VOLVO



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Towards zero emissions VOLVO FM 420 4X2 LNG TRACTOR

APS Mining and Infrastructure India Pvt. Ltd.



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FROM THE EVP'S DESK

"At Volvo Trucks, we remain committed to driving progress in the trucking sector, embracing the future, and leading the transition to sustainable transport solutions globally."

Dear Partner,

As we reflect on our journey, I am filled with pride in the progress we have made, a testament to the strength of our partnership and shared vision. Navigating through industry complexities, your resilience and determination shine through in our combined success.

At Volvo Trucks, we remain committed to driving progress in the trucking sector, embracing the future, and leading the transition to sustainable transport solutions globally.

In India , we have introduced gas-powered trucks for express cargo logistics, marking our first step towards offering alternative fuel solutions and have plans to expand into other segments. Looking ahead, we are excited about the opportunities. We focus on delivering world-class products, services, and solutions that meet your evolving needs.

In this edition of Wheels Magazine, we celebrate our customer's achievements, embodying innovation and excellence. We share insights into our latest technologies and initiatives to enhance productivity, safety, and sustainability. Thank you for your continued trust and partnership.

Together, let us drive progress.

Happy reading!

Warm regards,

Dinakar B Executive Vice President Volvo Trucks India, VECV



VOLVO FUEL EFFICIENCY SERVICES (FES)

New technologies create better drivers.

Connectivity and data analytics are creating new opportunities in driver development and coaching. It has the potential to improve fuel consumption, uptime and safety.

There are many factors that influence a truck's fuel consumption – many of which are outside of the driver's control. However, driving technique does make a difference and any investment in driver development and coaching is likely to be returned through lower consumption, fewer accidents and reduced wear on components.

The challenge when it comes to driver development is knowing which specific skills can be improved. Connectivity and data analytics are making it easier to identify these potential improvements, giving businesses and drivers the opportunity to tailor coaching accordingly.

Trucks today produce vast amounts of data every time they are out on the road, and this data can generate useful insights. For example, is there a specific route or stretch of road where fuel consumption is always higher? Or certain situations where harsh braking is more common?

Whether drivers are beginners or experienced, the right type of driver coaching together with connectivity and data analytics, could help any driver to perfect their technique and make an impact on any business.



Finding new avenues to help our customers succeed is our priority. That's why we are constantly developing innovative products and services to optimize operations. Our new Fuel Efficiency Services program is a game-changer. It combines cutting-edge data analysis with the expertise of our experienced driver trainers, resulting in unprecedented fuel savings.

Redefining fuel efficiency

Fuel expenses constitute 50-60% of total costs of transportation in mining. Our trucks are seamlessly connected. They constantly collect and transmit data to our advanced telematics platform, Volvo Connect. The data on Fuel Efficiency and performance can be accessed through Volvo Connect. With the FES tool insights are generated for each driver that highlights the areas of improvement.

Armed with these insights, our driver trainers gain a clear understanding of each driver's performance. This data-driven approach allows them to tailor their training, maximizing its effectiveness in boosting your fleet's fuel efficiency.

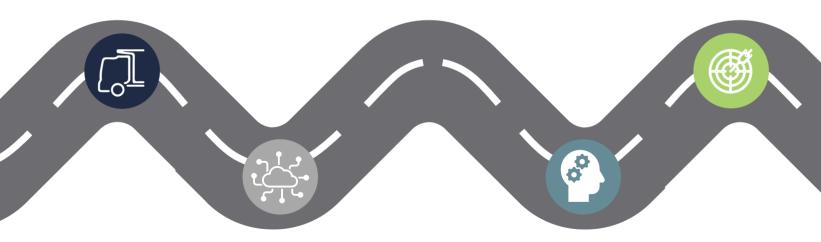
How does it work

Vehicle in operation

Our trucks are well-connected and constantly collect and send data to Volvo Connect.

Customised Driver Training

The generated actionable insights are followed up through a custom-made driver engagement on the ground by our experienced driver training team.



Volvo Connect

The data on Fuel Efficiency and performance can be accessed through Volvo Connect.

Analytics

Using advanced analytics, we generate actionable insights for each driver through the FES tool.

New approach to driver training



- ► Pre-study of driver behaviour & site conditions
- Data analytics & advisory generation through FES toolbox - identification of individual training needs
- Driver coaching, individual attention through FES report
- Monitoring efficacy
- Report discussion & Sign-off sharing driver wise report card
- Add-on Refresher in subsequent month

Advantages of FES



Improved Efficiency

Helps in improving fuel efficiency, and with improved driving behaviour, the use of assets are best optimised

Improved Operation Helps in improving site conditions to further improve FE

Personalized Driver Training Programs

One-one personalized training program with a month-on-month report card and evaluation

Cost Efficiency

For every litre of fuel saved, there is a direct reduction in your operational costs!

