

THE SEATTLE 2030 DISTRICT

A Business Alliance to Achieve High Performance in Real Estate

With the most pressing economic crisis facing the country today now occurring in the Commercial Real Estate (CRE) market, high rates of unemployment have led to a decrease in demand for office, retail, manufacturing, warehouse, and hotel space. Office vacancy rates nationwide are reaching a staggering 18 percent. As a result, rents are going down, making it more difficult for borrowers to pay their loans let alone perform necessary energy upgrades on their buildings. Further, reduced electrical power generation has increased local utility rates which will impact operating costs and asset values if current consumption levels are not cut back.

In response to these market conditions, Architecture 2030, the City of Seattle, five major property owners and management companies, two utilities including the city-owned electric utility, a major healthcare provider, engineers, architects, design firms, BetterBricks and others have united to create a groundbreaking high-performance building district in downtown Seattle known as the Seattle 2030 District. The Seattle 2030 District will ease the stress on the CRE market by helping owners and developers find innovative financing, share critical tools and best practices and create joint education opportunities to decrease their building's energy consumption and operating costs. Cumulatively, these actions will increase cash flow and property values, reduce the risk of default, increase CRE desirability, create new jobs, and help keep Seattle's edge as a desirable city to work and live in the 21st century.

In 2010, over 40 civic leaders, working together as a private-public and voluntary entity, created the Seattle 2030 District Planning Committee (the Committee) and adopted the *2030 Challenge for Planners*, which adds reductions in water consumption and vehicle miles traveled to the energy and fossil fuel building reduction targets of the 2030 Challenge. The Committee's work to collaboratively advance the growth of the Seattle 2030 District is vital and unique. The Seattle 2030 District will be the first high-performance building district in the country.

Achieving the 2030 Challenge targets at a district scale, and focusing on existing medium to large buildings that are privately owned, will provide a working model that other cities and regions can use to reduce emissions and impacts. While individual buildings will have specific opportunities for energy reductions, a district approach will provide the opportunity for district-wide heat recovery, distributed generation, and other district energy efficiencies that can reduce the demand for resources. The 2030 District will provide members a roadmap to own, manage, and develop high performance buildings by leveraging existing market resources and by creating new tools and partnerships to overcome current market barriers. This type of collaborative action is key to maintaining the integrity of legislative energy reduction mandates, such as those in Washington's SB 5854. The 2030 District is also a strategic undertaking to help the City of Seattle meet its goal of carbon neutrality by 2030 and represents a major investment in Seattle's future.

SEATTLE 2030 DISTRICT Planning Committee Moving Seattle towards Carbon Neutrality

Mission Statement

The Seattle 2030 District Planning Committee (the Committee) is an interdisciplinary public-private collaborative working to create a groundbreaking high-performance building district in downtown Seattle. With the *Architecture 2030 Challenge for Planners* as the foundation for the Committee, we seek to develop realistic, measurable, and innovative strategies to assist district property owners, managers, and tenants in meeting aggressive goals that reduce environmental impacts of facility construction and operations. These collective efforts will establish the District as an example of a financially viable sustainability focused private sector driven effort that maximizes profitability and prosperity for all involved.

Through collaboration among diverse stakeholders, leverage of existing and development of new incentives and financing mechanisms, and development and communication of shared resources, the 2030 District seeks to prove the business case for sustainability. Property owners will not be required to achieve the goals of the District by legislative mandates, or as individuals. Rather, this type of goal achievement requires sharing of resources and ongoing collaboration to make high-performance buildings the most profitable building type in Seattle.

District Goals:

Existing Buildings and Infrastructure Operations:

- **Energy use:** A minimum 10% reduction below the National average by 2015 with incremental targets, reaching a 50% reduction by 2030.
- **Water Use:** A minimum 10% reduction below the National average by 2015, with incremental targets, reaching a 50% reduction by 2030.
- **CO₂e of auto and freight:** A minimum 10% reduction below the current District average by 2015 with incremental targets, reaching a 50% reduction by 2030.

