

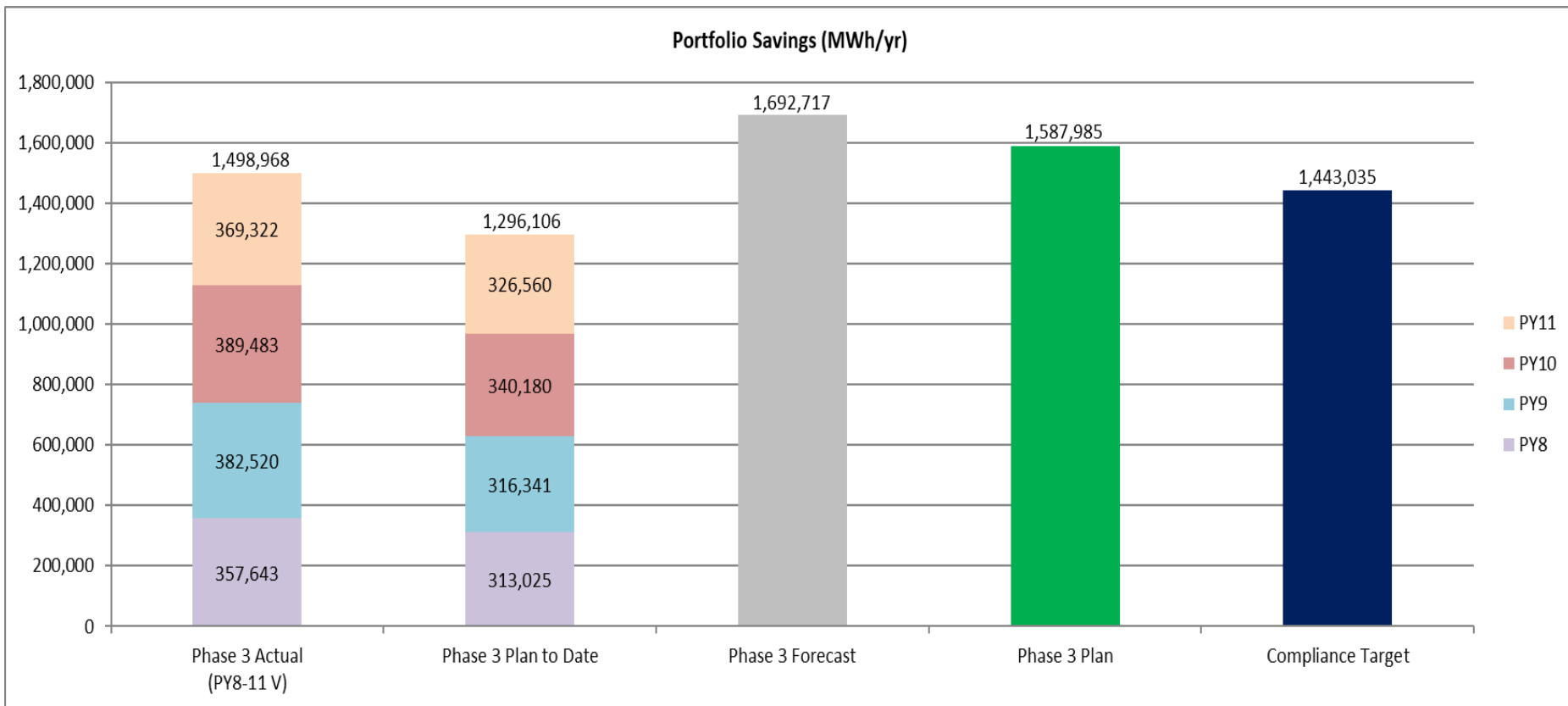


PPL Energy Efficiency Update PPL Stakeholder Meeting March 11, 2021

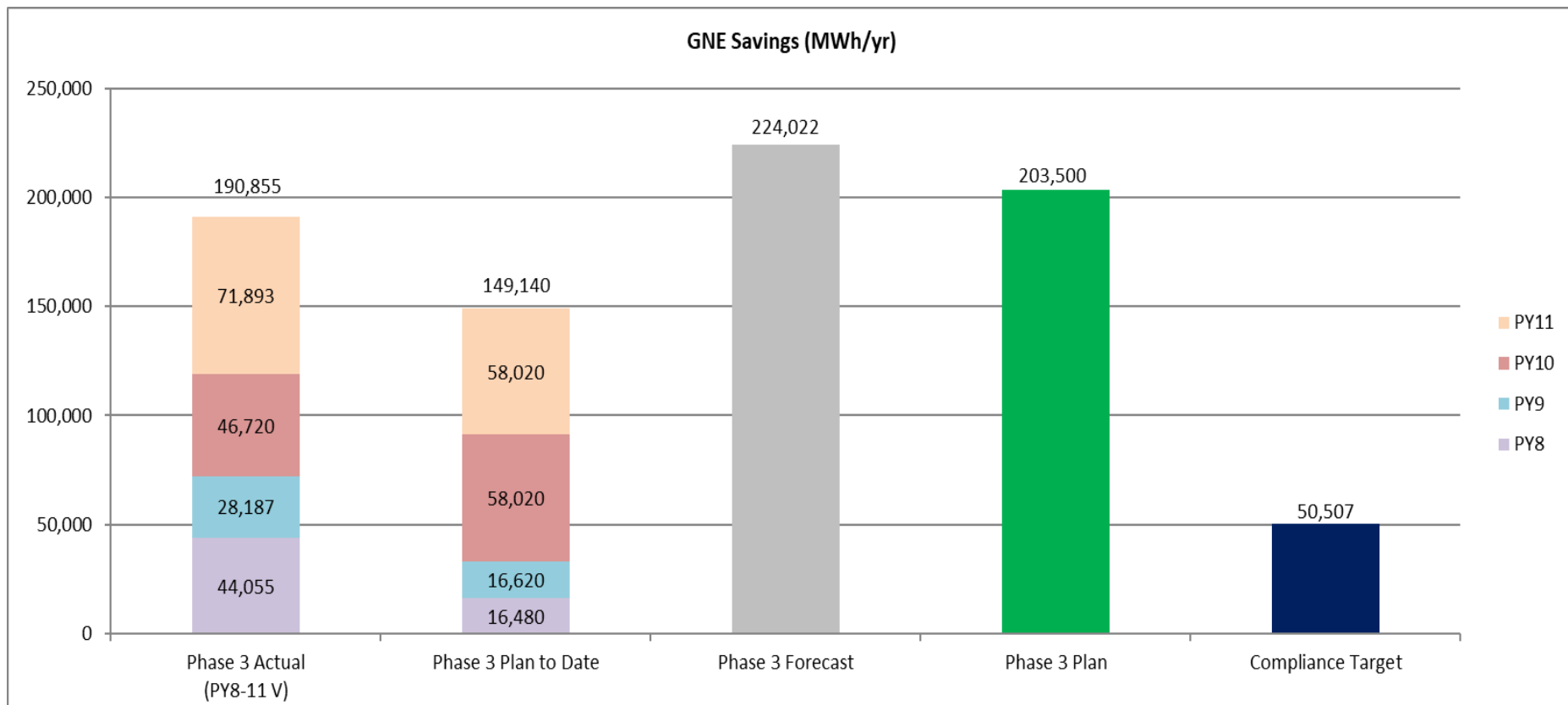
Agenda

- **Overview:** Dirk Chiles
- **Programs Update:** Chris Schoemaker
- **Question and Comment Period:** All
- **Closing:** Dirk Chiles

