



EcoDistricts

The background image shows a city waterfront scene. In the foreground, there is a dark metal railing and some tall, dry grasses. Beyond the railing is a body of water reflecting the sky. In the background, there is a dense urban skyline with several tall, modern buildings. On the right side, a large, modern stadium with a distinctive white, spiky roof structure is visible. The sky is clear and blue, suggesting a bright day.

Revitalizing cities from THE NEIGHBORHOOD UP.

© Copyright 2014

About Us

1

OUR VISION

Just, sustainable and resilient cities and neighborhoods for all.



2

OUR MISSION

Provide support and leadership for urban change makers and innovators to accelerate sustainable district and neighborhood scale regeneration.



PROFESSIONAL DEVELOPMENT—Dynamic courses that equip the next generation of leaders with knowledge for change.

SUMMIT—An annual gathering of the world’s most innovative change makers revitalizing cities from the neighborhood up.

INCUBATOR—A three-day intensive, project-based workshop designed to accelerate district-scale projects.

PROTOCOL—Our process and performance areas for supporting neighborhood sustainability across diverse projects.

TARGET CITIES—A two-year immersion program guiding North America’s catalytic, district-scale projects—and shaping the way cities view urban regeneration.



more than
half

of the world's population
lives in cities, a proportion
that is expected to reach

**two-
thirds**

by 2050.

Cities (currently)...

...account for 80% of greenhouse gas emissions and 75% of energy consumption

...contribute to a vast equity gap: the zip code a child is born into has a bigger role in determining that child's future than any other single factor

...face a \$1 trillion+ infrastructure backlog from ruptured water mains to decaying public buildings, bridges, roads and transit



Districts are the building blocks
of sustainable cities



EcoDistricts



Sustainability depends on every citizen living in a healthy, safe, connected and vibrant neighborhood.



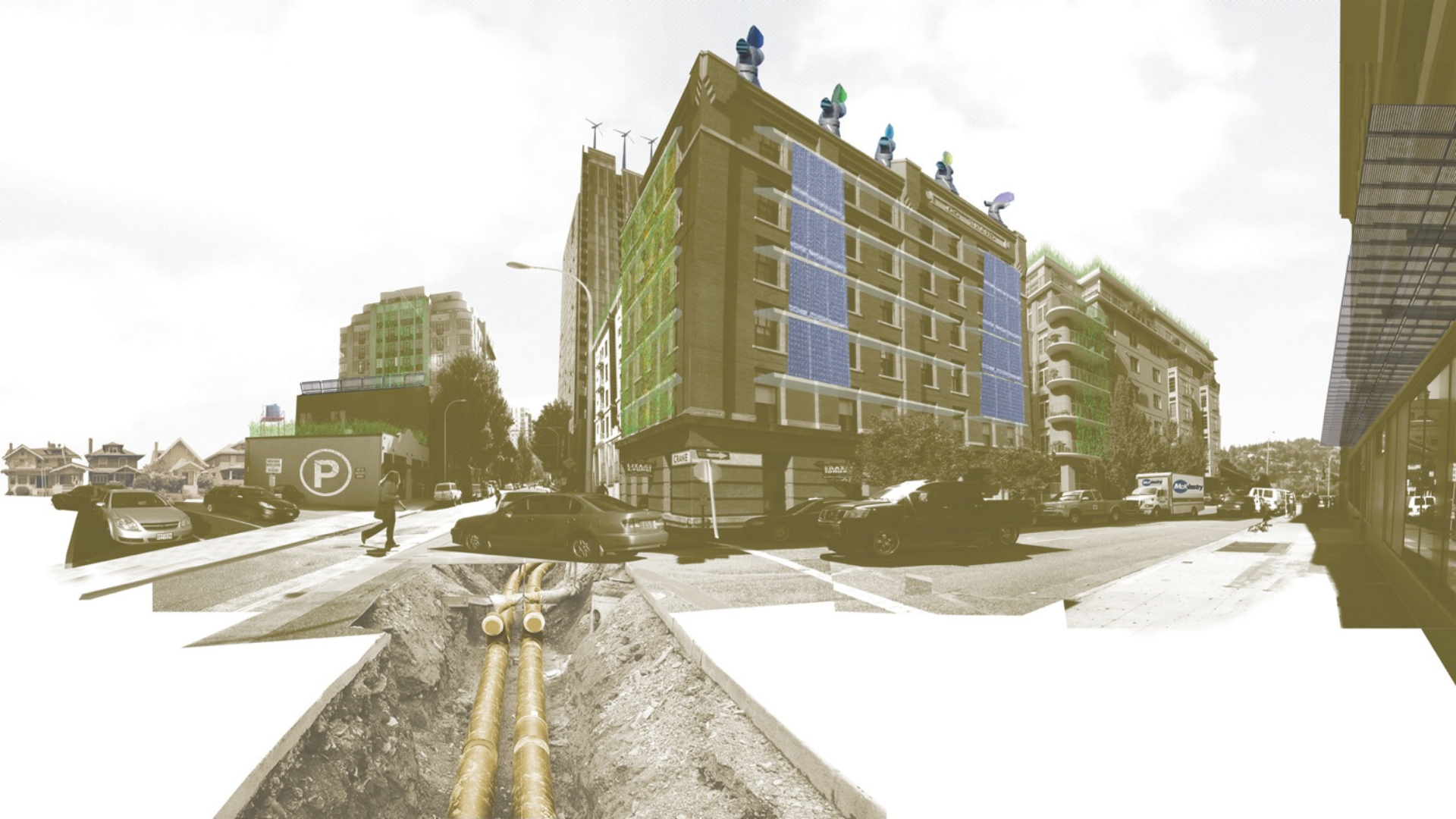
Economic opportunity,
community well-being,
and ecological health
are fundamental metrics.



