



Projecting and Evaluating Motor Rewinds

CEE Winter Meeting
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NEEA's Unique Value



Accelerates market adoption of energy-efficient products, services and practices

Leverages regional advantage through shared resources, economies of scale, reduced risk

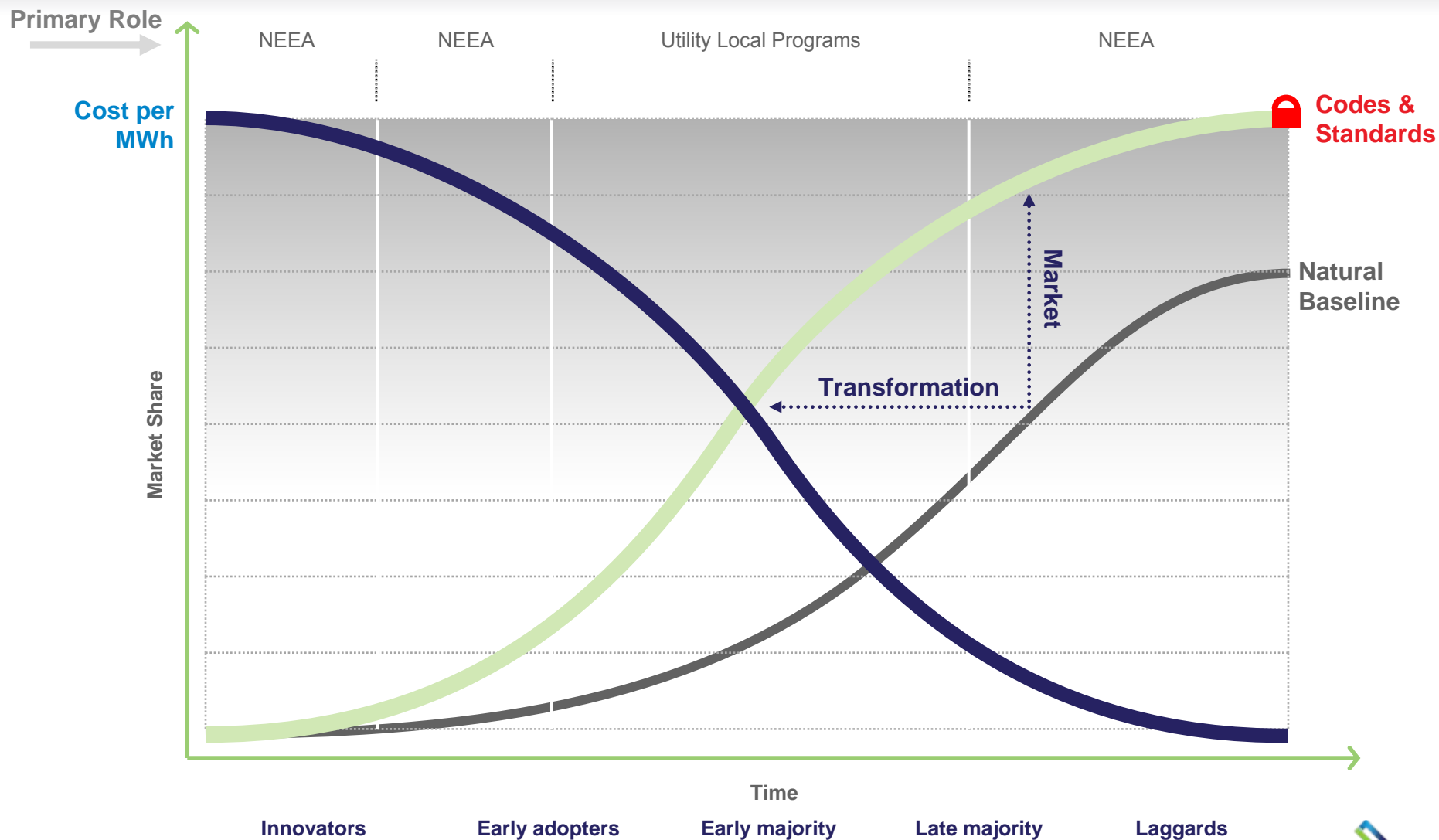
Fills the energy efficiency pipeline, championing innovation, driving emerging technologies

NEEA Funders

Avista
Bonneville Power Administration
Clark Public Utilities
Energy Trust of Oregon
Eugene Water & Electric Board
Idaho Power
NorthWestern Energy
Pacific Power
Snohomish Public Utility District
Cowlitz Public Utility District
Puget Sound Energy
Seattle City Light
Tacoma Power



Our Strategy: Market Transformation



What is evaluation?

