



GRAND RAPIDS 2030 DISTRICT

CANNABIS

WEBINAR SERIES

# SMART BUSINESS: MANAGE YOUR ELECTRIC USE IN ALIGNMENT WITH COMMUNITY GOALS

Gillian Giem | Grand Rapids 2030 District

Bill Wadsworth | Consumers Energy

Mike Troupos | Foresight





# INTRODUCTIONS

## Moderator/Speaker:

Gillian Giem, Program Manager,  
Grand Rapids 2030 District

## Speakers:

Bill Wadsworth, Economic Development Manager,  
Consumers Energy

Mike Troupos, Managing Director, Foresight

GRAND RAPIDS  
**2030**  
DISTRICT®



GRAND RAPIDS

2030

DISTRICT<sup>®</sup>

REACHING  
FOR ZERO  
CARBON  
BY 2050



# THE GRAND RAPIDS 2030 DISTRICT

The Grand Rapids 2030 District is public-private partnership that is committed to creating high performing buildings and smart mobility options that:

- Drawdown carbon in Grand Rapids' built environment
- Increase marketability and profitability for property owners
- Strengthen the greater community's vibrancy

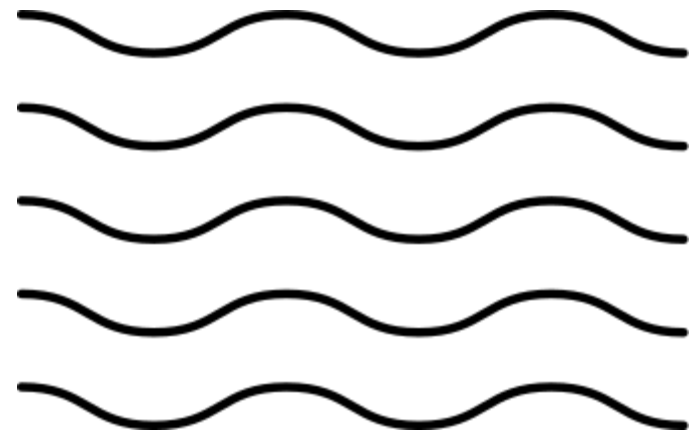


# ACHIEVING DISTRICT-WIDE GOALS

**2030 Districts commit to reducing:**



Building Energy Use



Water Consumption



Transportation GHG  
Emissions

**50% by 2030**



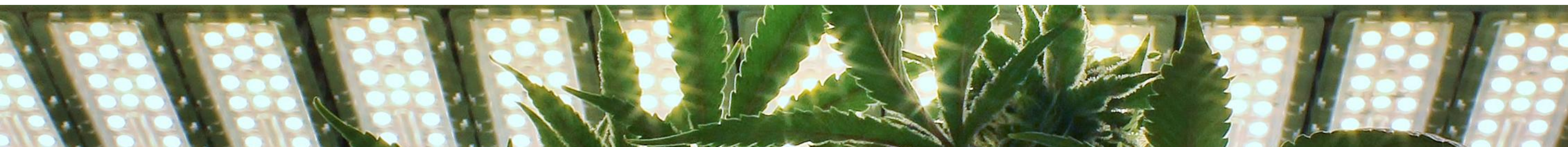
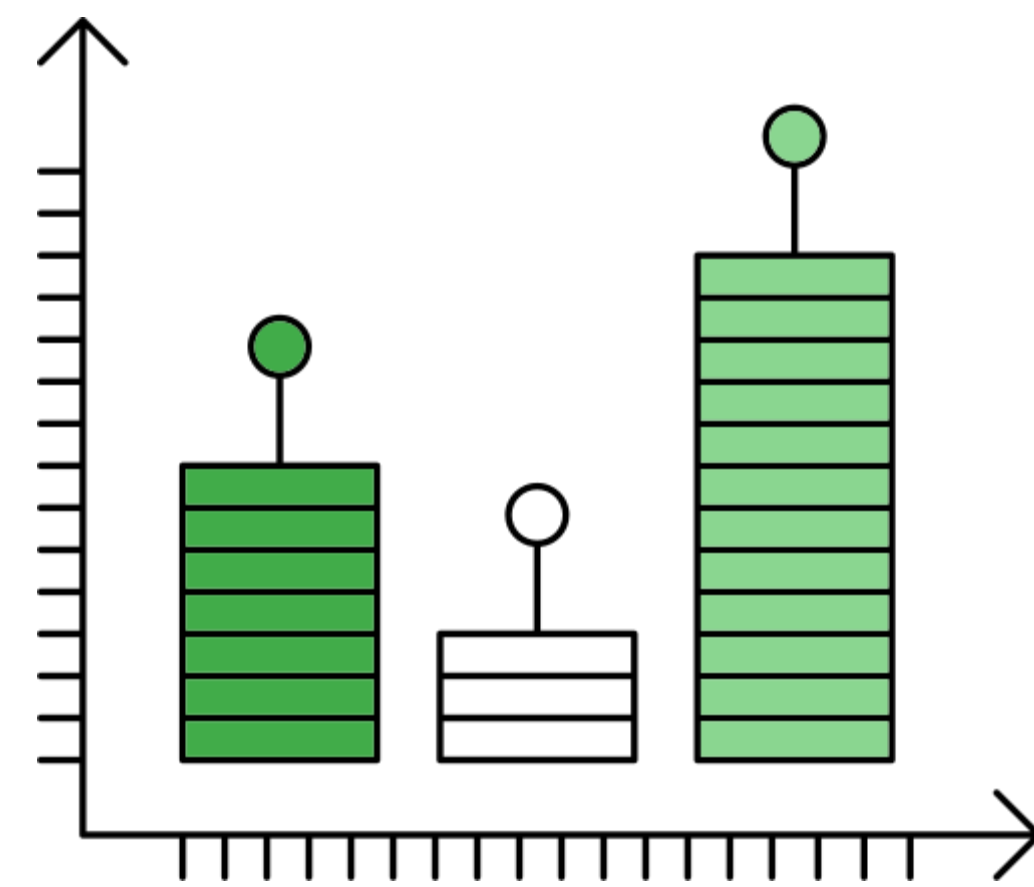


