



2024 Annual ESG Report

Building a sustainable
and healthier future

Our commitment

At Meticuly, we believe that good health lies not only in the innovations we bring to medicine, but also in the values that guide our journey. As the Managing Director, COO and Head of the ESG Committee at Meticuly, we are proud to present to you our 2024 ESG report, which showcases our commitment to environmental, social, and governance excellence.

In these pages, you will find tangible evidence of our commitment to:

Environmental Responsibility: Minimising our footprint through eco-conscious practices and embracing sustainable innovations in our products and operations.

Social Impact: Prioritising diversity and inclusion in our workforce, fostering ethical and responsible conduct through robust governance practices, and actively contributing to improving health outcomes globally.

Corporate Governance: Upholding the highest standards of transparency, accountability, and risk management, ensuring that our business operates with integrity and purpose.

This report is just the beginning. We are committed to continuous improvement, setting ambitious goals, and measuring our progress transparently. We invite you to join us on this journey, as we strive to build a healthier future for generations to come.

On behalf of Meticuly,



Peeranoot Lohwongwatana
Managing Director, COO and Head of the ESG Committee at Meticuly



AT A GLANCE

At Meticuly, we hold our core values to heart. We aim to take on the challenges of creating better lives for our patients and our prospective employees.

As such, Meticuly supports the UN Sustainable Development Goals (SDG) with the following most closely related SDG's:



Our core values:

Quality

We strive to do our best all the time.
Every Time.

Unity

We work hand-in-hand together in
harmony towards the same goal.

Innovation

We continually seek newer and better
ways.

Meticulous

We pay great attention to detail.

Integrity

We always commit to doing what is
right.

Customer Focus

We dedicate ourselves to making our
customers happy and satisfied.

Prioritising health and medical excellence

At Meticuly, our commitment to the UN Sustainable Development Goal 3 – Good Health and Well-being – remains at the heart of our mission. As a leading MedTech company, we believe that access to high-quality healthcare should not be a privilege but a fundamental right.

Our work is driven by the understanding that patient-specific solutions lead to better clinical outcomes, yet accessibility remain significant barriers for many. In 2024, our Meticuly patient-specific titanium mesh implant demonstrated exceptional clinical success, with an average 6-month follow-up showing a low explantation rate of 1.56% (13 implants), primarily due to infection (0.60%) and skin complications (0.72%), including skin erosion and wound dehiscence. Only 0.24% of explants resulted from other complications such as epidural hematoma and brain abscess.

Beyond clinical excellence, we remain deeply committed to supporting those in need. In 2024, we facilitated 37 cases through hospital foundations, ensuring that patients who would otherwise be unable to afford treatment received the life-changing care they required. Behind each number is a patient and a family who placed their trust in us, reinforcing our mission to make advanced medical solutions more accessible.



Ensuring ethical supply and workplace equality

In the MedTech sector, diversity, ethics, and responsible governance are crucial drivers of innovation, sustainability, and trust. At Meticuly, we believe that fostering an inclusive workplace and maintaining the highest ethical standards are not just obligations—they are essential to our success. Our commitment to gender equality, ethical business conduct, and regulatory compliance reinforces our dedication to responsible growth and long-term sustainability.

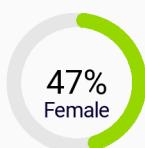
Advancing gender equality

Gender diversity remains a key focus for us. As of December 2024, women represent 47% of our full-time workforce, a notable achievement in an industry where women, particularly in engineering roles, are still underrepresented. We are especially proud to have cultivated an equal-opportunity workplace, ensuring that hiring, promotion, and compensation decisions are based solely on merit. This commitment extends to leadership roles, where we continue to uphold a balanced representation of women in senior positions, fostering a culture where diverse perspectives drive better decision-making and innovation.

