

Phil Rockefeller
Chair
Washington

Tom Karier
Washington

Henry Lorenzen
Oregon

Bill Bradbury
Oregon



Northwest Power and Conservation Council

W. Bill Booth
Vice Chair
Idaho

James Yost
Idaho

Pat Smith
Montana

Jennifer Anders
Montana

April 28, 2015

MEMORANDUM

TO: Council members

FROM: Charlie Grist, Conservation Manager

SUBJECT: Presentation by Energy Trust of Oregon

BACKGROUND:

Presenter: Margie Harris, Executive Director of Energy Trust of Oregon

Summary Margie Harris, the Executive Director of Energy Trust of Oregon (ETO), will be presenting to the Council on ETO's accomplishments to date and their updated Strategic Plan for 2015-2019.

Their refreshed Strategic Plan was released in October 2014 and can be reviewed here:

http://energytrust.org/library/plans/2015-2019_Strategic_Plan0.pdf

ETO (<http://energytrust.org>) is a non-profit organization created to implement energy efficiency and renewable resources in Oregon under a stable and consistent funding paradigm. ETO designs and runs efficiency programs for customers of Portland General Electric, Pacific Power, NW Natural and Cascade Natural Gas.

Workplan: 1.B. Develop Seventh Power Plan

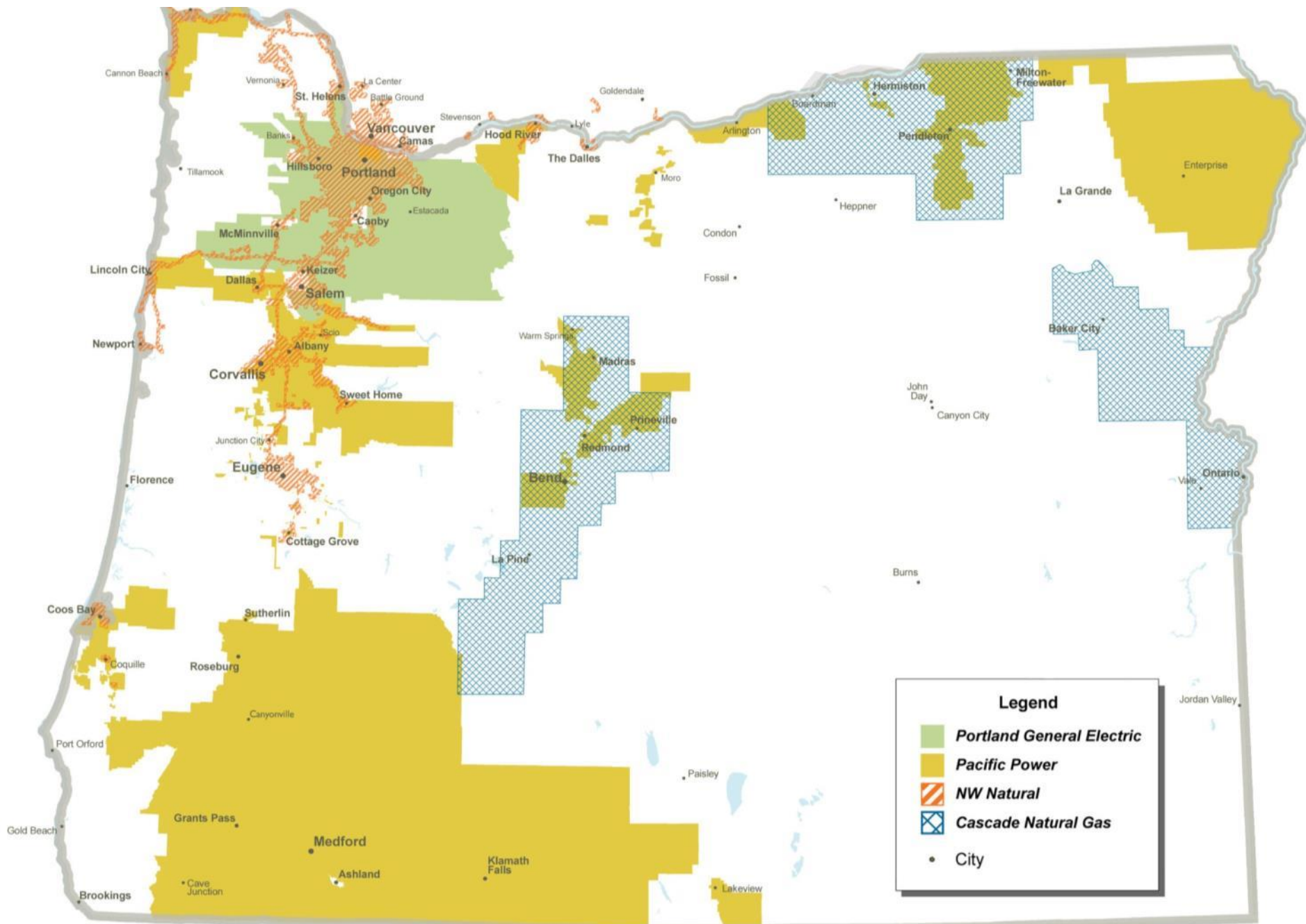
Looking Ahead:

