



STATE OF RHODE ISLAND
**ENERGY EFFICIENCY &
RESOURCE MANAGEMENT COUNCIL**

CONSULTANT TEAM

EERMC Monthly Data Snapshot Walkthrough

Presented By: EERMC C-Team

Date: January 18, 2024



Outline

Background

Data Snapshot Walkthrough

Additional Data Snapshot Content

Council Discussion



BACKGROUND





Background

The Consultant Team and RI Energy present detailed program results four times each year:

- First, Second, and Third-Quarter Program Results
- Year-End Program Results

Several Councilors have requested increased visibility into program performance data, which led the Consultant Team to develop a Monthly Program Data Snapshot

The Monthly Data Snapshot includes several visuals to display lifetime savings and spending achieved through a given month relative to planned goals



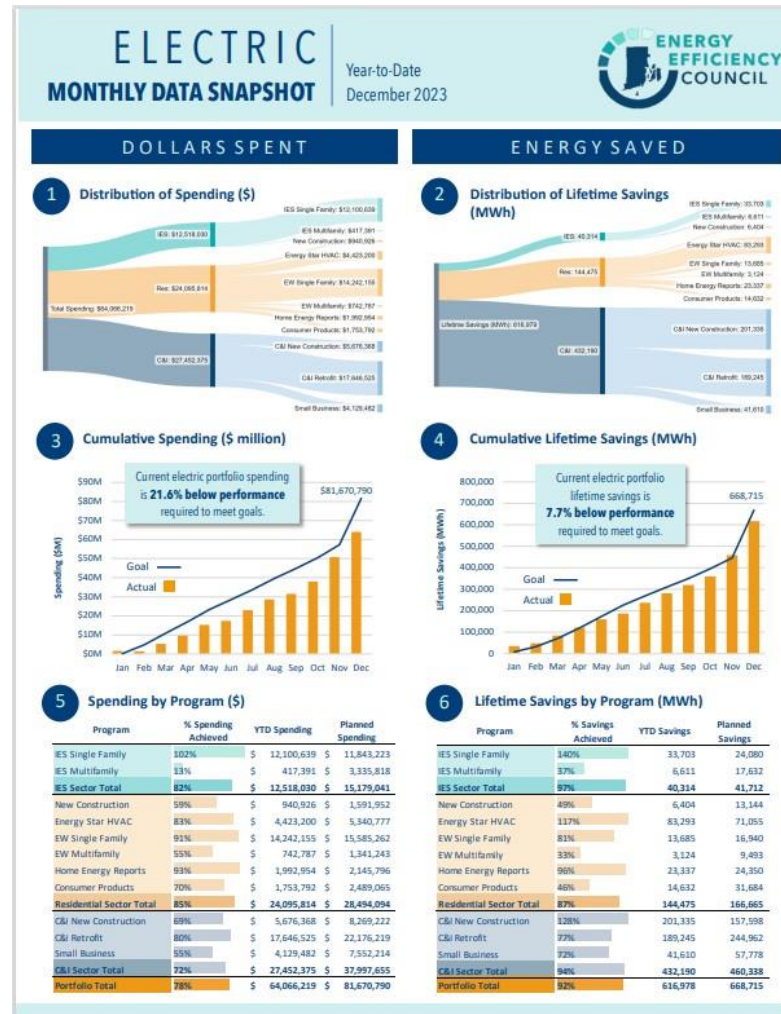
DATA SNAPSHOT WALKTHROUGH



Data Snapshot Overview

Figures 1 & 2 (Sankey Diagrams) illustrate the distribution of spending and lifetime savings for each sector and program.

Figures 5 & 6 (Program Performance Tables) display data bars next to each program, which indicate the percent of budget spent or planned savings achieved to date.



Figures 3 & 4 (Performance Forecasts) compare cumulative spending and savings to estimated monthly achievement required to meet planned goals.

