



POWERING MANUFACTURING **WITH GREEN ENERGY**

**SHRIRAM
PISTONS'**

Journey Towards Sustainable Growth



INTRODUCTION TO SHRIRAM PISTONS & RINGS LTD

Shriram Pistons & Rings Ltd (SPRL), part of the Shriram Group, is one of India's most respected manufacturers of critical automotive and industrial engine components. Established in 1963, the company has built a strong legacy in precision engineering, supplying pistons, piston rings, engine valves, and related powertrain components to leading original equipment manufacturers (OEMs) across the automotive, industrial, and agricultural sectors.

With decades of manufacturing expertise, SPRL operates state-of-the-art production facilities backed by stringent quality standards and advanced process controls.

Today, Shriram Pistons & Rings serves a diverse global customer base and continues to strengthen its position as a trusted partner for high-precision, performance-critical components in a rapidly transforming mobility ecosystem.

SPRL's Energy Landscape & Challenges

As a manufacturer of high-precision automotive components, SPRL's operations are inherently energy-intensive. Core manufacturing processes, such as metal casting using medium-frequency induction furnaces operating at temperatures of nearly 1,550°C — require a continuous and reliable power supply to maintain product quality, throughput, and operational efficiency.

With expanding production capacities and evolving customer requirements, energy consumption has become a significant component of SPRL's operational footprint. This gave rise to three interlinked challenges:



Rising Power Costs

Escalating grid tariffs and energy price volatility began impacting long-term cost predictability, directly influencing manufacturing margins.



Growing Sustainability Expectations

As a Tier 1 supplier to leading OEMs, SPRL faces increasing pressure from customers and stakeholders to demonstrate measurable carbon reduction and responsible sourcing across its value chain.



Need for a Clean, Scalable Energy Solution

With energy demand projected to grow alongside production, SPRL required a solution that could support capacity expansion while aligning with its long-term sustainability commitments.

Recognizing that its environmental responsibility extends beyond factory operations, SPRL adopted a holistic sustainability approach. The company focused on improving energy efficiency, minimizing wastage, increasing the share of renewable energy in its power mix, and establishing measurable emission reduction targets to drive continuous improvement across its operations.

Sustainability Vision & Strategic Partnership with FPEL



SPRL has set a bold ambition to become carbon neutral by 2045, embedding sustainability at the core of its long-term business strategy. As the company accelerated its decarbonisation roadmap, the leadership team recognised that transitioning to renewable energy required more than just access to clean power it demanded a partner with deep expertise in Open Access structures, regulatory navigation, and long-term energy planning tailored for energy-intensive industrial operations.

After evaluating available pathways, SPRL partnered with Fourth Partner Energy (FPEL), one of India's leading renewable energy solutions providers for the commercial and industrial sector In June 2020.

FPEL conducted a comprehensive assessment of SPRL's manufacturing footprint, energy consumption patterns, and sustainability objectives. Based on this evaluation, a customised Open Access solar procurement strategy was structured to ensure seamless integration of renewable energy into SPRL's power mix without compromising the reliability required for its high-precision, high-temperature manufacturing processes.

Clean Energy in Action

Energy transition began at SPRL's Ghaziabad facility, one of its highest electricity-consuming hubs. Through a 15 MWp Group Captive solar procurement from FPEL's Saharanpur Solar Park, SPRL met approximately 19% of the plant's total energy requirement. Notably, SPRL became the first customer to source power from FPEL's Uttar Pradesh park, reinforcing early trust in execution capability and project reliability.

Encouraged by operational performance and partnership confidence, SPRL expanded its renewable portfolio with an additional 12 MWp and 4 MWp from FPEL's Babina Solar Park, demonstrating the scalability and long-term viability of the Open Access model.

Continuing this momentum, in 2025, SPRL signed a Power Purchase Agreement (PPA) for 2.085 MWp from FPEL's Babina Solar Park to power its Noida plant, extending renewable energy integration across multiple manufacturing locations.

By sourcing power across FPEL's Saharanpur and Babina solar parks in Uttar Pradesh, SPRL developed a diversified renewable energy portfolio that enhanced energy security, ensured long-term tariff visibility, and accelerated its decarbonisation journey.

The Partnership Milestones





Annual Clean Energy Generation by SPRL

~50 Mn kWh from 33 MWp



Annual Cost-Savings To SPRL

~₹10.52 Crores

Client Speak



Rajnish Julka

Executive Director,
Shriram Pistons & Rings Ltd

“Sustainable manufacturing is not only good for the environment — it is good for business. At Shriram Pistons & Rings Ltd, sustainability is deeply embedded in our operations, and through our partnership with FPEL, we procure solar power from their Saharanpur and Babina solar parks to strengthen our transition toward low-carbon manufacturing. This transition is delivering measurable impact — we are saving approximately ₹10 million per month and have achieved nearly 40% carbon neutrality, with a clear target to reach 50% by 2030. Our collaboration with Fourth Partner Energy has been structured, reliable, and growth-oriented, giving us the confidence to scale renewable integration across more of our plants in the years ahead.”

Annual Environmental Impact



45,444 Tons of reduced Carbon Offset



21,795 tons of reduction in coal



10.66 crore Litres of water conserved



Equivalent to Planting over 21 lakh Trees



How FPEL Identified the **Right Solar Solution for SPRL**

Following a detailed technical and commercial assessment, Fourth Partner Energy identified Open Access as the most effective renewable pathway for Shriram Pistons & Rings Ltd aligned with its manufacturing scale, energy intensity, and long-term sustainability ambitions.

