



2021

OUR 20TH ANNUAL

**SUSTAINABILITY
IMPACT REPORT**

Smithfield.

Good food. Responsibly.®



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Letter to Our Stakeholders From Shane Smith, President and CEO

Dear Stakeholders,

For Smithfield, “Good food. Responsibly.®” is more than just our tagline; it’s what we do. Over the last two decades, our Smithfield team members’ unwavering commitment to continuous improvement has spurred extensive research and investments across our vertically integrated value chain. As a result, we have pioneered efforts addressing some of the greatest challenges and opportunities facing our industry while remaining ever mindful of the impact our operations have on our communities and planet.

Our 2021 Sustainability Impact Report commemorates the 20th anniversary of our sustainability program, which drives our perennial pursuit to supply wholesome, safe and affordable food produced the right way: with respect for our people, animals, communities and planet. It likewise highlights many of the important lessons we’ve learned and innovations we’ve implemented along the way.

Our quest to responsibly feed a world of nearly 8 billion people continues. Last year, amid continued fallout from the pandemic, our commitment to “*Good Food, Good Work and Good Stewardship*” never wavered thanks to more than 60,000 dedicated Smithfield team members worldwide. In the pages that follow, you will find a detailed report on our progress toward the ambitious goals and targets we have set across our holistic program to enhance animal care; expand diversity, equity and inclusion (DEI); protect the environment; ensure food safety and quality; promote health and wellness; help our communities and foster top-notch worker health and safety. As we continue to make progress toward our own goals, we support our customers, suppliers and farmers in our value chain in furthering their own sustainability objectives.

We are proud of the good work our team members do across 29 states and seven countries. From our farms and feed mills to our processing facilities and transportation network, we take great care to deliver high-quality protein to family tables around the world. Our sustainability program and culture of Responsibility, Operational Excellence and Innovation (ROI) are fundamental principles for our 86-year-old food company and will be for years to come.

On behalf of our team members, thank you for your support of Smithfield.



With appreciation,

Shane Smith
President and CEO



Q&A With Stewart Leeth, Chief Sustainability Officer

Stewart Leeth leads sustainability initiatives at Smithfield. We spoke with him about how the company's sustainability program has evolved over the past 20 years and upcoming priorities for 2022.

How have the challenges of current times shaped Smithfield's sustainability strategy?

Smithfield's sustainability strategy and Environmental, Social and Governance (ESG) focus has evolved over the years to address challenges and urgent concerns of the day. Today's threats — ever more severe extreme weather, rising temperatures, water scarcity, loss of biodiversity, social challenges and risks to the global food supply to name a few — are reflected in our newest goals and targets as well as the expansion of our pillars, which we announced last year.

I'm extremely proud of the efforts we have underway across all of our sustainability pillars: animal care; diversity, equity and inclusion; environmental stewardship; food safety and quality; health and wellness; helping communities and worker health and safety. We made incredible headway in 2021, including forging progress under [Smithfield Renewables](#) toward our industry leading goals to reduce GHG emissions 30 percent across our entire U.S. value chain and become [carbon negative](#) in all U.S. company-owned operations by 2030. For example, we completed a \$150 million, decade-long project to install manure-to-energy technology on nearly all our hog finishing farms in Northern Missouri, where we are now producing carbon-negative renewable natural gas (RNG) at a rate of approximately 800,000 dekatherms annually.

Smithfield also was named a [U.S. Food Loss and Waste 2030 Champion](#) by the U.S. Department of Agriculture and U.S. Environmental Protection Agency for our commitment to [halve overall food loss and waste](#) in our U.S. company-owned operations by 2030. We strengthened our best-in-class worker safety record and had a strong start toward our forward-looking DEI goals and Unity & Action targets by establishing a new contract grower program [to support Black and other minority farmers](#) and diversify our hog supply chain. In 2021, we welcomed our first minority-owned farmers to the program.

Smithfield's sustainability strategy will continue to evolve. One thing is constant: day in and day out, we remain steadfast in our commitment to help maintain the global food supply through the production of wholesome, safe and affordable protein.

How has Smithfield's 20-year commitment to being an environmental leader influenced the business, its operations and employees?

Everyone speaks about sustainability as a journey, but for us it truly has been a top priority for more than two decades. And it didn't just happen overnight. We started with long-term, big aspirational goals — our first was to be an environmental leader. Then, we developed clear strategies, which included defined responsibilities for our team, development and implementation of management systems building on internationally recognized standards, measurable goals, targets, internal scorecards and an awards system recognizing success. Through this process, we began leading the



industry in many “[first-ever](#)” achievements, including becoming the first-ever protein and livestock company to obtain ISO certification in 2005 for every facility and every farm. Those achievements continue to the present day with our industry first absolute carbon-reduction goals announced in 2016 and 2020 and supporting projects.

This framework helped us not only achieve sizeable improvements in water and waste management while vastly improving environmental performance across our company — it also allowed us to adapt platforms and achieve successes as we expanded our sustainability platform to include other pillars such as animal care, DEI, food safety and worker health & safety.

Particularly inspiring is that so much of our progress is the result of ideas and projects thought up and developed in-house at our facilities by our employees. Examples include a simple nozzle-change on the misters we use in barns to keep our animals cool that significantly reduces the volume of fresh water we use, or a project in Virginia where we use recycled grey water for some operations that also produces tremendous groundwater savings, or another project initiated by our Midwest Environmental team to create a farm-specific tracking and reporting system allowing for immediate testing results of above-ground nutrient storage tanks.

What distinguishes Smithfield from a lot of other organizations is true action across our company by real people toward our goal — I’m proud of that. Our commitments aren’t just words on a page — they mean something to us and show that our sustainability initiatives benefit Smithfield’s overall financial position. Sustainability is woven into the cultural fabric that is Smithfield.

Where do you see Smithfield’s ESG platform leading the company in the future?

ESG is front and center for more companies, consumers, customers, regulators and investors than ever before. The new way we organize and communicate our pillars — “Good Stewards, Good Food, Good Work” — helps define our ESG platform and reflects the way ESG will continue to be integrated and ingrained in our culture well into the future. It also helps demonstrate how we are managing our environmental impact, ensuring food safety and worker safety, improving animal care, identifying cost savings or mitigating regulatory threats, supporting communities where we live and work, investing in diversity, equity and inclusion, supporting health and wellness, and supporting our customers, who want to make sure their supply chains are responsibly managed.

In the near term, I’m looking forward to accelerating our decarbonization efforts and continuing to foster DEI in our company and communities and throughout our supply chain through meaningful action around the Unity & Action goals we announced last year, and the new goal of aligning the safety program with ISO 45001. Longer term, we will continue to evolve our program to encompass new issues and challenges just as we have done over the past two decades.



Two Decades of Sustainability Milestones: 2001-2021

- 2001** • Became the first U.S. agriculture livestock company to achieve ISO 14001 certification.
- 2001** • Published first [Environmental Report](#).
- 2005** • First in industry to achieve ISO 14001 environmental certification at all U.S. hog production and processing facilities (apart from new acquisitions).
- 2007** • First large scale producer in industry to begin transition from traditional stalls to group housing for confirmed pregnant sows on company-owned farms.
- 2007** • Implemented the Employee Injury Prevention Management System (EIPMS).
- 2008** • Established the Helping Hungry Homes® initiative, which has since provided more than 250 million servings of protein to communities.
- 2010** • Global Food Safety Initiative (GFSI)-certified 100% of applicable facilities.
- 2012** • Set initial goal to achieve one zero-waste-to-landfill (ZWTL) facility by 2018.
- 2012** • First pork producer to implement a comprehensive animal welfare management program that predated the Common Swine Industry Animal Care Audit.
- 2012** • Achieved zero NOVs on U.S. company owned farms.
- 2013** • First company in industry to begin voluntarily reporting antibiotics usage.
- 2013** • Achieved zero NOVs on U.S. company owned farms.
- 2015** • Implemented workers safety training into virtual Smithfield University.
- 2016** • First in industry to announce an absolute greenhouse gas (GHG) emission-reduction goal: 25% by 2025.
- 2016** • First to remove medically important antibiotics from production uses.
- 2016** • First in industry to publish online ingredient glossary.
- 2017** • Launched Smithfield BioScience.
- 2017** • First large scale producer in industry to fully implement group housing for confirmed pregnant sows on all company-owned farms.
- 2017** • Evolved the EIPMS program with the implementation of the Smithfield Injury Prevention System (SIPS).
- 2019** • Increased the stakes of the previous ZWTL goal to target 75% of facilities by 2025.
- 2019** • Achieved protein donations in all 50 states through Helping Hungry Homes®.
- 2020** • Formalized DEI efforts into a dedicated, standalone pillar and launched a \$15 million companywide Unity & Action initiative.
- 2020** • Marked largest year of charitable giving since Smithfield's founding in 1936, with donations of nearly \$70 million.
- 2020** • Outperformed both the meat industry and the general industry for least worker injuries.
- 2020** • Expanded sustainability platform to include a designated Health & Wellness pillar.
- 2020** • First in industry to commit to becoming carbon negative by 2030.
- 2020** • Increased the stakes of "25 by 25" goal to target a 30% reduction in GHGs by 2030.
- 2020** • Completed installation of camera monitoring systems in all harvest facilities.
- 2021** • Became #1 supplier of heparin sodium in the U.S.
- 2021** • Achieved worldwide ISO 14001 certification for all farms and processing facilities (except for new acquisitions).
- 2021** • Set goal to implement consumer packaging that is 90% recyclable, reusable or industrially compostable and to halve use of virgin petroleum-based plastic by 2030.

● Good Stewards ● Good Food ● Good Work



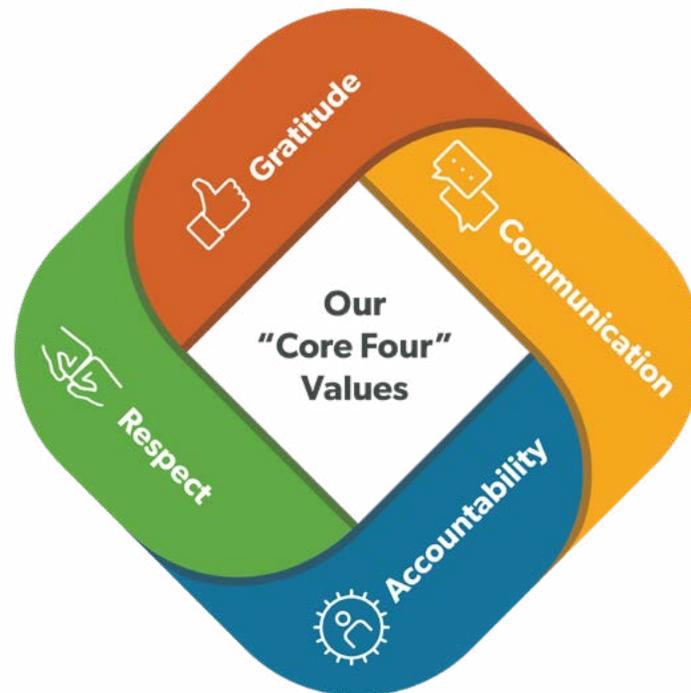
About Smithfield

Headquartered in Smithfield, Va. since 1936, Smithfield Foods, Inc. (“Smithfield Foods” and together with its subsidiaries, “Smithfield”) is an American food company with agricultural roots and a global reach. We have a presence in 29 states and seven countries in Europe and Mexico with a portfolio of high-quality iconic brands, such as Smithfield®, Eckrich® and Nathan’s Famous® (among many [others](#)).

Our Guiding Principles

At Smithfield, we’re committed to delivering on the promise of “Good food. Responsibly.®” In pursuing this commitment and all it means, we are guided by the principles of Responsibility, Operational Excellence and Innovation — which define the way we do business every day.

Our Core Four Values are our cultural standards that embody the behaviors that are central to our success. They serve as the basis for how we work with one another as a Smithfield Family, at all levels of our organization:



Gratitude: We are thankful for our people and make a point to recognize contributions, big and small, to ensure others feel valued.

Communication: Communication is an essential part of building a team that has a shared vision, walks forward together, trusts one another and always improves.

Accountability: We act honorably and hold ourselves accountable to each other and for our people, words and actions, and successes and failures.

Respect: We practice humility and integrity in our treatment of others with respect for all individuals.



Our Business

Since our beginning as a small-town meatpacking company, progress and innovation have been central themes in our company's story

More than 60,000 jobs	More than 700 company-owned farms	More than 3,000 contract farms	7 Operations in seven countries
			70 Facilities

Good food. Responsibly.®

In 2021, we raised 21.7 million pigs globally producing 11.3 billion pounds of fresh pork, packaged meats and poultry, totaling nearly \$18 billion in sales.

Our trusted products make us one of the world's leading food and protein companies. We supply 42 of the top-50 retailers, all of the top-30 food service providers and 18 of the top-30 restaurant chains across the U.S. Millions of people purchase our products every year, making Smithfield the leading U.S. producer of packaged meats products with top market share in numerous categories. In addition to our core brands, our regional and international brands capture significant share in their respective markets. Our success is based on a few simple ingredients: great taste, reasonable prices and a reputation for products that families can trust.

Sales by Segment (in billions) CY2021					
North America Pork	North America Packaged Meats	Europe Pork	Europe Packaged Meats	Europe Poultry	Total (billions)
\$6.5	\$8.5	\$1.1	\$1.1	\$0.5	\$17.6

Responding to Consumer Trends

According to trade publication Winsight Grocery Business, in 2020, 52% of shoppers surveyed indicated they bought groceries online. Just a year later, that number had grown to 64%. By the end of 2022, Walmart says in-home delivery will be available to 30 million households. Smithfield is responding to online shopping, grocery delivery and other trends by making it easier for consumers to shop for our products wherever they want, however they want and across any device or medium — making nutritious, essential protein food options more equitably accessible to consumers everywhere. Our marketing team is constantly evaluating the latest innovations in digital technology to ensure we are listening to and meeting the changing needs of our customers and consumers while exploring new avenues for serving them through Shop-ability and e-commerce strategies — including a multi-million dollar investment in e-commerce.



Where We Operate

Smithfield supports more than 60,000 jobs in seven countries, including the U.S., Hungary, Poland, Romania, Slovakia, the United Kingdom (UK) and Mexico.

Proudly Made in the USA

The majority of our Smithfield Family members are located in the U.S. where we have a presence in 29 states and provide more than 40,000 jobs. All our U.S. products are made in one of our more than 45 facilities across America. Across the country, we have nearly 500 company-owned farms and partnerships with more than 2,100 contract farms. In addition to growing our own hogs, we contract with independent partners and suppliers across America to grow hogs for our processing operations.

A Growing European Business

We first invested in Central Europe more than two decades ago. Between 2017 and 2019, we expanded our footprint in Poland and Romania. These acquisitions allow us to continue our growth trajectory in packaged meats, fresh pork and poultry in Poland and attain the leading position in the Romanian packaged meats market — with a branded portfolio of products sold in the higher-margin traditional channel.

In 2021, we acquired two additional operations in Hungary and Slovakia — adding four more packaged meats facilities to our global footprint. In addition to strengthening our vertically-integrated supply chain, these transactions continue to make us more competitive in European markets and across the globe.

Today, our European operations provide nearly 18,000 jobs across 21 facilities, 58 company-owned farms and five offices in Hungary, Poland, Romania, Slovakia and the UK. We also partner with more than 1,000 contract farms in Central Europe.





North America Expansion

In Mexico, Smithfield Foods has controlling interest in Granjas Carroll de México (GCM) and is a 50% joint-venture partner in Norson. Both are fully integrated pork companies supplying the domestic retail, wholesale and industrial trade channels as well as numerous export markets to further our promise of “Good food. Responsibly.®”

“

Sustainability reflects our everyday actions and brand positioning. We have focused on promoting sustainable growth over the last decade and investing in making a positive impact. Our future goals are ambitious in terms of social impact and sustainable development; year after year we continue to advance and work to achieve our short, medium and long-term objectives.

—M.V.Z. Víctor Manuel Ochoa Calderón, Managing Director

”

Combined, our Mexico operations provide more than

6,000 jobs

across

3 Facilities **170+** Farms

Each year, we make over

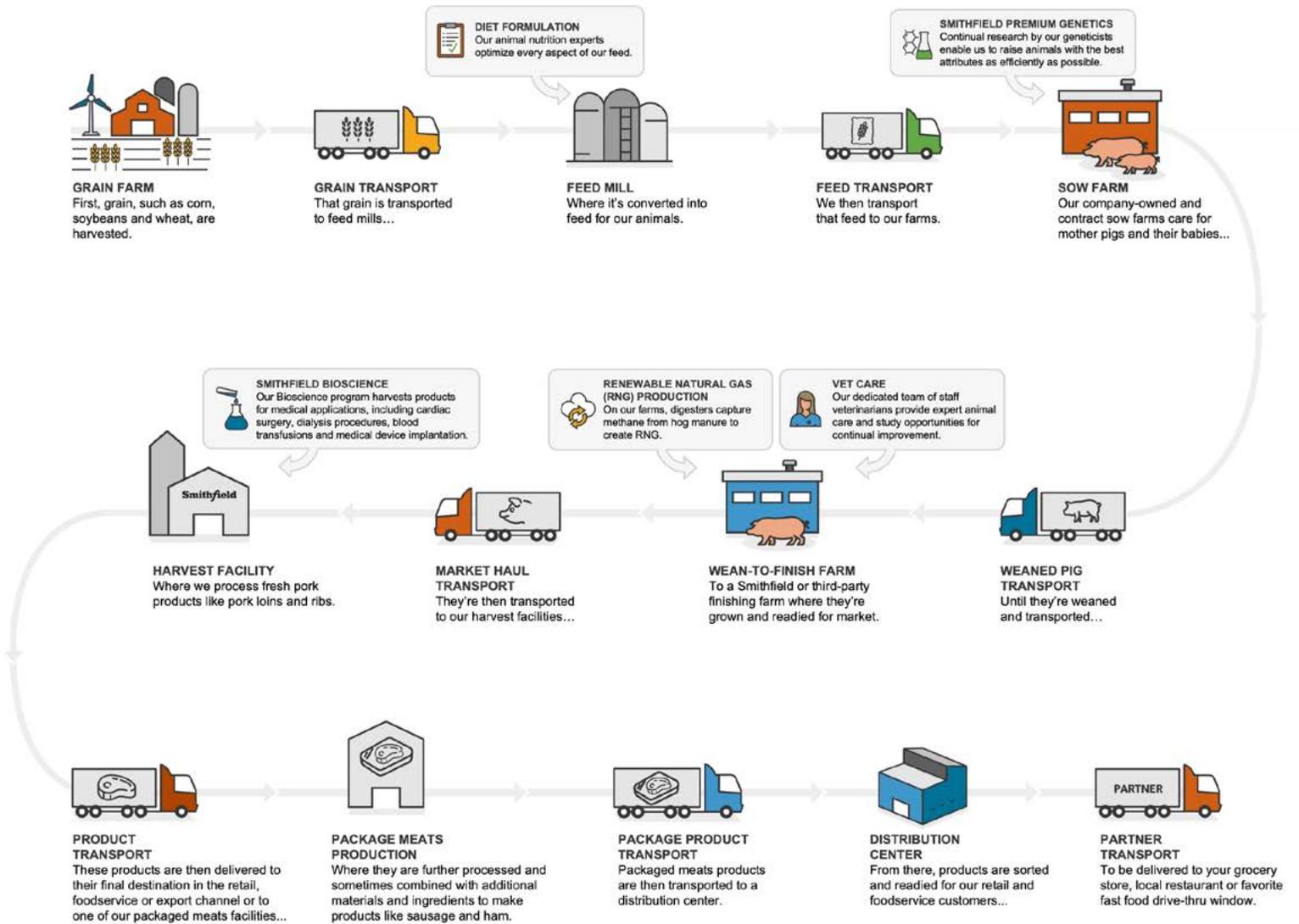
\$510 million

in payments to contract farms globally, many of which are family farms



Value Chain

We don't just make good food. We operate a vertically integrated business that allows us to continually enhance every aspect of our end-to-end supply chain that delivers food from farm to fork, while also yielding value-added products in bioenergy and biomedical solutions. Our vertically integrated platform ensures the supply of consistent, high-quality and traceable food and raw material.





Our Approach to Sustainability

Our Sustainability Strategy

At Smithfield, “good” is in everything we do. We provide good jobs. We take good care of our animals. We are good stewards of the environment. We do good in our local communities. “Good” is an integral part of who we are, and it drives our business to make a difference every day.



Our Commitments

Good Stewards

- Shrink our environmental impact and eliminate waste
- Keep our animals safe, comfortable and healthy

Good Food

- Deliver safe, affordable, high quality protein to meet the growing global demand
- Promote wellness through improved nutrition and innovations in pharmaceuticals, nutraceuticals and other human applications

Good Work

- Address food insecurity, advance education and support the vitality of the places we work and live
- Ensure a diverse, equitable and inclusive workplace and a culture that respects every employee
- Keep our employees healthy and safe

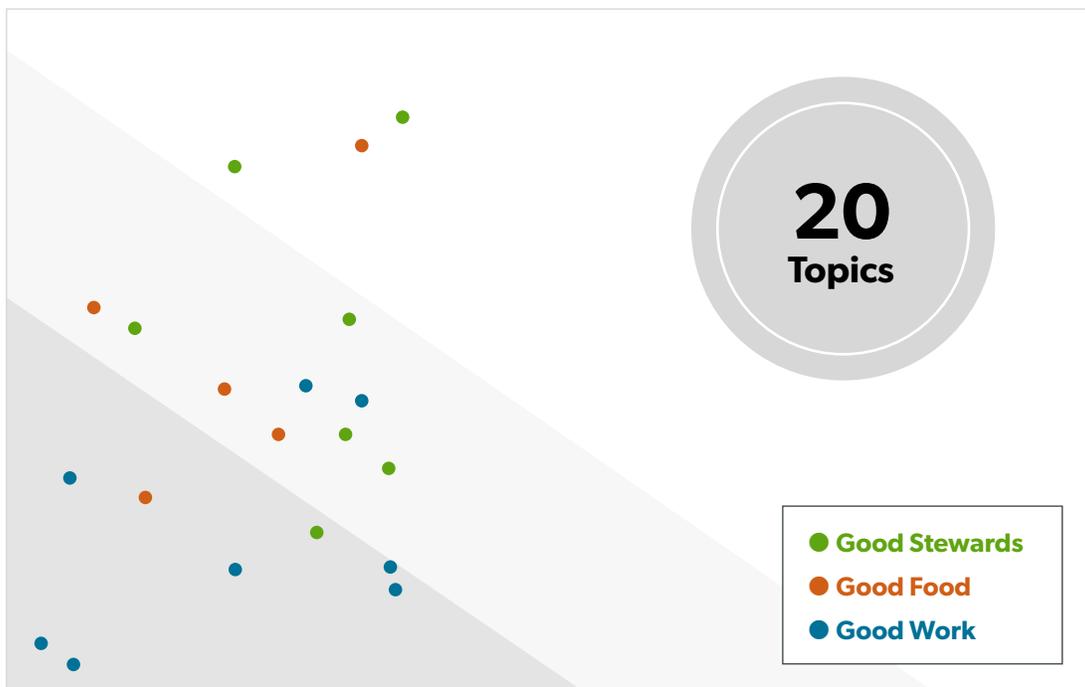


Our Sustainable Impact Priorities

We regularly analyze global and local trends to identify potential issues related to ESG that are most important to our company. The outcomes inform our strategic, sustainability and broader ESG management and communications priorities. For example, our materiality assessment, conducted in 2020, was performed in accordance with best-in-practice guidelines as outlined by the Global Reporting Initiative (GRI), an international independent reporting standards organization that encompasses the full breadth of our sustainability platform, including all ESG topics.

Our assessment, reflected in our refreshed materiality matrix, highlights an increased interest from internal and external stakeholders in five areas:

- Occupational health and safety
- DEI
- Food insecurity
- Employee engagement and development
- Health, wellness and nutrition



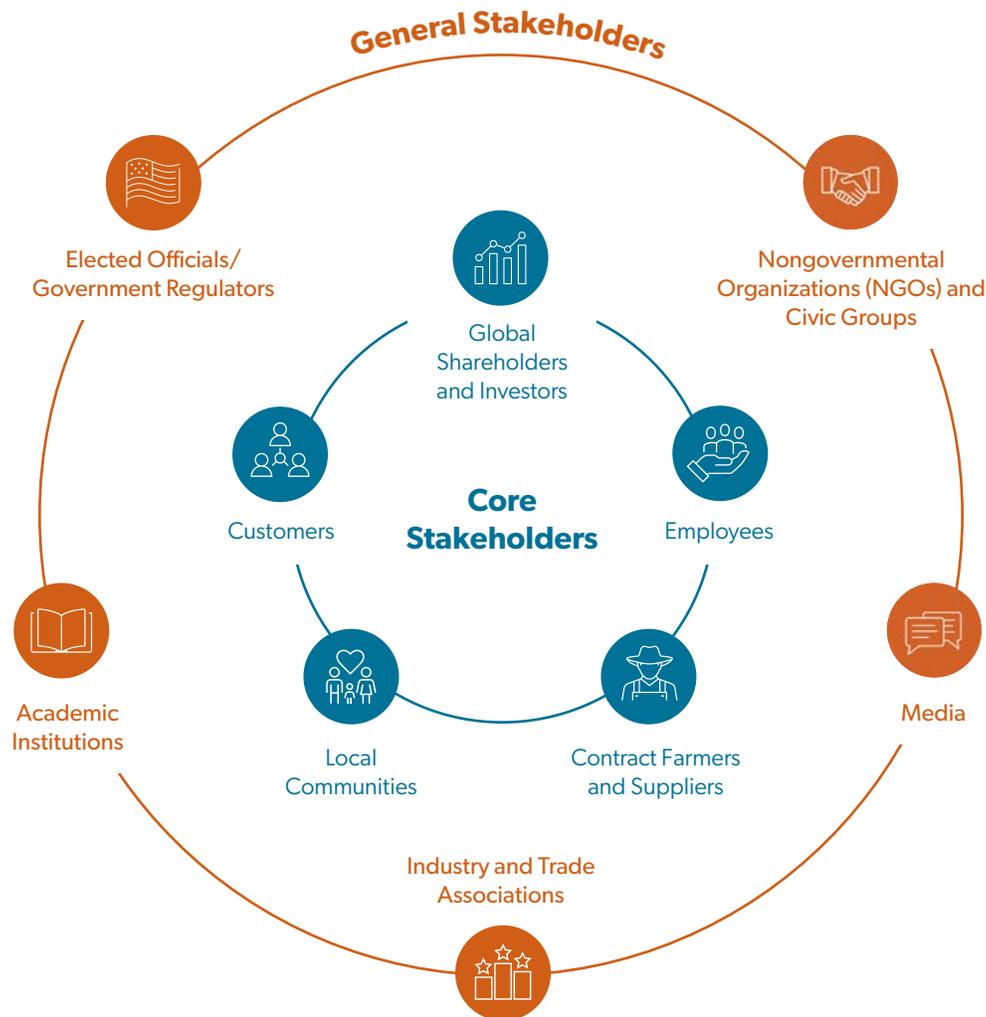
For full details on our Materiality Assessment, please see the [Appendix](#).



Stakeholder Engagement

ESG issues are critical to all our stakeholders. Across our value chain, we engage, collaborate and partner with stakeholders, including employees, customers, communities, governments and regulators, suppliers, industry associations and academia. These groups are essential to strengthening our business in support of our mission to feed the world in a responsible way.

We engage with stakeholders through several mediums and forums, depending on the issue and group. On the following page, we highlight some of the ways we have engaged with our stakeholders and the impact this has led to. For a full list of stakeholder organizations that we actively engage with, please see the [Appendix](#).



Stakeholder Engagement in Action

- In 2013, after our customer Walmart challenged us to consider ways to advance grain sustainability, Smithfield approached Environmental Defense Fund (EDF) to explore a partnership. This collaboration paved the way for Smithfield’s agronomics initiative — SmithfieldGro — which helps farmers across the company’s domestic grain supply chain improve crop yields while utilizing less fertilizer, reducing carbon emissions, reducing waste and supporting economic growth for participating farmers.



- To further affirm its environmental commitments, Smithfield recently signed to Business Ambition for 1.5°C, a global campaign designed to drive climate action in the private sector to reach net-zero global emissions by 2050 and align with a 1.5°C future. The joint initiative, comprised of corporate leaders taking climate action, is modeled after the Paris Climate Accord and spearheaded by the Science Based Targets initiative (SBTi) — a partnership between CDP Worldwide, the United Nations (UN) Global Compact, World Resources Institute (WRI) and the World Wide Fund for Nature (WWF).
- Protein PACT for the People, Animals and Climate of Tomorrow: Smithfield is a founding member of The Protein PACT, a committee comprised of fellow meat and poultry processing companies committed to accelerating momentum and verifying progress toward global sustainability using science-based goals across all protein sectors. To learn more, visit the Protein PACT [here](#).
- In 2000, Smithfield entered into a voluntary agreement with the Attorney General of North Carolina, which resulted in significant contributions to North Carolina’s environmental protection efforts. Among other things, Smithfield contributed over \$15 million towards the independent evaluations of numerous potential alternatives to existing farm waste management systems by an independently appointed designee with appropriate expertise — specifically, Dr. C. M. Williams, Director of the North Carolina State University Animal and Poultry Waste Management Center. In addition, under the Agreement, Smithfield also provided well over \$30 million to date to fund more than 100 initiatives that protect, enhance and restore thousands of acres of environmentally sensitive areas, improve water quality, and support research and education on vital environmental issues.





