



The Benefits of Utility-Sponsored Industrial Energy Efficiency Programs

Guidelines for Industrial Customers

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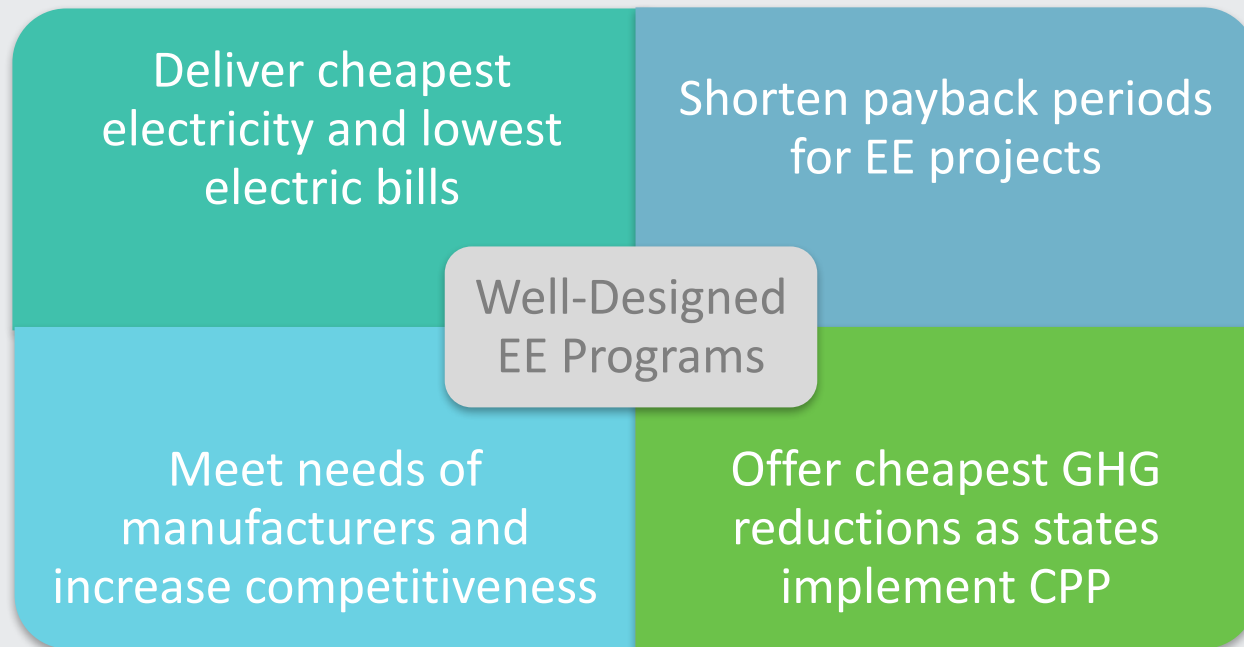
Presentation Summary

- Defining the Problem
- Benefits of utility efficiency programs
- Responding to industry arguments
- Best practices for utility programs
- Case studies: Industrial efficiency success stories
- Making efficiency programs work for your company



Overview

- Manufacturing groups are opposing utility energy-efficiency (EE) programs; however, opting out of these programs is bad for their bottom line



Terminology

- Utility EE programs - All ratepayers pay fees on their electric bills
- Self-direct programs - Large customers still pay fees, but choose how to spend them at their own facilities
- Opt-out programs - Large customers “opt out” of EE fees, with no obligation to make EE investments on their own

