

**Workshop on “Green Ammonia for Fertilizer Manufacturers”**

Wednesday, September 27, 2023

(In Person event)

**Venue:** 3<sup>rd</sup> Floor Conference Room, Ministry of New and Renewable Energy,  
Atal Akshaya Urja Bhawan, New Delhi

Time/ duration	Session
09:30 – 10:00	<b>Registration</b>
10:00 – 10:05 (5 mins)	<b>Welcome Remarks</b> – Ms. Monali Zeya-Hazra, Regional Energy & Clean Energy Specialist and Mission Environment Officer, Indo Pacific Office, USAID/India
10:05 – 10:10 (5 mins)	<b>Keynote Address</b> – Mr. Ajay Yadav, Joint Secretary MNRE
10:10 – 10:15 (5 mins)	<b>Special Address</b> - Mr. Bhaskar Rajah, Senior Energy Adviser, Indo Pacific Office, USAID/India
10:15 – 10:45 (30 mins)	<b>Why Green Ammonia discussion is relevant to fertilizer manufacturers.</b> (Presenter: Mr. Vivek Bhardwaj, USAID-SAREP) <ul style="list-style-type: none"> <li>• Importance of fertilizers in <i>National Hydrogen Mission</i>.</li> <li>• Concept of Green Ammonia.</li> <li>• Supply chain for Green Hydrogen / Ammonia in fertilizer manufacturing.</li> <li>• Policy &amp; Economics for promoting Green Ammonia.</li> </ul>
10:45 – 11:15 (30 mins)	<b>Fertilizer industry perspective on Green Ammonia</b> (Presenter: Dr. Sachchida Nand, Adviser Fertilizer Association of India) <ul style="list-style-type: none"> <li>• Challenges and Opportunities.</li> <li>• Existing supply chain.</li> <li>• Changing trends in fertilizer type</li> <li>• Fluctuation of price of black ammonia and its impact on profitability to fertilizer manufacturer.</li> </ul>
11:15 – 11:30 (15 mins)	<b>Tea/Coffee break</b>
11:30 – 12:00 (30 mins)	<b>Case Study Green Ammonia plants: 50TPD and 100TPD</b> (Presenter: Dr. M. R. Panda, NTPC GM (RE)) <ul style="list-style-type: none"> <li>• Introduction to the study</li> <li>• Technology advancements</li> <li>• Key commercial learning.</li> <li>• Levelized cost of Green Ammonia (LCOA)</li> <li>• Q&amp;A</li> </ul>
12:00 – 1:30 (90 mins)	<b>Round table Discussion</b> (Moderated by Mr. Sumedh Agarwal – Deputy Chief of Party USAID SAREP; Participants Fertilizer Manufacturers, Open to All) <ul style="list-style-type: none"> <li>• Challenges and opportunities by participating fertilizer manufacturers, financial organization and other institutions.</li> </ul>
1.30- 1.45 (15 mins)	<b>Way forward by MNRE</b>
	<b>Vote of Thanks</b>
1.45 – 2.45 (60 min)	<b>Lunch break</b>
<b>Close of program</b>	