



CURRENT AFFAIRS



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GLOBAL BIOFUEL ALLIANCE

This article covers "Daily Current Affairs" and the Topic details "Global Biofuel Alliance". This Topic has relevance in the Economy section of the UPSC CSE exam.

For Prelims:

About Global Biofuel Alliance?

For Mains:

GS 2: Economy

Objectives of Global Biofuel Alliance?

Significance for India?

Challenges for Global Biofuel Alliance?

Why in the news:

During the G20 summit, Prime Minister Narendra Modi launched the Global Biofuel Alliance with President Luiz Inácio Lula da Silva of Brazil and President Joe Biden of the United States.

About Global Biofuel Alliance:

- The Global Biofuel Alliance, **founded by India, Brazil, and the United States**, collectively **responsible for 85% of global ethanol production**, is an international initiative to foster collaboration in the biofuel sector. The alliance aspires to influence the global energy landscape and work toward achieving the net-zero emissions target.
- India, Brazil, and the United States are collectively responsible for 85% of global ethanol production

Membership:

- The core members of the Global Biofuel Alliance are India, Brazil, and the United States.
- To broaden its reach and impact, the Global Biofuel Alliance allows other countries to become members by endorsing its foundational document. The GBA welcomes participation from all interested nations. Currently, 19 additional countries, apart from the founding members, have expressed interest in joining, including nations such as Italy, Kenya, and the UAE.
- The membership structure of the Global Biofuel Alliance comprises **three categories: member countries, partner organizations, and industries**, to bring together diverse stakeholders to collaborate in advancing biofuel initiatives.

Objectives of Global Biofuel Alliance:

- Foster international collaboration and cooperation to promote the adoption and utilisation of biofuels on a global scale.
- Establish robust markets for biofuels and facilitate international trade in biofuels.
- Promote the widespread use of sustainable biofuels within the transportation sector.
- Provide policy guidance and technical support to assist national biofuels programs worldwide, promoting knowledge sharing and capacity building.
- Highlight and build upon the successful best practices and case studies already implemented in biofuels.
- Complement and collaborate with relevant existing regional and international agencies and initiatives focused on bioenergy, the bioeconomy, and energy transition, further enhancing global efforts in these areas.

Significance for India:

- **Increased Technology Transfers:** GBA allows India to access advanced technologies and international climate funds.
- **Higher Blending of Petrol with Ethanol:** India's goal of achieving E-20 (20% ethanol blending with petrol) by 2025-26 can benefit from insights and experiences shared by countries like Brazil, which have achieved higher ethanol blending levels (E-85).
- **Flex Fuel Vehicle Introduction:** India can utilise GBA to collaborate with Brazil in adopting flex fuel vehicle technologies. These vehicles can use a wide range of fuel blends, reducing emissions and curbing India's crude oil import bills.
- **Global Climate Action:** By being a part of GBA, India positions itself at the forefront of global climate action. It strengthens India's role in combating climate change and demonstrates its commitment to sustainability.
- **Promotion of Biofuel Exports:** GBA can aid India in increasing its share of biofuel production, potentially making it a major exporter of biofuels globally.
- **Greater Energy Independence:** GBA supports India's pursuit of greater energy independence by promoting the use of biofuels and reducing reliance on foreign crude oil.
- **Financial Support for Farmers:** Biofuel production has already provided financial relief to sugarcane farmers. GBA can further support farmers, especially those struggling with low sugar prices, by expanding opportunities in the biofuel sector.

