

FAQs on 2G Ethanol

1. What will be the Ethanol requirement in India?

The National Policy on Biofuels announced in 2018 is aimed at accelerated promotion of Biofuels with indicative targets of achieving 20% blending in Petrol and 5% blending in Diesel by 2030. However, efforts are on to advance the target of achieving 20% ethanol-blending with petrol by 2025. Oil Marketing Companies (OMCs) are targeting 10% Ethanol blending by 2022 on Pan India basis. In order to meet 10% ethanol blending target with a projected demand for petrol in 2021-22, about 450 crore litres of ethanol would be required. The estimated production of bioethanol in the country is around 300 crore litres, a large part of which is required for potable alcohol and chemical industries and the balance is used for Ethanol Blending Petrol (EBP) programme.

2. Which are the schemes of Government of India to support 2G Ethanol production?

Government of India has launched the scheme “PM JI-VAN Yojana” for providing financial support to Integrated Bioethanol Projects using lignocellulosic biomass and other renewable feedstock. The objective of the scheme is to support 12 Commercial Scale and 10 demonstration scale 2G ethanol Projects with Viability Gap Funding and a total financial outlay of Rs 1969.50 crore for the period 2018-19 to 2023-24. Following is the break-up of Rs 1969.50 crore:

- a. Rs 1800 crore for supporting 12 Commercial projects
- b. Rs 150 crore for supporting 10 demonstration Projects
- c. Rs 19.50 crore to Centre for High Technology (CHT) as administrative charges

3. What is the mechanism of Financial support in PM JI-VAN Yojana?

- For Commercial projects: Viability Gap Funding is subject to a maximum of 20% of the project cost OR Rs. 5 crore for every 10 lakh litres summed to Biorefinery’s annual name plate capacity, whichever is lesser, will be provided to make the projects commercially viable. The maximum financial outlay per project has been capped at Rs 150 crore.
- For demonstration projects: The financial assistance will be limited to Rs. 15 crore per Technology

4. Upto what time PM JI-VAN Yojana will remain open?

PM JI-VAN Yojana will remain open till FY 2023-24 or all 12 Commercial projects and 10 Demonstration projects are approved for financial assistance, whichever is earlier.

5. Which agency will be point of contact?

Centre for High Technology (CHT), a body under the aegis of MoPNG, will be nodal Agency for implementation of the scheme. CHT shall issue Request for Selection (RFS). Project proposals will be reviewed and recommended by Scientific Advisory Committee (SAC) of Ministry of Petroleum & Natural Gas (MoP&NG). Projects deemed fit for seeking grant under the Scheme by SAC will be approved by Steering Committee of CHT under the chairmanship of Secretary, MoP&NG for disbursement of funds under the grant.

6. Whether Foreign investors can avail benefits under PM JI-VAN Yojana?

Yes, Foreign investors proposing to set up 2G Ethanol Project in India are also eligible for availing the benefits of the scheme. However, all statutory provisions related to foreign investment in such projects i.e., FDI limit etc. would be applicable. For foreign investor, policy framework on Foreign Direct Investment Consolidated FDI Policy (Effective from August 28, 2017) issued by Department of Industrial Policy and Promotion Ministry of Commerce and Industry Government of India, or as updated/ amended from time to time shall apply.

7. Is there any prequalification criterion for Commercial Projects?

- a. Proposed Technology should have been demonstrated at one fiftieth (1/50th) or higher Capacity, in India or elsewhere. Operational data of 3 months (cumulative or continuous) duration of at least 50% capacity or 1 month (cumulative or continuous) duration for name-plate (100%) capacity of the demonstration/ commercial plant shall be submitted
- b. The annual turnover should be at least Rs 250 Crore (excluding GST/ Excise Duty).
- c. Net Worth of an Entity PD should be positive.
- d. Declared wilful defaulters and Declared Non-cooperative borrowers as per RBI norms are not eligible.
- e. Entities who have availed one time settlement (OTSs), are not eligible.

8. Is there any prequalification criteria for Demonstration Projects?

- a. The annual 2G Ethanol generation capacity should be between 3.75 lakh Litres to 11.25 Lakh litres (Feedstock capacity- 5 TPD – 15 TPD).
- b. Proposed Technology should have been demonstrated to convert Biomass to Ethanol at laboratory level. Three months (continuous or cumulative) Operational data of the proposed technology needs to be shared at the time of invitation to RFS.

9. How the Financial assistance / VGF shall be released?

The financial assistance/grant component for the commercial projects will be released in four stages achieving respective milestones, as mentioned hereunder:

Project Milestones	% of Grant payment
Erection/ Installation of Proprietary equipments	25%
Completion of mechanical erection of the Project	25% (total 50%)
On reaching 25% of annual production capacity of design value subsequent to mechanical completion and commissioning of Project	25% (total 75%)
On reaching 75% of annual production capacity of design value	25% (total 100%)

The financial assistance/grant component for the demonstration projects will be released in three stages achieving respective milestones, as mentioned hereunder:

Project Milestones	Grant payment	Cumulative Grant
Completion of mechanical erection of the Project	50%	50%
Upon achieving ethanol equivalent to 50% of rated capacity for 3 months and completion of experiments over a period for 3 months as per Pre-designated Matrix.	25%	75%
After 15 months (Continuous or cumulative) operation at minimum 50% capacity or 3 years of plant Whichever is later.	25%	100%

10. Whether, additional grant can be obtained from other agencies also?

Yes, grant can be obtained from State Governments/PSUs/Other Agencies up to 20% of the total project cost. Therefore, total grant taken from the Central Government and State Government/ PSUs/other Agencies shall not exceed 40% of the total project cost.

11. When proposal can be submitted and to whom?

CHT publishes Request for Selection (RFS) on its website <https://www.cht.gov.in/> and Central public procurement portal (<https://eprocure.gov.in/cppp/>). Normally three months timelines from date of publishing are given for proposal submission.

12. Whether, produced 2G Ethanol can be exported?

No, produced 2G Ethanol cannot be exported. It will be necessarily supplied to OMCs (Oil Marketing Companies) and for that, proper connectivity to be ensured before commissioning the project.

13. What is Ethanol Purchase Agreement? Who will provide it?

Ethanol Purchase Agreement (EPA) is a contract to be signed between Project Developer and OMCs for smooth delivery of produced 2G Ethanol from project site to OMCs depot. Format for EPA is be provided by CHT along with RFS.

14. What are the documents to be furnished along with proposal submission?

i) Detailed Feasibility Report ii) Biomass Assessment Report. iii) Technology Licensing Agreement iv) Document regarding land availability v) Results for trials of proposed Technology and proposed feedstock. vi) EPCM (Engineering, Procurement & Construction Management) Contract/ other execution mode as PMC & EPC/ OBE vii) validated life cycle analysis (LCA) report viii) Contract Agreement for supply of biomass with Biomass supplier. ix) Contract Agreement for operation and maintenance with vendor.

15. What should be the quality of ethanol produced?

Ethanol produced should meet BIS standards IS 15464 (2004) or any revision thereof.

16. How many commercial projects per technology are eligible to apply under this scheme?

Maximum 4 commercial projects per technology.

17. How many demonstration projects per technology are eligible to apply under this scheme?

Only 1 demonstration project per technology.