New Buildings, Major Renovations, and New Infrastructure:

- **Energy use:** an immediate 60% reduction below the National average, with incremental targets, reaching carbon neutral by 2030.
- **Water Use:** An immediate 50% reduction below the current National Average.
- **CO₂e of auto and freight:** An immediate 50% reduction below the current District Average.

Seattle 2030 District Committee Strategies:

- Invite those who are already benchmarking their properties and/or already taking proactive steps to reduce energy use to participate in the Seattle 2030 District.
- Engage building owners and users in a collaborative district and develop elegant strategies and solutions to increase building performance.
- Map buildings for which current data exists.
- Develop common metrics for all buildings, considering Energy Star Portfolio Manager and the Seattle Climate Partnership Carbon Footprint Calculator as achievable starting points.
- Create a mechanism to reward good performers and to help poor performers improve, benefitting properties at all performance levels

- Develop the road map for property owners and managers to follow that includes benchmarking and working to improve upon current energy usage including water, therms and kWh.
- Create an “economic development umbrella” for participants.
- Investigate funding/financing possibilities to support goals and strategies.

Seattle 2030 District Committee Members

Property owners and managers:

Unico
Vulcan
Hines
CB Richard Ellis
GVA Kidder Matthews

Utilities:

Seattle Steam
Seattle City Light

Healthcare Providers:

Virginia Mason

Engineers:

MacDonald-Miller
OAC Services

Community Stakeholders:

Architecture2030
Cascadia Region Green Building Council
Seattle Climate Partnership
New Buildings Institute
Northwest Energy Efficiency Alliance
City of Seattle – Department of Planning and Development
ZGF Architects
GGLO
Mithun
Sellen Construction
Powers Economics

Definitions and footnotes:

Specific Incremental Performance Targets:

Existing buildings and infrastructure operations:

- Energy Use: 10% reduction by 2015, 20% reduction by 2020, 35% reduction by 2025 and 50% reduction by 2030.
- Water Use: 10% reduction by 2015, 20% reduction by 2020, 35% reduction by 2025 and 50% reduction by 2030.
- CO₂e of auto and freight: 10% reduction by 2015, 20% reduction by 2020, 35% reduction by 2025 and 50% reduction by 2030.

New buildings, major renovations, and new infrastructure:

- Energy Use: 60% reduction beginning immediately, 70% reduction in 2015, 80% reduction in 2020, 90% reduction in 2025 and carbon-neutral in 2030. 20% of the operating energy reduction amount may come from off-site renewable energy sources.
- Water Use: An immediate 50% reduction below the current District Average.
- CO₂e of auto and freight: An immediate 50% reduction below the current District Average.

Definitions

- **Major Renovation:** The renovation of a building where (a) the total cost of the renovation related to the building envelope or the technical building systems is higher than 25 % of the value of the building, excluding the value of the land upon which the building is situated, or (b) more than 25 % of the surface of the building envelope undergoes renovation.
- **Infrastructure:** All constructed elements within the district outside of individual building footprint
- **Carbon Neutral:** No net contribution of carbon dioxide to the atmosphere on an annual basis.
- **National Average for Building Energy:** Target Finder will set the building energy average that building owners will work from, using the national CBECS database.
- **National Average for Water Use:** Need to define national average baseline.
- **Regional Average for CO₂e of auto and freight:** As defined by Seattle's Transportation Mitigation Plan process.
- **District Average:** The average consumption or generation of a given metric by a building or entity within the district boundaries, using 2010 data as a baseline.



Architecture 2030

The 2030 Challenge: Planning

Architecture 2030 has issued **The 2030 Challenge: Planning**, asking the global architecture and building community to adopt the following targets:

- All new and renovated developments / neighborhoods / towns / cities / regions immediately adopt and implement a 60% reduction standard below the regional average for:
 - fossil-fuel operating energy consumption for new and renovated buildings and infrastructure and
 - fossil-fuel embodied energy consumption of materials.