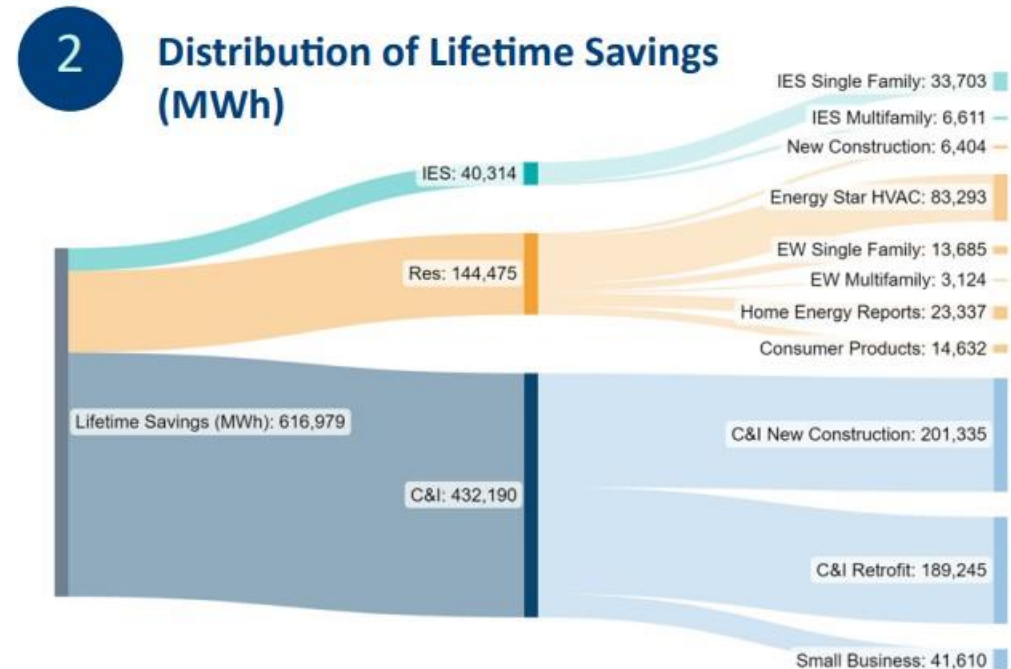
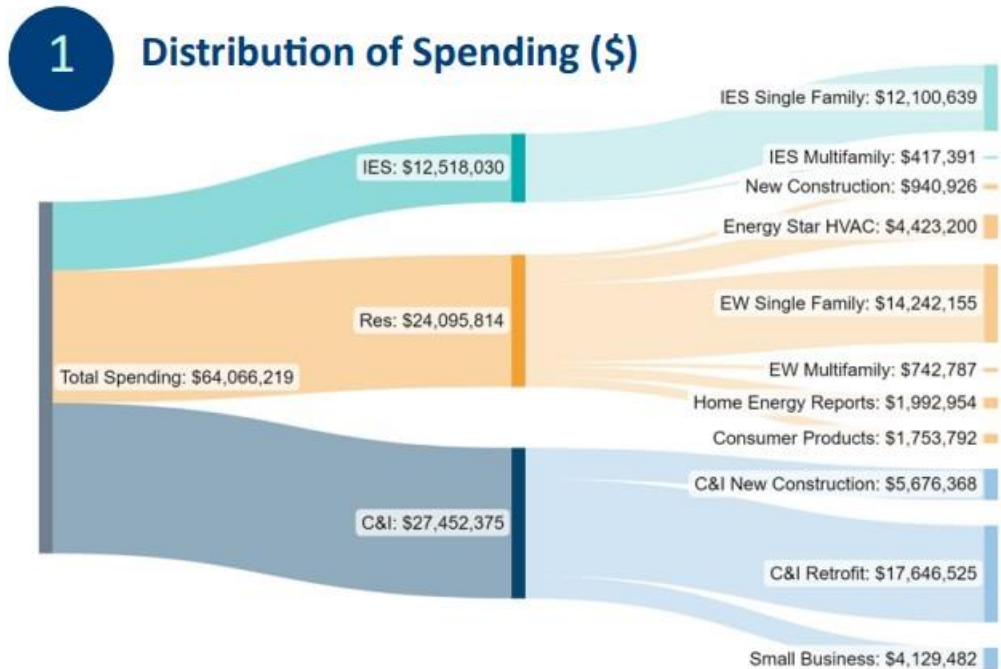


Figures 1 & 2 – Overview

Figures 1 & 2 are Sankey Diagrams which illustrate the distribution of spending and lifetime savings for each sector and program

