

**GREEN
BUILDINGS
FOR EVERYONE
WITHIN THIS
GENERATION**



Topics

USGBC and LEED: What's New

Why Build Green

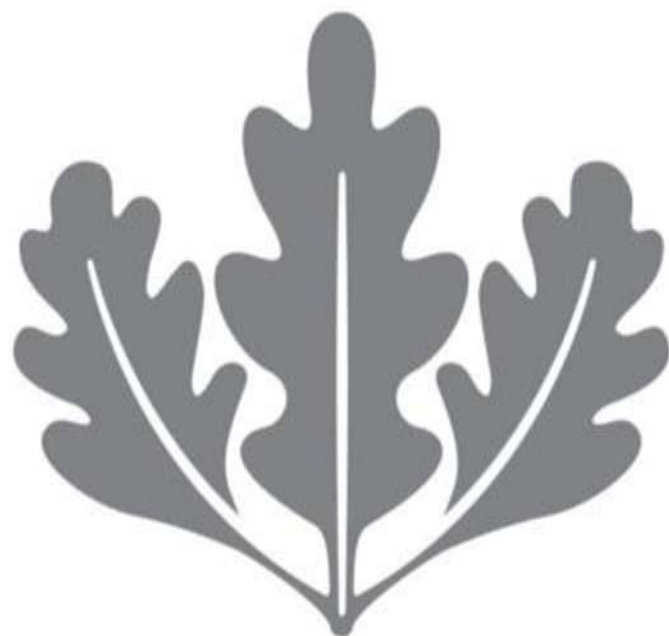
Technologies and Policies That Can Get Us to Zero

Green Cities Around the World



The U.S. Green Building Council (USGBC) and its community are changing the way buildings and communities are designed, built and operated. We believe in better buildings; places that complement our environment and enhance our communities. Places that give people better, brighter, healthier places to live, work and play.





MISSION

To transform the way buildings and communities are designed, built and operated, enabling an environmentally and socially responsible, healthy and prosperous environment that improves the quality of life.

VISION

Buildings and communities will regenerate and sustain the health and vitality of all life within a generation



Leadership in Energy and Environmental Design

LEED® is an internationally recognized mark of excellence for buildings, communities and professionals that are transforming the building industry.



Pictured: Patrick H. Dollard Discovery Health Center | LEED Certified

GLOBAL
REGIONAL
LOCAL

A row of international flags on poles, including the German flag (black, red, and gold horizontal stripes) and the Swiss flag (red with a white cross), is shown against a background of a body of water and a cloudy sky. A large, semi-transparent green circle with a stylized, low-poly sunburst pattern inside is centered over the flags. The text "LEED®" is written in large, white, bold, sans-serif capital letters across the middle of the circle, with "IS GLOBAL" in smaller, white, sans-serif capital letters below it.

LEED®
IS GLOBAL

150 COUNTRIES & TERRITORIES

214,000 Projects

11.1 Billion Square Feet





TOP 10 COUNTRIES

FOR LEED OUTSIDE THE U.S.

