

How Nayara Energy Collapsed Fleet Risk Response from 24 Hours to Near Zero

Sub-4-second in-cab intervention, AI-powered behavioural telematics, and structured coaching - deployed across a multi-thousand tanker fleet moving flammable liquids across multi-state corridors

Overview

Nayara Energy, one of India's leading integrated downstream energy companies, operates thousands of tanker vehicles across multi-state corridors transporting petroleum products under high-risk operating conditions.

The company needed to close a structural gap in how fleet risk was being managed. Traditional telematics reported incidents after they happened. By the time a coaching conversation was scheduled, the risk window had already closed - often by 24 hours or more.

Novus Hi-Tech replaced that lag with real-time intervention. Through AI-powered in-cab monitoring, sub-4-second alerts, behavioural analytics, and structured coaching, Nayara Energy moved from post-event reporting to in-the-moment correction - and the fleet-wide outcomes followed.

Results at a Glance

46%

fewer road-behaviour violations

55%

fewer fatigue alerts per 1,000 km

55-60%

Reduction in Distraction Events

<4 sec

intervention lag (down from 24 hours)

CLIENT AT A GLANCE

**SECTOR**

Petrochemicals / Oil & Gas

**FLEET**

Multi-thousand vehicles

**COVERAGE**

Multi-state, India

**CARGO**

Flammable liquids

**OPERATIONS**

24/7 night-heavy cycles

The Challenge

Nayara Energy operates one of the largest dangerous-goods road transport networks in India, with thousands of tankers carrying flammable liquids across multi-state corridors, day and night. For a board governing this scale of exposure, safety is a fiduciary mandate, not an operational KPI.

Yet the existing telematics stack had a structural flaw no policy could solve: it told managers what went wrong, not what was going wrong. Incident logs surfaced 24 hours after the event. By then, the risk window had closed and the next one had already opened.

THE CORE TENSION

The gap between a risk event and a corrective response was measured in hours. In flammable-cargo logistics, that gap is not an operational inefficiency - it is the incident itself, waiting to happen.

Four Compounding Risk Factors

01 Multi-Thousand Vehicle Scale

Unsafe patterns remain hidden without fleet-wide behavioural intelligence.

02 Night-Heavy Duty Cycles

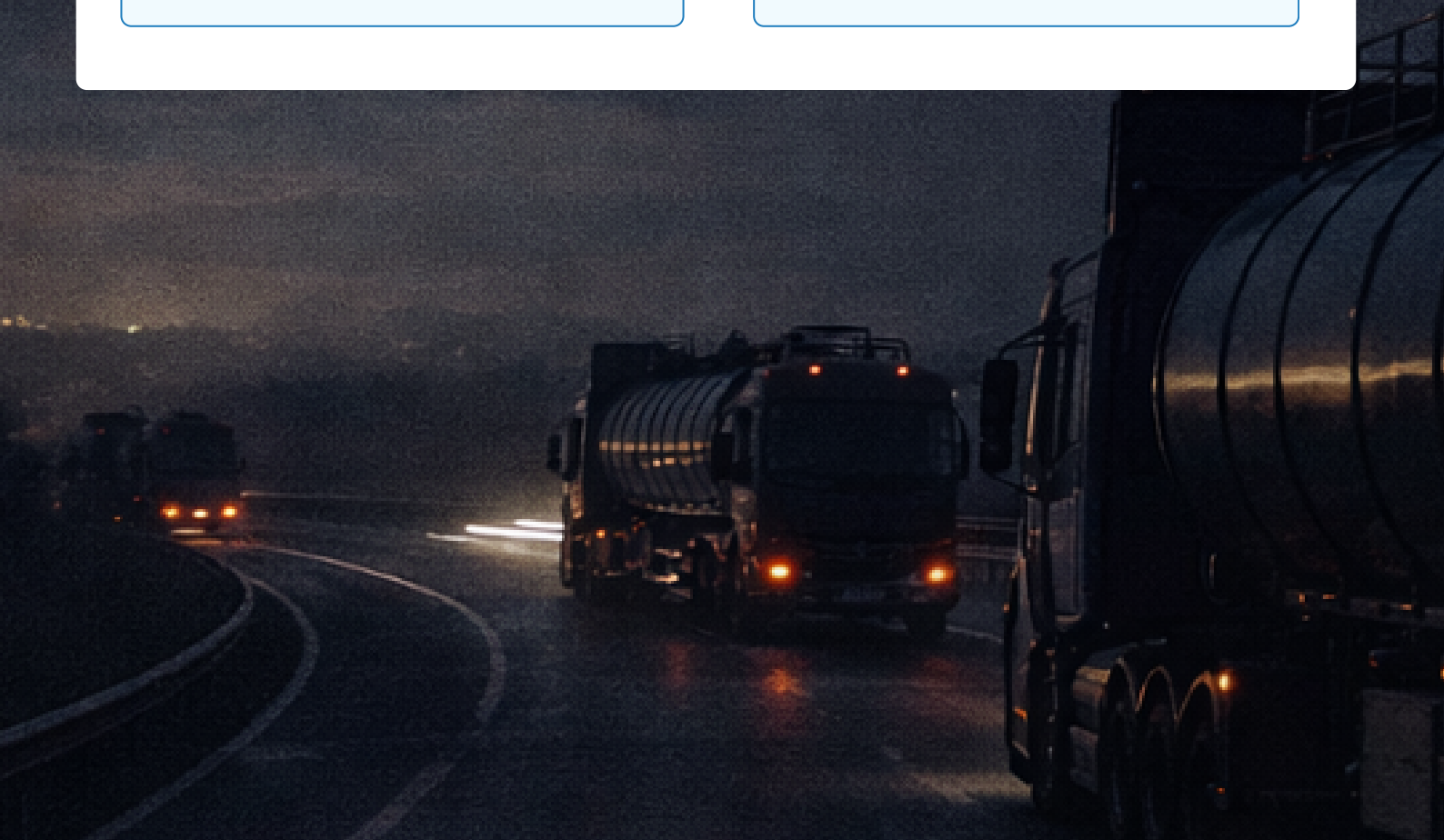
Fatigue risk increases when visibility and alertness decline.

