

How Crystal Convention Center Trichy Replaced Manual Energy Guesswork with Smart Nova — and Became the First Convention Space in the Region to Bill Every Watt Automatically

Crystal Convention Center in Trichy has three convention halls that can host a thousand guests at once, fifty-two air-conditioned rooms, a full kitchen operation, and a lobby with its own AC load. Before Smart Nova, the billing team estimated energy use after every function and applied a flat rate. EnSmart deployed Smart Nova across the entire facility — connecting every energy meter, tracking every zone, calculating every bill automatically with unit rates, CGST, and SGST.

Client: Crystal Convention Center · Location: Manikandam, Tiruchirappalli, Tamil Nadu · Platform: Smart Nova Tenant Billing & Energy Management · Live Since: September 2025

At a Glance

3 Convention Halls Automated — 1000, 600 & 150 Capacity	52 AC Rooms on Smart Nova	7 Energy Meters Across Halls, Kitchen & Lobby	250+ Vehicle Parking Facility
First Convention Centre in Trichy on Smart Nova			

Every Event Used Energy Differently. Nobody Could Measure How Much — or Bill for It Accurately.

Imagine a hotel that charges every guest the same room rate regardless of whether they used the AC all night or never turned it on. That is exactly how most convention centres in India handle energy billing today — a fixed package rate that has nothing to do with actual consumption. At Crystal Convention Center, the situation was the same. A wedding in Opal Hall 1 that ran the AC for twelve hours was billed the same way as a corporate meeting that used it for three. The kitchen ran its full load for a 1000-person banquet and for a 50-person breakfast — the energy cost was absorbed into a flat package either way. The facility had no meter-level visibility, no zone-wise consumption data, and no automated billing engine. Every invoice was a judgment call. And when a client questioned the bill, there was no data to show them — only an estimate backed by experience, not evidence.

Every Invoice Was a Judgment Call

- **No zone-wise energy metering** — halls, kitchen, lobby AC, and rooms had no individual consumption data.
- **Billing was based on flat package rates** — actual energy consumption had no relationship to what was charged.
- **No automatic bill generation** — every invoice was manually calculated after each event, consuming staff time and introducing errors.
- **No GST breakdown in billing** — CGST and SGST calculations were done manually and were prone to mistakes.
- **No real-time energy monitoring** — the facility team had no live view of which hall or zone was consuming how much at any given moment.
- **No historical consumption data** — when energy costs rose, there was no way to identify which zone was responsible.
- **No accountability for clients** — a client who wanted proof of their energy usage had no document to show them.

"A wedding in Opal Hall 1 that ran the AC for twelve hours was billed the same way as a corporate meeting that used it for three."

This Was the First Time a Convention Centre in Trichy Was Run on Intelligent Energy Accountability. That Is Not an Upgrade — That Is a Transformation.

First Convention Centre in Trichy on Smart Nova

Crystal Convention Center is not just a new Smart Nova installation — it is a first for the region. No convention facility in Trichy had deployed automated tenant billing and energy management at this scale before. EnSmart, through partner M/s. Josh Automation, made it happen.

Zone-Wise Energy Metering Across the Entire Facility

Smart Nova connects and tracks seven energy meters covering every major zone — Opal Hall SSB 1, Opal Hall SSB 2, Kitchen SSB 1, Kitchen SSB 2, Lobby AC, Opal Hall 1 AC, and Opal Hall 2 AC. Every zone has its own consumption record, updated in real time.

Automatic Billing With Unit Rate, CGST, and SGST

Smart Nova generates bills automatically. Opening reading, closing reading, consumption in KWH, unit rate, amount, CGST at 9%, SGST at 9%, and grand total — all calculated and printed without a single manual entry.

Energy Cost Report — Client-Ready and Transparent

Every event can now receive a detailed Energy Cost Report showing exactly which meters were active, how many units were consumed, what the unit rate was, and what the final bill is including tax. No disputes. No estimates.

52 AC Rooms on the Same Platform

All fifty-two guest and participant rooms are integrated into Smart Nova. Room-wise energy consumption is tracked, logged, and available for billing alongside the hall and kitchen data.

If Your Venue Charges a Flat Rate Because You Have No Way to Measure Actual Consumption, This Is Your Story

Relevant for Teams Managing Relevant Roles

- Convention Center
- Banquet Hall
- Hotel
- Hospitality Venue
- Facility Manager
- Operations Head
- Billing Manager
- Property Owner

What This Case Study Covers

- How Smart Nova was deployed across a large convention facility with three halls, fifty-two rooms, a kitchen, and a lobby — all on one platform.
- How seven energy meters were integrated and mapped to specific zones so every watt consumed in every part of the building is tracked separately.
- How Smart Nova generates automatic Energy Cost Reports — opening reading, closing reading, KWH consumption, unit rate, amount, and GST breakdown — without any manual calculation.
- How Crystal Convention Center moved from flat-rate package billing to consumption-based billing that is fair, transparent, and provable.
- Why convention centres are one of the most underserved building types when it comes to energy accountability — and how Smart Nova addresses that gap.
- What a convention centre's Energy Cost Report looks like in Smart Nova and how it is used in client billing.

