



Energy solutions
for a changing world

Getting the Most out of Energy Efficiency

NECPUC 2014 Symposium

Presented by Richard Sedano

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The Regulatory Assistance Project

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Introducing RAP and Rich

- RAP is a non-profit organization providing technical and educational assistance to government officials on energy and environmental issues. RAP staff have extensive utility regulatory experience. RAP technical assistance to states is supported by US DOE, US EPA and foundations.
 - Richard Sedano directs RAP's US Program. He was commissioner of the Vermont Department of Public Service from 1991-2001 and a former member of NECPUC.

Proposition

- No state is securing all cost-effective energy efficiency



Proposition

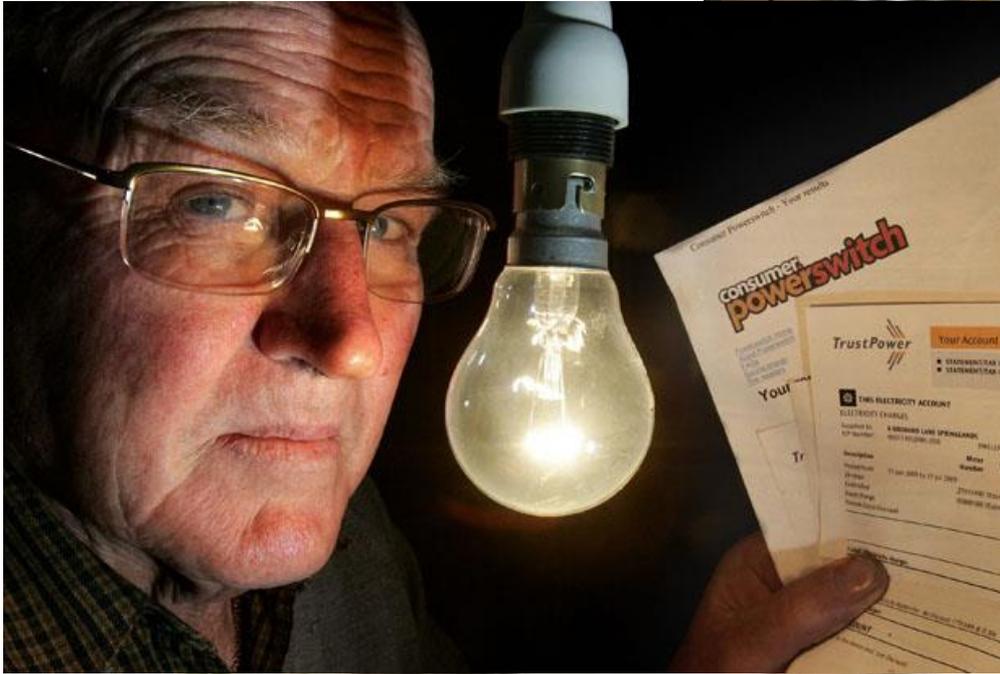
- No state is securing all cost-effective energy efficiency

