<u>Reply to Parliament Question No 768 for 04.02.2025 for Rajya Sabha regarding "Petroleum</u> <u>Import" in respect of Numaligarh Refinery Limited (NRL):</u>

- Q no. (a): whether the Government is aware that petroleum imports have risen by 7.1% in April-December, and the reasons for this increase despite efforts to promote energy self-sufficiency;
- Reply: Ministry to reply.
 [As NRL is located in the land locked area in North East, thus NRL is not being able to achieve 100% capacity utilisation. Thus, during the year April-December, NRL has imported crude oil 21 TMT to improve its capacity utilisation.]
- Q no. (b): how the Government plans to balance rising imports with domestic production and renewable energy goals;

Reply: Ministry to reply.

[NRL is executing a bio-refinery project in the state of Assam through its Joint Venture Company Assam Bio Ethanol Pvt. Limited (ABEPL). NRL owns 50% share in the company and remaining 50% equity is shared between two M/s Fortum BV3 and M/s Chempolis. M/s Chempolis is also the technology provider for the bio-refinery. Bio-refinery will produce 50 TMTPA of Advance bio-fuel (ethanol) from 300 TMTPA of dry bamboo. The first trial run has been conducted successfully to establish conversion of bamboo to alcohol. During the trial run, bamboo was successfully processed through the digestor, bamboo washing section, enzymatic hydrolysis and fermentation sections. The 2G bio-ethanol project at Numaligarh is set to become fully operational by the first quarter of 2025-26. It is envisaged that Ethanol will substitute petrol to the same extent and thereby reduce import of crude required for production of petrol in the country.

Further, in line with all oil and gas industries, NRL developed a Net Zero roadmap during 2022 with project plan, timeline and project costs as a guiding document to achieve net zero carbon emissions by the year 2038 with regards to scope 1 & scope 2.

Accordingly, company is gauging the carbon emissions YoY and has braced up with multiple projects involving low carbon, green, alternative and renewable energy technologies namely CO to acetic acid; green Hydrogen; SAF; waste ammonia recovery; Solar PV rooftops; RERTC (Renewable energy Round the clock) by integrating renewable energy into the refinery's power mix, alongside massive plantation drive.]

Q no. (c): whether the ethanol blending rate of 18.2% in December 2024 is sufficient to reduce dependency on imports, and the steps being taken to achieve the 20% target; **Reply:** Ministry to reply.

- Q no. (d):why has there been a delay in expanding ethanol production capacity; andReply:Ministry to reply.
- Q no. (d): what measures are being implemented to boost domestic biofuel production?
- Reply:Ministry to reply.[NRL's bio ethanol project has been granted of Rs. 150 crore by Central Govt.under Pradhan Mantri JI-VAN yojana.]

Note for Supplementary:

Numaligarh Refinery Limited (NRL) is a Public Sector Enterprise with a 3.0 MMTPA petroleum refinery at Numaligarh in Golaghat district of Assam. Present shareholding pattern of NRL is Oil India Limited (OIL) – 69.63%, Govt. of Assam (GoA) – 26% and Engineers India Ltd (EIL) – 4.37%.
