Renewable Heat New York

Matt McQuinn, Project Manager
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Renewable Heat New York

John Rhodes, President and CEO, NYSERDA announcing Renewable Heat NY July 29th, 2014. Photo credit: Pyramid Energy EES.

Announced in Governor Cuomo's 2014 State of the State Address

Built upon NYSERDA's biomass heating R&D program to bring advanced technologies into the NYS heating market

Retirement of outdoor wood boilers, indoor wood boilers and wood stoves

Commercial pellet boiler heating systems

Residential pellet boiler heating systems and stoves

Residential/small commercial advanced cordwood boilers with full thermal storage

Continued R&D

Workforce development for proper system design, sizing and quality installations

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Clarkson University

CURRANRENEWABLEENERGY

SUNY CANTON

Atmospheric Sciences Research Center
UNIVERSITY AT ALBANY State University of New York
Research...Knowledge...Solutions

Northeast Forest LLC

THE WILD CENTER

ADIRONDACK MUSEUM

UNIVERSITY of ROCHESTER MEDICAL CENTER

Pyramid EES
Energy Engineering Services, PLLC

Mesa
Reduction Engineering & Processing, Inc.

SUNY-ESF
Improve Your World

SUNY Cobleskill

ACTbioenergy
clean, green heating solutions

Lowell Center for Sustainable Production
UNIVERSITY OF MASSACHUSETTS LOWELL

University at Buffalo
The State University of New York

HYDRONIC SPECIALTY SUPPLY
...THE EXPERTS IN MOVING WATER EFFICIENTLY, AND EFFECTIVELY!

CayugaNature CENTER

Vincent's
Heating & Fuel Service

Thermo-Control

TROY BOILER WORKS
QUALITY • INTEGRITY
SINCE 1843

ClearStak

Econoburn
High-Efficiency Wood-Fired Boilers

Cooperative Extension
Tompkins County

EVOWORLD

TARM BIOMASS
Innovative Leaders in Alternative Heating Solutions

NESCAUM

FINGER LAKES RESOURCE CONSERVATION & DEVELOPMENT COUNCIL, INC.

