

# Elvee Jewels CASE STUDY

By partnering with 75F and embracing IoT-driven automation, Elvee Jewels has achieved significant energy savings—cutting consumption by 1,13,160 kWh since Feburary 2025. Enhanced visibility and intelligent controls have empowered the team to streamline facility management, reduce costs, and advance their sustainability goals. This transformation is a testament to Elvee’s commitment to responsible luxury and environmental leadership.



## THE BACKGROUND

Founded in 2017 in the heart of southern Gujarat, Elvee Jewels has quickly earned a reputation for elegance, sophistication, and responsible craftsmanship. Guided by a passion for timeless jewelry and a strong commitment to sustainability, The company seamlessly integrates cutting-edge technology with sustainable practices, ensuring that every piece of jewelry reflects both exceptional artistry and environmental responsibility.

From ethically sourcing lab-grown diamonds to adopting energy-efficient manufacturing processes, Elvee is dedicated to reducing its ecological footprint—while upholding the highest standards of quality and delivering an outstanding customer experience.

## THE CHALLENGE

Despite Elvee Jewels’ investment in energy-efficient equipment and eco-friendly processes, their manufacturing facility struggled with uneven temperature distribution. Persistent hot spots caused discomfort for artisans and threatened the quality of sensitive materials, while cold spots led to wasted energy and higher operational costs. These imbalances impacted on employee productivity, risked the integrity of lab-grown diamonds, and increased the company’s carbon footprint.

Elvee Jewels needed a solution to identify and address these temperature issues in real time, optimize HVAC operations, and create a consistently comfortable, sustainable workspace.

## AT A GLANCE

Location	Surat, Gujarat
Building Type	Manufacturing Plant
Area	68,300 Square Feet
75F® Solutions	BMS Integration
	Energy Management System
	Number of CCUs: 4
	Number of HyperStats: 5
Turnaround Days	Number of Energy Meters: 9
	30 days from start to commissioning



# THE SOLUTION

## Installation and Execution

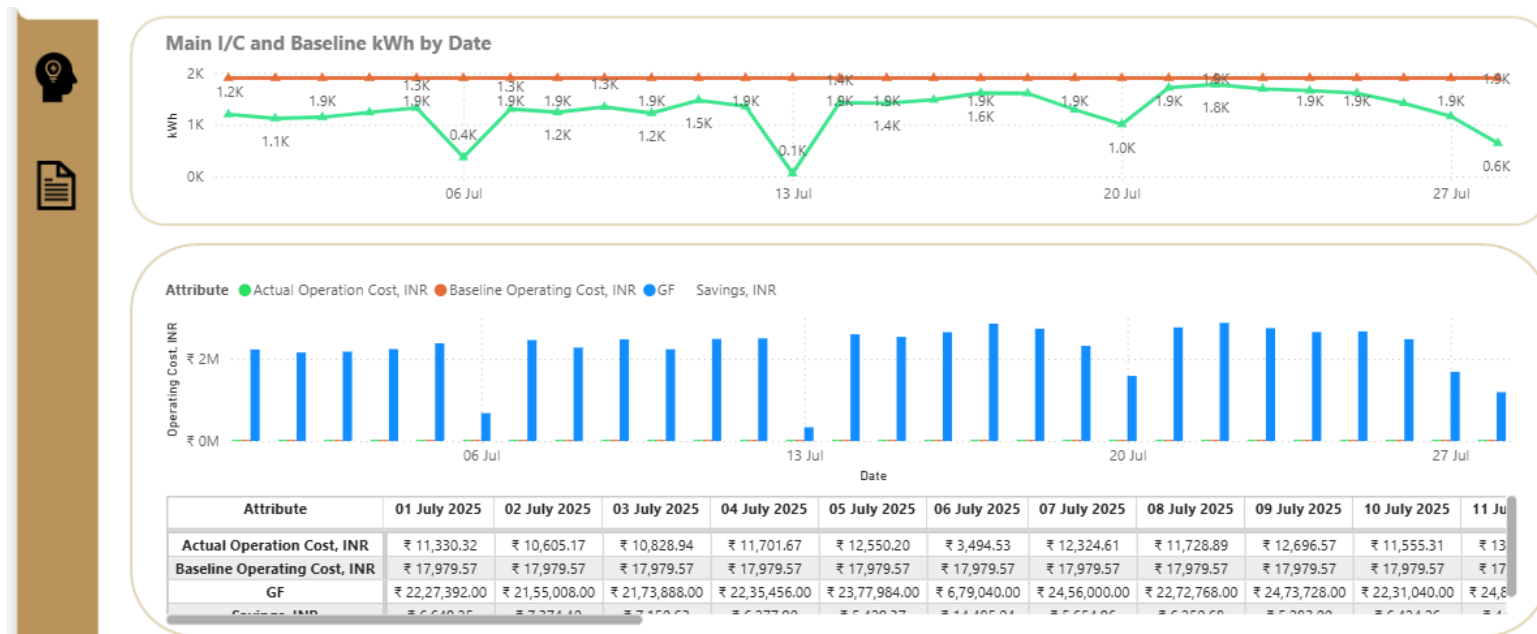
The retrofit project at Elvee Jewels called for the installation of advanced energy meters to boost energy monitoring and efficiency. This upgrade required a complete electrical shutdown for safe cabling, adding complexity to the project. Integrating the new meters with existing VRF and DX air conditioning systems also presented technical challenges, as the legacy equipment needed careful handling to ensure compatibility and continuous operation.

