

March 7, 2018

# Cost Effectiveness Advisory Committee



Introduction to Savings:  
***NEEA's Role in Savings and Cost  
Effectiveness Reporting***

# The Alliance



NW Natural®

PACIFIC POWER



# NEEA's Role

NEEA is funded by utilities in the Pacific Northwest (the “Alliance”) with the purpose of driving energy efficiency gains in the region

NEEA does this for the Alliance through two primary means:

# Alliance Strategic Goals

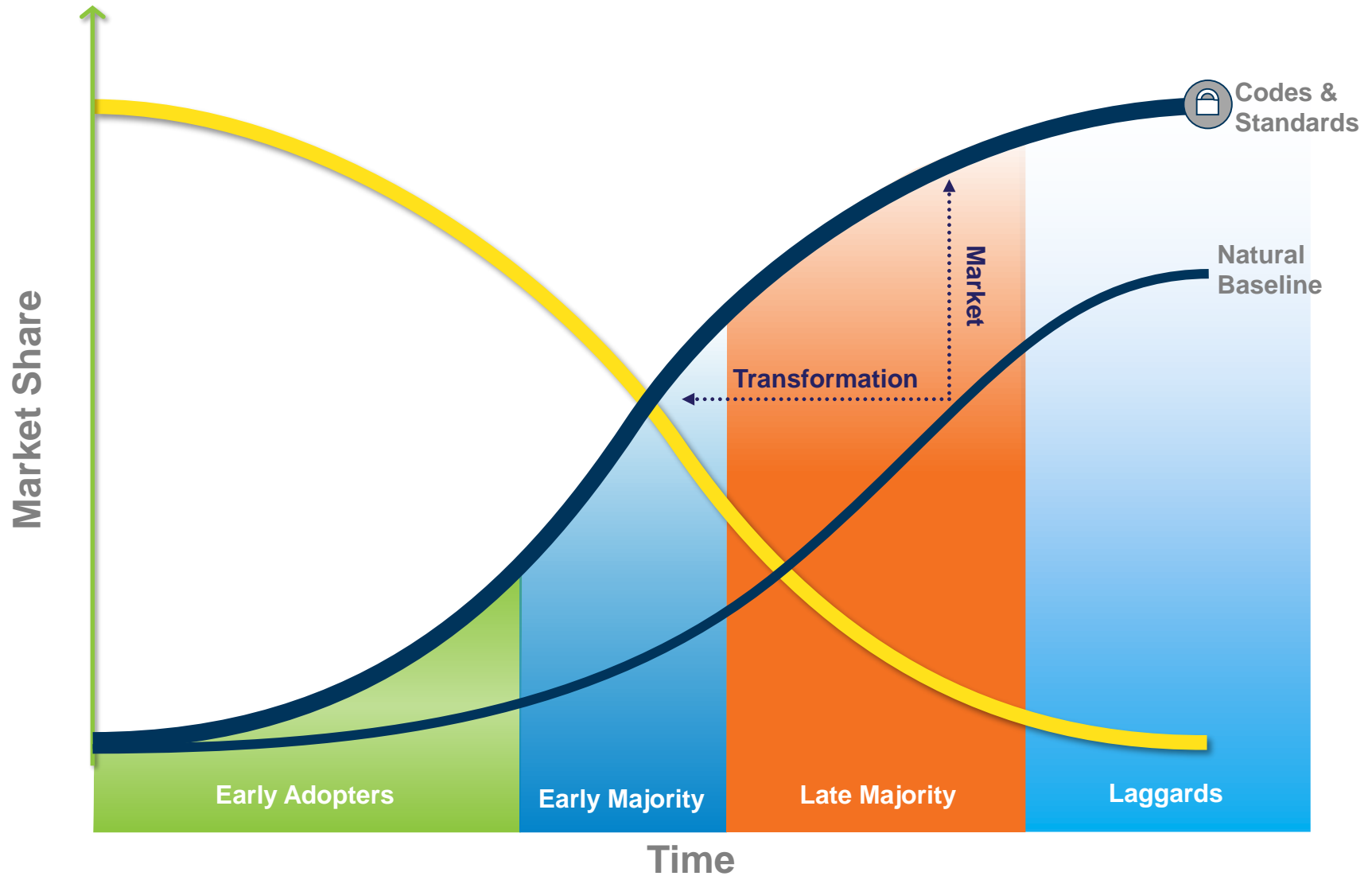
## Goal 1

Fill the energy-efficiency pipeline with new products, services and approaches.

## Goal 2

Create market conditions that will accelerate and sustain the market adoption of emerging energy-efficiency products, services and practices.

# Market Transformation: a Long-Term Engagement



# Why Does NEEA Estimate Savings?

## NEEA estimates and reports savings for two primary purposes:

1. One way we track progress and measure success
2. To support funders' regulatory requirements for cost recovery

# How Does NEEA Calculate Savings?

## Fundamental approach:





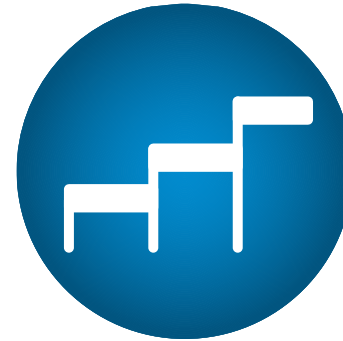
# How Does NEEA Calculate Savings?