Helping Oregon prosper in a
dynamic energy future

May 6, 2015

NW Power Planning and Conservation Council





Building a clean energy power plant

- Saved 436 average megawatts
- Generated 112 aMW of renewable energy
- Saved 33 million annual therms
 - Enough to power 470,000 homes & heat over 77,000 homes with natural gas
- Saved \$1.7 billion on participant energy bills, *so far*
- For every \$1 invested by Energy Trust in energy efficiency, ratepayers will save \$2.80



10,000,000 tons of carbon avoided



Market knowledge and context



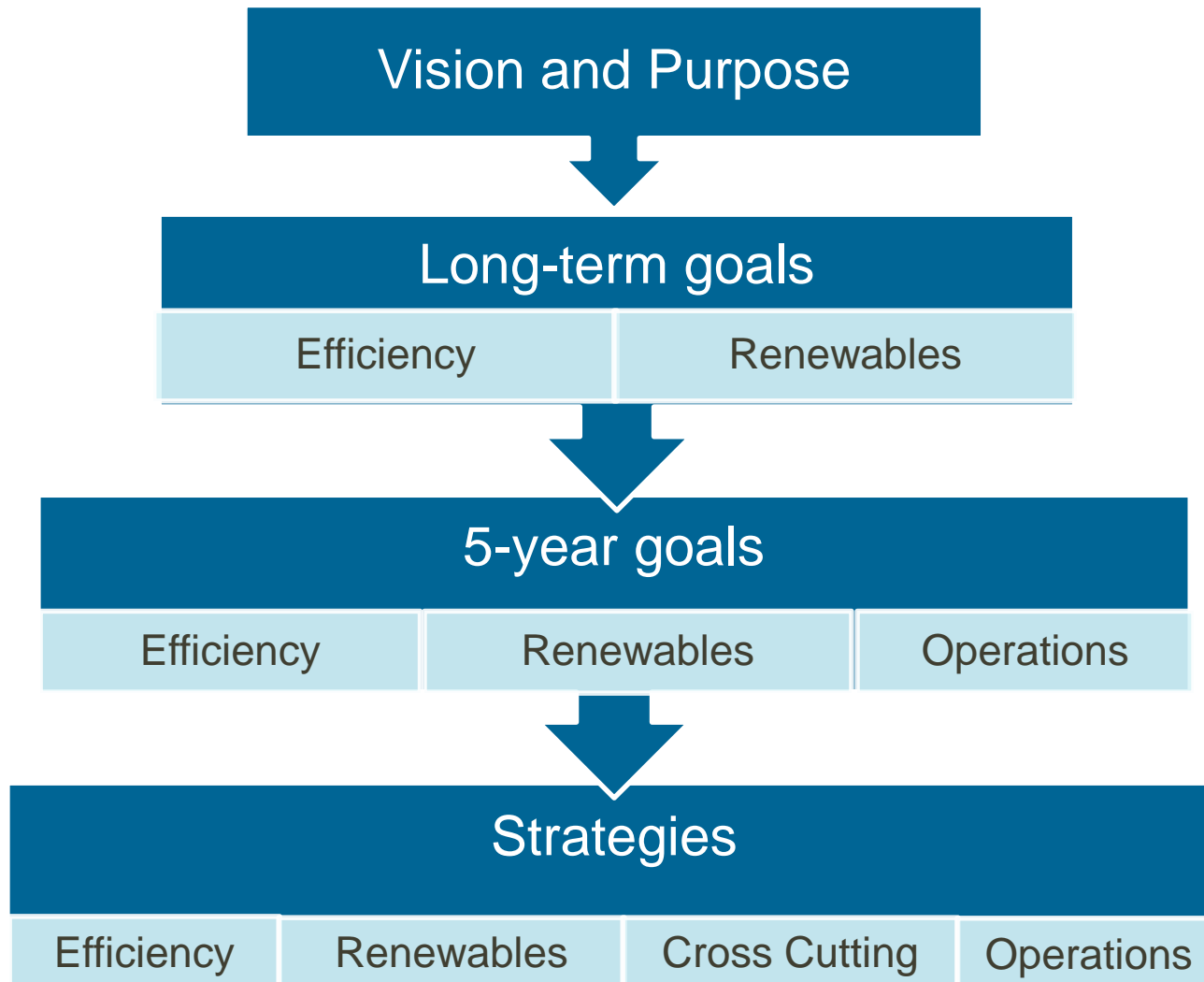
- Uneven economic recovery
- Low natural gas prices
- Market maturation/saturation
- Challenge to reach and serve smaller, and more diverse customers
- Fewer and lower state tax credits available
- Future energy savings harder to acquire

