GOVERNMENT OF TAMIL NADU

TAMIL NADU ETHANOL BLENDING POLICY 2023

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2023

INDUSTRIES, INVESTMENT PROMOTION
& COMMERCE DEPARTMENT

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Contents

1. Preamble

1.1. Introduction

Tamil Nadu is the automotive manufacturing capital of India with the largest number of factories and output nationally. Being the highest urbanised state, with close to 50% of the population residing in urban areas, Tamil Nadu is also a major automobile market, with the 3rd largest vehicular population in India. Coupled with the fact that the State has state-of-the-art advanced road and freight corridor network systems, this positions Tamil Nadu amongst the highest consumers of petrol in India, which is predominantly imported. The State's petrol requirement is estimated to increase to 474 crore litres by FY 2024-25. With transportation sector accounting for nearly one-fourth of GHG emissions, and considering the projected robust growth of the State's vehicular fleet, there is an immediate need to transition to alternate cost-effective green fuel that mitigates climate change.

Tamil Nadu accords the highest of importance to sustainable industrial development that upholds the right balance between economic development and environmental protection. The State is a leader in installed renewable energy capacity and more than 50% of its power requirement is serviced through renewable energy. With a clear vision of achieving a $1 trillion economy by 2030 underpinned by green technologies, Tamil Nadu is actively promoting adoption of EVs and manufacturing of green hydrogen manufacturing as alternative green fuel solutions.

In order to address environmental concerns from the transportation sector, reduce import dependency and boost the agriculture sector, the Government of India launched the Ethanol Blended Petrol (EBP) Program in 2003 with a target of supply of 5% ethanol blended petrol and has now reset its target, to achieve 20% blending of ethanol in petrol by 2025 through the National Biofuels Policy. Presently, the market for ethanol in India is driven by primarily by demand for disinfectants, beverages and other industrial applications and the Indian ethanol market is estimated to reach $ 5.64 billion (~ Rs.40,593 crores) by 2027. In order to achieve the 20% blending target indigenously, India has the opportunity to create production capacity of 900 crore litres of bioethanol from various sources.

Tamil Nadu has a natural advantage with a total cropped area of ~ 6.63 million hectares from a diversified range of crops such as sugarcane, paddy, maize, tapioca, and sweet sorghum. Further, the coverage of irrigated area is higher than the national average. The EBP Program provides an opportunity for Tamil Nadu to maximise its value addition to the State's natural resources by promoting indigenous ethanol production based on existing locally available agrocentric resources, expansion of these resources as well as utilisation of surplus and damaged produce.

The Tamil Nadu Ethanol Blending Policy seeks to support indigenous production of fuel grade ethanol under the EBP Program. Given the fluctuations in crude oil prices, it is prudent for pioneer States like Tamil Nadu to augment biofuel production within the State using indigenous sources which could partly insulate the import price shocks, address the pollution concerns and enhance agricultural output and its utilisation.

1.2. Advantage Tamil Nadu

i. Growing demand for petrol and Increasing Refining Capacity

In terms of consumption of Motor Spirit (MS) petrol, Tamil Nadu stands third after Uttar Pradesh and Maharashtra with about 2.7 million metric tonnes (~ 3.8 billion litres) consumption during FY 2021-22[1]. Considering the average growth rate of 7% in the last few years (FY 2017-18 to FY 2019-20), the demand or MS petrol during FY 2024-25 is estimated to be 3.3 million metric tonnes (4.6 billion litres). To achieve the blending target of 20%, the fuel grade ethanol requirement works out to be 0.9 billion litres[2] Chennai Petroleum Corporation Limited (CPCL), formerly known as Madras Refineries Limited (MRL), has an installed refining capacity of 10.5 million metric tonnes in Manali (near Chennai) and the proposed augmentation at CPCL Cauvery Basin is 1 million metric tonne. Further, considering a moderate share of demand from neighbouring States, Tamil Nadu offers an opportunity for manufacturing 1.3 billion litres by 2025 to service the regional demand.

ii. Ethanol Production Capacity & Demand in Tamil Nadu

Tamil Nadu currently has installed plant capacity of 664 KLPD specifically to produce fuel grade ethanol under the EBP, with a further 160 KLPD capacity to be developed, in pipeline. The existing plants and immediate pipeline of projects are molasses based, and several investors have expressed interest to invest and establish standalone grain-based ethanol plants.

