America’s Supply Operations - Sustainability

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Sustainability Director America’s Operations

May 2025

Agenda

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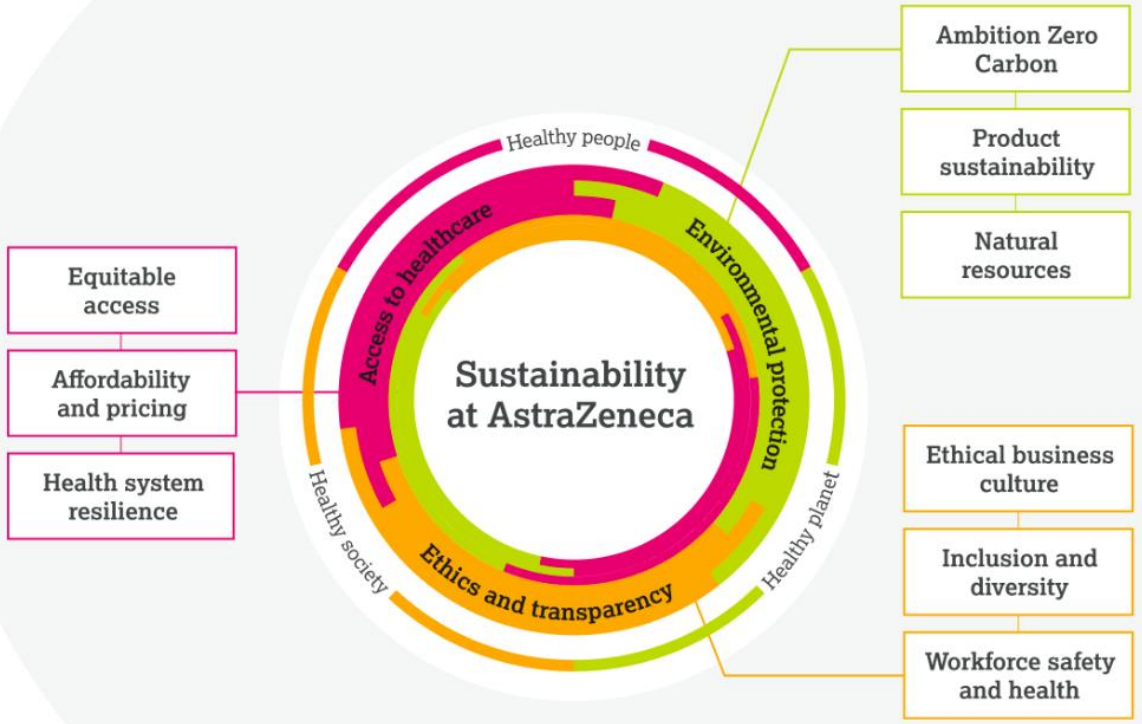
AstraZeneca's Key Sustainability Commitments

AstraZeneca

Building a sustainable future for people, society, and the planet

At AstraZeneca, we push the boundaries of science to solve some of the world's biggest health challenges. We've already shown just what we can do when we work together in new ways to overcome disease and disruption. And now we must increase our focus on an equally important challenge.

Sustainability is fundamental, not only to the health of the planet, but to the health of our society and people. We know it's not only global temperatures and sea levels that are rising, but rates of chronic disease and levels of health inequality too. We believe that science is key to helping unlock the answers to these challenges. So, we are looking at every part of our business to see how we can make a difference, ensuring sustainability is part of our DNA and embedded into everything we do.



Our commitment to Sustainability

Driving deep decarbonisation

- **77.5% GHG emissions reduction across sites and fleet** (vs 2015)
- **63% of fleet** now battery electric vehicles
- **Progressing transition to Next Generation Propellant** for respiratory medicines

Protecting and restoring nature

- **23% reduction in water use** (vs 2015)
- **40m+ trees planted** through AZ Forest, our $400m commitment to plant 200m trees across six continents by 2030

Investing in health equity and health systems resilience

- **Embedding health equity across the enterprise** incl. R&D, healthcare delivery and community investment
- **Partnering with 35 governments** and partners to strengthen health systems
- **90m people reached** through access to healthcare programs

