



HARVARD UNIVERSITY

**LIVING LAB FOR ADVANCING
A FOOD SYSTEM THAT SUPPORTS
PLANETARY HEALTH**

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HARVARD
UNIVERSITY

Sustainability

MY TALK AT A HIGH-LEVEL

1. Harvard's approach to sustainability
2. Living laboratory: a testbed for innovative solutions
3. Harvard's approach to sustainable food
4. Institutional foodservice: opportunity for scale
5. Research agenda: what's needed?

NEW sustainability strategy launched in May 2023



Accelerating action to protect the climate and environment, advance a more equitable society, and promote the wellbeing of people.

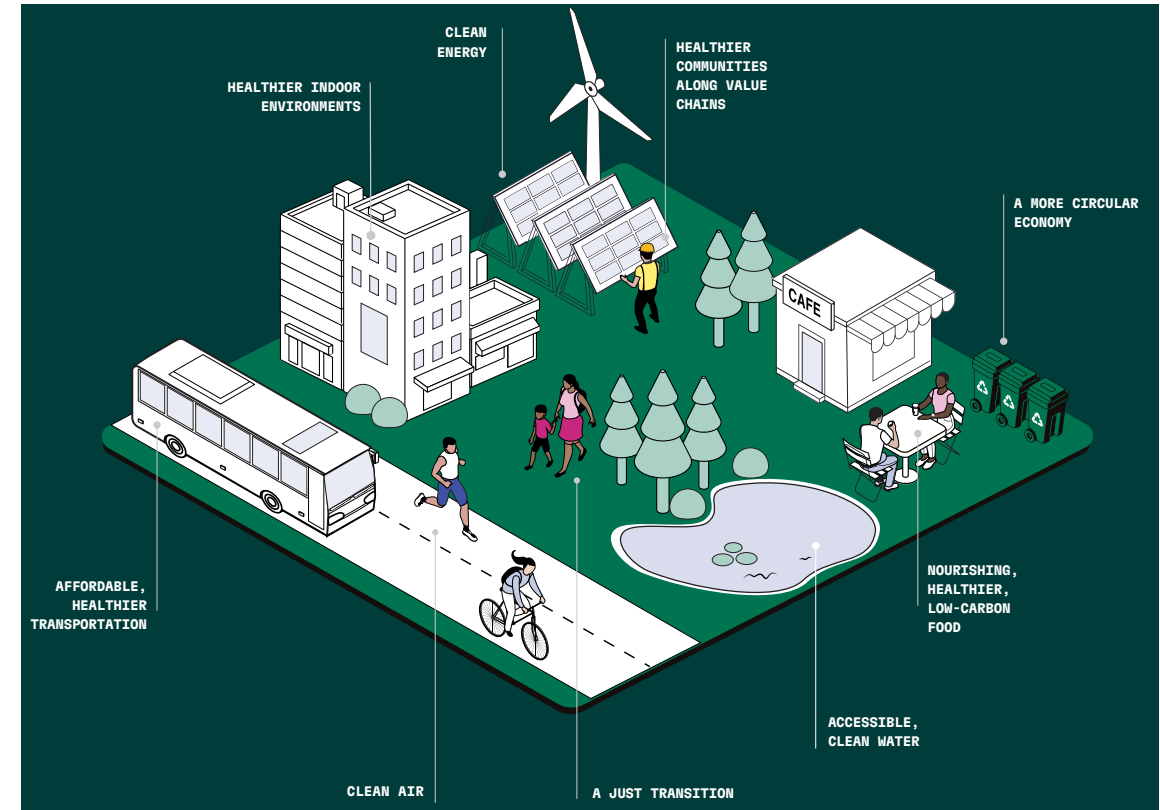
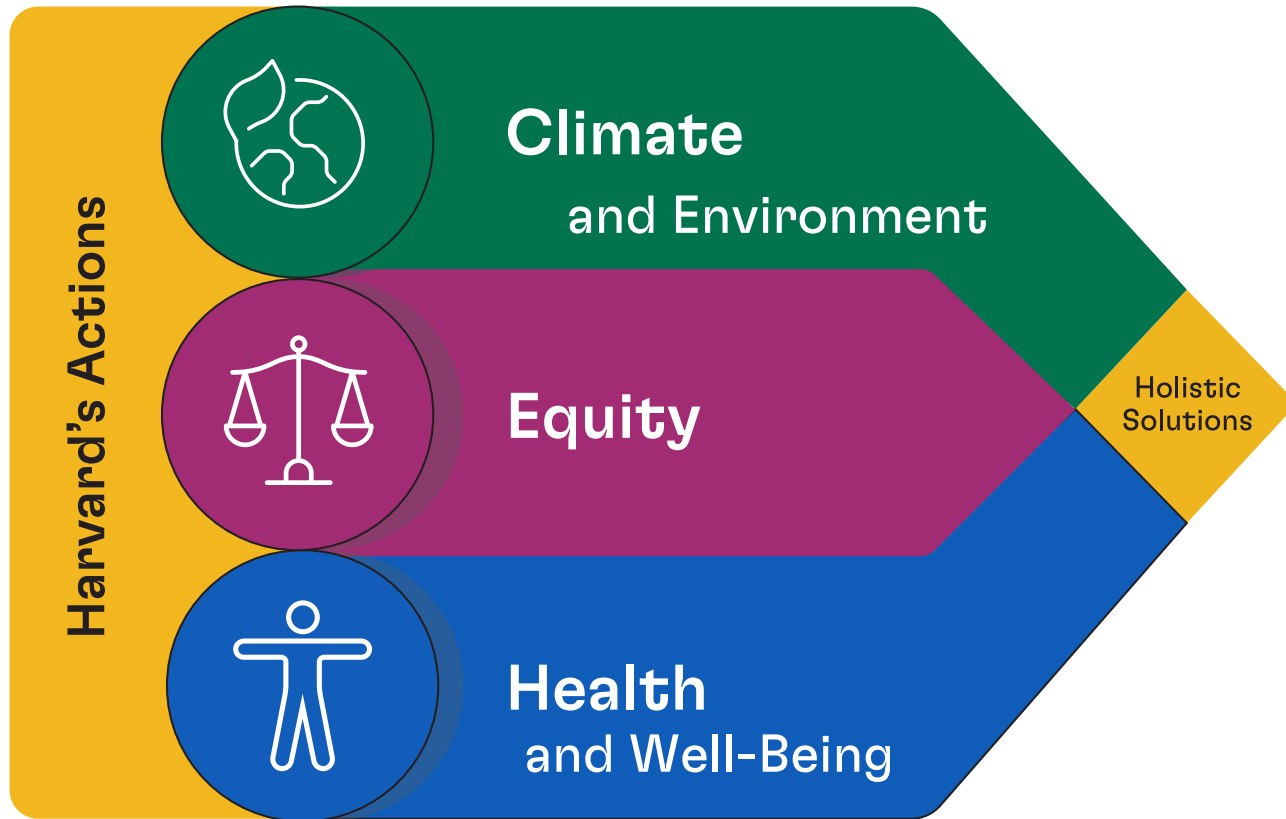
sustainable.harvard.edu/our-plan