DOLLARS SPENT

ENERGY SAVED

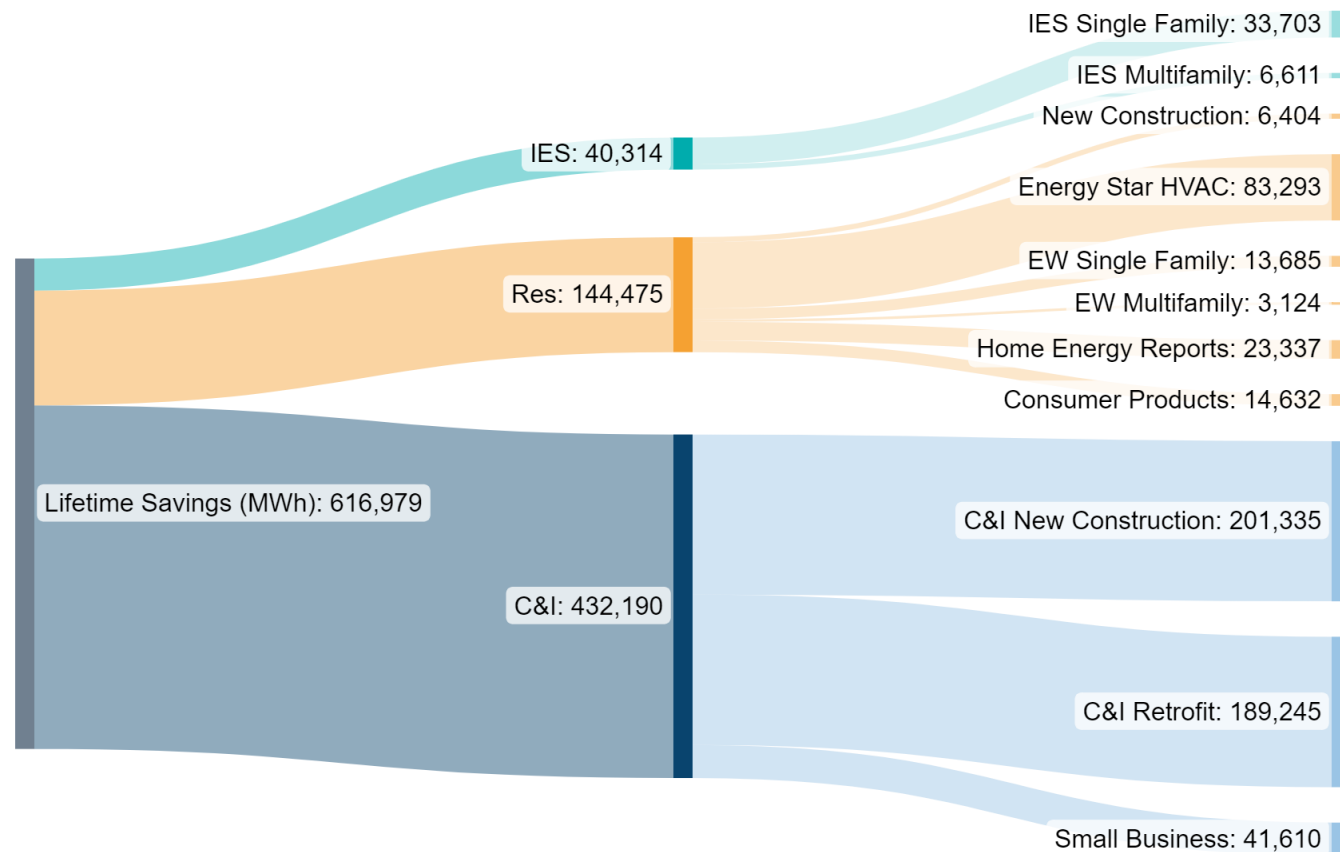




Figures 1 & 2 – Content Description

Distribution of Lifetime Savings

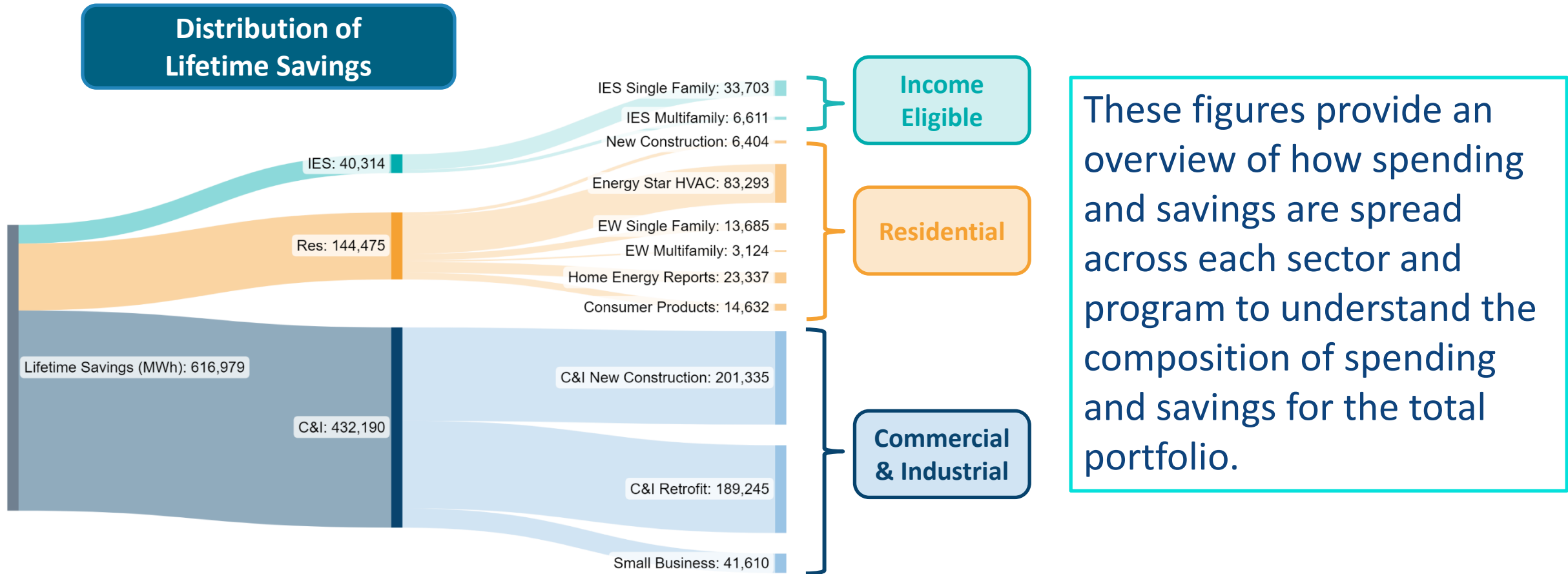
Each branch of the Sankey Diagram represents year-to-date (YTD) performance, or total achievement through the current month.