Environmental protection

BV Denotes metric independently assured by Bureau Veritas

Focus area:
Ambition Zero Carbon

Target	Year	Progress	Status
Reduce absolute Scope 1 and 2 greenhouse gas (GHG) emissions by 98% from 2015 base year.	2026	Reduced Scope 1 and 2 GHG emissions by 77.5% since 2015, a reduction of 481,224 tonnes CO_2e.	On plan
100% electric road fleet where technically feasible.	2025	63% of our total road fleet are battery electric vehicles.	On plan
Reduce total energy consumption from sites by 10% from 2015.	2025	Total energy consumption from sites was 1,466,686 MWh, representing a 20% reduction from the 2015 baseline.	On plan
Double energy productivity at sites from 2015.	2025	Energy productivity at sites increased by 147% since 2015.	On plan
100% renewable electricity consumption from sites globally.	2025	97% of all electricity consumption from sites came from renewable sources in 2024.	On plan
Reduce absolute Scope 3 GHG emissions 50% by 2030 and 90% by 2045, from 2019 base year.	2030 & 2045	Total Scope 3 is 5,897,822 tonnes CO_2e and increased by 3% from the 2019 baseline and Scope 3 intensity reduced by 44%. We aim to increase the use of primary data and encourage our suppliers to set science-based targets (SBTs) to support future absolute emissions reductions.	On plan
Increase the share of primary activity data in Scope 3 reporting.	2025	59% of data used to calculate Scope 3 came from primary sources.	On plan
95% of our suppliers by spend covering purchased goods and services and capital goods, and 50% of our suppliers by spend covering upstream transportation and distribution and business travel, will have SBTs.	2025	Purchased goods and services and capital goods (categories 1 & 2): 46%; Upstream transportation and distribution (category 4): 30%; Business travel (category 6): 66%.	On plan
Launch a next-generation propellant (NGP) inhaler to treat asthma and Chronic Obstructive Pulmonary Disease (COPD) containing a near-zero global warming potential propellant.	2025	In 2024, project milestones achieved included completion of key registrational studies and the first regulatory filing submissions of our NGP with Breztri/Trixeo in COPD to the EU, UK and China with further filings anticipated in 2025.	On plan

Focus area:
Natural resources

Target	Year	Progress	Status
Reduce water use by 20% below the 2015 baseline.	2025	Water footprint was 3.44 million m^3, a 23% reduction from 2015.	On plan
Reduce waste by 10% below the 2015 baseline.	2025	Total waste was 26,285 tonnes, a 13% reduction from 2015.	On plan
Plant and maintain 200 million trees.	2030	Over 40 million trees were planted through AZ Forest since 2020.	On plan
All 12 key materials within our Raw Materials Sustainable Sourcing Framework have sustainability action plans in place.	2025	Developing Sustainable Sourcing frameworks with peers in Pharmaceutical Supply Chain Initiative (PSCI), progress made on forest-related materials.	On plan
All of our sites with labs operate My Green Labs.	2025	129 labs are My Green Lab certified; 91 at Green level.	On plan

Ambition Zero Carbon

We will follow the science and target absolute reductions in all our direct and indirect sources of greenhouse gas (GHG) emissions across our value chain (Scopes 1, 2 and 3), doing our part to limit the impacts of climate change while unlocking opportunities to deliver improved healthcare in a low carbon economy.

We follow a hierarchy to achieve our ambitions

Eliminate · Reduce · Substitute · Compensate

SBTi Verified

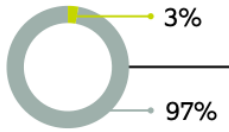
Scope 1 & 2 reduction targets are measured from a 2015 base year. Scope 3 reduction targets measured from 2019 base year

Scope 1 & 2

Emissions from our own operations (site and fleet)

Target baseline emissions (2015): 621 $ktCO_2e$

2015 baseline emissions ($ktCO_2e$)	
Fleet	93
Scope 1 energy	167
Scope 2 energy	322
F-gas & Others	39



Scope 3

All other indirect emissions that occur in our value chain

Target baseline emissions (2019): 5,681 $ktCO_2e$

2019 baseline emissions ($ktCO_2e$)	
Purchased goods & services and Capital goods	3,714
Fuel and energy-related	81
Upstream transportation/distribution	248
Waste treated off-site	19
Business travel	327
Upstream leased assets	33
Use of sold products	1,037
End of life treatment of sold products	16
Other: Employee commuting; Downstream transportation/ distribution; Downstream leased assets	205

Scope 1 & 2 Baseline

ACHIEVED

- 67.6% reduction in GHG since 2015
- 35% BEV; 75% green fleet (EV, hybrid or plug-in hybrid)
- $175m invested in natural resource efficiency projects since 2015
- 99% imported renewable electricity globally since 2021
- F-gas management activities continue
- 17.5% absolute reduction in total energy consumption from our 2015 baseline
- Energy productivity has more than doubled since 2015

2025 INITIATIVES

- EV 100 — Road fleet decarbonisation strategy delivered
- RE 100 — 100% renewable energy with over half from new-to-grid sources
- EP 100 — Energy consumption reduced by 10% and energy productivity doubled

Realise opportunities to substitute F-gases for low global warming potential (GWP) alternatives

Substitute natural gas consumption with renewable sources of heat and power

Reduce and capture F-gas emissions from production of respiratory medicines

2026 TARGET

Reduce absolute Scope 1 and 2 GHG emissions by 98% by 2026

Continue activities to eliminate future emissions sources from new assets and integrate acquisitions into Ambition Zero Carbon

