EcoStruxure™ Power for single and multi-site commercial and industrial buildings
Grow your business with advanced digital solutions and services

[Website link: schneider-electric.com/ecostruxure-power]
Contents

> Challenges and business opportunities

> EcoStruxure Power: a complete solution approach

> Facilitating building design, construction, and operation

> Grow your business with EcoStruxure Power

> Case studies
New challenges for your customers

Amid rising costs and increased regulation, digitization is transforming the way buildings operate today – and that’s presenting new challenges to owners and managers of midsize buildings.

Building investors want to develop high-quality buildings that comply with the latest standards to maximize the value of their investments.

Business owners want to improve operational efficiency, avoid downtime, and ensure occupant comfort and safety.

Building managers want to know about an issue before it leads to unnecessary damage or downtime; whether managing their systems internally or outsourcing to an external company, they want to stay informed.

Average amount of operation cost: 250k€ per year for a 5,000m² office building
New challenges for your customers

Amid rising costs and increased regulation, digitization is transforming the way buildings operate today – and that’s presenting new challenges to owners and managers of midsize buildings.

Building types
Targeted Buildings: 500 to 15,000m²
More than 65% of building market

Building Investors

Reach superior ROI
• Higher revenues and occupancy rate
• Sustainable and efficient buildings

Reduce time-to-market
• Shorter project cycles

Challenges and business opportunities

EcoStruxure Power: a complete solution approach

Facilitating building design, construction, and operation

Grow your business with EcoStruxure Power

Case studies
New challenges for your customers

Amid rising costs and increased regulation, digitization is transforming the way buildings operate today – and that’s presenting new challenges to owners and managers of midsize buildings.

Building types
Targeted Buildings: 500 to 15,000m²
More than 65% of building market

Public Buildings
Retail
Small Industry
Small Healthcare

Business Owner
Reach business objectives
- Reliable power and building systems
- Lower operating expenses

Increase safety and comfort
- Safer workplace
- Healthy and productive environment
- Regulations compliance

Challenges and business opportunities
EcoStruxure Power: a complete solution approach
Facilitating building design, construction, and operation
Grow your business with EcoStruxure Power
Case studies
New challenges for your customers

Amid rising costs and increased regulation, digitization is transforming the way buildings operate today – and that’s presenting new challenges to owners and managers of midsize buildings.

Building types
Targeted Buildings: 500 to 15,000m²
More than 65% of building market

Public Buildings
Retail
Small Industry
Small Healthcare

Building Managers

Run efficiently
• Minimize downtime
• Optimize operational and energy costs

Cope with limited workforces
• Remedy experience falloff
• New activities and new competencies

Challenges and business opportunities
EcoStruxure Power: a complete solution approach
Facilitating building design, construction, and operation
Grow your business with EcoStruxure Power
Case studies
Turn the new power paradigm into new business opportunities

As the world becomes more electric, more digitized, more decarbonized, and more decentralized, your customers do not have the time, skills, or tools to react effectively to these trends. That's where you come in.

With EcoStruxure™ Power, you can offer the cutting-edge digital solutions and support that they are looking for and take your share of those rising operating costs.

**Construction solutions**
- Propose and deliver energy management and maintenance solutions that are digital, cost-effective, and scalable
- Good design is an opportunity to reduce operating costs

**Operation solutions**
- Provide high-quality, energy-saving operational and maintenance services based on data-driven decisions and collaborative teams

---

**Challenges and business opportunities**

**EcoStruxure Power: a complete solution approach**

**Facilitating building design, construction, and operation**

**Grow your business with EcoStruxure Power**

**Case studies**
Thrive in the new power paradigm

With EcoStruxure Power, we have redefined power distribution to elevate building **reliability, safety, efficiency, sustainability, and connectivity** to new levels.

