

**9**

**STANDING COMMITTEE ON  
PETROLEUM & NATURAL GAS  
(2021-22)**

**(SEVENTEENTH LOK SABHA)**

**MINISTRY OF PETROLEUM & NATURAL GAS**

*[Action Taken by the Government on the recommendations contained in the Sixth Report (Seventeenth Lok Sabha) of the Standing Committee on Petroleum and Natural Gas (2020-21) on the subject 'Review of Progress in Production of Non-Conventional Fuels with Specific Reference to Bio-Fuels']*

**NINTH REPORT**



**LOK SABHA SECRETARIAT  
NEW DELHI**

*December, 2021/ Agrahayana, 1943 (Saka)*

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(2021-22)****(SEVENTEENTH LOK SABHA)****MINISTRY OF PETROLEUM & NATURAL GAS**

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*Presented to Lok Sabha on 07.02.2022*

*Laid in Rajya Sabha on 22.12.2021*



**LOK SABHA SECRETARIAT  
NEW DELHI**

*December, 2021/ Agrahayana, 1943 (Saka)*

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## INTRODUCTION

I, the Chairperson, Standing Committee on Petroleum & Natural Gas having been authorised by the Committee to submit the Report on their behalf, present this Ninth Report on Action Taken by the Government on the recommendations contained in the Sixth Report (Seventeenth Lok Sabha) of the Committee on the subject 'Review of Progress in Production of Non-Conventional Fuels with Specific Reference to Bio-Fuels'.

2. The Sixth Report of the Standing Committee on Petroleum & Natural Gas was presented to Lok Sabha on 10.03.2021. The Action Taken Replies of the Government to all the recommendations contained in the Sixth Report were received on 11.11.2021.

3. The Standing Committee on Petroleum & Natural Gas (2021-22) considered and adopted the Report at their sitting held on 20.12.2021.

4. An analysis of the action taken by the Government on the recommendations contained in the Sixth Report (Seventeenth Lok Sabha) of the Standing Committee on Petroleum & Natural Gas is given in Annexure-II.

5. For facility of reference and convenience, the observations and recommendations of the Committee have been printed in bold letters in the body of the Report.

6. The Committee place on record their appreciation for the valuable assistance rendered to them by the officers of the Lok Sabha Secretariat attached to the Committee.

**New Delhi;**  
**20 December, 2021**  
**29 Agrahayana, 1943 (Saka)**

***RAMESH BIDHURI,***  
***Chairperson,***  
***Standing Committee on***  
***Petroleum & Natural Gas.***

## REPORT

### CHAPTER I

This Report of the Standing Committee on Petroleum and Natural Gas deals with the action taken by the Government on the recommendations contained in the Sixth Report (Seventeenth Lok Sabha) of the Standing Committee on Petroleum and Natural Gas (2020-21) on the subject 'Review of Progress in Production of Non-Conventional Fuels with Specific Reference to Bio-Fuels' which was presented to Lok Sabha and laid in Rajya Sabha on 10.03.2021.

2. Action Taken Notes have been received from the Ministry on 11.11.2021 in respect of all the 17 recommendations/observations contained in the report. These have been categorized as per the following:

- (i) Recommendations/Observations that have been accepted by the Government:- Reco. Nos. 1, 3, 4, 9, 10, 14, 15 and 16 (Total-8)  
**(Chapter- II)**
- (ii) Recommendations/Observations which the Committee do not desire to pursue in view of the Government's replies:- Reco. No. 6 and 8 (Total-2)  
**(Chapter- III)**
- (iii) Recommendations/Observations in respect of which replies of the Government have not been accepted by the Committee:- Reco. Nos. 5, 7, 11 and 13 (Total-4)  
**(Chapter- IV)**
- (iv) Recommendations/Observations in respect of which final replies of the Government are still awaited:- Reco. No. 2, 12 and 17 (Total-3)  
**(Chapter- V)**

**3. The Committee desire that the Action Taken Notes on the Recommendations/Observations contained in Chapter-I of this Report and Final Replies in respect of the recommendations for which interim replies have been furnished by the Government (included in Chapter-V), should be furnished expeditiously.**

4. The Committee will now deal with the action taken by the Government on some of their recommendations.

## **Recommendation No. 5**

### **Procurement and Pricing of Bio fuels**

5. The Committee had recommended as under:

“The Committee note that OMCs have released a 5-year ethanol procurement EOI on 12.08.2020 for procurement of ethanol for the ESYs 2020-21 to ESY 2024-25. OMCs jointly invite ethanol offers through a public Expression of Interest (Eoi) on an annual basis. These offers are invited periodically in 4 to 5 cycles during an Ethanol Supply Year (ESY) (1<sup>st</sup> December of the year to 30<sup>th</sup> November of the next year) to procure ethanol from indigenous sources. BPCL is the overall coordinator for all the three OMCs. MoPNG is carrying out regular reviews with OMCs to monitor the progress of EBP Programme and to resolve any issues with the ethanol suppliers.

The prices of ethanol during an ESY, produced from all sugarcane based feedstock, is approved by the Government after recommendations of a Committee of Joint Secretaries from the Department of Food & Public Distribution, Ministry of Agriculture, Department of Expenditure and Ministry of Petroleum & Natural Gas. The various factors which are taken into consideration are the projections on availability of sugarcane, molasses & sugar during the year, the FRP of sugarcane, the MSP of sugar, cost of raw material & cost of conversion which includes cost of utilities, pollution control measures, interest and depreciation etc. The price of ethanol produced from Damaged Food Grains (DFG) is fixed by OMCs. In addition, GST and transportation charges are paid extra to the suppliers.

Regarding Bio-Diesel, Oil Marketing Companies (OMCs) have floated an Expression of Interest (Eoi) for procurement of Biodiesel produced from UCO across 200 locations in the country. Till 01.07.2020, 30 Eois have been received by the OMCs for setting up 49 Biodiesel plants with a capacity of 1015 MT/day. Under the scheme, OMCs will pay biodiesel producers ₹51 per litre in the first year, ₹52.7 per litre in the second, and ₹54.5 per litre in the third year (excluding transportation and GST).

Similarly, the Committee note that the marketing of all the CBG produced through such plants will be through OMC network. The Committee note that the ethanol suppliers have to supply ethanol at a particular location of a minimum quantity and also of the quality norms prescribed. This makes ethanol producers of small quantity unable to supply under this programme. The Committee also expect the OMCs to take care of safety aspects during transportation and storage of ethanol.

The Committee recommend that the Procurement and pricing of Ethanol, Bio diesel and Compressed Bio Gas should be periodically reviewed so that the planned quantity may be procured and the targeted blending and production of Bio fuels are achieved. The Committee also desire that Ministry and OMCs should devise mechanism to procure small quantities of ethanol from interested small suppliers and also from stand alone distilleries which produce ethanol from

sugarcane juice so as to maximize availability of ethanol under this programme for blending purpose”.

6. In this regard, the Ministry has submitted the following reply:

“Public Sector OMCs are taking care of safety aspects during transportation and storage of ethanol blended petrol by adhering to all norms/regulations including Oil Industry Safety Directorate (OISD) and Petroleum and Explosive Safety Organisation (PESO) norms/regulations.

Ethanol is purchased by OMCs through tendering process wherein bids are received from suppliers who are interested in supplying ethanol in quantities of 10KL and above. The Sugarcane (Control Order) by DFPD allows production of ethanol directly from sugarcane juice, sugar, sugar syrup in case of sugar factories only”.