Compensate for any residual Scope 1 and 2 emissions through high quality removals including Bioenergy with carbon capture and storage (BECCS)

Compensate for any residual Scope 1 and 2 emissions through high quality nature based solutions as part of our 2030 carbon negative value chain programme

2015 2019 2020 2021 2022 **2023** 2024 2025 2026 2027 2028 2029 2030 2045

Scope 3 Baseline

ACHIEVED

- SBTi verified targets to Net-Zero Corporate Standard
- 29% of supplier spend in purchased goods and services has SBTs
- Supplier engagement to measure and report GHG footprint, and access renewable electricity through the Energize programme
- Freight transition from air to sea and rail is 73% by tonne.km
- Business air travel emissions 52% below baseline
- Next-generation inhaler project milestones achieved including further Phase III investment decision
- Product Sustainability Index scoring complete for 13 launched brands
- Share of primary data in Scope 3 reporting increased to 52%

2025 TARGETS

SBTs covering

- 95% of suppliers by spend, covering purchased good and services and capital goods
- 50% of suppliers by spend covering transportation, distribution and business travel
- Launch our first next-generation inhaler with near-zero GWP propellants by 2025

Transition to next-generation inhalers across our portfolio

2030 TARGET*

Reduce absolute Scope 3 GHG emissions by 50% by 2030

- 46% GHG reduction in purchased goods and services
- 46% GHG reduction in upstream transportation and business travel
- 80% GHG reduction in fuel and energy-related activities, upstream leased assets
- Footprint from patient use of sold products (e.g. inhalers) reduced by 95%; end of life treatment of sold products reduced by 46%

2045 TARGETS*

Reduce absolute Scope 3 GHG emissions by 90% by 2045 from a 2019 base year

Science-based net zero

Continue to decarbonise the full value chain of our business in line with the 1.5C pathway

Invest in nature-based removals

Remove more CO_2e from the atmosphere than we emit from 2030, to be carbon negative

*Chart displays actual data for 2019-2023 GHG emissions and the target levels for 2030 and 2045. Current forecasting indicates (i) 2023 is unlikely to be the emissions peak, (ii) reductions are unlikely to be linear. Note that Scope 3 Category 9 (<5% of total emissions) is excluded from the scope of the 2030 target.

3

America’s Supply Operations Sites

US – Redwood City

The Redwood City site has established state-of-the-art commercial scale spray drying expertise. Currently the site manufactures Porous Particles (functional excipient), which are the basis for some of our respiratory medicines, as well as drug substance. The Redwood City site also supports clinical development of several new potential clinical candidates.

80+
Employees

2
Commercial medicines made

5
Clinical medicines made

Statistics and medicines correct as of 30 September 2021

US – Coppell

The Coppell site
is a facility dedicated to the sole global production and supply of drug substance for a cardio-renal medicine for patients worldwide. The site - which includes manufacturing, laboratory, warehousing, utilities and administrative space - is located 20 miles northwest of Dallas, Texas. Growth in global demand and investment in site capacity will continue beyond 2025, making it one of the fastest growing supply sites in the AstraZeneca network.

220
Employees

1
Commercial medicine made

1
Clinical medicine made

Statistics and medicines correct as of 30 September 2021

US – Mount Vernon

Mount Vernon is the largest manufacturing site in the Americas region. It was established in 1972 as a Bristol Myers Squibb site and became part of the AstraZeneca Network in 2015. Mount Vernon is the 'digital lighthouse' for the Americas.

The site formulates and packs oral solid dose tablets, capsules, powders and liquids – supporting over 60 markets.

Mount Vernon is the only site that uses Bohle active coating and bilayer compression.

700 Employees

5.8bn tablets produced annually

9 Commercial medicines made

49m units packed annually

500+ Commercial SKUs packed

Statistics and medicines correct as of 31 March 2024

US – Newark

The Newark site opened in 1971 as part of Stuart Pharmaceuticals. Today the site consists of formulation, packing (bottle/blisters/sachets), testing, and distribution. Newark is one of our two main distribution centers for patients in the US.

Following the announcing of our ground-breaking partnership with Vanguard Renewables to provide renewable natural gas (RNG) to all of our U.S. research and manufacturing sites by 2026, our site in Newark became the first in the U.S. to begin purchasing RNG for powering the campus.

340
Employees

4
Commercial medicines made

26
Commercial medicines packed

Statistics and medicines correct as of 31 December 2023

Mexico – Lomas Verdes

Lomas Verdes supplies to Mexico and countries in the Latin American region (CAMCAR, Ecuador, Colombia, Perú, Uruguay).

