

NJ Association of Energy Engineers

May, 24, 2018

NJCEP Program Update

NJCEP BACKGROUND



ADMINISTERED by

New Jersey Board of Public Utilities

FUNDED from

Societal Benefits Charge (SBC)
on utility bill



PROGRAM GOALS

- Save energy and lower operating cost
- Protect environment and lower emissions
- Change the business mindset

PROGRAM PORTFOLIO



ELIGIBLE SECTORS

Commercial, Industrial, Government, Schools, Non-Profit, Institutional and Multifamily

PROGRAMS

Audits:

- Energy Benchmarking
- Local Government Energy Audits

Comprehensive Projects:

- Direct Install
- Pay for Performance – Existing Buildings
- Pay for Performance – New Construction
- Large Energy Users Program

Equipment Rebates:

- Smart Start – Existing Buildings
- Smart Start – New Construction

Distributed Energy Resources (DER) – Energy Generation:

- Combined Heat and Power
- Electric Storage

PLANNING FOR FY 19



Documents released for public comment:

4 year CRA

Strategic Plan

Compliance Filings

Protocols

Comments Due to BPU May 31st

Board Meeting June 20th



Proposed FY19 Program Changes

TWO-PART FILING



- **Part 1** – Changes to existing suite of programs
- **Part 2** – Roll-out of new program designs

PART 1



- Changes to programs effective July 1, 2018:
 - C&I SmartStart Buildings
 - C&I Direct Install
 - C&I Local Government Energy Audit (LGEA)
 - C&I Pay for Performance New Construction
 - Combined Heat & Power
 - Residential New Construction

PROPOSED SMARTSTART CHANGES



- Expand eligibility to include LED screw-in bulbs replacing CFL screw-in bulbs
- Reduce incentives for LED Energy Star qualified screw-in lamps from \$3 to \$1 per lamp
- Eliminate prescriptive incentives for new fluorescent lighting technology
- Provide new/revised incentive for the following Design Lighting Consortium® qualified categories:
 - (New) Retrofit Kit for LED Linear Ambient Luminaires
 - Up to \$15 per 2' and 4' fixture
 - Up to \$25 per 8' fixture
 - (New) LED Linear Lamps (LED Tubes)
 - Up to \$5 per 3' linear lamp
 - Up to \$10 per 8' linear lamp
 - (Revised) LED Linear Lamps (LED Tubes)
 - Reduce incentive for 2' linear lamps from \$5 to \$3
- Delete incentive for dual enthalpy economizers

PROPOSED DIRECT INSTALL CHANGES



- Change maximum 200 kW annual peak demand to **annual average**
- Increase TRC ratio to 1.25%, and
- Offer sliding scale incentive option which will allow more measures, more energy savings but at a lower overall cost.

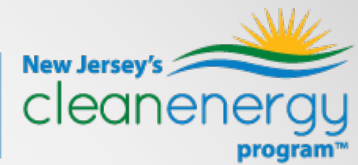
Recommendations made with input from stakeholders regarding prevailing wage, marketing and other factors

PROPOSED LGEA CHANGES



- Change minimum kW eligibility logic to align with Direct Install changes
- Revise eligibility waivers for facilities under 200kW
- Expand Level 1 audit offering to small facilities/customers below 200kW

PROPOSED P4P NC CHANGES



- Revise energy savings calculation for gut rehab projects
- Open MFHR path to all stories if project pursuing ENERGY STAR®. P4P NC opened to all stories as alternative (interim change in Multifamily Program Planning based on stakeholder input to date).

PROPOSED CHP/RES CHANGES



Combined Heat & Power

- Match minimum system efficiency to revised protocols (65%LHV to 60%HHV)
- Reward resiliency through blackstart/islanding for critical facilities with 10% incentive bonus
- Provide flexibility on 10 year warranty for public entities
- Offer technical assistance (via Part-2 launch of programs)

Renewable Electric Storage

- Initiate stakeholder process for new design
- Plan to integrate with Governor's goal for storage

PART 2



- Informed by Strategic Plan
- Redesign of most C&I Programs
- Redesign of *WARM/COOL* Advantage and Home Performance with ENERGY STAR
- New Programs
 - NJBASE
 - Multifamily

NJCEP OBJECTIVES



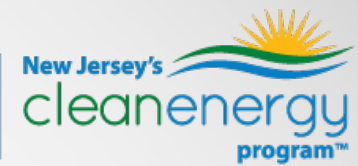
- ***Lower Energy Bills: Reduce the cost of energy and lower energy bills by maximizing lifetime energy savings per dollar spent (kWh and therms).***
 - Maximizing peak demand (kW) savings
 - Providing equitable access to efficiency and renewable energy programs
 - Promoting the development and transformation of energy efficiency and renewable energy markets
 - Reducing long-term environmental impacts of energy use
 - Minimizing lost opportunities