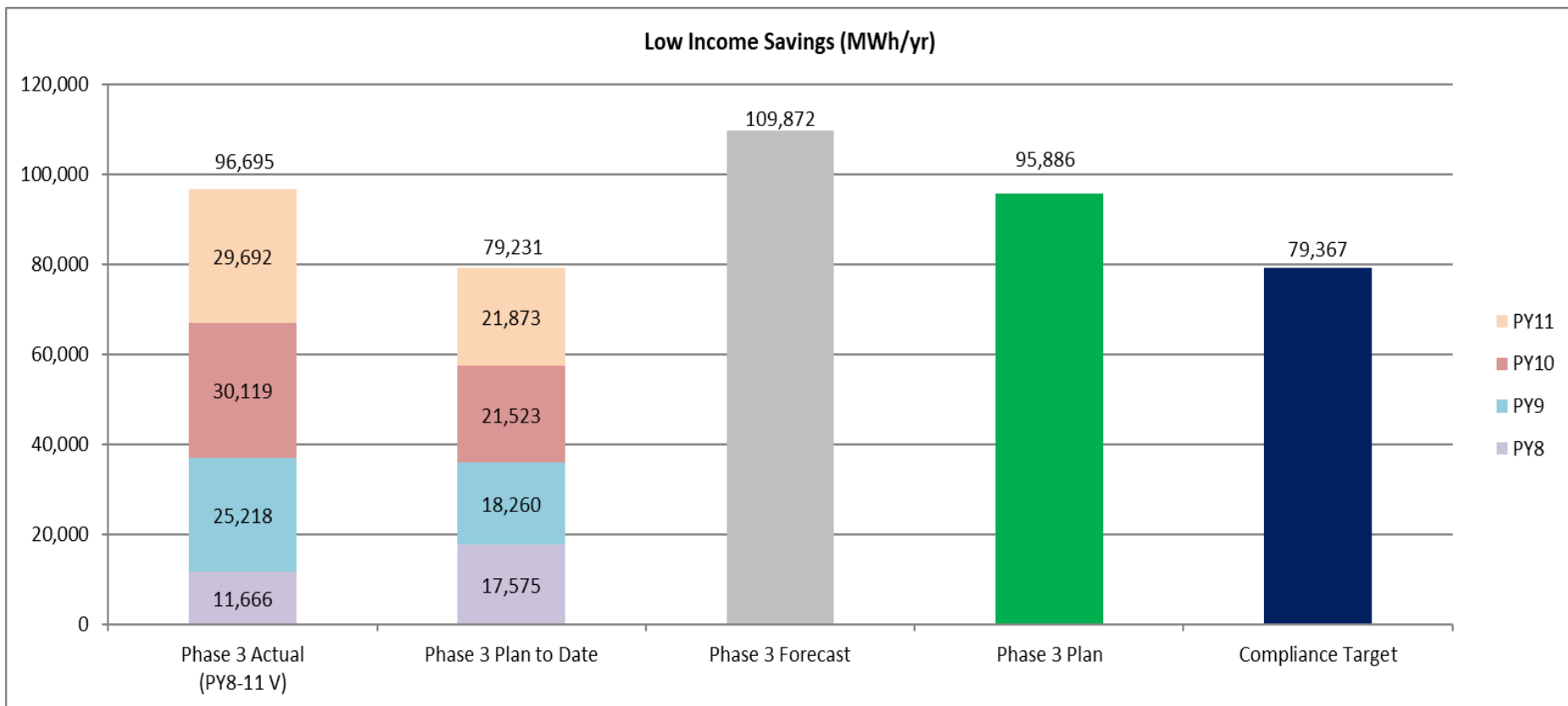
Overview: Portfolio Savings



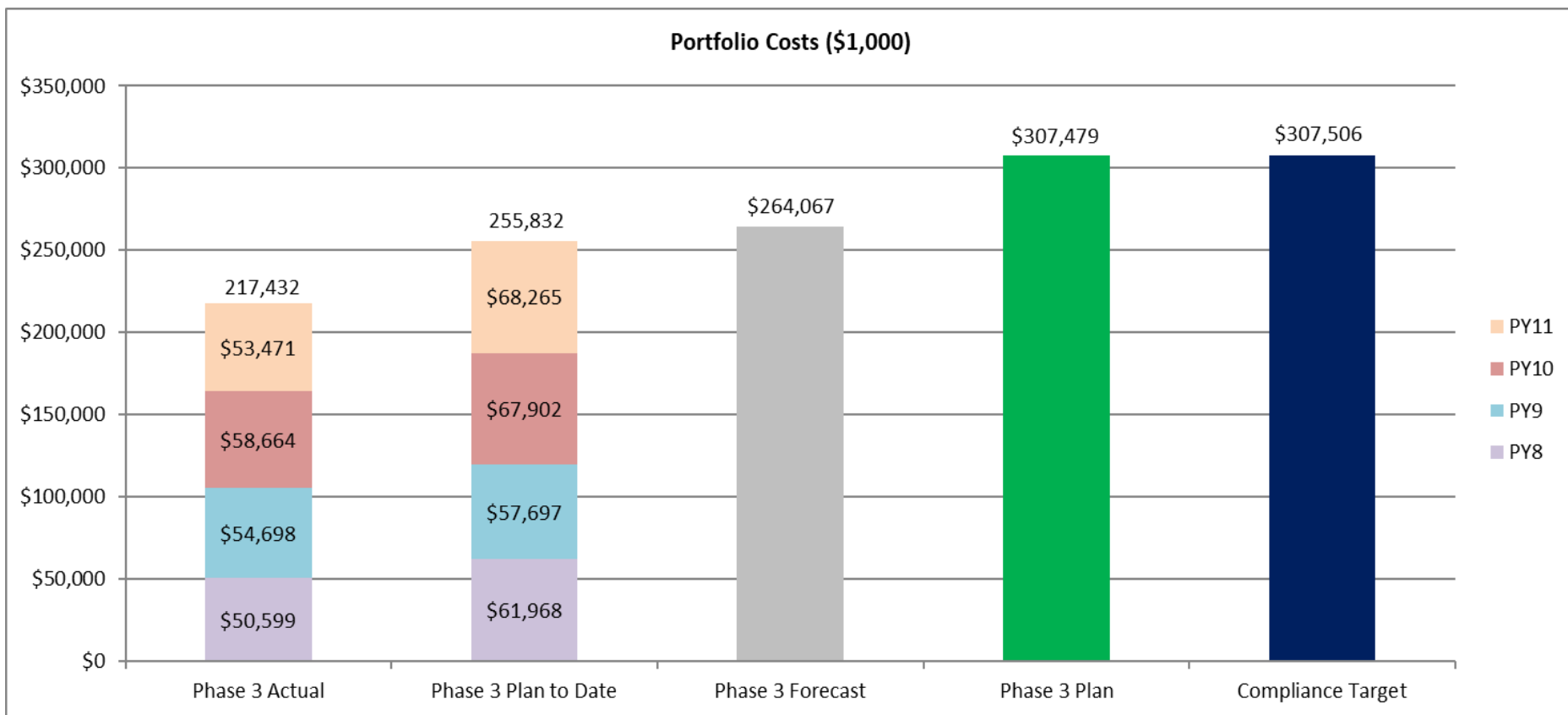