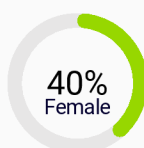
Combatting modern slavery and strengthening supply chain ethics

Building on our foundational work from previous years, we have taken significant steps in 2024 to assess and mitigate the risks of modern slavery within our supply chain. We are proud to report that we have mapped 100% of our Tier 1 suppliers, enhancing transparency and accountability. To further strengthen our approach, we have:

- Increased supplier assessments, particularly in high-risk regions and industries.
- Expanded training and awareness programmes, ensuring both employees understand risk indicators and reporting mechanisms.
- Implemented structured KPIs and regular internal reviews to measure the effectiveness of our modern slavery risk mitigation efforts.



All employees



Engineers



Suppliers mapped for
modern slavery risks



Fostering a culture of growth and well-being

At Meticuly, we are committed to fostering a workplace that prioritises continuous learning, personal growth, and overall well-being.

Employee training and development

To support our employees' professional growth, we provide seven mandatory training programmes, ensuring that all team members meet essential competency standards. Additionally, we offer over 25 voluntary training sessions, covering a diverse range of topics—from leadership development to AI prompt engineering. In 2024, we successfully achieved our training investment KPI, ensuring that each employee has access to the resources needed to expand their skills and thrive in their careers at Meticuly.

Health and well-being initiatives

We recognise that a healthy workforce is a productive and engaged workforce. Our physical and mental health initiatives focus on fostering a balanced lifestyle, encouraging team bonding, and promoting cultural and social well-being. Key initiatives include:

- Activity challenges: Employees track their exercise and earn rewards, motivating regular physical activity.
- Annual health check-ups: Supporting early detection and prevention of health issues.
- Company outing: A 3-day, 2-night team retreat in Chonburi, featuring activities such as Batik painting and team-building games to strengthen collaboration.

- Festive gatherings: Annual Christmas and New Year celebrations, fostering a strong sense of community.
- Cultural and spiritual well-being: traditional annual company ceremonies, including merit-making and visits to sacred sites, reinforcing our cultural values.
- Inclusive well-being support: complimentary weekly massage therapy sessions with visually impaired massage therapists, promoting both employee well-being and social inclusion.

With **61% of employees actively participating in these initiatives**, our well-being programmes have made a significant impact on workplace engagement and morale.



Revolutionising patient care through innovation

At Meticuly, innovation is at the core of our mission, driving advancements in personalised medical solutions and strengthening healthcare infrastructure. Our intellectual property strategy is a key pillar of this commitment, ensuring our technological developments are protected and continue to create meaningful impact.

As of 2024, our portfolio includes:

- **36 patents** (10 granted, 26 pending)
- **15 trade secrets**
- **18 trademarks**

Our commitment to innovation was recognised globally when Meticuly was named a winner of the prestigious **2024 WIPO Global Awards**, celebrating our success in transforming research into commercial ventures, driving business growth through IP-led strategies, and developing innovations that contribute to the United Nations Sustainable Development Goals (SDGs).

A significant milestone this year was the official launch of **OSS30**, a Meticuly subsidiary pioneering the world's first titanium 3D printing at the point of care within a hospital. With a clear roadmap to manufacture implants in 2025, this breakthrough technology will revolutionise patient care by:

- Drastically reducing logistical demands and transportation-related emissions
- Shortening lead times, ensuring faster access to patient-specific implants
- Enhancing treatment for time-sensitive conditions, enabling more patients to benefit from personalised solutions

Picture credit: WIPO. Violaine Martin.





Optimising resources for a sustainable future

At Meticuly, we are committed to minimising our environmental footprint through sustainable practices, resource efficiency, and carbon reduction initiatives. In 2024, we took significant steps to refine our carbon emissions calculations, optimise resource consumption, and advance waste reduction efforts.