Utility Integrated Resource Plan targets

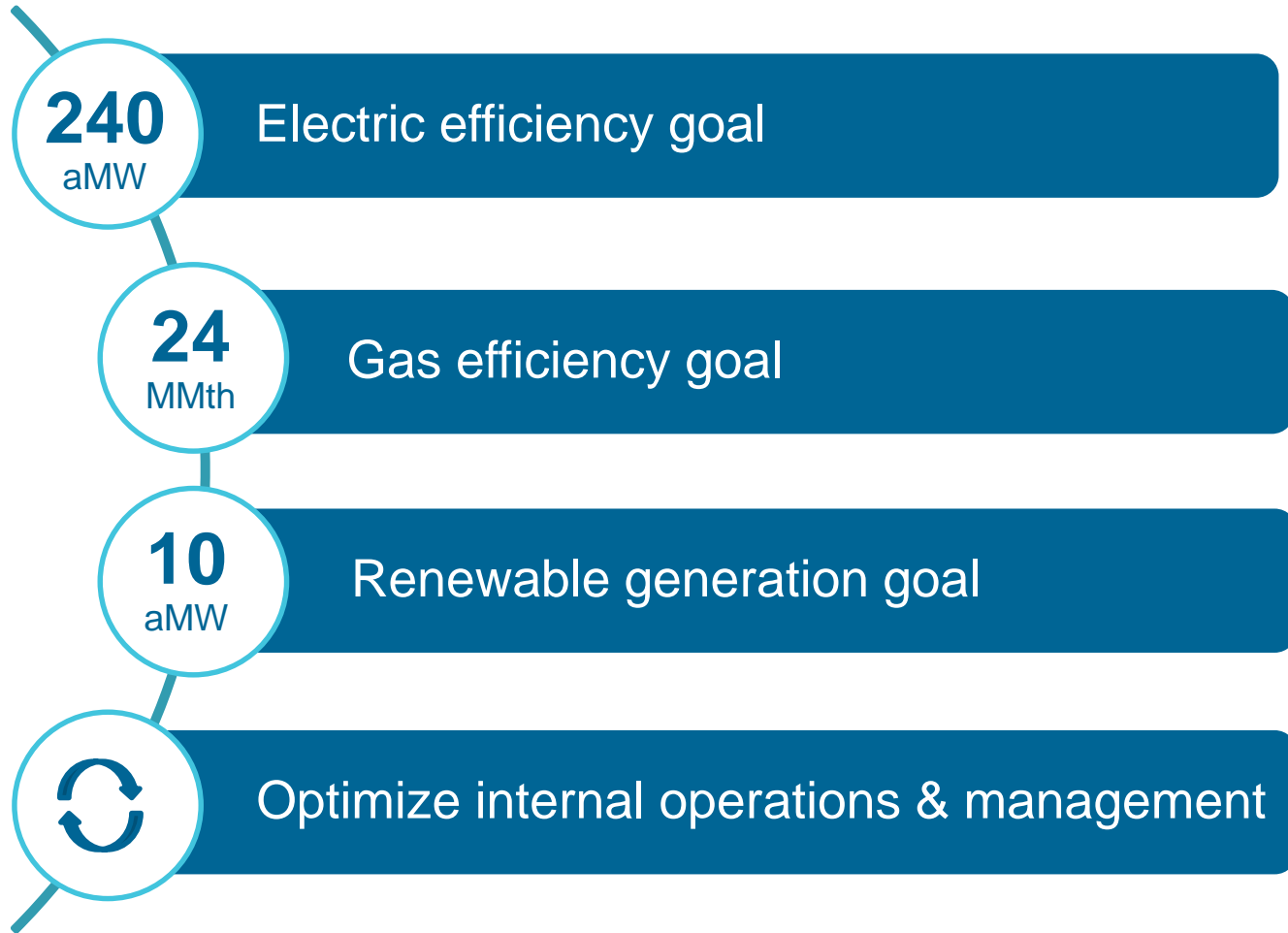


- Single Energy Trust annual energy efficiency goal for each utility; approximates individual Integrated Resource Plan (IRP) target
- Utilities file tariffs for OPUC consideration to collect funding necessary for Energy Trust to meet goal
- The OPUC will hold us accountable for acquiring a minimum of 85% of the Energy Trust annual goal by utility

