



# Introduction to the 2010 Annual Review of Savings and Cost-Effectiveness Assumptions

June 22, 2011

# Agenda: Day One

1:00 - 1:10 AM	Welcome & Agenda <ul style="list-style-type: none"><li>Review Agenda and Meeting Purpose</li><li>Check the 2011 Work Plan Status</li></ul>	Christine Jerko
1:10 – 1:30	2010 aMW Savings Summary <ul style="list-style-type: none"><li>Total Regional Savings &amp; Net Market Effects</li><li>Retroactive Savings Change</li><li>Portfolio Cost Effectiveness Metrics</li></ul>	Christina Steinhoff
1:30 - 2:30	Review Residential Assumptions <ul style="list-style-type: none"><li>Overview of Residential Savings</li><li>Televisions</li><li>Ductless Heat Pumps</li><li>Efficient Homes &amp; Codes</li></ul>	Christina Steinhoff
2:30 - 3:00	Break	
3:00 - 3:45	Review Residential Assumptions Cont. <ul style="list-style-type: none"><li>Lighting</li><li>White Goods</li><li>Windows</li></ul>	Christina Steinhoff
3:45 – 4:30	Review Commercial Assumptions <ul style="list-style-type: none"><li>Commercial Overview</li><li>BetterBricks</li><li>80+, Energy Star 5.0</li></ul>	Kathryn Bae

# Agenda: Day Two

9:00 – 9:05 AM	Welcome & Agenda <ul style="list-style-type: none"><li>Review Agenda and Meeting Purpose</li></ul>	Christine Jerko
9:05 – 10:00	Review Commercial Assumptions, Continued <ul style="list-style-type: none"><li>Previous Investment Assumptions</li></ul>	Kathryn Bae
10:00 – 10:15	Break	
10:15 – 11:30	Review Industrial Assumptions <ul style="list-style-type: none"><li>Overview of Industrial Savings</li><li>Current Investments</li><li>Previous Investments</li></ul>	Kathryn Bae
11:30 – 12:00	Summary of Decisions and Actions <ul style="list-style-type: none"><li>Update Advisory Committee on 2011 Work Plan</li></ul>	Christina Steinhoff

# Meeting Purpose

## Finalize assumptions for the 2010 Annual Savings Report

- This meeting is a part of NEEA's due diligence in reporting electric energy savings.
- NEEA will incorporate the feedback from this meeting into its report.

### Annual Reporting Due Diligence

1) Update & Review Alliance Cost Effectiveness Models

2) a. Third-party Review of Assumptions  
b. Internal Approval of Assumptions

3) Review Assumptions with Cost Effectiveness Advisory Committee

4) Gain Final Approval of Savings Report by Sector Lead

5) Report Electric Energy Savings

# Meeting Outline

## Day One

### Portfolio Summary

- Incremental Savings
- Cumulative Savings
- Cost Effectiveness



### Residential Summary

- Incremental Savings
- Cumulative Savings
- Cost Effectiveness



## Day Two

### Commercial Summary

- Incremental Savings
- Cumulative Savings
- Cost Effectiveness



### Industrial Summary

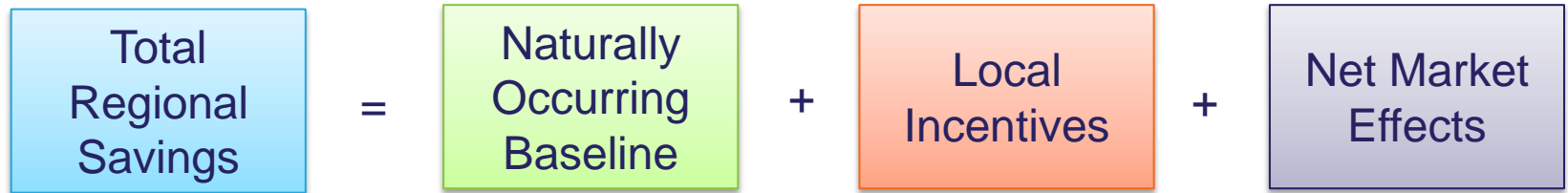
- Incremental Savings
- Cumulative Savings
- Cost Effectiveness