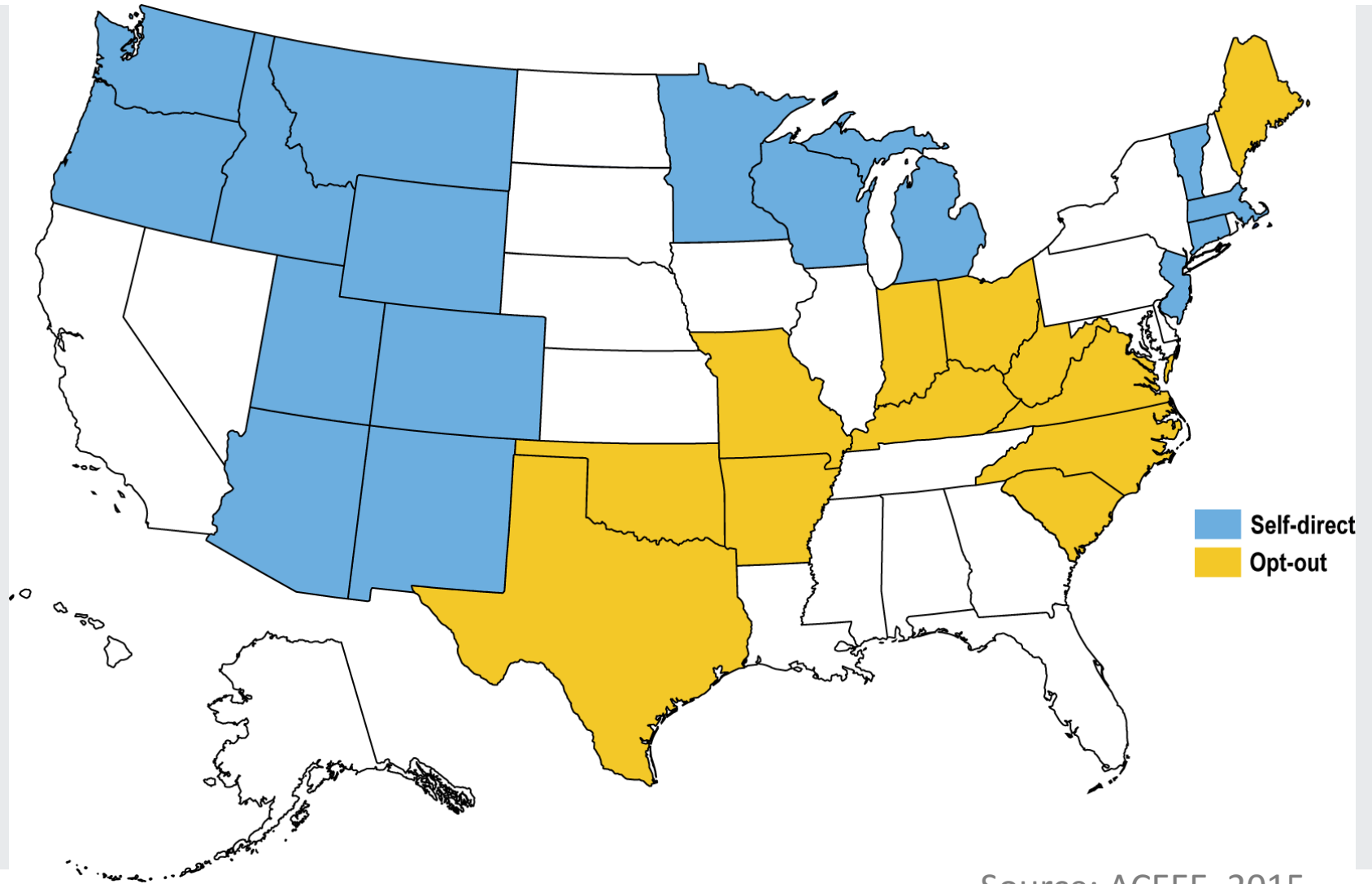


The Problem

- Manufacturing groups are taking action against utility EE programs:
 - Opposing energy efficiency resource standards (EERS)
 - Seeking to opt out of utility EE programs
- 12 states allow some or all large customers to opt out