Ministry of Petroleum & Natural Gas  
O.M No.P-13039(18)/2/2020-CC (E-38408) Dated. 02<sup>nd</sup> August, 2021

#### **Comments of the Committee**

7. **The Committee in its report had recommended that the procurement and pricing of ethanol, bio-diesel and CBG should be periodically reviewed so that the planned quantity would be procured and the targeted blending and production of biofuels could be achieved. Further, the Committee had desired the Ministry of P&NG/OMCs to devise a mechanism to procure small quantities of ethanol from interested small suppliers and also from stand alone distilleries for producing ethanol from sugarcane juice in order to maximize availability of ethanol for blending purpose.**

**In this regard, the Ministry in its reply has stated that ethanol is purchased by OMCs through tendering process from interested suppliers to supply ethanol in quantities of 10 KL and above. Further, it has been stated that the sugarcane (Control Order) by DFPD allows production of ethanol directly from sugarcane juice, sugar, sugar syrup in case of sugar factories only.**

**The Committee are not satisfied with the reply of the Ministry as the Ministry have chosen to remain silent on a very vital recommendation of the Committee that procurement/pricing of ethanol, bio-diesel and CBG should be periodically reviewed so that the planned quantity may be procured and the targeted blending and production of biofuels could be achieved. While reiterating their recommendation, desire that specific reply on these matter be submitted to the committee and that MoPNG should impress upon OMCs and DFPD to permit**



**interested small scale suppliers to supply ethanol in quantities less than 10 KL by ensuring strict compliance of quality norms for the same.**

### **Recommendation No. 7**

#### **GST**

8. The Committee had recommended as under:

“The Committee note that the Ethanol manufacturers use molasses as the key raw material for manufacturing of ethanol which is subjected to higher rate of GST @28% as against ethanol supplied to OMC's for blending which attract GST @5%. GST paid on procurement of molasses is available as Input Tax Credit (ITC) to ethanol manufacturers. However, they are not able to utilize the full ITC of GST paid due to lower rate of tax on ethanol supplied to OMCs for blending. GST provisions allow refund of such unutilized ITC. The inverted duty structure leads to working capital blockage for ethanol manufacturers.

The Committee feel that the problems of Ethanol manufacturers is legitimate and early refund of unutilized ITC help them to get improve their financial position which incentivize them to produce ethanol. Therefore the Committee recommend that the MoPNG and DFPD may represent the matter to GST Council for early refund and review”.

9. In this regard, the Ministry has submitted the following reply:

“The issue of taking up the matter of early refund of unutilized ITC to ethanol manufacturers with GST Council is noted”.

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O.M No.P-13039(18)/2/2020-CC (E-38408) Dated. 02<sup>nd</sup> August, 2021

### **Comments of the Committee**

**10. The Committee in its report, while concurring with the concerns of ethanol manufacturers being subjected to higher rate of GST @28% for procuring the required raw material molasses as against the finished product ethanol being supplied to OMCs attracting 5% GST, had recommended that the Department of Food and Public Distribution to represent the matter before the GST Council for review of the policy in order to settle the refund of Input Tax Credit (ITC) to ethanol manufacturers at the earliest.**

**In this regard, the Ministry of P&NG in its reply stated that the issue of taking up of early refund of unutilized ITC to ethanol manufacturers with GST Council has been noted. While taking cognizance of the evasive and non-serious reply of the Ministry, the Committee note that it has been more than nine months**

since the report on the subject was presented and no action has been initiated till date. The Committee, therefore, take a serious view of the non-chalant stance of the Ministry and reiterate its recommendation and exhort the Ministry of P&NG to coordinate with DFPD proactively so that the legitimate concerns of ethanol manufacturers would be represented before the GST Council and unutilized ITC would be paid to the same at the earliest. The Committee may be apprised of the progress in this regard.

### Recommendation No. 11

#### Bio Diesel

11. The Committee had recommended as under:

“The Committee note that while petrol is blended with ethanol and production of ethanol from sugar mills for blending purpose has picked up, the Bio diesel policy has not kept pace with EBP programme and has been a non starter. So far OMC's have procured 10.56 cr litres of Bio diesel for blending with HSD during the period April 2019- March 2020. Presently, the bio diesel produced in the country primarily from imported palm stearin oil. In order to phase-out palm stearin and as a measure towards import substitution, it has been decided to promote domestically available used cooking oil (UCO) as the feedstock.

The Committee are disappointed that the Bio diesel has not been accorded the importance it deserved as diesel is the most consumed fuel and used mostly by in public transport and commercial vehicles. This makes that higher biodiesel blending will have a greater impact on reduction of crude oil imports. The Committee further desire that MoPNG should seriously identify sources of feed stock for production of bio diesel and take concrete steps in this direction.

It is proposed that UCO can be collected from Bulk Consumers such as hotels, restaurants, canteens, etc. for conversion. Oil Marketing Companies (OMCs) have floated an Expression of Interest (EoI) for procurement of Biodiesel produced from UCO across 200 locations in the country. Till 01.07.2020, 30 EoIs have been received by the OMCs for setting up 49 Biodiesel plants with a capacity of 1015 MT/day. Under the scheme, OMCs will pay biodiesel producers ₹51 per litre in the first year, ₹52.7 per litre in the second, and ₹54.5 per litre in the third year (excluding transportation and GST). Therefore, the Committee would like to recommend that MoPNG should undertake a massive awareness programme in the initial locations and simultaneously monitor the UCO program closely and try to improve the bio diesel production in a significant way which may help the country to reduce its import dependence”.

12. In this regard, the Ministry has submitted the following reply:

“OMCs are regularly floating Expression of Interest (EoI) for procurement of Biodiesel made from Used Cooking Oil (UCO). EOI status as on 15.5.21- EOI received for 58 plants capacity of 1140 MT/D.

To give wide publicity to this EoI, the following activities have been undertaken by the OMCs:

- a) Seven road shows have been conducted by the OMCs.
- b) The EoI has also been advertised the form of a Jingle over many Radio Channels across the country.
- c) The EoI has also been prominently broadcasted on social media such as Facebook, Web sites of the OMCs, twitter, etc.

The primary aim of the road shows, broadcast on social media and the radio jingles is to attract more entrepreneurs to set up Biodiesel manufacturing plants from UCO so as to increase the procurement of biodiesel.

2. Further All States and UTs have been requested to form State Level Committees to look into the various aspects of procurement of UCO for production of biodiesel”.

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### **Comments of the Committee**

**13. The Committee in its report while taking note of the picking up of the ethanol blending with petrol, had observed that the blending of bio-diesel has been a non-starter till date. They had also noted that Oil Marketing Companies have floated expression of interest for procurement of bio-diesel produced from Used Cooking Oil (UCO) across 200 locations in the country and accordingly, had recommended the Ministry to undertake a massive awareness programme in those locations and monitor the same to improve bio-diesel production in a significant way to reduce the country’s dependence on import of crude oil.**

**In this regard, the Ministry in its reply while enumerating various activities undertaken by OMCs has stated that States and UTs have been requested to form State Level Committees to look into various aspects of procurement of UCO for production of bio-diesel.**

**The Committee, while not being satisfied with the reply of the Ministry, are concerned to note that the Government has not made much progress on the ground since the Committee made their recommendation. The written reply reflects that the Ministry has not been proactive in its approach. Instead, the Ministry seems to have left the issue to State Governments/Union Territories for procurement of UCO for production of bio-diesel. The Committee are unhappy to note that no updated information has been furnished on Expressions of Interest**

**(Eol) received for 58 plants with a capacity of 1140 MT/D as on 15.05.2021 and also about the status of remaining plants in 200 locations.**

**In view of the above, the Committee, while exhorting the MoPNG not to be complacent with the progress made on Ethanol Blended Petrol, take a considered view that the speedy implementation of bio-diesel policy will be in the larger interests of the country's energy security. Accordingly, the Committee recommend the Ministry/OMCs to accord priority by proactively taking up the issue with various State Governments/UTs at regular intervals and initiate massive awareness programmes so that available Used Cooking Oil from bulk consumers for large scale commercial production of bio-diesel in the country could be implemented.**

