



Building a Movement from the Ground Up

2019 Environmental, Social,
and Governance Report

 AppHarvest



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Letter from Founder & CEO Jonathan Webb



With our partners across Appalachia, from community non-profits and universities to government leaders of both parties, AppHarvest is building a stronger food system, creating America's AgTech capital from within Eastern Kentucky.

This report details our efforts throughout 2019, as we prepared for the opening in fall 2020 of our first controlled environment agriculture facility. Among our 2019 accomplishments was recognition by B Lab as a Certified B Corporation, building on our initial decision to found AppHarvest as a Benefit Corporation because of our focus on putting people and planet first. We also expanded our AgTech education programs in Eastern Kentucky in an effort to grow our growers. These accomplishments paired with the start of construction in Morehead, KY, which has proven to be a new and exciting journey for our region.

Key to our efforts have been partnerships with AgTech leaders in the Netherlands,

which despite a land mass one-third the size of Kentucky is second only to the US in agriculture exports. The Netherlands utilizes high-tech indoor facilities to grow 30 times the fruits and vegetables on a single acre compared to traditional open-field agriculture. Leaders from government, education and industry have all joined with us to impart their knowledge, as we seek to build America's AgTech capital from within Appalachia.

Today's unprecedented times demonstrate just how vital it is to have a resilient and secure food system.

Our home is the ideal choice for that economic engine. Our region's hard-working men and women powered the country for decades, and their faith and grit ensure they will persevere.

We're working alongside them to build a more resilient economy for the future. By growing here, we're less than a day's drive to more than two-thirds of Americans. That lowers transportation costs by 80%, allowing our fresher produce to better compete against low-cost foreign imports.

This report represents the work our team has achieved in this transformational period. In times of uncertainty, we should benefit from long-term, well-developed solutions. We're proud of our impact and are both humbled and excited by the work ahead of us in 2020 and beyond.

Together, we can transform American agriculture.

A handwritten signature in black ink, appearing to read 'Jonathan Webb'.

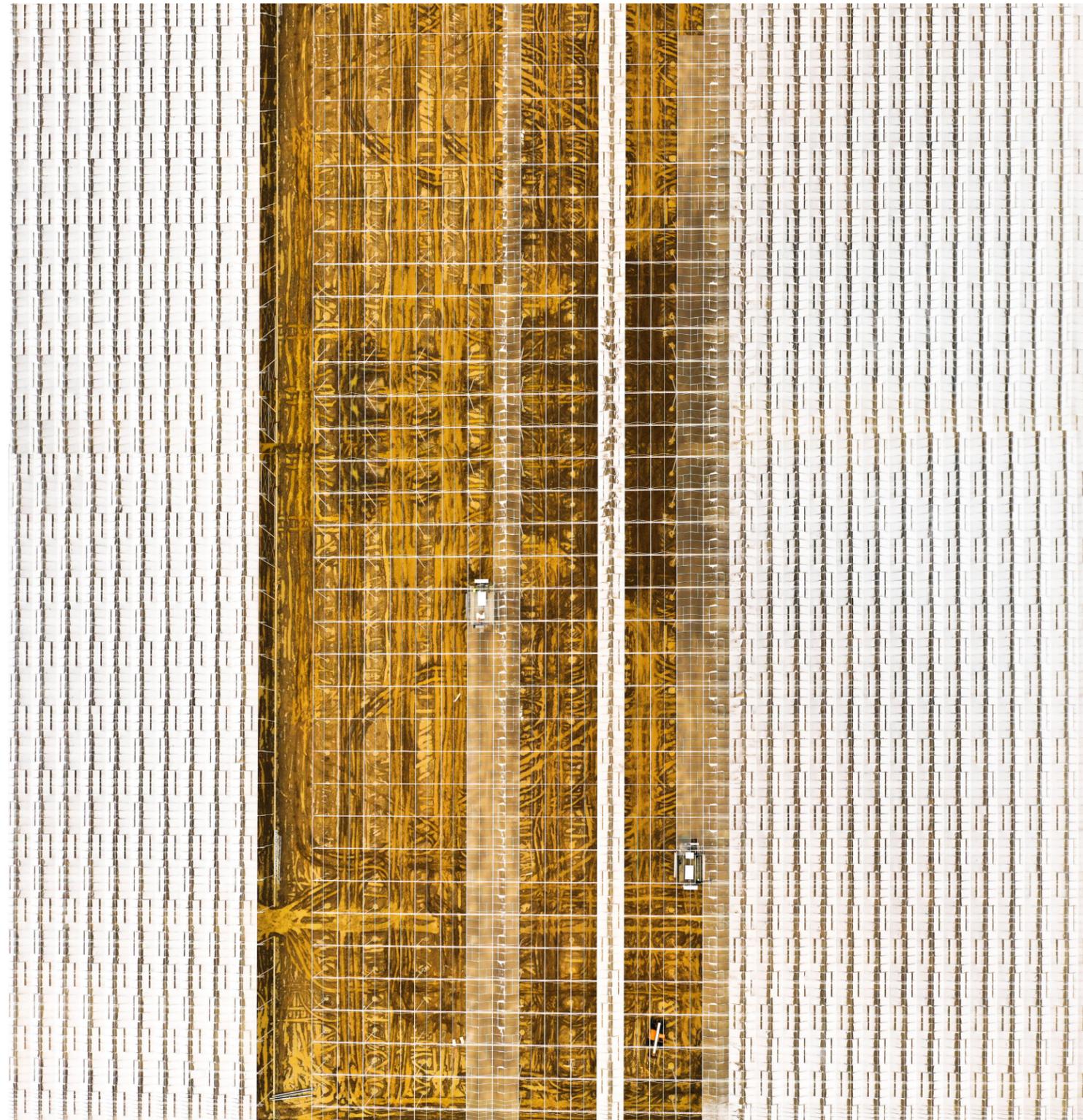
Jonathan Webb
Founder & CEO of AppHarvest

