



How to decrease your energy costs: A PMA Sustainability Webinar

February 18, 2021

Today's Expert Panel



Nicole Flewell

- Director of Sustainability
- Taylor Farms



Jim Leimkuhler

- CEO
- Progressive Produce



Nelson Longenecker

- VP, Business Innovation
- Four Seasons Produce



Creating an Energy Efficient Future
Four Seasons Family of Companies
February 2021

Beyond a tag line...

**GROWING IDEAS
PRODUCING EXCELLENCE™**

**DRIVING
HEALTHY,
DISTRIBUTION™**





G.R.E.E.N!

Gaining Resource & Energy Efficiency Now!

Commit,
Focus,
and
Persist



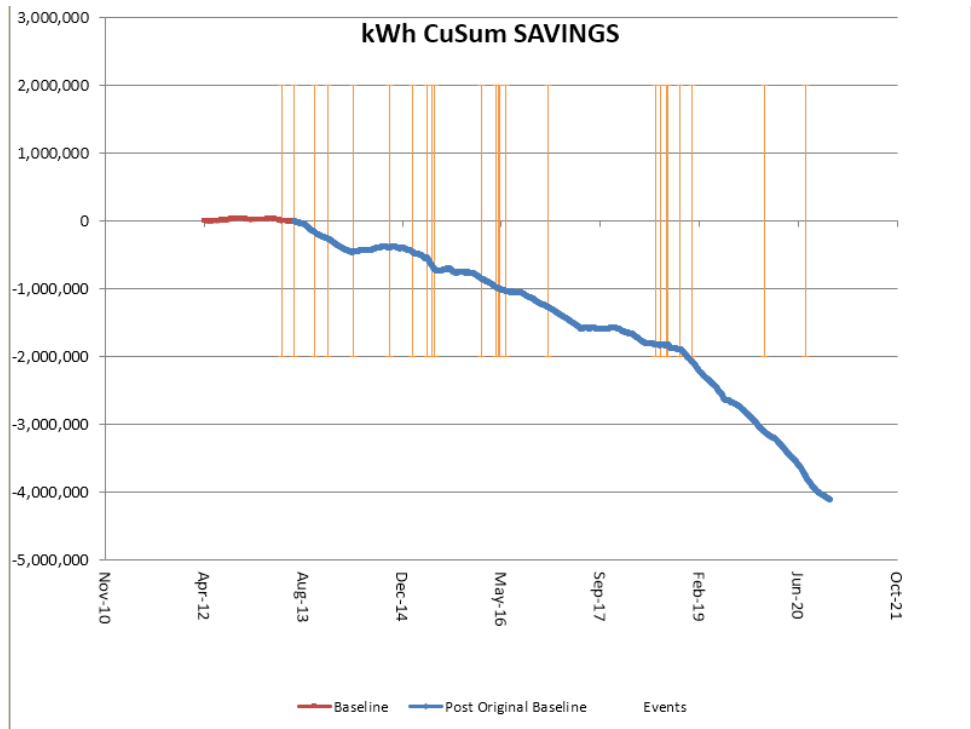
PPL Electric Utilities



Continuous Energy Improvement

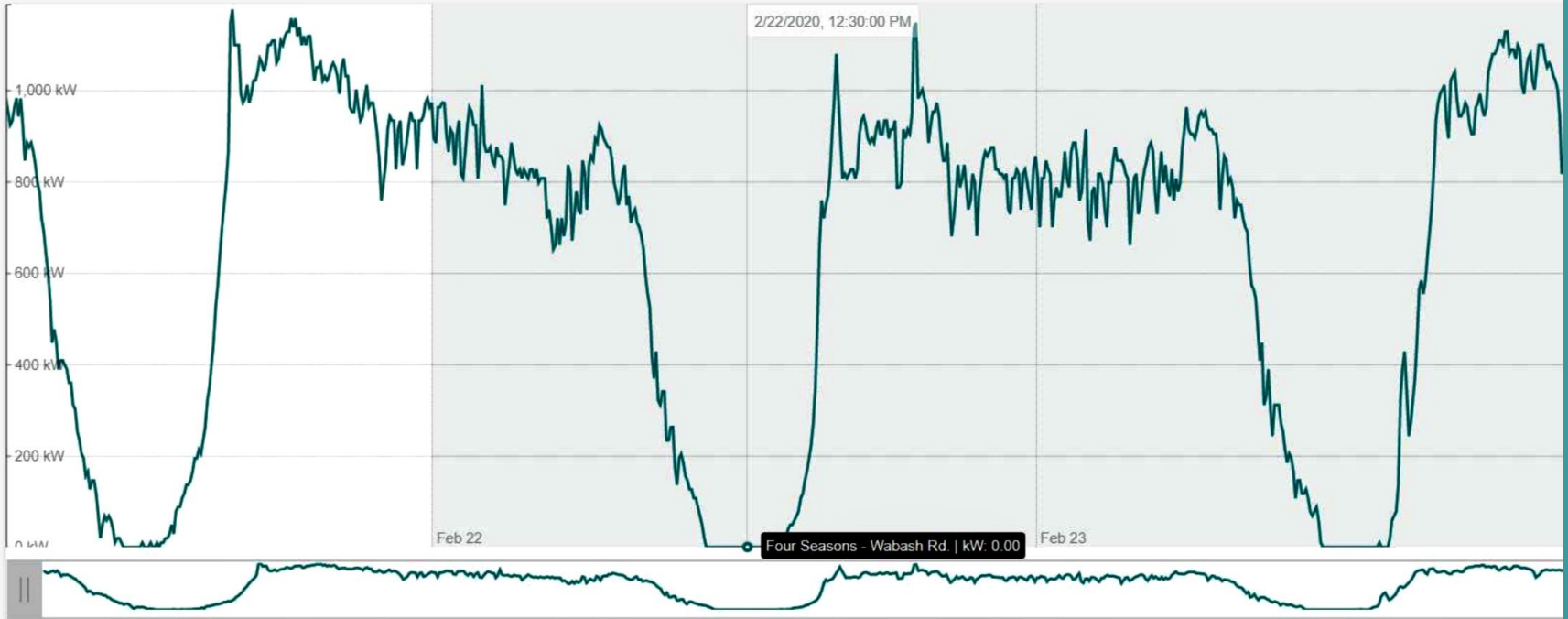


50001 Ready
U.S. DEPARTMENT OF ENERGY



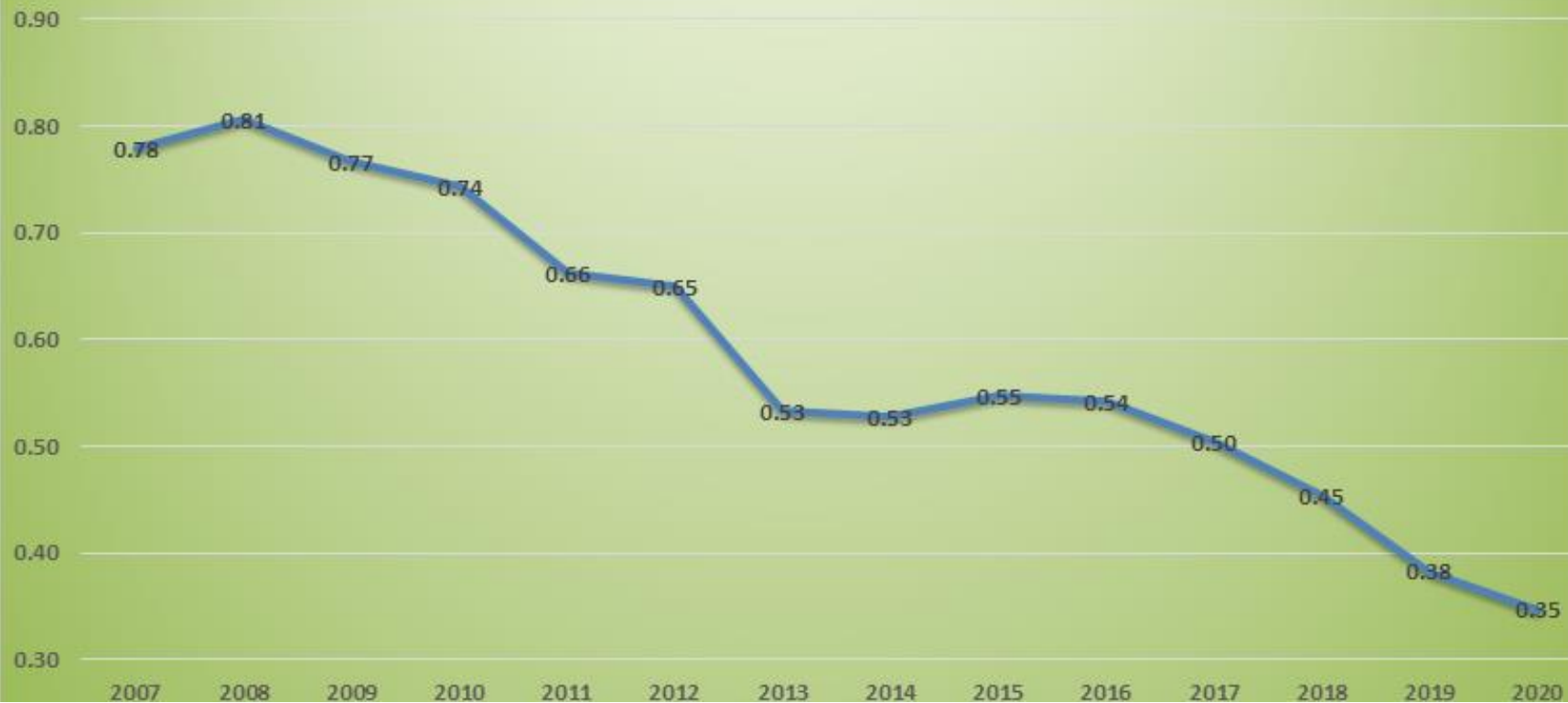


Four Seasons - Wabash Rd. x





kWh per Throughput Case



Smart Refrigeration Controls Upgrade



In Partnership with



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2012 and 2019

We partnered with NRM who installed a **smart user-friendly refrigeration control system.**
Per Year Savings at 2

*Locations:
Commerce & La Mirada*

547K

kWh Savings

\$82K

Annual Savings

ROI 60% & **386 Metric Tons**
of CO2



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Greenhouse Gas Equivalent:

83.5

Passenger Cars
Driven for a Year

5.1

Tanker Trucks worth
of Gasoline

65.4

Homes' Energy Use
for 1 Year

28.2M

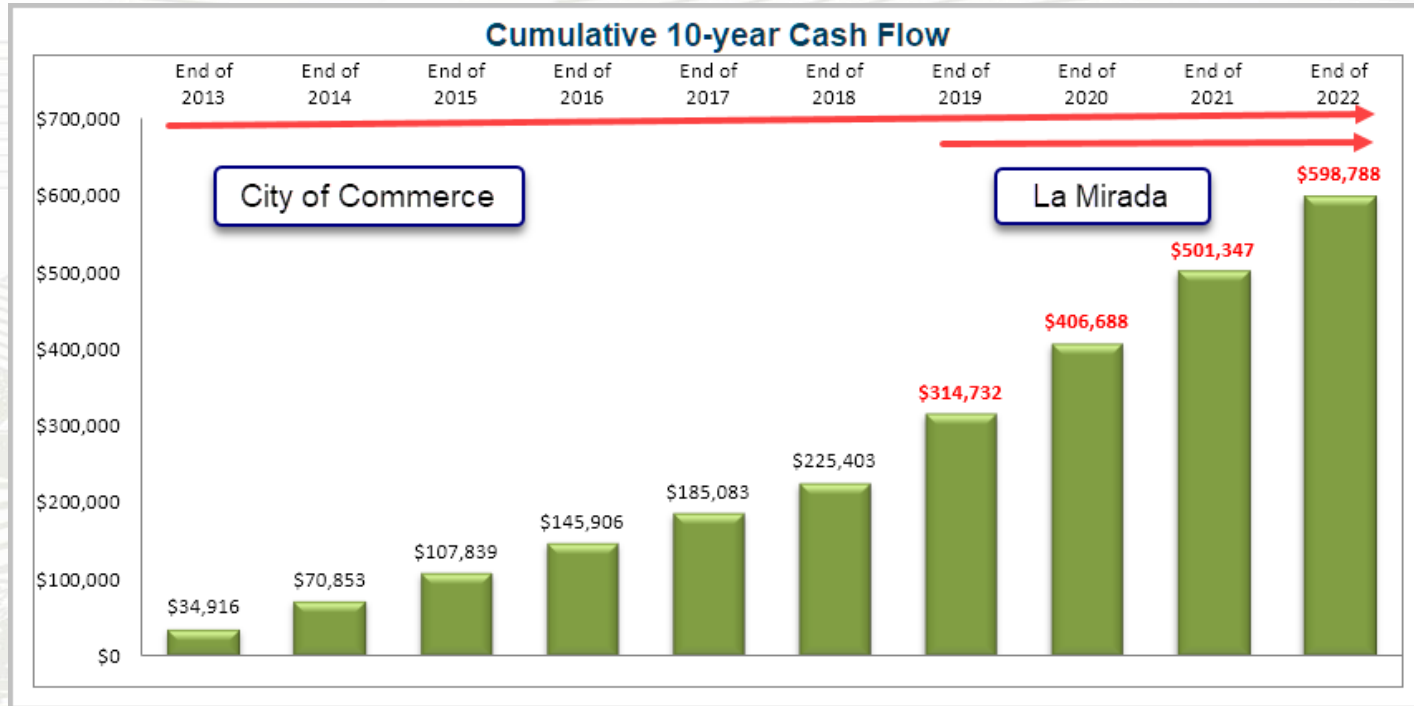
Smartphones
Charged

Source: <https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator>

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Cash Flow Analysis Since Installation



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Reduced Evap Fan Run



Room	Annual Comp Run time	Annual Evap Fan Run Time
Cooler 1 - Zones 1	12.00%	38.90%
Cooler 1 - Zones 2	6.00%	33.30%
Cooler 2 - Central Zone 3	21.50%	46.60%
Cooler 2 - Central Zone 4	31.90%	41.60%
Cooler 3 - Dock Zone 5	52.70%	62.00%
Cooler 3 - Dock Zone 6	63.20%	64.20%
Cooler 4 - Zone 7	12.50%	45.30%
Cooler 4 - Zone 8	11.60%	35.60%
Average	26.43%	45.94%

Before Controls		94.00%
Reduced Run Time		48.06%

Fan Run Times Reduced by Nearly 50%

Progressive Produce
 15130 Northham Street
 La Mirada, CA 90638
 Tel: 323-854-7427

Fullerton, Fullerton Municipal Airport, CA

Last Updated on Feb 12 2021, 10:53 am PST - Fair
 Temperature 65 °F, Humidity 36 %, Dewpoint 37 °F



