Groundbreaking High-Performance Building Districts
U.S. Energy Consumption by Sector

Transportation 28.1%
(27.5 QBtu)

Industry 23.2%
(22.7 QBtu)

Buildings 48.7%
(47.8 QBtu)

Source: ©2011 2030, Inc. / Architecture 2030. All Rights Reserved.
The 2030 Challenge for Planning: New Buildings & Major Renovations

Source: © 2011 2030, Inc. / Architecture 2030. All Rights Reserved.

*Using no fossil fuel GHG-emitting energy to operate.
The 2030 Challenge for Planning: Existing Buildings

Source: © 2011 2030, Inc. / Architecture 2030. All Rights Reserved.
“Quite simply, this is one of the most important buildings in the world”

Jason McLennen, CEO of the International Living Future Institute

The Bullitt Center, Seattle, WA
Unique private/public partnerships
- Property owners and managers
- Local governments
- Business and community stakeholders
- Private Sector Led/Public Sector Supported
- Voluntary
- Common Mission and Goals
- Connected to Market Realities
A Successful 2030 District is a PRIVATE–PUBLIC PARTNERSHIP, comprised of:

PROPERTY OWNERS AND MANAGERS
that own, manage, and/or develop real estate within a District boundary.

SERVICES STAKEHOLDERS
providing related services within a District boundary.

COMMUNITY STAKEHOLDERS
representing either non-profit organizations or local government.
2030 Districts commit to reducing

BUILDING ENERGY USE + WATER CONSUMPTION + TRANSPORTATION GHG EMISSIONS

50% BY 2030 for EXISTING BUILDINGS
CARBON NEUTRAL BY 2030 FOR NEW CONSTRUCTION
**Energy Consumption Baselines**

**STATEMENT OF ENERGY PERFORMANCE**

**Seattle 2030 District Office Building**

- **Building ID:** 0000000
- **For 12-month Period Ending:** April 1, 2011
- **Date SEP becomes ineligible:** N/A
- **Date SEP Generated:** May 07, 2011

**Facility**

- **Seattle 2030 District Office Building**
- **2030 District**
- **Seattle, WA 98104**

- **Year Built:** 1987
- **Gross Floor Area (ft²):** 110,000

**Energy Performance Rating**

- **(1-100): 80**

**Site Energy Use Summary**

- **Electricity - Grid Purchase (kBtu):** 5,539,625
- **Natural Gas - (kBtu):** 2,374,125
- **Total Energy (kBtu):** 7,913,750

**Energy Intensity**

- **Site (kBtu/ft²/yr):** 72
- **Source (kBtu/ft²/yr):** 191

**Emissions (based on site energy use)**

- **Greenhouse Gas Emissions (MTCO₂e/year):** 762

**Electric Distribution Utility**

- **Seattle City Light**

**National Average Comparison**

- **National Average Site EUI:** 103
- **National Average Source EUI:** 214
- **% Difference from National Average Source EUI:** -30%

**Target Reduction - 50%**
Water Consumption Baselines

Source: Seattle 2030 District, Seattle public Utilities, and the Partnership for Water Conservation
Source: The Gilmore Research Group and Commute Seattle. *2010 Center City Commuter Mode Split Survey Results. March 2011*

*Note: Mode-Split, Trips, and Total Miles are based on total weekday trips per mode.*
7 Property Members
12 Buildings
11.3 million sq ft
10 Professional Stakeholders
4 Community Stakeholders
Linked in a Powerful Network

- 866 Buildings
- 238 Property Members
- 127 Professional Stakeholders
- 93 Community Stakeholders
Emerging 2030 Districts

- Albuquerque
- Ann Arbor
- Detroit
- Ithaca
- Portland, ME
- San Antonio
Member/Partner Types

Property Owner / Property Manager or Developer
An individual or entity that owns, manages and/or develops real estate within a 2030 District boundary.

Services Stakeholder
An individual or entity that provides services within a 2030 District boundary.

Community Stakeholder
A non-profit, government entity or community organization.
Member/Partner Commitments

Property Owner /Property Manager or Developer
Agree to support District performance goals by sharing:

- Building energy use, water use, and transportation date (confidentially*)
- Best practices and lessons learned for case studies
- Challenges in further improvements

*Data Disclosure: No energy use, water use, or transportation data specific to any building will be released outside of the 2030 District without the express permission of the Building Owner and/or Property Manager.
Benefits For Building Owners, Managers and Developers

- Utilize special Financing programs
- Access exclusive incentives, discounts & programs
- Improve competitive positioning
- Receive comparative analysis reports
Efficiency Road Map

Reference guide for creating an Energy Management Program
Facility Audits

Free Building Audits
Sign-up fees waived for D2030D member building tenants
Community Power Works
Rebates and Financing
Up to $500,000 in incentive dollars
Wegowise Pro
FirstView™ Reports