Our Contributions to the United Nations (UN) Sustainable Development Goals (SDGs)

The UN SDGs represent a global agenda to address the most pressing environmental and social issues facing our world today. We are committed to addressing these sustainable development challenges in areas where we believe we can make a difference. Throughout the report we have noted how our efforts are tied to specific SDG goals. A full recap of the SDGs our strategies support is also provided in the [Appendix](#).



Goal 2: Zero Hunger

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



Goal 3: Good Health and Well-Being

Ensure healthy lives and promote well-being for all at all ages.



Goal 4: Quality Education

Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.



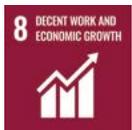
Goal 6: Clean Water and Sanitation

Ensure availability and sustainable management of water and sanitation for all.



Goal 7: Affordable and Clean Energy

Ensure access to affordable, reliable, sustainable and modern energy for all.



Goal 8: Decent Work and Economic Growth

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



Goal 9: Industry, Innovation and Infrastructure

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



Goal 10: Reduced Inequalities

Reduce inequality within and among countries.



Goal 12: Responsible Consumption and Production

Ensure sustainable consumption and production patterns.



Goal 13: Climate Action

Take urgent action to combat climate change and its impacts.



Goal 15: Life on Land

Protect, restore and promote sustainable use of terrestrial ecosystems; sustainably manage forests; combat desertification; and halt reverse-land degradation and biodiversity loss.



Good Stewards

"*Good Is What We Do*" means taking good care of our animals and being a good steward of the environment.

- ▶ **Animal Care**
- ▶ **Environment**



Key Milestones: Good Stewards

2001

Became the first U.S. agriculture livestock company to achieve ISO 14001 certification.

2001

Published first [Environmental Report](#).

2005

First in industry to achieve ISO 14001 environmental certification at all U.S. hog production and processing facilities (apart from new acquisitions).

2007

First large scale producer in industry to begin transition from traditional stalls to group housing for confirmed pregnant sows on company-owned farms.

2012

Set initial goal to achieve one zero-waste-to-landfill (ZWTL) facility by 2018.

2012

First pork producer to implement a comprehensive animal welfare management program that predated the Common Swine Industry Animal Care Audit.

2012/2013

Achieved zero NOVs on U.S. company owned farms.

2013

First company in industry to begin voluntarily reporting antibiotics usage.

2016

First in industry to announce an absolute greenhouse gas (GHG) emission-reduction goal: 25% by 2025.

2016

First to remove medically important antibiotics from production uses.

2017

First large scale producer in industry to fully implement group housing for confirmed pregnant sows on company-owned farms.

2019

Increased the stakes of the previous ZWTL goal to target 75% of facilities by 2025.

2020

First in industry to commit to becoming carbon negative by 2030.

2020

Increased the stakes of "25 by 25" goal to target a 30% reduction in GHGs by 2030.

2020

Completed installation of camera monitoring systems in all harvest facilities.

2021

Achieved worldwide ISO 14001 certification for all farms and processing facilities (except for new acquisitions).

2021

Set goal to implement consumer packaging that is 90% recyclable, reusable or industrially compostable and to halve use of virgin petroleum-based plastic by 2030.



Animal Care

Smithfield is committed to being an industry leader in animal care practices. That means maintaining our steadfast commitment to the safety, health and comfort of our animals and providing disease prevention; regular veterinary care; biosecurity; and safe, comfortable housing through every stage of our animals' lives. To learn more, please see our [Animal Care video](#).



Our Commitment to Animal Care

Keep animals safe, comfortable and healthy.

★ 2021 Animal Care Highlights

- Established an Animal Well-Being Committee with the Center for Food Integrity.
- Continued focus on industry leading housing for sows.

Our Animal Care Targets

Farms	Status
Continue to maintain and implement updates to our Animal Care Management System and achieve an annual audit score of excellent (97%–100%) globally.	● Achieved
Obtain one or more external certification(s) from globally-recognized animal care organization(s) for company-owned farms by 2025.	● Needs improvement
Maintain group housing for all confirmed pregnant sows on company-owned farms globally. In Poland and Romania, provide pigs and poultry, including laying hens, with housing, floor area and surface area consistent with European Union (EU) requirements.	● Achieved
Maintain principles for judicious use of antibiotics as defined by the U.S. Food and Drug Administration (FDA) and American Veterinary Medical Association (AVMA) and continue transparent reporting of antibiotic usage.	● Achieved
Assess barn enrichment and adopt recommendations on company-owned farms by 2030.	● On Track
Processing Facilities	
Maintain a written program for animal welfare at processing facilities globally.	● Achieved
Maintain a systematic program for animal care based on the North American Meat Institute's (NAMI's) recommended Animal Handling Guidelines and Audit Guide at every applicable facility in the U.S.	● Achieved
Maintain the U.S. Department of Agriculture's (USDA's) Process Verified Program (PVP) certification in the U.S.	● Achieved
Receive certifications for all live animal suppliers in the U.S. to the National Pork Board's (NPB's) Pork Quality Assurance® Plus (PQA® Plus).	● Achieved
Maintain Transport Quality Assurance® (TQA®) certification for all live animal transporters in the U.S.	● Achieved
Achieve an annual audit score of excellent (97%–100%) at every processing facility globally.	● Achieved



Our Approach to Animal Care

We formalized our approach to animal care at Smithfield with a comprehensive Animal Care Management System and [Animal Care Policy](#). Both underscore our commitment to being a leader in responsible animal welfare practices, humanely producing wholesome food products for our customers and analyzing our operations and practices to ensure continual improvement. These programs, created in consultation with two of the world's foremost experts in animal behavior and handling, include employee training and audits to make certain that our animal care policies are always followed and that any issues of noncompliance are corrected swiftly.

In 2021, we established an Animal Well-Being Committee with the Center for Food Integrity. Establishing an external animal well-being committee will achieve:

1. Improved integration and alignment of animal care policies and practices in production and processing.
2. Third party validation of current programs and policies.
3. Additional insight from fresh eyes with varied perspectives.

Barn Enrichment

Environmental enrichment for pigs entails safely providing them with various materials to stimulate them. Current studies on pig enrichment vary greatly, and opinions on whether enrichment has any impact on pigs' behavior, performance or well-being vary even more. Smithfield is working with select U.S. universities to extend their current research projects on the subject. For example, we are engaging with researchers at Iowa State University (ISU) who have already made headway and helped summarize literature on this topic. ISU continues to research types of enrichment — such as sawdust, pears, branches, wood shavings, logs, silage, chain, rubber toys, rope, plastic balls and newspapers — and the ideal time in pigs' development to offer enrichments.





Our Romania operation is also exploring enrichment through the use of wooden rulers for pigs to play with and possibly chew. Romania also trialed alfalfa briquettes, jute bags, hemp twine, cubic stone, plastic balls and rubber occupational objects. To help mitigate the spread of African Swine Fever (ASF), our farms in Poland also implemented different environmental enrichments that are easily cleaned and disinfected, including chains, plastic balls, teethers or salt licks.

We continue to monitor existing environmental enrichment research resources and information.

Animal Handling

Erin Reedy and Jessie Hain work in our Gilt Multiplication Department. Their job is to move up to 1,200 mature gilts (female pigs under the age of 1 year) each week. Seeing an opportunity for continuous improvement, Reedy and Hain researched how they could help ensure the animals were moved as safely and efficiently as possible.

Their team focused on animal handling strategies, specifically ways to prompt an animal to move at a steady pace. They also learned some of the signals the animals use to communicate, such as a pig’s squeal.

Reedy and Hain began counting squeals and worked to reduce them. Their increased awareness of squeals enabled them to adjust how they handled the animals, reducing their risk of injury and animal stress. This approach, now called the “Reedy-Hain Method” is so effective that our Safety Office plans to use it to reduce animal handling injuries companywide.

“

Since we started the recording of squeals, I have become more aware of potential stress factors. The most important thing of all is I now see how these changes are safer.

—Jesse Hain, Gilt Selection Specialist, Midwest Hog Production Region

”



As Manuel Flores always says, “There is only one way to do things and that is the right way.”

Flores is an Animal Handling Specialist (AHS) at our Monmouth, IL, facility. He has worked for Smithfield for 22 years in varying capacities, starting as an hourly production worker before becoming part of hog procurement as the AHS.

Flores embodies Good Stewardship. Managing the Monmouth plant’s Animal Welfare Response Team, he brings a positive, proactive and persistent approach to implementing our animal welfare program and goes above and beyond our written policies. As a result, Monmouth is meeting or exceeding the animal welfare goals set at the start of 2021, largely due to Flores’ encouragement and leadership.



Animal Housing

Our housing systems reflect our commitment to being an industry leader in animal care. They are designed, maintained and operated to provide a physical environment that meets our animals' health needs and complies with all applicable legal and regulatory requirements.

Group Housing for Female Pigs

Our leadership in the pork production industry is reflected in our successful transition to group housing systems globally. All confirmed pregnant female pigs on company-owned farms, including those in our Poland, Romania and Mexico operations, are housed in groups. Individual stalls are used initially for breeding to help ensure a sow's successful conception — a practice supported by multiple scientific studies indicating that housing sows individually, after breeding, reduces fighting, injuries and stress and better assures successful pregnancies as compared to sows who are mixed in with a herd immediately after breeding. We also use individual stalls during farrowing to protect a sow's growing litter.

For a virtual tour of one of our farms, visit [Smithfield Sow Farm 360° Virtual Tour](#).

California Proposition 12 and Massachusetts Question 3

California Proposition 12 ("Prop 12") and Massachusetts Question 3 are the result of ballot initiatives successfully introduced by animal activists as part of ongoing efforts to undermine livestock agriculture and meat consumption. The ballot initiatives prohibit the sale of eggs or fresh meat from animals raised in conditions that did not meet the state's housing standards. Industry organizations such as the National Pork Producers Council (NPPC), American Farm Bureau Federation, NAMI, the Food Equity Alliance and other groups publicly concluded that the standards proposed are arbitrary, not based on science and require considerable time and expense without yielding any improvements to animal care. The California Department of Food and Agriculture, which is charged with enforcing the new requirements, also acknowledged that the new law is "not based on peer-reviewed published scientific literature" and will result in "increased sow mortality."

As a leader in group housing gestation, Smithfield will comply with these laws, is assessing these new requirements and ways to mitigate sow stress levels and injuries, and is evaluating options to ensure the continuity of our pork supply in California and Massachusetts.



Animal Safety and Biosecurity

According to the World Health Organization (WHO), biosecurity is a “strategic and integrated approach to analyzing and managing relevant risks to human, animal and plant life and health and associated risks for the environment.” Strong biosecurity on our farms — and throughout the industry — is not only vital to our business, but also supports our efforts to help feed a growing world population, provide jobs in our communities and sustain other businesses in our supply chain such as corn and soybean farming.

Our animal welfare and biosecurity measures are based on risk management to halt the spread of disease by segregating farms by health status; feed and supply deliveries; transportation fleets; and enforcing strict biosecurity rules and active veterinary surveillance, including routine diagnostic testing.

Biosecurity Practices in Action

All of our farms and facilities have a comprehensive ASF plan that enables them to quickly respond to the presence of ASF in any animal. This plan is developed in close collaboration with expert veterinarians, state officials and other industry stakeholders. With each plant physically visited by state veterinarians to inform our biosecurity maps and our Foreign Animal Disease (FAD) Manual, Smithfield stays ahead of early indicators before any issues arise for the industry. This diligence is then transferred to all farms, harvest plants and sister facilities internationally.

- **U.S. Proactive Planning and Biosecurity for ASF**

Smithfield Hog Production continues to collaborate with regulators, veterinarians and industry experts to protect against the introduction of diseases such as ASF into the U.S. This highly contagious swine disease is nearly always fatal to pigs, and there is currently no treatment or vaccine. ASF does not infect people.

- **Incidents of ASF in Romania and Poland**

In 2021, commercial farms in Poland reported 124 ASF outbreaks. Also in 2021, Agri Plus had three outbreaks in contract finishing farms, and pigs in two farms were preventively euthanized.

In addition to our overall biosecurity prevention measures, we participated in USDA-led mock ASF outbreak exercises to drill on response protocols. These exercises are joined by state animal health agencies and other pork industry participants and are designed to improve our chances of quickly containing and eradicating an outbreak. Our internal FAD Crisis Plan defines our response and procedures under a variety of potential scenarios.

Enhanced Biosecurity Measures

In 2018, we imposed additional farm and packing plant visit restrictions that require stringent approval for visitors coming from foreign countries that are positive for ASF, including the Dominican Republic (DR) and Haiti. Smithfield employees returning from countries with ASF require five nights back in the country prior to returning to work. Other foreign travel requires four nights of downtime.

Other ASF prevention and preparedness initiatives include an internal ASF working group that spans our hog production division as well as packing plant preparations for potential foreign animal disease outbreak scenarios.



Finally, we are emphasizing two key issues with the federal government: 1) the importance of establishing USDA federal authority over ASF response, containment and eradication versus state-by-state decision-making that could slow response and prolong an outbreak, and 2) the need to quickly define a plan supported by other countries that will allow regions of the U.S. not impacted by ASF to maintain pork supply chain operations, including exports.

Use of Antibiotics

Antibiotics are an important animal welfare tool that we use to treat, prevent and control disease. The misuse of antibiotics in all forms — whether in human or animal medicine or plant agriculture — may contribute to the emergence of resistant microorganisms. As the first U.S. hog producer to report on antibiotic usage, Smithfield is committed to responsible and judicious use of antibiotics. We invite you to review our [Antibiotics Use Policy](#). The amount of antibiotics we use varies year-to-year due to a variety of factors, including weather conditions, inventory decisions, type of antibiotic used, the prevalence of diseases and active ingredient concentration.

In 2016, we ended the use of medically important antibiotics for growth promotion at company-owned and contract farms.

Antibiotics Used (milligrams per pound of live weight used)

	2015	2016	2017	2018	2019	2020	2021
United States	152	118	78	97	96	93	112
International	175	129	144	124	137	117	93

Annual milligrams per pound represents the total amount of active ingredients of antibiotics administered to the animals divided by the total weight of live hogs produced.





Environment

At Smithfield, we are continually researching bold, impactful and innovative solutions to optimize our supply chain, reduce waste and improve our energy and water efficiency. Our actions create value for our planet, business and stakeholders. To learn more, view our [Environmental video](#).

Our Commitment to the Environment

We are committed to shrinking our environmental impact and eliminating waste.



★ 2021 Environment Highlights

- Certified five new ZWTL facilities in 2021 (21 total)
- 16% increase in renewable energy directly sourced
- 108% increase in biogas production
- 38% reduction in notices of violation (NOVs)

Our Environment Targets

Climate Targets	Status
Become carbon negative in all company-owned operations in the U.S. by 2030.	● On Track
Reduce GHG emissions across our U.S. value chain by 30% by 2030 compared to a 2010 baseline.	● On Track
Obtain 50% of electricity needs from renewable resources by 2030.	● On Track
Proactively identify and prepare strategies to address and adapt to climate-related risks and opportunities.	● On Track
Waste and Packaging Targets	
Achieve a 75% reduction in solid waste compared to a 2010 baseline and ZWTL certification at 75% of our U.S. facilities by 2025.	● Needs improvement
Achieve 90% recyclable, reusable or industrially compostable consumer packaging by 2030.	● On Track
Halve virgin petroleum-based plastic use compared to a 2019 baseline by 2030.	● On Track
Halve food loss and waste by 2030.	● On Track
Water Targets	
Reappraise our entire U.S. water supply footprint and adopt internationally recognized water stewardship standards by 2025.	● On Track
Other	
Reduce NOVs to zero.	● On Track



Our Approach to Environmental Stewardship

Environmental stewardship at Smithfield is not only about what we have to do to stay compliant. It's more about what we should do. Our focus is on finding bold, impactful and innovative solutions to optimize our supply chain, reduce waste and improve our energy and water efficiency. Our actions create value for our planet, business and stakeholders.

[Smithfield's Environmental Policy](#)

Our Environmental Management System (EMS) helps us manage our environmental actions in a comprehensive, systematic and documented approach that is aligned with ISO 14001. All our facilities (except new acquisitions and those where certification is not applicable) and all company-owned farms are ISO 14001:2015-certified, which is considered the gold standard of environmental management. We also maintain robust, standardized internal auditing systems that ensure consistent environmental compliance across operations.

Industry Leading Commitment

100% of our plants are ISO 14001-certified, making Smithfield the first in our industry to have all farms and facilities certified to ISO 14001. Recent acquisitions are certified in a timely manner.



Pathway to Decarbonization

In 2021, we took bold action toward reducing our carbon emissions. We initiated our first GHG inventory; made a carbon-neutral declaration; committed to Science Based Targets; and formalized a comprehensive data collection process for reporting on Scopes 1, 2 and 3, which will have limited levels of third-party assurance. By validating our environmental, sustainability and regulatory compliance programs through third-party assurance, we can identify and manage risk, develop corrective actions and management plans and minimize the environmental health and safety (EHS) risk to human health and the environment.

To further affirm its environmental commitments, Smithfield signed to [Business Ambition for 1.5°C](#), a global campaign designed to drive climate action in the private sector to reach net-zero global emissions by 2050 and align with a 1.5°C future. The joint initiative, composed of corporate leaders taking climate action, is modeled after the Paris Climate Accord and spearheaded by the Science Based Targets initiative (SBTi) — a partnership between CDP Worldwide, the United Nations (UN) Global Compact, World Resources Institute (WRI) and the World Wide Fund for Nature (WWF).

Through internal and third-party assessments, we confirmed excellent progress with energy-reduction efforts throughout our value chain on our farms and in our facilities.

Over the last several years, we have made significant investments at our Sioux Falls, SD facility, including:

\$21 million

in new, enclosed livestock barns that are temperature controlled, easier to clean and help capture animal odor.

\$1.8 million

in new, high-intensity room air scrubbers that are self-contained, more efficient and ensure all emissions associated with our animal feed operations are treated prior to discharge to the atmosphere.

\$45 million

to install a new state-of-the-art wastewater treatment facility that will add additional water treatment to our current process, slated for completion in 2023.

In addition to improving the air, these efforts are making our operations more efficient, supporting our commitment to become carbon negative by 2030 and improving conditions for our employees and community for decades to come.



Managing Our Impacts Through Life-Cycle Assessment (LCA)

In an ongoing effort to understand the environmental impacts of our business, operations and products, we commissioned an expansion of our previous LCA. This new assessment includes regional environmental data to better represent the scope of our operations and impacts and allows us to more accurately track progress toward our GHG-reduction goals. We are proud to partner with the Institute on the Environment at the University of Minnesota to utilize continuously improving LCA methodologies and models to identify “hot spots” and innovate opportunities to reduce environmental impacts.

The latest version of the LCA showed a decrease in the per hog emissions over the 2010–2020 time frame of 517 to 511 kilograms of carbon dioxide (CO₂) equivalent/processed head respectively. When only considering the emission categories, from 2010–2020, we found an approximately 13% reduction in cradle-to-gate emissions per four ounces of boneless pork meat. These reductions largely came from activities we undertook in manure management.

Our Biggest Impact

From 2020, the top-three GHG-emitting operational categories included:

Manure	Home Consumption	Feed Supply
Manure accounts for our operation’s largest impact, contributing 27% to our overall GHG emissions due to its high concentrations of methane (CH ₄). Methane, if left uncaptured, is more than 25 times more potent than carbon dioxide (CO ₂) at trapping heat in the atmosphere.	Consumer consumption, retail and food waste represents our second-largest contributor to our overall carbon footprint at 34%, including the energy used during the in-home consumption of our products. This category is an indirect scope and includes impacts incurred during the general preparation and consumption of our products by consumers.	Grain farms and feed milling, including the production of animal feed from corn, soy meal and other grains, is our third-largest contributor, accounting for 27% of emissions. This too is an indirect scope.

How Smithfield Is Addressing Hot Spots

Manure	Home Consumption	Feed Supply
Manure is the largest contributor to our emissions, but it is also our greatest area of opportunity for reduction. Through the use and expansion of anaerobic digesters in our company-owned operations and through external partnerships, we shrunk the GHG emissions associated with our manure management from 40-45% in 2010 to just 27% as of 2020 – and we are making significant progress toward our carbon-reduction goals. Learn more about Smithfield Renewables and renewable natural gas (RNG).	Home consumption impacts are measured as a nationwide average and are influenced heavily by consumer behaviors and regional differences such as energy grid mixes. Even though many of these impacts are incurred downstream of Smithfield operations, there are strategies we can implement to reduce the amount of environmental input from the consumer to enjoy our products, including the expansion of our ready-to-eat product lines that require limited home preparation and support the reduction of food waste in households and communities.	We are now tracking feed supply at a regional level, providing a greater level of engagement between our procurement teams and upstream suppliers and farms. Fully understanding the impacts of crops in specific regions helps us identify best practices to implement throughout our supply chain and provides opportunities to experiment with alternative feed ingredients that carry a smaller environmental footprint. By using alternative feed ingredients, we reduced GHG emissions associated with feed by more than 100,000 tons from a 2010 baseline.



New Heat and Power in Poland

Our facility in Poland began upgrading its coal-fired steam boiler house — equipped with three steam boilers that dated back to 1976 — to a new natural gas steam boiler house. The new boiler house’s high-efficiency gas cogeneration system will reduce CO2 emissions to an estimated 30,000 tons annually — a nearly 50% reduction. Additional benefits include:

- Estimated annual energy savings in fuel: 24,873 gigajoules/year
- Estimated annual electricity production: 28,182 megawatts/year



Reducing Environmental Impact on Our Farms

Below are examples of other initiatives that are supporting or otherwise driving progress toward our ambitious climate goals:

- **Growing Wind Energy Investment:** In addition to our 2019 ALLETE Clean Energy Diamond Spring project, we have undertaken a wind turbine pilot with Eocycle Technologies in Colorado. Eocycle provides small, individual wind turbines to power farms.
- **Manure-to-Energy Projects and Partnerships:** We continue to convert manure into renewable energy at our hog farms in North Carolina, Missouri and Utah, displacing methane emissions and powering local energy grids with low-carbon fuel. We are also working with partners to recycle the nutrients in manure as fertilizer for cropland to ensure nothing goes to waste.
- **North Carolina RNG Partnership With Optima BioEnergy:** We are partnering with Optima BioEnergy on a wastewater-to-RNG project at our Tar Heel, NC facility.

2021 Sustainability Award Winner Spotlight: Energy

Ilawa, Poland (Animex) – Convenience Food Line Fryer Fuel Conversion

The team changed cooking fuel from an electric source to natural gas, which is more efficient and reduces energy use.



**Electricity reduction:
225,588 kilowatt hours/year**

Middlesboro, KY – Smoked vs. Clear Casings Project

The team shortened product cook time by replacing clear casings with pre-smoked casings. The team also eliminated the use of wood chips, reducing energy use and air emissions.



**Natural gas reduction:
1,040 dekatherms/year**



- **Monarch Bioenergy Joint Venture With Roeslein Alternative Energy:** We finished installing manure-to-energy technology on nearly all our company-owned finishing farms in northern Missouri. In addition to generating carbon-negative RNG at a rate of approximately 800,000 dekatherms annually, we planted hundreds of acres of prairie grass through this partnership to provide ecological services and wildlife habitat for monarch butterflies across the state. Together, we are also exploring harvesting prairie plants to create biomass for RNG production.
- **Align RNG Joint Venture With Dominion Energy:** Our inaugural Align RNG project in Milford, UT officially came online in November 2020 and is producing RNG from a network of 26 farms that raise hogs under contract with Smithfield. Building on that success, we are nearing completion of similar projects in North Carolina and Arizona and began construction on a project in Virginia. All three of these new projects are scheduled to be producing biogas in 2022.
- **Poland AgriPlus Fertilizer Management:** Our Poland facility, which operates in accordance with goals based on Good Agricultural Practices, committed to reduce its use of nitrogen from natural fertilizers to 150 kilograms per hectare in 2025 to improve nutrient balance and minimize potential impact to natural ecosystems.
- **Romania's Fertilizer Management Process:** Our Romania Farms Division applies organic fertilizer only after soil and manure analyses are performed by external agencies. The division strives to protect local biodiversity and underground water.
- **Farm Powered Strategic Alliance (FPSA), Vanguard Renewables:** In 2021, Smithfield joined the [FPSA](#), a collaborative movement to boost food waste reduction and recycling and expand renewable energy production across America. The FPSA, founded in 2020 by Vanguard Renewables, Unilever, Starbucks and Dairy Farmers of America, aims to avoid or eliminate food waste first and repurpose what cannot be eliminated into renewable energy via farm-based anaerobic digesters.
- **Anuvia™ Plant Nutrients:** Through our partnership with [Anuvia™ Plant Nutrients](#) and other fertilizer producers, we are producing sustainable fertilizer from renewable biological materials from our hog farm manure treatment systems. Fertilizer produced through this and other partnerships utilizes remnant solids that accumulate at the bottom of Smithfield's anaerobic lagoons and basins, which store and treat hog manure on farms. This results in commercial-grade fertilizer that is higher in nutrient concentration than the organic materials in their original form. Because Anuvia's products and other similar fertilizers contain organic matter, their nutrient release is more controlled, resulting in reduced GHG emissions.





Lessons From 20 Years of Manure Management Innovations

For over 20 years, we have prioritized innovative solutions to improve our waste management practices, funded independent research by NCSU and participated in efforts by regulatory agencies seeking to identify meaningful solutions.

Achievements Timeline

- **2003** – Invested \$20 million in the aggressive implementation of a livestock waste-to-biofuel system at our Utah-based Circle Four Farms.
- **2006/2007** – Bolstered our commitment to reduce GHGs by joining the Chicago Climate Exchange (CCX).
- **2007/2008** – In our processing plants, captured biogas from wastewater and used it to fuel steam boilers, reducing their need for natural gas or fuel oil.
- **2008** – Six of our facilities combined produced enough biogas to power 12,782 U.S. households for one year.
- **2015** – Announced our first manure-to-energy biogas project on our Missouri farms and installed impermeable synthetic covers and flare systems on 88 existing lagoons to create biogas.
- **2016** – Became the first protein company to announce a goal to significantly reduce absolute GHG emissions by 25% across our entire U.S. value chain by 2025.
- **2017** – Established Smithfield Renewables, a platform to unify our carbon reduction and RNG efforts and expanded our manure-to-energy projects to farms in North Carolina, Utah and Virginia.
- **2018** – With a pilot in North Carolina, proved the concept of anaerobic waste digesters in Duplin County by successfully capturing biogas from a network of contract farms and producers and converting it to RNG.
- **2018** – Formed two joint ventures to further our RNG strategy, Align RNG and Monarch Bioenergy.
- **2020** – Delivered RNG to the grid in Utah, the first large-scale effort in the state to capture methane from hog-farming operations and convert it into RNG.
- **2021** – Increased the stakes of our "25 x 25" goal to target a 30% reduction in GHG emissions by 2030 and became the first company in the industry to commit to being carbon negative in all U.S. company-owned operations by 2030.

We are proud of our transformation and leadership over the past 20 years. As we celebrate how much we have achieved, we continue to research and investigate new ways to continuously improve.

U.S. Environmental Protection Agency (EPA) AgSTAR: The EPA has updated its information on biogas digesters and the benefits of digesters for animal manure. Biogas is created when animal manure decomposes. Methane recovered from capturing biogas from cattle, hog and poultry farms can reduce GHG emissions and provide a cost-effective source of renewable energy. Recovered biogas can be a clean energy source for electricity, heating or transportation fuel.



A Progress Update With RNG Partner Rudi Roeslein, Roeslein Alternative Energy (RAE)



In our 2016 Sustainability Impact Report, we spoke with Rudi Roeslein of RAE, one of our first partners in RNG. Roeslein recognized early on the potential for a joint venture with Smithfield for biogas capture and reuse. By 2016, the project was already delivering numerous benefits, and had prevented about 400 million gallons of rainfall water from entering lagoons, much of which was diverted into drinking water for hogs, and had avoided 850,000 tons of GHG emissions. We caught up with Roeslein again for an update on our Monarch Bioenergy partnership's progress.

How has the joint RNG project with Smithfield progressed in recent years? What successes have you had?

We've made considerable progress in recent years toward completing eight major projects in Missouri valued at close to \$150 million. These projects are projected to produce more than 800,000 dekatherms of energy each year that would have otherwise escaped to the atmosphere. This investment in rural America provides high-paying engineering, construction, maintenance and operations jobs in communities that desperately need the infusion of opportunities beyond the current agriculture industry. Providing farmers with another source of revenue beyond food and commodities is essential in revitalizing rural America.

What gave you the idea to launch a joint biogas project with Smithfield?

I have a farm in northern Missouri located very close to Smithfield farms and was seeking innovative ways to comply with environmental requirements while operating at a scale that maintained a level of biosecurity, quality of production and profitability. My primary business of building aluminum beverage can plants required me to spend considerable time in Germany and Austria, and I learned of their efforts to use anaerobic digestion systems to produce RNG from their dairy industry and convert that to electricity. This led to a meeting with Michael Rainwater, Regional General Manager for Smithfield, and his team to discuss the possibility of using their lagoons to produce carbon credits that later evolved into producing RNG.

While Monarch Bioenergy officially launched in 2014, Smithfield and RAE began collaborating more than 10 years ago. What milestones from this period are you most proud of?