1

CANADA

4

SOUTH
KOREA

7

BRAZIL

2

CHINA

5

TAIWAN

8

SINGAPORE

3

INDIA

6

GERMANY

9

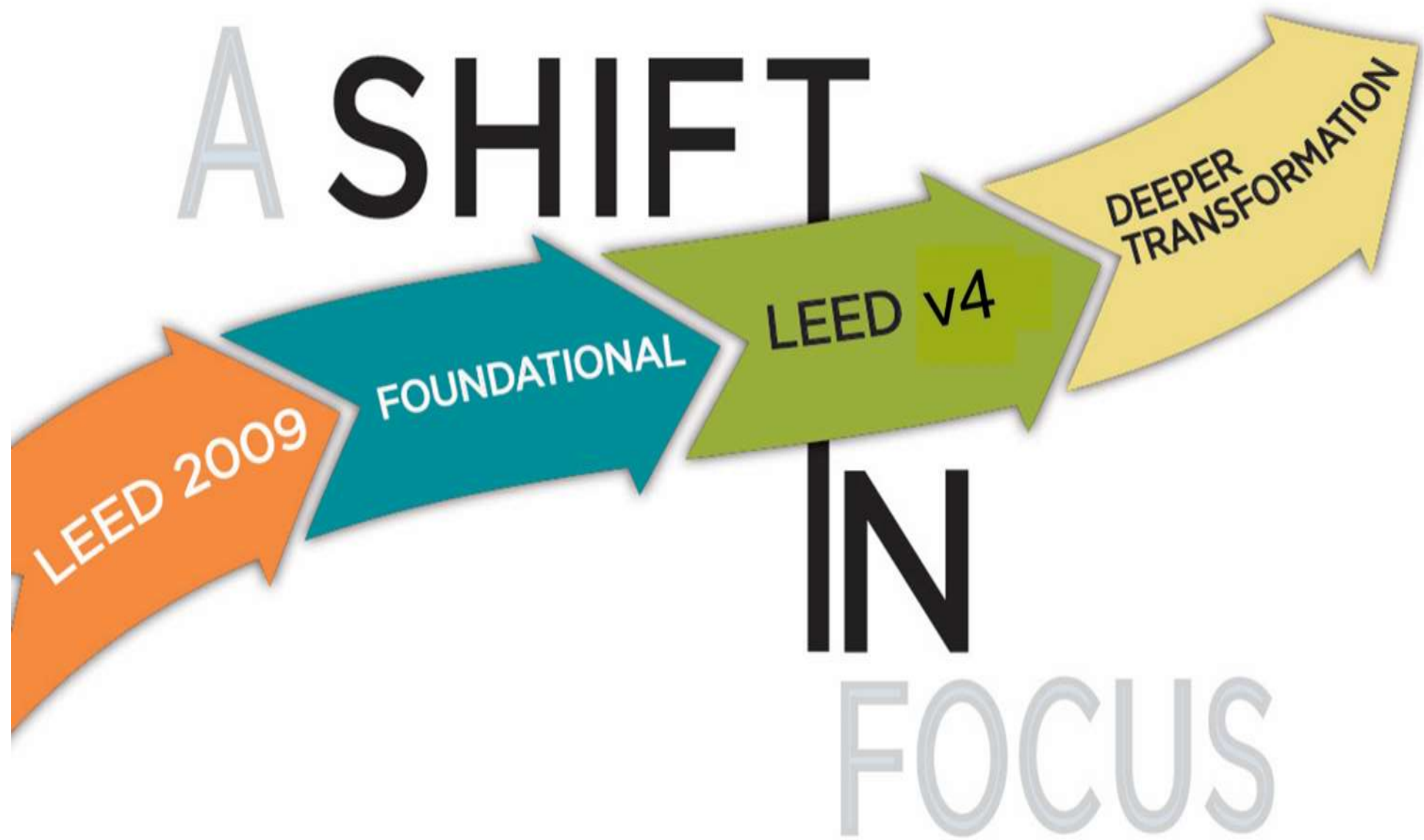
UNITED ARAB
EMIRATES

10

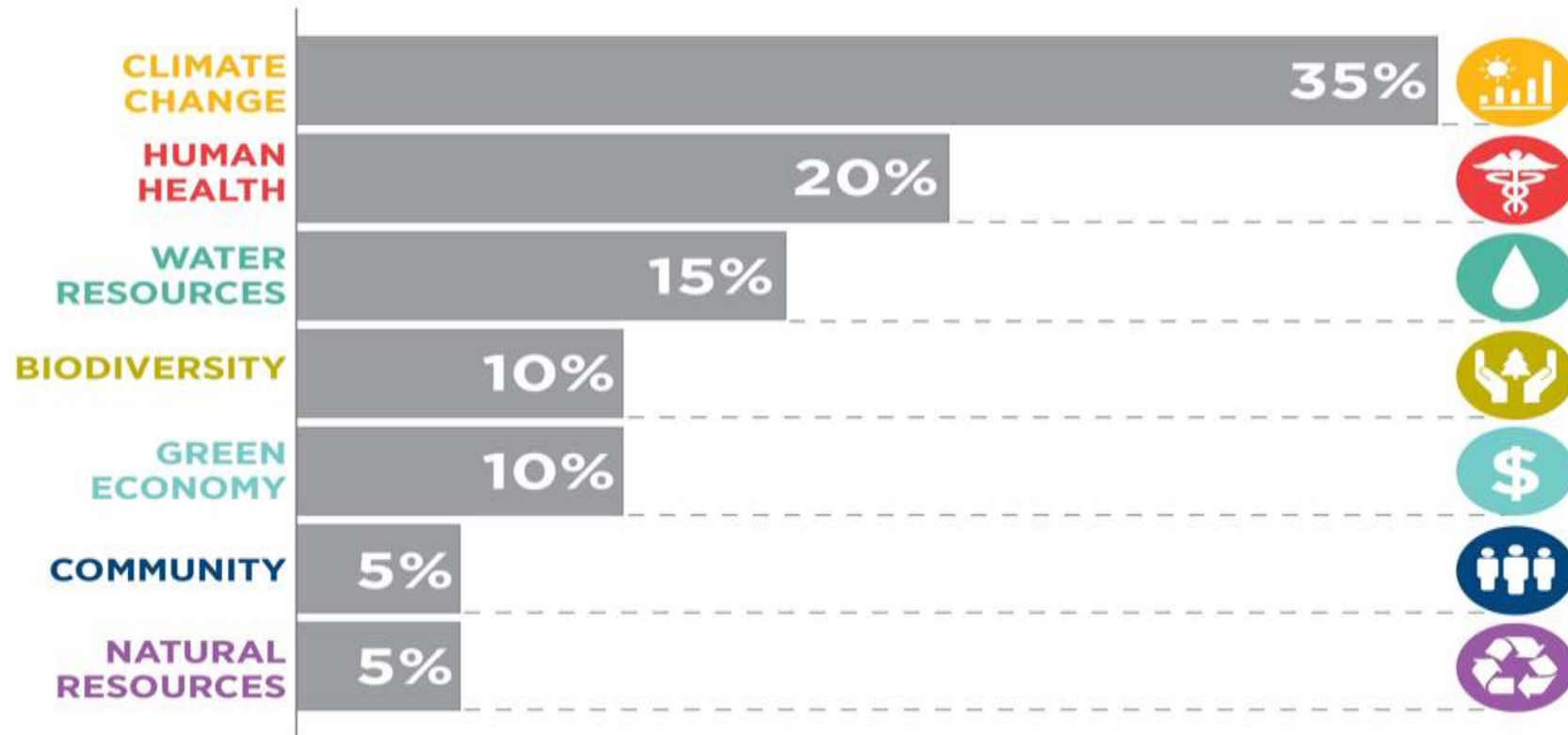
FINLAND



LEED
v4



LEED v4 SYSTEM GOALS



NEW CONSTRUCTION

NEIGHBORHOOD DEVELOPMENT

COMMERCIAL INTERIORS

HOMES

**EXISTING BUILDINGS
OPERATIONS + MAINTENANCE**

HEALTHCARE

CORE + SHELL DEVELOPMENT

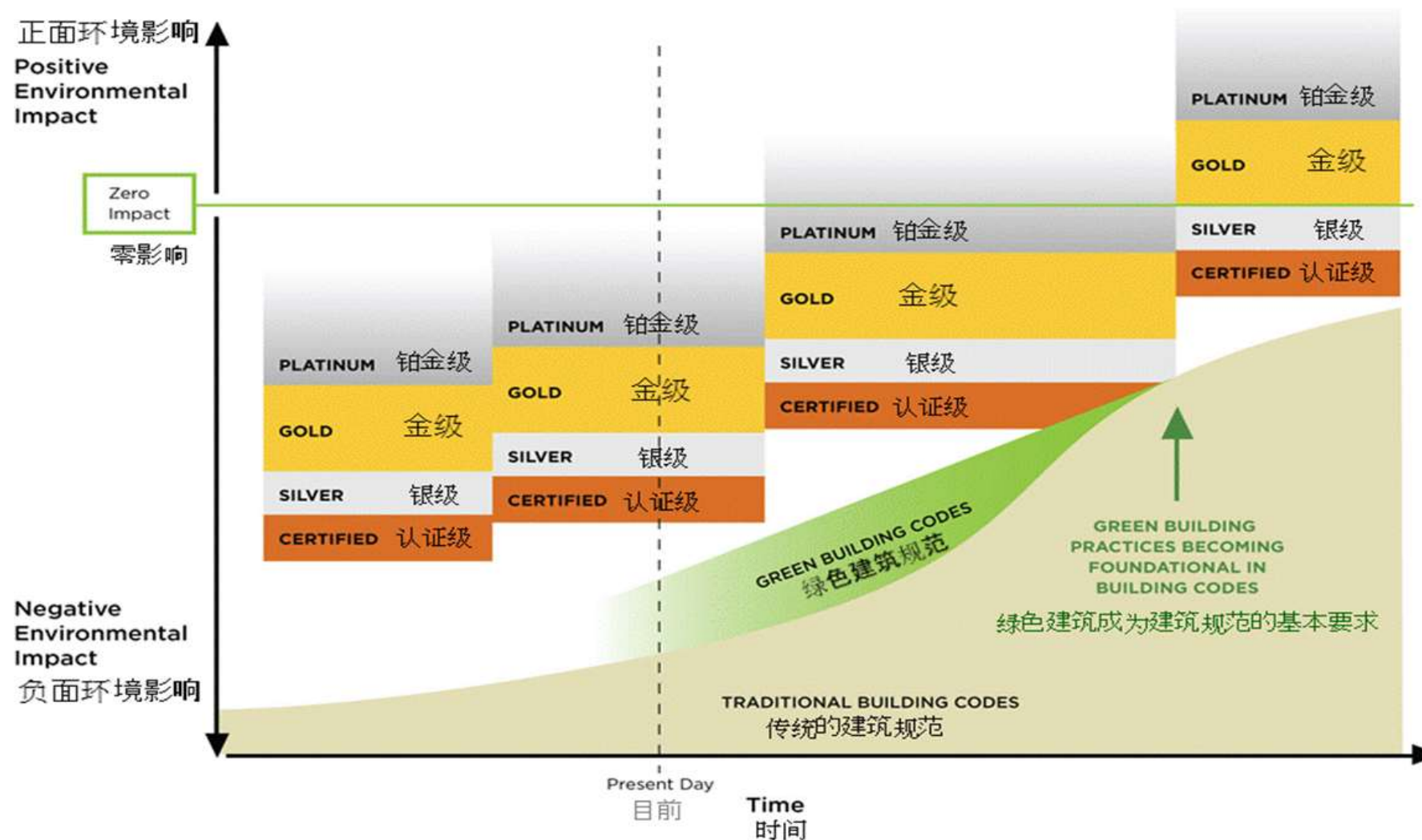
RETAIL

SCHOOLS



LEADERSHIP IN ENERGY & ENVIRONMENTAL DESIGN

Steps to Constant Improvement





LEED® PROFESSIONALS

A LEED professional credential signifies that you are a leader in the field and an active participant in the green building movement.

