August 21, 2025 **Toshiba Corporation** naturenix inc.

# Toshiba and naturenix Scale Up and Transition to Paid Battery Subscription Pilot for **E-Motorcycle Taxis in Bangkok**

Advancing a Sustainable Manufacturing Business Model —

Kawasaki and Tokyo, Japan— Toshiba Corporation and battery-tech startup naturenix inc. are taking their battery subscription demonstration test for electric motorcycle taxis in Bangkok, Thailand, to the next level by expanding the scale and shifting to a paid subscription model. Both companies are now preparing for the transition, and production of battery packs and related components has started. The new phase will run from December 2025 through March 2026.



From September 2024 to March 2025, the two companies conducted the first phase of service testing free of charge, allowing motorcycle taxi drivers to quickly swap battery packs at a dedicated charging station and return to carrying passengers\*1. In this trial, Toshiba supplied its SCiB™ lithium-ion batteries, while naturenix developed battery packs and chargers and modified the motorcycles. Sensors embedded in the motorcycles collected data on ambient temperature, environmental conditions, and driver behavior. The results, alongside driver surveys, confirmed the long-life and reliable performance of SCiB™, even in the torrid heat of Bangkok, and validated naturenix's core technologies.

The paid service will be larger in scale, supporting up to 100 electric motorcycles, and one charging station will become five, covering Bangkok and its environs. Toshiba will

## **News Release**

continue to supply SCiB™ batteries, and naturenix will provide its proprietary system, a solution for rapid charging with standard power outlets. To refine the service, the two companies will leverage Thailand's Windee International\*2 to gather feedback from drivers, including their reactions on pricing. They will also identify technical challenges resulting from scaling up production, evaluate the performance of the new charging technology, and analyze battery degradation while exploring potential countermeasures.

The battery packs for the second round of testing are upgraded and improved, with real-time monitoring of usage history and cell-level degradation, coordinated control across multiple packs, and optimized management for rapid charge/discharge cycles. Designed for reuse and repurposing in second-life applications, the new packs will contribute to development of a circular electrification ecosystem that maximizes resource use and reduces disposal-based recycling.

Toshiba and naturenix position the service as the proving ground for a new business model. In response to growing environmental concerns and the resource depletion associated with mass production and consumption, the two companies are advancing a sustainable business model centered on long-life batteries and subscription-based services. This approach challenges the traditional "volume equals revenue" paradigm by prioritizing durability over disposability, and aims to realize a more sustainable manufacturing framework.

Following the second round of demonstration testing, Toshiba and naturenix plan to launch a commercial subscription service for motorcycle taxi drivers in fiscal year 2026, and look to future expansion into industrial applications such as forklift trucks. Over the long term, Toshiba and naturenix will advance the integration of mobility and energy infrastructure as a unified service, aiming to expand both its applications and business scope.

<sup>\*1</sup> Toshiba and Naturenix Launch Demonstration Test of Battery Subscription Service for Electric

Motorcycle Taxis in Bangkok

## **News Release**

\*2 naturenix's joint venture with a local parking management service provider.

### **About Toshiba**

In 2025, the Toshiba Group celebrates its 150th anniversary. As the company looks ahead, it is enhancing its management structure, streamlining operations, and investing in forward-looking businesses to build foundations for new growth. This will allow it to continue to support advances toward a sustainable future with products and services developed by its wide range of businesses in the energy, infrastructure, and electronic devices domains.

Guided by its corporate philosophy, "Committed to People, Committed to the Future.," Toshiba brings industry-leading capabilities in green transformation (GX) and digital transformation (DX) to solutions for companies addressing the many challenges faced by modern society. By leveraging the power of data derived from its constantly evolving products and solutions, the Group is determined to help to achieve carbon neutrality and a circular economy.

In fiscal year 2024, Toshiba Group recorded annual sales of 3.5 trillion yen and employed 95,000 people worldwide. For more information, visit our <u>website</u> or follow us on <u>LinkedIn</u>.

#### **About naturenix**

naturenix is a start-up company that aims to create a world where nature and electronics coexist through the provision of battery longevity technologies and next-generation energy platforms. By collecting dynamic data on batteries in actual use and analyzing it with AI technology, the company promotes open innovation in batteries and ensures long-term use across multiple applications by guaranteeing asset value based on an understanding of battery use and degradation. For more information, please visit <a href="https://www.naturenix.co.jp/en/index.html">https://www.naturenix.co.jp/en/index.html</a>