About AppHarvest

AppHarvest is working to create America's AgTech capital in Appalachia by building some of the country's largest indoor farms, combining conventional agricultural techniques with cutting-edge technology to grow affordable, nutritious fruits and vegetables at scale. We're working tirelessly to address four issues needed in America:

- Better access to nutritious food
- More sustainable farming
- Building a home-grown food supply
- Increased investment in Appalachia

We're seeking to revolutionize American agriculture with our Farming Now philosophy. Instead of looking far into the future, we understand that proven technology already exists today to grow much more fresh food with far fewer resources. With that technology in hand, we're developing an ecosystem across Appalachia — partnering with universities, government leaders and non-profits — to lead a real food revolution and work with our region to build America's AgTech capital.



About the Report

AppHarvest is excited to be sharing our first Environmental, Social, and Governance Report (ESG). This report is to serve as an educational tool for consumers to better understand AppHarvest and the impact of our business. We are proud to be sharing our accomplishments from our previous year of operations and additional initiatives already underway for the year 2020 and beyond.

AppHarvest was founded as a Benefit Corporation, which means our company is empowered to put people and planet first with each business decision. Because of this commitment, AppHarvest earned Certified B Corporation status in 2019. This voluntary third-party verification validates our efforts in areas including environment, workers, community, and government. We have additionally aligned our business with the United Nations Sustainable Development Goals in an effort to address six different global challenges. As construction of our first controlled environment agriculture facility continues, we will use these principles to ensure our commitment to both people and planet.

The only way to start
a movement is from
the ground up.

AppHarvest aims to redefine American agriculture by improving access for all to fresh fruits and vegetables, growing more with fewer resources, and creating an AgTech hub from within our Appalachian home.

Fresher food.
Sustainable growth.
Rewarding jobs.

This is Farming Now.



We're working to establish America's AgTech capital from within Appalachia. To do so, we're working diligently with partners including the region's universities, government officials, and community organizations. Our collective work has attracted unprecedented investment and media attention.