WE EMPOWER BUILDING OWNERS TO  
HARNESS THEIR CARBON FOOTPRINT IN A  
WAY WHICH MAKES THEIR BUSINESS  
PROSPER



# **BENCHMARKING =** **GREAT FOR YOUR BUSINESS MODEL**

- "You can't manage what you don't measure"
- Keeps a pulse on the systems for O&M
- Tracks the effects of projects down the road



# ENERGY STAR PORTFOLIO MANAGER



**We Can Help!**



GRAND RAPIDS  
**2030**  
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**THANK YOU!**

Gillian Giem  
Program Manager  
Grand Rapids 2030 District

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616-691-1243



# Consumers Energy & Cannabis Grow Facilities

Bill Wadsworth  
July 28, 2020

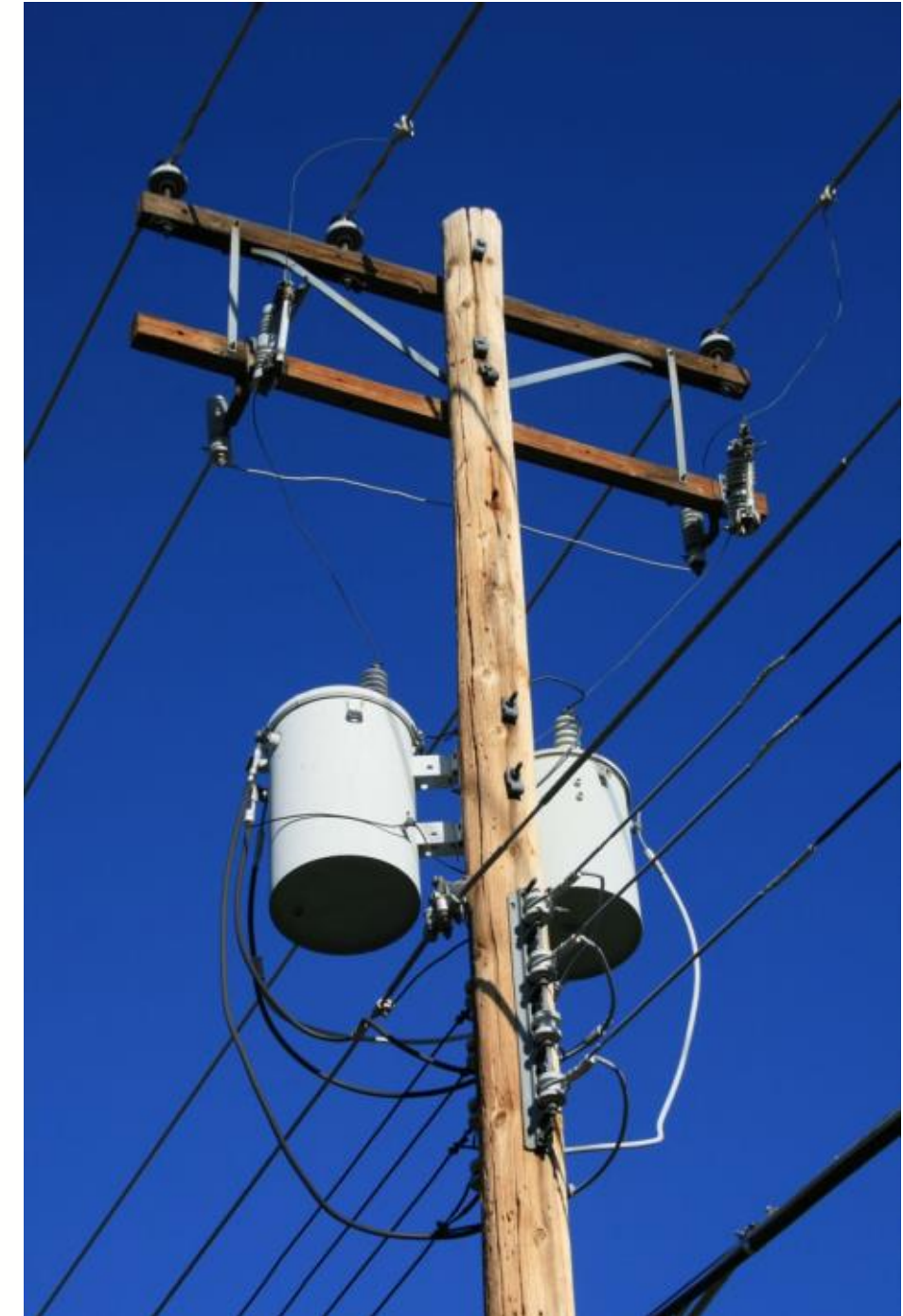
# An Energy Intensive Industry



- Reuse of former factory and big box buildings
- Aggressive customer service timelines
- Evolving energy needs
- Location, energy infrastructure and physics matters
- Don't assume that power is available
- Phased approach for future growth

# Serving New Grow Operations

- Electric infrastructure has limits and upgrades may be required
- Acquiring new high voltage service can take time
- Available new construction and energy efficiency incentives
- Execution of energy contracts may be required
- Status of state and local approvals
- Satisfactory credit review may be required
- Alternative energy solutions during buildout, such as generators



# Summary

- Contact us early
- Start a new notification by calling our Business Center. 1-800-805-0490
- Timely and accurate energy loads are needed.
- Utilize the Consumers Energy - Energy Efficiency Program
- Here to help

# *Optimizing Electricity for Growing Operations*



***foresight***  
MANAGEMENT

*July 28, 2020*



# Outline:



1. About Foresight Management
2. Electricity - Big Picture
3. Components of Electricity Charges
4. Types of Electric Rates – Consumers Energy
5. Savings Recommendations
6. Questions



