

IPO Note

September 13, 2021

Sansera Engineering Limited





Issue Snapshot:

Issue Open: Sep 14 – Sep 16 2021

Price Band: Rs. 734 – 744 (Discount of Rs 36 for all eligible employees)

Issue Size: Rs.1265.7 – 1282.9 cr (1.724 cr shares – entirely offer for sale)

Reservation for:

QIB Upto 50% eq sh
 Non Institutional atleast 15% eq sh
 Retail atleast 35% eq sh
 Employee Reservation: eq sh aggregating Upto Rs.9 cr

Face Value: Rs 2

Book value: Rs 166.96 (Mar 31, 2021)

Bid size: - 20 equity shares and in multiples thereof

100% Book built Issue

Capital Structure:

Pre Issue Equity: Rs. 10.28 cr
 Post issue Equity: Rs. 10.28 cr

Listing: BSE & NSE

Book Running Lead Managers: ICICI Securities Ltd, IIFL Securities Ltd, Nomura Financial Advisory and Securities (India) Private Ltd.

Registrar to issue: Link Intime India Private Ltd

Shareholding Pattern

Shareholding Pattern	Pre issue %	Post issue %
Promoter and Promoter Group	43.9	36.6
Public	56.1	63.4
Total	100.0	100.0

*=assuming issue subscribed at higher band
 Source for this Note: RHP

Background & Operations:

Sansera Engineering Limited (SEL) is an engineering-led integrated manufacturer of complex and critical precision engineered components across automotive and non-automotive sectors. Within the automotive sector, it manufactures and supply a range of precision forged and machined components and assemblies, such as connecting rod, rocker arm, crankshaft, gear shifter fork, stem comp, and aluminium forged parts, that are critical for engine, transmission, suspension, braking, chassis and other systems for the two-wheeler, passenger vehicle and commercial vehicle verticals. Within the non-automotive sector, it manufactures and supply a range of precision components for the aerospace, off-road, agriculture and other segments, including engineering and capital goods. It supplies most of its products directly to OEMs in finished (forged and machined) condition, resulting in significant value addition by it.

SEL is one of the top 10 global suppliers of connecting rods within the light vehicle segment (passenger vehicles with gross vehicle weight of 3.5 tonnes or less, "Light Vehicle") and one of the top 10 global suppliers of connecting rods within the commercial vehicle ("CV") segment for CY 2020. It has been gaining market share in connecting rods in terms of production volume (units) for (i) Light Vehicles with a global market share of 2.3% in CY 2020 compared to a global market share of 0.9% in CY 2015 and (ii) CVs with a global market share of 3.0% in CY 2020 compared to a global market share of 0.9% in CY 2015. Within India, it is one of the leading manufacturers of (i) connecting rods, crankshafts, rocker arms and gear shifter forks for two-wheelers and (ii) connecting rods and rocker arms for passenger vehicles. Specifically, it is the largest supplier of connecting rods, rocker arms and gear shifter forks to two-wheeler OEMs in India. It is the largest supplier of connecting rods and rocker arms to passenger vehicle OEMs in India.

The Company is a technology-driven company with a focus on design, engineering, machine building and automation capabilities. These capabilities enable it to roll out new products in a timely manner and develop higher strength components required for high-end performance and graduate from manufacturing individual parts to the designing and manufacturing of sub-assemblies, thereby moving up the value chain. It possesses machine building capabilities, with several complex special purpose machines being manufactured in-house. As of July 31, 2021, it had built over 900 computer numerical control special purpose machines, which are deployed across manufacturing facilities. Its engineering capabilities, evolved over decades, has enabled to consistently offer quality, complex, precision components and assemblies, allowing to diversify business beyond the automotive sector into various other sectors, including aerospace, off-road and agriculture. It sold components across 69 product families during Fiscal 2021 as compared to 51 during Fiscal 2019. Recently developed products by SEL include (i) suspension, rotor and aluminium forged components for internal combustion engines ("ICE") and electric two-wheelers ("e-2W"), (ii) steering system components and drive train parts for ICE and hybrid passenger vehicles, (iii) cabin tilt system components and braking system parts for CVs, (iv) suspension components for off-road vehicles, (v) common rail systems for agriculture and (vi) components for industrial engines within other non-automotive sectors. In addition, since April 1, 2021, it has have developed (i) suspension and drive train components for electric two-wheelers, (ii) braking system components for passenger vehicles, (iii) machined engine casings for aerospace components for the defence sector and the bicycle segment and (iv) components for power transmission. It also has an active pipeline of products under development, including components for the defence sector and the bicycle segment.

Within India, SEL' customers include nine out of the top 10 two-wheeler OEMs and the leading passenger vehicle OEM based on production volume for Fiscal 2021. Globally, its customers include six out of top 10 global Light Vehicle OEMs and three of the top 10 global MHCV OEMs based on production volumes for CY 2020. In the two-wheeler vertical, it has relationships spanning over 20 years with HMSI, 25 fiscal years with Bajaj and over 20 years with Yamaha, the second, third and fifth largest two-wheeler Indian OEMs in terms of domestic production volume for Fiscal 2021, respectively. In the passenger vehicle vertical, it has relationships spanning more than 30 years with Maruti Suzuki, the leading Indian passenger vehicle OEM in terms of domestic production volume for Fiscal 2021 over 10 years with Stellantis N.V. (formerly Fiat Chrysler Automobiles), a leading European passenger vehicle OEM, and over 10 years with one of the leading North American passenger vehicle OEMs. The Company was the suppliers to 71 customers during Fiscal 2021 as compared to 64 during Fiscal 2019, which helped to decrease its reliance on top customer, Bajaj. For Fiscals 2021, 2020 and 2019, its top customer, Bajaj, contributed 20.75%, 22.08% and 22.71% of its revenues from sale of products, respectively.



As of July 31, 2021, SEL had 16 manufacturing facilities, of which 15 are in India in the states of Karnataka (Bengaluru, Bidadi, Tumkur), Haryana (Manesar), Maharashtra (Chakan), Uttarakhand (Pantnagar) and Gujarat (Mehsana), and one facility is in Trollhättan, Sweden.

For Fiscal 2021, SEL derived 88.45%, and 11.55% of its revenue from sale of products from the automotive sector and nonautomotive sectors, respectively. SEL is a global supplier and for Fiscal 2021 it derived 64.98% of its revenue from sale of products from India and 35.02% of its revenue from sale of products from Europe, USA and other foreign countries combined.

Its manufacturing operations are (i) integrated across the product cycle with the entire manufacturing process (encompassing forging, heat treatment, precision machining, other specialized processing, assembly, testing and quality control) being carried out in-house and (ii) coordinated through concurrent design and engineering, machine building and automation divisions. This enables to keep the core competencies required for its business within Group, streamline production processes, achieve shorter product development and delivery times, exercise greater control over key inputs and processes, reduce inventories and manage capital expenditure. The Company's long-term bank facilities are domestically rated by ICRA as [ICRA] AA-/Stable and by India Ratings as Ind AA-/Stable, and its short-term bank facilities are domestically rated by ICRA as [ICRA] A1+ and by India Ratings as Ind A1+.

Objects of Issue:

The objects of the Offer are to (i) to carry out the Offer for Sale of up to 17,244,328 Equity Shares by the Selling Shareholders; and (ii) achieve the benefits of listing the Equity Shares on the Stock Exchanges. SEL will not receive any proceeds from the Offer and all such proceeds (net of any Offer related expenses to be borne by the Selling Shareholders) will go to the Selling Shareholders. Further, the Company expects that listing of the Equity Shares will enhance its visibility and brand image and provide liquidity to its Shareholders and will also provide a public market for the Equity Shares in India.

Competitive Strengths

Leading supplier of complex and high-quality precision engineered components that is gaining market share across automotive and non-automotive sectors: SEL is one of the top 10 global suppliers of connecting rods in terms of production volume (units) for (i) Light Vehicles with a global market share of 2.3% in CY 2020 compared to a global market share of 0.9% in CY 2015 and (ii) CVs with a global market share of 3.0% in CY 2020 compared to a global market share of 0.9% in CY 2015. Within India, it is one of the leading manufacturers of (i) connecting rods, crankshafts, rocker arms and gear shifter forks for two-wheelers and (ii) connecting rods and rocker arms for passenger vehicles. Specifically, within two-wheelers, it is the largest supplier of connecting rods, rocker arms and gear shifter forks in India. Within passenger vehicles, it is the largest supplier of connecting rods and rocker arms in India. SEL's market position is the result of its established presence in the precision components manufacturing industry and its ability to manufacture and supply complex, high-quality precision components according to its customers' specifications, resulting in it being many of its customers' preferred supplier. Further, it is the single source supplier for certain components to select OEM companies in India and globally. As at July 31, 2021, SEL has been awarded business from 35 customers in the automotive sector and from 21 customers in the non-automotive sector across its product portfolio, where the start of production is either during or after Fiscal 2021.

SEL is well positioned to leverage its strengths towards expected growth in the automotive and non-automotive industries, particularly as OEMs are starting to outsource not only the manufacture of forged precision components but also the entire forging and machining operations of these components to integrated component manufacturers, including it. In addition, certain OEMs are seeking to consolidate their suppliers, particularly with suppliers who are able to manufacture complex and high-quality components, scale up production and supply products across a number of geographies.

Well diversified business model: SEL business model is well diversified by customer base, end segment, geographical spread of revenues and product portfolio.

Customer base: SEL has a diversified and increasing customer base. Within India, its customers include nine of the top 10 two-wheeler OEMs and the leading passenger vehicle OEM based on production volume for Fiscal 2021. Globally, its customers include six out of top 10 global Light Vehicle OEMs and three of the top 10 global MHCV OEMs based on production volumes for CY 2020. It was suppliers to 71 customers during Fiscal 2021 as compared to 64 during Fiscal 2019 and are continuously pursuing new customer relationships.

End segment: SEL derives its revenue from multiple segments within the automotive sector, including the two-wheeler, passenger vehicle and commercial vehicle verticals. Within the non-automotive sector, it manufactures and supply a range of precision components for the aerospace, off-road, agriculture and other segments, including engineering and capital goods.



	Fiscal 2021		Fiscal 2020		Fiscal 2019	
	Revenue (₹ in million)	% of Revenue from Sale of Products	Revenue (₹ in million)	% of Revenue from Sale of Products	Revenue (₹ in million)	% of Revenue from Sale of Products
Automotive Segments						
Two-wheelers	7,341.36	50.39%	7,007.29	50.30%	7,268.26	47.60%
<i>Of which:</i>						
<i>Scooters</i>	1,460.30	10.02%	1,639.37	11.77%	1,624.40	10.64%
<i>Motorcycles</i>	5,881.07	40.37%	5,367.92	38.53%	5,643.85	36.96%
Three-wheelers	115.65	0.79%	178.87	1.28%	226.16	1.48%
Passenger vehicles	3,514.64	24.12%	3,244.48	23.29%	3,671.52	24.04%
Commercial vehicles	1,914.71	13.14%	1,809.04	12.99%	2,254.59	14.77%
<i>Sub Total (Automotive)</i>	12,886.37	88.45%	12,239.68	87.86%	13,420.53	87.89%
Non-Automotive Segments						
Aerospace	547.88	3.76%	813.69	5.84%	675.26	4.42%
Off-road	607.75	4.17%	414.75	2.98%	555.36	3.64%
Agriculture	360.62	2.48%	299.75	2.15%	391.01	2.56%
Others	166.30	1.14%	162.50	1.17%	227.65	1.49%
<i>Sub Total (Non-Automotive)</i>	1,682.54	11.55%	1,690.69	12.14%	1,849.28	12.11%
Revenue from Sale of Products	14,568.90	100.00%	13,930.38	100.00%	15,269.81	100.00%

Geographical spread: It has focused on increasing its export revenues with a view to reduce dependence on the Indian market. Revenues from sale of products are geographically diversified with Europe, USA and other foreign countries accounting for 35.02%, 30.62% and 31.00% of its revenue from sale of products in Fiscals 2021, 2020 and 2019, respectively.

Product portfolio: Within most of SEL product families, it manufactures a range of components for multiple end applications. For instance, its key product families such as connecting rods, rocker arms and crankshafts have multiple end use applications across both automotive (two-wheelers, passenger vehicles, commercial vehicles) as well as non-automotive (off-road, agriculture, engineering and capital goods, marine and others) sectors.