03 Flammable Cargo, Zero Margin

One distraction event can create outsized consequences.

04 ESG & Insurance Scrutiny

Incident rates directly influence disclosures, premiums, and stakeholder confidence.





Our Solutions

Novus Hi-Tech deployed a three-layer behavioural safety system built to compress response time from hours to seconds.

Layer 1: AI-Enabled Monitoring

AI-powered sensors continuously tracked driver state - eye movement, blink rates, head position, and handheld device use. The instant a threshold is crossed, an in-cab audio alert fires. Not logged for review. Not queued for debrief.



Eyes-off-road detection



Handheld mobile-use alerts



Micro-fatigue & drowsiness indicators



Continuous in-cab audio warning

Layer 2: Enterprise-Level Risk Visibility

Trip-wise violation indexing, continuous-driving duration tracking, night-driving assessment, and overspeeding flags gave fleet managers a live, forward-looking picture of where risk was concentrating - not a backward-looking incident report.



Live fleet-wide risk dashboard



Night-driving & fatigue heat mapping



Trip-wise violation indexing



Driver-level performance baselining

Layer 3: Coaching & Positive Reinforcement

Structured monthly driver review cycles anchored in real trip data. Targeted guidance addressed repeat-risk profiles before patterns became incidents. A formal recognition programme awarded 1,000+ positive acknowledgments.



Monthly data-driven coaching cycles



1,000+ driver recognition instances

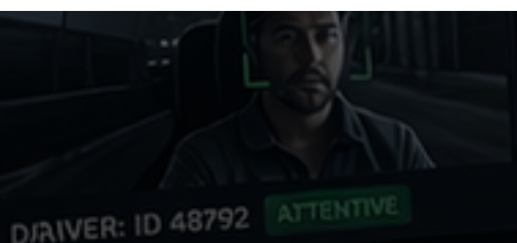


Repeat-risk profile targeting



Culture of safety ownership, not compliance

We aren't just monitoring drivers. We're recognising the ones doing it right. That changes the culture entirely.



Results & Impact Metrics

As independently validated in the organisation's Annual Report FY 2023-24, the Novus Hi-Tech deployment delivered measurable, sustained outcomes across the full fleet over 18 months. These were not short-term compliance spikes. The sustained trendline was the proof.

46%

Reduction in Road Behaviour Violations

Annual monitored violations decreased significantly across the fleet.

55%

Reduction in Drowsiness Alerts

Drowsiness alerts per 1,000 km declined from approximately 1.5 to 0.7 over an 18-month period.

55-60%

Reduction in Distraction Alerts

Distraction alerts per 1,000 km dropped from approximately 4.5 to 2.0 over the same period.

Before vs. After - Key Metrics

Metric	Before Novus	After 18 Months	Improvement
Road-Behaviour Violations	Baseline (100%)	54% of baseline	46% reduction ↓
Drowsiness Alerts / 1,000 km	~1.5 events	~0.7 events	~55% reduction ↓
Distraction Alerts / 1,000 km	~4.5 events	~2.0 events	55-60% reduction ↓
Risk Response Time	24 hours (post-event)	< 4 seconds (real-time)	Near-Zero lag ↓
Coaching Basis	Generalised, delayed	Trip-level, monthly	Data-driven precision

Hidden Fleet Risk Rarely Appears in Reports Until It Becomes Expensive.

[Book a Fleet Risk Assessment](#)

Identify preventable risk exposure, coaching gaps, and behavioural hotspots across your fleet.



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