

FOOD SYSTEMS CONSIDERATIONS FOR RI ACT ON CLIMATE

photo: Pat's Pastured (East Greenwich, RI)

EC4 ADVISORY BOARD MEETING • APRIL 27, 2022



Julianne Stelmaszyk | Director of Food Strategy, RI Commerce
Nessa Richman | Network Director, RI Food Policy Council

CAPITAL
ACCESS

CLEAN
AIR

SUPPORTIVE
POLICY

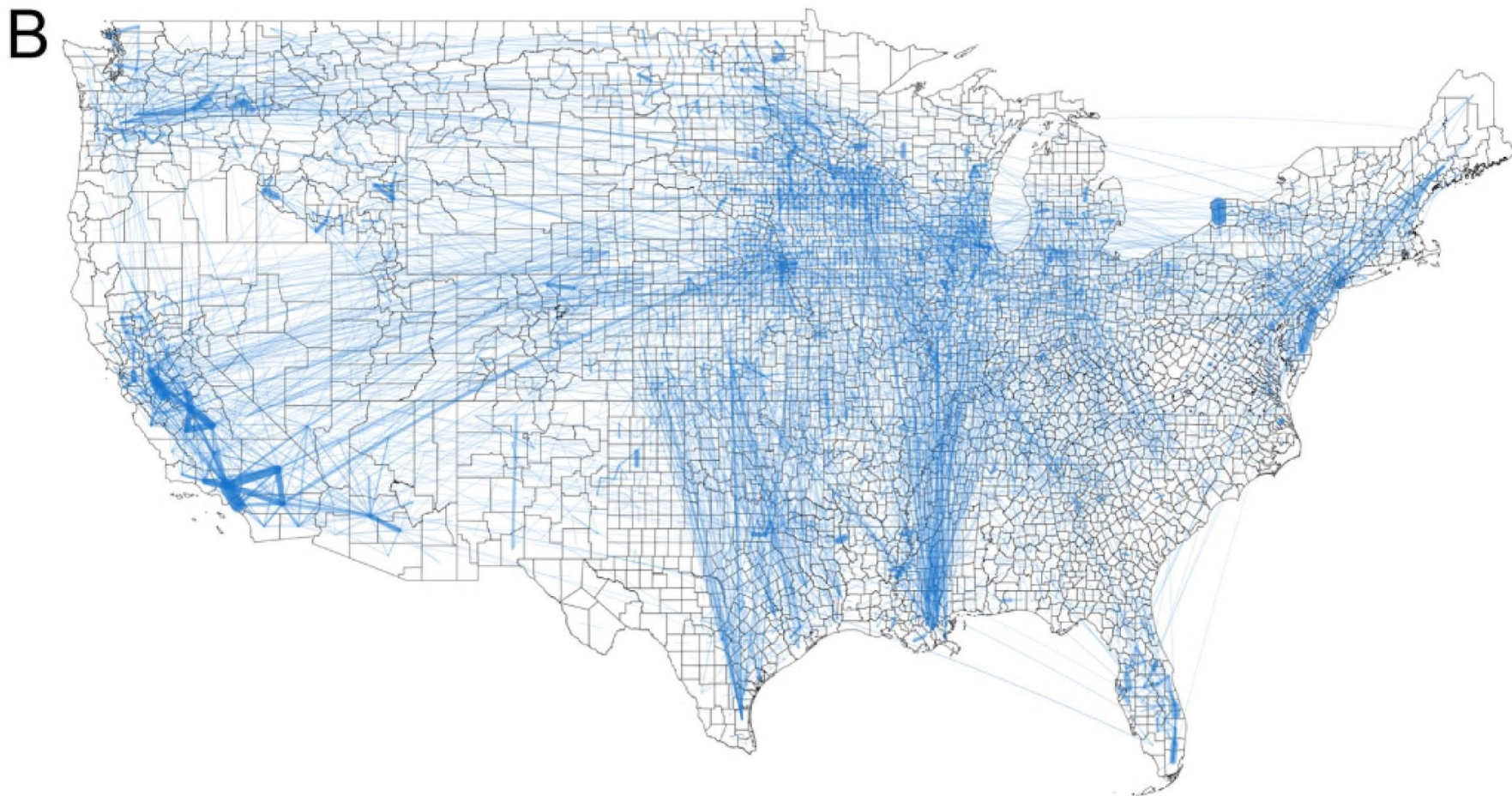


LAND
ACCESS

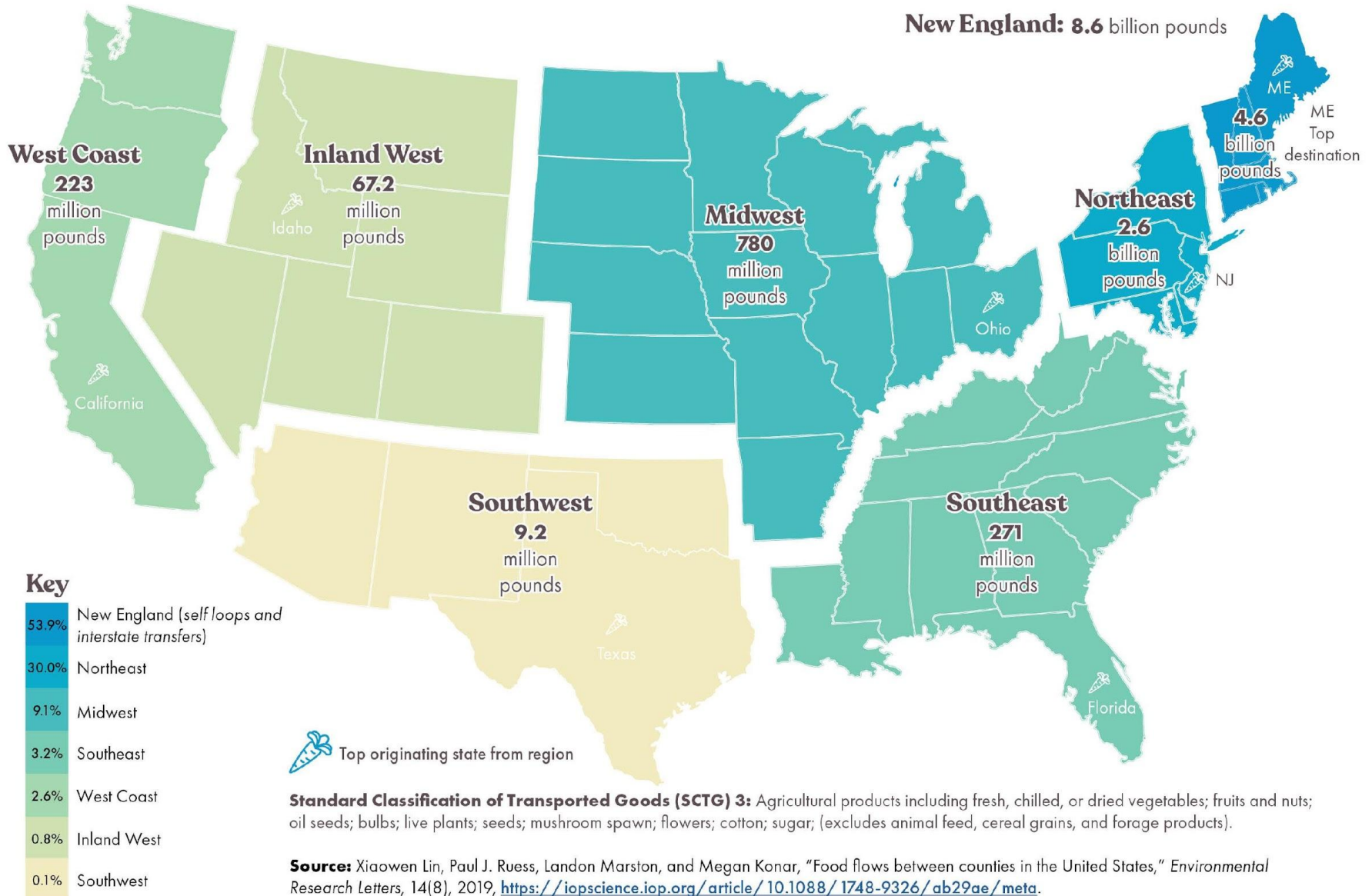
CLEAN
SOIL

CLEAN
WATER