Year-to-Date (YTD): defines the period of time from the beginning of the current calendar year to the current date



Figures 1 & 2 – How to Interpret

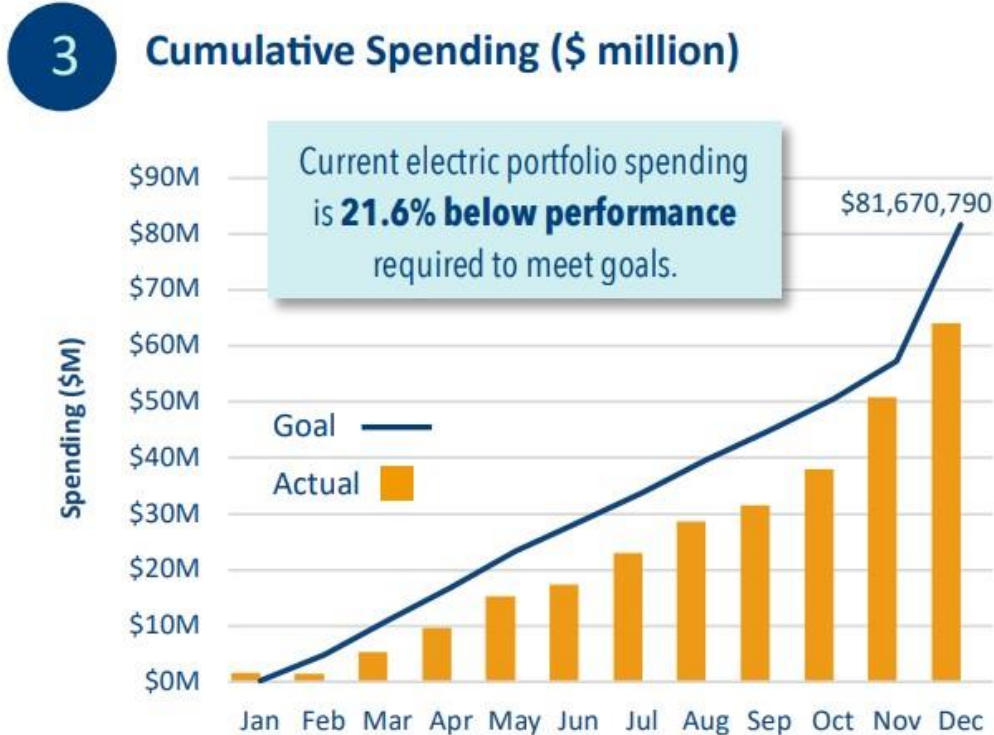


The darker shades represent sector-level branches and lighter shades represent program-level branches.