Evaluation is skepticism . . .

. . . Not Cynicism.

Evaluation is analysis . . .

. . . Not an audit.

Evaluation is based on data collection . . .

. . . Not detection.

RA vs. MT Evaluation

	Resource Acquisition	Market Transformation
Approach	Save energy via customer participation	Save energy by mobilizing widespread market adoption
End-User Characteristics	Participants/ enrollees are known & recruited directly	Adopters are not known (aside from early partners/ demonstrations)
Savings Estimation	Summation of site-by-site savings	“Deemed”/ average savings value must be calculated in order to project savings to market
Implications	<ul style="list-style-type: none">• All savings based on verifiable results• Success of program judged on short-term results, and easily determined.• No logic model needed	<ul style="list-style-type: none">• Savings based on market projections using accepted & replicable techniques• Success of initiative based on long-term outcomes.• Theory of change with specific market progress indicators required to validate progress

Estimating Energy Savings – Part 1

$$\begin{array}{|c|} \hline \text{Per Unit} \\ \text{Savings Estimate} \\ \hline \end{array} \times \begin{array}{|c|} \hline \text{Change in Total Units} \\ \hline \end{array} = \begin{array}{|c|} \hline \text{Savings} \\ \hline \end{array}$$

- Reliable Secondary Sources
- Primary Research, as needed
- Tracking Databases
- Survey Data

Estimating Energy Savings – Part 2

Define the “unit” – i.e.
business practices

+

Per “unit”
Savings Estimate

- Reliable Secondary Sources
- Primary Research, as needed

X

Change in Total Units

=

Savings

- Tracking Databases
- Survey Data

Long Term Monitoring & Tracking

Low cost review of market change after NEEA implementation

→ Market Activity

→ Baseline Activity

→ Per-Unit Energy Savings

A bit of history

Drive Power Initiative (1999 – 2005)

- Increase region's overall motor fleet efficiency
- Influence repair/replace decisions in favor of efficiency
- Improve motor service centers repair practices

A bit more history

Industrial Efficiency Alliance (2005 – 2009)

→ Change manufacturing behaviors/business practices regarding energy management

Green Motors Practices Group

“Craftsmen Saving Energy”

- EASA Tech Note 16
- Aggregator of incentives from 99 utilities in 7 states and 1 Canadian province on behalf of 68 motor service centers in 10 states and 2 Canadian provinces
- \$2.00 per hp per rewind of which at least \$1.00 is passed on to the customer

2008 LTM&T

Findings:

- Low baseline activity
- Increased participation

A bad question: How many efficient rewinds did you perform from 2006 to 2008?

A new Question: *How do you comply with EASA Tech Note 16 (item-by-item)?*

Findings:

→ Increasing participation

→ Increasing the number of efficient rewinds

2009 Rewinds

	Total Rewinds Performed	# of EE Rewinds Performed		EE Rewinds as a Share of Total Rewinds	
		Self-Defined	EASA-Compliant	Self-Defined	EASA-Compliant
GMPG Members	1,054	894	861	85%	82%
Non-members	777	163	41	21%	5%
Total	1,831	1,057	903	58%	49%

