

GLOBAL BIOFUELS ALLIANCE

Recently, the Prime Minister of India announced the launch of the Global Biofuels Alliance.



About Global Biofuels Alliance:

- It is an **India-led Initiative to develop an alliance of Governments, International organisations and Industry** to facilitate the adoption of biofuels.
- A total of **19 countries and 12 international organisations** have so far agreed to join the alliance, including both G20 members and non-member countries.
- **India, Brazil and the US** is the founding members of the alliance.
- This Alliance will be aimed at **facilitating cooperation and intensifying** the use of **sustainable biofuels**, including in the transportation sector.
- **Significance of the alliance**
 - It will place emphasis on strengthening markets, facilitating global biofuels trade, developing concrete policy lesson-sharing and providing technical support for national biofuels programs worldwide.
 - It 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 **facilitate** mobilising a virtual marketplace to assist industries, countries, **ecosystem players and key stakeholders** in mapping demand and supply, as well as connecting technology providers to end users.
 - It will also facilitate the development, adoption and implementation of internationally recognised standards, codes, sustainability principles and regulations to incentivise biofuels adoption and trade.

What is Biofuel?

- It is a fuel that is produced over a **short time span from biomass** rather than by the very slow natural processes involved in the formation of fossil fuels, such as oil.
 - **Different Generations of Biofuel**
 - **First generation:** It is produced from consumable food items containing starch (rice and wheat), sugar (beets and sugarcane) for bioalcohols, or vegetable oils for biodiesel.
 - **Second generation:** It is mainly obtained **from non-food feed stocks** such as forest/industry/agricultural wastes and waste or used vegetable oils.
 - **Third generation:** It is known as ‘**algae fuel**’ and is derived from algae in the form of both biodiesel and bioalcohols.
 - **Fourth generation:** Like the third generation, 4G biofuels are made using non-arable land. However, unlike the third, they do not need the destruction of biomass.
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INDIA-MIDDLE EAST-EUROPE ECONOMIC CORRIDOR

Recently, the Prime Minister of India announced the launch of the India-Middle East-Europe mega economic corridor.



About the India-Middle East-Europe Economic Corridor:

- The project includes **India, the UAE, Saudi Arabia, the European Union, France, Italy, Germany and the US.**
- The project will aim to enable **greater trade among the involved countries**, including energy products.
- The IMEC comprises of an **Eastern Corridor connecting India to the Gulf region** and a **Northern Corridor connecting the Gulf region to Europe.**
- It will include a railway and **ship-rail transit network and road transport routes.**
- The corridor will include a rail link as well as an electricity cable, a hydrogen pipeline and a high-speed data cable.
- In the coming times, it will be a major medium of economic integration between India, West Asia and Europe.

- The rail and shipping corridor is part of **the Partnership for Global Infrastructure Investment (PGII)**
- **Significance**
 - It would **increase prosperity** among the countries involved through an **increased flow of energy and digital communications.**
 - The project would help deal with the lack of infrastructure needed for growth in lower- and middle-income nations.

Key facts about the PGII

- It is a collaborative effort **by G7 nations** to fund infrastructure projects in developing nations.
- It is a developmental initiative aimed **at narrowing the infrastructure gap** in developing countries as well as help towards accelerate progress on SDGs globally.
- The infrastructure plan was first announced in June 2021 during the G7 Summit in the UK.
- Collectively, it aims **to mobilise nearly \$600 billion from the G7 by 2027** to invest in critical infrastructure that improves lives and delivers real gains for all of our people.”

ONE SUN, ONE WORLD, ONE GRID (OSOWOG) INITIATIVE

A day-long conference on "Transnational Grid Interconnections for One Sun, One World, One Grid (OSOWOG)" was recently held in New Delhi.



About One Sun, One World, One Grid (OSOWOG) Initiative:

- The idea for the OSOWOG initiative was put forth by the Prime Minister of India, at the First Assembly of the International Solar Alliance (ISA) in October 2018.
- The initiative **aims at connecting energy supply across borders.**
- **Vision:** It aims to **connect different regional grids through a common grid** that will be used to transfer renewable energy power and, thus, **realise the potential of renewable energy sources, especially solar energy.**

- The project is being spearheaded by the governments of India and the UK in partnership with the International Solar Alliance (ISA) and the World Bank Group.
- It will bring together a global coalition of national governments, international financial and technical organisations, legislators, power system operators and knowledge leaders to accelerate the construction of the of the new infrastructure needed for a world powered by clean energy.
- **When will it be completed?** The grid is expected to be set up over the next few years by the ISA. Once operational, it will transport solar power to different countries.

