

Assessment of Environmental Sustainability in Highway Construction and Maintenance”: A Review

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Abstract: *These activities can have significant impacts on the environment, including air and water pollution, habitat destruction, resource depletion, and contributions to climate change through greenhouse gas emissions. As awareness of these environmental challenges has grown in recent decades, there has been increasing focus on developing more sustainable approaches to highway infrastructure. Environmental sustainability in the context of highways refers to designing, building, and maintaining road networks in ways that minimize negative ecological impacts, conserve natural resources, protect human health, and support long-term environmental quality. This involves considering the full lifecycle of highways, from raw material extraction and construction to operation, maintenance, and eventual decommissioning. Key aspects include reducing emissions and pollution, using recycled and low-impact materials, minimizing land disturbance, managing storm water runoff, preserving habitats and biodiversity, and designing for climate change resilience.*

Keywords: activities, significant impacts, environment, including air, water pollution, habitat destruction, resource depletion, contributions climate change, greenhouse gas emissions