Industrial Opt-Out Landscape



Source: ACEEE, 2015



Example of Opposition

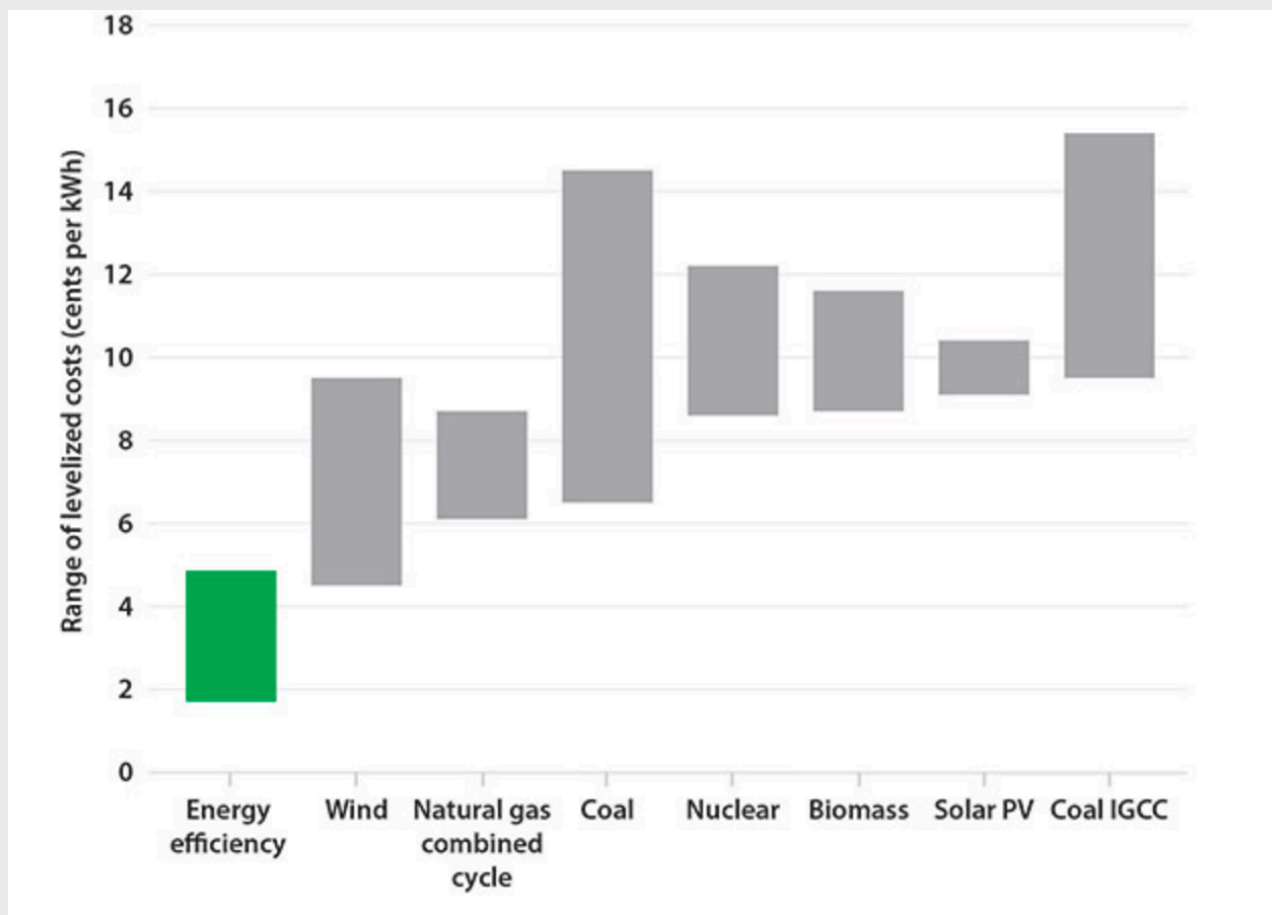


- ◆ Pennsylvania – SB 805
 - ◆ Seeks to allow customers to opt out of Act 129, the state’s Energy Efficiency and Conservation Program
 - ◆ Industrial Energy Consumers of Pennsylvania (IECPA) submitted testimony supporting an opt-out option
- ◆ *“...[Act 129] is putting Pennsylvania’s large industrial customers (large manufacturers) at a competitive disadvantage compared to their competition in other states and globally. ... Large customers are highly motivated to energy efficiency with or without Act 129.”*
–IECPA