THEMES OF PROGRAM REDESIGN



- Focus on sustained customer engagement
 - Throughout lifecycle of project(s)
 - Build and maintain relationships for future projects
- Program flexibility to meet customers' needs
- Promote bundling of measures to increase savings and cost-effectiveness, but avoid onerous participation requirements
- Use pilots to regularly test and demonstrate specific technologies and/or target specific sectors

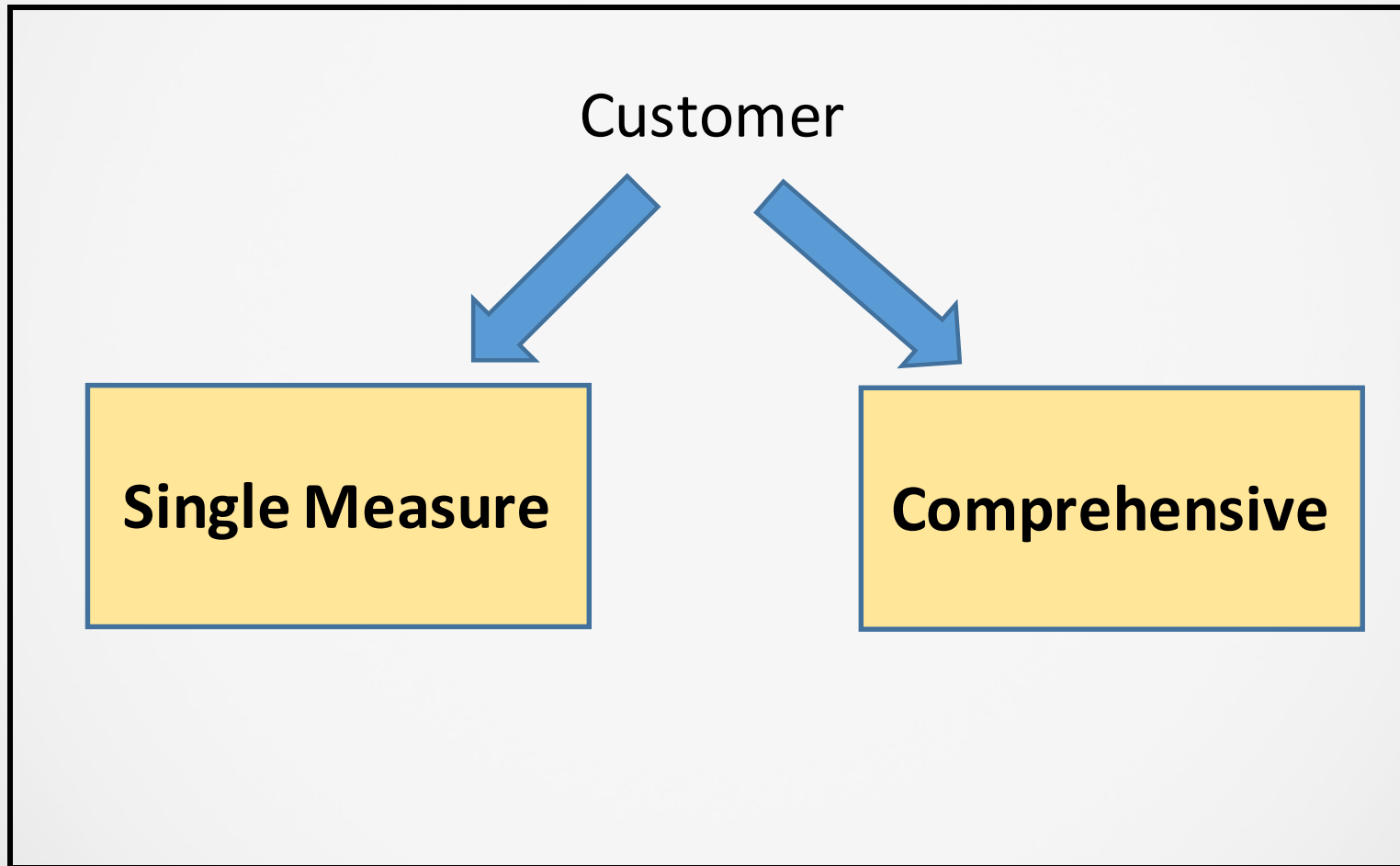
THEMES OF PROGRAM REDESIGN



- Increase Outreach
- Restart Marketing
- Increase program training for contractors to allow them to better use programs and serve customers

