

Joan M. Dukes
Chair
Oregon

Bruce A. Measure
Montana

James A. Yost
Idaho

W. Bill Booth
Idaho



Rhonda Whiting
Vice-Chair
Montana

Bill Bradbury
Oregon

Tom Karier
Washington

Phil Rockefeller
Washington

April 26, 2012

MEMORANDUM

TO: Council Members

FROM: Charlie Grist

SUBJECT: Presentation and discussion with Susan Stratton

Susan Stratton is the executive director of the Northwest Energy Efficiency Alliance (NEEA). NEEA works in collaboration with its regional funders and other partners to use the market power of the region to accelerate the innovation and adoption of energy-efficient products, services and practices. NEEA initiatives have delivered over 700 average megawatts of low-cost energy savings since 1997, accelerated the adoption on new technologies, advanced codes and standards and provided key market research and coordination in support of regional efficiency initiatives.

Ms. Stratton took the reins of NEEA in January of this year after a stint at the Energy Center of Wisconsin and as a utility regulator in Wisconsin and Virginia. She will brief the Council on NEEA activities and direction.

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NEEA and Northwest Power Conservation Council

Susan E. Stratton, NEEA Executive Director

May 8, 2012

NORTHWEST ENERGY EFFICIENCY ALLIANCE

It's Great to be in the Northwest!