Benefits of Utility Programs: *Keep Costs Down for All Customers*

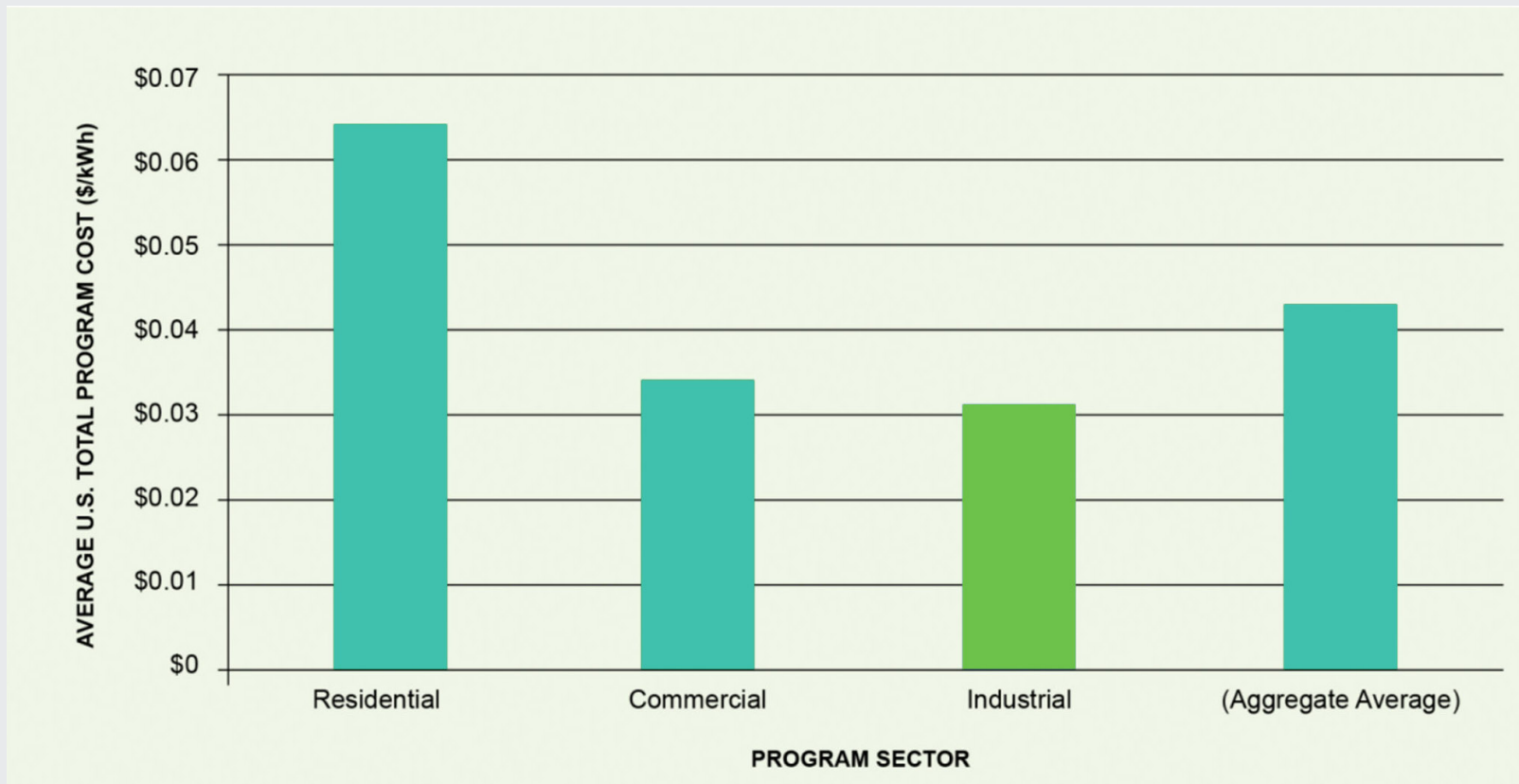
EE is the Cheapest Energy Resource



Source: ACEEE, 2014



Industry Has Lowest Cost of Saved Energy on National Level



Reducing energy use lowers prices for everyone – including industrial customers!

Source: DOE, 2013



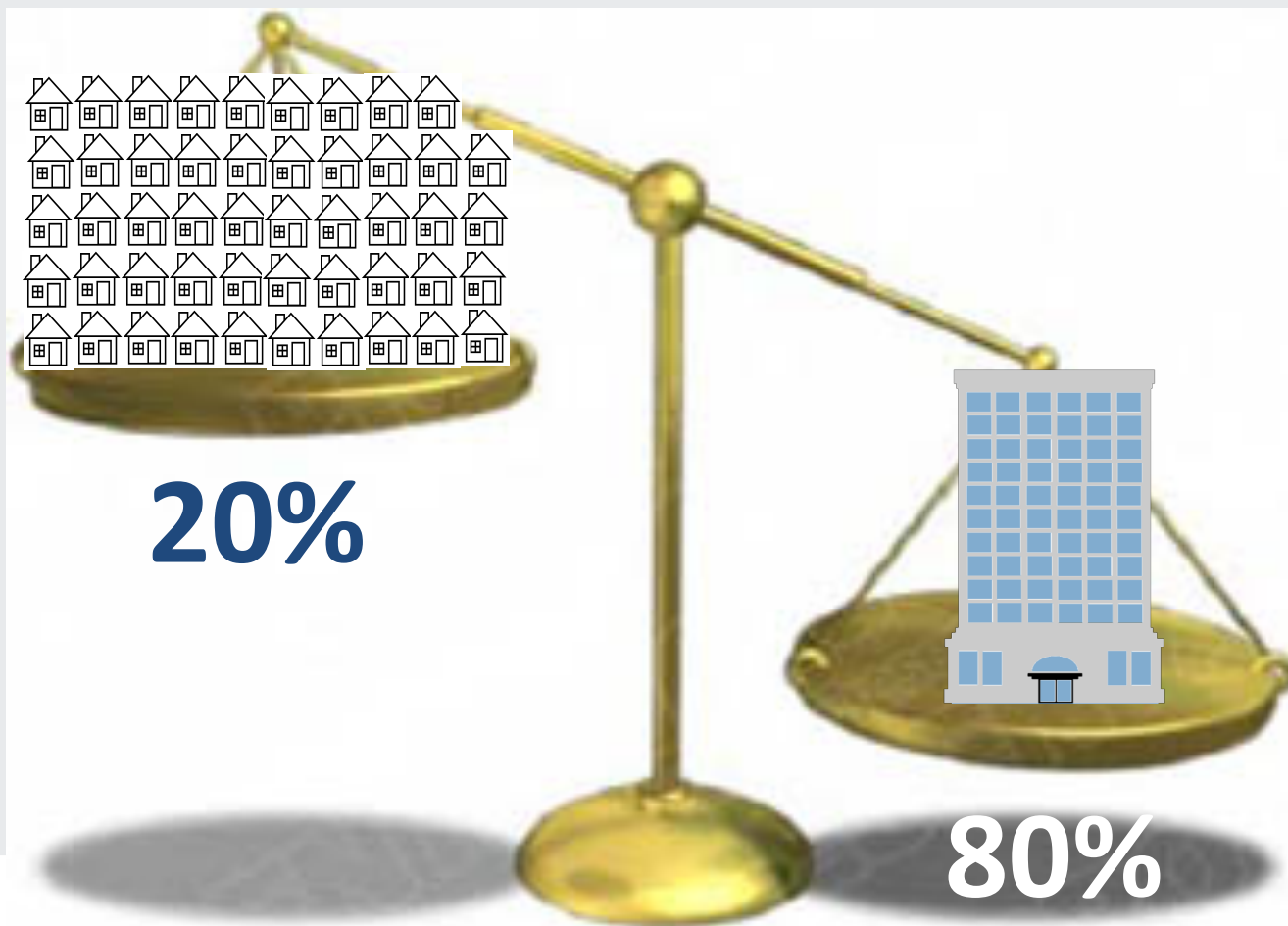
Benefits of Utility Programs: *Utility Programs Make More Projects Possible*

