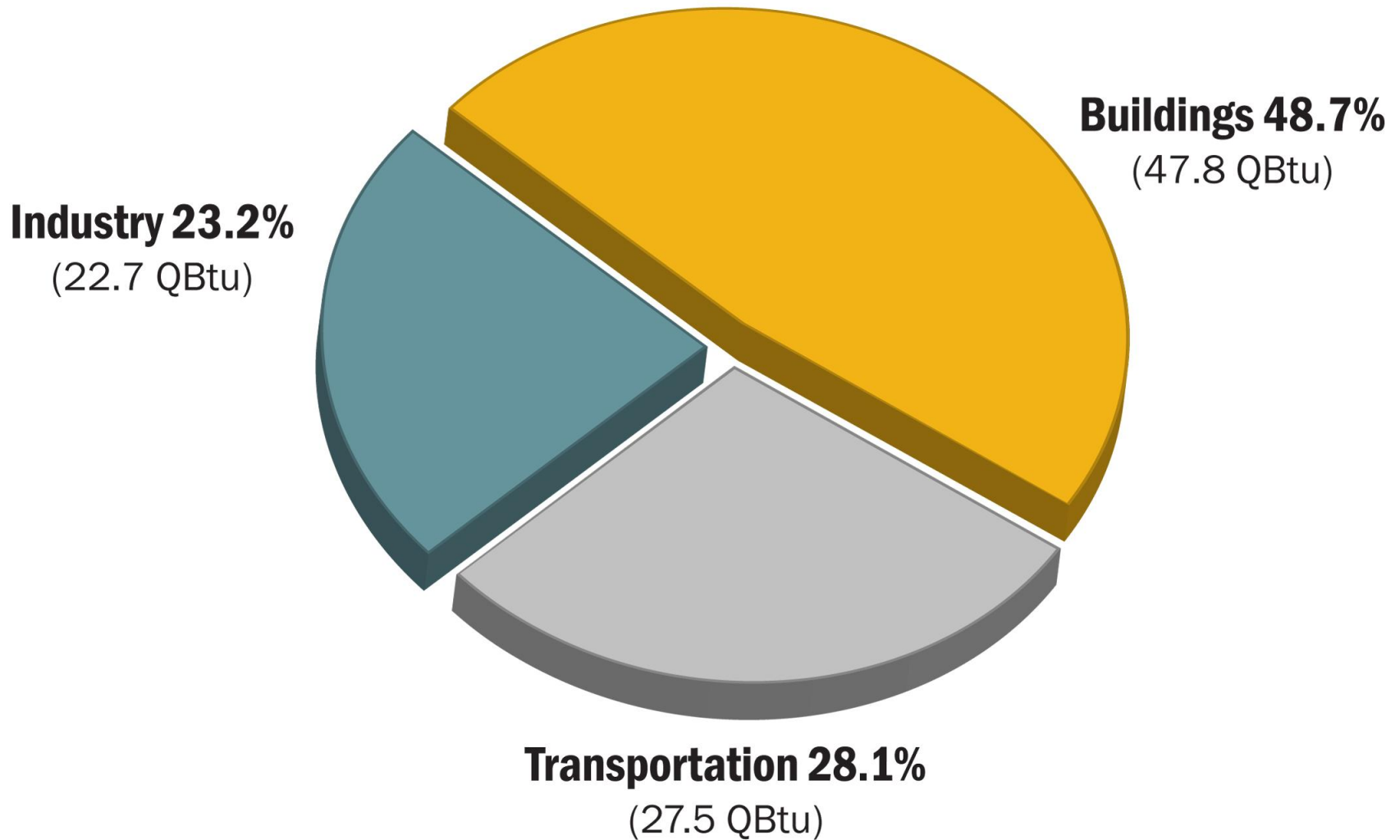




2030
DISTRICTS®

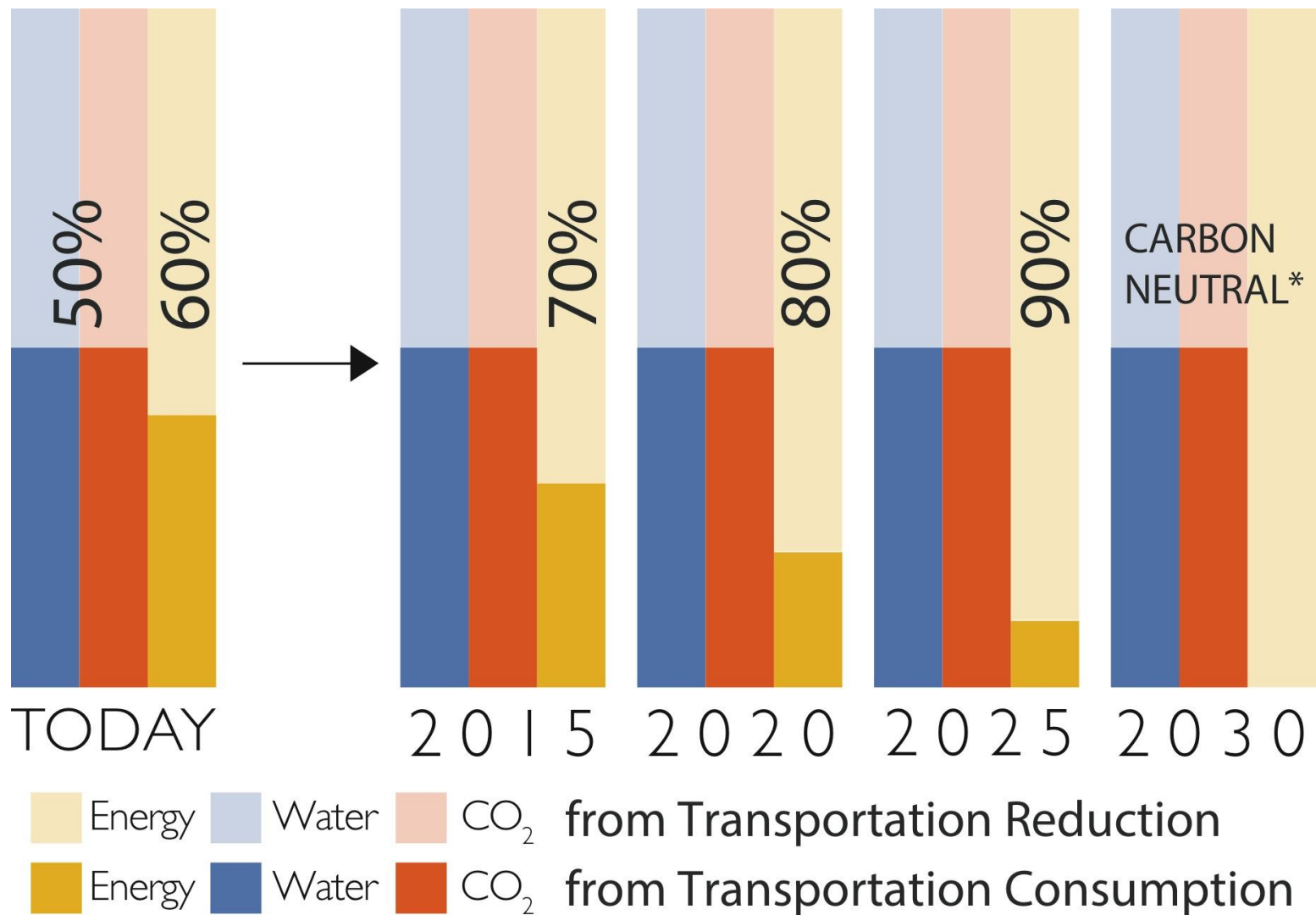
Groundbreaking
High-Performance
Building Districts





