

纽约绿色循环堆肥中心 Green Loop, New York

PRESENT 建筑设计事务所 /
PRESENT Architecture

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摘要 ……

纽约市绿色循环堆肥中心是一项由10个滨水堆肥站组成的堆肥网络计划。每一个堆肥站都将配备位于路面的堆肥设施并在顶层设置一个高架公园，以为教育设施、街区花园和冬季越野滑雪等活动提供充足的空间。纽约市人均公共空间面积低于美国其他的主要城市。而绿色循环堆肥网络计划将缓解有机垃圾处理 and 缺乏绿色公共空间这两个主要的城市问题。

关键词 ……

堆肥公园；垃圾处理；清洁能源战略

Abstract ...

The Green Loop is a proposal for a network of ten waterfront composting hubs in New York City. Each proposed Green Loop hub would consist of a composting facility at street level and an elevated public park on top, large enough to accommodate a range of activities from educational programs, neighbourhood gardens, and cross-country skiing in the winter. New York City has less open space per person than almost every other major city in the US. The Green Loop network alleviates two major urban problems: organic waste management and lack of green public space.

Key words ...

Composting Park; Waste Disposal; Clean Energy Strategy

项目地址：美国纽约州纽约市

项目面积：0.5 km²（每个堆肥站面积为0.05 km²，共10个）

项目委托：纽约市政府

景观设计：PRESENT 建筑设计事务所

首席设计师：Andre Guimond、Evan Erlebacher

项目团队：Christian Schwarzwimmer

设计时间：2013~2014年

Location: New York, NY, USA

Area (size): 0.5 km² (Each Green Loop hub covers an area of 0.05 km², a total of 10)

Client: New York City

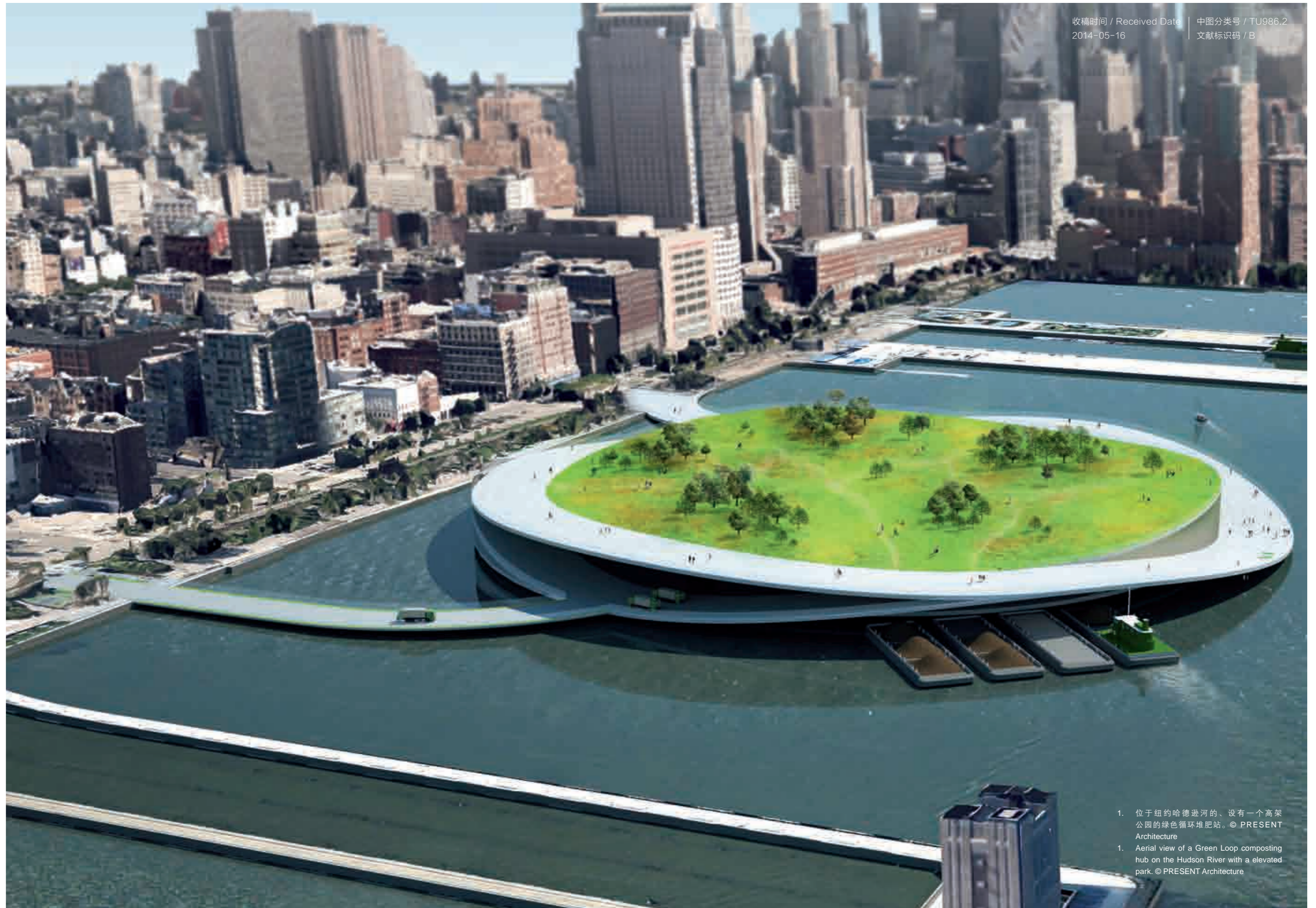
Landscape Architecture: PRESENT Architecture