Harvard University Sustainability Action Plan



Accelerating action to protect the climate and environment, advance a more equitable society, and promote the wellbeing of people.

ACCELERATING ACTION AT INTERSECTION OF CLIMATE, EQUITY, & HEALTH



LEVERAGING HARVARD'S RESOURCES AS A TESTING GROUND FOR INNOVATION AND CHANGE



12+

Harvard College,
12 graduate and
professional schools,
Central Administration,
and Harvard Radcliffe
Institute



650+
Buildings



26+
million
Square Feet



10+
million meals
served per year

50k+

Engaging more than 50,000 Faculty, students, staff
and Harvard community members

400k+

Connecting with more than 400,000 Harvard alumni.

HARVARD'S ROLE

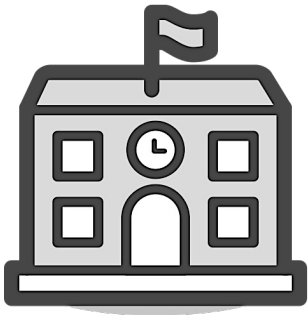
Pilot and prove new solutions and systems—scaling them to advance positive change globally



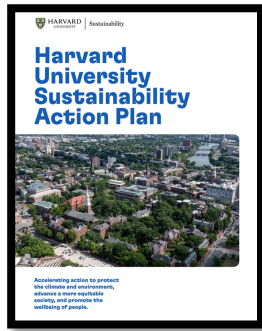
OFFICE FOR SUSTAINABILITY



HARVARD
Office for Sustainability



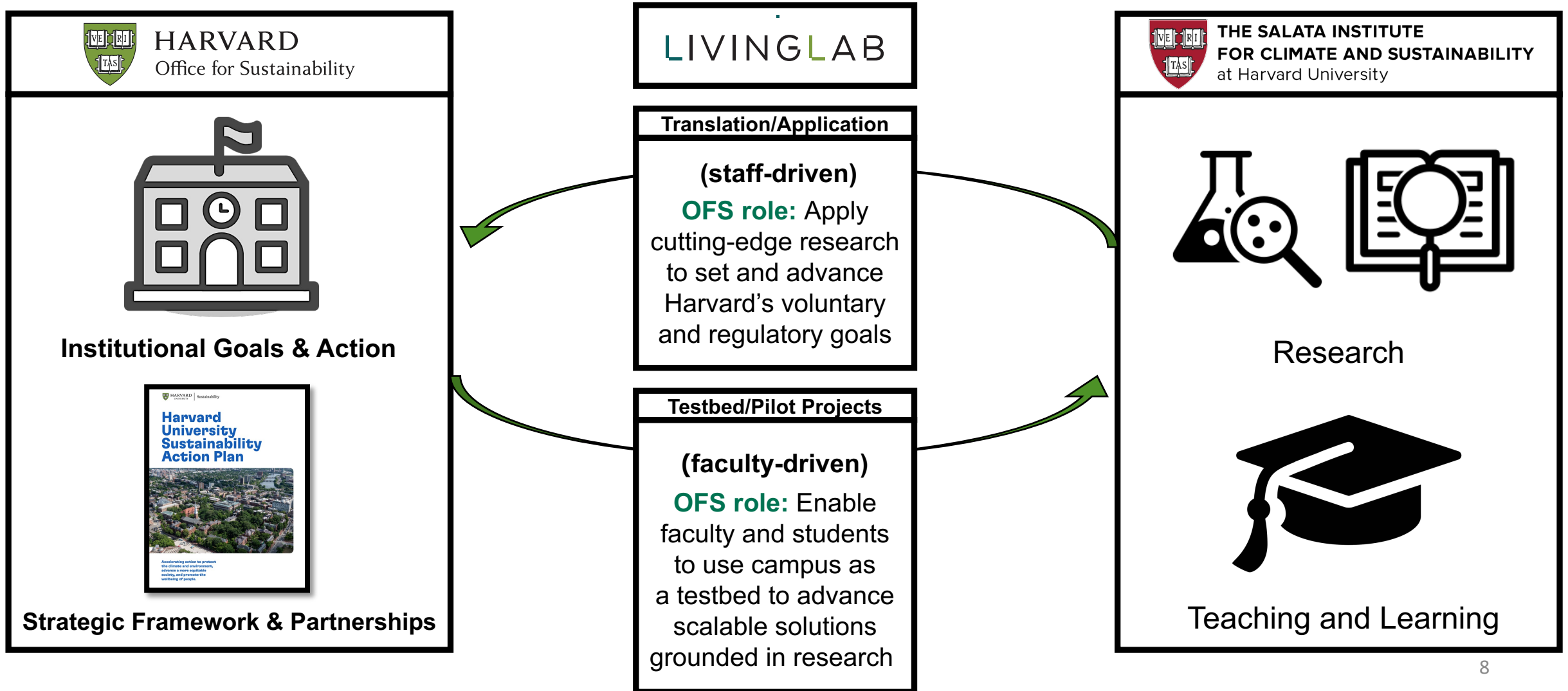
Institutional Goals & Action



Strategic Framework & Partnerships

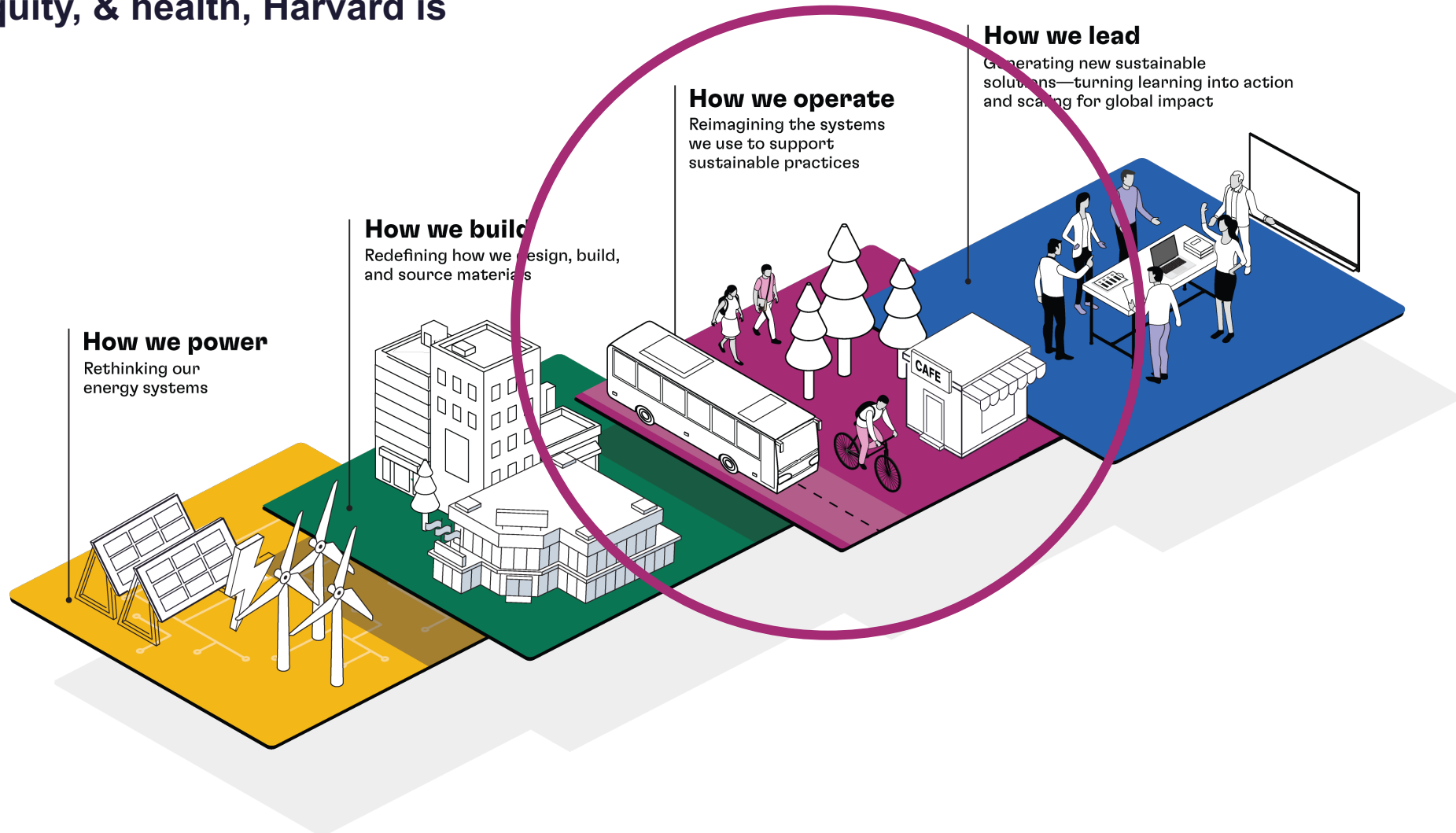
- Drive institutional sustainability strategy
- Co-create goals, priorities, and policies
- Manage organizational change
- Pilot, prove, and scale innovation
- Advance strategic partnerships
- Contribute to student leadership development