U.S. Energy Consumption by Sector

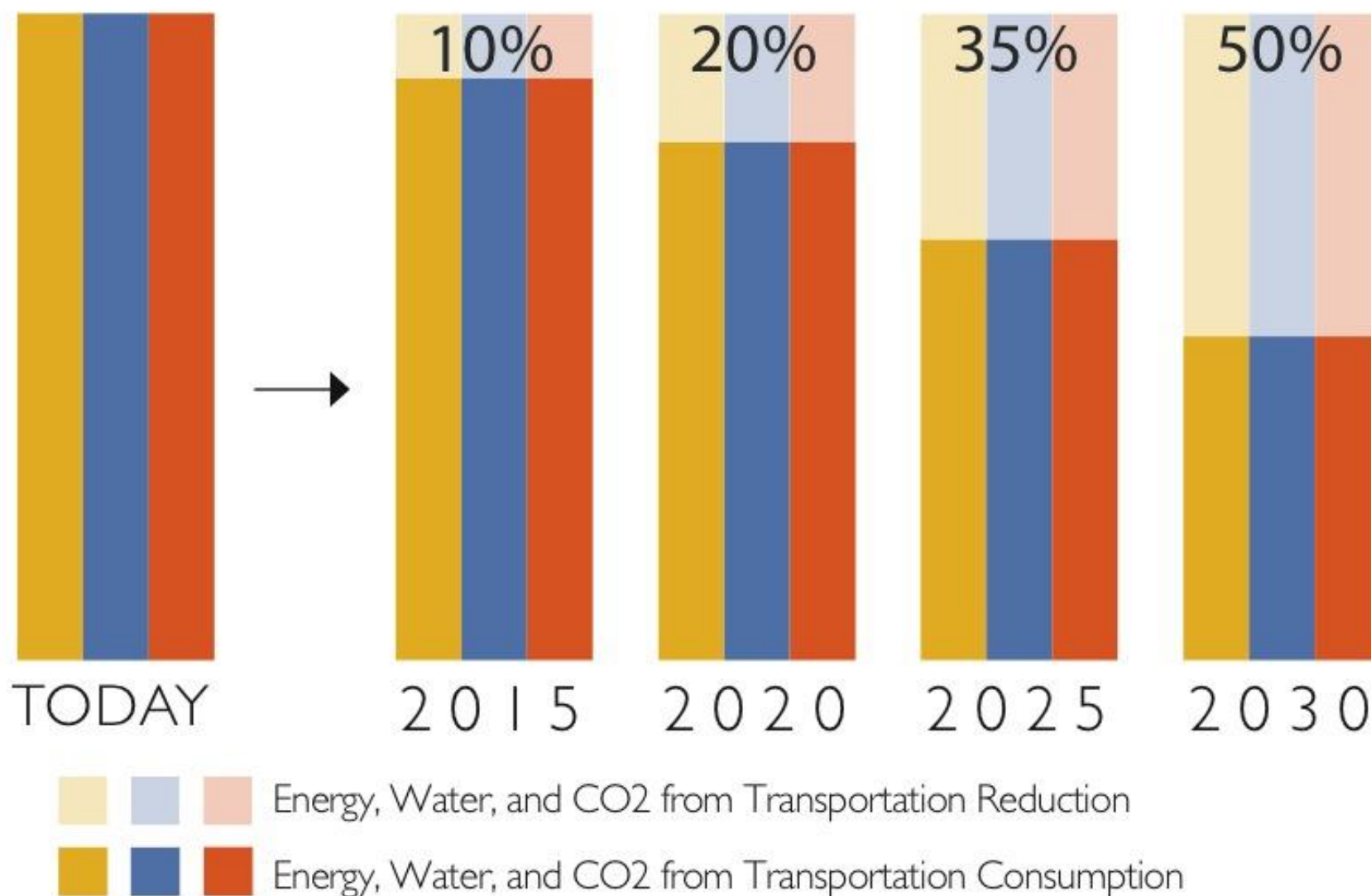
Source: ©2011 2030, Inc. / Architecture 2030. All Rights Reserved.
Data Source: U.S. Energy Information Administration (2011).



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

2030 DISTRICTS®

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:



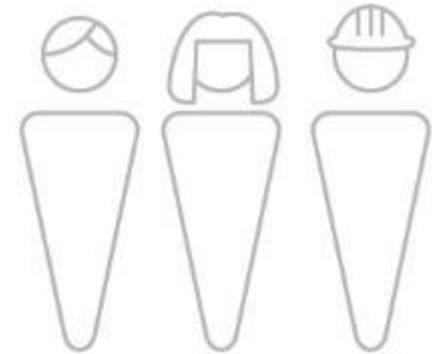
PROPERTY OWNERS AND MANAGERS

that own, manage,
and/or develop real
estate within a
District boundary.



SERVICES STAKEHOLDERS

providing related
services within a
District boundary.

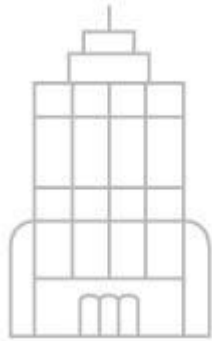


COMMUNITY STAKEHOLDERS

representing either
non-profit
organizations or
local government.