2015-2019 Strategic Plan structure

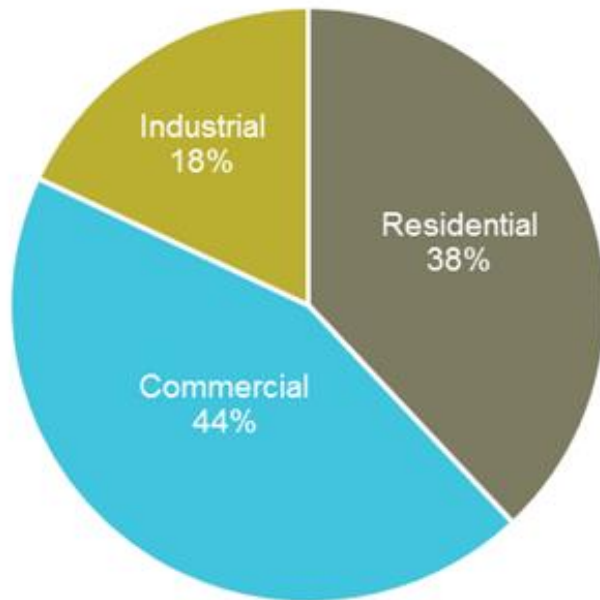


2015-2019 Strategic Plan Goals

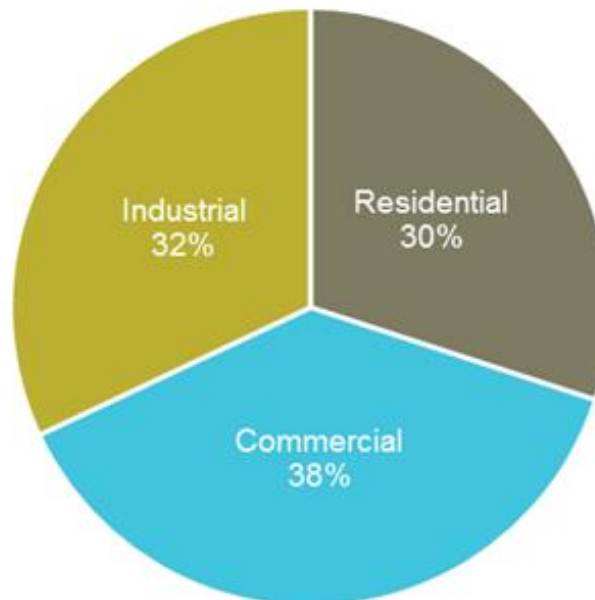


Sources of savings and generation

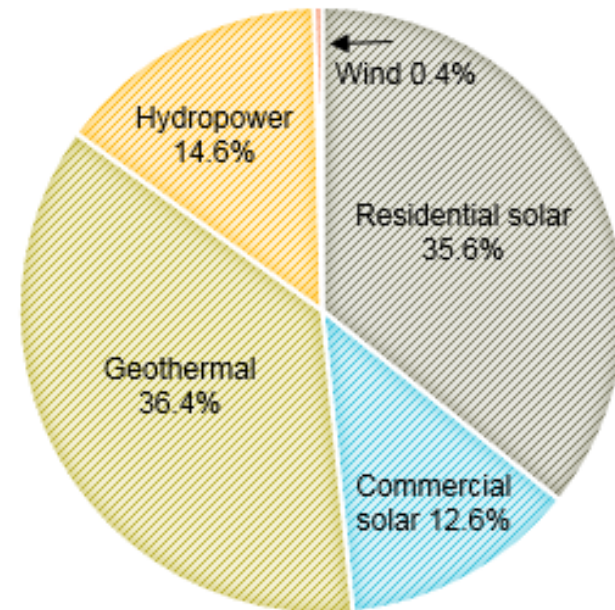
Gas Efficiency



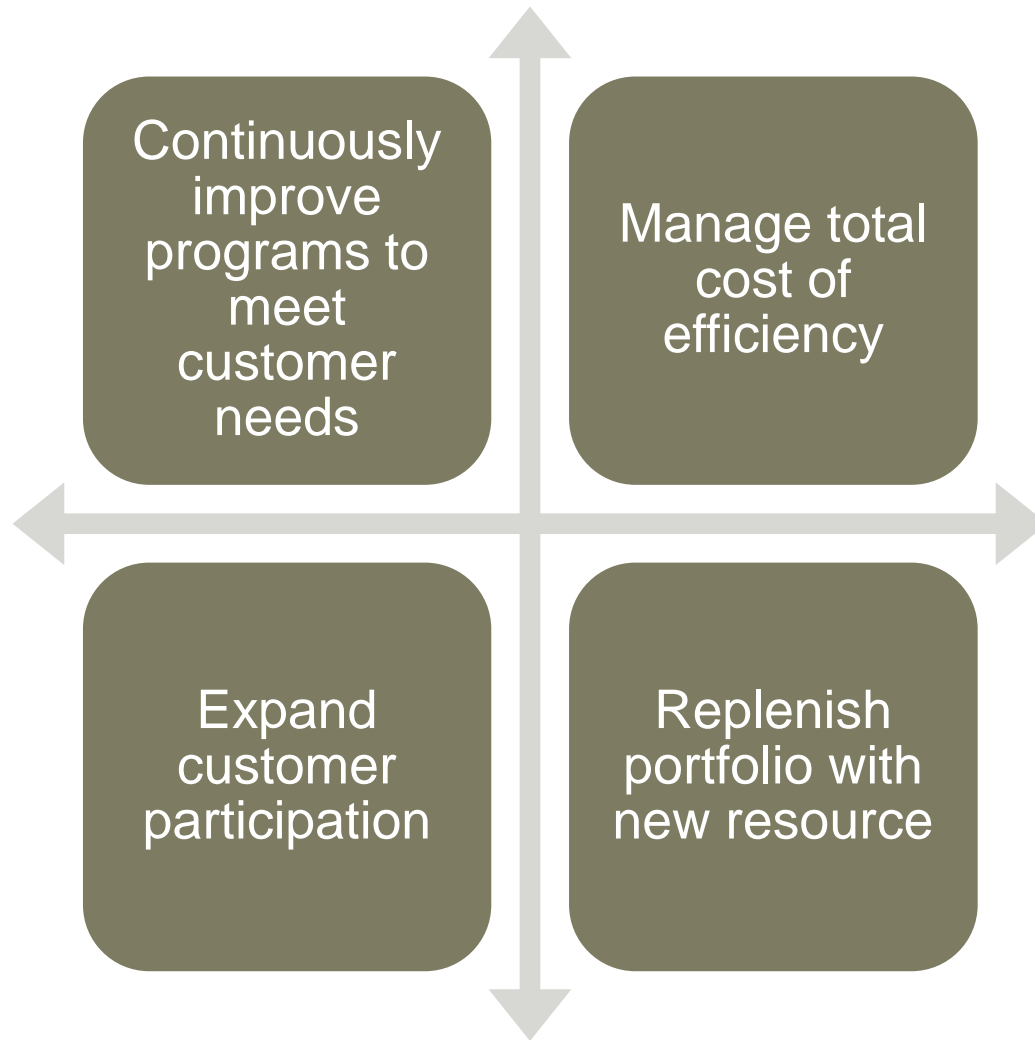
Electric Efficiency



Renewable Generation



4 strategies to meet efficiency goals



Focus area: Expanding participation

- Data, research and targeting
- Moderate and low income, including renters and multifamily
- Small businesses (both industrial and commercial)
- Presence in rural and outlying areas
- Utility and expanded new partnerships and trade allies





44%

15%

42%

22%

10%

25%



Strategic Energy Management

- 33 commercial participants
- 38 industrial participants completed projects
- SEM delivers $\frac{1}{4}$ of all industrial electric savings



Efficient new construction heats up

- Record 565 New Buildings projects enrolled—34% more than 2013
- Half outside Portland area
- Especially multifamily housing

Energy-efficient new homes

- Reached 34% EPS market share
- Rated 6,000th EPS new home
- Savings per home increased



Focus area: Emerging technologies

- Northwest Energy Efficiency Alliance investment, including natural gas market transformation
- Pilot programs and test bed/demonstrations
- Validation of energy savings, performance
- Expanded project support for renewable technologies



Emerging Technologies

Industrial/Agricultural



- Industrial Energy Management Systems
- Complete Integrated Motor System Solutions
- Pump System Operator Certification
- Source to Pivot Optimization

Commercial



- Low-Cost, High-Reliability Building Performance Metering
- Advanced Roof-Top Units and Controls
- Commercial Interior Secondary Window Glazing

Residential



- Super-efficient Dryers
- Dual Purpose Ductless Heat Pumps
- Advanced Heat Pump Water Heaters
- Efficient Manufactured Homes

Lighting on the rise

- 4 million bulbs in homes—including 1/3 LEDs
- 30% of all business savings from lighting
- LEDs installed in multifamily units, distributed in schools



