

For Immediate Release

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Open Lab Unveiled to Scale Up Sustainable Innovation in the Textile & Fashion Industry

A transformative initiative by HKRITA and H&M Foundation to drive advanced technologies and global collaboration

The Hong Kong Research Institute of Textiles and Apparel (HKRITA) and the H&M Foundation proudly announce the official unveiling of the Open Lab, a pioneering initiative designed to revolutionise the textile and fashion industry through sustainable innovation. Located at the Advanced Manufacturing Centre in Tseung Kwan O InnoPark, the Open Lab is set to become a dynamic hub for industry-wide collaboration, providing a 20,000-square-foot physical space for research and development, as well as a platform for fostering dialogue and knowledge sharing. Building on Hong Kong's strategic location, advanced infrastructure and innovation-friendly environment, the Open Lab aims to not only support HKRITA's research, but also become a hub for applied solutions to scale up to industrial-scale applications for the benefit of all global stakeholders addressing the challenges of climate change.

Mr Lee Kwok Bun, Ivan, JP, Commissioner for Innovation and Technology, joined today's opening ceremony at the Open Lab, celebrating this important milestone together with other officiating guests including **Mrs Christiane DOLVA, Strategy Lead, H&M Foundation, Ms Teresa YANG, Chairman, The Hong Kong Research Institute of Textiles and Apparel**, and **Mr Edwin KEH, Chief Executive Officer, The Hong Kong Research Institute of Textiles and Apparel**.

Ms Teresa YANG, Chairman, The Hong Kong Research Institute of Textiles and Apparel, said, "This moment marks a significant milestone in leading the textile and fashion industry toward a more resilient future. At the core of the Open Lab is the mission to bridge the gap between lab innovations and industrial applications. By applying cutting-edge research and technology, funded by Hong Kong's ITF funding schemes, we at HKRITA are developing sustainable and scalable solutions that will benefit the Hong Kong community, local corporations, regional suppliers, and global brands in addressing our climate change challenges."

Mrs Christiane DOLVA, Strategy Lead, H&M Foundation, added, "We are thrilled to see the vision of Open Lab come to life. A strong network of supporting organisations, the sharing of knowledge, and of course the courage to explore the unknown, is what has made the Open Lab possible. In providing a safe collaborate space, a key infrastructure and a vibrant encouraging community, the amazing team at HKRITA and it's visionary partners, have created something truly special. I'm excited for the future and to witness the groundbreaking solutions that will help drive greater sustainability in the textile and fashion industry and hopefully beyond."

With the support of the **Innovation and Technology Commission of the HKSARG**, the Open Lab also received support from many stakeholders from multiple industries. These include manufacturers, brands, service providers and organisations that use textile and soft materials. The common goal is to address our shared environmental challenges by developing agile and scalable solutions. The Open Lab's approach is threefold: to showcase innovative solutions at scale, to provide a collaborative platform for industry-wide partnerships, and to contribute to problem-solving – thereby catalysing the transformative journey of the fashion and textile industry toward a sustainable future.

The Open Lab features two main components: the **Pilot Plant**, which is an end-to-end upcycling line designed for industrial-scale demonstrations and technology trials, including an AI-powered smart garment sorting system for recycling and the **Green Machine 2.0**, which separates polyester fibres from PET-cotton blended textiles at scale, reaching up to 1 ton of daily recycling capacity; while the **Fashion Future Lab** is a modular research space focusing on early-stage solutions with the first project “**Farm-to-Garment**”, a location-independent production line from hydroponic cotton cultivation to yarn processing and garment knitting.

Open Lab also houses a technological database of over 80 of HKRITA’s sustainable projects. By bridging the gap between the research lab and industry, Open Lab transforms lab-scale outcomes into useful industrial-scale applications. Solutions developed here will be licensed at cost, ensuring they are affordable for widespread adoption. This approach maximises impact of reducing the carbon footprint and driving greater circularity within the industry.

Growth in research capabilities is a key focus for Open Lab, and it is dedicated to nurturing young innovators and startups. Through its upcoming residency program, which will be available to global undergraduates and postgraduates in full-time STEM-related programs, participants can work closely with scientists and engineers on meaningful textile related sustainability technology. For other curious minds, the Open Lab Challenge will invite creative solutions on various textile sustainability topics.

For more information about Open Lab and its initiatives, please visit the Open Lab website (theopenlab.one) or contact our media relations team.

About the Open Lab

Open Lab, a pioneering initiative by HKRITA and the H&M Foundation, is a transformative force within the textile and fashion industry. The Open Lab spans 20,000 square feet in the Advanced Manufacturing Centre in Hong Kong and hosts a technological database with over 80 sustainable projects, creating a dynamic hub for the entire industry value chain. It focuses on showcasing solutions, providing a platform for collaboration, and engaging in problem-solving and resource optimisation in order to set the stage for industry-wide transformation to address climate change. Supported by key stakeholders like the Innovation and Technology Fund of the Hong Kong government and leading industry players, the Open Lab is driving the industry towards a sustainable future.

