GWSP Global Warming Solutions Project

Energy Policy Briefing

Protecting Consumers & The Climate

May 19, 2015

Environmental League of Massachusetts

neep

Acadia Center

Overview

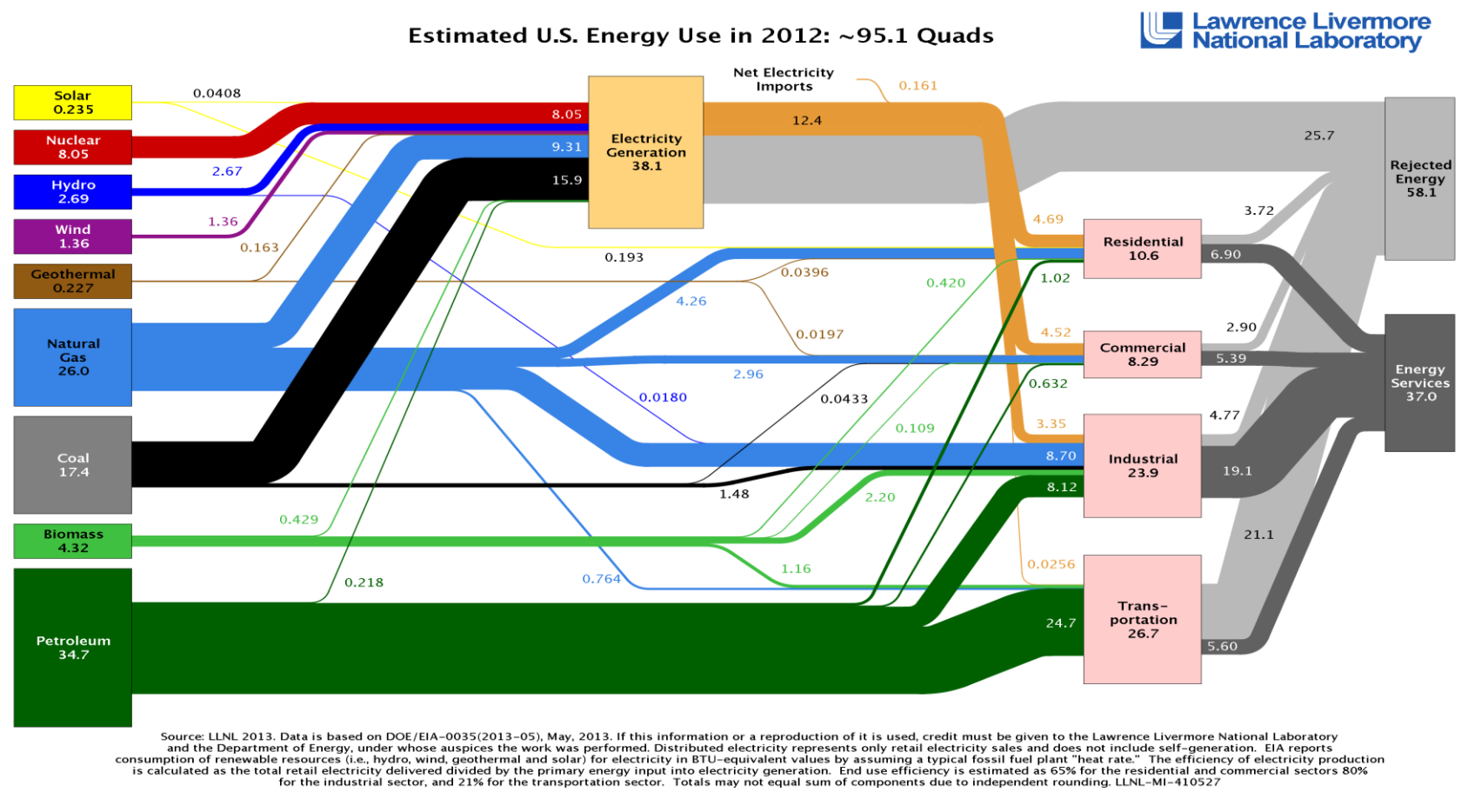
- **Representative Lori Ehrlich: Protecting Customers from Leaked & Unaccounted for Natural Gas (HB 2870)**

