

Sustainability at Plant Health Care

Supporting Sustainable Food Production

Plant Health Care plc
Excerpt from the Annual Report & Accounts 2022

AIM: PHC. OTCQB: PLHFC



Major global challenges are driving a significant and urgent transformation in how we grow and distribute food. Farming is faced with increased demand as the population grows to 10 billion, in parallel with a simultaneous decrease in arable land on which to grow crops, and the need to safeguard the environment for future generations. At Plant Health Care, our mission is at the heart of this challenge: supporting agricultural production for growers providing food, fiber and energy for the world's population. We know that reliable access to affordable, nutritious food is becoming more of a priority for businesses and governments worldwide and this challenge is made more difficult with challenges from climate change, nature-related risks and geopolitical instability. Based on the World Economic Forum's 2021-22 Global Risks, many of the top 10 risks identified could have an impact on food security, including extreme weather, biodiversity loss, infectious diseases and geoeconomic confrontation. Our role is to support growers as they confront food security issues in order to feed the world's growing population. Sustainable, long-term approaches that support positive environmental and social outcomes are vital.

Plant Health Care believes in sustainability, both for the products we sell and how we operate. With a unique combination of low-cost, proven products and very strong market access, Plant Health Care is well positioned to succeed in a market increasingly driven by long-term sustainability. As an alternative to the application of toxic chemicals to plants, our products act via activation of plants' natural defenses against diseases and multiple types of environmental stress for major row crops and specialty crops, leading to higher yields, enhanced shelf-life, and reduced waste.

Over the past year, the PHC Sustainability Leadership Team (SLT) has worked company-wide to build sustainability practices and culture. Focusing initially on the three ESG pillars (Environmental, Social Responsibility, Governance) of Sustainability, the SLT conducted a survey of sustainable practices in place in one or more of our regional offices to identify best-practices that could be adopted across all global sites. In parallel, the SLT solicited potential new initiatives that promote sustainability from our global colleagues. By making sustainability a company-wide mission, we have embedded sustainability into our culture and brought all our colleagues along with us on this ongoing sustainability journey. Over the following pages, we share our achievements for this year, and our commitment to promote the three ESG pillars.

Environmental

We improve the environmental impact of agricultural through promoting the use of our products by farmers and running

our operations using the most sustainable means available. Assessment of our environmental impact is split between our products and operations, two areas where we know we can have a big impact.

Environmentally friendly products

Our Harpin $\alpha\beta$ and PREtec-based products are based upon naturally occurring proteins which plants and animals have evolved over eons to tolerate. Most of the ingredients in our products are edible, such as protein and corn starch, and our active ingredients are produced via natural fermentation rather than by chemical synthesis.

Upon application to crops, the products will quickly elicit the desired effect in the plant and then break down into plant food in the soil, leaving no residues and having no off-target harmful effects to the environment. The US Environmental Protection Agency has classified Harpin $\alpha\beta$ and PREtec peptides as having low toxicity and leaving zero residues on plants or in the environment. Treated plants show great resistance to fungal diseases, harmful soil nematodes and various types of abiotic stress such as drought, with some PREtec seed treatment products increasing crop yield up to 15% versus the standard seed treatment product.

The future of our products

We are currently focusing our R&D efforts on the biopesticides PHC279 and PHC949, which act via activation of the plants' innate immune system, activating genes involved in resistance to biotic and abiotic stress leading to increases in yield and crop quality in many crops such as fruits and vegetables. History has shown that disease-causing organisms ultimately evolve to resist chemical fungicides, rendering them ineffective. Given the unique mode of action of PHC279 and PHC949, it is not expected that resistance development will occur.

Our PHC 949 product is showing performance for nematode control comparable to conventional chemical nematicides and superior to current biological solutions in field trials. There is a need for new biological nematicides that can replace less-safe chemical products and less effective microbial products. Currently available nematicides are facing increasing regulatory scrutiny around environmental and user safety which in some cases has led to products being withdrawn from the market. PHC949 is well-positioned to become a key tool for farmers struggling to control harmful nematodes.

PHC279 provides enhanced disease control across a wide range of disease-causing pathogens. Over time, pathogens develop resistance to existing chemical fungicides, requiring farmers to use higher application rates and to combine multiple fungicides to maintain adequate disease control. Ultimately, some fungicides are rendered useless as the targeted pathogens evolve complete resistance. Resistance development is not expected to occur for PHC279. And, similar to the case for chemical nematicides, regulators are reviewing the safety and environmental profile of fungicides and removing them from the market, leaving farmers with no good choices to control diseases in their crops. With its broad-spectrum disease control and environmental safety PHC279 will be a valuable tool for farmers.

