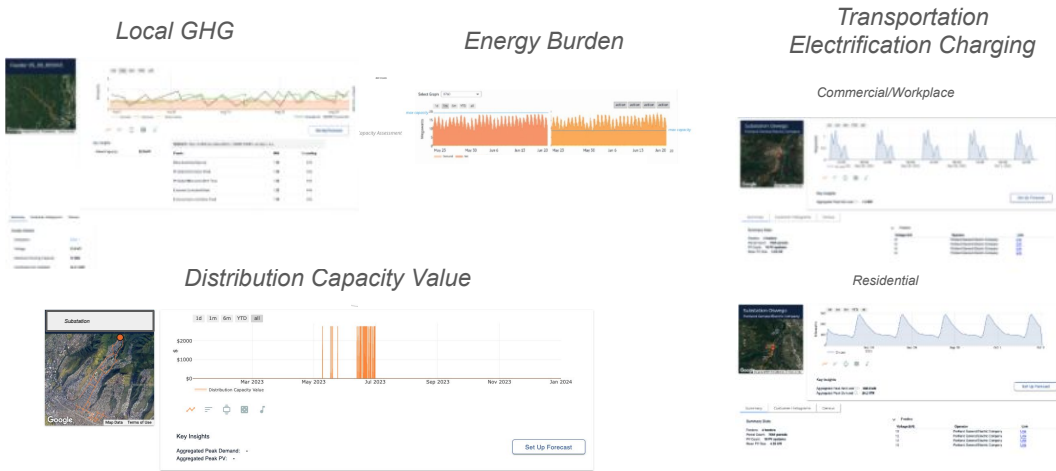
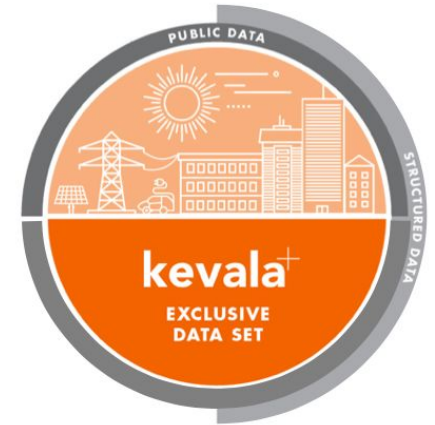


# About Kevala

The Kevala platform combines time-series, geospatial, and relational datasets to deliver **actionable intelligence** by leveraging **proprietary analytics** and **exclusive datasets** from energy markets, the built environment, and the IOT.

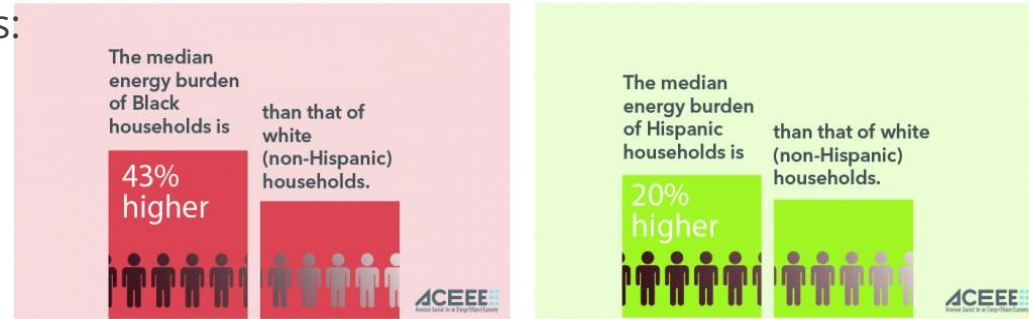


- T&D Grid Planning
- Hosting Capacity and Non-Wires Alternatives
- Rate Design
- Load and DER Forecasting
- Solar, storage and EVSE siting
- Carbon accounting

# Root Problem: Inequitable Resilience & Energy Justice

Inequities in **resilience** to weather events:

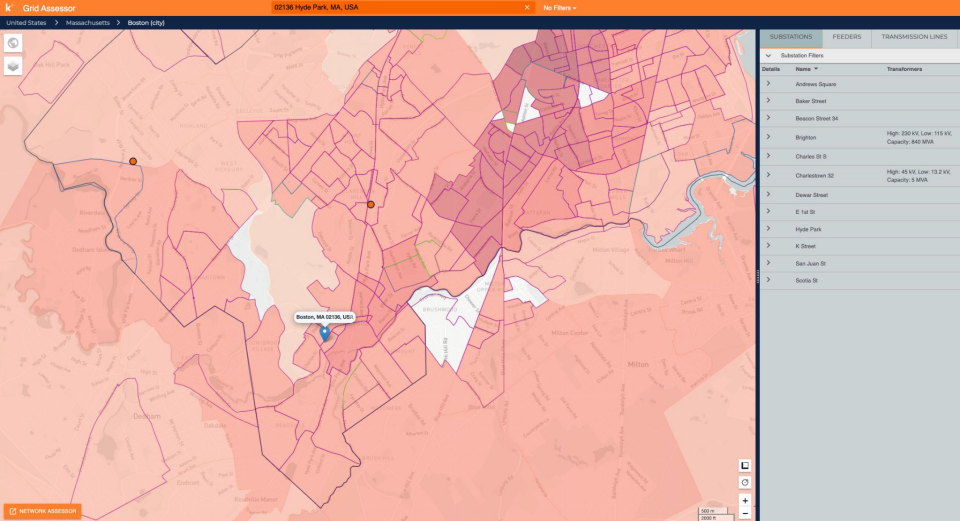
- Texas Winter 2021 Storm: disproportionate impact to low-income, black and latinx communities



Source: American Council for an Energy-Efficient Economy (ACEEE) <https://www.aceee.org/energy-burden>

Inequities in **energy burden**:

- *Low-income* households pay 7.2% of household income on utilities – more than 3 x the amount that higher income households pay (2.3%)
- On average, *African-American* and white households paid similar utility bills, but African-American households experienced a median energy burden 43 % greater
- *Latino* households paid lower utility bills, on average, than African-American and white households did, yet they experienced a median energy burden 20% greater
- *Renters* also experienced higher energy burdens and pay almost 20% more per square foot than homeowners, indicating that they live in less efficient homes



## Locating, measuring and quantifying inequalities in resiliency response and energy justice:

- Location matters
- Quantitative metrics
- Lack of data to support and visualize root problem
- Education in energy justice and resiliency

# Key Obstacle

*“Once you see it, you can’t unsee it”*

# Risks of Inaction

- **Human lives**
- Local leaders are pointing out bad insulation, leaking roofs and older pipes that make the most *vulnerable less likely to withstand extreme weather*
- *No access to back-up generators, hotels, etc.*
- Families are forced to choose between **electricity** and other **basic necessities**
  - A 2015 Residential Energy Consumption Survey showed that of the 25 M households that reported forgoing food and medicine to pay energy bills, 7 M faced that decision every month

	PEOPLE WITHOUT POWER	DEATHS *	TEMP.
2003 NE BLACKOUT	50 Million	100	90°F (32°C)
2021 TEXAS COLDWAVE	5 Million	700	Near 0°F (-17°C)
2021 NW HEATWAVE	300,000	600	116°F (47°C)

\* DEATHS = more deaths due to blackout - PBS: Could The Next Blackout Be More Deadly Than Katrina? <https://www.youtube.com/watch?v=Sh1GkbZKxo0&t=12s>

# Benefits

- **Transparent** costs and benefits of policies and accountability to **track progress**

*Regarding Critical Infrastructure, Equity and Resilience, to achieve Greater Boston's Carbon & Equity goals, a critical obstacle to overcome in 12 months is **transparent and granular metrics and maps** for resiliency and energy justice in grid planning, rates and decarbonization programs, and infrastructure build-out.*