- **NEEP: Driving Energy Efficiency through a Home Energy Labeling System (SB 1761)**

- **Acadia Center: Next Generation Solar Policy Framework for Massachusetts**

Environmental League of Massachusetts

60 percent of U.S. Primary Energy is Wasted



Source: LNL via Opower

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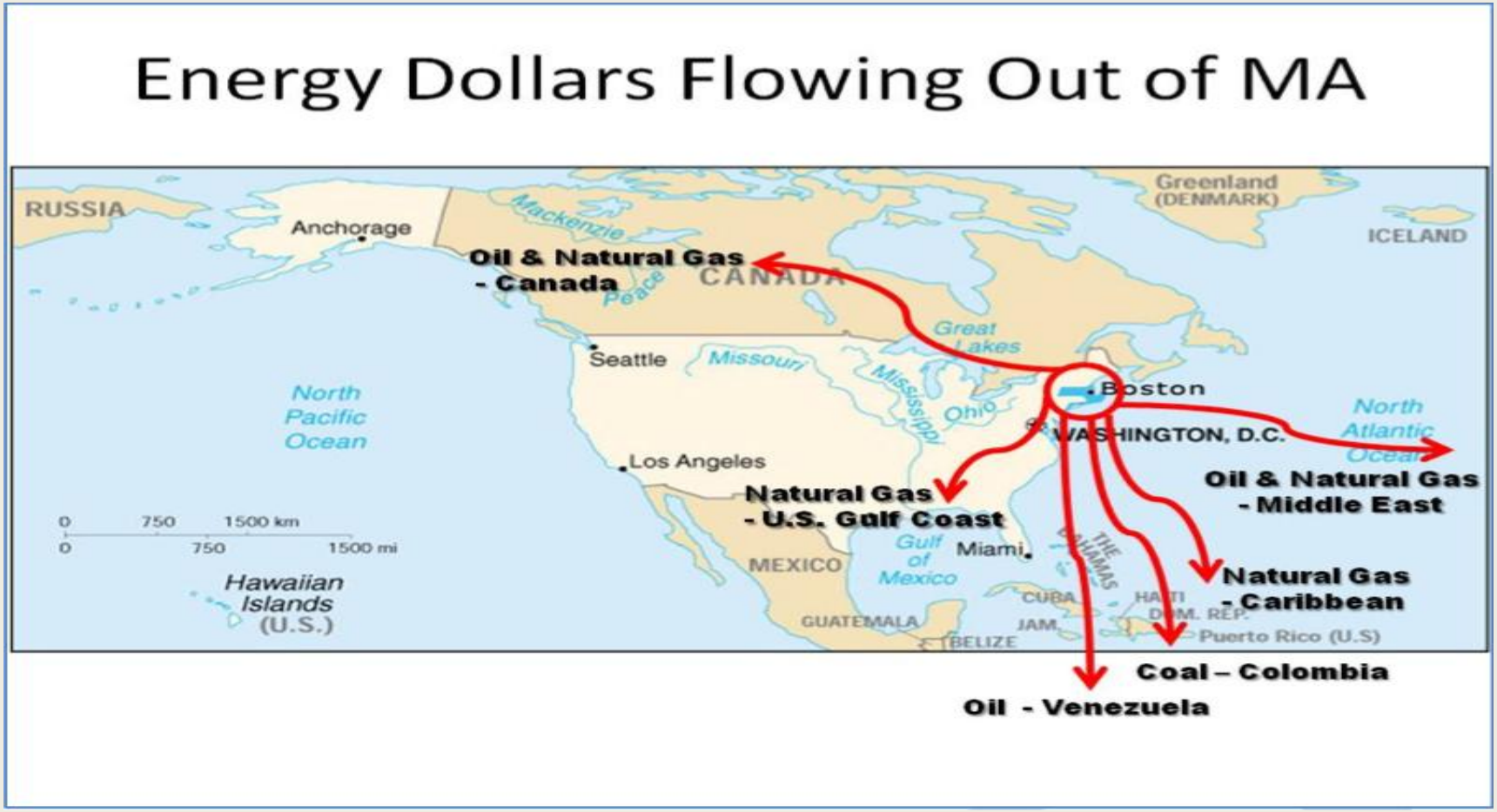
Massachusetts spend ~$22 billion on energy every year, 80% of which leaves the state.



