# OpenADR Alliance Annual Report

2025

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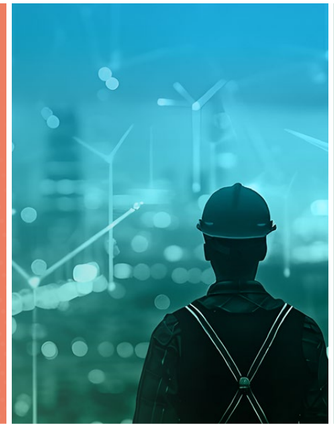
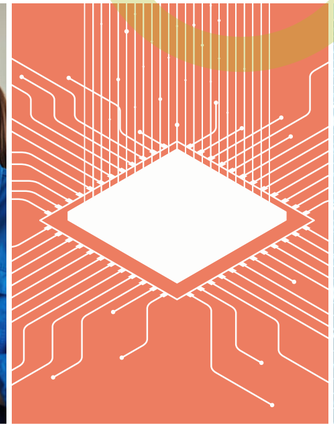







# Executive Summary

**This annual report highlights the successful growth and global adoption of the OpenADR standard, marked by an increase in worldwide membership, certified products being integrated into the market and the strategic expansion into new global market segments.**

The OpenADR Alliance has had a number of key achievements this year, in particular a significant uplift in worldwide membership driven by changes to energy management systems and the growing number of distributed energy resources (DER), including EV managed charging networks, energy storage, and the integration of renewables.

Almost 60 organizations have joined in the last year, at a rate of one new member a week, an unprecedented number since the Alliance was formed 15 years ago to foster the development, adoption and compliance of the OpenADR communication standard. Geographically, Asia is driving this membership growth with more than a third of new joiners from Japan, China and Korea, as well as organizations from across Europe and North America.

Global recognition of the Alliance is also growing as more governments and policymakers specify open standards as part of energy demand flexibility. Several European countries have chosen OpenADR as their demand side flexibility technology standard, while in the UK, the Energy Networks Association (ENA) recently specified OpenADR. Japan has also specified additional OpenADR usage requirements, and in the U.S., California is working on OpenADR 3 for dynamic pricing communications.

# About Us / Mission

**The OpenADR Alliance, a non-profit corporation created to foster the development, adoption, and compliance of OpenADR and related standards,** helps utilities manage the growing pool of distributed energy resources (DER), which includes renewable energy, energy storage, demand response and electric vehicle (EV) charging. The OpenADR standard supports communications to all DER to manage changes in load shape, energy inputs and power characteristics of DER assets. The EcoPort standard additionally enables smart appliances to be connected.


*The mission of the OpenADR Alliance is to foster the development, adoption, and compliance of the DER standards through collaboration, education, training, testing and certification.*

# Year in Review

- **Since OpenADR 3 was launched in 2023, several OpenADR 3-certified products have been announced,** including from E.ON Energy Networks, EVoke Systems, Universal Devices, and more recently, mwConnect. In total, 335 OpenADR-certified products are now available, with more than 5,000 companies downloading the OpenADR specification.

- **Among many new members who joined the last twelve months are Ennowell** (state-of-the-art smart building management solutions); **Edo** (innovative energy and demand optimization solutions); **Shadow Power** (energy infrastructure technology); **LOXONE** (intelligent building automation); and **DynaChrge Inc.** (advanced EV charging solutions).

- **Leading U.S. water heating technology manufacturers, A. O. Smith and Bradford White, also joined the Alliance** with EcoPort© compliant products American Standard Water Heaters, Rheem Manufacturing Brands — Commercial, LG Electronics, Rinnai America Corporation, and ECO2 Systems.

- An important milestone was reached **in August 2025 when the Alliance published the specification version 3.1.0,** which includes a number of small adjustments requested by the industry and support of MQTT (a standard for IoT messaging) for subscription models. The latter makes OpenADR one of the few, if not the only, standard in the space that can support this model.

- **A new open specification was announced this year allowing OpenADR and Matter to work together,** enabling mass-market, consumer-friendly grid demand response solutions. Service providers and smart appliance manufacturers can unlock energy flexibility in home appliances, EV chargers, water heaters, solar, and battery storage.

- **EcoPort® certification (the brand name for CTA-2045) continues to be adopted by manufacturers and regulators.** In the U.S., several states now require all new electric storage water heaters sold to include a CTA-2045 communications standard.

