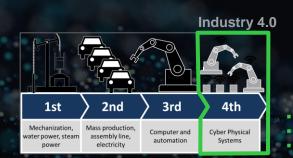


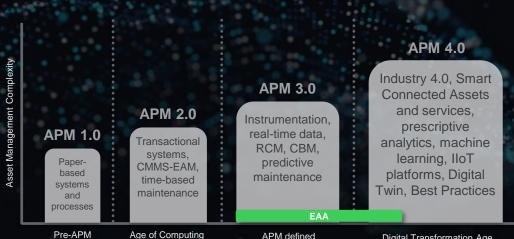
# EcoStruxure<sup>™</sup> Asset Advisor

Schneider Electric Advanced Asset Management Services

### Industry 4.0 Demands a New Approach to Asset Performance Management



**Industry 4.0** – Driving new insights and innovations for **Operational Excellence** 



Cyber-physical Systems

Digital Transformation Age

Internet-of-Things

Cloud Computing

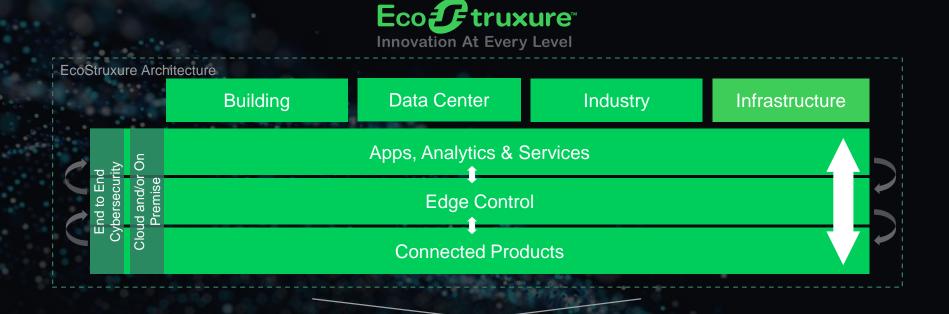
**Asset Performance Management** is a critical component of the strategy

#### **APM 4.0**

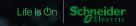
- Prescriptive analytics and machine learning
- Smart connected assets and services
- **IIoT** platforms
- Industry best practices
- Digital twin

Source: APM 4.0: Redefining Asset Lifecycle for Industry 4.0 Insresearch.com

### One EcoStruxure™ architecture, serving 4 End Markets with 6 Domains of Expertise



**EcoStruxure**<sup>TM</sup>



**EcoStruxure**<sup>™</sup>

Grid

**EcoStruxure**<sup>TM</sup>

**EcoStruxure**™

**Machine** 

**EcoStruxure**<sup>™</sup>

**Building** 

**EcoStruxure**<sup>TM</sup>

**Power** 

### The EcoStruxure™ Architecture maximizes the value of data

Translating data into actionable intelligence and better business decisions



Transforms **data** from your electrical distribution system ...

.. through a cloud-enabled predictive analytics & expertise ...



... into actionable insights and recommendation, from experienced professionals, on managing & maintaining equipment health.



# Include your electrical system in your journey to Reliability Centered Maintenance (RCM)

Schneider



### REACTIVE



- React when failures happen
- No downtime prevention
- Frequent replacement of equipment
- Expensive urgent maintenance (Less negotiation levers, urgent intervention cost...)

### **CONDITION-BASED**



- Anticipate failures and mitigate risk, but it is uncertain and time consuming
- Prevent asset failure and reduce downtimes
- Protect staff
- Optimize maintenance scheduling
- Reduce maintenance costs

### **EcoStruxure Asset Advisor for Electrical Distribution**

Cybersecure Cloud-based remote monitoring and risk assessment service with 2 different levels





**Dedicated Service Bureau experts** 

# **PREDICTIVE**

Risk assessment using advanced Analytics and dedicated expert in Service Bureau.



Customized insights reported



24/7 Service Bureau



**PREVENTIVE** 

Continuous monitoring enabled by smart-

alarming and remote support

Web dashboard & Mobile Apps



**Condition Based** Maintenance & predictive analytics

## Optimize the cost of asset management

With EcoStruxure Asset Advisor, proactively identify and address issues inside electrical equipment to:

- Mitigate electrical failure risk
- Reduce downtime
- Optimize maintenance work.