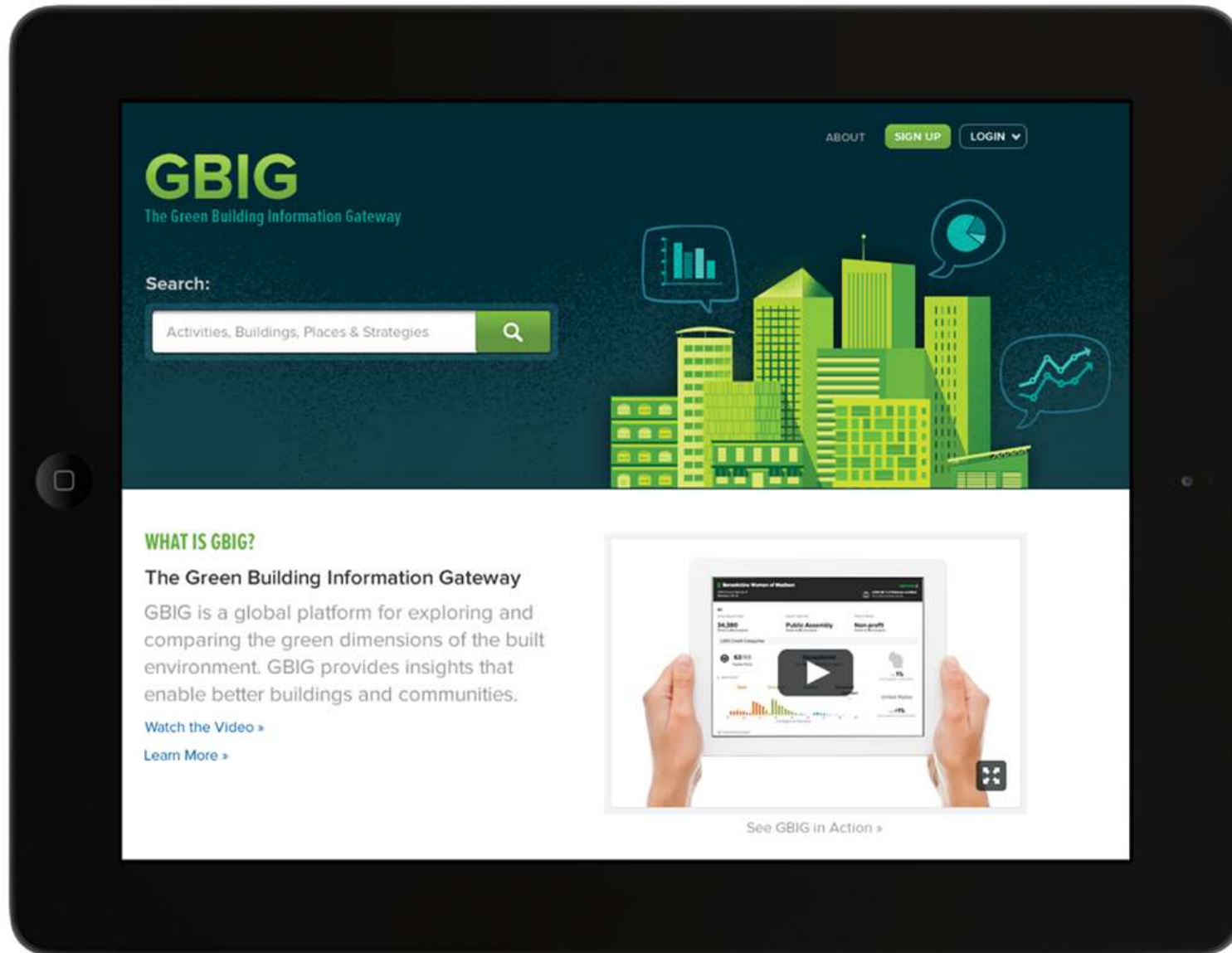


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U.S. and international patents and trademarks pending



Visit [LEEDon.io](https://leedon.io).



WWW.GBIG.ORG

Washington Convention Center November 18-20, 2015



Greenbuild is the world's largest conference and expo dedicated to green building. **Tens of thousands** of building professionals from all over the world gather every year to be inspired, to learn, to hear from renowned speakers, and to explore a vast expo floor featuring cutting-edge products and services.





WHY BUILD GREEN?



THE BUSINESS BENEFITS

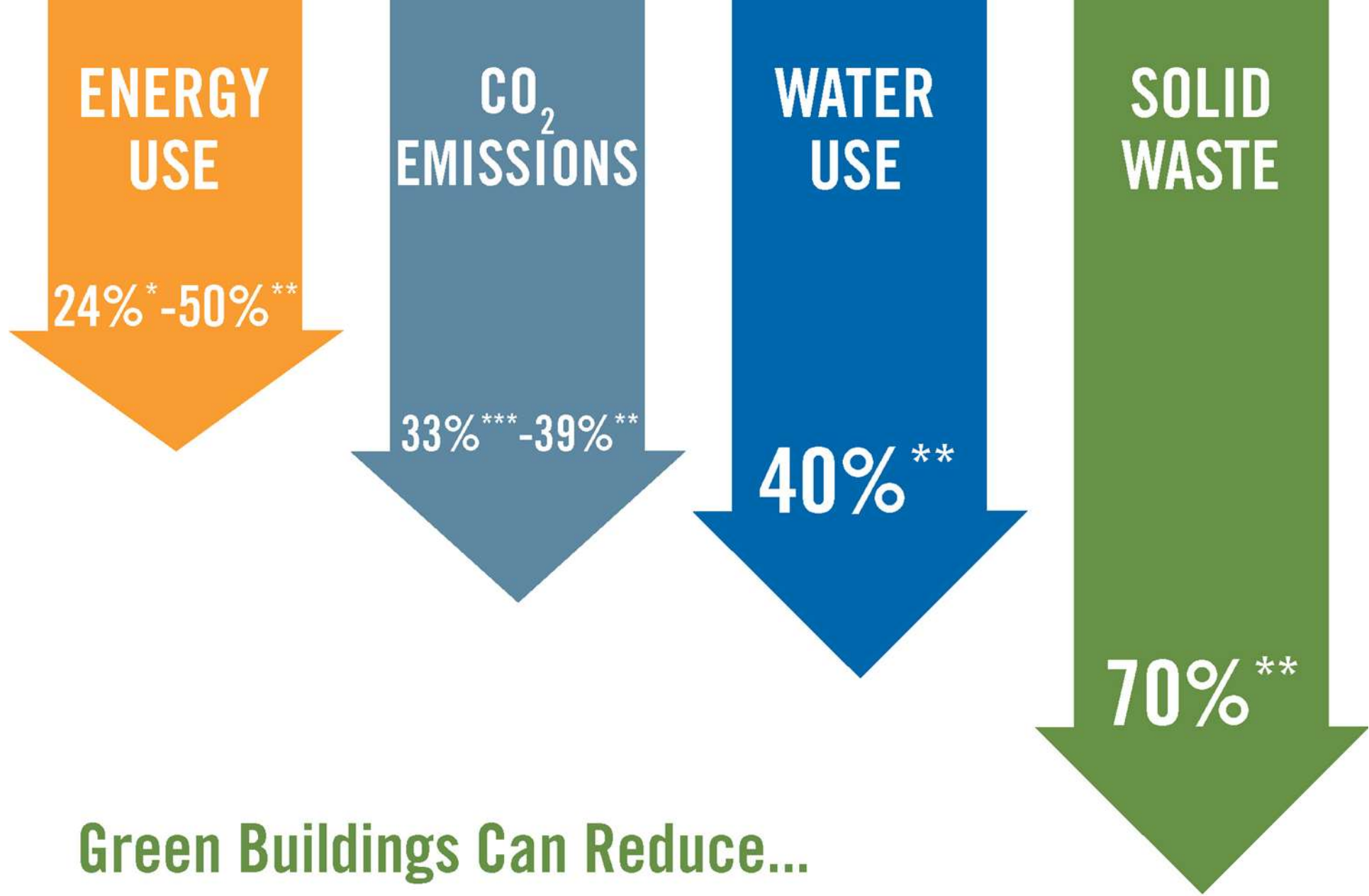
Design and Construction Costs

Asset Value

Operating Costs

Workplace Productivity and Health

Risk Mitigation



Green Buildings Can Reduce...

* Turner, C. & Frankel, M. (2008). Energy performance of LEED for New Construction buildings: Final report.

** Kats, G. (2003). The Costs and Financial Benefits of Green Building: A Report to California's Sustainable Building Task Force.

*** GSA Public Buildings Service (2008). Assessing green building performance: A post occupancy evaluation of 12 GSA buildings.



Benefits to Cities

- Reduce energy costs for the government...and citizens
- Reduce urban pollution and resulting improved health
- Mitigate global climate change
- Assistance in achieving the National and City Energy Goals
- Reduce power grid congestion
- Help assure reliable energy supplies
- Foster economic development
- Produce jobs in new and emerging technologies
- Increase community pride and reputation

HEALTH



THE WELL BUILDING STANDARD®

Leadership in Healthy Environments

<http://delos.com/about/well-building-standard>

<http://wellcertified.com>

<http://www.gbci.org>



WELL at CBRE Headquarters

Los Angeles





People who work in WELL Certified environments have expressed the positive impacts their WELL offices have on productivity and performance. In the first office to be WELL Certified™ — A Pilot Program at CBRE Headquarters, employees provided the following feedback:

- 83%** **Feel more productive**
- 100%** **Said that clients are interested in their new way of working**
- 92%** **Said the new space has created a positive effect on their health and wellbeing**
- 94%** **Said that the new space has a positive impact on their business performance**
- 93%** **Said that they are able to more easily collaborate with others**

**Source: CBRE Global Corporate Headquarters
Los Angeles, California, Workplace 360 Study. 2014**

Why is the US Federal Government Going **GREEN**?