Success will require a new model for action rooted in collaboration and inclusion.

Ecodistricts are the integration of
green buildings,
smart infrastructure &
community engagement and action.











Neighborhood Typologies



Cities +
Utility Providers



EcoDistricts Framework



The **Framework** offers a process management approach and performance areas to build support, guide investments and measure outcomes.

The EcoDistricts™ Framework Building Blocks of Sustainable Cities

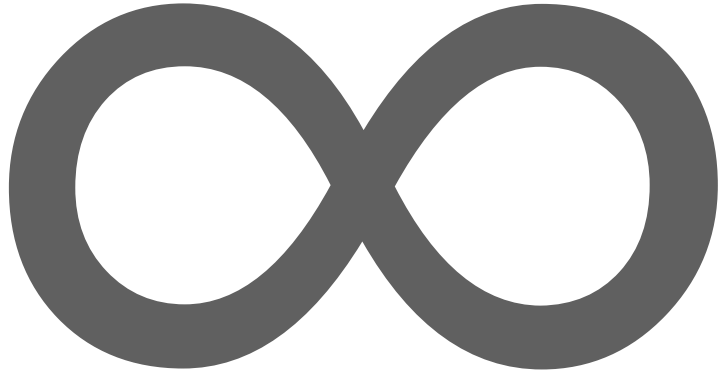
May 2013



Process

DISTRICT
ORGANIZATION

DISTRICT
PROJECTS



DISTRICT
MANAGEMENT

DISTRICT
ASSESSMENT



Eight Performance Areas



EQUITABLE DEVELOPMENT
Promote equity and opportunity and ensure fair distribution of benefits and burdens of investment and development

- OBJECTIVES**
- | Ensure neighborhood investments provide direct community benefit through job creation and investment opportunities
 - | Provide quality and consistent local job opportunities through EcoDistrict projects
 - | Mitigate the forced displacement of existing residents and businesses
 - | Ensure diverse stakeholder involvement in all EcoDistrict activities and decision making



HEALTH + WELL BEING
Promote human health and community well being

- OBJECTIVES**
- | Provide access to safe and functional local recreation and natural areas
 - | Provide access to healthy, local and affordable food
 - | Ensure safe and connected streets
 - | Expand economic opportunities to support a socially and economically diverse population
 - | Improve indoor and outdoor air quality



COMMUNITY IDENTITY
Create cohesive neighborhood identity through the built environment and a culture of community

- OBJECTIVES**
- | Create beautiful, accessible and safe places that promote interaction and access
 - | Foster social networks that are inclusive, flexible and cohesive
 - | Develop local governance with the leadership and capacity to act on behalf of the neighborhood



ACCESS + MOBILITY
Provide access to clean and affordable transportation options.