Investment

We have attracted more than \$125 million in private investment into Appalachia in less than 18 months. Investment has come from ESG investors such as Equilibrium, Rise of the Rest Seed Funds, and ValueAct Capital Spring Fund.

\$125 million
in funding in 18 months

Equilibrium: The world's first-of-its-kind Controlled Environment Foods Fund seeks to expand controlled environment agriculture in North America.

Rise of the Rest Seed Funds: Led by AOL Co-Founder Steve Case, this investment fund aims to accelerate innovation in Middle America.

ValueAct Capital Spring Fund: The ValueAct Spring Fund invests in companies solving social and environmental problems and is led by ValueAct Co-Founder Jeff Ubben, who has served as a director of Martha Stewart Living Omnimedia, Twenty-First Century Fox, and Sara Lee.

Press

Our efforts have been recognized by national media outlets including The New York Times, The Wall Street Journal, CNBC, and 60 Minutes.

**The
New York
Times**

[A Greenhouse Large
Enough to Feed the
Eastern Seaboard](#)

WSJ

[The Indoor Farmer
Who Wants to Remake
Appalachia's Agriculture](#)

CNBC

[How Startup AppHarvest
Aims to Introduce a New
Sustainable Method
of Farming](#)

**60
MINUTES**

[Searching Middle
America for the Next
Big Idea](#)

// The mammoth project will use Dutch greenhouse technology, which focuses on sustainable crop production, to meet the rising demand for American-grown tomatoes... It also responds to a host of cultural concerns about food safety, freshness, environmental quality and energy consumption. //

- The New York Times

AppHarvest Farming Now **by the Numbers**

40% **less energy**

Our \$15 million in LEDs are 40% more efficient than traditional lighting

365 **days**

Growing indoors eliminates weather and seasonal constraints, empowering our region with a resilient food source

90% **less water**

We're growing more while reducing water usage

70% **reach**

We reach 70% of Americans in just a day's drive from our Appalachian home

30x **higher yield**

A single acre will yield 30 times more fruits and vegetables than an acre farmed outdoors

80% **less diesel**

Our central location will result in 80% less diesel use in transportation

0 **ag runoff**

Our closed-loop rainwater retention system eliminates agricultural runoff

AppHarvest Construction **by the Numbers**

6,700

columns installed in the facility

3,637

tons of glass to craft the facility's roof

600

shipping containers of construction materials

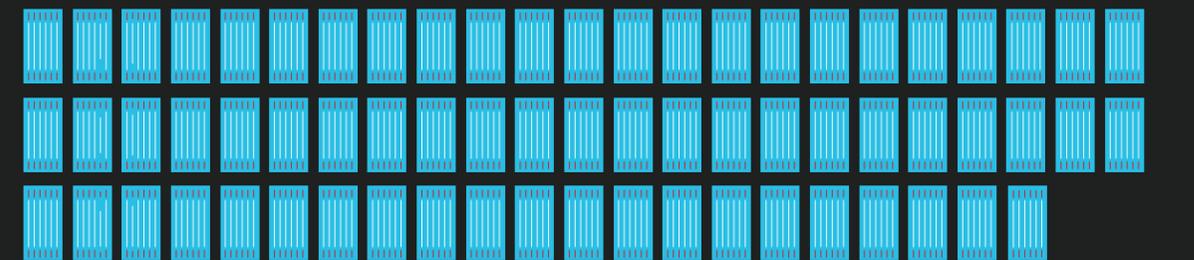
60 acre

greenhouse = 45 American football fields



10 acre

rainwater retention pond =
67 Olympic-sized swimming pools



Sustainability

Certified B Corporation

"B Corp" has become a recognizable term among conscientious consumers. Certified B Corporations like Patagonia, New Belgium Brewing, Seventh Generation, and Ben & Jerry's proudly share this certification that validates their commitment to community, environment, customers, and governance. Administered by the non-profit B Lab, the voluntary certification validates organizations through three methods:

- Verified Performance
- Legal Accountability
- Public Transparency

Certified B Corps must complete a rigorous assessment including a detailed review of the company's values and operations. If businesses pass the initial review, they move to the audit phase of the certification,

during which all information is verified. If at that time the business still holds the score required, businesses are awarded the B Corp Certification.

