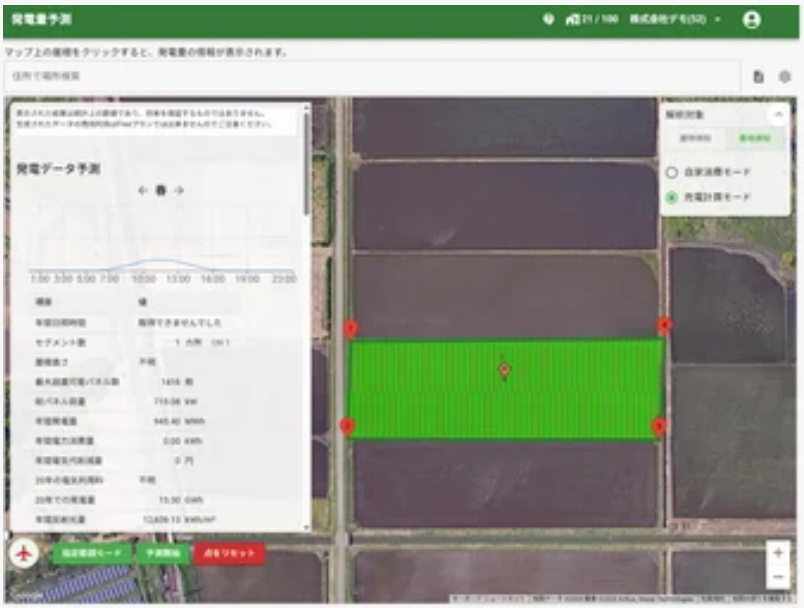
Patented IoT Platform Improves Solar Power Forecast Accuracy with Automated Workflow

Using its proprietary AI system, Nobest IoT enhances solar power forecasting accuracy while enabling flexible analysis and automated reporting workflows.

It is now possible to split and simulate the roof according to its orientation.


Example when farmland is selected

KAWASAKI, JAPAN, December 24, 2025 /EINPresswire.com/ -- Nobest Inc., a Japan-based environmental IT startup, announced new feature enhancements to its patented solar power plant management platform, Nobest IoT, further strengthening its solar power generation forecasting accuracy and operational usability.

Developed in Japan, Nobest IoT is an integrated solar power plant management platform that digitally unifies electrical current data, geographic information, and operational history to support the sustainable operation of energy assets and facilities. Through cloud-based traceability and Nobest's proprietary AI system, CAEOS, the platform enables failure prediction and optimized asset management — all delivered through a single, unified platform.

New Features Added to Solar Power Generation Forecasting

With the latest update, Nobest IoT has introduced new features that significantly improve the accuracy of solar power generation forecasting.

More precise forecasts have also led to improved accuracy in estimating electricity costs and surplus power sales.

Key Enhancements

Roof Clearance Settings

Users can now specify roof clearance — the distance between rooftops and solar panels — enabling more realistic and accurate simulations.

Panel Temperature Correction Values

Temperature-based correction values can now be configured to account for performance variations caused by ambient temperature differences.

Selectable Solar Panel Models

Users can select specific solar panel models. Additional models are added upon request at no extra cost.

When a model is selected, the following parameters are automatically populated:

Panel capacity

Power generation efficiency

Panel dimensions

Temperature correction values

Example of an area surrounded by multiple points.

New Analysis Target Menu Added

Previously, analysis was limited to building rooftops.

With this update, agricultural land can now also be analyzed, expanding the platform's applicability beyond rooftop installations.

Manual Area Selection for Higher Forecast Accuracy

If AI-based automatic detection does not fully cover the desired rooftop or land area, users can manually define the analysis area by plotting points before starting the forecast.

While AI auto-detection performs well when rooftops or land boundaries are clearly visible, it may struggle with areas where ground colors or boundary lines are ambiguous.

By using the manual area selection mode, users can precisely define target areas, ensuring accurate power generation forecasts even in challenging environments.

Segmented Rooftop Simulation Now Available

Users can now simulate power generation by dividing rooftops into individual segments.

Segment On/Off Control

Rooftop segments can be toggled on or off by clicking red markers displayed on the roof.

This allows users to easily exclude areas where panel installation is unnecessary and generate results tailored to specific project needs.

Panel Size Visualization

Green frames representing the actual size of solar panels are now displayed, making layout planning more intuitive.
Annual Reflected Light Volume
A new metric for annual reflected light volume has been added, helping users assess potential glare impact on surrounding environments and comply with regulatory considerations.

Additional Sheets Added to Downloadable Report Files
Previously, downloadable proposal reports consisted of a single sheet.
With this update, a new calculation details (evidence) sheet has been added.
This enhancement allows customers to:
Review detailed calculation logic
Recalculate values independently
Increase transparency and trust in forecast results
Reports can be downloaded in Excel format, supporting flexible review and internal analysis.

Partnership Opportunities
Nobest Inc. is currently seeking global technology and business partners.
Companies and organizations interested in collaborating on the international deployment of Nobest IoT are invited to contact the company for further discussion.

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Established: April 22, 2022
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