

Advancement of Biofuel Policy in India

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Background

Global economic growth of India is mounting at a faster rate. The demand for fuel efficiency, environmental quality and energy security have stimulated an attention to promote sustainable energy development feasible to meet the rapidly increasing demand in transportation fuels, as well as meeting the energy needs of India's massive population. In order to address the problem, the government of India has taken a step forward to boost the use of biofuels as one of the transportation fuels. Consequently, targeting EURO-III and IV as the reference emission norms for vehicles. Henceforth, the clean and green energy fuel comes into picture. Green energy or "Renewable energy" is indigenous, non-polluting, environmental friendly and virtually inexhaustible.

National Policy on Biofuel

The Government of India approved the **National Policy on Biofuels** on December 24, 2009. It is one of the milestones of India's biofuel initiatives. An indicative target of 20% blending of biofuels (bioethanol or biodiesel) by the end of 12th Five-Year Plan (2017) is proposed. The policy encourages the use of renewable energy resources as an alternative fuel for transportation (Gunatilake et al., 2014). In January 2013 the Government of India launched the **Ethanol Blended Petrol (EBP)** programme for 5% ethanol blended petrol. India achieved its highest ever ethanol market penetration by 3.3 % in 2016 (Aradhey., 2016). The blend targets were partially successful in years of surplus sugar production but unfulfilled when sugar production declines. Technically, blend wall and transportation-storage are the major challenges towards the biofuel targets. Nonetheless, the government has initiated significant investments in improving the storage and blending infrastructure. On December 10, 2014, the government of India announced a price control schedule for fuel ethanol procurement for multi-state OMCs (Oil marketing Companies). The program fixes the ethanol prices at OMC depots from INR 48.50 to INR 49.50 per liter. (http://mnre.gov.in/file-manager/UserFiles/biofuel_policy.pdf)

According to the resolutions approved by Union Cabinet Government of India on June 5, 2015: (Aradhey., 2016) Sugarcane juice will not be used for ethanol production. Ethanol produced from non-food feedstock besides molasses may be allowed to processed subject in meeting the Bureau of Indian standard. Biofuel will be derived from non-food feedstock that would be grown on degraded soils or wastelands not otherwise suited for agriculture. To support R& D on biofuel feedstock production, including second generation biofuels, and reassure the use of renewable energy resources as supplement to motor transport fuels to upsurge India's

energy security, the Government of India may consider promoting National Biofuel Fund to deliver financial incentives, such as subsidies and grants, for new and second-generation feedstocks, advanced technologies and conversion processes. The biofuel program will support R&D and demonstration projects which will lead to commercial development of second generation biofuels.

VISION AND GOALS

The Policy aims at mainstreaming of biofuels and foresees a central role in energy and transportation sectors of the country in the coming decades. The Policy believes to accelerate development and promotion of the cultivation, production and use of biofuels to substitute petrol and diesel for transport. Adapting to renewable energy will contribute to energy security, climate change mitigation, leading to environmentally sustainable development. For the **goal of the policy**, to ensure that a minimum level of biofuels become readily available in the market to meet the country's demand at any given time. Biofuel technologies and projects would be allowed 100 percent foreign equity through automatic approval to attract foreign direct investment (FDI).

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