Coolers				Temperature °F							Status				Starts 24 Hr.			% Run 24 Hr.			% Run 7 Days			
Site/Description	Notes	Links	Alarms	Dif	SP	Space	24hr	Coil1	Coil2	Coil3	Mode	Dfst	Sol	Fan	Amps	Sol	Comp	Fan	Sol	Comp	Fan	Sol	Comp	Fan
Cooler 1 CU1	AU 1,4			2	45	46.0	46.0	44.5	46.0		Run	Off	Off	Off	1.0	13	13	125	15.6	16.1	41.8	11.8	12.2	38.8
Cooler 1 CU2	AU 2,3			2	45	46.0	46.0	46.0	46.0		Run	Off	Off	Off	1.5	0	0	148	0.0	0.0	28.3	1.5	1.5	29.8
Central Cooler 2 CU3	AU 7,10,6			3	32	35.5	36.4	44.0	31.0	41.0	Run	On	Off	Off	85.5	10	10	83	20.4	20.7	41.4	11.9	12.1	35.3
Central Cooler 2 CU4	AU 8,5,9			3	34	35.5	36.6	24.5	33.0	32.0	Run	Off	Off	Off	1.2	25	45	67	21.4	27.4	41.4	24.5	29.5	36.1
Dock Cooler CU5	AU 13,12,16			3	36	36.0	36.3	33.5	194.0	222.0	Run	Off	On	On	65.0	30	45	72	52.8	57.5	62.9	42.0	45.7	55.1
Dock Cooler CU6	AU 14,11,15			2	37	36.0	36.2	32.5	31.0	**	Run	Off	On	On	57.8	30	30	72	52.8	54.7	62.9	43.6	45.4	56.0
Cooler 3 CU7	AU 19,18,22			3	39	45.5	45.2	45.5	45.0	44.0	Run	On	Off	On	8.8	16	16	139	11.0	11.9	36.8	10.5	11.4	36.4
Cooler 3 CU8	AU 20,17,21			3	40	45.5	**	45.0	45.5	44.0	Run	Off	Off	Off	0.2	**	**	**	**	**	**	**	**	**

Active Alarms					
Site	Topic	Start Time	Text	Ack Time	User

Historic Alarms

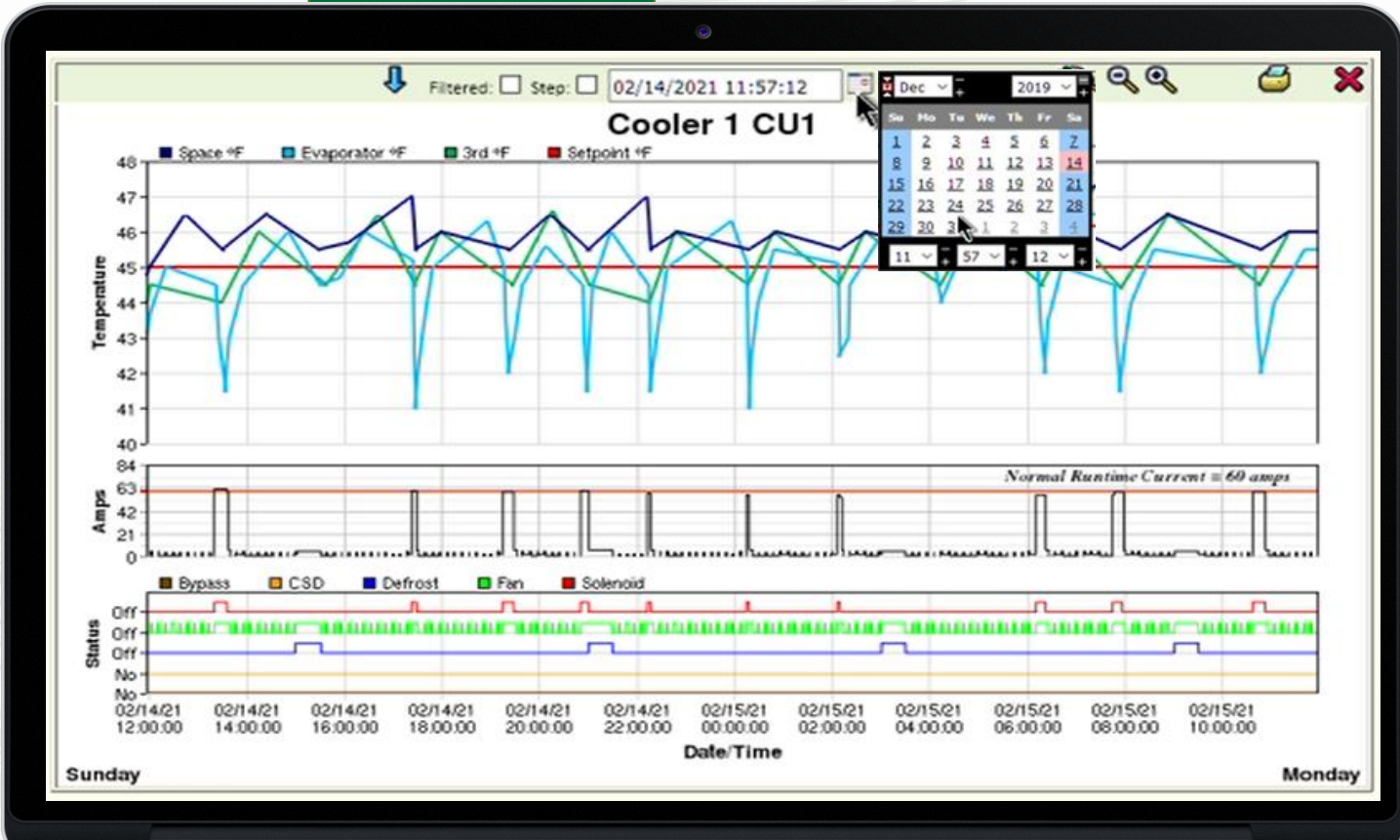
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Main Summary Page showing all cooler zones and vital statistics. Users can also make changes