Remaining open to new opportunities

- Indoor Agriculture
- USDA loans for mobile home switch-out
- Washington and Lake County particulate Air Quality solutions
- Electric vehicle
- 111-D Carbon reduction strategies dependent on more EE and RE
- SB 844 – oil heated home conversions
- City of Portland commercial disclosure of energy usage





Thank you

1.866.368.7878

www.energytrust.org



Back-up Slides
Do Not Print

Fodder re: new cumulative accomplishments slide

- Looking back over the past 5 years, we exceeded our 2010-2014 Strategic Plan efficiency goals, experiencing significant growth:
 - Since 2002, we saved 492 aMW = 103% of electric goal of 479 aMW
 - Since 2002, we saved 39.1 m therms = 113% of gas goal of 34.7 m therms
- We came quite close to achieving our 5-year strategic renewable energy generation goal with:
 - Since 2002, 115 aMW of new generation installed = 93% of renewables goal of 124 aMW
 - A number of projects moved from 2014 to 2015 and one was cancelled
 - Still these are quite remarkable results considering the loss of the BETC for renewables mid-cycle during this 5 year SP period

2015-2019 Strategic plan focus areas

Energy Efficiency

- Continuously improve programs
- **Manage total cost of efficiency**
- **Expand and diversify participation**
- Replenish portfolio with new resources

Renewable Energy

- **Help develop and change the market**
- Provide assistance for **all five eligible technologies**
- Use competitive approach to funding
- Emphasize market and project development

Operations Improvements

- Maintain and pursue effective partnerships and support
- **Remain open and ready to new opportunities**
- **Implement management review recommendations**
- Continue to be open, transparent, accountable

Long-term trends in savings, generation

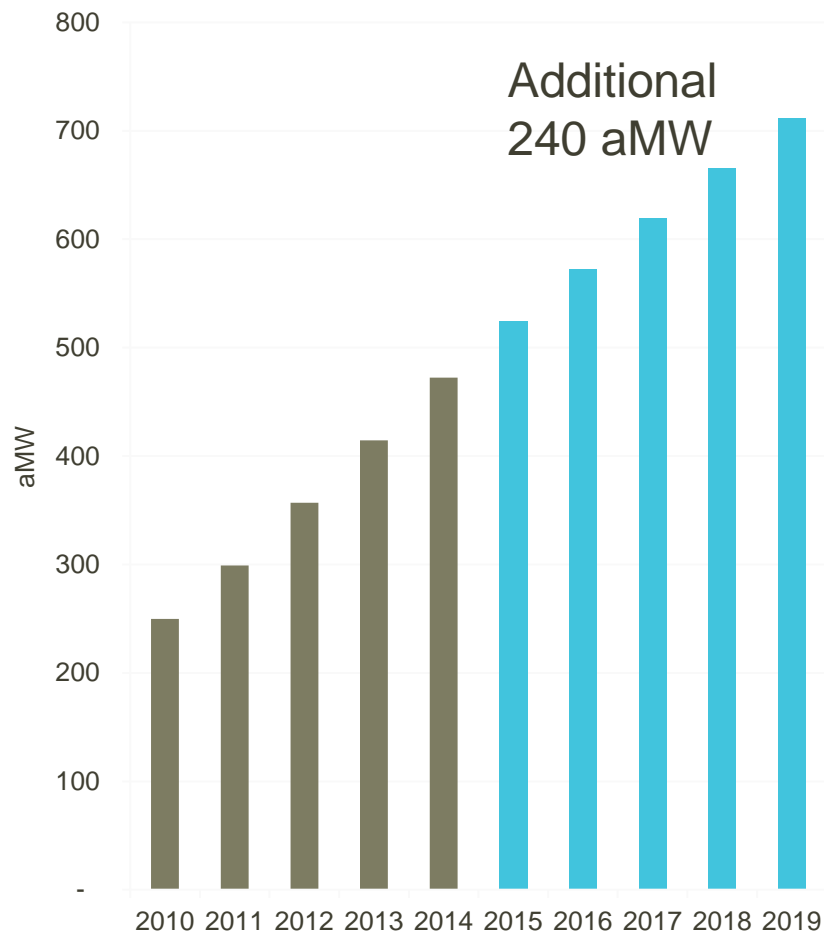
Total Savings & Generation	2005 – 2009	2010 – 2014*	2015- 2019**
Electric Efficiency (aMW)	145.6	265.6	240
Natural Gas Efficiency (therms)	11.5 million	26.1 million	24 million
Renewable Generation (aMW)	85.4	15.0	10.0