### **Recommendation No. 13**

#### **2G Ethanol Plants**

14. The Committee had recommended as under:

“The Committee note that ethanol blended petrol is one of the main and important objective in the national policy of bio-fuel and it is estimated that around thousand crore litre of ethanol may be required by the year 2030 to achieve 20% blending of ethanol with petrol. The current availability in the country is around 180 crore litre per year and it is expected that all other sources like sugar juice and food grains production may also supplement availability of ethanol in blending purpose. These are all ethanol produce from 1G method. However, in order to increase the availability of ethanol across the country the Ministry proposes to set up 2G plants at twelve locations in the country which use non edible oil seeds, non agriculture residue such as straw, cotton stalks, corn cobs, saw dust etc,. With an objective to augment ethanol supply, the Government has allowed procurement of ethanol produced from other non food stocks like cellulosic and lignocelluloses materials. The Committee note that in furtherance of this decision the oil PSUs have planned to establish twelve 2G ethanol bio refineries in 11 states in the country with over all capacity of 1100 kile litre per day with a over all investment of Rs. 14000 crores. Out of this the projects at Panipat (Haryana) by IOCL, Bhatinda (Punjab) by HPCL, Bargarh (Odisha) by BPCL and Numaligarh (Assam) by NRL are in advance stage of progress.

The Committee are of the view that the continuous availability of ethanol by 1G or 2G methods at affordable cost is important for sustainable and successful implementation of the EBP programme. The Committee, therefore, recommend that the Ministry should periodically monitor the progress of the establishment of 2G ethanol bio refineries in the country and they should be completed within schedule time and cost. Furthermore, the Committee also emphasise that the Ministry should focus on technology for development of 2nd Generation and other advance biofuels utilising domestic feedstocks so as to address the cost factor in sustainability and commercial production of Ethanol plants”.

15. In this regard, the Ministry has submitted the following reply:

“Oil PSUs have planned to set up 2G ethanol bio refineries in different parts of the country with overall investment of Rs 8,000 crore & production of 550 KLPD”.

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**Comments of the Committee**

16. The Committee in its report had observed that around 1000 crore litre of ethanol would be required to achieve 20% blending of ethanol with petrol as against the availability of 180 crore litre per annum. They had also noted about the proposal of the Ministry to set up 2G ethanol bio refinery plants at 12 locations in the country by using non edible oil seeds, non agricultural residue like straw, cotton stalks, corn cobs and raw dust etc. and only four such bio refinery 2G plants had been at advanced stage.

The Committee in its report had recommended the Ministry to periodically monitor the progress in setting up of 2G ethanol plants and had also emphasized upon ensuring the continuous availability of ethanol at affordable cost for sustainable implementation of the EBP programme.

The Ministry in its reply has stated that oil PSUs have planned to set up 2G ethanol bio refineries in different parts of the country with an overall investment of Rs 8,000 crore and production of 550 KLPD.

In this regard, the Committee express displeasure at the short and terse reply of the Ministry as it is silent on status of setting up of 2G ethanol plants and also on the ‘cost factor’ for commercial production of 2G ethanol at bio refinery plants. The Committee, therefore, view seriously the lackadaisical attitude of the Ministry in addressing the issue, expect it to focus on cost-effectiveness of ethanol produced by 2G bio refineries so as to ensure long term availability of ethanol blended petrol through various feed stocks. While reiterating their earlier recommendation, the Committee desire to be kept abreast of specific measures taken by them in this regard.

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## CHAPTER II

### RECOMMENDATIONS/OBSERVATIONS WHICH HAVE BEEN ACCEPTED BY THE GOVERNMENT

#### Recommendation No. 1

##### Implementation of National Policy on Bio-Fuels

The Committee note that one of the important mandates of Ministry of Petroleum and Natural Gas is to strengthen energy security of the country. At present the country is importing more than 80% of the crude oil and the Government has announced its intention to reduce import dependency. The Green house Gas emissions along with environmental pollution have brought focus for alternative fuels that have superior environment benefit that are economically competitive. The Committee note that this has laid to an important role for biofuels and the Government notified the National Policy on Bio-Fuels 2018 on 08.06.2018. This policy aims to increase uses of bio-fuel in the energy and transportation sectors thereby substituting fossils fuels and contributing to National Energy Security, climate change mitigation, apart from growing new employment opportunities in a sustainable way. Bio fuels include Bio-ethanol, bio-diesel, Compressed Bio Gas, bio-jet fuel and any other advanced Bio fuels.

In the National Policy of Biofuels, 2018 many new additional raw materials for 1G ethanol production have been included like Sugarcane Juice, Sugar containing materials like Sugar Beet, Starch containing materials like Corn, Cassava, Damaged food grains like wheat, broken rice, Rotten Potatoes which are going to increase availability of 1G ethanol. Used Cooking Oil (UCO) is being promoted for Biodiesel production. Govt has also announced Sustainable Alternative Towards Affordable Transportation (SATAT) scheme for marketing Compressed Bio Gas (CBG) produced from waste. The various sources of biofuels that are being developed as part of the alternate fuels programme in the country are lignocellulosic biomass, non-food crops, industrial waste & residue streams, MSW, plastics & industrial waste, food waste etc.

The Committee note that the Government is committed to utilize these with the aim to reduce our dependence on import of crude oil, achieve foreign exchange savings, provide better remuneration for the farmers with a view to double their income, address growing environment issues owing to use of fossil fuels and burning of biomass/ waste, address challenges of waste management/agri-residues management in line with Swachh Bharat Abhiyan and promote "Make in India" campaign.

The policy has proposed an indicative target of 20% blending of ethanol in petrol and 5% blending of bio-diesel in diesel is proposed by 2030. Some of the steps taken for achieving are increasing domestic supplies of ethanol and biodiesel, setting up of 2G bio-refinery, development of new feed stocks for bio-fuels, development of new technologies for conversion to bio-fuels and creating suitable environment for bio-fuels and its integration with main fuels.

The Committee would expect the MoPNG being the nodal Ministry to implement the policy to effectively fix milestones for production and blending of bio-fuels with fossil fuels for the next few years. Considering the multiple objectives set out to be achieved through the National Policy on Bio Fuels, the Committee recommend that it should be reviewed periodically to address policy issues and hurdles that may arise and ensure

that the National Policy on Bio-Fuels is implemented in letter and spirit so as to enhance the energy security of the country and reduce import dependency of fossil fuels.

### **REPLY OF THE GOVERNMENT**

The report of the Expert Committee on "Roadmap for Ethanol Blending in India 2020-25", published in June, 2021 provides for production and blending of ethanol with petrol for the next few years. Moreover, the National Policy on Biofuels-2018 (NPB-2018) provides indicative target of blending 5% biodiesel in diesel by 2030. The Working Group on Biofuels and National Biofuel Coordination Committee (NBCC) formed under the NPB-2018, conducts periodical reviews to address policy issues and hurdles that may arise.

Ministry of Petroleum & Natural Gas  
O.M No.P-13039(18)/2/2020-CC (E-38408) Dated. 02<sup>nd</sup> August, 2021

### **Recommendation No. 3**

#### **Advancement of Ethanol Blending Targets**

The Committee note that the Ministry has planned to achieve a target of 10% blending of ethanol with Petrol by 2022 and 20% ethanol by 2030. The quantity of Ethanol supplied for blending which was 38 cr litres in 2013-14 at a blending level of 1.5 % has now reached a supply of 188 cr litres in 2018-19 at a blending level of 5 %. The overall quantity has shown almost increase of 5 times over the last five years.