CUSTOMER STORY

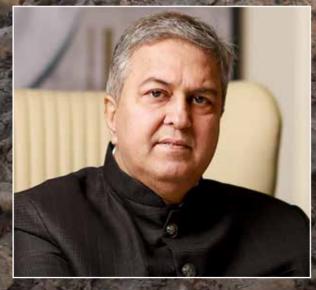
FUEL EFFICIENCY SERVICES The game changer

Eagle Infra India Limited

Founded in 1981, Eagle Infra is an established construction company headquarted in Ulhasnagar, Maharashtra. Eagle Infra recently ventured into coal mining and is associated with Volvo Trucks since 2022.

Led by Mr. Udhav M Rupchandani, the mining business is overseen by Mr. Deepak Khubchandani, Director of Mining Projects.

Mr. Amresh Kumar Mishra, General Manager, Mining Projects, who manages the day-to-day operations at the Kamptee site shares insights on how Volvo FES is playing a key role in their success.



Mr. Udhav M Rupchandani CEO, Eagle Infra India Limited

"Fuel costs in coal mining projects are 60-62% of total transportation costs. With FES we achieved upto 20% fuel savings per truck per month."

Mr. Amresh Kumar Mishra, General Manager, Mining Projects

Tell us about the Kamptee mining project

We began the Kamptee Project almost 2 years ago, where we have a task of excavating 20,000 cubic meters of overburden (OB) each day.

Volvo Trucks support has been instrumental in achieving outstanding productivity.

Why did you opt for Volvo FES?

Initially, the driver's unfamiliarity with the FMX460s advanced features presented a hurdle. Coming with experience on FMX440 tippers, they struggled to optimize the FMX460's capabilities. This led to challenges in controlling fuel consumption.

In a pilot program, we implemented Volvo's FES Service package for five trucks over six months. The package included customized theory and practical driver training delivered on site by Volvo driver trainers.

To compare the advantages of FES, we divided our drivers into two groups: one received FES training and the other did not.



What were the results from FES?

The results were impressive. Drivers who underwent FES training saw a significant increase of upto 20% in fuel efficiency. Additionally, the program reduced vehicle idling time and boosted overall operational efficiency. Breakdowns have also decreased, and all our drivers have become more skilled.

Throughout the FES program, we closely monitored fuel consumption and were pleased to observe a steady decrease, with significant cost savings in fuel. These impressive results instilled confidence in our decision to expand the FES program to include the remaining trucks.

Beyond the measurable fuel savings, the FES program also achieved substantial improvements in uptime and maintenance costs, surpassing our internal benchmarks.

How was FES implemented?

Volvo's meticulous implementation of the FES process included regular trainer visits and a comprehensive driver training



program. The training was divided into theoretical and practical components. Theoretical sessions focused on an in-depth understanding of the FMX460's features and their optimal usage. They also addressed persistent driver issues and provided strategies to overcome them.

Following the theory, practical sessions provided individual driver assessments. Based on these assessments, the trainer offered personalized corrective measures. This targeted approach resulted in a remarkable improvement in the performance of FES-trained drivers, as evidenced by their consistent A+ ratings.

Each driver's performance was evaluated every two weeks and every driver was trained to correct driving practices to improve fuel efficiency.

What is the end benefit of FES?

The benefits of FES program far outweigh the investment. By implementing FES, we've observed a significant fuel cost saving of upto 20%.

Volvo Trucks commitment does not

end with initial training. Constant engagement and monitoring promotes driver development, preventing complacency. Regular trainer visits during the subscribed period reinforce good practices and act as an ongoing improvement program.

How does the training help the drivers beyond driving practices?

The FES program not only enhanced driver operational skills but also fostered a strong sense of camaraderie. Sharing knowledge during training sessions sparked a competitive spirit, leading to in-house fuel efficiency competitions. This collaborative environment encouraged drivers to showcase their best practices and constantly strive for improvement.

The program addresses the needs of the drivers as well. Since a large portion (around 80%) might lack formal education, the training provides them with valuable knowledge through theory, practical exercises, and technical instruction. This equips them to handle challenges more effectively and navigate driving situations with confidence. The training even extends beyond technical skills, fostering teamwork and improving overall job satisfaction.

The FES program instilled a sense of self-respect in the drivers and deepened their bond with Eagle Infra. The organization's commitment to its development fostered a culture of excellence. Drivers now actively support each other, offering help if any colleague faces issues. They even proactively alert management to problems at the site.

Furthermore, the program's focus on safe driving techniques has significantly reduced over-speeding and consequently, collisions. This, combined with their refined skills, has transformed the drivers into valuable assets. They now assist supervisors in identifying faults in haul roads and site conditions, contributing directly to Eagle Infra's overall efficiency.

How has opting for Fuel Efficiency Service benefited in reducing the maintenance costs of your fleet?

