



**PAINE SCHWARTZ
PARTNERS**

paineschwartz.com

2020

Sustainability Report



SUSTAINABLE FOOD CHAIN INVESTING TOWARDS A POSITIVE FUTURE

Dear Reader,

We are pleased to share our third annual Sustainability Report.



Paine Schwartz Partners

is a private equity firm investing in the sustainable food chain, with an operational expertise in and a differentiating thesis-driven approach to the global food and agribusiness sector.



2019 was another year marked by success and continuous improvement at Paine Schwartz Partners. Both the firm and our portfolio companies have spearheaded exciting initiatives surrounding Environmental, Social, and Corporate Governance (ESG) standards. Paine Schwartz continues to focus on responsible solutions to emerging risks, including access to sustainable sources of nutrition, which is key to eradicating hunger and poverty. Private sector contribution is critical to achieve this ambitious societal goal.

As a significant investor in the global food and agribusiness sector, we are in a position to influence agricultural solutions in support of the goals established by the United Nations' Sustainable Development Goals (SDGs). This report maps to those goals – a universal set of 17 objectives, targets, and indicators designed to align corporate strategies and political policies towards social, environmental, and economic development issues. Our firm is committed to proactive, day-to-day management of key ESG issues across the portfolio and believes that responsible stewardship helps protect and enhance the value of our investments.

While the vast quantities of land, water, and human resources required by the food and agribusiness sector pose a unique set of challenges, they also provide opportunities. Our companies innovate to support economic growth, secure food supplies, address adverse environmental impacts, promote human rights and fair labor standards, and provide safe and healthy products to consumers.

Climate change is an emerging area of focus due to both physical risks to assets and broader economic risks. In 2019, we advanced our climate strategy by calculating greenhouse gas emissions across our portfolio and capturing a number of other key environmental metrics. As the world transitions to a lower-carbon economy, we along with our portfolio companies will continue to pursue innovative and environmentally conscious lines of business that address these imminent issues.

Within our own operations, we have strong governance structures to manage risk, identify potential conflicts of interest, and maintain anti-corruption policies – and then conduct a robust audit of these efforts to ensure compliance. Paine Schwartz became a signatory of the Principles of Responsible Investment (PRI) in April 2019 and will report on responsible investment activities annually. We acknowledge the key requirements mandated by these precepts and align our systems with both PRI and the American Investment Council's Guidelines for Responsible Investing.

In May of 2020, as part of Paine Schwartz's Veteran's Initiative, our firm announced our support for [Hope For The Warriors](#), a leading national nonprofit organization that helps veterans who are transitioning financially, professionally, and personally from service to civilian life. In addition to our financial contributions, our CEO, Kevin Schwartz, will be serving as a leader on the organization's Board Council, and our employees will have the opportunity to participate in a variety of volunteer services to provide critical support to veterans during their time of need.

Value Creation Opportunities and Operationalizing Sustainability

We believe that value creation and sustainability are inextricably linked in the food and agribusiness sector. Identifying opportunities for socially and environmentally conscious investing has been integral to our business since the early days of the firm.



Through our decades of experience in the food and agribusiness sector, we understand that responsible investment aligns with long-term profitability. This is why we consider ESG factors essential to our investment decisions, and why we integrate sustainability criteria into our evaluation of a company's potential.

We foster transparency about our own ESG-related activities and those of the companies in which we invest. This year, we supported our portfolio companies in calculating several key environmental KPIs. This includes both Scope 1 direct greenhouse gas (GHG) emissions from their owned assets (such as fleet vehicles and onsite energy generation), and Scope 2 indirect emissions from their purchased electricity and heating. In addition, we are reporting their energy usage, water usage, and waste. We also supported portfolio companies in assessing their social and governance performance in areas such as diversity and inclusion, governance policies, and ESG management practices. This approach builds on the work we conducted with portfolio companies in the prior two years.

Our portfolio companies understand the importance of ESG success factors, work to meet defined standards, and measure performance on topics relevant to the business. Lyons Magnus, a fruit flavors innovator, determined that approximately 90% of its product packaging is recyclable, made from recycled material, or both, and its product shipments average more than 97% capacity.

Crop health experts at Verdesian Life Sciences helped improve the lives of local farming communities by improving their yields while increasing access to educational resources for customers and growers. For example, in addition to providing meals to victims of Nebraska's 2019 floods, the company launched more than 50 online continuing education courses to introduce retailers and growers to emerging research about nutrient use efficiency.

Our commitment to ESG runs through the entire investment cycle, from pre-investment due diligence, to monitoring portfolio companies' progress and ensuring maximum long-term value at exit. Every step of the way, the firm is dedicated to transparency and reporting as reflected in this Sustainability Report and our [ESG Policy](#). We believe our approach increases portfolio company accountability to ESG principles and improves transparency with external stakeholders.

We look forward to sharing our third annual assessment with you. This report reflects the commitment of Paine Schwartz and its portfolio, and we thank you for your ongoing support as we continue to invest and create value in companies that share our view of the future.

With Regards,



Kevin Schwartz,
Chief Executive Officer



Dexter Paine,
Chairman

Environmental, Social, and Governance (ESG)

are the three categories of factors for measuring sustainability and societal impact. Paine Schwartz adheres to PRI's definitions of ESG, which considers global standards for responsible investing as it relates to these factors.

Environmental: Issues relating to the quality and functioning of the natural environment, such as biodiversity loss, greenhouse gas (GHG) emissions, renewable energy, energy efficiency, water or resource depletion, and waste management.

Social: Issues relating to the rights, well-being, and interests of people and communities, such as human rights, labor standards in the supply chain, child, slave and bonded labor, workplace health and safety, freedom of association, human capital management, and relations with local communities.

Governance: Issues relating to the governance of companies and other investee entities, such as board structure, size, diversity, skills and independence, executive pay, shareholder rights, stakeholder interaction, disclosure of information, business ethics, bribery and corruption, internal controls, and risk management.

Collective Sustainability Aspirations

Working towards sustainability and universal food security by implementing environmentally sound practices.

We operate in an environmentally, socially, and resource sensitive sector of the global economy and believe that it is our responsibility to contribute to the collective movement towards sustainability.

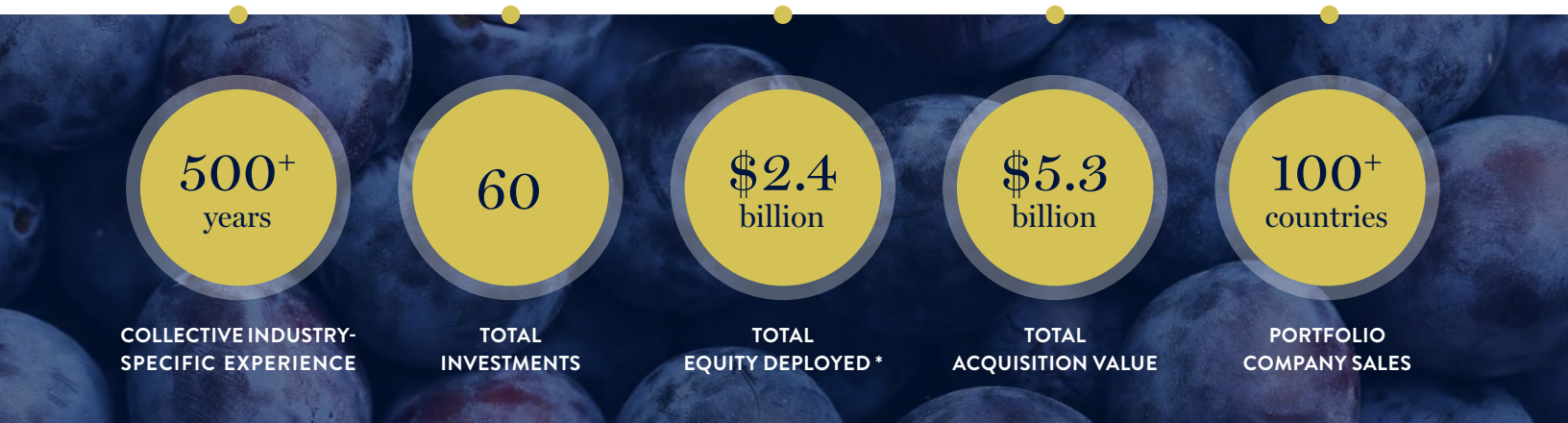


How Our Business Aligns with the SDGs

Given the nature of our business, we have the opportunity to impact several of the targets set by the SDGs. We have identified the SDGs to which our portfolio companies currently contribute, with a particular emphasis on **Zero Hunger**.