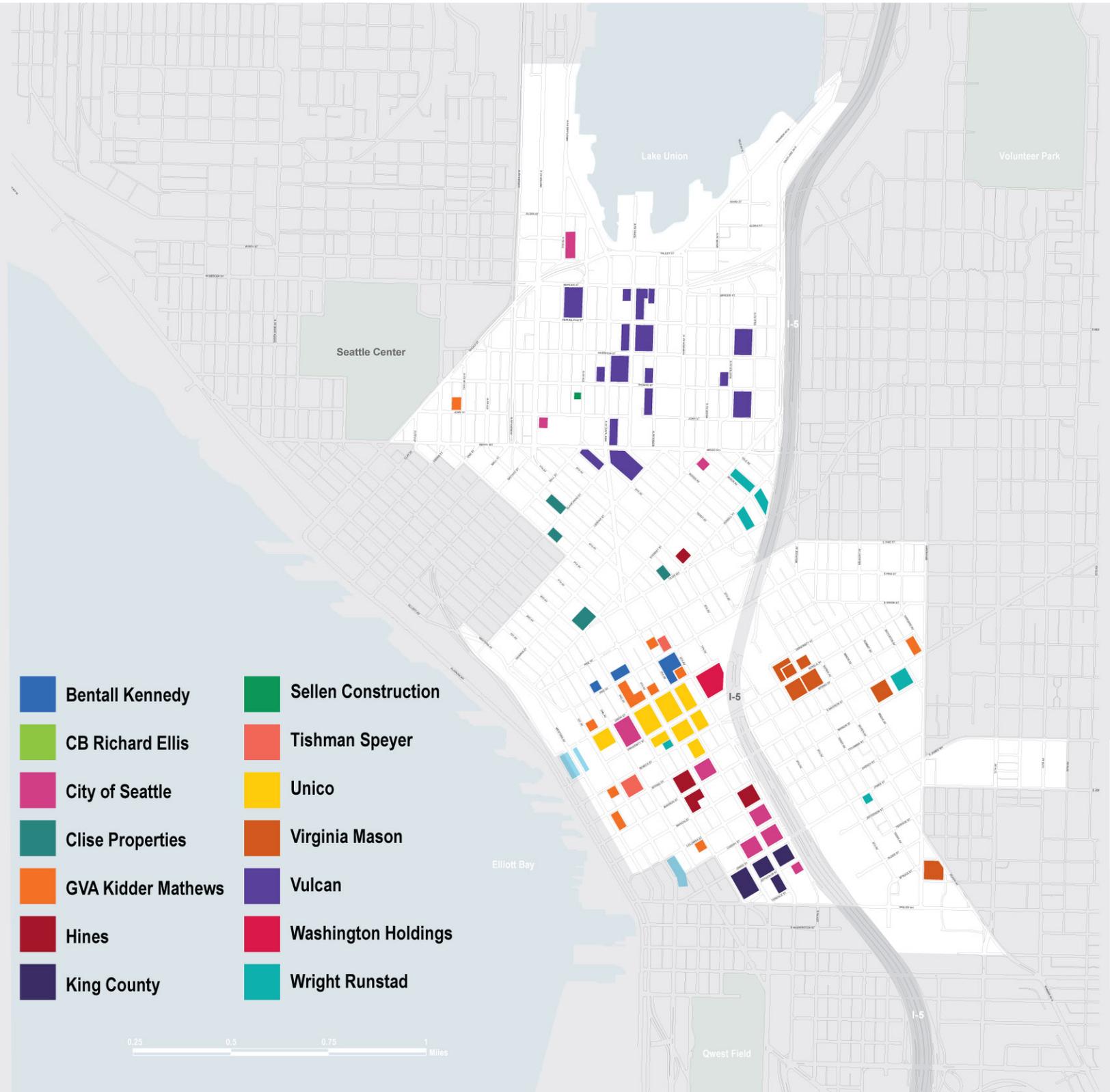
The fossil-fuel reduction standard for all new buildings, major renovations, and embodied energy consumption of materials shall be increased to:

- 70% in 2015
- 80% in 2020
- 90% in 2025
- Carbon neutral in 2030 (using no fossil-fuel, GHG-emitting energy to operate or construct).

