ADVANTECH
Enabling an Intelligent Planet

# iFactory SRP Solution

## Factory Energy Management Solution

## (FEMS SRP)

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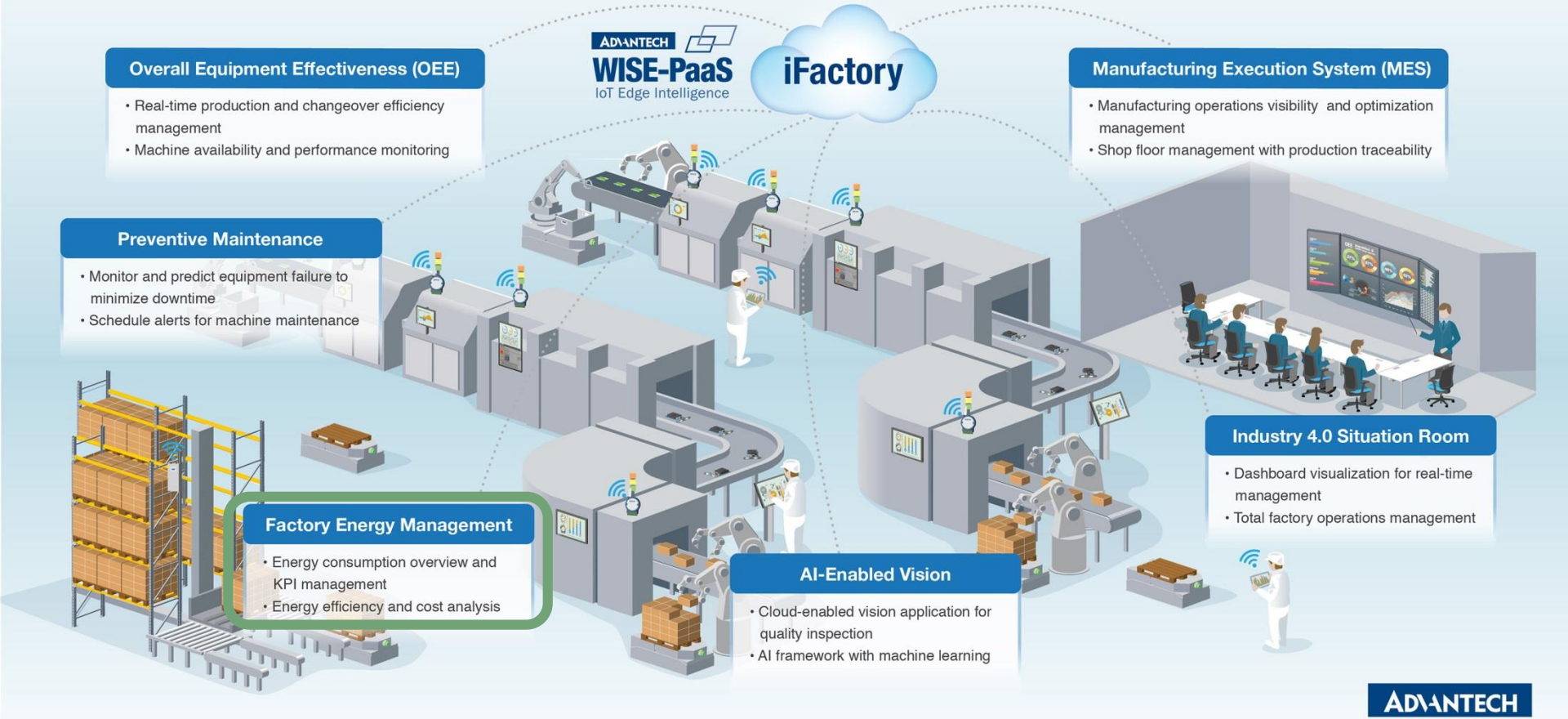
BDM of iFactory PD
Oct 8th 2019

