Copy No....

No. 411/2/1/2020-Cab.III (Vol.II) Government of India / भारत सरकार Cabinet Secretariat / मंत्रिमंडल सचिवालय Rashtrapati Bhavan / राष्ट्रपति भवन

New Delhi, dated the 02nd April, 2025.

OFFICE MEMORANDUM

Subject: Sixth meeting of the Empowered Group under the National Green Hydrogen Mission.

The undersigned is directed to enclose herewith a copy of the Minutes of the Meeting (Doc No. 09/2025-CA.III) on the above-mentioned subject, chaired by Cabinet Secretary on 28th March, 2025 at 04:00 PM at Committee Room, Cabinet Secretariat, Rashtrapati Bhavan.

2. It is requested that the status of action taken on the relevant decisions may please be uploaded in the 'Committee of Secretaries' module of e-Samiksha portal.

(Namrata Gandhi) Deputy Secretary Tel: 23019017

Principal Scientific Adviser to the Government of India

CEO, NITI Aayog

Secretary, D/o Revenue

Secretary, D/o Economic Affairs

Secretary, D/o Commerce

Secretary, M/o Petroleum & Natural Gas

Secretary, M/o Skill Development and Entrepreneurship

Secretary, M/o Ports, Shipping and Waterways

Secretary, M/o Heavy Industries

Secretary, M/o Power

Secretary, M/o New and Renewable Energy

Secretary, D/o Fertilizers

Secretary, DPIIT

Secretary, M/o Steel

Secretary, M/o Road Transport and Highways

Secretary, M/o Environment, Forest & Climate Change

Secretary, D/o Scientific and Industrial Research

Secretary, D/o Science and Technology

Dr. R.K. Malhotra, President, Hydrogen Association of India

Shri Ravi Pandit, Non-executive Chairman, KPIT Technologies Limited

Copy for kind information to: Principal Secretary to Prime Minister

(Namrata Gandhi) Deputy Secretary

INTERNAL CIRCULATION (One Copy) Secy.(C)/AS(SS)/ Dir(AT)

Meeting Pad/Office Copy 23 copies

CABINET SECRETARIAT RASHTRAPATI BHAVAN

MINUTES OF THE MEETING

Doc.No. 09 / 2025-CA.III

Subject: Sixth meeting of the Empowered Group under the National Green

Hydrogen Mission

Reference: PPT received from MNRE on 28th March, 2025

Sixth meeting of the Empowered Group (EG) under the National Green Hydrogen Mission (NGHM) was held under the chairmanship of Cabinet Secretary on 28th March, 2025. List of participants is annexed.

- 2. Secretary, MNRE presented the action taken report on the decisions taken in the 5th EG Meeting on 23rd September, 2024. She informed that 5 Meetings of Empowered Group (EG) and several meetings of Advisory Group (AG) have been held under NGHM and MNRE has also held regular interactions with other members of EG to ensure timely implementation of Mission activities.
- 3. Secretary, MNRE informed that MoEFCC has finalised Cabinet Note for Joint Credit Mechanism between India and Japan under Article 6.2 of Paris Agreement after receiving comments of DEA. She also informed that efforts were made to resolve issues on the proposal related to duty benefits for Green Hydrogen (GH) and Green Ammonia (GA) plants under Export Promotion Capital Goods Scheme (EPCG) and Export Oriented Units (EOU) and meeting was held with DoC, DoR, CBIC, MNRE and DGFT. It was observed that SEZ related provisions meet the requirements for Solar based Green Hydrogen (GH) products, however, for wind-based GH products, EOU and EPCG schemes can not meet the objectives.
- 4. Cabinet Secretary directed D/o Commerce to examine and carve out economically justified proposal with limited applicability on Wind Projects in SEZ and without scope for misuse for duty benefits in 30 days.
- 5. Secretary, MNRE informed that the process of seeking PESO approvals for establishment of plants for GH and its derivatives have been streamlined and online modules have been developed.
- 6. Secretary, MNRE further informed about action taken to strengthen the Transmission network as per the projected production facility announced by the industry. Secretary, Power raised concerns on risks in making huge investments on transmission infrastructure on the basis of assurances by manufacturers in the scenario where the commitment by the manufacturer for production is not fulfilled. He noted that some developers had already backed out after causing significant costs to the PSUs. It is crucial to devise a mechanism to dissuade manufacturers from going back on their commitments. It was suggested that enhanced commitment fees in terms of Bank guarantee should be taken from Developers.