The Committee note that the availability of ethanol is currently around 188 crore liter per year. However, for achieving the 20% blending by 2025, the requirement of ethanol is likely to be in the range of 900 crore litres. The Committee note that at present the production of ethanol for blending with petrol is being done from sugarcane juice / sugar syrup, B heavy molasses, C heavy molasses and damaged food grains. The Department of Food and Public Distribution (DFPD) has also allowed the diverting 60L MT of excess sugar for the production of ethanol.

The concerned Ministries are discussing ways to increase the production of Ethanol in the country based on foodgrains in addition to sugarcane. The ethanol from grain based distilleries was around 15.94 cr litres during 2019-20. The Committee have been informed that by the year 2025, the total of 900 cr litres of ethanol for 20 % blending target will be met by sugar to the extent of 550 cr litres and remaining 350 cr litres to be met by grain based distilleries.

The Committee note that as per the original plan, the indicative target was to achieve 10 percent by 2022 and 20 percent by 2030. However, the Committee have been apprised that there has been a good momentum over the years in procurement of ethanol and with the planned efforts of the concerned Ministries, it will be possible to achieve the 20 percent ethanol blending with petrol target by 2025 and therefore recommend that MoPNG should pre-pone this accordingly.

### **REPLY OF THE GOVERNMENT**

Government has advanced the target of blending 20% ethanol in petrol and accordingly, MoP&NG has released a Notification dated 02<sup>nd</sup> June, 2021, wherein, Oil Marketing

Companies (OMCs) shall sell ethanol blended petrol with percentage of ethanol up to 20% as per BIS Specifications in the whole of India and Union Territories. This will come into effect from 01<sup>st</sup> April, 2023.

Ministry of Petroleum & Natural Gas  
O.M No.P-13039(18)/2/2020-CC (E-38408) Dated. 02<sup>nd</sup> August, 2021

#### **Recommendation No. 4**

##### **Diversity of feedstocks for Production of Ethanol**

The Committee note that major quantity of ethanol production for blending purpose is coming from sugar industry. However the requirement of ethanol for achieving the targeted blending levels will not be fully met by the sugar industry as the quantity of ethanol produced is inadequate. Hence the DFPD has plans to allow the damaged food grains from FCI godowns for production of ethanol through grain based distilleries. This step may augment availability of ethanol but it may be not possible to reach the target in a sustainable way in the years to come. Hence the excess rice stocks in FCI godowns after meeting the food security requirements can come in handy for production of ethanol. The Committee therefore recommend that the MoPNG and DFPD should work closely about the quantity of rice that can be allowed for ethanol production without comprising food security so as to achieve the ethanol blending targets.

The Committee also note that the sugarcane is a water intensive crop and it is saddled with environmental issues and not sustainable in the long run and that ethanol produced from rice is of meagre quantity. Further, the Committee have been informed that that the ethanol used for blending purposes across the world over will be around 10,000 crore litres annually out of which more than 60 percent use maize as feedstock for production of ethanol. But in India, the ethanol production is mainly from sugarcane. The need for increasing maize cultivation in the country for ethanol needs to be seriously pursued and farmers may be educated and awareness programs may be conducted. The Committee are of the opinion that MoPNG may study the policies successfully followed in the countries which adopted bio fuels from feedstocks other than sugarcane and suitably adopt them in India. The Ministry of Petroleum and Natural Gas should take up with Ministry of Agriculture and Farmers welfare on this issue and proper ground work involving States and Platforms like ATMA for this purpose.

The Committee note that production of ethanol from maize and other foodgrains including cereals etc. will help ethanol blending throughout the country as against the present scenario wherein ethanol production capacities are mostly located in sugar producing states. This will reduce transportation costs and prices of maize will increase boosting the farmers income. Therefore, the Committee recommend that the NBCC should diversify the feedstocks for ethanol production from maize and other foodgrains and motivate the farmers to increase cultivation and production such feed stocks in the country over a period of time to ensure that the ethanol blended petrol programme is sustained in the long run.

#### **REPLY OF THE GOVERNMENT**

Government has allowed ethanol production from surplus rice available with Food Corporation of India (FCI). Government has also fixed the price of surplus FCI rice to be issued to ethanol producers in 2020 & again in 2021 at concessional rate of Rs.2,000



per quintal. The release of surplus rice with FCI is to be monitored by Ministry of Consumer Affairs, Food and Public Distribution taking into consideration food security.

Government has allowed ethanol production from damaged food grains, maize and surplus rice with FCI, thereby enhancing the scope of raw material for ethanol production in the country. This is also aimed at reducing the dependence of ethanol production on sugar sector alone and to ensure that the EBP Programme is sustained in the long run. For better management Government has amended the provisions of IDR Act thereby bringing ethanol under its ambit which enables free movement of denatured ethanol.

Ministry of Petroleum & Natural Gas  
O.M No.P-13039(18)/2/2020-CC (E-38408) Dated. 02<sup>nd</sup> August, 2021

### **Recommendation No. 9**

#### **Implementation of Industrial (Development and Regulation) (IDR) Act**

The Committee note that the Government of India had amended Industrial Development and Regulation Act (IDR) vide notification No. 27 dated 14 May 2016. As per amendment, the State Governments can legislate, control and / or levy taxes on duties on liquor meant for human consumption while the denatured ethanol which is not meant for human consumption, will be controlled only by Central Government. The Committee note that 13 States have already implemented IDR Act Amendment and some States including Rajasthan, West Bengal, Orissa, UP, Kerala, Telengana, Jharkhand, Delhi have not implemented the IDR Act.

The hurdles due to non implementation of IDR Amendments act are that licenses are required for inter state movement and storage of ethanol, cess/import duties/excise duties, etc are levied on ethanol and approvals, permissions are required which make the entire exercise highly bureaucratic and procedural causing avoidable delays. The States which are deficient in ethanol production should help the OMC's to sell ethanol blended petrol in the states by removing hurdles and procedural requirements and also by reducing taxes/duties and incentivise this programme so that the programme is implemented throughout the country.

Therefore, The Committee recommend that NBCC should take up the matter with remaining State Governments for implementing the amended IDR Act so that the denatured ethanol which is not meant for human consumption can be utilized for blending purposed with petrol. Further, the Ministry should also take up with the States to reduce procedural delays by state agencies and adopt measures for ease of business.

### **REPLY OF THE GOVERNMENT**

NBCC, under the Chairmanship of Minister, Petroleum and Natural Gas review the progress of Ethanol Blended Petrol Programme. MoP&NG is also regularly taking up the matter of implementation of amended provisions of IDR Act, 1951 with the State Governments.

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### **Recommendation No. 10**

#### **Reduction in cost of Biofuels**

The Committee note that the bio-fuel production cost can be reduced by improvising the fermentation and distillation efficiencies and converting waste to resource in the sugar industries where in particular the utilization of spent wash in molasses waste distilleries for producing value added products can help in reducing the cost of production. Therefore, The Committee recommend that MoPNG/DFPD may take up this issue in NBCC and invest in such projects so as to reduce the cost of production of ethanol and improve recovery rate or revenue generated from sugarcane and molasses by means of producing value added products.

### **REPLY OF THE GOVERNMENT**

As per Allocation of Business Rules, DFPD is the nodal Department for setting up ethanol/alcohol distilleries in the country and is regularly monitoring the setting up of ethanol distillation capacities in the country. NBCC review the progress under the EBP Programme covering all aspects pertaining to supply & demand of ethanol while deciding, as the price of ethanol, DFPD recommend the value generated from by products & this is accounted in the ex-mill price of ethanol by MoPNG.