iii. Scope of 1st Generation – 4th Generation Biofuels

The National Biofuels Policy has charted out a plan to promote 1st and 2nd generation feedstock. With an objective to augment ethanol supplies, the Government has allowed procurement of ethanol produced from other non-food feedstock besides molasses, like cellulosic and lignocellulosic materials including petrochemical route. Oil PSUs have planned to establish 2G ethanol bio-refineries in various parts of the country. Tamil Nadu, being an industrial hub with a focus on circular economy for sustainable industrial development, is an ideal destination for use of 4th generation feedstock like industrial waste.

iv. Surplus feedstock availability with the State

Sugarcane and Sweet Sorghum are the major sugar crops grown in the State. During FY 2021-21, sugarcane was cultivated in 1.27 lakh hectares with a production of 133 lakh metric tonnes.

Sweet Sorghum is a principal dryland crop which is popular with farmers due to assured grains and fodder yields for low-input cultivation. Sweet sorghum holds a great potential as a field crop for ethanol production throughout the world in view of the high yield compared to grains, sugar, lignocellulosic biomass. The Tamil Nadu Agricultural University has carried out extensive crop improvement research on Sweet Sorghum including five hybrids and 44 varieties in sorghum. Maize is the most versatile crop grown in the State having wider adaptability under varied agro-climatic conditions and is grown to produce a large variety of food and non-food products. With a production area of about 4 lakh hectares, Maize production from the State constituted ~8% of the production in India . The State has an advantage in matching the agricultural production to its manufacturing prowess. Tapioca (cassava) is grown in an area of 91,506 hectares in the State.

[1]Petroleum Planning & Analysis, Ministry of Petroleum & Natural Gas
[2]Vide letter from Joint Secretary (Sugar & Admin) dated 14th January 2021

1.3. Need for Policy

The State recognises the opportunity under EBP and the following factors reflect the aspirations and motivations of the State for encouraging EBP:

i. Augmenting indigenous bioethanol production capacity from agri-resources to encourage revival of the sugar industry and diversification to other food grains.

ii. Simplifying/streamlining regulatory challenges by creation of institutional mechanism to support investors with faster clearances and facilitate assured procurement.

iii. Ensuring efficient utilisation and capacity augmentation of agri-resources that does not compromise on food security and is aligned with sustainable land use.

1.4. Benefits of EBP

The EBP strives to address environmental concerns, reduce import dependency and provide a boost to agriculture sector. It also offers direct benefits to farmers and consumers.

i. **Improved Farmer Income**

In the surplus season Ethanol production and supply under Ethanol Blended Programme improves liquidity position of sugar mills and enables them to clear the crop price arrears of farmers. This offers an opportunity for increased income for both sugarcane farmers and farmers engaged in cultivation of grains such as maize that are also eligible feedstock for Ethanol Blending through improved price realisation for EBP. Farmers can also increase araea under cultivation and productivity for crops such as maize to meet the requirements for the EBP. The by-product during grain based ethanol production such as Distilleries Wet Grain Soluble (DWGS) and Distilleries Dried Grain Soluble (DDGS) is used as feed for cattle & other livestock.

ii. **Superior Fuel Quality**

Ethanol is considered a better blend component for petrol due to higher octane number of 108.5, which helps in improved engine power and performance. It also helps in significantly reducing other pollutants (Carbon Monoxide, Sulphur Oxide, Nitrogen Oxides, Hydrocarbon and Particulate Matter) in comparison to fossil fuels. Specifically, bio ethanol produced from agri-based feedstocks can be attributed to reduction in GHG emissions in comparison to fossil fuels.

[3]*Agri Exchange Portal, Agricultural & Processed Food Products Export Development Authority, GoI*

2. Objectives

2.1. Vision

- To promote Tamil Nadu as a green economy and investment hub for alternate cost-effective green fuel.

2.2. Mission

- Improve farmer income through price realisation and expansion in opportunities due to ethanol blending.
- Revive the sugar industry in Tamil Nadu through improved utilisation of existing mills and diversification to dual feedstock.
- Enhance import substitution through indigenous sourcing and production of fuel grade ethanol.
- Enable capacity creation and diversification of grain-based distilleries.
- Mitigate climate change risks and support diversification through reduction in air pollution arising from fossil fuels.

2.3. Goals

The Government of Tamil Nadu has set the following targets for the policy term:

- To be self-sufficient and meet the estimated Ethanol blending requirement of 130 crore litres.
- To attract investments worth Rs. 5000 crore in molasses/grain-based Ethanol production capacity in the State.

2.4. Scope of the Policy

Tamil Nadu Ethanol Blending Program shall apply to the following eligible units and feedstock, subject to other conditions.