- 7. Mission Director, NGHM informed about the status of progress under SIGHT Scheme, for Electrolyser manufacturing and Green Hydrogen production. He further informed EG regarding details of major upcoming GH/ GA Projects and Year wise commissioning of GH production. Status of pilot projects in steel sector and technologies under development was also intimated to EG.
- 8. Joint Secretary, D/o Fertilizers stated that in addition to subsidy from MNRE, additional financial assistance would be required to use Green Ammonia for fertilizers. Cabinet Secretary observed that concessions and subsidy to be granted should be consolidated at one point rather than staggering it at different points. He desired that a gap analysis should be done to find the total estimate of the subsidy to be given to GH/ GA manufacturers.
- 9. Joint Secretary, MoPNG, informed that 6 refineries have floated tenders for production of 42 KTPA of Green Hydrogen out of the allocated capacity of 200 KTPA. Refineries have expressed concerns regarding the high cost of Green Hydrogen as compared to Grey Hydrogen making it commercially unviable, even after including mission subsidy. Further, fluctuations in availability of renewable energy will also results in additional cost of storage capacity. Cabinet Secretary stated that new technology may not be commercially viable initially, however, production of earmarked quantity has to be done to establish technical capabilities. Therefore, MoPNG should ensure that OMCs must go-ahead with finalising the already floated tenders for Green Hydrogen by June, 2025, in accordance with the decision of the Cabinet. The resulting cost increase would be insignificant when averaged across the total turnover of the refineries.
- 10. Secretary, MoRTH informed that 5 projects have been awarded for deploying 37 Hydrogen fuelled vehicles (10 buses and 27 trucks) and 9 Hydrogen Refuelling stations across 10 different routes. He suggested that these pilot projects may first be evaluated before expansion to second round of proposals.
- 11. Secretary, M/o Ports, Shipping and Waterways informed about the progress of pilot projects in shipping sector related to retrofitting of vessels (outlay of Rs. 80 crore) and establishing of bunkering and refuelling facility of GH (outlay of Rs. 35 crore). Mission Director, NGHM mentioned that the green shipping corridor from Kandla to Rotterdam and to Singapore is envisaged with ships running on green hydrogen-based fuels.
- 12. Principal Scientific Adviser mentioned that projects have been awarded under various categories for research and development, and proposals in second round will be invited by May, 2025, specifically in storage and transportation sector. Mission Director, NGHM informed that as part of EUTTC (European Union Trade & Technology Council) collaboration, joint R&D proposals will also be invited in May, 2025 from EU/ Indian Research Institutions on Hydrogen production from waste water.
- 13. Secretary, Skill development informed that skill gap study has been completed for Green Hydrogen value chain, 41 courses have been developed and 81 master trainers and 330 trainers have been aligned. He also informed that to facilitate monitoring of the training, a separate dashboard for National Green Hydrogen Mission has been developed.

- 14. Secretary, DST made a brief presentation on inclusion of Hydrogen Valley Innovation Cluster (HVIC) as part of NGHM. He stated that HVIC aims to demonstrate complete Green Hydrogen value chain, including production, storage, transportation and utilisation. Presently, 4 proposals have been selected to be implemented at pilot level on a small industrial scale.
- 15. It will be implemented in a consortium mode with partners across the hydrogen value chain. Each HVIC will be managed by not-for-profit Section 8 Company, set up by the lead applicant. He also informed that 4 projects will be implemented in Public Private Partnership at a total cost of Rs. 485 crore, out of which Rs. 169.89 crore will be funded from the Hydrogen Hub component of NGHM and the balance Rs. 315 crore will be contributed by the lead applicants of 4 HVICs. PSA mentioned that HVIC are pilot projects and each HVIC is technologically complementary to each other. Secretary, EA queried the appropriateness of the Kochi location where the source was shown as "electrolysis" but in the discussion it was justified based on availability of bio-ethanol. Secretary, DST clarified that the source for research may not be local but the institute had good technical potential. Cabinet Secretary stated that release of government contribution should be in proportion to Industrial funding. EG members supported inclusion of 4 HVICs as part of NGHM.
- 16. Mission Director, NGHM informed EG about collaboration with H2Global to establish a collaborative framework to promote Green Hydrogen initiative and requirement of comfort letter by MNRE to Green Hydrogen/ Green Ammonia developers for facilitation of export of GH and derivatives from India. He also informed that approval of projects will be granted as envisaged under SIGHT. Cabinet Secretary stated that the projects should be permitted to export as the scope of the NGHM is to develop India as supplier of GH/ GA.
- 17. After discussions, the following decisions were taken:-
 - D/o Commerce to examine and to give recommendation in one month on the proposal related to duty benefits for Wind turbine projects supplying power to Green Hydrogen and Green Ammonia plants, which are registered under Export Oriented Units (EOU) or in SEZ.
- II. MoEFCC to finalise draft Cabinet Note for joint credit mechanism between India and Japan under Article 6.2 of Paris Agreement.
- III. Developers to be charged enhanced commitment fees in terms of Bank Guarantee for electricity transmission network.
- IV. D/o Fertilizer to identify the additional subsidy burden (apart from mission subsidy) based on the discovered price of Green ammonia. A gap analysis to be undertaken by MNRE to find the total estimate of the extra subsidy required.
- V. MoPNG to ensure that OMCs must go-ahead with finalising the already floated tenders for Green Hydrogen by June, 2025, despite the cost