140
Employees

7
Commercial medicines made

Statistics and medicines correct as of 25 July 2023

Puerto Rico – Canovanas

Canovanas has the capability to formulate oral solid dosage products (roller compactor, wet granulation, direct compression, capsule filling) for use in our commercial medicines which are globally distributed.

150
Employees

2
Commercial medicines made

Statistics and medicines correct as of 30 September 2021

Brazil – Cotia

Cotia is the largest AstraZeneca packaging site in Latin America, packing for domestic and Latin American markets.

With more than 180 employees, the site packs around 26 million packs annually.

Cotia receives around 9 million units imported as finished goods and provides in country quality testing.

198
Employees

9
Medicines packed locally

26m
units packed annually

Statistics and medicines correct as of 30 Sept 2023

4

Project Highlights

Lokelma Supply Site – Landfill Waste Reduction

BEFORE

1 kg Lokelma → 9 kg liquid waste

2019

9 kg Liquid Silica to Landfill Waste

In 2024, this would have been 8MM kg to landfill

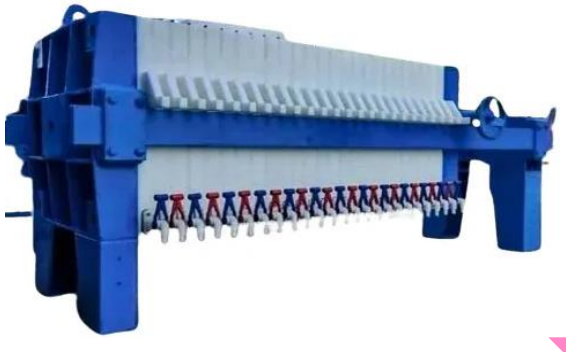
For Every 1 kg of Lokelma: We Generated 9 kg of Liquid Silica Waste!

AFTER

1 kg Lokelma → 9 kg liquid waste

Current

On Site Waste Water Treatment Plant / Filter Press



1 kg Solid Silica Cake to Concrete Plant – Repurposed in Cement

8 kg of Water Back to Public Water Usage

For Every 1 kg of Lokelma: We Now Generate 1 kg of Silica Cake and 8 kg of Water

Equates to 70% Reduction of AstraZeneca Land Fill Waste

Coppell Silica Waste Journey

OBEX Making Concrete Better

EPD Environmental Product Declaration

Sustainable Admixture Product

- Repurpose over 10 million gallons of high silica liquid (2025-2029)
- Save over 700k gallons of phosphoric acid (2025-2029)
- Achieve complete circularity as sustainable product

High Silica Liquid Product

- Intelligent Concrete lab testing in 2023
- Field case studies in 2024
- Sell high silica liquid as product to concrete admixture industry

INTELLIGENT CONCRETE®

342k kg of Lokelma

Liquid silica vacuum truck removal

- Produced about 2687 tonnes of waste in 2021
- 96% of site total waste

825k kg of Lokelma

Filter Press Waste Building

- Completed in 2022
- 1150 tonnes produced in 2023
- 57% reduction from 2021

Silica Cake Repurpose in Concrete

- Averaged 112 tonnes per month
- 15 tonnes in September
- Avoided 120 tonnes (96% circularity rate)

900k kg of Lokelma

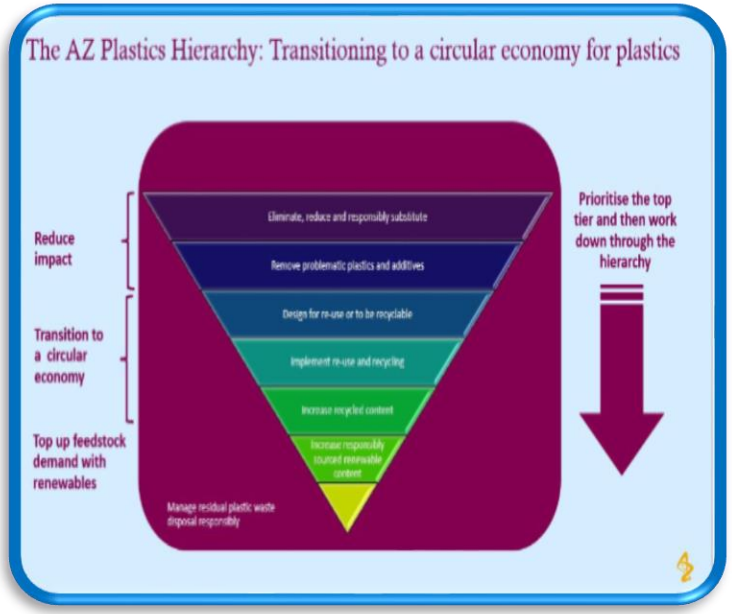
Incineration Reduction: Fiber Drum Reuse