**Construction phase benefits**

- **Standards compliance**
  - Construction and installation standard
  - Electrical certifications
  - Green certifications

- **Shorter delivery time**
  - Reference designs
  - Proven and tested architectures
  - Design and commissioning tools

- **Higher-value investment**
  - IoT technology
  - Big data ready
  - Green and energy efficient
  - Higher tenant revenue

**Operation phase benefits**

- **Gain control on energy costs**
  - Clear view of energy consumption
  - Benchmark building performance
  - Demonstrate regulatory compliance

- **Keep key assets up and running**
  - Monitor status of key assets to avoid power outage, assets breakdown
  - Quickly implement corrective actions
  - Switch to preventive maintenance

- **Improve maintenance efficiency**
  - Simplify maintenance operations in the field
  - Access maintenance operation history
  - Schedule preventive maintenance tasks

---

[Challenges and business opportunities]

EcoStruxure Power: a complete solution approach

Facilitating building design, construction, and operation

Grow your business with EcoStruxure Power

Case studies
EcoStruxure Power gives you a complete solution approach to:

- Deliver safer, more reliable, and more efficient power
- Provide tailored, future-ready solutions that “simply work”
- Enable new services in energy and operation management
- Create new business opportunities for your company
EcoStruxure Power: Innovation At Every Level

These three levels communicate continuously within a cyber-secure environment.

**Apps, Analytics & Services**
Apps, analytics, and services let you make timely, informed decisions to reduce costs and boost efficiency.

**Edge Control**
Operation monitoring and information sharing, supported by a suite of Schneider Electric software, allows 24/7 control on-site and remotely.

**Connected Products**
Connected products collect and send information to the second level.
Best-in-class connected products

EcoStruxure Power turns an electrical panel into a connected object, able to gather information from meters, circuit breakers, transformers, and other smart products.

Make informed decisions
- Diagnostics for operations and maintenance
- Embedded and wireless metering

Make future-ready systems
- Reference designs per application
- Scalable

Make implementation simple
- Plug-and-play, with self-discovery
- Single commissioning tool

Connected products make critical information available on-site or remotely.
Edge control cloud software

Schneider Electric software applications allow operation monitoring and information sharing, ensuring business continuity while reducing energy and maintenance costs.

Keep key assets up and running
- Alerts with root cause and recommendation
- Asset condition monitoring

Control energy costs
- Building performance assessment
- Multi-site benchmarking
- Energy cost allocation

Improve operation and maintenance efficiency
- Proactive maintenance plan with technical documentation
- Task manager and repair logs
- Intervention and activity reports
- Cloud-based team collaboration

EcoStruxure Facility Expert software lets you ensure reliable and efficient operations.
Enable your customers to make timely and informed decisions to reduce costs and boost their building performance.

**Generate greater savings**
- Predictive analytics reveal invisible inefficiencies
- Proactive responses correct without delays

**Make data-driven decisions**
- Analytics-powered alerts
- In-depth analysis of energy use and assets performance

**Secure your contract with your customer**
- Performance reports with recommendations and action plan
- Expert support and partnership with Schneider Electric

Facility Advisor services allow you to reach unparalleled building performance and operational efficiency.
New opportunities for your business

At every stage of a building’s life cycle

Construction Phase
- Design
  - Electrical system designers and consultants
- Build
  - Panel builders
- Install
  - Electrical contractors and installers

Operation Phase
- Operate
  - Electrical contractors, facility managers, service providers

Challenges and business opportunities

EcoStruxure Power: a complete solution approach

Facilitating building design, construction, and operation

Grow your business with EcoStruxure Power

Case studies
New opportunities for your business

At every stage of a building’s life cycle

Construction Phase

Design

Build

Install

Operation Phase

Operate

Electrical system designers and consultants

In the DESIGN PHASE, specifiers need to deliver state-of-the-art configurations that fit project, budget, and time specifications.

Click here to learn more about the BUSINESS OPPORTUNITY
New opportunities for your business

At every stage of a building's life cycle

Panel builders

In the BUILD PHASE, panel builders need to construct quality switchboards, incorporating new technology and delivered on time.

Click here to learn more about the BUSINESS OPPORTUNITY
New opportunities for your business

At every stage of a building’s life cycle

Construction Phase

Electrical contractors and installers

In the INSTALLATION PHASE, electrical contractors need to complete work on schedule, on budget, and to specification, with no surprises.