Outline

Foresight  
Management

Electricity –  
Big Picture

Components of Electricity  
Charges

Types of Consumers  
Electricity Rates

Savings  
Recommendations

Questions



# Foresight Management

## *Our Mission:*

**Champion Energy Management  
Accelerate Sustainability  
Increase Profitability**

## *Who We Are:*

**Outsourced Energy & Sustainability Managers**

## *Who We Serve:*

**Commercial, Industrial, and Institutional Facility Operators**

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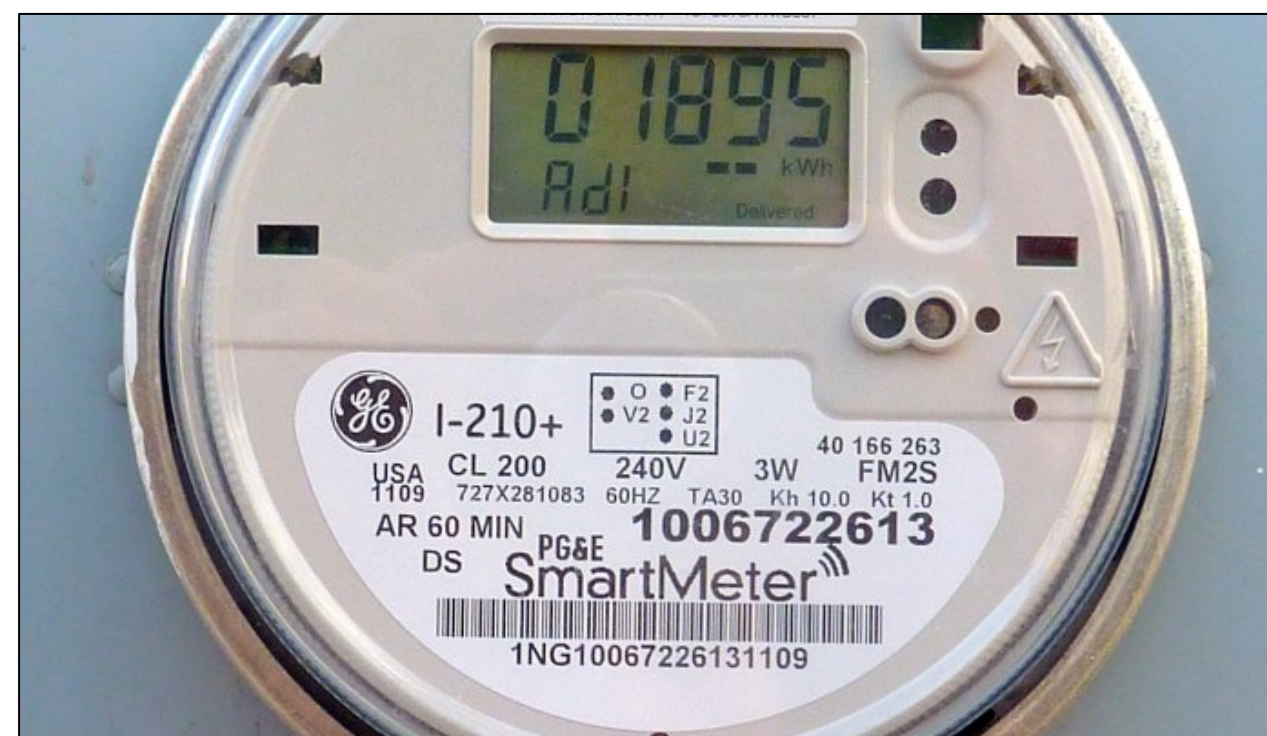
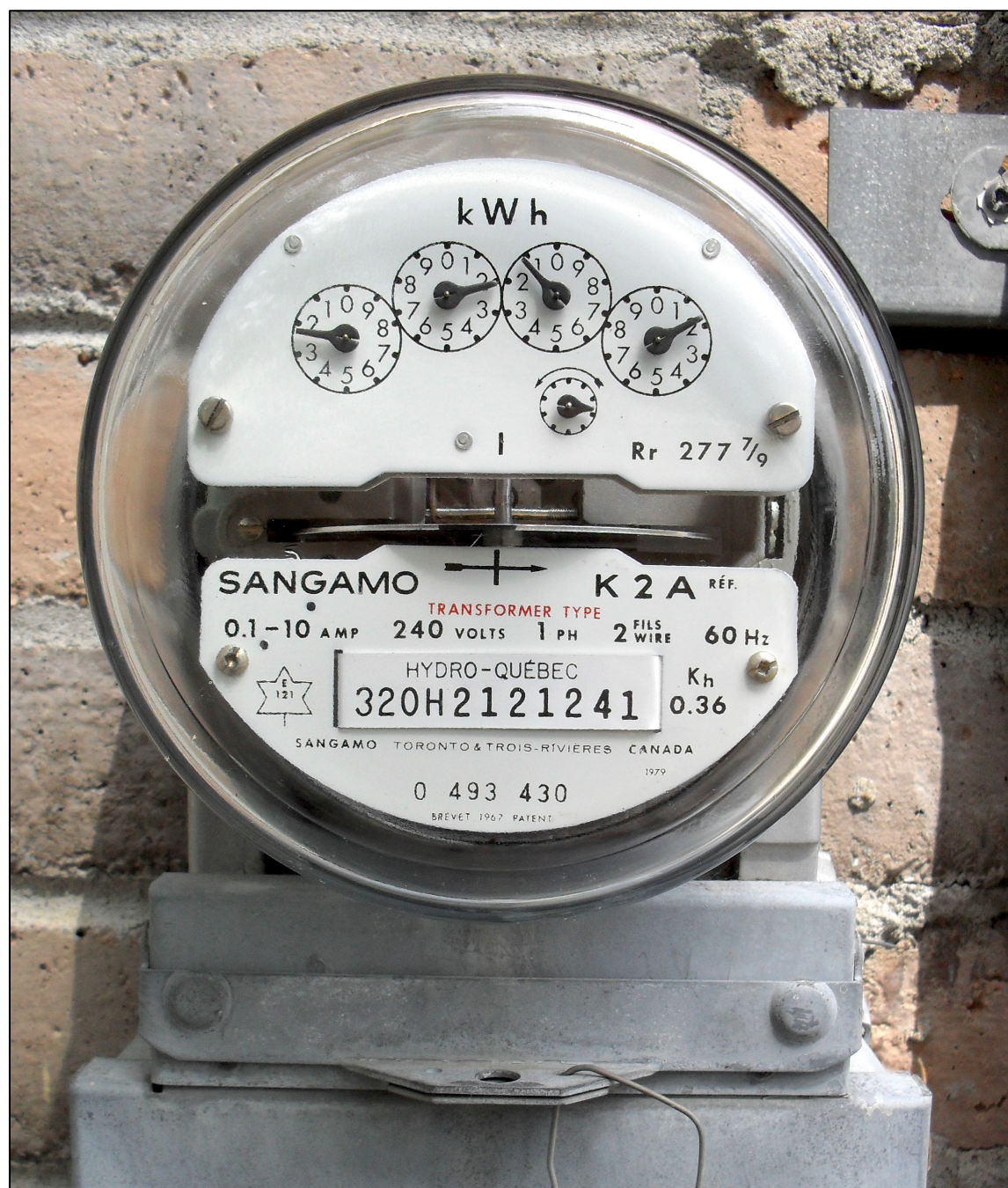
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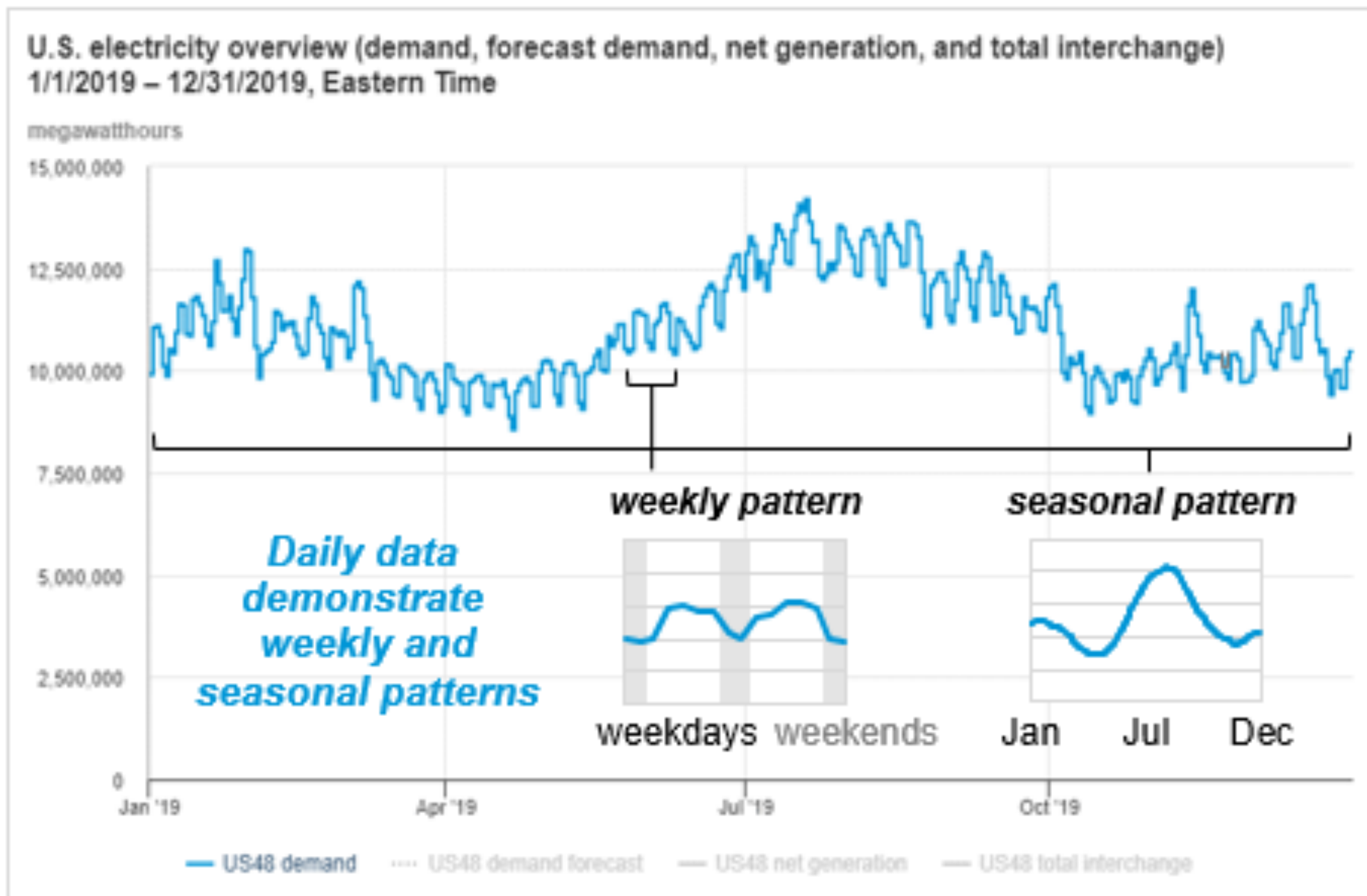


