SEGMENTAL REVIEW

SPECIALTY CHEMICALS



In 2024, Specialty Chemicals (SC) Division, encompassing Perstorp and BRB, continued our growth trajectory with a strategic focus on innovation, sustainability and market expansion. With a global network comprising 15 production sites, the division serves diverse markets across the Americas, Europe, Middle East, Africa and Asia Pacific (APAC).

Guided by a comprehensive transformation strategy, the division aims to advance further down the chemicals value chain to be closer to end users, enabling us to identify new opportunities. This includes efforts to enhance competitive positioning through both organic and inorganic initiatives in target segments to deliver tailored solutions for the specific challenges faced by our customers.

Another crucial element of this transformation is the ongoing establishment of the innovation networks, scheduled for completion in 2025. These facilities will be strategically located close to our customers, facilitating expedited services and more efficient, responsive solutions. Designed to address the diverse needs of customers across various regions, the hub will leverage cuttingedge technology and innovative practices to foster co-creation with customers and deliver enhanced value.

As we progress with these strategic initiatives, our commitment to sustainability, innovation and customer-centric solutions remains steadfast. We are confident that these efforts will not only solidify our position in the specialty chemicals market but also propel us towards achieving our long-term vision of becoming a leading specialty chemicals player and delivering exceptional value to our stakeholders.

CHALLENGES & MITIGATION

In 2024, SC navigated challenges from global economic uncertainties, geopolitical tensions, and supply chain disruptions, affecting supplydemand balance and key industries like construction and automotive. Persistent high energy prices in Europe and competition from lowcost Chinese producers resulted in compressed margins.

To mitigate these pressures, we implemented operational and commercial strategies. We enhanced efficiency, controlled input costs through favourable supplier negotiations, and sourced alternative raw materials. In addition, strengthening inventory management ensured steady material flow.

To diversify revenue streams, we targeted specialised markets and emerging sectors, focusing on lower carbon footprint products. Furthermore, we reinforced customer engagement initiatives and value-added services to foster long-term relationships.

These initiatives increased our market share, sales volumes, and operational resilience while maintaining margins. Exploring new product lines and diversifying suppliers minimised market fluctuation impacts, opening up new revenue streams and reinforcing a resilient foundation for growth.

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SEGMENTAL REVIEW

PERFORMANCE HIGHLIGHTS

REVENUE

2024

RM6.5 billion

2023: RM6.4 billion

EBITDA

2024

RM0.3 billion

2023: RM0.2 billion

PROFIT/(LOSS) **AFTER TAX**

RM0.05 billion 897 KMT

2023: (RM0.2 billion)

SALES VOLUME

2023: 841 KMT

New products launched in 2024:

Events participated in 2024:

In 2024, Perstorp commissioned its ISCC PLUS certified plant in Bharuch, India, which was officially inaugurated in February. This facility is set to produce 40,000 metric tonnes of Pentaerythritol and 26,000 metric tonnes of calcium formate annually. This includes the renewable-based, ISCC PLUS certified Voxtar™, all manufactured using renewable raw materials and hybrid electricity sources.

- In March, Perstorp secured full ownership of its polyol manufacturing site in Zibo, China, enhancing its strategic focus on the Asian market and paving the way for future expansion and diversification of the site.
- Inaugurated new offices in Malaysia, Turkey, and Taiwan, reinforcing our presence in Southeast Asia and Europe, while leveraging Taiwan's strategic position within the semiconductor supply chain.
- The inclusion of Isononanol (INA), Iso-Dodecene and Oxo Oil 9N has expanded Perstorp's Oxo Alcohols portfolio from C8 to C10, thereby broadening Perstorp's product range and strengthening its capability to better serve customers.
- In December, Perstorp acquired OQ Chemicals Nederland B.V. renamed as Perstorp Amsterdam B.V. which will further enable our growth strategy and strengthen our presence in the Engineered Fluids segment.
- BRB's subsidiary, CSL Silicones, expanded its portfolio for high voltage insulator coatings (HVIC) in the Middle East and strengthened its roof coatings business in North America through partnerships and product diversifications.
- BRB's production sites in Ittervoort and Echt, the Netherlands and Gebeng, Malaysia, achieved ISO 45001 (OH&S) and ISO 14001 (environmental management) certifications, reinforcing BRB's commitment to Quality, Environment and Safety.



