

Methodology

Inputs come from ISOs, customers, and proprietary vendors

ISO/RTO
SCADA

GRID DATA

AMI/AMR data
SCADA data

DISTRIBUTION DATA

Multiple global models
Millions of points
Hourly refresh

WEATHER DATA

Smart meter (AMI/AMR)
On-Premises EMS
DERs (EV, PV Battery)

ON-PREM DATA

CIS
ETRM
EDI/Billing data

ENTERPRISE DATA API

WattTime
Hourly refresh

GRID CARBON INTENSITY DATA



AI ENGINE

Outputs are easily integrated into business decision processes

LOAD FORECASTS

Various resolutions, from the grid all the way down to individual meters

RENEWABLE FORECASTS

Grid and site level solar/wind forecasts

PRICE FORECASTS

Zonal price forecasts for optimal hedging strategies

SCOPE 2 CARBON EMISSIONS

Localized and available hourly, with short & long-term forecast

The Weather Data

Unique, multi-ensemble weather models deliver better accuracy



Dr. Mark Shipham

Our on-staff PhD meteorologist provides context as our data science team intakes weather data to our models.

Four weather vendors

Instead of relying on a single source, we use data from four different weather vendors: AG2 (WSI), DTN, Spire, and NBM.

20,000+ weather points

Rather than sampling weather at airports, our models pull weather data every 1km, 5km or 10km based on population density. This high-resolution view leads to more precise forecasts.

30+ different weather scenarios

Including: rolling 30-, 10-, and 5-year normals; extremes vs normals vs milds; single years (e.g. 2021); and new ones upon request.

15+ years of historical weather data

Includes daily temperatures, dew points and, in some areas, snow. Updated weekly.

Complete set of weather parameters

Our team thoughtfully selects the right parameters from the right vendor for each model they create. For example, our models for short-term demand forecasts take into account temperatures, dewpoints, snow, precipitation, solar radiation, windspeed, wind gust, cloud cover, visibility, humidity, and/or atmospheric pressure.