

# AI infrastructure powered by renewable energy via Container DCs

ENEOS, KDDI, Mitsubishi Heavy Industries, TOYOTA



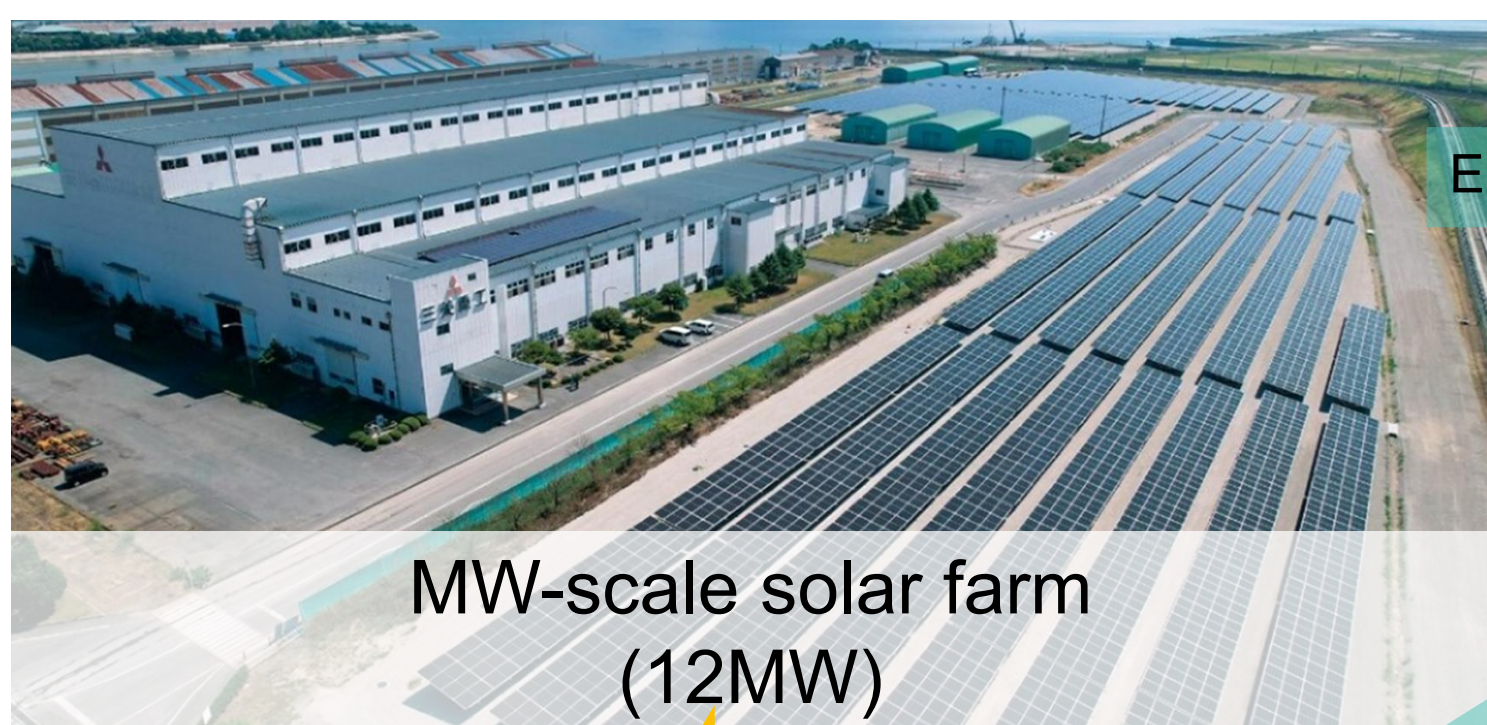
## Goal

Growing GPU demand strains urban power grids, while rural renewable energy is often curtailed. Renewable-powered container DCs shift AI workloads to surplus energy sources, turning wasted power into virtual computing resources.

## Demo Overview

① Building GPU infrastructure directly connected to renewable energy sources.

