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INTERVIEW



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# POWER DEMAND PROSPECTS AMID MONSOON HOPES

# Blue Energy makes inroad in LNG-powered trucks with 500-strong fleet



## Coal Insights Bureau

In less than two years since its inception, Blue Energy Motors has designed, developed, and deployed over 500 LNG-powered heavy-duty trucks on Indian roads, a testament to the market's readiness and the industry's trust in the company's innovation.

These environmentally-friendly trucks are being seen as economically viable, providing a tangible solution to the pressing issue of carbon emissions in the transportation sector thus pioneering the green trucking revolution in the country.

The journey of Blue Energy Motors, promoted by serial entrepreneur Anirudh Bhuwalka, began with the establishment of a state-of-the-art manufacturing plant in Pune in 2022.

This facility has been instrumental in transforming the conventional truck industry by focusing on three core pillars: product, manufacturing, and service.

“By introducing modern LNG-powered trucks equipped with the latest technology, leveraging world-class strategic vendor partnerships to achieve economies of scale, and offering unique services to our customers, we have already garnered significant interest

from sectors that are energy-intensive and have high carbon footprints,” Bhuwalka, CEO of Blue Energy Motors said.

The installed capacity of the current plant is 10,000 units per year in 3 shifts and based on the demand from the industry and after capacity utilization has reached a threshold, Blue Energy Motors would explore expanding its manufacturing footprint.

## Growth of LNG and electric-powered trucks in India

In the next 3 to 5 years, Bhuwalka sees LNG witnessing a strong growth story in India.

The increasing awareness of environmental



Nitin Gadkari, Union Minister of Road Transport and Highways inaugurating Blue Energy Motors' LNG-fuelled green truck manufacturing plant at Chakan in 2022.

issues and the government's push for cleaner energy solutions is driving this momentum with more refuelling stations facilitating wider adoption of LNG-powered trucks.

Significant growth opportunities also exists for electric vehicles (EVs) in the trucking sector.

Looking ahead, Bhuwalka expects a multi-faceted approach to dominate the market with EVs being followed by hydrogen-powered vehicles entering the scene.

"We do not foresee a single technology monopolizing the market. Instead, multiple technologies will coexist, each serving specific needs based on application cases," Bhuwalka said.

For instance, LNG might be more suitable for long-haul trucking due to its range and refuelling infrastructure, while EVs could be ideal for urban and short-distance logistics, he explained.

To tap these emerging opportunities, Blue Energy Motors is committed to driving innovation across these diverse technologies through strategic partnerships and continuous investment in R&D ensuring that the company remains at the forefront of this transformation.

"By embracing a variety of green

technologies, we can effectively address the unique demands of different segments within the trucking industry, supporting India's broader goals of sustainability and carbon reduction," the CEO said.

#### Plans to launch EV trucks

Advances in battery technology, supportive government policies, and growing investments in EV charging infrastructure are paving the way for more widespread EV adoption in trucking sector.

#### Need to strengthen fuelling/charging infrastructure

The planned development of 1,000 LNG stations along major highways within the next 3 years, and the goal to increase LNG capacity by 17 million tons by the following year, are significant steps towards supporting wider LNG truck adoption.

However, Bhuwalka believes the current state of LNG filling and EV charging infrastructure in India is in its early stages but showing promising growth.

As awareness about the benefits of LNG and electric-powered trucking spreads, more LNG and electric trucks are likely to enter the market which will help drive demand and acceptance.

"For LNG, the availability of refuelling stations is crucial for widespread adoption. Over the past year, we have seen significant progress in this area. The number of LNG fuel pumps has increased from just one to 13 stations, indicating a positive trend in infrastructure development. This expansion is vital because a robust refuelling network is essential for the practicality and convenience of using LNG-powered trucks," he said.

Similarly, EV charging infrastructure is also developing, though it currently lags behind the rapid growth needed to support widespread EV adoption in the heavy-duty truck sector.

Bhuwalka believes the government's initiatives and private sector investments are beginning to lay the groundwork for a more extensive and reliable network of charging

"We are foraying into EV space soon. The EV version of the truck is expected sometime this year and will cater to short and intermediate haul requirements of the industry. As per our brand philosophy, we aim to provide disruptive solution that challenge the existing industry norms and our EV offering would be no different," Bhuwalka said.

stations. However, more needs to be done to ensure that EV charging points are as ubiquitous and accessible as possible.

“We believe that the combined efforts of industry players, government policies, and strategic investments in infrastructure will accelerate the adoption of both LNG and electric trucks. Our commitment to pioneering green trucking solutions is complemented by our proactive stance on supporting infrastructure development,” he said.

### Policy interventions needed

The government has recognized the critical need for cleaner transportation and has implemented initiatives such as the Faster Adoption and Manufacturing of Electric Vehicles (FAME) scheme to incentivize EV adoption.

This scheme, along with a focus on LNG infrastructure development, demonstrates a strong commitment to promoting green transportation solutions.

Despite these efforts, the current policy landscape does not include specific incentives for LNG truck adoption.

Bhuwarka believes this is an area where policy interventions could play a crucial role.

“While the FAME scheme effectively supports EV adoption, similar incentives for LNG-powered vehicles could accelerate the shift towards cleaner fuels in the transportation sector. These incentives could include tax breaks, subsidies for LNG fuel infrastructure, and direct incentives for purchasing LNG-powered trucks,” he said.

As new technologies like hydrogen fuel cells emerge, LNG remains a game-changer in the short to medium term due to its immediate availability and lower carbon footprint compared to diesel and we have actively engaged with government bodies to advocate for such incentives.

Both industry leaders and policy think tanks like NITI Aayog have made recommendations to the government to promote LNG by providing necessary incentives.

To drive greater adoption of LNG and electric trucks, Bhuwarka recommends comprehensive policy support including:

- ◆ Enhancing FAME scheme
- ◆ Implementing tax incentives for LNG infrastructure
- ◆ Ensuring supportive regulatory environment.

Such measures will not only facilitate a smoother transition to green trucking but also align with India’s broader goals of reducing carbon emissions and achieving sustainable economic growth, Bhuwarka believes.

### Superiority of LNG over hydrogen as a fuel

Hydrogen-powered vehicles have undoubtedly attracted attention for their promise as a clean energy solution, however, there are doubts about their viability, particularly in terms of infrastructure development, cost-effectiveness, and scalability.

These challenges may slow down widespread adoption of hydrogen-powered vehicles on a global scale. In contrast, LNG-powered commercial vehicles have already seen significant adoption in various parts of the world, including India,” he said.

According to Bhuwarka, LNG offers several advantages such as lower emissions compared to traditional fuels, abundant global supply, and established infrastructure for production, storage and distribution.

Additionally, LNG technology is relatively mature and proven, providing a reliable alternative for reducing emissions in the transportation sector.

In India, where there’s an escalating emphasis on environmental sustainability and reducing reliance on conventional fuels, LNG-powered commercial vehicles hold substantial potential in driving the transition towards cleaner energy solutions, he believes.

Government policies and incentives aimed at incentivizing LNG use in transportation further bolster this trajectory.

However, future adoption of LNG-powered commercial vehicles in India will depend on various factors such as regulatory frameworks, technological advancements, infrastructure development, and economic considerations. Collaboration between the government, industry stakeholders, and technology innovators will be crucial in overcoming challenges and realizing the full potential of LNG as a viable alternative fuel for commercial vehicles in India. ■