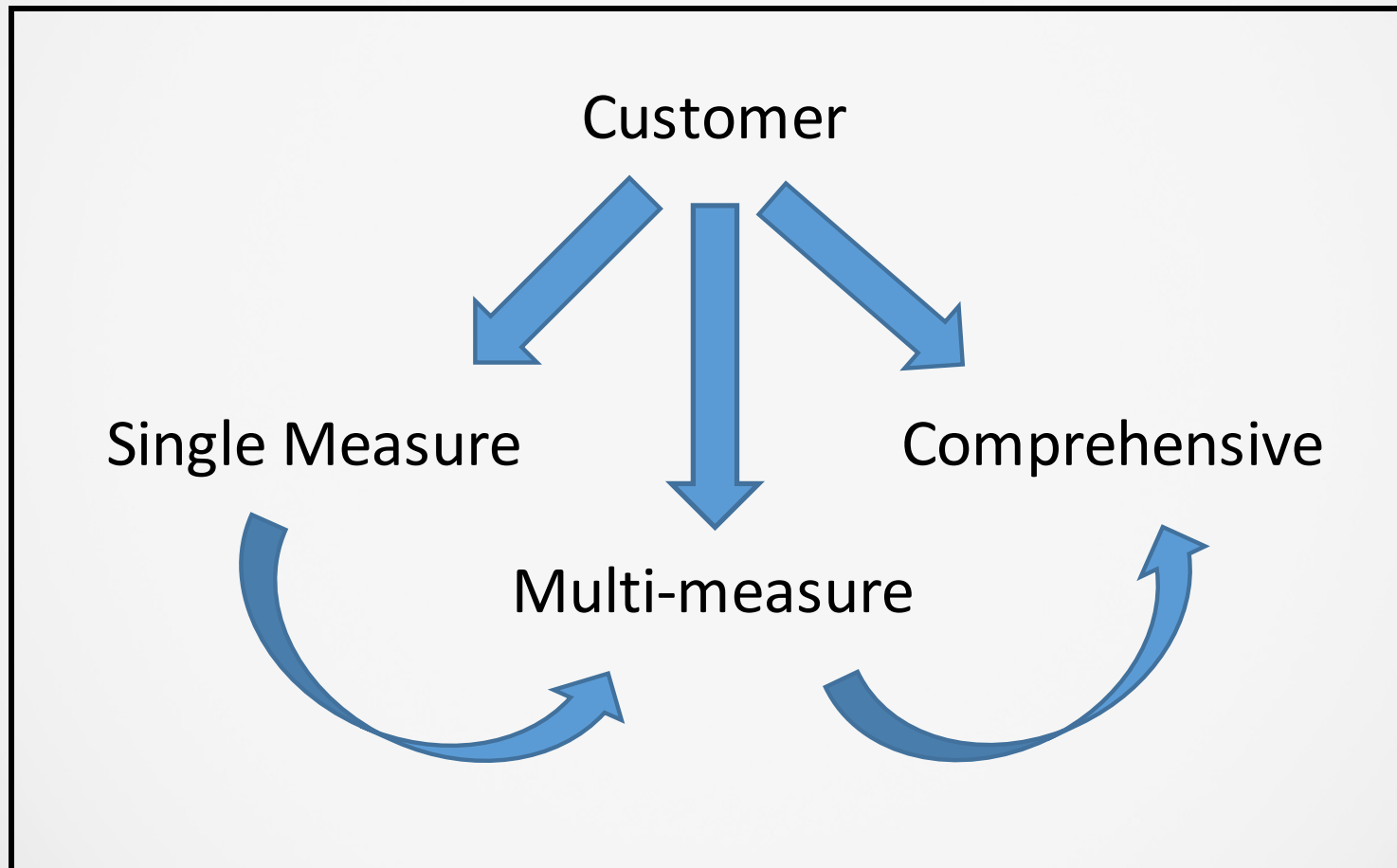


Perception of Current Programs