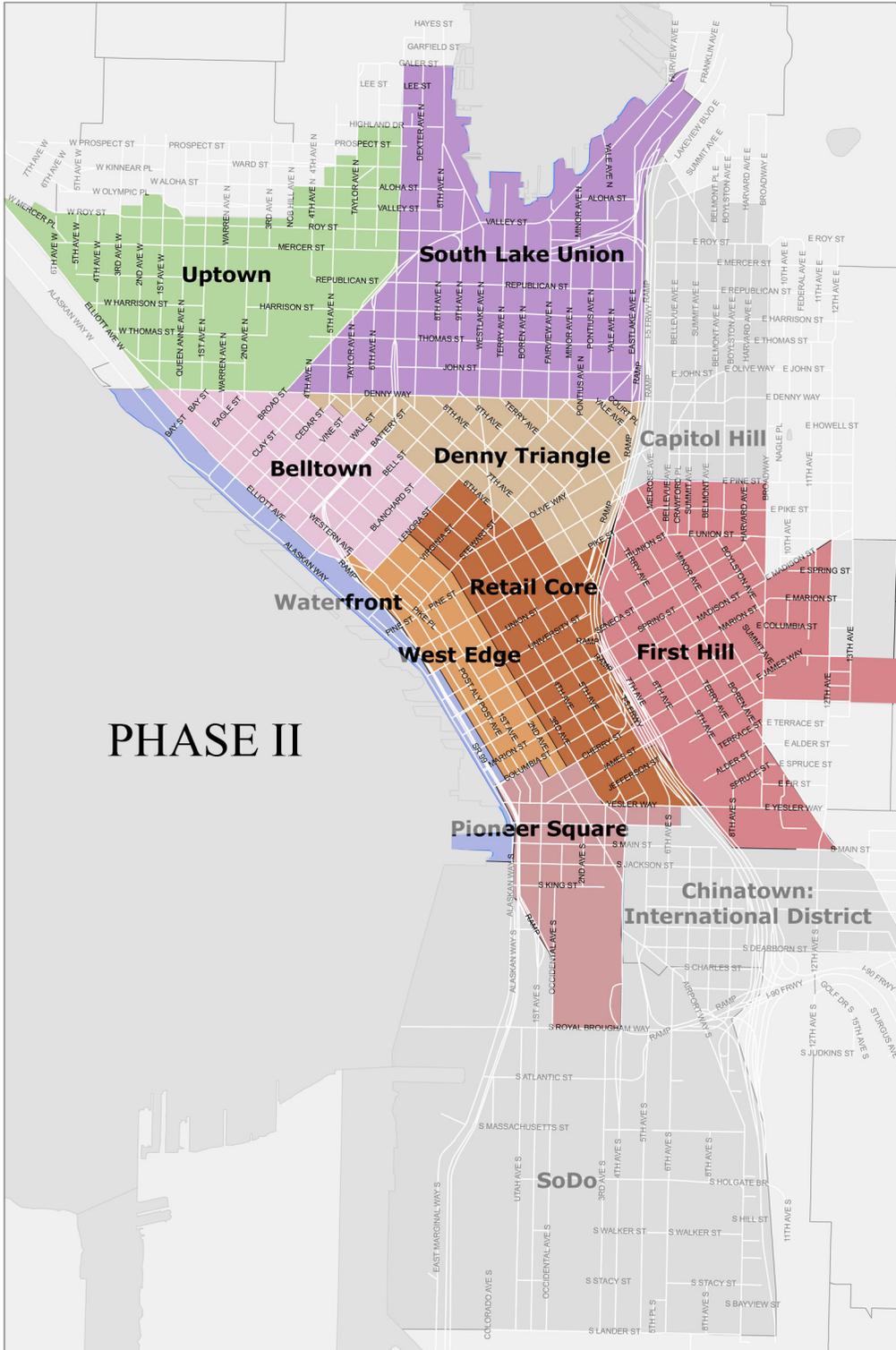
These targets may be accomplished by implementing innovative sustainable design strategies, generating on-site renewable power and/or purchasing (20% maximum) renewable energy and/or certified renewable energy credits.