2.4.1. Eligible Units

Eligible units shall include the following units which provide fuel-grade ethanol:

i. New grain-based distilleries or expansion of existing grain-based distilleries
ii. New molasses and sugar/sugar syrup-based distilleries or expansion of existing distilleries, whether attached to sugar mills or standalone distilleries
iii. New dual feed distilleries or expansion of existing dual feed distilleries – of which one feed shall be sourced from molasses
iv. Conversion of existing molasses-based distilleries to dual feed; and also, to convert grain-based distilleries to dual feed

2.4.2. Eligible Feedstock

The feedstock to be used by the Eligible Units for the EBP Programme shall include:

i. C & B- Heavy Molasses,
ii. Sugarcane juice,
iii. Sugar,
iv. Sugar syrup,
v. Biomass in form of grasses,
vi. Agriculture residues (rice straw, cotton stalk, corn cobs, saw dust, bagasse etc.),
vii. Sugar containing materials like sugar beet, sweet sorghum, etc.
viii. Starch containing materials such as corn (maize), cassava (tapioca), sorghum, rotten potatoes,
ix. Agro food / pulp industry waste,
x. Damaged Rice unfit for distribution under the Public Distribution System as certified by Tamil Nadu Civil Supplies Corporation/procured from FCI,
xi. Damaged food grains (except rice and 2.4.2.x above) unfit for human consumption,
xii. Food grains during surplus phase as declared by National Biofuel Coordination Committee (NBCC),
xiii. Industrial waste (which contains fermentable sugar),
xiv. Algal feedstock and seaweeds,
xv. Any other feedstock as may be notified by NBCC or the Government of Tamil Nadu from time to time.

2.4.3. Other Conditions

i. Ethanol produced from such eligible units and sold to any buyers other than OMCs or any other purposes other than fuel blending under the EBP Programme shall be considered ineligible under this policy.
ii. As sugar mills, edible oil industries, rice, wheat and flour mills, alcoholic beverages, and fertiliser and animal feed manufacture feature in the Annexure I *(List of Industries Ineligible for Incentives)* of the Tamil Nadu Industrial Policy 2021 (TNIP 2021), and are excluded from the scope of the indus trial policy (Clause 1.3 TNIP 2021); the Eligible Units shall be covered only under this Policy and shall not be covered under the Tamil Nadu Industrial Policy 2021.

3. Sustainable Agriculture Interventions

Agriculture, with its allied sectors, is the largest source of livelihood in Tamil Nadu. More than two-third of rural households in the State still depend primarily on agriculture for their sustenance, with 93 percent of farmers being smallholders. The net cropped area in Tamil Nadu constitutes 37.1% of the total geographical area of the State. In 2020-21, at current prices, agriculture, contributed to 13% of the State's economy and registered growth rate of 4.8%.

The State has taken proactive measures to achieve equitable, competitive and sustainable growth in agriculture, increase farmer income and to ensure food security. The Government of Tamil Nadu has introduced various Special and Innovative Agriculture Technological initiatives to augment area, production and productivity of major crops:

- With an objective to use the available agricultural lands for sustainable development of agriculture and to ensure that the agricultural activities are not unduly constrained by non-agricultural use or other development, the Tamil Nadu Protected Agricultural Zone Development Act, 2020 has been notified. Under this Act, Thanjavur, Thiruvarur, Nagapattinam, Mayiladutharai and parts of Cuddalore (Kattumannarkoil, Melbhuvanagiri, Parangipettai, Keerapalayam and Kumaratchi) and Pudukottai (Aranthangi, Avudaiyarkoil, Manamelkudi, Thiruvarankulam and Karambakudi) districts have been listed as Protected Agricultural Zones.

- The State has allocated 6.5% of its total expenditure towards agriculture and allied activities. This is higher than the average allocation for agriculture by states (6.2%). Under the budget provision 2022-23, Rs.1,760 crores has been allocated towards crop insurance and Rs.487 crores has been allocated towards agricultural research and education.

- The Government of Tamil Nadu is taking concerted efforts to boost farmers' income and to increase productivity of crops through efficient usage of water. To supplement this, the micro-irrigation scheme is being implemented in the State to bring more area under cultivation and enhance production by judicious use of water. Also, to encourage the farming community 100% subsidy is provided to small/marginal farmers and 75% for other farmers for installation of micro irrigation schemes.