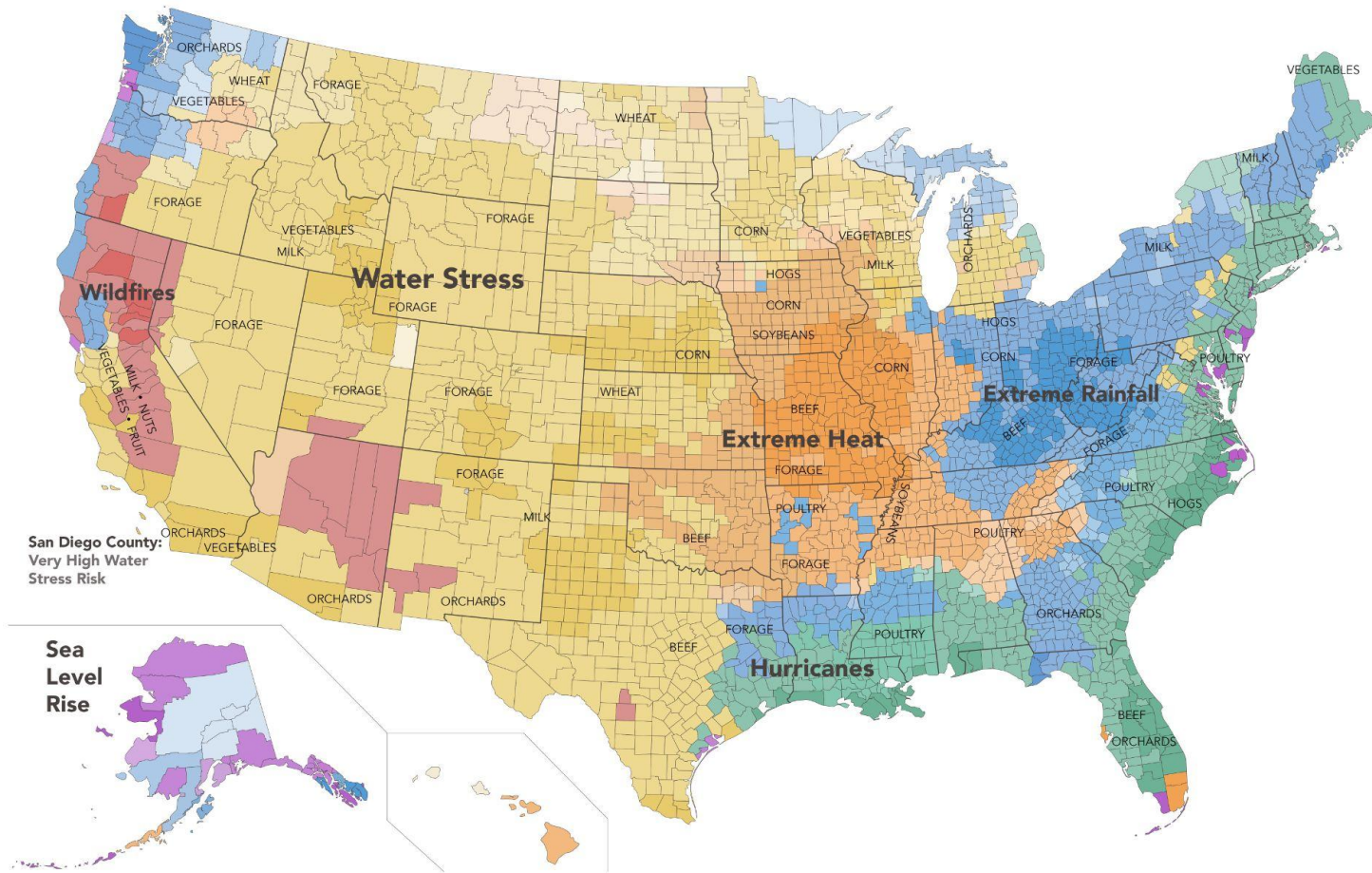
Food Flows: Downscaled to All Counties



Agricultural Product (SCTG 3) Flows Into New England



Major Climate Risks by US Agricultural Production Regions



Sources: Stuart A. Thompson and Yaryna Serkez, "Every Place Has Its Own Climate Risk. What Is It Where You Live?," *The New York Times*, www.nytimes.com/interactive/2020/09/18/opinion/wild-fire-hurricane-climate.html. Based on data from Four Twenty Seven. Major agricultural products data based on USDA Ag Atlas Maps.

FOOD STRATEGY PRIORITIES FOR 2022

In 2017, RI launched its first-ever statewide food strategy envisioning a sustainable, equitable food system that is uniquely Rhode Island; one that build on our *traditions, strengths, and history* while encouraging *innovation*.



AN ACTIONABLE VISION FOR FOOD IN RHODE ISLAND



INTEGRATED FOCUS AREAS:

Preserve & Grow Agriculture, Fisheries Industries in Rhode Island

Enhance the Climate for Food & Beverage Businesses

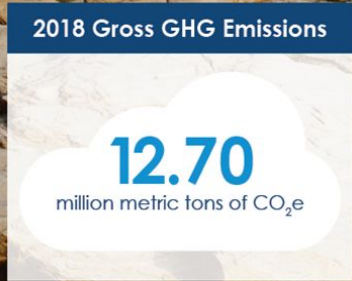
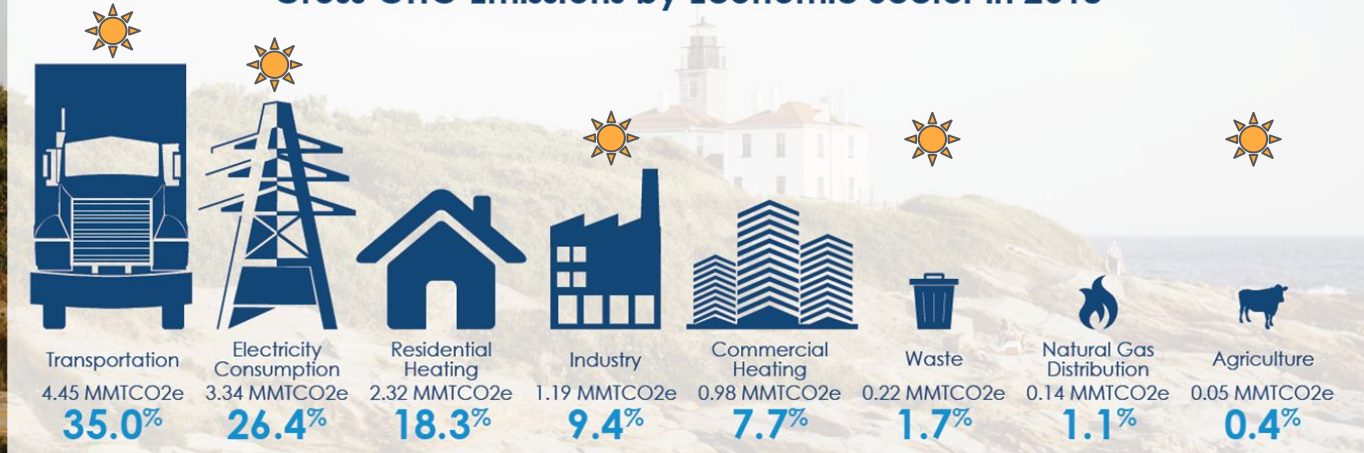
Sustain & Create Markets for Rhode Island Food, Beverage Products

Ensure Food Security for all Rhode Islanders

Minimize Food Waste & Divert It from the Waste Stream

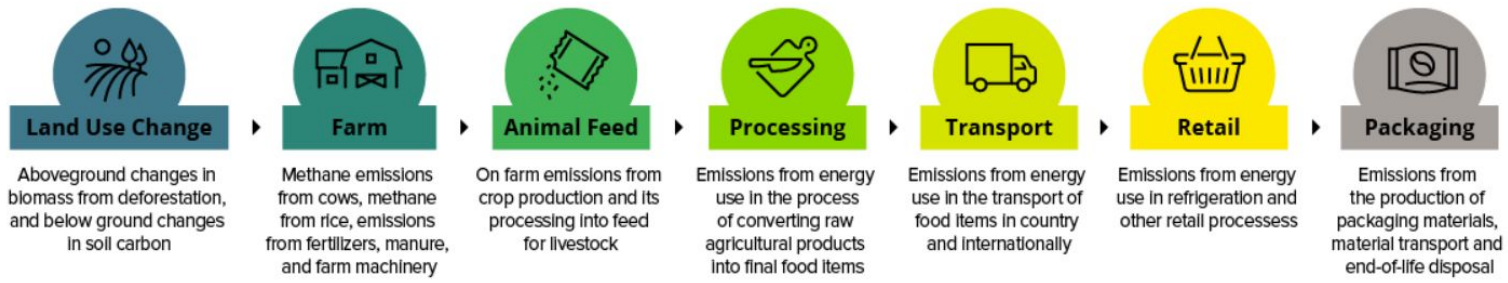
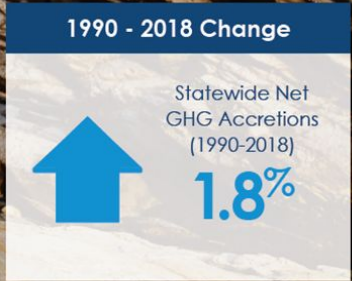
FOOD SYSTEM x CLIMATE

Gross GHG Emissions by Economic Sector in 2018



RI Greenhouse Gas Emissions 1990 v. 2018

SECTOR	CHANGE IN MMtCO ₂ e	PERCENT CHANGE	TREND
Transportation	-0.52	-10.4%	↓
Electricity Consumption	0.52	18.5%	↑
Residential Heating	-0.05	-2.0%	↓
Industrial Heating & Processes	0.38	46.5%	↑
Commercial Heating	-0.17	-14.8%	↓
Other	-0.24	-36.9%	↓
Total	0.22	1.8%	↑