Current: Largest fiber drums sent for reuse; smaller are incinerated

2025 Opportunity: Smaller drums sent for reuse

Trash to Treasure

Incineration Reduction: Flexible Plastic Recycling

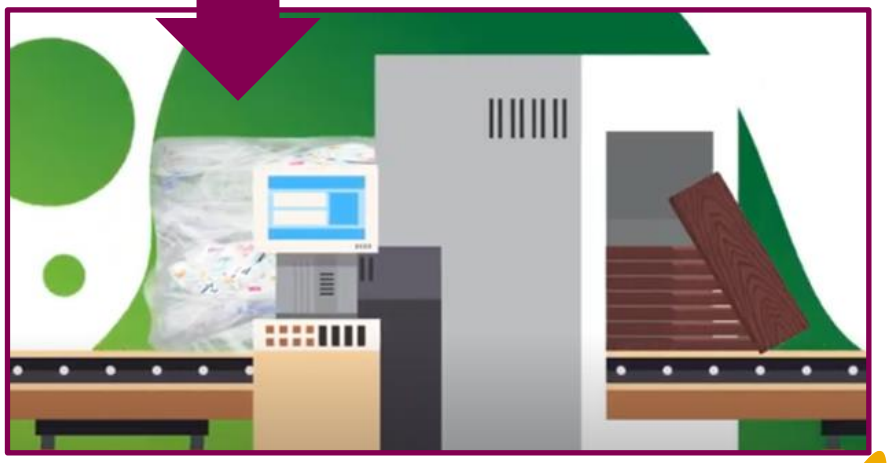


Recycle baled flexible plastic waste (shrink wrap, bottle bags, pallet covers, etc.).

Reduces Incineration Waste by 33 tonnes

Savings: $9,000 reduced waste treatment per year

Scope 3 GHG emissions reduction



Plastic Bales can be transformed into Trex decking

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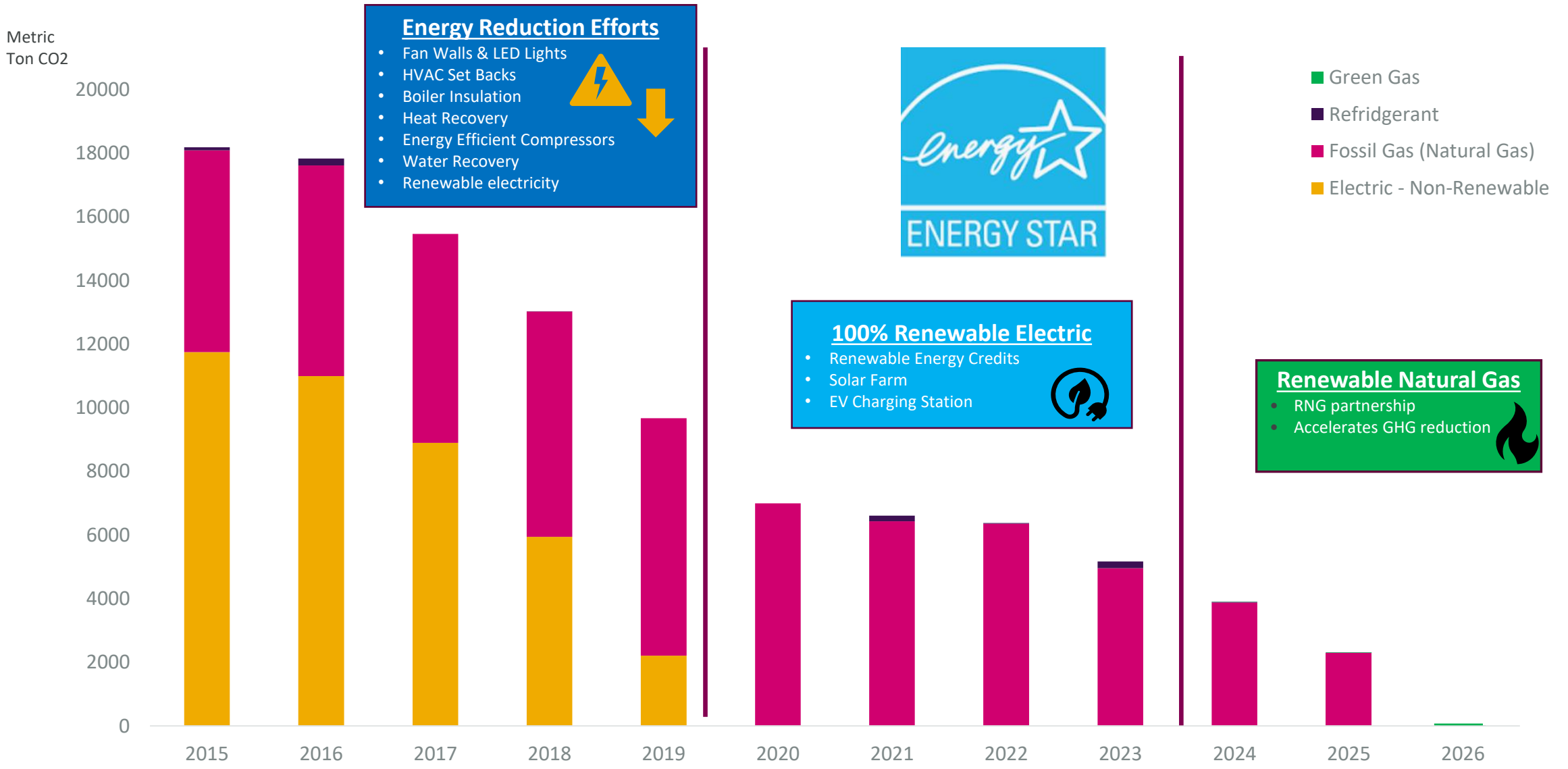
AZ Newark Progress to Ambition Zero Carbon