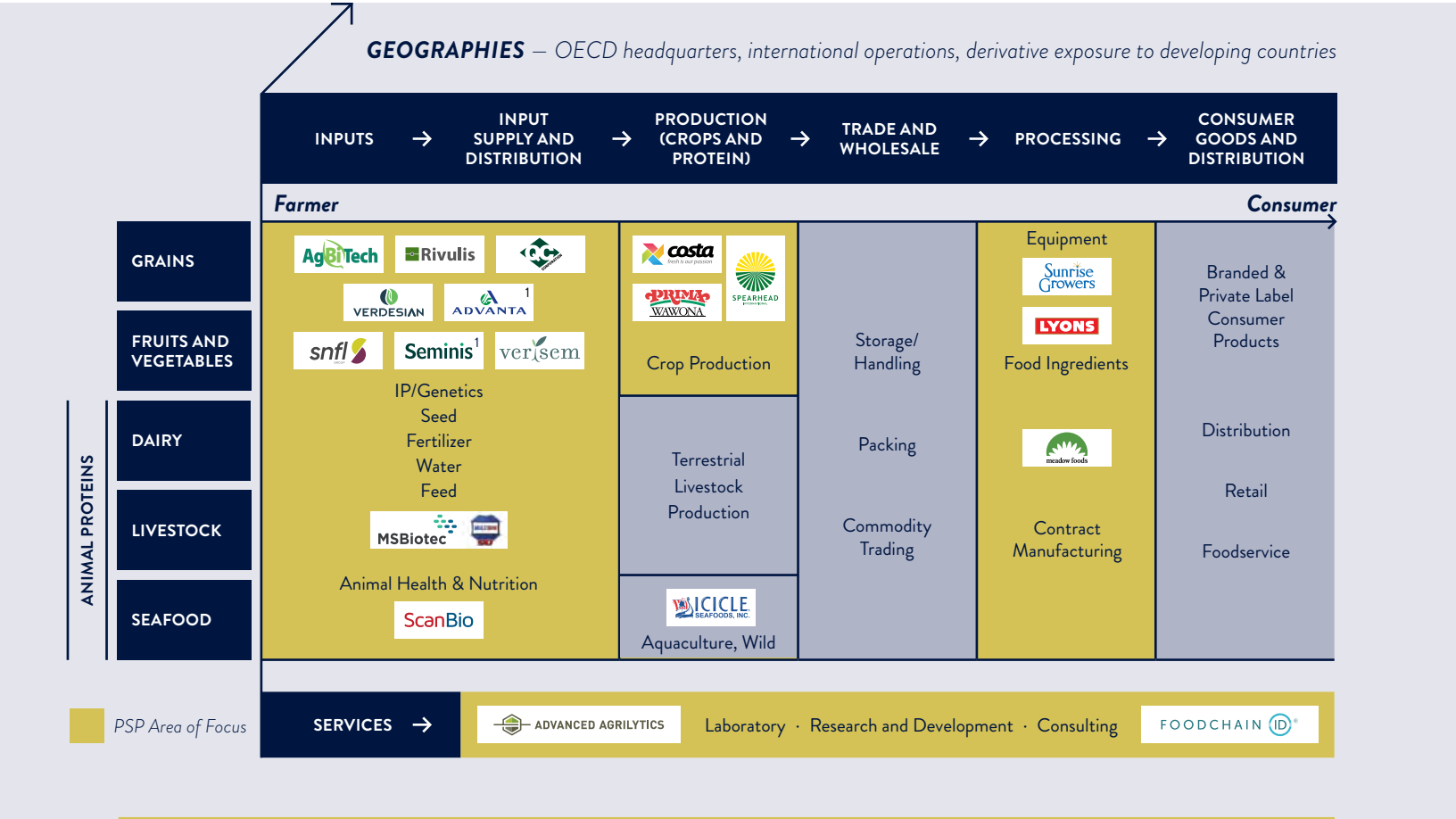
ZERO HUNGER #2	GOOD HEALTH AND WELL-BEING #3	CLEAN WATER AND SANITATION #6
End hunger, achieve food security and improved nutrition, and promote sustainable agriculture.	Ensure healthy lives and promote well-being for all at all ages.	Ensure availability and sustainable management of water and sanitation for all.
AFFORDABLE AND CLEAN ENERGY #7	DECENT WORK AND ECONOMIC GROWTH #8	INDUSTRY, INNOVATION, AND INFRASTRUCTURE #9
Ensure access to affordable, reliable, sustainable, and modern energy for all.	Promote sustained, inclusive, and sustainable economic growth, full and productive employment, and decent work for all.	Build resilient infrastructure, promote inclusive and sustainable industrialization, and foster innovation.
RESPONSIBLE CONSUMPTION AND PRODUCTION #12	CLIMATE ACTION #13	LIFE BELOW WATER #14
Ensure sustainable consumption and production patterns.	Take urgent action to combat climate change and its impacts.	Conserve and sustainably use the oceans, seas, and marine resources for sustainable development.
LIFE ON LAND #15	PARTNERSHIP FOR THE GOALS #17	 PAINESCHWARTZ PARTNERS BEGINNING ON PAGE 13, WE IDENTIFY THE SPECIFIC SDGS THAT ALIGN WITH EACH OF OUR PORTFOLIO COMPANIES.
Protect, restore, and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, halt and reverse land degradation, and halt biodiversity loss.	Strengthen the means of implementation and revitalize the global partnership for sustainable development.	

Paine Schwartz Partners: Investors in Food Chain Sustainability



* This figure is inclusive of co-investments. All statistics are as of May 2020.

Paine Schwartz leverages a thesis-driven approach to investing and deep operational expertise, targeting specific segments of the food and agribusiness value chain:



Paine Schwartz Partners: Investors in Food Chain Sustainability

Paine Schwartz Partners measures what it manages.



ESG has become an important topic in the investment community, and firms have responded. Paine Schwartz commits to realizing meaningful results through its approach to sustainable investment and effective management practices. The firm uses a number of tools throughout the investment process to integrate ESG into the lifecycle of ownership of a portfolio company. These tools include peer benchmarking, industry standards such as the Sustainability Accounting Standards Board (SASB), and expert third-party judgment to identify material ESG focus areas for its portfolio companies. Over the years, we have evaluated acquisitions in part based on their approaches to issues such as energy use, water, waste, and fair labor practices, all of which will continue to be diligently measured and standardized going forward.

Paine Schwartz also delivers periodic training on ESG integration for its investment team. The purpose of the training is to illustrate industry best practices across the investment lifecycle and to provide a refresher on the firm’s sustainability policy and processes. To help ensure accountability, we incentivize training by incorporating ESG into personal development plans for all employees.

There is broader evidence that private equity firms can improve portfolio performance by focusing on ESG as an additional set of value creation levers. Such firms generally reduce costs and improve productivity while uncovering new revenue channels. Still, the most compelling reason to consider ESG in the investing process is risk mitigation. These risks are frequently unquantified, but that is often because they have not yet captured the attention of credit rating agencies. Over time, this proactive approach can keep investors in the forefront of risk identification. That, as much as anything, has attracted an estimated \$30 trillion in investments in ESG strategies as of early 2018.

In continuation of our existing processes and practices, Paine Schwartz will diligently track both the financial viability and other measures of sustainability of each portfolio company.

Paine Schwartz Partners’ Philosophy

The PSP Way encompasses our approach to delivering successful outcomes in our investments, realizing core aspirations for our portfolio companies, and working together with various stakeholders to support our management teams.

Key Elements of Our Philosophy:

- 1. AMBITION
- 2. PERFORMANCE
- 3. TALENT
- 4. TEAM
- 5. EXPERTISE
- 6. VALUES



Paine Schwartz Partners: Investors in Food Chain Sustainability



Sourcing

ESG and sustainability are key themes underpinning the global food and agribusiness sector. Paine Schwartz adopts a thesis-driven approach to investing that includes careful consideration of these factors. Due diligence and screening processes are conducted alongside a third-party expert to properly assess any potential ESG risks and value creation opportunities.

Monitoring

Following the investment, our team monitors all portfolio companies to track progress while partnering closely with management teams to support initiatives and implement a strong corporate responsibility culture within the company.

Enhancement

In addition to monitoring and reporting on year-over-year portfolio company ESG metrics, Paine Schwartz also consolidates that data into actionable items to drive ESG achievements for companies. The objective is to ensure that over the hold period, real measurable changes are made in terms of improving our sustainability footprint in ways that are consistent with driving returns.

Exit

At the time of exit, Paine Schwartz ensures that companies have integrated ESG frameworks that will remain intact during the period of transition. Potential issues are proactively addressed prior to exit, and significant value enhancement opportunities are identified for the road ahead.



Measuring Both Breadth and Depth of ESG Results

This year, Paine Schwartz empowered each portfolio company to track and measure various ESG-related metrics, many of which have been synthesized into a portfolio-wide overview as presented on the following page.


The firm has expanded its ESG program this year, quantifying portfolio-wide ESG performance across the following set of key environmental metrics:

SCOPE 1 EMISSIONS	Direct greenhouse gas (GHG) emissions from owned assets or controlled sources.
SCOPE 2 EMISSIONS	Indirect GHG emissions generated from purchased energy, heating, and electricity.
RENEWABLE ELECTRICITY CONSUMED	Energy use resulting from the consumption of electricity originating from company-owned renewable sources.
DIVERTED WASTE	Waste that is disposed of in a manner other than via landfill.
RECYCLED WATER	Used water that has been treated or processed for reuse.
% RENEWABLE WITH BIO-BASED ENERGY	Percent of total energy consumption that originated from renewable sources, including from biologically based materials.
% RENEWABLE WITHOUT BIO-BASED ENERGY	Percent of total energy consumption that originated from renewable energy sources, but not including biologically based materials.
TOTAL RECORDABLE INCIDENT RATE (TRIR)	Measure of occupational safety and health, useful for comparing working conditions in workplaces and industries. It is calculated by combining the actual number of safety incidents and total work hours of all employees with a standard employee group.
WOMEN SHARE OF TOTAL WORKFORCE (%)	Percentage of women employees across all portfolio company workforces.
WOMEN IN MANAGEMENT POSITIONS (as % of total management workforce)	Percentage of women in leadership positions across all portfolio company management teams.
FINANCIAL CONTRIBUTIONS (\$) TO CHARITABLE ACTIVITIES AND/OR COMMUNITY ORGANIZATIONS	Collective amount of financial contributions to philanthropic causes, as measured in U.S. dollars.


THE FOLLOWING BASELINE METRICS ARE ESTIMATED BASED ON DATA REPORTED BY PAINE SCHWARTZ'S PORTFOLIO COMPANIES.

Baselining Portfolio Metrics







0.078/\$000
MT GHG REVENUE
AVERAGE SCOPE 1 & 2 GREENHOUSE GAS EMISSIONS INTENSITY*



26%
WASTE DIVERTED FROM LANDFILLS



136,500
MWH RENEWABLE ENERGY GENERATED BY COMPANIES**



32%
OF COMPANY WORKFORCES ARE WOMEN***

27%
OF TOTAL MANAGEMENT WORKFORCE ARE WOMEN****

* Does not include fertilizer emissions.
** Includes bio-based fuels.
*** Does not include Rivulis.
**** Does not include Prima® Wawona or Lyons Magnus.

A Portfolio-Wide Overview²

Paine Schwartz’s companies maximize resource efficiency, generate renewable energy, implement innovative technology, and establish ESG-supportive management frameworks.

Many of these companies also displayed low recordable incident rates, indicating solid safety records. AgBiTech, Multimin, and Verisem even achieved zero recordable incidents over the span of the year.

Paine Schwartz supports diversity and inclusion, and we actively monitor policies and management practices within each company. Our firm also collects metrics across the portfolio related to topics of health and safety, community engagement, and supply chain oversight.