- OBJECTIVES**
- | Provide accessible services through mixed-uses and improved street access
 - | Prioritize active transportation
 - | Reduce vehicle miles traveled
 - | Use low and zero emission vehicles



ENERGY
Achieve net zero energy usage annually

- OBJECTIVES**
- | Conserve energy use by minimizing demand and maximizing conservation
 - | Optimize infrastructure performance at all scales
 - | Use renewable energy



WATER
Meet both human and natural needs through reliable and affordable water management

- OBJECTIVES**
- | Reduce water consumption through conservation
 - | Reuse and recycle water resources wherever possible, using potable water only for potable needs
 - | Manage stormwater and building water discharge within the district



HABITAT + ECOSYSTEM FUNCTION
Achieve healthy urban ecosystems that protect and regenerate habitat and ecosystem function..

- OBJECTIVES**
- | Protect and enhance local watersheds
 - | Prioritize native and structurally diverse vegetation
 - | Create habitat connectivity within and beyond the district
 - | Avoid human-made hazards to wildlife and promote nature-friendly urban design



MATERIALS MANAGEMENT
Zero waste and optimized materials management.

- OBJECTIVES**
- | Eliminate practices that produce waste wherever possible
 - | Minimize use of virgin materials and minimize toxic chemicals in new products
 - | Optimize material reuse and salvage and encourage use of regionally manufactured products or parts
 - | Where opportunities for waste prevention are limited, maximize use of products made with recycled content



a breath of fresh air re-envisioning main street

Imagine going from an environment full of asphalt and fast moving traffic to **a place for bees, bikes, babies, and birds**. What would that place be like? It would be an ecologically supportive environment teeming with the most vulnerable residents of our planet. It is filled with pedestrians, bicyclists and public transport replacing autos. Copenhagen reminds us that **bicyclists are not part of transport, they are part of public life**. We have accommodations for commuter bicyclists and eight year olds out with their grandparents. One could imagine that **every drop of water that falls on main street stays on main street or leaves cleaner than when it fell**. In that sense, it defines an incremental watershed in anticipation of its role in developing a fully functioning EcoDistrict over a period of time. It is, simply, a place you would rather be that is good for you.