In December 2019, AppHarvest was recognized as a Certified B Corporation by the nonprofit B Lab. AppHarvest further sets itself apart among large-scale agriculture operators by its legal formation as a Benefit Corporation. As our business continues to grow so does our commitment to people and planet.



// AppHarvest has built a company based on the value of sustainability. Our strategy to date and our strategy moving forward is to use our business decisions to make a positive and resilient impact on the world. //

**Nickie Cashdollar,
Sustainability Lead**



United Nations Sustainable Development Goals

The world we live in faces great challenges. In 2015, the United Nations gathered in an effort to tackle those challenges. The initiative yielded recommendations known as the Sustainable Development Goals. Each of the 17 goals has a different agenda, creating a holistic approach to tackling the world's problems. To ensure these goals produced concrete results, the UN set a deadline to have these goals accomplished. It was decided that 15 years provided ample room for action and urgency. The campaign, now known as #Envision2030, has influenced government planning,

universities, research, and private initiatives.

AppHarvest realigns agriculture to put people and planet first. We are proud to position ourselves with six Sustainable Development Goals. Each of the goals highlights a unique problem the world faces, problems that AppHarvest can help address. We include information about the Sustainable Development Goals in our presentations and videos about the company's impact, as it is important to us that our employees and community know the company's priorities.



AppHarvest realigns agriculture to put people and planet first.

AppHarvest was one of only two companies selected to present to the United Nations Security Council during the group's visit to Kentucky in December. Founder & CEO Jonathan Webb discussed the importance of controlled environment agriculture and its role in feeding the world's rapidly growing population. Shown here are U.S. Ambassador to the United Nations Kelly Craft, AppHarvest Founder & CEO Jonathan Webb, and Kentucky Governor Andy Beshear.



AppHarvest is focused on the following United Nations Sustainable Development Goals:



End hunger, achieve food security and improved nutrition, and promote sustainable agriculture

The Centers for Disease Control and Prevention reports that just 1 in 10 adults and 17% of children in the US eat enough fruits and vegetables.

Controlled environment agriculture allows for year-round growth and produces 30x the yield on a single acre as traditional open-field farming on a single acre.



Ensure availability and sustainable management of water and sanitation for all

Controlled environment agriculture uses 90% less water than traditional agriculture.

Our farm's water needs are met by a 10-acre rainwater retention pond that feeds a closed-loop system, eliminating agricultural runoff entirely.



Promote sustained, inclusive and sustainable economic growth, full and productive employment, and decent work for all

1 in 4 residents in Appalachia live in poverty. In Rowan County, where we're building our first facility, per capita income is 40% below the national average.

Our first project in Appalachia will create 300+ jobs with full benefits, including paid time off.



Build resilient infrastructure, promote inclusive and sustainable industrialization, and foster innovation

Our first farm uses \$15 million in LEDs that are 40% more efficient than typical greenhouse lighting.

Our facility will be the first-of-its-kind with both a hybrid lighting system and a closed-loop water system.



Ensure sustainable consumption and production patterns

1.3 billion tons of food are lost due to poor transportation and harvest practices each year.

By locating within Appalachia, AppHarvest is within a day's drive to 70% of the US population, creating significantly longer shelf life for the company's fruits and vegetables.



Take urgent action to combat climate change and its impacts

The world will need 50% more food by 2050. Controlled environment agriculture grows far more with far fewer resources by using hydroponics, advanced lighting, robotics, and more.

From its central location, AppHarvest reduces diesel use in transportation by 80%.

Community

AgTech Education

AppHarvest's continuous commitment to the environment and community is showcased through the company's investment in education efforts across Eastern Kentucky. From the start, we committed to "growing our growers." By investing in the schools of Eastern Kentucky, we are investing in the future generation of sustainable farmers.

Container Farm

In 2018, AppHarvest established a partnership with Pike County Public Schools to build an AgTech program and educate students about local career paths in this field.