Click here to learn more about the BUSINESS OPPORTUNITY
New opportunities
At every stage of a building’s life cycle

Electrical contractors, facility managers, service providers
In the OPERATION PHASE, service providers such as maintenance or facility managers need to maximize uptime and optimize operational and energy costs to offer new, high-quality services and competencies.

Click here to learn more about the BUSINESS OPPORTUNITY
Helping specifiers to win higher-value projects

In the **DESIGN** phase, EcoStruxure Power gives **specifiers** a competitive edge, allowing them to ensure compliance and differentiate their offer.

**Construction Phase** ▶ **Design**

**Electrical system designers and consultants**

- Reduce design time
- Ensure standard compliance
- Gain recognition as a cutting-edge provider proposing cost-effective and scalable solutions for energy and maintenance management

---

**Challenges and business opportunities**

**EcoStruxure Power: a complete solution approach**

**Facilitating building design, construction, and operation**

**Grow your business with EcoStruxure Power**

**Case studies**
Helping specifiers to win higher-value projects

In the **DESIGN** phase, EcoStruxure Power gives **specifiers** a competitive edge, allowing them to ensure compliance and differentiate their offer.

- Latest scalable technological solutions
- Trusted and complete system architectures
- Dedicated software and tools for efficient design and specification
Helping specifiers to win higher-value projects

In the **DESIGN** phase, EcoStruxure Power gives **specifiers** a competitive edge, allowing them to ensure compliance and differentiate their offer.

---

Electrical system designers and consultants

- **EcoStruxure Power Benefits**
- **EcoStruxure Power Offer**
- **Business Opportunity**

Win higher-value projects

---

Challenges and business opportunities

EcoStruxure Power: a complete solution approach

Facilitating building design, construction, and operation

Grow your business with EcoStruxure Power

Case studies
Ensuring on-time delivery for panel builders

In the **BUILD** phase, EcoStruxure Power helps **panel builders** increase volume and profitability by producing higher-value panel boards.

- Increase project mean value by 5 percent*
- Reduce mounting and cabling time
- Simplify panel operation with metering and communication
- Provide added value to your customers

*Source: Navigant Research publication*
Ensuring on-time delivery for panel builders

In the BUILD phase, EcoStruxure Power helps panel builders increase volume and profitability by producing higher-value panel boards.

Panel builders

- Tested and proven panel board architecture
- Tools that simplify selection, configuration, and assembly of smart electrical panels
- Test reports to ease administration
- Document repository for Factory Acceptance Test report and single-line diagram of the panel

EcoStruxure Power Benefits  
EcoStruxure Power Offer  
Business Opportunity

Installation guide (Prisma and Blokset)
Ensuring on-time delivery for panel builders

In the **BUILD** phase, EcoStruxure Power helps **panel builders** increase volume and profitability by producing higher-value panel boards.

**Panel builders**

- **EcoStruxure Power Benefits**
- **EcoStruxure Power Offer**
- **Business Opportunity**

Increase turnover and profitability by selling higher value panelboards
Helping contractors commission, maintain, and monitor energy-efficient installations

EcoStruxure Power helps contractors in the INSTALLATION phase win projects requiring digital skills, and in the OPERATION phase, offer new maintenance services and increase profitability.

- Install a secure system while reducing configuration time
- Enhance customer relationships by reducing energy costs by 5 percent* and decreasing downtime by 10 percent**
- Differentiate service offering by providing maintenance and energy management solutions

Sources: *Navigant Research publication **The Service Council publication
Helping contractors commission, maintain, and monitor energy-efficient installations

EcoStruxure Power helps contractors in the **INSTALLATION** phase win projects requiring digital skills, and in the **OPERATION** phase, offer new maintenance services and increase profitability.