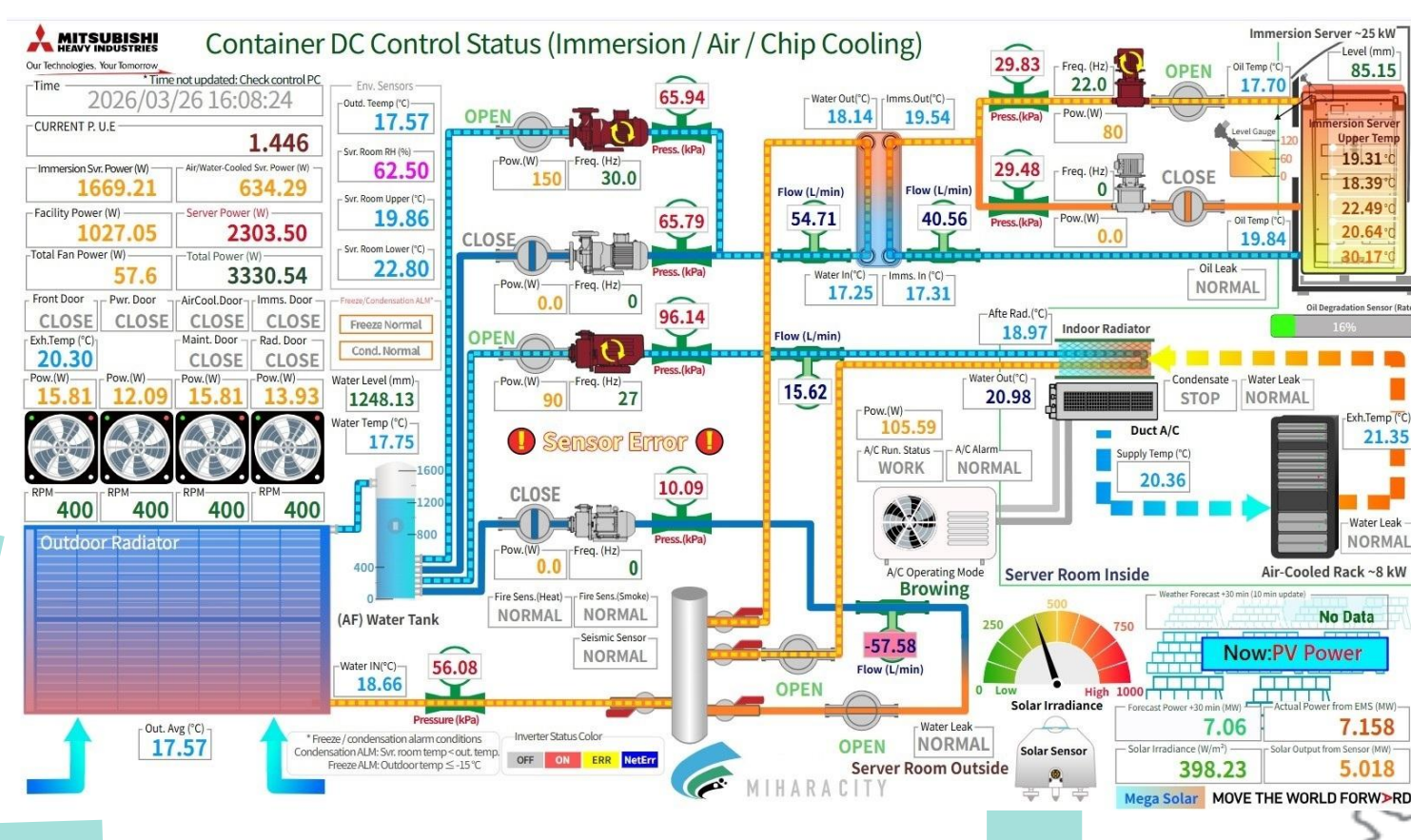
② Visualization of Energy Production and DC Facility Data