About The Hong Kong Research Institute of Textiles and Apparel (HKRITA)

Established in 2006, HKRITA is funded by the Innovation and Technology Commission of the HKSAR Government and is hosted by The Hong Kong Polytechnic University. HKRITA contributes to the competitiveness of the textile and apparel industry by providing one-stop services in applied research, technology transfer and commercialisation. HKRITA also plays a vital and expanding role in driving sustainable improvements in the industry and thus bringing benefits to society as a whole.

About H&M Foundation

The H&M Foundation is privately funded by the Stefan Persson family, founders and main owners of the H&M Group. It utilises philanthropic resources to find, fund, and facilitate disruptive innovations, initiatives, and research that enable a socially inclusive and planet-positive textile industry. To accelerate this transformation, the foundation takes a holistic and open approach, bringing diverse partners together to co-create solutions and share learnings. Additionally, the H&M Foundation provides emergency relief. For more information, visit hmfoundation.com.

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Photos:

Photo 1

Mr Lee Kwok Bun, Ivan, JP, Commissioner for Innovation and Technology (second right) joined today's opening ceremony at the Open Lab, celebrating this important milestone together with other officiating guests including **Mrs Christiane DOLVA, Strategy Lead, H&M Foundation** (first right), **Ms Teresa YANG, Chairman of The Hong Kong Research Institute of Textiles and Apparel** (second left), and **Mr Edwin KEH, CEO of The Hong Kong Research Institute of Textiles and Apparel** (first left).



Photo 2

Ms Teresa YANG, Chairman of The Hong Kong Research Institute of Textiles and Apparel, delivering the Welcome Speech at the opening ceremony of the Open Lab.



Photo 3

Mr Edwin KEH, CEO of The Hong Kong Research Institute of Textiles and Apparel sharing his insights into how the Open Lab help drive greater sustainability in the textile and fashion industry during the opening ceremony.



Photo 4

The opening ceremony of the Open Lab was well attended by industry key stakeholders celebrating an important milestone together.



Please download photos: <https://bit.ly/3Tkhmcy>

Appendix I: Overview of Key Facilities in the Open Lab

1) About Pilot Plant

Pilot Plant is a space to house new technologies at pre-industrial and industrial scale. It demonstrates our flagship technology, Green Machine 2.0, at scale –separating and recycling waste from PET-cotton blends, transforming them into new products such as fibre, yarn, apparel or accessories. The production line separates polyester fibres from PET-cotton blended textiles at scale, with a daily recycling capacity reaching 1 ton, while reusing water and chemicals. The incoming post-consumer materials will be sorted by AI-powered smart garment sorting system for recycling.



2) About Fashion Future Lab

Fashion Future Lab is a modular research space for early-stage solutions. Its first project “Farm-to-Garment” is a location-independent production line from hydroponic cotton cultivation to yarn processing and garment knitting. Adopting a modular design provides flexibility, scalability and rapid deployment. These advantages allow the development of agile solutions with quick adjustments and responsiveness to meet changing market needs.



Appendix II: Mrs Christiane Dolva, Strategy Lead, H&M Foundation

🌐 Mrs Christiane Dolva, Strategy Lead, H&M Foundation

Christiane Dolva has over 15 years of experience in sustainability and is currently the strategic lead for the Planet Positive pillar at the H&M Foundation. This involves speeding up meaningful research and innovation to support the textile and fashion industry to halve its emissions by 2030.

Prior to this, Christiane served as the Global Sustainability Director at the Swedish outdoor brand Fjällräven, Sustainability Manager for the Norwegian outdoor brand Bergan and Co-founder and advisor at consultancy firm Sustema, focusing on environmental management systems.

Furthermore, she has served as a board member for organizations such as the Scandinavian Outdoor Group, and a mentor at Unreasonable Group, supporting growth-stage entrepreneurs.



Appendix III: Mr Edwin KEH, Chief Executive Officer, The Hong Kong Research Institute of Textiles and Apparel

Mr Edwin KEH

Chief Executive Officer, The Hong Kong Research Institute of Textiles and Apparel

Mr Edwin Keh is the CEO of The Hong Kong Research Institute of Textiles and Apparel. He also teaches supply chain operations in the Operations, Information and Decisions Department of the Wharton School, University of Pennsylvania.

Until April 2010 Edwin was the SVP COO of Wal-Mart Global Procurement. Prior to Wal-Mart Edwin managed a consulting group that has done work for companies on supply chain, manufacturing, and product design. The practice also did work for non-profit organizations and charities. Edwin co-founded the Consortium for Operational Excellence in Greater China (COER GC) sponsored by the Wharton School and Tsinghua University.

Edwin had a career as senior executive with several international consumer goods and retail companies. He also worked for the United Nations High Commission for Refugees.

Edwin is on the advisory board of multiple social enterprises and NGOs and was served on the Board of Whittier College, CA and the Expert Panel of H&M Foundation's Global Change Award for year 2018 & 2019.

Edwin was awarded the Medal of Honor in 2020 by the HKSAR Government for his research work during the pandemic. He was named the best of Top 50 Innovative Retail Leaders by Inside Retail Hong Kong in 2019 and is on the Debrett's Hong Kong 100 as one of the most influential people in Technology and Digital sector, and a recipient of the Production and Operations Management Society's Excellence in Production and Operations Management Practice Award. Edwin holds multiple IPs which won global invention awards.