**Construction Phase ➔ Install**

**Electrical contractors and installers**

- A tested and proven architecture
- Documentation and tools that ease commissioning
- Web portal and smart phone app to manage maintenance activities, get alerts when issues arise, and monitor energy consumption

**EcoStruxure Power Benefits ➔ EcoStruxure Power Offer ➔ Business Opportunity ➔**

- EcoStruxure Power Commission software
- EcoStruxure Facility Expert
- Connected products

**Challenges and business opportunities**

**EcoStruxure Power: a complete solution approach**

**Facilitating building design, construction, and operation**

**Grow your business with EcoStruxure Power**

**Case studies**
Helping contractors commission, maintain, and monitor energy-efficient installations

EcoStruxure Power helps contractors in the **INSTALLATION** phase win projects requiring digital skills, and in the **OPERATION** phase, offer new maintenance services and increase profitability.

**Construction Phase** ➤ **Install**

**Electrical contractors and installers**

- Win projects requiring digital skills
- Increase profitability
- Start a new maintenance service business

---

**Challenges and business opportunities**

**EcoStruxure Power: a complete solution approach**

**Facilitating building design, construction, and operation**

**Grow your business with EcoStruxure Power**

**Case studies**
Enabling service providers to grow their business with new offerings

In the **OPERATION** phase, EcoStruxure Power helps **service providers** retain customers, increase profits, and extend their business to new energy management and equipment performance contracting offers.

**Electrical contractors, facility managers, service providers**

- **Increase revenues**
  - Propose new energy management services
  - Differentiate from standard maintenance service

- **Decrease operating expenses**
  - Improve operation and maintenance team efficiency by 12 percent*
  - Have the right tool with the right information at the right time

- **Improve customer loyalty**
  - Prove job is complete
  - Perform faster repairs
  - Enhance customer relationships by reducing energy costs by 25 percent** and decreasing downtime by 10 percent***

**Sources:**
*Manufacturer publication CIAT & Trane  
**Navigant Research publication  
***The Service Council publication
Enabling service providers to grow their business with new offerings

In the OPERATION phase, EcoStruxure Power helps service providers retain customers, increase profits, and extend their business to new energy management and equipment performance contracting offers.

- Partnership with training and certification
- Web portal and app to manage maintenance activities, be alerted to issues, and monitor energy consumption
- In-depth energy and asset analysis to reveal inefficiencies
- Recommendations and action plans from Schneider Electric experts

Electrical contractors, facility managers, service providers

EcoStruxure Power Benefits ➤ EcoStruxure Power Offer ➤ Business Opportunity ➤

- EcoStruxure Facility Advisor
- EcoStruxure Facility Expert

Life is On | Schneider Electric
Enabling service providers to grow their business with new offerings

In the **OPERATION** phase, EcoStruxure Power helps **service providers** retain customers, increase profits, and extend their business to new energy management and equipment performance contracting offers.

**Electrical contractors, facility managers, service providers**

- Retain your customers to increase profits
- Extend business with energy management services or equipment performance contracting
Start a new business with EcoStruxure Power.

As an electrical contractor, embark on a progressive journey with Schneider Electric.

- Install and commission electrical panels without communication
- Set the circuit-breaker protections

Hardware and installation
Start a new business with EcoStruxure Power.

As an electrical contractor, embark on a progressive journey with Schneider Electric.

What you do

- Install and commission electrical panels without communication
- Set the circuit-breaker protections

What you sell

- Hardware and installation

Business opportunity

- Configuration: Preventative maintenance contracts
- Propose preventive maintenance contract

Electrical Panels

Smart Panels

Challenges and business opportunities

EcoStruxure Power: a complete solution approach

Facilitating building design, construction, and operation

Grow your business with EcoStruxure Power

Case studies
Start a new business with EcoStruxure Power.

As an electrical contractor, embark on a progressive journey with Schneider Electric.