When we initially started out, there were no pathways for hog manure with either the EPA for D3 RIN credits or the California Air Board for Low Carbon Fuel Standard (LCFS) credits. I started these projects with the expectation of getting carbon credits and invested more than \$50 million to prove out the commercial concepts of using lagoons to capture methane and then purify it with membrane purification systems that RAE designed, built, installed and operated. This led to the completion of the remaining seven projects in Missouri and one in Utah. We currently have the lowest carbon intensity (CI) scores in the pork production industry, averaging below -400, and developed state-of-the-art gas purification systems with more than a 99% methane recovery rate. We are partnering with Smithfield to seamlessly complete these projects on existing farms with minimal disruption to their operations while maintaining their strict standards of biosecurity in less than a year from project approval and funding.



What excites you most about working in the alternative energy industry?

I firmly believe we all want to do things that make a difference in people's lives and especially for the next generation. At age 73, I don't want to do things that are purely driven by a return on investment, but rather the total return to society and the environment. Producing "Good food. Responsibly.®" is not just a slogan to Smithfield, but an ongoing drive to make things better for the consumer and other members of the supply chain. With



RNG, we have a source of energy that is primarily produced from waste products like animal manure and food waste but could also be produced from cover crops and prairie restored on marginal lands. This source of biomass would not only produce RNG, but it would help solve many of the current environmental challenges that cost society trillions of dollars. The ecological services that would be derived from 100 million acres of cover crops and 30 million acres of reconstructed and restored prairie would reduce flooding, absorb nutrients, substantially reduce soil erosion, help cool our atmosphere and provide critical wildlife habitat for many threatened wildlife species and pollinators. This source of energy is multifunctional as opposed to wind and solar, which only produce energy and have many other unintended environmental consequences.

How do you see your partnership with Smithfield evolving?

Smithfield and RAE looked at the challenge of manure management as an opportunity and not just a problem. We continue to look at the challenge of water management, air quality and land management in a holistic way — striving for an integrated, total solution that benefits society, the environment, wildlife and all stakeholders. RAE continues to develop technology that helps solve these challenges, and Smithfield provides the platform to experiment and a patience to bring these solutions to commercialization. Together, we have reconstructed several thousand acres of prairie and are also working with ISU to measure the impact of manure application, pollinator use, nutrient absorption and soil erosion. Smithfield, in cooperation with the Environmental Defense Fund (EDF) and RAE, has provided more than \$500,000 in cash and services in northern Missouri to restore critical habitat not only for monarchs, but for many other threatened species that depend on our grasslands. Our mutual commitment to provide healthy and nutritious food for an ever-growing population in an efficient and responsible way that protects the environment by using the byproducts to produce energy, clean water and holistic nutrients is what unites us in this mission. We ask each other every day, "What else can we do to accomplish these goals?"



Eliminating Waste in Our Processing Operations

Our Goal: Zero Waste to Landfill (ZWTL)

We ended 2021 with 42% of all Smithfield facilities certified ZWTL. We hope to add 17 more facilities by 2025, which would exceed our goal of 75% of our facilities ZWTL-certified. Our secondary goal is a production-weighted 75% reduction in waste sent to landfill compared to a 2010 baseline. At the end of 2020, we were at a 63% reduction. The largest challenge in achieving ZWTL for some of our locations is that recycling companies cannot currently accept contaminated plastics. Getting cost-effective and durable biodegradable plastics on the market would allow contaminated plastics to be treated in commercial anaerobic digesters and would be a game changer in the plastic recycling industry.

Our focus on waste-reduction efforts is reflected in our transition from managing regional efforts to a centralized database that tracks performance and increases visibility of best practices. All facilities also have a Recycling Lead position who communicates best practices with other regions. We have been emphasizing cardboard recycling pricing by empowering our Recycling Leads to develop partnerships with representatives from the recycling markets.

Smithfield's ZWTL program is cost-effective and records overall program cost savings across the 21 ZWTL facilities relative to their baseline year. Some successful project outcomes from 2021 include:

- Our Smithfield, VA, facility was certified as ZWTL in 2021 with a unit cost decrease (\$/ton) by transitioning from landfill to waste-to-energy (WTE) for all materials that could not be recycled.
- Our Kansas City, MO, facility reached cost neutrality by using sustainable packaging and reported a \$22,342 cost savings relative to its baseline year by transitioning from landfill to WTE for all materials that could not be recycled.

As our efforts to reduce waste generation continue, we must continue to remain agile as technology and opportunities shift.

Zero Hero Award

Each year, we recognize the impressive efforts and talents of our Smithfield Family members who go above and beyond to ensure their locations receive zero NOVs. Their efforts have a direct impact on our mission to produce "Good food. Responsibly.®" Our 2021 Zero Heroes were:



Mike Edwards
Wastewater Supervisor
(Smithfield, VA)



R.O. Britt
Senior Environmental Systems Manager,
North Region, Hog Production (Waverly, VA)



The Benefits of Renting Pallets

Animex, our operation in Poland, has been working with a vendor that allows us to rent pallets to decrease waste and cut down on the amount of raw wood material needed to produce pallets. As a result of this partnership, Animex’s pallet rentals resulted in the following benefits, calculated through an LCA completed by CHEP:

- 1,561 trees saved
- CO₂ reductions equivalent to 42 truckload trips around the world
- 155,833 kilograms of waste saved

“



Environmental regulations are not stagnant; they are constantly changing. We must continually adapt how we do business and strive to maximize efficiencies and avoid waste however possible.

—John Meyer, Senior Director, Environmental Affairs

”

2021 Sustainability Award Winner Spotlight: Waste

Hog Production Division Midwest Algona, IA, for Cathodic Bar Testing

Smithfield’s Midwest Environmental team recognized there were significant cost savings and reporting improvements that could be made by internalizing the structural integrity testing of above-ground nutrient storage tanks. The team stepped up to absorb the physical testing of these tanks rather than continue outsourcing the service. Along with cost savings in the testing process, the team created a farm-specific tracking and reporting system that allows for immediate results to be shared with contract growers and company representatives. This enabled them to make timely decisions related to tank upkeep and maintenance. Building on existing relationships with growers also allowed the internal staff to expand the scope of environmental services provided and further sustainability at no extra cost to the grower.



Solid waste reduction:
23,610 pounds/year



Water reduction:
14,788 gallons/year

2021 Sustainability Award Winner Spotlight: Waste

Hermosillo, Mexico (Norson joint venture) – Reduction of Single-Use Plastics

The team reduced transportation, packaging materials and emissions associated with one-time use plastic products by replacing single-use plastic aprons, arm covers and gowns with water-resistant, cut-resistant, washable and reusable cloth materials.



GHG reduction: 2.4 tons CO₂/year



Smithfield Becomes a Food Loss and Waste Champion

In 2015, the USDA and EPA announced a first-of-its-kind domestic food loss and waste-reduction goal. The goal seeks to cut overall food loss and waste in half by the year 2030 to reduce climate and environmental impacts associated with food loss and waste while improving food security and saving money for families and businesses.

Smithfield recently accepted an invitation from the USDA to become a [U.S. Food Loss and Waste 2030 Champion](#). Champions are businesses and organizations committed to reducing food loss and waste in their own operations in the U.S. by 50% by 2030. These businesses are developing new efficiencies, marketing innovations, donation channels and composting and waste-recycling processes while helping feed those in need. They are also reducing the strain on U.S. environmental resources and the pressures of climate change.

The Impact of Food Waste

In the United States, over one-third of all available food goes uneaten through loss or waste. When food is tossed aside, so too are opportunities for improved food security, economic growth and environmental prosperity.

10x20x30

The groundbreaking [10x20x30](#) initiative brings together more than 10 of the world’s largest food retailers and producers, each engaging at least 20 suppliers to halve food loss and waste by 2030. The effort catalyzes a “whole chain” approach to fight food loss and waste and supports upstream reduction of this waste. Each of the food retailers and suppliers committed to the “Target-Measure-Act” approach: Set a target of reducing food loss and waste in its own operations by 50%, measure and publish its food loss and waste inventories and take action to reduce its waste.

10x20x30 got its start at the 2015 UN General Assembly when countries around the world formally adopted a set of 17 Sustainable Development Goals (SDGs) as part of the Post-2015 Development Agenda. SDG 12 seeks to “ensure sustainable consumption and production patterns.” The third target under this goal (Target 12.3) calls for halving global food waste per capita at the retail and consumer level and reducing food losses along production and supply chains by 2030.



Going Beyond Diversion: Food Loss and Waste Measurement Case Study

As part of our industry-leading sustainability program, we strive to maximize the social, environmental and economic value of food and are committed to reducing food loss and waste. At our facility in Junction City, KS, a process-level prevention assessment with environmental consultant Enviro-Stewards identified and implemented measures that reduced food loss to rendering by 30% and retained 3.8 million protein servings (943,400 pounds) per year in the food supply chain with an estimated market value of \$615,000 per year. Learn more [here](#).



How We're Utilizing Bakery Byproducts in Our Animal Feed to Reduce Food Waste

Our vertically-integrated business model continually presents us with new opportunities to make our operations even more efficient. To complement ongoing efforts in our manufacturing and supply chain operations, we're furthering our food loss and waste goals in hog production through innovative optimizations to our animal feed formulations.

Baked goods manufacturers generate a significant amount of food that never makes it to the food supply. The USDA [estimates](#) that 30%–40% of food in the U.S. is wasted annually. Smithfield staff nutritionists identified a way to utilize this pre-consumer food waste — specifically byproducts from popular bread, snack and baked goods facilities — as sources of human-grade fats, sodium, sugars and other ingredients in our animal feed.



Under the supervision of our nutritionists, these byproducts can effectively replace other sources of these ingredients to produce an energy-dense, highly metabolizable feed that is optimal for our pigs to consume at various stages of their growth, such as for small pigs during weaning. We now purchase more than 400,000 tons of bakery meal each year from established manufacturers and recyclers to convert these products into meal for our animal feed.

Using specialized equipment to process these otherwise difficult-to-recycle bakery products, including both raw and prepackaged goods, we're ultimately diverting more than 23,000 tons of food waste from landfills each year. Through this new program, we produce approximately 4,500 tons of bakery meal each week. See our video [here](#).



Carbon Cycle Energy

Carbon Cycle Energy is a renewable energy project developer that designs, builds, owns and operates anaerobic digestion and biogas treatment facilities that convert organic waste streams such as manure into pipeline-grade biogas and other sustainable energy products.

Our partnership with Carbon Cycle Energy will provide a channel for our facilities to send organic waste from processing to a centralized digester to create RNG instead of sending it to landfill. Through rendering, bioscience and other measures, Smithfield maximizes the value derived from each animal. Carbon Cycle Energy offers a solution for the very little waste that is left after each animal is processed.

Carbon Cycle Energy's combination of GHG reduction, cost reduction and landfill reduction achieve disposal and transportation costs that are significantly less than sending waste to landfill, aligning sustainability with cost savings. Among the five facilities that are contracted to use Carbon Cycle Energy's services, we will realize an annual savings of approximately \$785,000 in waste disposal costs.



Sustainable Packaging

In 2021, we announced plans to achieve bold new packaging commitments across our portfolio by 2030. We aim to achieve consumer packaging that is 90% recyclable, reusable or industrially compostable while reducing the use of virgin petroleum-based plastic by 50%.

To meet these goals, we established an internal cross-functional team to investigate and explore new strategic packaging and plastic-use-reduction options. Among the team’s current efforts, we are identifying and testing replacements for products currently packaged in polystyrene (PS) trays.

Both the new recyclable packaging and plastic-reduction goals will help us reduce overall solid waste sent to landfills by 75% by 2025.

Our Journey to Sustainable Packaging

Our packaging engineering team focused on three key areas in 2021:

1. Identifying materials that move us closer to our goal of compostable and recyclable packaging or reusable packaging while having an imperceptible change to the to the business, the customer or the consumer.
2. Working with our in-house strategic sourcing team to ensure we have the right vendors and with the [Sustainable Packaging Coalition](#) to promote cross-industry coordination and innovation.
3. Developing our next-level strategy with an eye toward challenges facing the recycling infrastructure in the U.S.

By proactively improving our own collection and recycling infrastructure and partnering with organizations that share our commitment, we can enhance our material recyclability and provide more accessible materials collections and recycling solutions for our consumers.

2021 Sustainability Award Winner Spotlight: Packaging

Hermosillo, Mexico (Norson joint venture) – Plastic and Cardboard Box Reduction

Our Norson facility used the project concepts of Define, Measure, Analyze, Implement and Control to identify unnecessary use of cardboard and plastics. The facility reduced cardboard use by 2% or ~1 ton/month.



**Cardboard reduction:
11 tons/year**

Smithfield Romania – Free Space Reduction

The team redesigned boxes for two products to satisfy the needs of customers. For one product, the team also improved space utilizations from 67% to 85%, which decreased box use by 25% for one customer and 5% for another.



**Cardboard reduction:
27,558 pounds/year**



Assessing Our Water Impact

Since 2010, we have utilized different tools, like the World Business Council for Sustainable Development's (WBCSD) Global Water Tool and the GEMI Local Water Tool developed by the Global Environmental Management Initiative, to assess our water impact. Building on these assessments, in 2021, we completed water footprint assessments using a total cost of water model for Smithfield manufacturing facilities to identify significant costs and develop reduction strategies. This model provides a comprehensive approach to calculating water use and cost savings by incorporating factors such as our incoming water supply, wastewater treatment chemical costs, wastewater pollutant loading city surcharge costs and wastewater sludge disposal costs.

To track progress, cross-functional teams, including corporate and facilities staff, review water data at least quarterly to identify areas for improvement and solutions for cost reduction while maintaining permit compliance.

Also in 2021, we commissioned a study undertaking a comprehensive water analysis that will help us better understand current and future groundwater demands across our U.S. company-owned locations, contracted hog farms and grain suppliers to further increase our water conservation efforts and ensure sustainable sourcing companywide. As part of this initiative, we will also adopt internationally recognized water stewardship standards by 2025. The assessment will be completed in 2022.

[Smithfield's Water Policy](#)

2021 Sustainability Award Winner Spotlight: Water/Wastewater

Cudahy, WI – Ready-to-Cook Bacon Wastewater-Reduction Project

The team reduced hot water consumption by 80%, eliminated water use, chemicals and setup costs and simultaneously increased microbiological swabbing and analysis to ensure cleanliness.

 **Cost: \$6,925**

 **Savings: \$378,217 annually**

Opole, Poland (Animex) – Sustainable Water Consumption Management Project

The team installed meters to gauge water consumption and identify potential areas for water-use reduction. The team also developed new plant and contract cleaning procedures that substantially reduced wastewater generation and related costs.

 **Cost: \$1,100**

 **Savings: \$313,023 annually**

Honorable Mention: Tar Heel, NC – Creates Wastewater Tour Comic

The team developed a comic strip to illustrate its wastewater efforts, depicting the scenery, equipment and plant personnel as comic-strip characters. Computer graphics technology was used to provide full-color comic books outlining the facility's wastewater-treatment efforts while providing a uniquely memorable souvenir.



Maintaining Our Leadership

Smithfield is proud to receive awards and other forms of recognition from leading companies and organizations for our commitment to sustainability. Here are just a few.



World Sustainability Awards

Smithfield won WSA's "[Profit with a Purpose](#)" award for aligning sustainability and profitability with our innovative renewable natural gas (RNG) programs. In addition to the "Profit with a Purpose" award, Smithfield received a "Highly Commendable" honorable mention in the WSA's 'External Partnership' category for our collaboration with a leading environmental organization to assist farmers in our supply chain with implementing sustainable farming practices.



ProFood World Sustainability Excellence in Manufacturing Awards

Smithfield's Crete, Neb.; Kinston, N.C.; and Sioux Falls, S.D. facilities were recognized by [The Association for Packaging and Processing Technologies \(PMMI\)](#) for their efforts in driving improved performance through sustainability and going beyond environmental compliance.



2021 Environmental Achievement Awards from NAMI

Our Orange City, IA; Springdale, OH; Lincoln, NE; and Cudahy, WI, facilities [received awards recognizing local facility projects](#) in the categories of environmental technology, outreach and training; pollution prevention; resource conservation; and social and economic sustainability. Two Smithfield facilities received first-place recognition, and two additional facilities received second-place recognition. 45 Smithfield facilities further received Environmental Recognition Awards.



2021 Sustainability, Environmental Achievement and Leadership (SEAL) Award

Smithfield was recognized in the [Environmental Initiative category](#) for demonstrating ESG leadership and innovation in its distribution operations.



Business Intelligence Group

Smithfield Foods was a [2021 Sustainability Award finalist](#) for leadership demonstrated through the [Smithfield Renewables](#) program. The outlet's Sustainability Awards honor companies who made sustainability an integral part of their business.



Food Logistics 2021 Top Green Provider

Smithfield's North East, MD distribution center was recognized among companies whose products, services or exemplary leadership are [enhancing sustainability in the cold food and beverage industry](#).



Smithfield Sustainability Awards

Maintaining environmental leadership is a team effort. Each year, our Sustainability Awards recognize the impressive efforts of team-led projects that uphold our commitment to sustainability and environmental compliance. The awards recognize achievements by individuals or teams in six areas: community outreach, energy, packaging, training/education/ISO 14001, waste and water/wastewater.

Over 90 projects across Smithfield’s facilities were considered for awards. Combined, these projects resulted in environmental impacts and cost savings of over \$8.5 million in 2021.

Our Sustainability Awards program’s highest honor is the **President’s Award**. This year’s winner is our **Monmouth, IL, facility** for its **City Water Valve Replacement Project**. This project saved more than \$294,000 per year and reduced water use by up to 19.4% per year — the equivalent of 222,000 gallons per production day.

<p>Community Outreach</p> <ul style="list-style-type: none"> • Milan, MO • Missouri Region, Hog Production 	<p>Energy</p> <ul style="list-style-type: none"> • Ilawa, Poland (Animex) • Middlesboro, KY 	<p>Packaging</p> <ul style="list-style-type: none"> • Hermosillo, Mexico (Norson, joint venture) • Smithfield Romania
<p>Training/Education/ISO 14001</p> <ul style="list-style-type: none"> • Milan, MO • Smithfield Romania • Tar Heel, NC 	<p>Waste</p> <ul style="list-style-type: none"> • Hermosillo, Mexico (Norson, joint venture) • Midwest Region, Hog Production (Algona, IA) 	<p>Water/Wastewater</p> <ul style="list-style-type: none"> • Cudahy, WI • Monmouth, IL • Opole, Poland (Animex)

2021 Sustainability Award Winner Spotlight: Training/Education/ISO 14001

Milan, MO for Stormwater Training

Our Milan, MO, team created a training program to satisfy their upgraded wastewater permit’s Stormwater Pollution Prevention requirements. The permit identified areas for required, periodic monitoring, emphasizing nearby natural resources. The project utilized satellite photographs to pinpoint areas and train pertinent personnel in response processes.

Smithfield Romania for Developing an Internal Certification Program in 2021

Our Smithfield Romania team introduced a broad training program for improvements in enterprise-level, standardized management procedures and skills. This included employee training, support and recognition, decreased production costs, improved employee retention and identification of potential management successors.



Good Food

Good Food is what we do best. We're helping feed families around the world with safe, affordable, center-of-the-plate protein that people can trust for its quality and love for its flavor.

- ▶ **Food Safety & Quality**
- ▶ **Health & Wellness**



Key Milestones: Good Food

2010	2016	2017	2020	2021
Global Food Safety Initiative (GFSI)-certified 100% of applicable facilities.	First in industry to publish online ingredient glossary.	Launched Smithfield BioScience.	Expanded sustainability platform to include a designated Health & Wellness pillar.	Became #1 supplier of heparin sodium in the U.S.

Food Safety & Quality

We're proud to be a leader in food safety policies, procedures and performance. We know that our success depends entirely on satisfied customers and consumers. To learn more, view our [Food Safety & Quality video](#).

Our Commitment to Food Safety & Quality

Deliver safe, affordable, high-quality protein to meet the growing global demand.



★ 2021 Food Safety & Quality Highlights

- An enhanced Manufacturing Intelligence (M-IQ) process.
- A downward trend for consumer/customer complaints.

Our Food Safety & Quality Targets

	Status
No incidents requiring a recall	● Did Not Achieve
Maintain GFSI certification at all applicable facilities	● Achieved
Maintain a robust food safety and quality employee training program	● Achieved



Our Approach to Food Safety & Quality

To underscore our commitment to quality, and to further improve our food safety culture, we developed and implemented a Food Safety & Quality Assessment (FSQA) dashboard for our fresh and packaged meat operations. We use the dashboard to track and deliver monthly reports on facility-level compliance and improvements on key food safety and quality metrics such as customer complaints, recalls and product shelf life.

We also worked to standardize all our food safety and quality policies, procedures, programs and data collection. We participate in projects with the U.S. Department of Agriculture (USDA) Food Safety and Inspection Service (FSIS) aimed at improving food safety and increasing consumer protection in addition to executing standardized protocols and compliance.

“

Our Food Safety and Quality Team ensures that our products are safe, wholesome and consistently meet our customers’ expectations. This team helps our facilities adhere to food safety and quality regulations as well as customer and company requirements. We also focus heavily on franchising food safety and quality best practices across all our facilities.



—Dawn Pickett, Vice President of Food Safety & Quality Assurance , Lisle, IL

”



Industry Leading Standards

Smithfield measures Food Safety & Quality performance against the industry-leading GFSI standard, which was developed to drive continuous improvement in food safety and quality management systems around the world. GFSI certification requires annual third-party audits by organizations such as Safe Quality Food (SQF), the Brand Reputation Compliance Global Standard (BRCGS), the International Featured Standard (IFS) Food Standard, and ISO 22000. We have GFSI certifications at all applicable facilities — U.S. and international. In Poland, our farms, warehouses and rendering plants are IFS- and BRCGS-certified. In Romania, our fresh meat division is IFS- and BRCGS-certified, and all rendering facilities, warehouses and farms are ISO 22000-certified.

GFSI certification requires facilities to have scientifically valid food safety and quality plans that monitor, on an ongoing basis, compliance with product and ingredient specifications, facility maintenance, manufacturing procedures, and Hazard Analysis and Critical Control Point (HACCP)-based critical quality points across product development, customer specifications and product-quality review.

We require our suppliers to undergo annual GFSI certification or equivalent, as well as a third-party animal-handling audit, including a transportation audit. Process Verified Program (PVP) certification, a USDA farm-to-table assurance initiative, applies to 100% of our suppliers.

For additional details, visit our Food Safety & Quality management programs and policies page [here](#).



Franchising “The Smithfield Way”

Our manufacturing leadership team combines forces with our sustainability team to develop independent department goals and metrics that align with our manufacturing platform and focus on efficiency and efficacy. This is one of several sustainability metrics included as part of our new FSQA dashboard for our fresh and packaged meat operations. The dashboard enables us to track and deliver monthly reports on facility-level compliance and improvements on key food safety and quality metrics, including customer complaints, recalls and product shelf life. The dashboard can also be holistically employed across our other pillars.

The key to our approach is that we’re not just implementing goals, we’re implementing the procedures behind them. We’re franchising food safety and quality procedures and best practices, documenting them and distributing them to every Smithfield facility. It’s all centered around reducing customer complaints and improving against the already high standards we set.

A big focus for us in 2021 was on aligning our manufacturing platform and implementing M-IQ, which is the methodology that standardizes all aspects of our manufacturing operations and defines how we produce our products “The Smithfield Way.”



M-IQ is about facilitating:

- An improved culture for our people.
- Improved efficiency in our plants.
- Preparing us for the future.

M-IQ establishes a standard set of working practices within our company by pulling together cross-functional manufacturing teams, including Food Safety & Quality and Worker Health & Safety. It standardizes all policies, procedures, programs and data collection in our facilities, and establishes a benchmark that we can measure improvements against. Initially, the MI-Q process focused on our Food Safety & Quality processes. With other departments further engaging the process, we look forward to sharing more stories of how MI-Q is impacting all aspects of our business.

Enhancing Product Quality: “The Smithfield Way”

Development of this standard operating process will help us strengthen our performance, enhance product quality and consistency and allow us to consistently address the challenges we face as a top-tier global supplier. It will make us more efficient and an even better place to work.

Here are some of the ways we’re leveraging the M-IQ process:

- **Bacon inspections:** Through the M-IQ process, we evaluate the entire process to reduce leaker packages.
- **Tar Heel harvesting and Wilson processing:** By moving our quality inspections inline, we’re reducing the amount of product from our harvest facility that does not meet the specification at our bacon processing facility, which allows us to make changes to the process upstream before the raw material is packaged. To date, we have improved raw material product that does not meet the specification by 8%, resulting in increased throughput at our Wilson bacon packaging facility.
- **Reduced complaints:** In 2021, customer and consumer complaints were down 8% from 2020 in the U.S., 20% in Poland and 13% in Romania.



Employee Training and Skill Development

The skill development of our employees is a critical component of Food Safety & Quality. This includes:

- Creating a culture of continuous improvement that engages and values input from team members at all levels.
- Enhancing training to improve the skill base for individual employee success.
- Defining roles and responsibilities to minimize variables and frustration, making training more precise and efficient.
- Developing more reliable schedules due to decreased downtime.
- Providing an environment that enables a proactive, strategic approach to addressing issues.
- Empowering employees to be part of the problem-solving culture, leveraging the M-IQ process and tools to make decisions in real-time.



Our Food Safety & Quality Commitment

Our Food Safety & Quality systems help ensure that we can respond quickly to address product recalls, should they ever occur. In the event of a product recall, we work swiftly to block the item from being sold and alert retailers immediately.

In December 2021, we voluntarily recalled a limited quantity of Margherita Meats, Inc. pepperoni products for potential contamination with *Bacillus cereus* (*B. cereus*). The limited voluntary recall was conducted out of an abundance of caution with the involvement of the USDA FSIS. There have been no confirmed reports of adverse reactions due to consumption of these products. *B. cereus* is ubiquitous and is occasionally found in foods.

Our international facilities coordinate with multiple agencies in Poland and Romania that oversee food safety requirements and recall procedures. In 2021, Poland reported seven product recalls regarding food safety, including salmonella, an incorrect expiration date and ASF. Romania had two recalls last year, both of which were related to ASF.





Health & Wellness

At Smithfield, “good” doesn’t stop with our products — it’s in everything we do. From easier-to-read nutrition and ingredient labels on our packaging to harvesting lifesaving drugs for use in hospitals, we’re not just producing good food — we’re making good progress toward a healthier society. To learn more, view our [Health & Wellness video](#).



Our Commitment to Health & Wellness

Smithfield promotes wellness through improved nutrition and innovations in pharmaceuticals, nutraceuticals and other human applications.

★ 2021 Health & Wellness Highlights

- Expanding our BioScience facility.
- Streamlining production processes and product formulations.
- Working collaboratively with customers.
- Creating cleaner food labels that are easier to understand.
- Reducing allergens in our products.

Our U.S. Health & Wellness Targets

	Status
Increase transparency through cleaner labeling across 100% of our product line by 2025.	● On Track
Reduce added sugars by 10% across our entire product line by 2025.	● On Track
Reduce sodium by 10% across our entire product line by 2025.	● On Track
Maximize our vertically-integrated supply chain to produce products critical to human health, including pharmaceuticals and nutraceuticals.	● On Track
Ensure a variety of products for different diets and needs.	● On Track
In our international operations, include products designed to address health and wellness in accordance with European Union (EU) nutrition and labeling standards.	● Achieved



Our Approach to Health & Wellness

- Focusing on healthy, nutritious and affordable center-of-the-plate products.
- Improving the healthy attributes of our products.
- Leveraging our vertical supply chain and unique ability to control and manage products.
- Utilizing our Innovation Center to partner with food service and retail customers.
- Proactively collaborating with customers to test small-batch ingredients and assessing products and reformulations.

Healthy Eating

We're doing our part to ensure our products are delicious and provide an important source of essential protein, which is a key part of the human diet. We are creating cleaner food labels that provide shorter, easier-to-understand ingredient lists for the families who choose our products for their tables. We're also simplifying and transforming ingredients — such as using cultured celery juice and cherry powder as alternatives to sodium nitrate and sodium erythorbate in our all-natural and naturally cured products.

Additionally, we're streamlining our production processes and product formulations to help deliver on our 2025 targets, which include reducing added sugars and sodium by 10% across our product lines. And we're reducing allergens such as wheat and sesame derivatives.

Smithfield was the first company in the industry to publish an [online ingredient glossary](#). It provides information about the ingredients in our most popular items, in addition to our main ingredients — pork and other meats. These ingredients are added to enrich flavor, expand variety and enhance food safety.



Smithfield Power Bites Wins Newsweek's Best New Product Award

In 2021, Smithfield Power Bites won Newsweek's Best New Product award in the breakfast bites category. Power Bites is a breakfast snack made of premium pork sausage, real eggs, potatoes and cheddar cheese for a delicious snack that includes all the breakfast favorites.

More than 14,500 U.S. shoppers participated in a survey to pick the 81 winning products. The Best New Product Awards, hosted by BrandSpark, have been celebrating product innovation for more than 13 years and are 100% consumer voted.



Smithfield BioScience

Smithfield BioScience is part of our vertically-integrated platform that offers innovative solutions to increase the functionality and viability of Smithfield’s nonfood products for the advanced development of pharmaceuticals, nutraceuticals and medical devices. It’s part of our ongoing efforts to improve the human condition by developing lifesaving products.

Part of fulfilling our commitment to “Good Food. Responsibly.®” is making sure we utilize the entire animal and minimize waste. There are many parts of the animal that are not typically consumed. Smithfield has found valuable uses for these bioproducts, including medical applications, to leverage our vertically-integrated business model. Our business structure allows us to control every stage of production — and deliver a premium product for the development of lifesaving pharmaceuticals and biomedical innovation.