Three Keys to More Cost-effective EE

1. More Money
2. Better Program Administrator Incentives
3. Better Delivery

1. More Money for Energy Efficiency

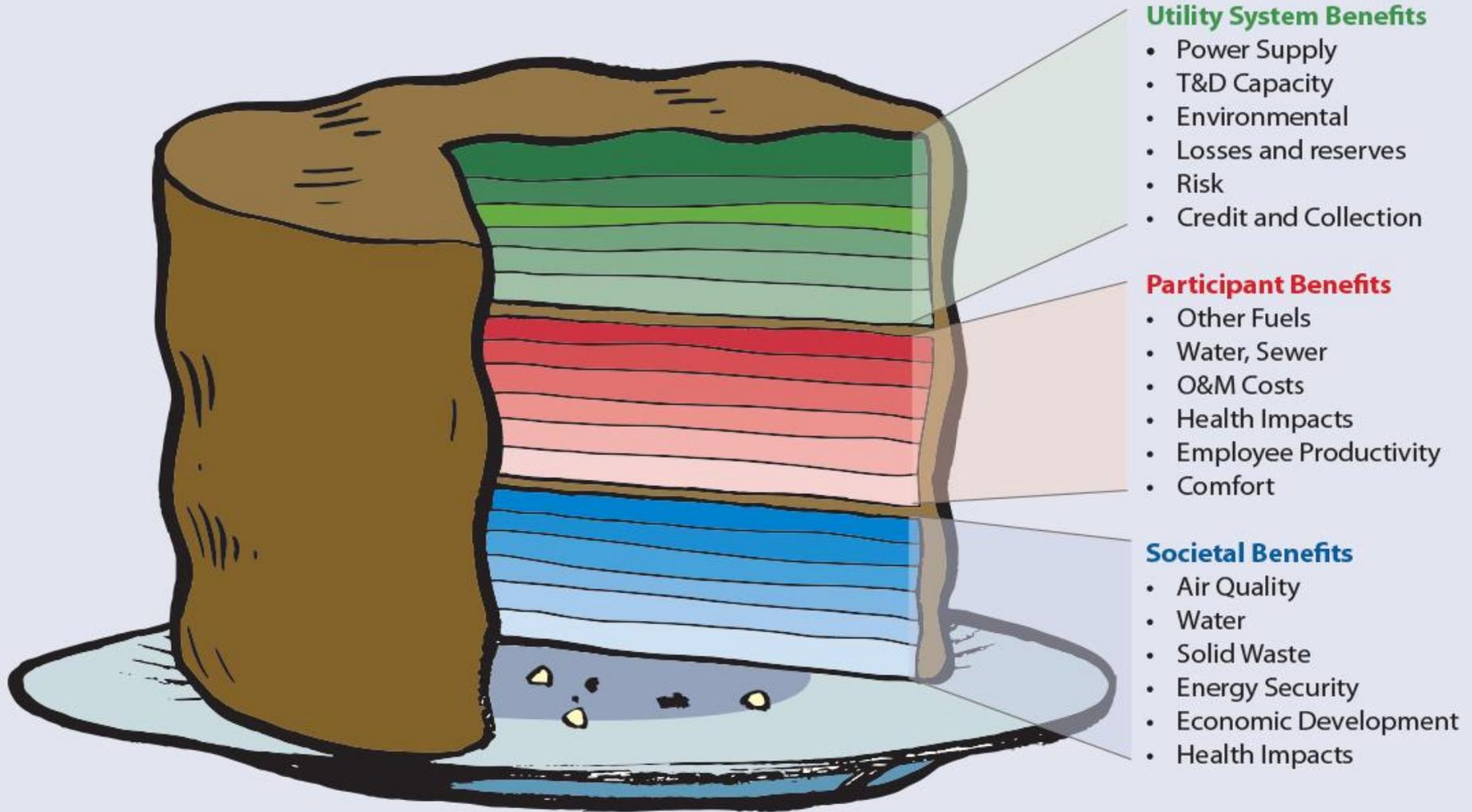
- Fully value energy efficiency
- Where does the money come from?
 - (it all comes from us)



Fully Valuing Energy Efficiency

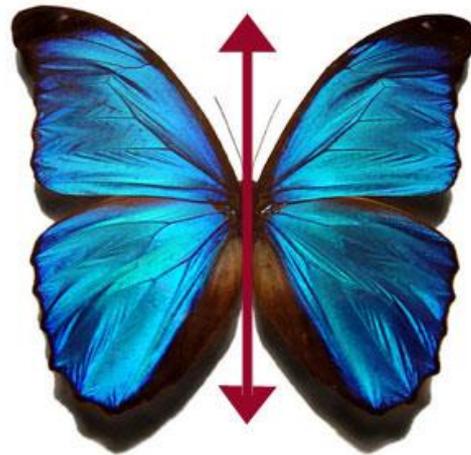
- **Utility System** value
- **Participant** value
- **Societal** value

A "Layer Cake" of Benefits from Electric Energy Efficiency



Symmetry in Benefit Cost Analysis

Include just **system** costs and benefits



Include **all** costs and benefits including participants, noting that participants invest in energy efficiency for many reasons