SEL varied product offerings and continuous product development efforts have enabled it to cater to multiple sectors and customers, enhance its ability to attract new customers. It sold components across 69 product families during Fiscal 2021 as compared to 51 during Fiscal 2019.

Advanced capabilities in design and engineering, machine building and automation resulting in continuous new product development and improved productivity, with fungibility of equipment, machinery and production lines across product families and sectors: SEL is engineering-led in its capabilities, with integrated operations across the product manufacturing cycle. As of July 31, 2021, it had a team of 201 personnel working on design, engineering, machine building, automation and technical support functions.

Design and engineering capabilities: SEL design and engineering capabilities comprise product, process, machine, fixture and cutting tool design as well as advanced engineering capabilities, which has enabled it to support its customers through concurrent development of critical products and further strengthened its relationships. Its engineering capabilities also enable it to design new products from statements of requirements, validate its designs through software using FEA (finite element analysis), develop prototypes and perform relevant testing to confirm design robustness, all of which increase opportunities for it to secure higher value-added business with its customers and enables it to deepen its customer relationships through cost optimisation and reductions in development and testing time.

Machine building capabilities: SEL possess integrated machine building capabilities with special purpose machines being manufactured in-house. Its computer numerical control ("CNC") special purpose machines ("SPM") are built in a separate dedicated facility, which employed 56 personnel as of July 31, 2021 and manufactured 65 machines during Fiscal 2021. It manufactures advanced CNC SPMs, including automated cells, four station SPMs, vertical honing machines, double disc grinding machines, internal grinding machines, laser cracking machines, trumpet-form hole machines, balancing machines and laser structuring machines, which are deployed across its manufacturing facilities. Over the last few years, it has also deployed many of its own special purpose machines at its Swedish manufacturing plant that conform with the CE (Conformité Européenne) Mark.

Automation capabilities: SEL' automation capabilities enable it to combine operations and eliminate multiple operators in the production process in order to increase productivity, while controlling costs and maintaining consistent product quality. The Company's automation division included a team of 27 personnel as of July 31, 2021 who work concurrently with machine and fixture design to implement automation projects intended to increase its productivity and control labour costs. As of July 31, 2021, it had numerous automation projects underway, with a number of these targeted for implementation during the current fiscal year. The Company has leveraged its design, engineering, machine building and automation capabilities in its existing production facilities to optimise cycle times to plan its personnel needs and enhance productivity. Further, it has deployed similar manufacturing



lines for its newly developed suspension products, reaping similar benefits in manpower and productivity. In addition, it is in the process of extending these capabilities for its braking system components and its other existing product lines.

Fungibility of production lines: SEL' production line configurations are flexible, allowing it to interchange capacity and product mix between all its product categories within and across automotive and non-automotive sectors based on customer and operational requirements from time to time, enabling it to offer a diverse range of products and services to its customers. This optimises its machine productivity and operational efficiency and de-risks its business model.

Long-standing relationships with well-known Indian and global OEM customers: Within India, SEL customers include nine of the top 10 two-wheeler OEMs and the leading passenger vehicle OEM based on production volume for Fiscal 2021. Globally, its customers include six out of top 10 global Light Vehicle OEMs and three of the top 10 global MHCV OEMs based on production volumes for CY 2020. It has long-standing relationships with several well-known Indian and global OEMs. Specifically, (i) in the two-wheeler vertical it has relationships of 25 fiscal years with Bajaj, over 20 years with Yamaha and over 20 years with HMSI, the third, fifth and second largest two-wheeler Indian OEMs in terms of domestic production volume for Fiscal 2021, respectively and (ii) in the passenger vehicle vertical it has relationships of over 30 years with Maruti Suzuki, the leading Indian passenger vehicle OEM in terms of domestic production volume for Fiscal 2021 over 10 years with Stellantis N.V. (formerly Fiat Chrysler Automobiles), a leading European passenger vehicle, and over 10 years with one of the leading North American passenger vehicle OEMs. It has been recognised with numerous awards by its customers for the quality of its products.

Financial performance that has outperformed the industry trends, with industry leading metrics: In Fiscal 2021 compared to Fiscal 2020, two-wheeler production volume in India declined by approximately 12.6% and the passenger vehicle production volume declined by approximately 11%. In CY 2020 compared to CY 2019, the global Light Vehicle and CV segments registered a decline in production of approximately 17.8% and 4.4%, respectively. Despite these decreases in production volumes, SEL' revenue from sale of products increased by 4.58% to Rs. 14,568.90 million for Fiscal 2021 from Rs. 13,930.38 million for Fiscal 2020. In Fiscal 2020 compared to Fiscal 2019, two-wheeler production volume in India declined by 14.1% and the passenger vehicle production volume declined by 15%. Further, over the preceding two challenging fiscal years, SEL has been able to increase its profits and reduce its borrowings.

Its profit for the year (after tax) increased from Rs. 980.64 million in Fiscal 2019 to Rs. 1,098.60 million in Fiscal 2021 while its Net Debt reduced from Rs. 5,637.63 million in Fiscal 2019 to Rs. 4,846.07 million in Fiscal 2021. It has managed to outperform the industry trends through the introduction of new product families and the acquisition of new customers. Total operating income (revenue from operations) has grown at a CAGR of 12.8% from Fiscals 2016 to 2020 as compared to the average CAGR of 7.4% for the top 10 listed auto-component manufacturers in India by market capitalization, in the same period. as compared to the publicly listed top 10 auto-component manufacturers in India by market capitalisation, it is the top auto-component manufacturer in India in terms of operating EBITDA margin for Fiscal 2020 and one of the top five auto-component manufacturers in India in terms of profit after tax margin in Fiscal 2020.

Skilled and experienced board of directors and management team, with an employee culture that emphasises teamwork and collaboration across functions: SEL is an employee-driven, professionally managed organisation. It takes pride in its employee culture that emphasizes teamwork and collaboration across functions, which helps ensure that its employees are able to suggest and implement ideas, regardless of their roles. Its highly experienced and professional management team provides it with a key competitive advantage. Most members of its senior management have been with the Company for more than 10 years and has extensive experience in the precision components manufacturing industry, including in operations, business development, quality assurance, customer relationships and human resources. This results in effective operational coordination and continuity of business strategies. Its management team has led its organisation through multi-pronged diversification of the business, acquisitions and development of new systems and products over the last several years. It is further supported by an experienced board of directors with diversified expertise. Its management team has ownership stakes in the Company through ESOP schemes with a view to align their interests with its performance. It also has incentive schemes for employees at various levels, as well as in-house talent development programmes and career progression pathways.

Business Strategy:

Consolidate and strengthen global market share in existing automotive product portfolio and diversify into new products to cater to the expected increase in electrification of vehicles: As OEMs focus their resources on the final assembly of vehicles, they are increasingly looking to external suppliers for content that they have previously produced in-house. This trend is underpinned by OEMs' growth outside their home markets, consumer expectations with regard to product complexity and feature integration and an increased focus on safety and the environment. (Source: the CRISIL Report). Accordingly, SEL intends to take advantage of this outsourcing trend that has led to an increase in OEM dependency on suppliers that are capable of managing complex component production while maintaining high quality standards across multiple geographies. It intends to focus on consolidating its leading market share, both globally and in India across its existing product portfolio. Its long-standing experience in supplying most complex and critical engine and transmission components, makes it well positioned to diversify into other segments such as suspension, braking, steering, chassis and other systems within the automotive sector. Further, it intends to develop multiple technology driven systems and components to cater to growing opportunities in electrification of vehicles. It is in the process of setting up a dedicated facility for hybrid and electric components in Plant 2 and it expects this facility to be commissioned during Fiscal 2022.

Two-wheelers

Within the two-wheeler segment in India, SEL has a dominant position across all of its key product families. Specifically, it is the largest supplier of connecting rods, rocker arms and gear shifter forks, as well as a leading manufacturer of crankshafts, in the two-wheeler segment in India. CRISIL Research expects two-wheeler rocker arms, connecting rods, gear shifter forks and crankshafts in India to grow at a CAGR of 12.0%, 12.3%, 12.2% and 12.3%, respectively, over the next five years from Fiscal 2021 to Fiscal 2026. SEL has been able to consolidate its market share in its key product categories in the



two-wheeler segment over the years. Further, one of the leading two-wheeler OEM has outsourced the connecting rod and crankshaft business to it, which was previously being carried out in-house by the same OEM. Its integral crankshaft products are currently being supplied to Royal Enfield and a leading U.S. premium motorcycle brand and can be supplied to other customers. SEL intends to further continue to consolidate its market share by capitalising on the increasing outsourcing trend by the OEMs and by increasing content per vehicle for its existing customers. As part of the strategy to diversify into technology agnostic products and to cater to growing opportunities with respect to electric powertrains, it has added multiple new components in the two-wheeler segment over the last couple of years:

- The Company is currently supplying its recently developed suspension component, stem comp, to one OEM. It expects to consolidate its market share for this product by supplying to multiple customers across both ICE and electric two-wheelers.
- It has recently secured business with a leading electric-two-wheeler OEM for supplies of multiple precision forged and machined suspension and axle (drive train) components. It commenced supplies of these components in August 2021 and plans to supply similar components to other OEMs.
- Aluminium forged products currently cater to high-end premium motorcycles. It commenced supplies of these components in Fiscal 2020. With the expected growth in the high-end premium motorcycles market and the expected growth in electrification of vehicles, it expects increasing usage of aluminium forged components going forward
- SEL supplies arm relay, a suspension system part, to a leading 2W OEM for their premium motorcycles. It expects the demand for this product to witness steady growth in line with the growing share of premium motorcycles. It intends to supply this product to other OEMs as well.

Passenger Vehicles / Light Vehicles

Within the passenger vehicles segment in India, SEL is the largest supplier of connecting rods and rocker arms. It is one of the top 10 global suppliers of connecting rods within the Light Vehicles segment. It has been gaining market share in connecting rods for Light Vehicles with a global market share of 2.3% based on its production volume (units) in CY 2020 compared to a global market share of 0.9% in CY 2015. It has secured multiple new programs for the supply of connecting rods across geographies from its existing customers and expects to further consolidate its global market share in connecting rods. It also expects to consolidate its market share going forward based on the continued need for connecting rods in all hybrid vehicles.

As part of SEL' strategy to diversify into technology agnostic products and to cater to growing opportunities in electrification of vehicles:

- SEL has recently secured business for multiple drive train components, specifically for hybrid EVs, from a leading global passenger vehicle OEM. It expects to commence supplies of these components in Fiscal 2023. It plans to increase the number of its customers it supplies these components to and increase the number of components it supplies for use in hybrid EVs.
- It has secured orders for braking system components from a leading Indian passenger vehicle OEM and for multiple steering components from an Indian Tier 1 supplier. It has also been supplying multiple drive train and chassis components for a global Japanese OEM. It plans to supply these components to other OEMs.
- It supplies aluminium forged products developed for high-end two-wheelers. With growing light weighting and electrification trends, it expects increasing usage of aluminium forged components going forward in passenger vehicles and plans to cater for these requirements.

Commercial Vehicles

SEL were one of the top 10 global suppliers of connecting rods within the CV segment in CY 2020. It has been gaining market share in connecting rods for CVs with a global market share of 3.0% based on its production volume (units) to the CV segment in CY 2020 compared to 0.9% in CY 2015. Ricardo expects the connecting rod market for CVs to grow at a CAGR of 0.7% to 35.9 million units by CY 2025 from 34.8 million units in CY 2020. It plans to further consolidate its global market share in connecting rods by increasing its share of business from existing customers and adding new customers. In addition, it has secured business to supply one of its key product families, gear shifter forks, to CNHi and leading European CV OEMs, and added new customers, such as leading global suppliers of braking systems, across multiple new geographies in the CV segment.

As part of diversification strategy, SEL has recently started supplying precision components for cabin tilt systems, which is the part of the chassis of HCVs. It currently supplies its components for the Indian arm of a global manufacturer of these systems and intend to increase its supplies and cater to global requirements of its customer. It has developed components that are part of the braking system of heavy commercial vehicles, such as guide bushes and integral crankshafts. SEL intends to increase the number of precision components that can be used in multiple subsystems of CVs.