Directly powered by solar energy

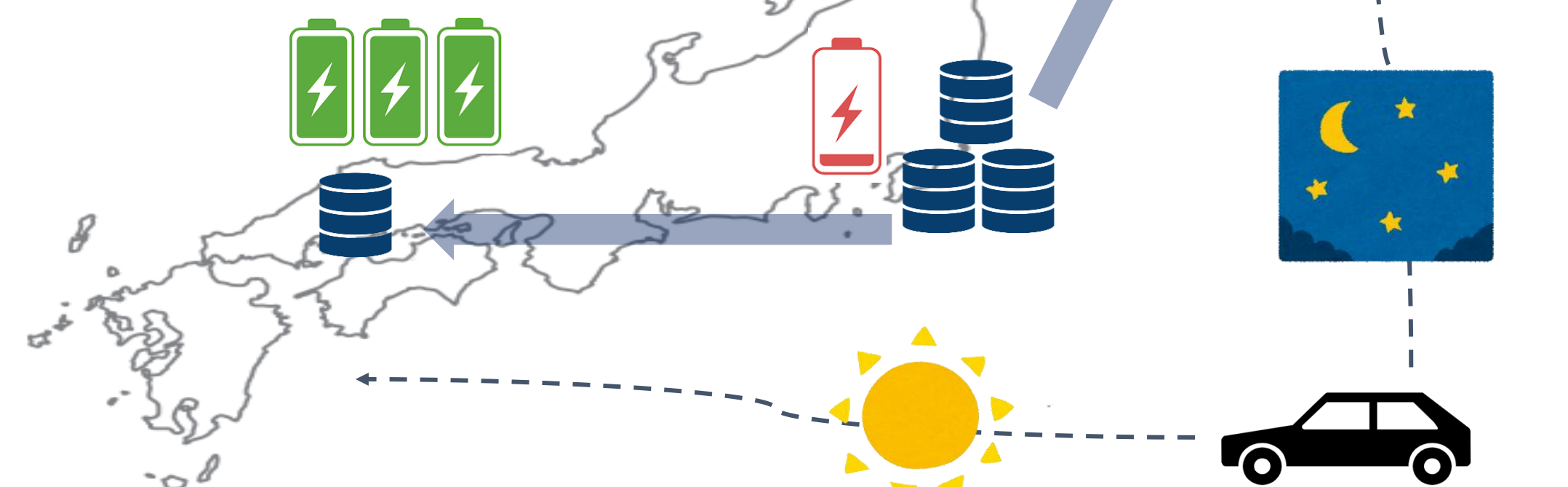
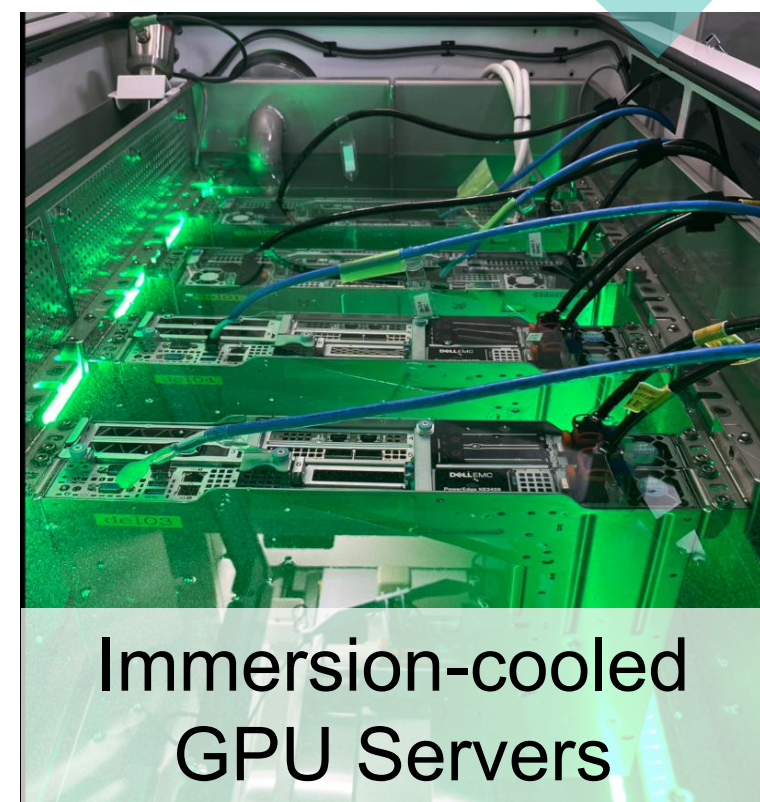
Energy production data