2030 Districts commit to reducing



BUILDING
ENERGY USE





WATER
CONSUMPTION



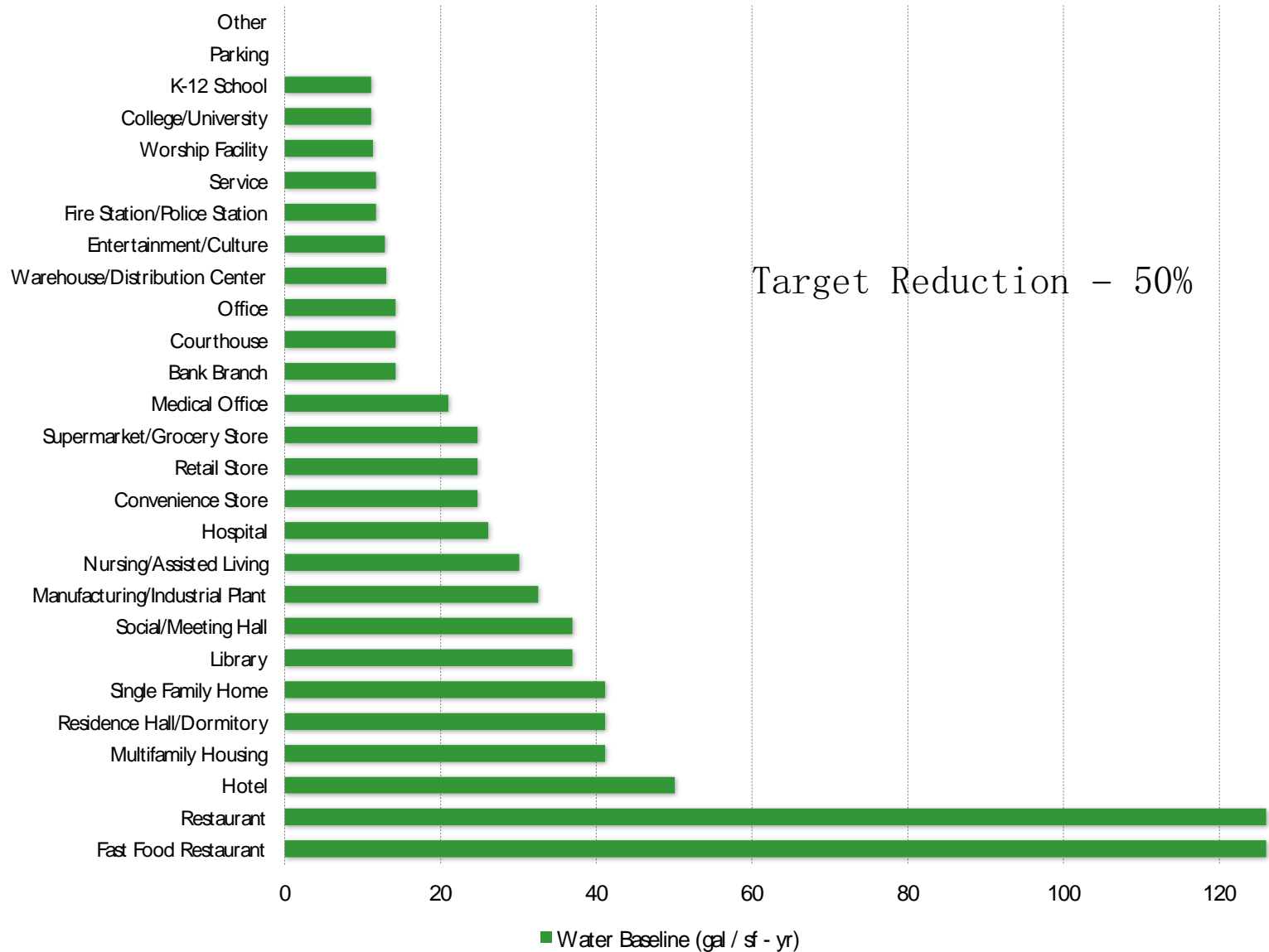
TRANSPORTATION GHG
EMISSIONS

50% BY 2030 for EXISTING BUILDINGS
CARBON NEUTRAL BY 2030 FOR NEW CONSTRUCTION

Energy Consumption Baselines

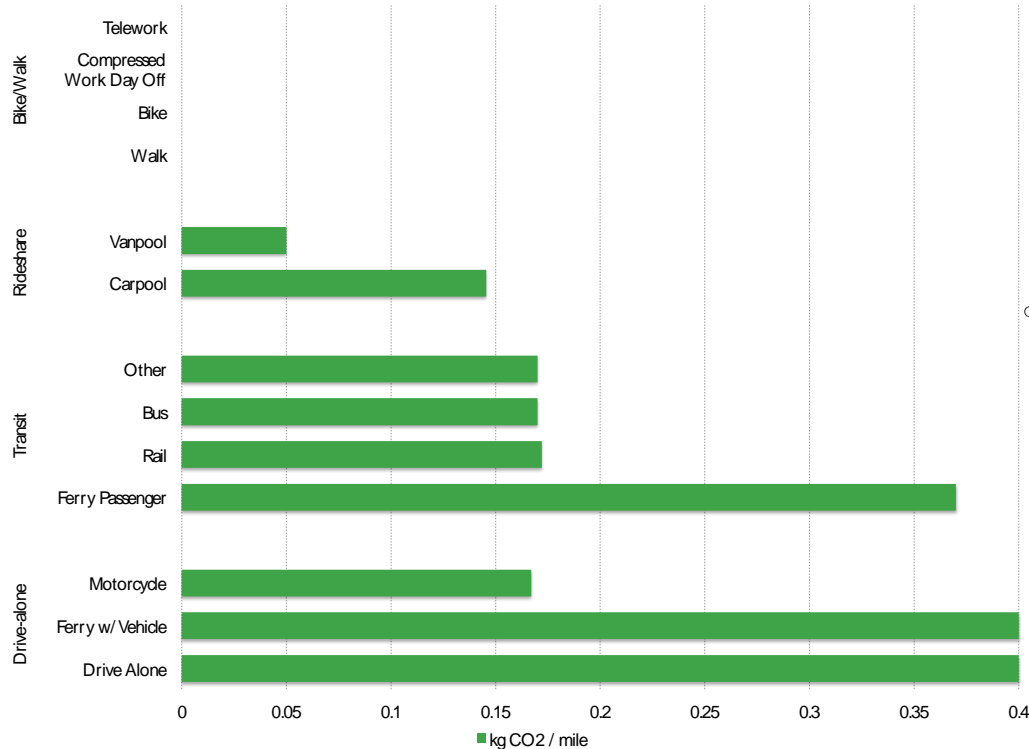
	STATEMENT OF ENERGY PERFORMANCE Seattle 2030 District Office Building
Building ID: 0000000	
For 12-month Period Ending: April 1, 2011 ₁	
Date SEP becomes ineligible: N/A	
Date SEP Generated: May 07, 2011	
Facility Seattle 2030 District Office Building 2030 District Seattle, WA 98104	
	
Year Built: 1987	
Gross Floor Area (ft²): 110,000	
Energy Performance Rating₂ (1-100) 80	
Site Energy Use Summary₃	
Electricity - Grid Purchase(kBtu)	5,539,625
Natural Gas - (kBtu) ₄	2,374,125
Total Energy (kBtu)	7,913,750
Energy Intensity₅	
Site (kBtu/ft ² /yr)	72
Source (kBtu/ft ² /yr)	191
Emissions (based on site energy use)	
Greenhouse Gas Emissions (MtCO ₂ e/year)	762
Electric Distribution Utility Seattle City Light	
National Average Comparison	
National Average Site EUI	103
National Average Source EUI	274
% Difference from National Average Source EUI	-30%
Building Type	Office