Continue to leverage existing capabilities to diversify further into non-automotive businesses and expand addressable Market: With a track record of developing complex and critical precision engineered components for the automotive sector over multiple decades, SEL' manufacturing capabilities can be extended to manufacture precision components for several nonautomotive segments, such as aerospace, off-road, agriculture and engineering and capital goods. Further, its existing key product families in the automotive sector have multiple applications across various non-automotive sectors. CRISIL Research expects the market for precision engineered components for non-automotive applications (including defence, engineering and capital goods, power, aircraft and other niche applications such as tractors, construction equipment, railways, medical etc.) to grow at a CAGR of approximately 8.3% over the next five years to reach Rs. 2,655 billion by Fiscal 2026 from Rs. 1,780 billion in Fiscal 2021. Within the non-automotive segment, it primarily focusses on manufacturing precision engineered components that require complex engineering capabilities, resulting in high value addition by it.



Aerospace Sector

For Fiscals 2021, 2020 and 2019, SEL's revenue from sale of products to the aerospace segment was 3.76%, 5.84% and 4.42% of its total revenue from sale of products, respectively. Fleet renewal is likely to be the main driver of order books for Airbus and Boeing till CY 2025. China and India are expected to be the first and third most important markets by delivery value. Aircraft deliveries by Airbus and Boeing are expected to increase at a CAGR of 10-12% between CY 2020 and CY 2025.

Over the years, the Company's strategy in the aerospace segment has been to increase its revenue by supplying high value components. It started by supplying components for cargo, structural, lighting and seating systems, with an objective to eventually graduate to supply critical and complex precision components for actuation systems and engine and landing gear systems.

It intends to increase the number of engine and landing gear components and graduate to supply of subsystems and assemblies. In addition, it plans to expand the end use application of its components from civilian aerospace to defence aerospace. In order to facilitate this strategy, it plans to construct a new greenfield manufacturing facility in Bangalore dedicated to aerospace and defence. This facility is planned to have a built up area of 13,020 square metres compared to a built up area of 4,000 square metres for its current facility for aerospace, which is Plant 9. SEL expects the facility to be commissioned during Fiscal 2023.

Off-road Sector

SEL has recently secured additional business for supplying multiple new components, including suspension parts, for an existing customer's new program. It has also added another customer in the off-road segment for eventual supplies in Canada and the European Union. It intends to increase its revenue from the off-road sector by adding new products and customers.

Agriculture Sector

The global tractor market is expected to grow at a CAGR of 5.0% to reach 2.8 million units by CY 2025 from 2.2 million units in CY 2020. The Indian tractor market is expected to grow at a CAGR of 0 to 2% to reach 1.03 million units by Fiscal 2026 from 965,000 units in Fiscal 2021. It has developed several new components for the agriculture sectors, such as a common rail for tractors and Euro VI fuel pump components. Further, it has secured new business from existing customers for supplying its existing and new components. It intends to increase its revenue from the agriculture segment by adding new products and customers.

Other Non-Automotive Sectors

SEL plans to develop and manufacture additional precision components for other non-automotive applications where it can leverage its engineering capabilities.

Retain and strengthen technological leadership through continued focus on engineering capabilities: SEL' customers demand for higher performance and top-quality products is growing. In response to this, it has placed emphasis on continually improving its design and engineering capabilities so that it can focus on providing high value-added and technology-driven components, which will present it with opportunities to capture shifts in customer preferences as well as evolving regulatory requirements, such as heightened emissions control standards. Further, this would increase opportunities for SEL to become a preferred supplier to its customers, thus giving the opportunity to consolidate its position with its customers. Further, SEL' machine building, automation and advanced engineering capabilities enable it to de-risk its business against product obsolescence and reconfigure machines to suit new products in various verticals.

To enhance SEL' capabilities, it has undertaken a number of initiatives:

- Commissioned a new fatigue testing machine, with which it has tested its products to conform design assumptions or characteristics. It expects this to further enhance its ability to analyse and enhance product reliability, durability and performance.
- It has added five-axis machining capabilities for machining large structural components for aerospace, both in aluminium and other precious metals.
- SEL has commissioned aluminium forging lines complementing its existing machining capabilities, which will make SEL well-positioned to capitalise on the growing demand and increasing need for components that are lighter in weight and environmentally friendly, as OEMs strive to reduce the ecological footprint of their vehicles.

Focus on operational efficiencies to improve returns: SEL has been able to deliver a RoCE of 15.11%, 12.88% and 19.36% for Fiscals 2021, 2020 and 2019, respectively, in challenging market conditions. It continues to focus on improving operational efficiency, including by way of the following key initiatives:

SEL' operations are integrated across the product cycle, and almost all of its manufacturing processes (encompassing forging, heat treatment and machining) are carried out in-house. This allows it to respond quickly and efficiently to any customer requirements or changes in product specifications without needing to depend on any external vendors. This helps SEL to closely monitor product quality, production costs and delivery schedules.

Ability to design and build computer numerical control special purpose machines allows SEL savings in operational and capital expenditure through savings in capital cost, footprint, power and maintenance costs, etc. which would otherwise have been higher.

SEL has adopted a number of initiatives to increase its operational efficiency, such as (i) improving production line output by constantly improving productivity at the bottleneck operation through implementing TPM (total productive maintenance) methodology on the shop floor and balancing line output through partial investments (if required), (ii) inventory management (working towards single piece flow and streamlining material movement), (iii)



optimising shop floor layouts through simulation software to streamline people and material movement, (iv) utilising simulations to improve input raw material yield in forgings, (v) optimising tool consumption to increase tool life and reduce costs, (vi) reduction in internal rejection or rework by streamlining manufacturing processes, and (vii) energy costs reduction through efficient power sourcing and reduction in consumption through implementation of EMS (energy management systems), with all plants being EMS certified by TUV NORD.

SEL has implemented several automation projects in-house, including pick and place systems, material handling gantries, machine tending robots, automated assembly and automated inspection cells.

The Company has a practice of sharing and horizontally deploying kaizens and QCC (quality controls circles) results implemented in any one plant, across various plants. This helps plants to improve SPQCD (safety, productivity, quality, cost and delivery) simultaneously. This practice is monitored centrally as a corporate function.

SEL closely monitors operational efficiency at each of its individual plants, benchmarking performance to relevant key performance indicators through which it distributes its business to optimise capacity utilization at each plant.

Industry

Review and Outlook of Indian Two-Wheeler Industry

Indian two-wheeler industry review (Fiscals 2016 – 2021)

Production volume

India is among the top two producers of two-wheelers globally. The two wheelers segment also dominates the Indian automobile industry accounting for approximately 80% of industry output in volume terms. Domestic two-wheeler production remained flat between Fiscals 2016 and 2021. During Fiscals 2016 to 2019, the industry's production increased at a CAGR of 9.3%, propelled by good monsoons, the favourable economic situation, and rising exports. In Fiscal 2020 there was 14.1% decrease in production volume from Fiscal 2019, owing to transition to Bharat Stage (BS)-VI norms, and in Fiscal 2021 there was a 12.6% decrease in production due to challenges heaped by the COVID-19 pandemic.

Domestic sales vis-à-vis exports

The Indian two-wheeler industry is primarily domestic-skewed, with domestic sales accounting for approximately 86% share of overall two-wheeler sales in the past five years. However, over the years, manufacturers, such as Bajaj Auto, TVS Motor Company and HMTI, have been expanding their geographical footprint. Also, joint ventures with global brands, such as KTM, BMW and Husqvarna, and catering to the global demand of these brands from India, have given an additional thrust to two wheeler exports. Indian two-wheelers are primarily exported to crude oil exporting developing countries, primarily in Africa and Latin America, and contributed approximately 65% of India's exports in Fiscal 2020.

Domestic and export-wise motorcycle, scooter and moped sales

Motorcycles dominated the domestic two-wheeler space, with approximately 66% market share in Fiscal 2021. Over 2016 to 2020, though, the share of scooters had risen from 31% to 33%. The expanding share was because of strong demand, following new model launches (including variants with higher engine power), aggressive marketing strategies, such as gender-based positioning, increasing usage of scooters by working women in urban areas (due to convenience), and growing preference for scooters as a second vehicle by households. However, in Fiscal 2021, because of urban regions facing stricter lockdown, sales of scooters declined. Share of premium motorcycles in overall motorcycles have risen to 16% in Fiscal 2021 from 12% in Fiscal 2016 driven by rising affordability, entry of premium bike manufacturers in India, launch of new products in premium motorcycle segment and growing customer preference to premium and better performance motorcycles. Despite a 1.3% CAGR decline in demand for motorcycles, demand for premium motorcycles grew at 3.6% CAGR over Fiscal 2016 to 2021. In exports as well, motorcycles have the dominant share. These are largely exported to African and Latin American countries. Exports of premium motorcycles are also gaining traction, mainly to developed regions, such as the EU. Scooters are mainly exported to Asian countries.

Key domestic regulations

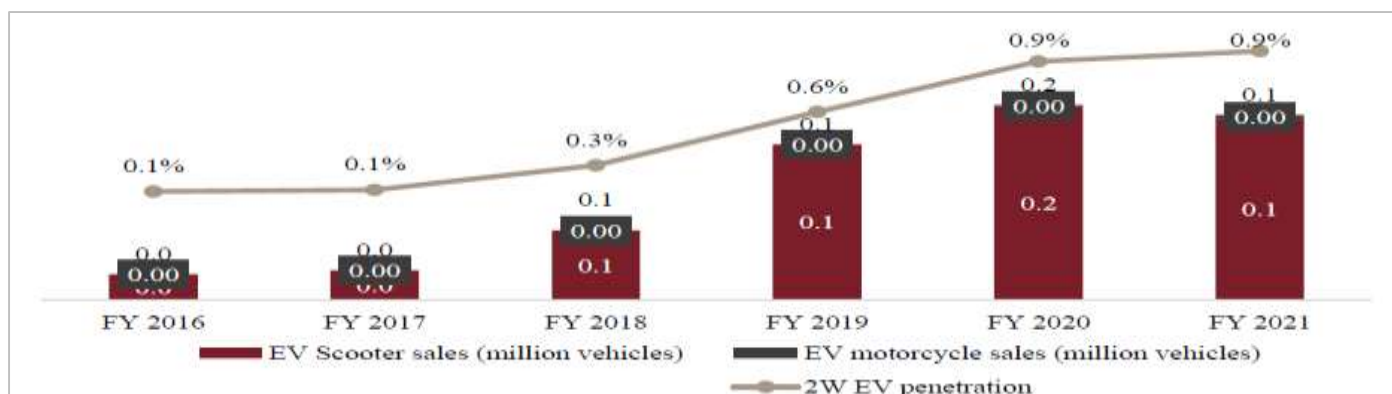
The Indian government has been taking aggressive steps to converge emission standards with global norms. In February 2016, it decided to skip BS-V norms and directly mandate BS-VI norms. Compliance with the latest emission standards requires improvement mainly in the exhaust system, thereby increasing the prices of the two-wheeler.

Finance availability

Finance penetration is lower in two-wheeler segment compared with other automotive segments, given the industry's smaller ticket sizes, relatively lower income profile of customers, high default rates, and difficulty in repossessing vehicles.

Electric vehicle penetration

India is a signatory to the Paris Agreement under the United Nations Framework Convention on Climate Change. The country is also part of the EV30@30 campaign, targeting a 30% sales share for EVs by 2030.