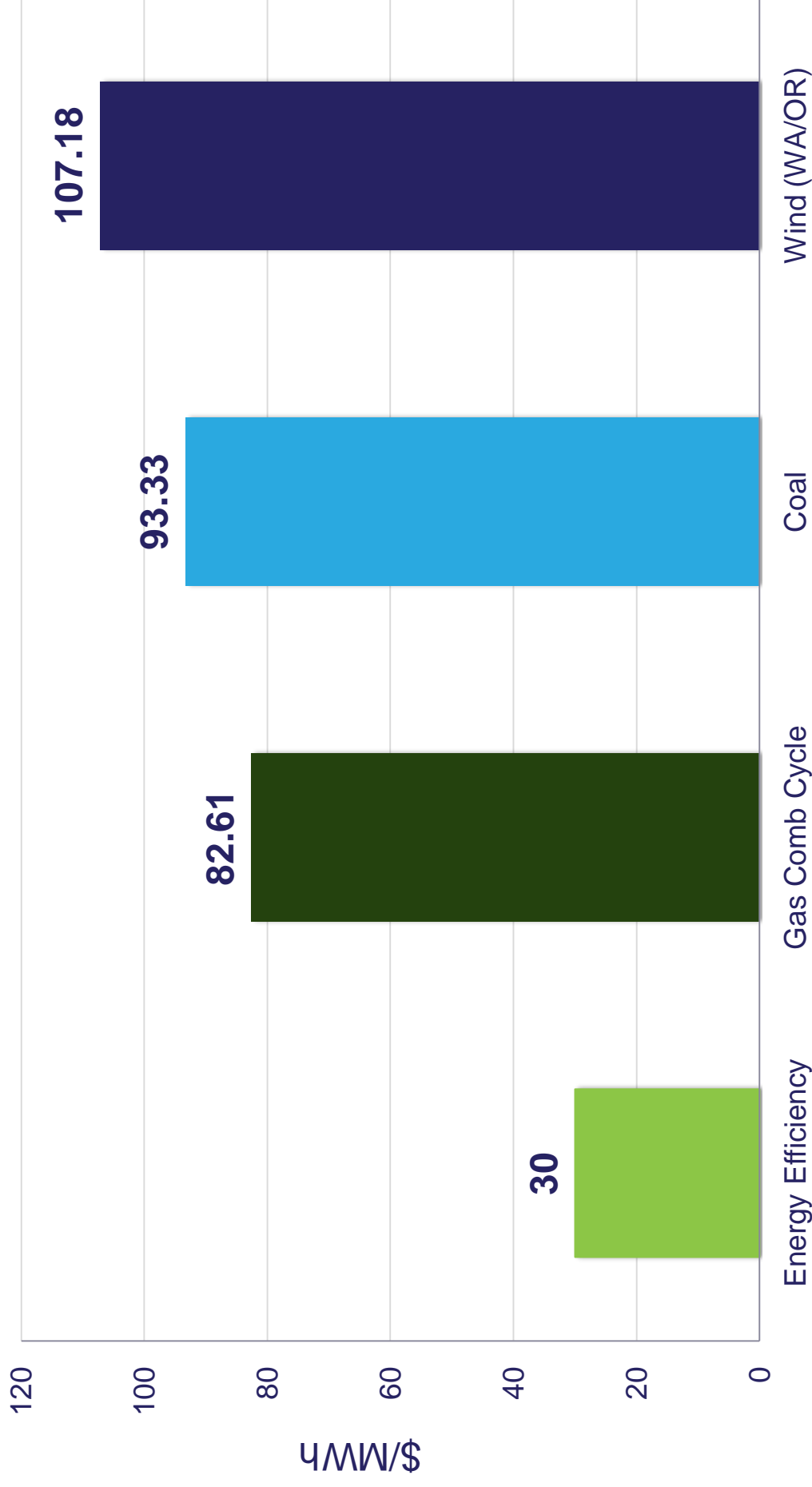
Today's Talk

- Why Energy Efficiency Matters
- How NEEA Helps Maximize EE
- What the Region Has Saved
- Who We Work With
- Collaboration With You



Levelized Lifecycle Cost (\$/MWh)

New Electric Resources Options



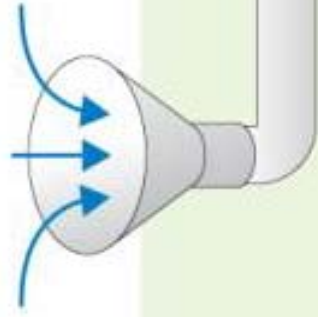
Source: Jeff King, Northwest Power and Conservation Council: Sixth Northwest Conservation & Electric Power Plan, Rankine (steam) Cycle Coal-fired Power Plant, Resource Assessment, Dec. 9, 2008

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How NEEA Helps Maximize Energy Efficiency



NEEA Fills The Energy Efficiency Pipeline



NEEA Accelerates Market Adoption



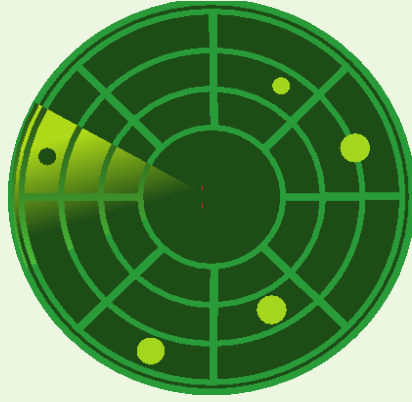
NEEA Leverages the Power of the Region

Accelerating Market Adoption



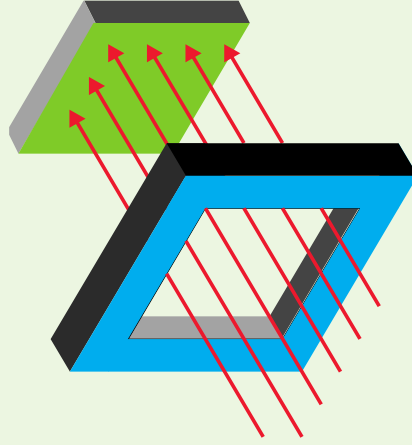
How NEEA Works

IDENTIFY BARRIER



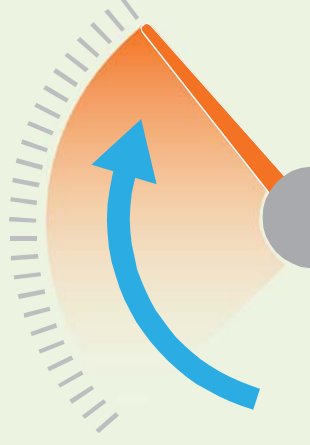
NEEA identifies barriers that impede market adoption of energy-efficient products, services and practices.

MARKET INTERVENTION



NEEA strategically intervenes to remove market barriers in collaboration with our partners.

MARKET TRANSFORMED



The market is transformed and continues to accelerate without further intervention.