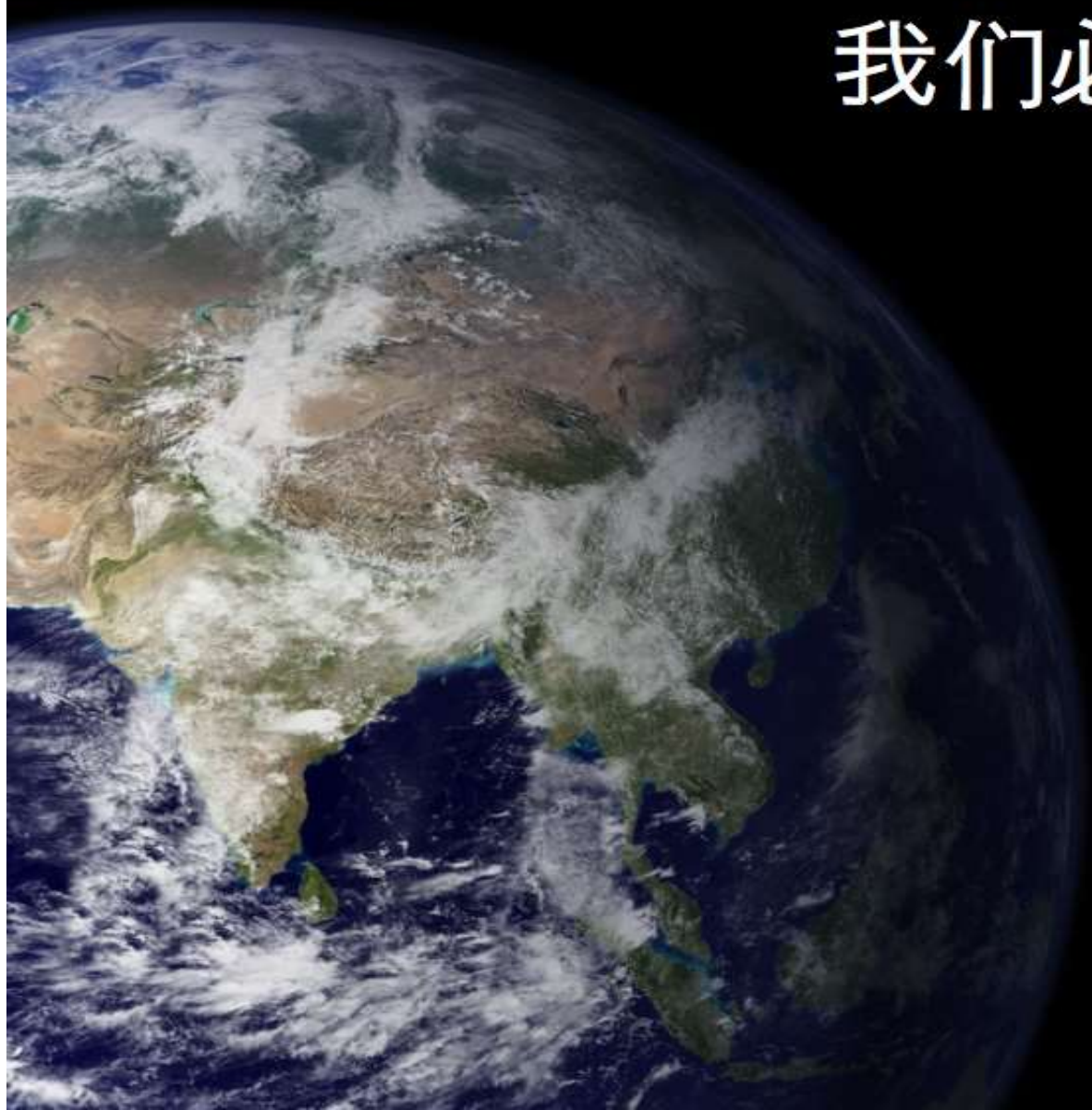
The President issued an Executive Order and convened a business roundtable

- Strategies will save the Federal government **\$18 billion** in avoided energy costs
- Will reduce GHG emissions by **26 million metric tons** by 2025 from 2008 levels, the equivalent of taking nearly 5.5 million cars off the road for a year.
- Increase the share of electricity the Federal Government consumes from *renewable sources to 30 percent.*
- Demonstrate *leadership*

Why are Companies Going **GREEN**?

- **Corporate Social Responsibility**
- **Supply Chain**
 - **Example of Wal-Mart**
 - **Efficiency and Cost Savings**
- **Happy, productive employees**
- **Triple Bottom Line**
 - **People, Profit, Planet**

We must **engage**
我们必须携手各方人士



Visions of the Future



- **What We Are Coming To (1895, Grant E. Hamilton for the Judge Magazine)**
- This city has its own railway system, school, telephone exchange, armory, theatre, saloon, fire department, meat market and everything that a usual settlement has.

Visions of the Future





**The Shimizu Mega-City Pyramid – Over Tokyo Bay, Japan,
designed by Dante Bini and David Dimitric in 2003**

It would be 14 times higher than the Great Pyramid at Giza – 6574 ft or 2004 m – and would house almost one million people. The structure would be composed of 204 smaller pyramids on eight layers.

Ultima Tower (Eugene Tsui, 1991)



This 10,560 ft high (3,218.7 m) tower would cost US\$150 billion and would have a huge, 6000 ft (1,828.8 m) diameter at the base. One million people would live here on 500 stories.

Taichung, Taiwan: Floating Observatories

Next year in Taiwan's third largest city, construction is set to begin on this skyscraper shaped like a tree trunk. The eight "leaves" are super-lightweight, helium-filled observational decks that glide up and down the side of the building, providing bird's-eye views of the city and the Taiwan Strait. Besides being visually stunning, the building—which is slated to house offices, restaurants, and a museum—will also be outfitted with green technologies such as solar cells, wind turbines, a rainwater recycling system, and a geothermal power plant in the basement.



Visions of the Future - *Now*





Dezhou, China: Solar Valley

Coal-crazed China may seem like an unlikely environmental booster, but it's betting on a green future in this northern Chinese city. Here, farmland and forest have been bulldozed to create an industrial zone dubbed the Solar Valley. The city is so committed to sun power that more than 80 percent of buildings have solar water heaters. (Dezhou is the world's largest producer of the devices) Streets are lit by solar lights, and luxury apartments—eco-friendly, of course—are outfitted with solar-heated pools.



Burj Khalifa, Dubai

The world's tallest building opened in early 2010 and remains one of the most talked-about structures. Why? Not only is the Burj Khalifa the world's tallest building (2,716.5 feet), it's also the tallest free-standing structure, with the highest number of stories, the highest occupied floor, the highest outdoor observation deck, and an elevator with the longest travel distance in the world. Then there's the show-stopping architecture: a tower comprising three elements arranged around a central core, inspired by the spider lily and courtesy of Skidmore, Owings & Merrill with consulting designer Adrian Smith. A Y-shaped floor plan shows off views of the Persian Gulf, and when seen from above, the building echoes the onion dome motif prevalent in Islamic architecture.



Saadiyat Cultural District, Abu Dhabi on Saadiyat Island

Launch Date: 2015 (for the Louvre).

A new 'city' is coming up on an island close to Abu Dhabi called Saadiyat. On this island, Abu Dhabi Tourism Authority is constructing a mixed commercial, residential, and leisure project and it is expected to be completed in 2020. The island will house a **Louvre Museum**, a **Guggenheim Museum**, a world-class **Performing Arts Centre** and a **Concert Hall**.

Five Pritzker Prize-winning architects. In the works: the Zayed National Museum, a Foster + Partners design of tilted steel towers inspired by the flight of a falcon; the Jean Nouvel–designed Louvre Abu Dhabi in a domed building perforated with a lattice design that filters sunlight; the Guggenheim Abu Dhabi, whose madcap look is pure Frank Gehry; and a Performing Arts Centre of swooping, sinuous lines from Zaha Hadid. The Louvre is slated to open first, and the entire island will eventually house about 145,000 people.