Overview: GNE Savings



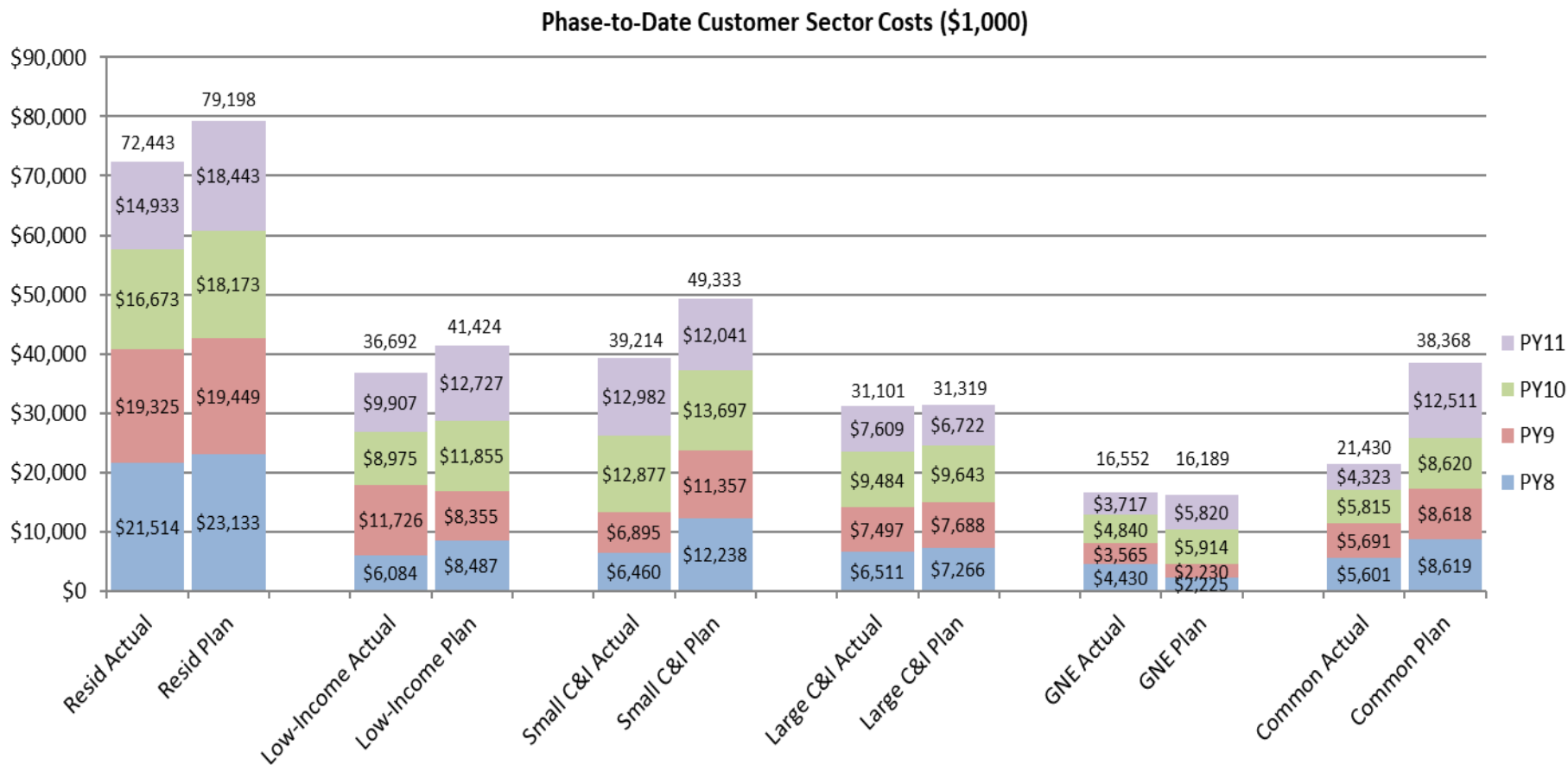
Overview: Low Income Savings



Overview: Portfolio Costs