# iFactory Solution Ready Packages 2.0

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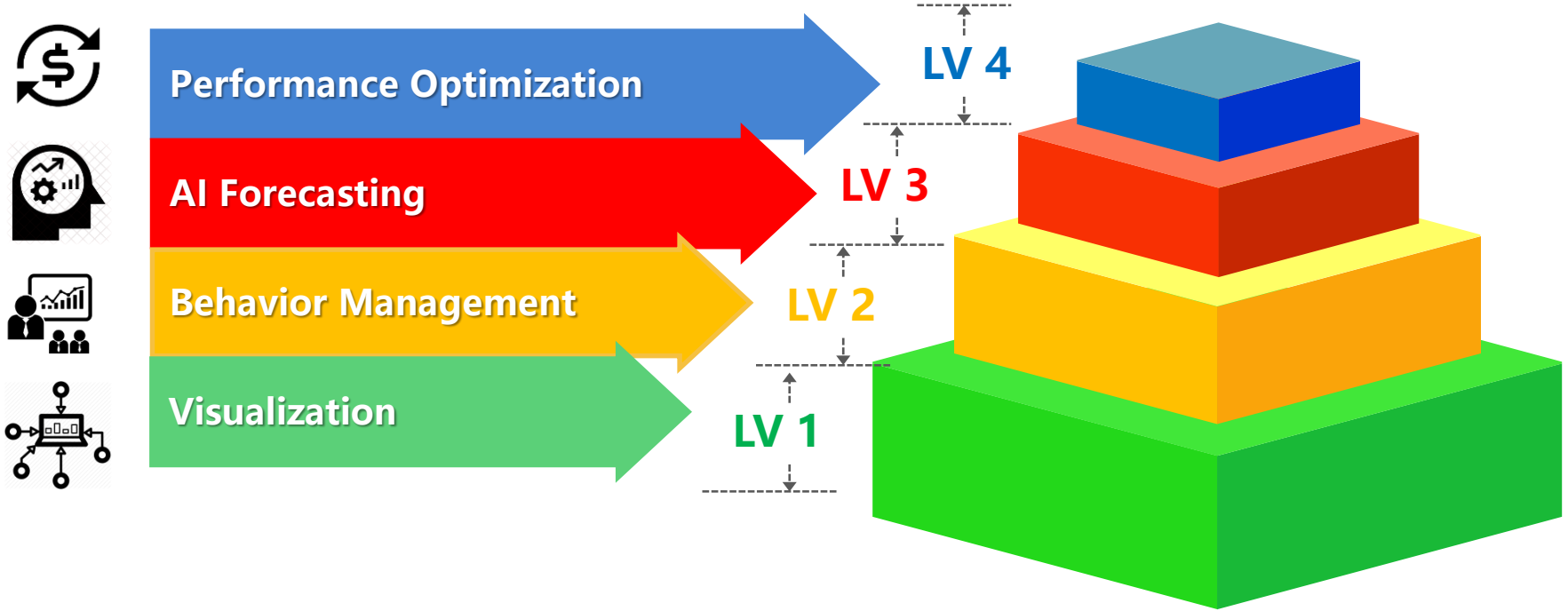
# 4 Progress for Factory Energy Saving



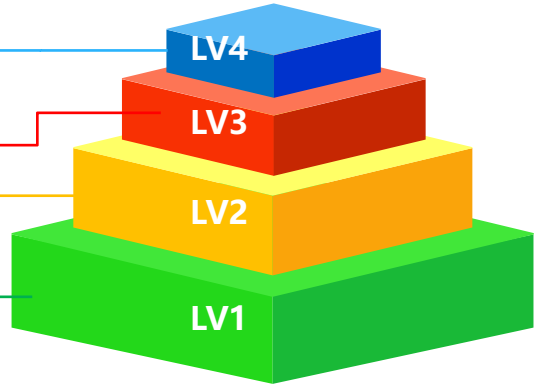
# FEMS Factory Energy Management Solution

Payback

AI Tech

Behavior

Dashboard




## Organization

- LV4 ROI Evaluation
- LV3 Demand forecasting
- LV2 Target Setting
- LV1 Distribute cost