Presently, the ethanol production in the State is primarily from Sugarcane (molasses based) distilleries. Under the Ethanol Blending Policy, the State shall encourage diversification of feedstock to encourage low water consuming and versatile crops like Maize, Sorghum and Tapioca. Further, the State shall come up with appropriate guidelines to utilize damaged rice for Ethanol production. The important sources of feedstock for ethanol production and the measures to optimise their availability are discussed herein.

3.1. Optimising Availability of Feedstock

3.1.1. Sugarcane

Sugarcane is a major commercial crop cultivated in an area of 1.56 lakh Ha with a production of 161 lakh metric tonnes in 36 districts of Tamil Nadu. Owing to the initiatives taken by State Government under National Food Security Mission and Pradhan Mantri Krishi Sinchayee Yojana (PMKSY), sugarcane area coverage has increased by 30% compared to FY 2020-21.

Tamil Nadu has 42 sugar mills with overall cane crushing capacity of 1.23 lakh tonnes per day. On an average, during the last two decades, sugar production in Tamil Nadu constituted to 9% of overall sugar production in India. Tamil Nadu Sugar Corporation Limited (TASCO Ltd), a public sector undertaking of the State operates two sugar mills at Kurungulam, Thanjavur District and Pandiarajapuram, Madurai District. Perambalur Sugar Mills Ltd., was established as a subsidiary of TASCO Ltd. The State has 23 sugar industries set up by private players and 16 mills set up by State level cooperatives.

From a peak of 254 lakh tonnes of cane crushed from 43 factories with a capacity utilisation of 73% in FY 2011-12, the capacity utilization fell to 44% with 80 lakh tonnes crushed from 37 factories in the State. The capacity utilization has remained below 60% over the past few years due to multiple reasons such as reduction in the crop production area in the State, decline in the recovery rate from 9.5% to 8.5% impacting the production costs. The EBP programme presents an opportunity for reviving the sugar industry in the State by improving the capacity utilization of the existing plants. The Government of Tamil Nadu under the EBP program shall encourage sugar industries to set up molasses-based Ethanol plants and improve capacity utilization.

3.1.2. Damaged rice unfit for human consumption

The State Government is also steadfast in increasing the production of rice through promoting high yielding varieties in different agro-climatic zones, water conservation and labour-saving techniques, conjunctive use of water through direct sowing and providing awards to encourage the farmers for adoption of System of Rice Intensification (SRI) technology and for cultivation of traditional varieties.

With a production of 5.54 metric tonnes of rice FY 2018-19, the State accounted for 5.5% of rice production in India and recorded phenomenal yield (3,748 kilo grams per hectare), the second highest yield in India, after Punjab. The Tamil Nadu Civil Supplies Corporation (TNCSC) has 21 Modern Rice Mills with a monthly hulling capacity of 47000 MT. TNCSC periodically auctions damaged rice due to insect/moisture/heat/discoloration. The damaged rice unfit for human consumption available with TNCSC shall be made available to fuel grade ethanol producers through a suitable mechanism.

[4]*Indian Council of Agricultural Research*

3.1.3. Maize

Production of ethanol using maize as the base is considered more profitable owing to low water consumption and low capital costs to set up dry mills. Further, distilleries can sell the protein rich by product to poultries. United States, which is the largest producer of ethanol uses maize as the major source of feed stock for ethanol production.

In view of high productivity, relatively low water usage and cost of cultivation, maize has emerged as a favourite crop in the State. Tamil Nadu ranks first in terms of productivity with a yield of 6,551 kilograms/hectare during FY 2018-19 . Over the last two decades, the area under cultivation for maize in the State has increased from 0.8 lakh hectares during 2000-01 to 3.9 lakh hectares during 2018-19 and production of 25 lakh tones which constituted 9.2% of overall production from India.

The State shall encourage production of maize by increasing the land for maize cultivation from 4 lakh hectares to around 6 lakh hectares considering the opportunity from EBP. Further, the State shall undertake measures to improve productivity in the areas under cultivation by optimising planting density and irrigation depth, and adopting sustainable innovative practices.

3.1.4. Cassava (Tapioca)

Tapioca is an important tropical tuber crop in India. Tapioca starch is obtained from the roots of Cassava plant. Tamil Nadu accounts for about 80 per cent of the total acreage of the crop in India. In Tamil Nadu, tapioca is cultivated in an area of 91,506 hectares with the production of 38.93 lakh metric tonnes. It is mainly cultivated in Salem, Namakkal, Erode, Cuddalore, Villupuram, Dharmapuri and Kanyakumari districts of Tamil Nadu. Tapioca finds application as a raw material for starch extraction in India.

