

During FY 23, the Company announced capital expenditure of ₹ 175 crore which would lead to increased crushing capacity (from 61,000 TCD to 63,000 TCD), modernisation, refurbishment, debottlenecking and efficiency improvements at various sugar units, to enable cost optimisation. The CapEx will also go into process conversion and a new pharma facility to enhance the refined sugar production.

Following is a summary of the upcoming planned activities:

- Expansion in crushing capacity of Sabitgarh sugar unit by 2000 TCD, thereby increasing the crushing capacity to 9000 TCD
- Process conversion at Milak Narayanpur unit to refinery process (DRP)
- Setting up of another pharma sugar facility at one of the sugar units, besides the existing facilities at the Sabitgarh unit

The proposed increase in distillation capacity to 1,110 KLPD would further enhance the integrated operation capabilities, value additions and profitability for the Company.

To support the financial health of the industry and to ensure timely payments to the farmers, we would look forward to the Government's help in increasing the Minimum Selling Price (MSP) of sugar, as the domestic sugar prices are stagnant and have not been able to offset the increased costs, including sugarcane price increase in SS 2021-22, or another such possible increase in the forthcoming season.

## ALCOHOL BUSINESS

### Indian Ethanol Industry

#### Indian Ethanol Industry Overview

The Central Government has been focussing on reducing the country's dependence on imported crude oil while minimising the environmental impact resulting from pollution and emissions. The Government has been actively promoting the production and blending of fuel ethanol with petrol, and has targeted 20% blending through Ethanol Blended Petrol (EBP) Programme or EBP20 by 2025. EBP20, which was earlier targeted by 2030, was advanced in December 2020, reaffirming the Government's focus and commitment towards biofuels.

EBP20 will lead to numerous benefits, such as saving of ₹ 30,000 crore of foreign exchange per year, lower carbon emissions, self-reliance, use of damaged food grains, increased farmers' incomes, and better investment opportunities.

#### FY 23 Industry – Domestic Outlook:

- Out of the 511.5 crore litres finalised by the OMCs for the Ethanol Supply Year 2022-23 (December 2022 to October 2023) against a total requirement of 600 crore litres, contracts for 505.2 crore litres have been executed
- Out of the 523.5 crore litres finalised by the OMCs for the Ethanol Supply Year 2022-23 (December 2022 – October 2023) against a total requirement of 600 crore litres, contracts for 519.9 crore litres have been executed till May 21, 2023
- Against the above, 268.6 crore litres have been lifted by the OMCs till May 21, 2023
- The total lifted quantity is 52% of the contracted quantity and 51% of the finalised quantity
- The average blending percentage is 11.67% till May 21, 2023





#### Raw Material Wise Ethanol Contracted and Supplied Quantities

Raw Material	Total LOI Quantity	% of Total LOI Quantity	Total Contracted Quantity	Receipt Quantity	% of Total Receipt Against Total Contracted Qty
Sugarcane Juice	143.02	27%	136.27	118	87%
B-Heavy Molasses	230.05	44%	235.14	101.16	43%
C-Heavy Molasses	6.29	1%	5.71	3.19	56%
Damaged Food Grains	21.45	4%	18.98	6.7	35%
Surplus Rice	122.73	23%	123.79	39.49	32%
<b>Total</b>	<b>523.54</b>	<b>100%</b>	<b>519.9</b>	<b>268.55</b>	<b>52%</b>

Note: Till May 21, 2023

#### Quantity of Ethanol Supplied and Amount of Sugar Diverted from December 2022 to May 2023

- Till May 21, 2023, out of total ethanol supply of 268.55 crore litres, 118 crore litres have been supplied from Sugarcane Juice and 101.16 crore litres have been supplied from B-Heavy Molasses. For 118 crore litres, 17.70 lakh metric tonnes of sugar have been diverted and for 101.16 crore litres, 8.09 lakh metric tonnes of sugar have been diverted.
- Till May 21, 2023, total contracted quantity from Sugarcane Juice and B-Heavy Molasses is 136.27 crore litres and 235.14 crore litres respectively. For 136.27 crore litres, 20.44 lakh metric tonnes of sugar shall be diverted, and for 235.14 crore litres, 18.81 lakh metric tonnes of sugar shall be diverted.