**25%
DISCOUNT**



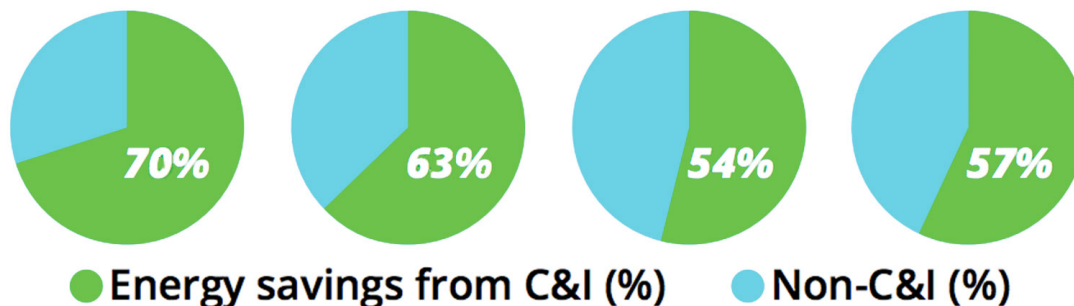
Industrial Customers Are the Largest Energy Users

In certain territories, as little as 2% of ratepayers use 80% of the electricity



Commercial and Industrial Programs Provide Big Reductions

Energy savings from commercial and industrial programs



Energy Trust of Oregon	National Grid Rhode Island	Xcel Colorado	Focus on Energy Wisconsin
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2.4¢

2.8¢

1.9¢

1.8¢

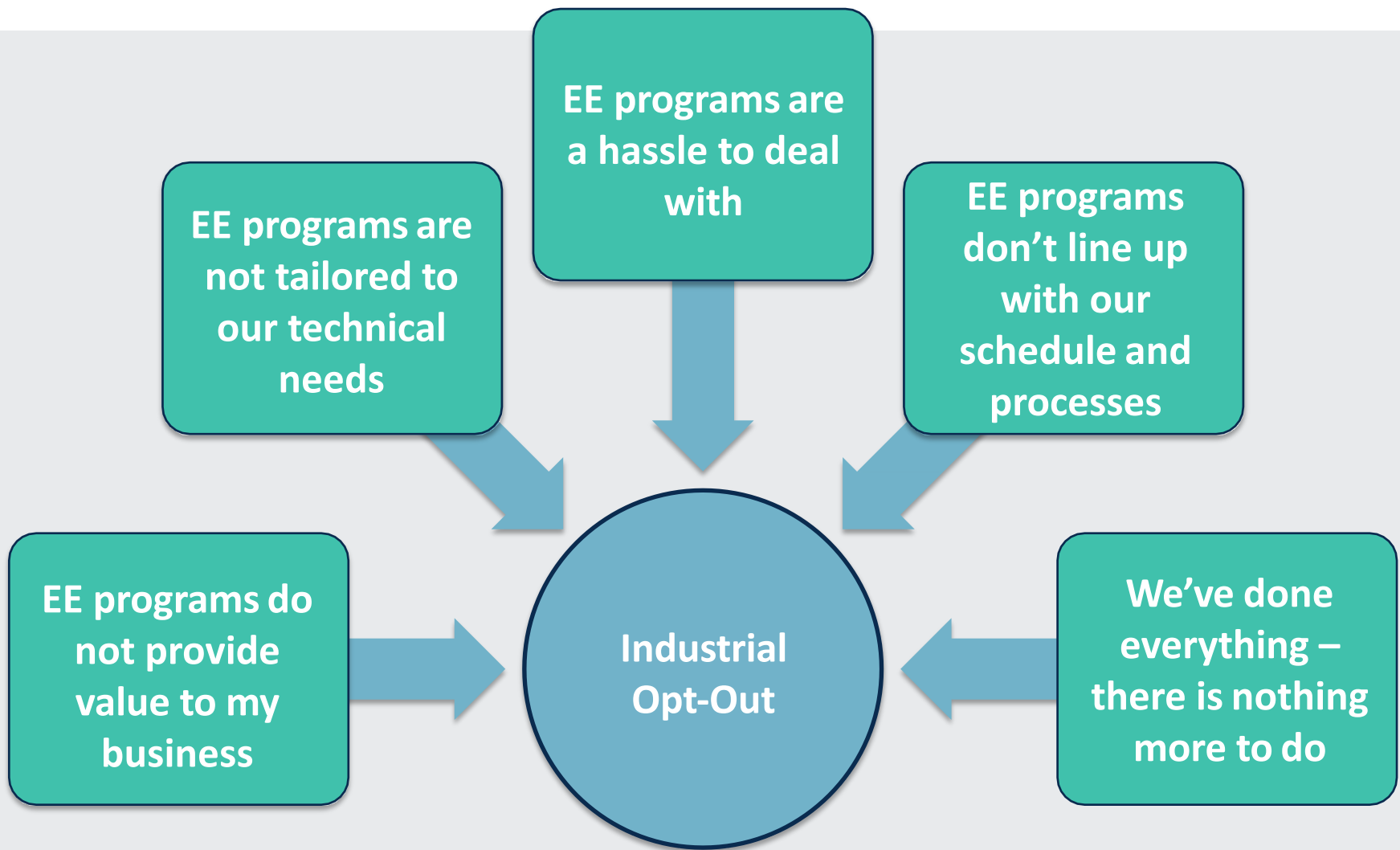
Levelized cost of C&I savings (\$/kWh)

Source ACEEE estimates, based on publicly available program administrator annual reports for 2014. We calculate the levelized cost of the program using the PMT function in an Excel spreadsheet and assume a 13-year measure life and a 5% discount rate.