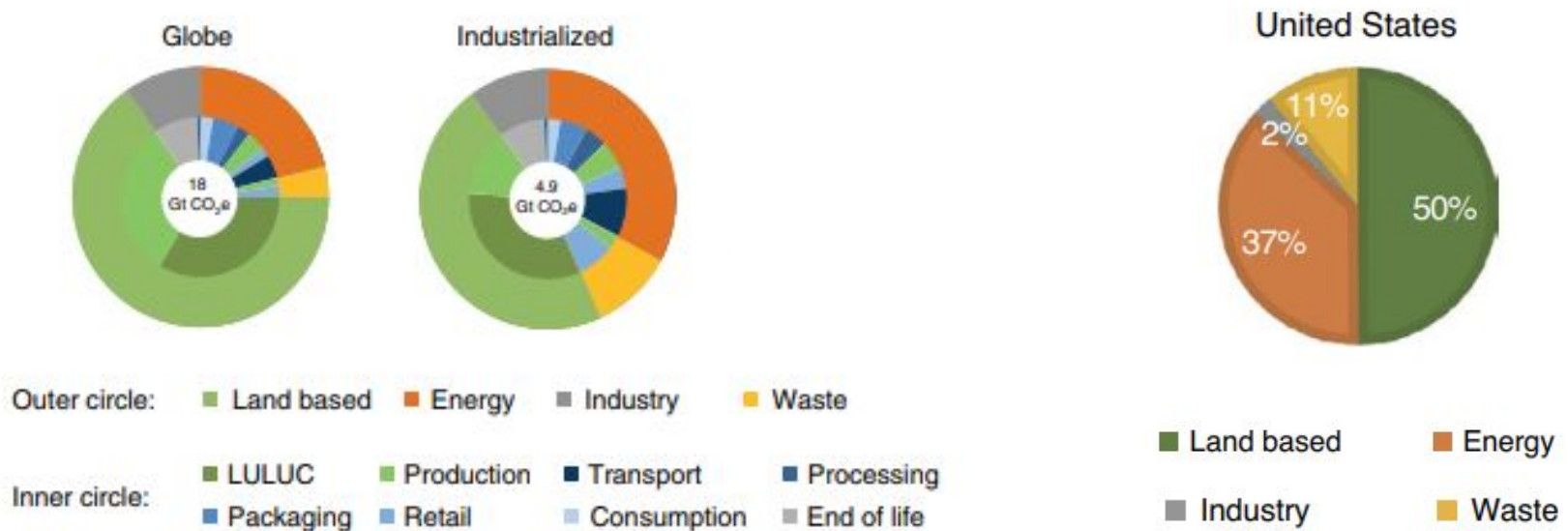
source: [Neufeld, Visual Capitalist \(2020\)](#)



FOOD SYSTEMS ARE
RESPONSIBLE FOR
 **$\frac{1}{3}$ OF GLOBAL GHG
EMISSIONS**

source: Cippa, Solazzo et al. *Nature* (2021)

37% OF US FOOD EMISSIONS COME FROM ENERGY (PACKAGING AND TRANSPORTATION)



source: Cippa, Solazzo et al. *Nature* (2021)

GHG Emissions from RI Food Waste?



TONS OF COMPOSTABLE WASTE
GOING INTO THE CENTRAL RI
LANDFILL (2017)