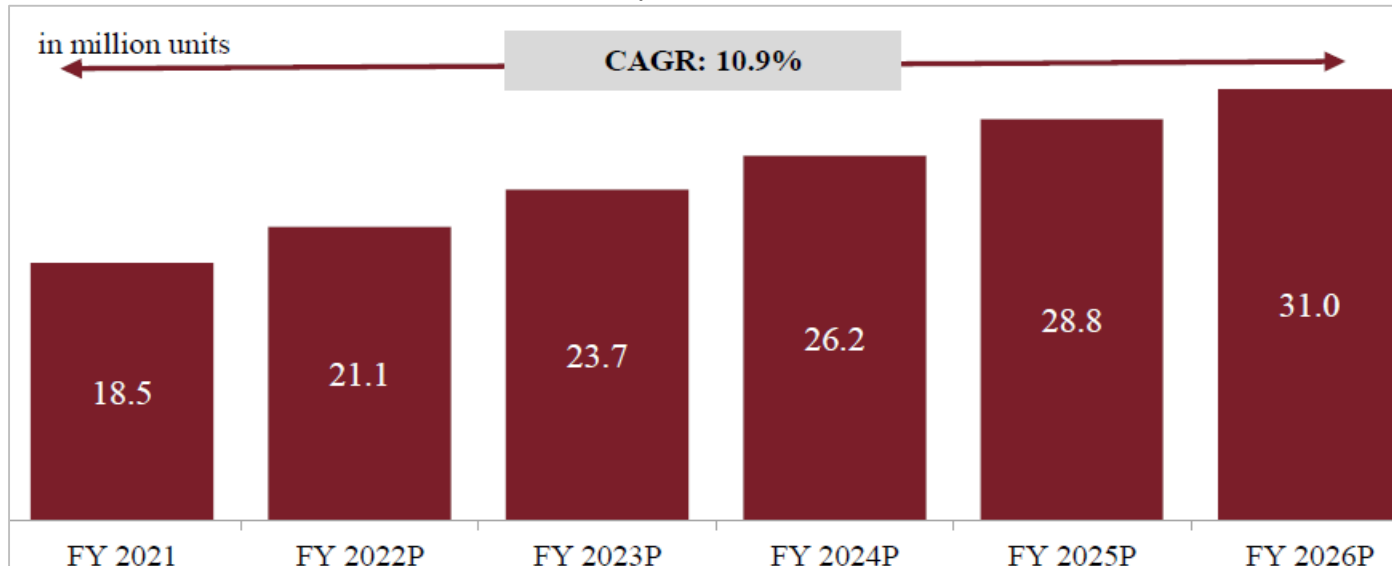
However, due to the high cost of lithium-ion batteries, along with inadequate charging infrastructure, the penetration of electric two-wheelers (e-2Ws) is still below 1% and comprises mainly low speed electric scooters. Penetration of electric motorcycles is also currently low on account of lack of availability of established electric model in affordable or premium segment. Factors, such as higher cost of ownership, unavailability of easy finance, lack of proper charging infrastructure in urban as well as rural areas, etc., are key constraints for adoption of electric motorcycles in affordable motorcycle segment. On the contrary, even a premium motorcycle user is hesitant to shift to electric motorcycle due to user preference for internal combustion engine (“ICE”) motorcycles because of driving feel-related factors, lack of availability of high performance electric motorcycles at comparable price points to ICE, insufficient range profile of existing products and lack of charging infrastructure outside city limits.

Outlook on Indian two-wheeler industry (Fiscals 2021 – 2026P)

Production volume outlook

Overall domestic two-wheeler production is expected to grow at a robust pace of 10.9% CAGR over Fiscals 2021-26 to reach approximately 31.0 million units by Fiscal 2026. Domestic sales and exports are estimated to grow at 11.2% and 9.5% CAGR, respectively, during this period. However, the risk of subsequent waves of COVID-19 cases and the need for the state and central governments to impose localised or extensive lockdown to control spread of pandemic may have an impact on supply chains as well as sales volumes. In such a case, overall industry production is also likely to be impacted over the short term.

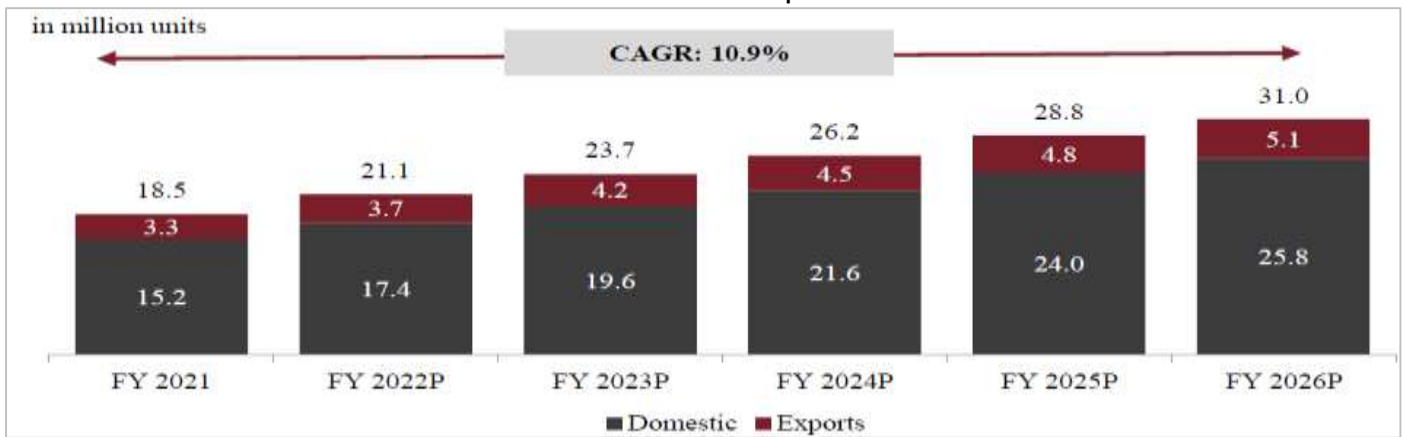
Two-wheeler production volume outlook



Split by domestic sales and exports

Domestic sales volume (80-85% of total production) is estimated to grow at a 11.2% CAGR over the five-year period, after declining 18% on-year in Fiscal 2020 and 13% in Fiscal 2021. Higher GDP growth and lower inflation would boost domestic sales volume, led by better affordability with a rise in disposable incomes. Rising income will be further aided by better rural connectivity and rising women workforce in urban and rural areas. The under-penetrated rural market is likely to be the key growth segment for the two-wheeler industry. Preference to personal mobility on account COVID-19 pandemic will also support demand over the short to medium term till a time reliable solution to COVID-19 pandemic becomes widely available.

Two-wheeler domestic and exports outlook



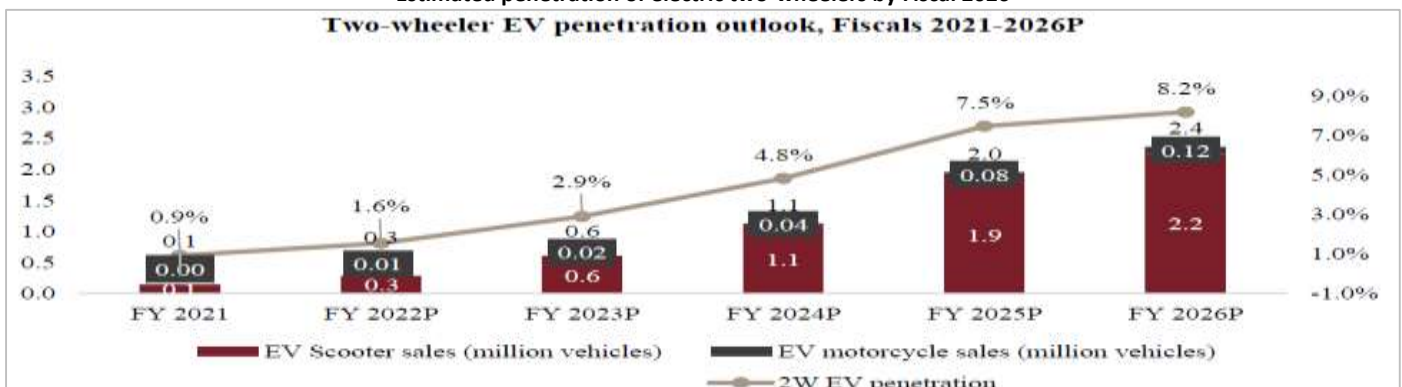
CRISIL Research expects two-wheeler exports from India to grow at a CAGR of 9.5% over Fiscals 2021- 2026 compared with 5% between Fiscals 2016-2021. While expanding geographical footprints and extensive product portfolios would drive growth, crude oil prices and currency fluctuations in export markets will remain key monitorables. Moreover, government initiatives to make India an exports hub, along with policies, such as production-linked incentive (PLI), provide further impetus to two wheeler exports. Even in case of export, OEM sales are likely to come under pressure in case of a worsening of the COVID-19 situation in key export markets

Government intervention in regulations and policies

The Government of India, through various ministries, has formulated policies for the development of the EV sector in India. The following table lists some of the policies and their expected outcomes:

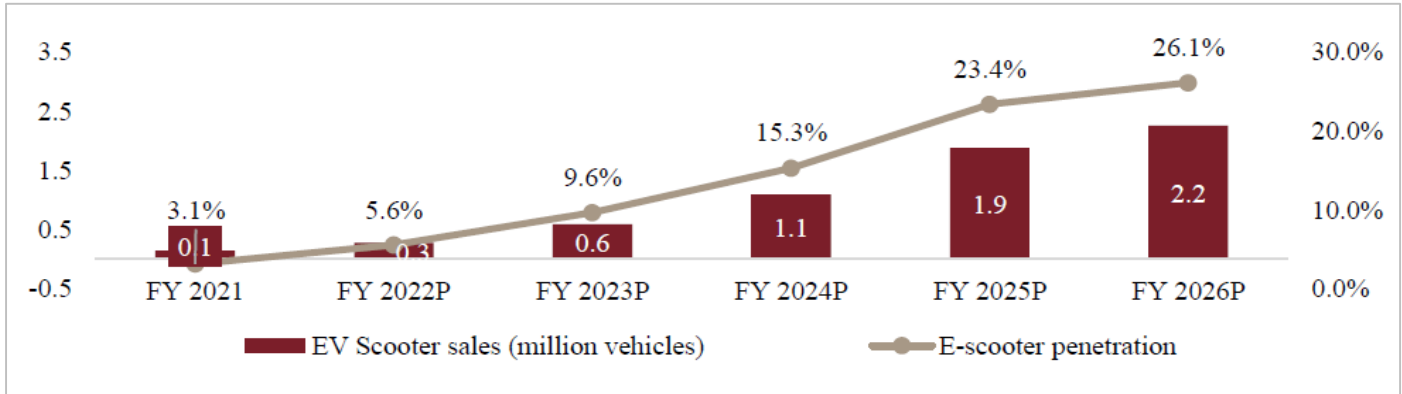
Policy	Policy details	Expected outcome
Reduction in the GST rate for EVs and chargers	-From 12% to 5% for EVs, and 18% to 5% for chargers, effective from August 1, 2019	-EV acquisition cost came down. Fast-charging infrastructure cost also reduced
Union Budget 2019-20	-Income tax deduction of Rs 1.5 lakh on EV loans	-TCO decreased, especially for salaried professionals
Warranty condition for eligibility of vehicle under FAME II (May 15, 2019)	-Warranty condition revised to 3 years subject to 20,000 km; earlier warranty on vehicles was provided for one year only	-Customer perception of low quality of EVs will change
FAME II subsidy (March 22, 2019) valid till FY22	-1 million e2W to be given subsidy at Rs. 10,000 / kwh or 20% of ex-factory price (limited to Rs 1.5 lakh)	- e2W acquisition cost came down, with subsidy ranging up to 20% of ex-factory price for current models
State EV policies	-8 states have finalised their EV policies and 8 others have draft policies -Policy entails supply and demand-side incentives	-Maharashtra and Delhi are offering incentives, further decreasing acquisition cost -Demand-side incentives include reduced tariff for EV charging, rebates on road tax, interest-free loans for auto component manufacturer, and cost split for skill development

Estimated penetration of electric two-wheelers by Fiscal 2026



CRISIL Research estimates e-2W penetration to reach approximately 8% by Fiscal 2026 from approximately 1% currently. A bulk of migration towards EVs is expected from the scooter segment. Notably, scooters have a higher urban penetration of around 65-70% compared to motorcycles that are largely rural demand driven. EV penetration in scooters is expected to reach approximately 25-27% by Fiscal 2026, whereas EV penetration in motorcycles is expected to stay below 1%.