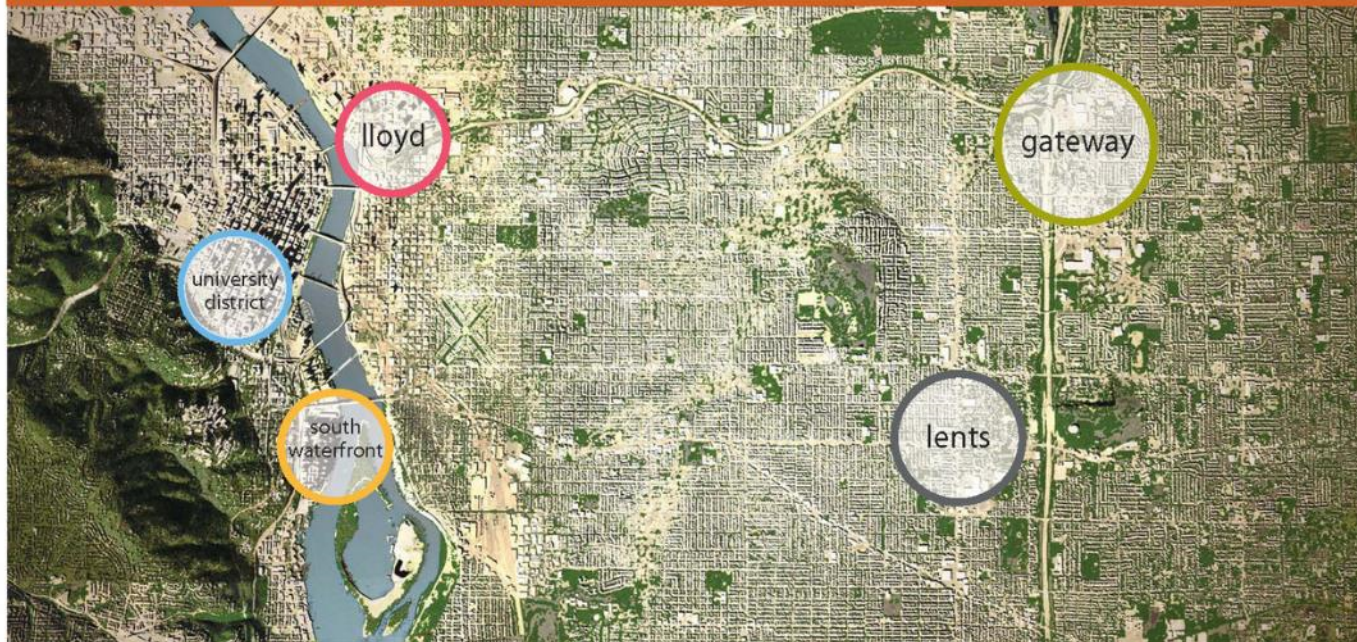
softer touch living infrastructure

Bold infrastructure interventions build towards a city living in balance. The redevelopment of a main street at the site of a regional transit station provides a rich street life based on pedestrians, bicycles, and public transport. Urban greenways created from abandoned freeways and green streets provide a new green city infrastructure for habitat, food, water and waste. In a net-zero energy and water community, local fuels power nodes of district energy that couple efficient mixed-use structures, and neighborhood water utilities capture, clean and reuse water arriving from the sky. The urban greenways, roof gardens, living walls, and use of the in between green spaces allow agriculture to be embedded into the community.

-  Residential buildings use excess heat captured from supermarket refrigeration systems
-  Geothermal conditioning loops extend across the neighborhood below ground connecting to heat pumps in buildings
-  People, bikes, trains and buses dance in a multi-modal system on streets where cars are prohibited
-  Renewable energy production (solar and wind) integrates into the urban fabric
-  Organic wastes are anaerobically digested to produce energy



PORTLAND SYMBIOTIC DISTRICTS TOWARDS A BALANCED CITY



5

EcoDISTRICTS

Neighborhoods are the right scale to accelerate sustainability – small enough to innovate quickly and big enough to have meaningful impact. Their varied behavior and characteristics are an asset providing resources to share across a city. For example, a district with ample sun exposure can fuel a downtown that consumes more than its solar potential. Together, they create balance and a city in symbiosis whose sum is greater than its parts.

7 PETALS

- 1 site
- 2 water
- 3 energy
- 4 health
- 5 materials
- 6 equity
- 7 beauty



PROJECT SNAPSHOT

- 1st EcoDistricts director in the US
- 60% energy savings by 2035
- Comprehensive building retrofit program
- LED street lighting retrofit
- District thermal energy system
- Aggregated renewable energy – 5% of demand by 2035



CASE STUDY



Lloyd EcoDistrict

The Lloyd EcoDistrict, **governed by a new NGO** aspires to be the most sustainable business district in North America. The Portland Trail Blazers are helping lead the way with new investments in their sports campus.

PROJECT SNAPSHOT

- 300 acre brownfield site
- Net-positive operational GHG emissions goals
- LEED Gold and Platinum buildings
- \$600 million in new transportation infrastructure – rail, streetcar, tram, pedestrian improvements
- District stormwater management
- Proposed district energy system



South Waterfront EcoDistrict

Part of the **C40 Climate Positive** and **LEED ND** programs, the South Waterfront EcoDistrict is integrating high performance buildings, multi-modal transportation, green infrastructure and district utilities into the high density neighborhood.



PROJECT SNAPSHOT

- 81 acre brownfield site
- Integrated infrastructure: foreshore/habitat water, energy, transportation, waste
- District energy: 6.2K tons/yr. GHG reductions = 65% helping to achieve GHG neutrality
- District energy: 7.2% return compares favorably with the City's cost of debt of approximately 4% (real rates of return)



CASE STUDY

Southeast False Creek

Vancouver's SE False Creek Neighborhood, home to the 2010 Winter Olympics Athletes' Village, **pioneered new strategies** in urban design, neighborhood planning, infrastructure and green building performance. It also earned a LEED Platinum designation.