Source: Marc Breslow, Ph.D., “Exported Energy Dollars = Lost Opportunity", pg. 3, 2012

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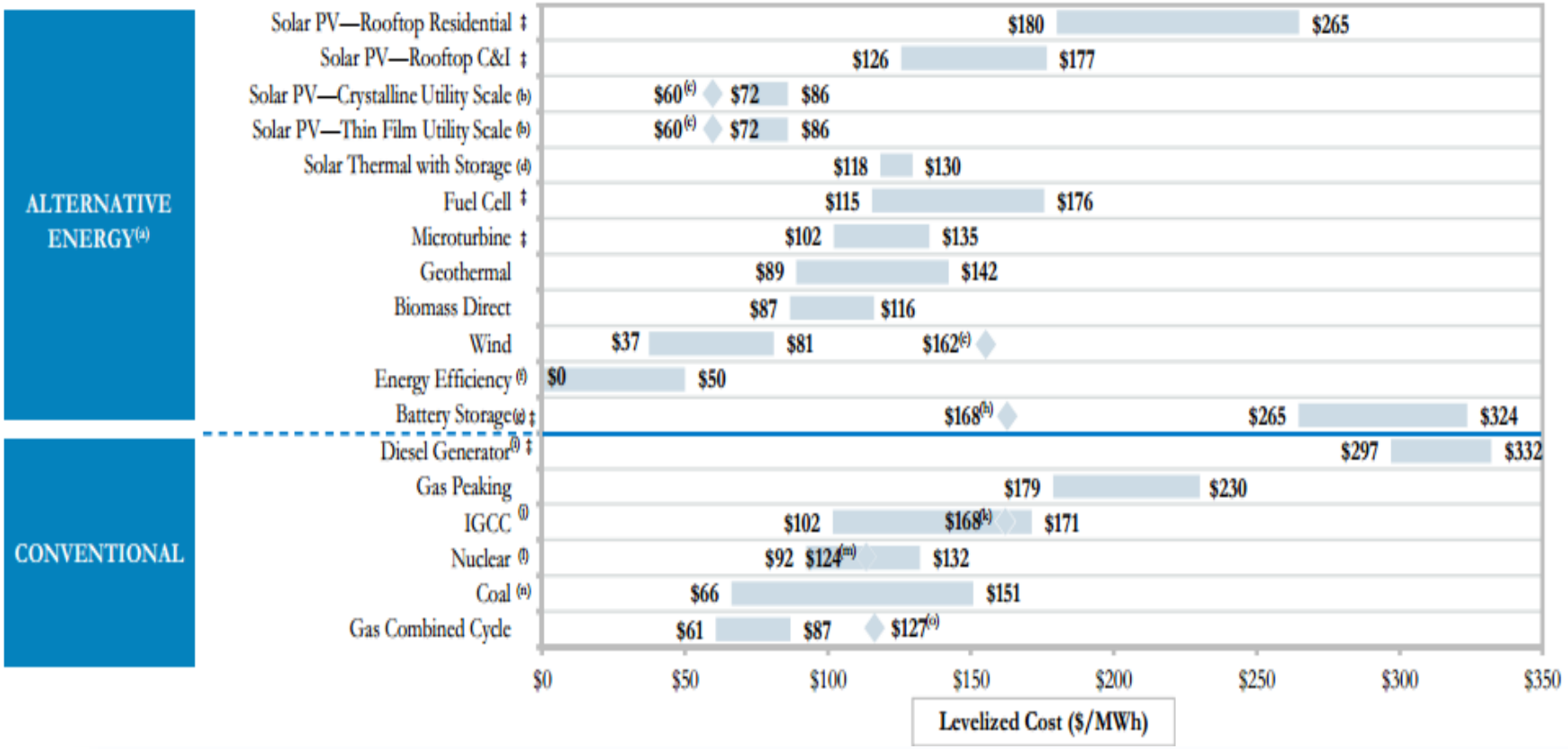
ENERGY POLICY BRIEFING: DRIVING ENERGY EFFICIENCY THROUGH A HOME ENERGY LABELING SYSTEM (SB 1761)