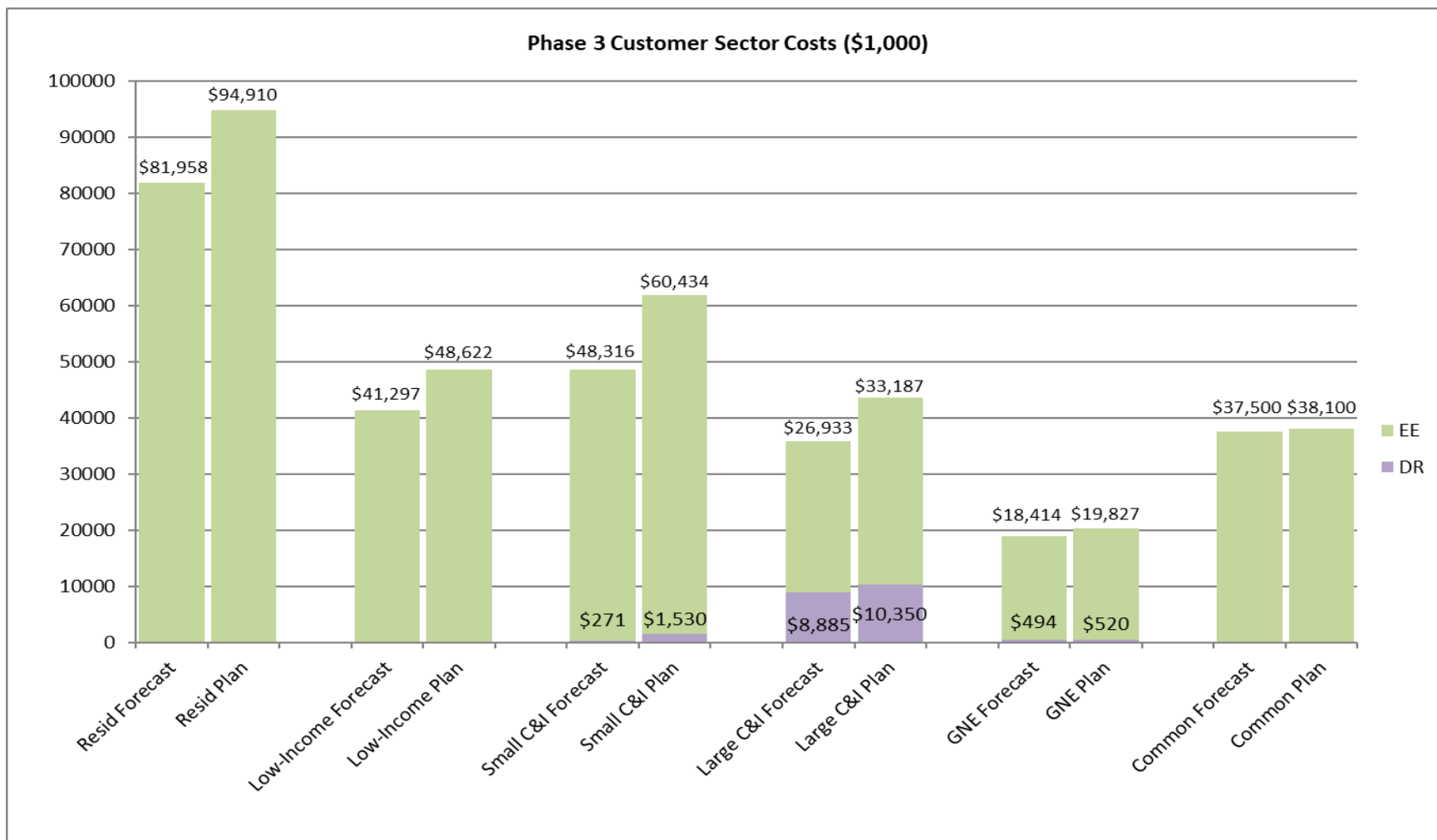


Overview: Phase To Date Costs

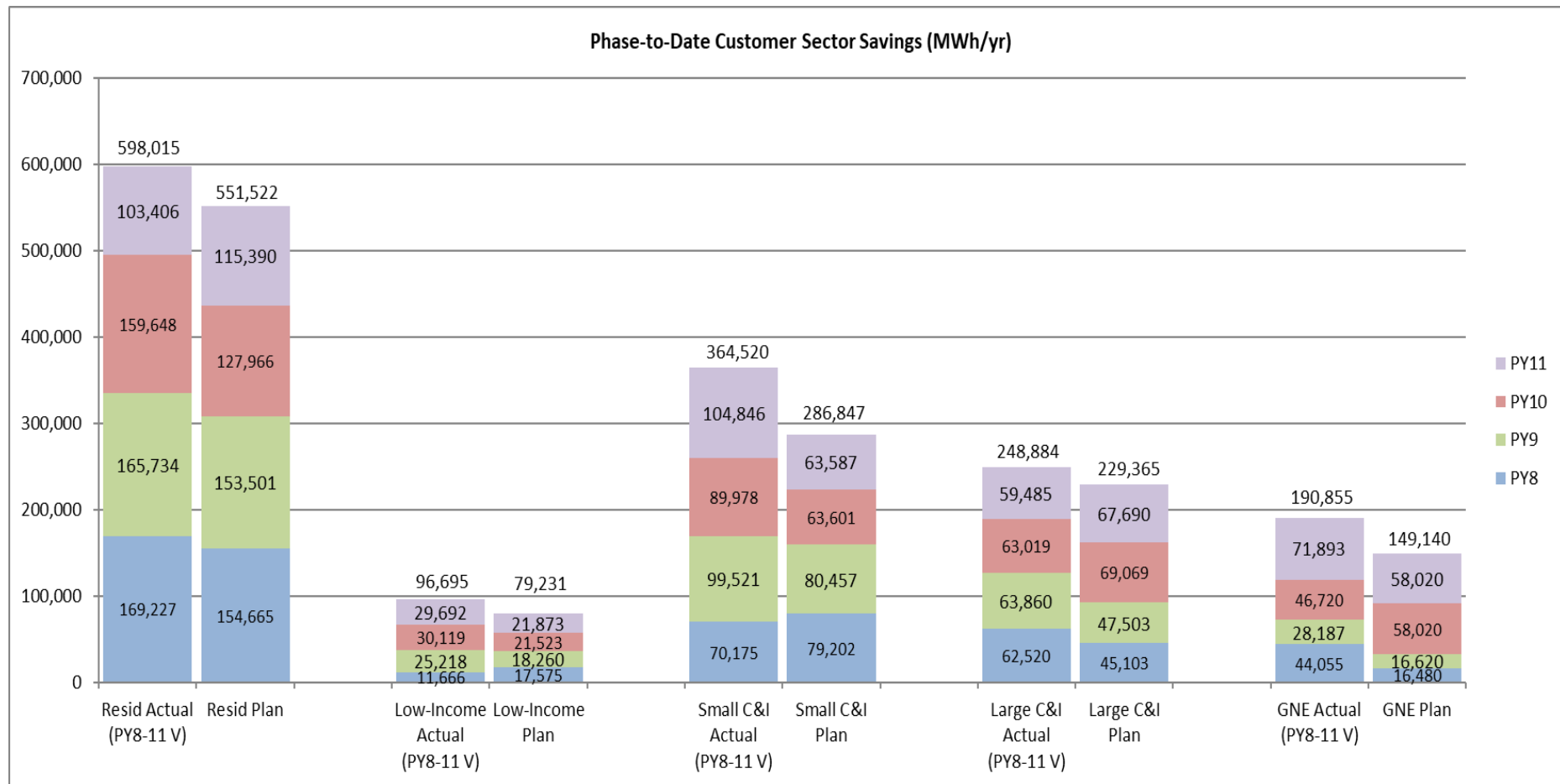


Overview:

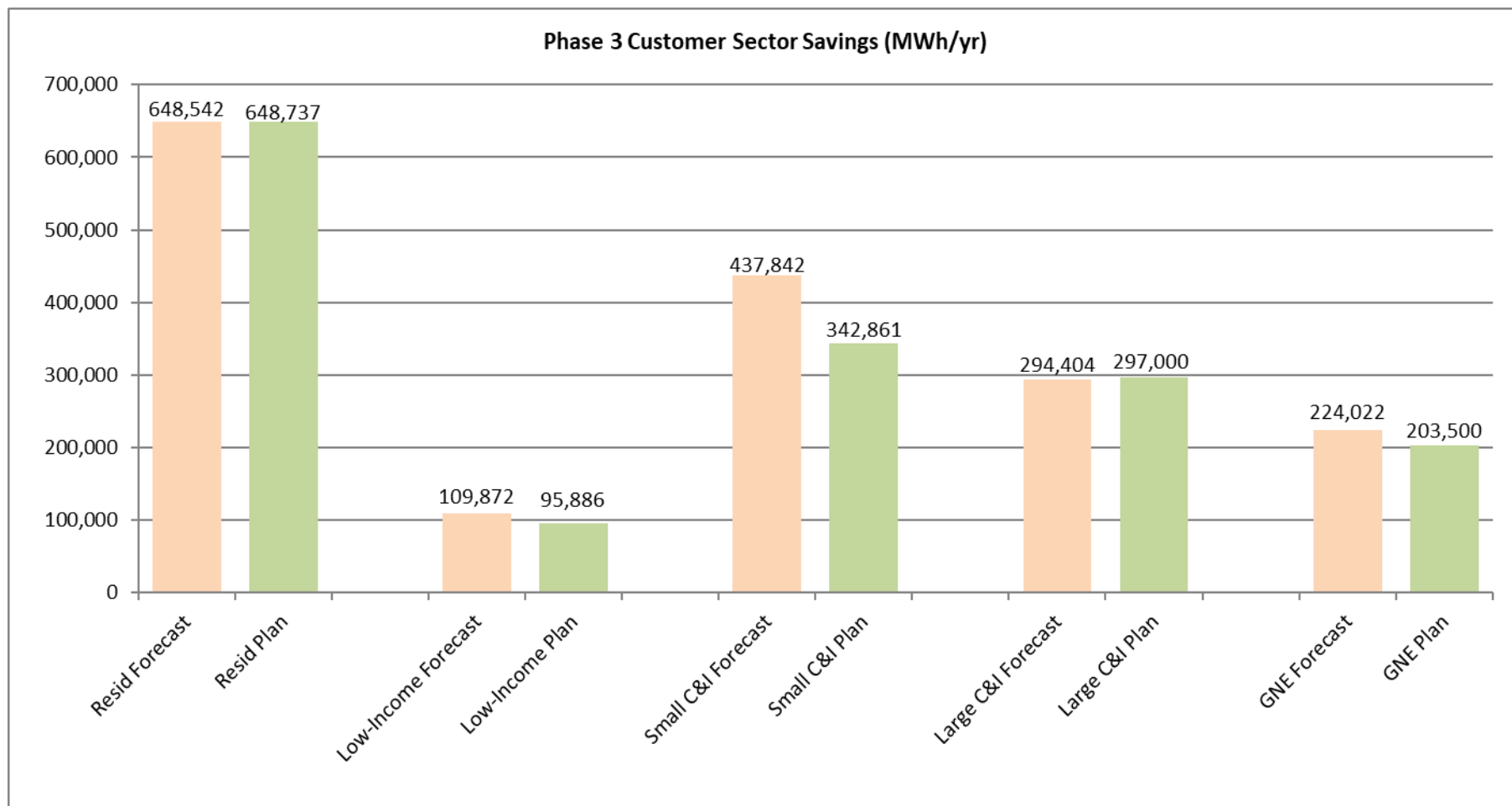
Phase 3 Sector Costs



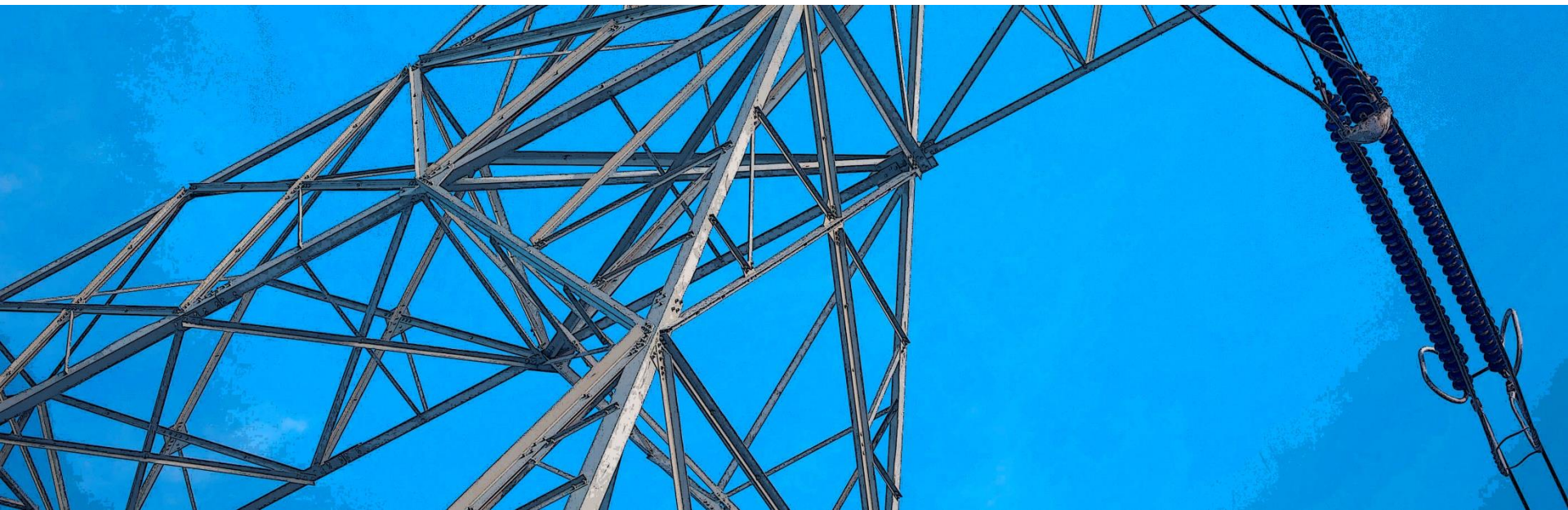
Overview: Phase to Date Sector Savings



Overview: Phase 3 Sector Savings



Residential Programs



Residential Program: EE Lighting



PY11	PTD (Verified)
1.2M LEDs	10.3M LEDs
48,339 MWh/yr.	426,752 MWh/yr.

Residential Programs: New Homes

PY11

- 1,381 homes
- 4,000 MWh in savings
- \$1.2 million in incentives

Key Successes

- 3,500 homes PTD
- 3,000 kWh/yr. per home
- Up to \$2,500 incentives per home

Residential Program: New Homes



The U.S. Environmental Protection Agency recognizes

PPL Electric Utilities

for its outstanding commitment to energy-efficient new homes
and for contributing

175

ENERGY STAR certified homes in 2019

Which is equivalent to reducing CO₂ emissions by 256 metric tons, or:



Growing 4,235 tree seedlings for 10 years



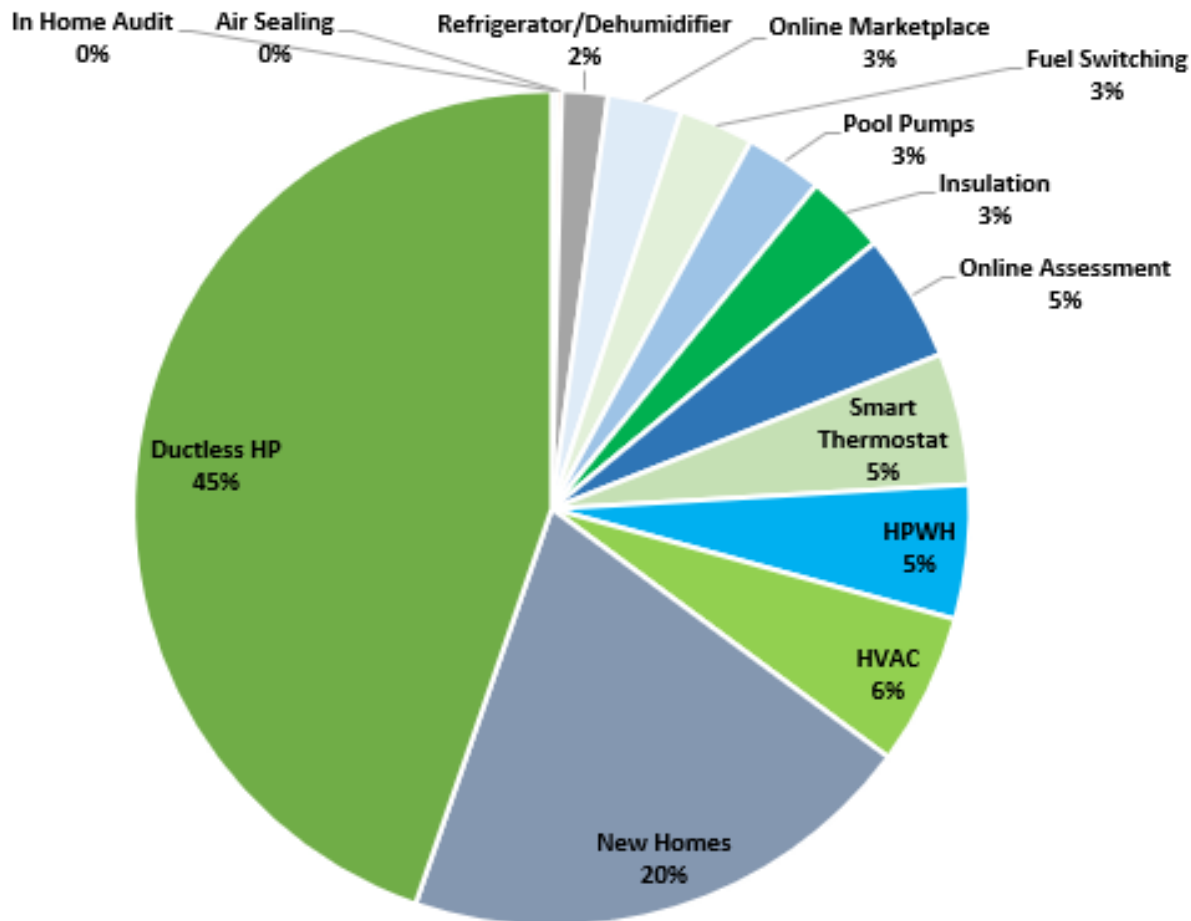
Avoiding the consumption of 595 barrels of oil



Removing 55 passenger vehicles from the road

Residential Program: Energy Efficient Homes

PY11 Savings by Measure Category



PY11

- 16,929 MWh/yr.