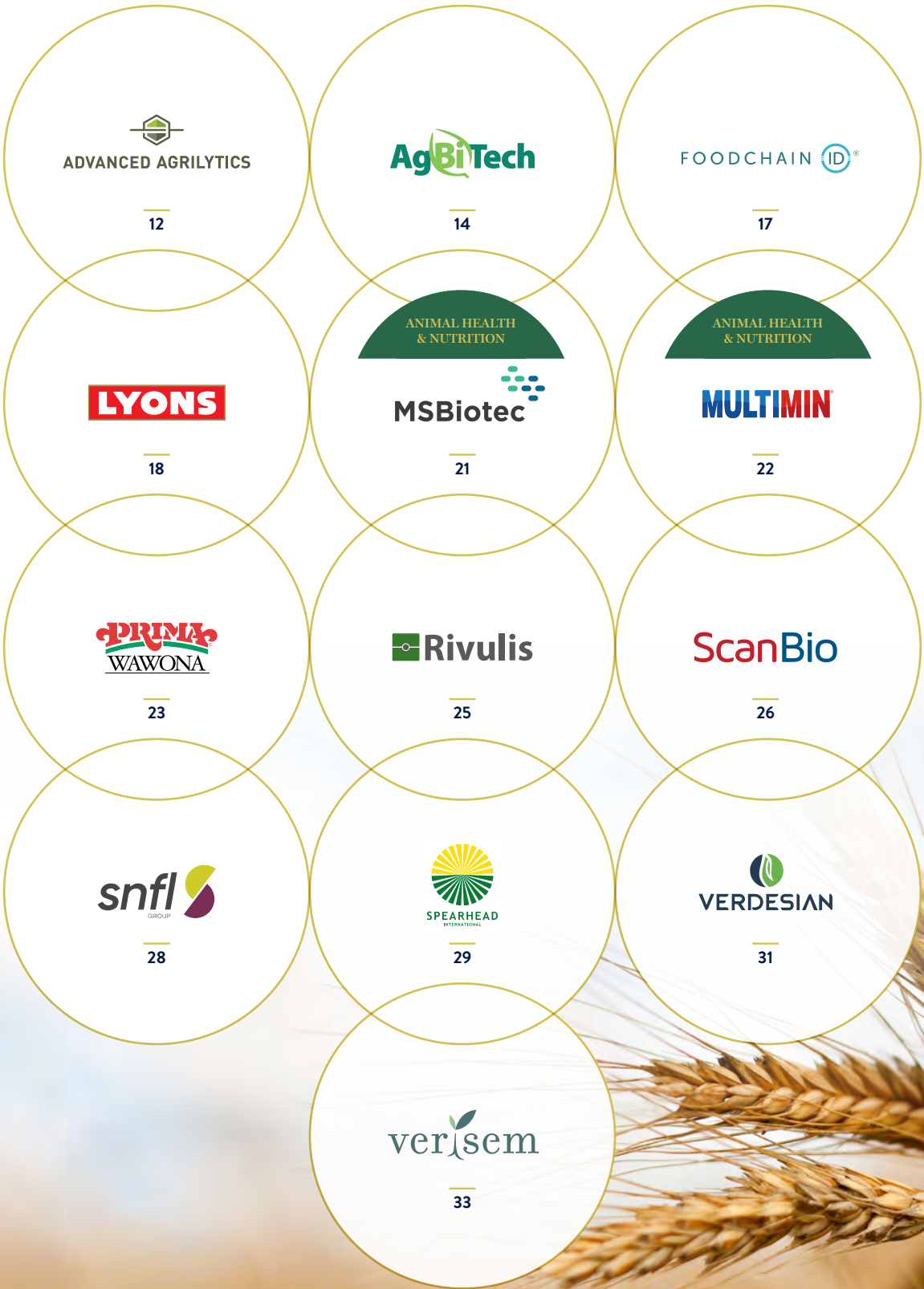
Our companies operate in varied markets with very different throughputs, which is taken into account. While they are compared to a broader portfolio and to industry averages, perhaps the most important measurement is how they are performing this year as opposed to last.

Paine Schwartz recognizes that transparency is essential for establishing a baseline for key ESG topics, metrics, data collection, and public disclosure. Baseline year metrics, such as the ones highlighted in the table below, will serve as a starting point for measuring and disclosing year-over-year portfolio performance as we move forward. As a whole, the baseline data our firm has collected is relatively consistent with industry performance when viewed across our portfolio companies.

COMPANY	SCOPE 1 & 2 (MT GHG/ \$000 REVENUE)	% RENEWABLE (INCLUDES BIO-BASED)	% RENEWABLE (WITHOUT BIO-BASED)	% WATER RECYCLED	% WASTE DIVERTED	% WOMEN IN WORKFORCE	% WOMEN IN MANAGEMENT POSITIONS	FINANCIAL CONTRIBUTION TO LOCAL ORGANIZATIONS / CHARITIES	TOTAL RECORDABLE INCIDENT RATE
ADVANCED AGRILYTICS	✓								
AgBiTech	✓	Prescribes 5% less nitrogen than industry standard					61% women in leadership positions		
FOODCHAIN ID®		2.28 million acres saved from chemical pesticides							
LYONS									
MSBiotec		40% of strawberry rewashing is completed with recycled water			90% of products is recyclable or made with recycled materials				
MULTIMIN									
PRIMA WAWONA				35% of the workforce are women					
ScanBio		2,852 tons of fish oil reused for heating					\$1,000,000+ provided to employees' families to support education		
SPEARHEAD INTERNATIONAL									
VERDESIAN							28% increase of women in leadership		
verisem									

Data In Hand Data In Process Not Applicable

Individual Portfolio Case Studies



Advanced Agrilytics



- MICROTARGETING CROP INPUTS
- COMBINING DATA-DRIVEN SCIENCE WITH PERSONAL AGRONOMIC EXPERTISE

Business Snapshot

ADDING GREATER PRECISION TO CROP SCIENCE APPLICATION

Advanced Agrilytics works with progressive growers to improve sustainability by maximizing yields and profitability by applying high-touch, independent, and comprehensive agronomy tactics. This approach is enabled by technology using precision data and spatial models to recommend optimal uses of each input, practice, and attribute of every acre throughout the season.

PRECISE, ECONOMICAL APPLICATIONS OF NITROGEN TO CROPS

Advanced Agrilytics has developed and refined its nitrogen application technique to improve efficiencies for farmers. Fertilizer loss, which can lead to harmful runoff and polluted waterways, is also minimized by this technique.

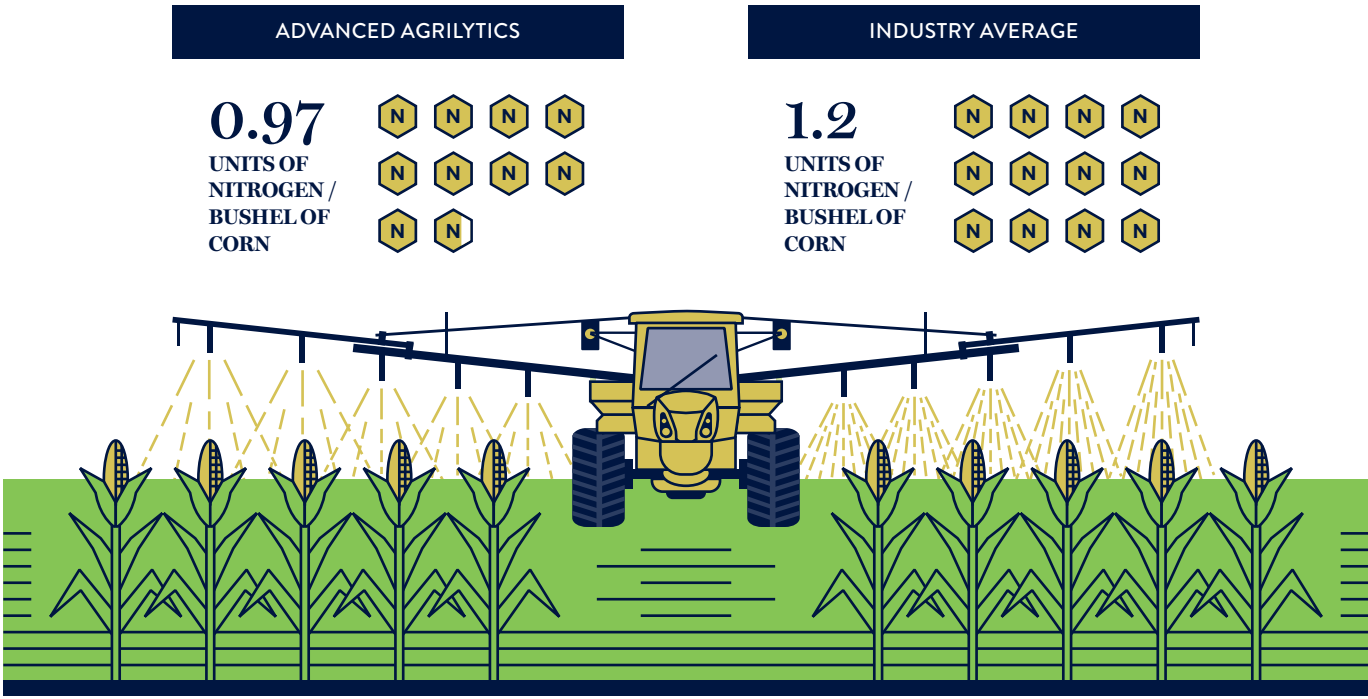
Key Highlights

In 2019, Advanced Agrilytics prescribed applications of 40 million units of nitrogen, with 0.97 units per average bushel of corn. This is approximately 5% less usage than traditional estimates of around 1.0 to 1.2 units per bushel of corn, saving anywhere from 1.2 to 8 million units of nitrogen that would be overapplied using traditional estimates.

ESG and Sustainability Initiatives

SERVICES THAT SUPPORT SUSTAINABILITY

By using their proprietary tool, Advanced Agrilytics can prescribe higher rates of nitrogen stabilizer to customers whose land is more at risk for nutrient loss. This approach also increases output while minimizing agricultural resource inputs and reducing nitrogen loss to the environment.³



ENVIRONMENTAL PROFILE

GHG EMISSIONS SUMMARY		
GHG	Metric Tonnes	
Biogenic CO2	0	
Scope 1	30	
Scope 2 (Location-Based)	33	
TOTAL SCOPE 1 AND 2	63	
ENERGY SUMMARY		
ENERGY	MWh	% of Total Energy
Purchased Electricity	58	43%
Mobile Fuel Energy	26	19%
Natural Gas Heating Energy	0	0%
Other Fuel Energy	51	38%
TOTAL	135	100%
WASTE SUMMARY		
WASTE	Destination (Metric Tonnes)	% of Total
Landfilled	33	100%
Recycled	0	0%
Composted	0	0%
Incinerated	0	0%
TOTAL	33	100%
WATER SUMMARY		
WATER	m3	
Recycled Water Usage	0	
Total Water Usage	379	
% of Water Usage from Recycled Sources	0%	

MANAGEMENT FRAMEWORK AND PRACTICES

In 2019, the company instituted safety requirements for driving, including mandatory safety kits and fire extinguishers for all company vehicles. Additionally, all trucks with the OnStar capability installed can activate services that automatically place an emergency call in the event of an accident.



