



29 May 2024

National and International News

GAIL Commissions First 10 MW Green Hydrogen Plant in Madhya Pradesh

Context:

- **GAIL, under the National Green Hydrogen Mission, has commissioned its first 10 MW Green Hydrogen Plant in Vijaipur, Madhya Pradesh.**
- This plant utilizes electrolysis of water with renewable power to produce **4.3 Tonnes Per Day (TPD) of Hydrogen.**
- The produced Hydrogen boasts a purity of 99.99% and is generated at a pressure of 30 Kg per square centimeter.

Key points:

- Initially, the **hydrogen will be used as fuel, alongside natural gas**, for captive purposes at GAIL's Vijaipur plant.
- Subsequently, it will be supplied to retail customers in nearby areas through high-pressure cascades.
- To support this initiative, **GAIL is installing 20 MW Solar power plants at Vijaipur** to fulfill the green power requirement for electrolysis in the Green Hydrogen production process.
- The company also plans to procure renewable power through open access.

National Green Hydrogen mission:

On **4th January 2023**, the **Union Cabinet approved the National Green Hydrogen Mission** with an outlay of **₹ 19,744 crore from FY 2023-24 to FY 2029-30**. The overarching objective of the Mission is to make **India a global hub for production, usage and export of Green Hydrogen and its derivatives.**

The expected outcomes of the Mission, by 2030, are as follows:

- India's Green Hydrogen production capacity is likely to reach **5 MMT per annum**, contributing to reduction in dependence on import of fossil fuels.
- Achievement of Mission targets is expected to reduce a cumulative **₹ 1 lakh crore worth of fossil fuel imports by 2030.**
- Nearly **50 MMT per annum of CO2 emissions are expected to be averted** through production and use of the targeted quantum of Green Hydrogen.

Depending on the nature of the method of its extraction, hydrogen is categorised into three categories, **namely, Grey, Blue and Green.**



- **Grey Hydrogen:** It is produced via **coal or lignite gasification (black or brown)**, or via a process called steam methane reformation (SMR) of natural gas or methane (grey). These tend to be mostly **carbon-intensive processes**.
- **Blue Hydrogen:** It is produced **via natural gas or coal gasification** combined with carbon capture storage (CCS) or carbon capture use (CCU) technologies to reduce carbon emissions.
- **Green Hydrogen:**
 - It is produced using **electrolysis of water with electricity generated by renewable energy**.
 - The carbon intensity ultimately depends on the carbon neutrality of the source of electricity (i.e., the more renewable energy there is in the electricity fuel mix, the "greener" the hydrogen produced).

UN Military Gender Advocate of the Year award



Context:

- Major Radhika Sen, an **Indian military peacekeeper serving with MONUSCO**, has been awarded the **2023 United Nations Military Gender Advocate of the Year Award**.

Key points:

- Created in 2016, the United Nations "**Military Gender Advocate of the Year Award**" recognizes the dedication and efforts of an individual military peacekeeper in promoting the principles of **UN Security Council resolution 1325 (2000) on women, peace and security**.
- Major Sen is the **second Indian peacekeeper to receive this prestigious award following in the footsteps of Major Suman Gawani who was a co-recipient for 2019**.
- Other past honourees were from Brazil, Ghana, Kenya, Niger, South Africa and Zimbabwe.
- India is **currently the eleventh largest contributor of women military peacekeepers to the United Nations with 124 now deployed**.

Background and Significance:

- Born in **Himachal Pradesh, India (1993)**, Major Sen is a biotech engineer who chose to pursue a career in the armed forces.
- Her dedication to peacekeeping is evident in her deployment with the **UN Organization Stabilization Mission in the**



	<p>Democratic Republic of Congo (MONUSCO) from March 2023 to April 2024.</p> <ul style="list-style-type: none"> Major Radhika Sen's achievements highlight the importance of gender-sensitive peacekeeping in building trust and fostering lasting peace. Her story serves as an inspiration for peacekeepers around the world and underscores India's commitment to contributing to global peace efforts, particularly through the deployment of women peacekeepers (currently the 11th largest contributor).
<p>'Sustainability Champion – Editor's Choice Award' at Outlook Planet Sustainability Summit & Awards 2024</p>	<p>Context:</p> <ul style="list-style-type: none"> REC Limited, a leading power sector financier, received the "Sustainability Champion – Editor's Choice Award" at the Outlook Planet Sustainability Summit & Awards 2024. This award acknowledges REC's commitment to environmental responsibility and its role in driving India's transition to clean energy. <p>REC's Sustainability Initiatives:</p> <ul style="list-style-type: none"> REC's loan portfolio prioritizes renewable energy projects, currently sitting at ₹ 38,971 crores. The company aims to increase the renewable energy share of its projected ₹ 10 lakh crore loan book to 30% by 2030. <p>About the Outlook Planet Sustainability Summit & Awards:</p> <ul style="list-style-type: none"> This prestigious event recognizes organizations demonstrating leadership in sustainable practices. Industry leaders, policymakers, and sustainability advocates gather at the summit for discussions, innovation exchange, and recognition of sustainability achievements. <p>About REC Limited:</p> <ul style="list-style-type: none"> REC was incorporated in 1969 in the backdrop of severe drought and famine in the country, to energise agricultural pump-sets for irrigation purposes A "Maharatna" public sector enterprise under the Ministry of Power. Functions as an NBFC, Public Financial Institution (PFI), and Infrastructure Financing Company (IFC).



