PROBLEMS SOLVED BY CONTROLLED ENVIRONMENT AGRICULTURE

PROBLEM 1

Unless we change, we will need two planet Earths to feed the population.

The UN has found the world will need ~ 50% to 70% more food by 2050, yet 70% of all freshwater is already dedicated to agriculture[1]

PROBLEM 2

Our food supply is dangerously unstable

COVID-19 exposed the unstable nature of America's food system, as shortages mounted across the country (and world) highlighting our reliance on uncertain imports

PROBLEM 3

We are relying heavily on imports that are harmful to the U.S., the planet and workers

69% of all fresh vine crops sold in the U.S. in 2019 were imported, according to the U.S. Department of Agriculture[2]

CEA: SOLVING FOR AGRICULTURE'S BIGGEST ENVIRONMENTAL & SOCIAL ISSUES

Winning Approach to Labor
- AppHarvest pays 41% higher than comparable jobs in Kentucky[a]
- A single entry-level worker earns 74% of Rowan County's median household income of $36,411[b]

Highly Water Efficient
- 90% less water than conventional agriculture[c]
- 100% recycled rainwater
- 2.76 million sq ft of roof

Free of Chemical Pesticides
- Integrated pest management
- Employee and customer health are the priority

No Agriculture Runoff
- Closed loop water system
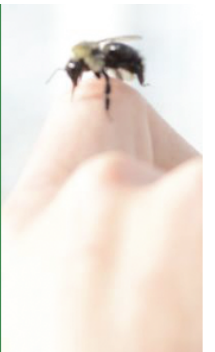- Keeps nutrients in the plants, local waterways

Less Food Waste
- Traditional agriculture pre-retail spoilage rate is 34%[d]
- Controlled environment agriculture food spoilage rate less than 10%[d]

Climate Resilient
- Adaptation to climate risks
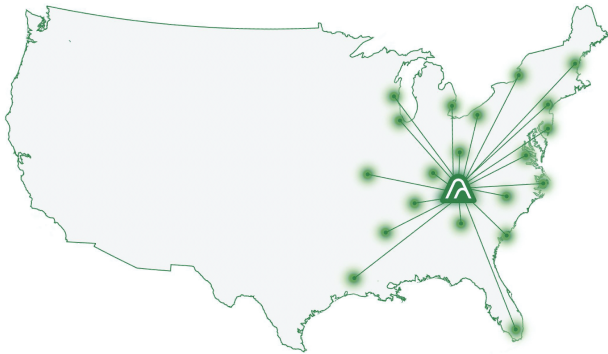- Avoid soil depletion
- Grow 365 days per year

1. Water for Sustainable Food and Agriculture Report, Food and Agriculture Organization of the United Nations.
2. Average rate of imports of bell peppers, tomatoes, and cucumbers. Vegetables and Pulses Yearbook, United States Department of Agriculture Economic Research Services.

APPHARVEST IS BUILDING A RESILIENT FOOD SYSTEM

APPHARVEST IMPACT BY THE NUMBERS

DOMESTIC IMPACT ~70% of U.S. population within a day's drive	80% Less diesel expected to be used in transportation[a]	90% Less water usage than conventional agriculture[b]	10 Acre rainwater retention pond at Morehead facility	~30x Higher yields than open-field agriculture
365 Days of growing indoor eliminates weather and seasonal constraints	0 Zero agricultural runoff due to unique closed-loop system	1,000s Of projected jobs in high unemployment areas	0 Soil usage, keeping carbon sequestered	40% Increase in lighting efficiency due to use of LEDs

NEW LOCAL SUPPLY CHAIN

This is the future of farming: ecologically responsible, locally supported, and utterly predictable.

DEVELOPING A ROBUST REGIONAL ECONOMY

As of June, 2021, AppHarvest has 505 employees.

$27 MILLION

ESTIMATED ANNUAL SALARY
IN KENTUCKY

- **2018** 4 employees joined
- **2019** 8 employees joined
- **2020** 157 employees joined
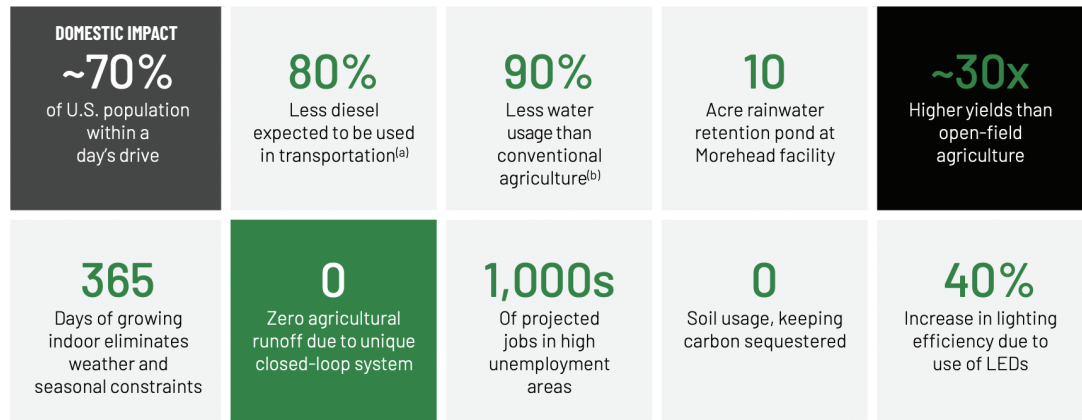- **2021** 336 employees joined

APPHARVEST SUPPLY CHAIN

AppHarvest is upending the outmoded paradigm of farming. Our technology will enable hyper-efficient facilities that can grow produce where it is consumed.

Through innovation, we can secure our food supply and democratize access to fresh, affordable nutrition.