PTD

- 63,336 MWh/yr.

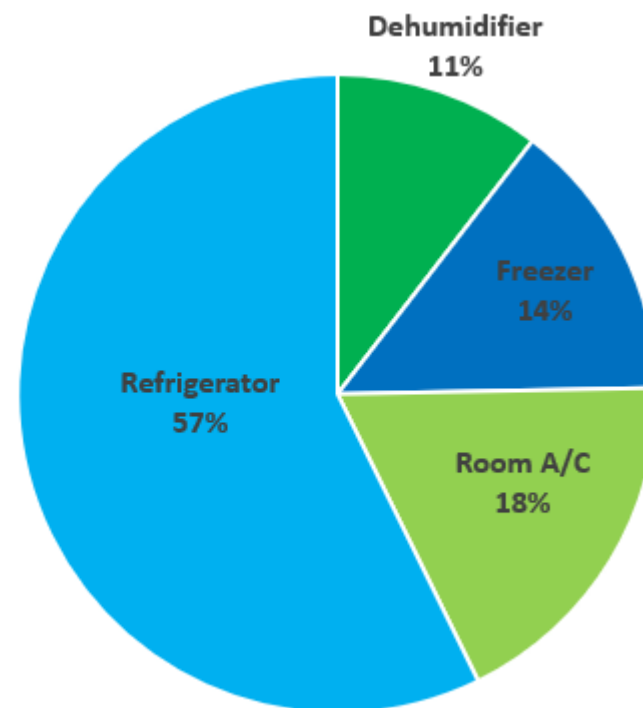
Residential Program: Energy Efficient Homes



Residential Program: Appliance Recycling

PY11 Units Collected

Appliance	PY11	PTD
Refrigerators	7,510	33,318
Freezers	1,869	8,306
Room A/C	2,368	6,871
Dehumidifiers	1,370	3,052



**Units collected in PY11*

Residential Program: Student Energy Education

Program	Grade Level
Bright Kids	2 nd – 3 rd
Take Action	5 th – 7 th
Innovation	9 th – 12 th

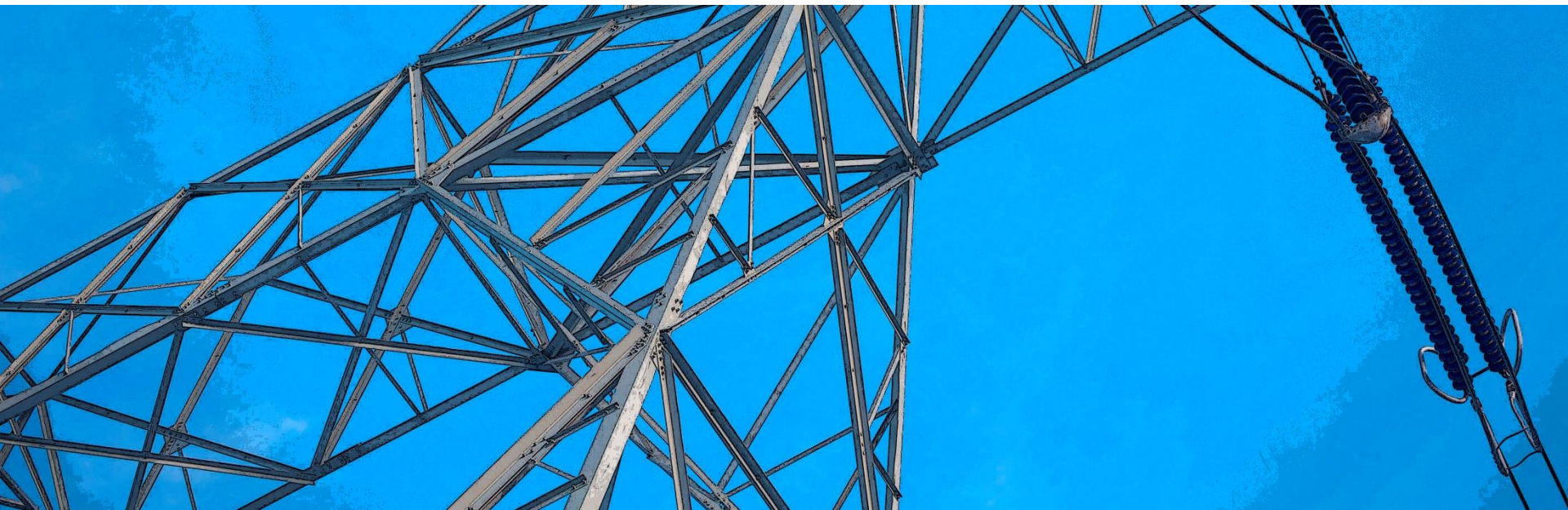
PY11

- 24,000 kits
- Focus on low-income schools
- Poster contest (K-8th)

Residential Program: Home Energy Education

- 143,000 customers
- 38,000 MWh/yr.
- Customer fatigue = lower CSAT
- Low-income treatment continues

Low Income Programs



Low Income Program: WRAP PY11

Goal	Achieved
7,000	10,000

- **Increased leads**
 - Quick Track
 - Marketing mix
- **Benefits**
 - Budget on track
 - High CSAT (97%)

Low Income Program: Multifamily & MMMF

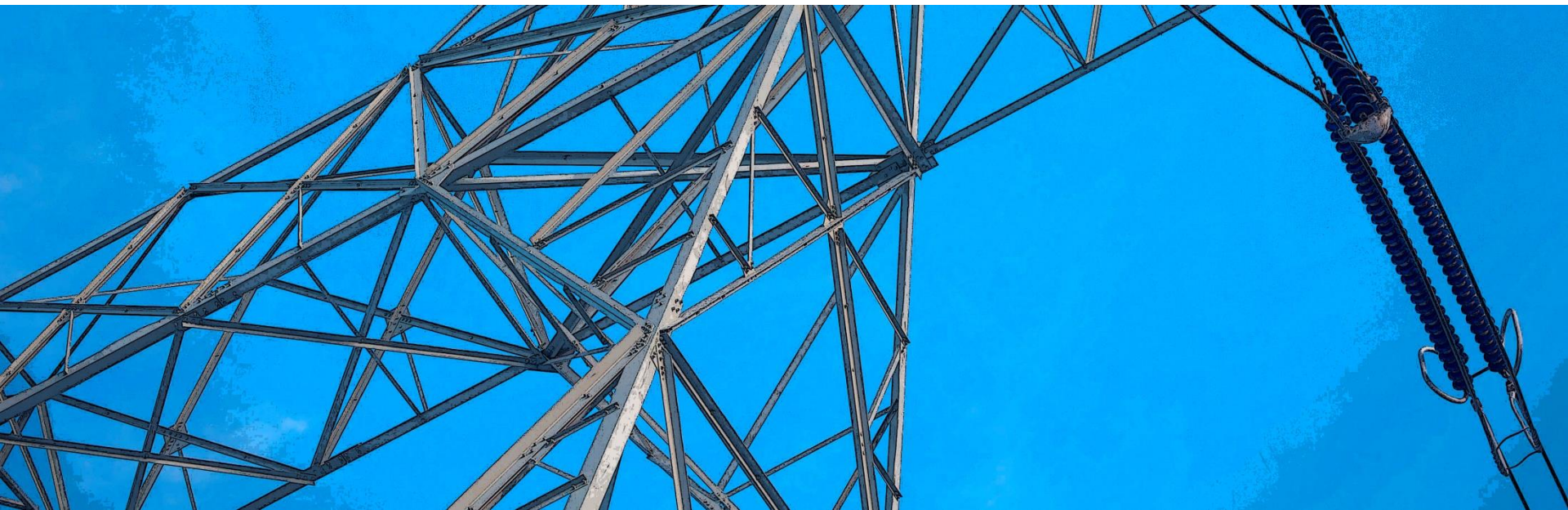
- **Individually-metered multifamily (IMMF)**
 - PTD = 15,000 customers
 - Phase 2 = 1,400 customers
- **Master-metered multifamily PTD**
 - 96 facilities
 - 4,900 units
 - Mostly GNE (75/25 split)
 - Challenges continue

