security, fair compensation, and workers' rights. Processes are in place but do not extend beyond minimum standards, resulting in neither notable improvements nor setbacks. **2** **Mid negative impact:** Between neutral and negative impact. **1** **Negative Impact:** The project lacks effective processes to monitor and ensure employment security, fair compensation, and workers' rights, leading to significant risks of non-compliance with statutory requirements and substantial negative impacts on workers' welfare. **N/A**
Score			
Justification			
Mitigation			
Re-evaluated score			
Justification			

LOW CARBON MOBILITY

Doughnut state

The delivery of highway maintenance service ensures that low carbon modes of transport (active mobility, shared mobility, public transport etc) are available for all and the infrastructure that supports them is enhanced.

	Q1: Public transportation works **Does the project contribute to the enhancement of the public transport network?**	Q2: Active mobility works **Does the project contribute to the enhancement of active mobility modes?**	**Scoring scale** **5** **Positive impact:** The project implements comprehensive measures to significantly enhance the public or active transport network. **4** **Mid positive impact:** Between neutral and positive impact. **3** **Neutral Impact:** The project neither significantly enhances nor detracts from the public and active transport network. **2** **Mid negative impact:** Between neutral and negative impact. **1** **Negative Impact:** The project does not consider the enhancement of the public and active transport network, potentially negatively impacting existing services. **N/A**	**Q3. Active transportation materials** **Do the selected materials enhance low carbon mobility, in line with the Transport Hierarchy*?** • walking • cycling • public transport • delivery • other motorised vehicles	**Scoring scale** **5** **Positive impact:** The project strongly prioritises and implements the use of materials that significantly enhance active modes of transport in line with the transport hierarchy. **4** **Mid positive impact:** Between neutral and positive impact. **3** **Neutral Impact:** The project neither significantly enhances nor detracts from active modes of transport through the choice of materials. **2** **Mid negative impact:** Between neutral and negative impact. **1** **Negative Impact:** The project does not consider the use of materials that enhance active modes of transport, potentially using materials that are detrimental to active transport infrastructure. **N/A**
Score					
Justification					
Mitigation					
Re-evaluated score					
Justification					

SOIL & LAND HEALTH

Doughnut state

The delivery of highway maintenance service ensure that land and soil health is preserved by minimising soil disturbance, mitigate manmade or natural geohazards* in local operations and avoiding land degradation (e.g. loss of productive lands, deforestation and desertification) in the supply chain.

* An object, feature or activity related to the natural or engineered ground (including geotechnical assets) that has the potential to have adverse effects or undesirable consequences.

	Q1. Soil disturbance: **Will this project result in soil disturbance through e.g. soil compaction and soil erosion due to the use of heavy machinery?**	**Q2. Geohazards** **Will this project minimise and mitigate the occurrence of man-made and natural geohazards*?** * Man made geohazards: • Engineered slopes of marginal stability • Defective or inappropriate drainage • Animal burrows • Loss of vegetation * Natural geohazards: • Solution features (incl cavities and voids) • Soft or compressible grounds • Natural landslides (rock or soil) • Shrink / swell • Groundwater rise • Soil or groundwater chemistry	**Scoring scale** **5** **Positive impact:** The project includes comprehensive measures to prevent soil disturbance, such as low-impact machinery and erosion control barriers, and has a robust strategy to mitigate both man-made and natural geohazards through extensive assessments and mitigation measures. **4** **Mid Positive Impact:** Between neutral and positive impact. **3** **Neutral Impact:** The project includes standard measures to manage soil disturbance and geohazards. These measures are sufficient to meet basic expectations but do not significantly exceed or fall short of typical practice. **2** **Mid Negative Impact:** Between neutral and negative impact. **1** **Negative Impact** : The project lacks measures to prevent soil disturbance, resulting in significant soil compaction, erosion, or other issues. There are no effective strategies to mitigate geohazards, making the project highly vulnerable to both man-made and natural hazards, which could result in severe environmental degradation and safety concerns. **N/A**
Score			
Justification			
Mitigation			
Re-evaluated score			
Justification			

HAZARDOUS MATERIALS

Doughnut state

The delivery of highway maintenance service ensures that hazardous materials, substances, and mixtures in local operations are carefully managed thereby eliminating impacts on human health, natural ecosystems, and biodiversity.