What is the International Solar Alliance (ISA)?

- The ISA is an intergovernmental organisation that was launched in 2015 by the Prime Minister of India and the President of France at the United Nations Climate Change Conference held in Paris.
- ISA is an action-oriented, member-driven, collaborative platform for increased deployment of solar energy technologies.
- The ISA is guided by its 'Towards 1000' strategy, which aims:
 - To mobilise USD 1000 billion of investments in solar energy solutions by 2030;
 - To deliver energy access to 1000 million people using clean energy solutions;
 - To install 1000 GW of solar energy capacity;
 - To mitigate global solar emissions to the tune of 1000 million tonnes of CO2 every year;
- **Vision:** Let us together make the sun brighter.
- **Mission:** Every home, no matter how far away, will have a light at home.
- **Headquarters:** National Institute of Solar Energy (NISE) in Gurugram, India.

KONARK TEMPLE WHEEL

A replica of the Konark Wheel from the Sun temple in Odisha's Puri served as the backdrop of the Prime Minister of India's welcome handshake with G20 leaders as they arrived at the summit venue, Bharat Mandapam.



About Konark Temple wheel:

- The Konark wheel was built **during the 13th century** under the **reign of King Narasimhadeva-I**.
- The wheel with 24 spokes is also adapted into India's national flag and embodies India's ancient wisdom, advanced civilisation, and architectural excellence.
- The rotating motion of the Konark Wheel **symbolises time, Kalachakra as well as progress and continuous change**.
- It serves as a powerful symbol of the wheel of democracy that reflects the resilience of democratic ideals and commitment to progress in society.

Key facts about Konark Sun temple

- It is located on the eastern shores of India.
- It is the culmination of Kalingan temple architecture, with all its defining elements in complete and perfect form.
- It was built in 1250 CE by **King Narasimhadeva I (r. 1238-1264 CE)** of the Eastern Ganga dynasty.
- The temple in its present state was declared by **UNESCO a World Heritage Site in 1984**.
- The word 'Konark' is a combination of two Sanskrit words, Kona (corner or angle) and arka (the sun).
- It thus implies that the **main deity was the sun god**, and the temple was built in an angular format.
- The temple follows the **Kalinga or Orissa style of architecture**, which is a subset of the Nagara style of Hindu temple architecture.

AKSHARDHAM TEMPLE



UK Prime Minister recently visited the Akshardham Temple in Delhi.

About Akshardham Temple:

- The Akshardham Temple, officially known as the **Swaminarayan Akshardham Temple**, is a **Hindu temple complex located in Delhi, India.**
- It is Located on the **banks of the Yamuna River.**
- It was **officially opened to the public on 6th November 2005.**
- It was **inaugurated by the then President of India Dr. A.P.J. Abdul Kalam.**
- Akshardham Temple God is **Bhagwan Swaminarayan (1781- 1830).** However, it is also **dedicated to great saints, devas and avatars of Hindu Gods.**
- **Architecture:**
 - It comprises of the **main temple, beautifully laid out gardens, exhibitions, open courtyards and water bodies**, each section presenting an intriguing aspect of **Hindu religion and spirituality.**
 - **Constructed with pink sandstone and marble, Akshardham Mandir is the centre of the Akshardham Temple complex.**
 - It is built in the **traditional Hindu architectural style.**
 - It follows the **traditional Vastu shastra as well as Pancharatra Shastra.**
 - The mandir and the entire complex **display intricate carvings of flowers, animals, musicians, dancers and Hindu deities.**

WTO DISPUTE SETTLEMENT SYSTEM



The G20 leaders recently expressed their commitment to conduct discussions for having a "fully and well-functioning" dispute settlement system of the World Trade Organisation (WTO) by 2024.

About World Trade Organization (WTO)

- WTO is an **international organisation that promotes and regulates global trade among nations.**
- The WTO was established on **January 1, 1995**, by replacing the **General Agreement on Tariffs and Trade (GATT).**

- **Objective:** Its main objective is to **promote free and fair trade** by **eliminating barriers to trade**, such as tariffs and quotas, and by **ensuring that trade disputes are resolved** through a transparent and predictable process.
- **Functions:** The WTO is responsible for:
 - **setting the rules of international trade;**
 - **negotiating and implementing trade agreements;**
 - **providing a forum for trade negotiations;**
 - **monitoring national trade policies;**
- The WTO also works closely with other international organizations, such as the World Bank and the International Monetary Fund, to promote global economic development and reduce poverty.
- It is **headquartered in Geneva, Switzerland**, and operates on a **consensus-based decision-making process**.