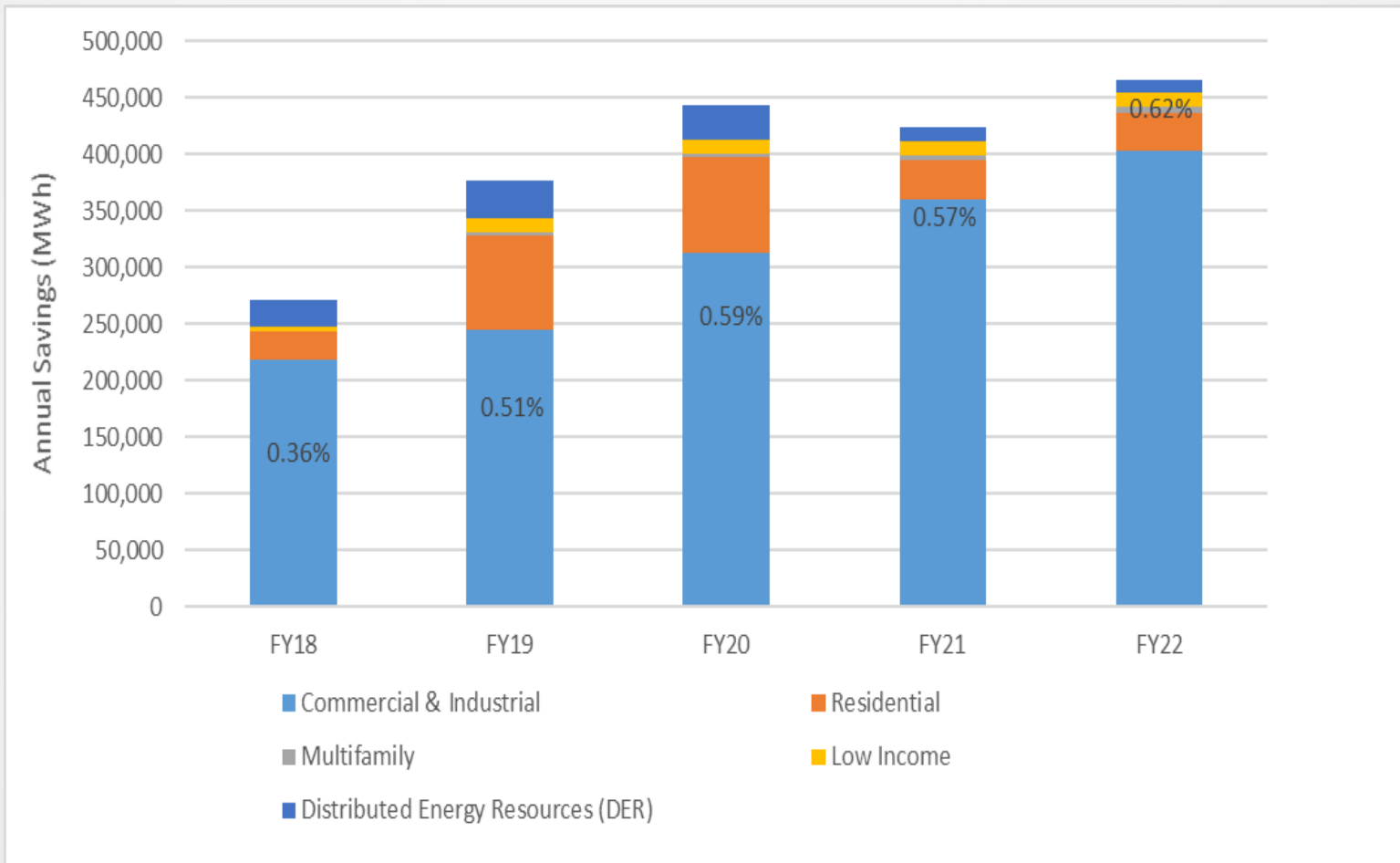




What do Customers Need?