<table>
<thead>
<tr>
<th>Electrical Panels</th>
<th>Smart Panels</th>
<th>Smart Panels connected to EcoStruxure Facility Expert</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>What you do</strong></td>
<td><strong>What you sell</strong></td>
<td><strong>Business opportunity</strong></td>
</tr>
<tr>
<td>• Install and commission electrical panels without communication</td>
<td>• Hardware and installation</td>
<td></td>
</tr>
<tr>
<td>• Set the circuit-breaker protections</td>
<td>• Install and configure electrical panel with communication for local monitoring</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Use Facility Expert Free Version for maintenance</td>
<td></td>
</tr>
<tr>
<td></td>
<td>+ Configuration: Preventative maintenance contracts</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Propose preventive maintenance contract</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Install and configure Smart Panels connected to the cloud</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Use Facility Expert for electrical equipment maintenance</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Configure Facility Expert Trial Version and train the end user to use it</td>
</tr>
<tr>
<td></td>
<td></td>
<td>+ Training</td>
</tr>
<tr>
<td></td>
<td></td>
<td>+ Intervention with SLA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Provide cloud-based solution for multi-sites project</td>
</tr>
</tbody>
</table>

Challenges and business opportunities

EcoStruxure Power: a complete solution approach

Facilitating building design, construction, and operation

Grow your business with EcoStruxure Power

Case studies
Start a new business with EcoStruxure Power.

As an electrical contractor, embark on a progressive journey with Schneider Electric.
Start a new business with EcoStruxure Power.

As an electrical contractor, embark on a progressive journey with Schneider Electric.

<table>
<thead>
<tr>
<th>Electrical Panels</th>
<th>Smart Panels</th>
<th>Smart Panels connected to EcoStruxure Facility Expert</th>
<th>Operations and/or energy services</th>
<th>Service provider activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Install and commission electrical panels without communication</td>
<td>• Install and configure electrical panel with communication for local monitoring</td>
<td>• Install and configure Smart Panels connected to the cloud</td>
<td>• Install and configure Smart Panels + other sensors/meters</td>
<td>Using Facility Expert Operations and Energy subscriptions and Facility Advisor, offer more advanced services and switch to service provider business</td>
</tr>
<tr>
<td>• Set the circuit-breaker protections</td>
<td>• Use Facility Expert Free Version for maintenance</td>
<td>• Use Facility Expert for electrical equipment maintenance</td>
<td>• Use Facility Expert Smart Power to operate and improve maintenance efficiency</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Configure Facility Expert Trial Version and train the end user to use it</td>
<td>• Configure Facility Expert Smart Power to operate and improve maintenance efficiency</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Configuration: Preventative maintenance contracts</td>
<td>• Training</td>
<td>• Monitor energy consumption</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Propose preventive maintenance contract</td>
<td>• Intervention with SLA</td>
<td>+ Preventative maintenance contract</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Hardware and installation</td>
<td>Provide cloud-based solution for multi-sites project</td>
<td>Enhance your contract with Service Level Agreements and propose basic energy consulting</td>
<td></td>
</tr>
</tbody>
</table>

**What you do**

**What you sell**

**Business opportunity**

**Challenges and business opportunities**

**EcoStruxure Power: a complete solution approach**

**Facilitating building design, construction, and operation**

**Grow your business with EcoStruxure Power**

**Case studies**
Grow your business with EcoStruxure Power.

As a service provider, embark on a progressive journey with Schneider Electric.

- Installation of connected devices
- Sporadic maintenance

Installation/configuration + basic maintenance services

Grow maintenance services business
Grow your business with EcoStruxure Power.

As a service provider, embark on a progressive journey with Schneider Electric.

**Maintenance activities**
- Installation of connected devices
- Sporadic maintenance

**Preventative maintenance service contract**
- Convert customers to recurring service contracts
- Use Facility Expert to improve operations with mobility features, maintenance planning, and task manager

**What you do**
- Installation/configuration + basic maintenance services

**What you sell**
- Installation/configuration + preventative maintenance services

**Business opportunity**
- Grow maintenance services business
- Switch to preventative maintenance business to generate regular revenues

Challenges and business opportunities

EcoStruxure Power: a complete solution approach

Facilitating building design, construction, and operation

Grow your business with EcoStruxure Power

Case studies
Grow your business with EcoStruxure Power.

As a service provider, embark on a progressive journey with Schneider Electric.