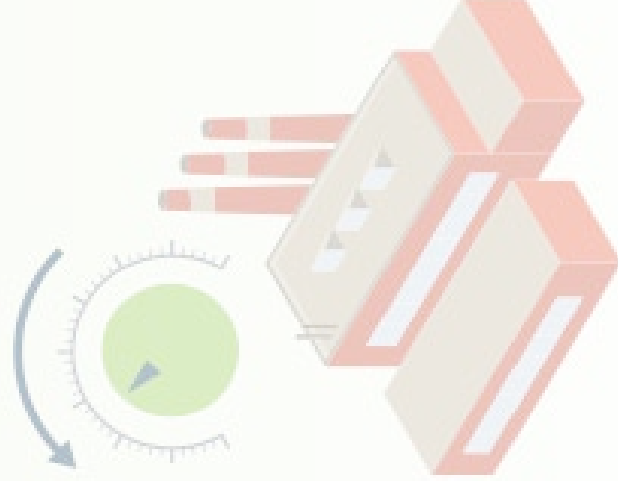
Changing Manufacturers' Behavior

IDENTIFY BARRIER



CONFUSION

MARKET INTERVENTION



CLARITY

MARKET TRANSFORMED

The NWFPA set an industry-wide goal to reduce energy intensity by

25% in 10
years and 50% in 20 years.

More than

15% of large

Northwest food processors are implementing SEM.

SUCCESS

NEEA's History of Success



Efficient Washers
50% Market Share

1997

1997
NEEA
Launched

1998
BacGen
Reduces
Wastewater
Treatment Energy
Use
by 50%

2000
VFD cold
Storage Fans
Reduce Energy
Use
by 61-86%



ENERGY STAR
Windows Market
Share Hits 75%

2001

2004
NEEA First
National Partner
for 80PLUS



2004
Northwest
ENERGY STAR
New Homes
Specifications



BetterBricks
Healthcare
Focus

2005

2007
CFL sales
Top 18 Million



2009
Ductless Heat
Pump Pilot
Launched



Northwest
Food
Processing
Industry

2008



Energy Forward
Campaign

2010



Our Unique Role

“UPSTREAM”



LOCAL

REGIONAL



“DOWNSTREAM”

Key Differences in Efficiency Procurement

Direct Acquisition

End-user focused

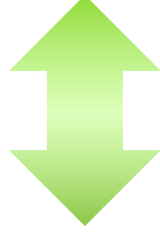
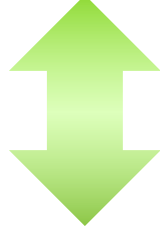
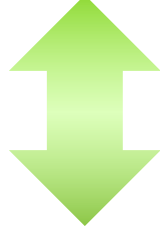
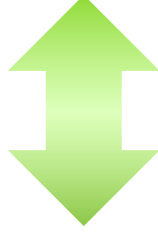
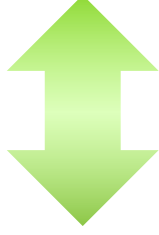
Provide incentives to consumers for projects

1:1 correspondence between incentives and customer actions

Widget-based

Immediate savings

Vs.