Jim O'Reilly, Director of Public Policy

Northeast Energy Efficiency Partnerships (NEEP)

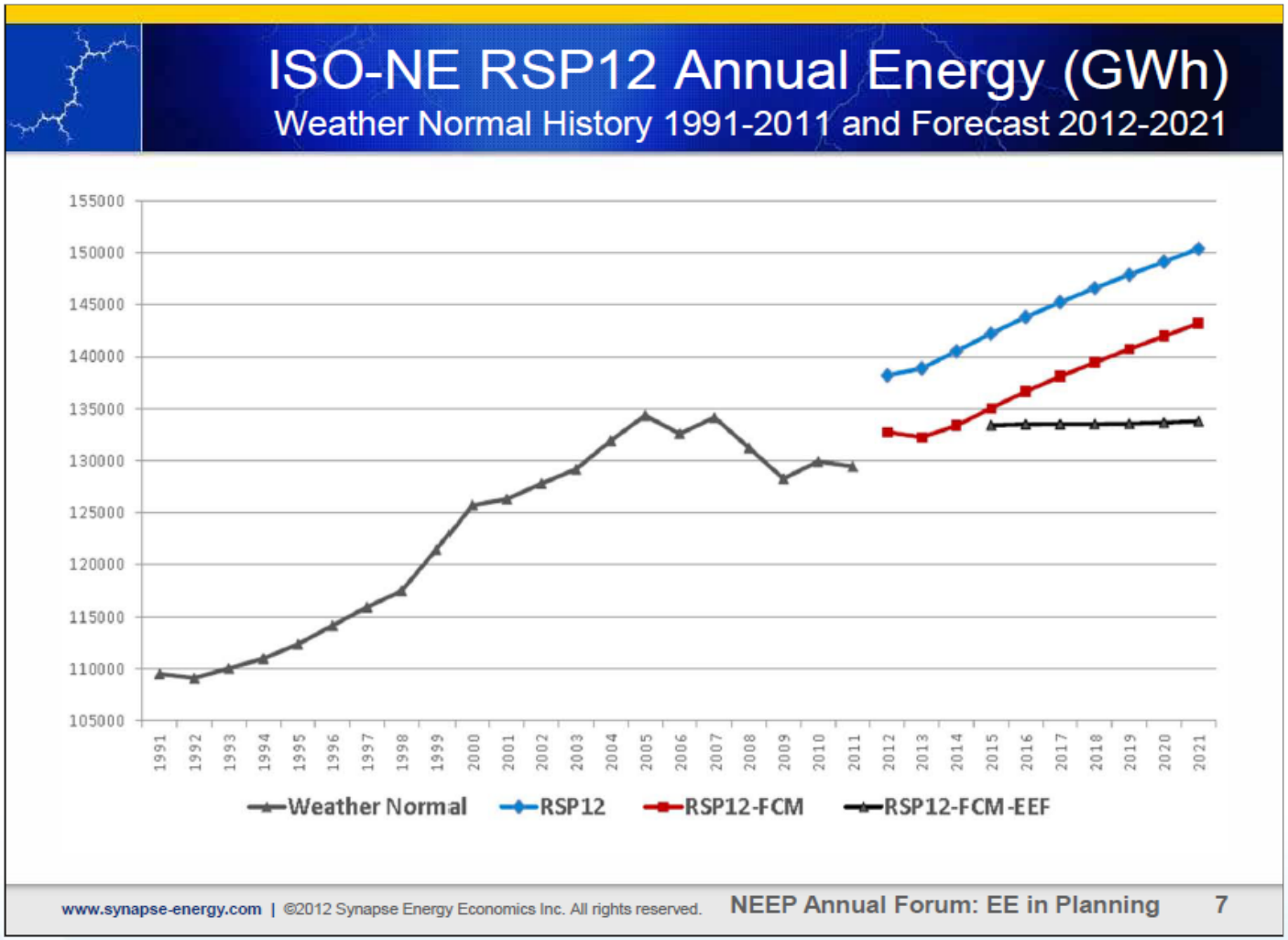
May 19, 2015

ENERGY EFFICIENCY: FAR AND AWAY OUR LEAST COST RESOURCE



- Source: Lazard, 2014

THE REALITY: NO GROWTH IN ELECTRICITY CONSUMPTION THROUGH 2021



Paul Peterson, Synapse Energy Economics, EM&V Forum Annual Public Meeting, December 2012, http://neep.org/uploads/EMV%20Forum/Calendars/Synapse%20EE%20in%20System%20Forecasting.pdf