Beyond PHC279 and PHC949, we have an extensive library of PREtec candidates available for future development, many of which have been validated in greenhouse testing and field trials spanning multiple years.

ESG

Operations

Our environmentally sensitive operations

Ensuring that our operations are sustainable is important to Plant Health Care. In the last year we have taken strides to identify and implement specific environmental initiatives and to imbed a culture of environmental sustainability across all our operations. In our Research and Development facility in Seattle, Washington, these initiatives take many forms, including mandatory recycling and composting of food waste, composting waste from manufacturing, and washing and reusing laboratory supplies. Producing our products by fermentation generates large volumes of wastewater but rather than discharge this byproduct into the municipal wastewater system, we choose to evaporate the excess water which is then discharged as harmless steam.

Our products are packaged in cartons and dividers that are made from recycled paper, as well as being recyclable. We continue efforts to find a vendor that can provide moisture-impermeable packaging made of recyclable materials which will protect our products during shipping and storage. In our offices we recycle cans, bottles, paper and cardboard. During 2022, we moved our corporate headquarters to a pedestrian-friendly location in Holly Springs, North Carolina, thereby reducing automobile usage by employees and its associated carbon emissions. Our new headquarters employs a variety of energy savings enhancements, including motion sensor lighting, high-efficiency windows and heat pumps, and reflective TPO roofing to save electricity that would otherwise be used for cooling. Recycling of office paper in our Holly Springs office resulted in savings equivalent to thirty-nine trees.

Regulatory

Agriculture as a sector is exposed to the impacts of climate change, from global temperature increase to more frequent adverse weather events. As suppliers to this sector, Plant Health Care is aware of the impacts of climate-related risks and opportunities on our business. The UK has made it mandatory for premium listed companies to disclose their exposure to climate-related risks under the Task Force on Climate-Related Financial Disclosures ("TCFD") regulation. Other countries are considering similar measures. As such, the evolving requirements around disclosure of potential climate-related risks on our business will be an area that we monitor closely over the coming years.

We will continue to explore strategies to reduce the carbon footprint from our operations, including giving preference to those manufacturing partners that employ forward-thinking waste-minimization initiatives.

Social responsibility

Our goal is to create a culture that is empowering, diverse and socially oriented, supporting the communities we engage with locally. Our social pillar encompasses how we support our employees and how we support the communities in which we live and work.

Our people

Plant Health Care conducted a survey asking employees about their experience at the Company and perceptions of a range of workplace issues. These included company management and leadership, communication of strategic goals, opportunities for career growth and employee engagement. The management team was pleased by the survey responses and learned of two areas where there was more that could be done to support our employees: Employee Training and Communications.

Employee Training

The survey identified the opportunity to focus on employee training to support career development. Because we are a relatively small company there are not always traditional routes to career growth and advancement within the company. Recognizing that employee engagement and long-term retention is enhanced by the availability of new challenges and ongoing learning opportunities, company management has implemented regular meetings with each employee to create and implement a professional growth and training plan based on each employee's needs and preferences. In the long run, we are confident this initiative will lead to greater employee satisfaction and a better trained workforce.

Communications

The survey revealed that company priorities were not always communicated clearly throughout the company. When priorities changed, the rationale for such changes was not always communicated throughout the organization. While we had previously established quarterly company-wide 'townhall' meetings to share financial and operational performance updates as well as strategy updates, the survey results indicated we could do a better job cascading information throughout the organization. As a result, after each future townhall meeting, members of the management team will meet with their employees to answer any questions around company priorities or other matters that may have been discussed during the meeting. Because our employees are located throughout the US, Brazil, Mexico, Spain and the UK and come from multiple backgrounds it is critical that we engage our employees through multiple channels to ensure we develop a common understanding of the company's vision and are aligned around common goals. We continue to look for opportunities to build community within our global workforce as a means of leveraging our collective experience and expertise.

Providing a competitive benefits package is important for the well-being of our people as well as ensuring that the company is well situated to attract the best talent. During the past year, our existing health insurance provider reduced health care coverage. As a result, the company switched to another benefits provider that offers more comprehensive health insurance benefits at a lower cost to the company and its employees.

Work/life balance

Operationally, we are proud to support our people and contribute to the local communities in which we work and live. An example of our resilient and adaptable culture is the way Plant Health Care embraced the new hybrid office/home work model that employees have consistently indicated they prefer over the traditional full-time in-office model. While this accommodation was initially adopted as a response to Covid-19, having now seen how it enables employees to optimize their workdays to take care of their families and other personal obligations, we plan to maintain this hybrid work model. This change also reduces miles driven commuting to the office, thereby reducing greenhouse gas emissions.