Market Transformation

Market focused

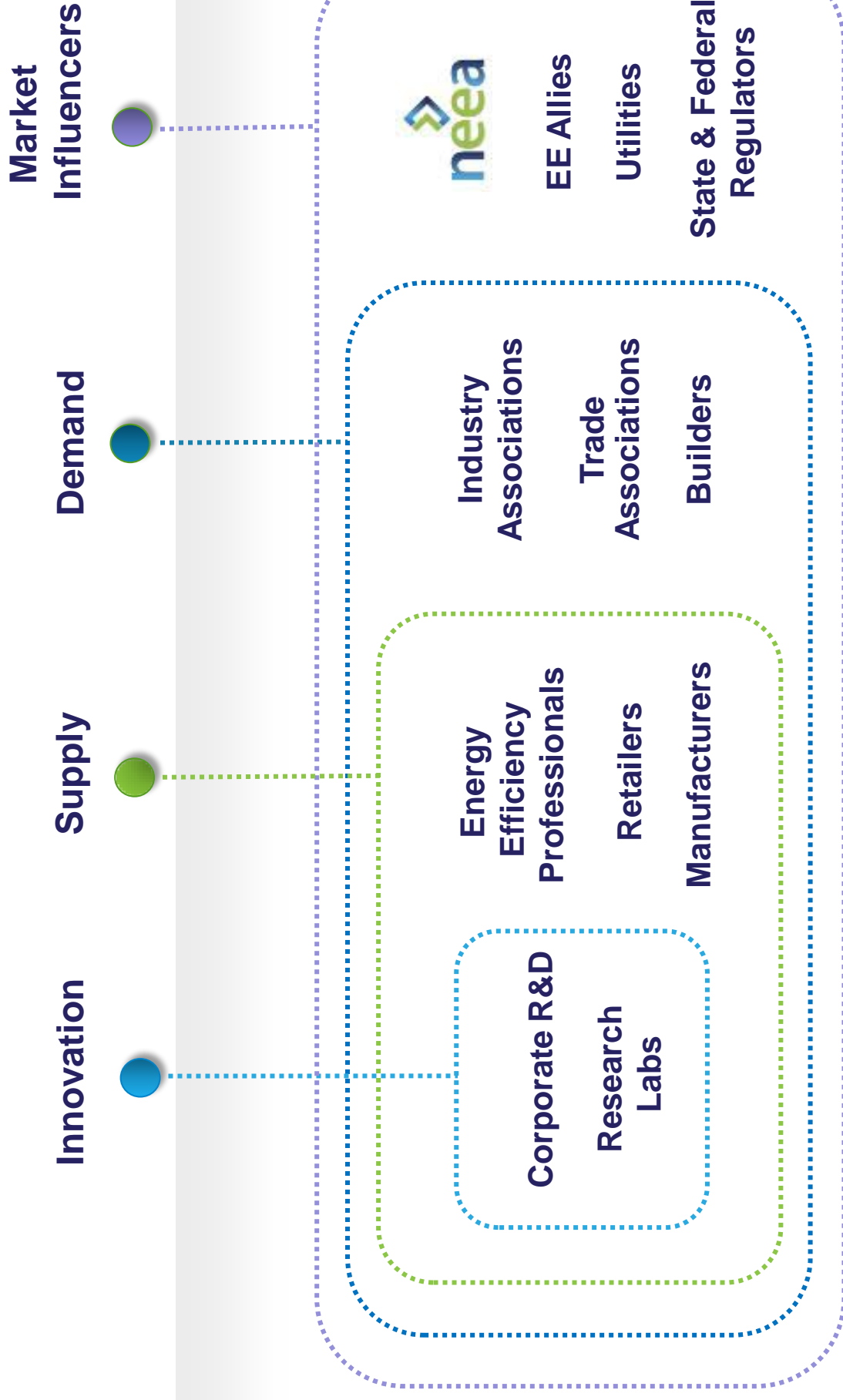
No incentives or incentives only “upstream”

Longer time horizon. Diffuse relationship between actions and results

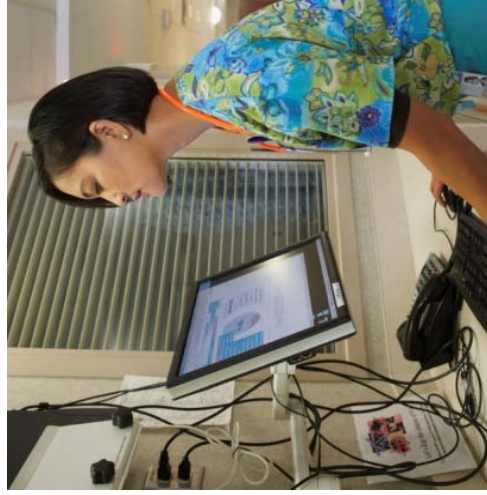
Make personal business case for efficiency (I should do this myself!)

Fill the pipeline for future savings

Influencing Markets



Northwest Regional Equity



Strategic Goals

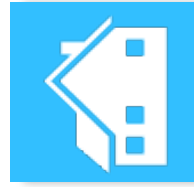
Fill the Pipeline

Accelerate Market Adoption

Leverage Regional Advantage

1. Increase market adoption of energy efficient products, services and practices
2. Help Northwest utilities and other energy efficiency organizations achieve their energy efficiency goals
3. Build regional market capability via education, training and technical support
4. Facilitate emerging technologies and solutions
5. Promote energy efficiency
6. Facilitate regional energy efficiency planning and implementation

Current Initiatives



Residential

Efficient Homes
Televisions
Ductless Heat Pumps



Commercial

Existing Building Renewal (EBR)
Commercial Real Estate (CRE)
Commercial Lighting Solutions
Healthcare
Building Operator Certification (BOC)
Expansion



Industrial

Food Processors
Small/Medium Industrial



Emerging Technology

Heat Pump Water Heaters
High Performance Windows
Green Pumps
Solid-State Street Lighting
80 PLUS
Luminaire Level Lighting Controls
Residential Economizers
Residential Test Bed



