

Hari Krishna Exports

CASE STUDY

Hari Krishna Exports selected 75F Solutions for their advanced IoT-based platform, which provides real-time monitoring and control of HVAC systems. By implementing 75F, they achieved substantial energy savings and reduced operational costs.

During our validation, post the commissioning, HK Exports realized impressive daily energy savings of 1,387.4 kWh, representing a 52% reduction from baseline consumption. The system's intelligent automation ensures optimal comfort while continuously tracking energy usage throughout the facility, reinforcing HK Exports' commitment to sustainability and operational efficiency.



THE BACKGROUND

Hari Krishna Exports is a globally acclaimed diamond manufacturing and exporting company celebrated for its unwavering commitment to quality, innovation, and ethical practices. With decades of industry expertise, the company consistently delivers meticulously crafted diamonds that meet the highest international standards, earning the trust of clients worldwide through integrity and excellence. At the core of Hari Krishna Exports' operations lies a strong emphasis on sustainability and energy efficiency.

By integrating advanced technologies with sustainable practices, Hari Krishna Exports continues to set new benchmarks in the diamond industry—balancing exceptional craftsmanship with a commitment to a greener future.

THE CHALLENGE

HK Exports struggled with consistently high energy consumption, largely driven by the absence of automation in their building systems. HVAC and lighting were operated manually, which not only increased the risk of human error but also made it difficult to ensure systems were running efficiently. This manual approach required substantial manpower for routine adjustments and monitoring, diverting staff from more critical tasks and driving up operational costs.

The client was looking for a smarter, more efficient solution that would reduce their reliance on manual intervention, optimize energy use, and ultimately lower both energy bills and labor requirements.

AT A GLANCE

Location	Bhatpore, Limla, Surat, Gujarat
Building Type	Manufacturing Plant
Area	6,00,000 Square Feet
	BMS Integration
	Energy Management System
75F® Solutions	Number of CCUs: 6
	Number of Energy Meters: 14
Turnaround Days	60 days from start to commissioning