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Trend showing Temps Compressor Amps and Controller Outputs. Calendar lets users go back to view history.

Short video of how users can view and manage their refrigeration assets using a browser.



Runtime: 3:09

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Progressive Consolidated - Pale Moon

remotesitemanager.com https://www.remotesitemanager.com/vs.php?v=844

RSM - Progressive Consolidated User: emrejs5 Log Out National Resource Management, Inc.

Progressive Produce
15130 Northham Street
La Mirada, CA 90638
Tel: 323-854-7427

Fullerton, Fullerton Municipal Airport, CA
Last Updated on Feb 22 2021, 10:53 am PST - Fri
Temperature 65 °F, Humidity 36 %, Dewpoint 37 °F

Coolers	Site/Description	Notes	Links	Alarms	Dif	SP	Temperature °F				Status			Starts 24 Hr.			% Run 24 Hr.			% Run 7 Days					
							Space	24hr	Coil1	Coil2	Coil3	Mode	Dfrst	Sol	Fan	Amps	Sol	Comp	Fan	Sol	Comp	Fan	Sol	Comp	Fan
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Cooler 1 CU2	AU 2,3				2	45	46.0	46.0	46.0	46.0	Run	Off	Off	Off	1.5	0	0	148	0.0	0.0	28.3	1.5	1.5	29.8	
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Active Alarms

Site	Topic	Start Time	Text	Ack Time	User
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Historic Alarms

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Summary of *Benefits*



System gives early warning when coils are icing. User can start a defrost remotely.



System sends alarms before temps are impacted.



Temperature logs are automatically sent. Makes Food Safety documentation seamless.



3rd Party technicians are notified quicker. Emergency calls are reduced.



Lower fan time = quieter environment and less dehydration.



Remote system supervision =quicker responses and corrective actions.

Thank You!



800-900-0757



www.progressiveproduce.com



800-377-5439



www.nrminc.com



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Taylor Farms

Renewable & Alternative Energy
Strategy



Taylor Farms Overview

Mission Statement: To be North America's favorite maker of salads and healthy fresh foods.