Figures 3 & 4 – Overview

Figures 3 & 4 (Performance Tracking) compare cumulative spending and savings to estimated monthly achievement required to meet planned goals.





Figures 3 & 4 – How to Interpret

Performance Tracking

The estimated monthly achievement required to meet planned goals is informed by a two-year rolling average of monthly program achievement data. This calculation normalizes historical data to assume goals are met.

3

Cumulative Spending (\$ million)



Note: The orange, vertical columns represent actual YTD achievement. Estimated monthly achievement required to meet planned goals are shown by the forecast line in a darker shade.



Figures 3 & 4 – How to Interpret

Performance Tracking

Any instance where the vertical columns for YTD achievement fall below the forecast line indicate that performance to date is below what would likely be required to meet goals. The opposite is true if YTD achievement exceeds the forecast line.

3 Cumulative Spending (\$ million)





Figures 5 & 6 – Overview

Figures 5 & 6 display data bars next to each program, which indicate the percent of budget spent or planned savings achieved to date.

5 Spending by Program (\$)

Program	% Spending Achieved	YTD Spending	Planned Spending
IES Single Family	102%	\$ 12,100,639	\$ 11,843,223
IES Multifamily	13%	\$ 417,391	\$ 3,335,818
IES Sector Total	82%	\$ 12,518,030	\$ 15,179,041
New Construction	59%	\$ 940,926	\$ 1,591,952
Energy Star HVAC	83%	\$ 4,423,200	\$ 5,340,777
EW Single Family	91%	\$ 14,242,155	\$ 15,585,262
EW Multifamily	55%	\$ 742,787	\$ 1,341,243
Home Energy Reports	93%	\$ 1,992,954	\$ 2,145,796
Consumer Products	70%	\$ 1,753,792	\$ 2,489,065
Residential Sector Total	85%	\$ 24,095,814	\$ 28,494,094
C&I New Construction	69%	\$ 5,676,368	\$ 8,269,222
C&I Retrofit	80%	\$ 17,646,525	\$ 22,176,219
Small Business	55%	\$ 4,129,482	\$ 7,552,214
C&I Sector Total	72%	\$ 27,452,375	\$ 37,997,655
Portfolio Total	78%	\$ 64,066,219	\$ 81,670,790

6 Lifetime Savings by Program (MWh)

Program	% Savings Achieved	YTD Savings	Planned Savings
IES Single Family	140%	33,703	24,080
IES Multifamily	37%	6,611	17,632
IES Sector Total	97%	40,314	41,712
New Construction	49%	6,404	13,144
Energy Star HVAC	117%	83,293	71,055
EW Single Family	81%	13,685	16,940
EW Multifamily	33%	3,124	9,493
Home Energy Reports	96%	23,337	24,350
Consumer Products	46%	14,632	31,684
Residential Sector Total	87%	144,475	166,665
C&I New Construction	128%	201,335	157,598
C&I Retrofit	77%	189,245	244,962
Small Business	72%	41,610	57,778
C&I Sector Total	94%	432,190	460,338
Portfolio Total	92%	616,978	668,715



Figures 5 & 6 – Content Description

Program Performance

The data bars directly correspond to the percent achievement, meaning the bars will increase in size depending on year-to-date achievement.