Chief Designers: Andre Guimond, Evan Erlebacher

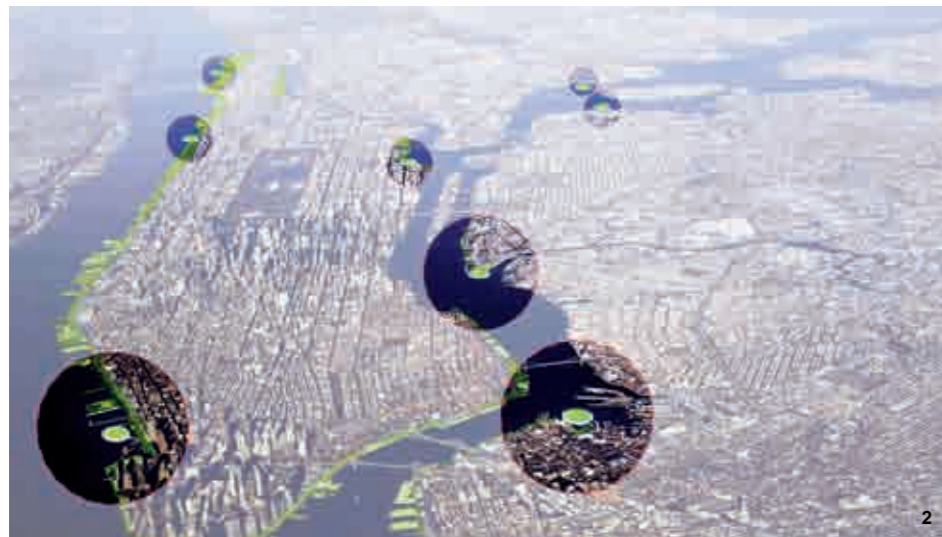
Project Team: Christian Schwarzwimmer

Design Period: 2013 ~ 2014

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1. 位于纽约哈德逊河的、设有一个高架公园的绿色循环堆肥站。© PRESENT Architecture
1. Aerial view of a Green Loop composting hub on the Hudson River with a elevated park. © PRESENT Architecture



2. 纽约市绿色循环堆肥中心是一项由10个滨水堆肥站组成的堆肥网络计划。© PRESENT Architecture
3. 绿色循环堆肥站示意图 © PRESENT Architecture
4. 堆肥设施图：由卡车将垃圾运送至堆肥中心，并通过轮船和铁路运输完成堆肥产品的对外输送。© PRESENT Architecture
5. 堆肥中心的设施将对纽约市的有机废物进行处理，约占全市生活垃圾总量的40%。© PRESENT Architecture

纽约市每年大约会产生1 400多万吨垃圾，这一庞大的数量几乎相当于39座帝国大厦的体积。大部分的垃圾将被运送至远离城市的垃圾填埋厂进行分解，分解过程中会产生甲烷——这种强效温室气体将对

气候变化产生一定的影响。通常情况下，纽约市每年需要花费超过3亿美元来运输这些垃圾，并且在运输过程中还会造成额外的温室气体排放、增加交通流量和产生噪音污染。然而纽约市的大部分生活垃圾

可以通过在本地进行堆肥的方式进行处理。尽管解决垃圾问题的最佳途径是减少垃圾的产生，但堆肥确实是一种处理有机垃圾的清洁的、可行的方案。

绿色循环堆肥网络方案旨在建造10座



滨水堆肥站以处理纽约市的有机垃圾。每一个绿色循环堆肥站都将配备位于路面的堆肥设施和一个高架公园。每座绿色循环堆肥站占地0.05km²，足以容纳包括教育设施、街区花园和冬季越野滑雪等活动。绿色循环堆肥系统将为纽约的城市结构增加宝贵的绿色空间，并有助于减少需要运输至城外垃圾填埋点的垃圾总量。