The program has led to considerable savings on maintenance. With the improvement in driver behavior and driving practices we have observed better asset life. For instance, anticipated braking have reduced wear and tear of components like brake pads, brake liners & suspension. In fact, our vehicles have

> reached 10,000 engine hours without needing replacement of brake pads. This efficiency directly results from the skills drivers gain through the program.

To what do you attribute the success of the Volvo FES Program?

Volvo's Service team's dedication towards extending proactive support was commendable. The team not only

kept us informed about our fleet's performance on a day-to-day basis but also shared their observations on the site conditions. These in-depth insights allowed us to identify operational issues we might miss on our own, leading to better decision-making.

Building a High-Performing Team

Volvo Trucks commitment extends to driver training. Their trainers transform semi-skilled drivers into highly skilled Volvo Truck Drivers. Additionally, Volvo Connected Services provides critical data on driver behaviour, idling time, and fuel efficiency. By analyzing this data, we can identify areas for improvement and continuously refine our operations.

FES: A Collaborative Ecosystem

Volvo Trucks FES Services has fostered a strong connect within our organization. It creates a network of skilled personnel and builds a collaborative ecosystem – essential for successful mining operations. After all, mining relies heavily on both efficient drivers and technologically advanced trucks.

Continuous Improvement

Ultimately, Volvo Trucks FES plays a vital role in the entire driver journey, from selection to skill development, performance improvement, and fostering responsible, knowledgeable individuals. It also equips drivers to adapt to evolving technology, keeping them competitive within the industry. The success story is evident: two of our best drivers have even been up-skilled to supervisors.

I strongly recommend other mining operators to go for this unique Volvo Trucks FES program to improve their fleet's fuel efficiency significantly and operational efficiency for higher productivity.

"Volvo Trucks commitment does not end with initial training. Constant engagement and monitoring promotes driver development, preventing complacency."



VOLVO FM 420 4X2 LNG TRACTOR Towards zero emissions

The choices we make today define the world we live in tomorrow. Climate change, population growth and increasing urbanization is shifting the expectations on transport and infrastructure, making sustainable transportation increasingly important. For us at Volvo Trucks, energy efficiency and alternative fuels are essential in our strategy to succeed. Our new gas-powered trucks running on LNG offers the same performance, driveability, and productivity as its diesel counterpart, but with 20% less CO₂ emissions & 100% less CO₂ with Bio LNG.

Our trucks demonstrate our long-term ambition to move towards zero emissions.

The Volvo FM 420 4x2 LNG Tractor offers a compelling solution for those seeking a more sustainable and efficient option in the transport industry. Powered by a gas-powered engine, it delivers the same impressive performance as its diesel counterparts while significantly reducing CO_2 emissions.

This unique engine utilizes High Pressure Direct Injection (HPDI) technology, unlike conventional spark ignition or Otto cycle engines. This provides superior efficiency while maintaining the power and torque of a diesel engine.

Technology Advantage The technology features a dual-layered cryogenic LNG tank with a built-in highpressure piston pump. This pump delivers compressed natural gas (CNG) to the engine at 300 bars, while a separate circuit injects a small amount of diesel to initiate combustion. This flame ignites the CNG that is injected into the combustion chamber. The truck uses 90-95% LNG and 5-10 % diesel. This innovative approach ensures efficient fuel utilization and maintains the power expected from a diesel engine.

Even if the LNG runs out, the truck can still operate on diesel at reduced power and torque, allowing you to safely reach a nearby filling station.

The dual-layered cryogenic tank stores 225 kg of LNG at - 135 to -140°C, enough fuel to run the truck for 1000 km. The unique single receptacle can be used for both venting Boil-off gas (BoG) and also for filling LNG.

The Volvo FM 420 4x2 LNG Tractor is a powerful and sustainable solution for the trucking industry. With its advanced technology, environmental benefits, and driver-focused design, it sets a new standard for clean and efficient transportation.

Benefits

Efficient solution: The cryogenic tank stores 225 kg of LNG, enabling a range of up to 1000 km.

Lower fuel costs: LNG is often cheaper than diesel, and the higher energy content ensures ~35% better fuel efficiency leading to significant cost savings over time.

Comfortable and safe cab The FM cab is climate controlled sleeper cab with air-suspended seats. I-shift Automated manual transmission ensures that driver is comfortable even on long hauls.

Safety features: Tinted windshield, electronically controlled rear-view mirrors, power windows, central door locking, and driver-side airbag.

Reduced environmental impact: 100% less Particulate matter, 100% less SOx 85% less NOx, 20% less CO₂ Lower CO₂ emissions contribute to a cleaner environment.

Advanced Safety Features

Electronic Braking System (EBS): Ensures precise and responsive braking, in challenging conditions.

Electronic Stability Control (ESC): Maintains vehicle stability during maneuvers and prevents skidding, especially in corners or on uneven terrain.

Advanced Driver Assistance Systems (ADAS): Provide additional support and reduce the risk of accidents:

Lane Departure Warning: Alerts the driver if the vehicle unintentionally drifts out of its lane.

