

**TEACHERS COLLEGE**  
COLUMBIA UNIVERSITY

**BRIGHTER GREEN**



# CLIMATE CHANGE & FOOD POLICY IN NEW YORK CITY



An aerial, high-angle view of the New York City skyline, featuring numerous skyscrapers and dense urban development. The image is in grayscale and serves as a background for the text.

Changing what we eat and how we grow it presents the greatest potential for impacting climate change and improving food resilience in New York City.

**Plant-based initiatives can be the common thread that ties together NYC's Green New Deal platform.**



# ONENYC | GOALS AND INITIATIVES

## THE FOUR PRINCIPLES

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### 1 GROWTH

New York City will continue to be the world's most dynamic urban economy, where families, businesses, and neighborhoods thrive

### 2 EQUITY

New York City will have an inclusive, equitable economy that offers well-paying jobs and opportunity for all New Yorkers to live with dignity and security

### 3 SUSTAINABILITY

New York City will be the most sustainable big city in the world and a global leader in the fight against climate change

### 4 RESILIENCY

Our neighborhoods, economy, and public services will be ready to withstand and emerge stronger from the impacts of climate change and other 21st century threats

# NYC'S FOODPRINT | WHY PLANTS



Globally, livestock accounts for appx **14.5% of all GHG emissions**



**Meat and dairy make up disproportionate share** of food-related emissions



Dietary **emissions of meat-eaters can be twice as high as dietary emissions of people on a plant-based diet**



**Significant public health benefits** (lower risk of obesity, heart disease, type 2 diabetes, and certain types of cancer)



Fewer livestock equals **major reductions in water usage and pollution**



# REDUCING NYC'S FOODPRINT: POLICY PROPOSALS



## INFORMATION

Seek to raise public awareness of the benefits of reduced meat and dairy consumption, and can be used as antecedents for additional measures.

Such policies may include Meatless Monday resolutions, public awareness campaigns, recognition in city climate action plans, and carbon footprint labels.



## DISTRIBUTION & PROCUREMENT

Harness the power of procurement. Seek to reduce a city's purchasing of meat and dairy products—either through food procurement policy and/or standards, or by creating programs in individual public institutions within the city.

### *Architecture of Choice*

- Google
- University
- Hospital



## ECONOMY

Alter price (or comparative price) of meat and dairy to influence consumer choices. No examples of such policies yet implemented, but taxes on meat considered in other countries.

Policies could take form of taxes on undesirable products; removal of existing subsidies for undesirable products; or subsidization of desirable alternative products.



# DISTRIBUTION | SOLUTIONS

Bring the plants to the people.

- Plant fruit trees and community gardens in parks to increase access to organic and local fruits and vegetables and increased soil diversity.
- Reduce Food Travel Emissions (**about 99% of city's distribution system is done by trucks, which rely on bridges and tunnels**).
- Identify suitable public and private vacant land for urban agriculture.

# ROOFTOPS & VERTICAL GARDENS | SOLUTIONS

## Endorse traditional and vertical farming

Cornell University assessed that the carbon footprint of vertical farming showed a higher carbon footprint than greenhouses, but both were lower than bringing food in from California.

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## Incentivize rooftop gardens

NYC has about 40,000 acres of roof space!

Reduces water run-off, keeps residents cooler (less need for A/C).



# EMPLOYMENT | SOLUTIONS

## Creating Green Opportunities

Incubate and harness "Silicon Alley" - Turn jobs currently in the food sector into  
**green jobs with competitive pay**

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Provide more **green job training programs** through educational programs at  
K-12 public schools and community colleges

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Incentivize farmers to **grow field crops and plant based proteins in**  
**peri-urban and rural communities**

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# NYC FOOD WASTE AND RECYCLING

## BY THE NUMBERS

**1 MILLION**

Tons of organic waste  
(Latest study 2017)

**\$411 MILLION**

Estimated cost of all  
exporting 2019 waste

**\$12.5 MILLION**

Potential earnings from  
sale of compost

**\$135 MILLION**

Estimated savings from reduced-  
weight shipping  
(with optimal organics processing)

**135,000 TONS**

Amount of food needed to  
meet food insecurity gap  
(less than 14% of organic waste)

**66% WASTED**

Almost two-thirds of food  
thrown away is edible

**\$22.5 MILLION**

Potential earnings from  
biogas energy  
(with optimal organics processing)