Source: ACEEE, 2016



Why Do Industrial Customers Choose to Opt Out?



Source: Schlegel and Associates, 2015

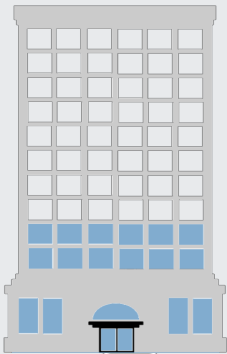


Let's take a look at each of these arguments...



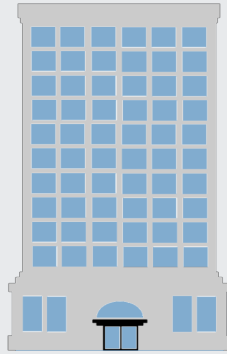
"We've done everything – there is nothing more to do"

Industrial-funded (opt-out)



**1-2 yr paybacks
50-100% ROI**

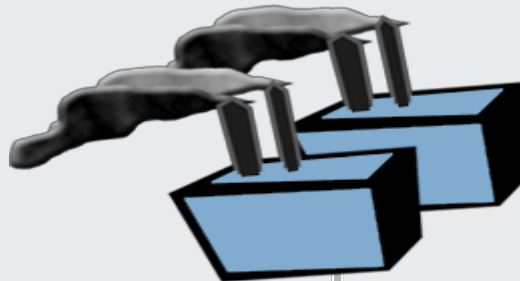
Co-funded time horizon



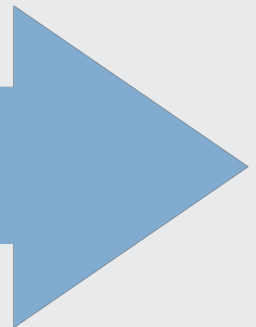
**2-8 yr paybacks
12-50% ROI**



Utility-funded



**10-30 year
time horizon**



Access to
technical
expertise

Utility becomes
“partner” in
finding
reductions

“EE programs
do not provide
value to my
business”

Fund larger
projects by
shrinking ROI

Provide “fresh
set of eyes” to
consider
possible
projects



~~“EE programs
are not tailored
to our technical
needs”~~



Custom EE
program
offerings



“EE programs
are a hassle”

Prescriptive
rebates as low-
hassle
incentives

Many
technical
resources
available to
reduce hassle

Continuous
improvement
of application
processes



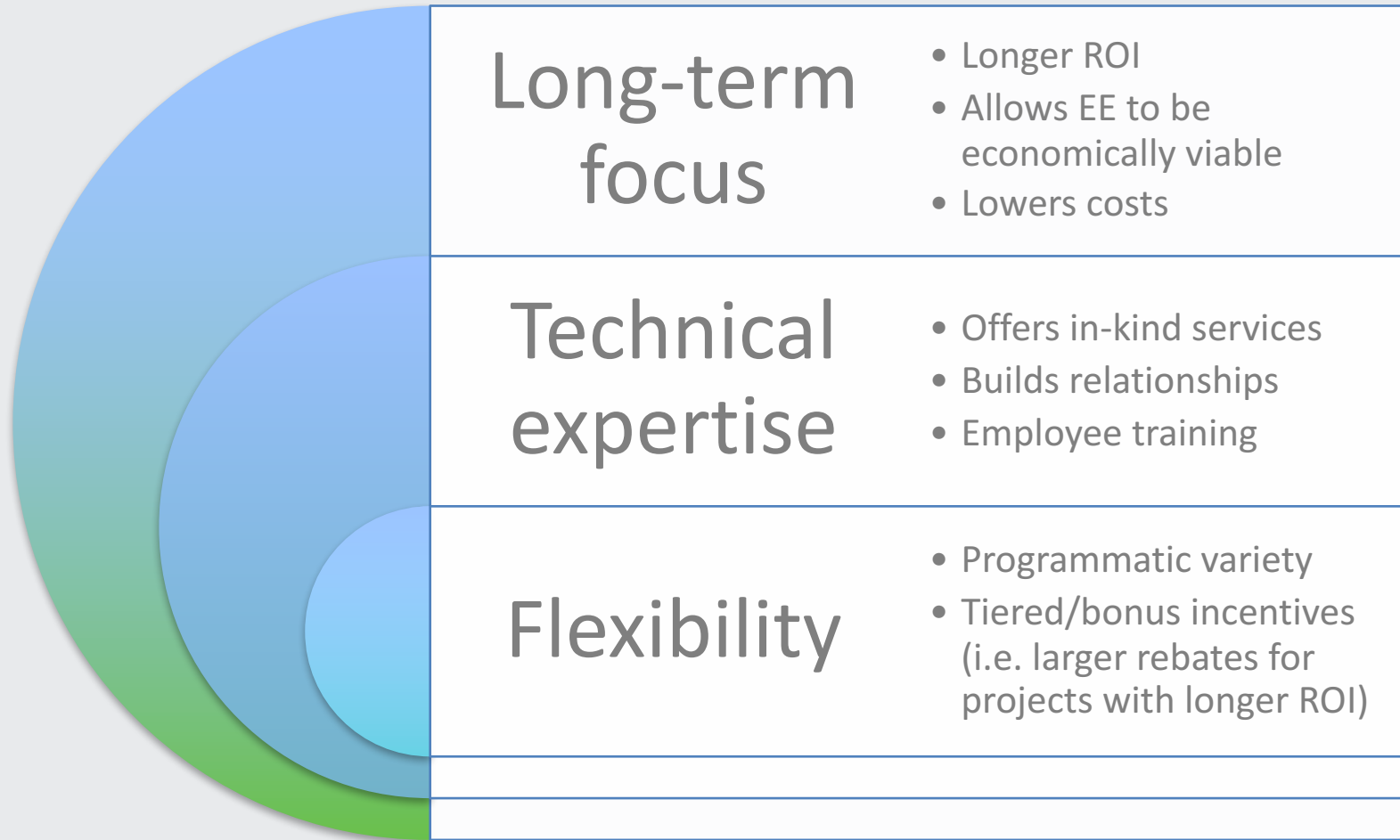
“EE programs
don’t line up with
our investment
schedule and
processes”