# Old Meters vs. New Meters



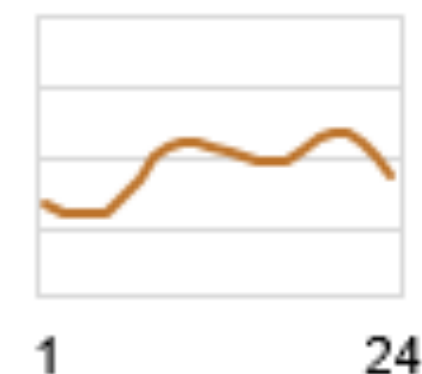


# National Electricity Data

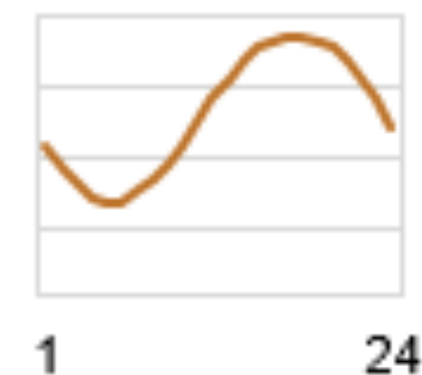


**Hourly data demonstrate daily patterns**

*winter*



*summer*



Outline

Foresight Management

Electricity – Big Picture

Components of Electricity Charges

Types of Consumers Electricity Rates

Savings Recommendations

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# Components of Electricity Charges

## 1. Consumption Charges (kWh)

- How much electricity you **consumed** at your facility.

## 2. Demand Charges (kW)

- The maximum power **draw** at your facility.
- Measured over a 15-minute interval in Consumers Energy territory.
- Billed on the peak for the month **and** even the year on some rates.

## 3. Fixed Charge

- Not based on consumption or demand.
- Do not vary month to month.
- Includes services like customer service, meter readings, low income assistance, etc.

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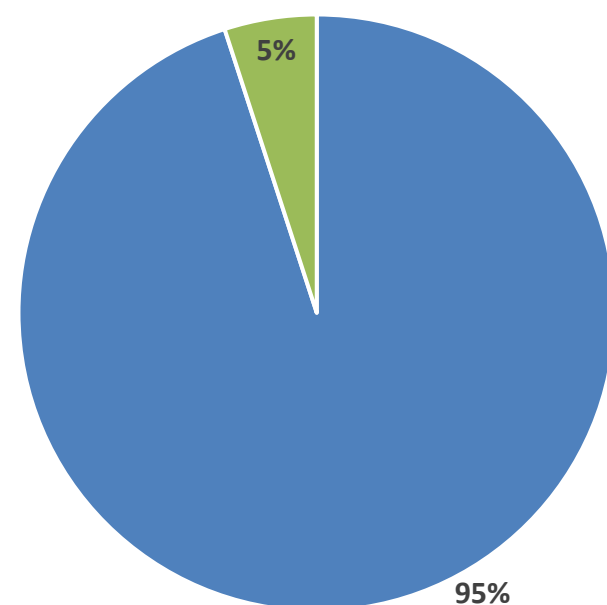
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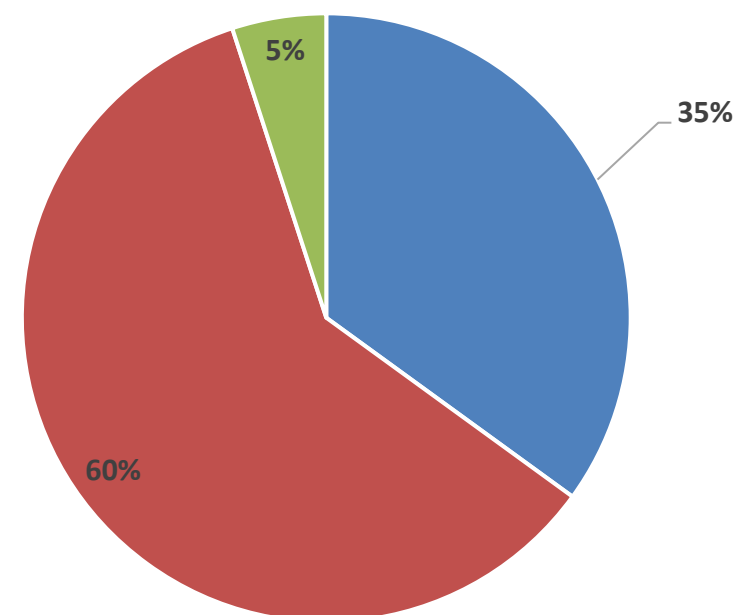