About Us

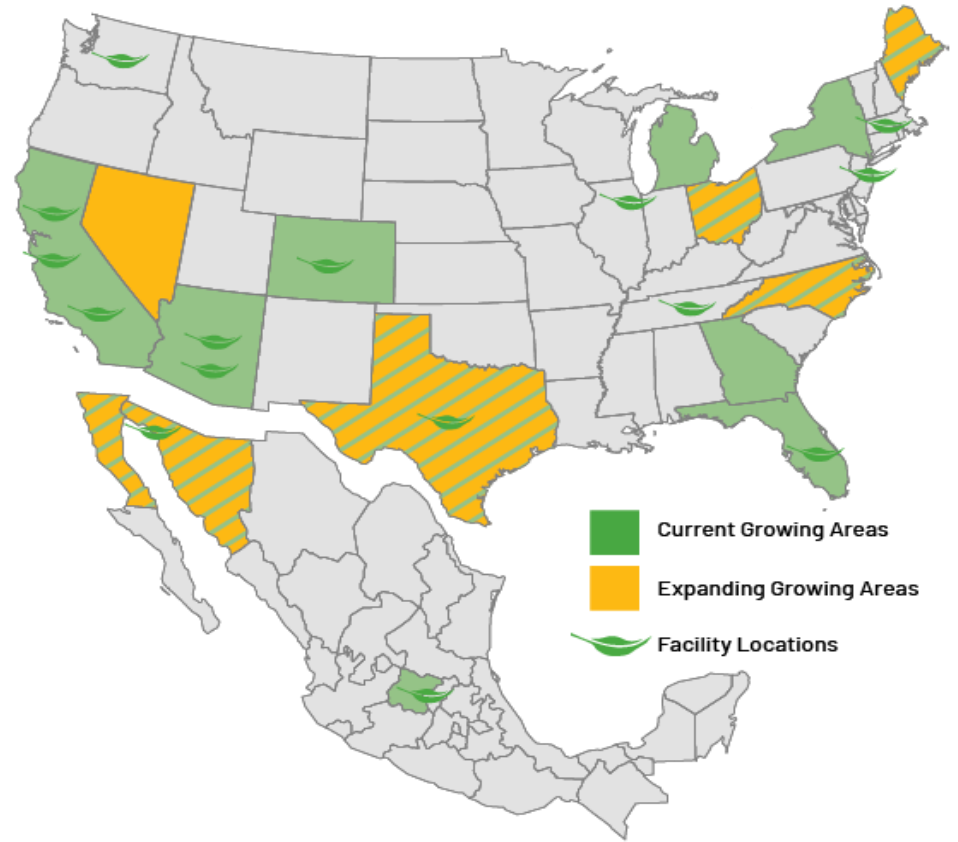
- Family owned, privately held company
- Founded in 1995, 17 operating companies
- Three Segments | Foodservice, Retail, and Deli
- Over 16,000 employees (3,000 Salinas, CA based)

Our Scale

- North America's largest supplier of value-added produce and ready-to-eat healthy fresh foods.
- Makers of 1 in 3 salads consumed in U.S.
- Produce 150+ million servings per week



Taylor Farms Locations & Growing Regions



Creating Healthy Lives

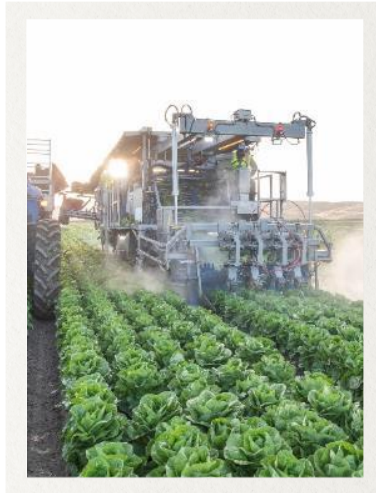
As North America's favorite maker of salads and healthy fresh foods, it is our greatest opportunity to create positive long-lasting social and environmental impact through products, processes and people.