Driver Alert Support: Monitors driver fatigue and drowsiness, prompting them to take a break when needed.

Forward Collision Warning with Emergency Brake: Detects potential collisions and automatically applies the brakes if driver doesn't take necessary action.

Passenger Corner Camera: Enhances visibility around the front passenger corner, helping with blind spots and tight turns.

Ultra-modern display and controls: A 12-inch, fully digital Driver Information Display provides a dynamic interface that adapts to your preferences, switching between classic analog gauges and a digital view using convenient steering wheel buttons.

Access all vital truck statistics, alerts, driver timers, and more directly on the display. Additional 9" touch screen Secondary information Display provides load indicator, trip meters, real time driver behaviour monitoring and coaching, camera displays, infotainment etc.

Bluetooth connectivity ensure safe driving

Stay Connected:

- The truck is constantly connected to your monitoring console and the Volvo Uptime Center sharing truck health and performance data.
- This allows for real-time data transmission and remote software upgrades, ensuring your truck stays optimized and up-to-date.

CUSTOMER STORY

IN 16 PERSONN

쀻큟큧큧 THE WILL TO WIN!

IN PURSUIT OF SUCCESS.

APS Mining and Infrastructure India Pvt. Ltd.

APS Mining and Infrastructure India Pvt. Ltd. in Sankari, TN is an emerging player in construction & infrastructure segment. They have executed a number of projects as sub-contractor to L&T and now deliver the projects on their own. Founded by Mr. A Sunderaswaran, today his sons S Vasudevan and S Gunasekaran are taking their father's vision to new heights.

Nestled amidst the Tamil Nadu hills, is Sankari Durg. A small-town bustling with activity. It was here, years ago, that a young Sundareswaran, fresh out of school from Mettur, arrived seeking his fortune. Starting as a taxi driver, his ambition soon steered him towards driving tippers. Driven by a desire for independence and growth, Mr. Sundareswaran, along with two friends, took a bold step. In a time when "start-up" wasn't even a term, they pooled their resources, investing in a single tipper. This marked the beginning of their journey, hauling limestone and steadily expanding their fleet to 5 tippers.

The rise of Aadi Parashakthi Transports

However, the year 1987 saw a shift. The partners decided to amicably part ways. This was the birth of Aadi Parashakthi Transport, by the ever-ambitious Sundareswaran at the helm.

Aadi Parashakthi Transport found a crucial partner in KMC construction, a Hyderabad-based contractor undertaking large projects in Mumbai. The trucks of Aadi Parashakthi Transport became the backbone of these projects.

The years that followed saw Aadi Parashakthi Transport flourishing. They rebranded themselves as APS Enterprises and later as APS Mining and Infrastructure India Pvt. Ltd. Their trucks became a familiar sight, transporting Ready Mix Concrete to construction sites for major cement companies like ACC, UltraTech, and India Cements. Currently APS owns a fleet of 300+ trucks.

Embracing Efficiency with Volvo Trucks

In 2021, APS picked up used FMX 440 Volvo tippers for a prestigious project. This was a game-changer for APS. The Volvo tippers brought a surge of efficiency, productivity, and profitability. As Mr. Sundareswaran himself says, these trucks brought them "Trupti" (satisfaction).

This success fuelled their ambition for a brand-new Volvo fleet. The logic was undeniable: if used trucks yielded such results, imagine the possibilities with a fleet of new ones. Their vision materialized in 2023 with the acquisition of their first 5 Volvo FM 420 8x4 tippers deployed at the Bhadrachalam quarry. The momentum continued with 10 more tippers joining the fleet soon after, mobilized for the Dabhol Power Project, Maharashtra.

Today, APS owns a fleet of 32 Volvo trucks, a testament to their commitment to excellence. So impressed is Mr. Sundareswaran with their performance that he envisions owning a staggering 100 Volvo trucks by 2025.

The Volvo Advantage: Efficiency, Uptime, and Speed

APS experienced higher productivity with Volvo Trucks. With three eight-hour shifts per day, uptime became paramount, and Volvo Trucks delivered beyond expectations. Volvo's service and support became a constant companion, available day and night. This eliminated downtime and ensured smooth operations. On-site driver training by Volvo ensured the team maximized the potential of their new Volvo trucks. This saved valuable time and ensured efficient operations from the get-go. With Volvo's reliable performance, APS could confidently take on projects with deadlines, and deliver well in time.



"Volvo trucks delivered higher productivity. With three eight-hour shifts running, uptime became paramount, and Volvo trucks exceeded performance goals."

MR. S VASUDEVAN DIRECTOR APS MINING AND INFRASTRUCTURE INDIA PVT. LTD.



"With Volvo's in our fleet, the principals have more confidence in us and we are approached for more projects."

MR. S GUNASEKARAN DIRECTOR APS MINING AND INFRASTRUCTURE INDIA PVT. LTD.