Looking Ahead to 2020

Advanced Agrilytics' initiatives to benefit charities and educational institutions include engaging with school STEM programs in a pilot program in Iowa and financially supporting the Disabled Veterans Hunt at the Ohio Hunting Reserve.

Advanced Agrilytics will be expanding its university outreach efforts in coaching and mentoring.

SUSTAINABLE DEVELOPMENT GOALS

#2

Zero Hunger

#15

Life on Land

#17

Partnership for the Goals

AgBiTech

AgBiTech

BIOLOGICAL AND SUSTAINABLE INSECT CONTROL

SAFE FOR ENVIRONMENT, HUMANS, AND NON-TARGETED ANIMALS

Business Snapshot

USING NATURAL PROCESSES FOR CROP PROTECTION




AgBiTech develops highly effective and natural pest control products that selectively target pests without impacting humans, beneficial insects, plants, or animals.

The company formulates products using extracted natural virus, glycerol, and water, which have no adverse environmental effects on groundwater or soil. The company harvests the resultant virus particles from caterpillars and formulates the final product. AgBiTech develops its natural pest control products at a state-of-the-art research and development facility in its Fort Worth, Texas, headquarters.

AgBiTech’s products significantly help growers embrace more regenerative agricultural practices.

FROM LAB TO CROPS, SAFELY AND SUSTAINABLY

AgBiTech’s two main products, Heligen and Fawligen, reduce the need for large amounts of harmful chemical applications and are environmentally safe for animals and humans.

<div>Heligen</div> <div>Fawligen</div>		<div></div> <div>AgBiTech Product</div>	<div></div> <div>Traditional Pesticide</div>
<div></div> <div>Safe for people, animals, and the environment</div>	<div></div>	<div></div>	
<div></div> <div>Season long control</div>	<div></div>	<div></div>	
<div></div> <div>Resistance Management</div>	<div></div>	<div></div>	
<div></div> <div>No impact on beneficial species</div>	<div></div>	<div></div>	
<div></div> <div>Low application rates and reduced storage requirements</div>	<div></div>	<div></div>	
<div></div> <div>Can be applied by ground, air, or chemigation</div>	<div></div>	<div></div>	
<div></div> <div>No need to delay application if rain was expected</div>	<div></div>	<div></div>	

ADMINISTRATION

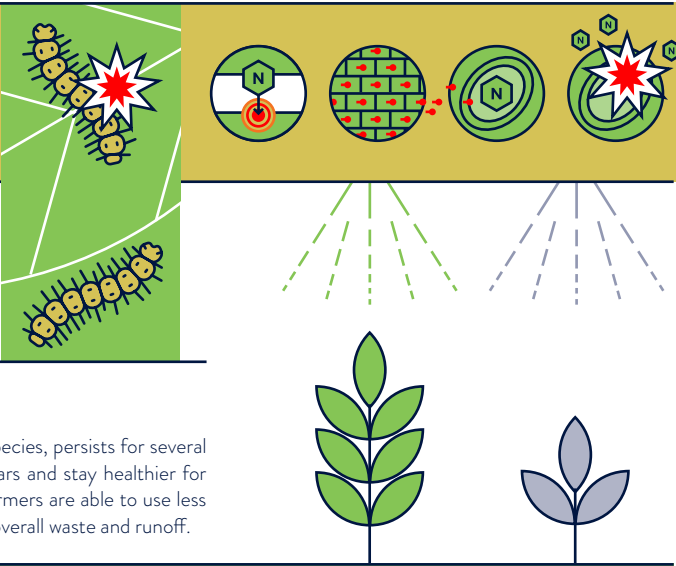
When harmful larvae species ingest product-sprayed crops, their own metabolism replicates the virus, causing the insect to rupture.

SPREAD

This releases the virus-laden liquid, which spreads throughout crops and provides ongoing control of harmful pests.

LASTING RESULTS

The replicated virus, which is benign to beneficial species, persists for several weeks. Crops are protected from harmful caterpillars and stay healthier for longer. Due to the highly concentrated formula, farmers are able to use less product, packaging, and storage space, decreasing overall waste and runoff.



Key Highlights

‘CERTIFIED ORGANIC’ STARTS HERE

METRIC	RESULTS	YEAR-OVER-YEAR IMPROVEMENT
Acres saved from chemical pesticides	2.28 million	880,000
Customers served	340+	At least 15
Product sold	114,200 liters	44,200 liters
Chemical pesticides replaced with biological pest control products	~490,000 gallons	322,000 gallons

In October of 2019, AgBiTech obtained regulatory approval in Brazil for the world’s first four-way, broad-spectrum baculovirus product, *Surtivo Plus®*, which will enable the company to control a greater combination of insects and achieve even greater pesticide reduction.

ESG and Sustainability Initiatives

As it relates to AgBiTech’s work with United Nations Food and Agriculture Organization (FAO) and USAID, the company began Phase I trials of its products in South Sudan last year.⁴ The aim of the project is to combat the Fall Armyworm, an insect that can cause significant damage to crops, including maize and sorghum. With more than half of South Sudan’s current population—nearly 6.2 million people—in need of life-saving food assistance in January, the Fall Armyworm threatens to exacerbate food insecurity that is already severe.

Following positive results in Phase I, AgBiTech is currently planning Phase II over the next few months. If successful, the rollout will contribute to greater food security for the region, targeting smallholder growers.



ENVIRONMENTAL PROFILE

GHG EMISSIONS SUMMARY		
GHG		GHG Emissions (Metric Tonnes)
Biogenic CO2		0
Scope 1		978
Scope 2 (Location-Based)		795
TOTAL SCOPE 1 AND 2		1,773
ENERGY SUMMARY		
ENERGY	MWh	% of Total
Purchased Electricity	1,454	25%
Mobile Fuel Energy	4,026	70%
Natural Gas Heating Energy	266	5%
Other Fuel Energy	6	0%
TOTAL	5,751	100%
WASTE SUMMARY		
WASTE	Destination (Metric Tonnes)	% of Total
Landfilled	97	89%
Recycled	12	11%
Composted	0	0%
Incinerated	0	0%
TOTAL	109	100%
WATER SUMMARY		
WATER		m3
Recycled Water Usage		0.00
Total Water Usage		984
% of Water Usage from Recycled Sources		0%



Company-Wide Initiatives

FOSTERING ENGAGEMENT

In 2019, the company donated a total of \$58,000 to university research programs to promote education within the broader community.⁵

AgBiTech continues to promote equal opportunity practices, with women comprising the majority of AgBiTech management.



Looking Ahead to 2020

AgBiTech plans to assess the potential of converting the existing product into a dry formulation. If successful, this will reduce energy use and expenditures by eliminating the need for freezers for product storage and manufacturing processes.



#2

Zero Hunger

#3

Good Health and Well-Being

#15

Life on Land

#17

Partnership for the Goals

FoodChain ID



FOOD SAFETY, TRANSPARENCY, AND TESTING

LEADERS IN NON-GMO AND ORGANIC VERIFICATION

Business Snapshot

FoodChain ID is a market-leading platform dedicated to providing the global food industry with technology-enabled food safety, quality, and sustainability solutions. The company’s holistic solutions ensure the safety and quality of the entire food supply chain against a backdrop of increasingly complex regulations and heightened consumer requirements, such as safety, transparency, authenticity, health, and sustainability that define the New Food Economy.

Key Highlights

FoodChain ID has verified more than 60,000 customer products according to the Non-GMO Project standard for producing goods without utilizing genetic engineering. In 2019, FoodChain ID verified 2,300 customers as Non-GMO. In addition to Non-GMO, FoodChain ID certified over 1,200 customer sites globally under Global Food Safety Initiative (GFSI) schemes. GFSI schemes include: Safe Quality Foods (SQF) and Global G.A.P in North America, and British Retail Consortium (BRC) in Europe and North America. FoodChain ID also designated approximately 14,000 customers as Certified Organic in the U.S. and Europe.

ESG and Sustainability Initiatives

ECO-FRIENDLY PRODUCT

FoodChain ID’s services provide clients with certification that adheres to various sustainable and responsible agriculture

standards promoting environmental protection, fair labor practices, and community rights.⁶

Additionally, company-wide contaminant testing services expanded in 2019 through the acquisition of Diversified Laboratories. Contaminant analysis focuses on topics including pest control, product residue, and mycotoxin testing.

MANAGEMENT FRAMEWORK

FoodChain ID worked within GLOBALG.A.P. standards and aligned consumer requirements for 2019 in approximately 135 countries. GLOBALG.A.P. is the world’s leading private sector farm assurance program, translating consumer requirements into Good Agricultural Practice.

ENVIRONMENTAL METRICS

In 2019, Foodchain ID began collecting data on annual water use, energy use and sourcing, and GHG emissions across operations. Results indicate that the company emitted 870 metric tonnes of GHG in 2019, with 54% Scope 1 and 46% Scope 2 emissions. A majority of Scope 1 emissions relate to mobile fueling operations, which accounts for 39% of overall company energy use. Other energy sources include natural gas heating energy (31%) and purchased electricity (30%).

Company-Wide Initiatives

ENGAGEMENT AND INCLUSION

FoodChain ID champions workplace diversity and inclusion. Women account for approximately 60% of the workforce and roughly 30% of all management positions.⁷



#2

Zero Hunger

#12

Responsible Consumption & Production

#15

Life on Land

#17

Partnership for the Goals

Lyons Magnus



LEADING SUSTAINABLE PRACTICES FOR FOODSERVICE

CONTINUOUS IMPROVEMENT IN PEOPLE, PACKAGING, AND FOOTPRINT

Business Snapshot

DELIVERING INNOVATIVE PRODUCTS AND PACKAGING SOLUTIONS TO THE FOOD SERVICE INDUSTRY

Lyons is the leader in the development and commercialization of innovative beverage and ingredient solutions for international foodservice, healthcare, and food manufacturing customers. From fruit-based ingredients to plant-based functional beverages, Lyons brings solutions to life.



