

让我们这一代每个人体验绿色建筑

**GREEN BUILDINGS FOR EVERYONE
WITHIN THIS GENERATION**



Comparison of Urbanization Processes in the U.S. and China: How New York and San Francisco Are Planning a Green Future

美中城镇化过程比较：纽约和旧金山如何规划绿色的未来

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2008 Olympic Village 奥运村



第一个LEED社区金级项目
First LEED-ND Gold

旧金山的生态城市工程

Eco-City Projects in San Francisco



Candlestick Point 烛台角/
Hunters Point Shipyard 猎人角码头
Treasure Island 金银岛

**San Francisco's Newest Sustainable
Neighborhoods**
旧金山最新的可持续发展社区



Clean Energy & Green Buildings

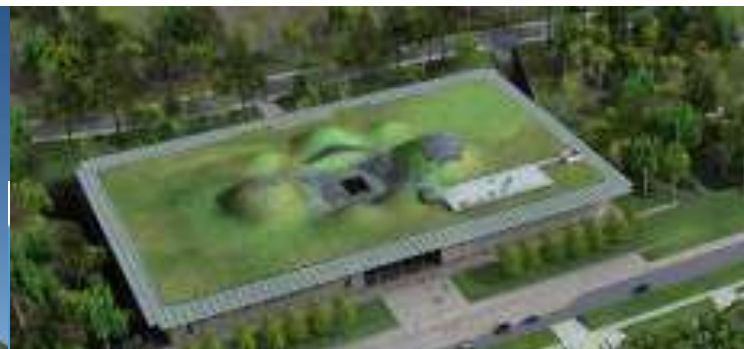
清洁能源和绿色建筑

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 new construction, lg. retrofits**

目标:

- **可再生能源: 2020年达到100%**
- **节能: 每年减少400,000吨二氧化碳排放**
- **市政用电 (170MW) = 100% 可再生能源**
- **20 MW来自太阳能光伏发电**
- **3MW来自污水处理中提取的沼气**
- **8,200个中小型企业与多户住宅**
- **减少45MW的能耗**
- **为旧金山的市民与企业每年节省三千万美元**
- **的电费所有新建建筑需达到LEED金级**



Clean Transportation 清洁能源交通

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**

目标:

- **2030年达到交通系统碳中和**
- **2020年达到自行车解决20%的交通**
- **公共交通100%使用电动或B20生物燃油车辆**
- **全国最大的市政电动车车队**
- **全国最大的市政生物燃油 (B20) 车队**
- **78%的出租车使用替代燃油**
- **7%的交通使用自行车**



Zero Waste 零废弃物填埋



目标 2020年达到废弃物填埋量为零

Goal: Zero waste by 2020

措施:

- 市政垃圾全部回收与堆肥
- 建筑材料和拆除材料强制实行回收
- 超市和药房禁止使用塑料袋
- 禁止使用发泡胶
- 市政厅各部门禁止使用瓶装水
- 全面实行垃圾回收和堆肥（2009年10月起）

ACTIONS:

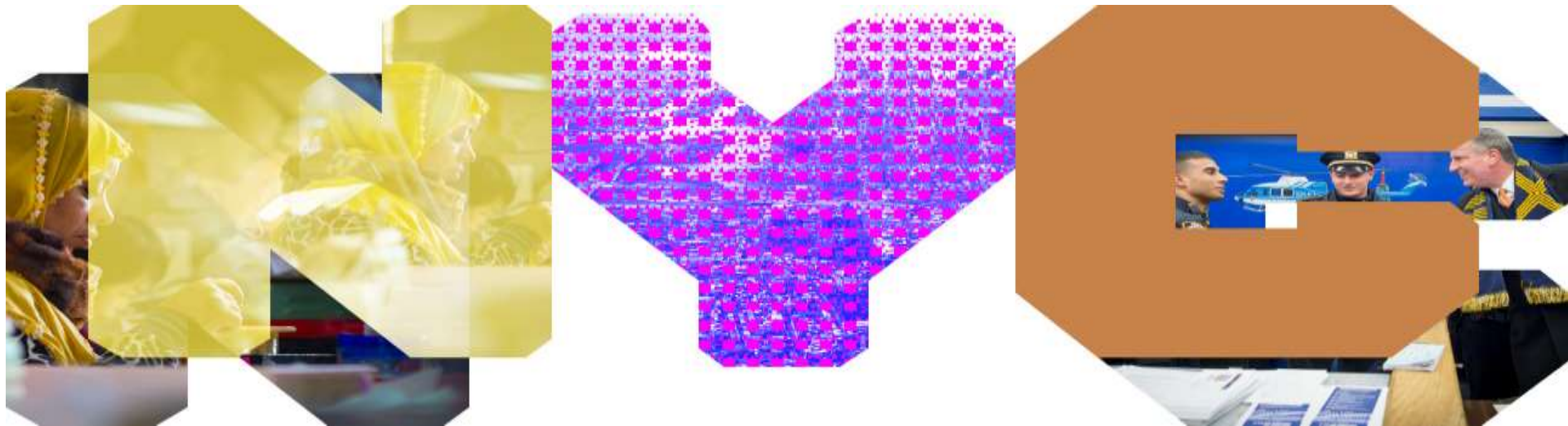
- Curbside recycling & composting
- Mandatory recycling of construction & demolition debris
- Banned plastic bags in supermarkets & drugstores
- Banned styrofoam
- Banned bottled water in City departments
- Mandatory recycling & composting (Oct '09)