5 Spending by Program (\$)

Program	% Spending Achieved	YTD Spending	Planned Spending
IES Single Family	102%	\$ 12,100,639	\$ 11,843,223
IES Multifamily	13%	\$ 417,391	\$ 3,335,818
IES Sector Total	82%	\$ 12,518,030	\$ 15,179,041
New Construction	59%	\$ 940,926	\$ 1,591,952
Energy Star HVAC	83%	\$ 4,423,200	\$ 5,340,777
EW Single Family	91%	\$ 14,242,155	\$ 15,585,262
EW Multifamily	55%	\$ 742,787	\$ 1,341,243
Home Energy Reports	93%	\$ 1,992,954	\$ 2,145,796
Consumer Products	70%	\$ 1,753,792	\$ 2,489,065
Residential Sector Total	85%	\$ 24,095,814	\$ 28,494,094
C&I New Construction	69%	\$ 5,676,368	\$ 8,269,222
C&I Retrofit	80%	\$ 17,646,525	\$ 22,176,219
Small Business	55%	\$ 4,129,482	\$ 7,552,214
C&I Sector Total	72%	\$ 27,452,375	\$ 37,997,655
Portfolio Total	78%	\$ 64,066,219	\$ 81,670,790



Figures 5 & 6 – How to Interpret

Program Performance

The columns next to the data bars show numerical values for YTD program spending and savings. Each program and sector is sorted by color for clarity.

5 Spending by Program (\$)

Program	% Spending Achieved	YTD Spending	Planned Spending
IES Single Family	102%	\$ 12,100,639	\$ 11,843,223
IES Multifamily	13%	\$ 417,391	\$ 3,335,818
IES Sector Total	82%	\$ 12,518,030	\$ 15,179,041
New Construction	59%	\$ 940,926	\$ 1,591,952
Energy Star HVAC	83%	\$ 4,423,200	\$ 5,340,777
EW Single Family	91%	\$ 14,242,155	\$ 15,585,262
EW Multifamily	55%	\$ 742,787	\$ 1,341,243
Home Energy Reports	93%	\$ 1,992,954	\$ 2,145,796
Consumer Products	70%	\$ 1,753,792	\$ 2,489,065
Residential Sector Total	85%	\$ 24,095,814	\$ 28,494,094
C&I New Construction	69%	\$ 5,676,368	\$ 8,269,222
C&I Retrofit	80%	\$ 17,646,525	\$ 22,176,219
Small Business	55%	\$ 4,129,482	\$ 7,552,214
C&I Sector Total	72%	\$ 27,452,375	\$ 37,997,655
Portfolio Total	78%	\$ 64,066,219	\$ 81,670,790



ADDITIONAL DATA SNAPSHOT CONTENT



Instructional Guide

The Data Snapshots include an instructional guide describing each set of figures and the underlying program data.

ELECTRIC MONTHLY DATA SNAPSHOT

Instructional Guide

1 Distribution of Spending (\$)

Figures 1 & 2 (Sankey Diagrams)
 Figures 1 and 2 illustrate the distribution of spending and lifetime savings for each sector and program using Sankey Diagrams. The darker shades represent sector-level branches and lighter shades represent program-level branches. Each branch of the Sankey Diagram displays year-to-date (YTD) performance, or total achievement through the current month. These figures provide an overview of how spending and savings are spread across each sector and program in order to understand the composition of spending and savings for the total portfolio.

3 Cumulative Spending (\$ million)

Figures 3 & 4 (Performance Forecasts)
 Figures 3 and 4 compare YTD spending and savings (illustrated by vertical columns) to estimated monthly achievement required to meet planned goals (shown by a forecast line in a darker shade). The estimated monthly achievement required to meet planned goals is informed by a two-year rolling average of monthly program achievement data. Any instance where the vertical columns for YTD achievement fall below the forecast line indicate that performance to date is below what would likely be required to meet goals. The opposite is true if YTD achievement exceeds the forecast line.

5 Spending by Program (\$)

Program	% Spending Achieved	YTD Spending	Planned Spending
IES Single Family	102%	\$ 12,100,630	\$ 11,843,223
IES Multifamily	13%	\$ 417,391	\$ 3,335,818
IES Sector Total	82%	\$ 12,518,030	\$ 15,179,041
New Construction	59%	\$ 940,926	\$ 1,591,952
Energy Star HVAC	83%	\$ 4,423,200	\$ 5,340,777
EW Single Family	91%	\$ 14,242,155	\$ 15,585,262
EW Multifamily	55%	\$ 742,787	\$ 1,341,243
Home Energy Reports	93%	\$ 1,992,954	\$ 2,145,796
Consumer Products	70%	\$ 1,753,792	\$ 2,489,065
Residential Sector Total	85%	\$ 24,095,814	\$ 28,494,094
CBI New Construction	69%	\$ 5,676,368	\$ 8,268,222
CBI Retrofit	80%	\$ 17,646,525	\$ 22,176,219
Small Business	55%	\$ 4,129,482	\$ 7,552,214
CBI Sector Total	72%	\$ 27,452,375	\$ 37,997,655
Portfolio Total	78%	\$ 64,068,219	\$ 81,670,790

Figures 5 & 6 (Program Performance)
 Figures 5 and 6 display data bars next to each program, which indicate the percent of budget spent or planned savings achieved to date. The data bars directly correspond to the percent achievement, meaning the bars will increase in size depending on achievement to date. The columns next to the data bars show numerical values for YTD program spending and savings. Each program and sector is sorted by color for clarity.