Masdar in Abu Dhabi, UAE



- **2.3 Sq Miles**
- **Anticipated \$18-22 Billion Invested**
- **100% Renewable Energy**
- **Zero Carbon**
- **MIT, Siemens, IRENA**
- **50,000 Residents, 60,000 Commuters**
- **Siemens HQ is LEED Platinum**



How Do We Get There?

ADVANCED TECHNOLOGIES

EFFECTIVE POLICIES

ADVANCED TECHNOLOGIES LEAD TO GREENER BUILDINGS





How Do We Get There?

ADVANCED TECHNOLOGIES

- SOPHISTICATED SENSORS, CONTROLS
- ENERGY MANAGEMENT SYSTEMS
- ADVANCED WINDOWS AND INSULATION
- SOLID STATE LIGHTING
- BUILDING INTEGRATED PV

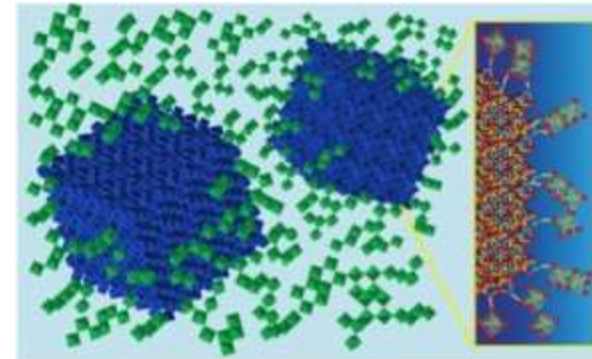
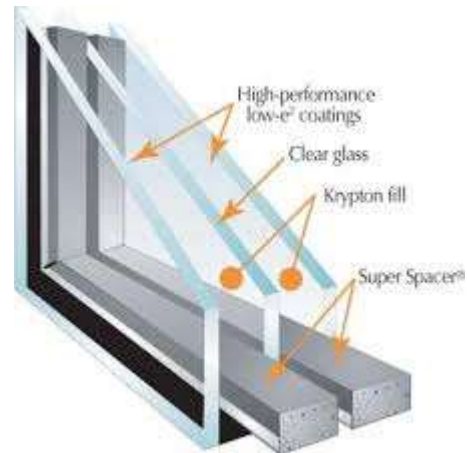
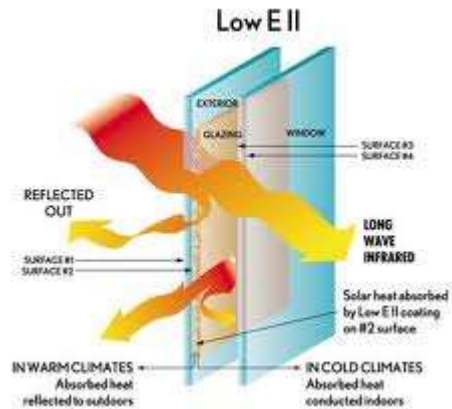
***ALL LEADING TO ECO-CITIES AND ZERO ENERGY
COMMUNITIES***



**Advanced sensors, controls,
and whole building energy
management systems**



Sophisticated Windows



Nanocrystals of indium tin oxide (shown here in blue) embedded in a glassy matrix of niobium oxide (green) form a composite material that can switch between NIR-transmitting and NIR-blocking states with a small jolt of electricity. A synergistic interaction in the region where glassy matrix meets nanocrystal increases the potency of the electrochromic effect.

Nano Insulation

New generation of polymer aerogel has strength, flexibility, durability and light weight



Advanced Lighting



Building Integrated PV





How Do We Get There?

POLICY

Cities and Communities
Policies and Guidelines

A light gray silhouette of the Paris skyline is visible in the background. The Eiffel Tower is the central and tallest element, with its lattice structure clearly defined. To its left, there are various smaller building silhouettes, including one with a prominent archway. To its right, a large dome, likely representing the Sacré-Cœur, is visible. The entire skyline is rendered in a uniform light gray color against a white background.

To accommodate the expected
increase in urban population of
2 billion people before 2030
would require the equivalent of
200 new cities the size of Paris

SCALING UP

FROM GREEN BUILDINGS TO GREEN CITIES





**Economic Development is a
guarantee for today...**

**Advanced Technologies are
a guarantee for tomorrow....**

**The Green Economy and
Green and Eco-Cities are a
guarantee forever**



Cities of the Future...

Will be
successful....

Only if they are
GREEN

To be Competitive in the 21st Century, Cities Must Be:

- **Efficient**
- **Affordable**
- **Resilient**

They Must Depend On:

- **Energy Efficiency**
- **Renewable Energy**
- **Smart Grid**
- **Integrated Urban Design**

Cities are built:

- Building by building
- Districts and Neighborhoods
- City-wide policies and design
- With transportation, municipal services, industry and buildings all integrated

***Green and Eco-Cities embrace
all these elements***

Leading to The Concept of Zero Energy, Low Carbon, Green and Eco-Cities

“Everything is a resource...nothing is waste.”

Bill McDonough

1. Integrating Energy Technologies

Municipal “waste” is a resource → Biofuels and Power

Buildings as Power Plants → Solar, Geothermal Heat Pumps

2. Applying Advanced Technologies

Zero or Positive Energy Buildings, Zero Water

Industrial Processes, Municipal Operations

Smart Transportation and Integrated Urban Design

Eco-cities Guidelines

1. Integrate existing stock, future availability and accessibility of all resources, sectors, components and subsystems and their interconnection for **comprehensive energy planning** for the city and surrounding communities
2. Develop efficient, ecologically responsible and **compact mixed-use communities** with walkable, bikeable and transit oriented transport reducing vehicle miles travelled
3. Design and maintain residential, commercial and public buildings with gradually improving **green building standards**
 - Construct all new government buildings showcasing green guidelines
 - Designate and incentivize near-zero energy townships and development zones
 - Progressively incorporate improving green guidelines in development regulations



California Academy of Sciences – LEED Platinum Building with Living Roof

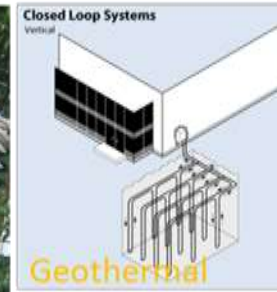


Bank of America – LEED Platinum Building with ICE Storage for cooling

Eco-cities Guidelines

4. Promote city and customer utilized **renewable energy** based on local resource availability, including;

- photovoltaics,
- solar thermal,
- wind,
- geothermal,
- biofuels
- co-generation,
- landfill gas or waste-water methane
- local smart grid for integration

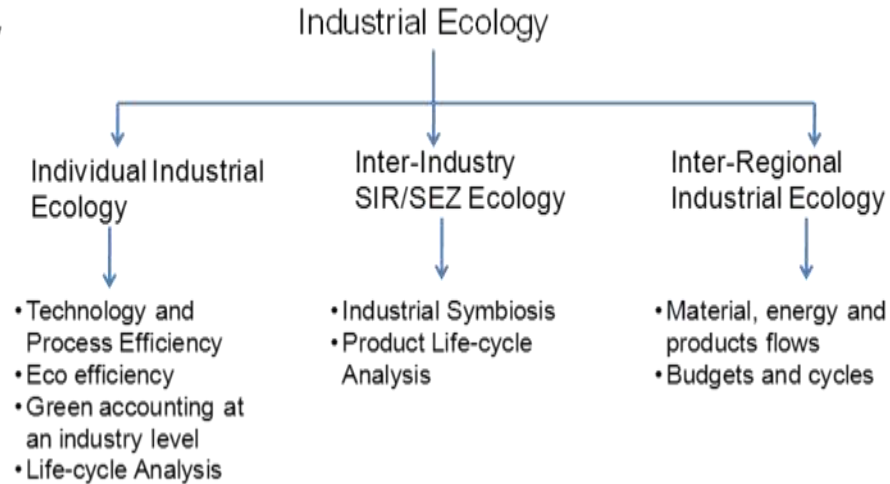


5. Establish **clean and efficient public/private transportation** services interconnected with neighborhood no-emission pooled vehicles using locally produced renewable fuels