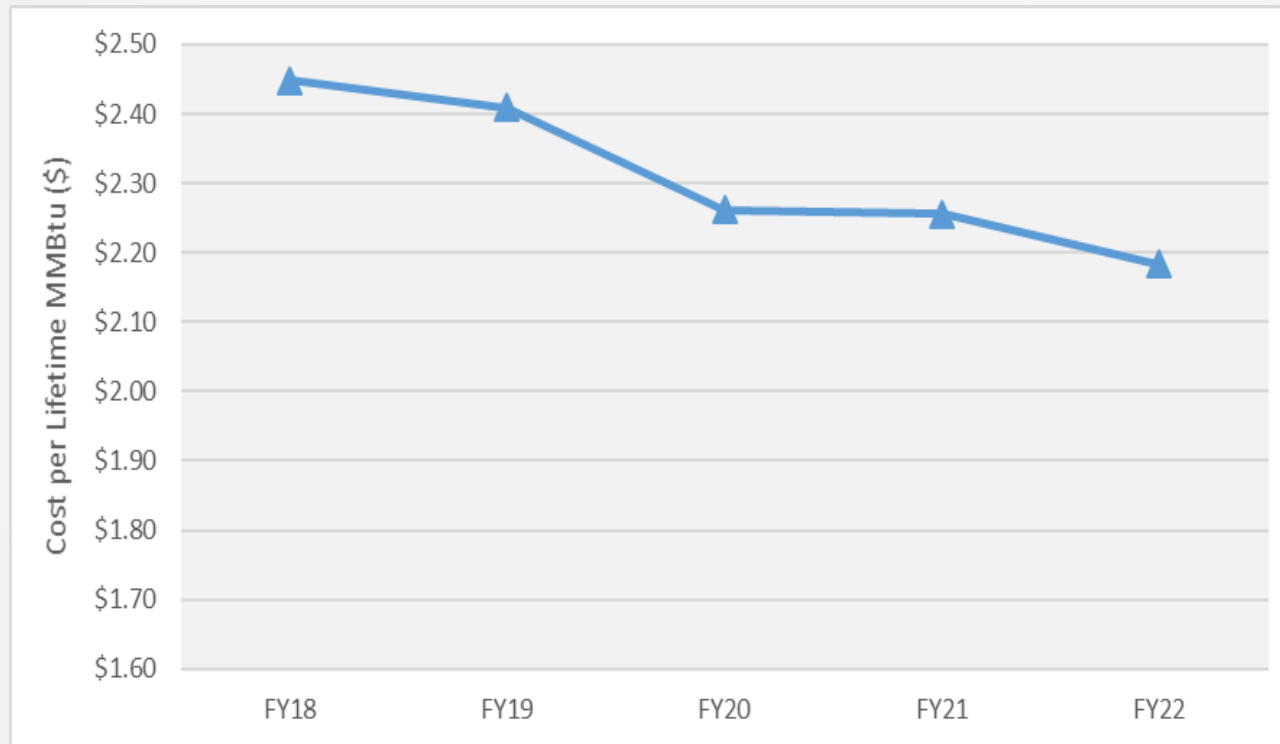


Expected NJCEP MWh Savings





Expected Cost per MMBtu Saved

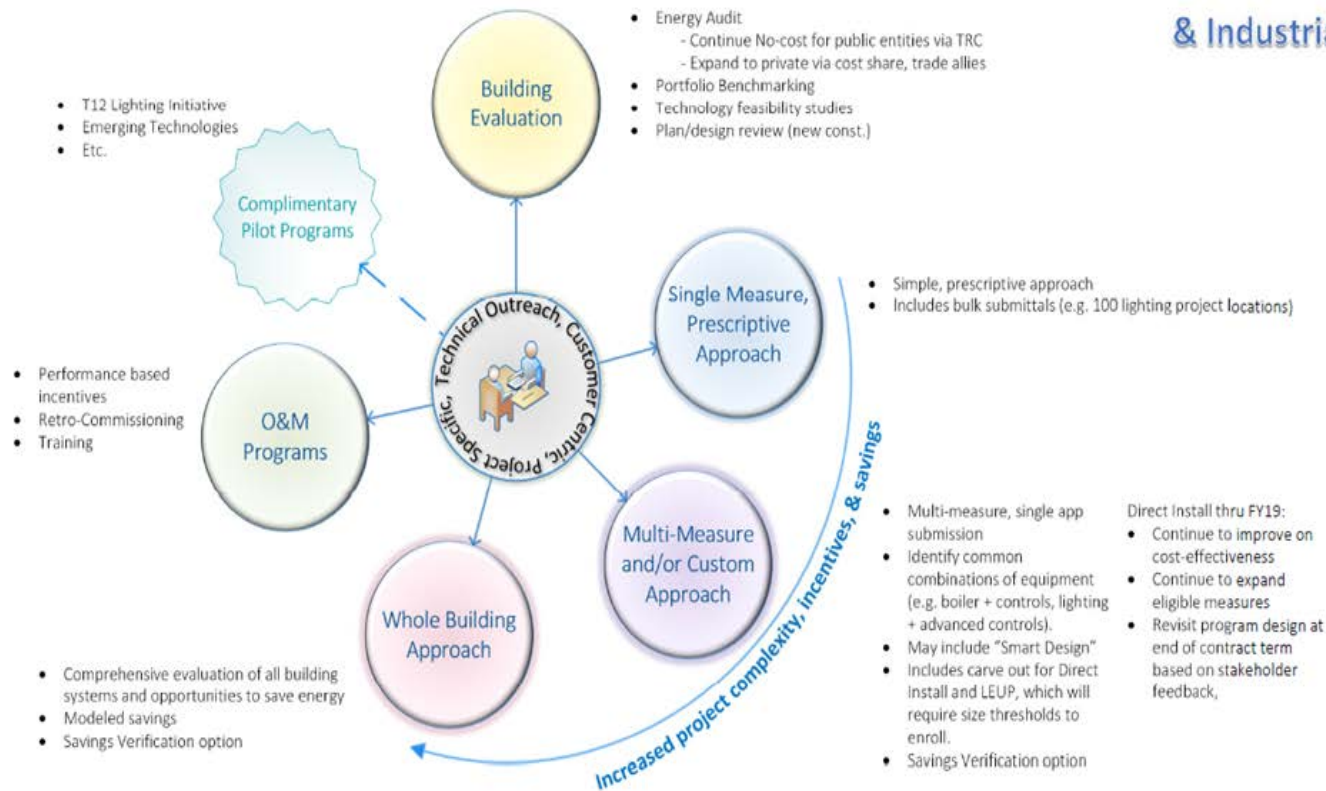


\$/MMBTU saved drops by over 11% over four year Plan

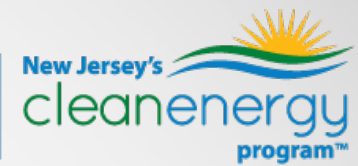
COMMERCIAL & INDUSTRIAL



Commercial & Industrial



PROPOSED C&I BUILDINGS PROGRAM



Eliminate Retrofit, New Construction, Customer Tailored, P4P EB/NC, and LEUP programs. Create a single Equipment program with multiple paths:

- **Single Prescriptive (\$)**
 - All LED
 - All rebate structure
 - Simplified application, equipment categories, and requirements
- **Multi-Measure Prescriptive & Custom (\$\$)**
 - Progress payments
 - No minimum savings for Custom, simplified requirements
 - Custom performance pilot will be investigated based on pre/post metering
- **Whole Building (\$\$\$)**
 - No minimum size or savings required, instead project must have comprehensive scope of work
