

 $\frac{2030}{\text{DISTRICT}^{\text{m}}}$ 

Groundbreaking
High-Performance
Building Districts



# 2030 $DISTRICT^{m}$

#### **2030 DISTRICTS**

Unique private/public partnerships

- Property owners and managers
- Local governments
- Business and community stakeholders

2030 Districts are business models for urban sustainability through collaboration, leveraged financing, and shared resources.







## Why Districts?



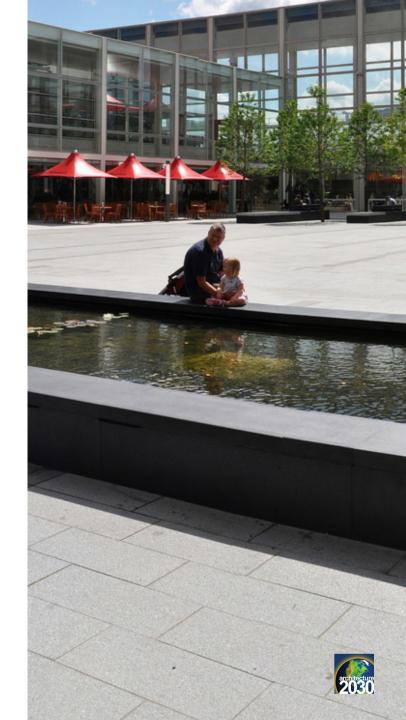
- Common Targets and Metrics
- Opportunities and Efficiencies of Scale
- Beacons of efficient resource practices, sound economic investments, and market leaders



# Private/Public Partnerships

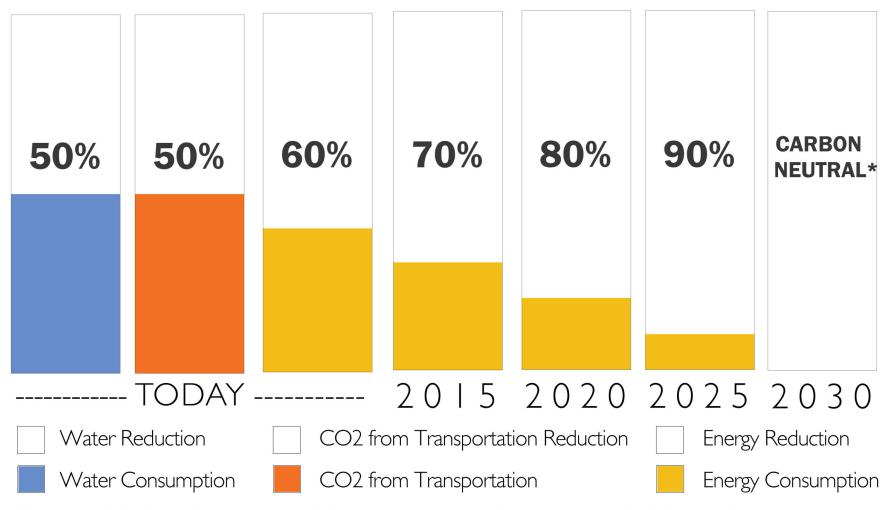


- Private Sector Led
- Public Sector Supported
- Voluntary
- Common Mission and Goals
- Connected to Market Realities





### **New Construction Goals**

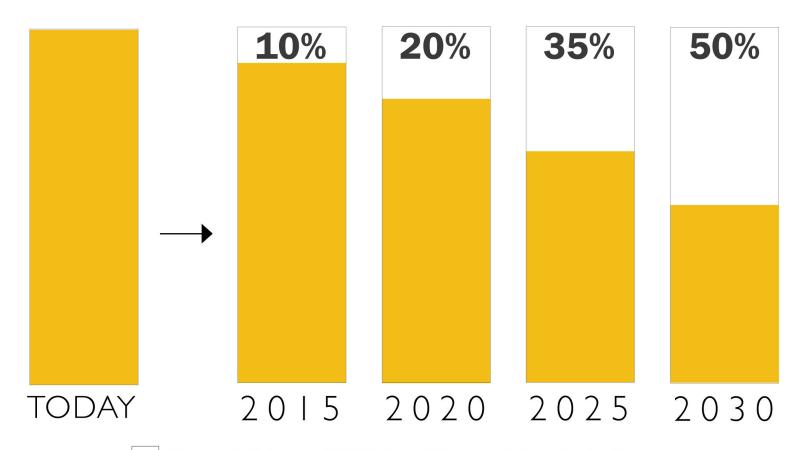


The 2030 Challenge for Planning: New Buildings & Major Renovations





## **Existing Building District-Wide Goals**





Energy, Water, and CO2 from Transportation Consumption







## STATEMENT OF ENERGY PERFORMANCE Seattle 2030 District Office Building

**Building ID: 0000000** 

For 12-month Period Ending: April 1, 20111

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<sub>2</sub> (1-100) 80

#### Site Energy Use Summary3

Electricity - Grid Purchase(kBtu)	5,539,625
Natural Gas - (kBtu) <sub>4</sub>	2,374,125
Total Energy (kBtu)	7,913,750