<2% GHG: F-Gas and Misc.
- Leak Detection for Refrigeration
- Low GHG Refrigerant Substitution
- Emergency Diesel Generator Usage

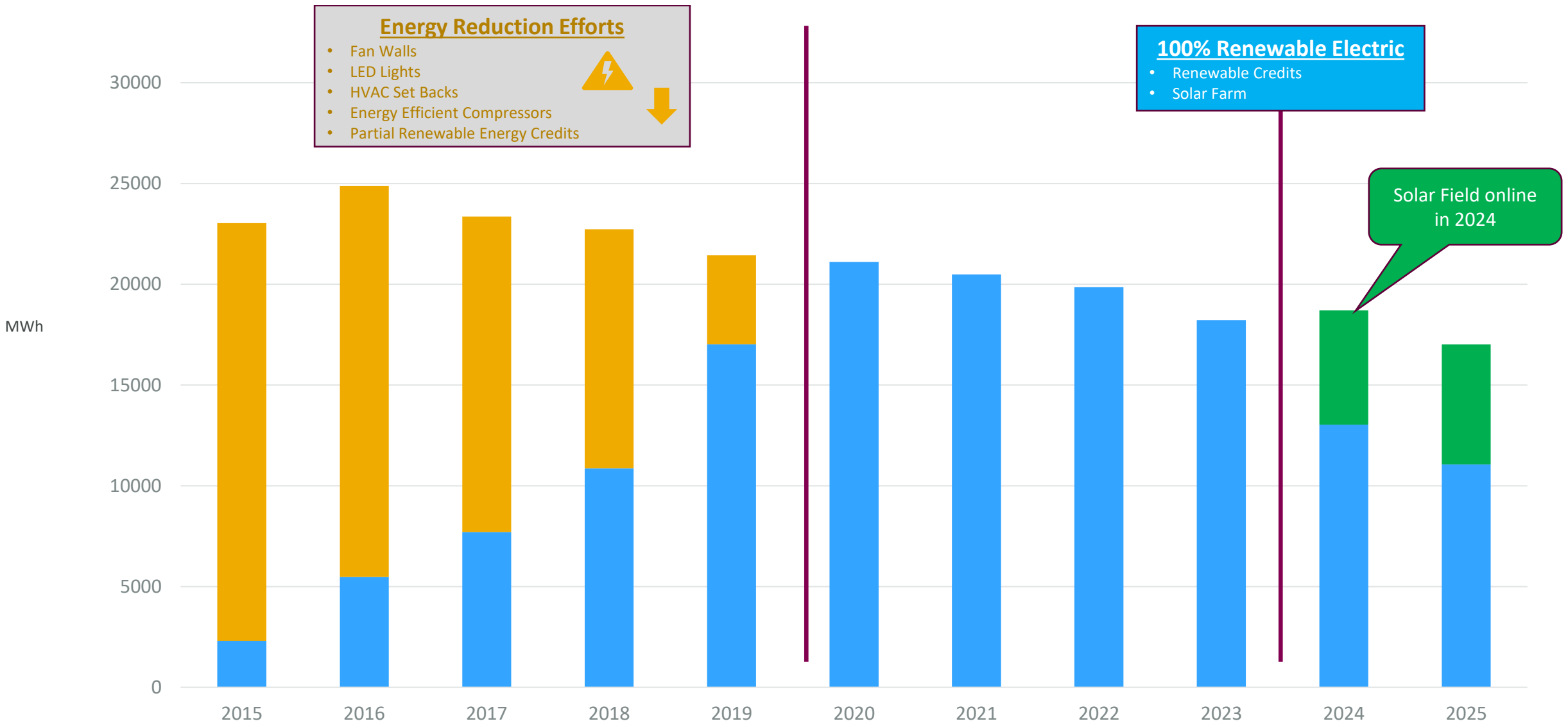
Newark Solar PV System

AstraZeneca

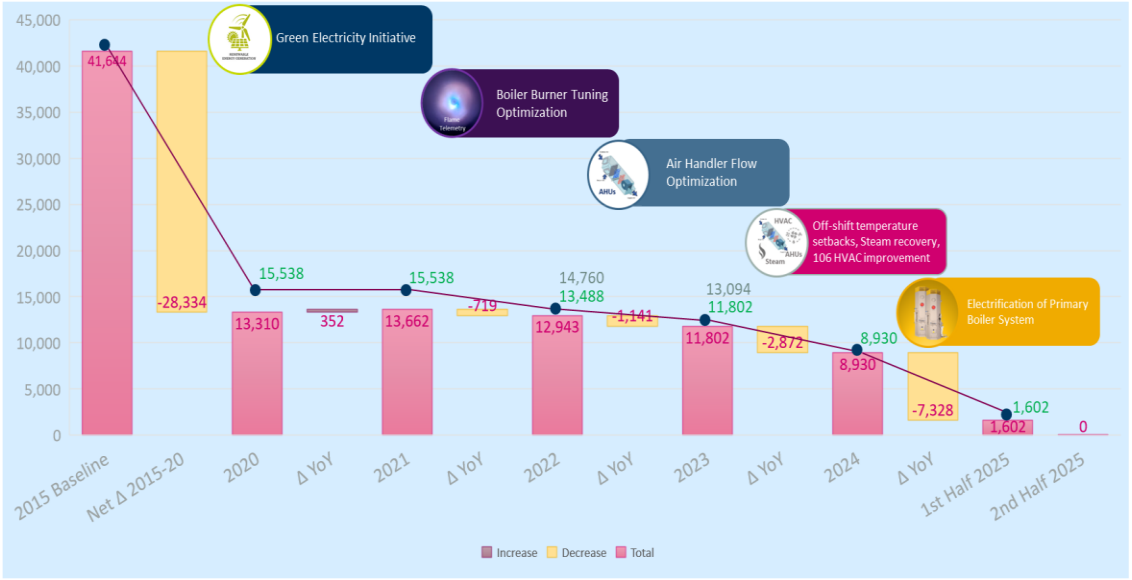
The **Newark Solar PV System** is a ground mount solar photovoltaic (PV) installation for onsite renewable energy.

- System Startup **January 30, 2024**
- **4.2 MW DC / 3.25 MW AC** Generation
- **7,800 JA Solar 535-watt** Solar Panels
- **26** SMA Sunny HighPower Inverters
- Solar Field Coverage **11 acres**
- Solar providing **5,800,000 kWh's** per year
- **30% of Site Usage** (Average Yearly Site Usage **19,550,000**)