- **In Europe, the OpenADR Alliance is further strengthening ties with other standards bodies and government/policy organizations.** These include the UK's Department of Energy Security & Net Zero (DESNZ), which has written OpenADR into two BSI standards, ENA, and National Energy System Operator (NESO) in the UK, EEBUS in Germany, and Smart Energy Europe (smartEn) among others.

> *In total, 335 OpenADR-certified products are now available, with more than 5,000 companies downloading the OpenADR specification.*

# Letter from

**Rolf Bienert**
Managing and Technical Director

*In 2026, we anticipate further growth of the certification program for the OpenADR 3 standard and other initiatives*

# our managing and technical director

## *Dear OpenADR Community,*

As another year has come to a close, we reflect on a period marked by both recurring conference seasons and a significant increase in face-to-face engagement with utilities and regulators, particularly in Europe where several OpenADR 3 initiatives are emerging.

Early this year, we finalized the OpenADR 3 test tool and quickly incorporated valuable community feedback into the specification. This resulted in the release of version 3.1, which includes two major updates:

1. **MQTT Support:** We have added support for Message Queuing Telemetry Transport (MQTT). This lightweight, publish-subscribe messaging protocol is ideal for connecting resource-constrained devices with small message sizes, and it introduces necessary support for subscription-based programs, offering an excellent way to scale OpenADR deployments.
2. **Price Clusters:** To efficiently communicate multiple prices (e.g., as part of a baseline), the standard now supports price clusters, allowing for a short-format communication that outlines the interval setup followed by a list of prices.

On the membership front, we have been positively surprised by adding approximately one new member each week of the year. Notably, a large number of these new members are international, with Japan and Europe being leading growth areas.

In 2026, we anticipate further growth of the certification program for the OpenADR 3 standard and other initiatives. This program will be ideal for DER, such as battery storage, EV managed charging networks, and Virtual Power Plants (VPPs).

Another key focus area is the efficient connection of smart appliances to the grid. In parallel with OpenADR, the EcoPort certification (CTA-2045) continues to see strong adoption by manufacturers and regulators. With 48 certified products, EcoPort's growth trajectory remains strong. You can explore the certified products here: https://ecoport.openadr.org/

Finally, we have several liaisons in the pipeline and have begun working with the International Electrotechnical Commission (IEC) to establish OpenADR 3 as an international standard. We will share more information on this soon.

**We look forward to the continued success of the OpenADR Alliance.**

# EcoPort

## — Connecting the Consumer to the Grid

*EcoPort facilitates the flow of OpenADR messages to appliance owners while allowing DSOs to use their preferred communication channels (e.g., WiFi, cellular).*

**The number of certified EcoPort® products continues to grow.**

EcoPort® is the brand name for products certified to the CTA–2045 technical standard. CTA–2045 is published by the Consumer Technology Association (R7.8 Modular Communication Interface for Energy Management Subcommittee). Compliance means a product has successfully completed the EcoPort certification program.

Smart appliances are being incorporated into energy flexibility programs operated by Distribution System Operators (DSOs). EcoPort facilitates the flow of OpenADR messages to appliance owners while allowing DSOs to use their preferred communication channels (e.g., WiFi, cellular).

The Consumer Technology Association (CTA) is currently working on a new revision of the standard (CTA–2045–C).


See all our certified productucts here:
**Certified EcoPort Products**

# 2025 highlights

#Certified products
Latest number
over **330**


# of members 2025
**60 new members**
joined



#OpenADR profile downloads
**waves of downloads** in
specific regions increase
outside of the U.S.,
including Europe,
particularly Eastern Europe