Leading the way

The Sundareswaran family's commitment to APS spans generations. Recognizing his sons' potential, Mr. Sundareswaran nurtured their interest in the business from a young age. By bringing his sons, Mr. S Vasudevan and Mr. S Gunasekaran, into the fold, he ensured the company's continued growth.

Mr. S Vasudevan, who joined the business in 2011, spearheads business development and client relationships. Meanwhile, Mr. S Gunasekaran oversees site operations, machinery, taxation, and local matters.

Volvo – APS Partners in Progress

APS was offered to work on the prestigious Sita Rama project. It is an under-construction barrage across the Godavari River, with a run-of-river hydroelectric project. Mr. Vasudevan decided to use Volvo trucks in the Sita Rama project to understand its benefits. Volvo helped them to get pre-owned Volvo trucks and the results were evident.

Next, APS secured an invitation to contribute to the groundbreaking Gandhi Sagar Pumped Storage Power Plant project in Madhya Pradesh. This one-of-a-kind project utilizes two linked reservoirs at varying elevations. Water will be pumped to the higher reservoir for storage, a method poised to be the future of power generation and attracting significant investments from major corporations.

The project scope involves the monumental task of removing nearly 1 Crore Cu.m of rock fill for embankment construction in 6-7 months. Additionally, a staggering 60 lakh cu.m of excavated material needs to be transported from depths of 30 meters to heights of 150 meters. This is precisely where Volvo Trucks demonstrated its exceptional capabilities. Highly fuel efficient and real workhorse. Taking Volvo Driver Training a step further, APS has invested in the future by training one of its employees as a Driver Trainer. This individual is now sharing his expertise to train other drivers, ensuring a highly skilled workforce.

Strength in togetherness

"My company truly flourished after my wife, Eswari, came into my life," Mr. Sundareswaran beams. He credits her sharp mind and business acumen as a key factor in their success. They are a true team, supporting each other both personally and professionally.

This family-oriented approach extends to every project. No matter the size, all four – Mr. and Mrs. Sundareswaran along with their sons – come together to strategize. It's a collaborative effort, leveraging each member's unique skills to ensure the best possible outcome.

Their commitment goes beyond strategy. To guarantee the flawless execution of every project, one of the sons is always present near the site. This hands-on approach ensures meticulous oversight and exemplifies the power of a family working together towards a shared vision.

Looking forward

The journey of APS Mining and Infrastructure India Pvt. Ltd. is a story of ambition, perseverance, and a strategic embrace of innovation, paving the way for a bright future built on efficiency and progress.

Their ambitious goals include manifold growth within the next 2-3 years and expanding into mining operations. Specifically, they plan to focus on coal and iron ore mining and overburden removal. Volvo Trucks is proud to be a partner in this exciting journey and looks forward to supporting their success.

1 MILLION KM AND GOING STRONG

JELHIUF



Ms. Hannah Ljungquvist

THE ANSWER IS

Vice President – India & Indonesia, Volvo Trucks International had the pleasure of meeting our esteemed customer M/s.Delhivery. From insightful conversations to understanding their evolving needs, every interaction was a testament to the importance of collaboration and making a positive impact together in the industry.

DELHIVERY reaches the 10,00,000 km milestone with the fleet of Volvo FM Tractor.

The fleet of Volvo tractors purchased in 2019 has logged a remarkable 1 million kilometers. This translates to an impressive average of 250,000 kilometers driven per year, or roughly 21,000 kilometers every month.

This is significantly higher than the typical monthly range of 7,000 to 9,000 kilometers for most trucks, highlighting the exceptional performance and durability of Volvo trucks.



LOGISTICS PARTNERS MEET



Volvo Trucks is at the forefront with its long-haul Volvo FM tractor – trailer solutions. To address the industry's evolving landscape, Volvo Trucks India hosted a roundtable with leading Indian logistics companies. The discussion centred on optimizing transport efficiency and improving productivity and safety.

Volvo Trucks invited the major companies in the logistics sector of India like Delhivery, Flipkart, Amazon, Ikea, CJ Darcl, BD Dhalla, NRTPL, Dhir Logistics, ARL Express Logistics, Linde, Nabros Transport and JH Parabia ,NSB transports, Instant transport, V express and Gati logistics to share the success story on long haul and also to present various solutions that would be of interest to the logistics industry.

The gathering was addressed by Mr. Per-Erik Lindstorm, Senior Vice President, Volvo Trucks International and Mr. B Dinakar, EVP Volvo Trucks India. They had a panel discussion with Mr. Arun Bhagavathi – Senior Vice President, Delhivery, while sharing experiences and answering questions.

The panel discussed the changes that are happening in the logistics industry along with the need for:

Faster Turnarounds and Larger Payloads: Meeting the demands of e-commerce requires quicker delivery times while handling increased cargo volumes.