## Production

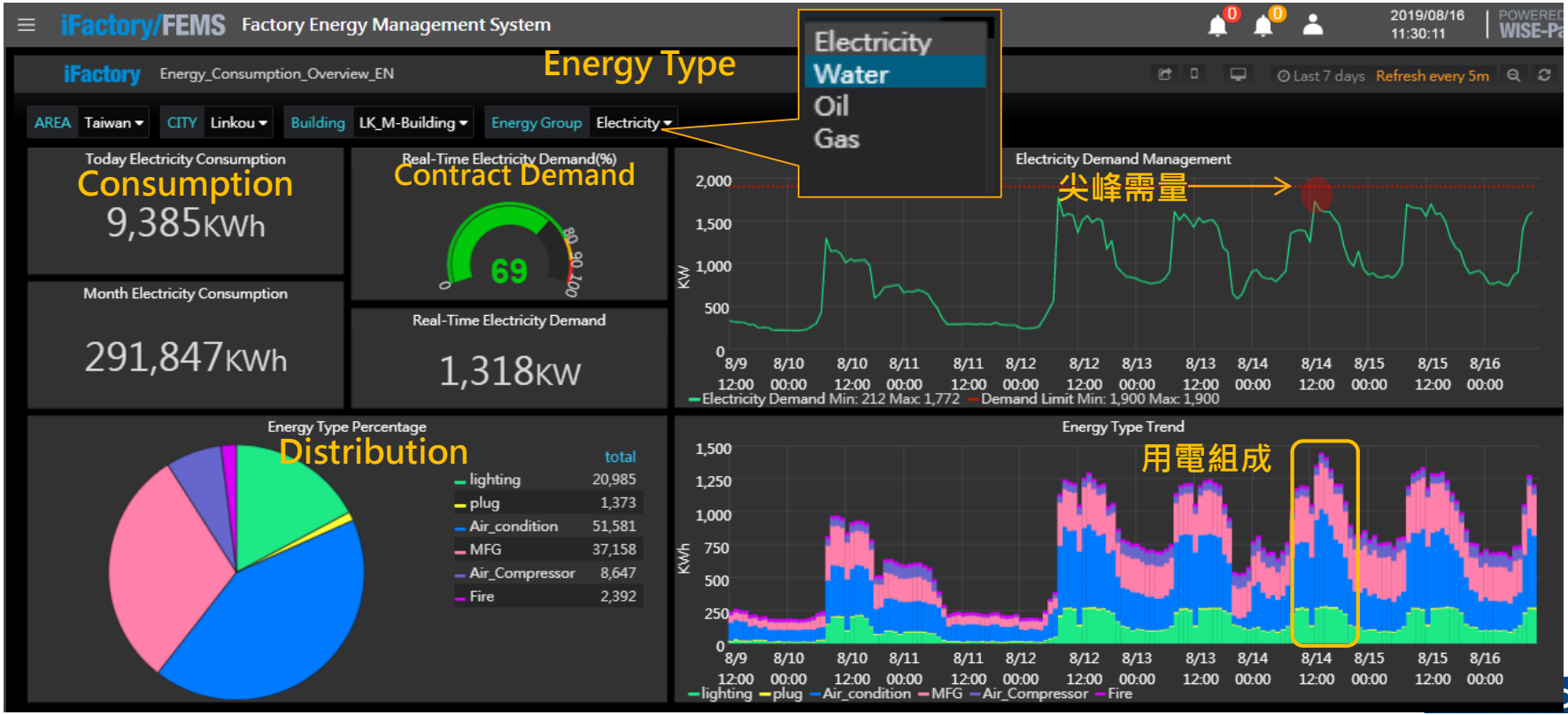
- LV4 Efficient process
- LV3 Cost forecasting
- LV2 Efficiency tracking
- LV1 Cost per-unite

## Facility

- LV4 ROI Evaluation
- LV3 Downtime forecasting
- LV2 Efficiency tracking
- LV1 Performance

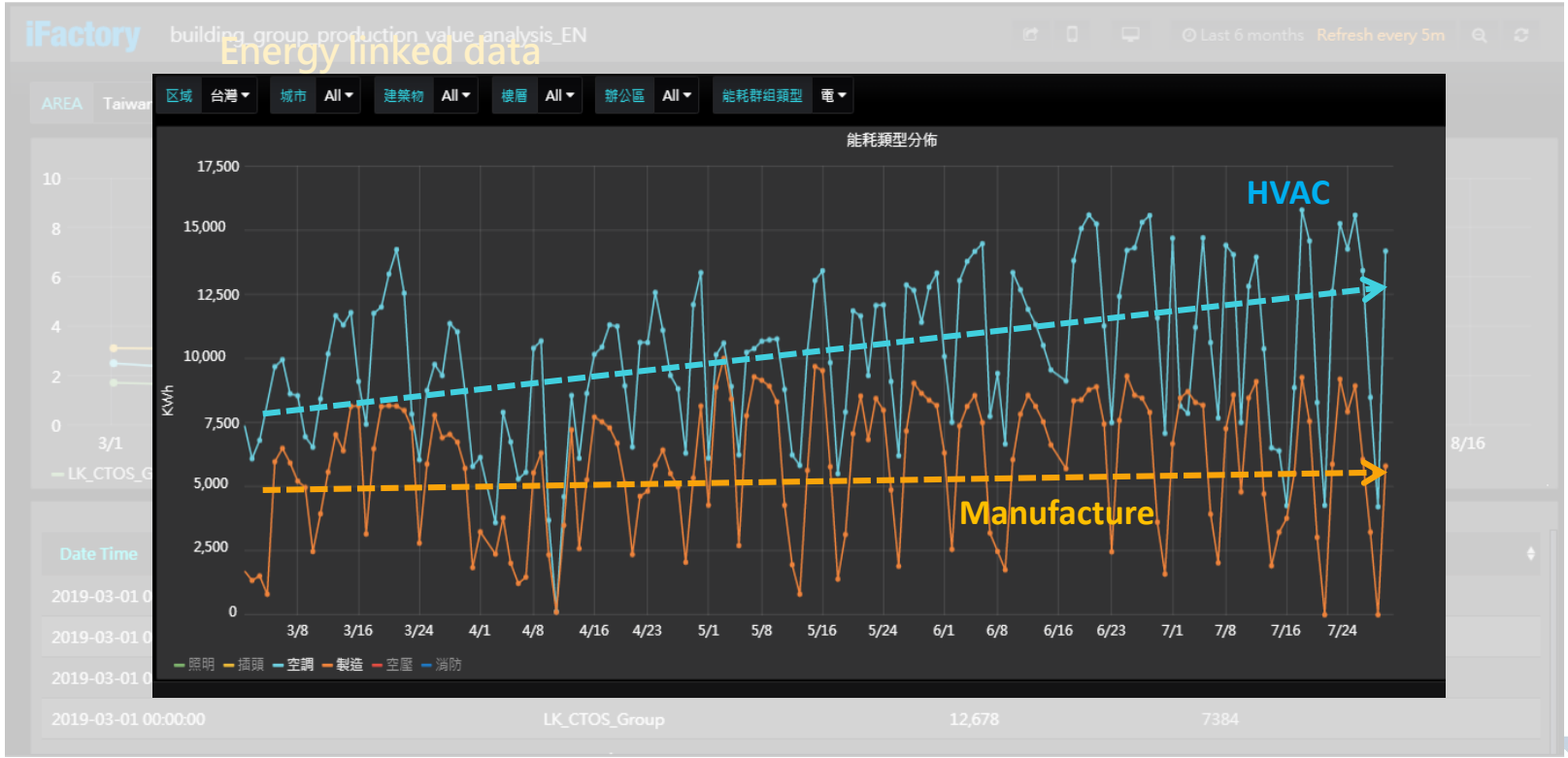
# FEMS SRP - Energy Consumption Overview