Key Highlights

In 2019, solid waste minimization efforts by Lyons Magnus reduced annual landfill charges by \$300,000.⁸

In 2019, the company donated more than \$50,000 to local Fresno, California projects and charities including the Ronald McDonald House and Toys for Tots. In addition to donations, employees collectively logged 250 volunteer hours.

Lyons Magnus has two business units with total recordable incident rates of 2.07 and 1.24, compared to the fruit and vegetable preserving and specialty food manufacturing industry average of 4.2.

Inclusion

In an effort to promote, recruit, develop, and retain an inclusive workforce, Lyons Magnus maintains a Diversity Management Plan. To assess plan progress, Lyons Magnus tracks senior and managerial diversity advancements. Nearly half identify as Hispanic, and more than 10% identify as individuals from underrepresented groups.⁹

LYONS MAGNUS MAINTAINS A WORKFORCE WITH STRONG MINORITY REPRESENTATION



50%
EMPLOYEES
THAT IDENTIFY AS
HISPANIC

10%
EMPLOYEES
THAT IDENTIFY AS
INDIVIDUALS FROM
UNDERREPRESENTED
GROUPS

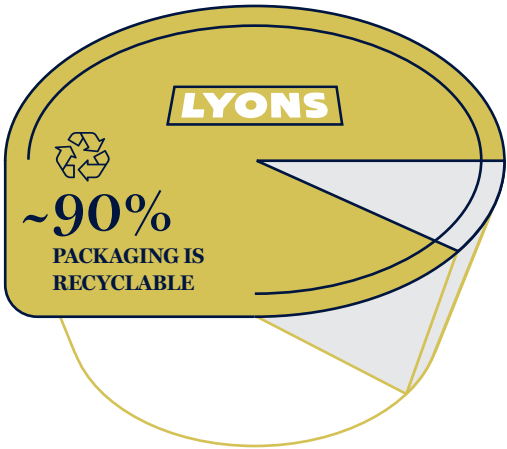
ESG and Sustainability Initiatives

ENVIRONMENTAL PROFILE

GHG EMISSIONS SUMMARY		
GHG	Metric Tonnes	
Biogenic CO2	0	
Scope 1	15,613	
Scope 2 (Location-Based)	12,973	
TOTAL SCOPE 1 AND 2	28,586	
ENERGY SUMMARY		
ENERGY	MWh	% of Total Energy
Renewable Electricity Consumed	850	1%
Purchased Electricity	26,605	24%
Mobile Fuel Energy	3,871	3%
Natural Gas Energy	81,539	72%
TOTAL	112,865	100%
WASTE SUMMARY		
WASTE	Destination (Metric Tonnes)	% of Total
Landfilled	6,800	78%
Recycled	1,900	22%
Composted	0	0%
Incinerated	0	0%
TOTAL	8,700	100%
WATER SUMMARY		
WATER	m3	
Recycled Water Usage	77	
Total Water Usage	942	
% of Water Usage from Recycled Sources	8%	



Lyons Magnus is constantly finding ways to better monitor, manage, and minimize energy use and GHG emissions – both on the factory floor and in transit to the consumer. Lyons Magnus retains an on-staff industrial hygienist who continuously monitors and addresses how business operations impact neighboring environments.



Nearly 90% of Lyons Magnus's product packaging is recyclable, made from recycled material, or both.



Nearly 40% of Lyons Magnus's strawberry rewashing is completed with recycled water.



Social Responsibility

Lyons Magnus purchases raw materials and supplies from local vendors and provides local sponsorships that support sports teams, nonprofit fundraisers, and other community groups.¹⁰

People

Lyons Magnus offers an employee educational assistance program to help offset the cost of education for courses relevant to job or career trajectory. Additionally, the company-wide Code of Business Conduct covers human rights topics, and selected employees receive advanced awareness training on human rights and engagement with local communities.¹¹

Looking Ahead to 2020

Lyons Magnus is taking steps to reduce the amount of biochemical oxygen demand to decrease organic pollution from its wastewater.¹²



ANIMAL HEALTH & NUTRITION

MS Biotec



INNOVATIVE, NATURAL SOLUTIONS FOR ANIMAL DIET MANAGEMENT

Business Snapshot

ADVANCING TECHNOLOGY IN ANIMAL HEALTH AND NUTRITION

MS Biotec is the world’s only commercial producer of the bacteria *Megasphaera elsdenii* (“Me”), a natural probiotic that helps feedlot cattle and dairy cows transition from a roughage-based diet to a high-grain diet. The company continues to lead commercial anaerobic fermentation and stabilization efforts, offering livestock producers innovative, science-based, natural solutions to animal health and production challenges.

Key Highlights

MS Biotec introduced a new natural feed additive which features a shelf life of approximately 12 months compared to previous generations which could be stored for only 14 days.

An estimated 1.8 million head of cattle received MS Biotec products in 2019.

In addition to a total corporate donation of \$5,400 to the Wamego Fire Department, Morrow County Future Farmers of America, and the American Cancer Society, MS Biotec’s employees also logged 447 hours at Topeka Civic Theater, Heroes on the Water, and local homeless shelters.

MANAGEMENT FRAMEWORK

The company holds a Good Manufacturing Practices (GMP) certification. All suppliers are also required to adhere to federal, state, and local laws and regulations governing licensure and certifications. In 2019, to further support regulatory reporting and operational practices, MS Biotec hired a director of Human Resources & Environmental, Health, and Safety.

ESG and Sustainability Initiatives

ENVIRONMENTAL PROFILE

GHG EMISSIONS SUMMARY		
GHG	Metric Tonnes	
Biogenic CO2	0	
Scope 1	479	
Scope 2 (Location-Based)	470	
TOTAL SCOPE 1 AND 2	949	
ENERGY SUMMARY		
ENERGY	MWh	% of Total Energy
Purchased Electricity	729	24%
Mobile Fuel Energy	858	28%
Natural Gas Heating Energy	1489	48%
Other Fuel Energy	10	0%
TOTAL	3,086	100%
WASTE SUMMARY		
WASTE	Destination (Metric Tonnes)	% of Total
Landfilled	263	38%
Recycled	439	62%
Composted	0	0%
Incinerated	0	0%
TOTAL	702	100%
WATER SUMMARY		
WATER	m3	
Recycled Water Usage	0	
Total Water Usage	2,601	
% of Water Usage from Recycled Sources	0%	

Looking Ahead to 2020

To continuously gather employee feedback, MS Biotec plans to increase the frequency of surveys to a semi-annual basis while also broadening the satisfaction topic range.¹³



#2

Zero Hunger

#6

Clean Water

#8

Decent Work and Economic Growth

#12

Responsible Consumption & Production

#13

Climate Action



#2

Zero Hunger

#3

Good Health and Well-Being

#12

Responsible Consumption & Production

ANIMAL HEALTH
& NUTRITION

Multimin



TRACE MINERALS TO IMPROVE ANIMAL IMMUNITY
AND REPRODUCTION

Business Snapshot

Multimin is the world's first and only marketer of **Multimin® 90**, a prescription patented injectable solution that provides a supplementary source of zinc, copper, selenium, and manganese at critical times in the production cycle of cattle.

Key Highlights

U.S. cattle received more than 12 million doses of Multimin 90 in 2019. Local organization donations totaled \$33,925. Donations largely support the Working Ranch Cowboys Association Foundation, which provides financial assistance to cowboys and their families. Other philanthropic efforts include scholarships endowed through the Academy of Veterinary Consultants and the Oklahoma Cattlemen’s Association.

ESG and Sustainability Initiatives

ECO-FRIENDLY PRODUCT

In addition to reducing the antibiotic dependence of cattle ranching, enhanced trace minerals such as those found in Multimin 90 improve bovine health, immunity, and performance while fostering environmentally sustainable practices.

Company-Wide Initiatives

DIVERSITY AND INCLUSION

Women comprise 35% of Multimin’s workforce and 42% of its management.¹⁴ Eithna O’Leary, the CEO of Multimin’s parent company Warburton Technology Inc., has been with the company for 11 years. She serves on the Board of Paine Schwartz Partners’ Animal Health & Nutrition platform in addition to Warburton and Multimin.

ENVIRONMENTAL PROFILE

GHG EMISSIONS SUMMARY		
GHG	Metric Tonnes	
Biogenic CO2	0	
Scope 1	0	
Scope 2 (Location-Based)	40	
TOTAL SCOPE 1 AND 2	40	
ENERGY SUMMARY		
ENERGY	MWh	% of Total Energy
Purchased Electricity	69	97%
Natural Gas Heating Energy	2	3%
Other Fuel Energy	0	0%
TOTAL ¹	72	100%
¹ Totals may not be exact due to rounding		
WASTE SUMMARY		
WASTE	Destination (Metric Tonnes)	% of Total
Landfilled	0.15	50%
Recycled	0.15	50%
Composted	0	0%
Incinerated	0	0%
TOTAL	0.3	100%
WATER SUMMARY		
WATER	m3	
Recycled Water Usage	0	
Total Water Usage	546	
% of Water Usage from Recycled Sources	0%	

Looking Ahead to 2020

In 2019, Multimin began collecting data on annual water use, energy use and sourcing, waste sourcing, and GHG emissions across operations. Results indicate that Multimin recycles 50% of company-wide waste.¹⁵ Multimin is considering energy management and water consumption topics as potential areas for process improvement.



#2

Zero Hunger

#3

Good Health and Well-Being

#12

Responsible Consumption & Production

#17

Partnership for the Goals

Prima® Wawona



SUSTAINABLE AND HEALTHY FRUIT,
FROM FARM TO TABLE

CATEGORY ORGANIC LEADERS

Business Snapshot

Prima® Wawona is the national category leader in unsurpassed quality organic and conventional peaches, plums, nectarines, and apricots and the employer of choice in the Central Valley of California. The company is driven by operational excellence across the value chain, from proprietary genetics to leading sustainable farming practices to innovative customer solutions, the company delivers consumers the most consistent and flavorful stone fruit experience.

Key Highlights

As part of its commitment to healthy soil, Prima® Wawona implemented the Advanced Integrated Pest Management Program to control harmful pests while minimizing pesticide use. Prima® Wawona employs natural methods of biological pesticides such as releasing native, predatory insects into fields; laying down weed mats to reduce the need for excess herbicides; using computer-controlled spray rigs to minimize pollution risk from overspray or run-off; and planting cover crops to build soil health.

