FROST & SULLIVAN

*Omya*

# 2022 NEW PRODUCT INNOVATION

*European Sustainable Mining Solutions Industry*

## Best Practices Criteria for World-Class Performance

Frost & Sullivan applies a rigorous analytical process to evaluate multiple nominees for each award category before determining the final award recipient. The process involves a detailed evaluation of best practices criteria across two dimensions for each nominated company. Omya excels in many of the criteria in the sustainable mining solutions space.


### *Market Snapshot*

Calcium carbonate is a natural, renewable, and readily available raw material widely used across various industries. The polymer industry, in particular, heavily utilizes this industrial mineral as a filler to optimize the overall production costs and improve end-product functionality. Moreover, the substantially lower carbon footprint of calcium carbonate compared to synthetic resins (for instance, 54 kilograms (kg) carbon dioxide ($CO_2$) per ton of fine untreated ground calcium carbonate[1] vs. 1548 kg $CO_2$ per ton of virgin polypropylene [PP] resin[2]) makes it the preferred renewable alternative for polymer applications. Within this context, market participants demonstrate an increasing interest in recycled calcium carbonate-based materials to enhance their end-products' recycled content.

Founded in 1884 and headquartered in Oftringen, Switzerland, Omya is a leading producer of industrial minerals (primarily calcium carbonate, dolomite, and perlite-derived pigments and fillers) and a global distributor of specialty chemicals. Implementing a holistic lifecycle perspective on its products and services throughout its organization, the company offers innovative value-added solutions that help customers improve their environmental sustainability, market competitiveness, and overall productivity.

[1] *IMA-NA Calcium Carbonate Life Cycle Assessment* (Sustainable Solutions Corporation, September 2016). https://cdn.ymaws.com/www.ima-na.org/resource/dynamic/blogs/20171019_170108_21129.pdf, accessed 2022.
[2] *Cradle-to-gate Life Cycle Analysis of Polypropylene (PP) Resin* (Franklin Associates, February 2021). https://www.americanchemistry.com/better-policy-regulation/plastics/resources/cradle-to-gate-life-cycle-analysis-of-polypropylene-pp-resin, assessed May 2022.

## *Omyaloop: Certified Recycled Calcium Carbonate for the Polymer Industry*

Over its 138-year-old history, Omya has consistently developed unique value propositions to address its customers' (existing and) evolving regional and industry-specific needs. In the polymer sector, the company pioneered the use of calcium carbonate-based fillers with its 1952 introduction of the market's first surface-coated calcium carbonate for polyvinyl chloride (PVC) applications.[3] This initial offering met the market's price reduction demands prevalent at the time. Similarly, the company delivered innovative solutions to address its customers' need to enhance their end-products' technical capabilities and functionalities in later years. As the European polymer industry intensifies its emphasis on meeting regional sustainability goals, especially those related to the circular economy, Omya has shifted its product development focus to ensure its calcium carbonate product portfolio aligns with this current need.

> *"At present, as the European polymer industry intensifies its emphasis on meeting regional sustainability goals, especially those related to the circular economy, Omya has shifted its product development focus to ensure its calcium carbonate product portfolio aligns with this current need."*
>
> ***- Paulina Blaszczyk, Industry Analyst - Sustainability & Circular Economy***

With innovation and sustainability as essential pillars of its core values, Omya invests heavily in research and development (R&D) and leverages market insights to develop novel products that generate positive value for all industry stakeholders. The company drives these R&D initiatives through 60+ active research collaborations with leading universities and research institutes, resulting in 6,500+ country-specific granted patents.[4] More importantly, Omya's positioning at the beginning of the industry value chain enables it to integrate intimately with its customers' product development processes. This approach ensures the co-development of innovative solutions that successfully address the sustainability needs of both its immediate clients and their end-users. These collaborative customer relationships and ongoing market trends monitoring advance the company's commitment to new product development.