# Industry events
— **9 Industry Events**

# Our Board of Directors

**Mark Martinez**
Chairman

**Mary Ann Piette**
Vice-Chairman

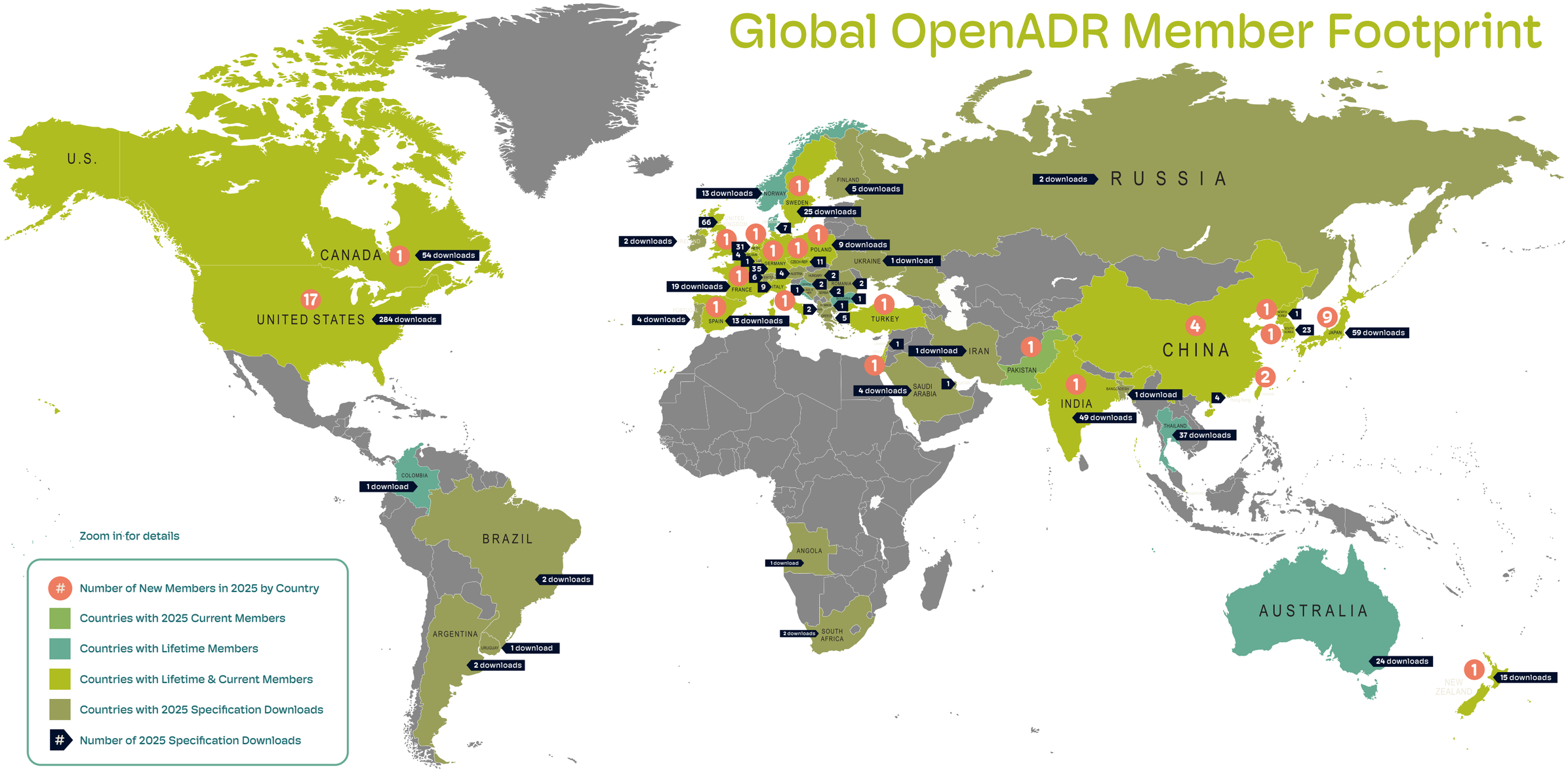
**Albert Chiu**
Secretary/Treasurer

**Sunil Goyal**

**Eric Olson**

*The OpenADR Alliance ecosystem has traditionally been made up of control manufacturers and utilities.*
***Now we are also attracting members from the automotive and associated sectors.***

# Global OpenADR Member Footprint




Zoom in for details

- # Number of New Members in 2025 by Country
- Countries with 2025 Current Members
- Countries with Lifetime Members
- Countries with Lifetime & Current Members
- Countries with 2025 Specification Downloads
- # Number of 2025 Specification Downloads

# Global Adoption of the OpenADR Standard

**OpenADR continues to expand globally, with significant activity in the US, Japan, and Europe.**

OpenADR usage is also growing in Japan, indicated by an influx of new Japanese member companies and certified products over the past year.

## Europe is also moving forward with several programs:

### Austria

Austrian Distribution System Operators and product groups are currently studying standards options, with OpenADR 3.1 under consideration. Several Austrian-based companies have recently joined the OpenADR Alliance:

- Loxone Inc. is active in the building automation and smart home markets across Europe and the U.S.
- LOYTEC Electronics develops products focused on open communication protocols for building automation and is active across Europe and the U.S. (California).