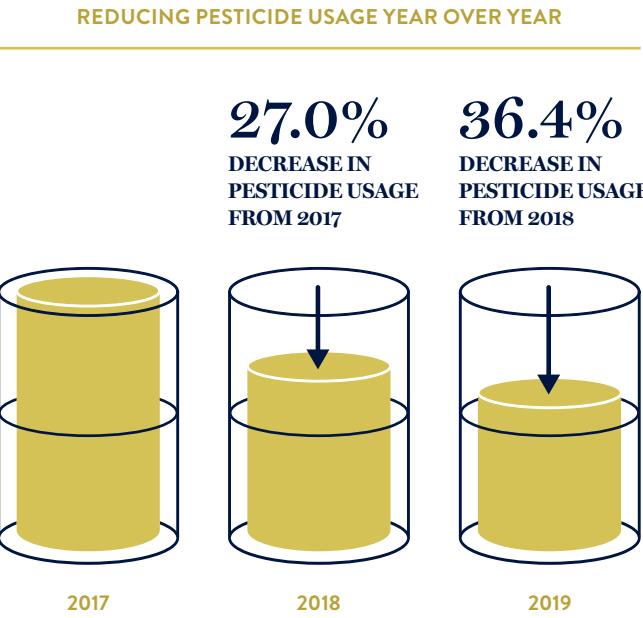
In 2019, Prima® Wawona achieved a 97% compliance average on twenty audits measuring the Primus Global Food Safety Initiative Good Agriculture Practices. Prima® Wawona’s achievement certifies the company as being among the produce industry vanguard for minimally-processed growing operations and fresh-cut consumer staples.



ESG and Sustainability Initiatives

ECO-FRIENDLY PRODUCT

Prima® Wawona has consistently reduced annual pesticide usage since 2017.

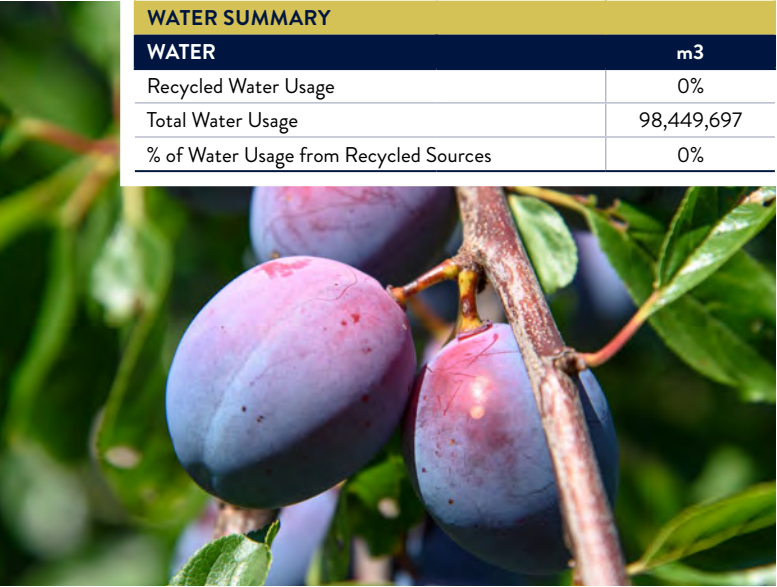


Reductions were achieved through mating disruption, use of organic pesticide alternatives, green waste composting, and soil amendment additions.¹⁶



ENVIRONMENTAL PROFILE

GHG EMISSIONS SUMMARY		
GHG	Metric Tonnes	
Biogenic CO2	0	
Scope 1	29,009	
Scope 2 (Location-Based)	8,485	
TOTAL SCOPE 1 AND 2¹	37,493	
¹ Totals may not be exact due to rounding		
ENERGY SUMMARY		
ENERGY	MWh	% of Total Energy
Renewable Electricity Consumed	3,305	4%
Purchased Electricity	35,301	45%
Mobile Fuel Energy	39,101	50%
Natural Gas Energy	930	1%
TOTAL	78,637	100%
WASTE SUMMARY		
WASTE	Destination (Metric Tonnes)	% of Total
Landfilled	51	9%
Recycled	496	91%
Composted	0	0%
Incinerated	0	0%
TOTAL	547	100%
WATER SUMMARY		
WATER	m3	
Recycled Water Usage	0%	
Total Water Usage	98,449,697	
% of Water Usage from Recycled Sources	0%	



MANAGEMENT FRAMEWORK

On average, employees receive higher wages for similar agricultural roles, and they are eligible for travel compensation, bonuses, and other benefits uncommon in the industry.

Employees at all levels are required to undergo diversity and inclusion training.¹⁷

Prima® Wawona, in coordination with the founding Gerawan family, has given more than \$1 million to employees and their children in support of education, as well as grants and student loans for higher education.

 \$1,000,000+

Company-Wide Initiatives

COMMUNITY ENGAGEMENT

Prima® Wawona partners with thought leaders and innovators to develop the next generation of agricultural talent.^{18, 19} Partners include the Future Farmers of America and crop science innovators at California State University, Fresno.



Rivulis



- MAKING MICRO IRRIGATION ACCESSIBLE
- HELPING GROWERS GROW, SEASON AFTER SEASON

Business Snapshot

Rivulis is a global micro irrigation leader that innovates and deploys smart micro and drip irrigation solutions to address food and water scarcity. Rivulis’s products help growers achieve better quality yields, more volume, and greater profitability while safeguarding the sustainability of grower land and livelihood.

Drip irrigation represents a transformative technology and is the most viable irrigation solution to address imminent global food and water security challenges due to rapid population growth, reduction in arable land availability, and increased water deficiency.

Key Highlights

Rivulis supports 3,300 customers in over 120 countries.



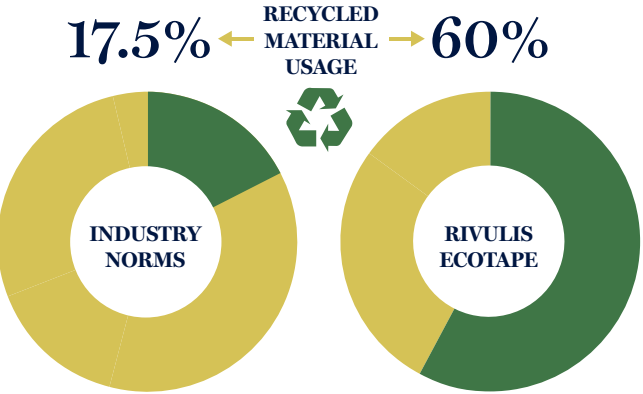
Use of recycled materials resulted in annual savings of **\$4.5 million.**

Since 2017, Rivulis has collected and reused over **1,000 tons** of used or recycled materials from customers’ used drip lines.

ESG and Sustainability Initiatives

Rivulis’s innovative new product line, Ecotape, can now produce drip tapes of equal field performance and durability while using up to 8% less raw materials.

These tapes can utilize close to 60% recycled material compared to industry norms of around 17.5%.



Rivulis is an active participant in the Indian Government’s program to encourage micro irrigation drip for smallholder farmers. Rivulis has also introduced its innovative Manna satellite imaging irrigation system cost-free to farmers in India, which provides site-specific irrigation recommendations and high-resolution views of the entire field.

Looking Ahead to 2020

Rivulis introduced a Full Circle Sustainability Program in California for growers to return used drip tapes to recycling stations. There, the tape is washed and repurchased by Rivulis for use in new product manufacturing. This program will be introduced to new areas in the coming year.



#2 

Zero Hunger

#12 

Responsible Consumption & Production

#15 

Life on Land

#17 

Partnership for the Goals

ScanBio Marine Group

ScanBio

AN ESSENTIAL PARTNER TO THE SEAFOOD CHAIN

CONVERTING WASTE STREAMS INTO VALUABLE INPUTS

Business Snapshot

TRANSFORMING WASTE MATERIALS INTO VALUABLE LINKS IN THE FOOD CHAIN

ScanBio transforms marine by-products from sustainable fisheries and sea farming into highly valuable animal feed ingredients for pets, livestock, and fish and provides mission critical biosecurity services to the aquaculture industry.²⁰

Key Highlights

TURNING WASTE CUTOFF INTO VALUE-ADDED BYPRODUCTS

METRIC	RESULTS (2019)	YEAR-OVER-YEAR IMPROVEMENT (FROM 2018-2019)
Fish protein concentrate	46.679 tons	1.516 tons
Fish oil for heating	2.220 tons	1.651 tons
Energy created by silage for biogas production	45 GW	15 GW



ESG and Sustainability Initiatives

ECO-FRIENDLY PRODUCT

Last year, the company produced 18,212 tons of fish oil using fish byproducts. The company also composts and recycles a majority of operational waste products, sending zero waste to landfills.²¹

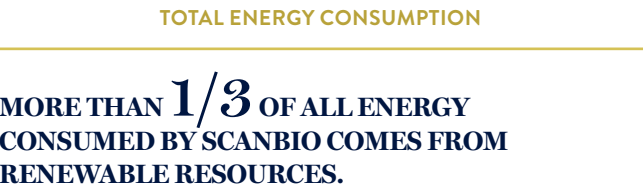


ENVIRONMENTAL PROFILE

In 2017, ScanBio invested in new, energy-efficient equipment for its office facility and by 2019, these improvements reduced energy use by 3.5 gigawatt-hours compared to 2015 baseline energy usage.

In 2019, the company also provided silage to a local, third-party energy provider for biogas production, yielding approximately 46 gigawatts of sustainable energy creation.

ScanBio is currently exploring opportunities to improve energy efficiency by replacing their fleet of marine vessels with more environmentally friendly, fuel-efficient alternatives. The company is also working with suppliers to decrease spent energy from evaporation and transport.²²



MANAGEMENT FRAMEWORK

STANDARDS OF CONDUCT

ScanBio meets or exceeds compliance thresholds with the Global Standard for Responsible Supply (IFFO RS) and Good Manufacturing Practices Plus (GMP+) for fishmeal production. In 2019, to maintain IFFO RS and GMP+ certification, the company launched an initiative to strengthen internal human rights and whistleblowing policies.

COMPANY-WIDE INITIATIVES

To promote internal communication on ESG topics, ScanBio publishes Politics for Environment and Health biannually. The report provides resources for risk assessments, checklists, and tracking nonconformity. The company’s management platform also provides access to important marine byproduct legislation for the European Union and Norway.

