

**EVALUATION OF SUSTAINABILITY OF BIOFUELS FOR TRANSPORT SECTOR
IN INDIA: A MULTI-DIMENSIONAL PERSPECTIVE**

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ABSTRACT

The debate on the impact of biofuel expansion on Land Use Change (LUC), greenhouse gas (GHG) emissions, food security etc. has not discouraged countries like India and China to follow the footsteps of US and Brazil through ambitious blending mandates. Biofuel policies often downplay the risks and ignore inter-dependencies between various sustainability objectives. The study aims to comprehensively address all the sustainability related barriers, social, environmental, institutional, bio-physical, technological and financial, using various indicators for biofuel development across states in India. The study relies on literature review and discussion to identify the dimensions, sub-themes, the related indicators and further the inter-play between them to eventually construct a Sustainable Biofuel Development Index (SBDI). SBDI gives us an overview of current state of the six dimensions and how implementation and progression of biofuel policies will affect it. The results reveal that across all the three time periods Uttar Pradesh is the best performing states followed by Karnataka, Maharashtra and Madhya Pradesh while Bihar is the worst performing state on SBDI.

Key Words: Biofuel Policy, Blending, Sustainability, Ethanol, Biodiesel, India

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