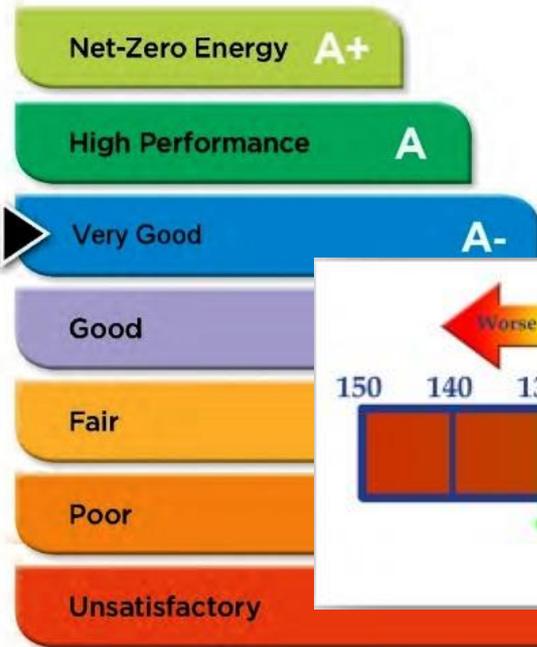
More Money from Participants

- Codes and standards
- Market transformation
 - Behavioral science
- Finance
 - Great to help with \$\$\$ and you need robust programs and information to articulate what the customer will finance or do beyond BAU

A-
AS DESIGNED



AS DESIGNED



Maximum Use of Markets

- Reduce program costs
 - Efficient use of resources
- System-wide programs maintain broad awareness

More money from utility consumers

- Yes
- Cost effective
 - Means **avoiding** more expensive stuff
 - Means **reducing risks** that might add more cost
 - Divested generation attenuates analysis
 - **Wholesale market effects** from energy efficiency matter and should count even if this is difficult

2. Program Administrator Incentives

- Remove counter incentives
 - It's just good government
 - Utilities **affected with the public interest**

Program Administrator Incentives

- Add positive incentives
 - Earnings opportunities for success
 - Recognize difference between compliance and excellence/innovation/inspiration
- Alignment
 - Maximize the power of the utility to deliver public interest outcomes

Enterprise wide scope

- Outcome-based regulation
 - Different skills from regulator and regulated
 - Forces periodic conversation about priorities
 - That is a good conversation