Low Income Program: Low Income Kits & Education PY11

Goal	Achieved
8,000	15,500

- Increased kits in PY9
- Closed program 12/2019
- High CSAT (98%)

Non-Residential Programs

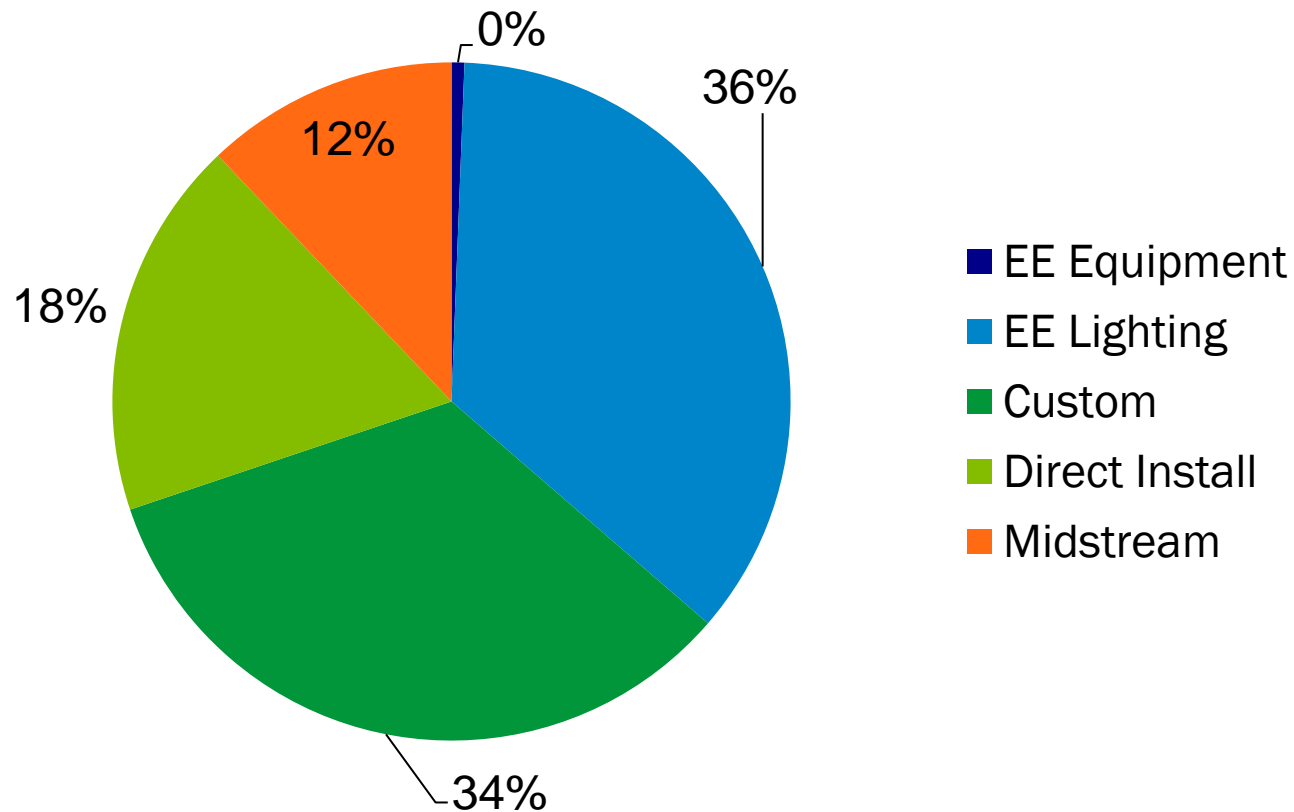


Non-Residential Programs

- **PY11 Program achievements**
 - 229,943 MWh/yr.
 - 71,600 MWh/yr. (GNE Sector)
 - \$13,956,971 incentives
 - 9,031 total projects
 - 7,926 midstream projects
 - High CSAT (94%)

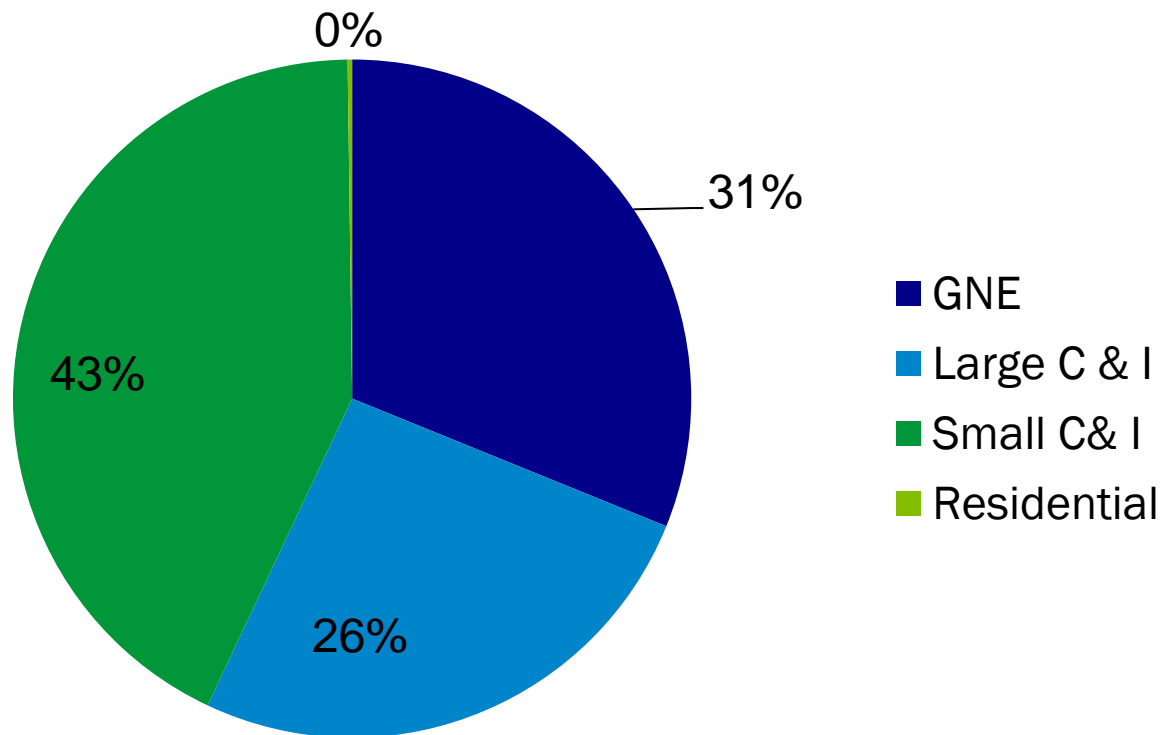
Non-Residential Programs

Energy Savings by Application for PY11



Non-Residential Programs

Energy Savings by Sector for PY11



Non-Residential: Efficient Equipment

PY11 verified savings by project type:

- Lighting
 - 992 projects
 - 121,451 MWh/yr.
- Equipment
 - 44 projects
 - 3,630 MWh/yr.
- (Includes both prescriptive and direct install)

PY11 Incentives
\$9,799,748

PTD verified savings:

- 408,189 MWh/yr.