With clearly defined renewable energy targets and a carbon neutrality vision for 2045, SPRL required a solution capable of delivering large-scale clean power across multiple plants. Open Access enabled rapid renewable integration at a scale that would not have been feasible through rooftop or on-site installations alone.

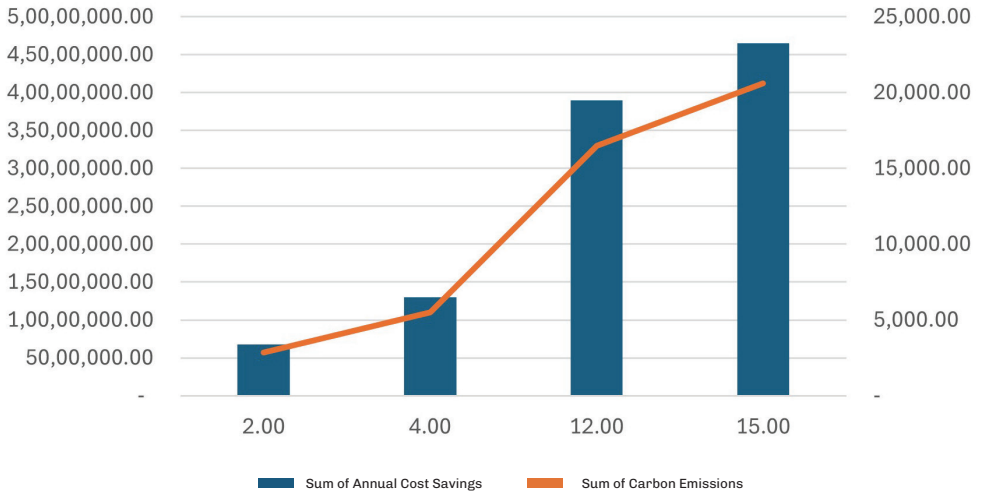
Beyond environmental impact, the model delivered tangible business value. Open Access provided long-term tariff visibility, protection against grid price volatility, and improved cost predictability — strengthening financial planning for energy-intensive operations.

Equally important, the solution enhanced SPRL's ESG positioning. As a Tier 1 supplier to leading global OEMs, sustainability performance increasingly influences supplier evaluation frameworks. Open Access supported measurable Scope 2 emission reductions, improved transparency in reporting, and reinforced SPRL's credibility within sustainability-driven supply chains.

By implementing Open Access, FPEL enabled SPRL to align renewable energy adoption with operational reliability, financial discipline, and ESG compliance, transforming clean energy from a compliance requirement into a strategic competitive advantage.

This strategic shift is already delivering measurable outcomes. Today, most of SPRL's plants operate with 35–45% solar energy penetration, reflecting a 20% increase in the share of renewable energy in its power mix. The transition has also contributed to a 20% reduction in Scope II emissions, reinforcing the company's tangible progress toward decarbonization.





FPEL Testimonial



Kushal Mangain,
Head - Business Development,
West Zone, FPEL

We are proud to partner with Shriram Pistons and Rings Limited, Uttar Pradesh, supplying 33 MWp+ of renewable power from our Saharanpur and Babina (Jhansi) Solar Parks across four of their manufacturing facilities through four separate transactions, with the first renewable power supply commencing in December 2022. This engagement is generating annual savings of over ₹10 crore, thereby enhancing cost efficiency and contributing meaningfully to overall profitability.

Simultaneously, SPRL has demonstrated a clear and forward-looking commitment to sustainability by progressively increasing its green energy portfolio, reinforcing its position as a responsible and environmentally conscious corporate leader.

We sincerely appreciate the Shriram Pistons management and the entire team for their continued trust and collaboration. Their confidence in us across multiple transactions reflects strong strategic alignment and underscores their faith in our execution capability, reliability, and long-term partnership approach.

Scaling Open Access Across Industrial Uttar Pradesh

Uttar Pradesh has emerged as one of India's fastest-growing industrial states, with manufacturing clusters spanning automotive components, engineering, FMCG, and heavy industry. As energy-intensive industries expand, managing electricity costs and reducing carbon emissions have become parallel priorities for industrial growth.

Open Access renewable energy is increasingly being adopted across the state as a scalable solution that addresses both cost efficiency and sustainability objectives. Supported by enabling regulatory frameworks and growing corporate awareness, the model is witnessing steady momentum among large industrial consumers.

Within this evolving landscape, Fourth Partner Energy has played a key role in supporting industrial clients across Uttar Pradesh in their transition toward structured, long-term renewable energy procurement.

FPEL's Open Access Footprint in Uttar Pradesh

Park Location	Babina	Saharanpur	Shahjahanpur
Park Capacity	105 MWp	88 MWp	15 MWp
Substation Type	220/132 KV	132/33 KV	220/110/33 KV
Connectivity Voltage	132 KV	132 KV	33 KV
Annual Energy Generation	153.3 Mn Units	128.48 Mn Units	22 Mn Units



FPEL's Marquee Clients across Uttar Pradesh



Power Your Company's
Journey to Net Zero with
Fourth Partner Energy



1800 1203 41345



www.fourthpartner.co



marketing@fourthpartner.co