Average Savings & Generation	2005 – 2009	2010 – 2014*	2015- 2019**
Electric Efficiency (aMW)	29.1	53.1	48
Natural Gas Efficiency (therms)	2.3 million	5.2 million	4.8 million
Renewable Generation (aMW)	17.1	3.0	2.0

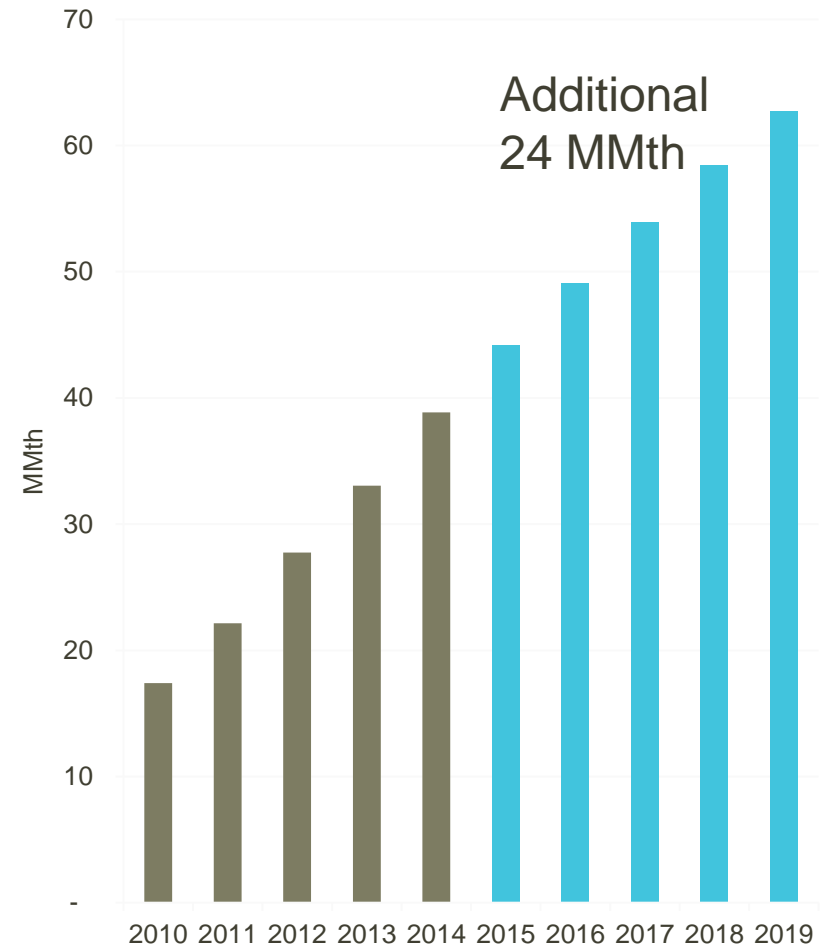
* 2014 results are projected

** 2015-2019 savings and generation are Energy Trust's 5-Year Strategic Plan goals

5-year efficiency goals—cumulative look



Electric Savings 2002-2019



Natural Gas Savings 2003-2019

Strategy: Operations

- Cost management
- Continuous improvement
- Web forms/automation
- Solar soft cost reduction
- Establish metrics to quantify productivity gains
- IT system improvements
- More use of data for analysis and targeted marketing
- Succession planning

