Office of Economic Development

SEATTLE SMART BUILDINGS PILOT

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Council Economic Resiliency and Regional Relations Committee

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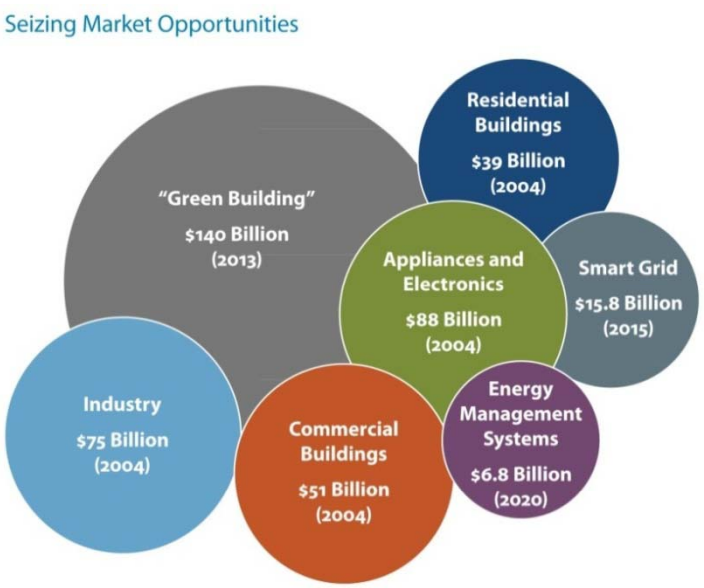
Energy Efficiency Market

What does the energy efficiency market look like?

U.S. market 2004
$300 billion
invested in energy efficiency technologies and infrastructure

$700 billion
projected U.S. spending in 2030



Seattle's Market Strengths

Where do our strengths align with market opportunities?

Macro Market Opportunities

- Energy Services
- Building/Energy Mgmt Systems
- ICT Enabled Integrated Systems
- Building Materials
- Sensors & Sensor Systems
- Smart Appliances
- Green Design , Construction Services, and Software

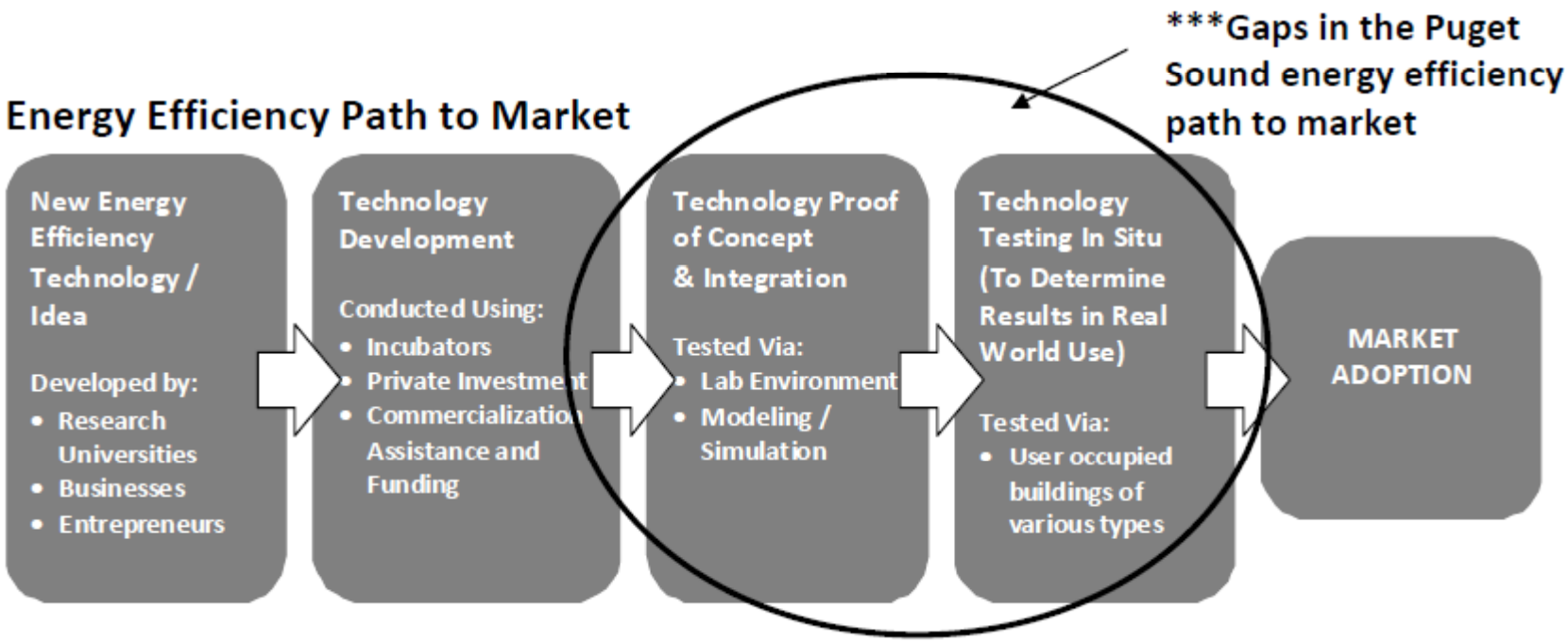
Puget Sound Assets

- Energy Services industry
- Software industry
- Architecture industry
- Construction industry
- Building / Energy Systems
- Machining expertise