# Portfolio

## Incremental 2010 Savings

# Incremental Savings

## Background



Savings Associated with all Market Change

Savings from naturally occurring market change without utility, NEEA, BPA, and ETO funded interventions

Savings claimed through local utility, ETO, or BPA activities

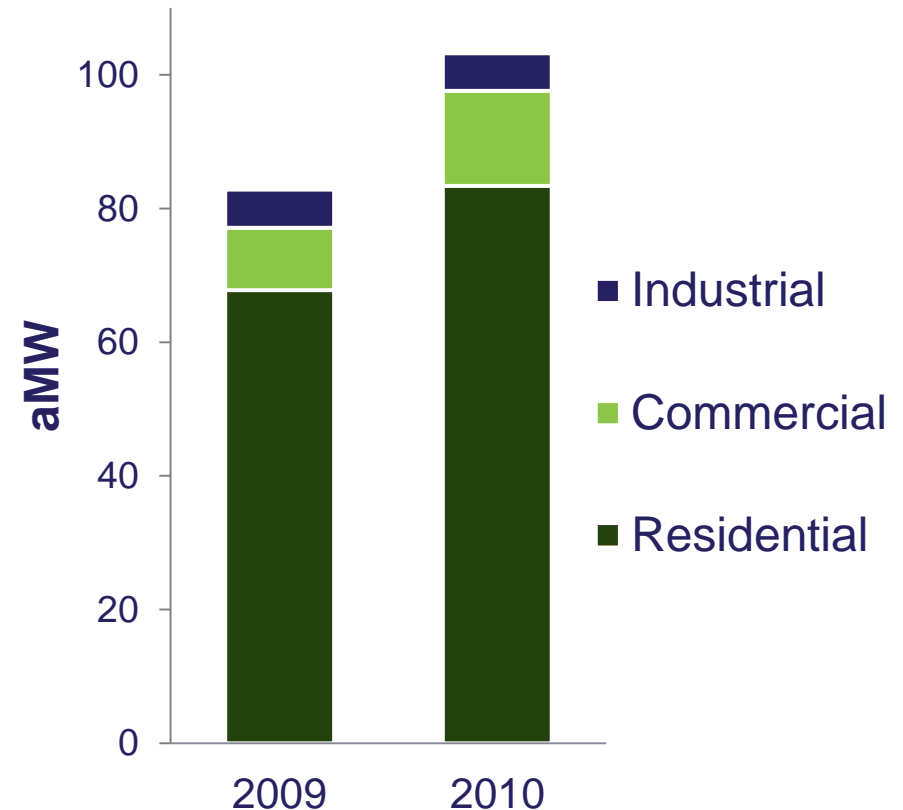
Savings associated with market change and not counted as Baseline or Local Incentives

# 2010 Portfolio Incremental Savings

## Total Regional Savings

- 103 aMW
- 24% increase from 2009  
Specialty Lighting and Televisions were large factors in the increase.
- 83 aMW, 81%, was from the Residential Sector