DC facility data



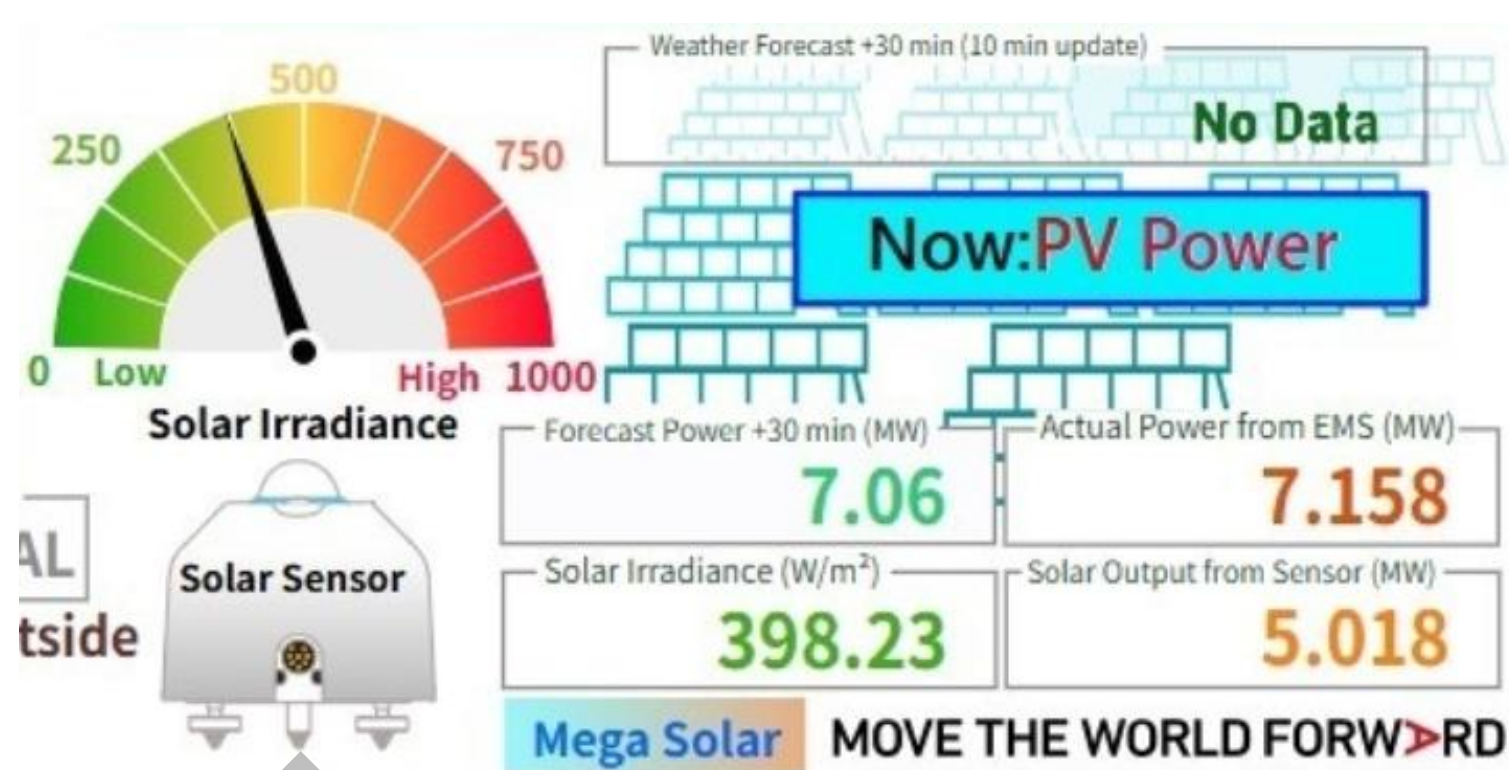
GPU/CPU Telemetry

③ Shift workloads to the site with the highest renewable output and process them with GPUs.