### Netherlands

Activity in the Netherlands stems from ElaadNL, an innovation center and joint initiative of Dutch grid operators. Current work includes:

- ElaadNL has published the specification for the Grid-Aware Charging profile using OpenADR 3.0, in collaboration with grid and charge point operators, to manage peak load.
- LF Energy created an open-source OpenADR implementation called openLEADR, based on existing code developed by ElaadNL.
- ElaadNL and the Flexible Alliance Network (FAN) have launched an open-source project, funded by the Dutch Ministry of Climate Policy and Green Growth, to accelerate the development of standardized connectors for various protocols, including OpenADR, to be tested at the ElaadNL Test Lab.
- The Flexpower Amsterdam Partnership is supporting flexible charging to accommodate the expected increase in electric cars and the use of locally generated renewable energy.

### Sweden

The Swedish Distribution System Operator, E.ON Energy Networks, successfully completed interoperability testing, making its flexibility platform, SWITCH, the first VTN solution to achieve OpenADR 3 certification.

- SWITCH uses OpenADR to proactively manage grid issues by communicating power demand adjustments in both real-time and forecast.
- E.ON's 3.0 implementation was provided by OpenADR member company AMPECO, which also provides the backend solution for the pan-European E.ON Drive Infrastructure.

### United Kingdom

There is significant governmental and industry movement toward OpenADR adoption:

- The U.K.'s Department for Energy Security & Net Zero (DESNZ) led the development of PAS 1878, which incorporates OpenADR as a requirement for energy smart appliances (ESAs).
- The U.K. Energy Network Association (ENA) is working to specify program parameters for the U.K. flexibility market to incorporate OpenADR 3.0.
- National Grid and other system operators are developing a U.K. dispatch standard based on OpenADR and other existing standards, migrating toward the use of APIs.

# Industry Partners

In Europe, the OpenADR Alliance is strengthening ties with other standards bodies and government/policy organizations. This includes the U.K.'s Department of Energy Security & Net Zero (DESNZ), which has written OpenADR into two BSI standards, EEBUS in Germany, and Smart Energy Europe (smartEn), which lobbies for energy flexibility as part of the transition to clean energy. **Learn more here.**

*Standards are evolving all over the world, learning from implementation and joining up all the actors is key to enabling stable and reliable flexibility.*

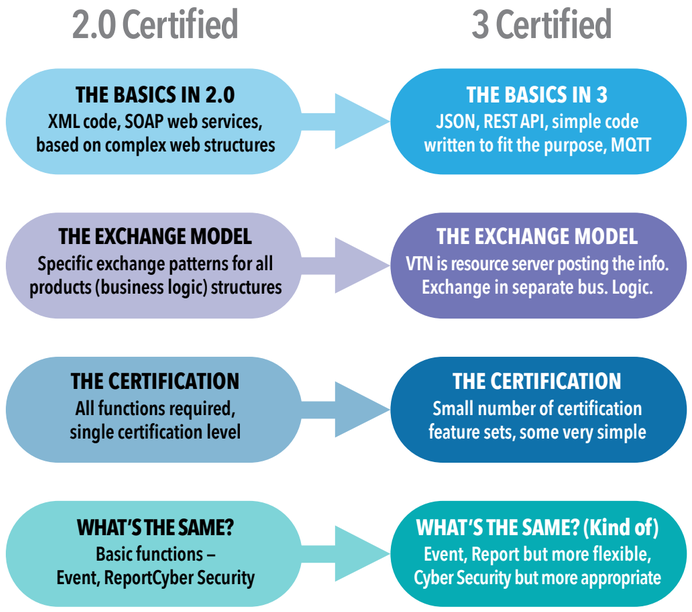
Department for Energy Security & Net Zero

EEBUS

smartEn
SMART ENERGY EUROPE

# Technology Update: OpenADR 3

**With the latest release of the OpenADR 3 communications standard and certification program the Alliance can support a broader range of distributed energy resources to better optimize energy storage for residential customers using OpenADR standards.**




It is important to note that the OpenADR 3 standard is not intended to replace the existing OpenADR 2.0a/b Profile Specifications. Instead, OpenADR 3 provides an additional, simplified way to integrate OpenADR functionalities into current, different, and new deployment scenarios.