## Incremental Total Regional Savings

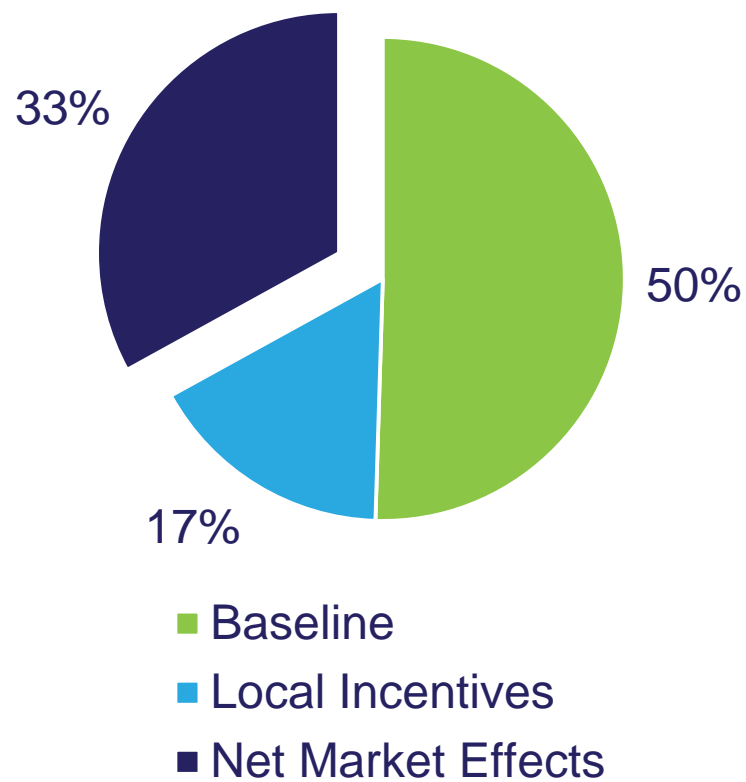


# 2010 Portfolio Incremental Savings

## Net Market Effects

- ~~33~~ 34 aMW
- ~~57~~ 62% increase from 2009  
Lighting, Building Operations and Televisions were large factors in the increase.
- ~~62~~ 63% is from the Residential Sector

## Total Regional Savings Buckets (Updated)

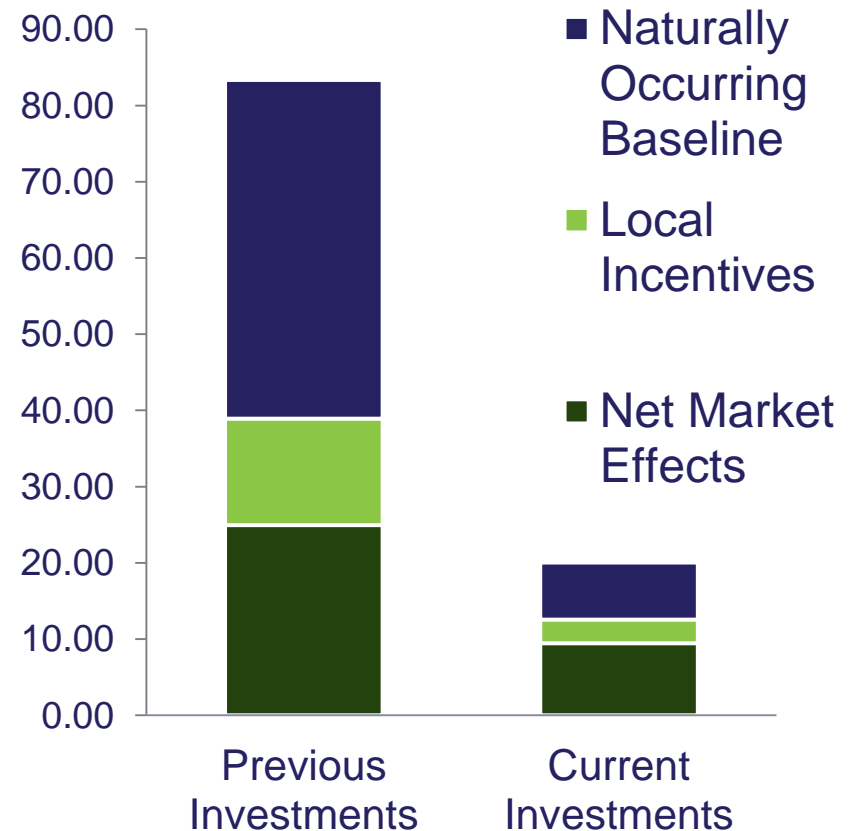


# 2010 Portfolio Incremental Savings (New Slide)

NEEA tracks energy savings as current investments and previous investments

- Current investments savings count toward NEEA's 2010-2014 Business Plan goals.
- Previous investments show the long-term effects of market transformation.