For instance, in November 2021, this needs-based approach inspired Omya to launch Omyaloop, its new recycled calcium carbonate-product family dedicated to facilitating the polymer industry's transformation towards a sustainable, circular economy.[5] This unique offering comprises ultrafine calcium carbonate Omyaloop MIX specifically developed to compatibilize Polyethylene (PE) and Polypropylene (PP) in mechanical recycling and 100% recycled and certified grades like Omyaloop 1 FC-AV, 1T FC-AV, 2 FC-AV, 2T FC-AV, 5 FC-AV, and 10 FC-AV. to improve the recycled content of its customers' end products.

The Omyaloop products are available in the most widely used particle sizes in polymer manufacturing. As a result, they can easily substitute carbon-intensive fillers in existing formulations. Moreover, the recycled Omyaloop products perform identically to conventionally-sourced "virgin" calcium carbonate in compounding and extrusion operations and, therefore, are viable as 1:1 replacements in most polymer

[3] https://www.omya.com/history, accessed May 2022.
[4] https://www.omya.com/Documents/Omya_Sustainability_Brochure.pdf, accessed May 2022.
[5] https://www.omya.com/Documents/news/Media%20Release_Omyaloop_November2021_EN.pdf, accessed May 2022.

production processes. This viability for immediate and complete substitution enables polymer companies to increase the recycled content in their final products, helping them meet the industry's stringent sustainability goals.

Furthermore, Omyaloop is the market's first certified 100% recycled calcium carbonate product range for polymer applications. The company carefully selects and responsibly sources recovered calcium carbonate (that would otherwise be discarded as waste) for this product line. Omya started producing its Omyaloop products in various European plants using highly selected raw materials. The company's extensive selection process and specification conformance (for instance, not generating more waste than the recovered amount) enabled it to earn the Bureau Veritas International Organization for Standardization 14021 certification for 100% recycled material. Moreover, Omyaloop meets the EU 10/2011 food contact certification requirements. This certification means polymers manufactured using the Omyaloop line are safe for all food contact applications, enhancing the range's adoptability across multiple end-use sectors.

Since its launch, the Omyaloop range has enjoyed considerable interest from several market segments, such as automotive, PVC (flooring, pipes, tubes, etc.), and compounds and masterbatches for various usages. For instance, companies striving to produce 100% recycled PVC flooring had access to recycled PVC and plasticizers, but the market lacked certified recycled fillers. The Omyaloop product is gaining popularity as a suitable solution for these customers.

Omya's new and purpose-built Omyaloop product portfolio sets it apart from its competitors, with sustainability, innovation, and quality as its central pillars.

### *Roadmap to Success: Customer-centric, Continuous, Proactive*

Omya serves customers across various industry verticals, including paper, polymers, building materials, and food sciences. Prioritizing long-lasting customer relationships over short-term financial gains, the company helps more than customers in 175+ locations across 50+ countries with 8,000+ employees.[6]

> *"Prioritizing long-lasting customer relationships over short-term financial gains, the company helps more than customers in 175+ locations across 50+ countries with 8,000+ employees. Omya's expertly-trained team of sales, technical, and regulatory staff utilize their deep understanding of local markets to ensure the company offers customized yet uniformly excellent customer service across its global locations."*
>
> ***- Sama Suwal,***
> ***Best Practices Research Analyst***

Omya's expertly-trained team of sales, technical, and regulatory staff utilize their deep understanding of local markets to ensure the company offers customized yet uniformly excellent customer service across its global locations. Moreover, the company provides exceptional 24/7 customer service through its dedicated team to ensure clients receive the optimum quality products delivered to their premises within the stipulated time. Additionally, Omya's scientists and engineers offer on-site technical advice, implementation facilitation, comprehensive lab analysis, and reformulation support to help customers incorporate Omyaloop into their existing products and manufacturing operations seamlessly. Furthermore,

[6] https://www.omya.com/Documents/Omya_Sustainability_Brochure.pdf, accessed May 2022.

the company provides customers with essential resources, including blogs, newsletters, webinars, and whitepapers, enabling clients to optimize their polymer production processes' overall sustainability.