**Energy overview,** one page to describe whole picture of factory energy, provides quick selected area to show various type of energy , real-time demand and breakdown consumption.



# FEMS SRP - Production Cost  Calculation per Unit

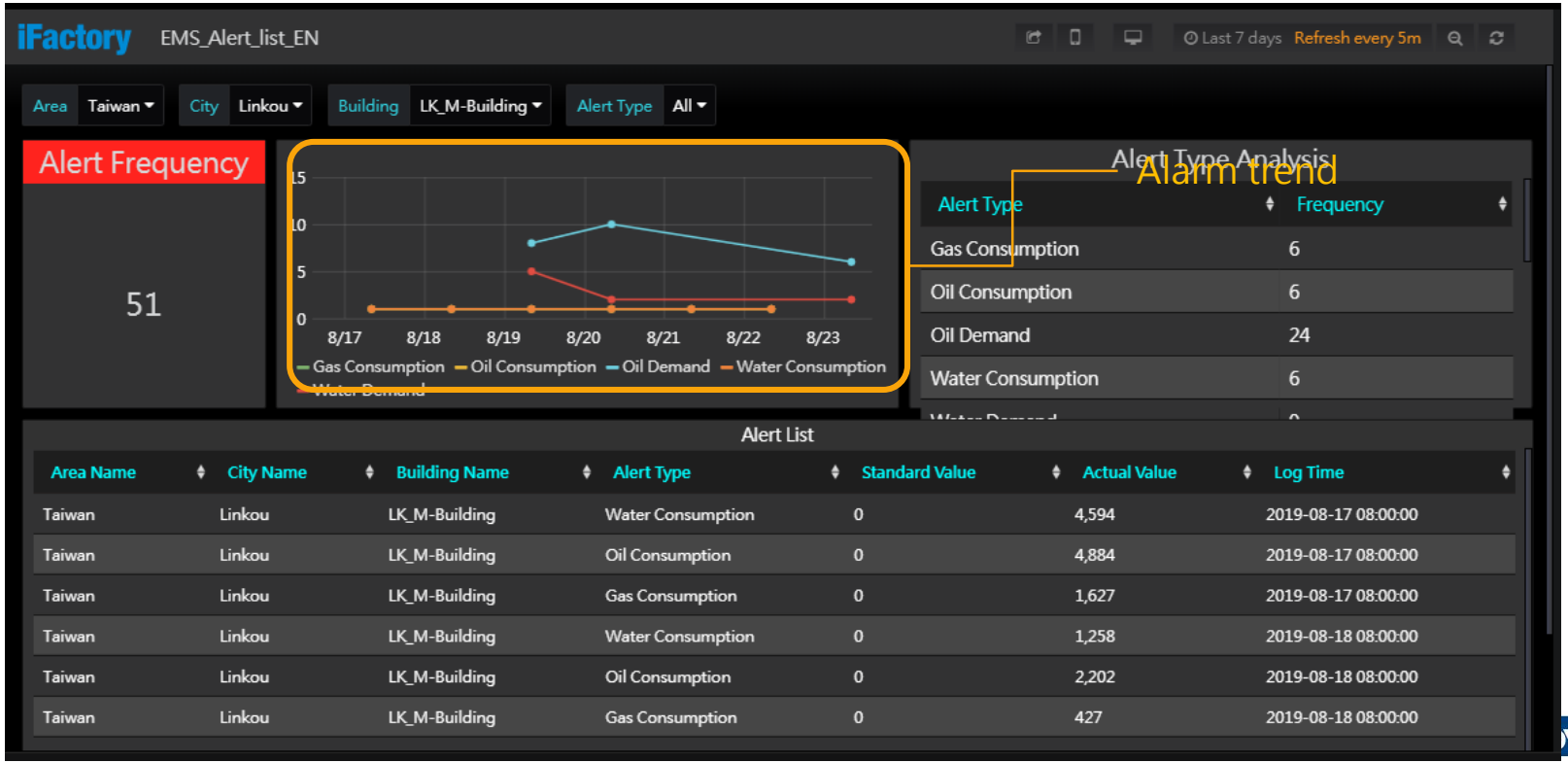
**Per unit cost** allows users get the energy ratio of value/yield/bill… sort of energy related data to review how the production efficiency is online.