# Types of Electric Rates – Consumers Energy

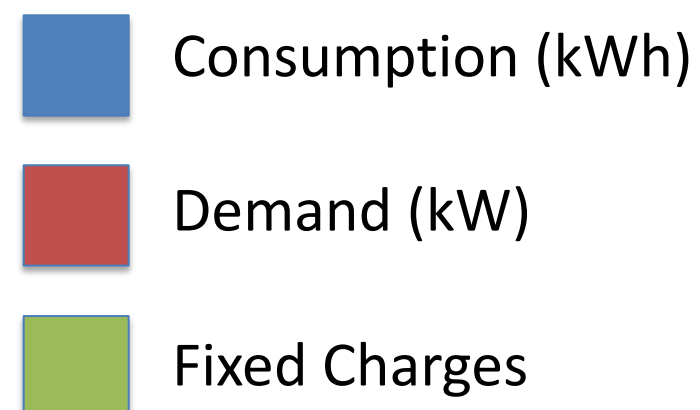
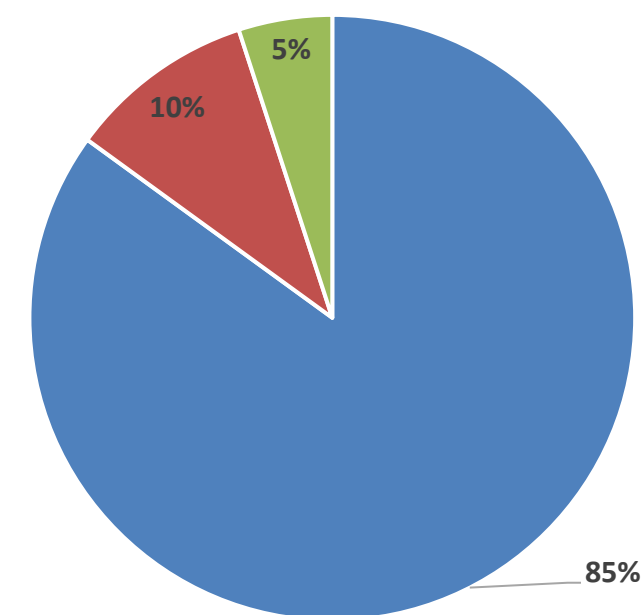
## “General Service”



## “General Demand”



## “Time of Use”





# Types of Electric Rates – Consumers Energy

## General Service

- Flat cost for electricity, pricing does change from summer to non-summer months.
- Average blended rate: \$0.14-0.20/kWh.
- Common rate for churches, schools, small users, etc.

## General Demand

- Low consumption (kWh) charges
- Monthly and Annual Max Demand Charges
- Average blended rate: \$0.07-0.16/kWh.
- Common for 24/7 operations
- **Best rate for consistent users**

## Time of Use

- Electricity cost varies widely depending on the time of day and season.
- Winter and Summer, On-Peak and Off-Peaks (7 different rates total)
- Average blended rate: \$0.09 - \$0.15/kWh
- Common for facilities that have lower consumption in the summer/afternoon (Colleges, movie theaters, etc).
- **Consumers indicates this is the most common rate for cannabis grow facilities to be on.**

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# How to save green and be more green

## Demand Rates

- Keep usage as consistent as possible!
  - **Scheduling** - If you have 12 hour grow cycles, don't run all for 12 hours. Instead, run half the operation at the opposite time as the other half
  - **Interval Data Analysis** – Determine when you are generally setting peak demands and change flexible schedules to be off at that time

## Time of Use Rates

- **SHIFT** - Move as much use to nights and weekends as possible!
  - If you have 12 hour grow cycles, run **ALL** from 11PM to 11AM
  - Avoid using electricity from 2PM to 6PM (June-Sept) at all costs as that is the most expensive time
  - Weekends are 100% off-peak. ***Can you shift any electricity usage to the weekends?***
  - **Interval Data Analysis** - Breakdown of when you use electricity