ALLIANCE FOR GREEN HEAT
clean, renewable & local

Hudson Valley GRASS ENERGY

SP
your Science Partner

bioenergy2020+

WITTUS
FIRE BY DESIGN

Stony Brook University

BROOKHAVEN NATIONAL LABORATORY

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

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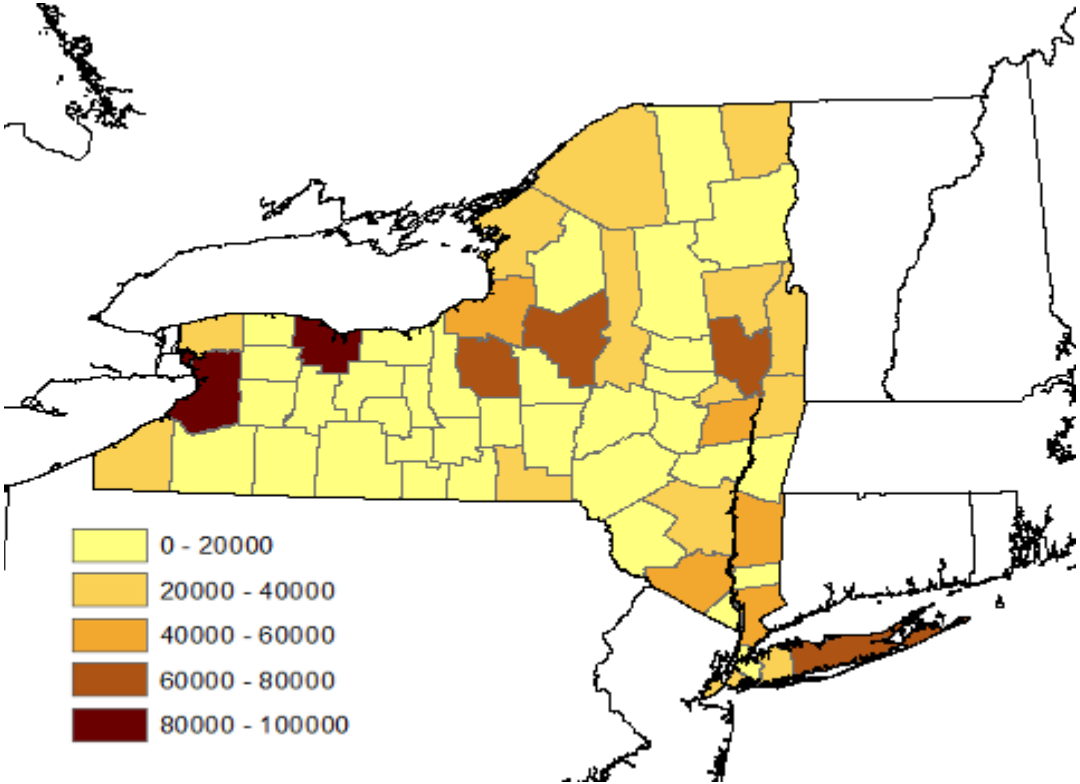
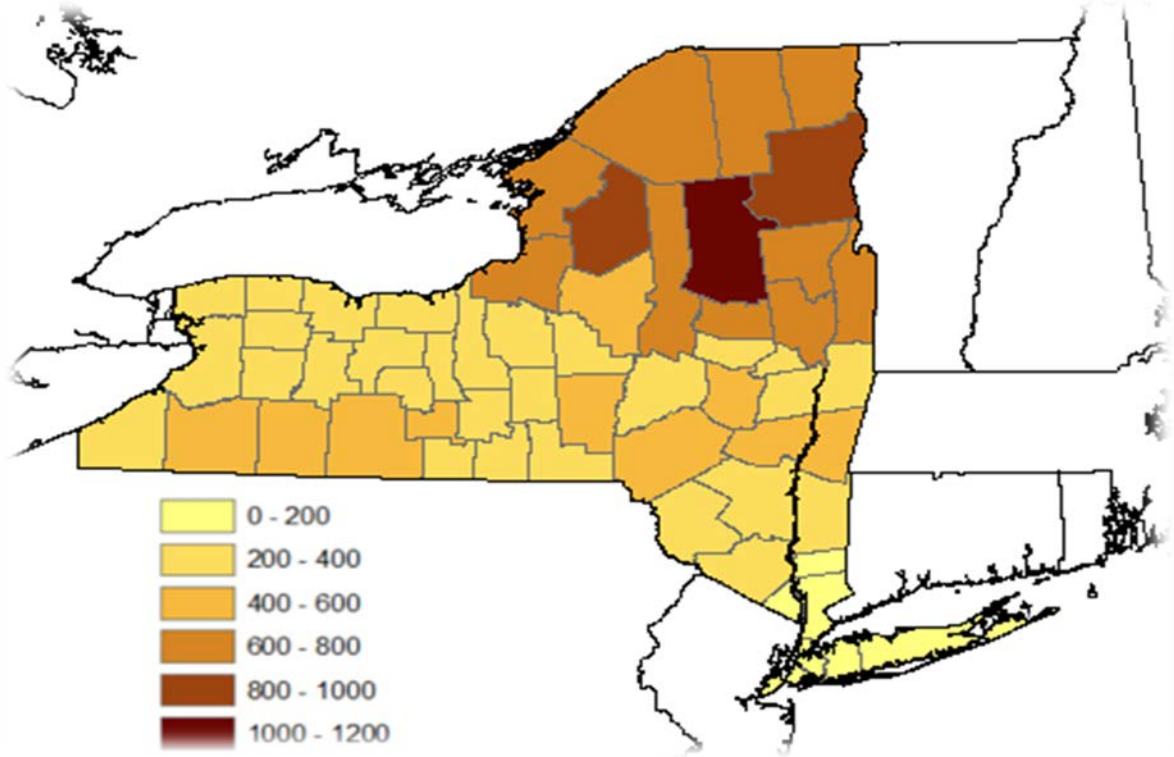
Residential Wood Combustion by County (tons) in 2011