LIVING LAB: STAFF, FACULTY, AND STUDENTS CO-CREATING SCALABLE SOLUTIONS



PRIORITIES FOR THE UNIVERSITY

Through the lenses of climate and environment, equity, & health, Harvard is transforming:



SUSTAINBLE & HEALTHFUL FOOD STANDARDS

GOING BEYOND JUST CLIMATE

- **PROVIDE** a more healthful and sustainable food supply.
- **ALIGN** Harvard's food providers around a shared vision and common set of evidence-based food-related principles and aspirations.
- **DRIVE** changes in the marketplace through partnerships and by leveraging purchasing power
- **QUANTIFY** the environmental & health impacts of the food supply.
- **ENHANCE** food literacy among the Harvard Community, and beyond.
- **HELP** individuals match their actions with their values

MULTIDISCIPLINARY FACULTY FOOD STANDARDS COMMITTEE



Committee Chairs

- Walter Willett, HSPH, HMS
- Ari Bernstein, HSPH

Office for Sustainability

- Heather Henriksen
- David Havelick

Committee Members

- Emily Broad Leib, HLS
- Eric Rimm, HSPH
- Elsie Sunderland, HSPH, SEAS
- Jose Alvarez, HBS
- David Ludwig, HMS, Children's
- Gary Adamkiewicz, HSPH
- Rob Paarlberg, HKS

GROUNDING IN THE LATEST SCIENCE



Food is the single strongest lever to optimize human health and environmental sustainability on earth.



EAT-Lancet Commission on Food, Planet, Health. Willett, et al. January 2019.