Water Consumption Baselines

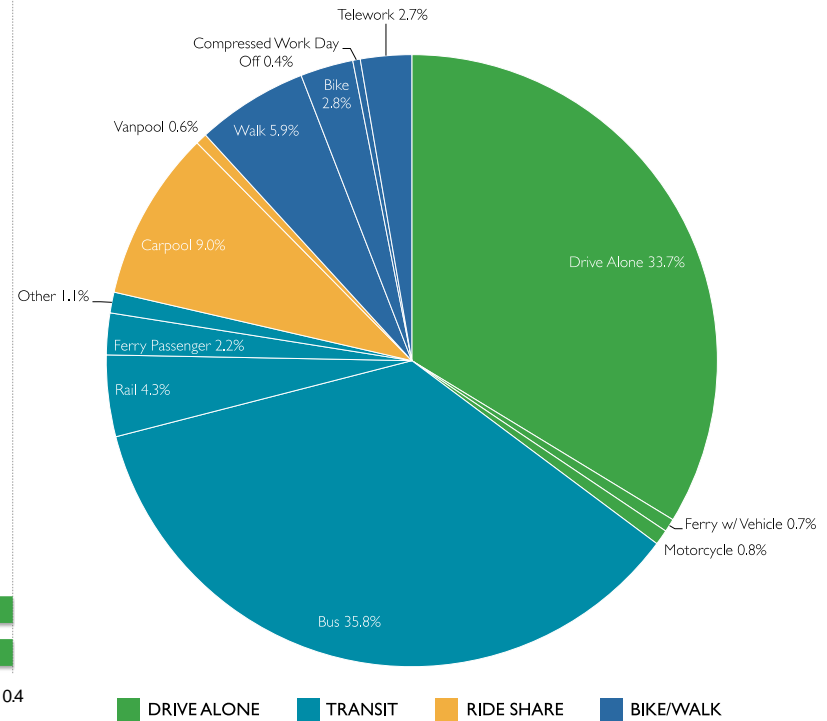


Commuter Transportation Baselines

Transportation Baselines: kg CO₂ / Mile

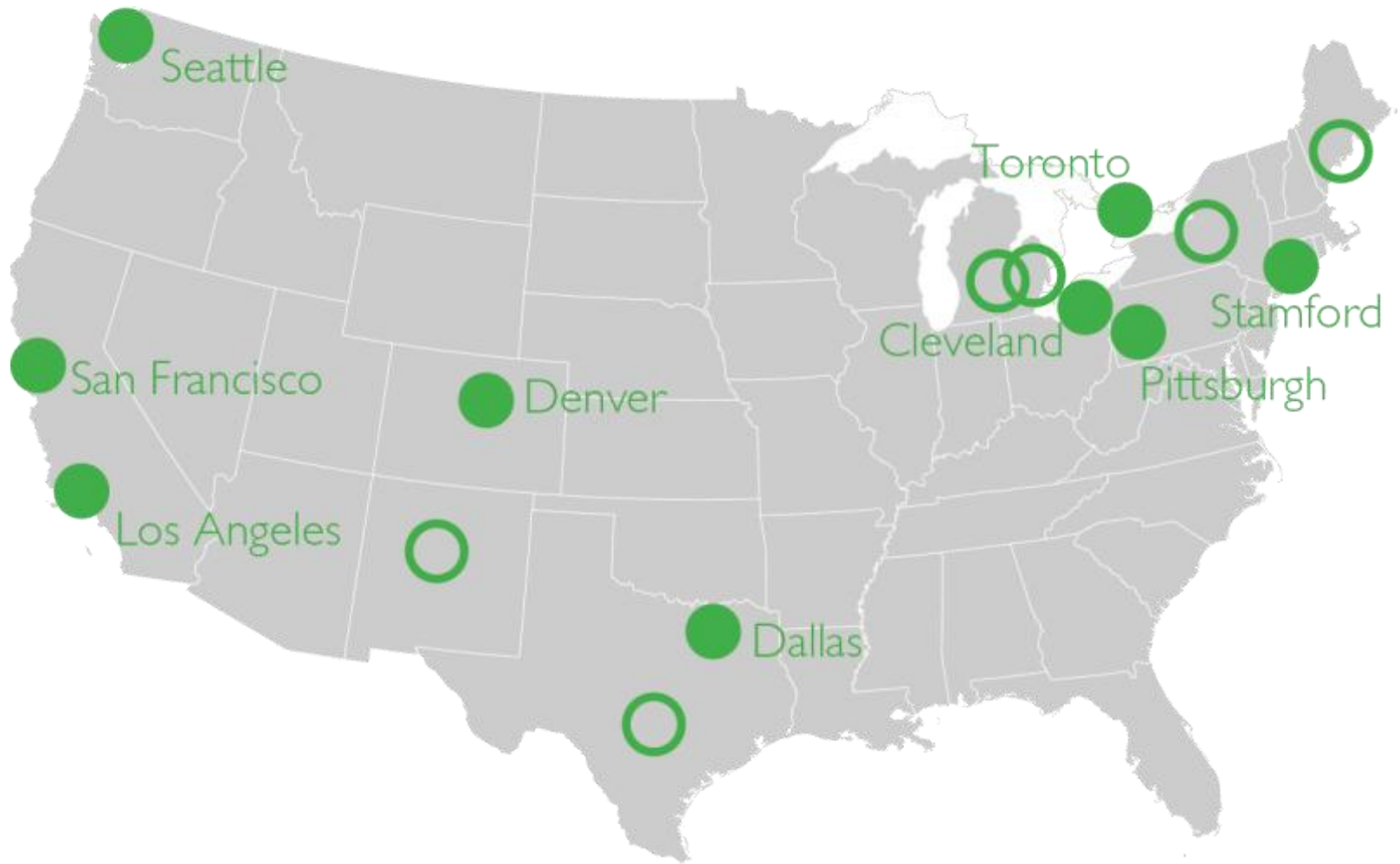


Mode Split



DALLAS 2030 DISTRICT®

- ⑦ 7 Property Members
- ⑦ 12 Buildings
- ⑦ 11.3 million sq ft
- ⑦ 10 Professional Stakeholders
- ⑦ 4 Community Stakeholders



● Established 2030 District ○ Emerging 2030 District

Linked in a Powerful Network



206 M
*Square Feet
Committed*

- 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:

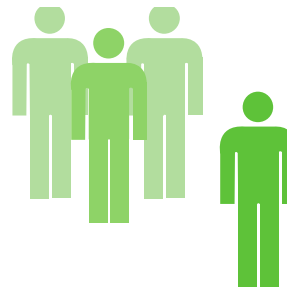
- ⦿ Building energy use, water use, and transportation data (confidentially*)
- ⦿ Best practices and lessons learned for case studies
- ⦿ Challenges in further improvements