Eco-cities Guidelines

6. Encourage **industrial symbiosis**, energy efficiency and green accounting at firm/industry/zone/regional level



7. Promote energy efficiency and distributed energy/electricity/heat generation from **water supply, waste water and solid waste systems**; including maximum water and waste recycling



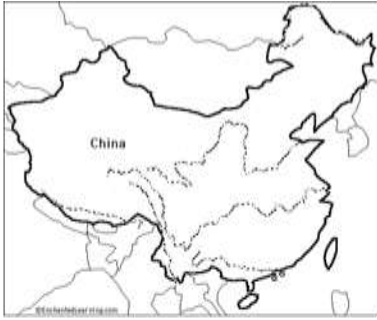
Solidwaste methane to energy



Waste-water methane to energy

8. Establish management frameworks for **effective operation** of urban infrastructure and services and develop frameworks for **continuous improvements** in the plans based on the performance of actual systems

Global Examples



MOHURD



US DOE USGBC



Working Together



Eco-Cities MOU to Work With 6 Cities in China

- **Hefei**
- **Langfang**
- **Hebi and Jiyuan in Henan Province**
- **Rizhao and Weifang in Shandong Province**

And 3 Cities in the US

- **San Francisco, Columbus, Ohio and Charlotte, NC**

2008 Olympic Village in Beijing

First LEED-ND Gold in China



**Guilin Olympic City:
Guo'ao Investment Group Plans to Apply the Lessons Learned
from the Olympic Village to a Large Project in Guilin**



India's Smart Cities Plans



PM Narendra Modi to unveil Smart City projects on June 25

- **100 Smart Cities to be launched**
- **Approximately \$16 billion anticipated**
- Enhance the quality of urban life
- Clean and sustainable environment
- 24 hour water and power supply
- Sanitation and solid waste management
- Efficient urban mobility and public transit
- Affordable housing for poor
- Robust IT connectivity

Read more at:

http://economictimes.indiatimes.com/articleshow/47573726.cms?utm_source=contentofinterest&utm_medium=text&utm_campaign=cppst

San Francisco Sustainability Initiatives

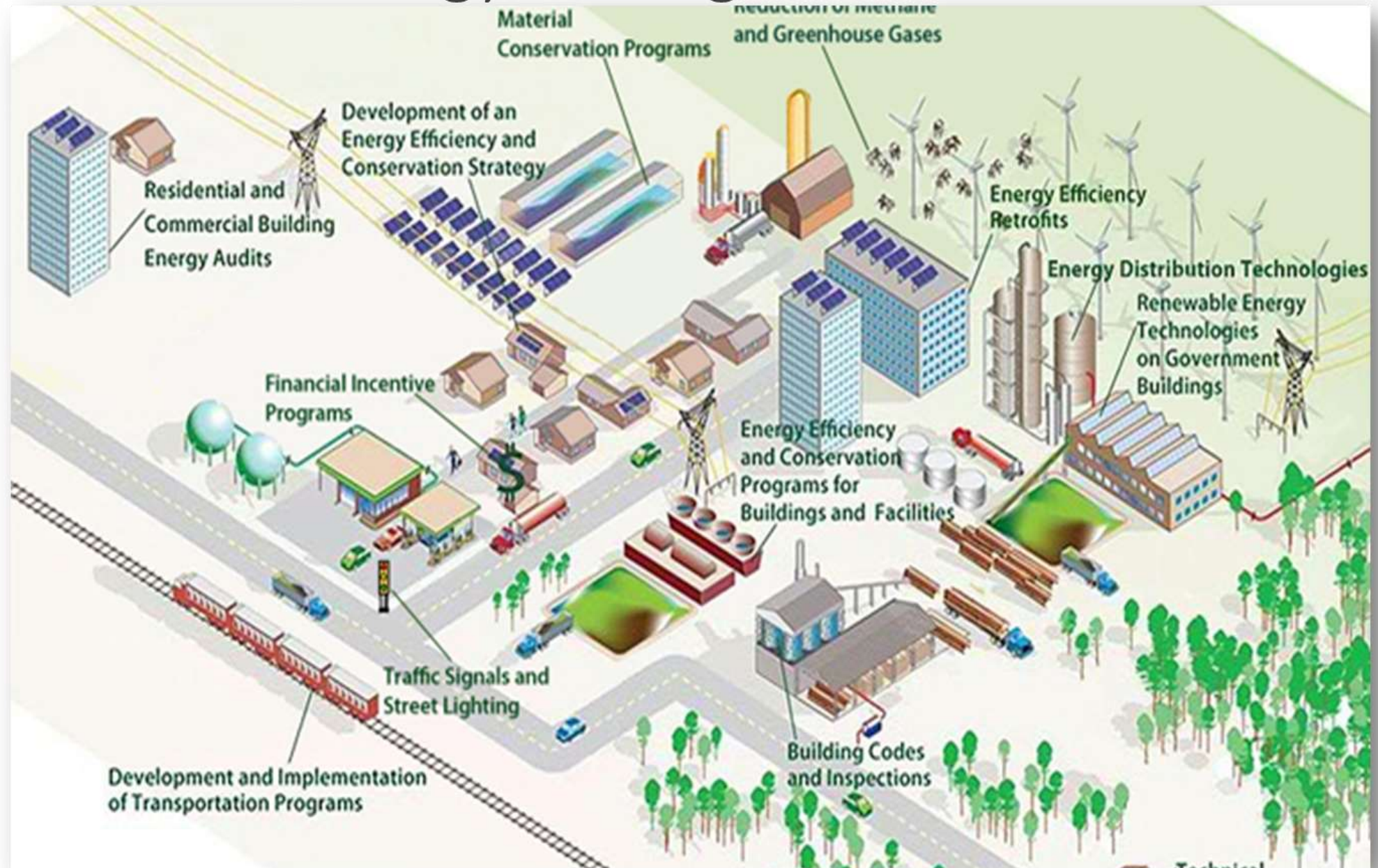
Office of San Francisco Mayor Edwin Lee



SF Cleantech Goals

- 100% Renewable Goal
- 100% Recycling and Zero Waste to the Landfill Goal
- LEED Gold required for all new construction, large retrofits
- Carbon neutral transportation system by 2030
- Eco-City Pilots at Hunters Point and Treasure Island
- Incentives and Cleantech Incubator

Charlotte Energy Strategies

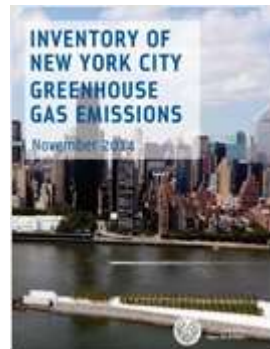
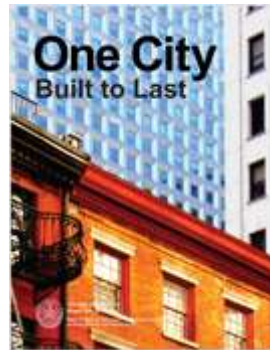


Fort Collins



Strategies for achieving net zero energy and the relative contribution of each to the goal include:

- Reducing energy-use in buildings (45 percent),
- Developing local renewable generation (35 percent),
- Balancing and optimizing energy sources (10 percent),
and
- Implementing smart grid infrastructure (10 percent).



<http://www.nyc.gov/html/planyc/html/home/home.shtml>

**Successful
Companies...
Communities...
Cities...
Countries...of the future
Will succeed**

Only if they are *Green*

LEED ON



Everyone in a green building within this generation.