To learn more, please view our [BioScience video](#).

BioScience

In 2021, we began the expansion of our BioScience facility, enabling us to increase our production of heparin by a factor of 10x. As part of the facility’s expansion, we upgraded aspects of its environmental program, including implementing a closed-loop solvent/reuse system and barrel collection system, which will be completed in summer 2022.



Biomedical Research

We continue our biomedical research, including regenerative medicine and partnerships with the U.S. Department of Defense (DOD), Advanced Regenerative Manufacturing Institute (ARMI) BioFab and University of Pittsburgh. We’re also investigating opportunities for manufacturing additional drugs beyond heparin. Smithfield maintains a collaborative relationship with Dr. George Christ’s research group in the Laboratory of Regenerative Therapeutics at the University of Virginia (UVA). Dr. Christ is at the forefront of an effort to develop novel treatments for volumetric muscle loss (VML), which will ultimately fill a critical gap in clinical interventions available to wounded warriors in the armed services.

In addition, several Smithfield research and development (R&D) projects that address the needs in the world of regenerative medicine are currently in progress, including the development of products utilizing decellularized porcine organs and tissues for wound healing and surgical applications. Other areas of focus include the extraction of important active pharmaceutical ingredients (APIs), such as enzymes and proteins from porcine organs and tissues.

Every week, we produce about 26,000 million international units per liter (mega units) of heparin that could be used to make:

260 million
blood collection tubes

52 million
lock flush syringes, or

more than 1 million
blood collection tubes



Good Work

Our Good Work is focused on helping the communities where we live and work; fostering a culture that promotes diversity, equity and inclusion (DEI); and maintaining a laser focus on ensuring the health and safety of our workers.

- ▶ **Helping Communities**
- ▶ **Diversity, Equity & Inclusion**
- ▶ **Worker Health & Safety**



Key Milestones: Good Work

2007

Implemented the Employee Injury Prevention Management System (EIPMS).

2008

Established the Helping Hungry Homes® initiative, which has since provided more than 250 million servings of protein to communities.

2015

Implemented workers safety training into virtual Smithfield University.

2017

Evolved the EIPMS program with the implementation of the Smithfield Injury Prevention System (SIPS).

2019

Achieved protein donations in all 50 U.S. states through Helping Hungry Homes®.

2020

Formalized DEI efforts into a dedicated, standalone pillar and launched a \$15 million companywide Unity & Action initiative.

2020

Marked largest year of charitable giving since Smithfield's founding in 1936, with donations of nearly \$70 million.

2020

Outperformed both the meat industry and the general industry for least worker injuries.





Helping Communities

We feel a great responsibility to the communities we call home. From supporting our local communities with volunteerism, donations and good jobs, we seek to help our communities thrive. View our [Helping Communities video](#).

Our Commitment to Our Communities

Through targeted philanthropy and employee volunteerism, we aspire to make a meaningful impact that addresses food insecurity, advances education and supports the vitality of the places we work and live.



★ 2021 Community Highlights

- Contributed more than \$44 million in cash and in-kind donations.
- Continued increased charitable giving levels amid the pandemic, donating nearly 775,000 servings of protein to communities in need every week and achieving our goal to donate 100 million servings of protein through our Helping Hungry Homes® initiative by 2025.
- Hired nearly 600 veterans.
- Provided a \$300,000 grant to fund a veteran employment center in Virginia.

Our Community Targets

	Status
Give back to our local communities through philanthropic and volunteer support at every Smithfield operation globally on an annual basis.	● On Track
Continue to fight food insecurity across the country by donating an additional 100 million servings of protein through our Helping Hungry Homes® initiative by 2025.	● Achieved
New: Double our previous goal of donating an additional 100 million servings of protein through our Helping Hungry Homes initiative to target a total of 200 million servings by 2025.	● On Track
Develop the next generation of leaders through scholarship assistance for students and donations to schools and educational programs.	● On Track
Honor the service and sacrifice of American veterans and their families through our Helping Our Heroes program, which includes hiring initiatives, career development and initiatives to strengthen the community and family support systems veterans rely on.	● On Track



Our Approach to Helping Communities

As the largest U.S. producer of pork products, we address food and nutritional insecurity by providing essential protein to food banks and other nonprofit organizations. We focus our donations on three key areas: food insecurity, education and the vitality of our communities, including support for U.S. veterans and their families. We also assist natural disaster response efforts nationwide.



Combating Food Insecurity

Donating Food Is a Proud Tradition at Smithfield

Our [Helping Hungry Homes](#)® initiative helps feed the hungry and fights food insecurity. Since 2008, we have donated hundreds of millions of servings of protein to food banks, disaster relief efforts and community outreach programs in all 50 U.S. states, Poland and Romania. During the pandemic, we increased donations through this initiative to record levels — donating a total of more than 100 million protein servings to our communities in 2020-2021 and exceeding our 2025 donation target four years early. To reflect our continued commitment to fighting food insecurity, we are doubling our pledge to target a total of 200 million servings by 2025.

	United States	International
Cash donations	\$4.4 million	\$0.3 million
Food donations (\$ value)	\$39.9 million	\$0.1 million
Total value of donations	\$44.3 million	\$0.4 million

Food donations (servings):
40.3 million
 servings of food globally

Local food donation events we supported in 2021 included:

- **Disaster Relief:** We partner with organizations to aid disaster relief efforts across the U.S. Last year, we sent protein donations through our Helping Hungry Homes® initiative to our partner Mercy Chefs, a Portsmouth, VA nonprofit that deploys to disaster zones to serve free chef-prepared, restaurant-quality hot meals to victims, volunteers and first responders. Our truckloads of protein donations were received by Mercy Chefs’ mobile kitchens in Louisiana following Hurricane Ida, in Miami following the Surfside condo collapse, in Texas following Winter Storm Uri, in Tennessee following severe floods and in Kentucky following the quad-state tornadoes.
- **25th Annual Mayflower Marathon Food and Fund Drive:** Every year, we participate in the Mayflower Marathon, a 57-consecutive-hour food and fund drive held annually the weekend before Thanksgiving to support the Virginia Peninsula Foodbank (VPF) and the Foodbank of Southeastern Virginia and the Eastern Shore (FSVES). In 2021, we delivered two full truckloads — the equivalent of 80,000 pounds and approximately 300,000 protein servings — to help families facing food insecurity during the holidays and beyond. Donations from the community were also received by 20 volunteers from Smithfield’s Black Professionals Network (BPN) employee business resource group.



- **The Oregon-Utah Food Insecurity Wager:** Food banks in Oregon and Utah were the winners when Oregon Senator Ron Wyden and Utah Senator Mike Lee raised roughly 55,000 pounds of food donations for local nonprofit organizations in their respective states as part of a bet prior to the Oregon Ducks vs. Utah Utes football game on Nov. 19. Both teams “won” 40,000 pounds of pork from Smithfield to donate to their local food bank of choice, which was good news for both Oregon and Utah teams — especially since the Ducks lost to the Utes, 38–7.
- **North Carolina State Fair’s Annual Hunger Relief Day:** We were the presenting sponsor of the NC State Fair’s annual Hunger Relief Day, one of the largest one-day canned food drives in the state. During this North Carolina tradition, fairgoers donate six cans of food to the Food Bank of Central & Eastern North Carolina in exchange for free admission. At the event, Smithfield President & CEO Shane Smith presented the food bank with a surprise donation of 500,000 servings of protein to complement all the canned foods donated. Combined, the event raised a total of 313,197 pounds — the equivalent of 260,997 meals — for those facing hunger in North Carolina.
- **Rivals Unite in the Commonwealth Clash:** As a Virginia-based brand and longtime supporter of the University of Virginia (UVA) and Virginia Tech athletic departments, we are proud to be a presenting sponsor of the Commonwealth Clash rivalry games between the schools for all sports. As part of the sponsorship, we collaborate with both schools on game-day activities, fan opportunities and community outreach events. These joint donations unite the opposing sides for the benefit of their hometowns by providing valuable center-of-the-plate nourishment to local children, seniors and families while helping the food banks maintain their current high volume of food distribution.
- **Food Bank in Olsztyn, Poland:** In 2021, Smithfield Poland’s Animex Foods donated more than 28 tons of food with a total value of more than 297 thousand Polish Zlotys (PLN) to the Food Bank in Olsztyn. Animex donated to 3,200 social organizations and institutions that help people in need, including canteens, community centers, night shelters and homes for the homeless, educational centers, hospices, support centers for single mothers and orphanages.





Advancing Educational Opportunity

We reinforced our commitment to education by funding more than \$1 million worth of educational scholarships globally to eligible dependents of our employees in 2021. Additionally, we supported local education programs across the U.S., in Poland and in Romania, including:

Fostering Mentorship

For the 10th consecutive year, our Crete, NE facility presented a \$50,000 check to TeamMates of Crete, a mentoring program serving middle and high school students in the Crete area. TeamMates of Crete strives to create confident leaders by providing them with the skills to succeed and putting them in a position to give back to their communities. Mentors and mentees live by TeamMates' motto: "Together We Transform Lives." We are extremely proud to have been named [TeamMates' Community Partner of the Year](#) for 2021.



Being a mentor with TeamMates for the last 12 years has been a wonderful experience for me. I've had the pleasure of getting to know four remarkable mentees throughout their middle and high school careers and have enjoyed helping them navigate through some incredible life choices. These experiences have been so rewarding and made me a better individual, husband and father. I'll forever be thankful for the opportunity I've had to volunteer as a TeamMates mentor.

—Terry Leiting, Industrial Engineering Manager, Crete, NE



Future Farmers of America (FFA)

Our Farmland brand recognized the national FFA organization and its positive impact in the agricultural industry with a \$100,000 donation. The gift was part of the 2021 Honoring the Heartland Tour, an initiative launched by Farmland to show appreciation for the honest, tireless work of Midwest farming communities, agriculture industries and retail establishments to support the next generation of farmers, including more than 760,000 current FFA student-members. For more information on Farmland's Honoring the Heartland Tour, see [page 58](#).

Adopt a School Romania

For the fourth consecutive year, Smithfield Romania implemented its Adopt-a-School program, providing financial support of 1 million Romanian New Leu (RON), the equivalent of approximately \$228,000, to more than 30 primary and middle schools in Smithfield communities. Adopt-a-School supports local educational infrastructure by funding specific investment projects — such as rehabilitating and renovating school infrastructure, procuring and equipping schools with new teaching equipment for online education and constructing new playgrounds and sports spaces. Our commitment to these schools has improved the study conditions for approximately 13,000 students.



Part of our promise to invest in the next generation of leaders through educational initiatives extends to giving commitments we have made to advance DEI. For more information on education programs that we partner with to support communities of color, see [page 64](#).



Helping Our Heroes

In 2020, we launched Helping Our Heroes, a veteran initiative that expands our long-standing commitment to honoring the service and sacrifice of American veterans and their families. The initiative is aimed at prioritizing veteran employment and career development and strengthening the community and family support systems that veterans rely on. Here are some of the ways we helped our military heroes and their families in 2021:

- **Hampton Roads Veteran Employment Center:** The resources to help military veterans find jobs are expanding in the Hampton Roads region of Virginia. In fact, they have doubled with the grand opening of a veteran employment center in Newport News. Smithfield provided a \$300,000 grant to operate the center and committed to hire 4,000 military veterans by 2025. We also continue to prioritize military spouses in our recruitment efforts and veteran-owned businesses as vendors.
- **Armed Services YMCA Partnership at Fort Bragg:** Last year, Smithfield and Armed Services YMCA hosted a food distribution and hiring event for the Fort Bragg military community, including military families, transitioning service members and veterans. More than 500 attendees received a hot lunch and Smithfield products to take home.



Veteran Employee Spotlight

Meet [Valerie King](#), a customer success supervisor in Suffolk, VA, who is one of the 4,000 veterans we have committed to hire by 2025 and a participant in our programs to support military-to-civilian life transitions. After serving in the Air Force for more than 10 years, Valerie was not sure what she would do next. She eventually found her home at Smithfield, where our programs helped her get a master's degree. Now, she sees no end to how far she will go.



Responding to Local Community Needs

Hometown Heroes Served Hot Meals

Our Smithfield Family in Warsaw, NC served hot meals to more than 4,500 health care and essential workers across the state to show appreciation for their ongoing efforts to keep communities safe during the pandemic. The hot to-go meals were served outdoors at Sampson Regional Medical Center in Clinton, Pender Memorial Hospital in Burgaw, Onslow Memorial Hospital in Jacksonville, Cape Fear Valley Bladen County Hospital in Elizabethtown, Wilson Medical in Wilson, Lenoir Memorial in Kinston and New Hanover Medical in Wilmington.

Solidarity With Medical Professionals in Romania

Smithfield Romania launched a new social responsibility program designed to support hospitals and medical institutions. The program, called Solidarity with the Medical System, is built around a grant fund that can be accessed by medical and public health institutions. The call for proposals was launched in November 2020, and the projects were implemented during 2021.

Solidarity with the Medical System supports a wide range of medical projects, including:

- **Timișoara Railway Clinical Hospital Association:** Equipped the wards of the hospital with 50 medical mattresses, 50 medical nightstands and 10 medication trolleys.
- **Oncohelp Association:** Provided equipment for radiology treatments within the Ambulatory for Radiotherapy Services and Radiotherapy Laboratory.
- **Caritas Federation – Hospice Timișoara:** Purchased an oxygen concentrator for patients admitted to the center.

Over the years, Smithfield’s financial support for the program totaled more than \$489,000 (2.14 million RON).

“

The funding the hospital received has had a major positive impact in increasing the quality of its medical performance.”

—Daniela Cîrlig, Hospital Director, Dr. Karl Diel Hospital, Jimbolia

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Support for Local Restaurants in Sioux Falls, SD

Pork was the star during the inaugural Downtown Pork Showdown in Sioux Falls, SD, a new culinary competition presented by Downtown Sioux Falls (DTSF) and Smithfield. The competition among 16 Sioux Falls restaurants ran during September 2021, with each restaurant serving creative dishes featuring pork. Chef Lance’s on Phillips was the winner for its Pulled Pork Wellington: pulled pork, boursin cheese and mashed potatoes baked in a puff pastry served with asparagus and a whiskey cream sauce.

“

Smithfield was excited to partner with DTSF on this fun community event. It was a great way for residents and visitors alike to support local businesses and partners who share our love of pork, and we were impressed by the creative and delicious recipes the restaurants came up with throughout the competition.



—Tolcha Mesele, Senior Community Development Manager, Sioux Falls, SD

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Smithfield Refugee and Asylum Seeker Resettlement Program

As a global industry leader and an employer of choice, we are voluntarily working with a network of partners, including the Department of Homeland Security and the U.S. State Department, to leverage our expansive footprint to assist refugees and asylum seekers with resettling and transitioning to life in the U.S.

We are proud of our 40-year partnership with Lutheran Social Services in Sioux Falls, SD, which has served as a pilot for these efforts. Through this partnership, we engage with community leaders and the local and federal government to provide holistic refugee resettlement services and support while their cases are pending — including acclimation and onboarding, assistance with immigration processes, legal counsel, Employment Authorization Document processing, cultural and language skills training and continuous employment at one of our many U.S. facilities.

La Masă în Banat

Smithfield Romania is proud to support “At Dinner in Banat” (La masă în Banat), an initiative to document and promote the culinary heritage of the Banat area of Romania and preserve its gastronomy traditions by preparing and serving eight traditional sets of original recipes. The unique heritage of the Banat area is rooted in an assimilation of the flavors, recipes and history of several Central and Eastern European cultures, including Slovak, German, Hungarian and Serbian. In each of these cultures, pork produced in an authentic way is highly valued, and every village has a recipe that is unique and carries with it the experiences of many generations.



Farmland® “Honoring the Heartland” Tour and Farm Tour With Luke Bryan

For years, Farmland® has worked with local farm families in America’s heartland to provide customers with high-quality, flavorful products they can trust and feel good about. For 13 weeks over the summer, Farmland delivered grab-and-go meals and presented monetary donations to the next generation of farmers through its “Honoring the Heartland Tour,” organized to show appreciation for the honest work and tireless commitment of Midwest farming communities, the agricultural industry and grocery and other retail establishments nationwide. Nearly 30 events and more than 10,000 meals were served throughout the tour.

Farmland was also proud to partner with country superstar Luke Bryan on his 12th annual Farm Tour, during which Luke and his team set up stages and played in the fields of six lucky local farmers. Proceeds from the concerts went toward college scholarships for students from farming families.



Farmer John + Los Angeles Regional Food Bank

Farmer John and Los Angeles Football Club (LAFC) Broadcaster Max Bretos stopped by the Los Angeles Regional Food Bank to recognize the organization’s commitment to serving the local community. To assist in the Food Bank’s efforts, Farmer John donated more than a quarter of a million servings of much-needed protein to aid in local hunger relief. In addition to giving back to the community through food, Farmer John also showed its gratitude to workers at the Food Bank, who have been committed to keeping families fed during the pandemic, by providing a “thank you” lunch to employees and their families.

During the summer and fall of 2021, Farmer John also launched a mobile tour to showcase its commitment to serving the Greater Los Angeles community. Over the course of the tour, the team targeted a combination of front-line workers, teachers and community groups to show appreciation by providing celebratory “thank you” events. At each “thank you” event, visitors were provided grab-and-go Farmer John meals as a small token of appreciation to recognize and celebrate these critical groups within the surrounding community.





Maintaining Our Leadership

Smithfield is proud to receive awards and other forms of recognition from leading companies and organizations for our commitment to communities. Here are just a few.



Forbes Best Employers for Veterans Award

Smithfield Foods was recognized for a second consecutive year on Forbes' list of America's Best Employers for Veterans. The [2021 list](#), presented by Forbes and Statista Inc., is based on an independent survey completed by over 5,000 U.S. veterans working for companies who employ at least 1,000 people in the United States.



Military Times Best for Vets Award

In 2021, Military Times included Smithfield Foods in the publication's [Best for Vets Employers](#) rankings for the third consecutive year. Awarded during National Military Month, the rankings recognize companies for their efforts to recruit and support service members, veterans, and military families.





Diversity, Equity & Inclusion (DEI)

Ensuring diverse representation from a variety of perspectives across our business strengthens our global competitiveness and helps us support our diverse stakeholders. View our [DEI video](#).

Our DEI Commitment

Smithfield is committed to ensuring a diverse, equitable and inclusive workplace and a culture that respects every employee. We also seek to promote equity across our business and in our communities.



★ 2021 DEI Highlights

- Launched three minority-owned farms through Smithfield’s contract grower program and established a robust pipeline of future candidate participants.
- Graduated more than 100 employees since the inception of Smithfield’s Operations Leadership Program (OLP), designed to identify and mentor future leaders and create a robust pipeline of diverse candidates to fill management positions.
- Supported 625 students through DEI-focused educational scholarships globally.

Our DEI Targets

	Status
Maintain our OLP program.	● On Track
Fund education programs that provide access to quality education and bridge divides in communities.	● On Track
Further diversify our Smithfield Foods Scholarship Program to include additional historically Black colleges and universities (HBCUs).	● On Track
Increase production facility spend with minority-owned businesses by 14% to achieve a more inclusive supply chain by 2025.	● On Track
Maintain a minority contract grower program to increase the number of diverse hog suppliers within our agricultural supply chain.	● On Track
By 2030, increase the racial and gender diversity of our leadership team by promoting and hiring: <ul style="list-style-type: none"> • Black, Hispanic and other underrepresented groups to reflect at least 30% of supervisors and above. • Female leaders to represent at least 35% of supervisors and above. 	● On Track



Our DEI Approach

As Smithfield grows, we continue to invest in a diverse, equitable and inclusive workplace where employees can learn, develop and reach their full potential. Our Unity & Action platform represents our \$15 million commitment to further DEI in food manufacturing, agriculture and education.

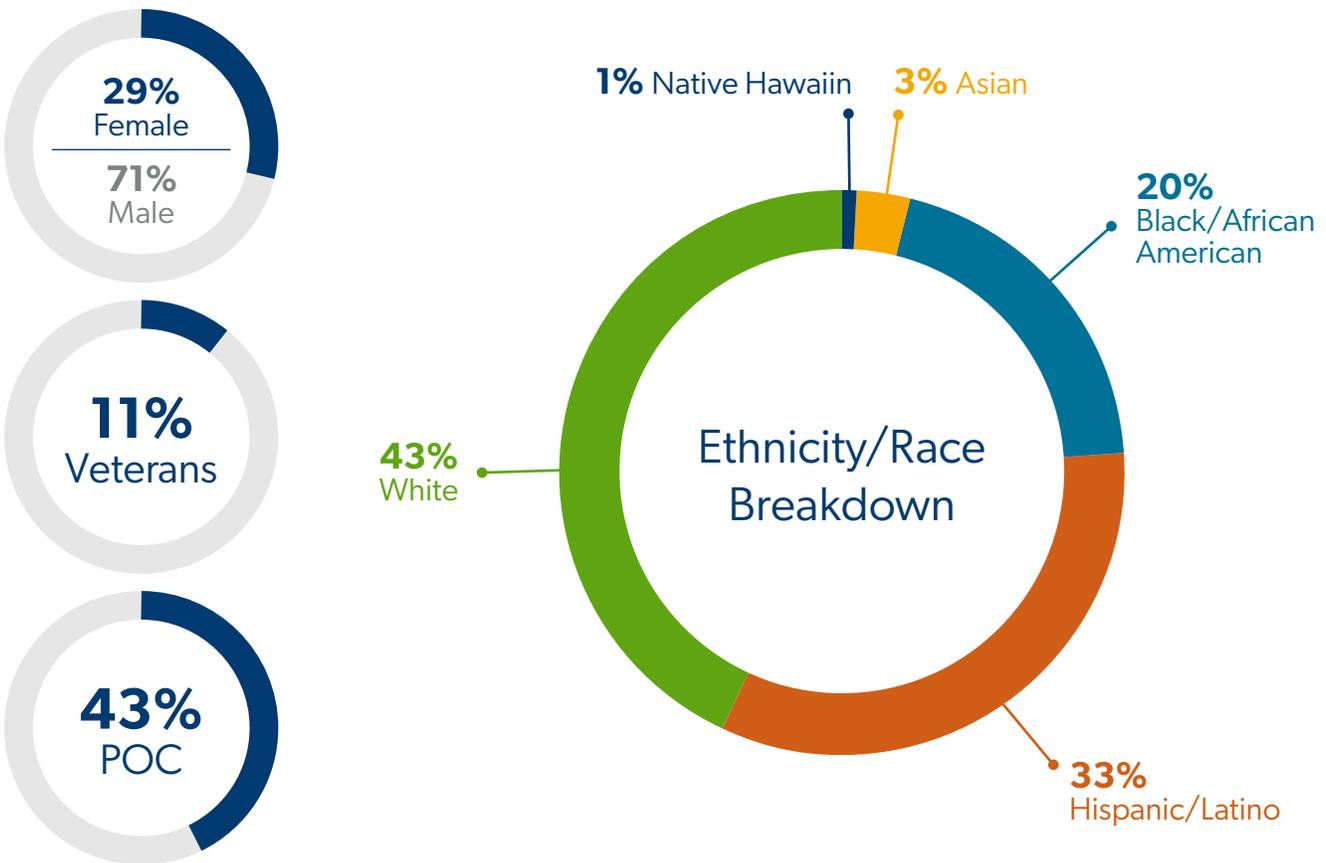


Building a Diverse, Equitable and Inclusive Culture

As Smithfield grows, we continue to invest in a diverse, equitable and inclusive workplace. Diversity is our strength, and we believe the diversity of our entire Smithfield Family should be reflected in our leadership teams.

Advancing Learning and Development Opportunities

We are investing in the professional development of our team members through our OLP, a key component of our Unity & Action strategy launched in September 2020 and designed to create a robust pipeline of diverse candidates to fill future management positions. Over a three-month period, program participants attain the skills and knowledge to become leaders in our company — and the opportunity to learn from key members of our Smithfield Family and personal mentors across our business. To date, our OLP has welcomed four cohorts, served more than 100 graduates representing 33 locations and resulted in 19 promotions. We are excited to continue to grow and develop our Smithfield Family through this new program.





Celebrating Our Diverse Smithfield Family

Our Employee Business Resource Groups (EBRGs) enable us to foster supportive communities that create a sense of empowerment among like-minded colleagues while strengthening professional and personal connections across all organizational levels and operating areas.

We currently have four EBRGs: Smithfield’s Black Professionals Network (BPN), Women’s Connect, Smithfield Next and Smithfield Salutes. These groups are building powerful connections among their members and positively impacting our business.



“

The BPN is a place for people of color to develop personally and professionally and is open to different perspectives and experiences. Even if you aren’t African American, there is still so much to learn and contribute!

—LaTonya Sumpter,
Chair of the Black Professionals Network

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Our Workforce by the Numbers

2021 U.S. Workforce Diversity (Percentage of Total Workforce)

	Executive/Senior Level Officials	Hourly Employees	Salaried Employees	Total
American Indian or Alaskan Native	0	405	62	467
Asian	1	2,543	221	2,765
Black or African American	2	9,175	834	10,011
Hispanic	2	10,886	863	11,751
Native Hawaiian or Other Pacific Islander	0	137	11	148
Two or More Ethnicities	0	342	58	400
White	94	6,718	4,146	10,958
Not Specified	0	167	23	190

2021 U.S. Workforce by Gender and Age

	Gender		Age			Total
	Female	Male	Under 30	30–50	50+	
Executive Leadership*	19	80	0	45	54	99
Number of Full-Time Employees	13,726	22,866	6,390	18,659	11,542	36,591
Percentage of Employees	37.46	62.54	17.42	50.98	31.61	100

2021 International Workforce by Gender and Age

	Gender		Age			Total
	Female	Male	Under 30	30–50	50+	
Number of Full-Time Employees	8,057	9,302	3,062	9,135	5,162	17,359
Percentage of Employees	46.4%	53.6%	17.6%	52.6%	29.7%	100%

*Executive leadership category consists of individuals at the vice president level and above



Our Commitment to Education and Community Development

Supporting access to quality education and addressing other structural inequalities in our communities is important to Smithfield. In 2020, we pledged to provide millions in funding to support organizations that are working to improve educational programs for students of color and provide access to quality education.

Our philanthropic initiatives provide educational opportunities to employees, their families and communities. In 2021, our funding of scholarships totaled \$766,743 in the U.S. and \$271,530 in Poland and Romania. We pledged to support additional access to education through community partnerships with:

- **The North Carolina Business Committee for Education (NCBCE):** to fund wireless hot spots for students in rural areas and address long-term internet access solutions in underserved communities.
- **Minorities in Agriculture, Natural Resources and Related Sciences (MANRRS):** to promote a diverse K–12 and collegiate student pipeline interested in food, agriculture and natural resource careers.
- **The Heritage STEM Camps Foundation (HSCF):** to fund a Science, Technology, Engineering and Math (STEM) summer camp empowering young minority women ages 12–18 in the mid-Atlantic region.
- **An Achievable Dream (AAD):** to support equity in education and provide resources to public school districts in underserved communities in the Tidewater region of Virginia.

Smithfield Foods Scholarship Program

We recently expanded our Smithfield Foods Scholarship Program to be inclusive of additional HBCUs: Virginia State University and Hampton University. We also welcomed the University of South Dakota and South Dakota State University to our program.



Agricultural and Supply Chain Diversity

At Smithfield, we never forget that we have both the opportunity and the responsibility to advocate and advance inclusion and economic opportunity by supporting minority-owned businesses — including our family of farm partners. The farms of the future must be as diverse as the growing world population that we feed.



Our position as a leading food company and hog producer in America is accompanied by tremendous responsibility to our many stakeholders, including our people and communities. We recognize our responsibility to promote diversity, equity and inclusion in our industry through purposeful actions to pave the way toward a stronger, more inclusive agricultural future for our communities.

—Shane Smith, President & Chief Executive Officer





Supporting Black and Other Minority Farmers

According to the U.S. Department of Agriculture (USDA), minority farmers represent just 5% of farmers in America, and fewer than 2% identify as Black.

Smithfield has established a new contract grower program to support Black and other minority farmers, diversify our hog supply chain and help address historic barriers disproportionately facing Black and other minority farmers such as access to affordable capital. The program will build a stronger stakeholder base that includes a broader range of perspectives and backgrounds in our



work to feed the world. In 2021, we were pleased to welcome the first participating family farmers to the program, the Martin family of Wayne County, NC, and contracted three additional minority-owned farms in the state. The first phase of our program focuses on North Carolina — home to Smithfield’s largest operational footprint and nearly a quarter of our U.S. employees — and will be expanded to include additional communities across the country where our farms are located. Plans are in place to establish a robust pipeline of future candidate participants.

Our new contract grower initiative enables contract growers like the Martin family to return to their legacy of hog farming and empowers additional minority farmers to enter or re-enter the industry.

“

Our goal is that this family farm stays in the family forever. And I think in order for you to keep it going, you have to know where you’ve come from.

—Elizabeth Martin Meggett, [Martin Family Farms](#)

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As the events of 2020 initiated important conversations about race, justice and inclusion in America, we began to reflect on the fact that many of our farms were minority managed but not minority owned. This sparked a larger conversation for Smithfield about what we could do as a leader in our industry to increase access to agriculture for Black and other minority farmers and help break through systemic barriers that are impeding their inclusion.

—Steve Evans, Director of Community Development

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Maintaining Our Leadership

Smithfield is proud to receive awards and other forms of recognition from leading companies and organizations for our commitment to diversity, equity and inclusion.