#### Indian Ethanol Policy and Market Developments

The Government has been incentivising the industry through supportive ethanol prices under the EBP Programme. There were two major developments on the pricing front in FY 23:

**Ethanol Price Increase by Oil Marketing Companies (OMCs) for ESY 2021-22:** In June 2022, the OMCs have declared monetary relief on despatch of ethanol for supplies made between June 1, 2022 and November 30, 2022 as below. This was to compensate for high energy costs and to boost biofuel production, and was in addition to previously declared ethanol prices by the Government.

Feedstock	Relief Amount (₹/KL)
Sugarcane Juice/Sugar/Sugar Syrup based Ethanol	1604
B-Heavy Molasses based Ethanol	1493
C-Heavy Molasses based Ethanol	1179
Damaged Food Grain based Ethanol	2337
Surplus Rice based Ethanol	1437

#### Ethanol Price Increase by the Government for ESY 2022-23:

In November 2022, the Government announced higher ethanol prices under the EBP Programme for ESY 2022-23 as shown below. While prices have been increasing over the years, we believe that to meet the aggressive Ethanol Blended Petrol (EBP) target of 20%, the Government may need to rectify prices of ethanol produced from sugarcane juice and grain, to improve project viability to facilitate further additions in capacities.

Ethanol Supply Year (ESY) was also redefined as a period of ethanol supply from November 1 of a year to October 31 of next year, with effect from November 1, 2023. In view of the above change in ESY period, the ESY 2022-23 period will be considered from December 1, 2022 to October 31, 2023, i.e. 11 months

Feedstock	ESY 22-23 Basic Rate for Ethanol (₹ Per Ltr)	ESY 21-22 Basic Rate for Ethanol (₹ Per Ltr*)
Sugarcane Juice/Sugar/ Sugar Syrup based Ethanol	65.61	63.45
B-Heavy Molasses based Ethanol	60.73	59.08
C-Heavy Molasses based Ethanol	49.41	46.66
Damaged Food Grain based Ethanol	55.54	52.92
Maize based Ethanol	56.35	53.45
Surplus Rice based Ethanol (Sourced from FCI)	58.50	56.87

\* ESY 21-22 Basic Rates do not include relief amount

#### Incentives for maize production

In view of the limited scope for expansion of sugar and grain sectors to achieve the target of 20% ethanol blending and the decline in sugar production in SS 2022-23, the Government is also planning incentives for maize production. The Ministry of Agriculture, in collaboration with the Indian Institute of Maize Research, will boost maize production through the development of high-yielding varieties that have higher ethanol recovery. The distillery will work with farmers for assured procurement of maize on the lines of the sugar industry.

#### Automobile Sector updates on E20 and Flexible Fuel Vehicles (FFVs)

The progress and updates in the key end-user industry, i.e. automobiles, are important for achieving the targets of the Ethanol Blended Petrol (EBP) programme in a timely manner. Ethanol can be used in vehicles calibrated to that particular degree of ethanol blending (e.g., E20) or in Flexible Fuel Vehicles (FFVs) that can run on pure fossil fuel or fossil fuels blended with any degree of biofuels.

In India, with the adoption of BS6 Phase II norms, vehicles sold in the country need to be compatible with E20 fuel. The commercial launch of FFVs is expected to happen in the coming years. E20 dispensing commenced at more than 1,000 outlets in specified states from/before April 1, 2023, which will raise the demand further. There is an increased R&D investment in FFVs that are likely to roll over by 2025.

In India, new projects have commenced which will boost the demand for ethanol, such as FFVs, Ethanol Chulhas (Gas Stove), Ethanol Based Diesel Generators (DGs), Opening of Energy Hubs, Charging stations, Hydrogen, CBG, among others.