Current Intakes vs Planetary Health Diet

Limited intake



Red meat



Starchy vegetables

Optional foods



Eggs



Poultry



Dairy foods

Emphasized foods



Fish



Vegetables



Fruit



Legumes

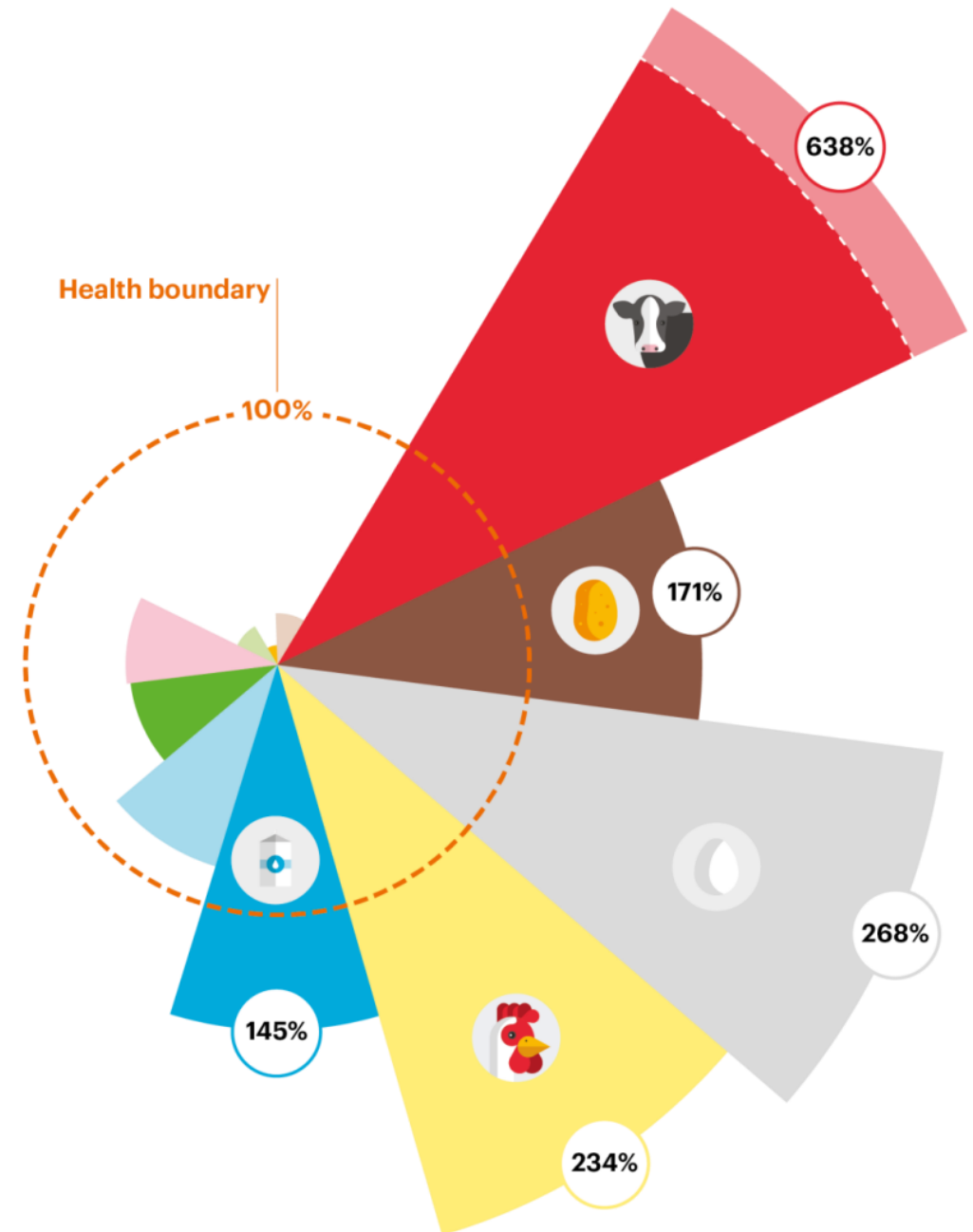


Whole grains



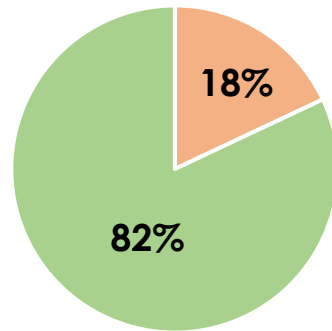
Nuts

North America

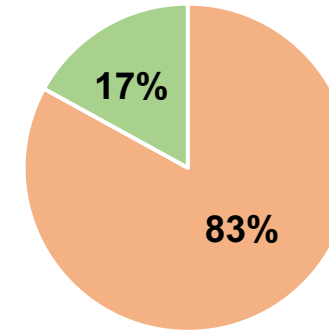


PLANT-BASED VS. ANIMAL-BASED AGRICULTURE

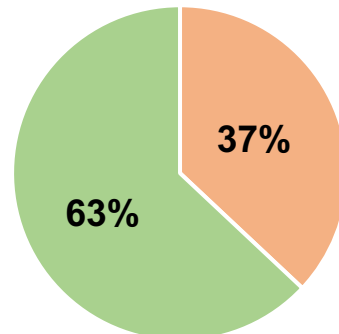
Source of calories



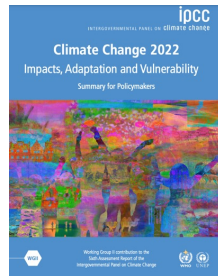
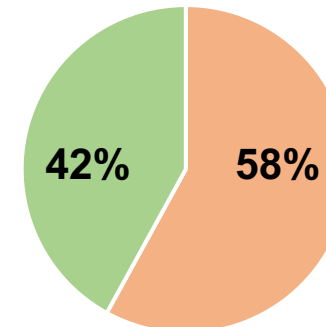
Agricultural land use



Source of protein



Share of GHGs



OTHER RESOURCES WE LEARNED FROM

MENUS^{of} CHANGE
The Business of Healthy, Sustainable, Delicious Food Choices



CENTER
FOR
GOOD FOOD PURCHASING



HARVARD UNIVERSITY SUSTAINABLE AND HEALTHFUL FOOD STANDARDS

April 2019

The Sustainable and Healthful Food Standards were developed by a multi-disciplinary faculty committee, with input from the Office for Sustainability, Council of Student Sustainability Leaders, and experts in the field. They were informed by research (including the 2019 report by the [FAT-Lancet Commission on Food, Planet, Health](#)) and designed to measurably increase access for students, faculty, and staff to sustainable and healthful food offerings. In addition, they aim to enhance food literacy and to optimize the impacts of food choices on people, animals, and the planet.

With these standards, Harvard University seeks to:

1. **Align** food providers around a shared vision and common set of evidence-based aspirations and principles.
2. **Quantify** the environmental and health impacts of the campus food system through reporting.
3. **Optimize** the campus food system for well-being, climate and community.
4. **Drive** changes in the marketplace through partnerships and by leveraging purchasing power.
5. **Enhance** food literacy across the Harvard community, and beyond.