Driver and Public Safety: Ensuring the safety of drivers and the surrounding environment remains a top priority.

The discussion highlighted the successful collaboration between Volvo Trucks and Delhivery. Delhivery adopted Volvo FM tractors for their trailers in 2019, demonstrating the industry's growing appetite for high-performance vehicles.

Speaking at the event, Mr. Per-Erik said, "With the lock down situation, businesses were affected, and we saw the emergence of E-commerce. India is an amazing country. When I came here in 2019, I saw the road network and thought, Wow! Here are a lot of opportunities. That was when we started our journey with Delhivery."

Volvo has been in India for 25 years and have dominated the coal mining industry. From a strategic point of view it was important to diversify into other segments, while continuing to dominate the mining business.

For Volvo Group, India is a very important country and they are planning to invest more here.

Mr. Dinakar B said, "Every opportunity that comes our way, we use it to improve performance and reduce costs. And we do not just sell the product, we provide an entire solution. There is a lot of work that is already done by us with Delhivery. We have developed a product that is conducive here. Another important aspect is the fuel costs, which attributes to about over 45% of the cost in long haul operations. With Delhivery we began operations with a fuel efficiency of 3.6 kmpl to now averaging around 4.2 kmpl. We are learning as we go along and we have a long way.

Speaking at the event Mr. Arun Bhagavathi, SVP of Delhivery reiterated the fact that the industry is changing. When they entered the logistics business in 2011, it was difficult to sell the idea of a truck that could run 18000 or 20000 km a month. In 2019, we were introduced to Volvo Trucks when we were asked to try the concept of interchangeability with the Volvo FM Tractors for our trailers and today it has become a new normal.

"In this industry a lot has changed. When the Mumbai-Nagpur Expressway opened up our drivers came to us and said that we could cut down the transport time by 3-4 hours and with good roads we saw an improvement in fuel. efficiency."

Opportunities and Challenges

While advancements like improved road infrastructure have led to faster deliveries and better fuel efficiency, challenges remain. Long wait times at warehouses continue to hamper overall efficiency. This is where interchangeability concept can improve overall efficiency of the ecosystem as a whole.

Volvo's Commitment to Efficiency

Mr. Per Erik acknowledged the potential for further optimization, pointing out extreme examples of trucks operating round the clock. Volvo Trucks remains committed to developing solutions that maximize utilization and contribute to a more productive long-haul transportation sector in India.

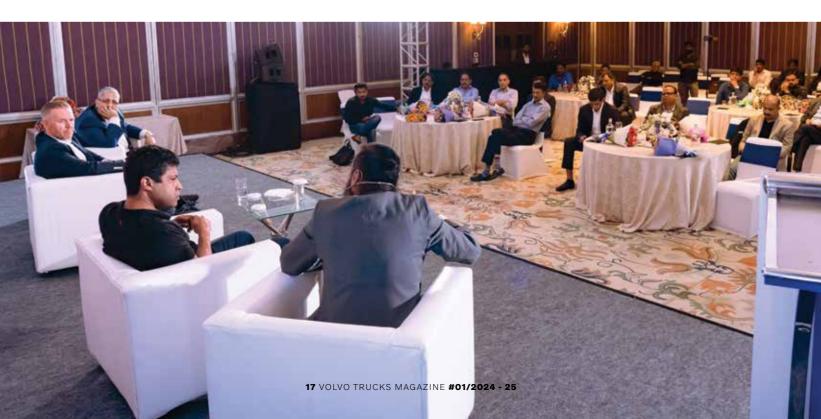
Volvo trucks took the opportunity to give a preview of various new transport solutions that are introduced in India including LNG trucks for lower emissions with lower fuel costs, Electric trucks with zero emissions and Road Train concept for high productivity.



Mr. Per-Erik Lindstorm, SVP, Volvo Trucks International and Mr. B Dinakar, EVP Volvo Trucks India.



Mr. Arun Bhagavathi - Senior Vice President, Delhivery,



TECHNOLOGY

New trucks. New features.



All you need to know about Volvo Trucks

Optimized energy efficiency, improved visibility, and an enhanced driver experience – this is what you can expect from the innovations unveiled by Volvo Trucks this year. These key feature improvements promise substantial advantages for the transport industry, drivers, and society as a whole. Here is an overview of the most important news.

Volvo Trucks latest launch of trucks and innovations marks one of the most extensive roll outs for the heavyduty segment in years. It encompasses everything from exterior design and aerodynamics to technological innovations aimed at boosting energy efficiency and safety. Included in the launch is a new, fuel-efficient D17 engine for Volvo FH16 and Volvo FH16 Aero, with impressive power and torque. The new products and features are developed to meet the needs and wishes from society, transport businesses, and drivers.