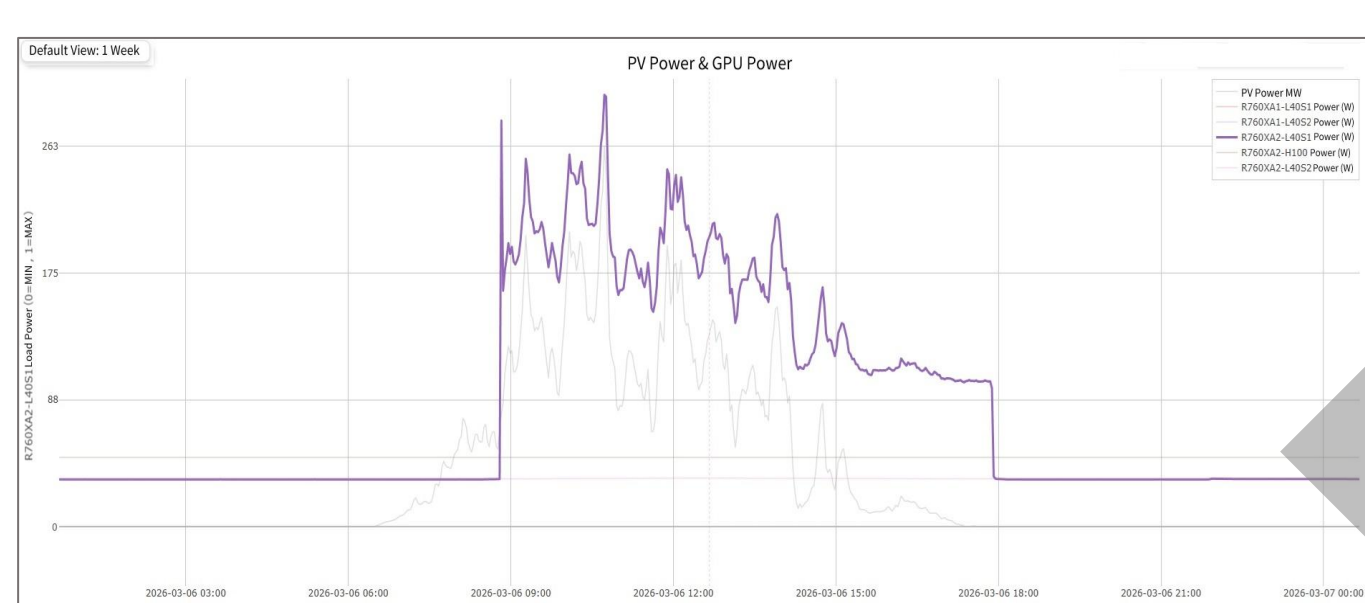


## Enabling Technology

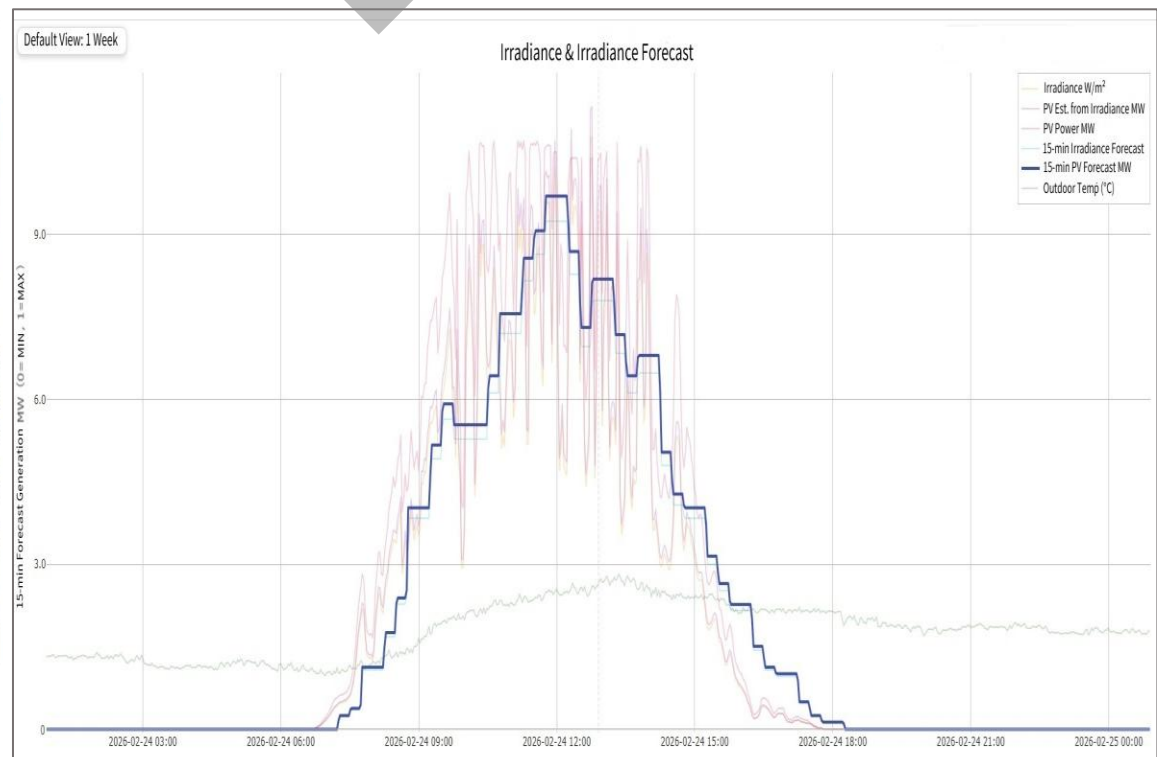