NY initiative: Reforming the Energy Vision

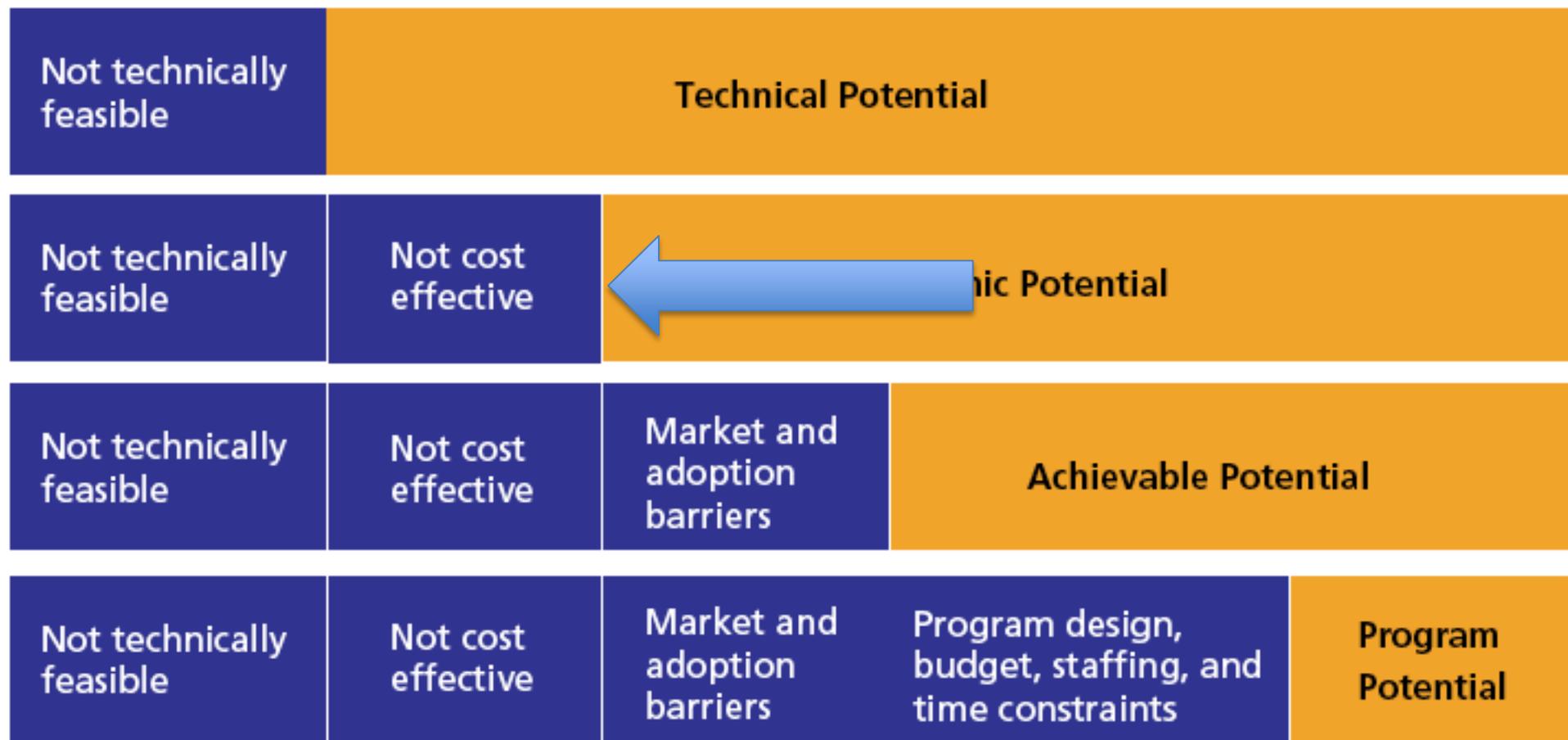
- PSC staff expressed interest in outcome-based regulation
 - Expectation of more energy efficiency justified for that purpose
 - Improved load factor (peak reduction)
 - Improving system operating efficiency
 - Reduced losses
 - Avoided capital
 - Geo-Targeted benefits plus use of Big Data
 - Customers #1

Performance Focus on Energy Efficiency

- More complete connection between EE practices to public interest benefits
- Multi-year scope
 - Use of milestones to manage flow and risk
- Market transformation
- Counting

Counting

- Measurement and Verification tends to be conservative
 - Looking over our shoulder at those suspicious of energy efficiency
- Many important sources of energy efficiency can be counted to motivate PA
 - Codes, standards, behavior, thermal improvements, especially across fuels, strategic reduction in fossil fuel dependence



Motivating Scoring Options

- Traditional EE programs credit
 - Gross and Net
- Market Transformation credit
- Efficient Electrification credit
- Efficient Thermal Conversion credit

3. Better Delivery

- Make it easier for people/decision-makers to engage with energy efficiency
 - Delivery channels where **people already are**
 - Communities
 - Faith based organizations
 - Employers
 - Comprehensive service providers (where permitted by utility regulation)
 - Consumer get any energy service they want from whomever they want

Promoting Better Delivery

- Utility motivation on energy efficiency guides utility behavior on energy efficiency
 - Motivation to secure all savings attributable to utility action **(NET)**
 - Program administrator is in the **scoring** business
 - Motivation to maximize overall savings regardless of attribution **(GROSS)**
 - Program administrator is in the **enabling** business

Prioritizing

- Regulation is always about prioritizing
 - Maximum cost-effective energy efficiency
 - Mitigate climate change
 - Save money from reduced system investment
 - Reduce risk
 - Motivate PA to do all it can do, including mobilizing others, and reduce EE soft costs
 - Getting to 3%, 30% and beyond

About RAP

The Regulatory Assistance Project (RAP) is a global, non-profit team of experts that focuses on the long-term economic and environmental sustainability of the power and natural gas sectors. RAP has deep expertise in regulatory and market policies that:

- Promote economic efficiency
- Protect the environment
- Ensure system reliability
- Allocate system benefits fairly among all consumers

Learn more about RAP at www.raonline.org

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