We put labels on a host of consumer products…

Nutrition Facts

Serving Size 1 cup (236ml)
Servings Per Container 1

Amount Per Serving	
Calories 120	Calories from Fat 45
	% Daily Value*
Total Fat 5g	8%
Saturated Fat 3g	15%
Trans Fat 0g	
Cholesterol 20mg	7%
Sodium 120mg	5%
Total Carbohydrate 11g	4%
Dietary Fiber 0g	0%
Sugars 11g	
Protein 9g	17%

Vitamin A 10% • Vitamin C 4%
Calcium 30% • Iron 0% • Vitamin D 25%

*Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs:

USDA ORGANIC

Based on standard U.S. Government tests

ENERGYGUIDE

Water Heater – Natural Gas
Capacity(first hour rating):
57 Gallons

GSW Water Heating Company
Model: JW540SNA
H4400

Compare the Energy Use of this Water Heater with Others Before You Buy.

This Model Uses

268 therms/year

Energy use (therms/year) range of all similar models

Uses Least Energy	Uses Most Energy
238	273

Therms/year is a measure of energy use. Your utility company uses it to compute your bill. Only models with first hour ratings of 56 to 64 gallons are used in this scale.

Natural gas water heaters that use fewer therms/year cost less to operate. This model's estimated yearly operating cost is:

$162

Based on a 1994 U.S. Government national average cost of $0.604 per therm for natural gas. Your actual operating cost will vary depending on your local utility rates and your use of the product.

Important: Removal of this label before consumer purchase is a violation of Federal law (42 U.S.C. 6302) 73316

Compare this vehicle to others in the **FREE FUEL ECONOMY GUIDE** available at the dealer.

CITY MPG
23

Actual Mileage will vary with options, driving conditions, driving habits and vehicle's condition. Results reported to EPA indicate that the majority of vehicles with these estimates will achieve between 19 and 27 mpg in the city and between 26 and 35 mpg on the highway.

Fuel Economy Information

1993 CANARY 2.0 LITER
L4 ENGINE FUEL INJECTED
AUTO 3 SPD TRANS CATALYST
FEEDBACK FUEL SYSTEM

Estimated Annual Fuel Cost:
$850

HIGHWAY MPG
30

For Comparison Shopping, all vehicles classified as COMPACT have been issued mileage ratings ranging from 1 to 31 mpg city and 16 to 41 mpg highway.

WHY NOT HOMES AND BUILDINGS?

SB 1761

- Requires home sellers to undergo a MassSave audit at time of sale
- Makes the results known to prospective buyers
- Requires DOER to develop a rating/labeling system so results of audits are consistent, easy to understand, actionable for buyers & sellers
  - May use MassSave Home MPG Pilot, RESNET HERS system or DOE Home Energy Score
- Provides consumers with more information to make informed real estate choices
- Uses market forces to reveal value of energy efficiency and help drive retrofits

Thank you!