Codes & Standards

Other Commercial Codes
Other Commercial Standards
Other Residential Standards
Other Residential Codes



Partner Services

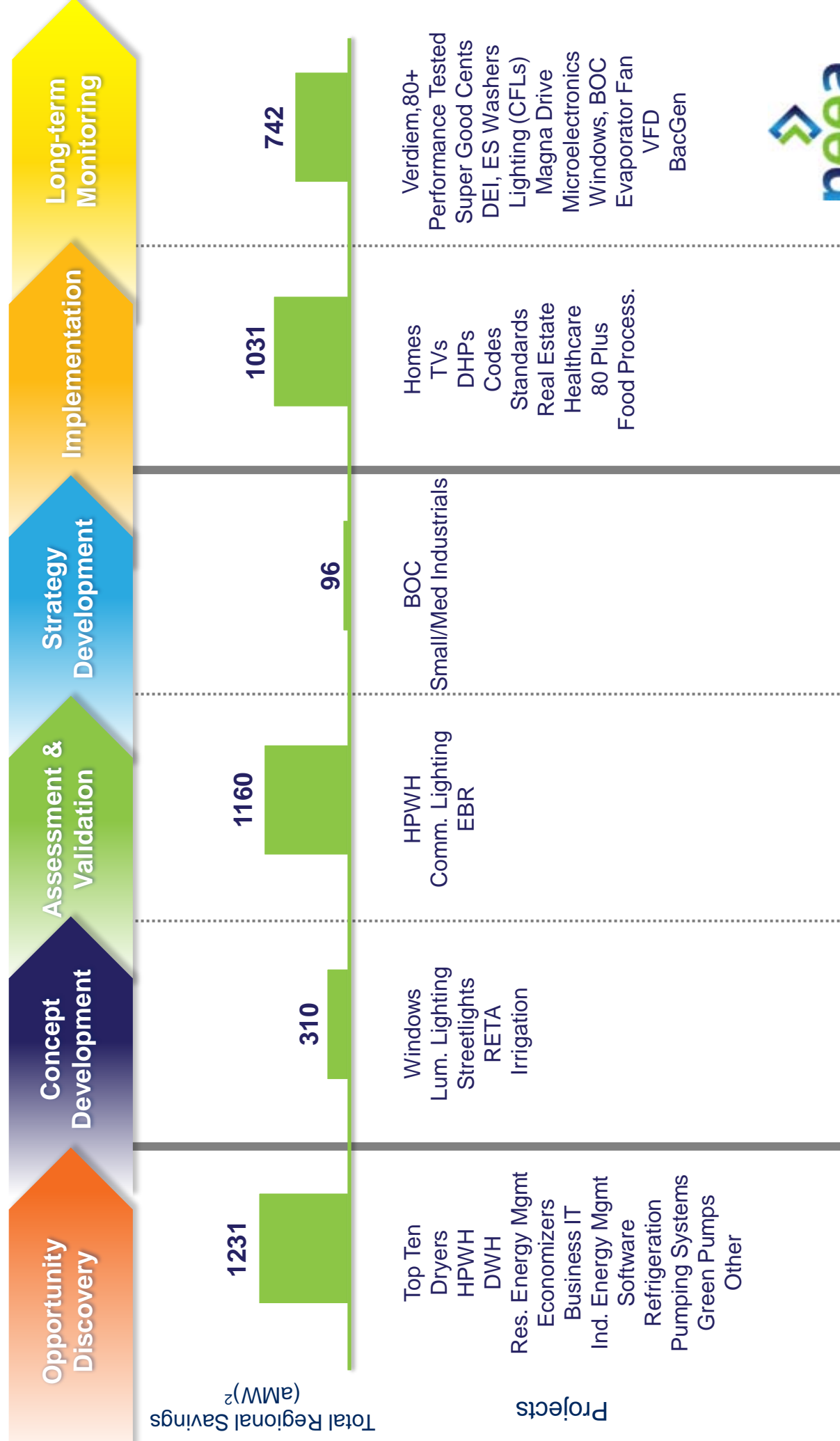
ConduitNW.org
Efficiency Connections Northwest
Other Regional Resources



Agriculture

Irrigation

NEEA 20-Year Savings Outlook



Savings estimates before 'Implementation' represent 6th Power Plan 20-year potentials; aMW after 'Strategy Development' are NEEA 20 year forecasts

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How Much Has the Region Saved?

