

Sustainable, precision irrigation helps growers produce more while benefiting the planet. To Valley, sustainability is more than a trend. More than a short-term strategy. It's built into who we are as a company. Valley is a leading industry partner advancing agricultural productivity, allowing growers around the world to produce more with less.

#### Consider these facts:

- The world population is expected to grow to 9.8 billion within 30 years.
- Food production will need to increase by 70% to feed those people.
- Arable land is disappearing at the rate of 175 acres an hour, or 3 acres every single minute.
- Only 30% of the planet's water is suitable for farming.

For all these reasons and more, Valley Irrigation has always been dedicated to providing solutions that help growers produce greater yields while using fewer resources – and maximizing their operation's profitability.



#### **Data-Driven Resource Efficiency**

Leveraging real-time field data is the foundation of sustainable farming practices, which is something Valley connected crop management technology enables every day.

Once you know the <u>soil moisture</u> content, for example, and combine that with automatically updated <u>weather</u> <u>data</u>, you know where, when and how much to irrigate for optimal crop development. With <u>Valley Scheduling</u><sup>™</sup> and <u>Variable Rate Irrigation</u>, growers can apply water precisely – limiting waste, maximizing water and energy efficiency, and increasing profits.

#### **Real Results in Real Fields**

#### **Sustainability with Valley Scheduling**

- Valley Scheduling reduces irrigation water and electrical use an average of 10% on average by helping growers irrigate exactly the right amount at precisely the right time.
- Reduces crop stress and need for treatments
- Can improve bio-matter yield as much as 20%
- Reduces risk of groundwater impacts

#### **ROI** with Valley Scheduling

Field studies during 2018 and 2019 demonstrated the ROI possible with smarter irrigation decisions.

- Potato fields with Valley Scheduling averaged 13 cwt/acre greater yield with an estimated \$24,626 additional revenue compared to fields without.
- In another study, silage corn yield increased by 20% with an estimated value of \$22,825 in extra revenue.

#### **Sustainability Success Stories**

One place our solutions recently accomplished measurable sustainability results was on a farm near El Paso, Texas. Valley remote management and integrated pump control devices for 52 irrigation machines led to confirmed water reduction of 6.5 million gallons per field per year, compared to other fields without Valley solutions. This is equal to the fresh water usage of 3,700 homes!

#### **Solar Energy**

We've also expanded our product offerings to include solutions in the photovoltaic energy (converting light into electricity) sector for agribusiness. This allows us to provide not only the most durable and advanced pivots available, but also a sustainable, low-cost energy source to supply power to them: <u>Ag Solar by Valley</u>.

#### **Load Control**

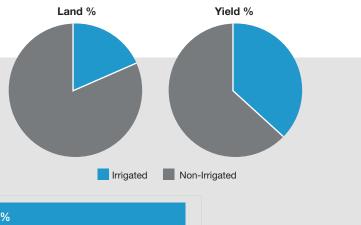
Today, sixteen power companies use Valley remote management solutions for peak demand load control. This helps reduce energy use and avoids system overloads.



### **Pivot Irrigation is a Maximizer**

Irrigation is a maximizer. Its proportionate impact is shown here. Irrigated land accounts for 40% of crop yield while using only 20% of land.

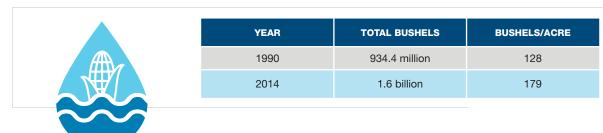
Even today, flood irrigation remains the most popular type of irrigation around the world. But flood irrigation is highly wasteful of fresh water resources.



Flood irrigation efficiency can be as low as 40-50% Center pivot irrigation reaches 95% application efficiency or greater<sup>1</sup>

Even before today's ag tech revolution, the graphs show that growers have been using less water, thanks in large part to center pivot irrigation:

#### 3,800 gallons per bushel of corn in 1990, down to 2,300 gallons in 2014.



Center pivots, <u>low-pressure sprinklers</u> and <u>efficient pumping technology</u> help growers produce more with less. While using significantly less water, yield actually increased in the same time period, from 128 bushels an acre in 1990 to 179 bushels per acre in 2014.

#### **Wastewater Irrigation**

The durability and reliability of Valley center pivot structures allows growers to irrigate with wastewater and other non-fresh water sources.

- Reduces freshwater demand
- Reduces energy use for water treatment
- Conserves nutrients for crop production
- Increases carbon sequestration in soil



 <sup>&</sup>quot;Food for all." World food summit. Agricultural machinery worldwide. www.fao.org Date from "Nebraska Crop Budgets, 2010" http://extension.unl.edu/publications



### **Acting Globally ... and Locally**

We were dedicated to sustainability before it was the trend. We will lead the way into a fully sustainable future. Join Valley – the leader in sustainable irrigation technology – as we continue to transform agriculture in your back yard and around the world.

