

# OPEX REDUCTION

**Maximize the output of your distillery and Minimize OpEx through advanced technological solutions from Praj.**

With the rapidly expanding base of ethanol plants in India—spanning fuel, industrial, potable, and value-added segments—distilleries face growing pressure to protect operating margins. **OPEX reduction** has therefore become a **strategic priority** across **both sugary and starchy feedstocks**.

Praj offers energy-efficient, multi-feed, multi-product solutions along with comprehensive OPEX reduction opportunities. Integrated **MVR and evaporative distillation** systems significantly cut steam consumption, lower utility costs, and typically achieve **payback within 1-3 years**.

## Why choose Praj for OpEx reduction

1. Reduce OpEx and expand throughput without adding boiler or turbine capacity
2. Rapid ROI driven by lower steam and fuel consumption with higher production volumes
3. Minimal CapEx enabled by extensive reuse of existing assets, utilities, and process infrastructure
4. Bolt-on, modular execution ensures minimal production downtime
5. Proven performance across diverse plant sizes, feedstocks, and process configurations

## Key Outcomes from Praj Interventions

- Significant OpEx reduction
- 30–50% capacity enhancement achievable within existing boiler and utilities
- 20–35% reduction in fuel consumption
- 30–40% reduction in freshwater usage and reduced effluent load
- Improved DDGS quality
- Higher fermenter titers, contributing directly to OpEx reduction

## Praj Interventions – Key Technologies



### Mechanical Vapor Recompression (MVR)

Significantly reduces steam duty, enhances thermal efficiency, and lowers overall utility costs.



### Eco Liv™

Transforms waste energy into essential process heat.



### EcoSmart ED® Evaporative Distillation and MSDH Upgrades

Enables significant capacity expansion while improving dehydration efficiency, product purity, and steam optimization—without adding load on existing boilers or utilities.



### Fermentation & Process Balance Upgrades

Enhances fermenter performance, stabilizes plant operations, and supports higher throughput within existing utility constraints.

## Customer's Voice



"Overall OpEx reduction **delivered significant fuel savings, improved gross margins and rapid payback.** The bolt-on execution ensured **negligible downtime.**"

"**Short payback periods** were achieved through a combination of **operating-cost reduction** and **revenue uplift** driven by higher throughput and improved process efficiency."



*CEO of large distillery in South India.*

**Contact Us** to schedule a technical assessment and quantify energy savings and capacity potential for your facility.

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