www.sf-planning.org





www.sfenvironment.org



- New York City will be the most sustainable big city in the world and a global leader in the fight against climate change
- 纽约将成为世界上最可持续的城市，一个与气候变化斗争的全球领导者



“Environmental and economic sustainability must go hand in hand – and OneNYC is the blueprint to ensure they do,” said Mayor de Blasio.

de Blasio市长说：“环境和经济的可持续性必须联手 --- OneNYC是确保实施的蓝图”

OneNYC: Our Sustainable City

80x50: Reducing the city's greenhouse gas emissions by 80 percent by 2050, compared to 2005.

80x50: 到2050年，减少80%的温室气体排放

Zero Waste: Sending zero waste to landfills by 2030.

零填埋: 到2030年，零废弃物填埋

Air Quality: Have the best air quality among all large U.S. cities by 2030.

空气质量: 到2030年，美国所有大城市具有最优质的空气质量

Brownfields: Clean up contaminated land and convert land to safe and beneficial use.

褐地: 改良受污土地，使其能被安全和有效益地使用

Water Management: Reduce neighborhood flooding and offer high-quality water services.

水资源管理: 减少环境水灾，提供优质用水

Parks and Natural Resources: Expand useful, accessible, and beautiful open spaces.

公园和自然资源: 扩展高效、可达、和美丽的开发空间

Empire State Building 纽约帝国大厦

Saves \$4 million annually

Recycled 80% of construction waste

Saves 40% water

90% of offices are daylit

Bike racks and showers

Achieved LEED Gold

每年节约400万美元

回收80%营建废弃物

节水40%

90%的办公空间自然采光

自行车存放和淋浴间

LEED 金级认证

www.esbnyc.com/esb-sustainability



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.

薄膜技术使得光伏发电板能被运用到大楼的外壳中。这座48层的摩天大楼在35-48层的南面和东面就有一层光伏“皮肤”——薄膜光伏电池板，形成了一张“光伏帘墙”。

时代广场四号
美国纽约州 纽约市





Hudson Yards – New York City 纽约哈德逊广场

- Mixed-use development on a platform over the New York City West Side Rail Yards containing up to 12 million square feet of Class A office, residential, hotel, retail, cultural and parking uses, 12 acres of public open space, and a 750-seat public school.
- Hudson Yards area has capacity for approximately 26 million square feet of new office development, 20,000 units of housing, of which almost 5,000 units will be affordable units, 2 million square feet of retail, and 3 million square feet of hotel space.
- The site includes the High Line walkway, restaurants, and unique cultural opportunities.