CLIMATE and ECOSYSTEMS

- Reduce impact on climate change by increasing proportion of foods that have a smaller emissions footprint and are less resource-intensive.
 - Develop a plan to track food purchases by category (e.g., red meat, cheese, beans) in order to provide the Office for Sustainability with the information to effectively track climate impacts of purchased foods as part of the mission to track Scope 3 greenhouse gas emissions.
- Obtain and retain [Green Restaurant Certification](#) for major locations.
- Track proportion of produce items that are certified USDA Organic, and prioritize other sustainable farming practices (e.g., integrated pest management, certified transitional organic).
- Prioritize fish and shellfish purchases that are certified by Marine Stewardship Council (MSC), Monterey Bay Aquarium Seafood Watch, Best Aquaculture Practice, and Aquaculture Stewardship Council. Prioritize other sustainable practices related to seafood, as well.
- When possible and appropriate, use reusable foodservice ware. When reusable items are not possible, use [BPI-certified](#) compostable items that do not contain [PFAS chemicals](#).

CONSUMER WELL-BEING

FOOD SAFETY

- Maintain a comprehensive food safety system that aligns with [Harvard's Food Safety Standard](#).
- Help to ensure the safety of food through active participation in Harvard's Campus-Wide Food Safety program offered by the Office of Environmental Health & Safety. The program evaluates food service operations and provides strategies and resources, as well as recommendations for improvement.
- Label all major allergens for dining service and catering. Develop strategies to communicate all ingredients and ensure that food service staff are trained in Allergen Awareness.

NUTRITION

- Implement effective strategies to emphasize and promote foods with safe amounts of salt and sugar.



CLIMATE & ECOSYSTEMS



REDUCTION OF FOOD WASTE



CONSUMER WELL-BEING



WELFARE OF ANIMALS



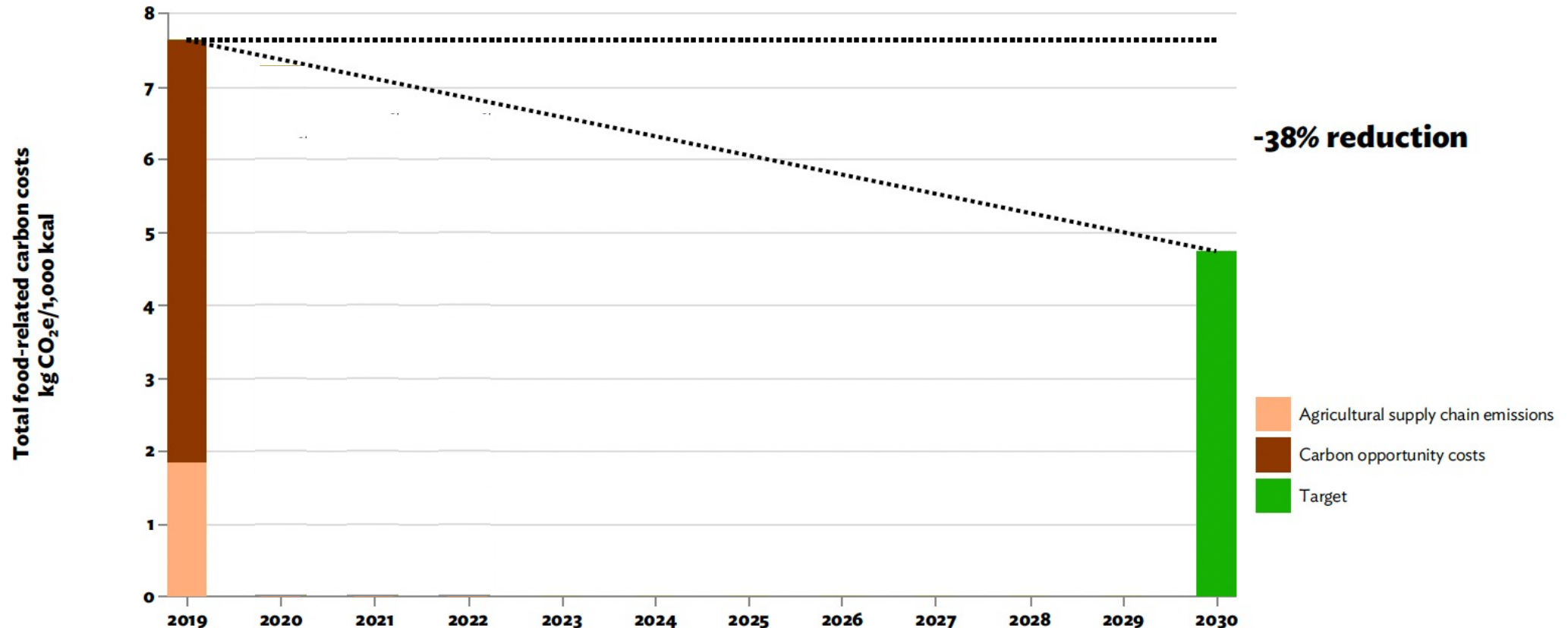
EDUCATION AND FOOD LITERACY



WELL-BEING OF WORKERS AND COMMUNITIES

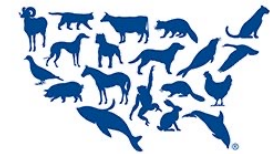


Harvard to cut food-related greenhouse gas emissions



Sources: Emission factors from Poore and Nemecek (2018) (agricultural supply chain) and Searchinger et al. (2018) (carbon opportunity costs).