OpenADR 3 offers simplicity at a time when technology is becoming more complex, making energy management easier and future-proofing energy systems. It utilizes modern web service designs, providing an easier-to-use alternative to older message style exchange formats while also offering added functionality.

**OpenADR 3 simplifies messaging for each of the following:**

- *dynamic pricing*
- *greenhouse gas (GHG) emissions*
- *grid code adjustments*
- *capacity management*
- *dynamic operating envelope communication*

**In this fast changing energy world there are a number of trends taking shape and standards such as OpenADR are the key to unlocking the grid's full energy potential.**

- *Electric appliances as grid resources*
- *The impact of Virtual Power Plants*
- *Higher electricity demand by data centers: the importance of microgrids*
- *Flexibility through EV charging*

# Innovation in VPPs

The OpenADR ecosystem continues to diversify beyond its traditional base of utilities and control manufacturers as the market evolves. New members are now developing energy-efficient heating, ventilation, and air conditioning (HVAC) products, battery storage systems, and EV charging platforms, alongside a growing number of innovative startups designing advanced technologies for grid-interactive buildings and building energy management systems (BEMS).

# & grid-interactive buildings drive growth

The Alliance is also benefiting from the growing capability of Virtual Power Plants (VPPs) as grid resources. With the VPP market predicted to grow from $5.6 billion in 2025 to $39.5 billion by 2035, we are seeing more cross-Distributed Energy Resource (DER) integration. While OpenADR's first-generation VPP implementations focused on rooftop solar and storage, companies are now developing new technologies for solar system integration and AI-based predictive load balancing.

In this context, the Alliance supported the creation of an OpenADR to Matter whitepaper. This document was developed by geo, a company that is a member of both OpenADR and the Connectivity Standards Alliance (CSA), and relates specifically to U.K. flex program designs.

*With the VPP market predicted to grow from $5.6 billion in 2025 to $39.5 billion by 2035, we are seeing more cross-Distributed Energy Resource (DER) integration.*

It can be found here — https://geotogether.com/wp-content/uploads/2025/04/Matter_OpenADR3.x_Interworking_Spec_v1.0.pdf

Their announcement is here: https://geotogether.com/oadr-matter-spec/

# Data center growth equals power demand, driven by AI and other power-hungry applications

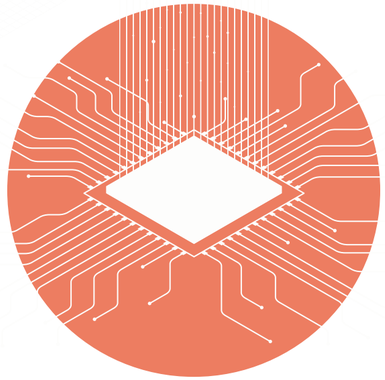
**Generating enough power for the demands of artificial intelligence (AI), cryptocurrency and other power-hungry applications, is one of the biggest challenges facing data centers right now.** With a power grid already under pressure and in the process of trying to modernize and flex to cope with the huge demands placed on it, the industry needs to rethink the way it adapts to these challenges.

The expected proliferation of AI will lead to a substantial increase in the number and size of data centers, placing severe pressure on the energy sector. Concurrently, technology companies face heightened demands for more energy-efficient and sustainable data center operations.

Microgrids present a compelling solution for a more sustainable and efficient energy supply. These small-scale, localized electrical grids can operate either independently or connected to the main power grid and are already being implemented across various settings.

The primary value of microgrids lies in their ability to overcome grid constraints and improve reliability. They manage consumption and maintain power during grid outages, which is critical for data centers requiring uninterrupted operation.

Additionally, microgrids offer significant sustainability benefits by integrating renewable energy sources and storage, substantially reducing the carbon footprint. They also provide potential cost savings by optimizing local power generation and employing demand-response strategies.



*Microgrids present a compelling solution for a more sustainable and efficient energy supply.*

In essence, data centers require a high, continuous power supply, and microgrids offer a pathway to a more resilient and responsive energy infrastructure. Decentralized power via a network of microgrids can dynamically manage power loads and optimize renewable energy sources as the demands on the grid continue to escalate with the move toward an AI-powered future.

# Flexibility through managed EV charging

**The rapid growth of the electric vehicle (EV) market is driving significant cooperation between automotive OEMs and the electric utility industry, representing a generational transformation for both sectors.**

We are already seeing EV charging programs increasingly utilize open standards like OpenADR and OCPP. However, as the industry evolves and governments invest heavily in charging infrastructure to meet net-zero goals, there is a clear need for greater standardization across the entire system, from the charging plug to the customer interface. This is essential for delivering customer-friendly and scalable solutions.