## Two different baseline methodologies:



### **MARKET TRANSFORMATION APPROACH**

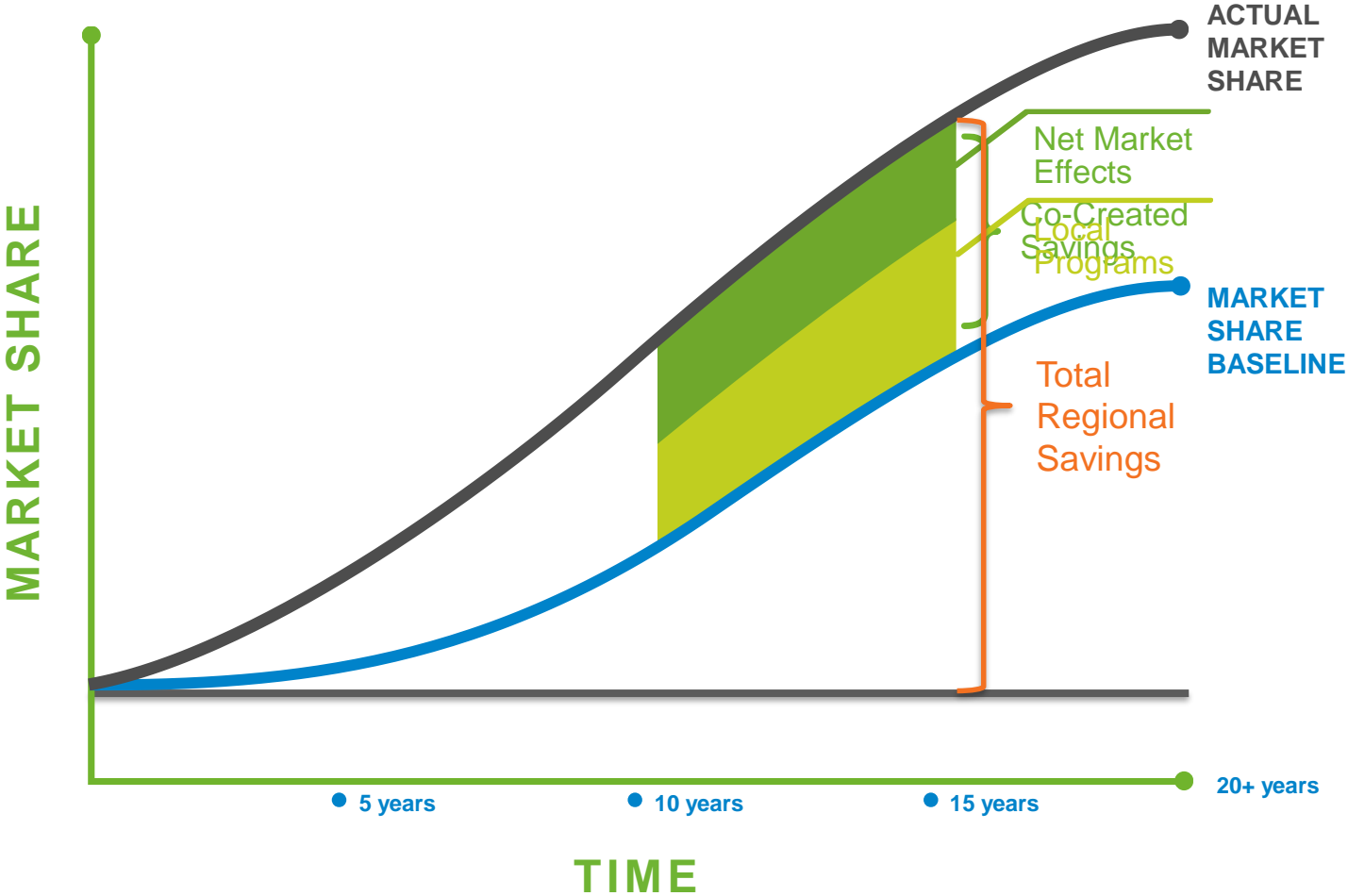
Uses the Naturally  
Occurring Baseline



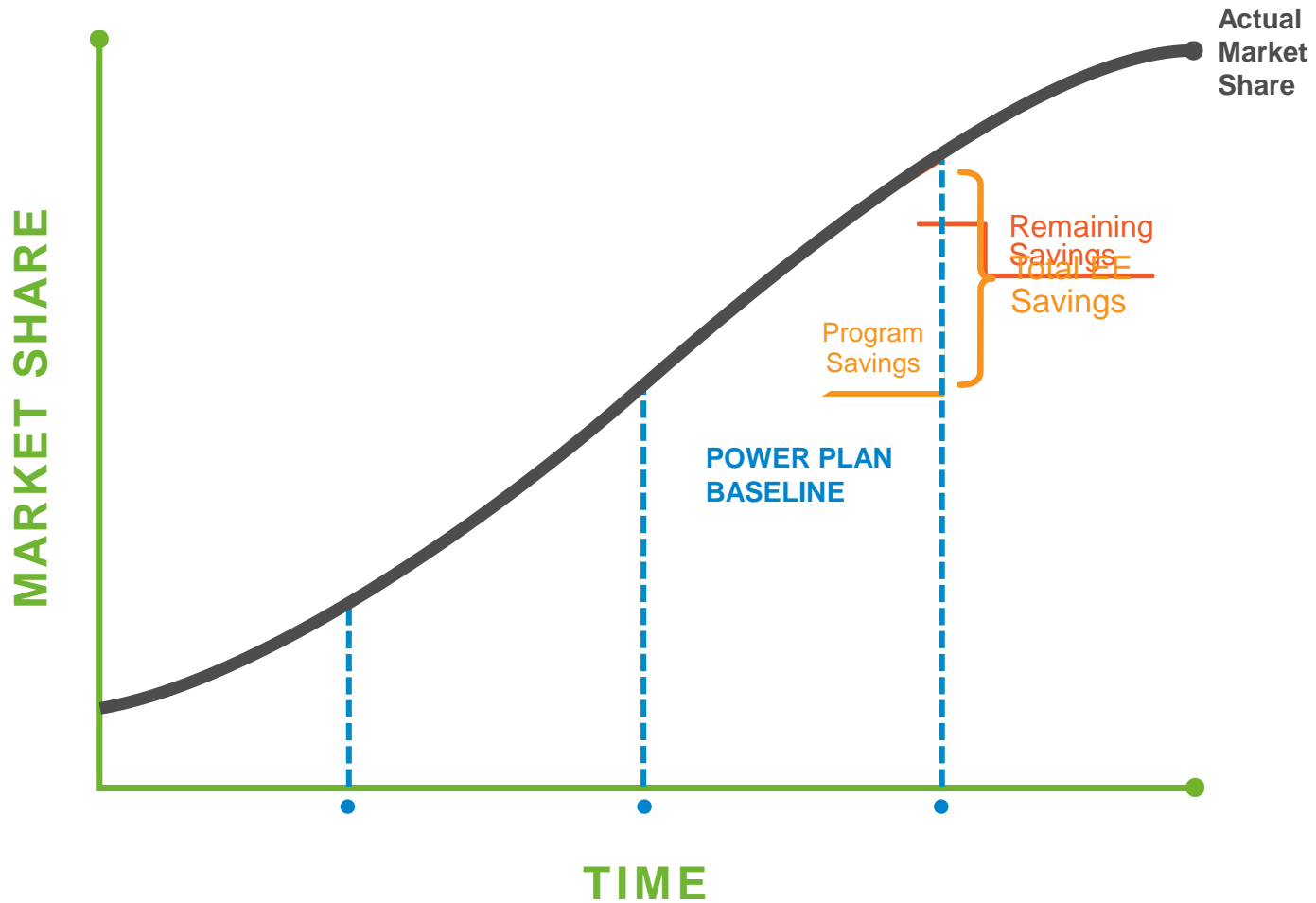
### **POWER PLAN APPROACH**

Uses a  
Fixed Baseline

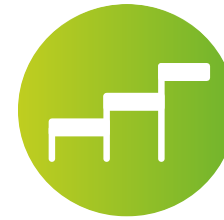
# MARKET TRANSFORMATION APPROACH



# POWER PLAN APPROACH



# FUNDER SAVINGS CALCULATIONS



# NEEA Cost Effectiveness Approach Overview

# NEEA's Objectives

- “Market Transformation is the strategic process of intervening in a market to ... accelerate the adoption of all **cost-effective** energy efficiency...”
- A cost-effective NEEA **portfolio** of initiatives has a Levelized Cost of 3.5 cents/kWh.

# NEEA Calculation Process

- Regional costs and benefits calculated using ProCost
- Calculated at the measure level
- Aggregate to initiative- and portfolio-level
- NEEA budget fully-loaded in portfolio value

# Cost Effectiveness Calculation

## Total Resource Cost Perspective

### Costs include:

- Incremental first cost
- Replacement cost
- Incremental O&M cost
- Utility program administrative costs
- Cost of NEEA's upstream incentives
- Market Research & Evaluation costs
- NEEA administrative cost
- Other costs associated with market change

### Benefits include:

- Electricity benefit
- Carbon
- Transmission and Distribution Loss
- Other quantified non-electric benefits (such as gas and water savings)



# Measuring Cost Effectiveness



Strategic Market	Program Development	Market Development	Long-term Monitoring
Consumer Products	Retail Product Portfolio  Super Efficient Dryers	Heat Pump Water Heaters  Ductless Heat Pumps	TVs  Residential CFLs  White Goods
New Construction (Commercial/Residential)	Next Step Home		Efficient Homes
Commercial Lighting	Luminaire Level Lighting Control	Reduced Wattage Lamp Replacement	
Other Markets	Extended Motor Products  Window Attachments		Food Processors Drive Power, 80Plus Bldg Operator Certification Commissioning RETA CRES Refrigeration Operator Certification