We are proud that our work around DEI is recognized in the industry.

Steve Evans, Smithfield's director of community development, was named to Forbes' inaugural For(bes)The Culture 50 Black and Brown Champions list. The list honors Black and Brown industry leaders for their standout impact and service in underserved communities. Culture 50 Champions are models of business excellence in their industries who also lift up Black and Brown communities. Steve was recognized among prominent American figures, including Dwayne Wade, Issa Rae and Colin Kaepernick, for playing an integral role in spearheading Smithfield's Unity & Action initiatives that advocate for minority farmers and the underserved in rural communities.



"Smithfield provided me with a platform to support minority farmers who are working to feed people in communities across our nation and the globe. This work is deeply personal for me; both my grandfathers were farmers, and as a Black man, I'm proud of our ancestral connection to — and expert stewardship of — the land. It's my honor and privilege to forge access for others who grew up in underserved, rural communities and help them reclaim their place in the agricultural industry."

The Suwałki Division of Animex Foods, part of Smithfield Poland, was awarded the prestigious Lidl Fair Pay, marking the third time a retail market leader organized a competition focusing on women's representation and wage equality. Lidl "Fair Pay" recognition is the outcome of women's equality in compensation, managerial positions and management boards in various companies. Launched in 2019, the Lidl "Fair Pay" competition promotes gender equality among business practices.

“

We strongly believe that equality that is inclusive of all of us in our operations, employment and salaries is central to our business."

—Adam Powichrowski, Managing Director of Animex Foods, Suwałki Division

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Worker Health & Safety

Just as we strive to be an industry leader in producing wholesome food products, following industry animal welfare practices and protecting the environment, we also strive to lead the industry in occupational safety and health. View our [Worker Health & Safety video](#).



Our Worker Health & Safety Commitment

Keep our employees healthy and safe.

★ 2021 Worker Health & Safety Highlights

- In the U.S., we hosted more than 200 vaccine education and vaccination events.
- Our Opole operation in Poland won the prestigious District Labor Inspectorate competition, which recognized Smithfield as the best employer in the region in the “Employer-Organizer of Safe Work” competition.
- Through the Smithfield Romania Vaccination Campaign, more than 900 employees were registered for vaccination at our on-site vaccination center.
- Leading sales publication Selling Power named Smithfield to its “50 Best Companies to Sell For” list after an evaluation process that assessed a variety of workplace criteria, including COVID-19 response.
- The American Business “Stevie” Awards named Smithfield a “Most Exemplary Employer (Bronze)” in its COVID-19 Response category.
- The North American Meat Institute (NAMI) honored 18 Smithfield locations with their highest recognition for worker safety — the Award of Honor; 12 locations received the Award of Merit; and two received the Award of Commendation and one Award of Recognition.

Our Worker Health & Safety Targets

	Status
Obtain ISO 45001 Health and Safety certification at all facilities globally by 2025.	● On Track
Continue to maintain employee health and safety with incident rates below global industry averages.	● On Track
Increase safety engagement to 50% or more of front-line employees globally by 2025.	● On Track
Score at least 90% on Smithfield Injury System (SIPS) audits at all locations globally by 2025.	● On Track



Our Approach to Worker Health & Safety

Our global health and safety program team and safety engagement culture drive continuous health and safety improvements across our company, helping keep our workers healthy and safe.

Ensuring Team Member Safety

Smithfield maintains strict compliance with our global health and safety program, SIPS, which is designed to drive health and safety improvements across our company with the new goal of aligning the companywide program with the ISO 45001 certification by 2025.

SIPS builds on the success of our Employee Injury Prevention Management System (EIPMS) established in 2007, which resulted in our safety record improving substantially over the years. Our rates are consistently better than competitors and, for many years, better than general industry rates. Despite these successes, we recognized opportunities to further enhance the program and relaunched it as SIPS in 2017.

We implemented SIPS in 2017 and completed audits of all Smithfield facilities in 2019 to ensure the effective and consistent operation of our safety management system. In 2021, we focused on fine-tuning facility operations to increase the system's effectiveness, continue to embed a safety culture and continue to drive down safety incident rates.

To maintain a safe and healthy working environment, every worker and visitor must comply with the requirements specified in SIPS. This policy is reviewed at least annually and is communicated to every worker and visitor.

In 2021, we also launched a new safety software system, which is designed to reinforce a culture of safety, operational excellence and sustainability across our company by managing, tracking and reporting critical health and safety information. This safety software system, in addition to investments in automation technologies in our facilities like state-of-the-art robotics, will save time and allow our people to focus on tasks that cannot be completed by machines or software. As we integrate more automation, we are also focused on enhancing employee skills through apprenticeship, training and other employee development programs.





U.S. Safety Data 2021

Processing Facilities	2017	2018	2019	2020	2021
TIFR	3.64	3.21	3.00	2.9	3.01
DART	2.50	2.30	2.40	1.9	2.18
DAFWII	0.62	0.53	0.50	0.50	0.45

Farms	2017	2018	2019	2020	2021
TIFR	3.80	3.30	4.56	4.40	4.39
DART	3.00	2.3	3.13	2.80	2.18
DAFWII	0.60	0.5	0.71	0.85	0.63
No. OSHA Inspections	54	56	55	105	2
No. OSHA Citations	12	15	18	012	11
No. OSHA Penalties	\$30,158	\$67,644	\$67137	\$93,386	\$28,490

We achieved our health and safety targets, as the U.S. Occupational Safety and Health Administration (OSHA) Total Incident Frequency Rate (TIFR); Days Away, Restricted, Transferred (DART) Rate; and Days Away From Work Injury and Illness (DAFWII) Rate for 2021 were all on par with or below 2020.



Ongoing COVID-19 Support

We assembled a dedicated team to provide proactive pandemic planning across Smithfield operations, including ongoing COVID-19 testing at all facilities/farms.

We also offer free vaccinations to all employees and have held more than 200 vaccination drives and 150 “Vax Facts” events in our locations since February 2021. At these events, we partnered with health services organizations, including local state and Department of Health agencies.

Events were held at facilities with real-time translation support for employees in their native languages. We also had doctors and public health experts in attendance to emphasize the importance of getting vaccinated, and we collected and reported data on some of the causes of hesitancy to the Chamber of Commerce and the city government. These drives helped increase awareness and dispel rumors surrounding the COVID-19 vaccine, while also increasing vaccine accessibility to employees.

As part of the Polish government’s vaccination campaign, throughout 2021, Smithfield’s Animex Foods operations facilitated vaccinations at 13 on-site locations, reaching approximately 2,300 employees, their families and external companies working for Animex Foods. Animex Foods and Agri Plus provide ongoing communication with employees about required and recommended safety measures.

In our Romania operations, we worked to arrange special accommodations for employees, including scheduling appointments, securing transportation for employees from work to and from vaccination sites and paid time off.



Building Our Culture

Over the last year, we steadily focused on efforts to make our company an even better place to work for our Smithfield Family. We rolled out dozens of interlinked initiatives designed to make Smithfield an employer of choice by enhancing employee engagement and communication and improving onboarding processes and on-the-job training. We increased pay, adopted more flexible policies, introduced various internal surveys to gather feedback and instituted new training programs to help our team members advance their careers with us.

We bolstered our recruiting and hiring initiatives and hosted multiple national hiring events throughout the year to help recruit and hire qualified candidates. We also rolled out an employee referral bonus program that rewards our team members for referring applicants who are hired and retained.



Employee Benefits

At Smithfield, we understand the long-term advantages of offering competitive benefits, including programs, services and resources to help our employees achieve a healthy work-life balance. Our standard offerings are available to all full-time employees but may vary due to country regulation or collective bargaining agreements. We provide employees and their families with a wide range of benefits, including insurance plans, a retirement savings plan, wellness programs and paid time off.

In the U.S., our “Let’s Get Healthy Together!” program supports good health through enhanced benefits, educational programs, screenings and encouragement. All full-time employees are eligible to receive the following benefits:

- Maternity management
- Asthma management
- Smoking cessation
- Diabetes management
- Voluntary benefits
- Incentive compensation
- Professional development opportunities, including Smithfield University, Tuition Assistance and Academic Scholarships for the children and grandchildren of full-time and retired employees

On International Children’s Day in 2021, Smithfield Romania started a new internal program — Smithfield Kids — specially designed for our employees’ children between 8 and 12 years old. The program features a variety of vocational-artistic workshops of interest to children and peer-to-peer interaction with other children in a creative space, following months of online school.

During the first edition of the program, participating children enjoyed activities organized by the NORD Education Arts Music Movement Association, including a two-day workshop focused on natural ecosystems — the Secret Life of Trees and the Wonderful Aquatic World.





Recognizing Good Work is Teamwork

Once again in 2021, we recognized members of our Smithfield Family who go above and beyond to uphold our guiding principles of Responsibility, Operational Excellence and Innovation (ROI). This year, we received a record number of ROI Awards nominations — more than 800. Of these nominations, we selected more than 70 location winners, 21 finalists, six winners and three grand-prize winners. Location winners receive \$250; finalists receive \$1,000; winners receive \$5,000; and grand-prize winners are awarded \$10,000.

2021 ROI Award Winners		
Responsibility	Operational Excellence	Innovation
<p>Grand Prize: Cassandra Vasquez de Hernandez, Bandsaw Operator and Trainer, Sioux Falls, SD</p>	<p>Grand Prize: Altoona, IA, Facility Team</p>	<p>Grand Prize: Jessie Hain and Erin Reedy, Gilt Selection Specialists, Midwest Hog Production Region</p>
<ul style="list-style-type: none"> Suan Tuang, Bulk Line Operator, St. Charles, IL Robert Smallwood, Lead for Boxing, Des Moines, IA 	<ul style="list-style-type: none"> Christina Phillips, Director of Production Research, Warsaw, NC, Office Cudahy, WI, Facility Team 	<ul style="list-style-type: none"> Jacob Lawson, Production Supervisor, and Jason Voss, Maintenance, Carroll, IA Mihail Bujoreanu, Plant Maintenance Supervisor, Sioux Falls, SD

Workers' Compensation Claims Management Awards

Claims Professional of the Year Award: Recognizes the unequalled commitment and measurable impact of an individual:

- Steven Jaltorossian** (Vernon, CA)

Commitment to driving strong results with professionalism and an attention to detail that had a significant impact.

Organizational Excellence Award: Recognizes a facility for ongoing excellence and sustained positive results:

- Clinton, NC**

Consistently strong performance results, with cost per employee claims down 24% over the prior year and achieved 100% timely return to work for 3 straight years.

Workers' Compensation Innovation Award: Recognizes creativity and innovation, resulting in financial savings or process improvement:

- Grayson, KY** — Created a log system to more efficiently sign-up employees for the Action Release Technique (ART) program.
- Arnold, PA** — Acquired a force gauge meter to ensure that weight restrictions could be accommodated to ensure employees can perform their tasks safely.



2021 Health and Safety Awards

Each year, our Health and Safety Awards recognize both facility and individual accomplishments in safety excellence. The awards include:

Worker Safety Excellence Award: Recognizes a facility for the highest level of safety performance.

- **Elizabeth, NJ**

Innovation Award Winner: For an innovative concept that provides a solid impact on reducing worker injuries.

- **Junction City, KS** — modified and extended the guarding on a forklift that enhanced the safety protection for the operator that would guard against an impingement injury while operating the lift around fixed racks.

Worker Safety Excellence Circle: Recognizes facilities that excelled in safety performance.

United States

- Tar Heel DC*, NC
- Bolingbrook, IL
- North East DC*, MD
- Wilson, NC
- Salt Lake City, UT
- SHP-Midwest Region
- Vernon DC*, CA
- Clinton, NC
- Kinston, NC
- Sioux Center, IA
- Edwardsville DC*, KS
- Greenfield DC*, IN
- Omaha, NE
- Tar Heel, NC
- Junction City, KS

International

Poland

- Elk
- Krakow
- Morliny
- Opole
- Szczecin

Romania

- Prod
- Ferme

Mexico

- GCM Farms
- GCM Plant

**DC= Distribution Center*



2021 Safety Professional of the Year:

Recognizes outstanding achievement and commitment to improve worker safety in our facilities and communities.

- Bryn Jenson, Corporate Safety Manager, West Hog Production



Maintaining Our Leadership

Smithfield is proud to receive awards and other forms of recognition from leading companies and organizations for our commitment to worker health and safety. Here are just a few.



2021 North American Meat Institute (NAMI) Worker Safety Awards

Each year, the [NAMI Worker Safety Awards](#) recognize production facilities that achieved a high level of performance in the areas of team member health and safety. Four award levels may be earned based on an evaluation of the facility's actual safety performance and its implementation of an effective safety and health program, as measured by a safety program questionnaire. The remaining points are earned based on the implementation of key components of an effective safety and health program, as measured by the NAMI safety program questionnaire.

Starting with the highest recognition, award levels are Honor, Merit, Commendation and Certificate of Recognition. Of the 1,500 points available, 900 (or 60%) may be earned based on the outcome of a statistical analysis of the facility's injury and illness data performed by the National Safety Council staff. The analysis includes an evaluation of both the TRIR and DART rates.

Smithfield is proud to have had 18 of its U.S. facilities receive the highest recognition with the Award of Honor, 12 locations receive the Award of Merit, and two with the Award of Commendation and one Award of Certificate of Recognition.

SellingPower



2021

Selling Power's 50 Best Companies to Sell For

Leading sales publication ranked Smithfield 27th on its list of "[Best Companies to Sell For](#)" after an extensive evaluation process that assessed compensation and benefits packages, sales culture, onboarding practices, sales enablement strategies and training processes and its COVID-19 response.



The American Business Awards®

Premier business awards program in the U.S. recognized Smithfield Foods with a [bronze award in the category of COVID-19 Response](#), which was designed to honor organizations that worked valiantly to keep the country safe, healthy, employed, and informed throughout the pandemic. Our North East, MD distribution center also received a bronze award in the Energy Industry Innovation category.

Smithfield's Animex Foods Branch in Opole won the prestigious District Labor Inspectorate competition, which recognized Smithfield as the best employer in the region in the 28th edition of the "Employer-Organizer of Safe Work" competition.



Forward-Looking Statements

This report contains “forward-looking” statements within the meaning of the federal securities laws. The forward-looking statements include statements concerning our outlook for the future as well as other statements of beliefs, future plans and strategies or anticipated events and similar expressions concerning matters that are not historical facts. Our forward-looking information and statements are subject to risks and uncertainties that could cause actual results to differ materially from those expressed in, or implied by, the forward-looking statements.

These risks and uncertainties include, but are not limited to, the availability and prices of live hogs; feed ingredients (including corn); raw materials; fuel and supplies; food safety; livestock disease; live hog production costs; product pricing; the competitive environment and related market conditions; risks associated with our indebtedness, including cost increases due to rising interest rates or changes in debt ratings or outlook; hedging risk; adverse weather conditions; operating efficiencies; changes in foreign currency exchange rates; access to capital; the cost of compliance with and changes to regulations and laws, including changes in accounting standards, tax laws, environmental laws, agricultural laws and occupational health and safety laws; adverse results from litigation; actions of domestic and foreign governments; labor relations issues; credit exposure to large customers; the ability to realize the anticipated strategic benefits of the acquisition of Smithfield Foods, Inc.,* by WH Group; the ability to make effective acquisitions and successfully integrate newly acquired businesses into existing operations; and other risks and uncertainties described under “Item 1A. Risk Factors.”

Readers are cautioned not to place undue reliance on forward-looking statements because actual results may differ materially from those expressed in, or implied by, the statements. Any forward-looking statement that we make speaks only as of the date of such statement, and we undertake no obligation to update any forward-looking statements, whether as a result of new information, future events or otherwise. Comparisons of results for current and any prior periods are not intended to express any future trends or indications of future performance, unless expressed as such, and should only be viewed as historical data.

About This Report

This report covers our sustainability progress during the 2021 calendar year against our goals and targets across our sustainability pillars, which include the range of our environmental, social and governance (ESG) programs. Where appropriate, we also provide updates on initiatives underway in 2022. We completed our most recent set of sustainability goals and targets in 2020 and launched new 2025/2030 goals and targets, which we will report against in future sustainability reports. This report was prepared in accordance with the Global Reporting Initiative (GRI) Standards: Core Option.

*All references to “Smithfield,” “we,” “us” and “our” are terms of convenience used to refer to Smithfield Foods and all its subsidiaries.



GRI Index

General Disclosures

Disclosure Number	Disclosure Title	2021 Disclosure
<i>Organizational Profile</i>		
102-1	Name of organization	Smithfield Foods Inc.
102-2	Activities, brands, products, and services	Our Business, p. 8
102-3	Location of headquarters	Headquartered in Smithfield, Virginia, USA
102-4	Location of operations	Where We Operate, p. 9
102-5	Ownership and legal form	Smithfield is a wholly owned subsidiary of Hong Kong-based WH Group Limited, a publicly traded company with shareholders around the world. For more information on WH Group and its operations, visit www.wh-group.com .
102-6	Markets served	Our products are sold in 89 countries on every continent (except Antarctica). Customers include supermarket and hotel chains, wholesale distributors, restaurants, hospitals, and other institutions. We also sell to companies that further process our meats into consumer food products. Our Business, p. 8
102-7	Scale of the organization	Smithfield employed nearly 60,000 individuals worldwide and recorded nearly \$18 billion in sales in 2021. Our Business, p. 8
102-8	Information on employees and other workers	Our Workforce by The Numbers, p. 63
102-9	Supply chain	Our Business, p. 8 Stakeholder Engagement, p. 14
102-10	Significant changes to the organization and its supply chain	Smithfield had no significant changes to size, structure, or ownership during the reporting period.
102-11	Precautionary principle or approach	The precautionary principle (or approach) was introduced in the Rio Declaration on Environment and Development from the United Nations Environment Programme. It states: '...Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation.' As discussed in the respective sections of this report, we evaluate and address risks as part of our management systems for key sustainability issues, including animal welfare, environmental stewardship, food safety and quality, local communities, and our employees. These issues are periodically evaluated by Smithfield's sustainability team and company leadership. The company may take certain precautionary actions from time to time on a case-by-case basis; however, we do not apply the precautionary principle as a matter of policy.



Disclosure Number	Disclosure Title	2021 Disclosure
102-12	External initiatives	Stakeholder Engagement, p. 14 Key Collaborators (Appendix)
102-13	Membership of associations	Key Collaborators (Appendix)
Strategy		
102-14	Statement from senior decision maker	Letter to Our Stakeholders from Smithfield Foods President and CEO Shane Smith, p. 3
102-15	Key impacts, risks, and opportunities	Our Enterprise Risk Management System, Code of Business Conduct and Ethics and approach to public policy are important elements of our sustainability strategy. Our Sustainable Impact Priorities, p. 13 Governance
Ethics and Integrity		
102-16	Values, principles, standards, and norms of behavior	In our quest to maintain our leadership position in our industry, we are guided by the following principles: Responsibility, Operational Excellence, and Innovation. We believe that adhering to these principles creates value for our business, as well as for a broad range of stakeholder groups, including customers, consumers, employees, and local communities. Code of Business Conduct and Ethics Our Guiding Principles, p. 7 Policies & Disclosures
102-17	Mechanisms for advice and concerns about ethics	All Smithfield employees are made aware of available avenues for complaint or ethics concern at the company's ethics hotline, which is documented in the Code of Business Conduct and Ethics. Code of Business Conduct and Ethics
Governance		
102-18	Governance structure	Our Sustainable Impact Priorities, p. 13 Governance
102-19	Delegating Authority	Our Sustainable Impact Priorities, p. 13 Governance
102-20	Executive-level responsibility for economic, environmental, and social topics	Our sustainability strategy and disclosures program include an executive-level position to lead our efforts, corporate-level oversight committees and a core team to further drive progress. Our chief sustainability officer reports to our chief administrative officer who reports directly to our chief executive officer (CEO). Our CEO reviews our sustainability performance at least on a quarterly basis. We establish and routinely evaluate goals and targets under each pillar to drive ongoing progress to create value for our stakeholders, employees and the company.
102-21	Consulting stakeholders on economic, environmental, and social topics	Our Sustainable Impact Priorities, p. 13 Stakeholder Engagement, p. 14 Key Collaborators (Appendix)
102-22	Composition of the highest governance body and its committees	Smithfield is governed by a five-member Board of Directors, which includes the chairman of the WH Group and Smithfield's president and CEO. Our Board of Directors elects executive officers to hold office until the next annual meeting of the Board, until their successors are elected, or until their resignation or removal.



Disclosure Number	Disclosure Title	2021 Disclosure
102-23	Chair of the highest governance body	The chairman of Smithfield’s Board of Directors also serves as chairman and CEO of WH Group. Although the listing standards of the New York Stock Exchange (NYSE) no longer apply to us, the Board of Directors has nevertheless used those standards to evaluate the independence of our directors. Under the NYSE’s standards, none of our directors are independent.
102-24	Nominating and selecting the highest governance body	<p>Smithfield’s current president and CEO, Shane Smith, was appointed by Smithfield’s Board of Directors.</p> <p>Smithfield’s Board of Directors does not have an audit committee and the full Board of Directors performs the functions typically performed by a selection committee.</p> <p>Directors are chosen, in part, based upon their qualifications, skills, and experience in our industry.</p>
102-25	Conflicts of Interest	<p>Smithfield’s Conflicts of Interest Policy can be found in the company’s Code of Business Conduct and Ethics (Code). The purpose of the Conflicts of Interest Policy is to ensure that our decisions are based on business needs, not on personal interests or relationships.</p> <p>Code of Business Conduct and Ethics Supplier Code of Conduct</p>
102-26	Role of highest governance body in setting purpose, values, and strategy	<p>Smithfield’s Board of Directors tasks the President and CEO, along with senior executives, with setting the purpose, values, and strategy for the company.</p> <p>Letter to Our Stakeholders from Smithfield Foods President and CEO Shane Smith, p. 3 Q&A with Stewart Leeth, Chief Sustainability Officer, p. 4-5</p>
102-27	Collective knowledge of highest governance body	Smithfield’s Chief Sustainability Officer regularly meets with our President and CEO and other senior management to discuss economic, environmental, social, and other sustainability-related topics pertaining to Smithfield and the industry.
102-28	Evaluating the highest governance body’s performance	Our Sustainable Impact Priorities, p. 13 Governance
102-29	Identifying and managing economic, environmental, and social impacts	Our Sustainable Impact Priorities, p. 13 Governance
102-30	Effectiveness of risk management processes	<p>Risk management is essential for Smithfield’s sustainable development. Our Risk Management Committee is responsible for managing corporate risk-related issues. To promote unified ERM throughout the Smithfield, it will continue to strengthen its ERM program to form an ongoing and effective process to identify complicated and emerging risks (internal and external) facing Smithfield that might hamper the achievement of its strategic, financial and compliance targets. ERM includes regular risk identification and assessment, control measures to mitigate the impact of risks, the management and monitoring of key risks, and reporting in a timely manner. Our ERM program incorporates elements related to sustainable development. During the reporting period, we identified 26 key risk areas and prioritized eight of them with regard to risk probability and potential impact: commercial prices and markets, food safety, epidemics, international trading, foreign exchange, industrial competition, laws, policies and listing rules, and plans and strategies. Based on our risk assessment, we formulated measures to reduce their impact.</p>



Disclosure Number	Disclosure Title	2021 Disclosure
102-31	Review of economic, environmental, and social topics	Smithfield’s Board of Directors periodically monitors and reports on economic, environmental, and social topics and their potential material impacts, risks, and opportunities for our operations. Our Sustainable Impact Priorities, p. 13 Governance
102-32	Highest governance body’s role in sustainability reporting	Smithfield’s Chief Sustainability Officer regularly meets with our President and CEO and other senior management to discuss economic, environmental, social, and other sustainability-related topics pertaining to Smithfield and the industry.
102-33	Communicating critical concerns	Smithfield’s Chief Sustainability Officer regularly meets with our President and CEO to discuss economic, environmental, social, and other sustainability-related topics.
102-35	Remuneration policies	Smithfield does not currently tie executive pay to sustainability performance. Our executive compensation philosophy is to motivate our executive officers continually to improve operating performance. To achieve this goal, our executive compensation program is designed to reward for individual and company performance.
102-36	Process for determining remuneration	Smithfield does not use remuneration consultants. Our Board of Directors is responsible for developing and administering the compensation program for executive officers and other key employees. The Board of Directors may delegate some or all its responsibilities to one or more committees whenever necessary to comply with any statutory or regulatory requirements or otherwise deemed appropriate by the Board of Directors.
102-37	Stakeholders’ involvement in remuneration	Smithfield’s Board of Directors is responsible for developing and administering the compensation program for executive officers and other key employees. The Board of Directors may delegate some or all its responsibilities to one or more committees whenever necessary to comply with any statutory or regulatory requirements or otherwise deemed appropriate by the Board of Directors. The Board of Directors has the authority to retain consultants and other advisors to assist the Board of Directors with its duties and has sole authority to approve the fees and other retention terms of such consultants and advisors.

Stakeholder Engagement

102-40	List of stakeholder groups	Stakeholder Engagement, p. 14 Key Collaborators (Appendix)
102-41	Collective bargaining agreements	We have both unionized and nonunionized facilities in the U.S. In this reporting period, approximately 56% of our workforce* in the United States was covered by collective bargaining agreements. If a facility has union representation, we honor and comply with the terms and conditions of the collective bargaining agreement. We have not identified any Smithfield operations in which the right to exercise freedom of association and collective bargaining may be at risk. *Figure includes U.S. Distribution Centers, Facilities, and DSD branches
102-42	Identifying and selecting stakeholders	Our Sustainable Impact Priorities, p. 13 Stakeholder Engagement, p. 14 Key Collaborators (Appendix) Materiality (Appendix)
102-43	Approach to stakeholder engagement	Our Sustainable Impact Priorities, p. 13 Stakeholder Engagement, p. 14 Materiality (Appendix)



Disclosure Number	Disclosure Title	2021 Disclosure
102-44	Key topics and concerns raised	Our Sustainable Impact Priorities, p. 13 Stakeholder Engagement, p. 14 Materiality (Appendix)
Reporting Practice		
102-45	Entities included in the consolidated financial statements	Our Business, p. 8 Where We Operate, p. 9 Stakeholder Engagement, p. 14
102-46	Defining report content and topic boundaries	We expect a variety of stakeholders to use this report, including the following: employees, customers and suppliers with whom we do business; governments and regulatory agencies; nongovernmental organizations; and members of the communities where we operate. Our Sustainable Impact Priorities, p. 13 Materiality (Appendix)
102-47	List of material topics	Our Sustainable Impact Priorities, p. 13 Materiality (Appendix)
102-48	Restatements of information	No restatements for 2021 reporting.
102-49	Changes in report	The scope and aspects of this report had no significant changes from the previous reporting period.
102-50	Reporting period	January 1, 2021 – December 31, 2021
102-51	Date of most recent report	Our 2021 Sustainability Report launched in April 2022. Past Reports
102-52	Reporting cycle	We report on our sustainability process annually.
102-53	Contact point for questions regarding the report	Contact Us
102-54	Claims of reporting in accordance with GRI Standards	This report has been prepared in accordance with the GRI Standard: Core option. For GRI Standards 303, 306, we have reported against the 2016 standard for this 2021 Social Impact Report. For the 403 Standard, we have reported against the 2018 standards. Materiality (Appendix)
102-55	GRI Content Index	This GRI Index is in accordance with GRI Standards
102-56	External Assurance	Smithfield did not seek external assurance for this report.