 - Move ERP incentive to NJ BASE (see next slide), move Performance Incentive to Optional M&V path
- **Optional M&V (+\$)**
 - Additional incentive for demonstrative verified savings
 - Open to Multi/Custom and Whole Building paths



Increased Complexity and
Depth of Energy Savings

PROPOSED C&I BUILDINGS PROGRAM



■ NJ Building and Systems Evaluation (NJ BASE)

- Modeled after NYSERDA's FlexTech Program
- First step before upgrades
- Offers building-specific technical assistance to guide decision making
- 50/50 cost-share model
- Work done by pre-approved contractors



New!



More Savings!

Allows us to engage new set of C&I customers
and capture lost opportunities

NYSERDA experience shows approximately 65% of all measure savings recommended as part of FlexTech process were implemented. National adoption rates are 10-40%.

PROPOSED C&I BUILDINGS PROGRAM



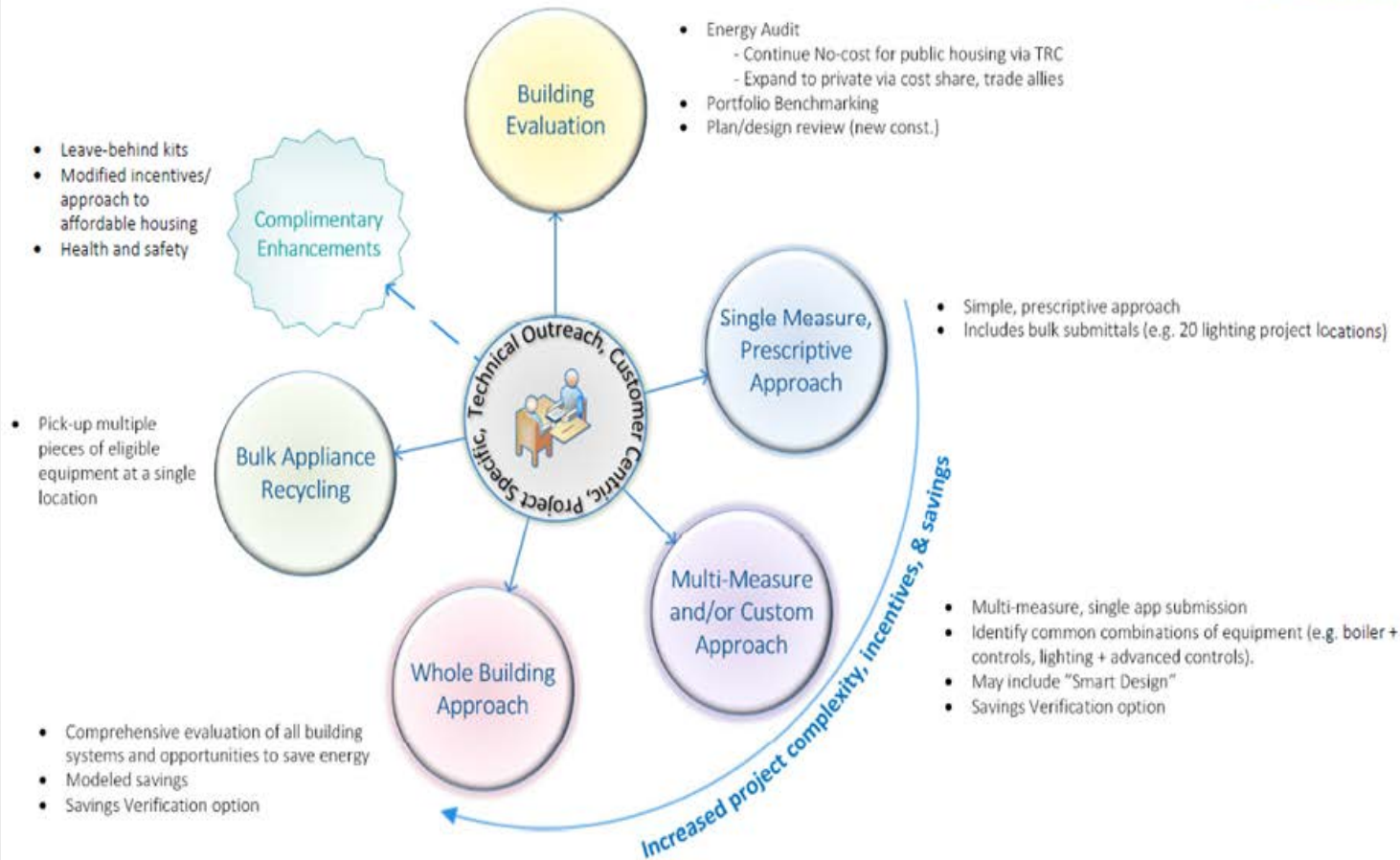
Large Energy Users Considerations:

- No longer a separate Large Energy Users Program, instead provide enhanced incentive within Custom and Whole Building pathway until incentive contribution caps are reached
 - Prescriptive incentives will be paid at the same rate as everyone else
- Simplify determination criteria for “large energy user”
 - Minimum size based on annual energy cost of \$5 million
 - Maximum incentive cap 3% of total annual energy costs
- Eliminate minimum building size (400kW) and project size (\$100k incentive)
- Allow funds to be used on New Construction Projects
- Retain banking feature
- Move M&V to Optional Path (see previous slide)

MULTIFAMILY PROGRAM



Multifamily



MF PROGRAM DESIGN OBJECTIVES



- Align program design with strategic direction
- Simplify participation through consolidated program delivery
- Provide more outreach and assistance
- Eliminate gaps/lost opportunities in the market
- Provide flexibility to meet customer needs
- Streamline program administration
- Increase participation and maximize savings per incentive paid

CURRENT MULTIFAMILY PROGRAM OPTIONS



Equipment Rebates and Incentives

Warm/Cool Advantage

Appliance Rebates

SmartStart – Prescriptive and Custom

Direct Install

Whole Building Retrofit

Home Performance w/ ENERGY STAR

Pay for Performance – Existing Buildings

Whole Building New Const.

ENERGY STAR Certified Homes

ENERGY STAR Multifamily High Rise

Pay for Performance – New Construction

Other

Recycling

Comfort Partners

Local Gov't Energy Audit Program

CHP/Cogen

MULTIFAMILY TARGET MARKET



- 3+ units under single owner/manager
 - Excludes individually owned single family, two-family, and townhomes
 - Includes dormitories, assisted living
- Participant will be owner, developer, management company, HOA, etc.
 - Individual residents ineligible
- Multifamily will be phased out of participation in all other programs (e.g. commercial and residential)
- Potentially adjusted incentive for low/moderate income.
- NJCEP CHP, SRECs continue as stand alone programs under Renewable Portfolio

MULTIFAMILY NEXT STEPS

- Stakeholder meetings complete
- Review comments received from stakeholders to further inform program design
- Develop incentive levels for all paths and distribute for public comment
- Things going on:
 - NJ Multifamily Baseline study
 - EPA ENERGY STAR Multifamily New Construction Re-design

FY19 NEXT STEPS & TIMING



- Program-specific stakeholder input throughout summer
- Board Action – June 20th
- Roll out of new programs in stages throughout 2nd half of FY19

FY19 - FY22 CRA



- The CRA sets out proposed funding levels for the next 4 years as follows:

| Proposed Funding Levels FY19-22 | | | | | |
|---------------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| Funding Category | FY18 | FY19 | FY20 | FY21 | FY22 |
| NJCEP | \$186,404,000 | \$186,404,000 | \$196,404,000 | \$206,404,000 | \$216,404,000 |
| State Energy Initiatives | \$158,261,000 | \$158,261,000 | \$148,261,000 | \$138,261,000 | \$128,261,000 |
| Total | \$344,665,000 | \$344,665,000 | \$344,665,000 | \$344,665,000 | \$344,665,000 |