	Q1. Minimising Hazardous Materials **Does the project minimise the use of hazardous materials and substances on the project site?**	**Scoring scale** **5** **Positive impact:** The project employs advanced technologies and environmentally friendly practices to minimise chemical usage, preventing soil and water pollution, habitat degradation, eutrophication, ecosystem degradation. **4** **Mid positive impact:** Between neutral and positive impact. **3** **Neutral Impact:** The project applies standard practices to manage chemical pollution. These measures generally prevent significant ecological harm but do not provide notable improvements or innovative approaches beyond typical expectations. **2** **Mid negative impact:** Between neutral and negative impact. **1** **Negative Impact:** The project leads to catastrophic chemical pollution and ecological devastation, causing massive contamination, irreversible habitat destruction, extreme eutrophication, and complete ecosystem degradation. **N/A**	**Q2. Proper handling of hazardous materials, substances, and mixtures** **Are there robust measures and training in place to ensure the proper handling and use of hazardous materials, substances, and mixtures on site - including emergency protocols and clean up procedures to minimise negative ecological impacts*?** *Negative ecological impacts include but are not limited to: • Soil pollution • Water pollution • Habitat & ecosystem degradation • Eutrophication due to nitrogen and phosphorous loading	**Scoring scale** **5** **Positive impact:** The project employs comprehensive safety, training, and emergency protocols to ensure the safe handling of hazardous materials, substances, and mixtures on-site, significantly minimising spillage and contamination risks. This includes detailed training programs, rigorous safety measures, and well-practiced emergency response plans that are regularly updated and tested to ensure maximum preparedness. **4** **Mid positive impact:** Between neutral and positive impact. **3** **Neutral Impact:** The project includes standard protocols for handling hazardous materials, substances, and mixtures on-site. These measures generally manage risks at an acceptable level without causing significant ecological harm or delivering notable improvements. **2** **Mid negative impact:** Between neutral and negative impact. **1** **Negative Impact:** The project lacks effective safety, training, and emergency protocols for handling hazardous materials, substances, and mixtures, leading to severe vulnerability and substantial risk of spillage, contamination, and negative impacts on human and environmental health. **N/A**
Score				
Justification				
Mitigation				
Re-evaluated score				
Justification				

WASTE

Doughnut state

The delivery of highway maintenance service follows the Waste Hierarchy principles which gives top priority to waste prevention followed by reuse, recycling recovery and final disposal.

	Q1. Waste minimisation **Does this project effectively minimise waste generation through proactive measures such as process optimisation and resource management?**	Scoring scale	Q2. Waste diversion through reuse, recycle and recovery **Does this project prioritise waste diversion through a combination of reuse and recycling, with a limited reliance on energy recovery, to minimise landfill disposal?**	Scoring scale	Q3. Waste sorting and proper disposal **Does the project have in place robust measures to implement the proper dismantling, separation and disposal of waste?**	Scoring scale
Score		**5** **Positive impact:** The project estimates a waste reduction of over 50% compared to baseline projections, demonstrating a robust commitment to minimising waste generation through efficient resource management and process optimisation. **4** **Mid positive impact:** Between neutral and positive impact **3** **Neutral Impact:** The project implements standard waste management practices, achieving a moderate reduction in waste generation of 10-30%. While there is some improvement compared to baseline projections, the efforts do not significantly exceed typical expectations or deliver substantial reductions. **2** **Mid negative impact:** Between neutral and negative impact. **1** **Negative Impact:** The project estimates negligible to no reduction in waste generation compared to baseline projections, highlighting a minimal effort to address waste reduction, resulting in continued high levels of waste generation. **N/A**		**5** **Positive impact:** The project reuses and recycles an estimate of over 80% of total waste generated, prioritising reuse and recycling as primary waste management methods. **4** **Mid positive impact:** Between neutral and positive impact **3** **Neutral Impact:** The project reuses and recycles an estimate of over 40% of total waste generated, reflecting a moderate commitment to incorporating reuse and recycling practices. Energy recovery accounts for less than 50% of remaining waste, with a balanced approach to waste management that minimises reliance on energy recovery while promoting reuse and recycling. **2** **Mid negative impact:** Between neutral and negative impact. **1** **Negative Impact:** The project achieves no reuse or recycling of total waste generated, highlighting a minimal effort to incorporate reuse and recycling practices. All the generated waste is disposed through recovery, incineration or disposal. **N/A**		**5** **Positive impact:** The project includes comprehensive and proactive guidelines and training to ensure proper dismantling, separation, and disposal of waste materials. All procedures are well-documented and consistently followed, leading to effective waste management and minimal environmental impact. **4** **Mid positive impact:** Between neutral and positive impact. **3** **Neutral Impact:** The project includes standard guidelines and training on the handling, dismantling, and disposal of waste materials. These measures generally align with common practice, without representing either strong leadership or significant shortcomings in material handling protocols. **2** **Mid negative impact:** Between neutral and negative impact. **1** **Negative Impact:** The project lacks effective measures and training to ensure the proper dismantling, separation, and disposal of waste materials, resulting in severe vulnerability and heightened risk of improper handling and disposal of waste materials and the negative impacts associated with this. **N/A**
Justification						
Mitigation						
Re-evaluated score						
Justification						