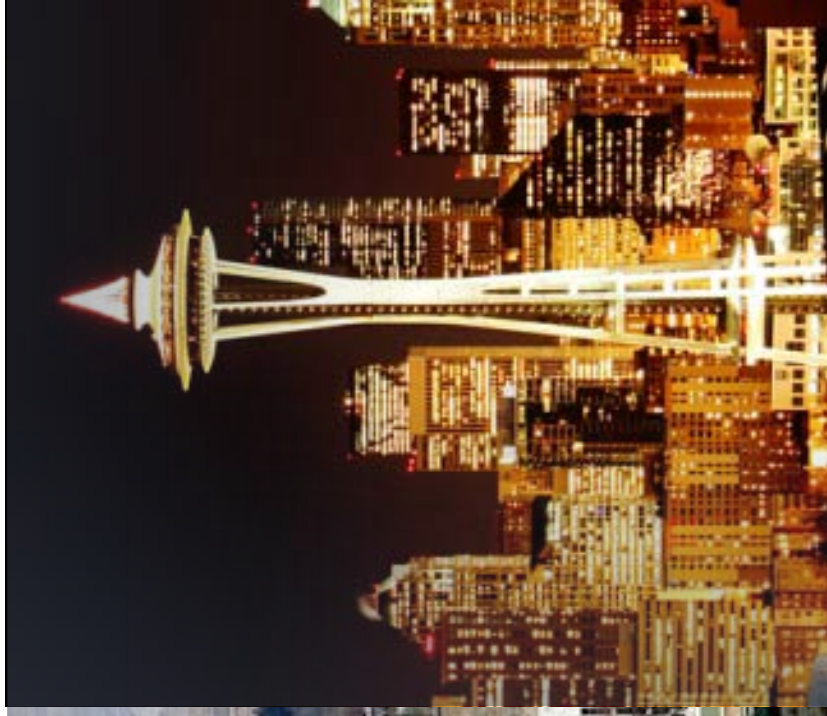
707 aMW Savings



Time

How Much Has the Region Saved?

All Households in Portland, Boise and Seattle Each Year (Residential Customers)