GHG EMISSIONS SUMMARY		
GHG		Metric Tonnes
Biogenic CO2		8,103
Scope 1		11,592
Scope 2 (Location-Based)		58
TOTAL SCOPE 1 AND 2		11,650
ENERGY SUMMARY		
ENERGY	MWh	% of Total Energy
Purchased Electricity	6,826	8%
Mobile Fuel Energy	45,789	56%
Natural Gas Heating Energy	0	0%
Other Fuel Energy	29,107	36%
TOTAL	81,722	100%
WASTE SUMMARY		
WASTE	Destination (Metric Tonnes)	% of Total
Landfilled	0	0%
Recycled	113	27%
Composted	239	58%
Incinerated	60	15%
TOTAL	412	100%
WATER SUMMARY		
WATER	m3	
Recycled Water Usage	0	
Total Water Usage	75,210	
% of Water Usage from Recycled Sources	0%	



SUSTAINABLE DEVELOPMENT GOALS

#2

Zero Hunger

#7

Affordable and Clean Energy

#12

Responsible Consumption & Production

#13

Climate Action

#14

Life Below Water

SNFL



GLOBAL LEADER IN GRAPE GENETICS & LICENSING

DEVELOPING THE NEXT LEADING TABLE GRAPE VARIETIES

Business Snapshot

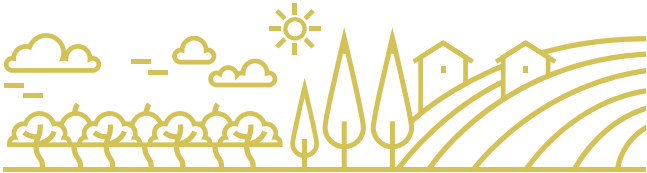
Special New Fruit Licensing Limited (SNFL) is a global market leader in the R&D, licensing, and marketing of proprietary table grape varieties. The company integrates a modern, sophisticated breeding engine designed to deliver market-leading solutions and value across the supply chain, from growers to retailers.

SNFL maintains a state-of-the-art R&D and breeding center in Spain, and broke ground in 2020 on a sister facility in the U.S. Furthermore, SNFL maintains a vast geographic presence with 15 trial centers around the world and nearly a thousand licensed growers covering 25,000 hectares in 16 countries. SNFL actively commercializes and licenses 16 of its 25 patented grape varieties.

ESG and Sustainability Initiatives

ENGAGEMENT AND INCLUSION

SNFL supports gender equality, with women currently accounting for 40% of the total workforce.



Looking Ahead to 2020

SNFL is integrating climate change considerations into its risk management processes. The company is also considering several improvements to its farming organics, irrigation efficiency, and pesticide-use reductions initiatives.





#2 

Zero Hunger

#12 

Responsible Consumption & Production

#15 

Life on Land

#17 

Partnership for the Goals

Spearhead International



SUSTAINABLE, SCALE AGRICULTURE
AT THE HEART OF EUROPE

Business Snapshot

Spearhead offers distinctive, long-term supply assurance of agricultural products, including specialty crops – at scale, across multiple European countries, in specification, delivered reliably with full traceability.



Key Highlights

In 2019, Spearhead International performed control monitoring on the Variable Rate Application of Nitrogen (VRAN) technology first tested in 2018 by comparing yield from control strips to variable fertilized land. The results indicated that when VRAN was applied on winter wheat fields, yields increased by 400 kg/ha.

By using satellites to guide cultivating and drilling tractors, Spearhead saved an average overlap of 0.5m over a working width of 9.0m. Efforts resulted in the reduction of unnecessary work and of diesel usage by 5.5%

ESG and Sustainability Initiatives

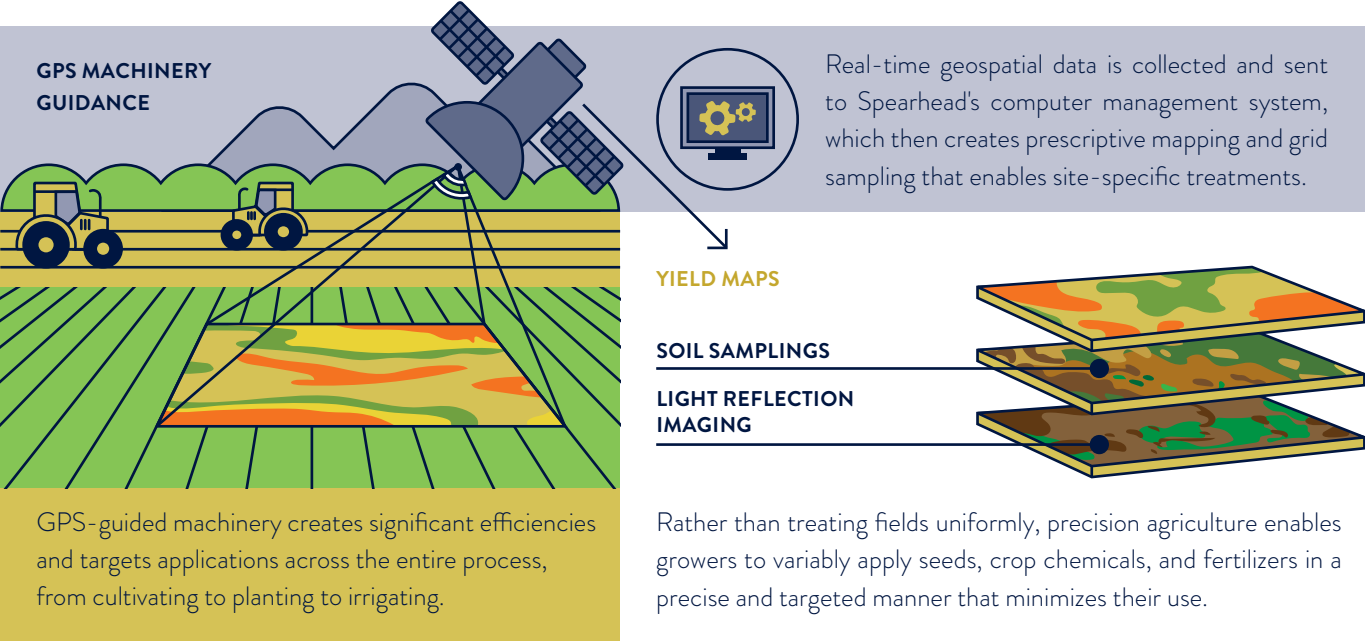
SUSTAINABLE PRACTICES

To promote efficient use of agrochemicals and fertilizers, Spearhead International employs satellite-guided soil sampling, aerial and satellite crop imagery, and machine-mounted sensors. Data from sampling, imagery, and sensors are then translated into variable-rate prescription maps to ensure the application of inputs is targeted in order to mitigate waste and overapplication.

Spearhead International holds Global GAP certification for most of the company’s arable land, requiring an annual, independent audit of production procedures, working practices, and suitability of facilities.



PRECISION FARMING THROUGH INNOVATIVE TECHNOLOGY



Looking Ahead to 2020

Spearhead International is seeking LEAF Marque accreditation of the Agrosumak farm. Certification and accreditation in 2020 will make Agrosumak the first Czech farm to achieve these certifications.

With increasingly stringent environmental legislation, a newly hired officer in the Czech Republic oversees all aspects of waste management and compliance. To further address and comply with legislation, Spearhead International is investing in storage facilities and application technologies that result in maximizing the benefits from biogas and livestock waste as an organic fertilizer.



Verdesian Life Sciences



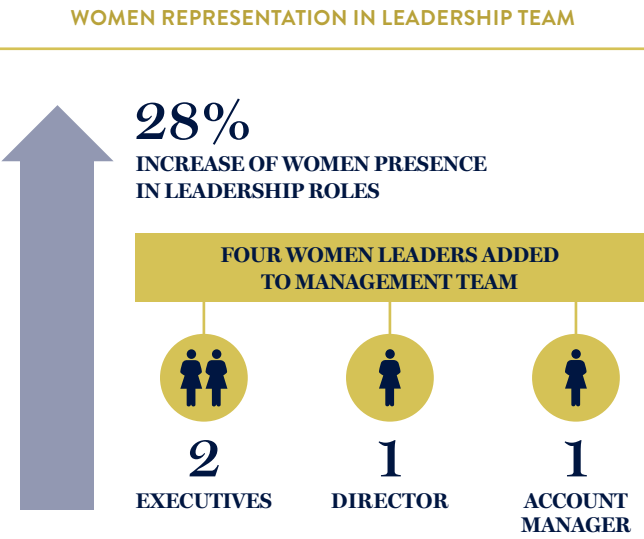
- PROVIDING SOLUTIONS FOR NUTRIENT-USE EFFICIENCY
- INTEGRATING SUSTAINABILITY WITH PROFITABILITY

Business Snapshot

Verdesian Life Sciences helps farmers maximize crop yields with fewer inputs and lower environmental impact through nutrient management and efficiency technologies, seed treatments and inoculants, and crop health chemistry and biologicals.²³

Key Highlights

Verdesian is focused on efforts to increase diversity in leadership. In line with its Equal Employment Opportunity Policy and Diversity Policy, Verdesian added new women team members to its workplace in 2019.



ESG and Sustainability Initiatives

ECO-FRIENDLY SERVICES

Verdesian continues to engage and educate retailers and growers on nutrient-use efficiency through its proprietary online learning platform. NUE™ University partners with third-party academic and agricultural experts to teach the agronomy of water salinity, nutrient stewardship in policy economics, fertilizer management, nitrogen stabilization, and nearly 50 other courses. University attendees receive Continuing Education credits.²⁴

ENVIRONMENTAL PERFORMANCE

GHG EMISSIONS SUMMARY		
GHG	Metric Tonnes	
Biogenic CO2	0	
Scope 1	4,771	
Scope 2 (Location-Based)	6,979	
TOTAL SCOPE 1 AND 2	11,750	
ENERGY SUMMARY		
ENERGY	MWh	% of Total Energy
Purchased Electricity	10,106	27%
Mobile Fuel Energy	4,593	12%
Natural Gas Heating Energy	22,309	60%
Other Fuel Energy	0	0%
TOTAL	37,008	100%
WASTE SUMMARY		
WASTE	Destination (Metric Tonnes)	% of Total
Landfilled	961	100%
Recycled	3	0%
Composted	0	0%
Incinerated	0	0%
TOTAL	964	100%
WATER SUMMARY		
WATER	m3	
Recycled Water Usage	0	
Total Water Usage	11,766	
% of Water Usage from Recycled Sources	0%	



MANAGEMENT FRAMEWORK

Verdesian continues to maintain a 4R certification from The Fertilizer Institute, acknowledging its commitment to sustainable input management.