As per ICAR-Central Tuber Crops Research Institute (CTCRI), cassava (tapioca) is a promising raw material for bioethanol production to meet India's Ethanol Blending Petrol (EBP) programme target of 2025. Tapioca with its high starch content and ability to grow under low management conditions has been globally recognised as a potential feedstock for bioethanol production.

3.1.5. Sweet Sorghum

As a principal crop in drylands, Sweet Sorghum is popular with farmers due to assured grains and fodder yields for low-input cultivation under harsh weather, especially in drought. The crop has higher starch compared to maize and it is grown in both kharif and rabi seasons. It is estimated that about 27% of the annually produced crop is wasted due to grain blackening following unseasonal rains which makes the grain not suitable for human or animal consumption. By utilising this for EBP, the returns to farmers could increase. The State shall undertake knowledge dissemination to encourage farmers to cultivate sweet sorghum.

[5]*Directorate of Economics & Statistics, DAC&FW*

3.2. Sustainable Land Use & Planning

With effective regional land use planning, over the past 15 years, the State has witnessed visible improvements in agricultural productivity, reduction in wasteland, expansion of irrigation coverage, and expansion of forest and tree cover. The Draft Tamil Nadu State Land Use (Planning) Policy proposes to clearly identify and demarcate Rural and Agricultural Zones as part of Regional and Sub Regional Plans. The draft policy proposes formulating and reviewing State Spatial Strategy Plan and coordinating inter-sectoral interactions and priorities. With Ethanol blending and indigenous sourcing of feedstock gaining strategic importance, the Regional and Sub Regional Plans/State level Strategy Plans shall have a special focus on demarcating land bearing in mind, the requirements for EBP.

4. Regulatory Framework

4.1. Clearances and Approvals from GoI/GoTN

Given the aspects of safety and social sensitivity of ethanol, there are specific statutory clearances required from GoI and the Government of Tamil Nadu. With a view to encourage ethanol production from agri-resources, the Government of India has undertaken various measures to significantly reduce the compliance burden of investors who wish to set up ethanol plants under the EBP Programme. Investors can obtain almost all the requisite standard clearances from the State Government within 30 days.

4.1.1. Clearances/Approvals from Government of Tamil Nadu

These clearances/approvals from Government of Tamil Nadu include Building approval from Town Panchayat (or) Village Panchayat approval, Permission from Fire and Rescue Department, Boilers License, Approval of Chief Inspector of Factories, Consent to Operate (CTO) from the Pollution Control Board, and Environmental Clearance from State Environment Impact Assessment Authority (SEIAA) for <100 KLPD molasses based ethanol plant. The CTO should clearly mention production of Absolute Alcohol or ENA (Extra Neutral Alcohol) or SDS (Special Denatured Spirit) or Alcohol or RS (Rectified Spirit) or Spirit or Ethanol or Denatured Anhydrous Ethanol). The Government of Tamil Nadu has provided specific relaxations to the sugar mills/distillery units to be located within 1 km /5 km of water bodies for obtaining a CTO (see Box 1).

All these clearances except the EC are currently available on the Tamil Nadu Single Window Portal. As part of the Ease of Doing Business initiatives, the new Single Window Portal (TNSWP) shall provide more than 200 services (including sector specific and sector-agnostic clearances) across 38 departments, making the process completely faceless, contactless, and paperless. The Environment Clearance issued by the SEIAA will be integrated with TNSWP. Further, the validity of the CTO provided by TNPCB is now being provided for a longer horizon. Renewal of CTO shall have a validity period of 5 / 10 / 14 years for Red / Orange / Green category industries respectively subject to the remittance of the total consent fee for the entire period in advance or have a shorter validity period restricted according to the amount of fees remitted.

Box Item 1

Relaxations offered to Sugar Industry in Tamil Nadu

In order to encourage expansion/green field ethanol plants in the State, the Government of Tamil Nadu has relaxed the requirements under G.O.(Ms.) No. 213, Environment and Forests Department, dated 30.03.1989 and G.O.(Ms). No. 127, Environment and Forests Department dated 08.05.1998. TNPCB shall give Consent to Establish to all those applicants intending to set up new ethanol production unit within existing Sugar mills/distillery units located within 1 km/5 km from water bodies subject to achieving ZLD with reject management and other conditions of TNPCB – vide G.O.(Ms). No.82 Environment, Climate Change and Forest (EC.3) Department dated 13.10.2021.