沿着纽约市长达837km的岸线布置绿色循环堆肥网络，需要解决以下三个重点规划问题。首先，就近利用纽约市现有的交通基础设施。通过卡车在短距离内将有有机垃圾运输至当地的绿色循环堆肥站，随后通过轮船和铁路运输完成堆肥产品的对外输送。其次，通过在全市5个行政区平均分配有机垃圾来实现“行政区公平”。绿色循环堆肥站将确保每个行政区都承担起处理垃圾的责任，而并非将全市的垃圾运往1~2个原本垃圾处理压力就已过高的行政区。第三，涉及选址问题。纽约需要更多的公共绿地，而作为《2020年城市规划愿景：滨水区综合规划》的一部分，通过建造公园、滨海步道和自行车道，能够逐步为市民增添滨水空间。绿色循环堆肥网络计划将正在开发的城市海岸线连为一

体，并提供了一种独特的、真正意义上的滨水体验方式。

作为一个堆肥公园网络计划，本项目将处理城市中40%的生活垃圾，同时为整座城市增加0.5km²的公园绿地。项目的实施意味着将显著地减少垃圾远程运输的距离、费用和能源消耗，降低交通流量、噪音和污染，其他的益处还包括将带来更加安全的街道、更加清洁的空气和更少的温

室气体排放。这类新型的城市公园同时还建立一个售卖营养丰富的堆肥产品的市场，该市场的形成建立在纽约市正在试行的路边堆肥计划的基础之上。绿色循环堆肥中心将为每一位纽约市民创造出更加清洁的、美好的城市环境。LAF

注释

本项目相关信息可参见www.presentarchitecture.com。





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New York City produces over 14 million tons of trash each year, equal to approximately the volume of 39 Empire State Buildings. Much of this trash is transported to out-of-state landfills where it decomposes, producing methane, a potent greenhouse gas that contributes to climate change. In a typical year, NYC spends more than 300 million US dollars to transport its trash out of the city, emitting additional greenhouse gases, car traffic, and noise pollution. Much of the household waste collected in NYC can be captured and processed locally through composting. While the best solution to waste is reduction, composting is a clean and achievable method for dealing with organic waste.

The Green Loop is a network of ten waterfront composting parks that will

process New York's organic waste. Each Green Loop hub will have a street-level composting facility combined with an elevated public park, adding much needed green space to the city's park system. At twelve acres, each Green Loop hub will be large enough to accommodate a diverse range of activities from educational programming, neighbourhood gardens to winter cross-country skiing. The Green Loop system will add much needed green space to New York's urban fabric and help reduce the amount of waste transported out of the city.

Locating a network of Green Loops along New York City's 837 km waterfront should address the following three important planning issues. First, it links into the city's existing transportation infrastructure. Trucks deliver organic waste in a short distance to

a local Green Loop composting hub, then barges and rail transport compost product out of the city. Next, it addresses "borough equity" by distributing organic waste management across all five boroughs. A Green Loop hub in each borough will ensure that every borough takes on responsibility for waste process, rather than sending the entire city's trash to one or two over-burdened boroughs. Lastly is the location. New York City needs more open space and as part of the *Vision 2020: Comprehensive Waterfront Plan*, the city is steadily seeking to improve access to the waterfront through parks, esplanades, and bike paths. A network of Green Loops connects to the City's developing shoreline, providing a truly and unique way to experience the waterfront.

The proposal is a network of composting



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parks that will process 40 percent of the residential waste stream, while adding 0.5 km² of public parkland across the city. The proposal would drastically reduce the distance, cost, and energy consumption of long-distance waste transportation, decreasing traffic, noise, and pollution. Other benefits include safer streets, cleaner air, and fewer greenhouse gas emissions. This new type of urban park would also create a market for nutrient-rich compost that could be coupled with NYC's pilot curbside composting program. The Green Loop would help make a cleaner NYC a reality for everyone. **LAF**

NOTE

For more information please visit www.presentarchitecture.com.

6. 位于绿色循环堆肥站顶层的高架公园能够容纳教育设施、街区花园和冬季越野滑雪等活动。© PRESENT Architecture
7. 高架公园效果图。纽约市的人均公共空间面积小于美国其他主要城市，绿色循环堆肥中心将同时缓解两个主要的城市问题。© PRESENT Architecture
8. 绿色循环堆肥中心夜景。纽约市正在试行一项路边堆肥计划，因此绿色循环堆肥中心将很快成为现实。© PRESENT Architecture
6. The facility has an elevated public park on top that is

- large enough to accommodate anything from educational facilities and neighborhood gardens to cross-country skiing in the winter. © PRESENT Architecture
7. Elevated park perspective. New York City has less open space per person than almost every major city in the country, and the Green Loop alleviates two major urban problems at once. © PRESENT Architecture
8. Nightscape of Green Loop. New York City is already piloting a curbside composting program, so Green Loop will soon be a reality. © PRESENT Architecture



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