为这一代每一个人的绿色建筑



And All of Us Working Together.
We Can Achieve a Better World



Contact Information



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USGBC Senior Fellow

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Useful Websites

www.worldgbc.org/activities/business-case

www.usgbc.org

Education Materials

Case Studies

Blogs and Articles

LEED Training and Certification

Reference Guides

mginsberg@usgbc.org

Eco-City Examples

More Details



MOHURD



US DOE USGBC



Working Together



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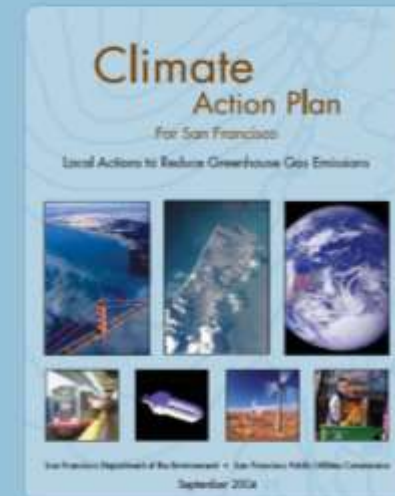
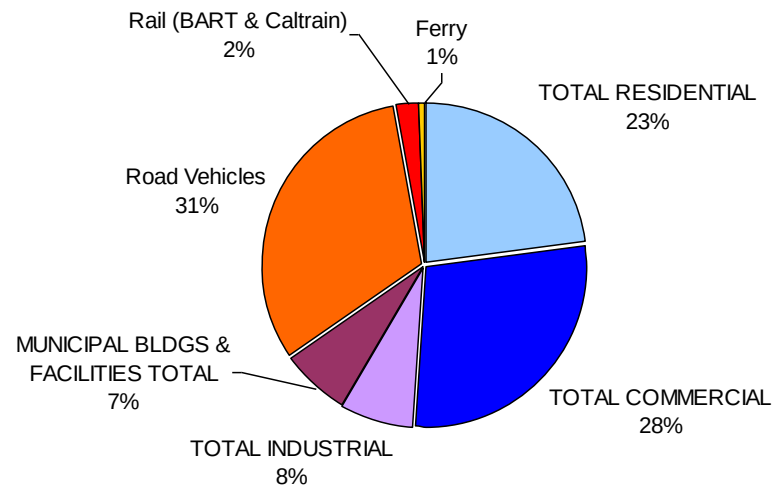
San Francisco Sustainability Initiatives

Office of San Francisco Mayor Edwin Lee



SF - Climate Action Plan

- 2004 & 2011
- Goal: Reduce CO₂ to 20% below 1990 levels by 2012;
80% by 2050
- Departmental Climate Action Plans (DepCAPs)
- Currently 12% below



SF - Clean Energy & Green Building

Goals:

- ***Renewable Energy: 100% Renewable by 2020***
- ***Energy Efficiency: Reduce 400,000 tons CO₂/year***
- **Municipal electricity (170 MW) = 100% renewable**
- **20 MW solar PV (2500 installations, incl. 5 MW Sunset Res.)**
- **3 MW methane from wastewater treatment**
- **8,200 small/med businesses & multifamily buildings**
- **Reduced energy consumption by 45 MW**
- **Saved SF residents & businesses \$30 M on utility bills/yr**
- **LEED Gold required for all new construction, lg. retrofits**





Reset Map Back

Map | Satellite | Hybrid

Welcome

Legend

Markers

Solar Installations

- Municipal
- Residential
- Commercial
- Schools/libraries
- Non-profits
- Monitoring stations
- Environmental Justice Program
- Case Study

Don't see your solar installation on the map?

What Can Solar Do For You?

11 Grove Street

(ex. 11 Grove Street or 11 Grove St)

get my info

SF Solar News

- Become a Neighborhood Solar Champion!
- Find out how you can get money from the City to install solar here.
- SF's solar permitting process
- Free Solar Classes

SF Solar Facts

- PV Systems Installed: 795
- Total capacity: 5.4MW
- Annual Energy produced: 8,853 MWh
- Annual savings: \$1,458,000
- Annual CO2 savings: 6,604,000 lbs



SF Solar Resources

- Benefits of Solar Electricity
- Solar Rebates, Tax Credits & Other Incentives
- Frequently Asked Questions (FAQs) about Installing Solar
- Clean Power Estimator
- Find a solar installer

11 Grove Street**

My Solar Potential

Roof Size: 5936 sq. ft.
Estimated solar PV potential: 7 - 15 kW
Estimated electricity produced: 12775 - 27375 KWh/yr
Estimated electricity savings: \$1460-\$3129 per year
Estimated carbon savings: 9530.15 - 20421.75 lbs per year

[Get Cost Estimates >>](#)

Links

[Find a solar installer](#)
[More information about installing solar](#)

Disclaimer
Map locations are approximate
Find out how we estimated your solar potential

SF - Clean Transportation

Goals:

- *Carbon neutral transportation system by 2030*
- *20% trips by bicycle by 2020*
- 100% of public transit is electric or B20 biodiesel
- Largest municipal electric fleet in country
- Largest municipal biodiesel (B20) fleet in country
- 78% taxis run on alternative fuels
- 7% trips by bike



SF - Zero Waste

Goal: Zero Waste by 2020

- Curbside recycling & composting
- Mandatory recycling of construction & demolition debris
- Banned plastic bags in supermarkets & drugstores
- Banned styrofoam
- Banned bottled water in City departments
- Mandatory recycling & composting (Oct '09)



➡ ***78% diversion rate***

Eco-City Projects in San Francisco



Candlestick Point
Hunters Point Shipyard
Treasure Island

**San Francisco's Newest Sustainable
Neighborhoods**



Cleantech Incentives

- 250 cleantech firms
- Cleantech payroll tax exclusion, biotech incentives
- Cleantech incubator @ Hunters Point
- China SF
- Mid-Market attraction



Charlotte, NC – The New Energy Capital

- 18th Largest City in US
- 5th Largest Urban Region in US
- 250+ electric, gas, engineering, alternative energy, research and educational resources create a vibrant hub of energy ideas.
- 27,000+ energy-related employees
- Projected sector job growth of 1,000/yr
- Jetion Solar chose Charlotte for US headquarters



FLUOR



Charlotte, NC – The Power of Collaboration



- \$6.78MM Federal Block Grant
 - Comprehensive Energy Strategy Plan, Including Energy Audits for City Facilities
 - 16 Projects
-
- Launched in 2010 as Part of Clinton Global Initiative
 - Public-Private Partnership Between Duke, Verizon, Cisco and Charlotte City Center Partners
 - Digital Smart Grid, Building Automation Technology & Energy Tracking Tools
 - 64 Buildings Participating w/ No cost to participate
 - \$5.3MM investment (80% Duke/20% Cisco)
 - Goal: Reduce Energy Use by 20% and Avoid 220,000 Metric Tons of Greenhouse Gas by 2016



ENVISION:CHARLOTTE
UNITING FOR A SUSTAINABLE CITY

Charlotte Energy Strategies





International Partnerships in Environmental Stewardship

- Sister-City Relationship with Baoding
 - 2012 City of Charlotte will commemorate its 25th anniversary with Baoding
 - MOU includes a commitment to strengthen cooperation on the cause of eco-city management via possible study/exchanges/information sharing/demonstration projects, and to promote business cooperation with an emphasis on new energy.
- City of Charlotte/Duke Energy EcoPartnership with the City of Langfang/ENN Group
 - Technology and Knowledge Exchange
 - Solar Power Development
 - Community Storage
 - Smart Grid Technology & Management
 - Swine Waste Energy Generation



Fort Collins



Fort Collins, Colorado

Nuts and Bolts of their Zero Energy District

- Improve energy efficiency in generation, conservation, and flexibility
- Develop and implement small-scale on-site renewables such as cost-effective solar PV panels and micro-wind turbines
- Create utility-scale green power such as wind and solar farms
- Customers can customize the program through a variety of products

Fort Collins, Colorado

Some of the Smart Grid technologies the Net Zero Energy District will utilize:

- Advanced mixed-fuel technology
- Advanced generator controls
- Low-cost grid parallel switchgear
- Micro-wind turbine
- Solar photovoltaic panels
- Solar thermal systems
- Solar electric systems
- LED lights
- CFL lights
- Fuel cells
- Hybrid engines, plug-ins
- Vehicle to Grid vehicles
- Continuous Power System (CPS)



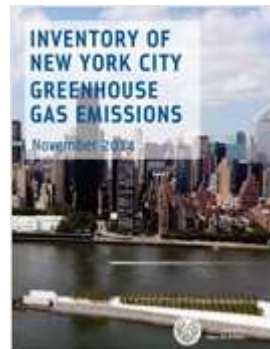
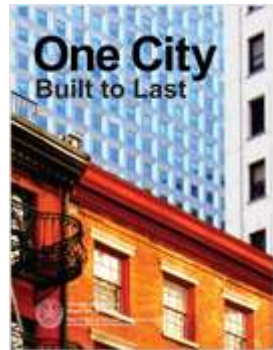
Photo Courtesy NREL