About WTO Dispute Settlement Mechanism:

- The **Dispute Settlement Understanding (DSU)** is the main **WTO agreement on settling disputes**.
- The **General Council of WTO convenes as the Dispute Settlement Body (DSB)** to deal with disputes between WTO members.
- **The DSB has the authority to:**
 - **establish dispute settlement panels;**
 - **refer matters to arbitration, adopt panel, Appellate Body and arbitration reports;**
 - **maintain surveillance over the implementation of recommendations and rulings** contained in such reports;
 - **authorise suspension of concessions in the event of non-compliance** with those recommendations and rulings;
- **Process:**
 - **Ideally disputes are resolved through negotiations.**
 - **If this is not possible, WTO Members can request the establishment of a panel** to settle the dispute.

- The panel will issue a report, which can subsequently be appealed before the WTO's Appellate Body on questions of law.
 - **The Appellate Body:**
 - Appeals are handled by the **permanent seven-member Appellate Body** which is set up by the DSB and broadly represents the range of WTO membership.
 - It **hears appeals from reports issued by panels** in disputes brought by WTO members.
 - The Appellate Body can **uphold, modify or reverse the legal findings** and conclusions of a panel.
 - **If a WTO member does not comply with recommendations** from dispute settlement, then **trade compensation or sanctions**, for example in the form of increases in customs duties, may follow.
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[INTERNATIONAL ATOMIC ENERGY AGENCY \(IAEA\)](#)

International Atomic Energy Agency (IAEA) recently warned of a potential threat to nuclear safety due to a spike in fighting near Europe's largest nuclear power plant in Ukraine.



About the International Atomic Energy Agency (IAEA):

- It is the world's foremost **intergovernmental forum for scientific and technical cooperation in the nuclear field.**
- It is widely known as the world's "**Atoms for Peace and Development**" organization within the United Nations family.
- It works for the **safe, secure and peaceful uses of nuclear science and technology.**
- **History:** Though established as an **autonomous organisation, independently of the United Nations** through its own international treaty, the **IAEA Statute**, the IAEA reports to both the **United Nations General Assembly and Security Council.**
- **Headquarters: Vienna, Austria.**
- **Functions:**

- The Agency works with its Member States and multiple partners worldwide to **promote the safe, secure and peaceful use of nuclear technologies.**
- It **applies nuclear safeguards**— consisting of **monitoring, inspection, information analysis,** and other activities – to **verify that nuclear activities remain peaceful and detect and deter their diversion,** including to weapons-related purposes.
- In particular, the IAEA **implements comprehensive safeguards agreements mandated by the Nuclear Non-Proliferation Treaty (NPT),** which serve as a first line of defense against nuclear weapons proliferation.
- The IAEA assists its Member States and **promotes the exchange of scientific and technical information** between them.
- The IAEA **enhances national, regional, and international capacities** to respond to nuclear and radiological incidents, which is essential to minimising their impact.

What is the Nuclear Non-Proliferation Treaty (NPT)?

- It was an **agreement signed in 1968** by several of the **major nuclear and non-nuclear powers** that **pledged their cooperation in stemming the spread of nuclear technology.**
- With 191 States parties, it is the **most widely adhered to treaty in the field of nuclear non-proliferation,** peaceful uses of nuclear energy and nuclear disarmament.
- **Under the NPT, non-nuclear-weapon States parties have committed themselves not to manufacture or otherwise acquire nuclear weapons or other nuclear explosive devices while nuclear-weapon States parties have committed not to in any way assist, encourage or induce any non-nuclear-weapon State party to manufacture or otherwise acquire nuclear weapons or other nuclear explosive devices.**
- **Nuclear-weapon States parties under the Treaty are defined as those that manufactured and exploded a nuclear weapon or other nuclear explosive device before 1 January 1967.**
- **There are five nuclear-weapon States parties to the Treaty.**
- **Only Israel, India, and Pakistan have never been signatories of the Treaty,** and North Korea withdrew from the Treaty in 2003.