See more client success stories at 75f.io/case-studies

THE SOLUTION

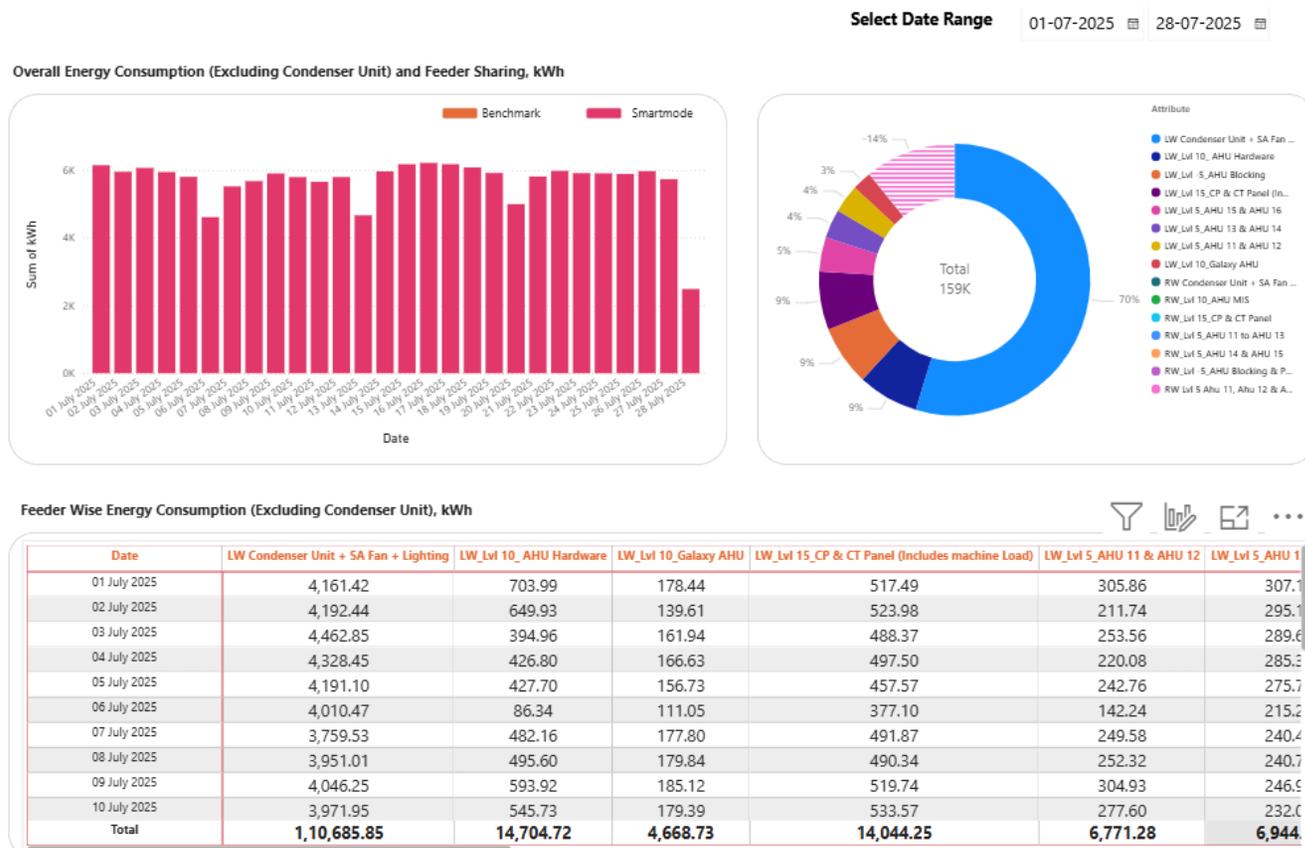
Installation and Execution

Integrating third-party actuators required careful planning, as the manufacturing plant operated 24/7 and installation could only occur during scheduled downtime provided by the client. To upgrade the energy monitoring system, our team needed to install new energy meters and remove the existing ones, which meant shutting down power to the entire plant for one hour. Through close collaboration and precise coordination with the client, we successfully completed the installation of all energy meters within the allotted time. This project was a success thanks to strong teamwork and effective communication.

Energy Management System

75F deployed advanced systems that automatically adjust Variable Frequency Drives (VFDs) using real-time sensor data, ensuring temperature and cooling levels are precisely matched to actual demand. This intelligent modulation maintains optimal comfort while significantly improving energy efficiency. To accurately track these improvements, energy meters and BTU meters were installed at each Air Handling Unit (AHU).