*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



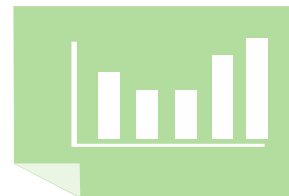
Utilize special
Financing programs



Improve competitive
positioning

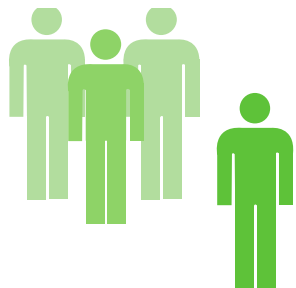
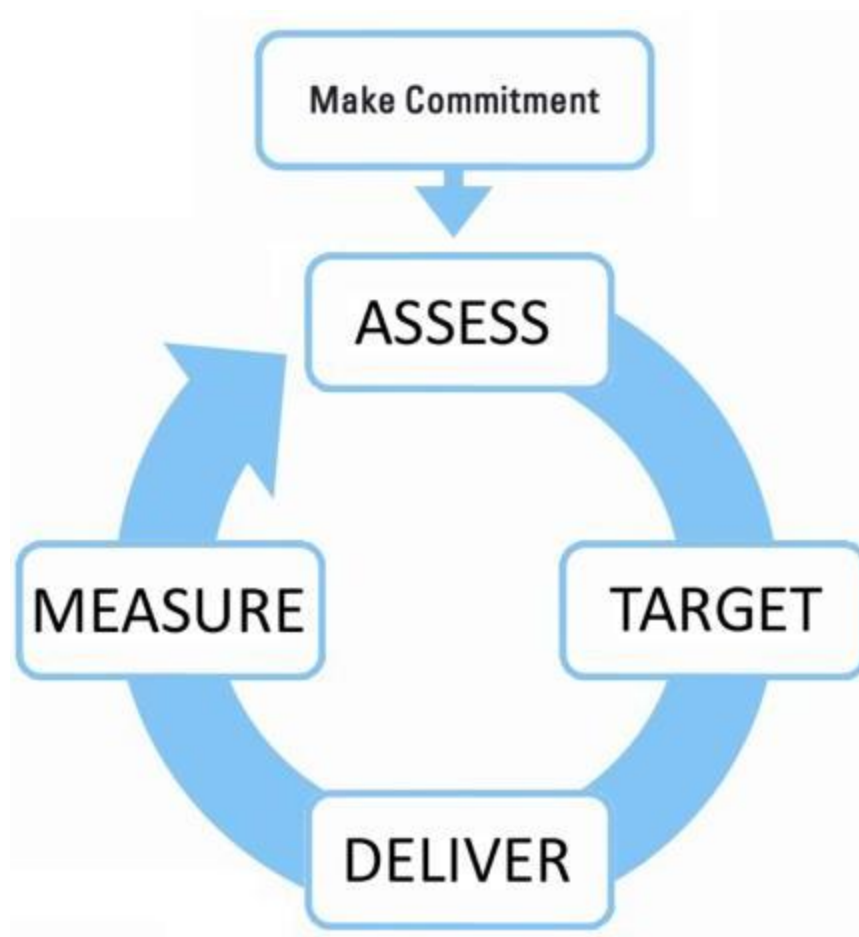