Scooter EV penetration outlook, Fiscals 2021-2026P



EV penetration in motorcycles is unlikely to pick up despite improvement in charging infrastructure on account of lack of affordability of electric motorcycles and limited availability of electric motorcycle options in affordable and premium segment. Factors such as higher total cost of ownership compared to ICE motorcycles even at reduced battery prices, lack of proper charging infrastructure in rural areas, etc. will remain key constraints for adoption of electric motorcycles in the affordable motorcycle segment. Even in the premium motorcycle segment, user preference for ICE over electric vehicles due to driving feel related factors is likely to limit electrification in the premium motorcycle segment.

Review and Outlook of the Global Light Vehicle Industry

Global Light Vehicle (Passenger Vehicles GVW <= 3.5T) production has remained flat between 2015-2019. However, vehicle production declined by approximately 17.8% in CY 2020 from CY 2019 due to COVID-19. Global Light Vehicle production declined by 22.5% in CY 2019 from CY 2018. Given that the USA and most parts of Europe are still severely impacted by COVID-19, Ricardo does not expect a V-shaped recovery for the passenger vehicle market, but a more gradual recovery coming out of the pandemic. Production in CY 2021 is projected to grow by approximately 8.1% YoY, primarily driven by the Chinese market. Despite realising growth in Q1 2021, the pandemic and the chip shortage issues continue to be the biggest concerns. Ricardo expects overall global volumes to reach approximately 91.5 million by CY 2025 and approximately 100.5 million by CY 2030 with China, Europe and North America accounting for approximately 70% of the global production volume. Ricardo expects the share in global production volume of the rest of the world (i.e., South America, South Asia and the Middle East) to grow from approximately 18.3% in 2020 to approximately 21.9% in 2030 largely driven by developing regions/ countries such as India and ASEAN countries (e.g., Malaysia, Vietnam and Indonesia). Top 10 OEMs in the Light Vehicle segment accounted for approximately 74% of the total production in CY 2020. Toyota leads the light vehicle market with approximately 13% share followed closely by Volkswagen with approximately 12% and Renault Nissan Mitsubishi alliance with approximately 10%. Over the years, Toyota and Volkswagen have been battling to be the number one OEM in passenger vehicle production. Post-merger of FCA and PSA, Stellantis N.V. (formerly Fiat Chrysler Automobiles) is now among the top five global OEMs in terms of production volumes displacing Honda and General Motors. Geely, with a share of 3%, is the only Chinese brand with significant share.

Expected trends:

As the emission and fuel economy (CAFE) norms become further stringent, pure ICE will no longer be a viable option. Depending on the stringency of CAFE norms across regions, OEMs have a choice of micro, mild and full hybrids, BEVs and FCEVs to meet CAFE norms. Mild hybrids offer a potential solution to meet FE norms between 2020-2025 and Ricardo expects BEVs to grow post 2025 as the regulations become more stringent.

2020 to 2025 outlook:

Ricardo estimates that between CY 2020 and CY 2025, the share of hybrid vehicles (micro, mild and full) in the global Light Vehicle segment will increase from 61.2% to 70.2%. Micro-hybrids are currently the standard option, but their share is likely to decline to approximately 37.3% by CY 2025. This decline will primarily be seen in Europe and China while it would be enough to meet FE norms in the US. Ricardo expects mild and full hybrids to account for approximately 32.9% in 2025 with mild hybrids being dominant. Mild hybrids offer the quickest route to electrification with limited complexity (compared to full hybrid) and substantial fuel economy benefit. Approximately 80% of mild hybrid volumes in CY 2025 will be in Europe and China. With approximately 8.4% CAGR, Ricardo expects the number of hybrid vehicles (micro, mild and full) to increase from approximately 43 million in CY 2020 to approximately 64.3 million in CY 2025. With a CAGR of approximately 37.2%, Ricardo projects that the number of BEVs will increase from 2.3 million to 11.2 million between CY 2020-25.

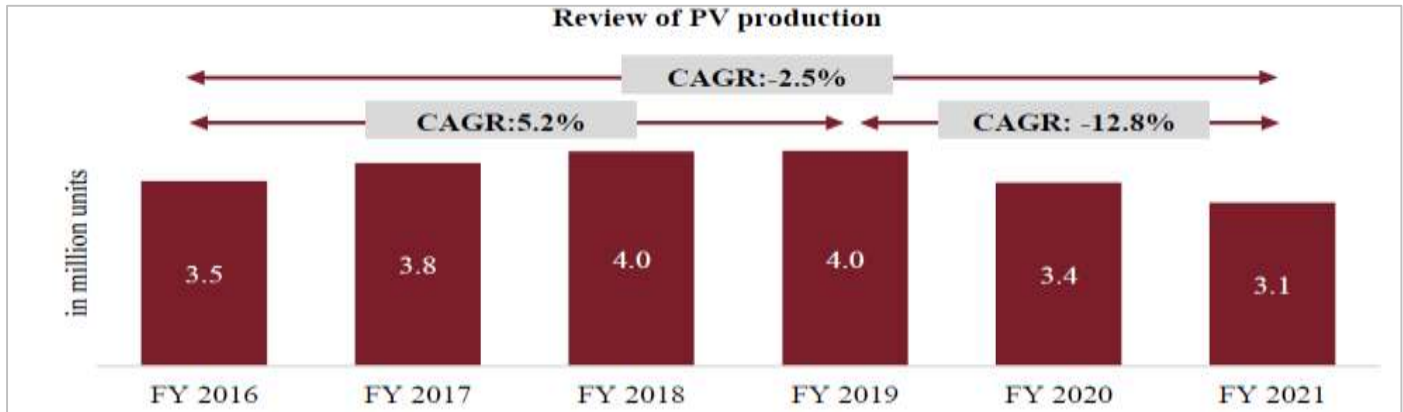
2025 to 2030 outlook:

Ricardo expects the share of mild and full hybrids to increase to approximately 43% in CY 2030 with mild hybrids being dominant for reasons explained above. With a CAGR of approximately 0.9%, the number of hybrid vehicles (micro, mild and full) will increase from approximately 64.3 million in CY 2025 to approximately 67.2 million in CY 2030. The share of BEVs is likely to increase from approximately 12.2% to approximately 23.4% between CY 2025-30 as FE norms become more stringent and battery cost drops to <\$100/kWh.

Review Of And Outlook Of The Indian Passenger Vehicle Industry

Review of the Indian passenger vehicle industry (Fiscals 2016 – 2021)

Production of passenger vehicles (PVs) in India recorded a healthy growth of 5.2% CAGR between Fiscals 2016 and 2019 due to a spurt in domestic and exports demand. Domestic demand was driven by expansion in the addressable market, development of infrastructure, and stable cost of vehicle ownership, as crude oil prices remained low except in the few months when output was reduced due to sanctions imposed on Iran.



Split by domestic sales and export

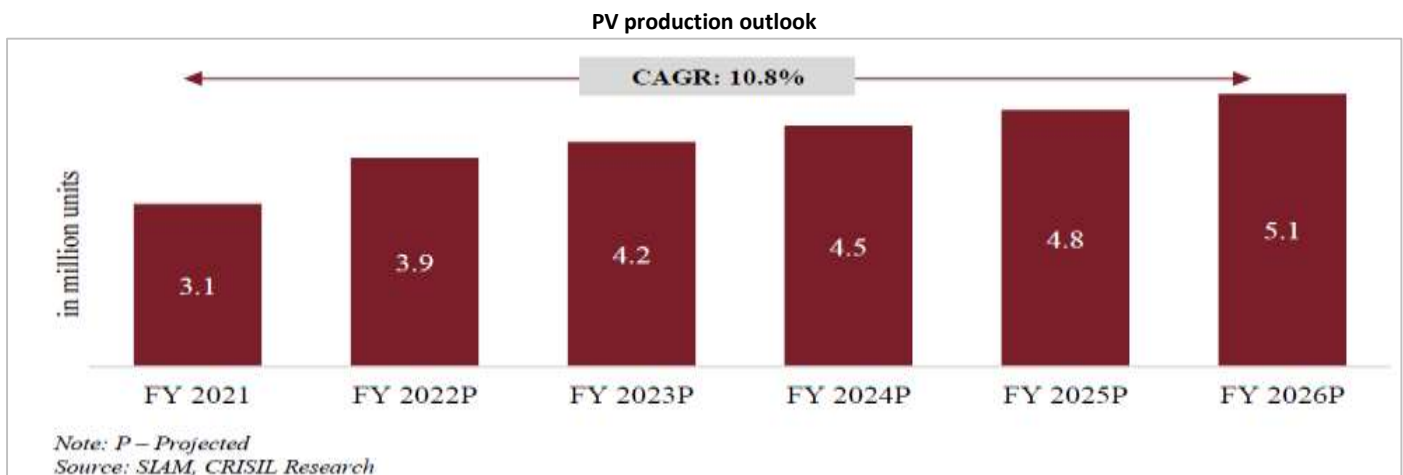
The Indian PV market is focused on the domestic market, with over 85% of demand stemming from the domestic market in Fiscal 2021. of compact UVs. The size of the large car segment has gradually shrunk, mainly due to a shift in customer preferences towards the SUV segment, few model launches and availability of high end technology features in the SUV segment as compared to the large car segment.

Current penetration of Electric PVs

Current EV penetration in the passenger vehicle category is miniscule (0.16% as on Fiscal 2021) due to the unavailability of affordable electric cars and charging stations leading to range anxiety.

Production outlook (Fiscals 2021 – 2026P)

India's car market is highly underpenetrated compared with most developed economies and some developing nations. As of Fiscal 2020, India had approximately 24 passenger vehicles per 1,000 people. This is significantly lower than developed nations and even other nations in the BRIC block (Brazil, Russia, and China), based on per-capita GDP. Brazil, Russia and China had 173, 307 and 99 passenger vehicles per 1,000 people respectively in 2015. Thus, the country holds tremendous potential for automobile manufacturers. Also, comparing on the basis the penetration of cars and UVs with per-capita GDP across countries, India still lags behind most countries and, as such, CRISIL Research expects the gap to reduce gradually after a decline in Fiscal 2021.



After a consecutive drop in production in Fiscals 2020 and 2021, PV production is expected to increase at a robust pace over the next five fiscals because of a spurt in domestic as well as exports demand. Domestic demand will be driven by an expansion in the addressable market, fast-paced infrastructure development and relatively stable cost of vehicle ownership, as crude oil prices are expected to stabilize at lower levels. The long-term outlook remains bright with regard to exports as efforts to penetrate newer geographies bear fruit and schemes such as how PLI incentivises players to tap exports. CRISIL forecasts exports to clock 12.1% CAGR between Fiscals 2021 and 2026. Rising competition in Europe amid sluggish demand growth, though, will prevent further increase in growth. Moreover, penetration of electric and hybrid vehicles will be a key monitorable.

Domestic and export sales outlook (Fiscals 2021 – 2026)

Domestic PV sales are expected to increase by 10.3% CAGR over Fiscals 2021 to 2026. Over the short to mid-term, COVID-19-induced demand for personal mobility is likely to support PV sales. Over the medium to long-term, moderate macroeconomic growth, increasing disposable income, relatively stable cost of vehicle ownership, and lower fuel prices are likely to drive demand for passenger vehicles. Other factors that would aid demand are increasing urbanisation, government support to farm incomes, and improved availability of finance. However, increasing congestion in metro cities and rising popularity of shared mobility services are likely to restrict car sales in the long term. Domestic sales, which formed approximately 87% of total production in Fiscal 2021, are estimated to grow at 10.3% CAGR between Fiscals 2021 and 2026.

PV industry: Domestic and export sales share (in volume terms)



Impact of regulatory changes on domestic passenger vehicle sales

Impact of corporate average fuel efficiency (CAFE) norms Fuel consumption standards for Indian vehicles came into force in India in April 2017 for petrol, diesel, liquefied petroleum gas (LPG) and compressed natural gas (CNG) passenger vehicles. These standards are based on the CAFE system and targets to bring about improvement in fuel consumption of passenger vehicles by 2022. The policy supports a continuous reduction in CO2 emissions through CAFE regulations. These regulations were first implemented on April 1, 2017 with the introduction of BS-IV emission norms. It was decided that the highest permissible carbon footprint would be 130 gm per km till 2022. Thereafter, it would be further reduced to 113 gm per km. CRISIL expects this to incentivise a shift towards greener technology such as hybrids and EVs. Upcoming regulatory changes and safety norms The Indian PV industry has seen a host of safety and regulatory changes in the past three to five years. Implementation of CAFE norms will further help in the cleaner fuel emission. CRISIL Research expects other safety features such as electronic stability control (ESC) and autonomous emergency braking (AEB) to be implemented on all cars to reduce road accidents.