Economic Disclosures

Disclosure Number	Disclosure Title	2021 Disclosure						
201: Economic Performance								
103	Management approach	Letter to Our Stakeholders From Shane Smith, President & CEO, p. 3 Our Sustainable Impact Priorities, p. 13 Helping Communities, p. 51 Responding to Local Community Needs, p. 56						
201-1	Direct economic value generated and distributed	<table border="1"> <thead> <tr> <th colspan="2">2021 Economic Value Distributed and Retained</th> </tr> </thead> <tbody> <tr> <td>Revenue</td> <td>\$17.6 billion</td> </tr> <tr> <td>Community Investments</td> <td>\$44.8 million</td> </tr> </tbody> </table> <p>Smithfield is a wholly owned subsidiary and does not make specific financial information publicly available. In 2021 Smithfield’s revenue totaled \$17.6B, with over \$44.8M being returned as community investments through our cash charitable donation programs.</p> <p>About Smithfield Trusted Brands Our Operations Stakeholder Engagement, p. 14 Our Approach to Helping Communities, p. 52 Responding to Local Community Needs, p. 56</p>	2021 Economic Value Distributed and Retained		Revenue	\$17.6 billion	Community Investments	\$44.8 million
2021 Economic Value Distributed and Retained								
Revenue	\$17.6 billion							
Community Investments	\$44.8 million							
201-2	Financial implications and other risks and opportunities due to climate change	<p>As an agriculture-based company, changes to the climate and weather patterns could affect key inputs to our business as the result of shifts in temperatures, water availability, precipitation, and other factors. Both the cost and availability of corn and other feed crops, for example, could be affected. The regulation or taxation of operations and carbon emissions could also affect the prices of commodities, energy, and other inputs to our business. We believe there could also be opportunities for us because of heightened interest in alternative energy sources, including those derived from manure, and participation in carbon markets.</p> <p>However, it is not currently possible to predict the complete structure or outcome of any future legislative or regulatory efforts to address greenhouse gas (GHG) emissions and climate change. There can be no assurance that GHG regulation will not have a material adverse effect on our financial position or results of operations. Early in 2021, we updated our life-cycle analysis to measure our greenhouse gas footprint across our supply chain. We are positioned to explore climate-related risks and opportunities across operations to better understand and prioritize actions to mitigate and adapt to drought, flooding or other potential severe weather-related events.</p> <p>Reducing the Environmental Impact on Our Farm, p. 28 Eliminating Waste in Our Processing Operations, p. 33</p>						
201-3	Defined benefit plan obligations and other retirement plans	Benefits are available to all of Smithfield’s full-time employees. Smithfield Careers						
201-4	Financial assistance received from government	Smithfield did not receive any significant financial assistance from the federal or state governments during this reporting period.						
202: Market Presence								
103	Management approach	Our Sustainable Impact Priorities, p. 13 Diversity, Equity & Inclusion (DEI), p. 60						



Disclosure Number	Disclosure Title	2021 Disclosure
202-1	Ratios of standard entry level wage by gender compared to local minimum wage	Across its facilities, Smithfield provides its hourly and salaried employees with competitive compensation packages relative to local market. While average hourly wages are not tracked by gender, the company pays significantly above the current federal minimum wage of \$7.25 per hour.
202-2	Proportion of senior management hired from the local community	Smithfield works to hire locally wherever possible; when hiring for senior management, we seek qualified candidates from across the country. Our Workforce by the Numbers, p. 63
203: Indirect Economic Impacts		
103	Management approach	Letter to Our Stakeholders From Shane Smith, President & CEO, p. 3 Our Sustainable Impact Priorities, p. 13 Our Approach to Helping Communities, p. 52 Responding to Local Community Needs, p. 56
203-1	Infrastructure investments and services supported	Our Approach to Helping Communities, p. 52 Responding to Local Community Needs, p. 56
203-2	Significant indirect economic impacts	Our Approach to Helping Communities, p. 52 Responding to Local Community Needs, p. 56
204: Procurement Practices		
103	Management approach	Our Sustainable Impact Priorities, p. 13 Sustainability: Positions and Programs/ Supply Chain Management Supplier Code of Conduct Our Approach to Animal Welfare, p.20 Agricultural and Supply Chain Diversity, p. 64
204-1	Proportion of spending on local suppliers	We do not currently track spending based on proximity to the end destination of given products, resources, or services. Our Biggest Impact, p. 27 Supplier Code of Conduct
G4 204: FPI	Percentage of purchased volume from suppliers compliant with company's sourcing policy	<p>In 2020, we extended Process Verified Program certifi. All our suppliers must be certified under the Pork Quality Assurance® Plus (PQA® Plus) program and all hogs must be delivered to our facilities by live animal truck drivers certified by the Transport Quality Assurance® (TQA®) program. In this reporting period, 100% of live animals were delivered by PQA Plus certified suppliers; 100% of supplier locations were site assessed; drivers delivering animals to our facilities were TQA certified.</p> <p>Europe has established animal welfare standards through legislation that are implemented by the Veterinary Authorities in member countries. The requirements focus on employee training and certification, physical alterations, antibiotic use, and housing. Animal transport drivers are certified by either transport or veterinary authorities. We require our suppliers to meet the applicable European standards. In Europe, 100% of our pig supply met the sow housing requirements.</p> <p>In Poland, 12% of our contract finishing farms are certified to the Global Good Agricultural Practices that regulate animal welfare, production hygiene, transportation, and other processes.</p> <p>Smithfield has been standardizing vendor requirements for our ingredient and packing suppliers. Virtually all of them are compliant with our food safety sourcing policy.</p> <p>Animal Care, p. 19</p>



Disclosure Number	Disclosure Title	2021 Disclosure
GA 204: FP2	Percentage of purchased volume, which is verified as being in accordance with credible, internationally recognized responsible production standards, broken down by standard	<p>100% of our facilities participate in the U.S. Department of Agriculture’s Process Verified Program (PVP), which validates our programs including our company’s requirement that all pigs are traceable to farm of origin and are raised in the United States. Our PVP programs monitor aspects of traceability, Pork Quality Assurance® Plus (PQA® Plus) adherence on farms, and Transport Quality Assurance® (TQA®) status of drivers. All hog farms that send animals to fresh pork facilities must participate in the TQA program. Additionally, many external suppliers participate in and meet all the requirements of the PVP.</p> <p>100% of company-owned farms, feed mills, and processing facilities in Poland and Romania are certified to International Organization for Standardization (ISO) 14001 standards. In Europe, our hog farms follow all European Union farming regulations.</p> <p>100% of our facilities in Poland and Romania maintain all applicable certifications to international and federal food safety standards (e.g., ISO 22000, British Retail Consortium, and International Featured Standards).</p> <p>Our Polish and Romanian fresh pork processing facilities receive approximately 16%, respectively, of their hogs from contract growers for which we confirm compliance with applicable European Animal Welfare laws. Our fresh meat facilities, company-owned farms, and contract growers in Poland and Romania are subject to many European animal welfare standards. The Veterinary Authority in each country routinely conducts animal welfare inspections of fresh meat facilities and pig and poultry farming operations to assure compliance with the animal welfare legislation. Overall, for international operations, we did not receive any penalties for animal welfare non-compliance in this reporting period.</p> <p>Animal Care, p. 19</p>
205: Anti-corruption		
103	Management approach	Our Sustainable Impact Priorities, p. 13 Materiality (Appendix) Sustainability Strategy, p. 12 Sustainability Governance Code of Business Conduct and Ethics
205-1	Operations assessed for risks related to corruption	We perform an annual risk assessment of our operations for risks related to corruption. No significant risks of corruption have been identified to date. Sustainability Governance Code of Business Conduct and Ethics
205-2	Communication and training about anti-corruption policies and procedures	We perform an annual risk assessment of our operations for risks related to corruption. No significant risks of corruption have been identified to date. <p>“As a global company, Smithfield is subject to various U.S. and non-U.S. laws that prohibit the payment of bribes to government officials and others in order to get or retain business or any other competitive advantage. These laws include the U.S. Foreign Corrupt Practices Act and other similar anti-bribery and anti-corruption laws and regulations such as the U.K. Bribery Act. Simply put, these laws prohibit the payment, solicitation, offer, or receipt of any bribe, kickback or other forms of payment intended to improperly influence anyone to further our business interests. These laws may apply regardless of whether the improper payment in question was offered or paid directly by a Smithfield employee or by third parties (e.g., agents, joint venture partners, brokers or consultants) acting on behalf of Smithfield.”</p> Sustainability Governance Code of Business Conduct and Ethics



Disclosure Number	Disclosure Title	2021 Disclosure
205-3	Confirmed incidents of corruption and actions taken	Smithfield had no incidents of corruption in this reporting period. Code of Business Conduct and Ethics
<i>205: Anti-corruption</i>		
103	Management approach	Our Sustainable Impact Priorities, p. 13 Sustainability Governance Code of Business Conduct and Ethics
206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	Smithfield is involved in several industry-based antitrust lawsuits that assert the same allegations. Smithfield disputes the allegations and intends to vigorously defend the suits. No decisions or judgments on the merits of these cases had been issued at the time of this report.



Environmental Disclosures

Disclosure Number	Disclosure Title	2021 Disclosure
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301: Materials

103	Management approach	Our Sustainable Impact Priorities, p. 13 Sustainability Governance Materiality (Appendix) Sustainability Strategy, p. 12 Enhancing Operational Efficiency Across Our Business, p. 26, Environmental Policy
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301-1	Materials used by weight or volume	U.S. Facilities & Farms																																																																																										
		<table border="1"> <thead> <tr> <th>Total Waste Disposition (tons)</th> <th>2014</th> <th>2015</th> <th>2016</th> <th>2017</th> <th>2018</th> <th>2019</th> <th>2020</th> <th>2021</th> </tr> </thead> <tbody> <tr> <td>Cardboard recycled</td> <td>27,833</td> <td>26,724</td> <td>27,288</td> <td>27,173</td> <td>28,702</td> <td>29,552</td> <td>20,623</td> <td>28,391</td> </tr> <tr> <td>Metals recycled</td> <td>2,016</td> <td>2,153</td> <td>3,973</td> <td>3,318</td> <td>3,367</td> <td>5,981</td> <td>6,338</td> <td>3,150</td> </tr> <tr> <td>Plastics recycled</td> <td>884</td> <td>1,259</td> <td>2,395</td> <td>1,655</td> <td>1,579</td> <td>2,259</td> <td>1,347</td> <td>1,326</td> </tr> <tr> <td>Sludge for Beneficial Use</td> <td>40,478</td> <td>73,287</td> <td>68,392</td> <td>62,905</td> <td>58,743</td> <td>62,127</td> <td>34,719</td> <td>105,748</td> </tr> <tr> <td>Waste to Energy</td> <td>31,179</td> <td>55,201</td> <td>49,112</td> <td>59,314</td> <td>66,987</td> <td>82,148</td> <td>68,475</td> <td>36,239</td> </tr> <tr> <td>Hazardous waste</td> <td>13</td> <td>9.3</td> <td>9.4</td> <td>7.5</td> <td>37.1</td> <td>13.5</td> <td>6.0</td> <td>20.50</td> </tr> <tr> <td>Universal waste</td> <td>37</td> <td>62.4</td> <td>28.7</td> <td>27.2</td> <td>18.8</td> <td>19.4</td> <td>14.78</td> <td>17.72</td> </tr> <tr> <td>Solid waste to landfill</td> <td>65,400</td> <td>70,946</td> <td>71,373</td> <td>68,590</td> <td>74,674</td> <td>52,806</td> <td>44,079</td> <td>49,714</td> </tr> <tr> <td>TOTAL</td> <td>167,840</td> <td>229,642</td> <td>222,571</td> <td>222,990</td> <td>234,108</td> <td>234,906</td> <td>154,979</td> <td>224,606</td> </tr> </tbody> </table>	Total Waste Disposition (tons)	2014	2015	2016	2017	2018	2019	2020	2021	Cardboard recycled	27,833	26,724	27,288	27,173	28,702	29,552	20,623	28,391	Metals recycled	2,016	2,153	3,973	3,318	3,367	5,981	6,338	3,150	Plastics recycled	884	1,259	2,395	1,655	1,579	2,259	1,347	1,326	Sludge for Beneficial Use	40,478	73,287	68,392	62,905	58,743	62,127	34,719	105,748	Waste to Energy	31,179	55,201	49,112	59,314	66,987	82,148	68,475	36,239	Hazardous waste	13	9.3	9.4	7.5	37.1	13.5	6.0	20.50	Universal waste	37	62.4	28.7	27.2	18.8	19.4	14.78	17.72	Solid waste to landfill	65,400	70,946	71,373	68,590	74,674	52,806	44,079	49,714	TOTAL	167,840	229,642	222,571	222,990	234,108	234,906	154,979	224,606
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301-2	Recycled input materials used	<p>We aim to incorporate recycled materials into packaging for final products and, in some instances, recycled content is included in our corrugated packaging; however, options are limited to materials that ensure products stay fresh during transportation, refrigeration, and handling. In addition, any packaging that directly touches food must meet federal regulatory requirements, and packages must meet certain specifications to allow for temperature fluctuations and high humidity.</p> <p>Moreover, for fresh meats, packaging must be able to accommodate variations in the size, shape, and weight of each cut of meat. As a result, most packaging comes from virgin materials until more suitable recycled options are developed. In 2020 we expanded our collaborations and joined the Sustainable Packaging Coalition.</p> <p>Sustainable Packaging, p. 37</p>
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302-3	Energy intensity	<p>In 2021, Smithfield U.S. operations had an energy intensity ratio of 0.117 gigajoules/cwt. Calculated by using our absolute energy consumption 18.7 million gigajoules and 159,963,970 cwt.</p> <p>In 2021, Smithfield International operations had an energy intensity ratio of 0.1081 gigajoules/cwt. Calculated by using our absolute energy consumption of 3.95 million gigajoules and 36,449,311 cwt.</p>																																																																																																																																																																																				
302-4	Reduction of energy consumption	<p>Since 2014, Smithfield U.S. Operations have seen a 25% increase in normalized energy consumption.</p> <p>The increase in U.S. energy from our baseline year is due in large part to an increase in transportation diesel consumption resulting from a move towards hiring more in-house haulers. In addition to transportation, recently acquired facilities accounted for higher energy consumption than our average buildings prior to retrofitting to meet our facility efficiency standards.</p>																																																																																																																																																																																				



Disclosure Number	Disclosure Title	2021 Disclosure																																																																																																												
		<p>Since 2014, Smithfield International Operations have seen an 8% decrease in normalized energy due to decreased usage of fuels such as coal, steam, and diesel oil.</p> <p>Environment, p. 26</p>																																																																																																												
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103	Management approach	<p>In 2018, the GRI launched a new Water and Effluent Standard. Water use is an important and material issue for Smithfield. In 2020, we continued to assess water quality and supply across our global footprint and enhance water efficiency. We have established new, clear targets documented in this report under our sustainability pillars. For this 2021 Social Impact Report we have elected to report against the 2016 G4 Standard for water.</p> <p>Our Sustainable Impact Priorities, p. 13 Sustainability Governance Materiality (Appendix)</p> <p>Our Contributions to the United Nations (UN) Sustainable Development Goals (SDGs), p. 16 Our Environment Targets, p. 25 Assessing Our Water Impact, p. 38 Reducing Environmental Impact on Our Farms, p. 28 Water Policy</p>																																																																																																												
303-1	Water withdrawal by source	<p>U.S. Facilities & Farms</p> <table border="1"> <thead> <tr> <th>Water Withdrawal by Source (billions of gallons)</th> <th>2014</th> <th>2015</th> <th>2016</th> <th>2017</th> <th>2018</th> <th>2019</th> <th>2020</th> <th>2021</th> </tr> </thead> <tbody> <tr> <td>Groundwater</td> <td>4.552</td> <td>4.694</td> <td>4.666</td> <td>4.58</td> <td>5.40</td> <td>5.19</td> <td>4.66</td> <td>4.6</td> </tr> <tr> <td>Third-party (Municipal)</td> <td>3.843</td> <td>4.171</td> <td>4.176</td> <td>4.34</td> <td>4.82</td> <td>4.95</td> <td>4.73</td> <td>4.6</td> </tr> <tr> <td>Surface water</td> <td>0.794</td> <td>0.94</td> <td>0.97</td> <td>0.97</td> <td>1.02</td> <td>1.00</td> <td>1.08</td> <td>0.78</td> </tr> <tr> <td>Reused and recycled</td> <td>0.467</td> <td>0.501</td> <td>0.295</td> <td>0.32</td> <td>0.16</td> <td>0.26</td> <td>0.05</td> <td>0.63</td> </tr> </tbody> </table> <table border="1"> <thead> <tr> <th>Water Discharge (billions of gallons)</th> <th>2014</th> <th>2015</th> <th>2016</th> <th>2017</th> <th>2018</th> <th>2019</th> <th>2020</th> <th>2021</th> </tr> </thead> <tbody> <tr> <td>Public-owned wastewater treatment plant</td> <td>3.042</td> <td>3.23</td> <td>3.406</td> <td>3.26</td> <td>3.61</td> <td>3.45</td> <td>4.63</td> <td>3.56</td> </tr> <tr> <td>Direct</td> <td>2.444</td> <td>2.771</td> <td>2.625</td> <td>2.79</td> <td>2.73</td> <td>2.8</td> <td>2.76</td> <td>2.51</td> </tr> <tr> <td>Land irrigation</td> <td>2.506</td> <td>2.451</td> <td>3.159</td> <td>2.35</td> <td>2.23</td> <td>3.29</td> <td>2.87</td> <td>2.73</td> </tr> </tbody> </table> <p>International Facilities & Farms</p> <table border="1"> <thead> <tr> <th>Water Withdrawal by Source (billions of gallons)</th> <th>2014</th> <th>2015</th> <th>2016</th> <th>2017</th> <th>2018</th> <th>2019</th> <th>2020</th> <th>2021</th> </tr> </thead> <tbody> <tr> <td>Groundwater</td> <td>1.09</td> <td>1.26</td> <td>1.27</td> <td>1.37</td> <td>1.41</td> <td>1.45</td> <td>1.41</td> <td>1.7</td> </tr> <tr> <td>Third-party (Municipal)</td> <td>0.6</td> <td>0.65</td> <td>0.65</td> <td>0.65</td> <td>0.64</td> <td>0.56</td> <td>0.49</td> <td>0.76</td> </tr> </tbody> </table>	Water Withdrawal by Source (billions of gallons)	2014	2015	2016	2017	2018	2019	2020	2021	Groundwater	4.552	4.694	4.666	4.58	5.40	5.19	4.66	4.6	Third-party (Municipal)	3.843	4.171	4.176	4.34	4.82	4.95	4.73	4.6	Surface water	0.794	0.94	0.97	0.97	1.02	1.00	1.08	0.78	Reused and recycled	0.467	0.501	0.295	0.32	0.16	0.26	0.05	0.63	Water Discharge (billions of gallons)	2014	2015	2016	2017	2018	2019	2020	2021	Public-owned wastewater treatment plant	3.042	3.23	3.406	3.26	3.61	3.45	4.63	3.56	Direct	2.444	2.771	2.625	2.79	2.73	2.8	2.76	2.51	Land irrigation	2.506	2.451	3.159	2.35	2.23	3.29	2.87	2.73	Water Withdrawal by Source (billions of gallons)	2014	2015	2016	2017	2018	2019	2020	2021	Groundwater	1.09	1.26	1.27	1.37	1.41	1.45	1.41	1.7	Third-party (Municipal)	0.6	0.65	0.65	0.65	0.64	0.56	0.49	0.76
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303-2	Water sources significantly affected by withdrawal of water	<p>To ensure our operations have a sustainable water supply, we used the World Resources Institute (WRI) Global Water Tool and the Global Environmental Management Initiative (GEMI) Local Water Tool in 2016 to assess risk associated with local water supplies where we operate. The results, which are applicable for several years, indicate our operations face little to no risk, do not significantly impact local water supplies, and none of our water comes from protected sources. For the few operations that are facing limited risk, we monitor water availability and potential changes closely.</p> <p>We have proposals to start a new assessment process in 2022.</p>																																																																																																												



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303-3	Water recycled and reused	In 2021, Smithfield recycled and reused 625 million gallons of water, which represents 9% of the total water usage in U.S. facilities and farms. Reducing Environmental Impact on Our Farms, p. 28 Assessing Our Water Impact, p. 38																				
304: Biodiversity (2016)																						
103	Management approach	Our Sustainable Impact Priorities, p. 13 Sustainability Governance Materiality (Appendix) Our Sustainability Strategy, p. 12																				
304-2	Significant impacts of activities, products, and services on biodiversity	We finished installing manure-to-energy technology on nearly all our company-owned finishing farms in northern Missouri. In addition to generating carbon-negative RNG at a rate of approximately 800,000 dekatherms annually, we have planted hundreds of acres of prairie grass through this partnership to provide ecological services and wildlife habitat for monarch butterflies across the state. The ecological services that would be derived from 100 million acres of cover crops and 30 million acres of reconstructed and restored prairie would reduce flooding, absorb nutrients, substantially reduce soil erosion, help cool our atmosphere and provide critical wildlife habitat for many threatened wildlife species and pollinators. Reducing Environmental Impact on Our Farms, p. 28 Lessons From 20 Years of Manure Management Innovations, p. 30																				
305: Emissions																						
103	Management approach	Smithfield is in the process of creating an all-inclusive data collection model. Throughout the next reporting cycle (ending in May of 2023) this tool will provide a more comprehensive measurement of year over year data throughout our value chain. Our Sustainable Impact Priorities, p. 13 Sustainability Governance Materiality (Appendix) Our Sustainability Strategy, p. 12 Managing Our Impacts Through Life-Cycle Assessment (LCA), p. 27 Our Approach to Environmental Stewardship, p. 26 Environmental Policy																				
305-1	Direct (Scope 1) GHG emissions	<p>Prior to 2018, direct and indirect emissions at Smithfield were recorded together as “Direct and Indirect emissions.”</p> <p>U.S. Facilities</p> <table border="1"> <thead> <tr> <th>Direct emissions</th> <th>2018</th> <th>2019</th> <th>2020</th> <th>2021</th> </tr> </thead> <tbody> <tr> <td>U.S. Facilities (metric tons CO2e)</td> <td>519,515</td> <td>542,569</td> <td>503,111</td> <td>526,426</td> </tr> </tbody> </table> <p>In 2021, Smithfield’s U.S facilities Scope 1 emissions were 526,426 metric tons of CO2e.</p> <p>International Facilities</p> <table border="1"> <thead> <tr> <th>Direct emissions</th> <th>2018</th> <th>2019</th> <th>2020</th> <th>2021</th> </tr> </thead> <tbody> <tr> <td>International Facilities (metric tons CO2e)</td> <td>123,945</td> <td>117,844</td> <td>111,739</td> <td>65,952</td> </tr> </tbody> </table> <p>In 2021, Smithfield’s International facilities Scope 1 emissions were 65,952 metric tons of CO2e.</p>	Direct emissions	2018	2019	2020	2021	U.S. Facilities (metric tons CO2e)	519,515	542,569	503,111	526,426	Direct emissions	2018	2019	2020	2021	International Facilities (metric tons CO2e)	123,945	117,844	111,739	65,952
Direct emissions	2018	2019	2020	2021																		
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Disclosure Number	Disclosure Title	2021 Disclosure																																				
305-2	Energy indirect (Scope 2) GHG emissions	<p>Prior to 2018, direct and indirect emissions at Smithfield were recorded together as “Direct and Indirect emissions.”</p> <table border="1"> <thead> <tr> <th>Indirect emissions</th> <th>2018</th> <th>2019</th> <th>2020</th> <th>2021</th> </tr> </thead> <tbody> <tr> <td>U.S. Facilities (Metric tons CO2e)</td> <td>722,404</td> <td>672,916</td> <td>708,377</td> <td>594,658</td> </tr> </tbody> </table> <p>In 2021, Smithfield’s U.S. facilities Scope 2 emissions were 594,658 metric tons of CO2e.</p> <table border="1"> <thead> <tr> <th>Indirect emissions</th> <th>2018</th> <th>2019</th> <th>2020</th> <th>2021</th> </tr> </thead> <tbody> <tr> <td>International Facilities (Metric tons CO2e)</td> <td>141,646</td> <td>137,140</td> <td>98,144</td> <td>196,298</td> </tr> </tbody> </table> <p>In 2021, Smithfield’s International facilities Scope 2 emissions were 196,298 metric tons of CO2e.</p>	Indirect emissions	2018	2019	2020	2021	U.S. Facilities (Metric tons CO2e)	722,404	672,916	708,377	594,658	Indirect emissions	2018	2019	2020	2021	International Facilities (Metric tons CO2e)	141,646	137,140	98,144	196,298																
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International Facilities (Metric tons CO2e)	141,646	137,140	98,144	196,298																																		
305-3	Other direct (Scope 3) GHG emissions	<p>Smithfield is developing an all-inclusive data collection model. Throughout the next reporting cycle (ending in May of 2023) this tool will provide a more comprehensive measurement of year-over-year data throughout our value chain.</p> <p>As a result of this progress, next year’s 2022 Sustainability Impact Report will include Scope 3 calculations.</p>																																				
305-4	GHG emissions intensity	<p>U.S. Facilities</p> <table border="1"> <thead> <tr> <th>GHG Emissions (Direct & Indirect) (normalized)</th> <th>2014</th> <th>2015</th> <th>2016</th> <th>2017</th> <th>2018</th> <th>2019</th> <th>2020</th> <th>2021</th> </tr> </thead> <tbody> <tr> <td>(metric tons CO2e/cwt)</td> <td>0.0106</td> <td>0.0098</td> <td>0.0100</td> <td>0.0098</td> <td>0.0099</td> <td>0.0098</td> <td>0.0100</td> <td>0.0097</td> </tr> </tbody> </table> <p>International Facilities</p> <table border="1"> <thead> <tr> <th>GHG Emissions (Direct & Indirect) (normalized)</th> <th>2014</th> <th>2015</th> <th>2016</th> <th>2017</th> <th>2018</th> <th>2019</th> <th>2020</th> <th>2021</th> </tr> </thead> <tbody> <tr> <td>(metric tons CO2e/cwt)</td> <td>0.0159</td> <td>0.0152</td> <td>0.0143</td> <td>0.0136</td> <td>0.0137</td> <td>0.0142</td> <td>0.0129</td> <td>0.0110</td> </tr> </tbody> </table> <p>Our Sustainable Impact Priorities, p. 13 Sustainability Governance Materiality (Appendix) Our Sustainability Strategy, p. 12 Managing Our Impacts Through Life-Cycle Assessment (LCA), p. 27 Our Approach to Environmental Stewardship, p. 26 Environmental Policy</p>	GHG Emissions (Direct & Indirect) (normalized)	2014	2015	2016	2017	2018	2019	2020	2021	(metric tons CO2e/cwt)	0.0106	0.0098	0.0100	0.0098	0.0099	0.0098	0.0100	0.0097	GHG Emissions (Direct & Indirect) (normalized)	2014	2015	2016	2017	2018	2019	2020	2021	(metric tons CO2e/cwt)	0.0159	0.0152	0.0143	0.0136	0.0137	0.0142	0.0129	0.0110
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(metric tons CO2e/cwt)	0.0159	0.0152	0.0143	0.0136	0.0137	0.0142	0.0129	0.0110																														
305-5	Reduction of GHG emissions	<p>We expanded our 2016 commitment to reduce absolute greenhouse gas (GHG) emissions across our entire supply chain 25% by 2025 and are now targeting a 30% reduction by 2030. With this new goal, we are utilizing additional strategies to reduce and fully account for our GHG emissions.</p> <p>Managing Our Impacts Through Life-Cycle Assessment (LCA), p. 27 Pathway to Decarbonization, p. 26 Manure to Energy Projects and Partnerships, p. 28 Growing Wind Energy Investment, p. 28</p>																																				
305-6	Emissions of ozone-depleting substances (ODS)	<p>The only significant use of ODS identified in Smithfield production relates to refrigerants. Three of the remaining facilities identified in 2019 as using Class II refrigerants as their primary means of refrigeration have been phased out. Smithfield conducts safety training for applicable employees on the proper management and disposal of refrigerants.</p> <p>Reducing Environmental Impact on Our Farms, p. 28</p>																																				



Disclosure Number	Disclosure Title	2021 Disclosure
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305-7 Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions

U.S. Facilities

Significant air emissions	2014	2015	2016	2017	2018	2019	2020	2021
Nitrous oxide (N2O) emissions (metric tons)	3,207	3,233	3,200	2,985	4,212	3,639	3,600	2,607

International Facilities

Significant air emissions	2014	2015	2016	2017	2018	2019	2020	2021
Nitrous oxide (N2O) emissions (metric tons)	337	276	289	292	320	309	298	31.01

Pathway to Decarbonization, p. 26

306: Effluents and Waste (2016)

103 Management approach

Our Sustainable Impact Priorities, p. 13 | [Sustainability Governance](#) | [Materiality \(Appendix\)](#) | Our Sustainability Strategy, p. 12 | Reducing Environmental Impact on Our Farms, p. 28 | Eliminating Waste in Our Processing Operations, p. 33 | [Environmental Policy](#)

Eliminating waste is an environmental priority for Smithfield. Our goal is to reduce overall solid waste to landfill by 75% and to certify three quarters of our U.S. facilities as zero-waste-to-landfill by 2025. We made significant progress in our efforts to address waste arising from our operations, establishing short-and long-term targets for waste reduction. We recognize that there is a new GRI 306 (2020) Standard pertaining to waste. However, we have elected to report against the 306 (2016) standard for the 2020 year.