4 R's:

RIGHT NUTRIENT SOURCE
AT THE RIGHT RATE
AND RIGHT TIME
IN THE RIGHT PLACE

Employee Engagement Survey 2019 Results:

Participation for Engagement Survey
85%

Overall Employee Satisfaction
2019 88.9%
2017 +9.6%
2016 +2.2%



CHARITABLE GIVING

In 2019, charitable contributions totaled \$49,500 for Iowa Agricultural Water Alliance, Agriculture Clean Water Alliance, Fluid Fertilizer Foundation, Habitat for Humanity, Nebraska Agri-business Association, and Southern Peanut Farmers.²⁵

Verdesian employees also provided meals to approximately 400 individuals—including growers—that survived the 2019 flooding in Nebraska. The Nebraska Flood Relief Effort worked in partnership with Verdesian retailers to add an additional \$30,000 to the cause.²⁶

#2

Zero Hunger

#3

Good Health and Well-Being

#12

Responsible Consumption & Production

#15

Life on Land

#17

Partnership for the Goals

Verisem



GLOBAL LEADER IN VEGETABLE, LEGUME, AND HERB SEED PRODUCTION

Business Snapshot

Verisem is a leading independent supply chain partner to the global seed industry, providing specialized production, processing, and distribution services to a diverse set of end customers for an expansive set of seed varieties from a global network of privileged production assets.



Key Highlights

In 2019, Verisem made water efficiency improvements including the installation of dry-treatment equipment in Italy. Additional improvement efforts in 2019 include tracking annual water usage to monitor ongoing improvement.²⁷ In coming years, the company plans to expand the dry-treatment process to France.

In 2019, Verisem recertified ISO 9001:2015, and the French subsidiary received certification to clean organic seeds for third parties.

In 2019, Verisem donated \$8,000 to local organizations near operations. More recently, Verisem donated medical masks to communities in China affected by the coronavirus pandemic.



ESG and Sustainability Initiatives

ECO-FRIENDLY PRODUCT

Verisem creates products that mitigate risks associated with unfavorable climatic conditions. For example, the company makes seeds that thrive across multiple continents and climates in an effort to mitigate climate-related risks.

Verisem also continues to limit the use of glyphosate— an herbicide— in accordance with Italian Association standards.

DIVERSITY, INCLUSION AND ENGAGEMENT

Verisem maintains a diverse workforce. In Italy, 35% of employees are women, as are 28.9% of all employees globally. Additionally, women hold nearly 40% of leadership positions in the company, including head of sales, a human resources manager, and two C-level executives.

Further, individuals with disabilities comprise 7% of Verisem’s workforce.



ENVIRONMENTAL PERFORMANCE

GHG EMISSIONS SUMMARY		
GHG		Metric Tonnes
Biogenic CO2		0
Scope 1		508
Scope 2 (Location-Based)		1,638
TOTAL SCOPE 1 AND 2		2,146
ENERGY SUMMARY		
ENERGY		MWh % of Total Energy
Renewable Electricity Consumed	4	0%
Purchased Electricity	4,455	57%
Mobile Fuel Energy	1,132	28%
Natural Gas Energy	1,705	48%
Other Fuel Energy	504	0%
TOTAL¹	7801	100%
¹ Totals may not be exact due to rounding		
WASTE SUMMARY		
WASTE		Destination (Metric Tonnes) % of Total
Landfilled	4,517	95%
Recycled	131	3%
Composted	100	2%
Incinerated	0	0%
TOTAL	4,748	100%
WATER SUMMARY		
WATER		m3
Recycled Water Usage	0	
Total Water Usage	2,903	
% of Water Usage from Recycled Sources	0%	



Looking Ahead

The food and agribusiness sector plays a critical role in many of the most pressing environmental and social challenges of our time, including climate change, land degradation, health, and food security.

Paine Schwartz Partners remains well-positioned to address these key issues through a diverse roster of portfolio companies, each of which pursues important innovations or solutions tied to today’s challenges.

Our portfolio companies will continue to integrate their existing ESG and sustainability-related programs into their business operations and focus on continuous improvement towards managing ESG standards. We expect to see meaningful progress in data collection and reporting as well as the cultivation of additional ESG and sustainability programs in the coming year across a variety of topics, including:

- Reducing energy use while increasing renewable energy use to mitigate climate change
- Reducing harmful pesticides used in crops to mitigate runoff and overapplication
- Continuously improving food safety measures
- Building management governance processes to advance sustainability
- Demonstrating commitment through additional certifications and other credentials

While Paine Schwartz Partners companies have diligently worked to attain ESG goals in 2019, just as they have in prior years, more remains to be done.

Many of our portfolio companies produce ecologically responsible products, and they all address climate change by reducing their use of non-renewable energy. Like any other responsible corporate citizen, they take employees’ health and safety to heart, and they commit time and money to worthy causes in their communities. Still, there are challenges to be faced in terms of reducing impact on the water table and integrating successes throughout the supply chain. Paine Schwartz will continue our work on increasing portfolio companies’ access to technological innovations, many of which are providing businesses in the food and agribusiness sector with new and exciting tools to help address ESG issues.

Next year’s Sustainability Report will reflect Paine Schwartz Partners’ activities that promote responsible investment through our commitment with PRI and continued alignment with the SDGs most relevant to our portfolio companies, such as **Zero Hunger** and **Life on Land**. We believe that the food and agribusiness sector offers sustainable solutions to address these goals, and we will continue to seek such investment opportunities across the value chain.

Last year, Paine Schwartz Partners earned the privilege and distinction of becoming a signatory to the Principles for Responsible Investment. The firm is committed to:

- 01 Incorporating ESG issues into investment analysis and decision-making processes
- 02 Being active owners and incorporate ESG issues into ownership policies and practices
- 03 Seeking appropriate disclosure on ESG issues by companies in the portfolio
- 04 Promoting acceptance and implementation of PRI within the investment industry
- 05 Working together with other signatories
- 06 Reporting on activities and progress towards implementing the Principles

Next year’s Sustainability Report should also reflect what Paine Schwartz Partners has been doing at the firm level to promote PRI.

As we look ahead to the coming year, we will continue to promote responsible investment practices and partner closely with each company’s management team to identify and address material ways to enhance ESG programs for their employees, end consumers, and communities.

#2Zero Hunger

#3Good Health and Well-Being

#9Industry Innovation and Infrastructure

#12Responsible Consumption & Production

#13Climate Action

#15Life on Land



Endnotes

- 1 Advanta and Seminis were portfolio companies of the Predecessor Firm’s Fund II portfolio.
- 2 Table does not include minority held companies, SNFL and Rivulis. Based on operations and current information available, water usage is not a material topic for FoodChain ID, Advanced Agrilytics, and Multimin.
- 3 Zero Hunger, Target 2.4: By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality.
- 4 U.S. Embassy in South Sudan.
- 5 Zero Hunger, Target 2.A: Increase investment, including through enhanced international cooperation, in rural infrastructure, agricultural research and extension services, technology development and plant and livestock gene banks in order to enhance agricultural productive capacity in developing countries, in particular least developed countries.
- 6 Zero Hunger, Target 2.4: By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality.
- 7 Reduce Inequalities, 10.2: By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status.
- 8 Target 12.5: By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse.
- 9 Decent Work and Economic Growth, Target 8.8: Protect labor rights, promote safe, and secure working environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment.
- 10 Partnerships for the Goal, Target 17.17: Encourage and promote effective public, public-private and civil society partnerships, building on the experience and resourcing strategies of partnerships.
- 11 Decent Work and Economic Growth, Target 8.8: protect labor rights, promote safe, and secure working environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment.
- 12 Clean Water, Target 6.3: By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally.
- 13 Decent Work and Economic Growth, Target 8.8: protect labor rights, promote safe, and secure working environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment.
- 14 Reduce Inequalities, 10.2: By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status.
- 15 Climate Action, Target 13.2: Integrate climate change measures into national policies, strategies and planning; Target 12.5: By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse.

- 16 Zero Hunger, Target 2.4: By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality.
- 17 Reduce Inequalities, 10.2: By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status.
- 18 Zero Hunger, Target 2.A: Increase investment, including through enhanced international cooperation, in rural infrastructure, agricultural research and extension services, technology development and plant and livestock gene banks in order to enhance agricultural productive capacity in developing countries, in particular least developed countries.
- 19 Partnerships for the Goal, Target 17.17: Encourage and promote effective public, public-private and civil society partnerships, building on the experience and resourcing strategies of partnerships.
- 20 Zero Hunger, Target 2.4: By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality.
- 21 Responsible Consumption and Production, Target 12.3: By 2030, halve per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains, including post-harvest losses; Target 12.5: By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse.
- 22 Affordable and Clean Energy, Target 7.4: By 2030, enhance international cooperation to facilitate access to clean energy research and technology, including renewable energy, energy efficiency and advanced and cleaner fossil-fuel technology, and promote investment in energy infrastructure and clean energy technology.
- 23 Zero Hunger, Target 2.4: By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality.
- 24 Zero Hunger, Target 2.3: By 2030, double the agricultural productivity and incomes of small-scale food producers, in particular women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment.
- 25 Zero Hunger, Target 2.A: Increase investment, including through enhanced international cooperation, in rural infrastructure, agricultural research and extension services, technology development and plant and livestock gene banks in order to enhance agricultural productive capacity in developing countries, in particular least developed countries.
- 26 Partnerships for the Goal, Target 17.17: Encourage and promote effective public, public-private and civil society partnerships, building on the experience and resourcing strategies of partnerships.
- 27 Clean Water, Target 6.3: By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally.





Sustainable Food Chain Investing Towards a Positive Future



**PAINE SCHWARTZ
PARTNERS**

San Mateo

One Franklin Parkway
Building 910, Suite 120
San Mateo, CA 94403

T: 650-393-7100
F: 650-393-7150

New York

475 Fifth Avenue
17th Floor
New York, NY 10017

T: 212-379-7200
F: 212-379-7235