What Changed at Crystal Convention Center After Smart Nova Went Live

Every Event Now Billed on Actual Consumption Opal Hall 1 running AC for twelve hours is billed for twelve hours of measured KWH. A smaller function in the 150-seat hall is billed for what it actually used. Flat-rate guesswork is gone.	Bills Generated in Seconds, Not Hours Smart Nova reads the energy meters, calculates consumption, applies the unit rate, adds CGST and SGST, and produces a complete Energy Cost Report automatically.
Zero Billing Disputes From Energy Charges Every client receives a detailed Energy Cost Report showing meter name, opening reading, closing reading, consumption, unit rate, and amount. There is nothing to dispute.	Full Facility Energy Visibility for the First Time The facility management team can see live consumption across all seven meter zones — halls, kitchen, lobby, and room AC — at any time.
Historical Energy Data Now Exists Every event, every hall, every day — Smart Nova logs it all. The facility team can look back at any period, identify high-consumption events, and compare hall-wise usage.	52 Rooms Billed With the Same Accuracy Guest and participant rooms are on the same Smart Nova platform as the halls. Room energy billing is now as accurate and automatic as hall billing.
Trichy's Convention Industry Has a New Benchmark Crystal Convention Center is the first venue in the region to operate at this level of energy intelligence — a competitive advantage that every other venue in the region will eventually need to match.	

From First Site Visit to Full Facility Billing — September 2025

Phase	Milestone
Phase 1	Energy meter integration: all seven meters connected to Smart Nova — Opal Hall SSB 1 & 2, Kitchen SSB 1 & 2, Lobby AC, Opal Hall 1 AC, Opal Hall 2 AC — live readings verified for each zone.
Phase 2	52 room integration: all AC rooms connected to Smart Nova, room-wise consumption tracking enabled and verified.
Phase 3	Billing configuration: unit rates configured, CGST and SGST at 9% each set up, Energy Cost Report template built and tested with live meter data.
Phase 4	Testing and commissioning: full billing cycle tested end to end — meter reading, consumption calculation, GST application, report generation — verified accurate across all zones.
Phase 5	Handover and go-live: facility team trained on Smart Nova billing and energy monitoring, first live Energy Cost Report generated, Crystal Convention Center live on Smart Nova — September 2025.

Frequently Asked Questions

Q: How does Smart Nova know how much energy each hall used during a specific event?

A: Smart Nova reads the opening meter reading when the event starts and the closing reading when it ends. The difference is the consumption in KWH for that event in that zone. The system applies the configured unit rate and generates the bill automatically. Every reading is timestamped and logged.

Q: Can the facility set different unit rates for different halls or zones?

A: Yes. Unit rates are configurable per meter zone in Smart Nova. If the convention centre wants to charge a different rate for hall AC versus kitchen power, that can be set independently for each meter.

Q: What does the Energy Cost Report look like for a client?

A: The report shows the client name, billing period, address, and a table listing each active meter — meter name, opening reading, closing reading, consumption in KWH, unit rate, and amount. Below the table the report shows subtotal, CGST at 9%, SGST at 9%, total GST, and grand total. It is a clean, professional document that can be handed directly to the client.

Q: Does Smart Nova handle the 52 rooms the same way as the halls?

A: Yes. All fifty-two rooms are on the same Smart Nova platform. Room energy consumption is tracked meter by meter, billed the same way as the halls — consumption multiplied by unit rate plus GST — and available in the same reporting system.

Q: Can Smart Nova generate reports for a specific date range — like a single day's event?

A: Yes. The Energy Cost Report is date and time configurable. The facility can generate a report from any start date and hour to any end date and hour — making it suitable for single-day events, multi-day conferences, or monthly summaries.

3 Halls. 52 Rooms. 7 Meters. Every Watt Accounted For.

Crystal Convention Center in Trichy hosts weddings, conferences, and banquets across three halls, fifty-two rooms, a kitchen, and a lobby — and until Smart Nova, every one of those events was billed on a guess. Now every hall, every room, and every kitchen load is metered, tracked, and billed automatically with a client-ready Energy Cost Report that leaves nothing to dispute.

Smart Nova Tenant Billing & Energy Management. Three halls. Fifty-two rooms. One platform. Live since September 2025.

If Your Venue Still Bills on a Flat Rate, This Is Where That Changes.

If your convention centre, banquet hall, or hospitality venue charges a flat rate because you have no way to measure actual consumption, Crystal Convention Center's story is exactly where your conversation with EnSmart should begin.

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