The growing demand for EVs places significant strain on grid capacity, particularly during peak charging hours (e.g., at home or work). Effective forecasting and balancing this demand are critical. Electricity suppliers will need to incentivize consumers to charge outside of peak periods using dynamic pricing and other incentives.

The basis for effective load control lies in standardized information exchange on pricing signals, energy consumption, and capacity. Distribution System Operators (DSOs) must communicate this information quickly and securely using open standards like OpenADR. Open communication standards will also be crucial for the success of energy flexibility developments such as Vehicle-to-Everything (V2X) and Vehicle-to-Grid (V2G), ensuring the infrastructure is fit for purpose.

Finally, we must address the lifecycle implications of EV batteries, as bi-directional charging introduces concerns about degradation and shortened battery life. The issue of power quality must also be monitored, as an increase in high-powered inverters feeding power into the grid may necessitate periodic adjustments to grid codes.

> ***Distribution System Operators (DSOs) must communicate this information quickly and securely using open standards like OpenADR.***

# Membership

## Promoter members

## Contributor members

Ademco Inc – Resideo Grid Services
AISPEX, Inc.
AMPECO
4energy Ltd
75F
A.O. Smith Water Products Company
ABB Bailey Japan Limited
ABB S.p.A.
ACMEPOINT ENERGY SERVICE Co., Ltd.
Acuity Controls
AcuityBrands
AddEnergie
Ademco Inc – Resideo Grid Services
ads-tec Energy GmbH
AEP
AI-RIDER Corp.
Airzone — Corporación Empresarial Altra
ajdvhad
Ambi Labs Limited
AMG Solution inc
AMITEK
Ampcontrol Technologies, Inc.
AmpedUp! Networks, LLC
ampUp
ANCLAB CO,.LTD
Apparent Inc.
Ariston Group
ATEN International Co., Ltd.
Austin Energy
Autani, LLC
Autel US Inc.
AutoGrid
Automated Logic Corporation
Avi-on Labs, Inc.
Azbil Corporation
Basari Mobile Co.
BC Hydro
Bellawatt
Blink Charging Co
Blue Pillar, Inc.
Blueprint Power Technologies LLC
BP Pulse Fleet North America , Inc.
Bradford White Corporation
Braeburn Systems LLC
British Columbia Institute of Technology (BCIT) — Applied Research — SMART Department
Budderfly LLC
Builddie
Buzze Inc.
Byucksan Power Co., Ltd.
CACTUS
Cala Systems
CarMedialab GmbH
Carrier Corporation
CastleOS Software, LLC
CCIC-CSA International Certification Co., Ltd. Kunshan Branch
CEIVA Logic, Inc.
ChargeLab
ChargePoint, Inc.
Chargie
Chichibu PPS K.K.
Chunghwa Telecom Co., Ltd.
Cielo WiGle Inc.
CleanSpark
Codibly
Coil Winding Specialist, Inc.
Colmac Waterheat inc.
Computime Ltd.
Connected Energy [former BPL Global LLC]
Cooldesign
Constellation Energy
Control Dynamics
Cooper Power Systems
Cortexo
CPower Energy Management
CrossChasm
Cuculus GmbH
Curoo
Customized Energy Solutions
CyberSwitching, Inc.
Daikin
Daintree Networks, Inc.
dcbel Inc.
Delta Networks(Xiamen)LTD.
DemandQ, Inc
Dialight
DigiKoo GmbH

# Membership

DIGITAL GRID Corporation.

DNV GL

Doosan

Driivz Ltd.

DynaChrg INC

E-Gear, LLC

e-Power Solutions Co.

Earth Networks

eCAMION Inc.

Eco Automation

Eco2 Systems LLC

ecobee

EcoFactor

Ecogy Energy

EIPGRID Inc. (formerly I-ON Communications Co., Ltd.)

ElecONE Inc.

Electric Era Technologies

Electric Motor Werks, Inc

Electric Power Research Institute, China Southern Power Grid

Electricity Generation and Retail Corporation trading as Synergy

Electriq Power

Electrosem LLC

Elocity Technologies Inc.

Embertec USA LLC

Emerson-White Rodgers

Encored

Encycle

Enel X
[EnerNOC / Electic Motor Werks]

Eneres Co., Ltd.

Energport Inc.