MATERIAL FOOTPRINT

Doughnut state

The delivery of highway maintenance service use materials that meet the three fundamental principles of a circular economy: 1) Use regenerative resources 2) Implement reuse and recycle practices 3) Maximise resource efficiency

	Q1. Virgin materials extraction **Does this project implement circular strategies to minimise the extraction of virgin materials and promote reuse, recycling, and repurposing of materials?**	Scoring scale **5** **Positive impact:** Over 80% of the project's materials are estimated to be sourced from recycled, repurposed, or reused sources, demonstrating a robust implementation of circular strategies. Extensive efforts are made to minimise virgin material extraction through efficient resource management and as well as improving on circularity levels. **4** **Mid positive impact:** Between neutral and positive impact. **3** **Neutral Impact:** Approximately 20% to 50% of project materials are estimated to be sourced from recycled, repurposed, or reused sources. Efforts are primarily focused on recycling materials, with little attention given to exploring opportunities for material reuse or repurposing. **2** **Mid negative impact:** Between neutral and negative impact **1** **Negative Impact:** Negligible to no project materials are estimated to be sourced from recycled, repurposed, or reused sources, with little consideration given to circular principles. Virgin material extraction remains the primary source of project materials, with minimal efforts made to prioritise reuse or recycling, indicating a low level of circularity. **N/A**	**Q2. Regional, low carbon alternatives** **Does this project prioritise the sourcing of regional, low-carbon, biogenic, rapidly renewable, and regenerative materials from suppliers who comply with the prescribed environmental reporting standards?**	Scoring scale **5** **Positive impact:** Over 80% of project materials are estimated to be sourced from low carbon or renewable alternatives, demonstrating a robust commitment to prioritising sustainable materials. Renewable alternatives such as bio-based materials and low carbon alternatives are extensively used, significantly reducing carbon emissions associated with material production. **4** **Mid positive impact:** Between neutral and positive impact **3** **Neutral Impact:** Approximately 20% to 50% of project materials are estimated to be sourced from low carbon or renewable alternatives. This reflects a moderate level of material sustainability without strong emphasis or neglect. **2** **Mid negative impact:** Between neutral and negative impact. **1** **Negative Impact:** Negligible to no project materials are estimated to be sourced from low carbon or renewable alternatives, highlighting a minimal effort to prioritise sustainability. Virgin materials with high carbon intensity remain the primary choice, with little consideration given to reducing carbon emissions through the adoption of renewable alternatives. **N/A**
Score				
Justification				
Mitigation				
Re-evaluated score				
Justification				

WATER

Doughnut state

The delivery of highway maintenance service minimises water consumption through increased water use efficiency, recycling, and reuse.

