Increasing number of high-rise buildings, commercial complexes, business zones, and shopping complexes and malls are driving the growth of Heating, Ventilation and Air Conditioning (HVAC) systems in India. India HVAC market is expected to attain a size of $5.9 billion by 2024, progressing at a CAGR of 7.0% during the forecast period (2019-2024). The commercial air conditioning market is likely to further grow significantly due to development of urban infrastructure and extreme temperatures.

The growing demand in multiple end-use applications such as healthcare, hospitality, etc. will further contribute to the growth of this market in the coming years. Also, the rising numbers of luxury condominiums and commercial spaces in Tier-1 have fueled the demand for energy efficient air conditioning solutions.

With the rising construction of Green building, the focus is not only on the efficiency but also the direct impact on environment due to the refrigerant used. Variable Refrigerant Flow (VRF) technology is a solution that is both energy efficient and uses a green refrigerant with zero Ozone depletion potential and a low global warming potential.

**Toshiba’s Energy Efficient Air-Conditioning Solutions**

Increasing number of high-rise buildings, commercial complexes, business zones, and shopping complexes and malls are driving the growth of Heating, Ventilation and Air Conditioning (HVAC) systems in India. India HVAC market is expected to attain a size of $5.9 billion by 2024, progressing at a CAGR of 7.0% during the forecast period (2019-2024). The commercial air conditioning market is likely to further grow significantly due to development of urban infrastructure and extreme temperatures.

The growing demand in multiple end-use applications such as healthcare, hospitality, etc. will further contribute to the growth of this market in the coming years. Also, the rising numbers of luxury condominiums and commercial spaces in Tier-1 have fueled the demand for energy efficient air conditioning solutions.

With the rising construction of Green building, the focus is not only on the efficiency but also the direct impact on environment due to the refrigerant used. Variable Refrigerant Flow (VRF) technology is a solution that is both energy efficient and uses a green refrigerant with zero Ozone depletion potential and a low global warming potential.

**Toshiba’s Air-Conditioning Solutions**

For over 30 years, Toshiba has reinforced its position as a leader in the air-conditioning market by investing heavily to develop and maintain the quality of products that differentiate Toshiba from other manufacturers. Toshiba is one of the first brands to bring the inverter revolution in India and has long been respected for its technologically advanced, energy-efficient air-conditioning solutions. With continuous product innovation and channel partners, Toshiba has been growing rapidly in the air-conditioning business in India.
Demand for the energy-efficient systems is on the rise for use in luxury condominiums. In recent years user expectations of air conditioning systems have changed. The Toshiba VRF systems can optimize the temperature to ensure comfortable cooling and reduce energy and maintenance costs, combined with maximized simplicity and operating flexibility. This technology has many advantages, from the system design to the installation and operation phase. The wide range of indoor units makes VRF the most flexible choice to fulfill any building requirement.

At Toshiba we realize that the urban landscape is changing. That’s why we created the SMMS7 – a tailored cooling solution that provides optimum air-conditioning without cutting corners. While being environment friendly, it also takes your area of application into consideration, delivering ultimate efficiency for your building. Powered by the 7 senses of Smartness, this top discharge VRF offers 7 exceptional benefits

- Higher Energy Efficiency: Enhanced efficiency at full load and part load 26% higher efficiency at 50% load with energy efficiency ratio as high as 7.2.
- Environmentally Oriented: HFC-410 A Refrigerant Over 20% reduction in refrigerant quantity.
- Space Saving and Light Weight: Footprint reduced by up to 24%. 88 KG reduction in weight.
- Wider Ambient Operation: Operates at up to 52ºC ambient temperature.
- Easy Installation and Maintenance: NFC wave tool function for installation and troubleshooting simplified refrigerant circuit.
- Design Flexibility: 200% diversity. Total piping length of 100 M.
- High Reliability: Diamond like carbon coated 2 stage vane, lesser friction and longer life, new inverter box with protection from small animals.

“India is the world’s fastest growing VRF market, witnessing a CAGR of 12%. Currently, the Indian market for VRF air conditioners is about 32,000 units a year and with over 10% market share, TCAI is amongst the top 3 players in VRF industry in India. With our manufacturing set-up in India that conforms to our ‘Make-in-India’ and ‘Make-for-India’ strategy, we plan to double our market share in the next 5 years, taking the share to 25% by the years 2023, which translates to 3 times the existing sales volume. Toshiba will explore in increasing of the localized products.”

Mr. Takao Hoshi, Managing Director
Toshiba Carrier Air-Conditioning India Private Ltd. (TCAI)
TCAI’s market intelligence indicates that 70% of Indian customers demand only cooling feature from commercial ACs (not the heating feature). Toshiba’s existing VRF products offer both heating and cooling solutions. To align its products with the requirements of Indian customers, TCAI is developing a ‘cooling-only’ VRF product variant for the Indian market. The standard “heating + cooling” variant will also be made available to customers in India. Under our make-in-India commitment, the products are being manufactured at our state-of-art facility in India under strict Toshiba quality guidelines.