Multi-year
operational
planning

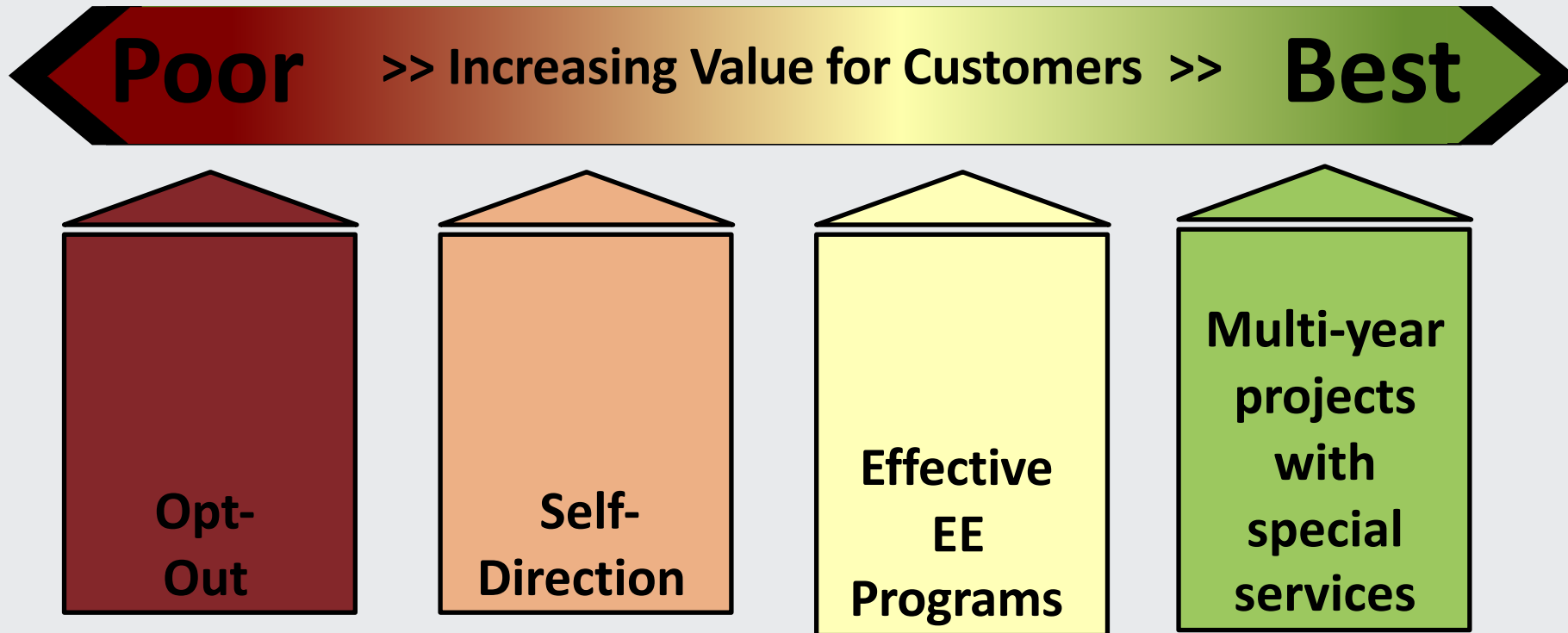
Energy price
mitigation for
all customers



Features of EE Programs Beneficial to Industrial Customers



Options for Large Customers



Case Study #1: Mass Save® & Cedar's Mediterranean Foods, Inc.