INTEGRATED REPORT 2024

SEGMENTAL REVIEW

SPECIALTY CHEMICALS PRODUCT GROUPS

RESINS & COATINGS

Essential building blocks and specialty products tailored to produce resins for the coatings industry, including alkyd resins, liquid saturated polyester, liquid unsaturated polyesters, powder polyesters, polyurethane dispersions, radiation curing, cationic curing and intumescent carbon donors.

Highlights:

 Product development to support customers transitioning away from Trimethylolpropane Triacrylate (TMPTA), a chemical commonly used in coatings, adhesives and inks, following its reclassification as a Class 2 carcinogen in late 2023

ENGINEERED FLUIDS

High quality building blocks for polyol ester base stock with a complete range of polyol portfolio. Mainly targeted for use in aviation turbine oils, hydraulic fluids, metalworking fluids, refrigeration lubricants, transformer oils and di-electric fluids.

Highlights:

 Introduced Synmerse[™] DC, a high-performance immersion cooling fluid designed to enhance operational safety, cooling efficiency, and reduce maintenance in data centres. Developed in collaboration with leading processor manufacturers and original design manufacturers, Synmerse[™] DC ensures compatibility with next-generation computing technologies. It was first showcased at Data Centre World Asia 2024 in October

ADVANCED MATERIAL

Leverages focused and innovative chemistry related to polymer additives, polyvinyl chloride (PVC) plasticisers and polyesters to help formulators, compounders and converters to produce safer, more sustainable and higher performance plastics.

Highlights:

- Expanded Akestra™ to the American market. This unique material offers a glass-like appearance
 with superior heat resistance compared to polyethylene terephthalate (PET), making it an ideal
 choice for hot-fill packaging and food contact applications
- Launched PevalenTM Pro 100, an ISCC PLUS certified, non-phthalate plasticiser made from 100% renewable carbon. This innovation sets a new industry benchmark by delivering a fully renewable, high-performance solution for flexible PVC without compromising on performance nor safety

ANIMAL NUTRITION

Innovative organic acid-based solutions that improve gut health and performance, while safeguarding feed from contaminants such as enteric pathogens, mycotoxins, molds and yeasts.

Highlights:

Launched Gastrivix[™] Go in Europe, the Middle East, and Africa (EMEA) and Gastrivix[™] Gain in the Chinese market. Both feed additives - Gastrivix[™] Go and Gastrivix[™] Gain - are formulated to support gut health in animals

SILICONES

Specialty silicones products cover markets such as Personal Care, Construction, Coating & Inks, Plastic & Rubber Composites, and Food & Beverages.

Highlights:

Personal Care

- BRB soft launched a novel bio-based emollient, Emfinity® CGSA 200B, which was developed in collaboration with PETRONAS Research Sdn. Bhd.
- Introduced innovative products that combine three unique silicone technologies to enhance hair and skin care as well as customer experience. BRB 1864 features a siliconerich formula for a luxurious shine and conditioning effect, BRB 2844 is a water-dispersible silicone wax that reduces tackiness and provides deep moisturisation, and BRB SG 250 is a silicone elastomer that imparts a velvety, powdery feel and lasting comfort on the skin

Coating Applications

Launched BRB Siloen® SMA 287 and BRB Siloen® SMA 288 coating additives, designed for
anti-blocking, slip and scratch, and mar resistant enhancers for water-based polyurethane
or acrylic wood coatings. Additionally, improved BRB Siloen® SR 619, a solvent-dilutable
impregnating agent for mineral construction materials (such as concrete, bricks and natural
stones), offering enhanced water repellency and superior penetration

LUBE OIL ADDITIVES AND CHEMICALS (LAC)

LAC solutions reduce fuel consumption, while extending service life and enhancing efficiency of vehicles and machineries, being the key enabler of cost-effectiveness in the automotive and industrial sectors

Highlights:

Introduced six strategic products aimed at advancing performance and sustainability across automotive and industrial applications:

• Petrolad® Series:

Petrolad 750, Petrolad 133LS, and Petrolad 9430 are innovative additive packages for automatic transmission fluids, gear oils and engine oils. These products deliver improved performance, cost savings and enhanced environmental sustainability

• Viscotech® Series:

Viscotech 6073LR, Viscotech 6540LR/6640LR, and Viscotech 6012LR are viscosity modifiers formulated with re-refined base oil, supporting a circular economy. These modifiers offer high performance, reduced environmental impact and cost-effective solutions for various lubricant applications