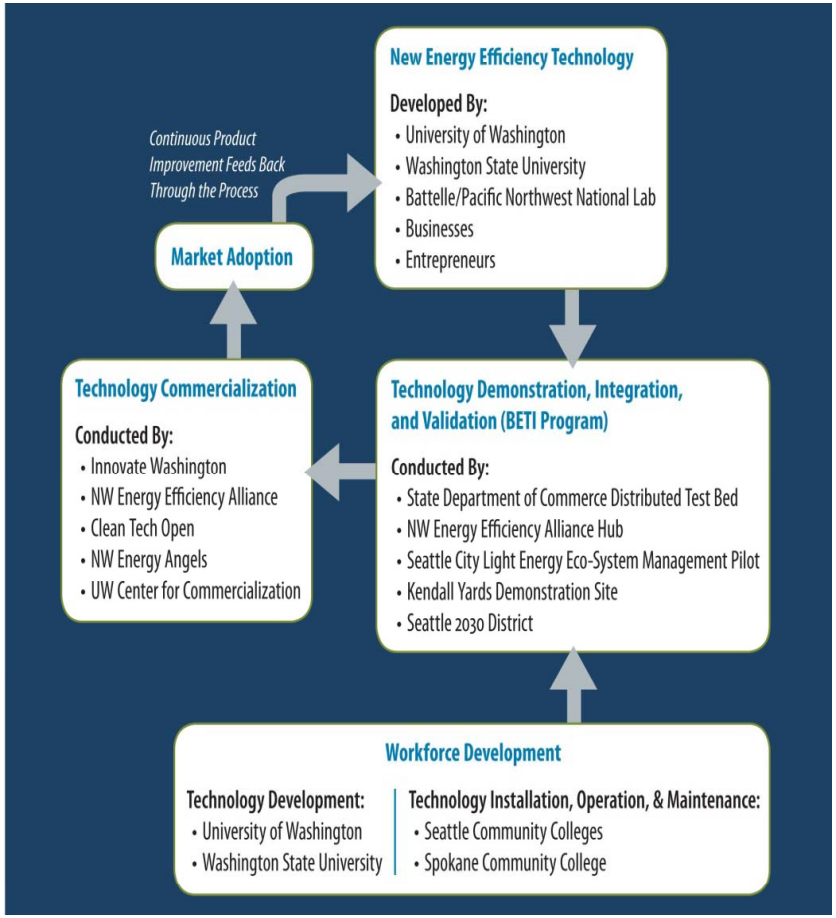
Opportunities for the Puget Sound

- Energy Services
- Building/Energy Mgmt Systems (Software)
- ICT Enabled Integrated Systems
- Green Design, Construction Services, and Software

Energy Efficiency Market Adoption



Washington Clean Energy Partnership



The **Washington Clean Energy Partnership** awarded $1.15 million i6 Green Innovation Challenge Grant

OED awarded $300,000 from U.S. Department of Energy to implement "Energy Eco-System Management Pilot"

Seattle Energy Management Pilot Project

- **Initiate a pilot project to drive energy efficiency at "city-scale"** through management of energy consumption across multiple buildings using "cloud" technology
- **Energy management enabled by aggregating and analyzing millions of data points from buildings**, interaction between building owners, and utility providers resulting in:
  - Energy efficiency at scale
  - Forecasting energy demand
  - Balancing generation and distribution
- **Seattle becomes "test bed"** for demonstrating viability of city scale energy efficiency
- Partners include Washington Clean Energy Partnership, U.S. Department of Energy, Microsoft, Seattle City Light, OED, and 2030 District

Ideal Pilot Participants

- **Leading commercial customers of Seattle City Light**, with a willingness to partner on a project with the City of Seattle, Microsoft and its technology partners
- **Owners of existing construction** with building management systems in place
- **Participating properties that include multiple buildings** with diverse characteristics and operational profiles

Benefits to Pilot Participants

- **Leadership in sustainability** that builds positive perception and brand equity
- **Lower facility energy management costs** and carbon footprint
- **Measurable property attributes** that support premium rent/ lease values
- Support for **owner/tenant business growth** objectives
- Favorable **ROI and payback** period

Next Steps

- **Identify and confirm potential pilot partners** within SCL's service territory
- Develop pilot **work plan that includes resource requirements** of all project stakeholders
- **Coordinate technical working group**, comprised of facilities teams from the pilot project, Microsoft, the City, and others to implement and evaluate project