	Q1. Water consumption on site **Will this project use regenerative strategies and efficient practices to minimise water consumption on site?**	Scoring scale	Q2. Water Cycle support **Will the project implement measures on the hydrological regime, specifically in terms of draining, recharging, polluting, or remediating local river catchments, and ground and surface water aquifers?**	Scoring scale
Score		**5** **Positive impact:** Over 80% of the project's water consumption is estimated to be sourced through regenerative strategies, such as rainwater harvesting systems and greywater recycling facilities. Water-efficient practices are extensively implemented, minimising overall water consumption. **4** **Mid positive impact:** Between neutral and positive impact **3** **Neutral Impact:** Between 40% and 60% of the project's water consumption is estimated to be sourced through regenerative strategies. This reflects a balanced approach to water use, without indicating either exceptional conservation efforts or excessive consumption. **2** **Mid negative impact:** Between neutral and negative impact. **1** **Negative Impact:** Negligible to no water is estimated to be sourced from through regenerative strategies, indicating a severe impact on water resources due to extensive water consumption without adequate conservation measures. Urgent action is needed to mitigate the project's adverse effects on water resources. **N/A**		**5** **Positive impact:** Over 80% of the project area incorporates green infrastructure features such as permeable pavements, bioswales, and retention ponds, facilitating natural infiltration and groundwater recharge. Stormwater runoff is effectively managed across most of the project area, supporting the local water cycle. **4** **Mid positive impact:** Between neutral and positive impact. **3** **Neutral Impact:** AApproximately 20–50% of the project area includes green infrastructure elements that offer a standard level of stormwater management and groundwater recharge. These measures reflect a typical approach, without indicating either strong innovation or significant gaps. **2** **Mid negative impact:** Between neutral and negative impact. **1** **Negative Impact:** Impermeable surfaces dominate the entire project area, exacerbating water cycle disruption with minimal to no green infrastructure in place. Lack of stormwater management measures leads to extensive runoff, erosion, and pollution, severely impacting local water resources and the water cycle. **N/A**
Justification				
Mitigation				
Re-evaluated score				
Justification				

ENERGY

Doughnut state

The delivery of highway maintenance service uses energy that comes predominantly from renewable energy sources while energy consumption is minimised and energy efficiency is maximised.

	Q1. Energy efficiency on site Will this project employ energy efficiency practices on site?	Q2. Renewable energy on site Will this project employ renewable energy sources on site?	Scoring scale
Score			**5** **Positive impact:** Renewable energy sources are estimated to contribute to over 80% of the project's energy usage. Energy-efficient machinery and sustainable practices are extensively employed, resulting in minimal energy consumption and resource depletion. **4** **Mid positive impact:** Between neutral and positive impact. **3** **Neutral Impact:** Renewable energy sources are estimated to contribute to less than 50% of the project's energy usage. The energy mix reflects a balanced but not ambitious approach, with some integration of renewable sources alongside conventional energy. **2** **Mid negative impact:** Between neutral and negative impact. **1** **Negative Impact:** Renewable energy sources are estimated to make up less than 10% of the project's energy usage. Conventional energy resources are extensively relied upon, resulting in significant depletion of energy resources and urgent need for mitigation measures. **N/A**
Justification			
Mitigation			
Re-evaluated score			
Justification			

AIR QUALITY

Doughnut state

The delivery of highway maintenance service ensures that the quality of air is always maintained, preserved and restored, when necessary, by eliminating the generation of pollutants at the source. Regenerative measures are actively promoted to restore and maintain clean air.

	Q1. Air quality onsite **Will the on-site maintenance work impact air quality levels due to dust and emissions from the activities, machines, or equipment?**	Q2. Road inspection **Will the types of journeys and vehicles used for road inspections, including their fuel types and emission standards, have a significant impact on air pollution levels?**
Score		
Justification		
Mitigation		
Re-evaluated score		
Justification		

Scoring scale

5 **Positive impact:** Air quality is fully ensured on site through ambitious mitigation measures for machinery, equipment, and activities. Road inspections are carried out in a streamlined, efficient and low emissions manner substantially minimising air pollution from inspections.

4 **Mid positive impact:** Between neutral and positive impact.

3 **Neutral Impact:** The project has a limited impact on air quality, with partial mitigation measures in place during onsite activities and inspection journeys. While some steps are taken to reduce emissions, they result in neither significant improvement nor substantial deterioration in air quality.

2 **Mid negative impact:** Between neutral and negative impact.

1 **Negative Impact:** The project has a severe negative impact on air quality on site, with no effective mitigation measures in place. Road inspections are carried out with high emissions, leading to a substantial increase in air pollution.