CLIMATE MITIGATION STRATEGIES VIA FOOD SYSTEM

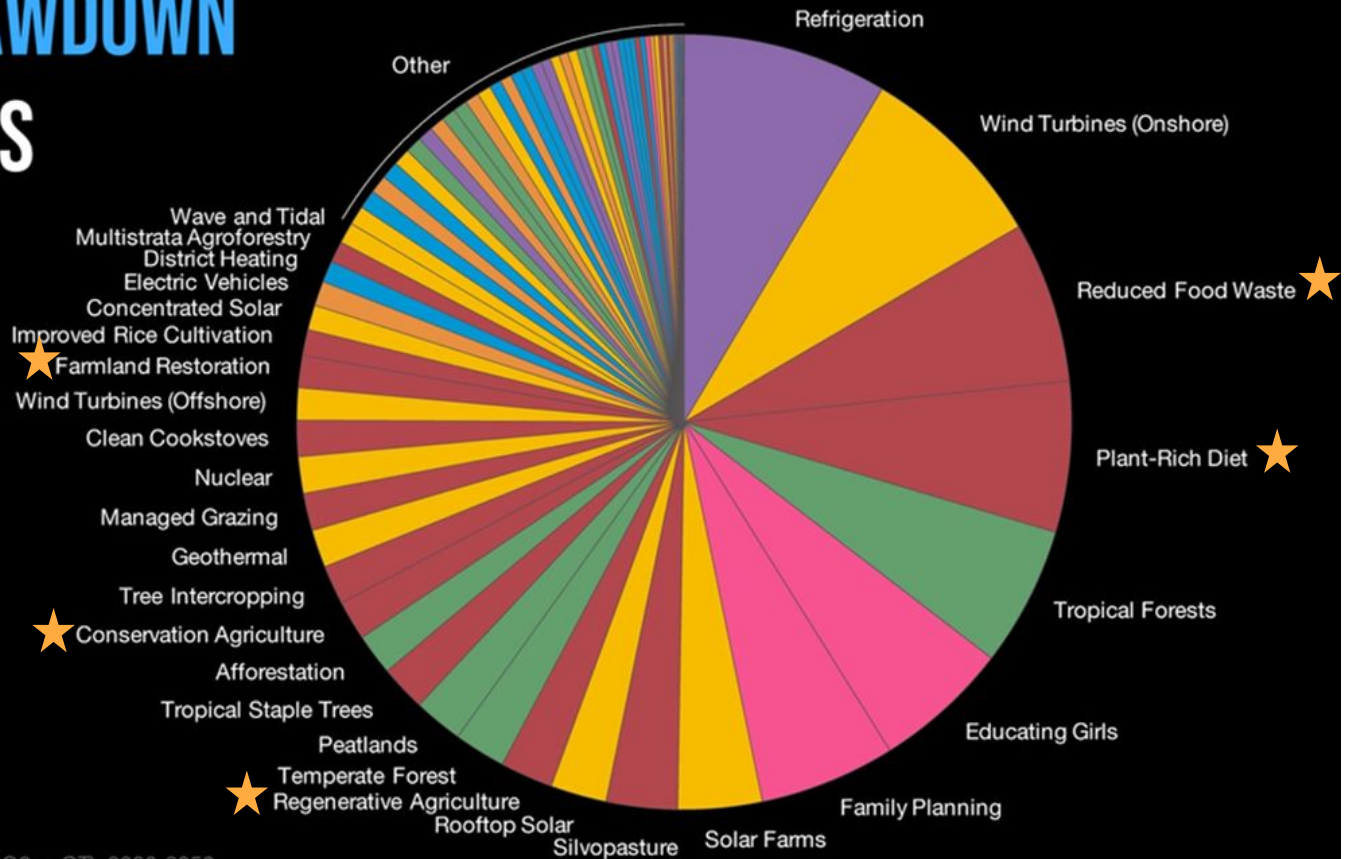
PROJECT DRAWDOWN

80 SOLUTIONS

CO2-EQ: 1,035 GT

COST: \$29.6T

SAVINGS: \$74.4T



Ranked by potential emissions reduction (CO2eq GT), 2020-2050, as modeled in Project Drawdown's Plausible Scenario (2017).



FOOD SYSTEM SOLUTIONS

A person wearing a yellow turban and a patterned shirt is working in a field of green plants. The background shows a dense line of trees under a hazy sky.

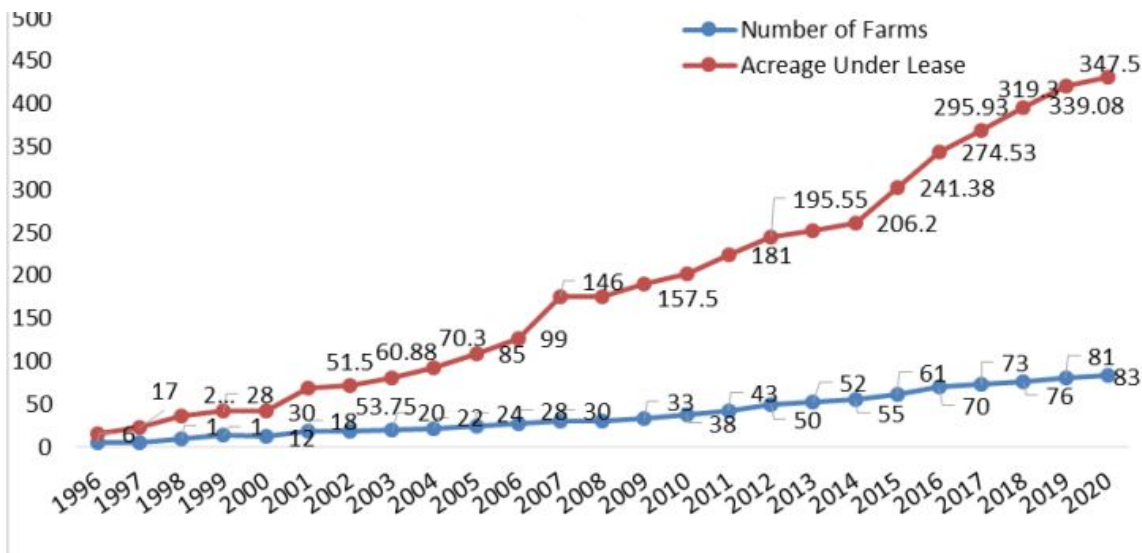
THE GOOD NEWS:
**AGRICULTURAL LAND AND
PRODUCTIVE OCEANS
REPRESENT HUGE CARBON SINKS**