- All new and renovated developments / neighborhoods / towns / cities / regions immediately adopt and implement a 50% reduction standard below the regional average for:
 - Vehicle Miles Traveled (VMT) for auto and freight and
 - water consumption.

PHASE I

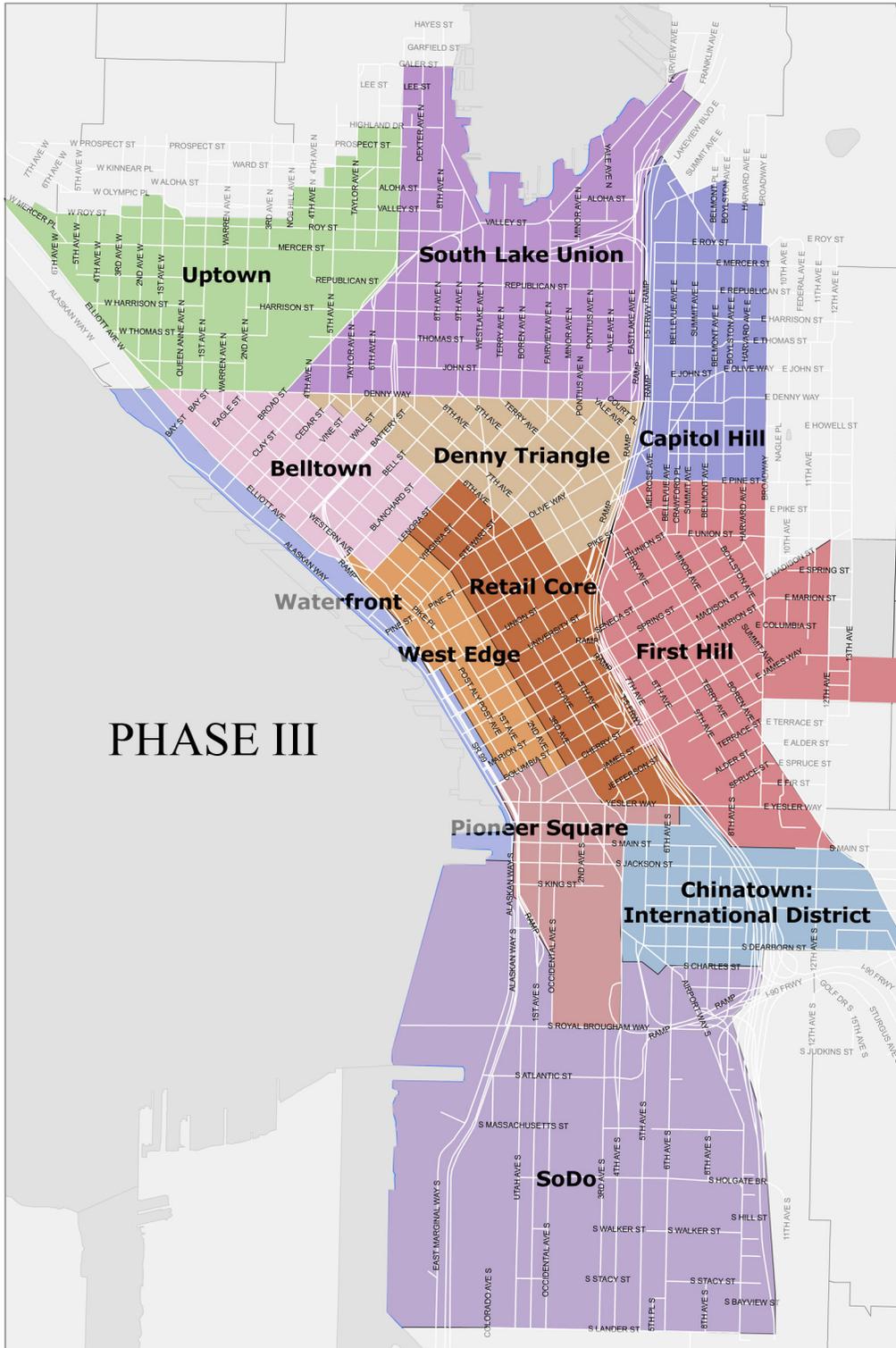


Downtown Neighborhoods



PHASE II

Downtown Neighborhoods



PHASE III

THE SEATTLE 2030 DISTRICT

EPA Climate Showcase Communities Grant

Organizations offering in-kind contributions

City of Seattle – DPD & OED 20% salary and personnel benefits cost share	\$ 67,127
Seattle City Light – Energy Analysis Assistance	\$ 52,500
Architecture 2030 – Washington staff member time	
NW Energy Efficiency Alliance – staff time and technical assistance	\$ 15,000
Seattle Steam – 15-20 hours per month, up to a maximum of	\$ 72,000
Unico – staff time equivalent to	\$ 10,000
CB Richard Ellis – staff time equivalent to	\$ 10,000
GGLO – 270 hours over three years and in-house reproduction	\$ 44,000
Vulcan – staff time equivalent to	\$ 20,000
Mithun – 250 labor hours over three years and printing costs	\$ 41,000
District Manager – 20% billable rate cost share	<u>\$ 43,680</u>
TOTAL	\$375,307

Activating the Seattle 2030 District

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Seattle 2030 District Work/Business Plan

Create an Organizational Framework to Activate the 2030 District

- Develop membership criteria, organizational structure and long-term, self-funding financial strategies,
 - Provide outreach to District property owners to solicit membership and showcase the benefits and opportunities in 2030 District participation,
 - Self funding scenarios to be considered:
 - Local Improvement Districts,
 - Climate Benefits District (with authorizing legislation),