N/A

BIODIVERSITY

Doughnut state

The delivery of highway maintenance service ensures that biodiversity is maintained and enhanced, ensuring healthy ecosystems and resilient habitats.

	Q1 Local safeguarding of flora **Are measures in place to protect existing vegetation, particularly rare or endangered species, by avoiding damage and promoting replanting and restoration efforts?**	Q2. Local safeguarding of fauna **Are measures in place to protect local fauna during the operational phase, by minimising disruptions specifically during breeding and migration and implementing mitigation measures such as wildlife crossings and buffer zones?**	Q3. Habitat preservation **Will this project preserve or restore natural habitats using regenerative nature management practices, including effective management of invasive species and by planting a variety of species, including different tree species, to improve biodiversity and reduce the likelihood of pathogen outbreaks?**	Scoring scale **5** **Positive impact:** Biodiversity loss (due to any of the identified reasons) is avoided or mitigated locally and throughout the supply chain. Habitat preservation measures are employed locally resulting in regenerative results. **4** **Mid positive impact:** Between neutral and positive impact. **3** **Neutral Impact:** The project includes standard practices that result in neutral impact to local biodiversity, and operations occur outside of sensitive periods. **2** **Mid negative impact:** Between neutral and negative impact. **1** **Negative Impact:** The project leads to severe impact on biodiversity for a majority of the identified reasons resulting in permanent loss of biodiversity locally and throughout the supply chain. **N/A**
Score				
Justification				
Mitigation				
Re-evaluated score				
Justification				

CLIMATE CHANGE

Doughnut state

Climate change is mitigated in the delivery of highway maintenance service by limiting the global temperature increase to well below 1.5 degrees Celsius above pre-industrial levels, by drastically reducing greenhouse gas emissions (Co2, CH4, N2O, HFCs), achieving carbon neutrality, and actively striving towards carbon positivity through carbon sequestration methods.

	Q1. Operational carbon emissions on site **Will this project greatly reduce operational carbon emissions on-site through low-emission machinery and efficient work practices?**	Q2. Embodied carbon emissions in materials **Will this project lead to high embodied carbon emissions from the materials used, considering their extraction, production, and lifecycle?**	Q3. Inspection transportation emissions **Will this project implement measures to minimise carbon emissions associated with road inspections by optimising routes, using low-emission vehicles, and employing innovative technologies such as remote sensing technologies and drones?**	Scoring scale **5** **Positive impact:** The project includes comprehensive, proactive measures to significantly reduce carbon emissions by an estimated 80-100 % from Carbon Baselining, achieving minimal emissions by implementing innovative and highly effective practices across on-site operations, in the use and extraction of materials, and road inspections. **4** **Mid positive impact:** Between neutral and positive impact. **3** **Neutral Impact:** The project incorporates standard measures estimated to reduce carbon emissions by 20–50% compared to the baseline. While some practices contribute to emission reductions, the overall approach is balanced without significant positive or negative deviation. **2** **Mid negative impact:** Between neutral and negative impact. **1** **Negative Impact:** The project includes no measures to reduce carbon emissions from Carbon Baselining, resulting in severe emissions from on-site operations, in the use and extraction of materials and road inspections, resulting in severe damages to the climate. **N/A**	Q4. Climate Adaptation and Resilience **Are robust climate adaptation measures integrated into the road maintenance project to mitigate the impact of extreme weather events such as flooding, wildfires, hurricanes, storms, droughts, changes in precipitation patterns, rising sea levels, coastal erosion, and temperature changes?**	Scoring scale **5** **Positive impact:** The project includes comprehensive, proactive, and innovative measures that fully mitigate the impacts and ensure preparedness of extreme weather events. **4** **Mid positive impact:** Between neutral and positive impact. **3** **Neutral Impact:** The project includes standard measures to address extreme weather events, offering partial coverage. While some impacts are mitigated, the overall approach remains balanced, with neither comprehensive integration nor significant gaps. **2** **Mid negative impact:** Between neutral and negative impact. **1** **Negative Impact:** The project lacks effective measures, resulting in severe vulnerability to extreme weather events, with no significant strategies in place, leading to substantial risk and damage. **N/A**
Score						
Justification						
Mitigation						
Re-evaluated score						
Justification						