**#1 IN THE US**

NYC has the largest residential  
organics collection program

**350 MILLION**

“Replacing all animal-based items with plant-based replacement diets can add enough food to feed 350 million additional people”

# REDUCTION & PROCESSING | POLICY

Policy adjustments can extend the law,  
pushing a larger number of NY-ers to reduce their organic waste

## BUSINESS

- As of February 2019, very large food retailers (supermarkets or restaurants) are required to “put their food scraps to good use”
- Expected to divert about 50,000 tons of food waste from landfills every year
- **RECOMMENDATION** - extend the requirements to establishments under 15,000 sq feet and chains with under 100 locations—possibly using a waste production parameter
- **RECOMMENDATION** - offer tax-breaks to plant-based restaurants based on low-environmental-impact menus

## INDIVIDUAL

- Brown-bin composting service is delivered automatically only to buildings with 10 or fewer units and residential curbside pick is not city-wide
- **RECOMMENDATION** - flip the paradigm and require buildings above a designated capacity to offer composting, offering tax-incentives or penalties to promote compliance
- **RECOMMENDATION** - charge and require residents to recycle food scraps, paying “tax” upfront, similar to South Korea

# SURPLUS MANAGEMENT | SMALL BUSINESS

Small businesses are setting the example with plant-based sustainability practices that can be replicated on a large scale through the city



**GRAFFITI EARTH** - <http://www.graffitiearthny.com>

Restaurant with “vegetable-forward” menu and a policy of choosing “ugly” produce that typically goes to waste strictly for cosmetic, and non-nutritive reasons



**ANCOLIE** - <https://www.ancolie.co>

Plant-forward menu with locally sourced produce, zero plastic usage, discounts for reusable customer-owned containers, and delivery of all food scraps to local community garden



**UGLY PRODUCE IS BEAUTIFUL** - <https://www.uglyproduceisbeautiful.com>

NY-based organization famed for its social media presence aimed at ending perceptions of produce as inedible because of appearance, pointing at federal regulations that cause massive food waste



**GOTHAM GREENS** - <http://www.gothamgreens.com/>

Brooklyn-based rooftop greenhouse company that helps restaurants and grocers source clean-energy produce and herbs from local facilities in NYC

# FOOD PRODUCTION | EMERGING TECHNOLOGY

Modern organizations like these are driven by utilizing  
or providing primarily plant-based materials

## SQUARE ROOTS

Hi-tech, organic, hydroponic urban farming that uses shipping containers to ensure consistency and protection against the elements.

## AMERICAN ORGANIC ENERGY

Robust anaerobic digestion that turns organic waste and composting biogasses into energy (located in Long Island).

## NEWTON CREEK WASTEWATER

Large water treatment facility that turns over usable water in 6–8 hours and uses organic waste to create biogasses for energy.

*Expanding these programs would cyclically require and benefit from increased conversion to plant-based eating patterns.*



# FOOD PRODUCTION | LOCAL FARMING

Similarly, local farms and composting initiatives thrive on providing and using plant-derived organics

## HARLEM GROWN

Local, community farming focused on food justice, with programs for all ages aimed at teaching **fruit and vegetable farming and cultivation**.

Nonprofit, Harlem-based, with 10 facilities that range from soil-based growing to hydroponics.

## SKY VEGETABLES

Indoor, hydroponic, organic, rooftop farming in the Bronx that provides **local access to vegetables and seeds**.

Accepts SNAP, WIC, and EBT to help spread healthy, plant-based foods to those in need.

## BK ROT

Brooklyn based composting facility that turns **“10–12,000 pounds of collected organic waste into approximately three tons of rich black compost** each month.”  
*(BK Reader)*

Local, community driven, and uses little to no fossil fuels in transporting compost.

***\*In a city landscape with limited space, more local food can be produced from plant-based farming than animal agriculture***