5 CORE PRINCIPLES OF REGENERATIVE AGRICULTURE



RI AGRICULTURE & AQUACULTURE

Aquaculture Farms & Acreage Under Lease



- 55,000 acres of farmland
- 1,200+ crop farms
- 347 acres under aquaculture production

POTENTIAL FOR CONSERVATION PRACTICES TO REDUCE GHG EMISSIONS IN RI

American Farmland Trust estimates that...

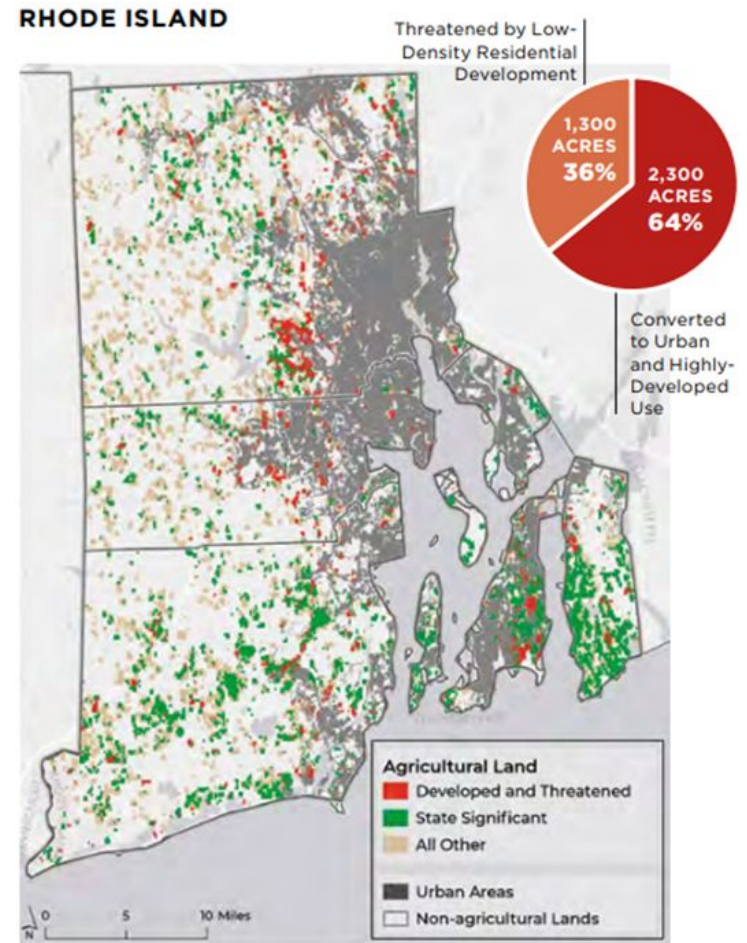
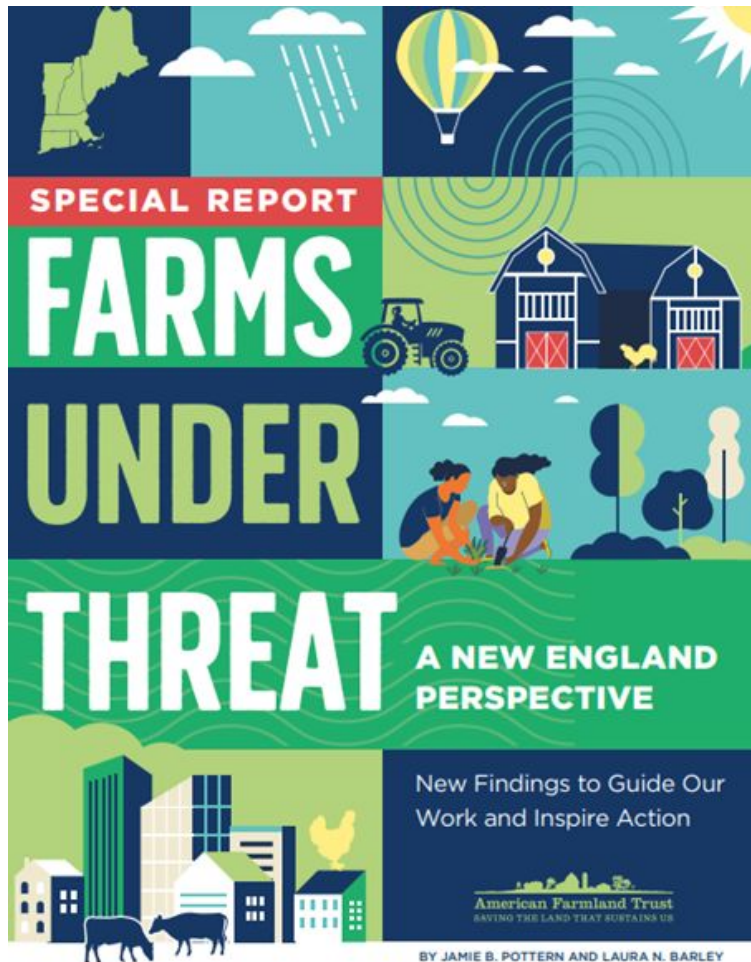
Rhode Island could reduce 1,800 to 4,200 tonnes CO₂e per year by adopting conservation practices on existing croplands which equates to planting 30,000 - 70,000 new trees for a decade.