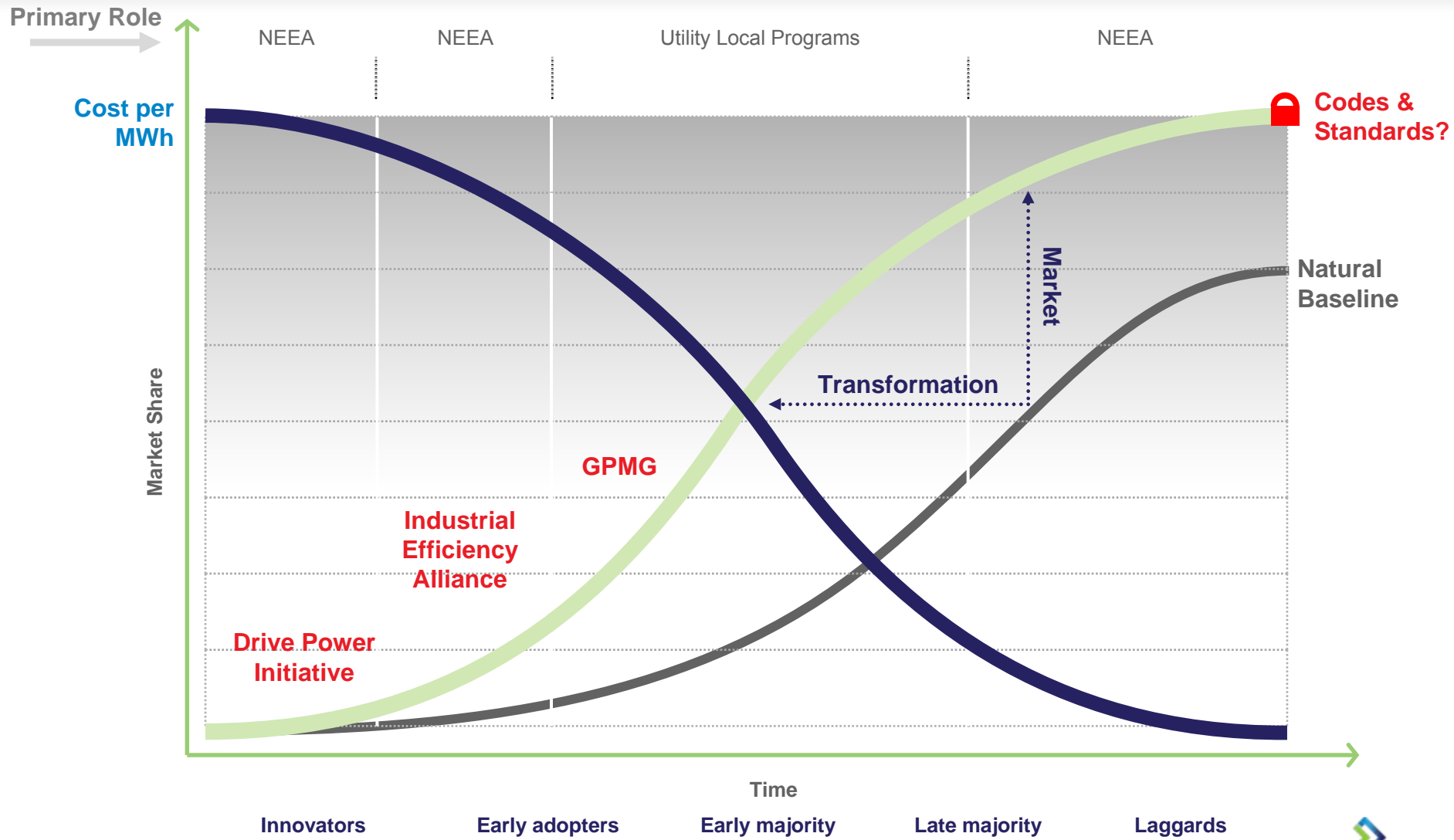
Source: Service center survey

2009 Regional Estimate of Efficient Rewinds

	EASA-Compliant Rewinds Performed (Survey Respondents)	Ratio of Population to Survey Respondents	EASA-Compliant Rewinds Performed (Population)
GMPG Members	861	4.3	3,704
Non-members	41	7	288
Total	903	4.4	3,992

Source: Service center survey and GMPG

The Market Transformation of Energy Efficient Rewinds





Questions or Comments

Thank You!