Environment Clearance Procedures Relaxed for Distillery and Sugar Mills going in for expansion under the Ethanol Blended Petrol Program

As per the EIA notification of 2006 (as amended by S.O.No.1960 E dated 13-06-2019), Molasses based Distilleries with capacities less than or equal to 100 KLD and Non-Molasses Based Distilleries with capacities less than or equal to 200 KLD (Schedule 5 (g), Category B) shall be considered for Environmental Clearance by the State Level Environmental Impact Assessment Authority through the State Expert Appraisal Committee (SEAC) and for capacities (Schedule 5 (g), Category A) beyond this by the MoEF&CC, Govt. of India through the Expert Appraisal Committee (EAC).

Waiver of EC for incidental increase in Ethanol Production

As per MoEF&CC Office Memorandum F.No. 22-33/2019-IA.III dated 5th November 2019, incidental increase in production of Ethanol due to use of B-heavy Molasses/Sugar cane Juice/ Sugar Syrup/ Sugar without any increase in the total pollution load in the existing distilleries or sugar mills for which environmental clearance was already granted shall be considered under para 7(i1)(a) of EIA Notification and do not require Environmental Clearance.

Special Provision in EIA for Grain based Ethanol

As per the MoEF&CC Notification S.O. 2339(E), dated 16th June, 2021, a special provision was made in the EIA Notification, 2006-(Schedule 5 (ga), Category B2), wherein for all applications for EC prior to 31.03.2024 made for Grain based distilleries with Zero Liquid Discharge producing ethanol; solely to be used for Ethanol Blended Petrol Programme of the Government of India shall be considered under B2 Category and appraised at Central Level by Expert Appraisal Committee (EAC) with condition that the project proponent shall file a notarized affidavit that the ethanol produced from the proposed project shall be used completely for the EBP Programme.

The project proponent is required to obtain a certificate of “no increase in the pollution load” from the environmental auditors or reputed institutions, to be empanelled by the State Pollution Control Board or Central Pollution Control Board or Ministry of Environment, Forest and Climate Change.

4.1.2. Clearances/Approvals from Government of India

The clearances from Government of India include valid "Petroleum and Explosives Safety Organization (PESO)" license for storage of class A products and Environmental Clearance from SEIAA for >100 KLPD molasses-based ethanol plant. Investors can directly upload the Project Proposals in Parivesh[6] to apply for the Environment Clearance. Further, investors can also apply for interest subvention schemes under DFPD on the National Single Window Portal. NSWS[7] has integrated with the TNSWP, and the investors can apply for the clearances on either portal.

4.2. Clarification on Applicability of State Regulations

While the market for ethanol grows and regulatory frameworks have been simplified with efforts from the Government of India and the Government of Tamil Nadu, there is regulatory uncertainty on the way forward. In this context, the following clarifications are offered on regulations under the State purview:

i. Since the amendment in the Industries (Development and Regulation) Act 1951 in 2016, States can legislate, control and/or levy taxes and duties on liquor meant for human consumption only. Other than that, liquor which is not meant for human consumption, i.e., denatured ethanol will be controlled/ legislated etc. by Government of India. Hence (denatured) Ethanol production for the purpose of Ethanol Blending Programme will not require any license from the Commissionerate of Prohibition & Excise/Home Department, Government of Tamil Nadu.

ii. The grant or issue of such licenses permits or other documents and charging/levying of fees, if any, etc. shall be under the exclusive control of the Government of India (as specified in Section 4.2.1). However, the procedures for interstate movement of Ethanol shall be monitored by Commissionerate of Prohibition & Excise/Home Department, Government of Tamil Nadu.

iii. No license is required from the Commissionerate of Prohibition & Excise/Home Department, Government of Tamil Nadu under the Prohibition & Excise Act for Ethanol production for Ethanol Blending Programme. It is clarified that for production of Ethanol under EBP, Eligible Units shall be exempt from obtaining clearances such as DL2 (For possession and use of Denatured Spirit / Methyl Alcohol (Methanol) in the manufacture of specified commodities other than Varnish), RL 1,2,3&4 (possession and sale, possession and use of Rectified Spirit and Absolute Alcohol).

iv. Eligible Units shall be permitted to import /purchase eligible feedstock from other states/countries subject to following conditions:

a. molasses subject to obtaining the necessary (ML) permit from Prohibition & Excise Department.

b. damaged rice shall be permitted only if it is procured from FCI.

v. The existing mechanism for certification of Ethanol produced from sugarcane juice and ethanol produced from B-heavy molasses and Syrup/sugar as per the guidelines circulated to all distillery officers in Tamil Nadu (vide letter No. P&E 3(1)/9798/2014 dated 21.09.2021) shall apply, till the revised mechanism, if any, is issued by DFPD at a later date.