### Challenges and business opportunities

### EcoStruxure Power: a complete solution approach

### Facilitating building design, construction, and operation

### Grow your business with EcoStruxure Power

### Case studies

---

**Maintenance activities**

- Installation of connected devices
- Sporadic maintenance

**Preventative maintenance service contract**

- Convert customers to recurring service contracts
- Use Facility Expert to improve operations with mobility features, maintenance planning, and task manager

**Condition-based maintenance with SLA**

- Connect and monitor customers’ equipment (PV, UPS...) 
- Use Facility Expert to improve operations with maintenance reminders and alerts on critical assets

---

**What you do**

- Grow maintenance services business

**What you sell**

- Installation/configuration + basic maintenance services
- Installation/configuration + preventative maintenance services
- Installation/configuration + SLA maintenance contracts

**Business opportunity**

- Switch to preventative maintenance business to generate regular revenues
- Extend business by selling higher-value services
Grow your business with EcoStruxure Power.

As a service provider, embark on a progressive journey with Schneider Electric.

### Challenges and business opportunities

- Installation of connected devices
- Sporadic maintenance

### EcoStruxure Power: a complete solution approach

- Convert customers to recurring service contracts
- Use Facility Expert to improve operations with mobility features, maintenance planning, and task manager

### Facilitating building design, construction, and operation

- Installation/configuration + preventative maintenance services
- Switch to preventative maintenance business to generate regular revenues

### Grow your business with EcoStruxure Power

- Installation/configuration + SLA maintenance contracts
- Extend business by selling higher-value services

### Basic energy consulting

- Use Facility Expert Energy to monitor energy consumption and benchmark customer sites
- Installation/configuration + basic energy consulting
- Extend business by selling higher-value services
Grow your business with EcoStruxure Power.

As a service provider, embark on a progressive journey with Schneider Electric.

**Maintenance activities**
- Installation of connected devices
- Sporadic maintenance

**Preventative maintenance service contract**
- Convert customers to recurring service contracts
- Use Facility Expert to improve operations with mobility features, maintenance planning, and task manager
- Installation/configuration + preventative maintenance services

**Condition-based maintenance with SLA**
- Connect and monitor customers’ equipment (PV, UPS...)
- Use Facility Expert to improve operations with maintenance reminders and alerts on critical assets
- Installation/configuration + SLA maintenance contracts

**Basic energy consulting**
- Use Facility Expert Energy to monitor energy consumption and benchmark customer sites
- Extend business by selling higher-value services
- Installation/configuration + basic energy consulting

**Trusted advisor**
- Use Facility Advisor to gain insights on energy consumption and equipment usage to leverage services and recommendations
- Strengthen contacts, increase margins, and develop new business opportunities by enhancing building performance
- Installation/configuration + Advanced services

---

**What you do**
- Grow maintenance services business

**What you sell**
- Installation/configuration + basic maintenance services

**Business opportunity**
- Installation/configuration + preventative maintenance services

---

**What you sell**
- Switch to preventative maintenance service contract

**Business opportunity**
- Extend business by selling higher-value services

---

**Basic energy consulting**
- Extend business by selling higher-value services

**Business opportunity**
- Use Facility Advisor to gain insights on energy consumption and equipment usage to leverage services and recommendations

---

**Challenges and business opportunities**

**EcoStruxure Power: a complete solution approach**

**Facilitating building design, construction, and operation**

**Grow your business with EcoStruxure Power**

**Case studies**
Case Study #1: City Hall, France

A complete solution with detailed dashboards, energy analysis, and access to the EcoStruxure Facility Expert web portal allows City Hall to identify potential issues based on analysis.

Customer Needs
- Replace old switchboard
- Improve energy consumption traceability

Customer Solution
- Smart Panels
  - ComPact NS and ComPact NSX circuit breakers with communication
  - MicroLogic modules to access energy data
- EcoStruxure Facility Expert
  - Allows monitoring and assessment of site energy performance
  - Access to Facility Expert web portal, with tracking consumption alerts

Customer Outcomes
- Reduced time for installation and commissioning
- Continuous alerts available right after commissioning
- Reports to track potential issues
- Accurate evaluation of energy savings and building performance possible within one month of operation
Case Study #2: Public Buildings – Local Authority France