EnergyHub

Enernet

EnerNOC Inc.

Enersponse

EnerSys

Enestone

Engie Storage
[former Green Charge Networks]

EnjoyElec

Enlighted Inc

Ennowell Co., Ltd.

EnPowered

EnTouch Controls

Epic Charging

EPSA [former CELSIA]

eSmart Systems

ESP

Essency

EV Connect, Inc.

EV Range

EVBox (formerly Everon former EVBox BV)

EverCharge

EvGateway

EvoCharge

Evoke Systems

Evolute Power

EVPassport

Exergy Controls

Faberwork, LLC

Far EasTone Telecommunications Co., Ltd.

Fermata Energy

Flipturn

Fortress Power

FranklinWH Technologies Co., Ltd.

FreeWire Technologies

Fuji Electric Co., Ltd.

Fujitsu Limited
[also Labs of America]

GD Midea Air-Conditioning Equipment Co., Ltd.

GE Appliances

GE Vernova

Generac Grid Services LLC

Girasol Energy, INC.

GismoPower LLC

GivEnergy

Goal connect Co.,Ltd .

Green Action Studio

GreenFlux Assets BV

Greenlots

Greenphard Energy Inc.

Grid co.

Gridmerge Ltd.

GrowShip Co.,Ltd.

Grid Solutions
(formerly Nishihara)

GridBeyond, LLC

GridFabric LLC

GridNavigator

GridPoint

Gridscape Solutions

GRIDWIZ

GridX, Inc.

GSE LLC

Hangzhou Telehems Electonics Technology Co.,Ltd

Harvest Thermal

HawkenIO

Hayward Industries, Inc.

Hisense

Hitachi, Ltd.

Honeywell

HUGEMORI CORPORATION

Hypercharge Networks Corp

IC Systems

IDEAL INDUSTRIES, INC.

iesMACH

IHI Energy Storage

ihomer

In-Charge Energy

Inda-Gro Induction Lighting

Industrial Technology Research Institute of Taiwan, R.O.C

INDRA SOLUCIONES TI S.L.U

Inergy Systems

Ingersoll Rand-Trane

innogy eMobility

Insight Energy Ventures LLC dba Powerley

Inspeerity

Institute For Information Industry

InTech Energy

Intellastar LLC

Intelligent Energy Solutions LLC / MidAmrican Energy Solutions

Intellihot Inc

Intellilum, Inc.

Intertek

Itron

Johnson Controls / CPower

Kaluza

KIGT Inc.

# Membership

Kitu Systems
KnGrid
Kyocera
Lancium LLC
Landis+Gyr
Lastmyle Limited
LBNL
Legrand
Lennox International
LG Electronics Inc.
Liberty PlugIns Inc.
Limelight Smart Systems
LiteTrace
Locbit, Inc.
Logistics Energy Korea Company, Ltd.
Loop, Inc.
Loxone Inc.
LOYTEC electronics GmbH
LUMHOUSE ENERJI SANAYI VE TICARET ANONIM SIRKETI
Lunera Inc. [Former Lunera Lighting]
Lutron Electronics Co., Inc.
Manageon
Matcha Labs, Inc.
MaxLite Inc.
MEIDENSHA CORPORATION
MelRok, LLC
Metergram
Micro-Star INT'L CO., LTD.
Mitsubishi Electric Corporation
MOEV Inc.
Monta
Murata Energy Solutions Americas
mwConnect
NaoDigital
NAONWORKS
National Cheng Kung University
National Electronics and Computer Technology Center (NECTEC)
Navien Inc.
ndustrial.io
NEC Corporation
NEC Engineering, Ltd. Is now Platforms
NExT-e Solutions Inc.
NextDrive Co.
NextEra Analytics LLC
Nhu Energy, Inc.
NIPPON KOEI Energy Solutions CO.,LTD.
Nippon Telegraph and Telephone Corp.
NISHIMU ELECTRONICS INDUSTRIES Co. Ltd.
Nissin Systems Co., Ltd.
Noodoe Inc
Nostromo Energy
NRG Energy, Inc
NURI FLEX
Nuri Telecom
Observant
Oi Electric Co., Ltd.
Olivine, Inc.
OMRON Corporation
OpConnect
Open Access Technology International, Inc.
Open Systems International Inc
OpenRoad Technologies Inc.
OPUS ONE SOLUTIONS
Orange Charger
Osaki Electric
OSRAM LTD [Digital Lumens Inc.]
Pacific Gas & Electric
Packetized Energy
Panasonic
Parsons (formerly IPKeys)
Pason Power
PAYENERGY A DBA of Pointfar Automation LLC
Pelican Wireless Systems
Philips
Phoenix Energy Technologies
PLATFORMATICS INC.
Plimoth Bay Controls, LLC
Polaris Energy Services
Power X, Inc
PowerFlex Systems, LLC
PowerPump
Powertech Labs Inc.
Prelect AS
Prescriptive Data Inc
Prol IAQ, INC
Quality Logic
QUARGE TECHNOLOGIES LLC dba EVCHRON
Quby International
RAB Lighting
Re:Power Inc.
Recargo, Inc.
Relation consulting
Reliable Controls Corporation
Renewable Japan Co.,Ltd.
REstore
RF Controls
Rheem Manufacturing Company
Rinnai
Rinnai New Zealand Ltd.
Saascharge, Inc.
Second Foundation Tech a.s.
SemaConnect, Inc
Serious Controls
Shadow Power
Shell
Shenzhen ELECQ Technology Co., Ltd
Shifted Energy
Shimmer Industries, Inc
ShirokumaPower Co., Ltd.
Quext
RUTILEA, Inc.
Shadow Power
Shenzhen ELECQ Technology Co., Ltd
Shizen Connect
Siemens Canada Limited
Silvair, Inc.
Sinope technologies
Skycentrics
SkyElectric
SLAC National Accelerator Laboratory
Small Planet USA LLC
SMSOFT
Soden Inc.
Sol-Ark, LLC (aka)-Portable Solar LLC
SolarPilot Energy