### **Valmont ESG Materiality**

#### Valmont aligns with the follow globally recognized ESG frameworks:

- The Global Reporting Initiative (GRI): <u>Valmont 2020 GRI G4</u>
  Sector: Resource Transformation Industry: Industrial Machinery & Goods
- Sustainable Accounting Standards Board (<u>SASB</u>): March, 2022 Alignment Sector: Resource Transformation Industry: Industrial Machinery & Goods
- UN Sustainable Development Goals (SDGs): March, 2022 Alignment

#### Valmont discloses the following ESG documents:

- Valmont Sustainability Report
- Valmont Sustainability Annex
- Valmont Sustainability Whitepaper
- Valmont Climate Whitepaper
- Valmont Environmental Playbook







#### **Environmental Goals & Statistics**

#### **Carbon Intensity Goal:**

10% Reduction in Carbon Emissions/Million \$ Revenue by Close of 2025. Reduction from 78.13 CO2MT/\$M Revenue to 70.65 CO2MT/\$M Revenue

- Our carbon intensity goal is reviewed against and guided by a scientifically-based carbon goal benchmark. We report our GHG emissions to the CDP.
- 2018 Baseline / 2025 End Date

#### **Global Electricity Goal:**

12% Additional Reduction in Normalized Electricity Usage by 2025. Overall Reduction from 67.8 MWh/\$M Revenue to 56.9 MWh/\$M Revenue

- 14% Reduction in Normalized Electricity Usage from 2018–2020
- 2018 Baseline / 2025 End Date

## Global Combustion Fuel Goal (Scope 1 Fuel Sources):

19% Reduction in Normalized Carbon Emissions from Scope 1 Mobile Sources by the Close of 2025. Reduction in Scope 1 Mobile Source Emissions from 7.76 CO2MT/\$M Revenue to 6.28 CO2MT/\$M Revenue



#### **Key Environmental Statistics:**

• Since 2018, Valmont has capital investments of \$6M USD focusing on energy conservation, alternative energy and electric vehicles. These projects and best management practices have conserved:

#### 18.4M kWh IN ELECTRICITY | 58.94M LITERS IN WATER | 117.97K LITERS IN FUEL

- 2020 Electricity: 168.7M kWh Non-Normalized | 58,286.95 kWh/\$M Revenue Normalized
- 2020 Water: 647M liters/ 170.92M gals Non-Normalized | 223,488.77 Liters/\$M Revenue Normalized
- 2018 2020 Scope 1 & Scope 2 Emissions (MT of CO<sub>2</sub>):

NON-NORMALIZED	2018	2019	2020
Scope 1 Emission	127,187	127,622	122,912
Scope 2 Emission	90,367	80,973	79,015
TOTAL	217,554	208,295	201,927

NORMALIZED	2018	2019	2020
Scope 1 Emission	46.13	46.12	42.46
Scope 2 Emission	32.78	29.16	27.29
TOTAL	78.91	75.28	69.75



#### **Social Goals & Statistics**

**Inclusion & Diversity Goal:** 

50% Increase in people of color representation by 2025; Double by 2030

#### **Employee Resource Groups:**

Continual rollout of Employee Resource Groups; currently: 7 established groups

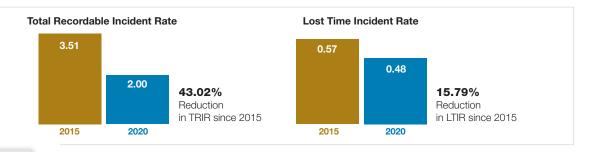
- Women's Leadership Council (WLC)
- Indian-American Leadership Council
- LGBTQ+
- African American Leadership Council
- Young Professionals Group (YPG)
- Valmont Veterans
- Hispanic Organization of Leadership Advancement (HOLA)

#### **Community Giveback:**

Our annual goal is to invest 1.0% of operating income in communities where we live and work, in 2020 we executed on that goal.

- In 2020, the Valmont Foundation supported more than 120 organizations. Collectively, these organizations have impacted the lives of millions of people across the world over the last decade.
- In 2020, our leadership team gave back to more than 60 organizations and industry associations donating over 4,000 hours of their time in making an impact outside of their everyday job.

#### **Health & Safety Metrics:**



#### Valmont Safety Index (VSI):

We have developed and are actively implementing a world-class system of metrics we call the Valmont Safety Index (VSI). It is a single composite score, 0-10, that measures safety performance of a Valmont facility and is scalable through all levels of the organization. VSI measures those proactive leading safety indicators balanced against real-time results to provide the site management team with a clear prescriptive roadmap to safety success. Locations using VSI have seen up to 40% year-over-year improvements.