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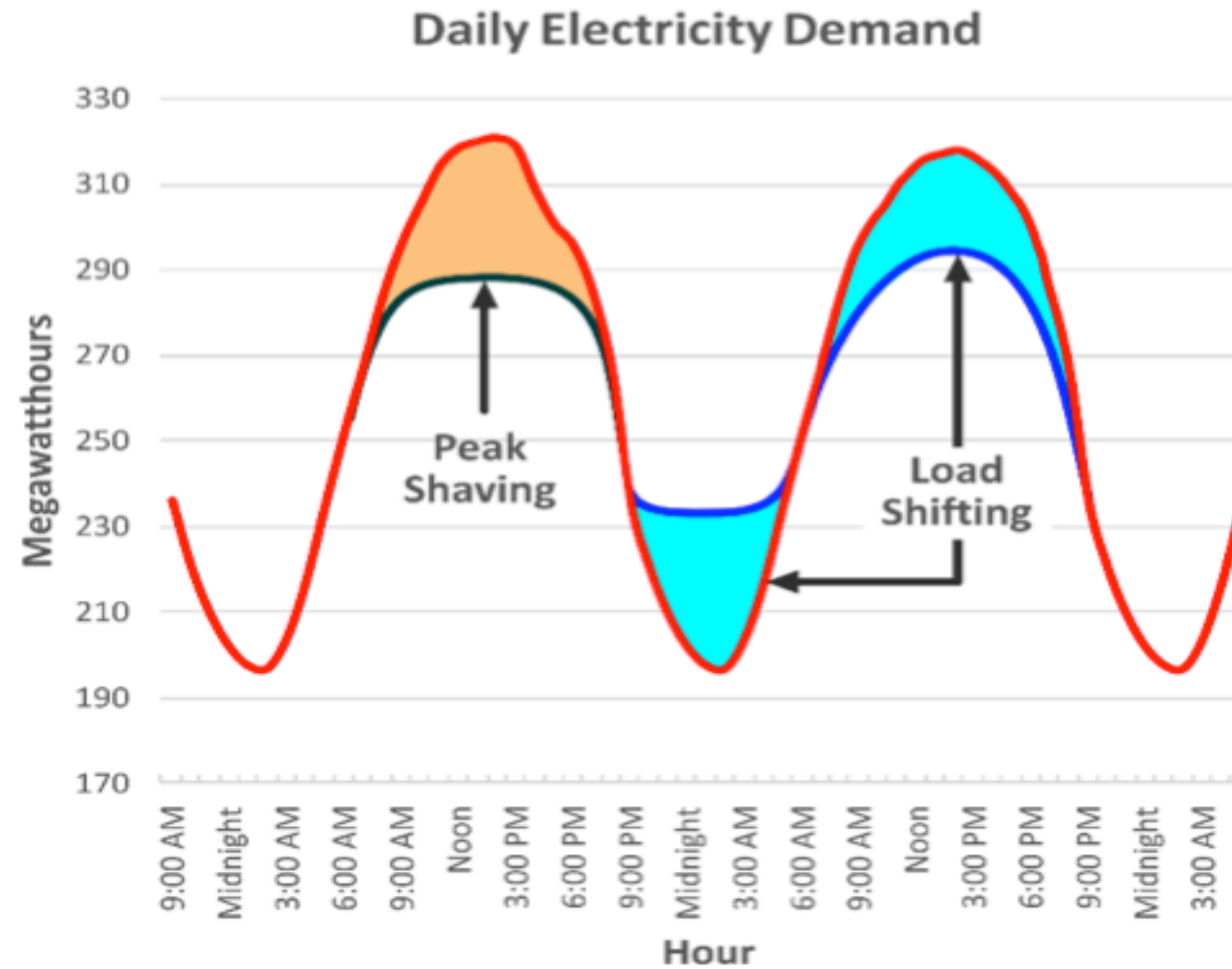
Types of Consumers  
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# Visualize Your Savings





# QUESTIONS?

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NEXT WEBINAR

A LOOK UNDER THE HOOD:  
WHAT ENERGY MODELING & AUDITING CAN DO  
FOR YOUR BUILDING OPERATIONS

Please fill out our 2 minute survey at the end of this  
webinar. Thank you!

Thank you to our Visionary Supporters!



MICHIGAN DEPARTMENT OF  
ENVIRONMENT, GREAT LAKES, AND ENERGY