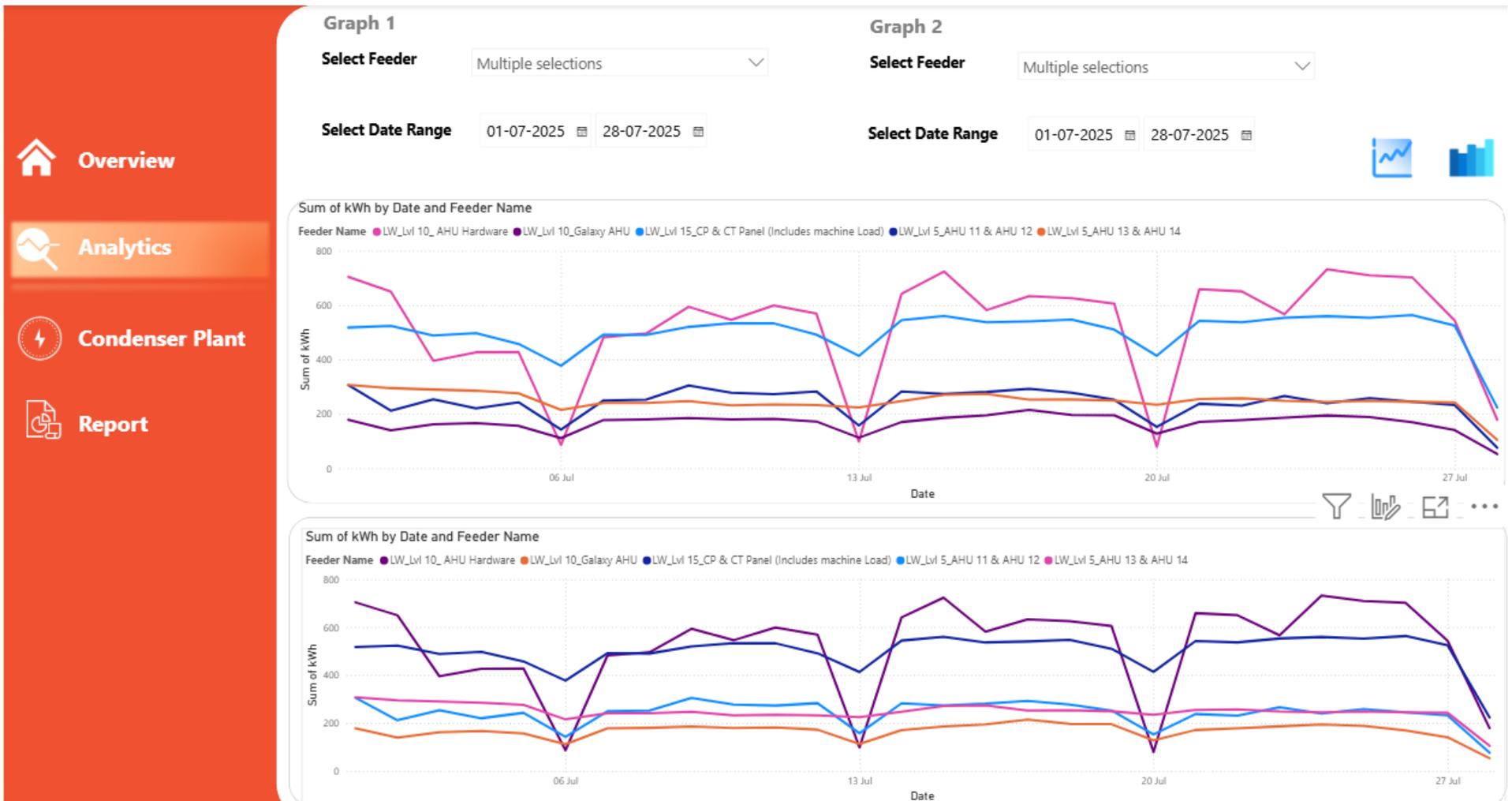
Additional energy meters at the floor and distribution board (DB) levels enable detailed, breaker-level monitoring and management, giving the facility team comprehensive insights into energy usage and system performance.



75F Facilisight

Facilisight delivers real-time, comprehensive insights into HVAC energy consumption across all your locations. Its AI-powered analytics transform complex data into clear visuals—like heatmaps and occupancy trends, making it easy for facility teams to track performance and spot opportunities for improvement. The intuitive interface allows teams to automate controls and make informed decisions that enhance both energy efficiency and occupant comfort, all with minimal manual intervention.

With smart scheduling, Facilisight automatically tailors HVAC operations to actual occupancy and usage patterns, ensuring systems operate only when necessary. This intelligent automation not only reduces energy waste but also maximizes efficiency throughout your buildings.