Access exclusive
incentives,
discounts
& programs



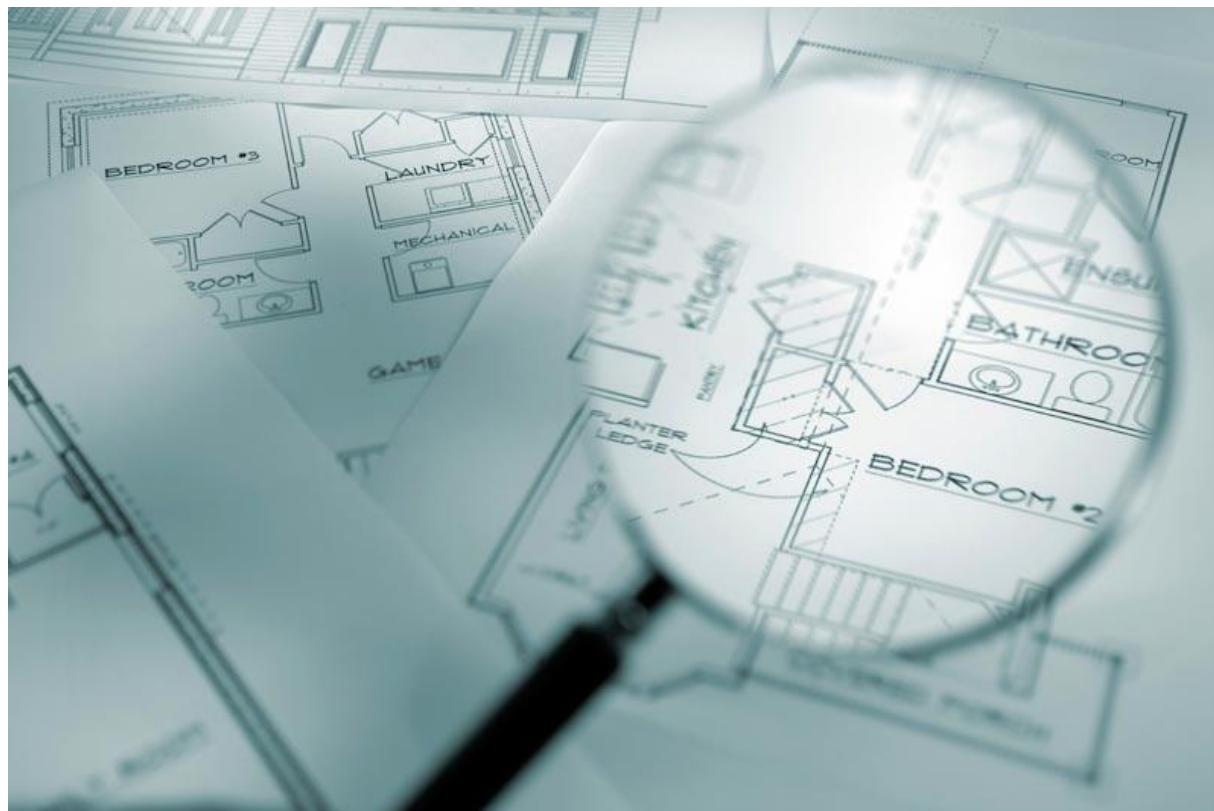
Receive comparative
analysis reports

Efficiency Road Map



Reference guide for creating an Energy Management Program

Facility Audits



Free Building Audits

Car2Go



Sign-up fees waived for D2030D member building tenants



Community Power Works Rebates and Financing



Up to \$500,000 in incentive dollars

2030
DISTRICTS®

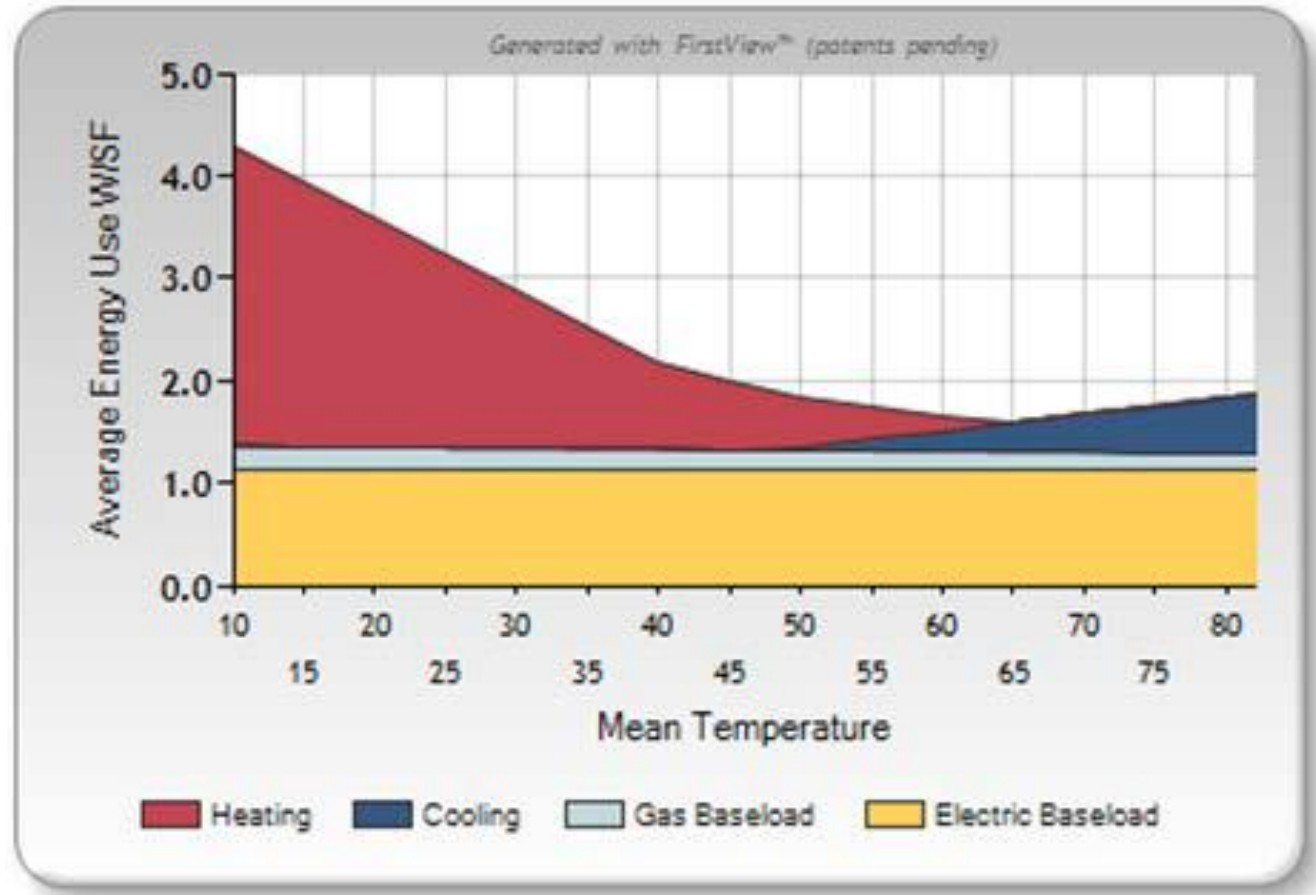
wegowise

Wegowise Pro



free

FirstView™ Reports



Energy consumption analyses, comparisons, and
diagnostics

Smart Building and Energy Solutions



Continuous commissioning through building analytics



Microsoft

 Seattle City Light

 growseattle
office of economic development



Switch Automation



Real-time building information on a live, interactive dashboard



Seattle 2030 & Nissan Partnership



Storm Water Calculator

SEATTLE 2030 DISTRICT WATER AND STORMWATER CALCULATOR

Baseline Stormwater and Potable Water Use

Building & Site Characteristics

Select Building Use & Total Building Floor Area

	SF
	SF
	SF
Enter Lot Area	SF
Enter Building Footprint Area	SF
Enter Current Water Use	Gal/Yr

Estimated Annual Baseline

Potable Water (District Average) 0 Gal/Yr

Stormwater 0 Gal/Yr

Strategies for Reducing Stormwater and Water Use

Potable Water Use Reduction Strategies

☐ Potable Water Saving Optimizer

Annual Potable Saving 0 Gal/Yr

Stormwater Reduction Strategies

☐ Trees

Newly Planted

Deciduous Na.

Evergreen Na.

Retained

Deciduous Na. Canopy Area (S¹)

Evergreen Na. Canopy Area (S¹)

☐ Bio-retention

Contributing Area SF

Pollution Generating Surface 0% SF

Facility Bottom Area 0 SF

Ponding Depth 2 Inch

Vertical Sideswall Ym

Underdrain ☐ Ym ☐ Orifice on Underdrain Ym

☐ Permeable Pavement

Perm. Pavement Area SF

Run-off Area SF

☐ Green Roof

Green Roof Area SF

Run-off routed to vault ☐ Ym

☐ Rainwater Harvesting

Annual Harvest Volume 0 Gal/Yr

☐ Detention Vault

Contributing Area SF

Green Roof Area SF

Bio-retention Cont. Area SF

Vault Volume Gal

Summary of Expected Water Managed⁶

Total Potable Water Managed² 0 Gal/Yr 0% Managed²

Total Stormwater Managed² 0 Gal/Yr 0% Managed²

Total Water Managed² 0 Gal/Yr 0% Managed²

Notes:

1. Applicable to all buildings. Potable water savings based on proposed strategies (reflected in this calculator).

2. All stormwater facilities must be designed according to the Seattle Stormwater Manual to prevent runoff.

3. Canopy area corresponds to total canopy area of all certified trees.

4. Pollution generating surfaces are any impervious or pervious areas considered to be a significant source of pollutants to discharge water. In-ground areas subject to vehicle use, parking, fueling, or other activities are Seattle Stormwater Manual for guidance.

5. Applicable to all buildings. Rainwater harvesting volume (reflected in this calculator).

6. Water managed volumes are related to 2030 District goals. They do not constitute validation of compliance with Seattle municipal permit requirements.

7. Percent managed is relative to District storage baselines. No credit given for management of water above these baselines.

SF = square feet Gal = gallons Yr = year Na. = Number

8-15-14

2030 District
Baselines

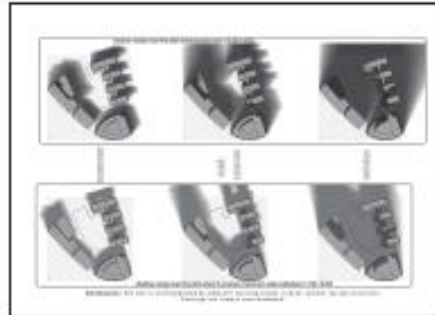
Stormwater and
Water
Reduction
Strategies