Estimated Penetration of Electric PVs by Fiscal 2026

The US and China have seen an acceleration of sales of electric/hybrid cars, as most major global original equipment manufacturers (OEMs) have one or more models in their portfolios in these countries. With more model launches by OEMs, issues of range anxiety being addressed, and declining battery prices, CRISIL Research expects electric vehicle (EV) volume to grow at a faster pace globally. Charging infrastructure, range anxiety and lack of large OEM presence are hindering EV adoption in India. The taxi segment accounts for 10-15% of sales within passenger cars, and within the taxi segment, cab aggregators (accounting for approximately 40-50% of total sales within the taxi segment) are expected to lead adoption of EVs. This should result in an estimated approximately 25% adoption of EVs within cab aggregator segment by Fiscal 2025 (assuming adequate infrastructure is available by then). Hence, CRISIL Research expects the share of EVs in total passenger car sales to remain low (approximately 4%) in Fiscal 2026. Penetration in Fiscal 2021 was approximately 0.16%. EV penetration can be higher if the government adopts stricter policies on OEMs for not meeting CAFE norms.

Review And Outlook On The Global Commercial Vehicle Industry

2015 to 2020

Global CV (LCV with GVW 3.5-6T and M&HCV >6T) production grew at a CAGR of approximately 2.3% from CY 2015- 2020 but saw a dip in CY 2020 due to adverse impact of COVID-19 on global infrastructure spends and halt in production. China was an outlier in CY 2020 with high replacement demand, specifically in heavy duty vehicles (China Stage III obsolescence) and medium duty vehicles (overload restrictions) driving growth.

2020 to 2025 outlook

Most markets are expected to pick up gradually in CY 2021 but a drop in China CV demand is predicted as incentives have been reduced. In Europe, CV production is not expected to reach pre-COVID-19 levels until 2025 primarily because of repeat lockdowns and delayed vaccine deployment in the region. Over the five-year period Europe will grow at a CAGR of approximately 3% to reach approximately 735,000 units per annum. At a global level, the CV market will recover to grow at a CAGR of approximately 2% over the 2020-25 period with the primary driver being the government's focus on infrastructure spending.

2025 to 2030 outlook

Post 2025, the global CV market is expected to grow in line with GDP growth of economies with a CAGR of approximately 2%. North America and China will continue to dominate CV production with approximately 68% market share by 2030. Top 10 OEMs in the MHCV (includes M&HCV with GVW >6T) segment accounted for approximately 67% of the overall production in CY 2020. China FAW overtook incumbent Daimler to become global leader for MHCV segment with approximately 11% market share. Except for China, MHCV sales declined in other regions. Higher government led infrastructure



spending & old truck replacement incentives led to Chinese OEMs gaining significant share and overtaking European OEMs like Volvo and Traton (MAN and Scania included).

2015 to 2020

With less stringent emission standards and fuel economy norms as compared to light vehicles, ICE remained the dominant technology in commercial vehicles with its share only marginally reducing from approximately 97% in CY 2015 to approximately 96% in CY 2020. Due to high duty cycles and long mileage requirements, there is a need for large, heavy batteries for commercial vehicles. This implies that use of battery is economically unviable for commercial vehicles. However, towards 2020 pure battery driven intra-city buses have seen rise in demand particularly in regions of China and Europe. This has resulted in pure BEV market share rising to approximately 1.4% in 2020.

2020 to 2025 outlook

With increased focus on emissions and fuel economy norms, particularly driven by regulations in Europe and China, the share of ICE is expected to decline to approximately 89% by 2025. Ricardo expects the number of hybrid vehicles (micro, mild and full) to increase from approximately 0.14 million in CY 2020 to approximately 0.47 million in CY 2025. This would represent a CAGR growth of approximately 27% from CY 2020 to CY 2025. Ricardo projects share of hybrid vehicles (micro, mild and full) will increase from approximately 2% in CY 2020 to approximately 6.8% in CY 2025. Share of BEVs is projected to go from approximately 1.4% in CY 2020 to approximately 4% in CY 2025.

2025 to 2030 outlook

Post CY 2025, regulatory push to limit emissions and improve FE will drive BEV and FCEV penetration. LCVs (delivery vans) and medium duty trucks, which are used for intracity usage are expected to convert to BEVs due to lower running costs. Electrification of intra-city buses will also drive the BEV growth in China, Europe and North America. ICE will remain the dominant propulsion technology but will drop to approximately 82% share by CY 2030. Fuel Cell infrastructure push, lower weight and space need of fuel cells compared to batteries will see FCEVs gaining popularity in long-haul trucks. The number of hybrid vehicles (micro, mild and full) is projected to increase from approximately 0.47 million in CY 2025 to approximately 0.65 million in CY 2030. This would represent a CAGR growth of approximately 6.6% from CY 2025 to CY 2030. The share of BEVs (and FCEVs, wherever applicable) is projected to go from approximately 4.4% in CY 2025 to approximately 9.2% in CY 2030.

Review And Outlook In The Indian Commercial Vehicle Industry

Historic production development (Fiscals 2016 to 2021)

Production of commercial vehicles (CV) in India registered a decline of 1.1% CAGR from Fiscals 2016-2020. The production drop in Fiscal 2020 was on account of inventory correction as the industry transitioned from BS-IV to BS-VI emission norms and a tepid demand for CVs due to a general slowdown in the economy and slower government infra spending post the general election. In Fiscal 2021, production declined by approximately 17% over Fiscal 2020 as the COVID-19 pandemic and ensuing lockdown measures by the government posed severe demand as well as supply-side challenges for the industry.

Production outlook (Fiscals 2021 – 2026P)

Production of CVs in India is expected to increase at 13.0% CAGR over Fiscals 2021 to 2026. MHCV production is expected to grow by CAGR of 16.5% and the LCV segment is expected to show CAGR growth of 11.4% in Fiscal 2026 over Fiscal 2021 production.

Electrification in overall commercial vehicles

Electrification in overall commercial vehicle segment is expected to reach approximately 4% by Fiscal 2026 driven by electrification in LCVs and buses. EV adoption in the HCV segment is expected to be negligible in the near future as operational profile makes them prohibitively expensive. Also, the current charging infrastructure is not suitable for larger batteries of HCVs, which will render electric adoption unviable for some time.

Review and Outlook for The Indian Auto Component Sector

Indian auto component sector by value (Fiscals 2016 – 2021)

Auto component industry by OEM, export, and aftermarket in value terms

Auto component production (which includes sale to OEMs, exports, and replacement market) increased at a CAGR of 3.4% over Fiscals 2016-21, to Rs. 3,013 billion from Rs. 2,553 billion. Almost two-thirds of automotive components produced were consumed by OEMs in Fiscal 2016, and the remaining one-third was equally shared between aftermarket and exports. However, by Fiscal 2021, OEM share dropped to 60% as demand for vehicle segments, such as 2W, 3W, PV, and CV, has been tepid since the second half of Fiscal 2019 due to the economic slowdown. Comparatively, demand from replacement and export has remained resilient. As a result, their shares have increased over Fiscals 2016-21.

Outlook of Indian auto component sector in value terms (Fiscals 2021 – 2026P)

Auto component industry by OEM, export, and aftermarket in value terms

CRISIL Research expects the auto component industry's revenue to be led by OEM demand, which is expected to log a CAGR of 11.9% over Fiscals 2021-26 to reach Rs. 5,284 billion. Production growth and higher outsourcing to auto component players by OEMs will drive OEM demand. The share of auto component players is expected to increase in the future because of their growing technological spend. CRISIL Research expects localisation by certain OEMs to increase further, supporting growth in domestic OEM offtake.

Exports are expected to increase at a CAGR of 9.4% over Fiscals 2021-26, driven by schemes such as the Production-Linked Incentive. CRISIL Research expects exports to benefit in the long term from Indian safety and emission norms approximating global standards, and domestic companies gaining technological capabilities through joint ventures. Replacement demand is expected to remain stable and grow at a 7.0% CAGR over Fiscals 2021-26. Expectation of robust new vehicle sales will be offset by manufacturing of improved components with a better life cycle. Therefore, the requirement to replace a component due to wear and tear will decline.



Review and Outlook of Non-Automotive Industry

Review and outlook on the aircraft industry

Review of deliveries by Airbus and Boeing

Hospitality and tourism was one of the worst-affected sectors in the pandemic. Demand plunged and losses mounted as entry restrictions in various countries and a shift towards work-from-home roiled the sector. By the end of 2020, airlines were operating at 50-60% capacity.

Commercial aircraft delivery outlook for Airbus and Boeing

Fleet renewal is likely to be the main driver of order books for Airbus and Boeing till 2025. China and India are expected to be the first and third most important markets by delivery value. Overall, aircraft deliveries are expected to clock 10-12% CAGR till CY 2025 over a low base of CY 2020.

Review and outlook on the ATV industry

Review of ATV industry in the US

Honda introduced all-terrain vehicles (ATVs) in the US in 1971. Given a booming market, several players such as Yamaha, Kawasaki and Polaris also entered the ATV market. The US market accounts for over 50% of worldwide ATV demand due to its large stretches of natural terrain, unpaved roads, and large ranches and farms across the country.

Between 2015 and 2019, ATV sales declined at 2% CAGR on growing concerns over rider safety. An increase in the number of deaths and injury cases led to requests for a ban on ATVs in protected areas to prevent damage to the ecosystem. ATV sales spiked 33.8% in the US in 2020 on increased interest in recreational activities, a rise in rural demand for ATVs as a replacement for bikes, and increased demand for ATVs in agriculture and defence. Consumer interest in outdoor activities also picked up following long lockdowns.

Factors such as a growing interest in recreational activities, worldwide championships, construction of dedicated trails for ATVs, increased acceptance in military applications, and increased safety requirements are likely to increase the demand of ATVs in the US. On a high base of 2020, ATV sales are projected to grow at a moderate 3-5% CAGR till CY2025. ATVs with more than four wheels are projected to be the fastest growing segment in the all-terrain vehicle market by 2025. A growing number of ATV buyers are looking for ATVs with more than four wheels, especially in military and agricultural applications.

Assessment of Indian Precision Engineering Industry

Overview of Indian precision engineering industry

The Indian engineering industry is divided into two segments, heavy and light, based on the nature of the product and the technology used for processing. Heavy engineering includes manufacturing and assembly of industrial machinery and plant equipment for various end-use sectors. Equipment are designed and manufactured to suit end-use applications for process industries such as fertiliser, textile, chemical, refinery, petrochemical, and oil and gas (O&G), and for the thermal and nuclear power sectors. While, light engineering includes sub-sectors, manufacturing, everything from basic to sophisticated equipment. Light engineering products (components, parts and small equipment) find application in automobiles, industrial machinery, power, O&G, fertilisers, steel, refineries, petrochemicals, cement, and railways sectors, and serve as inputs for the heavy engineering and capital goods sectors.