## 2010 aMW Savings



# 2010 Portfolio Incremental Savings

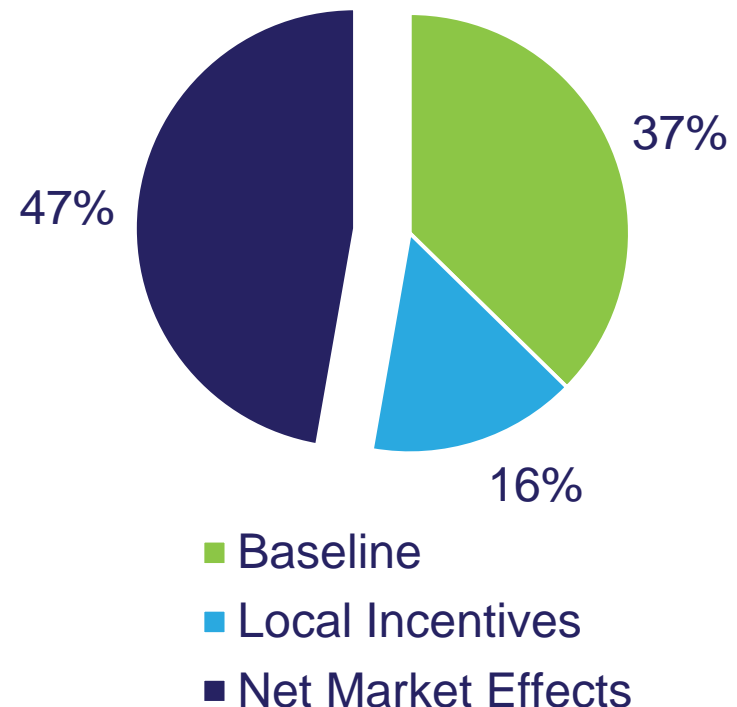
## Current Investments Total Regional Savings

- 20 aMW  
Televisions, Ductless Heat Pumps, Building Operations, and Food Processors were the largest contributors.

## Current Investments Net Market Effects

- 9 aMW

## Total Regional Savings (Current Investments)



Current Investments contributing to the 2010 savings comprise: Televisions Efficient Homes, Residential Codes. Ductless Heat Pumps. Food Processors, Commercial Real Estate, Healthcare, Building Operations, Commercial New Construction, and Business IT.

# 2010 Portfolio Incremental Savings

## Previous Investments Total Regional Savings

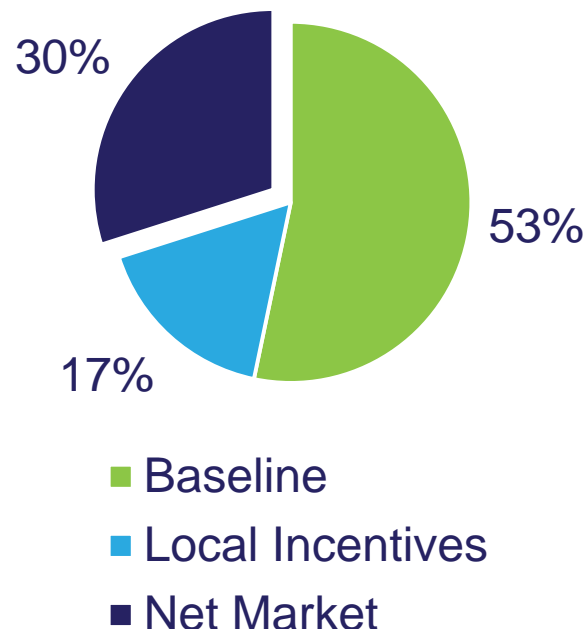
- 83 aMW  
The largest contributors were Lighting-General Purpose, Lighting-Specialty, and White Goods

## Previous Investments Net Market Effects

- ~~24~~ 25 aMW  
The largest contributors were Lighting and Business IT (80 Plus)

## Total Regional Savings (Previous Investments)

Updated



Previous Investments contributing to the 2010 savings comprise: Lighting-General Purpose, Lighting-Specialty, White Goods, Energy Star Homes, Residential Codes, Windows (U=0.35), Evaporator Fan (VFD), Drive Power, Pneu-Logic, MagnaDrive, AM 400 Data Logger, Verdiem, Commissioning, and Commercial Codes. In addition, NEEA attributes a portion of savings from some current investments toward the “previous investments” savings.