#### Energy Intensity5

,	
Site (kBtu/ft₂/yr)	72
Source (kBtu/ft2/vr)	191

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

Greenhouse Gas Emissions (MtCO<sub>2</sub>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 Baseline**



PREDOMINANT BUILDING USE	GAL/SF/YR	ADDITIONAL METRICS OF INTEREST
Restaurant	125.99	119 Gal/Employee/Day
Hotel	50.07	70 Gal/Room/Day
Multi-Family Residential	41.14	42 Gal/Resident/Day
Social/meeting	36.95	
Industrial	32.53	
Nursing/Assisted Living	30.11	
Hospital	26.12	53 Gal/Bed/Day
Retail	24.77	41 Gal/Employee/Day
Medical Office	21	32 Gal/Employee/Day
Office	14.21	
Warehouse	13	
Entertainment/culture	12.88	
Service (vehicle repair/service, postal service)	11.74	
House of Worship	11.31	
K-12 School	11.09	



**Target Reduction – 50%** 



## **Commuter Transportation Baseline**

#### COMMUTE SEATTLE



MODE GROUP	MODE	MODE SPLIT	TRIPS	Kg CO <sub>2</sub> /PM	MILES/TRIP	TOTAL MILES	TOTAL kg CO <sub>2</sub>
	Drove Alone	33.70%	58,861.77	0.4	14.1	829,950.93	331,980.37
DRIVE-ALONE	Ferry w/ Vehicle	0.70%	1,222.65	0.4	23.5	28,732.23	11,492.89
	Motorcycle	0.80%	1,397.31	0.167	11.1	15,510.16	2,590.20
	Bus	35.80%	62,529.71	0.17	14	875,415.97	148,820.71
TRANSIT	Rail	4.30%	7,510.55	0.172	27.5	206,540.18	35,524.91
	Ferry Passenger	2.20%	3,842.61	0.37	26.9	103,366.16	38,245.48
	Other	1.10%	1,921.30	0.17	13.6	26,129.73	4,442.05
RIDESHARE	Carpooled	9.00%	15,719.76	0.145	13.4	210,644.78	30,639.24
	Vanpooled	0.60%	1,047.98	0.05	24.1	25,256.41	1,262.82
	Walk	5.90%	10,305.18	0	1.8	18,549.32	0
BIKE/WALK	Bike	2.80%	4,890.59	0	6.3	30,810.73	0
	Compressed Work Day Off	0.40%	698.66	0	14.7	10,270.24	0
	Telework	2.70%	4,715.93	0	17.7	83,471.93	0

## Average – 900 kg CO<sub>2</sub> per commuter per year Target – 450 kg CO<sub>2</sub> per commuter per year



architecture 2030

Source: The Gilmore Research Group and Commute Seattle. 2010 Center City Commuter Mode Split Survey

Results. March 2011

Note: Mode-Spilt, Trips, and Total Miles are based on total weekday trips per mode.

# Why a

 $\frac{2030}{\text{DISTRICT}^{\text{m}}}$ 

for San Francisco?





- The City of San Francisco is already leading the way in sustainable efforts.
- Accelerate positive change in the built environment at the district scale.
- Leverage best practices from other 2030 Districts.