PLANT-BASED CHEF TRAINING



**THE HUMANE SOCIETY
OF THE UNITED STATES**



INITIATIVES AIMED AT NUDGING BEHAVIOR

“

Driven by our mission to translate research into practice to contribute to the inter-generational well-being of people and the planet, our own office's food policy for events and meetings is **DefaultVeg**.

- Harvard Office for Sustainability

Default policies



Defaults in the dining hall

SANDWICH OPTIONS

SIGNATURES

- Smashed Chickpea and Apple Salad, Shaved Cucumbers, Avocado, Carrots, Arugula, Rustic Roll 🌱
- Grilled BBQ Portobello, Red Cabbage and Fennel Slaw, Charred Tomato Relish, Wrap 🌱
- Chimichurri Roast Sweet Potato, Asparagus, Peppers and Onions, Tomato, Cilantro, Aji Panca, Telera Roll 🌱
- TTLA (Tempeh "Bacon", Tomato, Lettuce and Avocado with Roast Garlic Vegan Mayo) 🌱
- Blackened Tofu with Miso Dressing, Greens and Avocado 🌱
- Vegan Egg Salad Sandwich 🌱
- Curried Tofu Salad Sandwich 🌱
- Edamame Mash Sandwich 🌱
- Vegetarian Niçoise Salad, Hard Cooked Egg, Arugula, Lemon EVOO, Crusty Roll 🌱
- Grilled Chicken, Provolone, Artichokes, Roast Peppers, Pesto Aioli, Ciabatta
- House Roast Turkey, Chopped Pickled Vegetables, Arugula EVOO, Whole Wheat Baguette

Catering Menu
design and ratios



GREEN
are the most
environmentally-
friendly



YELLOW
fall somewhere
in the middle



RED
have the highest
environmental
impact

Climate labeling

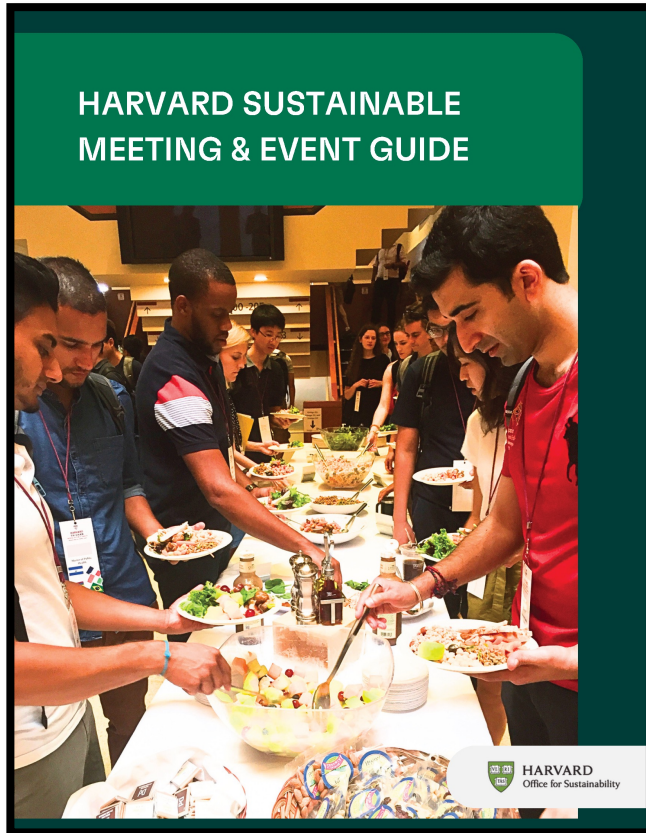
NUDGE-A-THON (HARVARD AND CHINESE UNIVERSITIES)