Omya uses client feedback combined with industry trend monitoring to guide its product roadmap and continuously evolve its solutions to maintain its innovative edge. Furthermore, the company conducts regular client check-ins to ensure high customer satisfaction, earning Omya an excellent market reputation and exceptional client success rates. Moreover, the company's focus on forming long-lasting partnerships with customers, suppliers, and industry principals builds trust and credibility in its solutions. This trust is evidenced in Omya's success in retaining most of its partners, some of whom have worked with the company for over 50 years.

## Conclusion

To create a new product, a company needs to understand the market's needs and deliver a solid solution designed and embedded with high quality and reliable performance. Frost & Sullivan finds that Omya's Omyaloop product portfolio embodies this concept. Moreover, Omyaloop is the market's first certified 100% recycled calcium carbonate product range and is suitable for 1:1 replacements of conventional mineral fillers in most polymer production processes. This viability for immediate and complete substitution enables polymer companies to increase the recycled content in their final products, helping them meet the industry's stringent sustainability goals. Furthermore, Omya integrates a customer-centric approach to ensure that its offering addresses the wants and needs of users.

With its strong overall performance, Omya earns Frost & Sullivan's 2022 European New Product Innovation Award in the sustainable mining solutions industry.

# What You Need to Know about the New Product Innovation Recognition

Frost & Sullivan's New Product Innovation Award recognizes the company that offers a new product or solution that uniquely addresses key customer challenges.

## Best Practices Award Analysis

For the New Product Innovation Award, Frost & Sullivan analysts independently evaluated the criteria listed below.

### *New Product Attributes*

**Match to Needs**: Customer needs directly influence and inspire product design and positioning

**Reliability**: Product consistently meets or exceeds customer performance expectations

**Quality**: Product offers best-in-class quality with a full complement of features and functionality

**Positioning**: Product serves a unique, unmet need that competitors cannot easily replicate

**Design**: Product features an innovative design that enhances both visual appeal and ease of use

### *Customer Impact*

**Price/Performance Value**: Products or services provide the best value for the price compared to similar market offerings

**Customer Purchase Experience**: Quality of the purchase experience assures customers that they are buying the optimal solution for addressing their unique needs and constraints

**Customer Ownership Experience**: Customers proudly own the company's product or service and have a positive experience throughout the life of the product or service

**Customer Service Experience**: Customer service is accessible, fast, stress-free, and high quality

**Brand Equity**: Customers perceive the brand positively and exhibit high brand loyalty

## About Frost & Sullivan

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### The Growth Pipeline Engine™

Frost & Sullivan's proprietary model to systematically create ongoing growth opportunities and strategies for our clients is fuelled by the Innovation Generator™.
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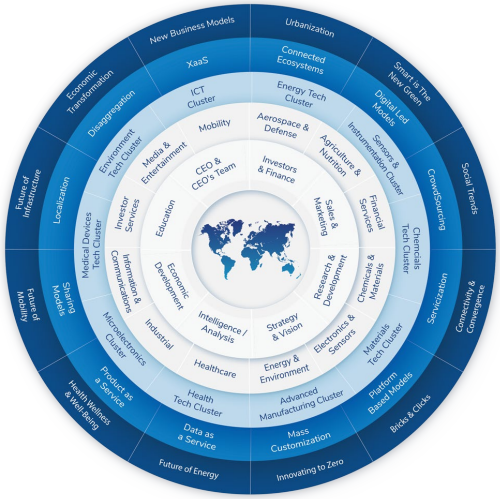
***Key Impacts***:

- **Growth Pipeline:** *Continuous Flow of Growth Opportunities*
- **Growth Strategies:** *Proven Best Practices*
- **Innovation Culture:** *Optimized Customer Experience*
- **ROI & Margin:** *Implementation Excellence*
- **Transformational Growth:** *Industry Leadership*

### The Innovation Generator™

Our 6 analytical perspectives are crucial in capturing the broadest range of innovative growth opportunities, most of which occur at the points of these perspectives.




***Analytical Perspectives:***

- Mega Trend (MT)
- Business Model (BM)
- Technology (TE)
- Industries (IN)
- Customer (CU)
- Geographies (GE)