The AppHarvest container farm is a high-tech controlled environment hydroponic growing system housed in a retrofitted shipping container. What was once a 40-foot steel shell is now a vertical hydroponic growing system complete with efficient LED lighting, closed-loop irrigation, and vertical growing columns that are together capable of growing 4,500 plants at one time. A cloud-based mobile app tracks temperature, nutrients, pH, and more to create ideal growing conditions. This high-tech container farm provides a living lab in which students gain hands-on experience that complement their classroom-based

coursework. Student obligations include planting and harvesting of greens, monitoring and calibration of system settings, maintenance, and procedural considerations for food safety.

Our AgTech program brings cutting-edge agricultural practices into the classrooms of Eastern Kentucky high schools by providing the students a pathway into this fast-growing business segment in the US and the world. To date, AppHarvest has invested \$150,000 in the next generation of Eastern Kentuckians by providing opportunities to specialize in entrepreneurship and high-tech agriculture. These educational programs will create new opportunities from within the region, setting participants up for success and establishing Appalachia as America's AgTech capital.

Curriculum

The AppHarvest AgTech Entrepreneurship course curriculum was developed by leaders in the field and includes information ranging from plant physiology to taking product to market. AppHarvest expanded the program in 2019 and established partnerships with five additional Eastern Kentucky schools to debut the AgTech curriculum. This transfer of curriculum ensures that schools in the region have access to fresh content that incorporates AgTech with traditional agriculture education programs.



Engagement

AppHarvest strives to engage community members in initiatives to serve mutual goals of economic development, educational advancement, and community building. To this end, when exploring new potential project areas, AppHarvest utilizes a stakeholder engagement plan to identify and engage partners. We believe that community partners will be integral in the development of meaningful impact in Appalachia, and we work with organizations that are committed to making a difference in the community.

AppHarvest proudly supported several community engagement opportunities in

2019. These initiatives support community-led projects and allow AppHarvest to serve as an engaged member of the community.

Initiatives

TEDxCorbin: In March 2019, AppHarvest served as the presenting sponsor for TEDxCorbin, the first of the independently organized TEDx events to be held in Eastern Kentucky. TEDx highlights “ideas worth spreading” and featured talks and performances from local Appalachians. In addition to our company’s sponsorship, our cohort of AgTech students attended as invited guests.

The student farmers witnessed live performances and also helped feed attendees and speakers. Students collaborated with Chef Matt Corbin of The Blue Raven, a popular restaurant in Pikeville, to craft their harvest into a butterhead lettuce cup enjoyed by TEDxCorbin workshop participants.

SOAR Summit: In support of our partnership with Shaping Our Appalachian Region (SOAR), AppHarvest sponsored the 2019 SOAR Summit. More than 1,300 attendees gathered to learn more from businesses and organizations about projects and outcomes focused on using technology to reduce and eliminate poverty in Appalachia.

AppHarvest showcased an interactive booth with a virtual reality rendering of our 60-acre controlled environment agriculture facility to build excitement about the AgTech hub being built in Appalachia.

Remake Learning Days: AppHarvest and Shelby Valley High School served as event co-hosts for the first regional Remake Learning Days held in Eastern

Kentucky. Our “Explore Modern Farming” event attracted more than 200 youth, providing an introduction to AgTech and an opportunity for middle school students to interact with high school leaders in Pike County. Supporting this event was one way to express our dedication to educating the youth of Eastern Kentucky on the future of agriculture.

New Frontier Outfitters: AppHarvest established a collaboration with New Frontier Outfitters, an outdoor apparel company based in Morehead, KY, because of its long-term commitment to the region. The clothing collaboration included the design of hats, shirts, and stickers to introduce and spread the “Appalachian Grown” concept as a point of pride. Items were sourced with a focus on environmental responsibility. This partnership has been important in rallying the region behind our effort to make Appalachia the AgTech capital of America.