306-2 Waste by type and disposal method

U.S. Facilities & Farms

Total Waste Disposition (tons)	2014	2015	2016	2017	2018	2019	2020	2021
Cardboard recycled	27,833	26,724	27,288	27,173	28,702	29,552	20,623	28,391
Metals recycled	2,016	2,153	3,973	3,318	3,367	5,981	46,718	3,150
Plastics recycled	884	1,259	2,395	1,655	1,579	2,259	1,347	1,326
Wastewater sludge land applied	40,478	73,287	68,392	62,905	58,743	62,127	34,719	105,748
Waste to Energy	31,179	55,201	49,112	59,314	66,987	82,148	68,475	36,239
Hazardous waste	13	9.3	9.4	7.5	37.1	13.5	6.00	20.50
Universal waste	37	62.4	28.7	27.2	18.8	19.4	14.78	17.72
Solid waste to landfill	65,400	70,946	71,373	68,590	74,674	52,806	44,079	49,714
TOTAL	167,840	229,642	222,571	222,990	234,108	234,904	228,655	224,606

*Does not include manure management



Disclosure Number	Disclosure Title	2021 Disclosure
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		<p>International Facilities & Farms</p> <table border="1"> <thead> <tr> <th>Solid Waste to Landfill (pounds in millions)</th> <th>2014</th> <th>2015</th> <th>2016</th> <th>2017</th> <th>2018</th> <th>2019</th> <th>2020</th> <th>2021</th> </tr> </thead> <tbody> <tr> <td>Solid waste to landfill</td> <td>14.4</td> <td>12.8</td> <td>13.4</td> <td>11</td> <td>9.9</td> <td>11.31</td> <td>15.2</td> <td>16.9</td> </tr> </tbody> </table> <p><i>*Does not include manure management</i></p> <p>Reducing Environmental Impact on Our Farms, p. 28 Eliminating Waste in Our Processing Operations, p. 33</p>	Solid Waste to Landfill (pounds in millions)	2014	2015	2016	2017	2018	2019	2020	2021	Solid waste to landfill	14.4	12.8	13.4	11	9.9	11.31	15.2	16.9
Solid Waste to Landfill (pounds in millions)	2014	2015	2016	2017	2018	2019	2020	2021												
Solid waste to landfill	14.4	12.8	13.4	11	9.9	11.31	15.2	16.9												

306-5	Water bodies affected by water discharges and/or runoff	<p>As part of Smithfield’s evolving management approach to water and wastewater management, we are currently reassessing the risks and potential impacts of our farms and facilities on adjacent water bodies.</p> <p>Reducing Environmental Impact on Our Farms, p. 28 Assessing Our Water Impact, p. 38</p>
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307: Environmental Compliance

103	Management approach	<p>Our Sustainable Impact Priorities, p. 13 Sustainability Governance Materiality (Appendix) Our Sustainability Strategy, p. 12 Environmental Policy</p>
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307-1	Non-compliance with environmental laws and regulations	<p>U.S. Facilities & Farms</p> <table border="1"> <thead> <tr> <th>Compliance at Company-owned Farms & Facilities</th> <th>2014</th> <th>2015</th> <th>2016</th> <th>2017</th> <th>2018</th> <th>2019</th> <th>2020</th> <th>2021</th> </tr> </thead> <tbody> <tr> <td>Notices of violation (NOVs)</td> <td>18</td> <td>11</td> <td>18</td> <td>13</td> <td>18</td> <td>20</td> <td>13</td> <td>9</td> </tr> <tr> <td>Fines (\$U.S.)</td> <td>\$400</td> <td>\$400</td> <td>\$6,500</td> <td>\$17,545</td> <td>\$169,962</td> <td>\$49,335</td> <td>0</td> <td>63,465.36</td> </tr> </tbody> </table> <table border="1"> <thead> <tr> <th>Compliance on Contract Farms</th> <th>2014</th> <th>2015</th> <th>2016</th> <th>2017</th> <th>2018</th> <th>2019</th> <th>2020</th> <th>2021</th> </tr> </thead> <tbody> <tr> <td>Notices of violation (NOVs)</td> <td>14</td> <td>34</td> <td>41</td> <td>48</td> <td>30</td> <td>46</td> <td>85</td> <td>78</td> </tr> </tbody> </table> <p>International Facilities & Farms</p> <table border="1"> <thead> <tr> <th>Compliance at Company-owned Farms & Facilities</th> <th>2014</th> <th>2015</th> <th>2016</th> <th>2017</th> <th>2018</th> <th>2019</th> <th>2020</th> <th>2021</th> </tr> </thead> <tbody> <tr> <td>Notices of violation (NOVs)</td> <td>5</td> <td>6</td> <td>7</td> <td>7</td> <td>5</td> <td>4</td> <td>0</td> <td>4</td> </tr> <tr> <td>Fines (\$U.S.)</td> <td>\$ 6,155</td> <td>\$ 750</td> <td>\$ 120</td> <td>\$ 803</td> <td>\$ 2,454</td> <td>\$128</td> <td>0</td> <td>\$6,200</td> </tr> </tbody> </table> <p>Sustainability Governance Maintaining Our Leadership – Good Stewards, p.41</p>	Compliance at Company-owned Farms & Facilities	2014	2015	2016	2017	2018	2019	2020	2021	Notices of violation (NOVs)	18	11	18	13	18	20	13	9	Fines (\$U.S.)	\$400	\$400	\$6,500	\$17,545	\$169,962	\$49,335	0	63,465.36	Compliance on Contract Farms	2014	2015	2016	2017	2018	2019	2020	2021	Notices of violation (NOVs)	14	34	41	48	30	46	85	78	Compliance at Company-owned Farms & Facilities	2014	2015	2016	2017	2018	2019	2020	2021	Notices of violation (NOVs)	5	6	7	7	5	4	0	4	Fines (\$U.S.)	\$ 6,155	\$ 750	\$ 120	\$ 803	\$ 2,454	\$128	0	\$6,200
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308: Supplier Environmental Assessment

103	Management approach	<p>Our Sustainable Impact Priorities, p. 13 Sustainability Governance Materiality (Appendix) Our Sustainability Strategy, p. 12 Eliminating Waste in Our Processing Operations, p. 33 Reducing Environmental Impact on Our Farms, p. 28 Sustainability: Supply Chain Management Environmental Policy Supplier Code of Conduct</p>
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Disclosure Number	Disclosure Title	2021 Disclosure
308-1	New suppliers that were screened using environmental criteria	<p>We require that all suppliers comply with our Supplier Code of Conduct outlining our expectations regarding environmental performance, compliance, labor and human rights, product safety, animal well-being, health and safety, legal requirements, and business integrity.</p> <p>Suppliers are obliged to report any regulatory noncompliance and any events that may have a negative impact on their business. We reserve the right to audit suppliers' facilities. We also have surveyed our largest suppliers to understand how they address areas such as energy reduction, natural resource use, employee safety, and community giving. In 2021, 100% of our new suppliers were screened using environmental criteria.</p> <p>Environment, p. 26 Reducing Environmental Impact on Our Farms, p. 28 Eliminating Waste in Our Processing Operations, p. 33 Sustainability: Supply Chain Management Environmental Policy Supplier Code of Conduct</p>



Social Disclosures

Disclosure Number	Disclosure Title	2021 Disclosure
401: Employment		
103	Management approach	Materiality (Appendix) Our Sustainable Impact Priorities, p. 13 Diversity, Equity and Inclusion, p. 60 Worker Health & Safety, p. 67 Smithfield Careers
401-1	New employee hires and employee turnover	We do not currently track employee turnover by age group or gender. Overall turnover in this reporting period for corporate offices and domestic plants was 65.5% and 46.2% for Smithfield Hog Production.
401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	Benefits are available to all of Smithfield's full-time employees. Additionally, medical benefits are available for part-time employees averaging more than 30 working hours a week. Smithfield Careers People Our Workforce by the Numbers, p. 63
402: Labor/Management Relations		
103	Management approach	Materiality (Appendix) Our Sustainable Impact Priorities, p. 13 Diversity, Equity and Inclusion, p. 60 Worker Health & Safety, p. 67 Our Workforce by the Numbers, p. 63
402-1	Minimum notice periods regarding operational changes	In the event of a facility closure, we fully comply with the federal Worker Adjustment and Retraining Notification (WARN) Act, which requires 60-day notifications of plant shutdowns to employees. Under the WARN Act, we also notify state level dislocated worker units so they can offer prompt assistance. Worker Health & Safety, p. 63
402-FP3	Percentage of working time lost due to industrial disputes, strikes and/or lock-outs, by country	We did not have any working lost time in the United States or in European operations due to industrial disputes, strikes, and/or lockouts in this reporting period.
403: Occupational Health and Safety (2018)		
103	Management approach	Smithfield maintains its commitment to employee health and safety in 2021 under the new pillar: Worker Health & Safety, Goal: Keep our employees healthy and safe For our 2021 sustainability report, we are reporting against the updated GRI 403 Occupational Health and Safety Standard (2018). Governance Materiality (Appendix) Q&A with Our Chief Sustainability Officer, p. 3 Our Sustainable Impact Priorities, p. 13 Health and Safety Policy Worker Health and Safety, p. 67
403-1	Occupational health and safety management system	In 2018 Smithfield implemented the Smithfield Injury Prevention System (SIPS) to ensure the effective and consistent management of injury prevention, education, and tracking throughout the organization. SIPS encapsulates Smithfield's entire OHS management system including Operational Control that encompasses OSHA regulatory required programs. In addition to the OSHA Required standards the foundation of the SIPS program is based on the ISO 45001 guidelines. The scope of SIPS covers All Workers as defined by ISO 45001 including management, hourly, temporary employees, co-packers, and contract workers. In 2021, we refined our facility operations to increase the effectiveness of SIPS and continue to drive down safety incident rates. Worker Health and Safety, p. 67 Health and Safety Policy



Disclosure Number	Disclosure Title	2021 Disclosure
403-2	Hazard identification, risk assessment, and incident investigation	<p>The Smithfield Hazard Identification & Risk Assessment process covers all jobs and tasks and any plant or farm. The assessment identifies potential hazards by evaluating historical incident data, observation by a team including hourly workers, safety professionals, engineering, and the site assigned Core Team. Once potential hazards of a task are identified, the process then identifies controls that are in-place such as guarding, training, and PPE, to protect workers from the risk. The effectiveness of those controls is then evaluated for assurance. Frequency and potential are also factors in the overall Risk Factor ranking score.</p> <p>Once the assessment is completed, the Core Team will then establish Objectives & Management plans to reduce the hazard risk ranking score. Assessments are reviewed and revised anytime an incident occurs to evaluate what lack of control may have been a factor as well as whenever new tasks are created. The HIRA assessment process is conducted by hourly workers with the assistance of the site Core Team and Safety professional to assure the process is conducted effectively. Assessments are reviewed annually to verify revision and to assure that any new tasks have been included in the overall HIRA. The HIRA assessment process is conducted by hourly workers with the assistance of the site Core Team and Safety professional to assure the process is conducted effectively.</p> <p>From Day-1 in the New Employee Orientation workers are instructed that they have the right and are encouraged to report any work-related hazards to their immediate supervisor and upper management, without any fear of appraisal. Workers are legally protected under the OSH Act Workers Right Act that is posted on bulletin boards in all locations. Smithfield also provides a Hotline number for workers to call to voice concerns. Workers can provide their name or make the call anonymously.</p> <p>From Day-1 in the New Employee Orientation workers are made aware that they have the right to remove themselves from work situations that they deem to be hazardous. As part of the training workers are advised that they are to immediately contact their supervisor, or Safety professional, or Human Resources of any situations that they deem could be hazardous to themselves or co-workers. The OSH Act, Workers Right, also protects workers from any fear of reprisal for voicing their concerns. Smithfield also provides a Hotline number for workers to call to voice concerns. Workers can provide their name or make the call anonymously.</p> <p>Worker Health and Safety, p. 67 Ensuring Team Member Safety, p. 68 Health and Safety Policy</p>
403-3	Occupational Health Services	<p>Occupational medical records are maintained separately from a personal health-related information. Personal health-related information is kept confidential in the workers Human Resources personal file.</p> <p>Worker Health and Safety, p. 67 Health and Safety Policy</p>
403-4	Worker participation, consultation, and communication on occupational health and safety	<p>Smithfield measures worker participation monthly. Participation is identified in several different ways, some other examples of participation include; volunteer leading/presenting monthly line topics, Volunteer for First Aid / CPR training, participation in safe work demonstrations (inside the facility or in the community), participation in other safety functional teams, participating Personal Protective Equipment trials, voluntary participation in safety inspections, leading safety task activities, etc. Regulatory training required by a task is not considered to be participation.</p>



Disclosure Number	Disclosure Title	2021 Disclosure
		<p>SIPS is promoted by the on-site Core Team that is led by the senior official of the site who is the Core Team Leader. Promotion is conducted through town hall meetings, line meetings, postings, and many other activities. SIPS is deigned be a part of the overall operational procedure that includes new line introduction, new product development, engineering controls, and administrative controls to assure that any impact on the safety program and the safety of the workers is part of the discussion and planning.</p> <p>Workers are provided with many opportunities to be engaged; a full list of participation ideas can be found in our SIPS program under the Worker Participation Clause.</p> <p>Worker Health and Safety, p. 67 Health and Safety Policy</p>
403-5	Worker training on occupational health and safety	<p>In 2021, Smithfield’s U.S. employees had a 49.7 percent engagement rate in worker safety training activities, nearly hitting the 50% target.</p> <p>Training needs for each task are determined during the Hazard Identification & Risk Assessment process. Various methods are utilized to deliver the training such as hands-on, Smithfield University, Train-safe, classroom, power-point, and may include third-party instructors or off-site training for more specific training.</p> <p>Training development is dependent about the training; regulatory required training is developed through the Corporate Core Team to ensure that the training is standardized and covers all regulatory requirements. Site specific training is developed by the Corporate Core Team or can be developed by the location.</p> <p>Worker Health and Safety, p. 67 Health and Safety Policy</p>
403-6	Promotion of worker health	<p>Worker Health and Safety, p. 67 Health and Safety Policy</p>
403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	<p>This is common on our hog production side as we have multiple contract farms where our workers will enter and work on the site. Smithfield’s primary responsibility is to always protect the safety & health of our workers, including when working at non-company owned locations. SOPS are developed for Smithfield workers to include inspection / operation of any equipment they may be utilizing and the general condition of the location.</p> <p>Smithfield sets a high standard for the locations to maintain a safe work environment; failure to abide by those commitments could result in discontinued use of the location.</p> <p>Worker Health and Safety, p. 67 Health and Safety Policy</p>
403-8	Workers covered by an occupational health and safety management system	<p>To maintain a safe and healthy working environment, every worker and visitor at one of our locations is required to comply with the requirements specified in SIPS.</p> <p>Worker Health and Safety, p. 67 Health and Safety Policy</p>
403-9	Work-related injury	<p>In 2021, U.S. processing facilities had a Total Recordable Injury Frequency Rate (TRIFR) of 3.01, a Days Away Restricted or Transferred (DART) rate of 2.18, and Days Away From Work (DAFWII) rate of 0.45.</p> <p>Our U.S. farms had a TRIFR of 4.39, a DART rate of 2.18, and DAFWII rate of 0.63.</p> <p>Worker Health and Safety, p. 67 Health and Safety Policy</p>



Disclosure Number	Disclosure Title	2021 Disclosure
404: Training and Education		
103	Management approach	Governance Materiality (Appendix) Our Sustainable Impact Priorities, p. 13 Diversity, Equity and Inclusion, p. 60
404-1	Average hours of training per year per employee	We do not consistently track employee training by gender or employee category. However, in 2021 Smithfield employees completed 80,736 hours of self-paced education modules using Smithfield University, our online learning platform. Diversity, Equity and Inclusion, p. 60
404-2	Programs for upgrading employee skills and transition assistance programs	Diversity, Equity and Inclusion, p. 60 Building a Diverse, Equitable and Inclusive Culture, p. 61
405: Diversity and Equal Opportunity		
103	Management approach	Governance Materiality (Appendix) Our Sustainable Impact Priorities, p. 13 Diversity, Equity and Inclusion, p. 60 Our Workforce by the Numbers, p. 63 Code of Business Conduct and Ethics Diversity Statement
405-1	Diversity of governance bodies and employees	Our Workforce by the Numbers, p. 63
406: Non-discrimination		
103	Management approach	Governance Materiality (Appendix) Our Sustainable Impact Priorities, p. 13 Code of Business Conduct and Ethics Diversity, Equity and Inclusion, p. 60
406-1	Incidents of discrimination or corrective actions taken	Smithfield and its affiliated entities have in place robust policies prohibiting discrimination, harassment and retaliation, along with well-publicized procedures for making complaints about such matters. Among the available avenues for complaint are the company's dispute resolution process and its ethics hotline. Like any company with more than 50,000 employees spread across more than 40 work sites, Smithfield periodically receives lawsuits and agency charges that allege discrimination. Smithfield defends against such matters and resolves them as appropriate. There were no adverse verdicts against Smithfield in any employment discrimination case in 2021.
407: Freedom of Association and Collective Bargaining		
103	Management approach	Governance Materiality (Appendix) Code of Business Conduct and Ethics Supplier Code of Conduct Human Rights Policy
407-1	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	All our employees have the right to exercise freedom of association and collective bargaining. Code of Business Conduct and Ethics Supplier Code of Conduct Human Rights Policy
408: Child Labor		
103	Management approach	Governance Materiality (Appendix) Code of Business Conduct and Ethics Supplier Code of Conduct Human Rights Policy



Disclosure Number	Disclosure Title	2021 Disclosure
408-1	Operations and suppliers at significant risk for incidents of child labor	We have not identified any operations as having significant risk or incidents of child labor. Our business overall is not at high risk because we do not source high risk agricultural commodities, conflict minerals, or finished consumer products or components containing such material. Code of Business Conduct and Ethics Supplier Code of Conduct Human Rights Policy
409: Forced or Compulsory Labor		
103	Management approach	Governance Materiality (Appendix) Code of Business Conduct and Ethics Supplier Code of Conduct Human Rights Policy
409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor	We have not identified any operations as having significant risk for incidents of forced or compulsory labor. Our business overall is not at high risk because we do not source high risk agricultural commodities, conflict minerals, or finished consumer products or components containing such material. Code of Business Conduct and Ethics Supplier Code of Conduct Human Rights Policy
410: Security Practices		
103	Management approach	Governance Materiality (Appendix) Code of Business Conduct and Ethics Supplier Code of Conduct Human Rights Policy
410-1	Security personnel training in human rights policies or procedures	Smithfield's Chief Security Officer is responsible for ensuring all security personnel at Smithfield locations have been trained according to their own organization's policies, which include equal employment non-discriminatory work practices, prohibitions against harassment and violence, as well as employee health and safety policies, etc. Smithfield's Human Rights Policy is reviewed annually with all security personnel and contractors at each location.
411: Rights of Indigenous Peoples		
103	Management approach	Governance Materiality (Appendix) Code of Business Conduct and Ethics Supplier Code of Conduct Human Rights Policy
411-1	Incidents of violations involving rights of indigenous peoples	Smithfield did not have any incidents of violations involving rights of indigenous people in this reporting period. Code of Business Conduct and Ethics Supplier Code of Conduct Human Rights Policy
412: Human Rights Assessment		
103	Management approach	Governance Materiality (Appendix) Code of Business Conduct and Ethics Supplier Code of Conduct Human Rights Policy
412-1	Operations that have been subject to human rights reviews or impact assessments	Smithfield monitors our suppliers' compliance through supplier surveys. We maintain the right, though not currently exercised, to conduct formal audits of suppliers to confirm compliance with company standards against trafficking and slavery in supply chains. Code of Business Conduct and Ethics Supplier Code of Conduct Human Rights Policy



Disclosure Number	Disclosure Title	2021 Disclosure
412-2	Employee training on human rights policies or procedures	Smithfield has a robust Human Rights Policy and Code of Business Conduct and Ethics (Code of Conduct), as well as employee handbooks which include anti-discrimination, anti-retaliation and human rights policies. In some facilities, anti-discrimination and human rights policies are distributed as stand-alone policies. All of these policies support fundamental human rights. Every Smithfield employee is trained on and required to review and adhere to these policies, including compliance with all applicable laws and regulations. Code of Business Conduct and Ethics Supplier Code of Conduct Human Rights Policy
412-3	Significant investment agreements and contracts that include human rights clauses or that underwent human rights screening	We are not aware of any significant investment agreements that include human rights clauses or human rights screening. Code of Business Conduct and Ethics Supplier Code of Conduct Human Rights Policy
413: Local Communities		
103	Management approach	Our Sustainable Impact Priorities, p. 13 Governance Materiality (Appendix) Helping Communities, p. 51
413-1	Operations with local community engagement, impact assessments, and development programs	Helping Communities, p. 51
414: Supplier Social Assessment		
103	Management approach	Governance Materiality (Appendix) Our Sustainable Impact Priorities, p. 13 Supply Chain Management Supplier Code of Conduct
414-1	New suppliers that were screened using social criteria	Smithfield monitors our suppliers' compliance through supplier surveys, including questions focused specifically on social impacts. We maintain the right, though not currently exercised, to conduct formal audits of suppliers to confirm compliance with company standards. Code of Business Conduct and Ethics Supplier Code of Conduct Human Rights Policy
415: Public Policy		
103	Management approach	Our Sustainable Impact Priorities, p. 13 Governance Sustainability: Public Policy
415-1	Political contributions	Since 2000, the Smithfield Political Action Committee (HAMPAC) has assisted numerous state and federal candidates in both major political parties in their bids for elected office. Contributions by HAMPAC are made objectively and on a bipartisan basis that includes consideration of the candidate's voting record, leadership committee assignments, and interest and commitment to issues of importance to our company and industry. The candidates that HAMPAC and its donors have supported understand the issues of importance to our industry and have stood with us as policy and regulatory champions. This report has been prepared to inform contributors how their funds are being used by HAMPAC.



Disclosure Number	Disclosure Title	2021 Disclosure
		<p>In 2021, HAMPAC made a total of \$24,500 in financial contributions to U.S. federal candidates seeking office or re-election. Also, in 2021, HAMPAC made a total of \$119,750 in financial contributions to state-level candidates seeking office or re-election. In states where corporate contributions are permissible, Smithfield made a total of \$XX.00 financial and in-kind contributions to state and local-level candidates seeking office or re-election. Neither HAMPAC nor Smithfield made any in-kind contributions to U.S. federal, state or local candidates in 2021.</p> <p>Neither HAMPAC nor Smithfield made a financial or in-kind contribution to any international (non-U.S.) candidate. Additionally, neither HAMPAC nor Smithfield made any indirect political contributions in 2021.</p> <p>Public Policy</p>
416: Customer Health and Safety		
103	Management approach	<p>There are senior level food safety managers at each of our segments, and all managers undergo specialized training in food safety issues. Across our operations, we have dozens of food safety and food science professionals (including a team of leading industry microbiologists), who are responsible for ensuring food safety management and product quality.</p> <p>Our Corporate Affairs and Sustainability team regularly evaluates our management of sustainability issues and other key business issues as part of its role in determining our strategy. We adjust management approaches as needed based on these evaluations.</p> <p>We follow a comprehensive approach that addresses each phase of production, from farms to processing facilities. Our food safety management system applies to facility, equipment, and process design; operating and sanitation procedures; employee training; and auditing of our facilities. We work to anticipate points in the production process where challenges might exist and then develop programs to solve potential problems. We maintain Global Food Safety Initiative certification at all applicable facilities.</p> <p>Training: We document training at every facility and confirm, through testing, employee comprehension of material as well as program effectiveness. Employees who repeatedly fail their tests may be reassigned to less critical positions.</p> <p>Governance Our Sustainable Impact Priorities, p. 13 Materiality (Appendix) Our Approach to Food Safety and Quality, p. 43 Our Approach to Health and Wellness, p. 47 Health and Safety Policy Sodium Policy</p>
416-1	Assessment of the health and safety impacts of product and service categories	<p>Smithfield uses a food safety and quality assurance (FSQA) scorecard on facility-level compliance and improvements on key quality metrics at our fresh meat and packaging meat operations.</p> <p>Testing Product Quality: Our plant management teams regularly review samples of the many products we produce at each of our facilities. Before a product is sent to a customer for the first time, a detailed review—called a First Production Report—is conducted to ensure that packaging, labeling, product appearance, and flavor are exactly what have been specified. These procedures are in addition to the continuous product monitoring conducted by our operations and quality assurance personnel. We provide food safety and pork handling tips on Smithfield.com to educate consumers on proper food handling, storage, and preparation. In 2021, we achieved recertification to the Global Food Safety Certification at all applicable facilities.</p> <p>Our Approach to Food Safety and Quality, p. 43</p>



Disclosure Number	Disclosure Title	2021 Disclosure
416-2	Incidents of noncompliance concerning the health and safety impacts of products and services	<p>There was one voluntary product recall of a limited quantity of products in the U.S. in 2021. Poland reported six product recalls regarding food safety, including salmonella and an incorrect expiration date. Romania had two recalls last year, both of which were related to the ASF virus.</p> <p>Our Approach to Food Safety and Quality, p. 43</p>
416-FP4	Nature, scope and effectiveness of any programs and practices (in-kind contributions, volunteer initiatives, knowledge transfer, partnerships and product development) that promote healthy lifestyles; the prevention of chronic disease; access to healthy, nutritious and affordable food; and improved welfare for communities in need	<p>Helping Communities, p. 51 Our Approach to Health and Wellness, p. 47</p>
416-FP5	Percentage of production volume manufactured in sites certified by an independent third party according to internationally recognized food safety management system standards	<p>In 2021, 100% hundred percent of our applicable facilities in the United States, Poland and Romania – 70 in total – were certified to GFSI standards through audits conducted by Safe Quality Food (SQF), BRC Global Standard, International Food Standards (ISF) and ISO 22000. Most of our customers rely on the GFSI auditing process, although some of our larger customers send their own food safety officials to perform audits at our facilities, ensuring an additional degree of transparency that we welcome and from which we also benefit.</p> <p>In 2021, 100% of our facilities in Europe maintained all applicable certifications to international and federal food safety standards (e.g., ISO 22000, British Retail Consortium, and International Featured Standards).</p> <p>Our Approach to Food Safety and Quality, p. 43</p>
416-FP6	Percentage of total sales volume of consumer products, by product category, that are lowered in saturated fat, trans fats, sodium and added sugars	<p>We have set a goal to reduce added sugars and sodium by 10% across our entire product line by 2025.</p> <p>Our Approach to Health and Wellness, p. 47 Sodium Policy</p>
416-FP7	Percentage of total sales volume of consumer products, by product category sold, that contain increased fiber, vitamins, minerals, phytochemicals or functional food additives	<p>Smithfield does not fortify our meat products with fiber, vitamins, minerals, phytochemicals, or functional food additives.</p>
417: Marketing and Labeling		
103	Management approach	<p>Governance Materiality (Appendix) Our Sustainability Strategy, p. 12 Our Approach to Food Safety and Quality, p. 43 Our Approach to Health and Wellness, p. 47</p>
417-1	Requirements for product and service information and labeling	<p>Smithfield makes every effort to ensure that our consumers receive the most current information about the ingredients and nutritional value of our products. Our labeling and any product related claims are clear and accurate, in accordance with the labeling requirements unique to each country in which we operate. Smithfield did not have any penalties or fines associated with product labeling regulations during 2021.</p>



Disclosure Number	Disclosure Title	2021 Disclosure
		<p>We are working on ways to improve our product labeling and our ingredient listings in an effort to help consumers better understand exactly what goes into our foods.</p> <p>Our Approach to Health and Wellness, p. 47 Our Approach to Food Safety and Quality, p. 43 Ingredient Glossary</p>
417-2	Incidents of noncompliance concerning product and service information and labeling	In 2021, there were no incidents of noncompliance.
417-3	Incidents of non-compliance concerning marketing communications	We did not have any such penalties or fines during this reporting period.
417-FP8	Policies and practices on communication to consumers about ingredients and nutritional information beyond legal requirements	<p>We follow all regulatory labeling guidelines. In addition, we communicate information about ingredients and nutrition on our corporate and core brand websites.</p> <p>Our Approach to Health and Wellness, p. 47 Our Approach to Food Safety & Quality, p. 43 Ingredient Glossary</p>
418: Customer Privacy		
103	Management approach	<p>Smithfield maintains administrative, technical and physical safeguards to protect any personal information obtain on the site against accidental, unlawful or unauthorized destruction, loss, alteration, access, disclosure or use.</p> <p>Privacy Policy</p>
418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	<p>Smithfield is aware of a potential breach involving customer credit card information from our ecommerce websites, which is alleged to have occurred in or around the fourth quarter of 2021. This potential breach is currently being assessed by our IT security team, the third-party website hosting provider, and third-party investigators. In the meantime, Smithfield is actively putting additional measures in place to enhance security on these sites to protect against issues like this in the future. See our Privacy Policy for more information on this matter.</p> <p>Privacy Policy</p>
419: Socioeconomic Compliance		
103	Management approach	Governance Materiality (Appendix) Our Sustainable Impact Priorities, p. 13 Our Approach to Food Safety and Quality, p. 43
419-1	Non-compliance with laws and regulations in the social and economic area	Our Approach to Animal Care, p. 20 Our Approach to Food Safety & Quality, p. 43
Food Processing Sector Supplements: Breeding and Genetics		
FP9	Percentage and total of animals raised and/or processed, by species and breed type	<p>Our operations raised more than 22 million hogs in 2021 in North America and Europe. We have genetically selected hybrids to meet various customer demands and expectations. Our genetic combinations are typically a crossbred comprised of large White x Landrace (dams) and Durocs (sires).</p> <p>Our Approach to Animal Care, p. 20 Animal Care Policy</p>