NEW ITEMS ON THE MENU



RESOURCES FOR OUR COMMUNITY



sustainable.harvard.edu/resources

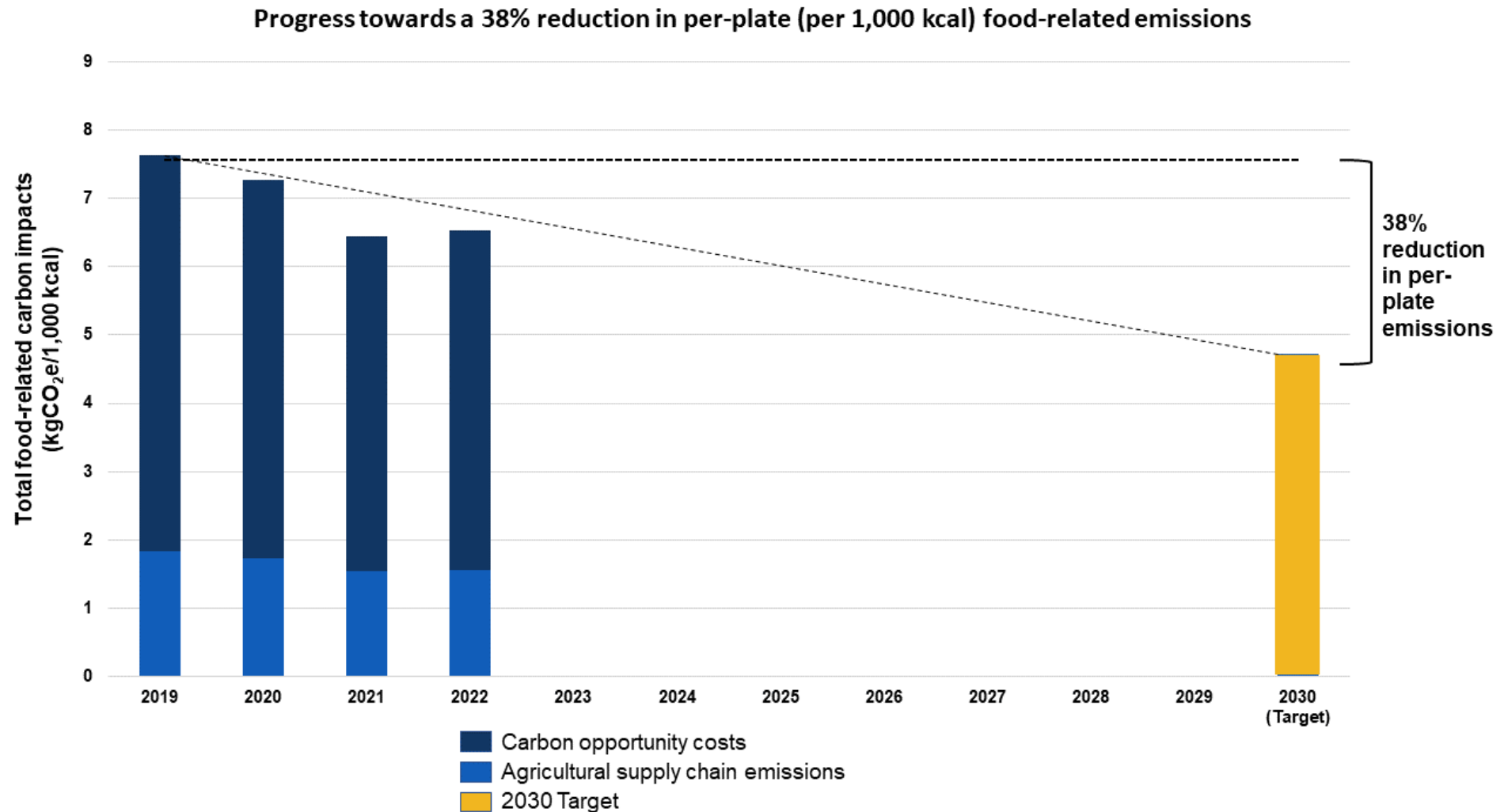


greenerbydefault.com/materials



wri.org/research/playbook-guiding-diners-toward-plant-rich-dishes-food-service

REDUCED EMISSIONS PER-CALORIE BY 12%



HIGHER EDUCATION CAN PROVIDE UNIQUE SOLUTIONS

Academic Programs



FOOD LAW
and POLICY CLINIC
HARVARD LAW SCHOOL



BROOKS MCCORMICK JR
ANIMAL LAW &
POLICY PROGRAM
HARVARD LAW SCHOOL



HARVARD T.H. CHAN
SCHOOL OF PUBLIC HEALTH



Harvard John A. Paulson
School of Engineering
and Applied Sciences

i-Lab (start-ups)



Harvard
innovation labs

Radcliffe Accelerator Workshops

“Setting a Strategic Agenda Towards Promoting Sustainable Diets via Institutions”

“Plant Futures: Equipping and Empowering the Next Generation of Leaders That Will Accelerate the Transition to Plant-centric Food Systems”



Courses

The Great Food Transformation
Prof. Sparsha Saha

Opportunities in the Plant-based Economy
Prof. Max Bazerman

Engineering Problem Solving and Design
Prof. Julia Lee

Faculty & Foodservice



INSTITUTIONAL FOODSERVICE = IMPACT

1. Can leverage purchasing power to send market signals
2. Can shift people's eating habits by changing the food environment
3. Can serve as living laboratories (pilot, prove, scale)

(SOME) RESEARCH NEEDS THAT WILL REQUIRE TRANSDISCIPLINARY APPLIED RESEARCH

- Surveillance systems to monitor trends in access, consumption, procurement, and agricultural practices
- Search for optimal messaging to inform strategic intervention design
- Pilot and model innovations for shifting institutional foodservice towards more sustainable practices
- Test interventions that guide diners toward more sustainable choices
- Leverage simulation modeling to identify what the “ideal” set of procurement standards should be
- Test strategies for dismantling existing practices that damage the environment and human health
- Identify effective dissemination and implementation strategies of best practice standards across institutions
- Explore how policies can be leveraged to support widespread adoption of effective institutional practices
- Develop new plant-based foods and innovative recipes

** From the Radcliffe Accelerator Workshop: “Setting a Strategic Agenda Towards Promoting Sustainable Diets via Institutions”*

CONNECT WITH HARVARD



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