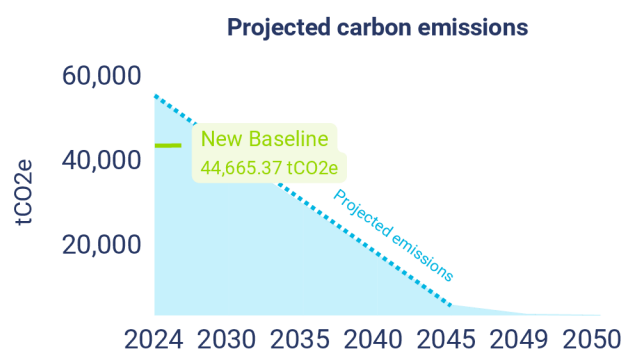
Responsible consumption and production (SDG 12)

- Energy and water use efficiency:
 - The quality control time reduction project exceeded expectations, achieving a 50.09% reduction in energy consumption during quality control processes, significantly surpassing the initial 20% target.
 - The Silicone line lead time reduction project successfully met its goal, achieving a 10% reduction in production lead time, improving efficiency and resource utilisation.
- Resource optimisation:
 - The cleanroom utilities reduction project achieved a 21.35% decrease in plastic and packaging material consumption, surpassing the initial 20% reduction target.
 - Our Argon gas reduction initiative continues to reduce material waste, supporting our broader carbon footprint reduction efforts.

By implementing these initiatives, we are taking measurable steps towards a more sustainable future, optimising resource use while reducing our environmental impact.

Climate action (SDG 13)

- In 2024, we conducted a more comprehensive carbon emissions assessment, establishing a new baseline of 44,665.37 tCO₂e. This expanded assessment covers Scope 3:
 - Upstream transportation and distribution
 - Waste generated in operations
 - Business travel
 - Employee commuting
 - Downstream transportation and distribution
- We remain committed to our long-term target of achieving carbon neutrality by 2050.
- 85% of our freight forwarding suppliers have pledged to reach Net Zero before 2050, aligning with our sustainability goals.



21.35%

Cleanroom utilities reduction

Shaping the future of sustainable healthcare

At Meticuly, we recognise that progress is an ongoing journey. As we reflect on our achievements in 2024, we remain committed to fostering innovation, investing in future talent, and advancing sustainability in MedTech.

Investing in future innovators

This year, we supported seven interns, providing them with hands-on experience in 3D-printed medical implants and the opportunity to contribute to real-world projects. As a company rooted in academic research, we also continued to drive scientific advancement, supporting 23 ongoing research projects, including 21 bachelor's, 9 master's, and 3 PhD-level studies.

Beyond research, we actively engaged in knowledge sharing, with our leadership participating in nine educational events, speaking on panels, and contributing insights to the broader MedTech community. Additionally, we launched the Young Innovator Programme, introducing 18 aspiring highschoolers to the fundamentals of 3D printing, design thinking, troubleshooting, and prototyping. Through mentorship and hands-on sessions, we aimed to spark curiosity and inspire future careers in engineering and medical technology.

Additionally, we believe in giving back to the communities that support us. This year, we contributed to the Kanchanaburi Children's Foundation through our Meticuly calendar project, themed "Me in 10 Years", which received inspiring submissions.

Driving sustainable growth

Our long-term sustainability vision is guided by our ESG committee, which is developing a comprehensive roadmap to deepen our environmental, social, and governance commitments.

In the coming year, we will:

- Expand our point-of-care 3D printing capabilities – In 2025, we will establish a fully operational titanium 3D printing facility at Siriraj Hospital, demonstrating our vision for decentralised, on-demand medical manufacturing.
- Continue tracking our carbon footprint – With a newly established emissions baseline, we will refine our sustainability strategies and monitor progress against our long-term goal of achieving carbon neutrality by 2050.

By integrating innovation, ethical leadership, and sustainability into every aspect of our business, we remain dedicated to creating lasting impact in healthcare, empowering the next generation, and shaping a more responsible MedTech industry.



References

Meticuly. (2024). Post-market surveillance data from 2018-2024 of Meticuly Patient-Specific Titanium Mesh Implant [Post market Surveillance Review]. https://www.meticuly.com/_files/ugd/f709d1_f35843c88c8b420a96b977fd552fb393.pdf

WIPO global awards 2024: Celebrating World-changing innovations in health, Climate Tech, and Advanced Technology. WIPO. (n.d.). https://www.wipo.int/pressroom/en/articles/2024/article_0011.html

Thank you for your ongoing support.



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