 - fee for service for assistance in setting targets, providing District services, and performance tracking,
- Assist and train property management staff in collecting and sharing building performance data using Energy Star Portfolio Manager and the Seattle Climate Partnership Carbon Calculator,
- Coordinate with formation of a City Team, led by Seattle DPD and OED to develop baselines, performance benchmarks and to create tools to support improved building performance.



Define the Context and Establish Targets for Achieving 2030 Challenge for Planning Goals

- Collect data for all building sector types in the District, using:
 - Downtown Seattle Association demographic data, and,
 - Energy Star Portfolio Manager and Seattle Climate Partnership Carbon Calculator, to:
 - Develop baselines and targets,
 - Establish District wide baselines for each building sector type and 2030 District as a whole,
 - Select interim and long term reduction targets for each sector to achieve District wide goals and guide performance improvement strategies of individual buildings.

Develop the Solutions

- Energy Efficiency Contracting Packages (EECP),
 - Develop “standardized” packages with local energy professionals and providers that:
 - Combine low-cost, no cost strategies with longer payback strategies to collectively achieve deep green efficiency improvements capable of meeting District performance goals,
 - Provide accountability for building and financial performance,
 - Develop energy assessment of a block of buildings to simulate and test district scale solutions,
- Streamlined Permitting Services,
 - Coordinate with DPD to develop coordinated cross-departmental permitting, technical support and access to financial incentives,
- Conduct Outreach and Training.