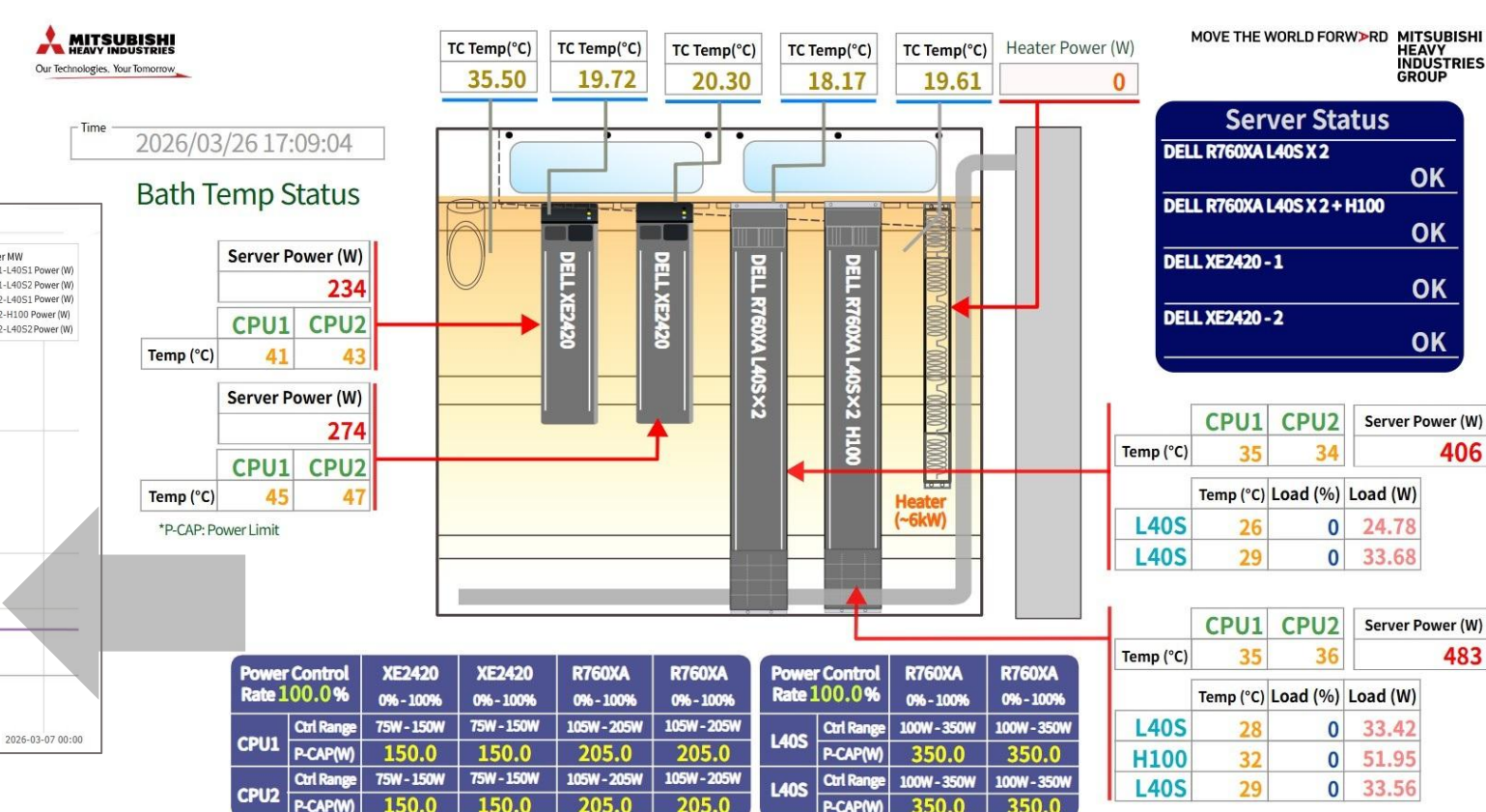
### Green power Insights