# EDUCATION | EATING PLANT-BASED

## Touchpoints for educating the community about sustainability through plant-forward lifestyle choices

### Nutrition and Health

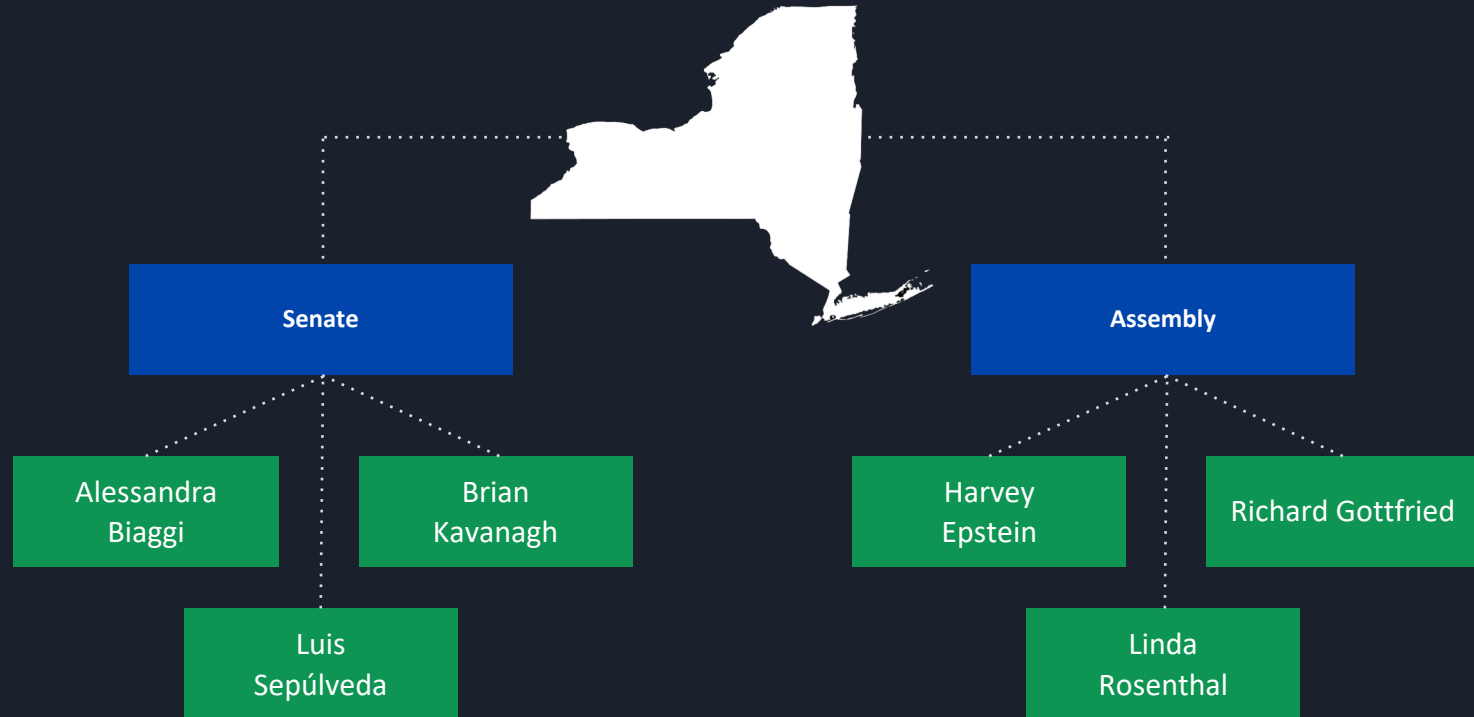
- Highlight the evidence supporting health benefits of plant-based diets
- Lean into positive effects on heart disease, type II diabetes, weight-loss, and longevity
- Highlight the nutrients derived from plants
- Educate consumers about different types of plant foods and ways to cook them to ensure they understand how to meet their typical needs

### City-Sponsored Programs

- Beyond understanding how to sustainably and nutritiously feed oneself, individuals should understand the various mechanisms at local and city-wide levels they can use to combat their own food insecurity: SNAP, WIC, and EBT programs and eligibility, food banks, food rescues, and other government and private programs.
- Additionally, residents should be better informed in a large-scale, public, and modern way about what's available to them for local composting, food surplus sharing, city programs for collection, and tax breaks available for green initiatives.