# Membership

Solo Energy Limited
Spokane Edo LLC
SORRID
SRP Salt River Project
Standard Euler, Inc. (d.b.a Flair)
Steffes ETS, LLC
Stonewater Controls
STRATIS IoT, Inc.
Sumitomo Electric
Sunnovations Inc.
SunPower Corp.
Sunverge Energy Inc.
Swell Energy
SWTCH Energy Inc.
Synop
SystemNihonKyushu
Systems Mechanics Ltd
Taiwan Electric Research & Testing Center (TERTEC)
Taiwan Testing and Certification Center
TAKAOKA TOKO CO.,LTD
TCL
tekmar Control Systems Ltd.
Telkonet, Inc
Tellus Power
Tennessee Valley Authority
TeraWatt Infrastructure
THG Energy Solutions, LLC
ThinkEco
TIS Inc.
Toinx Co., Ltd.
TOSHIBA Corporation
TOYOTA TSUSHO CORPORATION
TRC Companies [former Lockheed Martin]
TrickleStar Inc.
Trilliant
TTA (Telecommunications Technology Association)
Turntide Technologies, Inc.
[former Riptide IO Inc]
Typhoon HIL Inc.
UL LLC
Unilectric, LLC
Universal Devices Inc.
Universal Electronics Inc
University Carlos III of Madrid
University of Southern Denmark
Vaughn Thermal Corporation
Veloce Energy Inc
Venstar Inc.
Ventyx / ABB
Virtual Peaker
VITO
Volta Charging, LLC
Voltus, Inc.
Wanbang Digital Energy Co., Ltd.
WattEV
Wevo Energy Ltd
WiSilica Inc
Wooam, Inc.
XCSpec, Inc.
Xeal Energy
XiO, Inc
Yardi–Enerliance
YISO (Chengdu) SMART
TECHNOLOGY CO., LTD
Yokogawa Solution Service Corporation
ZEF Energy Inc.
Zen Within Inc.
Zero Impact Solutions
Zerova Technologies Taiwan Limited
Zevtron
株式会社 e 電力ソリューションズ

## Adopter members:

Adnet d.o.o
CSA Group
EDF R&D
ElaadNL
Energy Solutions
E.ON Energistribution AB
ETC
ETRI
Hawaiian Electric Company
Internet Initiative Japan Inc.
KETI
Korea Electrotechnology Research Institute
London Hydro
Énergie NB Power
New Hampshire Electric Cooperative
NV Energy Inc.
Research Center of Energy, Conservation for New Generation of Residential, Commercial, and Industrial Sectors
Resillion [former Eurofins Digital Testing]
Sacramento Municipal Utility District
STEM Inc
Transpower
Vermont Public Power Supply Authority
TUV Rheinland Japan Ltd.