R&D phase | Research **Expected Commercialization** | FY30-

Mehr Licht!
More Photonics for Intelligence

#E13

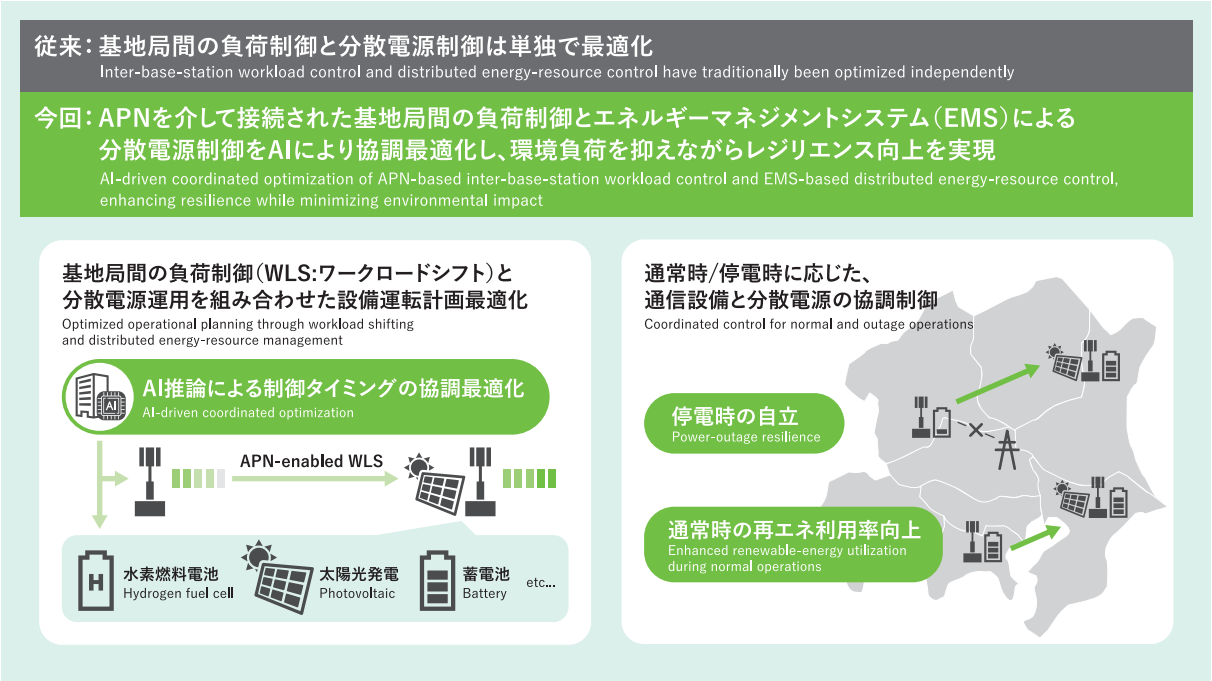
#Carbon Neutral#Climate Adaptation#Resilience

Next-Gen 6G/IOWN Green Base Stations

Delivers resilient communications with reduced environmental impact

Technical Challenges & Goals

Current technologies cannot simultaneously optimize base-station workloads and renewable energy use. This technology integrates distributed energy resources with workload shifting in vRANs to maintain communications during outages and stabilize power systems, enabling sustainable and resilient communications infrastructure.



Key Technologies

Core Technologies

- Integration of vRAN workload shifting and distributed energy resources to optimize power balance
- Renewable energy use, DR, and outage resilience with vRAN and distributed energy resources

Key Differentiators

- Integrating vRAN workload shifting and distributed energy operations for optimized system operation
- Enabling renewable energy use, DR support, and communication continuity on a single platform

Use Cases

Energy

This technology coordinates vRAN workload shifting and distributed energy resources to improve renewable-energy utilization and grid flexibility, sustain communications during disasters, and enable future coordination with data centers.

Exhibitors

R&D Innovation Division, NTT DOCOMO, Inc.
Space Environment and Energy Laboratories, NTT, Inc.

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