Water Managed
Summary

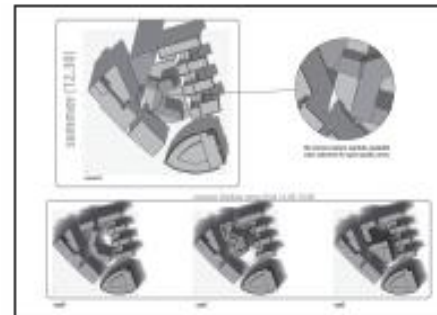
free

Early Energy Modeling Assistance

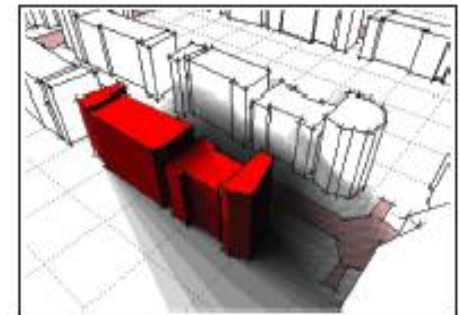
Shadow Analysis



Site Shadow Analysis

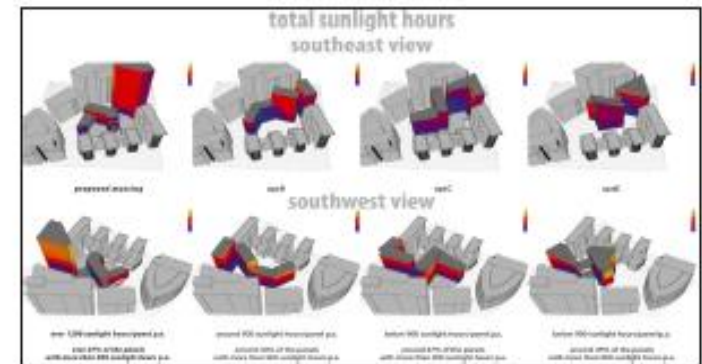
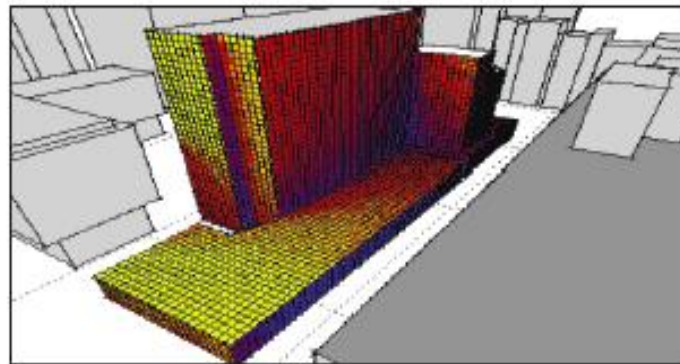


Shadow Analysis for Options



Shadow Range

Solar Radiation



Streamlined Permitting



Reduce permitting time by up to three months

2030
DISTRICTS®



Small Commercial Program Tools

www.2030districts.org/tech_tool/add/rt/1074

LIGHTING RETROFIT TOOL

PROJECT 123 Main Street SESSION NEW SESSION SAVE TO RESULTS DASHBOARD CANCEL

1

2

3

4

SAVE

SELECT OR COLLECT

EDIT

APPLY & REVIEW

SUMMARY

Open Office Private Office Summary

New Space Name Project

General Schedule Lighting Economics Controls 1 Controls 2

Space Floor Area ft²

Number of Workstations

Typical Workstation Area ft²

Location: State

Average Commercial Electricity Billing Rate /kWh

Electricity Demand Cost kWh/month

Baseline Lighting Type

Upgrade Lighting Type

Upgrade Control Strategies

☒ Tuning ☒ Occupancy ☒ Daylight Dimming ☒ Personal Controls

Profile Energy Cost

Lighting Power Density Profile Curve

Savings Based On Controls

62.3% Energy Savings

51.3% Peak Demand Savings

24.8 Years Simple Payback Period

Portfolio Executive Summary

EXECUTIVE SUMMARY

Building 1	95,000 ft ²
Building 2	275,000 ft ²
Building 3	200,000 ft ²

EXAMPLE PORTFOLIO

	EUI	WUI
S2030D Baseline ¹	82.6	N/A
City Office Average*	59.7	14.2
2030D Office Average	62.6	12.3
Example Portfolio	94.9	8.2
Percent Reduction from Baseline	-39%	42%
Percent/Year Reduction Necessary to Reach 2015 2030D Target (10%)	32%	0%
	Energy/ft ²	Water/ft ²
City Office Average*	\$1.86	N/A
Example Portfolio Average	\$1.77	\$0.14
Percent Reduction	5%	N/A

¹Baseline=National Median from Portfolio Manager/CBECS *All sizes, occupancies, schedules



