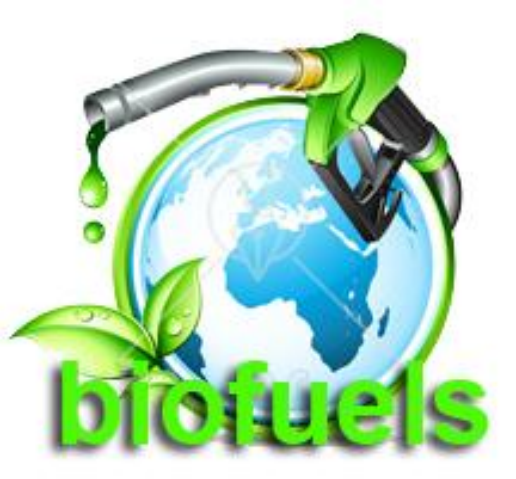
# NATIONAL POLICY ON BIOFUELS, 2018




The Union Cabinet headed by the Prime Minister Shri Narendra Modi approved National Policy on Biofuels, 2018 ("Policy") on Wednesday, 16th May 2018.

Biofuels allow the use of surplus food grains, sugar beet and starch for production of ethanol to blend with petrol to cut oil imports by □4,000 crore in 2018. Therefore, the Policy expands the scope of raw material for ethanol production by allowing use of sugarcane juice, sugar containing materials like sugar beet, sweet sorghum, starch containing materials like corn, cassava, damaged food grains like wheat, broken rice, rotten potatoes unfit for human consumption for production of ethanol.

**Salient Features of the Policy:**

1. The Policy categorizes biofuels as "Basic Biofuels" viz. First Generation (1G) bioethanol & biodiesel and "Advanced Biofuels" - Second Generation (2G) ethanol, Municipal Solid Waste ("MSW") to drop-in fuels, Third Generation (3G) biofuels, bio-CNG etc. to enable extension of appropriate financial and fiscal incentives under each category.

2. The Policy expands the scope of raw material for ethanol production by allowing use of Sugarcane Juice, Sugar containing materials like sugar beet, sweet sorghum, starch containing materials like corn, cassava, damaged food grains like wheat, broken rice, rotten potatoes, unfit for human consumption for ethanol production.

3. Farmers are at a risk of not getting appropriate price for their produce during the surplus production phase. Taking this into account, the Policy allows use of surplus food grains for production of ethanol for blending with petrol with the approval of National Biofuel Coordination Committee.

4. With a thrust on Advanced Biofuels, the Policy indicates a viability gap funding scheme for 2G ethanol Bio refineries of Rs.5000 crore in 6 years in addition to additional tax incentives, higher purchase price as compared to 1G biofuels.

5. The Policy encourages setting up of supply chain mechanisms for biodiesel production from non-edible oilseeds, used cooking oil, short gestation crops.

6. Roles and responsibilities of all the concerned Ministries/Departments with respect to biofuels has been captured in the Policy document to synergize efforts.

**Following are the benefits expected:**

1. Reduce Import Dependency: One crore litre of bio-ethanol saves Rs. 28 crore of foreign exchange (forex) on oil imports at current rates. The ethanol supply year 2017-18 is likely to see a supply of around 150 Crore litre of ethanol which will result in savings of over Rs.4000 crore of forex.

2. Cleaner Environment: One crore litre of E-10 saves around 20,000 ton of $CO_2$ emissions. For the ethanol supply year 2017-18, there will be lesser emissions of $CO_2$ to the tune of 30 Lakh ton. By reducing crop burning and conversion of agricultural residues/wastes to biofuels there will be further reduction in Green House Gas emissions.

3. Health benefits: Prolonged reuse of Cooking Oil for preparing food, particularly in deep-frying is a potential health hazard and can lead to many diseases. Used Cooking Oil is a potential feedstock for biodiesel and its use for making biodiesel will prevent diversion of used cooking oil in the food industry.

4. MSW Management: It is estimated that, annually 62 MMT of Municipal Solid Waste gets generated in India. There are technologies available which can convert waste/plastic, MSW to drop in fuels. One ton of such waste has the potential to provide around 20% of drop in fuels.

5. Infrastructural Investment in Rural Areas: It is estimated that, one 100klpd bio refinery will require around Rs.800 crore capital investment. At present Oil Marketing Companies are in the process of setting up twelve 2G bio refineries with an investment of around Rs.10,000 crore. Further addition of 2G bio refineries across the Country will spur infrastructural investment in the rural areas.

6. Employment Generation: One 100klpd 2G bio refinery can contribute 1200 jobs in Plant Operations, Village Level Entrepreneurs and Supply Chain Management.

7. Additional Income to Farmers: By adopting 2G technologies, agricultural residues/waste which otherwise are burnt by the farmers can be converted to ethanol and can fetch a price for this waste if a market is developed for the same.

Moreover, farmers are at a risk of not getting appropriate price for their produce during the surplus production phase. Thus, conversion of surplus grains and agricultural biomass can help in price stabilization.