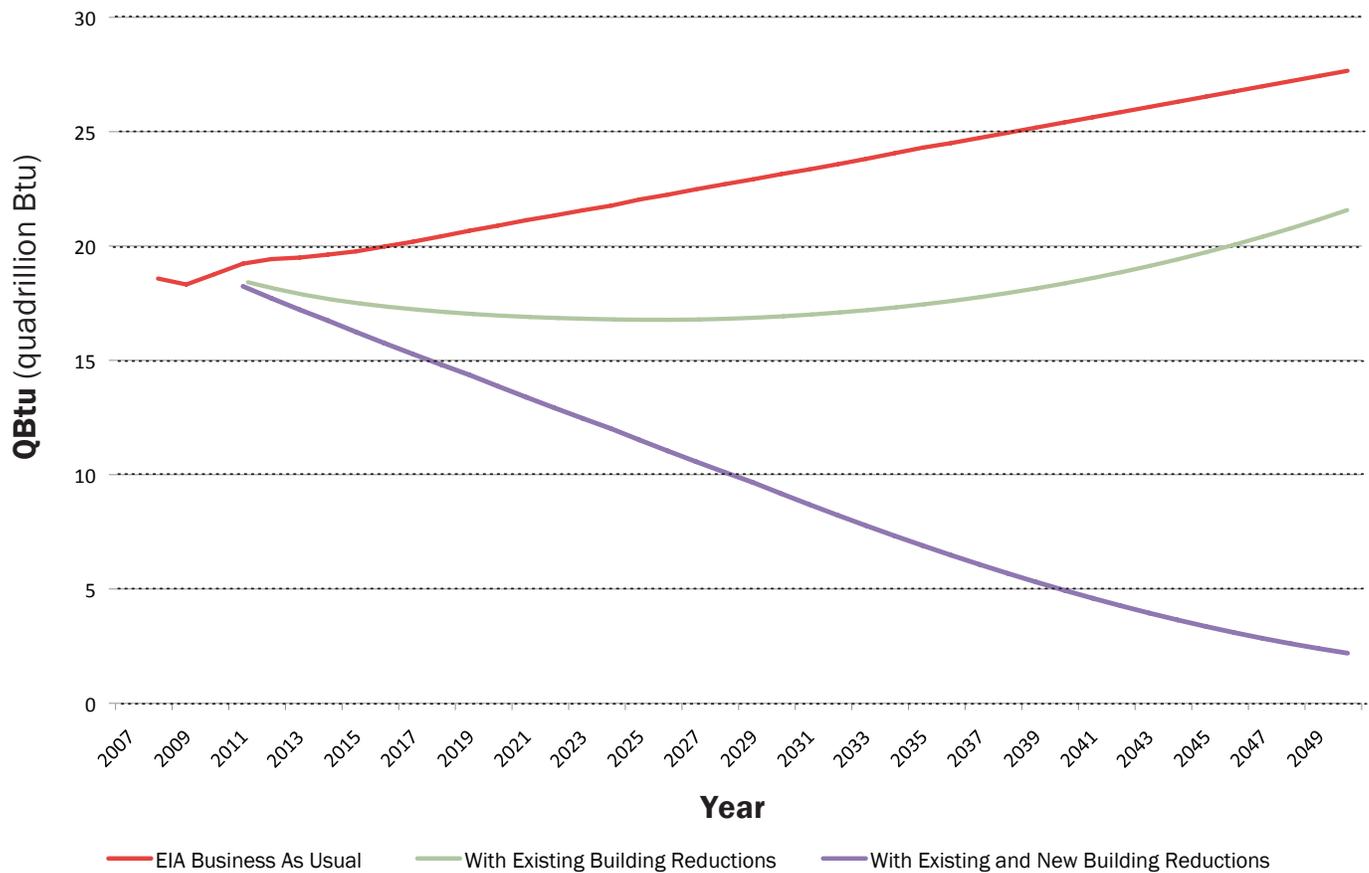
Implementing the Improvements

- Develop work plan and accountability agreement between 2030 District Committee, District members and City Team defining timelines, deadlines, expectations and responsibilities,
- Coordinate with City Team to implement EECP and Streamline Permitting.