[6] *https://parivesh.nic.in/*
[7] *https://www.nsws.gov.in*

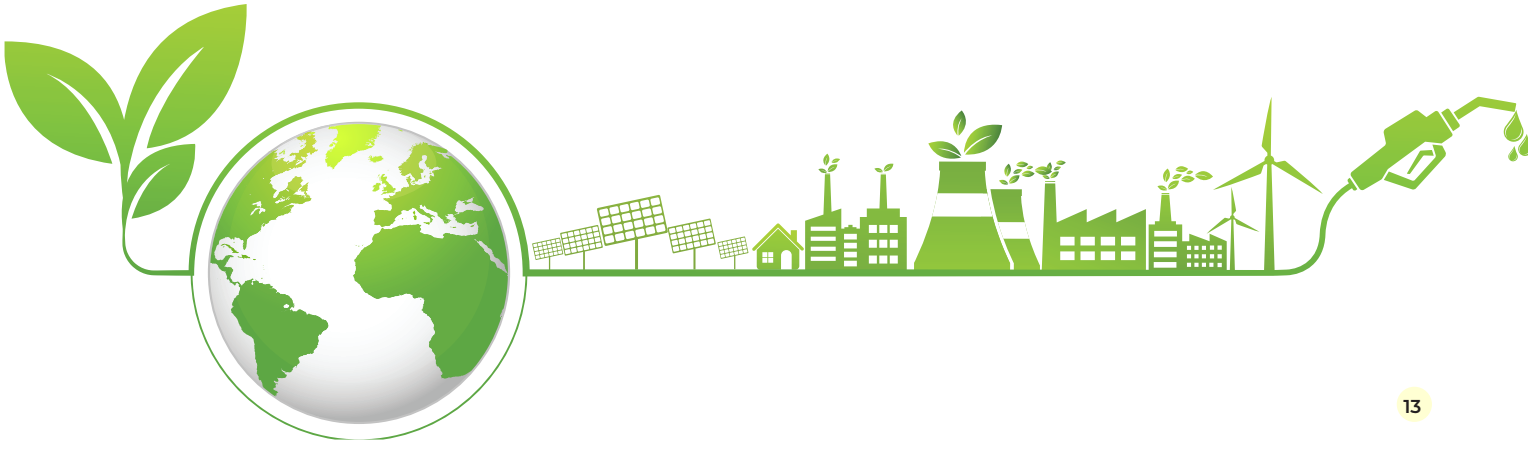
vi. Ethanol production units using eligible feedstock such as C - Heavy Molasses, Biomass in form of grasses, Agriculture residues (rice straw, cotton stalk, corn cobs, saw dust, bagasse etc.), Sugar containing materials like sugar beet, sweet sorghum, etc., Starch containing materials such as Maize (corn), cassava (tapioca), sorghum, rotten potatoes, agro food / pulp industry waste, etc., Industrial waste which contains fermentable sugar, algal feedstock/seaweed etc., and any other feedstock as may be notified by NBCC or the Government of Tamil Nadu, from time to time, shall be able to supply to OMCs under the EBP, subject to tender conditions. It is clarified that Ethanol manufactured for the Ethanol Blending Program solely from eligible feedstock other than B-heavy molasses and Syrup/ sugar (including food grains) shall not require excise licenses/clearances from the Commissionerate of Prohibition & Excise or Home Department, Government of Tamil Nadu.

vii. In adaptation of the guidelines issued by DFPD (vide OM No. 4/1/2018 – (BP&E)(Part-I) dated 11.11.2022), the ethanol produced through different routes i.e., from grains such as maize, damaged rice (unfit for distribution under the PDS as certified by TNCSC) damaged food grains (except rice), is to be certified by the concerned Prohibition & Excise Department with unique serial no. for proper identification. Such certificate for grains shall clearly indicate the type of grain used i.e. maize, damaged rice (unfit for distribution under the PDS as certified by TNCSC) damaged food grains (except rice). The Commissioner, Prohibition and Excise shall appoint excise officers and other functionaries as she/he thinks fit for oversight of overall accounts of ethanol produced from all sources and all uses/diversion, if any.