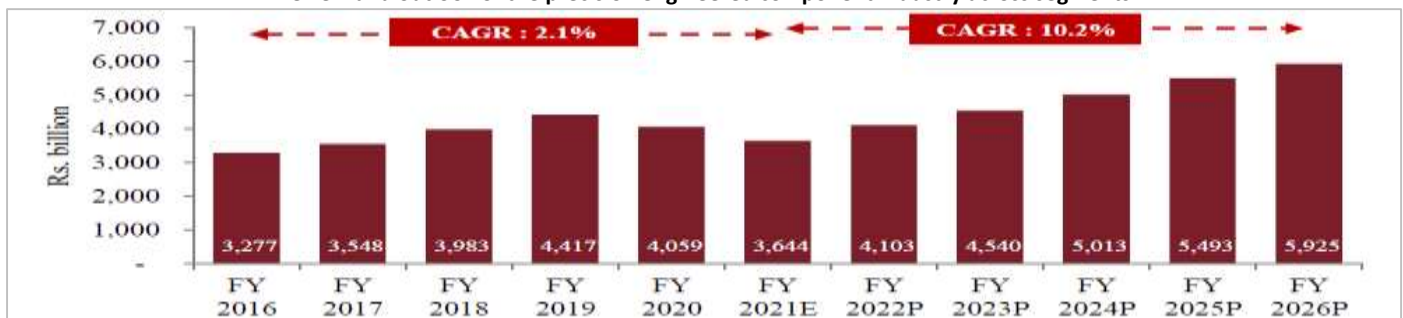
Precision engineering: Sub-discipline of manufacturing with high accuracy, stress on low tolerance for error

Precision engineering is a sub-discipline of engineering, concerned with manufacturing and assembling items with exceptionally low tolerance and are required to perform consistently over longer repeat cycles. Accuracy and margin of error are crucial for engineering and production. Any deviation in dimensions can lead to loss of performance or even catastrophic failure of the system. Typical tolerance in various engineering products ranges from millimetres (10⁻³ meter) to microns (10⁻⁶ meter). Precision engineering products have tolerance in the range of less than 10 microns. Low tolerance is important for precise fit, accuracy and efficiency in performance, along with consistency over several repeat cycles. Precision engineering is extremely critical in several applications, such as automotive engine components, defence, aircraft, capital goods and power generation.

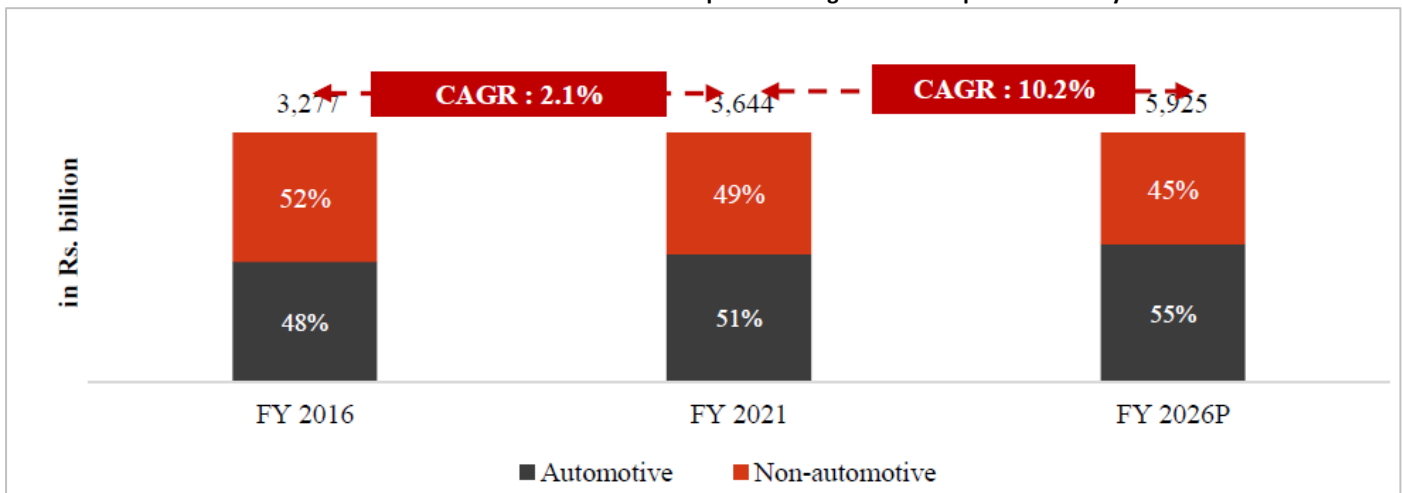
Precision engineering industry is projected to log a 10.2% CAGR between Fiscals 2021 and 2026

The precision engineering industry will benefit from supportive government policies for manufacturing and engineering sectors. Further, growth in the machinery and equipment industry and rising penetration of high technology machinery for manufacturing would contribute towards the industry's growth. CRISIL Research expects precision engineering to log a 10.2% CAGR between Fiscals 2021-2026 to reach Rs. 5,925 billion. Growth in domestic auto-components and export demand, and indigenous manufacturing in the defence segment would aid the industry's growth.

Review and outlook of the precision engineered component industry across segments



Share of automotive set to increase in the precision engineered component industry



Precision engineering in automotive industry

Manufacturing of precision automotive components is a multi-step, complex process, requiring high performance and extremely high precision. Since the vehicle comprises various sub-systems, all components should be precision engineered to ensure they fit together properly and function efficiently. Approximately 60-70% of automotive components manufactured are precision engineered, specifically, engine parts, suspension, steering parts, electrical parts, etc.

Precision engineering in the defence industry

The defence (including aerospace for defence) industry is the second-largest consumer of precision engineering (19.4% share as of Fiscal 2021), following the automotive industry. Precision engineering is critical for defence (including aerospace for defence) equipment, as a failure of even a small fitting component can lead to catastrophic results. Components of equipment in this segment require high material performance and special material properties, which are serviced by suppliers with expertise in these niche applications. Components such as artillery systems, land and naval weapon systems, fire control systems, maritime equipment and systems, underwater platforms, engineering systems for land and marine forces, uncrewed aerial vehicles (UAVs), remotely piloted vehicles, autonomous programmable vehicles - C4I (command, control, communications, computers and intelligence) systems, and missile systems, radar systems, ball screws, and electro-mechanical actuator are precision engineered.

Precision engineering in engineering and capital goods

Capital goods industry is the third-largest consumer of precision engineering after automotive and defence industry. It is estimated to have a share of 15.2% in the precision engineering market in India as on Fiscal 2021. Heavy electrical engineering occupies the largest pie (>50%) within the capital goods industry. Production of electrical equipment witnessed robust growth in the past few years, driven by growth in power distribution and transmission equipment such as transformers, conductors, meters, cables and switchgears on the back of government enhancing transmission capacity and pushing states to improve the distribution network. One of the sub-sectors within capital goods is Machine tools which includes Special Purpose Machines ("SPMs"). Other subsectors include process plant equipment, earth-moving and mining machinery, printing machinery, dies, moulds and press tools etc.

Review of special purpose machine manufacturing

SPMs are customised machines deployed to automate industrial processes to ensure high productivity. Designed to operate for 24 hours a day with minimum supervision, SPMs are mostly product-specific and need to be designed and developed as per individual requirements. Based on their usage, they are classified as general purpose machines or SPMs. Usage of SPMs reduces chances of human error and decreases human fatigue when carrying out repetitive operations. It assures consistent quality and interchangeability of parts by carrying out the same designed process every time without any shortcuts. SPMs are either cam-operated machines or use hydraulics and pneumatics as actuating elements or a combination of all. Often, a dedicated programmable logic controller is used in conjunction with positional sensors and transducers to give commands to the actuating elements. Sometimes, different special motors such as stepper and servo motors are used as actuating elements. Since SPM manufacturers are mostly machine tool manufacturers, SPMs are considered a part of the machine tools industry. However, not all machine tool manufacturers possess the capability to produce SPMs since these require strong design expertise, technical know-how, and industry knowledge. Only players with skilled manpower and design capabilities manufacture SPMs. SPMs are wide-ranging in terms of function and scale, resulting in players producing specific SPMs. While competition is high in the manufacture of less complex SPMs machines requiring high precision and design standards are produced by few manufacturers in India, providing them higher bargaining power. SPM manufacturers in Bengaluru command a premium over other regions due to the superior design and quality of the machines.

Precision engineering in aircraft industry

The Indian aircraft industry is still at a nascent stage. The growing passenger numbers and a burgeoning middle class indicate the possibility of healthy growth in passenger traffic for major airlines in the future. A buoyant market growth rate, coupled with the expansion of infrastructure, is likely to help the Indian civil aircraft industry grow at an accelerated pace.



Precision engineering in power industry

Components such as hydro turbines, pumps, valves and motors are precision engineered in power generation, transmission and distribution. High precision components are used to obtain high efficiency of power output, avoid leakages and sustain in various weather conditions. Generation, transmission and distribution of power occur at very high voltages and require precision engineering to avoid leakages. Transmission towers need precision components to withstand extreme weather conditions.

Precision engineering in other sectors

Precision engineering is used across industries like railways, in electric as well as diesel locomotives, mainly while manufacturing engine components. It is a similar case with construction equipment and tractors. Medical equipment, which is fitted within the human body, are also precision engineered.

Key Concerns:

- The COVID-19 pandemic has had, and is expected it to continue to have, a material adverse effect on the business, financial condition, results of operations and cash flows.
- SEL does not have firm commitment long-term supply agreements with its customers. If its customers choose not to source their requirements from it, there may be a material adverse effect on the business and results of operations.
- Business is dependent on the sale of its products to certain key customers. The loss of any of these customers or loss of revenue from sales to these customers could have a material adverse effect on the business, financial condition, results of operations and cash flows.
- Pricing pressure from customers may adversely affect the gross margin, profitability and ability to increase its prices, which may in turn have a material adverse effect on the results of operations and financial condition.
- Development of technologically advanced products involves a lengthy and expensive process with uncertain timelines and outcomes
- Any failure to adapt to industry trends and evolving technologies to meet customers' demands may materially adversely affect the business and results of operations.
- Derives a substantial portion of revenue from key product families, especially connecting rods, and if these products become obsolete it would have a material adverse effect on the business, financial condition, results of operations and cash flows.
- Depends on senior management team and other personnel with technical expertise, and if SEL is unable to recruit and retain qualified and skilled personnel, its business and ability to operate or grow the business may be adversely affected.
- SEL' employees are members of unions and it may be subject to industrial unrest, slowdowns and increased wage costs, which may adversely affect the business and results of operations.
- If SEL fails to keep technical knowledge confidential, it may erode its competitive advantage and have a material adverse effect on the business, financial condition, results of operations and cash flows.
- SEL' incremental business pipeline may not be indicative of future growth rate or new business orders it will receive in the future. Further, it may not realize all of the revenue expected from its incremental business pipeline
- SEL may not be successful in implementing growth strategies, such as developing multiple technology driven systems and components to cater to growing opportunities in electrification of vehicles and extending existing capabilities to engineer additional precision components for non-automotive applications, which could have a material adverse effect on the business, financial condition, results of operations and cash flows.
- SEL is subject to strict performance requirements, including, but not limited to, quality, delivery and development activities, and any failure by it to comply with these performance requirements may lead to the cancellation of existing and future orders, recalls or warranty and liability claims.
- Operations are subject to environmental, health and safety laws, which could result in material liabilities in the future.
- SEL is exposed to risks associated with foreign exchange rate fluctuations.
- Seasonal or economic cyclicity coupled with reduced demand in the verticals and sectors in which SEL operate may have a material adverse effect on the business, results of operations and financial condition.
- A decline in the financial condition and results of operations of customers could have a material adverse effect on the business, results of operations and cash flows.
- SSEL is dependent on contract labour and if it is unable to obtain the services of skilled and unskilled workmen at reasonable rates it will have an adverse effect on the business and results of operations.