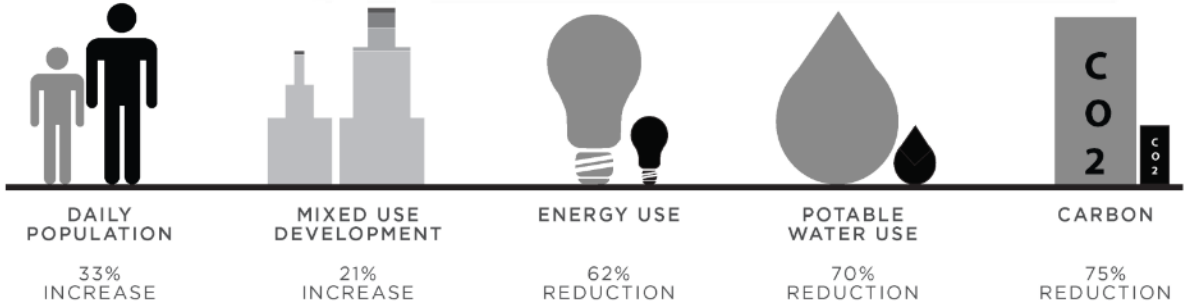
2010-2014

EcoDistricts Impact



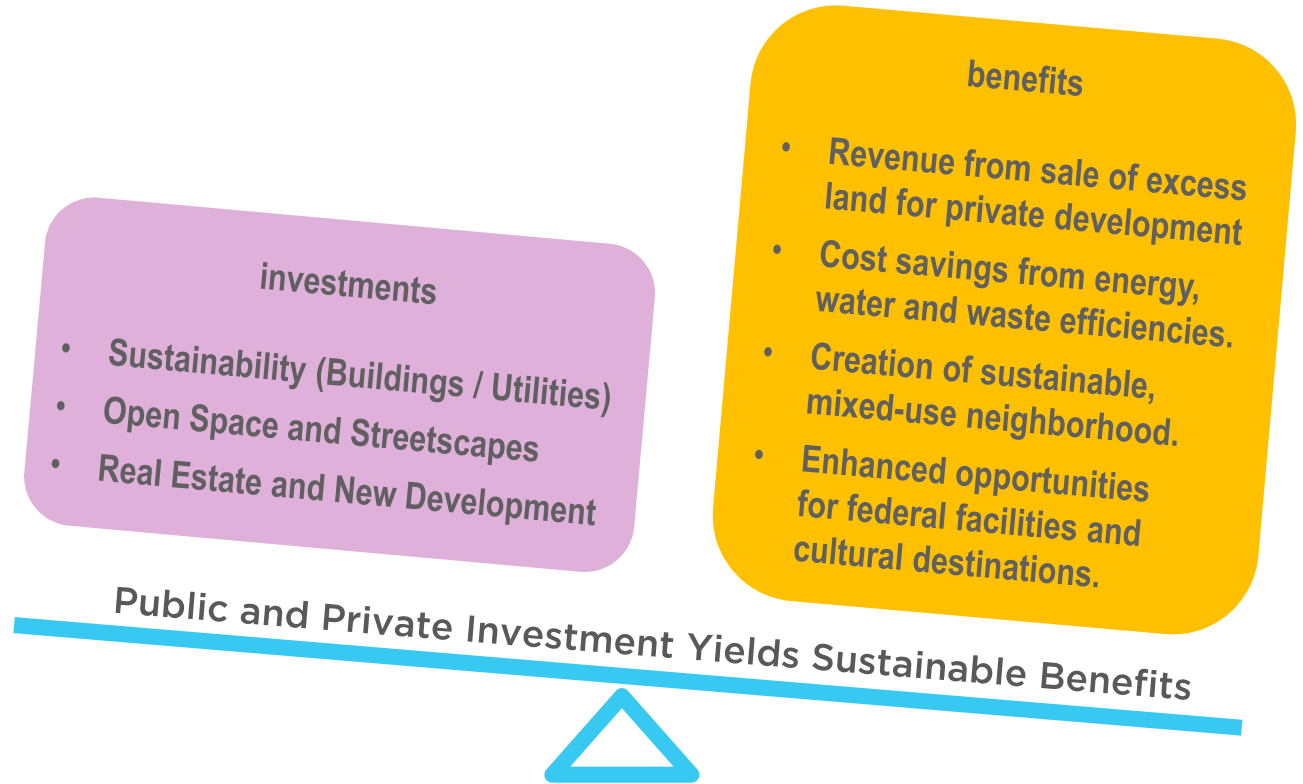
SW EcoDistrict Washington DC

A Comparison
Today and in 2030



National Capital
Planning Commission
ZGF Architects

The Business Case



Join Us in DC



COLUMBIA HEIGHTS
CIVIC PLAZA



EcoDistricts
SUMMIT

The **DISTRICT** *of*
COLLABORATION

WASHINGTON D.C. | SEPT. 24-26, 2014

PHOTOGRAPH COURTESY MARTHA EIXBY



Questions?

Lynne Barker
206.491.0279
lynne@ecodistricts.org