Partnerships

In 2019, AppHarvest committed to formalizing partnerships with our community to assist with AgTech talent acquisition. We have agreements with key partners to identify, train, and recruit the next generation of high-tech farmers and are looking forward to exercising partnerships with career service agencies to recruit employees and provide soft skills training. Creating this AgTech ecosystem would not be possible without partnering with governments, community organizations, and educational institutions.

Governments

- United Nations
- Kingdom of the Netherlands
- US Department of Agriculture
- Commonwealth of Kentucky

Community Organizations

- Addiction Recovery Care
- Eastern Kentucky Concentrated Employment Program (EKCEP)
- Fletcher Group
- Goodwill Industries
- Hindman Settlement School
- Shaping Our Appalachian Region (SOAR)

Educational Institutions

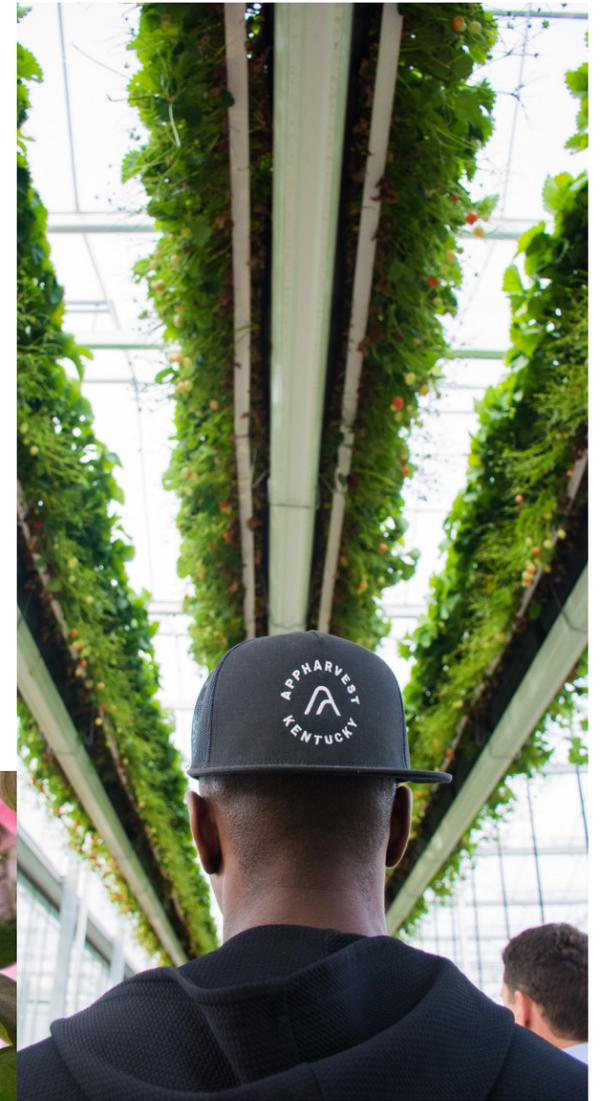
- Wageningen University and Research
- HAS University of Applied Sciences
- University of Kentucky
- University of Pikeville
- Morehead State University
- Kentucky Community and Technical College System
- Eastern Kentucky University
- Berea College

“Our team wants to ensure that AppHarvest is a place where people are proud to work. Partnering with local businesses, governments, and educational institutions has led us to identify fresh opportunities to collaboratively develop a new sector in controlled environment agriculture.”

Amy Samples

Director of Culture





In Review

Conclusion

AppHarvest is proud of the work our company and the community accomplished in 2019. We developed partnerships with integral regional organizations, obtained B Corp certification, began construction of our 60-acre controlled environment agriculture facility, and brought investment and national media attention to the region.

Our team is excited about our growth in the year ahead and continuing to expand our work with community partners, together striving to create a resilient economy in Appalachia.

Join us in our journey.



11.18.19



11.25.19



12.03.19



12.17.19



01.26.20



02.14.20



04.22.20

As AppHarvest enters 2020 and beyond, we continue to charge forward toward our goal of redefining American agriculture and creating the country's AgTech capital from within Appalachia.





2019 Environmental, Social, and Governance Report

