AppHarvest

AppHarvest Introduction July 2021

Building a resilient food system for America in Appalachia

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A World Enduring an Agricultural Crisis

The world must start rapidly building controlled environment agriculture (CEA) facilities to secure future food production

The UN has found the world will need at least 50% more food by 2050, yet 70% of all freshwater is already dedicated to agriculture^(a)

Unless we change, we will need two planet Earths to feed the population 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 69% of all fresh vine crops sold in the U.S. in 2018 were imported, according to the U.S. Department of Agriculture

Western U.S. may be entering its most severe drought in modern history

BY JEFF BERARDELLI APRIL 12, 2021 / 6:46 AM / CBS NEWS

(a) United Nations Department of Public Information – Sixty-fourth General Assembly.

NEW LOCAL SUPPLY CHAIN

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





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**.

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Controlled Environment Agriculture: Solving for Agriculture's Biggest Environmental & Social Issues

Winning Approach to Labor

- Living Wage
- Fully paid health, dental, vision benefits
- 401K
- Stock options

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, not 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



Certified B Corp – Helps build a more resilient business

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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	O Zero agricultural runoff due to unique closed-loop system	1,000s Of projected jobs in high unemployment areas	O Soil usage, keeping carbon sequestered	40% Increase in lighting efficiency due to use of LEDs

Investing \$1 billion in Appalachia through development and high school container farm education program.



(b) International Journal of Environmental Research and Public Health

JOBS, JOBS, JOBS!



Expanded Economic Impact

AppHarvest Economic Development in Kentucky Our Growing Supply Chain



Data as of 6/15/21, does not include subcontractors

AgTech Ecosystem – Kentucky Can Lead

- Kentucky can be the leader in ensuring America's food supply chain
- AppHarvest's focus = Eastern Kentucky & Appalachia
- Supporting industry not just about AppHarvest
 - Diffused glass
 - ➢ Steel
 - ➤ LED lights
 - Technology, robotics
 - Associated research & education
 - > Agritourism
- Research Facility
- Connection to the Netherlands
- Rural-Urban Connection

AgTech could be a significant part of rebuilding Kentucky's economy

Funding Our Future

AppHarvest – Kentucky's newest publicly-traded company. To date, we have not received any government incentives or funding.

- Federal Support
 - Abandoned Mine Lands (AML)
 - Abandoned Mine Lands Economic Revitalization (AMLER)
 - Pilot program available to six states, including Kentucky
 - More flexibility
 - Appalachian Regional Commission
 - Interagency Workgroup on Jobs for Coal Communities
 - Infrastructure Bill
- State & Local Support
 - Cabinet for Economic Development
 - Kentucky Business Investment Program
 - Kentucky Enterprise Initiative Act
 - American Rescue Plan Act

Partnering to find development sites and supportive funding

Funding Our Future

American Rescue Plan Act (ARPA)

- Six major eligible areas for using these funds :
 Support public health response
 - Address the negative economic impacts of the public health emergency
 - <u>Target low-income communities</u>
 - Perform government services based on lost public sector revenue
 - Provide premium pay for essential workers
 - Invest in water, sewer, and broadband infrastructure

AppHarvest believes AgTech could be Kentucky's new economy

Richmond, KY



Broke Ground October 2020 60+ Acres of growing area 900

To Grow Vine Crops Broke Ground October 2020 15 Acres of growing area V

To Grow Leafy Greens