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Acadia Center

EnergyVision, UtilityVision, and Next Generation Solar Policy

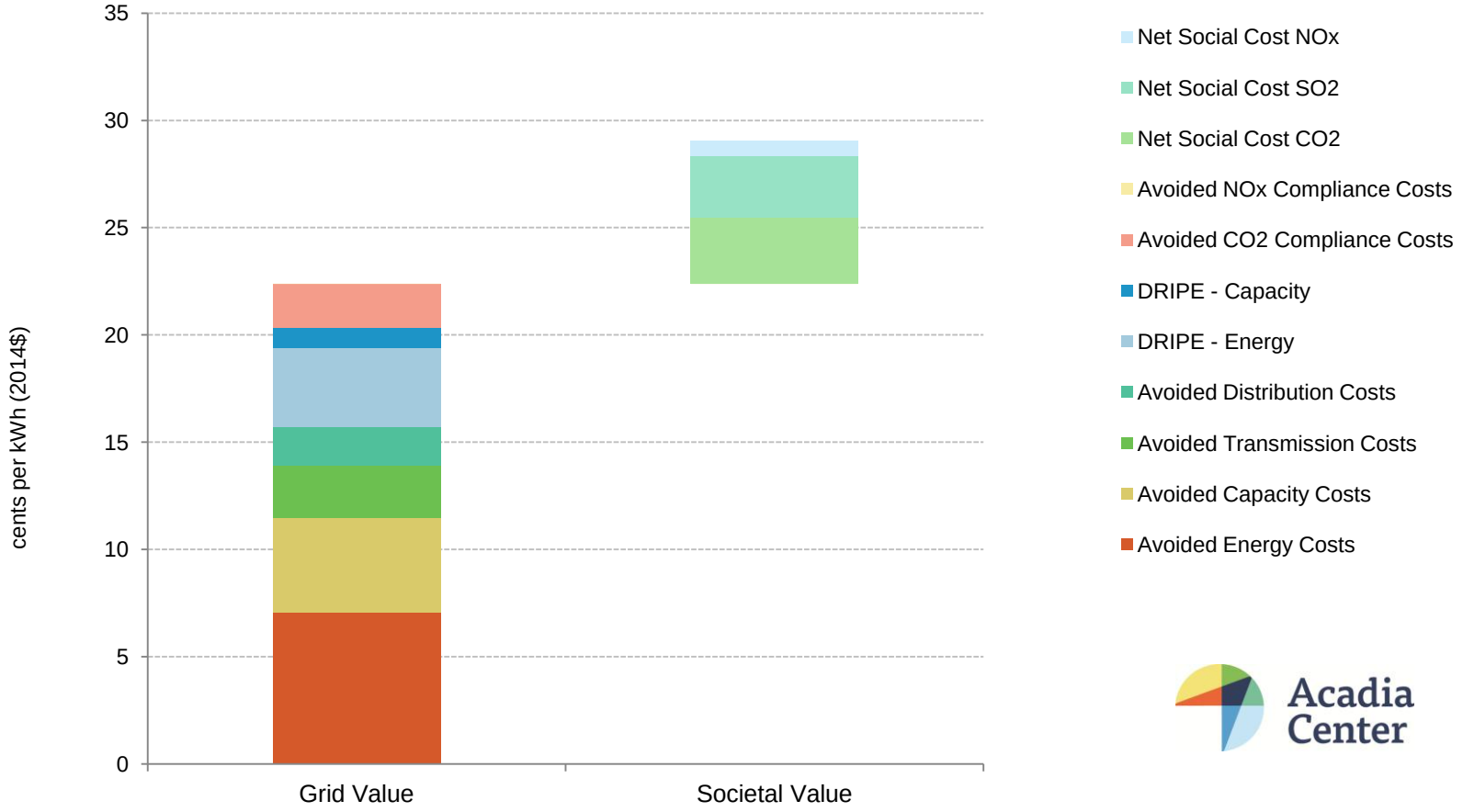
Massachusetts State House

May 19, 2015

Changing how we think about the energy system: Putting consumers in the center

Value of Solar PV in MA

(25 year levelized cost, $2014)