To minimize disruption, all shutdowns were meticulously planned and scheduled during late-night hours, outside of regular business times. The team worked closely with Elvee Jewels' operations staff, coordinating every step to fit the plant's 24/7 schedule. Detailed pre-installation planning—including site surveys, risk assessments, and clear task assignments—ensured a smooth process. On installation day, all resources were pre-staged, and responsibilities clearly defined, allowing the team to complete the upgrade within the strict one-hour window. Power was restored promptly, with no unplanned downtime, thanks to strong teamwork, proactive communication, and a shared commitment to operational excellence.

## Energy Management System

Elvee Jewels elevated its approach to energy management by partnering with 75F to implement a comprehensive, data-driven system. Smart sensors continuously monitor conditions throughout the facility, allowing the system to automatically adjust Variable Frequency Drives (VFDs) and fine-tune cooling output in real time. This ensures that energy is used efficiently, with cooling precisely matching the actual needs of each space.

To provide full transparency and actionable insights, energy and BTU meters were installed at every Air Handling Unit (AHU), as well as at key points across the facility's electrical infrastructure. With additional meters on the floor and distribution board levels, the operations team can now track energy consumption at a granular level—right down to individual breakers. This level of detail empowers Elvee Jewels to identify trends, optimize performance, and make informed decisions that support both operational excellence and sustainability goals.