# Portfolio

## Cumulative Savings

# Portfolio Cumulative Savings

## Background: Retroactive Changes

	Incremental 2009 Savings	
	Reported in 2010	Updated in 2011
Total Regional	80	83
Net Market Effects	19	21

*Note: Includes opt-in*

## Primary Causes for the net gain of 2-3 aMW

- Added residential codes savings for NEEA's 2005-2009 funding cycle.
- Collected 2009 data showing Pneu-Logic savings in 2009.
- ~~Retroactively changed the savings rate for BacGen based on Energy Trust of Oregon study.~~

# Portfolio Cumulative Savings (1997-2009)

## Retroactive Changes

Cumulative (1997-2009)		
	Reported in 2010	Updated in 2011
Total Regional	584 601*	584 604**
Net Market Effects	257 268*	257 268

*Note: Includes opt-in*

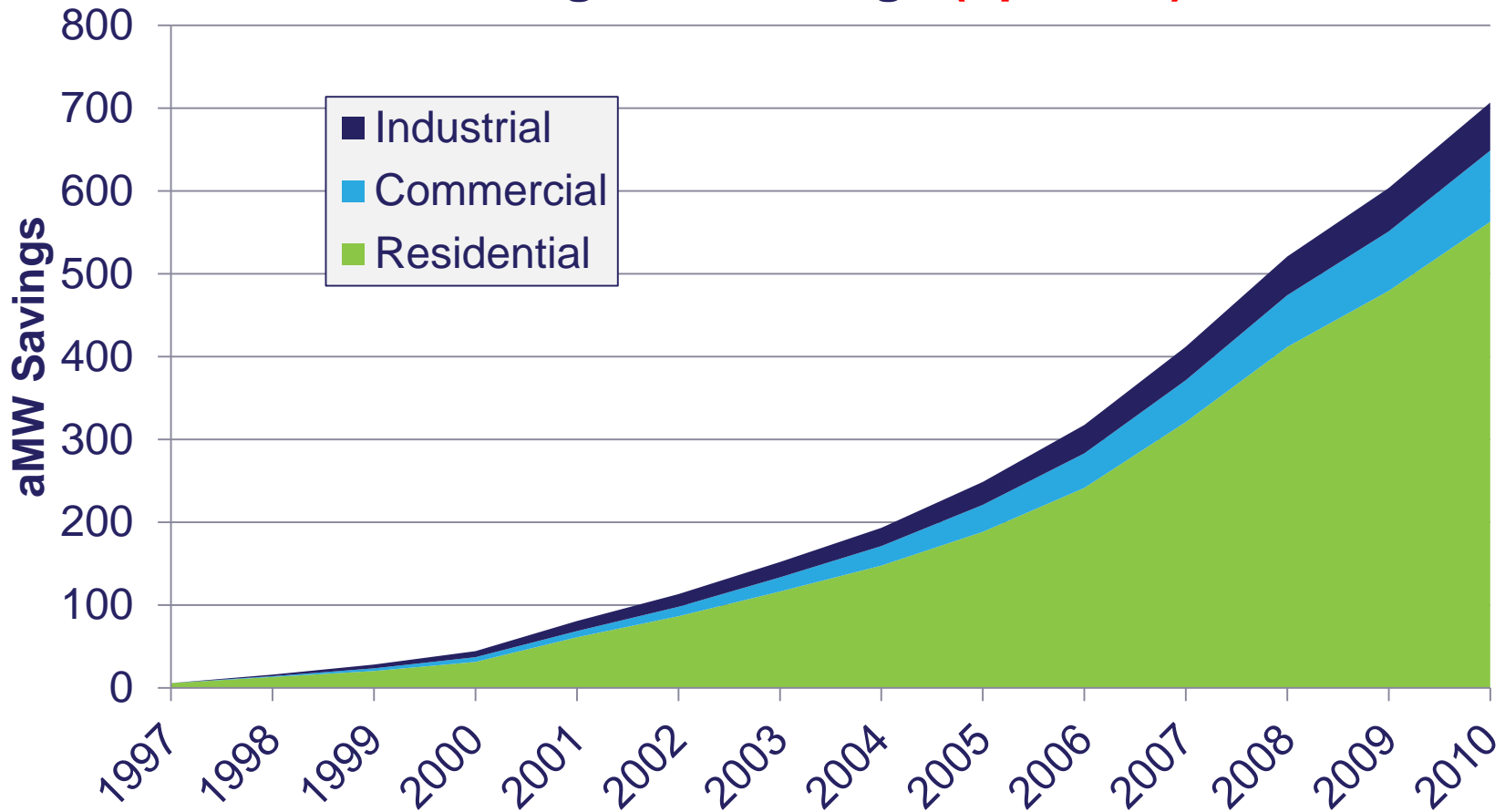
The change in cumulative savings was negligible.

