

Impact Reporting (April 2025~March 2026)

Eligible Project	ICMA Project Category	Impact Reporting Item	Disclosure Information
① 5G-related investment	Energy efficiency	<ul style="list-style-type: none"> ■ Number of 5G base stations installed 	<p><As of March 31 2026>Approx. 58,000 Stations <As of March 31 2024(Final year of fund allocation)>Approx. 45,000 Stations</p>
② FTTH-related investment	Energy efficiency	<ul style="list-style-type: none"> ■ Number of subscribers (units) 	<p><As of March 31 2026>23.99 Million Agreements <As of March 31 2024(Final year of fund allocation)>2,365 Million Agreements</p>
③ R&D for the realization of the IOWN concept	Energy efficiency	<ul style="list-style-type: none"> ■ Explanation of the intended effects of the eligible R&D projects ■ Introduction of the progress of the R&D and examples of services and products 	Attachment
④ Highly energy efficient and power-saving data center	Energy efficiency	<ul style="list-style-type: none"> ■ Amount of CO₂ emissions (t-CO₂) 	Not Applicable
⑤ Green Buildings	Green Buildings	<ul style="list-style-type: none"> ■ Name of the Green Buildings, certification level obtained, and the timing of acquisition and reacquisition ■ Amount of CO₂ emissions (t-CO₂) 	Not Applicable
⑥ Renewable Energy	Renewable Energy	<ul style="list-style-type: none"> ■ Power generation capacity/ actual amount (GWh) ■ Amount of CO₂ emissions reduced (t-CO₂) 	<p><As of March 31 2026> Power generation Actual Volume : 1,254GWh (Reference: Facility Capacity 2,260KW) Volume of CO₂ emissions reduced 505,053tons-Co2 (Buildings under construction excluded)</p> <p><As of March 31 2024(Final year of fund allocation)> Power generation Actual Volume : 880GWh (Reference: Facility Capacity 2,150KW) Volume of CO₂ emissions reduced 423,057tons-Co2 (Buildings under construction excluded)</p>

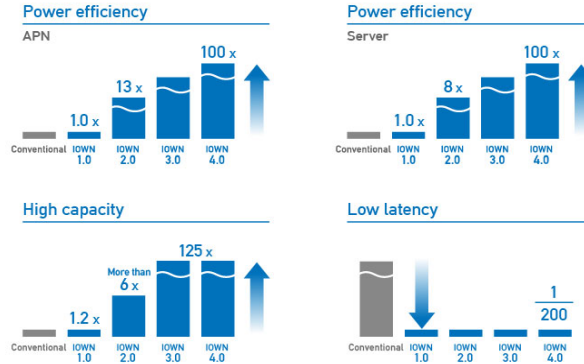
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Expected Impact

IOWN is a concept and initiative aimed at realizing a world of well-being in which everyone can live smarter in their way, based on next-generation information and communications infrastructure centered on optical technology.

It aims to contribute to humanity and achieve an environment-friendly and sustainable society. Innovative Optical and Wireless Network (IOWN), the next-generation information and communications infrastructure features high capacity, low latency, and low power consumption. In addition to the use of end-end optical fiber networks, we are working to realize a highly energy-efficient infrastructure by innovating the system by delivering light to the inside of computers.

In the field of photonics-electrics convergence devices, we expect to see several leaps forward with this innovation. At IOWN1.0, we launched the All-Photonics Network (APN) service and achieved a delay target of 1/200 (Figure 2). The IOWN2.0 is a board-connected photoelectric device that advances the IOWN into the computer realm. It enables more flexible assembly of parts than ever before while achieving a highly energy-efficient computer. IOWN3.0 targets 125 times capacity and IOWN4.0 targets 100 times power efficiency.



R&D Progress

■ Partnerships for Practical Application of Photonic-Electronic Convergence Devices

· At the NTT Pavilion at the Osaka-Kansai Expo, we utilized IOWN Photonic Computing to analyze the facial expressions of visitors inside the pavilion from outside the venue and reflected them in the movement of the curtain covering the pavilion. This IOWN Photonic Computing utilizes resource allocation technology that allows for only the necessary functions to be efficiently used in the amounts required and the high-capacity and lowpower-consumption photonic-electronic convergence device*1 (PEC) PEC-2*2 to achieve power consumption reduced to one-eighth of the conventional level.

*1 A device that integrates electronic and photonic devices into a single system to improve data transfer speed and energy efficiency.

*2 A photonic-electronic convergence device that optically connects short haul between computer boards.

· Aiming for commercial launch of PEC-2 during FY2026, we have established a collaborative system with supply chain partners including Broadcom Inc. and Accton Technology Corporation. In addition, NTT Innovative Devices Corporation is strengthening its production system through process automation and expanding production lines in response to demand.

■ Innovations in Computing with Photonics Technology (Toward IOWN 3.0)

· Advances in AI have caused an explosive increase in computer computation volume, making it essential to combine multiple GPUs to operate as a single large-scale computing resource. However, when data transmission between GPUs is performed electrically, constraints on transmission capacity and distance create limitations for configurations that span multiple racks. In IOWN 3.0, which we aim to realize in 2028, we have developed the extremely compact photonic-electronic convergence device PEC-3 using our proprietary technology of compound semiconductor thin-film (membrane) for optoelectronics, which optically and directly connects semiconductor packages such as CPUs and GPUs for data transmission. This makes it possible to build a large-scale computing platform that integrates numerous GPUs across multiple racks. We plan to begin providing commercial samples of PEC-3 in 2028.

<Commercial Track Record>

■ Domestic and International Deployment of IOWN APN

· In May 2025, using the IOWN APN*1, we showed Cho Kabuki*2 titled “CHO-KABUKI Powered by IOWN ‘Hanakurabe Senbonzakura Expo 2025 ver.’” We connected the Osaka-Kansai Expo venue with Taiwan and successfully transmitted in real time and bidirectionally the movements of CHO-KABUKI performed at the Expo venue and the traditional Taiwanese performing art Guan Jiang Shou performed in Taiwan between the two venues.



*1 Abbreviation for All-Photonics Network. By implementing optical-based technologies in everything from terminals to networks, extremely low power consumption, high speed and large capacity, and low-latency transmission can be realized.

*2 A new sensory stage art that fuses traditional kabuki performing art with the Company’s cutting-edge technology to bring together kabuki actors and a virtual singer.

· In September 2025, by connecting the filming site with the remote production center, we realized remote and efficient video production for terrestrial live broadcasts of large-scale sporting events. Overseas, in October 2025, we began providing services for the financial industry in Hong Kong to connect data centers via IOWN APN, and we are also working to expand connectivity going forward.