- Depend on third parties with whom SEL does not have long-term supply contracts for the supply of raw materials.
- SEL' insurance coverage may not be adequate to protect against all potential losses, which may have an adverse effect on the results of operations, cash flows and financial condition.
- Business subjects SEL to risks in multiple countries.
- SEL is dependent on third parties for the transportation and timely delivery of its products to customers.
- Any failure to compete effectively in the highly competitive precision components industry could have a material adverse effect on the business, financial condition, results of operations and cash flows.
- SEL require certain licenses, permits and approvals in the ordinary course of business, and failure to obtain or retain them in a timely manner may have a material adverse effect on the business and results of operations.
- Financing agreements contain covenants that limit SEL's flexibility in operating business and there have been instances of non-compliance with covenants under financing agreements in the past.
- Substantial portion of assets are hypothecated or mortgaged in favour of lenders as security for some of SEL's fund-based and non-fund-based borrowings.
- Some of SEL's manufacturing facilities are operated on industrial land allotted to it by industrial development corporations.
- Failure to comply with the conditions of use of such land could result in an adverse effect on the business, results of operations and financial condition.
- Estimates of production volumes may not correspond to the actual demand for SEL's products.
- SEL is required to obtain and maintain quality and product certifications for certain countries and customers
- Start-up costs and inefficiencies relating to new products and OEM approval processes could have a material adverse effect on the results of operations and financial condition.
- SEL may incur significant costs in connection with ongoing efforts by the customers to restructure their operations.
- SEL has substantial capital expenditure and working capital requirements and may require additional financing to meet those requirements, which could have an adverse effect on the results of operations and financial condition.
- Any downgrade of credit ratings may lead to an increase in its borrowing costs and constrain its access to borrowings.
- SEL is exposed to counterparty credit risk of its customers and any significant delay in receiving payments or non-receipt of payments may have a material adverse effect on its results of operations.
- The acquisition of other companies, businesses or technologies could result in operating difficulties, dilution and other adverse consequences.
- SEL might unintentionally infringe upon the intellectual property rights of others, any misappropriation of which could harm its competitive position.
- Any shutdown of manufacturing facilities may have an adverse effect on the business, results of operations and financial condition.
- Discontinuance or non-availability of fiscal benefits enjoyed by SEL or its inability to comply with related requirements may have an adverse effect on the business and results of operations.
- Failure or disruption of information technology ("IT") systems may adversely affect the business, financial condition, results of operations and cash flows.
- SEL has power and water requirements and any disruption to its power or water sources could increase its production costs.
- Sansera Sweden, SEL's indirect subsidiary, has availed an unsecured loan from Sansera Mauritius, SEL's direct subsidiary, which can be recalled at any time.



- Any downturn in the macroeconomic environment in India would adversely affect the business, financial condition, results of operations and cash flows.
- Financial instability in other countries may cause increased volatility in Indian financial markets and, directly or indirectly, adversely affect the Indian economy and the business, financial condition, results of operations and cash flows.
- Political instability, changes in economic policy, changing laws, rules and regulations and legal uncertainties, including adverse application of tax laws and regulations, may adversely affect the business, financial condition and results of operations.
- If inflation rises in India, increased costs may result in a decrease in SEL's profits.
- Foreign investors are subject to investment restrictions under Indian law that limit SEL's ability to attract foreign investors, which may adversely affect the trading price of the Equity Shares.
- Fluctuations in the exchange rate between the Rupee and other currencies could have an adverse effect on the value of the Equity Shares in those currencies, independent of its results of operations.

Profit & Loss

Particulars (Rs in million)	FY21	FY20	FY19
Revenue from Operations	15492.7	14571.7	16244.3
Other Income	230.9	159.7	163.8
Total Income	15723.6	14731.4	16408.1
Total Expenditure	12771.5	12324.7	13353.3
Cost of materials consumed	6678.3	6282.0	7220.0
Changes in inventory of finished goods and work in progress	-43.7	-19.0	-167.0
Conversion charges	526.2	486.8	468.8
Consumption of stores and spares	1335.8	1310.8	1506.3
Power and fuel	670.7	750.6	841.3
Employee benefits expense	2137.5	2134.2	2174.1
Other expenses	1466.8	1379.4	1309.8
PBIDT	2952.1	2406.7	3054.8
Interest	473.9	580.9	512.8
PBDT	2478.2	1825.8	2542.0
Depreciation and amortization	1016.8	939.0	757.5
PBT	1461.5	886.8	1784.4
Exceptional items	0.0	0.0	134.9
Tax (incl. DT & FBT)	362.9	87.7	668.9
Current tax	303.9	235.1	492.6
Deferred Tax	59.0	-147.3	176.3
PAT	1098.6	799.1	980.6
EPS (Rs.)	21.02	15.63	18.73
Face Value	2	2	2
OPM (%)	17.6	15.4	17.8
PATM (%)	7.1	5.5	6.0

(Source: RHP)

Balance Sheet

Particulars (Rs in million) As at	FY21	FY20	FY19
ASSETS			
NON-CURRENT ASSETS			
Property, plant and equipment	10000.1	9421.3	8890.7
Capital work-in-progress	604.2	683.4	488.6
Goodwill	358.4	323.6	324.2
Other intangible assets	19.2	25.7	32.5
Right of use asset	892.4	873.0	896.6
Financial assets			
Investments	36.9	36.9	0.0



Loans	284.5	267.1	257.3
Other financial assets	14.1	34.8	34.2
Other Non-Current Assets	224.7	204.7	227.0
Tax assets for current taxes (net)	27.1	29.3	62.5
	12461.6	11899.8	11213.7
CURRENT ASSETS			
Inventories	2485.7	2389.2	2434.6
Financial assets			
Investments	5.6	3.5	5.3
Trade receivables	3129.8	2591.2	2712.4
Cash and cash equivalents	365.0	600.1	239.3
Bank balances other than cash and cash equivalents	286.4	116.4	76.7
Other financial assets	222.8	236.5	256.5
Other current assets	331.9	445.7	516.4
	6827.3	6382.6	6241.2
TOTAL ASSETS	19288.8	18282.4	17454.8
EQUITY AND LIABILITIES			
EQUITY			
Equity share capital	93.9	93.9	93.9
Instruments entirely equity in nature	105.0	105.0	105.0
Other equity	8583.6	7482.9	6655.0
Total equity attributable to owners of the company	8782.4	7681.8	6853.8
Non-controlling interest	105.0	86.8	91.4
	8887.4	7768.6	6945.2
LIABILITIES			
NON-CURRENT LIABILITIES			
Financial liabilities			
Non-current borrowings	1876.5	1718.3	2133.8
Lease liabilities	810.3	788.6	805.7
Other financial liabilities	0.0	11.0	76.9
Non-current provision	151.8	126.9	85.8
Deferred Tax Liabilities (Net)	618.0	552.3	703.0
Other non-current liabilities	467.2	425.9	421.3
	3923.8	3622.9	4226.6
CURRENT LIABILITIES			
Financial liabilities			
Current borrowings	2552.3	3554.1	3043.1
Lease liabilities	110.9	96.9	86.5
Trade payables			
-Total outstanding dues of micro enterprises and small enterprises	86.4	67.2	91.2
-Total outstanding dues of other than micro enterprises and small enterprises	2184.1	1661.7	1774.5
Other financial liabilities	1236.7	1218.3	1002.4
Current tax liabilities (net)	0.6	29.5	82.5
Other current liabilities	207.6	164.5	137.6
Current provisions	99.1	98.5	65.4
	6477.7	6890.9	6283.1
TOTAL EQUITY AND LIABILITIES	19288.8	18282.4	17454.8



Disclaimer:

This report has been prepared by HDFC Securities Ltd and is meant for sole use by the recipient and not for circulation. The information and opinions contained herein have been compiled or arrived at, based upon information obtained in good faith from sources believed to be reliable. Such information has not been independently verified and no guaranty, representation of warranty, express or implied, is made as to its accuracy, completeness or correctness. All such information and opinions are subject to change without notice. This document is for information purposes only. Descriptions of any company or companies or their securities mentioned herein are not intended to be complete and this document is not, and should not be construed as an offer or solicitation of an offer, to buy or sell any securities or other financial instruments.

This report is not directed to, or intended for display, downloading, printing, reproducing or for distribution to or use by, any person or entity who is a citizen or resident or located in any locality, state, country or other jurisdiction where such distribution, publication, reproduction, availability or use would be contrary to law or regulation or what would subject HSL or its affiliates to any registration or licensing requirement within such jurisdiction.

If this report is inadvertently sent or has reached any person in such country, especially, United States of America, the same should be ignored and brought to the attention of the sender. This document may not be reproduced, distributed or published in whole or in part, directly or indirectly, for any purposes or in any manner.

Foreign currencies denominated securities, wherever mentioned, are subject to exchange rate fluctuations, which could have an adverse effect on their value or price, or the income derived from them. In addition, investors in securities such as ADRs, the values of which are influenced by foreign currencies effectively assume currency risk.

It should not be considered to be taken as an offer to sell or a solicitation to buy any security. HSL may from time to time solicit from, or perform broking, or other services for, any company mentioned in this mail and/or its attachments.

HSL and its affiliated company(ies), their directors and employees may; (a) from time to time, have a long or short position in, and buy or sell the securities of the company(ies) mentioned herein or (b) be engaged in any other transaction involving such securities and earn brokerage or other compensation or act as a market maker in the financial instruments of the company(ies) discussed herein or act as an advisor or lender/borrower to such company(ies) or may have any other potential conflict of interests with respect to any recommendation and other related information and opinions.

HSL, its directors, analysts or employees do not take any responsibility, financial or otherwise, of the losses or the damages sustained due to the investments made or any action taken on basis of this report, including but not restricted to, fluctuation in the prices of shares and bonds, changes in the currency rates, diminution in the NAVs, reduction in the dividend or income, etc.

HSL and other group companies, its directors, associates, employees may have various positions in any of the stocks, securities and financial instruments dealt in the report, or may make sell or purchase or other deals in these securities from time to time or may deal in other securities of the companies / organizations described in this report. HSL or its associates might have managed or co-managed public offering of securities for the subject company or might have been mandated by the subject company for any other assignment in the past twelve months.

HSL or its associates might have received any compensation from the companies mentioned in the report during the period preceding twelve months from t date of this report for services in respect of managing or co-managing public offerings, corporate finance, investment banking or merchant banking, brokerage services or other advisory service in a merger or specific transaction in the normal course of business.

HSL or its analysts did not receive any compensation or other benefits from the companies mentioned in the report or third party in connection with preparation of the research report. Accordingly, neither HSL nor Research Analysts have any material conflict of interest at the time of publication of this report. Compensation of our Research Analysts is not based on any specific merchant banking, investment banking or brokerage service transactions. HSL may have issued other reports that are inconsistent with and reach different conclusion from the information presented in this report.

Research entity has not been engaged in market making activity for the subject company. Research analyst has not served as an officer, director or employee of the subject company. We have not received any compensation/benefits from the subject company or third party in connection with the Research Report.

HDFC securities Limited, I Think Techno Campus, Building - B, "Alpha", Office Floor 8, Near Kanjurmarg Station, Opp. Crompton Greaves, Kanjurmarg (East), Mumbai 400 042 Phone: (022) 3075 3400 Fax: (022) 2496 5066 Compliance Officer: Binkle R. Oza Email: complianceofficer@hdfcsec.com Phone: (022) 3045 3600

HDFC Securities Limited, SEBI Reg. No.: NSE, BSE, MSEI, MCX: INZ000186937; AMFI Reg. No. ARN: 13549; PFRDA Reg. No. POP: 11092018; IRDA Corporate Agent License No.: CA0062; SEBI Research Analyst Reg. No.: INH000002475; SEBI Investment Adviser Reg. No.: INA000011538; CIN - U67120MH2000PLC152193

Mutual Funds Investments are subject to market risk. Please read the offer and scheme related documents carefully before investing.

Disclaimer : HDFC securities Ltd is a financial services intermediary and is engaged as a distributor of financial products & services like Corporate FDs & Bonds, Insurance, MF, NPS, Real Estate services, Loans, NCDs & IPOs in strategic distribution partnerships. Investments in securities market are subject to market risks, read all the related documents carefully before investing. Customers need to check products & features before investing since the contours of the product rates may change from time to time. HDFC securities Ltd is not liable for any loss or damage of any kind arising out of investments in these products. Investments in Equity, Currency, Futures & Options are subject to market risk. Clients should read the Risk Disclosure Document issued by SEBI & relevant exchanges & the T&C on www.hdfcsec.com before investing. Equity SIP is not an approved product of Exchange and any dispute related to this will not be dealt at Exchange platform.

This report is intended for non-Institutional Clients only. The views and opinions expressed in this report may at times be contrary to or not in consonance with those of Institutional Research of HDFC Securities Ltd. and/or may have different time horizons. Mutual Fund Investments are subject to market risk. Please read the offer and scheme related documents carefully before investing.

Disclaimer: HDFC Bank (a shareholder in HDFC Securities Ltd) is associated with this issue in the capacity of Escrow Collection Bank/ Refund Bank/ Public Offer Bank/ Sponsor Bank and will earn fees for its services. This report is prepared in the normal course, solely upon information generally available to the public. No representation is made that it is accurate or complete. Notwithstanding that HDFC Bank is acting Sansera Engineering Limited, this report is not issued with the authority of Sansera Engineering Limited. Readers of this report are advised to take an informed decision on the issue after independent verification and analysis.