*\*The prior numbers (584 and 257) did not include historical savings from Super Good Cents Manufactured Homes or Lighting Fixtures (pre 2005).*

*\*\*Prior to June 2011, NEEA retroactively lowered the BacGen savings rate. NEEA reviewed this change after the June 2011 Cost Effectiveness Advisory Committee meeting. The review led NEEA to switch back to the original savings rate. See memo "BacGen"*

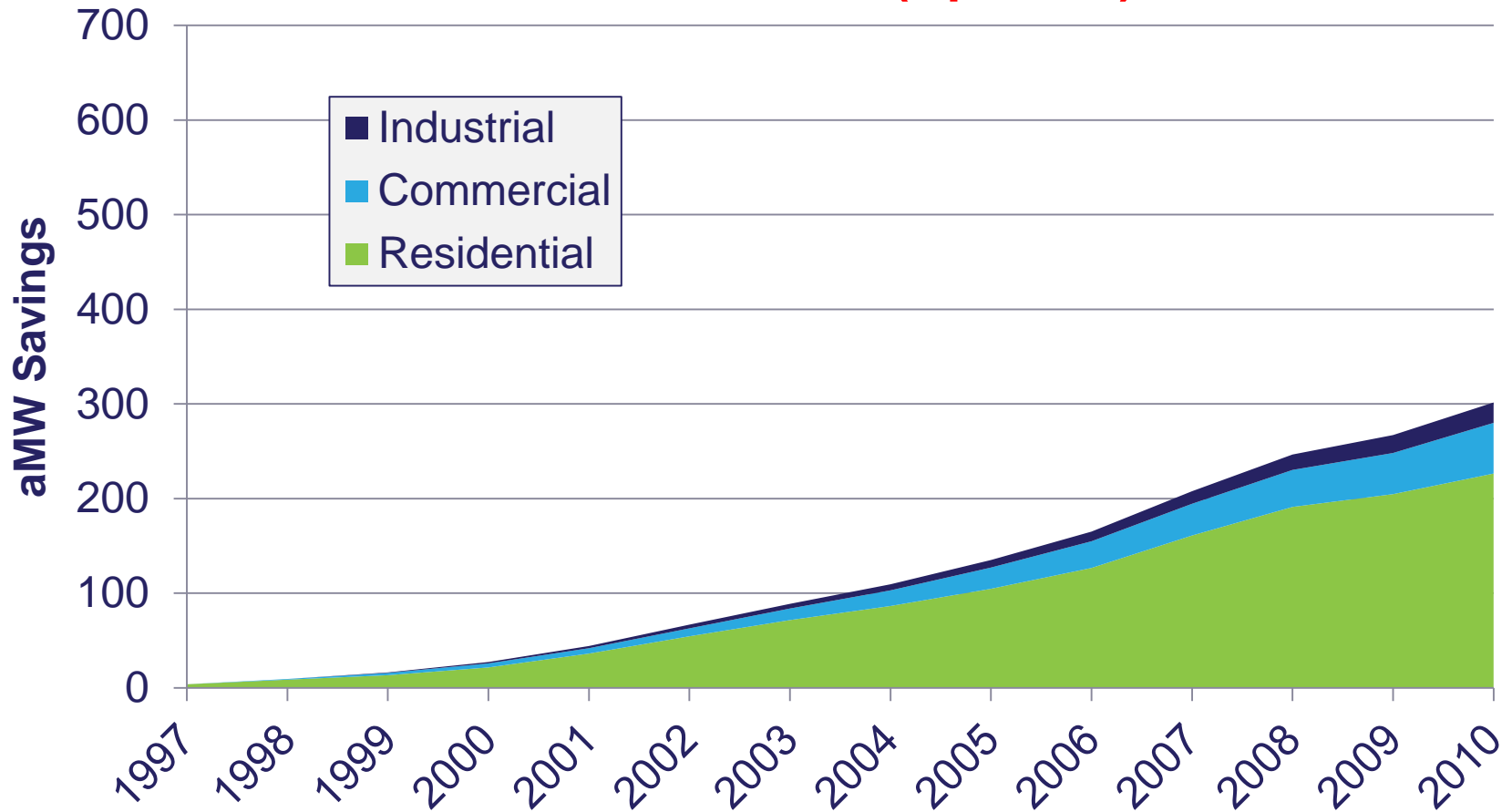
# Portfolio Cumulative Savings (1997-2010)