Here is a list of the most important news:

- The new, aerodynamic cab featured on Volvo FH Aero and Volvo FH16 Aero
- The Camera Monitor System available on most truck models
- · Aerodynamic enhancements on all cabs
- Enhanced sound system, and other updates on the inside

- The Volvo FH Aero with Globetrotter XXL cab available for all industry segments in Europe
- New engine with up to 780 horsepower and 3800 Nm of torque, for Volvo FH16 and FH16 Aero.

The fuel-saving feature I-See, is now even better" It's incredibly satisfying that we can offer our customers such an impressive array of innovations and news. This is a substantial step to improve energy efficiency and lower the carbon footprint. We're also enhancing safety with improved visibility by introducing a camera monitor system that replaces traditional mirrors. Furthermore, we're providing drivers with a better working environment. I'm confident that this will benefit both the industry and society at large," says Tomas Thuresson, Commercialization Manager New Offer at Volvo Trucks.

The all-new, energy-efficient aerodynamic cab

The most prominent innovation is the new aerodynamic cab that can be seen on the Volvo FH Aero and Volvo FH16 Aero. Thanks to changes in the European Union's Weights and Dimensions Directive, the front of the cab has been extended to reduce air drag. Furthermore, the cab's design has been meticulously refined for optimal aerodynamics.

" Reduced drag leads to improved energy efficiency, regardless if it's a diesel, gas, or electric driveline. In turn, this translates to reduced CO2 emissions and reduced costs for the customer. This is a significant advancement for operators," says Mattias Ahlberg, Total Offer Intro Manager at Volvo Trucks.

How Volvo Trucks Camera Monitor System will enhance driving

Another major update is Volvo Trucks' adoption of a camera monitor system to replace traditional mirrors. This system offers several key advantages:

- Cameras placed on wings for minimal air drag compared to traditional mirrors.
- Improved direct vision without the obstruction of conventional mirrors.
- Rain and dirt on the side window no longer affect rear visibility.
- The Zoom-out Field of View helps the driver manoeuvre safely by providing more information about the traffic surrounding the truck.
- End-of-trailer lines in the main rear view helps the driver, particularly when making lane changes.
- Enhanced night-time vision thanks to infrared technology.

To enhance driver security, the system can be activated from the bedside control panel when the vehicle is parked, to monitor any activity around it.

"It's a highly competent system, and I want to highlight that our well-regarded passenger corner camera is also available with this setup, positioned alongside the rear-view camera on the same wing," says Mattias Ahlberg.

Why small improvements make a big difference

All cabs have undergone aerodynamic enhancements, both visible and non-visible. These enhancements include reduced gaps and improved seals between the cab components to ensure smoother airflow. The area above the windshield has also been optimized to minimize air resistance.

" In summary, we've made numerous small improvements that collectively make the cabs more aerodynamic. Also, all lighting has been modernized, now exclusively featuring LED lamps. For a more contemporary look, we've given the Volvo Iron Mark a completely new and cleaner design that aligns with the overall aesthetic," says Tomas Thuresson.



What about updates on the inside?

The updated exterior design and forward-thinking approach is reflected also on the inside of the truck. The focus here is on creating a better working and living environment for drivers.

- A refined sound system for an enhanced experience, with optional amplifiers and sub woofers.
- An updated interface in the secondary display that allows for personalized views.
- An increased number of sockets (USB-C) to support charging of devices like mobile phones, tablets etc.
- A new microwave oven nicely integrated into the front shelf for improved accessibility.
- Camera Monitor System screens placed by the A-pillar to optimize direct visibility.
- A new key remote with a built-in light control function.

Will the Globetrotter XXL cab be available for more segments?

As the updated European Union Weights and Dimensions Directive allows longer cabs with an aerodynamic design, it is now legally possible to use Volvo's Globetrotter XXL cab on European roads. This means Volvo FH Aero and Volvo FH16 Aero with the Globetrotter XXL cab can be used in all industry segments in Europe without impacting the load capacity. Whether you're transporting timber, cement, or cars, you can enjoy a cab with more interior space and a wider bed.

"This is a genuine advantage for drivers who spend extended periods on the road," says Mattias Ahlberg.

More power and torque for the heavy haulage segment

Another substantial improvement in the heavy haulage segment is the introduction of the all-new 17-liter engine. As the most powerful engine ever built by Volvo, it offers up to 780 horsepower and 3800 Nm of torque.





It's more than a competition.

VISTA, Volvo International Service Training Award, the world's largest service market competition with more than 16,000 participants within Volvo Trucks and Volvo Buses global dealer networks. The VISTA is a true celebration of people who make Volvo Service Excellence a reality.

Vista Finalist **Team Iron Knight** from VSPC Jharsuguda, Odisha.

Team members: Roshan Pandey, Rana Kundu, Ranjan Nandy & Surojit Malick.

The team said, "From the very beginning of VISTA, our team has thrived on a core strategy: dedication, passion, and discipline. VISTA provides the perfect platform for this approach. It allows us to share our self-learning with teammates, fostering individual growth and ultimately propelling the entire team to success.