# FEMS SRP – Alarm analytics

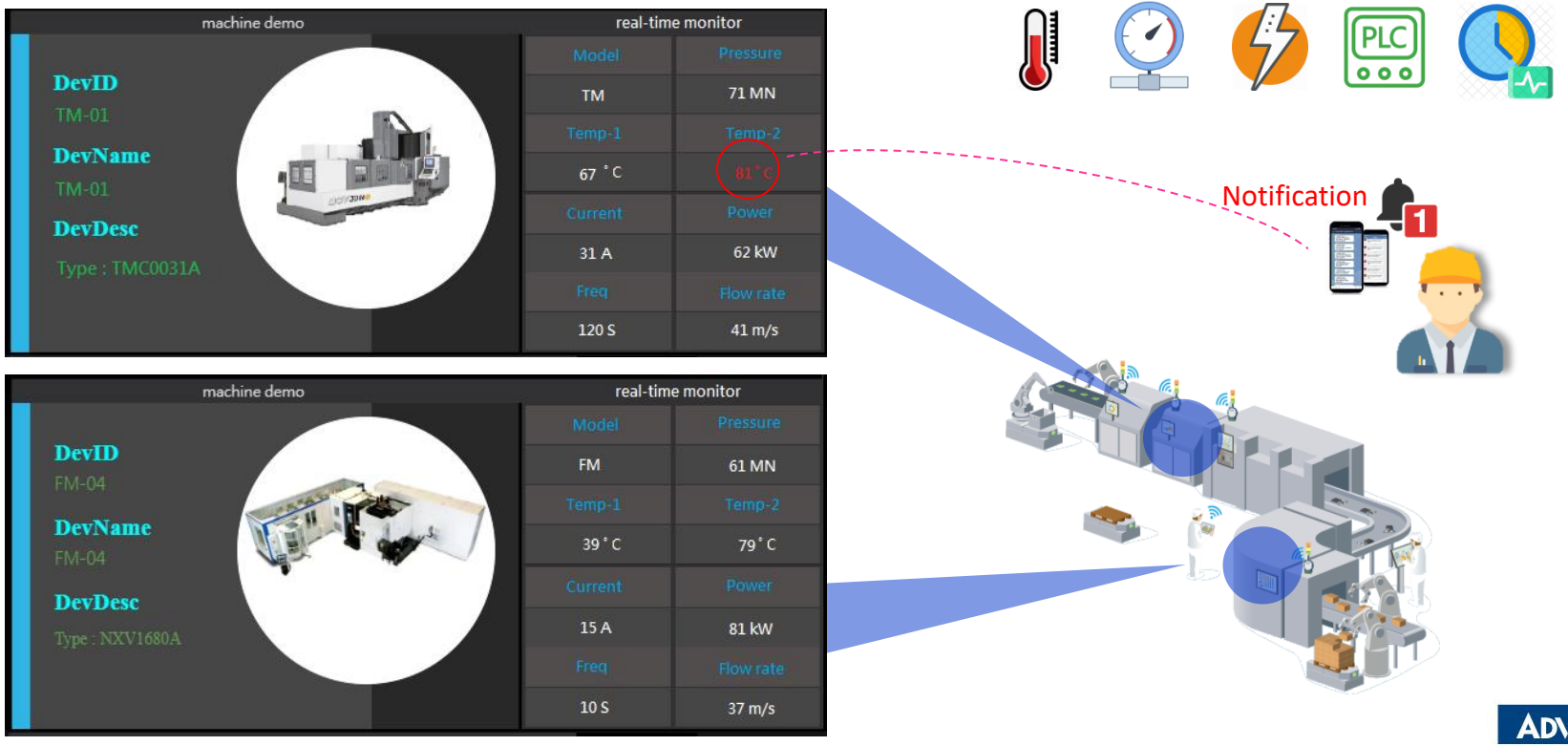
## Factory alarm analytics

This dashboard help user check alarm record by Type/Times/Frequency/Risk. Facility maintain staff can capture frequent issue and dig out the  root cause.

