#### **GREEN HYDROGEN PRODUCTION - ECONOMY**

**NEWS:** The Energy & Resources Institute (TERI) highlighted the necessity of developing a competitive market for green hydrogen procurement in India.

• Currently, India lacks a market for green hydrogen, impeding its adoption across industries.

#### WHAT'S IN THE NEWS?

### Proposal for a SECI-like Entity

- TERI suggested establishing a dedicated entity similar to the Solar Energy Corporation of India (SECI).
- This entity would be responsible for procuring green hydrogen through long-term contracts, supporting industries such as steel and fertilizers in their transition away from fossil fuels.

### Challenges with Current Support Mechanisms

- Existing programs like the SIGHT Program and Production-Linked Incentive (PLI) schemes may be insufficient without a well-developed green hydrogen market.
- TERI stressed the importance of creating sustained demand to attract investment and ensure adequate returns for investors.

### Importance of Long-Term Purchase Agreements

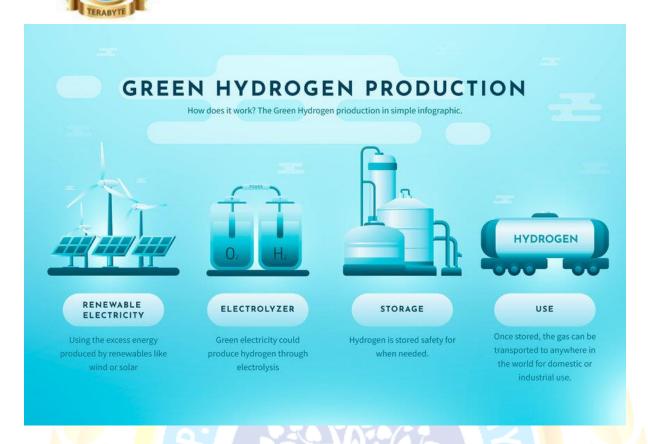
- Long-term contracts with assured prices (e.g., L1 bid price) can instill confidence in financial markets and facilitate both equity and debt financing.
- Drawing from the solar sector's success, TERI emphasized that contractual purchase agreements would encourage private sector participation and alleviate financing constraints.

# Competitive Procurement and Cost Reduction

- TERI recommended competitive bidding for hydrogen supply across various downstream projects to reduce costs and nurture a competitive industry structure.
- This approach would allow industries to procure green hydrogen as and when they commission their facilities, promoting cost efficiency.

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## Proposal for a Special Purpose Vehicle (SPV)

- To facilitate procurement, TERI proposed creating a Special Purpose Vehicle (SPV), similar to SECI, to procure green hydrogen competitively.
- Such an SPV would aim to replicate SECI's success in reducing solar energy costs, applying it to green hydrogen for hard-to-abate sectors.

# Downstream Project-Specific SPVs

- TERI recommended creating separate SPVs for each industry segment, focusing on pilot plant development.
- These SPVs would be promoted by relevant ministries to support industries in transitioning to green hydrogen.

## **De-risking Investments for Pilot Projects**

- For sectors with mature green hydrogen technology, TERI advocated using long-term procurement contracts to reduce investment risks for pilot projects.
- Assured supply and competitive pricing of green hydrogen would enable project developers to focus on plant setup and operations without worrying about hydrogen supply.

## **Benefits of SPVs for Industry Transition**



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- SPVs would help lower the cost of green hydrogen, making downstream production more economical.
- By ensuring supply, SPVs would reduce potential bidders' risks, encouraging investments in green hydrogen-powered facilities.

**Source:** <a href="https://www.thehindubusinessline.com/companies/create-seci-like-entity-for-efficient-long-term-procurement-of-green-hydrogen-long-term-procurement-of-green-long-ter

teri/article68845773.ece#:~:text=Emphasising%20on%20the%20criticality%20of,all%20industries%20through%20long%20term