The VISTA 2023-24 semifinals in Italy was an invaluable experience. We gained crucial insights into our team's strengths and areas for improvement before the finals. We encountered tasks involving new Volvo technologies available globally and are yet to come to India. We leveraged existing knowledge and tackled the challenges head-on.

This will mark our second consecutive finals appearance, following VISTA 2022-23. Now, our focus is laser-sharp: preparation for the finals. We're diligently studying new Volvo technologies while simultaneously upgrading our expertise in existing ones. Our confidence is high, and we're determined to deliver our best performance yet at the finals!".







Team Iron Knight from VSPC Jharsuguda, Odisha.

Team **Go Green** from VSPC Bhubaneshwar, Odisha.

VISTA fosters a vibrant exchange of experiences, directly impacting the quality of the services we deliver. This edition was a landmark year, marked by a significant rise in female participation. This is a testament to our commitment to breaking down barriers and creating a level playing field for all. Over 16,000 participants from across the globe (including 845 from India) joined VISTA 2023-24. The competition's intensity was evident in the semifinals held in Italy, where 145 teams battled it out, with 5 teams representing India. Notably, all participants, regardless of qualifying or not, gained valuable knowledge and honed new skills. VISTA underscores the importance of having well-trained and prepared teams to serve our customers effectively. Team Iron knight and Go Green is bound to Sweden for the grand finale in September.

Vista Finalist **Team Go Green** from VSPC Bhubaneshwar, Odisha.

Team members: Subrata Das, Ujjwal Dey, Somnath Mal and Santu Pramanik

The team said, "Our team thrives on a powerful formula: **passion, dedication, and teamwork.** We believe that by working together with these values at our core, we can achieve any goal. VISTA is more than just a competition; it's a continuous learning journey. Every year, we upgrade our skills and stay ahead of the curve. VISTA is equipping us for the future!

The VISTA semifinals in Italy was an enriching experience, despite some minor challenges like travel

and unfamiliar food. This year, we're proud to be represented by our first-ever team, "GO GREEN."

Reaching the finals in our debut year is a huge accomplishment, and we're determined to give it our all. Our focus for the finals is twofold: exploring alternative fuel technologies and unlocking the unforeseen potential of our product. We're confident and determined to achieve our goals!"



You win, we all win

Fuelwatch, a demanding competition for drivers is round the corner. The goal of this competition is to elevate the role of the driver and highlight the far-reaching benefits of best driving practices and fuel efficiency. The competition will challenge the driver's skills in the areas of fuel efficiency, safety and productivity – all vital to promoting professional pride, the customer's bottom line, environmental care and social progress.

How to encourage fuel-efficient truck driving?

There are several factors I believe are hugely important when it comes to maintaining motivation to drive fuel efficiently. The right support, training, and incentives can help to ensure that drivers are consistently fuel savvy and know exactly how to drive to get the most out of their trucks.



Monetary incentives and their limitations First,

I want to touch on monetary incentives as I know a lot of truck businesses use them. They can be a good idea, but I would argue that if you're a fleet owner, it's better to offer them as a team reward, rather than on an individual basis.

Setting a fuel target or benchmark and reviewing it regularly can give everyone an immediate purpose and encourage the sharing of information. Another thing to keep in mind is that bonuses based on productivity or mileage can backfire when it comes to fuel economy. What you save by being more productive will often cost more in fuel, and it doesn't promote good driving behavior.

Setting up the right processes, tools, and

rewards If you work with a consistent review and reward process, it could be worth investing in a customized fleet management system. You can get information on for instance engine and gear utilization, speed adaptation, anticipation, and braking. Then the drivers, themselves, can analyze how they drive and see where improvements can be made. Such a review process could for instance include a monthly follow-up, based on information from the fleet management system.

Creating an environment for continuous

learning Ongoing training on how to drive fuel efficiently is also a prerequisite. When devising a training strategy one of the most important factors to consider is creating a safe environment where the driver can feel confident and ready to take on the responsibility of implementing changes to their daily driving habits. There is no one size fits all approach and of course, legal requirements and the realities of your business can restrict what kind of training can be implemented. Nevertheless, we know that shorter training tends to deliver better results. Some of the most effective trainings we have implemented have been around three to four hours with two to three dedicated to theory and one hour of driving. Training in smaller groups also tends to be more effective than larger ones.

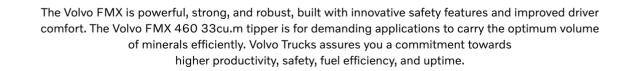
The right truck for the right assignment

But without the right tool, that is, a truck that is fit for the assignment, it's not easy for the driver to drive fuel efficiently. It can be a matter of size, specification, or proper maintenance– if the truck is not right for the job, the driver can only save so much fuel.

VOLVO

FMX 460 8x4 33cu.m Tipper

Push the limits of productivity



Volvo Trucks. Driving Progress