

Daily Mains Practice Answer 3-09-2026

Q. "The future of India's energy diplomacy will be determined as much by green technologies as by oil and gas." Critically examine. (10 marks, 150 words)

Directions: Intro-----Oil and gas will continue + Green technologies will shape diplomacy + Critical examination-----Conclusion.

Introduction:

Describe India's energy diplomacy.

Main Body

Why will oil and gas continue to matter?

- High import dependence
- Energy transition will take time - Transport, petrochemicals, fertilisers and several industrial sectors cannot be rapidly decarbonised.
- Strategic partnerships - Deepen India's relationships with Russia, West Asia, the US and other hydrocarbon-producing countries.
- Price and geopolitical shocks - Conflicts and disruptions in major producing regions.
- Strategic reserves - Oil remains important for maintaining an emergency energy buffer.
- Economic vulnerability - Oil-price spikes can increase inflation and widen the trade deficit.

Why will green technologies increasingly shape diplomacy?

- From resource geopolitics to technology geopolitics - Competition shifts from access to oil fields and gas reserves towards access to technology, manufacturing capacity and critical minerals.
- Green hydrogen diplomacy - National Green Hydrogen Mission, an opportunity to become a producer and exporter of green hydrogen and derivatives like Green Ammonia.
- Renewable energy - India's solar energy initiatives - International Solar Alliance - opportunity to position itself as a leader of the Global South in affordable clean-energy solutions.
- Critical minerals - Dependence on concentrated mineral supply chains could create a new form of strategic vulnerability; therefore, India needs partnerships for critical minerals.
- Technology & manufacturing partnerships - Batteries, EVs, Solar PV cells, nuclear

energy, smart grid, etc.

- Climate diplomacy - India's renewable-energy expansion strengthens its position in global climate forums, demonstrating development & decarbonisation can be pursued simultaneously.

Critical examination

- Green transition also creates new vulnerabilities - shift to green energy does not automatically mean energy independence.
- Critical-mineral dependence can replace hydrocarbon dependence.
- Renewable generation is intermittent, requiring storage and stronger transmission networks.
- Advanced clean technologies concentrated in a few countries.
- Developing countries face significant financing and technology-access constraints.
- Rapid decarbonisation without adequate alternatives undermines developmental priorities.

Conclusion:

Give a balanced conclusion and suggest some measures.

Securing today's energy needs while acquiring the technologies and supply chains that will power tomorrow's economy.