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### **Recommendation No. 14**

#### **CBG under SATAT**

The Committee note that Government has announced Sustainable Alternative Towards Viable Transportation Scheme (SATAT) for marketing Compressed Bio Gas (CBG) produced from waste. They further note that agriculture waste/residue, municipal solid waste, cattle dunk, sewage treatment plants wastes etc. have potential to be used in the production of bio-gas. CBG has more than 90% of methane content and can be utilized as an environment friendly fuel. The conversion of waste/bio-mass into compressed bio-gas has multiple benefits like reduction of green house gas, emission of reduction in burning of agriculture residue, reduction in environment pollution, reduction of natural gas import, employment generation, remunerative income to farmer etc. The SATAT scheme launched on 1.10.2018 envisages establishing all 5000 CBG plants with a total production capacity of 15 Million MT per annum by 2023. OMCs along with GAIL and IGL have invited expression of interest to procure CBG from potential CBG plants entrepreneurs. The CBG plans will also produce bio-manure as a bio-product which can be utilised in the farm sector and this has been included as bio manure under Fertilizer Control Order 1985. The Committee note that Ministry of New and Renewable Energy has extended central financial assistance to CBG projects while banks provide soft loan to CBG projects.

The Committee note that production of CBG will boost availability of more affordable transport fuel, reduce pollution, will create employment and value in the rural economy as well as assist in achieving climate change goal of the country as per the Paris agreement 2015. The Committee, are of the view that establishment of CBG plants is a key component which will help the country to achieve multiple objectives along with increasing self reliance on domestic and alternative source for fuel and energy needs

and they, therefore recommend that the establishment of 5000 CBG plants by 2023 should be taken up in mission mode and dedicated working group may also be set up to take necessary decisions and effectively monitor so that these plants are established on the ground.

### **REPLY OF THE GOVERNMENT**

(a) This Ministry is actively engaged with all the stake holders viz. Central Ministries / Departments, State Governments, Technology providers and Financial institutions to create enabling ecosystem for development of CBG sector.

(b) For effective implementation of SATAT scheme the Ministry is coordinating with the CPSEs who have a dedicated team to attend to this scheme. Further, State Level Coordination Committee has been constituted in Haryana, Punjab and Uttar Pradesh.

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### **Recommendation No. 15**

#### **R&D in Bio Fuels**

The Committee note that in order to successfully implement the bio-fuel policy there is need to have production of ethanol, bio-diesel, bio-gas etc. in a uninterrupted way for long years. As of now the programme is linked with a sugar industry for ethanol production and recently it has also taken up of ethanol production from food grains. In order to ensure uninterrupted supply of ethanol there has to be assurance of commercial production. In the National policy on bio-fuel many additional raw materials for ethanol production has been included for 1G ethanol production. Similarly with an objective to augment ethanol supply, the Government allowed production of ethanol from other non feed stocks like cellulosic and lignocellulosic materials including petro chemical route.

The Committee note that the DBT IOC R&D Centre has developed an indigenous technology for conversion of cellulosic and lignocellulosic bio-mass to 2G ethanol at 250 kg/day in a pilot plant commissioned with technical assistance from National renewable energy laboratory, US Department of Energy Lab & global leader in 2G ethanol projects. The Committee further note that DBT IOC centre has developed cost effective high titer and high performance enzyme technology for bio-mass pre-treatment. IOCL has planned on site production of indigenous enzyme in the demo plant at Panipat and based upon success of the demo plant, commercial plant for production of enzyme could be set up.

The Committee also note that DBT IOC centre at Indian Oil has developed a Novel third generation bio-fuel technology to convert CO<sub>2</sub> in to Acetic acid and convert them into lipids which will be further separated for high value product and bio-diesel fuel which will make the process economically feasible. A pilot facility has been put up by DBT IOC centre at Faridabad. Further the biomethanation technology developed to utilise diverse range of waste as feed stocks to produce higher bio-gas yields having high methane content. Similarly, IOC has developed a novel process to convert Co<sub>2</sub> into fuel molecules like methanol, butanol, ethanol, etc,. The Committee desire that MoPNG / DAC&FW / DFPD should strive for international cooperation to establish scientific and technical cooperation for better quality of Bio-Fuels, diversified feedstock, improving storage and longevity of blended fuel, etc.

The Committee appreciate the R&D efforts of MoPNG and IOC in collaboration in the areas of biofuels. The Committee recommend that the Ministry should closely monitor the progress of the R&D projects and critically peer review them so that cost effective and commercially viable technologies are developed so as to provide to sustainability to the national policy on bio fuel in the long run and reduce the country's dependency on import of crude oil.

### **REPLY OF THE GOVERNMENT**

- IOCL R&D Centre has developed a two-stage anaerobic digestion process along with proprietary inoculums for the conversion of various types of organic wastes to valuable biogas energy.
- Biogas can be purified for its application as Compressed Bio-Gas (CBG) for transport applications and power generation. Plant by-product can be used as organic manure
- The technology benefits the environment by reduction of Green House Gas (GHG), pathogen control and odor reduction besides creating additional avenues for employment generation and revenue for farmers.
- DBT-IOC Centre has developed an indigenous technology complete with in-house enzyme for conversion of Lignocellulosic biomass to 2G ethanol at 250 kg/day pilot plant scale.
- Optimized pre-treatment process to minimize the cost of chemical w.r.t similar technologies.
- IOCL is actively working to engage and develop international co-operation to establish scientific and technical co-operation especially in the field of 3G Ethanol.

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### **Recommendation No. 16**

#### **Waste to Energy**

The Committee note that Ministry of New and Renewable Energy is implementing a Waste to Energy programme and this program is eligible for Central Finance Assistance (CFA). Under the Programme, Energy from Urban, Industrial, Agricultural Wastes/ Residues and Municipal Solid Waste for recovery of energy through Waste to Energy projects in the form of Biogas, Bio CNG, Power, Syngas/Producer gas. This will be used for meeting various applications such as fuel for vehicles, industries for captive energy needs, cooking etc besides generating bio-fertilizers.

The Committee note that, under this scheme, 62 proposals were received for seeking Central Financial Assistance (CFA) out of which sanction to 16 Waste to Energy projects with cumulative installed capacity of 15.12 MWeq projects have been issued as on 31.01.2021. 14 projects having total installed capacity of 80 MWeq are under consideration for grant of CFA amounting to Rs 269 Cr. These projects are currently at various stages of implementation. The Committee further note that Under the Programme, financial assistance of Rs 4.0 Crore per 4800Kg/day for Bio CNG

generation (including setting of Biogas plant) in the form of back-ended capital subsidy is provided to CBG projects developers.

The Committee also note that Department of Drinking Water and Sanitation is implementing a GOBHAR Dhan scheme which aims to positively impact village cleanliness and generate wealth and energy from cattle and organic waste. The scheme also aims at creating new rural livelihood opportunities and enhancing income for farmers and other rural people.

The Committee appreciate the various initiatives taken by different Ministries in the sphere of their Mandate which will help to achieve the multiple objectives of management of waste, enhancing farmers income by sale of the waste generated in farming activities and also producing gas or energy locally which can be used to meet the demands of the local community. The Committee consider these projects as very important as this will help in meeting energy needs in a decentralized manner and enhance the energy security component as well and will develop large stakeholders to benefits from these projects. The Committee therefore, recommend that MOPNG /MNRE/DWSD should include all these programme in the periodical review by the NBCC so that any implementation issues may be ironed out and the projects can be extended / modified so as to benefit the country and the beneficiaries in a holistic way.

#### **REPLY OF THE GOVERNMENT**

Noted. Further, all the stakeholders including MoPNG (in respect of SATAT initiative) DDWS (in respect of cattle dung based & agricultural residue-based biogas / CBG plants) and MNRE (in respect of CFA for biogas plants) are coordinating for effective implementation of their schemes.