Challenges for Global Biofuel Alliance:

- **Technology Transfer:** GBA may encounter challenges related to the transfer of advanced biofuel technologies, as countries, particularly the United States, have historically been cautious about sharing proprietary technology, potentially impeding the alliance's objectives.
- **Geopolitical Friction:** The GBA may face resistance from countries like China and Russia, which may be averse to participating in a platform led by Western countries. China's **debt-trap diplomacy** and foreign policy influence could pose a hurdle to expanding membership and international cooperation.
- **Financial Sustainability:** A robust funding mechanism is imperative for GBA's projects. Economic downturns in the US and resource constraints faced by global institutions like the World Bank and IMF may challenge the alliance's efforts to secure sustainable financing.
- **Trade Barriers:** Import restrictions on biofuels, such as those outlined in India's National Biofuels Policy 2018, present a significant hurdle for developing a global biofuels market. GBA must focus on eliminating protectionist policies to promote cross-border biofuel trade.
- **Environmental Impact:** The production of biofuels, particularly ethanol derived from crops like sugar, carries substantial environmental consequences. This includes high water consumption,

potential shifts in crop patterns, and impacts on water-scarce regions in Africa. Addressing these environmental concerns is vital for GBA to ensure sustainable biofuel production practices.

Generation	Source	Greenhouse Gas Emissions	Special Characteristics
1st Generation	Edible items (sugar, corn, etc.)	Higher carbon content	Emit greenhouse gases
2nd Generation	Leftover food crops (rice husk, wood chips, etc.)	Lower emissions than 1st generation	Utilizes crop residues
3rd Generation	Microorganisms (algae)	Carbon Neutral	CO ₂ emitted equals CO ₂ sequestered
4th Generation	Genetically engineered crops (GM crops)	Carbon Negative	Advanced genetic modifications

Common Biofuels	Source	Energy Comparison with Petrol	Combustion and Emissions Impact
Bioethanol	Corn and sugarcane (fermentation process)	About 2/3 of petrol energy	Improved combustion, reduced CO and SO emissions Common blend: E10 (10% Ethanol)
Biodiesel	Vegetable oils, waste oils, animal fats (transesterification process)	As an alternative to diesel	Lower harmful gas emissions compared to diesel
Biogas	Organic matter (anaerobic decomposition)	Used for heating, electricity, and automobiles	Utilizes organic waste for energy

SOURCE:

<https://www.downtoearth.org.in/news/energy/g20-summit-india-launches-global-biofuel-alliance-91659>

Q.1 Consider the following Countries:

1. India
2. Russia
3. China
4. USA
5. Brazil

Which of the above countries are founding members of the Global Biofuel Alliance?

- (a) 1, 2 and 3
- (b) 3, 4 and 5
- (c) 1, 4 and 5
- (d) 1, 3, 4 and 5

ANSWER: C

Q.2 Consider the following statements regarding Biofuels:

1. Biofuels are carbon neutral but can not be carbon negative.
2. India, Brazil, and the United States control over two-thirds of global ethanol production.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

ANSWER: B

Q.3 Discuss the significance and challenges of the Global Biofuel Alliance (GBA) in the context of global energy sustainability and the transition to a low-carbon economy.

Rishabh

PARTNERSHIP FOR GLOBAL INFRASTRUCTURE INVESTMENT (PGII)

This article covers "Daily Current Affairs" and the topic details "Partnership for Global Infrastructure Investment (PGII)". This topic has relevance in the "International Relations" section of the UPSC CSE exam.

For Prelims:

What is Partnership for Global Infrastructure Investment (PGII)?

What is the background of PGII?

What are the various projects of PGII?

For Mains:

GS2: International Relations

Why in the news?

On September 9, Prime Minister Narendra Modi unveiled the expanded Partnership for Global Infrastructure and Investment (PGII) and the India-Middle East-Europe Economic Corridor program.