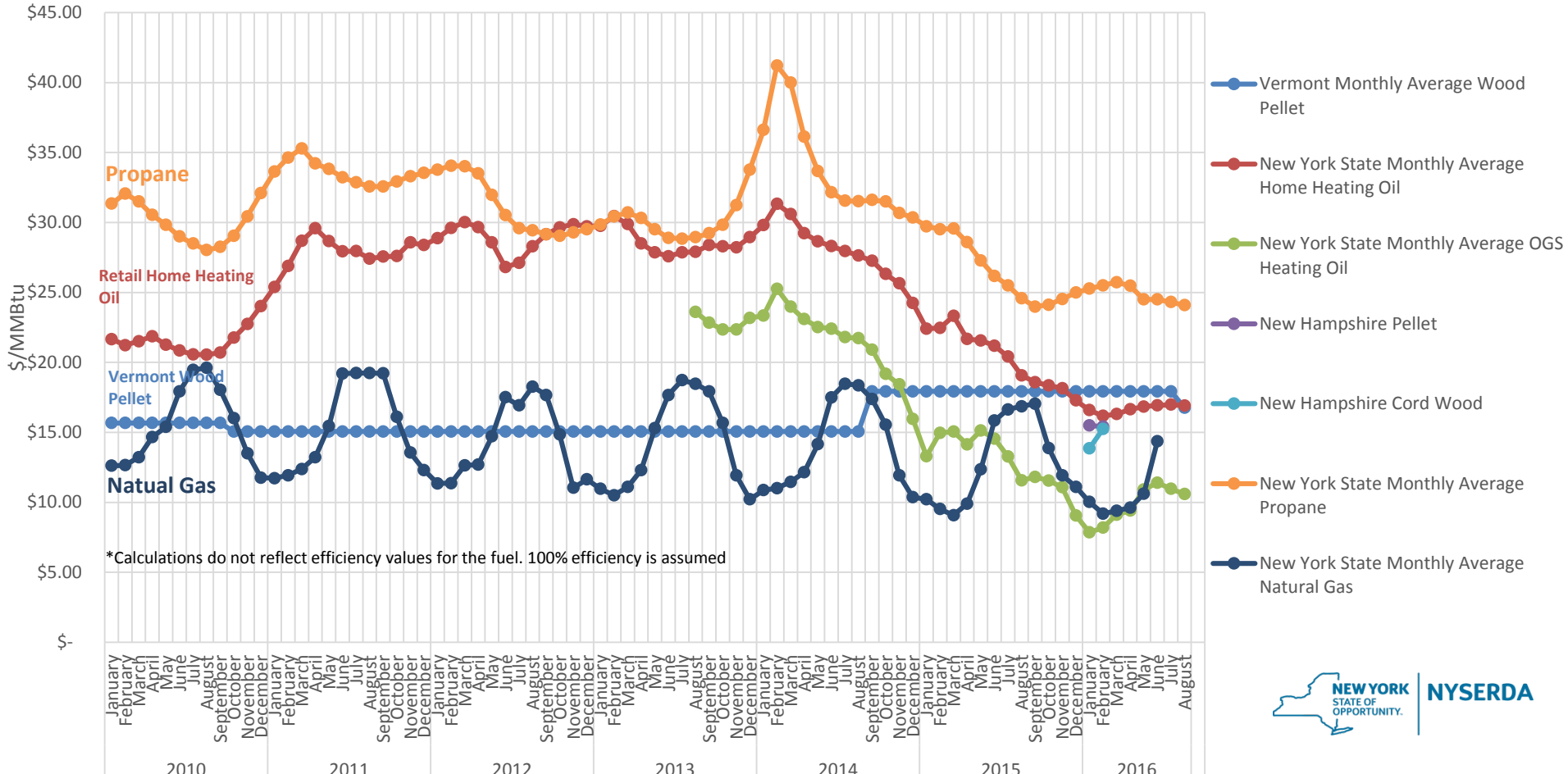
Source: Wood Heat Report

Per Capita Residential Wood Combustion (pounds) by County in 2011



Source: Wood Heat Report

Heating Oil Prices vs. Other Fuels ($/MMBtu) 2010-2015



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Qualified Advanced Cordwood Boiler Technologies

Must be ≥60% annual efficiency by BNL PTS and be accepted by NYSDEC.
PM ≤0.32 lb/MMBtu, report CO

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Advanced cordwood boiler in outbuilding