Our culture

At PHC we know it is vital that our people understand what makes our products unique and how our products fit within modern agricultural practices. We provide our employees with extensive training, which consists of an overview of the Company and discussion of how the products are used by farmers and the results obtained. We provide our team with opportunities to better understand the use of our products and how the products help growers address the challenges they face daily. As a technology-driven company, it is important that our people understand our products and can accurately speak about how they contribute to sustainable agriculture and the specific benefits provided to our customers.

Our communities

In 2022, PHC initiated an annual Global Day of Service to provide its employees a meaningful opportunity to give back to the communities in which we live and work by volunteering their time in support of local charitable organizations. In North Carolina, the Holly Springs team spent a morning at the Food Bank of Central and Eastern North Carolina to help address food insecurity in our community by packing single-serving juice packs. In Spain, the Plant Health Care team lent their help in the daily tasks to the residents in a charitable home supported by the work of the Franciscan White Fathers of La Casa de Nazareth in Almeria.

ESG

Governance

Governance

Plant Health Care maintains a rigorous approach to Governance and is committed to a transparent, fair and ethical environment for all of those working with or investing in us. Our Board is designed to deliver top quality Governance. During 2022 it had three non-executive directors and two executive directors. The Board is committed to the continuous diversification and development of its membership and will seek to identify candidates with particular competencies in Corporate Governance, Investor Relations and Remuneration.

We have strong risk and crisis management systems in place, which have stood up well during the COVID pandemic and the impact of Brexit. They continue to be actively reviewed and developed as we move forward. Across our supply chain we have established strong partnerships, selecting organisations reflecting our values and reputational standards. As we continue to expand our work across the globe, this is of paramount importance. Our reporting internally and externally to shareholders is regular and clear, providing the opportunity to engage and vote on key issues, where necessary. Our accounting and reporting standards are independently verified.

At the direction of the Board, a global Sustainability Leadership Team was established during 2022. Led by a senior member of the management team, the SLT is charged with identifying, prioritizing, and implementing new initiatives to promote sustainability across the three ESG pillars in all the regions in which the company operates. The SLT presents new initiatives for review and approval by the company's Executive Committee and, as appropriate, to the board.

We have a full Code of Conduct, developed and flexed for multiple markets, and share an Employee Handbook with our new hires. The Anti-bribery & Corruption policy were thoroughly reviewed and updated during the year and a social media policy has been implemented.



ESG

Health & Safety

Health and safety

Accidents are thankfully rare at PHC, and this is primarily due to our dedication to health and safety. We provide online safety training modules to our office personnel and in-person safety training to those in the field. We report to our Board quarterly on our accident rate. In 2022, we had no reportable accidents and are committed to maintaining this trend.

Next steps

PHC is rapidly advancing its ESG strategy and creating a culture incorporating sustainability in everything we do. As a company developing inherently sustainable products which address long-term global challenges around food security, environmental protection, and grower wellbeing, we can be proud of our underlying commitment to environmental, social and governance issues. In particular, the progress shared in this report at implementing the ESG pillar approach to sustainability demonstrates our commitment to this valuable undertaking. We welcome feedback from our stakeholders as we continue our journey towards a more sustainable future.

While we do not expect every ESG initiative to be successful, we are keen to test multiple ideas to see which work best at PHC. We look forward to accelerating our sustainability journey and to reporting on our activities in the next annual cycle. Below are some of the ideas we will be pursuing during 2023.

Environmental

- Reduce business travel where possible
- Maximize use of internal recycling programs
- Increase our use of sustainably sourced materials
- Carbon-offset/carbon-credit programs
- Integrate our products into partners' sustainable agriculture demonstration programs

Social

- Review our charitable donations approach with an aim of increasing giving to charities in line with our values
- Continue the Employee Day of Service, supporting our colleagues to participate in volunteer opportunities with a specific focus on food-oriented opportunities such as food bank drives
- Focused planning for career growth and expanded job-skills training to prepare employees to assume new roles within the company and learn new skills
- Optimize employee benefits programs to serve the needs of employees
- Explore Diversity & inclusion initiatives to ensure our people feel welcomed and empowered in the workplace

Governance

- Establish a whistleblower channel or program
- Appoint two new Non-Executive Directors to the board to improve its diversity as opportunities allow
- Anticipate new sustainability-related reporting requirements and ensure that Plant Health Care continues to comply with existing reporting requirements

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