Daily Current Affairs Encyclopedia

	<ul style="list-style-type: none"> • Finances the entire power sector - generation, transmission, distribution, renewable energy, and emerging technologies. • Recently diversified into non-power infrastructure sectors like roads, metro rails, and IT communication. • Plays a key role in government's power sector schemes like Saubhagya, DDUGJY, and RDSS. • Loan book stands at ₹ 5.09 lakh crore and net worth at ₹ 68,783 crore (as of March 31, 2024).
PRAGATI-2024	<p>Context:</p> <ul style="list-style-type: none"> • The Central Council for Research in Ayurvedic Sciences (CCRAS), under the Ministry of Ayush, launched PRAGATI-2024 (Pharma Research in AyurGyan And Techno Innovation) on May 28, 2024. • This initiative aims to propel Ayurveda's future through industry collaboration in research. <p>Key Points:</p> <ul style="list-style-type: none"> • Focus on Collaborative Research: PRAGATI-2024 fosters teamwork between CCRAS and the Ayurvedic drug industry to explore research avenues in Ayurveda. • Industry's Crucial Role: Highlighting the industry's potential, Vaidya Rajesh Kotecha, Secretary, Ministry of Ayush, emphasized its role in expanding and advancing the sector. He acknowledged the promising growth opportunities presented by new practitioners and startups. • Growing Global Interest: Prof. Rabinarayan Acharya, DG, CCRAS, addressed the increasing worldwide demand for Ayush products, particularly Ayurveda. He emphasized CCRAS's efforts to reach stakeholders, including students, through research scholarships and outreach programs. • Research for Quality Products: Dr. Koustubha Upadhaya, Advisor (Ayu.), Ministry of Ayush, stressed the importance of research and industry collaboration in ensuring high-quality, safe, and effective Ayurvedic products for societal benefit. • Platform for Collaboration: Dr. N. Srikanth, Deputy Director General, CCRAS, highlighted PRAGATI-2024's unique platform for collaboration. He emphasized its potential for showcasing the Ayurveda and herbal industry's vast potential and India's significant role in this sector.
Digital Health Collaboration: India and Google Discuss Partnership	<p>Context:</p>



Daily Current Affairs Encyclopedia

- During a side event at the 77th World Health Assembly in Geneva (May 28, 2024), a crucial meeting took place between representatives of the Indian government and Google.
- **Shri Apurva Chandra, Union Health Secretary who is leading the India delegation, met with Dr Karen DeSalvo, Chief Health Officer, Google.**

Key points:

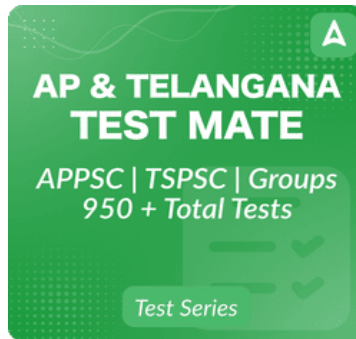
- **Enhancing Digital Health Accessibility:** Both parties explored ways to improve access to digital health tools for Indian citizens.

Focus Areas for Collaboration:

- **Leveraging Artificial Intelligence (AI):** India expressed interest in exploring AI applications for healthcare, potentially with Google's expertise.
- **Strengthening Ayushman Bharat Digital Mission (ABDM):** India sought Google's support in:
 - Expanding **ABDM's reach.**
 - Developing new **ABDM-compatible digital health tools (e.g., building on ARDA for diabetic retinopathy).**
 - Raising awareness about ABDM among students and startups to foster innovation.

Existing Partnership:

- Google highlighted its ongoing collaboration with India's National Health Authority (NHA) since 2022. This includes:
 - **Listing Google's AI-based diabetic retinopathy screening model (ARDA) on the ABDM website.**
 - **Jointly developing an open-source tool to simplify ABDM integration.**





తెలుగు

ADDAPEDIA

To get free Live Classes,
Materials Scan this QR Code &
Download our Adda247 App



Daily Current Affairs Encyclopedia

Copyright © by Adda247

All rights are reserved. No part of this document may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without prior permission of Adda247.