viii. The State has stocks of damaged rice unfit for distribution, with the Tamil Nadu Civil Supplies Corporation (TNCSC) which could be used for grain-based ethanol production. The Government of Tamil Nadu shall notify the guidelines for procurement of damaged rice unfit for distribution under Public Distribution System for ethanol production under the EBP programme. Only damaged rice unfit for distribution under Public Distribution System as certified by Tamil Nadu Civil Supplies Corporation and damaged rice procured from FCI shall be permitted for ethanol production under the EBP programme.

ix. To safeguard/avoid misuse of alcohol, the Prohibition & Excise Department shall provide guidelines on facilitation services for transportation and logistics for ethanol for EBP.

x. Fuel grade ethanol for supply to OMC shall attract GST. However, the end product - blended fuel will attract VAT. Any change in tax rates, tax structure, change in tax principles, or change in any applicable law, as directly applicable to EBP projects, in India/State of Tamil Nadu shall apply to Eligible Units.



5. Policy Implementation

5.1. Nodal Agency

The Industries, Investment & Commerce Department shall be the nodal agency for implementation of this Policy. The single window facilitation for ethanol projects under EBP shall be undertaken by Guidance through its Single Window Portal.

5.2. Project Monitoring and Coordination Cell

Guidance has established a Project Monitoring and Coordination Cell (PMC) to provide end-to-end facilitation on information, application and sanction of clearances and approvals. The PMC Cell shall provide investment facilitation for Eligible Units.

5.3. Operational Guidelines

Ethanol production is not covered under TNIP 2021. A high-level regulatory framework has been provided in this Policy and detailed operational guidelines/clarifications by the Government will be issued from time to time.

5.4. Term of Policy

The policy will be valid for a period of 5 years from the date of notification. The Policy may be periodically revised from time to time.

Abbreviations

BPCL	Bharat Petroleum
CPO-M	Central Procurement Organisation - Marketing
DFPD	Department of Food and Public Distribution
ESY	Ethanol Supply Year
EBP	Ethanol Blended Petrol
EoI	Expression of Interest
FCI	Food Corporation of India
GHG	Greenhouse Gases
GST	Goods & Service Tax
GoI	Government of India
GoTN	Government of Tamil Nadu
KLPD	Kilo Litres Per Day
KM	Kilo Meter
OMC	Oil Manufacturing Companies
MS Petrol	Motor Spirit Petrol
MoCA	Ministry of Consumer Affairs, Food & Public Distribution
NBCC	National Biofuel Coordination Committee
PDS	Public Distribution System
SEIAA	State Environment Impact Assessment Authority
TNCSC	Tamil Nadu Civil Supplies Corporation
TNIP 2021	Tamil Nadu Industrial Policy 2021
TNPCB	Tamil Nadu Pollution Control Board
TNSWP	Tamil Nadu Single Window Portal

Definitions

Advanced Biofuels

Fuels which are produced from lignocellulosic feedstocks (i.e., agricultural and forestry residues, e.g.,rice & wheat straw/corn cobs & stover/bagasse, woody biomass), non-food crops (i.e., grasses, algae), or industrial waste and residue streams, having low CO2 emission or high GHG reduction and do not compete with food crops for land use. Fuels such as Second Generation (2G) Ethanol, Drop-in fuels, algae based 3G biofuels, bio-CNG, bio-methanol, Di Methyl Ether (DME) derived from bio-methanol, biohydrogen, drop in fuels with MSW as the source / feedstock material will qualify as “Advanced Biofuels”.

Bioethanol

Ethanol produced from biomass such as sugar containing materials, like sugar cane, sugar beet, sweet sorghum etc.; starch containing materials such as corn, cassava, rotten potatoes, algae etc.; and, cellulosic materials such as bagasse, wood waste, agricultural and forestry residues or other renewable resources like industrial waste (as defined under the National Biofuels Policy 2018).

Ethanol

Ethanol is a chemical with the molecular formula C2H5OH

Ethanol Blended Petrol/ Blended Fuel

Ethanol blended with Motor Spirit as per percentage specified by the Government as per Bureau of Indian Standards specifications.

Fuel Grade Ethanol

Anhydrous Ethanol for use in automotive fuel as per IS 15464:2004 specifications or revisions thereof. Fuel Grade Ethanol under EBP programme has Ethanol content more than 99.5% and should meet IS 15464:2004 specifications or revisions thereof. Fuel grade Ethanol also contains denaturants, which makes it unfit for potable purpose. Denaturant is a substance completely miscible in ethyl alcohol and of such a character that while its addition makes the material or any aqueous dilution of it unpleasant and unwholesome for potable purposes,

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