SEGMENTAL REVIEW

RISKS & OPPORTUNITIES

Very High High Medium Low



Health, Safety and Environment Risk

- HSE incidents in chemical manufacturing, such as spills and fires, can have severe consequences on personnel, the environment and operations
- Mature facilities can result in plant slowdowns or shutdowns

Opportunity:

Driving HSE excellence through compliance with relevant laws and regulations, while enhancing personnel safety, protecting the environment, optimising operations and fostering continuous improvement and stakeholder trust

Action taken:

Continuously improve safety measures through asset integrity programmes, safety training and culture-building initiatives like the Perstorp Careway 365 programme, which includes annual assessments and integration with PETRONAS

• Recorded ZERO fatality, one Loss Time Injury (LTI), and ZERO major Loss of Primary Containment (LOPC) in 2024



Market Risk

- Decline in market share, demand, and customer base
- Geopolitical tensions and sustained high inflation contributing to economic slowdown
- Heightened competition with increased supply from China to Europe

Opportunity:

Gain a competitive market advantage by proactively anticipating customer needs, fostering stronger collaboration and building deeper relationships with stakeholders

Action taken:

- Implementing strategies to address challenges, including alternative sourcing and long-term partnerships
- Enhancing market presence through participation in exhibitions, hosting seminars/webinars and launching new products to meet evolving demand
- Conducted balanced approach between producing main product vs co-products to optimise margin contributions Participated in 42 key exhibitions across the world such as the Data Centre World Asia, American Coatings Show and in-cosmetics Asia

Results:

- Launched 17 new products which covers immersion cooling, personal care and plasticiser applications
- Increased 7% sales volume and driving growth in high-margin products

Talent Risk

- Inability to retain and recruit key personnel, insufficient manning for business sustainability and growth projects
- Skills and competencies management is not aligned with the company's strategies for recruitment, employee development, retention, and transition

Opportunity:

- Expanding team capacity and complement existing capabilities through re-organising the PCG SC Organisational Structure and Operating Model
- Develop Talent Management intervention to mitigate retention challenges

Action taken:

- Development of SC Operating Model and Organisational Structure to be effective in February 2025
- Dedicated HR personnel to look into talent management including recruitment with focused collaboration involving both HR, business units and external support
- Executing and accelerate the near term/recruiting efforts to support the business deliverable

Results:

- $Consultations \ with \ Perstorp\ and\ BRB\ Works\ Council/Union\ and\ subsequent\ agreement\ regarding\ SC's\ Organisational\ Structure\ were$ reached by the end of 2024
- Delivered recruitment success at a rate of 79%, with a 92% acceptance rate as of December 2024
- Implemented Cross Mobility programme for PCG Corporate Office, Perstorp and BRB talent pools as part of a targeted short-tomedium term strategy to enhance talent development and capabilities, aligning with our growth objectives

Operational Risk

- Energy and raw material prices remain elevated, creating a significant competitive gap between Europe, the Middle East, and Africa (EMEA) and the Asia-Pacific (APAC) region, impacting margin contribution
- Supply chain and logistics disruptions, driven by external factors such as geopolitical tensions and sanctions, continue to affect operations

Opportunity:

Strong value chain performance driven by efficient planning, effective implementation and proactive intervention in operations and maintenance activities

- Ongoing improvement programmes with site-specific implementation focused on cost reduction, raw material optimisation, and yield enhancement, while providing support to select struggling suppliers
- Renegotiate with current suppliers on raw material and develop supplier assessment, performance evaluation as well as audit programme

- Realised 7% cost savings across multiple sites in areas like direct variable costs, freight, and raw materials
- Improved product yield in the specialties segment
- Modified supplier terms (price, payment, consignment stock and order size) to assist suppliers during difficult periods

Regulatory Risk (including Sustainability)

- Emerging and increasingly stringent laws and regulations impacting specialty products and their markets
- Inability to anticipate and adjust to changing sustainability regulations may lead to legal penalties, market setbacks, reputational harm and higher operational costs

Opportunity:

Leveraging compliance as a catalyst for innovation, driving a competitive edge and enhancing market share

- Enhance employees' understanding of the Code of Conduct and Business Ethics (CoBE) by implementing mandatory e-learning and training programmes, including CoBE, EESG and more
- Develop a strong sustainability strategy and framework supported by clear and effective communication
- Utilise Subject Matter Expert (SME) knowledge through continuous communication and engagement

Results:

- Strengthened compliance practices to stay aligned with evolving laws and regulations
- Transformed ambitious 2030 sustainability targets into actionable roadmaps at both corporate level and each production plant. These roadmaps detail practical activities to reduce greenhouse gas emissions, minimise waste, conserve freshwater and drive sustainable transformation throughout the value chain

SEGMENTAL REVIEW



Innovation Risk

Inability to introduce new products to the market, resulting in the loss of competitive advantage and market share

Opportunity:

 Robust planning and execution, supported by adequate R&D funding, enhance the ability to outperform competitors

Action taken:

- Develop a comprehensive innovation strategy that aligns with future market trends and customer needs
- Capture the right talent and technology to drive innovation efforts forward

Results:

- Engage continuously with potential technology partners and invest in Research & Development (R&D) to capitalise on market opportunities
- Construction of innovation labs in Malaysia, China and Europe to expand R&D network set for completion in 2025

CONTRIBUTION TO SUSTAINABILITY

In the year under review, SC has demonstrated a steadfast commitment to incorporating sustainability into our daily operations, in alignment with PCG's Sustainability Agenda. Our sustainability efforts are further bolstered by Perstorp's ambition to achieve Finite Material Neutral, which aims to shift away from all virgin fossil raw materials and energy to using renewable, recycled or reclaimed raw materials and energy at production plants globally. Accordingly, Perstorp and BRB are progressing toward compliance with the Corporate Sustainability Reporting Directive (CSRD), with the primary objectives of enhancing transparency, fostering sustainable business practices and contributing to a more resilient economy.

Perstorp

In 2024, Perstorp earned the Platinum medal from EcoVadis, ranking it within the top 1% of all companies assessed. This improvement from Silver to Platinum in only two years reflects Perstorp's strong dedication to sustainability initiatives. In North America, Perstorp's Toledo site obtained the ISCC PLUS 'trader with storage' certification, demonstrating its commitment to sustainability and traceability in the trading and storage of sustainable materials.

In addition, Perstorp's Waspik site became the first Perstorp facility to achieve net zero emissions for both Scope 1 and Scope 2. This accomplishment was made possible through the replacement of natural gas with biogas, a full transition to 100% renewable energy and the implementation of additional sustainability initiatives, including the substitution of diesel trucks with electric vehicles. In April, Perstorp inaugurated a wastewater project at its Oxo plant in Stenungsund, Sweden, which is expected to conserve 1.1 billion litres of fresh water annually by purifying and reusing municipal wastewater.

BRB

BRB holds the Silver medal from EcoVadis in 2024, securing top 15% position across all industries. To enhance sustainability tracking, BRB implemented the Return on Society and Environment (ROSE) Framework for improved transparency in Corporate Carbon Footprint (CCF) and EESG goals. The ROSE framework is a sustainability management software that assists companies in achieving CSRD compliance.

Additionally, BRB's subsidiary, CSL Silicones, has partnered with Bullfrog Power to transition the electricity and natural gas supply for its silicone manufacturing plant in Guelph, Ontario, to renewable sources. Following extensive research and development efforts, CSL Silicones is now able to incorporate recycled silicone oil into certain formulations. Furthermore, BRB is collaborating with a new label supplier to use recyclable PET back lining instead of wax paper, thereby reducing carbon footprint.

OUTLOOK

PCG is well-positioned to enhance its global presence in 2025 by focusing on innovation, sustainability, and market responsiveness in the Specialty Chemicals business. A major milestone for the year will be the full operationalisation of the newly established Sayakha plant in Bharuch, India which will strengthen our polyol business in the APAC region and address the increasing regional demand for these products.

To deepen customer collaboration, PCG plans to establish new application labs in Malaysia, China, and Europe, complementing the existing network. These facilities will enable the division to co-develop innovative solutions and respond swiftly to customer-specific requirements, further enhancing operational agility and market insights.

On the operational front, efforts will focus on optimising supply chains, leveraging cost-effective raw materials, and strategically deploying resources to drive profitability. These initiatives aim to reinforce PCG's position as a dependable partner, delivering superior-quality specialty chemicals to customers worldwide.

PCG will pursue a balanced growth strategy that combines organic and inorganic initiatives, broadening its portfolio and venturing into new markets. Emphasising a customer-centric, sustainability, and solution-driven focus, we will ensure the delivery of high-performance products tailored to meet diverse industry needs. This strategic direction will help us progress towards a leadership position in specialty chemicals and capture the exciting opportunities that lie ahead.