Property Comparisons

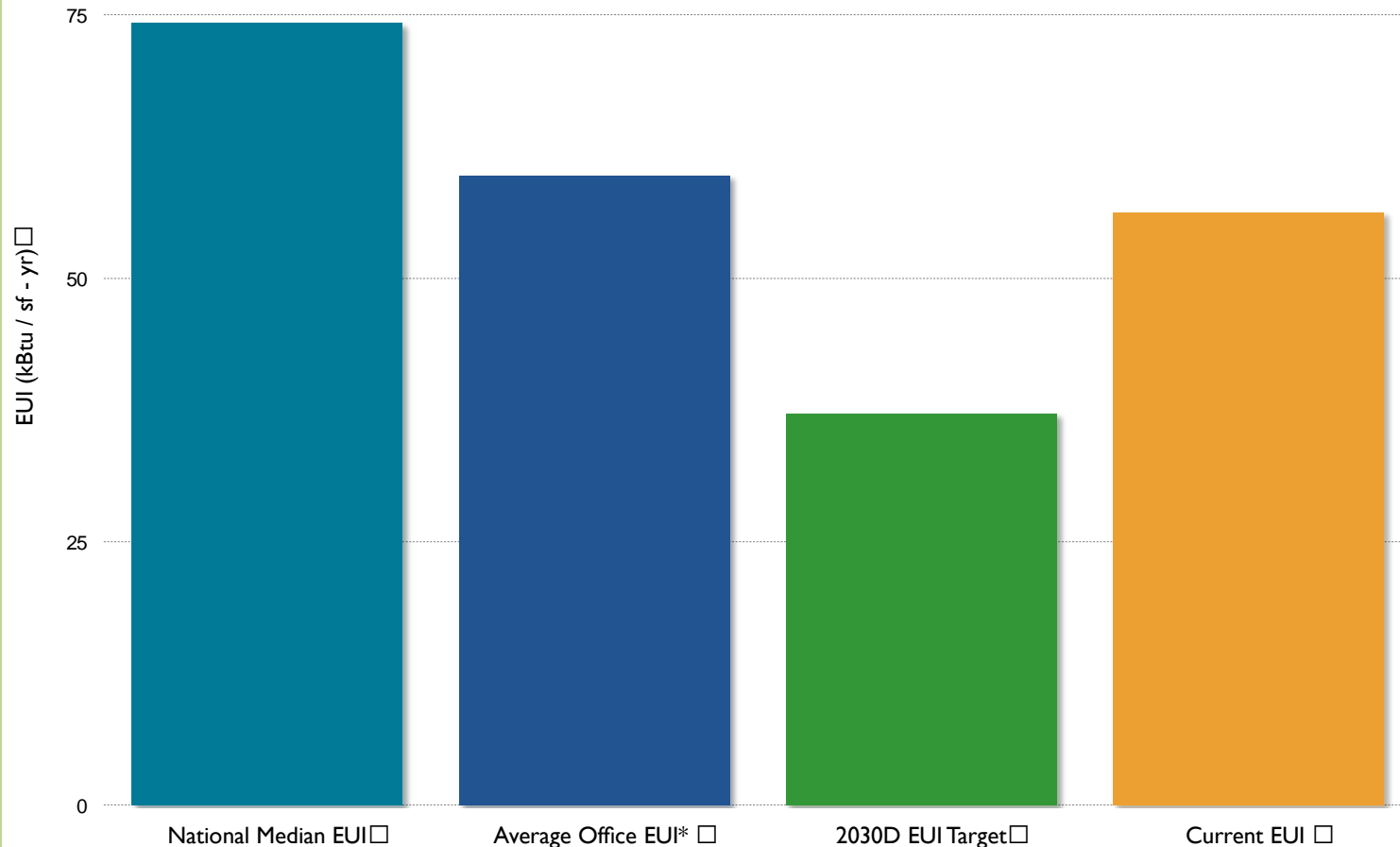
Energy Star Score

N/A

Example Building 1 Energy Use Intensity Comparison

Reduction

24%

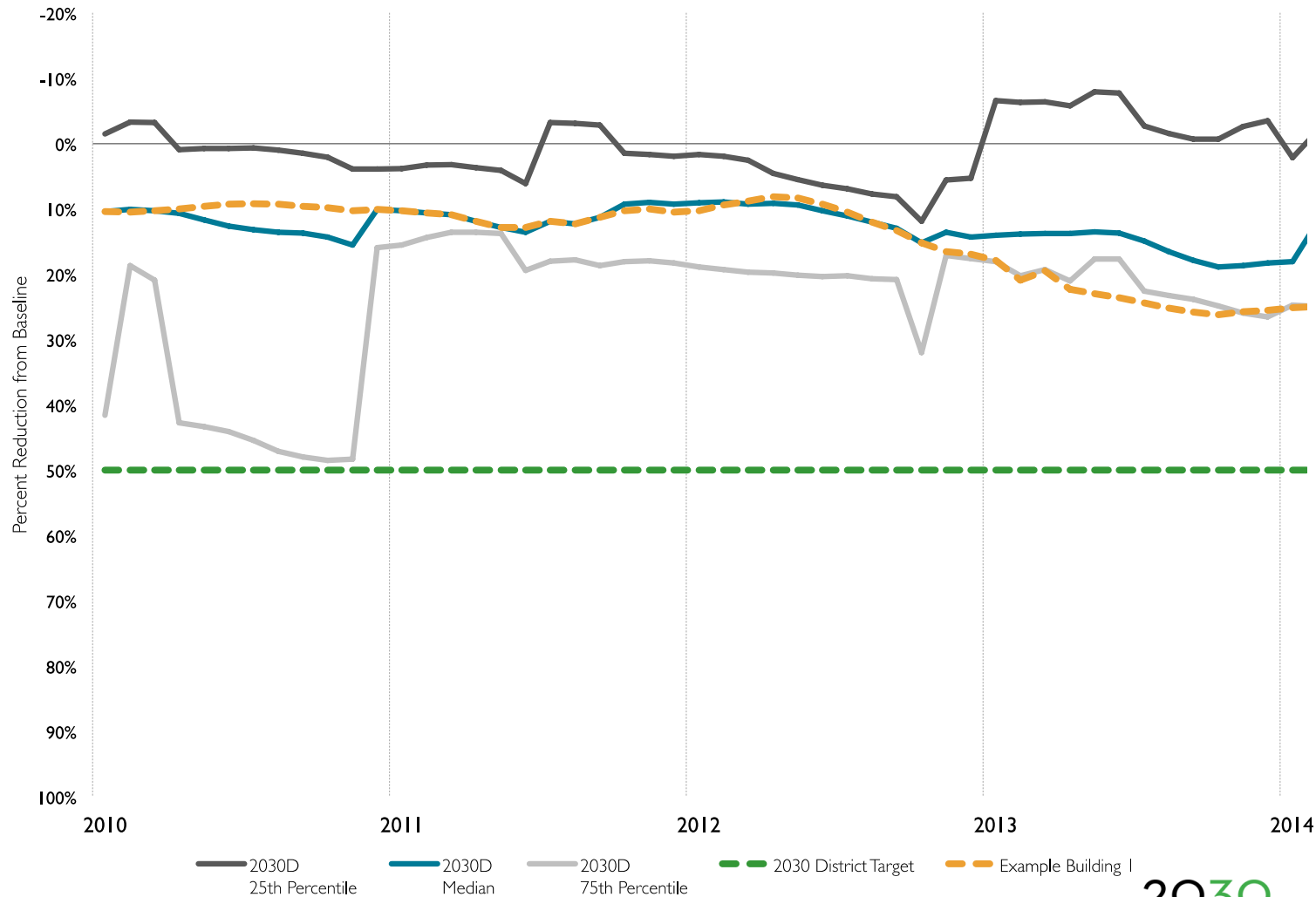


Energy Data Last Updated: 2014-03-31

* All sizes, occupancies, and schedules included

Property Comparisons

Example Building I
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

Benefits For Professional Stakeholders



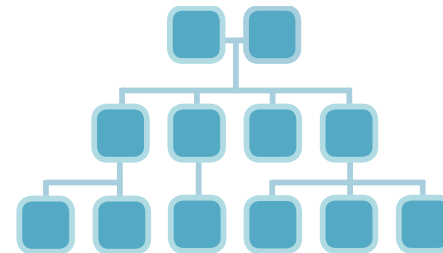
Bring the cutting edge
of
building performance
to
your customers



Get
recognized



Interact with
market-leading
clientele



Connect to new ideas,
education &
opportunities
for your customers

Member/Partner Commitments

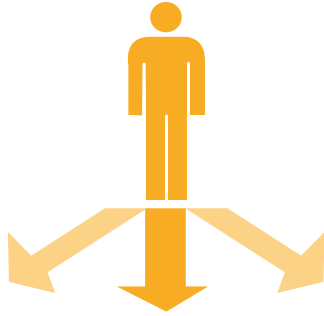


Community Stakeholder

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

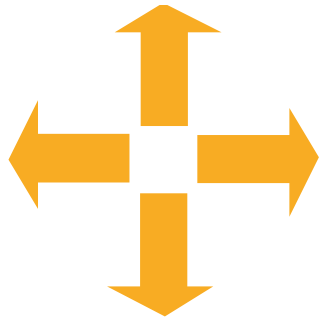
Benefits For Community Stakeholders



Extend your
organization's reach



Connect with building
owners/operators &
like-minded
organizations



Expand your
outreach



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:

- ① Private Sector Lead
- ① Sign the 2030 District Charter
- ① Adopt the 2030 Challenge for Planning targets
- ① Five different property owners, managers, developers
- ① Established Organizational Structure with an Advisory or Leadership Board/Committee

Forming the 2030 District