Fort Collins

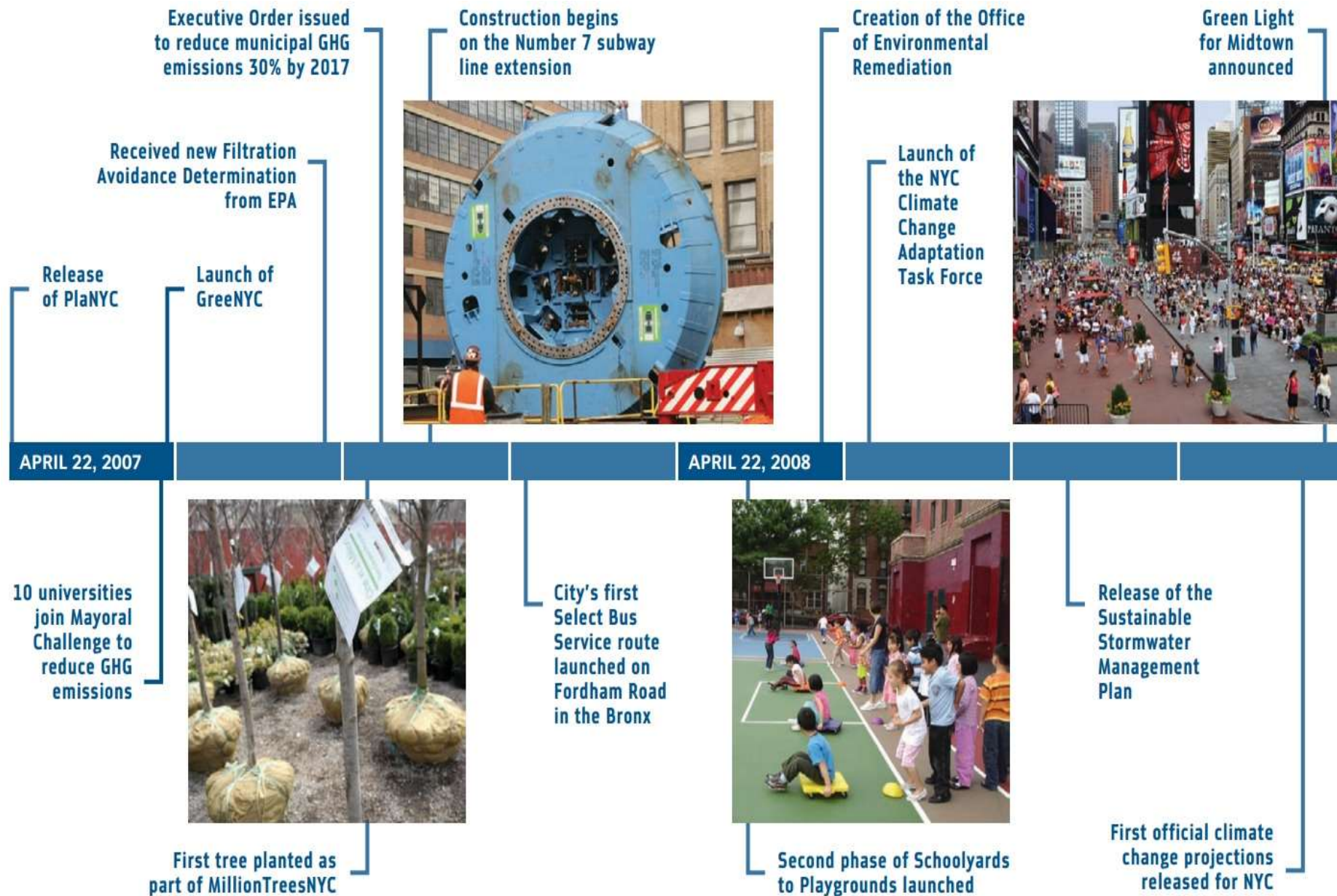


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<http://www.nyc.gov/html/planyc/html/home/home.shtml>



Start of \$175 rehabilitation of the St. George Ferry Terminal



250,000th tree planted as part of MillionTreesNYC

Launch of NYC °CoolRoofs

Greener, Greater Buildings Plan enacted to improve energy efficiency



Launch of NYC Brownfield Cleanup Program

Release of the NYC Green Infrastructure Plan

Ground-breaking on new municipal recycling facility in Sunset Park, Brooklyn

NYC's first energy-aligned commercial lease signed

APRIL 22, 2009

APRIL 22, 2010

NYPD unveils first hybrid patrol cars

Acquisition of 30-acre parcel for Hunters Point South in Queens



Local law enacted to lower the retirement age of school buses

Started \$508 million rehabilitation of Brooklyn Bridge

NYC Green Codes Task Force releases 111 recommendations



Coated one millionth square foot of rooftop white

Introduction of Green Tax Act of 2010 in Congress

4 Times Square in New York City

With thin film technology, photovoltaic power panels were integrated in the outer layer of the building. The 48-floor skyscraper has a layer of photovoltaic “skin”-- thin film photovoltaic panels from the 35th to the 48th floor on the south and east side, constituting a photovoltaic curtain wall.

There is a Fuel Cell on the 4th Floor and dozens of energy efficiency features.



Empire State Building

- Built in 1930
- 102 stories tall
- Starred in the King Kong Movie
- Renovated in 2010
- Saves \$4 million per year
- A model of energy efficiency in existing buildings



Solar on DOE's Roof



2008 Olympic Village in Beijing

First LEED-ND Gold in China



Micro-Energy Welcome Center at the 2008 Olympic Village



**Guilin Olympic City:
Guo'ao Investment Group Plans to Apply the Lessons Learned
from the Olympic Village to a Large Project in Guilin**





Masdar in Abu Dhabi, UAE

- 2.3 Sq Miles
- Anticipated \$18-22 Billion Invested
- 100% Renewable Energy
- Zero Carbon
- MIT, Siemens, IRENA
- 50,000 Residents, 60,000 Commuters
- Siemens HQ is LEED Platinum



URBAN SETTING

Urban sustainability is a key focus of the project, with a focus on creating a vibrant, walkable community. The design includes a mix of residential, commercial, and recreational spaces, all integrated with green infrastructure. Key features include:

- High-quality public spaces and greenery, including a central park and green corridors.
- A mix of housing types, from affordable to premium, to create a diverse community.
- Pedestrian-friendly streets with wide sidewalks, crosswalks, and green spaces.
- A focus on creating a sense of community and belonging, with shared spaces and amenities.
- A commitment to sustainable building practices, including energy efficiency and green materials.



TRADITIONAL BUILDING

The building's design is inspired by traditional architecture, featuring a mix of materials and a focus on craftsmanship. The design includes a mix of residential, commercial, and recreational spaces, all integrated with green infrastructure. Key features include:

- High-quality public spaces and greenery, including a central park and green corridors.
- A mix of housing types, from affordable to premium, to create a diverse community.
- Pedestrian-friendly streets with wide sidewalks, crosswalks, and green spaces.
- A focus on creating a sense of community and belonging, with shared spaces and amenities.
- A commitment to sustainable building practices, including energy efficiency and green materials.



MODERN BUILDING FACADE

The building's design is inspired by modern architecture, featuring a mix of materials and a focus on craftsmanship. The design includes a mix of residential, commercial, and recreational spaces, all integrated with green infrastructure. Key features include:

- High-quality public spaces and greenery, including a central park and green corridors.
- A mix of housing types, from affordable to premium, to create a diverse community.
- Pedestrian-friendly streets with wide sidewalks, crosswalks, and green spaces.
- A focus on creating a sense of community and belonging, with shared spaces and amenities.
- A commitment to sustainable building practices, including energy efficiency and green materials.



PUBLIC STATION

The building's design is inspired by public architecture, featuring a mix of materials and a focus on craftsmanship. The design includes a mix of residential, commercial, and recreational spaces, all integrated with green infrastructure. Key features include:

- High-quality public spaces and greenery, including a central park and green corridors.
- A mix of housing types, from affordable to premium, to create a diverse community.
- Pedestrian-friendly streets with wide sidewalks, crosswalks, and green spaces.
- A focus on creating a sense of community and belonging, with shared spaces and amenities.
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