ENERGYCAP SmartAnalytics™

Interval Data Readiness Checklist

1. Understand the basics

- [ ] **Confirm what interval data is and why it's important for your organization.**
  - ▶ What granularity of interval data do you need? (15 minute, daily, etc)
  - ▶ Which commodities and parameters are relevant to you?
- [ ] **Identify the key benefits for your specific goals (e.g., cost savings, demand management, sustainability reporting).**
- [ ] **Determine the scope of the project**
  - ▶ Will you begin with a pilot?
  - ▶ How many sites and points will you track initially?
  - ▶ What defines pilot or project success?
  - ▶ If successful, how will you scale to other sites?
  - ▶ How many additional sites and points will be added?
  - ▶ What's the target timeline for bringing all sites online?

2. Conduct a site survey

- [ ] **Inventory existing metering and data-collection infrastructure.**
  - ▶ Document communication protocols (eg BACnet, Modbus) and/or data export capabilities
  - ▶ Identify need for gateway to connect to existing meters
  - ▶ Determine whether existing meters can be used or must be replaced (ie, if insufficient communication capabilities)
- [ ] **Check accessibility for installing or upgrading metering devices**
- [ ] **Identify need for additional metering**
- [ ] **Evaluate physical space for device installations (indoors vs. outdoors, aesthetics).**

3. Assess communication and connectivity needs

- [ ] **Determine requirements for wired or wireless data communication:**
  - ▶ Distance, interference potential, and scalability.
  - ▶ Battery-powered vs. mains-powered devices.

- [ ] **Plan network connectivity:**
  - Secure internet access.
  - Signal strength and coverage in all required areas.

4. Ensure IT and cybersecurity readiness

- [ ] **Engage your IT department early to address:**
  - Network authentication and encryption protocols.
  - Firewall and VPN configurations for data export and remote data access.
  - Data storage and retention policies.
- [ ] **Verify data security measures, including compliance with local privacy regulations**

5. Build the team

- [ ] **Identify internal stakeholders:**
  - Energy managers, facilities managers, and sustainability leads.
  - IT and cybersecurity teams.
  - Operations personnel for installation, maintenance and troubleshooting.
- [ ] **Engage external experts or contractors as needed for:**
  - Hardware installation.
  - System integration and commissioning.

6. Prepare for hardware

- [ ] **Identify necessary hardware: meters, gateways, and sensors.**
- [ ] **Choose compatible hardware:**
  - Accuenergy: Multi-channel power meters with digital inputs for pulse signals, gateway for existing Modbus meters and pulse signals.
  - Wattwatchers: 4G-enabled electricity meters.
  - EpiSensor: Wireless power meters and sensors for pulse signals, analog signals, temperature, etc.
  - eGauge: multi-channel electricity meters.
- [ ] **Engage internal electricians or contractors for installations.**

7. Set up data integration

- [ ] **Confirm the data capture methods you'll use:**
  - Direct from meters (time-series files, API integration, etc.).
  - Through gateways or third-party platforms.

- [ ] **Test data export formats (flat files, APIs). Request a sample file if possible.**
- [ ] **Configure gateway(s) to read from Modbus/BACnet/pulse data for compatibility.**
- [ ] **Ensure IT network setup supports secure data flow to analytics software.**

8. Implementation and testing

- [ ] **Install meters and gateways in designated locations.**
- [ ] **Configure devices to send data to the analytics platform.**
- [ ] **Test system functionality to ensure data accuracy and flow.**

9. Establish baseline and define success metrics

- [ ] **Set baseline for interval performance benchmarks.**
- [ ] **Establish KPIs for interval data use:**
  - Reduced peak demand charges.
  - Faster detection and resolution of equipment inefficiencies.
  - Improvements in energy use intensity (EUI).

10. Provide training and documentation

- [ ] **Train key personnel on data interpretation and system use.**
- [ ] **Develop or source an operations manual for ongoing system management.**

11. Evaluate pilot

- [ ] **Evaluate pilot outcomes and refine processes.**
- [ ] **Scale up implementation across multiple sites, prioritizing the highest-impact locations.**

12. Monitor and optimize

- [ ] **Regularly review system performance and data insights.**
- [ ] **Adjust strategies based on findings to maximize ROI.**
- [ ] **Engage stakeholders with periodic updates and reports on system benefits.**