- The proposed funding level increases the funding available for NJCEP by \$10M/Year from \$186.4 M in FY19 to \$216.4 M in FY22
- The proposed funding level will cost an average residential customer about \$26/year and an average gas customer about \$19/year
- Energy savings that result from the programs can more than offset the cost for participating customers
- The CRA also sets out a proposed schedule of monthly payments by the utilities into the Trust Fund

PROPOSED FY19 NJCEP BUDGET



Proposed FY19 Budget

| <i>Program/Budget Line</i> | <i>New Funding</i> | <i>Other Funding</i> | <i>Estimated Commitments</i> | <i>Draft FY19 Budget</i> |
|---|----------------------|----------------------|------------------------------|--------------------------|
| Total -NJCEP + State Initiatives | \$344,665,000 | \$19,070,000 | \$138,352,480 | \$502,087,480 |
| State Energy Initiatives | \$139,300,000 | \$18,961,000 | | \$158,261,000 |
| Total NJCEP | \$205,365,000 | \$109,000 | \$138,352,480 | \$343,826,480 |
| EE Programs | \$171,445,000 | \$0 | \$117,100,000 | \$288,545,000 |
| Res EE Programs | \$57,000,000 | \$0 | \$18,700,000 | \$75,700,000 |
| Residential Retrofit- name TBD | \$30,000,000 | | \$4,700,000 | \$34,700,000 |
| RNC | \$9,000,000 | | \$14,000,000 | \$23,000,000 |
| EE Products | \$18,000,000 | | \$0 | \$18,000,000 |
| Res Low Income | \$30,000,000 | \$0 | \$6,000,000 | \$36,000,000 |
| Comfort Partners | \$30,000,000 | | \$6,000,000 | \$36,000,000 |
| C&I EE Programs | \$73,445,000 | \$0 | \$81,800,000 | \$155,245,000 |
| C&I Buildings | \$46,445,000 | | \$66,000,000 | \$112,445,000 |
| LGEA | \$2,000,000 | | \$1,800,000 | \$3,800,000 |
| DI | \$25,000,000 | | \$14,000,000 | \$39,000,000 |
| Multi-family EE | \$6,000,000 | \$0 | \$0 | \$6,000,000 |
| Multi-family | \$6,000,000 | | | \$6,000,000 |
| State Facilities Initiative | \$5,000,000 | \$0 | \$10,600,000 | \$15,600,000 |
| State Facilities Initiative | \$5,000,000 | | \$10,600,000 | \$15,600,000 |
| Distributed Energy Resources | \$16,000,000 | \$0 | \$19,252,480 | \$35,252,480 |
| CHP - RE Storage | \$14,000,000 | | \$17,200,000 | \$31,200,000 |
| Microgrids | \$2,000,000 | | \$2,052,480 | \$4,052,480 |
| RE Programs | \$2,550,000 | \$0 | \$1,000,000 | \$3,550,000 |
| Offshore Wind | \$150,000 | | \$1,000,000 | \$1,150,000 |
| SREC Registration | \$2,400,000 | | | \$2,400,000 |
| EDA Programs | \$0 | \$109,000 | \$0 | \$109,000 |
| CEMF | | \$31,000 | | \$31,000 |
| GGF | | \$78,000 | | \$78,000 |

NJCEP DRAFT FY19 ADMINISTRATION BUDGET



| | | | | |
|------------------------------------|---------------------|------------|--------------------|---------------------|
| Planning and Administration | \$15,370,000 | \$0 | \$1,000,000 | \$16,370,000 |
| <i>BPU Program Administration</i> | \$2,600,000 | \$0 | \$0 | \$2,600,000 |
| BPU Program Administration | \$2,600,000 | | | \$2,600,000 |
| Marketing | \$4,000,000 | \$0 | \$0 | \$4,000,000 |
| New Marketing Contract | \$4,000,000 | | | \$4,000,000 |
| Program Evaluation/Analysis | \$3,000,000 | \$0 | \$500,000 | \$3,500,000 |
| Program Evaluation | \$3,000,000 | | \$500,000 | \$3,500,000 |
| Outreach and Education | \$5,700,000 | \$0 | \$500,000 | \$6,200,000 |
| Sustainable Jersey | \$500,000 | | \$300,000 | \$800,000 |
| NJIT Learning Center | \$200,000 | | \$200,000 | \$400,000 |
| Outreach, Website, Other | \$5,000,000 | | | \$5,000,000 |
| Sponsorships | \$70,000 | \$0 | \$0 | \$70,000 |
| Sponsorships | \$70,000 | | | \$70,000 |



Questions?