

# CSB IAS ACADEMY

TOPIC OF THE DAY (DATE: 11.09.2023)

## GLOBAL BIOFUEL ALLIANCE

### WHY IN NEWS?

Recently, During the G-20 Summit at New Delhi Prime Minister Narendra Modi announced the formal launch of the **Global Biofuels Alliance in the New Delhi Declaration**.

### GENESIS OF GLOBAL BIOFUELS ALLIANCE

- The need of a **GLOBAL BIOFUELS ALLIANCE** earlier was announced by Hardeep S Puri, Minister of Petroleum & Natural Gas and Housing & Urban Affairs **during India Energy Week in February 2023** and announced the **launch of Global Biofuel Alliance is one of the priorities under India's G20 Presidency**.
- **Brazil, India, and the United States**, as leading biofuel producers and consumers, played a vital role in the formation of a Global Biofuels Alliance along with other interested countries.
- USA (52 per cent), Brazil (30 percent) and India (3 percent), contribute about 85 per cent share in production and about 81 per cent in consumption of ethanol.

### NEED OF ALLIANCE

- According to estimates from **the International Energy Agency (IEA)**, Global Biofuel production would need to **triple by 2030** to put the world's energy systems on track toward net zero emissions by 2050.
- India has committed to **achieving carbon neutrality by 2070**. The government has advanced its target to achieve 20% ethanol blending in petrol by 2025-26 from an earlier target of 2030. The target of petrol supplies with 10% ethanol blending was achieved in June last year, ahead of the original schedule of November 2022.
- The global ethanol market was valued at **\$99.06 billion in 2022** and is predicted to grow at a **CAGR of 5.1% by 2032 and surpass \$162.12 billion by 2032**.

### GLOBAL BIOFUELS ALLIANCE MEMBERS

- The GBA members include **19 countries and 12 international organisations**. The G20 member countries supporting the alliance include **Argentina, Brazil, Canada, India, Italy, South Africa and the US**.
- While the four G20 Invitee countries supporting GBA are **Bangladesh, Singapore, Mauritius and the UAE**. Similarly, the **eight non-G20 countries are Iceland, Kenya, Guyana, Paraguay, Seychelles, Sri Lanka, Uganda and Finland**.
- International Organisations include the World Bank, Asian Development Bank, World Economic Forum, World LPG Organisation, International Energy Agency, International Energy Forum, International Renewable Energy Agency and World Biogas Association.

### What is a Biofuel?

The term "biofuels" refers to a class of renewable energy sources made from organic materials, typically plant-based or biological, that can be processed to create fuel for various uses, such as transportation, heating, and electricity generation.



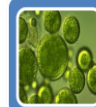
#### 1<sup>st</sup> Generation Biofuel

- It has **High Carbon Content**.
- Made from Edible Items. Eg- **Sugar, Corn, Starch** etc.



#### 2<sup>nd</sup> Generation Biofuel

- **Greenhouse Gas content less than 1<sup>st</sup> Generation Biofuel**
- Made from leftover of Food Crops. Eg- **Rice Husk, Wood Chips** etc.



#### 3<sup>rd</sup> Generation Biofuel

- It is **Carbon Neutral** in. (CO<sub>2</sub> Emitted = CO<sub>2</sub> Sequestered)
- Produced using Microorganisms. Eg- **Algae**



#### 4<sup>th</sup> Generation Biofuel

- Made from '**Genetically Engineered Crops**'.
- They are **Carbon Negative**.

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## OBJECTIVES OF ALLIANCE

- The main aim of Alliance is to take an initiative at a global-level **to take ethanol blending in petrol up to 20 percent**. and alternatively work on developing another blending mix for the greater global good, and ensure a stable energy supply.
- The Alliance is focused on securing the supply of biofuels, ensuring these biofuels remain affordable and are produced sustainably. Founding members of the Alliance will continue outreach to other countries committed to these shared values with the goal of adding more countries to this effort.
- GBA will support worldwide **development and deployment of sustainable biofuels** by offering **capacity-building exercises** across the value chain, technical support for national programs and promoting policy lessons-sharing.
- It will also facilitate development, adoption and implementation of internationally recognized standards, codes, sustainability principles and regulations to incentivize biofuels adoption and trade
- The **alliance will work in collaboration with relevant existing regional and international agencies** as well as initiatives in the bioenergy, bio-economy, and energy transition fields.

## ACHIEVEMENTS OF INDIA IN BIOFUEL PROGRAMME

- **Ethanol Production:** In 2020-21, India produced 4.08 billion litres of ethanol, resulting in a blending rate of 10.02% This led to a reduction of 2.7 million tonnes of CO2 emissions and significant savings in forex.
- **Blending Targets:** The current target for 2022-23 is to achieve a blending rate of 12%, with the ultimate goal- 20% by 2025 -26.
- India actively promoting **Compressed Bio Gas** as a clean fuel derived from waste through the **Sustainable Alternative Towards Affordable Transportation (SATAT) program**. As of 46 CBG plants established so far, and around 16,164 tonnes of CBG have been sold. The goal-install 5,000 CBG plants across India by 2024, contributing-waste management-reducing pollution.
- India conducted its **first commercial passenger flight- domestically produced sustainable aviation fuel (SAF)** blend- commitment to decarbonizing the aviation sector.
- The establishment of the **Bio-Aviation Turbine Fuel Program** Committee further advances the development of sustainable aviation fuel in the country.
- **National Biofuel Policy (2018)** is aimed at taking forward the indicative target of achieving 20% blending of biofuels with fossil-based fuels by 2030. it intends to ensure the adequate and sustained availability of domestic feedstock for biofuel production, increasing farmers' income, import reduction, employment generation and waste to wealth creation.
- Recently, On the occasion of World Biofuel Day, Prime Minister Narendra Modi **dedicated the 2nd generation (2G) ethanol plant set up at the Indian Oil Corporation's Panipat refinery in Haryana.**

**CONCLUSION** - **GLOBAL BIOFUELS ALLIANCE** as a tangible outcome of the G20 presidency, will help strengthen India's position globally. The formation of GBA mirrors the **International Solar Alliance (ISA)** piloted by New Delhi and Paris in 2015 to bring clean and affordable solar energy within the reach of all. ISA aims to mobilise more than **\$1,000 billion of investment needed by 2030 for the massive harnessing of solar energy.**