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**CHAPTER III****RECOMMENDATIONS/OBSERVATIONS WHICH THE GOVERNMENT DO NOT DESIRE TO PURSUE IN VIEW OF THE GOVERNMENT'S REPLIES****Recommendation No. 6****Interest subvention scheme for sugar based distilleries for capacity expansion**

The Committee note that till the year 2014-15, ethanol distillation capacity of molasses based distilleries was only 215 cr litres and in the past 6 years, the capacity of molasses based distilleries have been doubled and are currently at 426 cr litre. They further note that with a view to achieve blending targets, concerted efforts to further double the ethanol distillation capacities of molasses based distilleries in the country by 2024 is under way. Under the ethanol interest subvention scheme, 238 projects for a loan amount of Rs. 16000 crore have been approved by DFPD. Government will be bearing interest subvention @ 6% maximum per annum for 5 years against the loans availed from banks by entrepreneurs. The Committee note that this will help in enhancement and augmentation of ethanol production capacity to a large extent.

The Committee further note that to expedite sanction of loan under the scheme, a tripartite agreement (TPA) between sugar mills, OMC's and the banks through an escrow account has been evolved to provide loans even to sugar mills having weak balance sheets. The capacity expansion programme for ethanol production is a key component of the biofuel programme and any hurdles/delay in getting permission / clearances / approvals etc. may be sorted out with concerned agencies at fairly senior levels so that the interest subvention scheme progresses as per schedule. Therefore, the Committee recommend that expansion of molasses based distilleries for production of ethanol should be monitored periodically by NBCC as it is critically important for achieving success in the blending targets during the upcoming years.

**REPLY OF THE GOVERNMENT**

As per Allocation of Business Rules, DFPD is the nodal Department for setting up ethanol/alcohol distilleries in the country and is regularly monitoring the setting up of ethanol distillation capacities in the country. NBCC review the progress under the EBP Programme covering all aspects pertaining to supply & demand of ethanol.

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**Recommendation No. 8****Conversion of single feed to dual feed distilleries**

The Committee note that the availability of ethanol is critically important for the success of the Ethanol blended petrol programme in the country. The ethanol availability has been increasing over the years due to various policy interventions taken by the concerned Departments. There is a need for capacity expansion/ creation of molasses as well as grain based distilleries to convert single feed distilleries to dual feed distilleries and in installing molecular sieve dehydration in existing distilleries. The cost for setting up grain based distilleries as assessed by National Sugar Institute, Kanpur is about Rs.

1.45 crore to create 1 kilo litre per day (KLPD). An approximate investment of around Rs. 40120 crore would be needed to reach 20 percent blending target.

The Committee also note that setting up of new distilleries/expansion of existing distilleries will generate employment as lakhs of workers would be employed in these distilleries and ancillary activities. By this proposal, farmers and their dependents will be benefitted as in case of many domestic manufacturing companies, by the setting up of new distilleries will have significant employment generation potential.

Therefore, The Committee recommend that the MoPNG through the NBCC should monitor the progress of setting up of new distilleries/expansion of existing distilleries from single feed to dual feed and take corrective action wherever required so that the multiple objectives of increase in ethanol production capacity, enabling the achievement of the targets set for blending, benefiting the farmers and also generation employment.

### **REPLY OF THE GOVERNMENT**

As per Allocation of Business Rules, DFPD is the nodal Department for setting up ethanol/alcohol distilleries in the country and is regularly monitoring the setting up of ethanol distillation capacities in the country. NBCC review the progress under the EBP Programme covering all aspects pertaining to supply & demand of ethanol.

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## CHAPTER IV

### RECOMMENDATIONS/OBSERVATIONS IN RESPECT OF WHICH REPLIES OF THE GOVERNMENT HAVE NOT BEEN ACCEPTED BY THE COMMITTEE

#### **Recommendation No. 5**

##### **Procurement and Pricing of Bio fuels**

The Committee note that OMCs have released a 5-year ethanol procurement EOI on 12.08.2020 for procurement of ethanol for the ESYs 2020-21 to ESY 2024-25. OMCs jointly invite ethanol offers through a public Expression of Interest (Eoi) on an annual basis. These offers are invited periodically in 4 to 5 cycles during an Ethanol Supply Year (ESY) (1<sup>st</sup> December of the year to 30<sup>th</sup> November of the next year) to procure ethanol from indigenous sources. BPCL is the overall coordinator for all the three OMCs. MoPNG is carrying out regular reviews with OMCs to monitor the progress of EBP Programme and to resolve any issues with the ethanol suppliers.

The prices of ethanol during an ESY, produced from all sugarcane based feedstock, is approved by the Government after recommendations of a Committee of Joint Secretaries from the Department of Food & Public Distribution, Ministry of Agriculture, Department of Expenditure and Ministry of Petroleum & Natural Gas. The various factors which are taken into consideration are the projections on availability of sugarcane, molasses & sugar during the year, the FRP of sugarcane, the MSP of sugar, cost of raw material & cost of conversion which includes cost of utilities, pollution control measures, interest and depreciation etc. The price of ethanol produced from Damaged Food Grains (DFG) is fixed by OMCs. In addition, GST and transportation charges are paid extra to the suppliers.

Regarding Bio-Diesel, Oil Marketing Companies (OMCs) have floated an Expression of Interest (Eoi) for procurement of Biodiesel produced from UCO across 200 locations in the country. Till 01.07.2020, 30 Eois have been received by the OMCs for setting up 49 Biodiesel plants with a capacity of 1015 MT/day. Under the scheme, OMCs will pay biodiesel producers ₹51 per litre in the first year, ₹52.7 per litre in the second, and ₹54.5 per litre in the third year (excluding transportation and GST).

Similarly, the Committee note that the marketing of all the CBG produced through such plants will be through OMC network. The Committee note that the ethanol suppliers have to supply ethanol at a particular location of a minimum quantity and also of the quality norms prescribed. This makes ethanol producers of small quantity unable to supply under this programme. The Committee also expect the OMCs to take care of safety aspects during transportation and storage of ethanol.

The Committee recommend that the Procurement and pricing of Ethanol, Bio diesel and Compressed Bio Gas should be periodically reviewed so that the planned quantity may be procured and the targeted blending and production of Bio fuels are achieved. The Committee also desire that Ministry and OMCs should devise mechanism to procure small quantities of ethanol from interested small suppliers and also from stand alone distilleries which produce ethanol from sugarcane juice so as to maximize availability of ethanol under this programme for blending purpose.



## **REPLY OF THE GOVERNMENT**

Public Sector OMCs are taking care of safety aspects during transportation and storage of ethanol blended petrol by adhering to all norms/regulations including Oil Industry Safety Directorate (OISD) and Petroleum and Explosive Safety Organisation (PESO) norms/regulations.

Ethanol is purchased by OMCs through tendering process wherein bids are received from suppliers who are interested in supplying ethanol in quantities of 10KL and above. The Sugarcane (Control Order) by DFPD allows production of ethanol directly from sugarcane juice, sugar, sugar syrup in case of sugar factories only.

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**Comments of the Committee**  
**(Please see Para No. 7 of Chapter-I)**

### **Recommendation No. 7**

#### **GST**

The Committee note that the Ethanol manufacturers use molasses as the key raw material for manufacturing of ethanol which is subjected to higher rate of GST @28% as against ethanol supplied to OMC's for blending which attract GST @5%. GST paid on procurement of molasses is available as Input Tax Credit (ITC) to ethanol manufacturers. However, they are not able to utilize the full ITC of GST paid due to lower rate of tax on ethanol supplied to OMCs for blending. GST provisions allow refund of such unutilized ITC. The inverted duty structure leads to working capital blockage for ethanol manufacturers.