Advanced cordwood boiler

Seasoned wood is kept dry

Thermal storage tank in basement of farmhouse

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Qualified Pellet Boiler Technologies

Must be ≥85% thermal efficiency, PM2.5 ≤0.080 lb/MMBtu, and CO <270 ppm at 7% O_2

Bulk Pellet Storage

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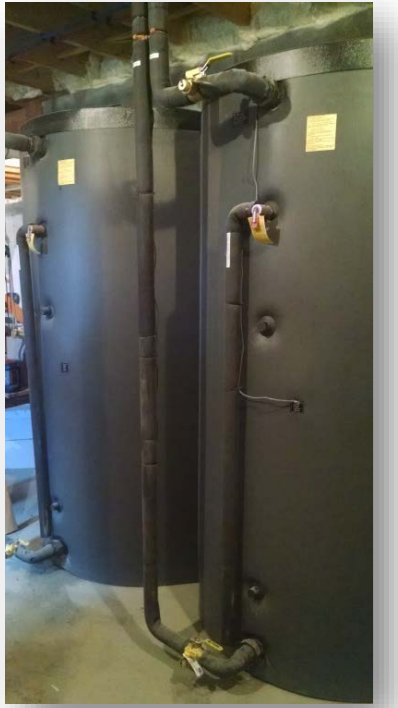
Maximizing performance with thermal storage

1250 Gallons
Unpressurized



528 Gallons
Pressurized

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Residential / Small Commercial Boilers

System Type / Technology	Incentive amount
Advanced Cordwood Boiler with Full Thermal Storage	25% of installed cost up to $5,000
Small Pellet Boiler with Thermal Storage	45% of installed costs up to $36,000

An additional $5,000 for the recycling of old outdoor/indoor wood boiler or $2,500 for recycling a whole house wood furnace

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Large Commercial Boilers (>300,000 Btu/h)

System Type / Technology	Incentive amount
Large Pellet Boiler with Thermal Storage	40% of total installed cost up to $200,000
Tandem Pellet Boiler with Thermal Storage	45% of total installed cost up to $270,000

Sizing ≤ 60% design day load, thermal storage, careful system integration with existing heating system and heat distribution system and controls.

Technical assistance for energy study, and review of commissioning and first year of Measurement and Verification.

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Qualified Pellet Stove Technologies

At or below 2.0 grams per hour particulate matter emissions on the ‘EPA List of Certified Wood Heaters’

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Residential Pellet Stoves

The following incentives are available toward the purchase of a new pellet stove for use in a primary residence, without natural gas service:

Qualification	Incentive Amount
Market Rate with Recycling	$1,500
Income Qualified (No Recycling)	$2,000
Income Qualified, add optional Recycling	$2,500

The new stove can provide either primary or supplemental heating and must be at or below 2.0 grams per hour particulate matter emissions on the ‘EPA List of Certified Wood Heaters’

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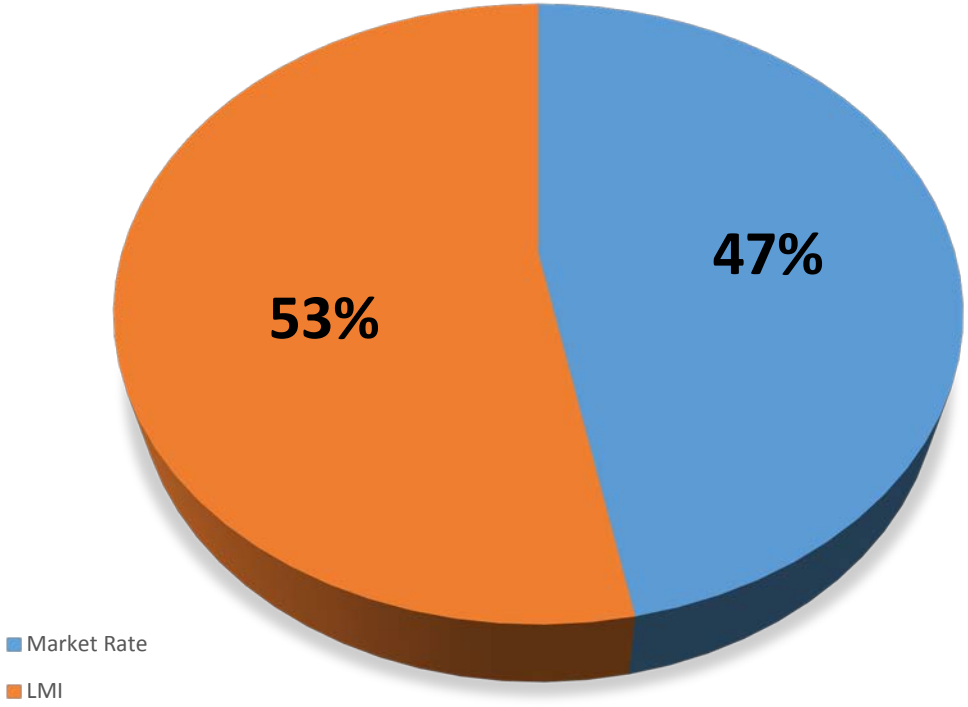
Residential Pellet Stove Program Participation