75F PORTFOLIO DASHBOARDS **SITE OVERVIEW** SITE EXPLORER FACILISIGHT ASSIST PORTFOLIO ANALYTICS

Sites HK Export All Floors All CCUs All Zones

Summary Tables Search For Parameter/Summary Tables

COOLER -3 -2 -1 0 1 2 3 HOTTER

Hierarchy View Priority Array & Edit Parameter Value ADD SUMMARY TABLE

HK Energy Meters - Summary_FS

Parameters	Active Energy	Voltage R	Voltage Y	Voltage B	Voltage R-Y	Voltage Y-B	Voltage B-R	Current R	Current Y	Current B	Current Average	Active Power Total	Apparent Power Total
RW Lvl10 Condsen EMR_4	567302.784	241.7	241.05	242.55	417.84	419.37	419.09	59.27	54.74	58.09	57.41	32.2853	33.0435
RW Lvl5 AHU11,12,13EMR_3	316558.144	241.77	240.65	242.07	417.38	418.94	418.52	22.04	28.27	32.32	27.48	-14.2318	14.6366
RW Level -5 AHU EMR_5	44018.032	241.31	240.85	242.25	417.22	418.9	418.42	2.23	0	0	0.74	0.5184	0.5184
RW Level 10 AHU EMR_6	57707.9	241.41	240.88	242.35	417.38	419.03	418.62	0	0	0	0	0	0
RW Cooling Tower EMR_1	93452.376	241.51	240.69	242.37	417.49	418.93	418.64	1.1	4.05	0.55	1.9	1.2253	1.2253

HK Blue Star DX Unit Summary_FS

Parameters	HARDWARE_04	HARDWARE_08	HARDWARE_07	HARDWARE_02	GALAXY ROOM 02	HARDWARE_06	HARDWARE_05	GALAXY ROOM 01	HARDWARE_03	HARDWARE_01	FL POLISHING 04	FL POLISHING 05	FI
Room Temperature	24	24	24	24	24	24	24	24	24	23	24	27	26
Set Temperature	24	24	24	24	24	24	24	24	25	24	24	24	24
Unit Command	SCHEDULE	SCHEDULE	SCHEDULE	SCHEDULE	SCHEDULE	SCHEDULE	SCHEDULE	SCHEDULE	SCHEDULE	SCHEDULE	SCHEDULE	SCHEDULE	SCH
Unit Fan Status	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON
Unit Fan Trip Status	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NOI
Valve Auto-Manual Command	MANUAL	MANUAL	MANUAL	MANUAL	MANUAL	MANUAL	MANUAL	MANUAL	MANUAL	MANUAL	MANUAL	MANUAL	MAI
Unit Mode Command	COOL MODE	COOL MODE	COOL MODE	COOL MODE	COOL MODE	COOL MODE	COOL MODE	COOL MODE	COO				
Unit Mode Status	COOL MODE	COOL MODE	COOL MODE	COOL MODE	COOL MODE	COOL MODE	COOL MODE	COOL MODE	COO				

THE RESULTS

With 75F’s solution in place, HK Exports experienced a remarkable transformation in facility management. **Advanced automation and remote monitoring** reduced the need for manual intervention, while daily **energy consumption reports and real-time alerts** for all 64 AHUs, 6 pumps, and 4 cooling towers enabled **proactive maintenance and efficient operation**. **Automated scheduling and control** delivered **measurable energy savings** and streamlined facility management processes.

During our validation after commissioning, HK Exports achieved an impressive **1,387.4 kWh of energy savings per day**, equivalent to a **52% reduction from baseline consumption per day**. This resulted in **improved operational visibility, increased efficiency, and significant cost reductions**. Overall, HK Exports now benefit from **smarter, more sustainable operations and a future-ready approach to energy management**.

“ At Hari Krishna Exports, we have integrated 75F’s smart building automation solutions into our facilities and have experienced remarkable improvements in energy efficiency and operational control. The intuitive interface and advanced IoT technology enable us to monitor and optimize our HVAC systems remotely, reducing energy consumption and maintenance costs significantly. 75F’s scalable and customizable solutions have empowered us to create a more comfortable and sustainable environment for our team and customers. We highly recommend 75F for any organization looking to modernize their building management with cutting-edge technology. ”

Naresh Lunagariya | Director, Hari Krishna Exports