About the Partnership for Global Infrastructure Investment (PGII):

- The PGII emerged from an **announcement made during the G7 summit in the UK in June 2021.**
 - The G7 comprises the United Kingdom, the United States, Canada, France, Germany, Italy, Japan, and the European Union (EU).
- Initially, the initiative was termed the **Build Back Better World (B3W)** framework, as US President Joe Biden proposed.
- The PGII was officially launched during the **G7 summit in Germany in 2022.**
- It is a collaborative **effort to finance infrastructure projects in developing countries** through **public and private investments.**
- The PGII was developed in **response to China's Belt and Road Initiative (BRI)**, which finances infrastructure projects on a global scale.
- **Funding Goal:** President Biden aimed to **mobilise approximately \$600 billion from G7 member countries by 2027.**

Need for an Alternative to China's BRI:

China's Belt and Road Initiative (BRI):

- Under President Xi Jinping, China initiated the Belt and Road Initiative (BRI) in 2013.
- The BRI aimed to revitalise historical trade routes connecting China to regions as far as Europe, including Rome, in a massive infrastructure development effort.

Criticism of BRI:

- **Debt Sustainability:**
 - China faced criticism from Western countries and others for providing loans for infrastructure projects that could result in unsustainable debt burdens for recipient countries.
 - In many cases, Chinese companies were awarded contracts for the projects.
 - A 2019 World Bank report raised concerns that among the 43 corridor economies examined, 12 could face unsustainable debt situations, potentially leading to the transfer of public assets to foreign contractors or China.
- **India's Opposition:**
 - India opposed the BRI because it included the **China-Pakistan Economic Corridor (CPEC), which ran through Pakistan-occupied Kashmir.**
 - India emphasised the need for transparency and respect for sovereignty in connectivity initiatives.
- **Italy's Concerns:**
 - Italy, **the only G7 member involved in the BRI,** also expressed concerns about the benefits of enhanced trade connectivity.

Announcements of PGII Initiatives:

- **Projects in Indonesia:**
 - Recent announcements included various projects in Indonesia, spanning clean energy and telecommunications, among other sectors.
- **Health Infrastructure Investment in India:**
 - India was also part of the PGII discussions, resulting in investments in its health infrastructure.
 - The **U.S. International Development Finance Corporation (DFC) pledged over \$15 million for India's health infrastructure,** supporting initiatives such as the expansion of

eye clinics and the production of affordable women's hygiene products for underserved areas.

- **EU's Global Gateway Program:**

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- The **European Union (EU) unveiled its Global Gateway program**, which aims to activate \$300 billion in investments for critical connectivity projects from 2021 to 2027.
- Half of this funding is allocated to Africa, with over 90 projects identified in various regions, including Africa, Latin America, the Caribbean, Asia, the Pacific, and the Western Balkans.

Challenges and Considerations:

- China's Belt and Road Initiative (**BRI**) has been adapting to address criticisms, focusing on a "**Green BRI**" and reducing high-risk overseas infrastructure investments.
- **China's capacity for investment remains substantial** compared to the G7, which must navigate political consensus within their countries and rely on private sector participation.
- **While PGII offers an alternative, it also presents competition with BRI.** Success in diversifying infrastructure options for countries with requirements could lead to mutually beneficial outcomes.

Sources: [PM Modi launches scaled-up Partnership for Global Infrastructure and Investment at G20 Summit](#)

Q1. With reference to the Partnership for Global Infrastructure Investment (PGII), consider the following statements:

1. The PGII was officially during the G7 summit in the United Kingdom in June 2021.
2. The initiative was first known as the Indo- Pacific Economic framework.
3. PGII is a collaborative effort to finance infrastructure projects in developing countries solely through private investments.

Which of the statements given above is/are correct?

- (a) 1 and 2 only
- (b) 2 and 3 only
- (c) 3 only
- (d) None

Answer: (d)

Q2. Consider the following:

1. United Kingdom
2. Canada
3. France
4. Australia
5. Italy
6. Spain

How many of the above-mentioned countries are part of G-7?

- (a) Only two
- (b) Only three
- (c) Only four
- (d) Only five

Answer: (c)

Q3. Partnership for Global Infrastructure and Investment (PGII) and the India-Middle East-Europe Economic Corridor are responses to China's Belt and Road Initiative. Discuss.

Gaurav Nikumbh