Life cycle costs

Downtime costs

Static time-based

Reactive maintenance

**Benefits of** maintenance

Life cycle costs

Downtime costs

Condition-based maintenance

> Dynamic time-based

Reactive maintenance

### **EcoStruxure™** Asset Advisor Predictive Customer Engagement

End-to-end service supported by **experts** and a platform that provide **actionable recommendations** and onsite support

### **Customer Portal**



- TRANSFORMERS
- **MV SWITCHGEARS**
- LV SWITCHBOARD
- **VSD**
- THERMAL MONITORING
- ENVIRONMENTAL

Electrical devices

(SE and 3rd Party)



**SE Gateway** 

Proactive maintenance recommendation

## **Expert Dashboards**





Service platform leveraging Predictive Analytics, Asset Knowledge and SE Expertise



Schneider Electric

Service Bureau representatives recommend & coordinate local Service Teams for on-site support

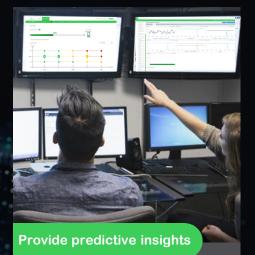
## Getting starting with EcoStruxure Asset Advisor



Access your data

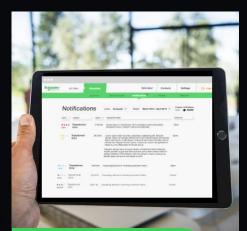
#### **User-Friendly Dashboard & Mobile App**

- Single view of multiple sites
- Historical data, patterns, trends, events
- Supported by advanced analytics
- Online access: Everywhere, Anytime



#### **Dedicated Service Advisors**

- Continuous monitoring of my critical assets (Schneider ElectricTM & 3rd parties) to validate events, triggering work orders
- Periodic reports with optimization recommendations



#### and turn them into actions

#### **Actionable notifications**

- Warning of assets abnormal behaviors, risk of failure or change in settings
- Actionable work orders
- Maintenance execution (optional)

### EcoStruxure<sup>™</sup> Asset Advisor protect your infrastructure from cybersecurity risks

Customer network

Schneider Electric gateway

Secure transport

Schneider Electric operates
Digital Service Platform

Customer web dashboard

- Secured Infrastructure relies on state of the art technologies and security practices
- Secure by design following strictly Secure Development Lifecycle,.
- Secured operation following global Schneider Electric's policy and strong validation procedures
- Customer remain as data owner, and Schneider Electric follows latest EU Data Protection regulation



SECURE

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Secure assets data collection:

- Gateway on customer network
- Only pre-authorized gateways can connect to the Schneider Electric infrastructure

#### **Hosted in Microsoft Azure cloud**

- MS advanced Firewalling
- Monitoring and system patches
- High availability and integrity storage encrypted where needed

### Customer dashboards to access results:

- Strong IMS (identity management system)
- Security controls regulations compliant



Schneider Electric Service Bureau

#### **Secured operation**

- Incidents Response Plan implemented
- Traceability: access logged, audited
- Segregation of duties and Privileges

**Secure data transport**:to prevent data access or manipulation

- Secure connection to cloud HTTPS or FTPS
- Full data encryption
- · One way data flows

### Discover the benefits

#### **OPERATIONAL PERFORMANCE**

- Lower unscheduled downtimes
- Increased asset useful life
- Reduce time to fix



Eco 2 truxure

**Asset Advisor** 



Reduced personal risk through:

- Maintenance expertise continuity in high turnover environment
- Early warning of impending equipment failures

#### FINANCIAL EFFICIENCY

- Lower total cost of ownership
- Decreased failure cost
- Decreased average maintenance cost / asset

### **PEACE OF MIND**

- New asset ecosystem insights
- Consistent experience across sites
- Right people at the right time

## Strong presence in these segments with references cases

- 1. Oil & Gas
- 2. Healthcare
- 3. Consumer Packaged Good
- 4. Life Science
- 5. Mining, Minerals and Metals
- 6. Automotive
- 7. Cloud & Service Providers
- 8. Transportation