Note: Values in Instructional Guide are placeholders.



Program Descriptions & Definitions

The Data Snapshots also include a third page with descriptions of each program and definitions of relevant terms.

ELECTRIC

MONTHLY DATA SNAPSHOT

Program Descriptions
& Definitions

INCOME ELIGIBLE SERVICES (IES) PROGRAM DESCRIPTIONS

Income-Eligible Single-Family: The IES Single Family program offers home energy assessments, weatherization services, appliance, and heating system replacements with no customer cost to qualified single-family customers.

Income-Eligible Multifamily: The IES Multifamily program offers comprehensive energy services (energy assessments, incentives for heating and domestic hot water systems, air source heat pumps, cooling equipment, water-saving installations, and smart thermostats) for eligible multifamily customers.

RESIDENTIAL PROGRAM DESCRIPTIONS

Residential New Construction: This program helps residential new construction and major renovation projects meet high energy performance standards and provides education and training support to builders, designers, tradespeople, and code officials.

Energy Star Heating, Ventilation, and Air Conditioning (HVAC): This program promotes the installation of high efficiency central air conditioners and eligible heat pumps for electric customers and new energy-efficient natural gas related equipment including boilers, furnaces, windows, water heating equipment, thermostats, and water-saving devices.

EnergyWise Single-Family: The EnergyWise Single-Family program offers single-family customers (homes with 1-4 dwelling units) in-home energy assessments, weatherization services, and information regarding their energy usage and energy-saving opportunities. The program is designed as a direct-to-customer offering that educates residential customers on how they can make their home more energy efficient. Once the assessment and energy saving installations are completed, participants receive energy efficiency recommendations and technical assistance, as well as financial incentives to upgrade to high efficiency HVAC equipment, water heating systems, insulation, and smart thermostats.

EnergyWise Multifamily: This program offers comprehensive energy services for market rate multifamily customers (buildings with 5+ dwelling units), including energy assessments, incentives for heating and domestic hot water systems, cooling equipment, and weatherization.

Home Energy Reports (HER): HER is a behavioral-based offering designed to make customers aware of their energy consumption through personalized print and email reports and a seamlessly integrated website. Each of the communication channels displays a customer's energy consumption patterns, sets an energy reduction goal for each customer, and contains a normative comparison to similarly sized and heated homes.

Residential Consumer Products: This program promotes the purchase and installation of energy-efficient products and appliances by offering discounts through an online marketplace and at retail stores.

OTHER DEFINITIONS

Watt-hour (Wh) – Unit of measurement for electric energy; used to denote electric-energy consumption or savings in kilowatt-hours (kWh), megawatt-hours (MWh), gigawatt-hours (GWh), etc.

British Thermal Unit (Btu) – Unit of measurement for thermal energy and the amount of heat needed to raise one pound of water at maximum density through one degree Fahrenheit; typically used to denote gas and delivered-fuels consumption or savings in million-British Thermal Units (MMBtu).

Year-to-Date (YTD) – The time period from the beginning of the current calendar year to the current date. YTD data in this Data Snapshot represents spending and savings data through the end of the month listed in the header of Page 1.

Program – A set of strategies and offerings designed to reduce energy demand by encouraging the adoption of energy-efficient equipment and behaviors within a specific customer segment.

Sector – A grouping of customer segments with shared characteristics; typically sorted into Residential (Residential and Income-Eligible) and Non-Residential (Commercial & Industrial and Small Business) categories.

Portfolio – The collection of all sectors and programs that target specific fuels (electric or gas).



COUNCIL DISCUSSION



Council Member Discussion

- Is the Monthly Data Snapshot well-designed?
- Are there additional data points that would be helpful to include?
- Are there qualitative takeaways to add to each Snapshot?