The Committee feel that the problems of Ethanol manufacturers is legitimate and early refund of unutilized ITC help them to get improve their financial position which incentivize them to produce ethanol. Therefore the Committee recommend that the MoPNG and DFPD may represent the matter to GST Council for early refund and review.

## **REPLY OF THE GOVERNMENT**

The issue of taking up the matter of early refund of unutilized ITC to ethanol manufacturers with GST Council is noted.

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**Comments of the Committee**  
**(Please see Para No. 10 of Chapter-I)**

### **Recommendation No. 11**

#### **Bio Diesel**

The Committee note that while petrol is blended with ethanol and production of ethanol from sugar mills for blending purpose has picked up, the Bio diesel policy has not kept pace with EBP programme and has been a non starter. So far OMC's have procured 10.56 cr litres of Bio diesel for blending with HSD during the period April 2019- March

2020. Presently, the bio diesel produced in the country primarily from imported palm stearin oil. In order to phase-out palm stearin and as a measure towards import substitution, it has been decided to promote domestically available used cooking oil (UCO) as the feedstock.

The Committee are disappointed that the Bio diesel has not been accorded the importance it deserved as diesel is the most consumed fuel and used mostly by in public transport and commercial vehicles. This makes that higher biodiesel blending will have a greater impact on reduction of crude oil imports. The Committee further desire that MOPNG should seriously identify sources of feed stock for production of bio diesel and take concrete steps in this direction.

It is proposed that UCO can be collected from Bulk Consumers such as hotels, restaurants, canteens, etc. for conversion. Oil Marketing Companies (OMCs) have floated an Expression of Interest (Eoi) for procurement of Biodiesel produced from UCO across 200 locations in the country. Till 01.07.2020, 30 Eols have been received by the OMCs for setting up 49 Biodiesel plants with a capacity of 1015 MT/day. Under the scheme, OMCs will pay biodiesel producers ₹51 per litre in the first year, ₹52.7 per litre in the second, and ₹54.5 per litre in the third year (excluding transportation and GST). Therefore, the Committee would like to recommend that MoPNG should undertake a massive awareness programme in the initial locations and simultaneously monitor the UCO program closely and try to improve the bio diesel production in a significant way which may help the country to reduce its import dependence.

### **REPLY OF THE GOVERNMENT**

OMCs are regularly floating Expression of Interest (Eoi) for procurement of Biodiesel made from Used Cooking Oil (UCO). EOI status as on 15.5.21- EOI received for 58 plants capacity of 1140 MT/D.

To give wide publicity to this Eoi, the following activities have been undertaken by the OMCs:

- a) Seven road shows have been conducted by the OMCs.
- b) The Eoi has also been advertised the form of a Jingle over many Radio Channels across the country.
- c) The Eoi has also been prominently broadcasted on social media such as Facebook, Web sites of the OMCs, twitter, etc.

The primary aim of the road shows, broadcast on social media and the radio jingles is to attract more entrepreneurs to set up Biodiesel manufacturing plants from UCO so as to increase the procurement of biodiesel.

2. Further All States and UTs have been requested to form State Level Committees to look into the various aspects of procurement of UCO for production of biodiesel.

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**Comments of the Committee**  
**(Please see Para No. 13 of Chapter-I)**

### **Recommendation No. 13**

#### **2G Ethanol Plants**

The Committee note that ethanol blended petrol is one of the main and important objective in the national policy of bio-fuel and it is estimated that around thousand crore litre of ethanol may be required by the year 2030 to achieve 20% blending of ethanol with petrol. The current availability in the country is around 180 crore litre per year and it is expected that all other sources like sugar juice and food grains production may also supplement availability of ethanol in blending purpose. These are all ethanol produce from 1G method. However, in order to increase the availability of ethanol across the country the Ministry proposes to set up 2G plants at twelve locations in the country which use non edible oil seeds, non agriculture residue such as straw, cotton stalks, corn cobs, saw dust etc,. With an objective to augment ethanol supply, the Government has allowed procurement of ethanol produced from other non food stocks like cellulosic and lignocelluloses materials. The Committee note that in furtherance of this decision the oil PSUs have planned to establish twelve 2G ethanol bio refineries in 11 states in the country with over all capacity of 1100 kile litre per day with a over all investment of Rs. 14000 crores. Out of this the projects at Panipat (Haryana) by IOCL, Bhatinda (Punjab) by HPCL, Bargarh (Odisha) by BPCL and Numaligarh (Assam) by NRL are in advance stage of progress.

The Committee are of the view that the continuous availability of ethanol by 1G or 2G methods at affordable cost is important for sustainable and successful implementation of the EBP programme. The Committee, therefore, recommend that the Ministry should periodically monitor the progress of the establishment of 2G ethanol bio refineries in the country and they should be completed within schedule time and cost. Further more, the Committee also emphasise that the Ministry should focus on technology for development of 2nd Generation and other advance biofuels utilising domestic feedstocks so as to address the cost factor in sustainability and commercial production of Ethanol plants”.

#### **REPLY OF THE GOVERNMENT**

Oil PSUs have planned to set up 2G ethanol bio refineries in different parts of the country with overall investment of Rs 8,000 crore & production of 550 KLPD.

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**Comments of the Committee**  
**(Please see Para No. 16 of Chapter-I)**

**CHAPTER V****RECOMMENDATIONS/OBSERVATIONS IN RESPECT OF WHICH FINAL REPLIES  
OF THE GOVERNMENT ARE STILL AWAITED****Recommendation No. 2****National Bio-Fuel Coordination Committee**

The Committee note that in order to implement the National Policy On Bio Fuels, a National Bio-fuel Coordination Committee (NBCC) has been set up with representatives of 14 Ministries and Departments to meet periodically to provide overall coordination, effective end-to-end implementation and monitoring of biofuel programmes in the country. The Committee note that the policy on biofuel envisages role of various Ministries and Departments to make it successful and appreciate that NBCC has been constituted which is headed by the Minister, Petroleum and Natural Gas to oversee all the policies. The Committee note that the policy on bio-fuel also envisages the promotion of compressed bio-gas through SATAT initiative of the Ministry of P&NG. Further, the Ministry of New and Renewable Energy is implementing a Waste to Energy programme under which recovery of energy in the form of bio-gas from urban industrial and agriculture waste/residue such as MSW, vegetable and food market waste, slaughter house waste, industrial effluence for meeting certain niche energy demands of urban industrial and commercial sector in the country. In this programme, the role of Ministry of Urban Development and municipal authorities in states will be the key stake holders. In addition, the Department of Food and Public Distribution (DFPD), Department of Agriculture, Cooperation and Farmer Welfare (DAC&FW), Department of Animal Husbandry and Dairing (DAHD) and Ministry of Environment and Forest and Climate Change are all part of the NBCC. Further the Committee note that Department of Drinking Water and Sanitation is implementing a GOBHARDhan scheme which aims to positively impact village cleanliness and generate wealth and energy from cattle and organic waste. The scheme also aims at creating new rural livelihood opportunities and enhancing income for farmers and other rural people. The Committee also note that the Department of Financial Services under Ministry of Finance has extended interest subvention scheme for expansion of distilleries for ethanol production and also given priority sector lending status for CBG projects under SATAT scheme.

However the Committee note that both Department of Financial Services (DFS) and Department of Drinking Water and Sanitation (DDWS) are not part of the NBCC where as these are two Departments which are very vital in terms of providing inputs /organic waste and financing of CBG projects. The Committee therefore, strongly recommend that in these two Ministries may also be made part of National Bio-fuel Coordination Committee (NBCC) so that overall coordination and collective effort from all stakeholders will be more effective in implementation of National Policy On Bio Fuels.