Non-Residential: Direct Install



PY11 verified savings for Direct Install:

- 41,567 MWh/yr.
- Roughly 33% of efficient equipment savings
 - Lighting verified savings 39,274 MWh/yr.
 - Refrigeration verified savings 2,221 MWh/yr.
 - Custom verified savings 72 MWh/yr.

PTD verified savings:

- 68,987 MWh/yr.

**PY11 Incentives
\$5,679,261**

Non-Residential: Midstream

PY11 verified savings for Midstream:

- 7,926 projects
- 27,794 MWh/yr.
- 21 distributors, 80+ locations

PY11 Incentives
\$2,077,807

PTD verified savings:

- 69,931 MWh/yr.

Non-Residential: Custom



PY11 verified savings for Custom:

- 69 projects
- 77,068 MWh/yr.
(Included 3 CHP projects)

PY11 Incentives
\$2,056,943

PTD verified savings:

- 241,572 MWh/yr.

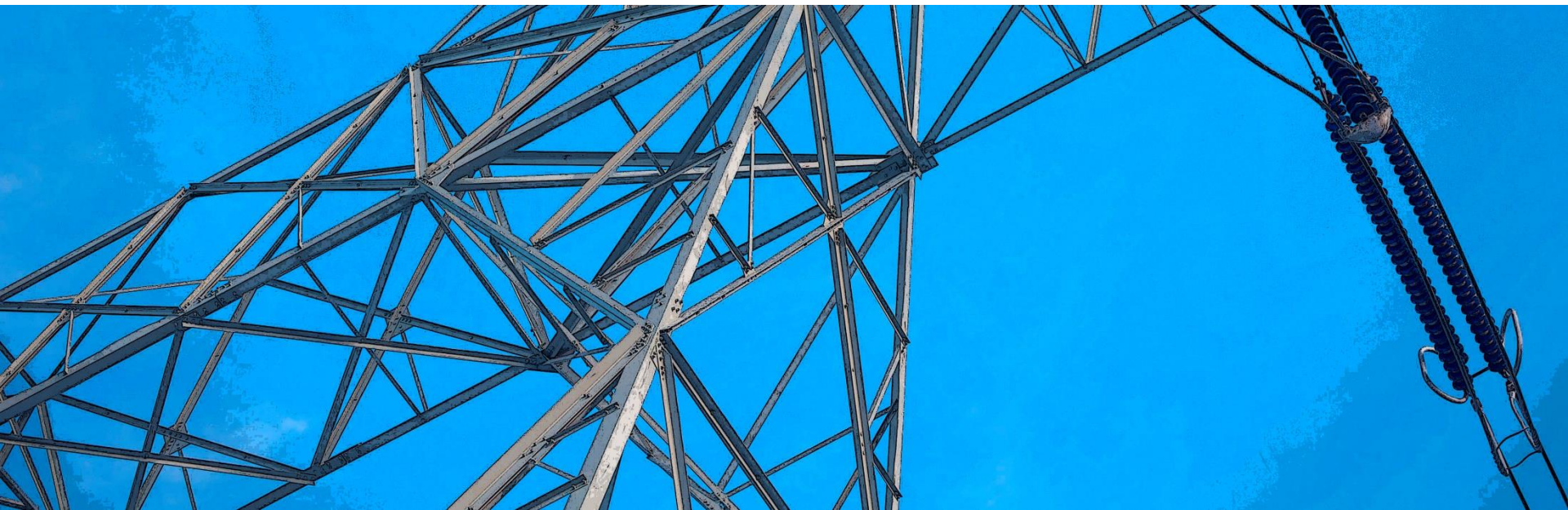
Non-Residential Program:

MWh Savings Verified*

Sector	Verified * MWh/yr.	Reported PY12	Total MWh/yr.	Phase 3 MWh Goals
LCI	248,864	14,603	263,467	297,000
SCI	281,980	27,078	309,058	312,810
GNE	187,868	12,496	200,364	201,000
RES	2,169	186	2,355	
Total	720,882**	54,364	775,246	810,810

- Verified savings thru PY11 by sector
- **may not match due to rounding

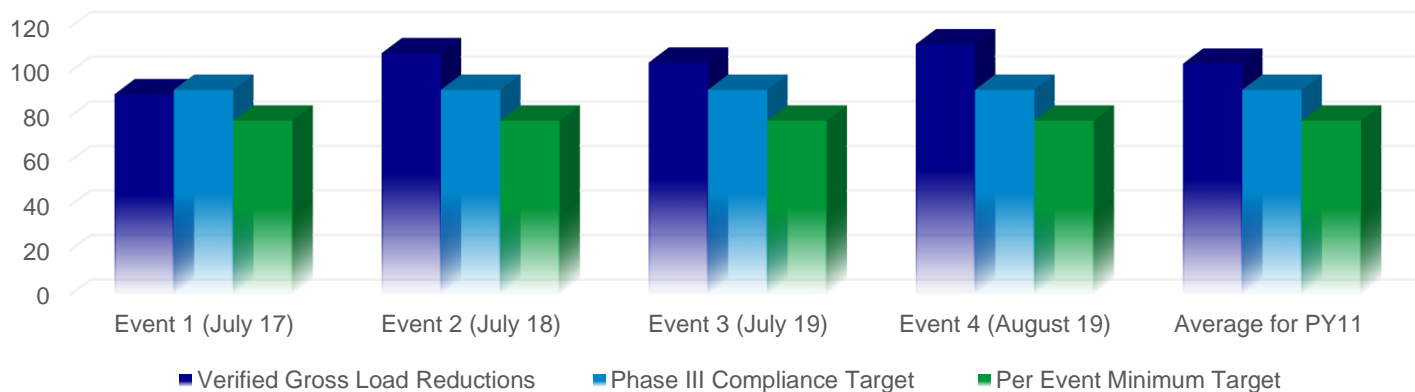
Demand Response Program



Demand Response Program

- **Demand Response PY11 season**
 - 104.3 MW avg (112.8 MW PTD)
 - 4 events called
 - Event 1 – 90.6 MW avg.
 - Event 2 – 109 MW avg.
 - Event 3 – 104.7 MW avg.
 - Event 4 – 112.8 MW avg.

PY11 DEMAND RESPONSE RESULTS



Demand Response Program

- **Challenges remain**
 - Multi-day events
 - 3 - day event in July (pre-fatigue/planning)
 - Natural regression
 - 126.7 MWs → 111.5 MWs → 103.7 MWs
 - Visibility to peak reductions
 - Customers with large amounts of portfolio
 - Confirming intent
 - Avoiding full commitment

Contacts

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Questions? Comments?

Thank you for participating