Customer Needs
• Reduce building operations cost
• Improve energy consumption traceability
• Promote renewable energies and demonstrate commitment to sustainability to citizens

Partner Needs
• Facility Manager partner needed to provide additional value beyond maintenance services to win the energy performance contract

Customer Solution
Two EcoStruxure Facility Expert services deployed
• Facility Expert Energy
  – To monitor multiple energy consumptions, including gas, fuel, electricity, and district heating
• Facility Expert Operations
  – To monitor indoor temperatures and evaluate the impact of ECM
  – To alert technicians in the event of boiler failure

Customer Outcomes
• Reduced design and configuration time
• Significant energy savings and improvement in building operation efficiencies with an ROI less than two years

Partner Outcome
• Facility Manager partner won the energy performance and operation contract
Case Study #3: Child Care Center, France

Detailed analysis reports and access to the Schneider Electric web-based troubleshooting platform allowed our partner to identify issues for the Child Care Center and apply remedies based on real performance data.

Customer Needs
- Occupant complaints due to discomfort
- Risk of non-compliance with child care building regulations
- Concern with undersized heat pump used for heating and cooling
- No data to identify issues and confirm assumptions

Customer Solution
Two EcoStruxure Facility Advisor services deployed
- Facility Advisor Energy
  - To monitor and accurately assess the building’s energy performance
- Facility Advisor HVAC
  - To monitor heat pump performance and status

Customer Outcomes
- 40k€ saved over a two-year period
- Right level of comfort achieved, eliminating occupant complaints
- 33 percent potential energy savings identified
- Heat pump energy consumption reduced 40 percent; life expectancy extended
- Better management of air handling unit

Running mode and energies

<table>
<thead>
<tr>
<th>Mode</th>
<th>Energy consumption</th>
<th>Energy production</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heater(s)</td>
<td>1,797 kWh</td>
<td>7,662 kWh</td>
</tr>
<tr>
<td>Electrical</td>
<td></td>
<td>Thermal</td>
</tr>
<tr>
<td>Thermal</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Energy consumption</th>
<th>Energy production</th>
</tr>
</thead>
<tbody>
<tr>
<td>30 kWh</td>
<td>25 kWh</td>
</tr>
<tr>
<td>Electrical</td>
<td>Thermal</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Energy consumption x COP = Thermal energy produced

Daily COP average

<table>
<thead>
<tr>
<th>Month</th>
<th>COP</th>
<th>Avg OAT (°C)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan.</td>
<td>4.98</td>
<td>6.5</td>
</tr>
<tr>
<td>Feb.</td>
<td>3.51</td>
<td>2.6</td>
</tr>
<tr>
<td>Mar.</td>
<td>4.26</td>
<td>7.1</td>
</tr>
<tr>
<td>Apr.</td>
<td>4.08</td>
<td>0.59</td>
</tr>
<tr>
<td>May</td>
<td>3.11</td>
<td>0.73</td>
</tr>
<tr>
<td>June</td>
<td>2.6</td>
<td>0.04</td>
</tr>
<tr>
<td>July</td>
<td>6.5</td>
<td></td>
</tr>
<tr>
<td>Aug.</td>
<td>2.6</td>
<td></td>
</tr>
<tr>
<td>Sep.</td>
<td>7.1</td>
<td></td>
</tr>
<tr>
<td>Oct.</td>
<td>6.5</td>
<td></td>
</tr>
<tr>
<td>Nov.</td>
<td>2.6</td>
<td></td>
</tr>
<tr>
<td>Dec.</td>
<td>7.1</td>
<td></td>
</tr>
</tbody>
</table>

COP: Coefficient of performance

Challenges and business opportunities
EcoStruxure Power: a complete solution approach
Facilitating building design, construction, and operation
Grow your business with EcoStruxure Power

Case studies
Learn more

There’s a lot more to EcoStruxure Power – learn the latest.

Monitor energy, optimize your operations, and more with Facility Expert – get started today.

Give your electrical system a voice with Smart Panels – learn more today.

Join our network of trained and certified partners by becoming an EcoXpert – find out how.

schneider-electric.com/ecostruxure-power