## Total Regional Savings (updated)



# Portfolio Cumulative Savings (1997-2010)

## Net Market Effects (Updated)



# Portfolio

## Cost Effectiveness

# Portfolio Cost Effectiveness

Current Investment	Net Levelized Cost Societal (cents/kWh saved)*		Notes
	With Act Credit Cost Advantage	Without Act Credit Cost Advantage	
Efficient Homes	3.8¢ (2009 calculation)	5.4¢ (2009 calculation)	NEEA is redesigning the initiative. As part of the redesign, NEEA needs to incorporate the effects of code changes in the metrics. Data for these effects will be available in August.
Televisions	0.0¢	1.3¢	
Ductless Heat Pumps	<del>3.4-3.5¢</del>	4.7¢	
Food Processors	0.0¢	0.0¢	
Business IT (80+ and ENERGY Star 5.0 Desktops)	2.0¢	2.7¢	
Commercial ( <i>Commercial Real Estate, Healthcare, Building Operations, Commercial New Construction</i> )	NA	NA	The Initiative is in redesign, which makes it difficult to forecast energy savings.
<b>Weighted Average</b>	<b>0.7¢</b>	<b>1.7¢</b>	Weighted by the 2010 Total Regional Savings

\* All societal costs

# Portfolio Cost Effectiveness

Current Investment	Benefit/Cost Societal*		Notes
	With Act Credit Cost Advantage	Without Act Credit Cost Advantage	
Efficient Homes	1.6 (2009 Calculation)	1.5 (2009 Calculation)	NEEA is redesigning the initiative. As part of the redesign, NEEA needs to incorporate the effects of code changes in the metrics. Data for these effects will be available in August.
Televisions	5.5	5.0	
Ductless Heat Pumps	<del>3.1</del> 1.9	<del>1.9</del> 1.7	Note: the 3.1 entry was a typo.
Food Processors	3.7	3.5	
Business IT (80+ and ENERGY Star 5.0 Desktops)	4.9	4.4	
<b>Commercial</b> ( <i>Commercial Real Estate, Healthcare, Building Operations, Commercial New Construction</i> )	NA	NA	The Initiative is in redesign, which makes it difficult to forecast energy savings.
<b>Weighted Average</b>	<del>4.9</del> 4.7	<b>4.3</b>	Weighted by the 2010 Total Regional Savings

\* All societal costs and benefits