# 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 the District performance goals through the sharing of the following information with the 2030 District Leadership Committee:

- Building energy use, water use, and Transportation Mitigation Plan (TMP) data
- Best practices and lessons learned for case studies
- Challenges in further improvements





# Member/Partner Benefits



#### **Property Owner / Property Manager or Developer**

- Assessment of current building performance relative to 2030 District goals
- Anonymous benchmarking against local peer buildings
- Guidance for moving towards 2030 District goals
- Training and ongoing support through educational workshops on tools and best practices
- Innovative software platforms to track and analysis performance
- In-kind member professional services and contributions, including project scoping and feasibility
- Influence on District-related policy issues, including incentives



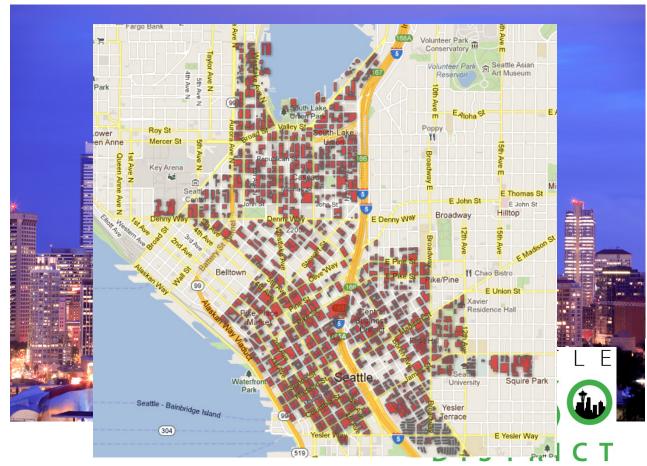


# Existing 2030 DISTRICT

- Seattle
- O Cleveland
- Pittsburgh
- O Los Angeles







Seattle 2030 District - 35 million Square Feet







**22,000,000 Square Feet** 







Pittsburgh 2030 District – 28 million Square Feet







Architectural Foundation of Los Angeles (AFLA)

Los Angeles 2030 District















SAN FRANCISCO, CA

ANN ARBOR, MI

SAN DIEGO, CA

BELLEVUE, WA





# SAN FRANCISCO 203 DISTRICT

- Working Group Formed
- © Community/Industry/City Support
- 2030 District Partners
- Sponsor Organization
- O Preliminary Boundary





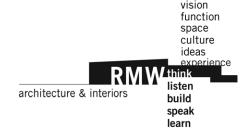
# San Francisco 2030 District Supporters























# Other 2030 District Supporters

#### Seattle



















#### Ocleveland





**studioTECHNE**larchitects



Westlake Reed Leskosky



#### Pittsburgh











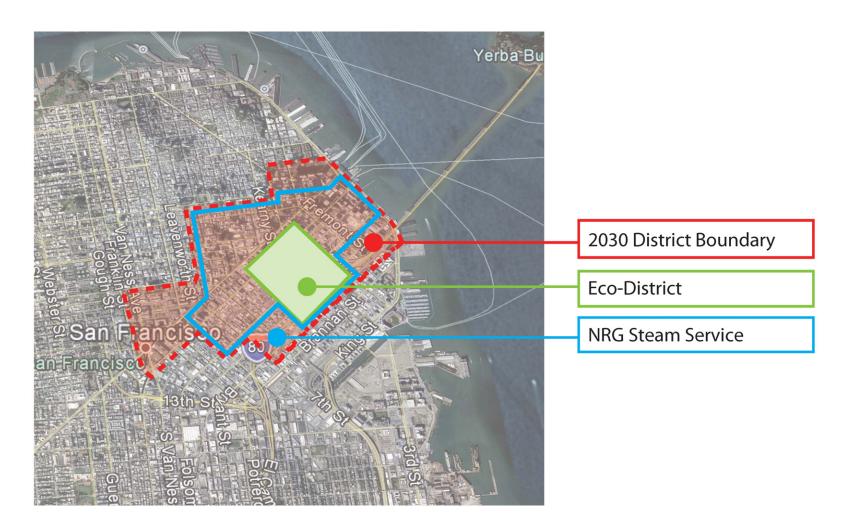








## Where?







### 2030 Districts Network

SEATTLE

203 to 10 to

20300 DISTRICT



CLEVELAND

2030 DISTRICT

LOS ANGELES

203 CO T RICT







# Forming the 2030 District



- Integration into an Existing Entity
- Creating a New Entity
- The 2030 District Charter



#### 2030 District Checklist

In order to be considered an established 2030 District the following are required:

- Private Sector Lead
- Sign the 2030 District Charter (includes establishing the 2030 Challenge for Planning as the goal set)
- Contain 5 different property owners and/or managers
- Have an established Organizational Structure









## **Next Steps**

- Engage Partners
- Establish Boundary
- © Educate/Outreach
- Implement
- Measure/Execute
- Accelerate Positive Change





# SAN FRANCISCO 203 DISTRICT





## **Questions/Contact**

- Stan Lew slew@rmw.com
- Rich Chien richard.chien@sfgov.org
- Vincent Martinez
  vincemtz@architecture2030.org













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