Energy consumption analyses, comparisons, and diagnostics
Continuous commissioning through building analytics
Real-time building information on a live, interactive dashboard
Seattle 2030 & Nissan Partnership
Storm Water Calculator

2030 District Baselines

Stormwater and Water Reduction Strategies

Water Managed Summary
Early Energy Modeling Assistance

Shadow Analysis

Site Shadow Analysis

Shadow Analysis for Options

Shadow Range

Solar Radiation
Streamlined Permitting

Reduce permitting time by up to three months
Small Commercial Program Tools

![Lighting Retrofit Tool](image)

- **New Space Name**: OpenOff1
- **Space Floor Area**: 6000 ft²
- **Location**: PA
- **Baseline Lighting Type**: T12 Fluorescent
- **Upgrade Lighting Type**: LED
- **Number of Workstations**: 70
- **Average Commercial Electricity Billing Rate**: $0.0991/kWh
- **Typical Workstation Area**: 86 ft²
- **Electricity Demand Cost**: $12/kWh/month
- **62.3% Energy Savings**
- **51.3% Peak Demand Savings**
- **24.8 Years Simple Payback Period**
# Portfolio Executive Summary

**EXECUTIVE SUMMARY**

<table>
<thead>
<tr>
<th>Building</th>
<th>Size (ft²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Building 1</td>
<td>95,000</td>
</tr>
<tr>
<td>Building 2</td>
<td>275,000</td>
</tr>
<tr>
<td>Building 3</td>
<td>200,000</td>
</tr>
</tbody>
</table>

**EXAMPLE PORTFOLIO**

<table>
<thead>
<tr>
<th>EUI</th>
<th>WUI</th>
</tr>
</thead>
<tbody>
<tr>
<td>S2030D Baseline¹</td>
<td>82.6</td>
</tr>
<tr>
<td>City Office Average</td>
<td>59.7</td>
</tr>
<tr>
<td>2030D Office Average</td>
<td>62.6</td>
</tr>
<tr>
<td>Example Portfolio</td>
<td>94.9</td>
</tr>
<tr>
<td>Percent Reduction from Baseline</td>
<td>-39%</td>
</tr>
<tr>
<td>Percent/Year Reduction Necessary to Reach 2015 2030D Target (10%)</td>
<td>32%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Energy/ft²</th>
<th>Water/ft²</th>
</tr>
</thead>
<tbody>
<tr>
<td>City Office Average</td>
<td>$1.86</td>
</tr>
<tr>
<td>Example Portfolio Average</td>
<td>$1.77</td>
</tr>
<tr>
<td>Percent Reduction</td>
<td>5%</td>
</tr>
</tbody>
</table>

¹Baseline=National Median from Portfolio Manager/CBECs  *All sizes, occupancies, schedules
Property Comparisons

Example Building 1
Energy Use Intensity Comparison

- National Median EUI
- Average Office EUI*
- 2030D EUI Target
- Current EUI

Energy Star Score
- N/A

Reduction
- 24%

*All sizes, occupancies, and schedules included

Energy Data Last Updated: 2014-03-31
Property Comparisons

Example Building 1
Energy Use Intensity Percent Reduction from Baseline
2030D Member Offices: 50K - 150K ft²
Member/Partner Commitments

Professional Stakeholder
Agrees to support District performance goals through the following actions:

- Share professional expertise and experience with the 2030 District
- Support Property Owners, Managers and Developers in their programs
- Support the 2030 District Staff and Board of Directors
Benefits For Professional Stakeholders

Bring the cutting edge of building performance to your customers

Get recognized

Interact with market-leading clientele

Connect to new ideas, education & opportunities for your customers
Community Stakeholder

Agrees to support District performance goals by:

- Sharing organizational experience and expertise in areas of their core mission
- Participating in District decision-making
- Evaluating membership criteria for property owners and stakeholders
- Mentoring small commercial property owners and managers
- Educating and training providers in our area of expertise
Benefits For Community Stakeholders

- Extend your organization’s reach
- Expand your outreach
- Connect with building owners/operators & like-minded organizations
- Gain access to new thought leadership
2030 Districts Toolkits

- District Formations Toolkit
- Member Resources Toolkit
- Small Commercial Toolkit
- Outreach and Communications Toolkit
- District Funding Toolkit
- Project Financing Toolkit
- Performance Metrics Toolkit

http://www.2030districts.org/toolkits
2030 District Checklist
The following are required:

- Private Sector Lead
- Sign the 2030 District Charter
- Adopt the 2030 Challenge for Planning targets
- Five different property owners, managers, developers
- Established Organizational Structure with an Advisory or Leadership Board/Committee

Forming the 2030 District