- ◆ Installed custom projects
 - ◆ Variable speed homogenizer
 - ◆ Positive displacement booster pump
 - ◆ Plant reconfiguration
- ◆ Total Project Cost: \$1,125,170
- ◆ Mass Save® Investment: \$372,665
- ◆ Annual Energy Savings: 1,170,084 kWh
- ◆ Annual Cost Savings: \$125,000
- ◆ Simple Payback Period: 3.8 years



Case Study #2: Efficiency Vermont & Husky Injection Molding Systems

- Manufacturer of injection molding manifolds
- Milton, VT facility participated in Efficiency Vermont
- EE investments would not have been made without program
- Annual Energy Savings: 5,900,000 kWh
- Annual Cost Savings: \$600,000

HUSKY®

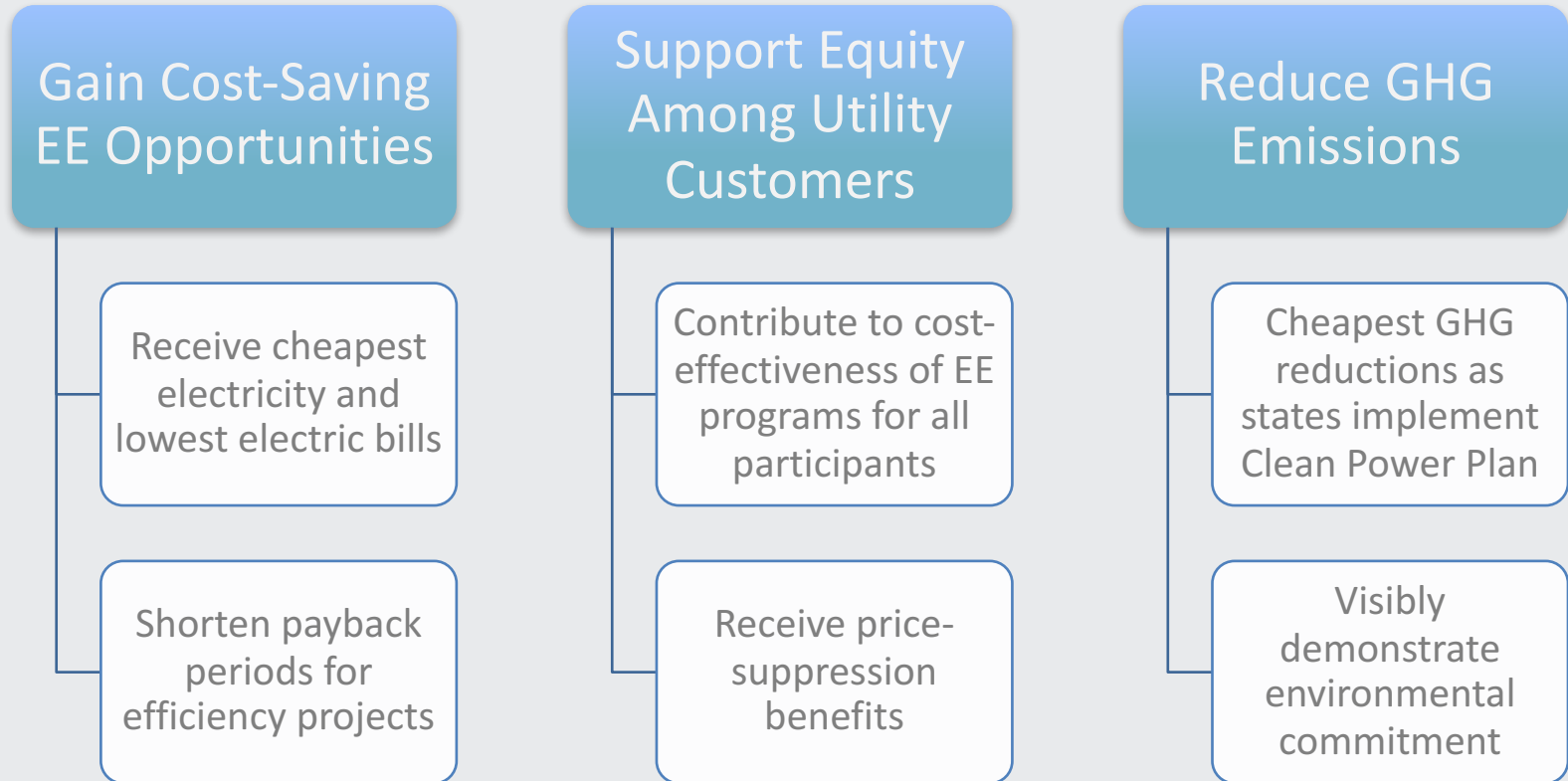


Efficiency Vermont

- “[Efficiency Vermont has] a clear understanding of our business from both an operational and financial standpoint and this allows them to adapt their focus to help us meet our goals.” – DeWayne Howell, Husky Injection Molding Systems



Why Should Manufacturers Support EE Programs?



Making Utility Efficiency Programs Work for Your Company

- Choose to participate in EE programs
- Publicly support utility EE programs
- Seek redesign of EE programs if they are not working for you





ALLIANCE

FOR INDUSTRIAL EFFICIENCY

Questions?

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