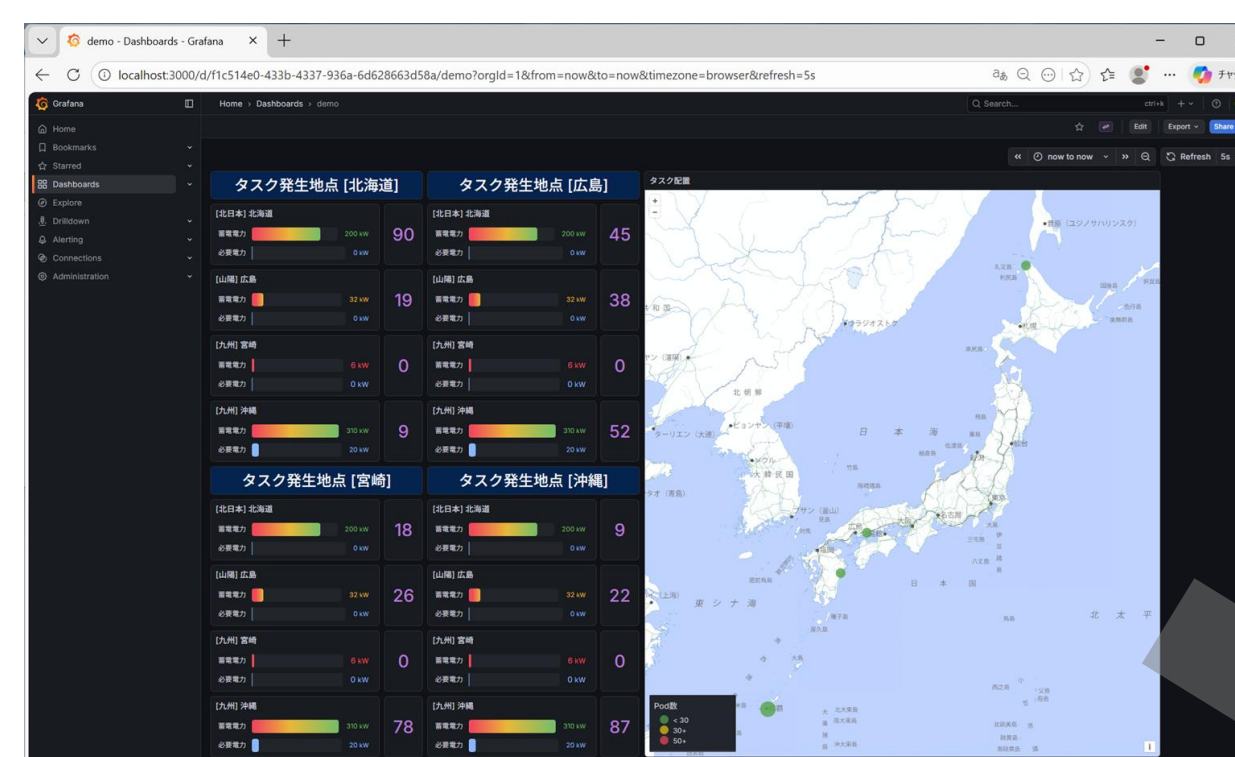
### GPU/CPU Telemetry



PV-driven GPU Power control

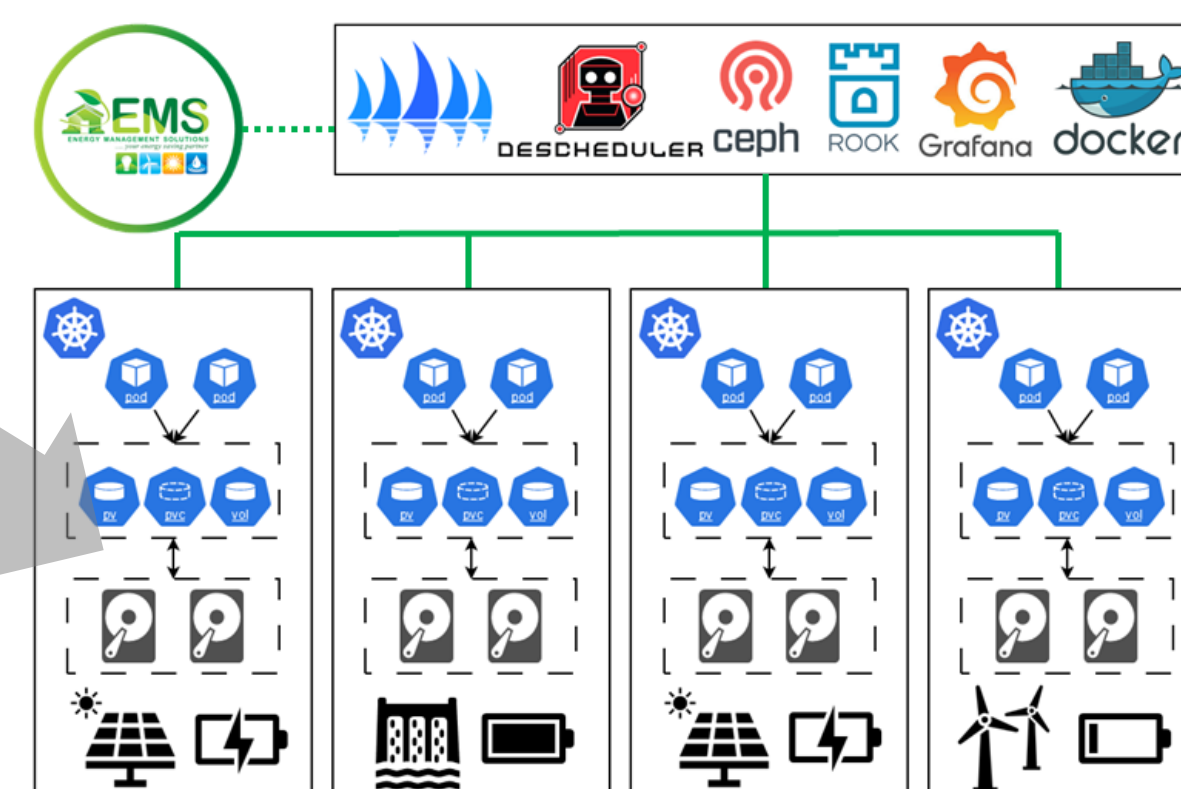


Solar Power Forecasting based on Insolation



Visualization of Stored Power & Demand Forecast Per-DC

### Forecast-based Job Distribution



Data & Workloads shifting