Healthy Environment

Preserving a healthy world for future generations.

Resource Conservation
Energy Independence
Responsible Business Practices



Healthy Business

Leading change to be a force for good in the world.

Food Safety
Innovation
Workforce Development



Healthy Community

Helping people lead healthy and happy lives.

Youth Development
Health & Wellness
Food Accessibility

Turning our philosophy into practice...

- **Healthy Environment:** Sustainability and environmental conservation is an inherent part of Taylor Farms
 - Renewable and alternative energy projects serve as a way to put this into practice
- **Healthy Business:** Increasing operational costs led us to look at ways to fix variable costs
 - Investments in energy projects allowed us to hedge a portion of our operating costs
- **Healthy Community:** Protecting and investing in the communities that helped develop us into the company that we are today
 - Taylor Farms is dedicated to creating positive change and using our scale for good in the communities in which we live and operate



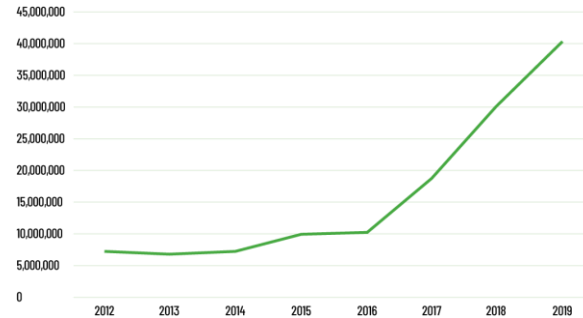
Energy Independence

Industry leader with 10 major sustainability projects including solar, wind, fuel cells, cogeneration, zero waste & water recycling.

Renewable & Alternative Energy

- *Energy Portfolio:* Solar (6), Wind Turbine, Fuel Cells & Cogeneration
- *Case Study for Energy Independence*
 - Our work on zero waste and energy independence comes together with three examples of facilities **more than 90% off the traditional utility grid** and **TRUE Platinum Zero Waste Certified**. Since 2018, our 3 California facilities have reduced over **175,000 MT of greenhouse gas emissions**. That's equivalent to taking over **37,000 cars off the road annually!**

Renewable & Alternative Energy Resources
kWh per Year



Energy output by our renewable and alternative energy assets reached an all-time high of 40,385,899 kWh in 2019. Over the lifetime of these systems, these assets have helped us to reduce our GHG emissions by 32,726 MTCO₂, that's equivalent to 7,070



Renewable vs Alternative Energy

- Renewable Energy

- Powered by sun or wind, does not generate any GHG emissions
- Intermittent power resource – depends on wind and sun availability
- Lower maintenance costs

- Alternative Energy

- Requires fuel source, typically natural gas – generating GHG emissions
- Firm power resource
- Higher maintenance costs

- Microgrid Development

- Mix of renewable and alternative energy resources to balance needs of operations and availability of natural resources. Storage can help to balance energy mix.



Economic Structures

- **Capital Purchase**
 - 4-6 year payback typical in higher cost energy markets
 - Lowest cost of energy
 - Locks in percent of energy cost for lifetime of equipment, typically 15-25 years
- **Power Purchase Agreement (PPA)**
 - No capital investment required
 - Lower cost of power than utility
 - Locks in percent of energy cost for 15-20 year term
- **Funding Opportunities**
 - Federal tax credits
 - Grants
 - Local & state incentives



Development Outside of California

Investment in energy projects in other regions in North America can appear more challenging on the surface, but you just have to get creative!

- Taylor Farms has made investments in Tennessee, Texas and Mexico
 - Looking into opportunities in Illinois, New Jersey and beyond...
- Leverage opportunities from utility companies such as lotteries and grants as well as local, state and federal incentives
- Get creative with design to keep costs low
 - Solar tubs and solar shade structures allow us to expand our usage of renewable energy while keeping equipment and installation costs low



Thank you.

Questions?