**To succeed, NYC must adequately fund appropriate staffing for city-run agencies, schools, and communities, including nutritionists, and wellness coordinators, coupled with mass-marketing initiatives on the level of the Vision Zero campaign.**

# CURRENT PLANT-BASED SUPPORTERS: STATE LEVEL



# RECENT INITIATIVES | NEW YORK STATE

## Health Care

### **BILL NO S1471A/A4072**

#### **Requires Plant-based Food Options in Hospitals**

**Sponsor:** Assemblyman Richard Gottfried,  
Senator Brad Hoylman

*Passed Assembly and Senate as of June 3, 2019,  
Governor's signature pending*

#### **The bill requires that:**

- Hospitals offer patients a plant-based food option as an alternative to every meal or snack offered
- All hospital written materials describing food options shall include the availability of a plant-based food option

### **NEXT STEPS**

Request amendment to have language flipped:

*Plant-based menu = default option*

*Meat option = alternative available upon request*



# RECENT INITIATIVES | NEW YORK STATE

## School System

### BILL NO A01624

**Requires Public Schools to Offer Plant-based Food Options in Food Service**

**Sponsor:** Richard Gottfried

*Referred to the Education Committee  
on January 16, 2019*

#### The bill requires that:

- Upon request of student, public schools shall offer a plant-based food option at every meal or snack
- All written materials shall include availability of plant-based option
- Plant-based food option shall be offered at no additional cost

### NEXT STEPS

Prior to Education Committee hearing, request language be flipped:

*Plant-based menu = default option*

*Meat option = alternative available only upon request*

# PROGRAMS IN MOTION | NEW YORK CITY

## Meatless Mondays

**All NYC public schools will have meatless Mondays beginning in the 2019–2020 school year**

- Students will be provided with all-vegetarian breakfast and lunch menus every Monday

### NEXT STEPS

- Advocate for Vegan Mondays, with a menu of fresh whole foods (meatless doesn't necessarily mean healthy)
- Advocate for Vegan Mondays in NYC offices and institutions

# PROGRAMS IN MOTION | NEW YORK CITY

## Plant-based Lifestyle Medicine Program

**\$400,000 Pilot program at NYC Health + Hospitals/Bellevue:** Intensive program for adults with chronic disease looking to reduce their cardiometabolic risk through a whole-foods plant-based diet

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### NEXT STEPS

Advocate for expansion of program to all NYC hospitals

# PROGRAMS IN MOTION | NEW YORK CITY

## Ban of processed meats in public schools

**RES 0238-2018 JANUARY 16, 2019**

### Resolution calls on NYC DOE to ban processed meats from NYC public schools

- NYC does not have authority to mandate this change. Committee called for reauthorizing Mayoral control of school system to make this and similar changes at local level

### NEXT STEPS

Advocate for state-wide ban of processed meats from all public schools and other state-controlled institutions



# PROGRAMS IN MOTION | NEW YORK CITY

## Climate Mobilization Act

**Passed by City Council in a 45–2 vote on April 18, 2019:** Package of bills to combat climate change with focus on requiring large residential and commercial buildings to reduce carbon emissions and requirements for green roofs and solar panels.

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### NEXT STEPS

- Advocate for provisions that provide incentives for green roofs that grow edible fruits and vegetables
- Advocate for provisions that require food-waste recycling

# PROGRAMS IN MOTION | NEW YORK CITY

## NYC's Green New Deal

**Launched by Mayor de Blasio on April 22, 2019:** \$14 billion new and committed investments to support 30% reduction in emissions by 2030 and other sustainability initiatives

- Phase-out of processed meat & 50% reduction in beef purchases

### NEXT STEPS

- Advocate for detailed specifics for implementation and strict time frame for phase-out and reduction
- Advocate for 50% reduction of all animal products



## SOLUTION:

# The Good Food Purchasing Program

### The Power of Procurement:

*“Governments have few sources of leverage over increasingly globalized food systems...public procurement is one of them. When sourcing food for schools, hospitals and public administrations, governments have a rare opportunity to support more nutritious diets and more sustainable food systems in one fell swoop.”*

Olivier De Schutter, U.N. Special Rapporteur on the Right to Food (2014)



# SOLUTION:

## The Good Food Purchasing Program

### 5 Core Values:

- 1) Local Economies
- 2) Valued Workforce
- 3) Environmental Sustainability
- 4) Nutrition
- 5) Animal Welfare

### Structure:

- Baseline Standard
- Certification-Based
- Flexible, Tiered Point System

### Policy Adoptions:

- Boston, DC, Chicago, San Francisco, LA, Cincinnati, Austin

An aerial view of a dense city skyline, likely New York City, with numerous skyscrapers and buildings. The image is overlaid with a semi-transparent dark grey layer. In the top-left corner, there is a large geometric shape composed of a blue triangle and a light green triangle. In the bottom-right corner, there is a blue triangle. The text is centered on the image.

# THANK YOU

THE VEGAN AMERICA PROJECT  
[veganamericaproject.com](http://veganamericaproject.com)

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