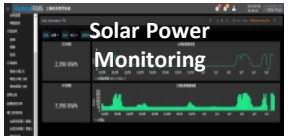


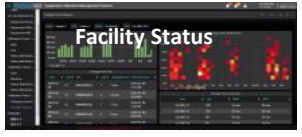
# FEMS SRP - Device Monitoring

**Device Monitoring** by FEMS can easily integrate multi-type sensors or PLC. Real-time monitor process data from machine, supported live notification for troubleshooting.



# Total Dashboard





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# FEMS SRP with Multiple Edge

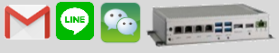
## For Machine/Equipment/Facility/Wire& Wireless meters

**iFactory/FEMS**

**Cloud + On Premise**

**SCADA PLUS**

External Notification



Warning

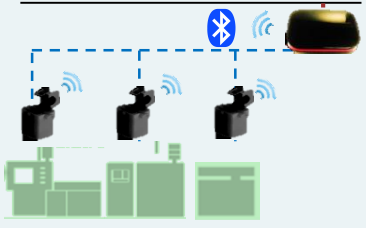
Ordinary OEE data

**SCADA PLUS**

External ERP & MES

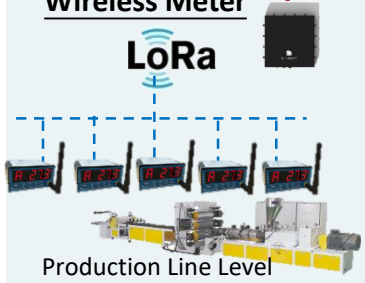
**Wireless Edge** | **EZ Plug-in** | **Chiller Efficient**

### Machine Current Monitor



Equipment Level

### Wireless Meter




Production Line Level

### Wired Smart meter

### Chiller Efficient Module

# FEMS SRP Server

## Lite Server

- Up to **200** Edge devices linkage
- SCADA **5000** tags linkage
- (P/N:SRP-IFS420-M77F01A + 32OTLFEM0001A0)

## Enterprise Server

- Up to **2000** Edge devices linkage
- **Unlimited** SCADA tags linkage
- (P/N:SRP-IFS420-M82F01A + 32OTLFEM0002A0)

## Cloud Server

- Support **100** Edge devices linkage(Entry Plan)
- (P/N:9803WPEM01)