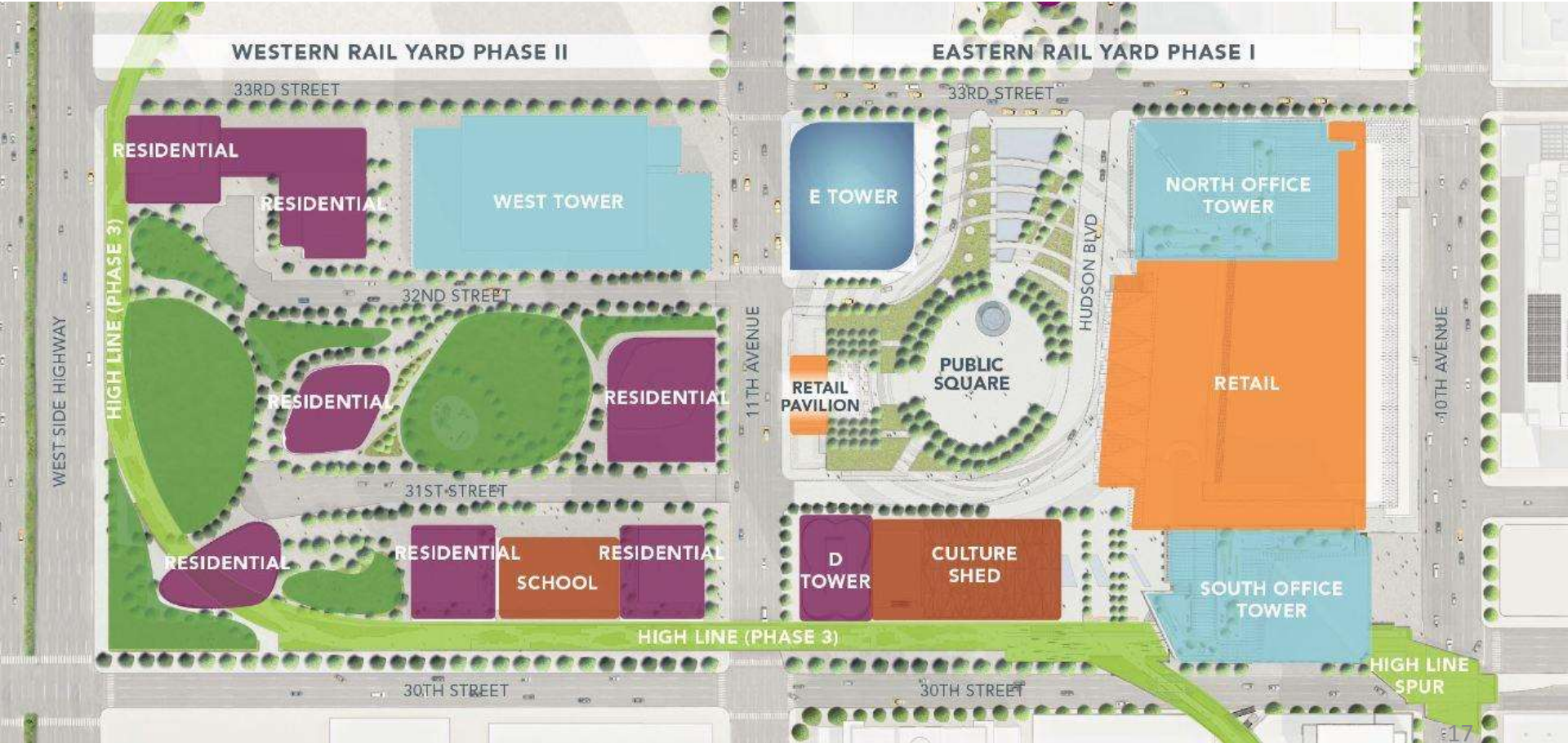


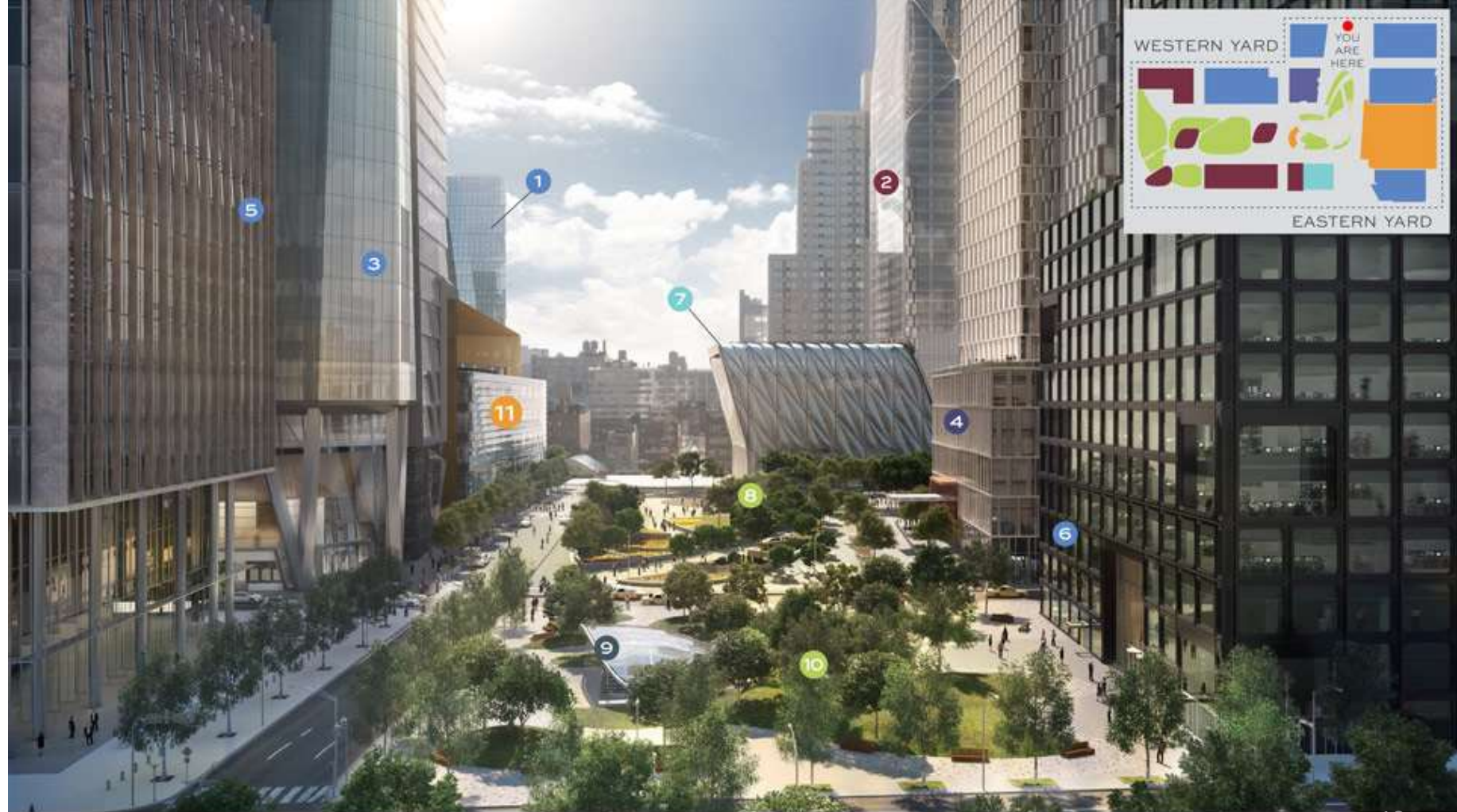
HYDC

Hudson Yards Development Corporation

纽约哈德逊广场







OFFICE

RESIDENTIAL

HOTEL

RETAIL

RESTAURANT

ARTS + CULTURE

Improving Energy Efficiency 改善能源效率



Implementation of microgrids

宏观电网的实施





Intelligent garbage disposal 智能垃圾处理

Pneumatic tube system
垃圾气送管道系统

Organic food waste to be
intelligently converted to dry
fertilizer on-site
场址内有机食品废弃物智能
转化成干肥料

WWW.HUDSONYARDSNEWYORK.COM

Resources

One NYC Plan

www.nyc.gov/onenyc

Overview on One NYC Plan

<http://www1.nyc.gov/office-of-the-mayor/news/257-15/mayor-de-blasio-releases-one-new-york-plan-strong-just-city#/0>

NY Built to Last

<http://www.nyc.gov/html/builttolast/assets/downloads/pdf/OneCity.pdf>

Everyone in a green building within this generation.

为这一代每一个人的绿色建筑





Resources You Can Use

可用资源

WWW.USGBC.ORG

WWW.SF-PLANNING.ORG

WWW.SFENVIRONMENT.ORG

WWW.NYC.GOV/ONENYC

WWW.ESBNYC.COM/ESB-SUSTAINABILITY

WWW.HUDSONYARDSNEWYORK.COM

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