Disclosure Number	Disclosure Title	2021 Disclosure
<p>FP10</p>	<p>Policies and practices, by species and breed type, related to physical alterations and the use of anesthetic</p>	<p>Our animal welfare policies and procedures meet industry-wide assurance requirements. Our operations follow procedures, including tail docking and castration, that are consistent with our Animal Care Policy. We do not clip teeth of any piglets. Tail docking is important for pig welfare to prevent tail biting behavior (and any resulting infections) later in the animals' lives. The docking procedures occur when piglets are between 3 and 5 days old. For identification and traceability purposes, our operations tag the ears of all (and notch the ears of a small percentage) of breeding stock. We do not use anesthesia, which is consistent with standards that are approved by the American Association of Swine Veterinarians (AASV) and the American Veterinary Medical Association (AVMA).</p> <p>We are active members of the Pain Mitigation Task Force, an industrywide effort that is chaired by a member of American Association of Swine Veterinarians (AASV) and includes experts in human and swine medicine from around the world. The group is tasked to develop scientific methodologies to assess pain associated with routine procedures, such as castration for very young male pigs. Currently various strategies of assessing pain are being tested in universities across the United States. Once these methods are verified, we will undertake a larger scale trial and report the results back to the task force.</p> <p>In Europe, tail docking and reduction of corner teeth in pigs is performed only where necessary and only by veterinarian or trained personnel. Poultry operations do not use beak clipping procedures. These practices are addressed by European rules specific to species type and reviewed by Polish and Romanian veterinarian authorities.</p> <p>Our Approach to Animal Care, p. 20 Animal Care Policy</p>
<p>FP11</p>	<p>Percentage and total of animals raised and/or processed, by species and breed type, per housing type</p>	<p>100% of the pigs raised and processed globally, regardless of breed type, live indoors in climate-controlled environments, according to generally accepted industry practices. All confirmed pregnant sows on company-owned farms globally, including those in Poland, Romania, and our joint ventures in Mexico, are housed in groups. Our poultry-growing farms use cage-free housing.</p> <p>Our Approach to Animal Care, p. 20 Animal Care Policy</p>
<p>FP12</p>	<p>Policies and practices on antibiotic, anti-inflammatory, hormone, and/or growth promotion treatments, by species and breed type</p>	<p>Our policies and practices on these issues apply to all animals raised in the United States and Europe, regardless of species or breed type. Our operations use a limited quantity of anti-inflammatories, including aspirin, for sick and injured animals. We comply with The European Union (EU) bans on the feeding of all antibiotics and related drugs to livestock for growth promotion purposes.</p> <p>Our Approach to Animal Care, p. 20 Animal Care Policy Antibiotics Use Policy</p>
<p><i>Food Processing Sector Supplements: Transportation, Handling and Slaughter</i></p>		
<p>FP13</p>	<p>Total number of incidents of non-compliance with laws and regulations, and adherence with voluntary standards related to transportation, handling, and slaughter practices for live terrestrial and aquatic animals</p>	<p>The U.S. Department of Agriculture Food Safety and Inspection Service (USDA FSIS) has established several different layers of regulatory notifications relative to animal handling and related issues at federally inspected meat facilities. In 2021, we were issued 2 Notices of Intended Enforcement (NOIE) and 0 Notices of Suspension (NOS). These issues, which did not include fines, were resolved.</p> <p>Our operations in Europe are routinely audited by veterinary authorities. Overall European operations did not receive any penalties for animal welfare noncompliance in this reporting period.</p> <p>Animal Care, p. 20 Animal Care Policy</p>



UN Sustainable Development Goals

Aligned SDG Goals and Targets	Our Impact: How We Are Contributing
 <p>Goal 2: Zero Hunger End hunger, achieve food security and improved nutrition and promote sustainable agriculture</p> <ul style="list-style-type: none"> • Target 2.1 • Target 2.3 • Target 2.4 	<ul style="list-style-type: none"> • Utilizing Bakery Byproducts in Our Animal Feed to Reduce Food Waste, Good Stewards p. 36 • Our Food Safety and Quality Commitment, Good Food p. 45 • Combatting Food Insecurity, Good Work p. 52
 <p>Goal 3: Good Health and Well-Being Ensure healthy lives and promote well-being for all at all ages</p> <ul style="list-style-type: none"> • Target 3.8 	<ul style="list-style-type: none"> • Smithfield Bioscience, Good Food p. 48 • Responding to Local Community Needs, Good Work p. 56 • Ongoing Covid-19 support, Good Work p. 69
 <p>Goal 4: Quality Education Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all</p> <ul style="list-style-type: none"> • Target 4.1 • Target 4.3 • Target 4.4 • Target 4.a 	<ul style="list-style-type: none"> • Advancing Educational Opportunity, Good Work p. 54 • Our Commitment to Education and Community Development, Good Work p. 64
 <p>Goal 6: Clean Water and Sanitation Ensure availability and sustainable management of water and sanitation for all</p> <ul style="list-style-type: none"> • Target 6.3 • Target 6.4 • Target 6.6 • Target 6.b 	<ul style="list-style-type: none"> • Water Targets, Good Stewards p. 25 • Assessing Our Water Impact p. 38
 <p>Goal 7: Affordable and Clean Energy Ensure access to affordable, reliable, sustainable and modern energy for all</p> <ul style="list-style-type: none"> • Target 7.1 • Target 7.2 	<ul style="list-style-type: none"> • Reducing our Environmental Impact on our Farms, Good Stewards p. 28 • Lessons from 20 years of innovation in manure management, Good Stewards p. 30 • A Progress Update with RNG Partner Rudi Roeslein, Roeslein Alternative Energy, Good Stewards p. 31 • Going Beyond Diversion: Food Loss and Waste Measurement Case Study, Good Stewards p. 35



Aligned SDG Goals and Targets	Our Impact: How We Are Contributing
 <p>Goal 8: Decent Work and Economic Growth</p> <p>Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all</p> <ul style="list-style-type: none"> • Target 8.2 • Target 8.3 • Target 8.5 • Target 8.6 • Target 8.8 	<ul style="list-style-type: none"> • Employee Training and Skill Development, Good Food p. 45 • Our Community Targets, Good Work p. 51 • Helping our Heroes, Good Work p. 55 • Our Diversity, Equity and Inclusion Targets, Good Work p. 61 • Building a Diverse and Inclusive Culture, Good Work p. 61 • Our Worker Health and Safety Commitment and Targets, Good Work p. 67
 <p>Goal 9: Industry, Innovation and Infrastructure</p> <p>Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation</p> <ul style="list-style-type: none"> • Target 9.4 • Target 9.5 	<ul style="list-style-type: none"> • Carbon Cycle Energy, Good Stewards p. 36 • Smithfield becomes a Food Loss and Waste Champion, Good Stewards p. 35 • Following Industry-leading Standards, Good Food p. 43 • Biomedical Research, Good Food p. 48
 <p>Goal 10: Reduced Inequalities</p> <p>Reduce inequality within and among countries</p> <ul style="list-style-type: none"> • Target 10.2 • Target 10.3 	<ul style="list-style-type: none"> • Smithfield Foods Refugee and Asylum Seeker Resettlement Program, Good Work p. 57 • Our Diversity, Equity and Inclusion Targets, Good Work p. 60 • Celebrating our Diverse Smithfield Family, Good Work p. 62 • Agricultural and Supply Chain Diversity, Good Work p. 64
 <p>Goal 12: Responsible Consumption and Production</p> <p>Ensure sustainable consumption and production patterns</p> <ul style="list-style-type: none"> • Target 12.2 • Target 12.3 • Target 12.4 • Target 12.5 	<ul style="list-style-type: none"> • Waste and Packaging Targets, Good Stewards p. 25 • Eliminating Waste in our Processing Operations, Good Stewards p. 33 • Sustainable Packaging, Good Stewards p. 37
 <p>Goal 13: Climate Action</p> <p>Take urgent action to combat climate change and its impacts</p> <ul style="list-style-type: none"> • Target 13.1 	<ul style="list-style-type: none"> • Climate Targets, Good Stewards p. 25 • Pathway to Decarbonization, p. 26 • Lessons from 20 years of Innovations in Manure Management, p. 30 • Going Beyond Diversion: Food Loss and Waste Measurement Case Study, Good Stewards p. 35
 <p>Goal 15: Life on Land</p> <p>Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt reverse land degradation and halt biodiversity loss</p> <ul style="list-style-type: none"> • Target 15.1 	<ul style="list-style-type: none"> • Animal Safety and Biosecurity, Good Stewards p. 23 • Reducing our Environmental Impact on our Farms, Good Stewards p. 28 • A Progress Update with RNG Partner Rudi Roeslein, Roeslein Alternative Energy, Good Stewards p. 31



Corporate Governance and Policies

Sustainability Governance

We are passionate about producing good food, the right way. We aim to be an ethical food industry leader that sets benchmarks for sustainability. We do this in part through sound governance and management principles and practices, which provide the foundations for trust, transparency and progress at our company.

Our systems for ethical conduct, the way we engage with stakeholders, our approach to public policy and our management of supply chain issues are all important elements of our sustainability strategy, cutting across our key pillars and creating value for our company and for our stakeholders.

Our Reporting Structure

Our sustainability strategy and disclosures program include an executive-level position to lead our efforts, corporate-level oversight committees and a core team to further drive progress. Our chief sustainability officer reports to our chief administrative officer who reports directly to our chief executive officer (CEO). Our CEO reviews our sustainability performance at least on a quarterly basis. We establish and routinely evaluate goals and targets under each pillar to drive ongoing progress to create value for our stakeholders, employees and the company as a whole.

Our Enterprise Risk Management System, [Code of Business Conduct and Ethics](#) and approach to public policy are important elements of our sustainability strategy.

Ethics and Integrity

Our Code of Business Conduct and Ethics, which is applicable to all employees and corporate officers, describes policies and practices for conducting business in accordance with applicable laws and ethical standards. Employees are required to read the Code and act in full compliance. Our executive-level Ethics and Compliance Committee, chaired by our chief legal officer, oversees the full range of compliance issues for our company and administers the Code. We encourage employees to report ethics violations or similar concerns through an anonymous telephone hotline. The company reviews and responds to all hotline complaints.



Diversity Statement

Good Food, Responsibly, Means a Commitment to Diversity

Smithfield understands that its customers, employees and suppliers are critical to its success as a global food company. Smithfield is committed to partnering with customers, employees and suppliers of diverse backgrounds and geographic locations and to conduct our business in an ethical and inclusive way. Our global perspective and commitment to inclusion are central to our mission to produce good food, responsibly, and ultimately maximize shareholder value.

Customers

Smithfield is always seeking new markets for its products. We continually strive to reach out to a diverse customer base and produce good food that will be enjoyed by families across the globe. Our new initiatives include product development, marketing and advertising with diverse media outlets, sponsorships and forming successful partnerships with key influencers.

Employees

Smithfield is committed to attracting, training and maintaining a diverse workforce that is reflective of the marketplace. We strive to implement a company culture that is inclusive, positive and performance oriented

Human Rights Policy

Smithfield is committed to the protection and advancement of human rights, as enshrined in the Universal Declaration of Human Rights (UDHR) issued by the General Assembly of the United Nations on December 10, 1948.

The Smithfield Human Rights Policy is grounded in the Smithfield Code of Business Conduct and Ethics (PDF) (the "Code") and operates in conjunction with the Code. The Code, in conjunction with the Human Rights Policy, sets forth Smithfield's policies and practices relating to conducting our business in an ethical and responsible manner that supports and respects the protection of human rights. It reflects the company's core values and high ethical standards.

As used in this Policy and the Code, the term "Smithfield" means Smithfield Foods, Inc., and all foreign or domestic operations and joint ventures in which Smithfield has a majority interest and/or management responsibility, the terms "employees" or "representatives" mean and include all Smithfield employees, officers and directors, and the term "supervisor" refers to the person to whom an employee reports. Smithfield will communicate this policy to its direct supply chain partners.

The Compliance Committee is responsible for the oversight and implementation of this policy and shall define the company's implementation and monitoring efforts to conform to this policy and advance our commitment to continuous improvement.

1. Equal Opportunity

Smithfield does not discriminate against any employee or applicant for employment because of race, color, national origin, sex, sexual orientation, religion, age, status as a protected veteran, status as an individual with disability, gender identity or any other protected group status or non-job-related characteristic, as directed by law. This applies to recruitment, hiring, training, promotion, disciplinary



practices and other terms and conditions of employment. Discrimination against any employee or applicant for employment is a serious violation of equal employment opportunity law and of Smithfield's corporate policies. It is the responsibility of every supervisory employee to ensure that discrimination does not occur and for every employee to report violations to our policy or the law.

Smithfield will take action to ensure that qualified applicants are given equal opportunity to be employed and promoted. All personnel actions and company-sponsored programs shall continue to be administered on a nondiscriminatory basis. Violations of policy will be reviewed and investigated, and appropriate action will be taken based on the facts.

2. Health, Environment and Safety

Smithfield is committed to ensuring the health, safety and well-being of our employees, the people living and working in communities near our facilities and the environment and will provide the human, physical and financial resources necessary to meet this commitment. These resources will be used to enable employees and contractors to work safely and comply with company policies and the law, to prevent pollution and to protect the environment. Our employees are expected to comply fully with company policies and to adhere, at a minimum, to the applicable health, environmental and safety legal requirements of their host country. Training will be provided to our employees on these company policies and legal requirements.

3. Harassment and Violence

Smithfield is committed to providing our employees with a nondiscriminatory work environment free of any type of harassment per company policy and the law. Supervisory employees must investigate all complaints of harassment, and employees are advised on their responsibility to report violations. The company will take appropriate disciplinary actions for violation of policy or law.

All verbal and physical threats of violent behavior are unacceptable and should be reported, as outlined in the Smithfield Code of Conduct. Every report of violence or threats of violence will be investigated. Employees who engage in violence or threats of violence will be subject to disciplinary action, up to and including termination of employment as well as criminal prosecution.

4. Rights of Employees

Smithfield does not use forced or compulsory labor. Workers are recruited and receive competitive wages and benefit packages. Smithfield will not use child labor and respects the rights of children to be protected from economic exploitation. Smithfield recognizes and respects employees' rights and freedom to choose whether to join or not join third-party organizations or to associate freely and bargain collectively. Where applicable, Smithfield supports the rights of its employees to make these choices through fairly conducted secret ballot elections. Smithfield recognizes that in some countries, workers are not free to organize and join unions, and in such circumstances, the company is open to other forms of worker representation.

5. Implementation

This Human Rights Policy will be implemented by Smithfield through communication and training programs for staff on human rights issues generally, and on the requirements of Smithfield's Human Rights Policy specifically.



Supplier Code of Conduct

Smithfield continues to focus on its vision of being the most trusted, respected and ethical food industry leader. This vision supports our promise to customers that we will produce “Good food. Responsibly.®” Our suppliers are integral to maintaining and improving on these goals by providing sustainable products and services. This Supplier Code of Conduct has been implemented to help ensure that our suppliers continue to meet and exceed these high standards. It sets forth the business conduct requirements for all suppliers (suppliers, vendors, contractors and consultants) who do business with Smithfield as well as strategies to support a sustainable future. These requirements are in addition to other contract terms and conditions that apply. The degree to which suppliers comply with these applicable requirements and the extent of their sustainability efforts will be considerations for future business with Smithfield.

Legal Compliance

Suppliers must comply with all applicable laws, regulations and rules for the products and services they manufacture, distribute or otherwise provide. This includes compliance with federal, state, local and international requirements. Examples include, but are not limited to, the following areas:

- Environmental
- Health and Safety
- Labor/Employment
- Labeling/Packaging
- Transportation
- Recordkeeping and Accounting
- Securities/Insider Trading
- Import/Export
- Antitrust/Fair Competition
- Foreign Corrupt Practices
- Data/Copyright
- Immigration

Labor and Human Rights

Suppliers shall treat all employees with respect and dignity at all times. Adherence to laws and regulations governing labor and human rights is a prerequisite for this to occur. Smithfield recommends suppliers go beyond the legal requirements and implement policies and procedures that help foster improved employee relations.

Forced Labor

All labor used by suppliers must be voluntary. The use of forced labor of any kind is prohibited, including indentured service, involuntary prison labor, bonded labor, and labor performed due to physical threat.

Child Labor

Suppliers and their subcontractors shall not use child labor, as defined by federal and state regulations and international standards. Smithfield prefers suppliers do not employ anyone under the age of 16.

Working Hours

Suppliers shall not schedule employees to work more hours or days than allowed by applicable laws. Voluntary alternative schedules and overtime are acceptable if conducted in compliance with legal requirements and collective bargaining agreements.



Compensation

Employees shall be fairly compensated for their work, which must meet minimum wage requirements, where applicable. Wages should be comparable to those of similar companies in the local area. Overtime shall be paid, as required by law or at least the same as the hourly wage.

Freedom of Association/Collective Bargaining

Suppliers must respect the rights of employees to freely associate, organize and bargain collectively.

Harassment and Abuse

Suppliers must ensure that their facilities are free from employee harassment, threats, punishment or other forms of abuse.

Product Safety and Quality

Smithfield is dedicated to providing the highest-quality meats and packaged foods to our customers. Suppliers of meat products and ingredients have a direct impact on our ability to meet this commitment and, therefore, must have in place policies and procedures to manage the safety and quality of products delivered to us. Smithfield reserves the right to inspect supplier facilities and request documentation to verify that these systems are in place and are being fully implemented.

[Human Rights Policy](#)

Well-Being

Smithfield is committed to being the industry leader in animal care practices to ensure respectful and humane treatment of animals that we own or process, to produce wholesome food products for our customers and to analyze our operations and practices, including internal and third-party audits, to ensure continual improvement. Suppliers that provide animal products to our facilities are expected to have similar operating policies and procedures in place to ensure the humane treatment of their animals during all stages of production, transportation and processing.

We invite our suppliers to review our [Animal Care Policy](#) and [Antibiotics Policy](#) for further guidance.

Environment and Sustainability

At Smithfield, we are constantly striving to improve our environmental performance, and we aim for leadership in our industry. Our suppliers must be an extension of these environmental stewardship efforts by adhering to applicable environmental regulations as a minimum. In addition, Smithfield expects its suppliers to pursue environmentally responsible leadership roles by proactively reducing its environmental impact and assisting our facilities in meeting their environmental objectives and targets whenever possible. Suppliers should consider the following environmental management best practices and sustainability goals:

- Adopt an Environmental Policy and implement an environmental management system (EMS).
- Obtain all permits and develop all applicable environmental plans required for your facilities and fully comply with their monitoring, reporting and renewal requirements.
- Minimize waste generation and manage all wastes, as required by law and in a responsible manner. Source minimization practices are preferred followed by direct reuse and recycling of wastes where feasible.



- Minimize water use and wastewater generation through conservation practices and reuse options.
- Minimize air emissions that affect human health and the environment and effectively operate installed air emission control processes.
- Reduce energy consumption and the generation of greenhouse gases.
- Reduce packaging materials for supplied products and assist Smithfield in reducing the environmental impact of the packaging used for our food products. A life-cycle approach to packaging design is preferred.
- Reduce the use of hazardous materials in manufacturing operations and inform Smithfield of any formulation changes that could adversely impact our environmental performance or food quality.

[Environmental Policy](#)

Health and Safety

At Smithfield, the safety, health and well-being of our employees is more important than our most valued customer. Our suppliers must also give the health and safety of their employees the same priority. Again, compliance with health and safety legal requirements is mandatory. The minimum program requirements include:

- Provide employees with clean, safe and healthy working conditions.
- Provide potable drinking water, adequate sanitation facilities, resources to respond to fire and medical emergencies and personal protective equipment.
- Implement policies and procedures that help ensure equipment is maintained in a safe condition, identify and correct workplace hazards, monitor and report on workplace illness and injury, require health and safety education and training for employees and encourage employee participation.
- Minimize employee exposure to health hazards including hazardous chemicals, biological agents and air pollutants.

[Health and Safety Policy](#)

Business Integrity

Smithfield expects its suppliers to always conduct business with high ethical, legal and socially responsible standards. The Smithfield Code of Business Conduct and Ethics may be referenced for a more detailed discussion of our expectations.

[Code of Business Conduct and Ethics](#)

Ethical Behavior

Suppliers must not tolerate any form of corruption within their company or from their subcontractors such as fraud, bribery, extortion or embezzlement. The improper use of insider information and price fixing are prohibited.



Conflicts of Interest

Suppliers shall notify Smithfield of any potential conflict of interest relating to financial interests or other arrangements with our employees that may be considered inappropriate. Gifts and entertainment offered to employees must not be excessive or construed as an attempt to influence business decisions.

Protecting Company Assets

Suppliers often have access to Company assets and sensitive information that must be safeguarded. This includes trade secrets, intellectual property, production methods and equipment and financial information.

Disclosure of confidential information or use of trademarks and copyrighted information requires written approval. Smithfield reserves the right to have executed nondisclosure agreements on file with distributors and manufacturers, although this shall not prevent Smithfield from conducting general business transactions.

Verification of Supplier Compliance

Smithfield will verify compliance with this Code of Conduct through the following:

- Smithfield reserves the right to audit supplier facilities following a reasonable request, with the expectation that suppliers will correct identified deficiencies.
- Suppliers shall inform Smithfield of any significant regulatory noncompliances or significant news events that may negatively impact public or governmental views of our company or jeopardize our legal compliance.

Suppliers shall complete an annual sustainability assessment survey, if requested, to develop a baseline of sustainability performance and identify improvement trends.



Stakeholder Engagement

Materiality



Smithfield's significant economic, environmental and social impacts

Material Topic Definitions

Material Topic	Issue Definition	Related GRI Aspects
1. Animal Welfare and Management	Our policies and performance as they relate to the health, safety and comfort of our animals	Animal welfare
2. Food Safety and Quality	Producing safe, high-quality meat products for our consumers	Customer health and safety, product and service labeling, compliance
3. Waste and Manure Management	Optimizing logistics and reducing waste at the plant and farm level through innovative policies and programs, including traditional operational waste and our systems for treating and utilizing manure as well as our programs to turn manure into a renewable energy source	Compliance, waste and effluents, energy, water, animal welfare
4. Climate Action	Addressing global climate change by reducing our carbon footprint and promoting resiliency through renewable energy alternatives	Energy, emissions



Material Topic	Issue Definition	Related GRI Aspects
5. Occupational Health and Safety	Policies, practices, and performance related to keeping our people healthy and safe	Occupational health and safety
6. Diversity and Inclusion	Employing individuals with diverse perspectives and backgrounds and providing training and career development opportunities to strive to create an inclusive environment for all	Diversity and equal opportunity
7. Environmental Management	Producing more while using less water, energy and materials as well as generating fewer emissions and solid waste	Compliance, environment overall, emissions, effluents and waste, water, energy, materials
8. Renewable Energy	Advancing the use of renewable technology through investments in outside renewable sources and operational efficiencies, including finding innovative ways to turn manure into an energy source	Energy, effluents and waste
9. Antibiotics	Ensuring the health and safety of the animal by implementing policies and practices that are aligned with industry standards and address the concerns of stakeholders	Animal welfare, healthy and affordable food
10. Supply Chain Management	Working across all aspects of the supply chain, from ingredient sourcing to reaching the consumer ESG, to optimize performance on environmental, social and governance (ESG) issues	Procurement/sourcing practices, indirect economic impacts
11. Health, Wellness and Nutrition	Contributing to the availability of, and affordable access to safe, nutritious food while leveraging vertical integration across the enterprise to create safe nutraceuticals options through the Smithfield BioScience platform	Healthy and affordable food, customer health and safety
12. Transparency	Ensuring proactive and clear communications across all aspects of our business operations	Compliance, anti-corruption, procurement/sourcing practices, anti-competitive behavior, economic performance, labor/management relations, product and service labeling, marketing communications
13. Employee Engagement and Development	Creating jobs, providing professional development opportunities and fostering a work environment that allows our employees to stay and grow with us throughout their careers	Employment, training and education, labor/management relations, market presence
14. Water Stewardship	Responsible management of water usage and impacts on local communities	Compliance, water, effluents and waste
15. Community Outreach	How we support local communities through social outreach and engagement, including philanthropic efforts and local environmental justice concerns	Indirect economic impacts, local communities
16. Consumer Expectations	Predicting and responding to our consumers' evolving dietary needs and preferences	Healthy and affordable food, market presence



Material Topic	Issue Definition	Related GRI Aspects
17. Human Rights	Respecting human rights in our business activities, operations and supply chain	Occupational health and safety, emissions, water, effluents and waste, local communities
18. Economic Impacts and Value Creation	Expanding our business value proposition for our customers, employees, investors and society	Economic performance, local communities, market presence, indirect economic impacts
19. Food Insecurity	Ensuring food is healthy, nutritious and affordable to all	Indirect economic impacts, local communities
20. Operating Globally	Addressing challenges related to diverse export markets, free trade and risk management	Procurement/sourcing practices, market presence, anti-corruption, anti-competitive behavior



Key Collaborators

National/Global

American Association of Swine Veterinarians
American Conference of Governmental Industrial Hygienists
American Feed Industry Association
American Meat Science Association
American Romania Business Council
American Society for Microbiology
American Society of Quality
American Trucking Associations
Animal Agriculture Alliance
Association of Pork Producers in Romania
Association for Supply Chain Management
Chamber of Commerce and Industry of Romania
Consumer Brand Association
Corporate Environmental Enforcement Council
Environmental Law Institute
European Fat Processors and Renderers (EFPRA)
Food Marketing Institute
Global Environmental Management Initiative
Institute of Food Technologists
International Association for Food Protection

Minorities in Agriculture, Natural Resources and Related Sciences (MANRRS)
National Association of Manufacturers
National Conference on Weights and Measurers
National Conservation Foundation - Envirothon
National Pork Board
National Pork Producers Council
National Renderers Association
North American Meat Institute
Organization for International Investment
Pet Food Institute
Romania Association of Swine Veterinarians
Romanian Meat Association
Sustainable Packaging Coalition
U.S.-China Agriculture and Food Partnership
U.S.-China Business Council
U.S. Meat Export Federation
U.S.-Poland Business Council
Women in Agribusiness
Women in Manufacturing
Women's Meat Industry Network



State/Local

Alliance for the Chesapeake Bay
Arizona Pork Council
Bladen County 100 Committee (North Carolina)
Bladen County Livestock Association (North Carolina)
California Chamber of Commerce
California Grain and Feed Association
California Pork Producers Association
Cape Fear River Assembly (North Carolina)
Chamber of Commerce Industry and Agriculture Timis
City of Clinton 100 Committee (North Carolina)
Colorado Agriculture Council
Colorado Livestock Association
Colorado Pork Producers Council
Duplin County Agribusiness Council (North Carolina)
Illinois Pork Producers Association
Indiana Pork Producers Association
Iowa Occupational Safety and Health Advisory Council
Iowa Pork Producers Association
Isle of Wight-Smithfield-Windsor Chamber of Commerce (Virginia)
James River Association (Virginia)
Middle Cape Fear Basin Association (North Carolina)
Minnesota Pork Producers Association
Missouri-Kansas Forum
Missouri Pork Association
Nebraska Chamber of Commerce
North Carolina Association for Soil and Water Conservation
North Carolina Chamber of Commerce
North Carolina Environmental Stewardship Initiative
North Carolina Forever
North Carolina Meat Processors Association
North Carolina Pork Council
North Carolina Trucking Association
North Carolina Trucking Association - Technology and Maintenance Council
Ohio Pork Council
Palmetto Agribusiness Council (South Carolina)
Sampson County Friends of Agriculture (North Carolina)
Snowflake/Taylor Chamber of Commerce (Arizona)
South Dakota Pork Producers
South Dakota Safety Council
South Dakota Trucking Association
Story County Pork Producers (Iowa)
Tulare County Farm Bureau (California)
Utah Farm Bureau
Utah Pork Producers Association
Virginia Agribusiness Council
Virginia Chamber of Commerce
Virginia Department of Health Water Advisory Board
VIRGINIA Forever
Virginia Grain Producers Association
Virginia Pork Council
Wisconsin Manufacturers & Commerce



Industry Certifications and Verifications

Brand Reputation Compliance Global Standards (BRGCS)	The BRGCS standard is an international food safety management system and a recognized scheme of Global Food Safety Initiative (GFSI). It lists requirements for food processors, including Hazard Analysis and Critical Control Point (HACCP), internal audits, supplier approval, traceability and more.
Common Swine Industry Audit (CSIA)	The CSIA was created in 2014 as a common audit platform for pork producers, packers and processors in the United States. Audit tools build on the existing Pork Quality Assurance® Plus (PQA Plus®) program.
Food Safety System Certification (FSSC) 22000	The FSSC 22000 standard is a recognized GFSI scheme used to control safety risks. Certification provides confidence to customers and consumers that a rigorous food safety system is in place.
GLOBALG.A.P.	The GlobalG.A.P. certification is highly regarded as a reliable standard for demonstrating on-farm food safety and sustainability.
GFSI	The GFSI was established to ensure confidence in the delivery of safer food to consumers while continuing to improve food safety throughout the supply chain. These global standards address food, packaging, packaging materials, storage and distribution for primary producers, manufacturers and distributors.
HACCP	The HACCP is a management system in which food safety is addressed through the analysis and control of biological, chemical and physical hazards from raw material production, procurement and handling to manufacturing, distribution and consumption of the finished product.
International Featured Standard (IFS) Food Standard	The IFS Food Standard is a standard used to audit retailer- and wholesaler-branded food products and applies at all stages of food processing.
International Organization for Standardization (ISO) 14001	ISO 14001 is the international standard that specifies requirements for an effective environmental management system (EMS). It provides a framework that an organization can follow, rather than establishing environmental performance requirements.
ISO 22000	The ISO 22000 standard demonstrates a company has a food safety management system in place and is tailored to apply to food safety.
National Pork Board's (NPB) PQA® Plus Program	PQA® Plus is an educational program representing the U.S. industry's commitment to continuous improvement of production practices. It addresses food safety, animal well-being, environmental stewardship, worker safety, public health and community. Farms are assessed every three years to ensure they meet PQA® Plus Site Status criteria.



NPB Transport Quality Assurance® (TQA®) Plus Program	TQA® is a framework that helps transporters, producers and handlers in the United States understand how to handle, move and transport pigs and the potential impacts of those actions on pig well-being and pork quality.
North American Meat Institute's (NAMI's) Recommended Animal Handling Guidelines and Audit Guide	The NAMI guidelines, which were revised in early 2017, were first developed by Colorado State University's Dr. Temple Grandin, who has provided Smithfield with her animal welfare expertise for many years. All slaughter facilities are audited, at minimum, once per shift using these guidelines by auditors who have been trained according to the standards of the Professional Animal Auditor Certification Association (PAACO).
PAACO	PAACO's mission is to promote animal welfare in the United States through auditor training and audit certification.
Safe Quality Food (SQF)	SQF is a recognized GFSI food safety management certification scheme with a focus on control of food safety risks.
U.S. Department of Agriculture's (USDA's) Process Verified Program (PVP)	The PVP is a third-party verification service designed to provide agricultural suppliers with labeling and marketing tools that assure customers of the consistent quality of the products they purchase.