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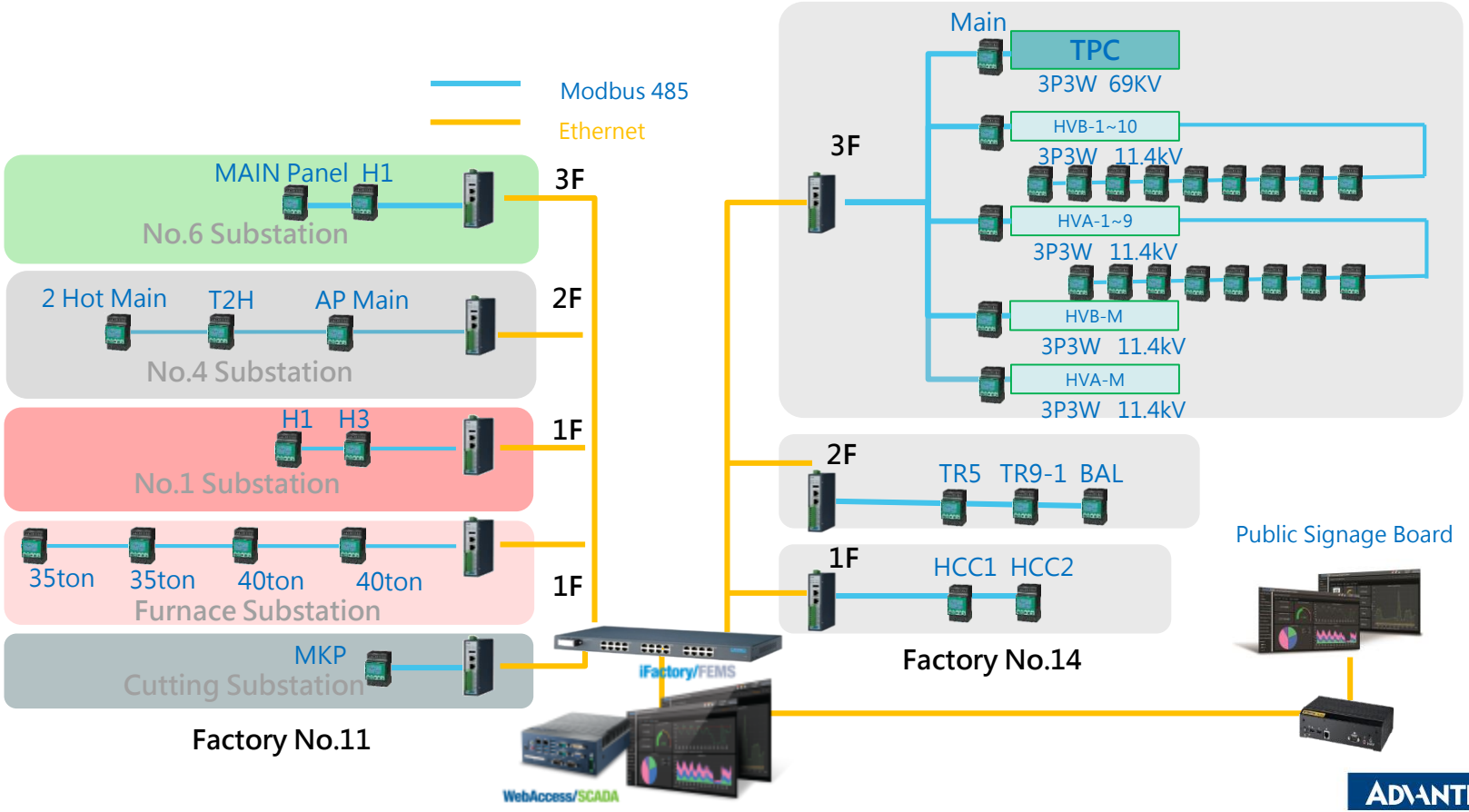
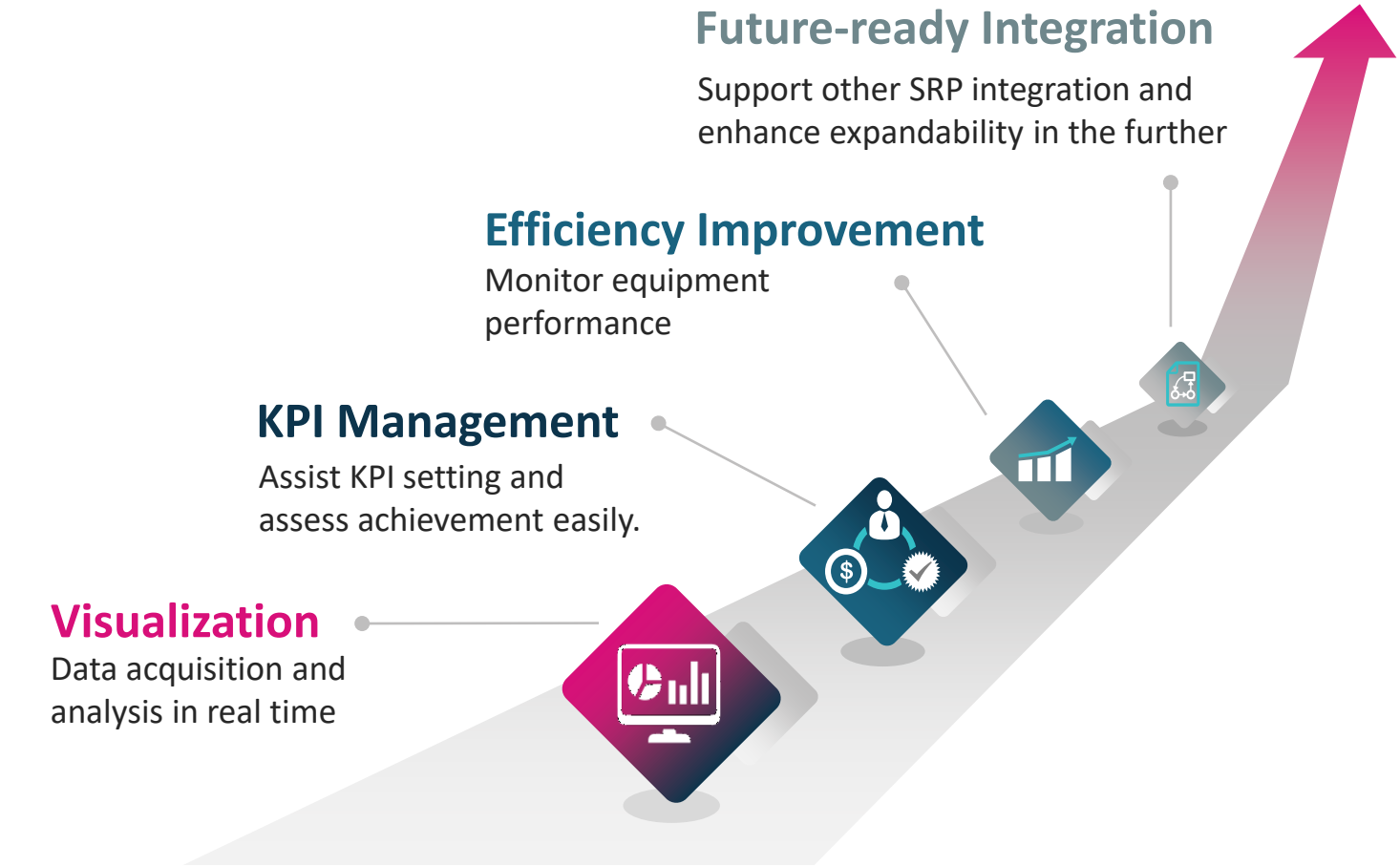
# Wired Case for FEMS:

## In a electronic assembly manufacturer



# Route to Intelligent Factory



## Visualization
Data acquisition and analysis in real time

## KPI Management
Assist KPI setting and assess achievement easily.

## Efficiency Improvement
Monitor equipment performance

## Future-ready Integration
Support other SRP integration and enhance expandability in the further

## Energy Yield Ratio

7-10%

By saving waste and improving production

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# Tech Training &  AE support

## Stage1st :  Entry Level training

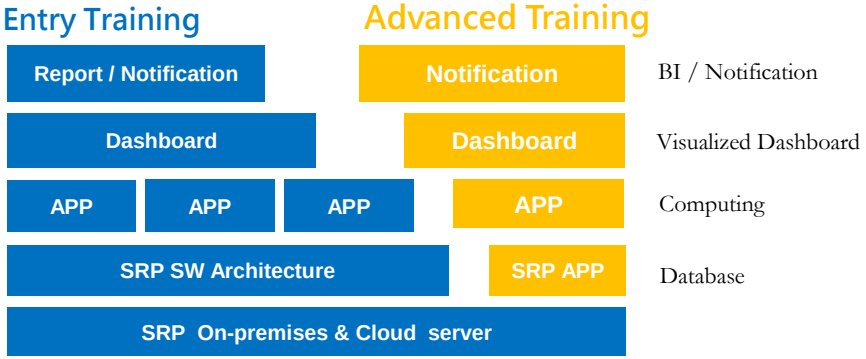
Edge to Computing server

Deployment & customized by standard tool

## Stage 2nd : Advanced Level training

DB application, Micro-service developing ,

Dashboard SQL  programming.




## iFactory SRP  Apply Engineer Team (G. China + Japan + ASEAN)

| iFactory SRP | Great China | Japan | Malaysia | Singapore | Thailand | Vietnam |
|---|---|---|---|---|---|---|
| **Team member** | Eden.Sun | Alger.Tan | Eden.Sun | Eden.Sun | William1.Lin | Alger.Tan |

# Value Chain of iFactory Business

## iFactory 生態價值鏈

**ADVANTECH**
**HW & SW Platform**

Support

**iFactory A+ SRP**

Enable

**Domain-Focused SI**

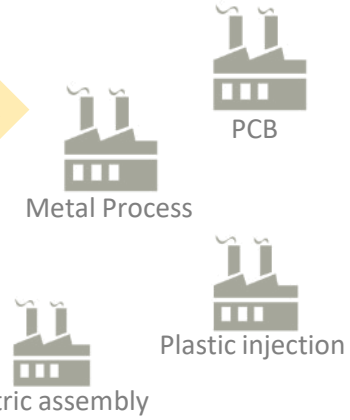
| Software Partner | Business Partner |
|---|---|
| IT background SI | OT Background SI |
| Software studio | Local King |
| Self-employed SW Partner | In-House SI in Mega Corp. |

**Regional Training Center**

| Advanced SW Partner | Business Consulting Partner |
|---|---|

Realize

**Digital Transformation**
for Manufacturers




**Specialized**
Individual Requirement
→ Domain-Focused SI

**Standard**
Domain Requirement
→ iFactory/FEMS
iFactory/OEE

**General Platform**
Software + Hardware
→ WebAccess, WISE-PaaS

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*Go Together,*

*We Go Far and Grow Big*