Acadia Center

http://acadiacenter.org/document/value-of-solar-massachusetts/

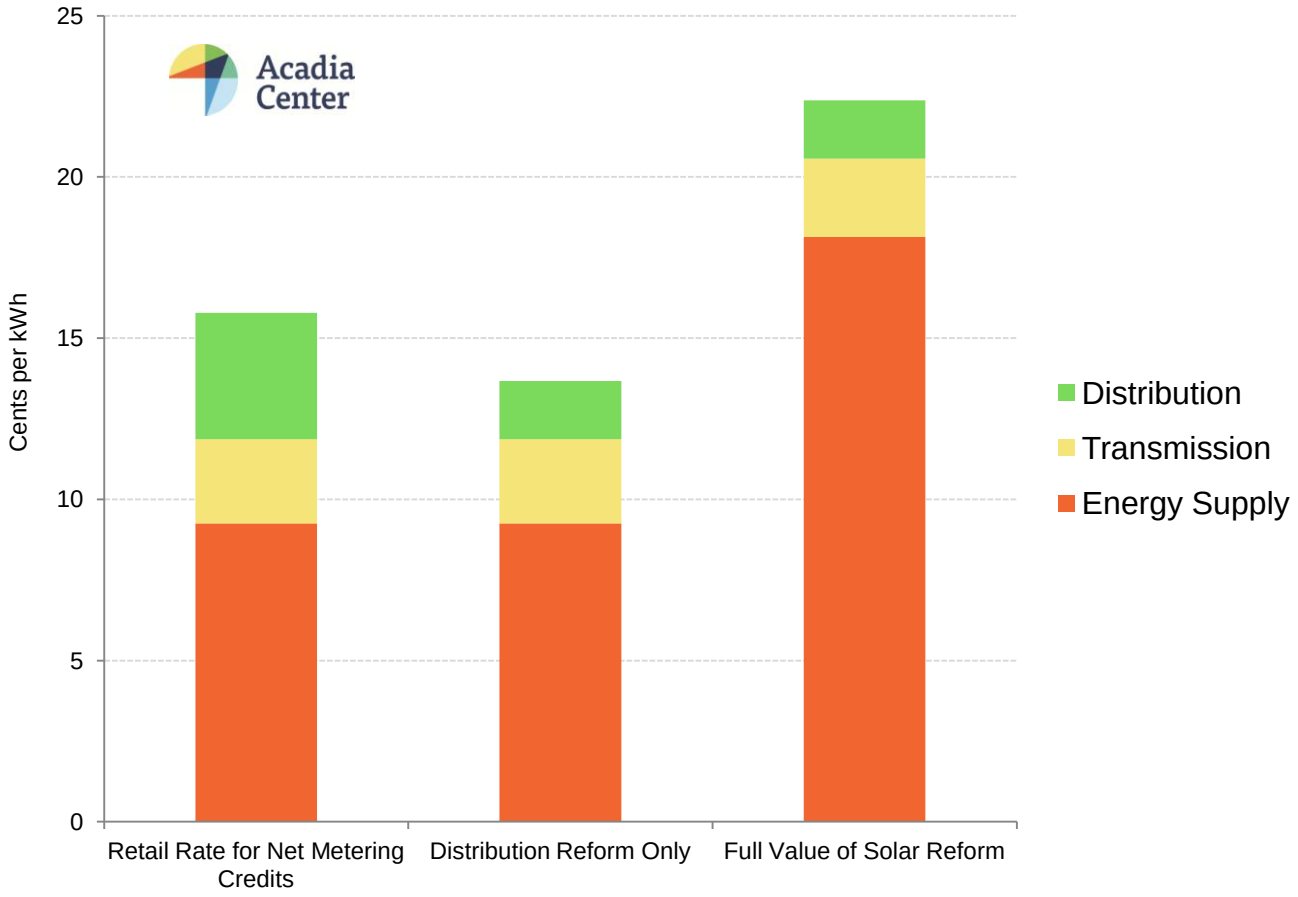
Next Generation Solar Policy for MA: What are our goals?

1. Solar PV should be a significant component of meeting climate and clean air requirements.
2. Any new policy should lead towards long-term utility regulatory structure that works for energy efficiency, electric vehicles, storage, and solar PV and appropriately protects low-income customers.
3. We should have a diverse self-sustaining solar PV industry that continues its record of success on jobs in MA.

Next Generation Solar Policy for MA: What are the solutions?

1. Keep net metering and virtual net metering as mechanisms
2. Make smart changes to credit values that:
   a) Fully compensate solar for value provided to ratepayers
   b) Make progress towards sustainable rate model for distribution grid
3. Adjustable block incentive program that:
   a) Allows pursuit of aggressive solar goals at a more reasonable cost per MW
   b) Allows targeted incentives for community solar, low-income solar, and municipal solar

Impact of Partial vs. Full Reform



- Value of Solar reform based on the grid value for a south-facing system with a tilt of 35 degrees from Acadia Center's recent Value of Solar study for Massachusetts.

www.acadiacenter.org

Contact: mlebel@acadiacenter.org

Additional Resources

Conservation Law Foundation: Into Thin Air (2013)

NEEP: Valuing Building and Energy Efficiency through Disclosure & Upgrade Policies (2009)

Acadia Center: Utility Vision (2015) & Value of Solar Study (2015)

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