A win-win scenario that..

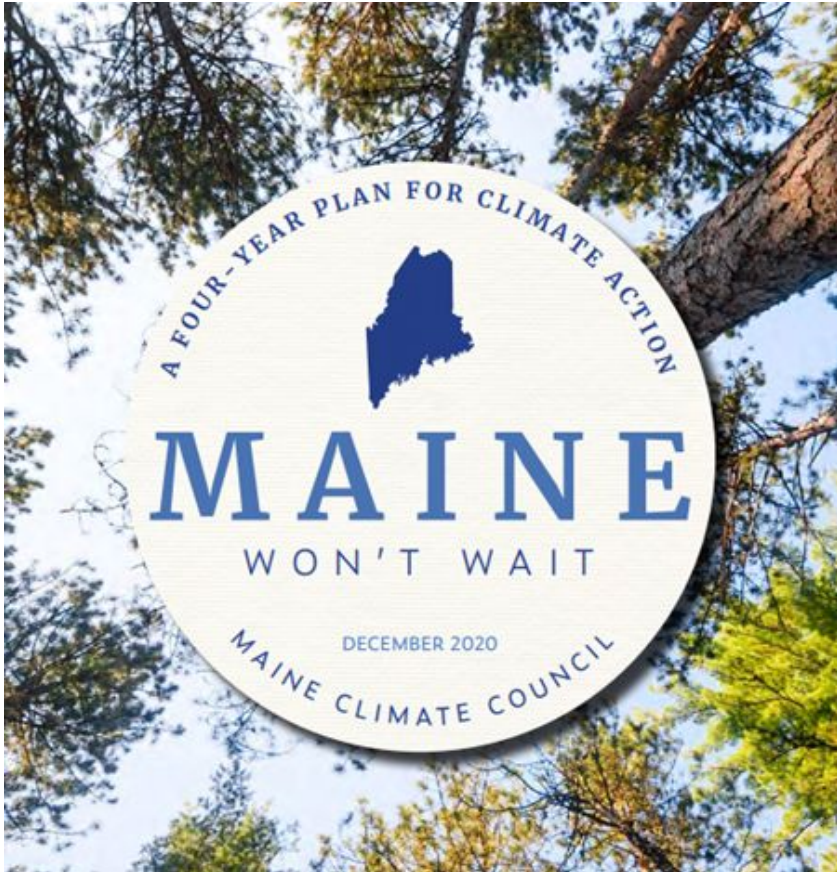
- improves long-term agricultural productivity and food security
- mitigates GHG emissions
- improves water quality

\$16,000/ACRE

HIGHEST COST OF FARMLAND IN THE NATION



FOOD SYSTEMS IN STATE CLIMATE PLANS



- Increase the amount of food consumed in Maine from state food producers from 10% to 20% by 2025 and 30% by 2030 through local food system development
- Launch the Maine Seafood Business Council by 2022

A CLIMATE-SMART FOOD SYSTEM CONSIDERS...

- How we grow and distribute food
- Leverages ocean biomass as carbon sinks
- How and what we eat
- How we dispose of food waste and wasted food

OUR ASK:

- Include a food systems perspective on taskforce
- Include food systems in State climate plans



A close-up photograph of a honeycomb frame, likely from a beehive. The frame is made of light-colored wood or plastic and features a grid of hexagonal cells. Numerous bees, with their characteristic brown and black stripes, are seen crawling across the surface of the honeycomb. The bees are densely packed in some areas, particularly along the left edge, and more sparsely distributed in others. The lighting is bright, highlighting the texture of the honeycomb and the details of the bees. Overlaid on the center of the image is the word "QUESTIONS?" in a bold, white, sans-serif font.

QUESTIONS?

Connect with us

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RI FOOD
POLICY
COUNCIL



RHODE
ISLAND
COMMERCE