Continuous Assessment

- Provide performance tracking for data as received, for updated performance as efficiency upgrades are performed, in order to measure actual performance against established District goals and make corrections as indicated,
- Report performance District-wide in both utility units (kilowatt hours, therms, gallons, etc.) and in greenhouse gas emission reductions.

U.S. Commercial Building Energy Consumption



Assumptions:

Existing Building Reductions are 2.5% per year, achieving a 50% reduction by 2030 and continuing on to carbon neutral by 2050.

New Building Reductions follow the 2030 Challenge, with reductions of 60% in 2010, 70% in 2015, 80% in 2020, 90% in 2025, and carbon neutral in 2030 and beyond.

In this scenario the baseline for the reductions is the energy use in 2010, which is comparable to energy use at the turn of the millennium.

Projections for 2036 to 2050 are based on EIA's projected trends for 2026 through 2035.

Source:

U.S. Energy Information Administration (EIA). *Annual Energy Outlook 2010: Table 5. Commercial Sector Key Indicators and Consumption*. ONLINE. 2009. Energy Information Administration. Available: http://www.eia.doe.gov/oiaf/aeo/aeoref_tab.html [December 2009].

Seattle 2030 District Property Owner and Manager Commitment

I _____, by providing my signature below, on behalf of _____ am expressing a commitment to become a Founding Member of the Seattle 2030 District. We agree to support the goals of the Seattle 2030 District, which are to meet the following performance goals on a district-wide scale:

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This is a private sector-led effort utilizing collaboration, incentives, and shared resources to prove the business case for sustainability. As property owners and managers we will not achieve the goals below by decree; we will do so because full participation in the Seattle 2030 District brings collaboration, shared resources, and financing options that will make high-performance buildings the most profitable building type in Seattle.

As a property owner and/or manager, we will support the Seattle 2030 District goals through the following actions:

Participation in the following programs:

- The Seattle Climate Partnership (SCP) and the SCP Carbon Calculator
- ENERGY STAR Portfolio Manager
- BOMA/BetterBricks Kilowatt Crackdown
- U.S. Green Building Council's Building Performance Partnership (LEED certified buildings)

Sharing of the following information:

- Building energy use, water use, and TMP data with the Seattle 2030 District committee
- Best practices and lessons learned for case studies
- Challenges in further improvements

Support for the Seattle 2030 District Committee:

- Participation in District decision-making
- Evaluation of membership criteria for property owners and stakeholders
- Mentorship for small/sole proprietor property owner and managers

As a member of the Seattle 2030 District we will receive the following benefits and access to the 2030 District Roadmap and its partners which include:

- An investment-grade energy, water, and transportation building assessment
- Training and ongoing support for the Seattle Climate Partnership Carbon Calculator
- Training and ongoing support for ENERGY STAR Portfolio Manager
- Re-tuning training through the Pacific Northwest National Laboratories (EMS required)
- Innovative energy efficiency finance plans and access to energy efficiency equity and debt markets
- The Clinton Climate Initiative (CCI) Preferred Purchasing Alliance for discounts on energy efficiency products
- The CCI/BOMA Toolkit
- One-stop shop for local, state, and federal rebates, incentives, and tax credits

- U.S. Green Building Council Building Performance Partnership annual energy and water performance report (LEED certified building required)
- Open source case studies that leverage shared knowledge and highlight industry best practices
- Demonstration of environmental leadership and support for Seattle's economic development goals
- Advocate for sustainability issues from the private sector perspective as one cohesive group
- Opportunity to communicate our support for and participation in the Seattle 2030 District

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