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NEEA Board Leadership

Chair



Anita Decker
Chief Operating Officer
Bonneville Power
Administration

Vice Chair



Margie Harris
Executive Director
Energy Trust of Oregon

Secretary



Jim West
Assistant GM
Snohomish
County PUD

Treasurer



Warren Kline
VP Customer Operations
Idaho Power



Ed Brost
GM
Franklin PUD



Steve Kern
Power Supply and
Environmental Affairs
Seattle City Light



Tom Karier
Council Member
NW Power & Conservation
Council



Kathy Hadley
ED - Montana
National Center for Appropriate
Technology



Kim Drury
Senior Policy Associate
NW Energy Coalition



Gregg Carrington
Managing Director of
Energy Resources
Chelan PUD



Patrick McGary
Director Energy
Resources
Clark Public Utilities



Cal Shirley
VP, Energy Efficiency
Services
Puget Sound Energy



Pat Egan
VP, Customer and
Community Affairs
Pacific Power



Bruce Folsom
Director of Energy
Efficiency
Avista



Clay Norris
Director, Power
Resources Division
EWEB



Deb Young
Program Consultant
NorthWestern Energy

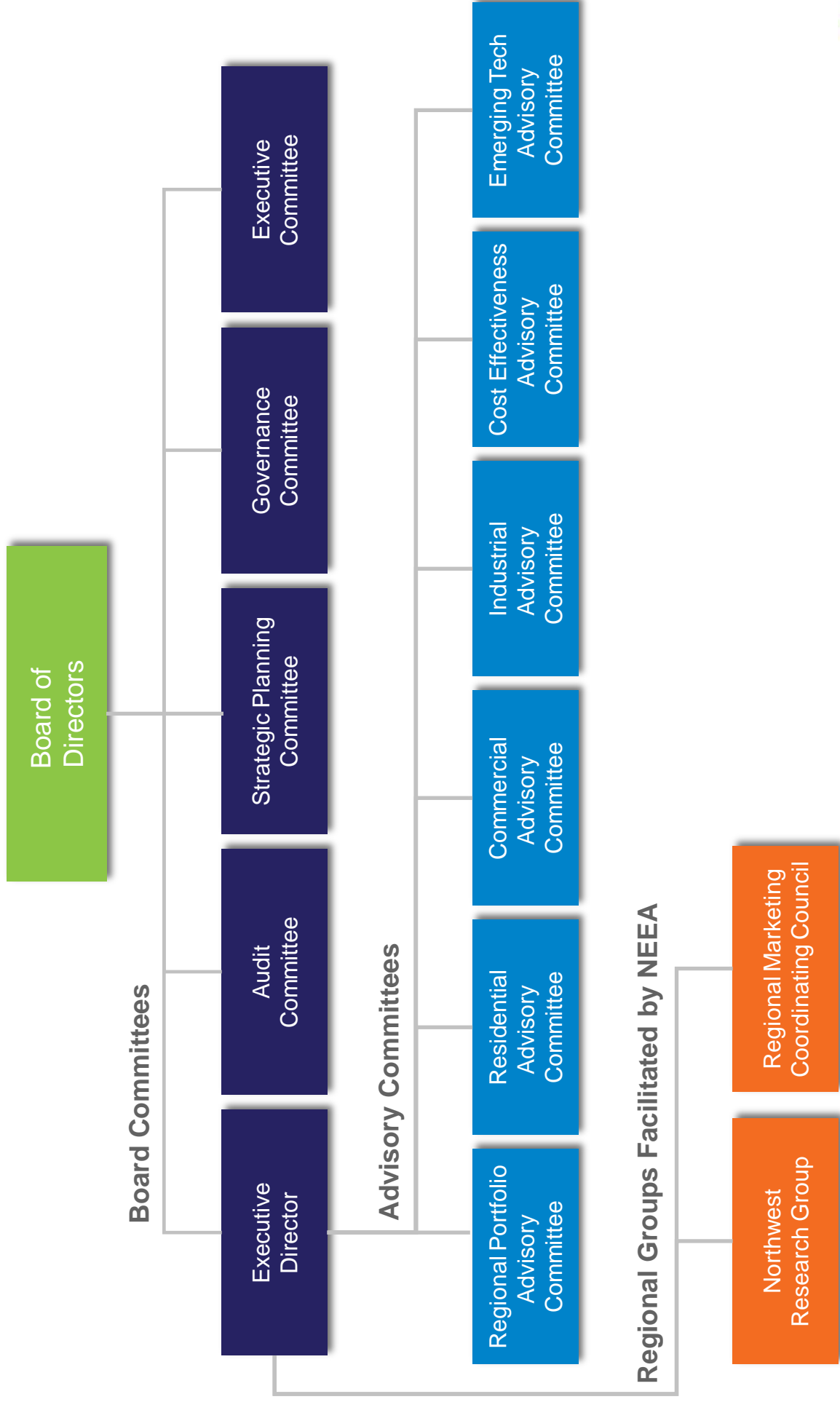
Our Strategic Partners and Funders



Maximizing energy efficiency in partnership with Northwest utilities



Advisory/Regional Groups



Our Market Partners



Maximizing energy efficiency with our market partners



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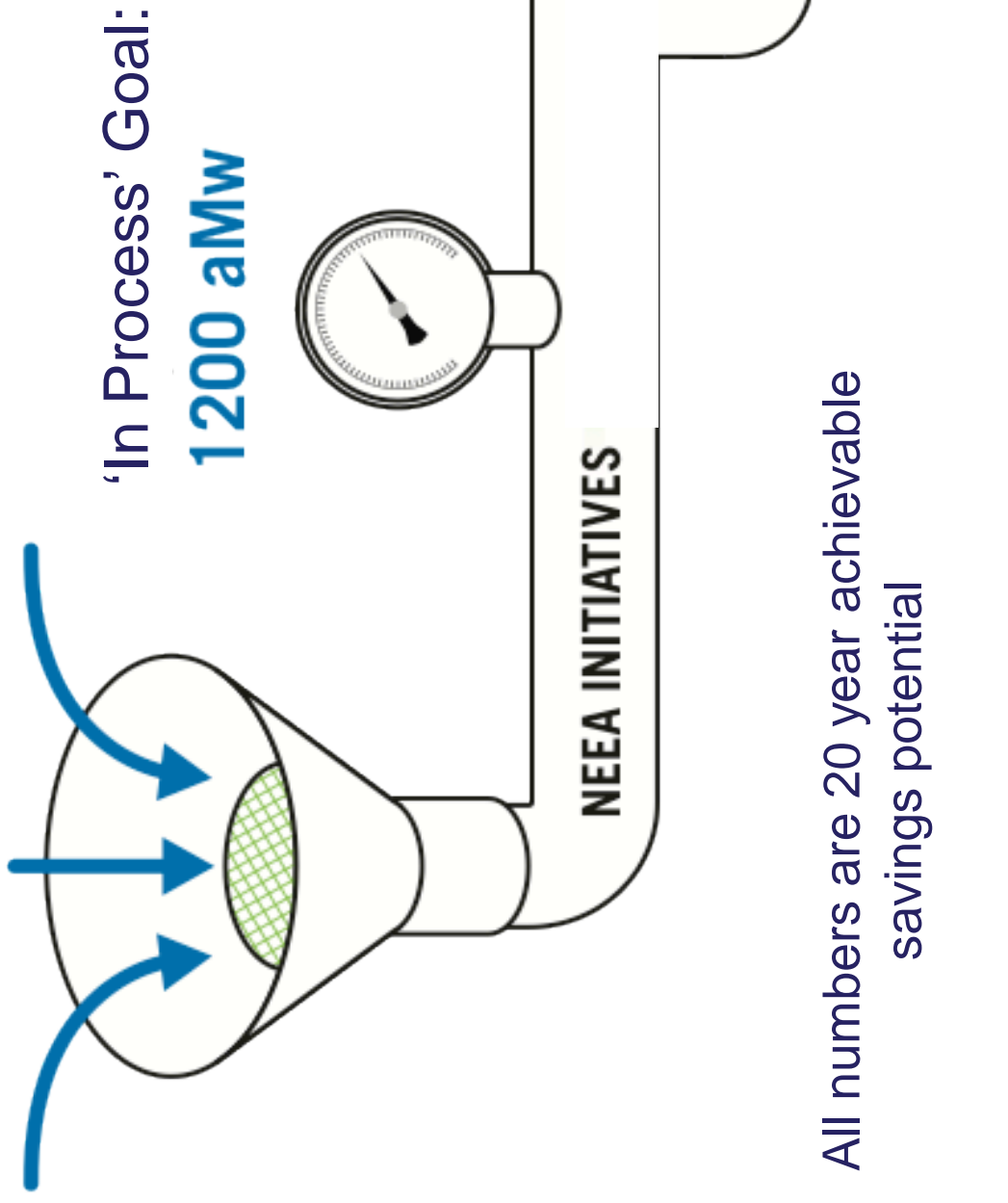


NEEA' Goals:

- Influencing **20%** of the region's savings potential (1,200 aMW) with **8%** of the region's resources
- Delivering **300** aMW of 20-year achievable potential savings every 5 years

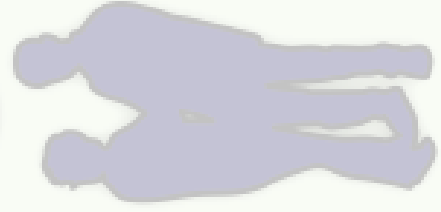
Working with the Region to Deliver Energy Savings

NEW IDEAS



NEEA's Unique Role - TVs

IDENTIFY BARRIER



CONFUSION

MARKET INTERVENTION



CLARITY

MARKET TRANSFORMED

Retailers representing **80%** of TVs sold in the Northwest promote Energy Forward TVs

The market responded and today TVs are

50%

more efficient than just three years ago.

SUCCESS



NEEA's Unique Role - Heat Pump Water Heaters

Significant opportunity:

492 aMW

NEEA's Role:

- Drive Northern Climate Spec
- Complement utility rebates to reduce cost for consumers
- “Upstream” incentives
- Field testing



“Have You Hugged Your Water Heater Today?”

Value Delivery Beyond “Bookable” Savings



Codes and Standards

Residential Building Stock
Assessment

Commercial Building Stock
Assessment

On the Horizon

Some options for NEEA's future

- More regional/national collaboration on new technologies
- Behavior change
- Multiple resource approach
- Continuous research updates
- Channel engagement



Final Thoughts

Collaboration and coordination
critical to achieve goals

Working with Power Council will
achieve greater results



Questions & Comments

Filling the
Energy
Efficiency
Pipeline

Accelerating
Market
Adoption

Delivering
Regional
Advantage



Thank You!

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