differential as per the directions of the Cabinet, since this is intended to demonstrate the technical feasibility and commitment.

- VI. EG agreed to include HVIC under the Hydrogen Hub components of the NGHM. PSA noted that HVICs will function as living lab for innovating hydrogen supply chain from production to transport, storage and consumption. These will provide learnings for scale up to large size hubs. DST to ascertain that Industry contribution is matching with the Government support.
- VII. EG noted the proposal of Joint offtake tenders between India and Germany by pooling subsidies provided from both sides. Details to be presented by MNRE in next meeting.
- VIII. EG observed that the objective of the mission is to export large quantum of Hydrogen derivatives from India. Hence EG agreed to the issuance of "Comfort Letter" to the Green Hydrogen developers setting projects as part of the mission for specified quantity and duration; the Comfort Letters should provide comfort only on non-imposition of export restrictions. No commitment should be made on subsidies/ other policies in the Comfort Letter.

The meeting ended with a Vote of Thanks to all participants.

List of Participants

- 1. Dr. T.V. Somanathan, Cabinet Secretary
- 2. Prof. Ajay Kumar Sood, Principal Scientific Adviser to the Govt. of India
- 3. Shri Ajay Seth, Secretary, D/o Revenue & D/o Economic Affairs
- 4. Ms. Vandana Gurnani, Secretary (Coord.), Cabinet Secretariat
- 5. Shri Pankaj Agarwal, Secretary, M/o Power
- 6. Ms. Nidhi Khare, Secretary, M/o New and Renewable Energy
- 7. Shri Abhay Karandikar, Secretary, D/o Science and Technology
- 8. Shri Surjit Bhujabal, Member (Customs), CBIC, D/o Revenue
- 9. Shri L. Satya Srinivas, Special Secretary, D/o Commerce
- 10. Shri Satendra Singh, Additional Secretary, Cabinet Secretariat
- 11. Shri Abhay Bakre, Mission Director, NGHM, M/o New and Renewable Energy
- 12. Shri Rajnath Ram, Programme Director, NITI Aayog
- 13. Dr. Anita Gupta, Head (CEST), D/o Science and Technology
- 14. Dr. R.K. Malhotra, President, Hydrogen Association of India
- 15. Ms. Anita Tripathi, Director, Cabinet Secretariat

Through Video Conference:

- 16. Shri Atul Kumar Tiwari, Secretary, M/o Skill Development and Entrepreneurship
- 17. Shri Kamran Rizvi, Secretary, M/o Heavy Industries
- 18. Shri T. K. Ramachandran, Secretary, M/o Ports, Shipping and Waterways
- 19. Shri Amardeep Singh Bhatia, Secretary, DPIIT
- 20. Shri V. Umashankar, Secretary, M/o Road Transport and Highways
- 21. Shri Tanmay Kumar, Secretary, M/o Environment, Forest & Climate Change
- 22. Shri Vinod K. Tripathi, Joint Secretary, M/o Steel
- 23. Smt. Sujata Sharma, Joint Secretary, M/o Petroleum & Natural Gas
- 24 Shri Anurag Rohatgi, Joint Secretary, D/o Fertilizers
- 25 Dr. Ashish Lele, Director, National Chemical Laboratory, CSIR, D/o Scientific and Industrial Research
- 26 Shri Ravi Pandit, Chairman, KPIT Technologies Limited