Market Rate vs. Low-Moderate Income



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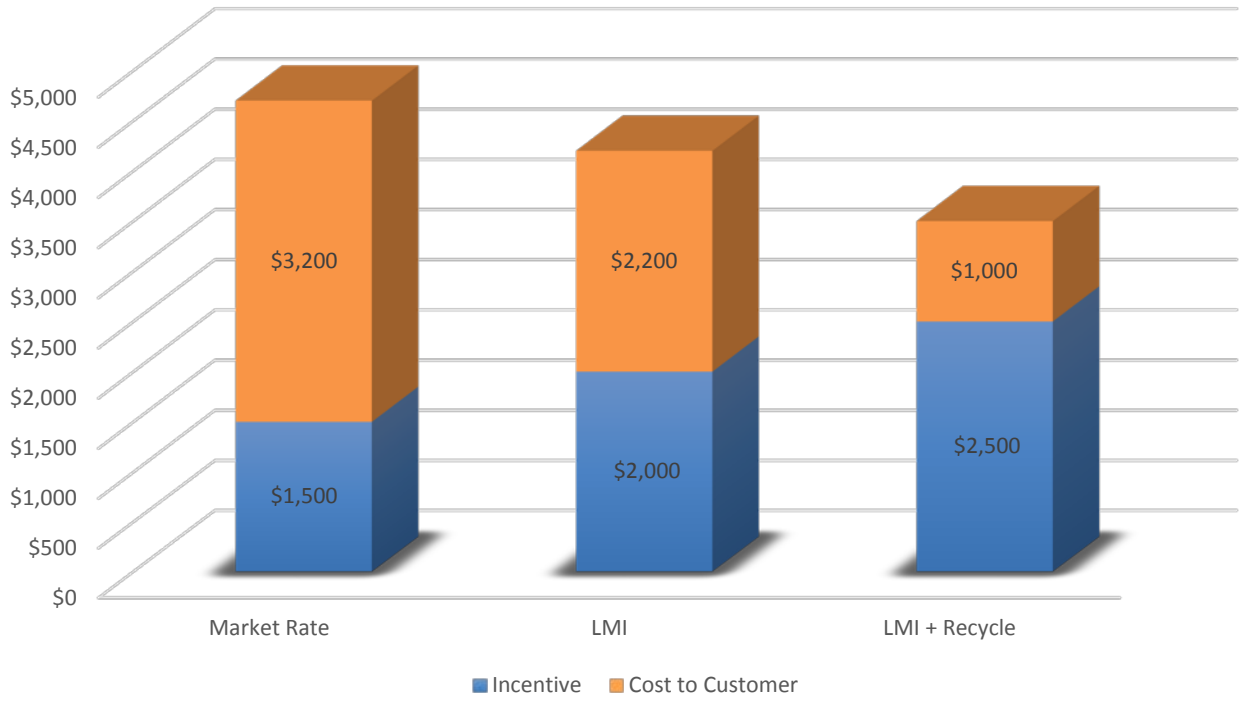
Cost Breakout per Customer Type



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Thank you

Matt McQuinn
866-NYSERDA, ext.3053
matt.mcquinn@nyserda.ny.gov
www.nyserda.ny.gov/renewableheatny

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