35.92K

Consumption, kWh



359.23K

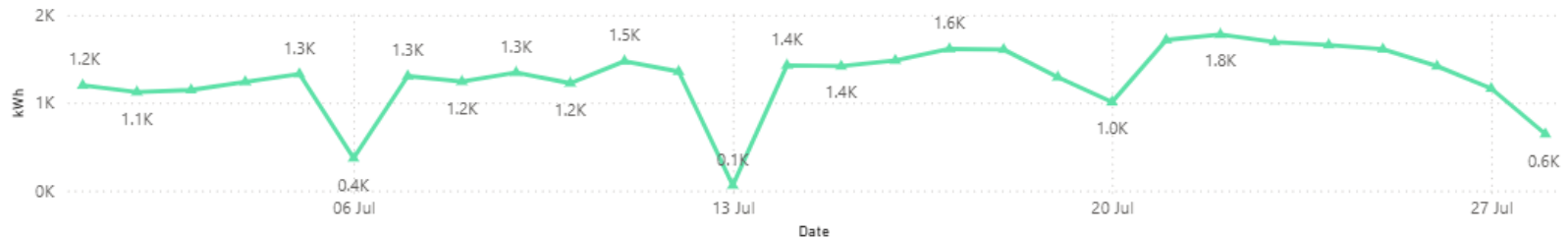
Operating Cost, INR



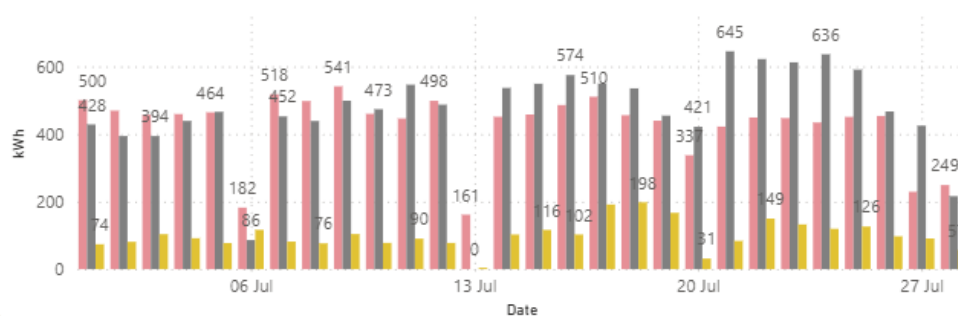
28.38

CO<sub>2</sub> Emission, Tons

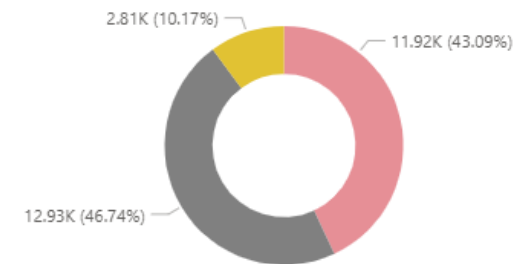
Main I/C kWh by Date



1F ODU, 2F AHU and 2F ODU kWh by Date



1F ODU, 2F AHU and 2F ODU kWh by Date



## 75F Facilisight

With the introduction of Facilisight, Elvee Jewels gained a powerful tool for managing HVAC energy use across their facility. Facilisight's intuitive dashboard combines real-time data from every zone, providing the operations team with a clear, consolidated view of system performance at a glance. Interactive charts and visualizations make it easy to spot trends, track occupancy, and identify areas for improvement—no technical expertise required.

Facilisight's intelligent automation eliminates the guesswork from HVAC management. The platform learns from daily activity patterns and automatically adjusts heating and cooling schedules to match actual building use. This ensures that comfort is maintained where and when it's needed, while eliminating unnecessary energy consumption. As a result, Elvee Jewels benefits from lower utility costs, improved comfort for staff and visitors, and a streamlined approach to building management—all from a single, user-friendly interface.

Parameters	25 Machinery 1	17 M6 office	22_Maintenance	05 Branding area	26 Machinery 2	01 Reception	02 HR extra	12 Meeting area	10 Cad area 3	08 Hotspot Cabin 2F	09 Cad area 2	11 Cad area 4	14 Account area	07 Cad area 1
Room Temperature	27.2	26.4	25.2	29.3	28.1	28.9	27.6	29.3	28.5	28.1	28.9	29.3	28.1	28.1
Set Temperature	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unit Command	SCHEDULE	SCHEDULE	SCHEDULE	SCHEDULE	ON	ON	SCHEDULE	SCHEDULE	ON	OFF	SCHEDULE	SCHEDULE	SCHEDULE	SCHEDULE
Unit Fan Status	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
Unit Fan Trip Status	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Valve Auto-Manual Command	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unit Mode Command	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unit Mode Status	-	-	-	-	-	-	-	-	-	-	-	-	-	-

## THE RESULTS

Since deploying 75F's **intelligent automation and remote monitoring**, Elvee Jewels has transformed its facility operations. Manual oversight has been dramatically reduced, with the system now providing **daily energy reports and instant alerts** for all 39 VRF units, 5 DX units, 9 energy meters, 5 HyperStats, and 4 CCUs. This **real-time insight** empowers the team to **address issues proactively** and keep every **system running at peak performance**.

**Automated scheduling and smart controls** have delivered **measurable energy savings**, while facility management has become more streamlined and responsive. With **enhanced visibility and control**, Elvee Jewels has achieved greater **operational efficiency and significant cost reductions**. The result is a **smarter, more sustainable, and future-ready operation**—perfectly aligned with Elvee's commitment to responsible luxury and environmental stewardship.

The impact is clear: since February 2025, the project generated an **energy saving of 1,13,160 kWh**, **reducing CO<sub>2</sub> emissions by 89.40 tons**. This is **equivalent to the environmental benefit of growing 85.47 tree seedlings for 10 years or electrifying 884 rural homes in India for a**. Elvee Jewels now enjoys a **smarter, more sustainable, and future-ready operation**—perfectly aligned with its commitment to responsible luxury and environmental stewardship.

“We at Elvee Jewels, Surat, are delighted to have chosen 75F as our trusted partner for intelligent building automation solutions. From the very beginning, the 75F team demonstrated a deep understanding of our unique requirements and provided us with innovative, energy-efficient solutions tailored to our needs.

Their advanced technology has significantly enhanced the comfort and efficiency of our premises, while also helping us achieve our sustainability goals. The seamless installation process, proactive support, and commitment to excellence have truly set 75F apart.

We highly recommend 75F Smart Innovations to any organization seeking reliable, smart, and future-ready building management solutions.”

**Mayur Lakhani** | Managing Director, Elvee Jewels



To learn more about our intelligent building solutions, visit [www.75f.io](http://www.75f.io)