**REPLY OF THE GOVERNMENT**

NBCC in its meetings has been requesting participation of relevant Ministries / Departments as per the set agenda items. MoP&NG is in the process of amending the NPB-2018 and will look into the aspect of including recommended Departments in NBCC.

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## **Recommendation No. 12**

### **Environment Category Status for Bio Fuel Projects**

The Committee note that one of the problems being faced in the implementation of bio fuel policy is getting approvals for ethanol distilleries and CBG plants. MoP&NG has requested MoEF&CC to remove the condition of Certification by MoP&NG that the proposal is for the purpose of blending bioethanol with petrol. However, MoEF&CC has extended the validity of the notification till February, 2021 including the aforesaid deterrent condition. It may be noted that special dispensation is available only for those project proponent which submit MoP&NG certificate as mentioned in the aforesaid notification along with the Environmental Clearance (EC) application. Accordingly, MoEF&CC is granting the EC as per its normal procedure and is not providing benefit of notification to the project proponents yet.

The Committee have been informed that even in zero discharge case from CBG plant, the Environment Ministry has kept the category as "orange". If the same can be moved to "white category", it can help in faster approvals and the plants can be brought into production earlier. The Committee recommend that MoPNG through NBCC mechanism should take up this issue and pursue CPCB to give white category status to the CBG projects.

### **REPLY OF THE GOVERNMENT**

(a) MoPNG has taken up the matter with Central Pollution Control Board (CPCB) and Ministry of Environment Forest and Climate Change (MoEF&CC). In this regard IOCL has made a presentation to CPCB wherein CPCB has asked to inform about bio gas slurry utilization plan.

(b) This Ministry has coordinated with Department of Agriculture Cooperation and Farmers Welfare (DAC&FW) to include Digested Bio Gas Slurry (DBGS) produced from CBG projects under Fertilizer Control Order 1985 (FCO). DAC&FW has approved inclusion of DBGS under FCO and likely to be notified soon which will facilitate its application and marketing. This will enable CBG plants in achieving Zero discharge.

(c) After notification of DBGS under FCO this Ministry will take up the matter with CPCB.

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## **Recommendation No. 17**

### **BIO-ATF**

The Committee note that one of the bio-fuel under the national policy on bio fuel being implemented is Bio-ATF. The aviation sector which plays pivotal role in the economy has shown phenomenal growth in the recent years. It also contribute to green house gas emission hence need for cleaner aviation fuel as gained significance. Though India is not a signatory CORSIA (Carbon Offsetting and Reduction Scheme for International Aviation) at present it may have to participate mandatorily in the second phase from 2024. Therefore, there is a need to build infrastructure for bio-jet fuel.

The Committee also note that there is a proposal to set up a demonstration scale bio-ATF plant in one of the refineries. They are apprised that once the fuel is developed successfully it may be used in Indian Air force which is looking to reduce its import requirements of aviation fuel. Therefore, the Committee recommend that Ministry should quickly finalise the demonstration scale bio-ATF plant at one of the refineries and also further support R&D activities for development of this fuel so that the Indian aviation sector and the Indian Airforce can use this bio-ATF in larger scale at an early date.

### **REPLY OF THE GOVERNMENT**

To give impetus to the Bio-Jet Fuel (Bio-ATF) program in the country two committees were formed on 02.08.2019 by MoP&NG.

2. Based on the report of the Committees and further discussions in the matter, MRPL has been asked to setup a Bio-ATF manufacturing facility integrated with MRPL Refinery.

3. Recently, there have been new developments in the field of ATF like Carbon Offsetting and Reduction Scheme for International Aviation(CORSIA), flights being flown by Indian Air Force on Bio-ATF blended ATF, need for reducing emissions, fuel efficiency, etc. To address the new developments this Ministry has formed a Committee on 16/06/2021 to look into all the aspects of the Bio-ATF program in the country including raw materials production, technology, demand, future requirements, CORSIA, BIS Standards, affect on engine performance, blending percentages etc.

Ministry of Petroleum & Natural Gas  
O.M No.P-13039(18)/2/2020-CC (E-38408) Dated. 02<sup>nd</sup> August, 2021

New Delhi;  
February, 2022  
Magha,1943 (Saka)

**RAMESH BIDHURI,**  
**Chairperson,**  
**Standing Committee on**  
**Petroleum & Natural Gas.**

**MINUTES**  
**STANDING COMMITTEE ON PETROLEUM AND NATURAL GAS**  
**(2021-22)**  
**SIXTH SITTING**  
**(20.12.2021)**

The Committee sat on Monday, the 20 December, 2021 from 1630 hrs. to 1645 hrs. in Committee Room 'B', PHA, New Delhi.

**PRESENT**

**Shri Ramesh Bidhuri - Chairperson**

**MEMBERS**

**LOK SABHA**

2. Smt. Chinta Anuradha
3. Dr. Ramesh Chand Bind
4. Shri Pradyut Bordoloi
5. Shri Naranbhai Kachhadiya
6. Shri Santosh Kumar
7. Shri Rodmal Nagar
8. Shri Mitesh Rameshbhai Patel
9. Shri Unmesh Bhaiyyasaheb Patil
10. Shri M.K. Raghavan
11. Shri Dilip Saikia
12. Shri Janardan Singh Sigriwal
13. Dr. Kalanidhi Veeraswamy
14. Shri Rajan Baburao Vichare

**RAJYA SABHA**

15. Smt. Kanta Kardam
16. Shri Rambhai Mokariya
17. Shri Subhas Chandra Bose Pilli
18. Dr. V. Sivadasan

**SECRETARIAT**

1. Smt. Abha Singh Yaduvanshi - Additional Secretary
2. Shri H. Ram Prakash - Director
3. Shri Vinay Pradeep Barwa - Deputy Secretary
4. Shri Mohan Arumala - Under Secretary

2. At the outset, Hon'ble Chairperson welcomed the Members to the sitting of the Committee. The Committee then took up for consideration draft Action Taken Report on the subject 'Review of Progress in Production of Non-Conventional Fuels with Specific Reference to Bio-Fuels' and adopted the same without modifications.

3. The Committee then authorised the Chairperson to finalize the Report and present/lay the Report in both the Houses of Parliament.

**The Committee then adjourned.**



**Annexure II**

(Vide Para 4 of the Introduction)

*ANALYSIS OF THE ACTION TAKEN BY THE GOVERNMENT ON THE RECOMMENDATIONS CONTAINED IN THE SIXTH REPORT (SEVENTEENTH LOK SABHA) OF THE STANDING COMMITTEE ON PETROLEUM AND NATURAL GAS (2020-21) ON THE SUBJECT "REVIEW OF PROGRESS IN PRODUCTION OF NON-CONVENTIONAL FUELS WITH SPECIFIC REFERENCE TO BIO-FUELS".*

I	<u>Total No. of Recommendations</u>	17
II	Recommendations/Observations which have been accepted by the Government (Vide Recommendations Nos. 1, 3, 4, 9, 10, 14, 15 and 16)	08
	Percentage to Total	47%
III	Recommendations/Observations which the Committee do not desire to pursue in view of Government's (Vide Recommendations Nos. 6 and 8)	02
	Percentage of Total	11.75%
IV	Recommendations/Observations in respect of which replies of the Government have not been accepted by the Committee (Vide Recommendations Nos. 5, 7, 11 and 13)	04
	Percentage of Total	23.50%
V	Recommendations/Observations in respect of which final replies of the Government are still awaited (Vide Recommendation Nos. 2, 12 and 17)	03
	Percentage of Total	17.75%