Transition to Efficient and Renewable Technology

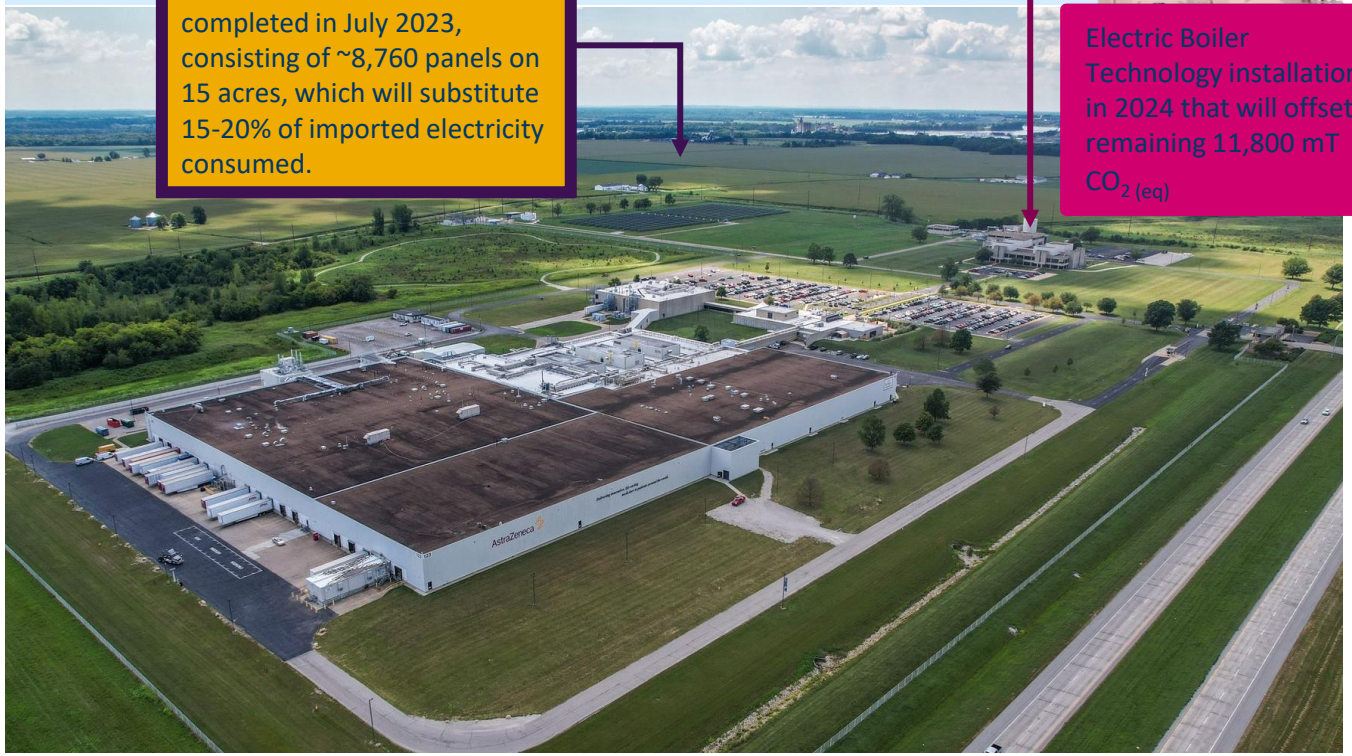


Our Glidepath to Zero Carbon



3 MW Solar Farm installation completed in July 2023, consisting of ~8,760 panels on 15 acres, which will substitute 15-20% of imported electricity consumed.

Electric Boiler Technology installation in 2024 that will offset remaining 11,800 mT $CO_{2\ (eq)}$

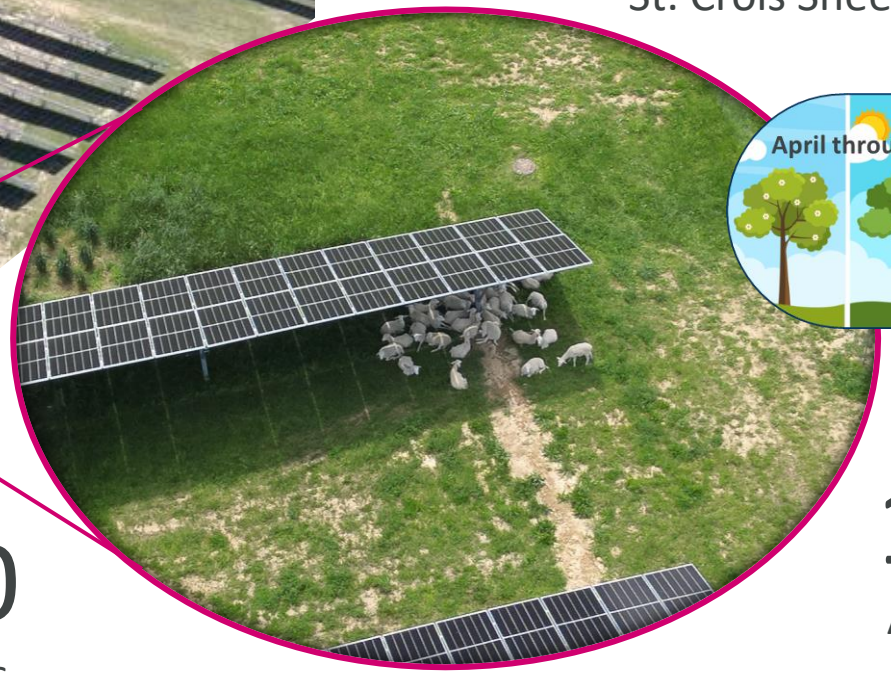


YEAR IMPLEMENTED	BRIEF PROJECT DESCRIPTION	PROJECTED UTILITY SAVINGS
2021	**2 MW Solar Field Installation** Install 6000 fixed axis ground mounted solar panels on approximately 7-acres of vacant land on southwest side of facility. The system will interconnect with the utility grid and offset imported power. The solar will tie into the main 12,470 VAC Substation.	3,150 MWh
2023	**1 MW Solar Field Installation** Install additional fixed axis ground mounted solar panels on vacant land adjacent to current 2MW Solar Field. The system will interconnect with the utility grid and offset imported power. The solar will tie into the main 12,470 VAC Substation.	1,575 MWh
2024	**0.5 MW Solar Field Installation** Install additional fixed axis ground mounted solar panels on vacant land adjacent to current 2MW Solar Field. The system will interconnect with the utility grid and offset imported power. The solar will tie into the main 12,470 VAC Substation.	787 MWh

SOLAR GRAZING OVERVIEW

42

St. Crois Sheep



8,760

Solar Panels

15

Acres

ElectroCell: Reduces Evaporative Cooling

Installed Nov 2024

Clean evaporator water to reduce total blowdown water waste.

New technology

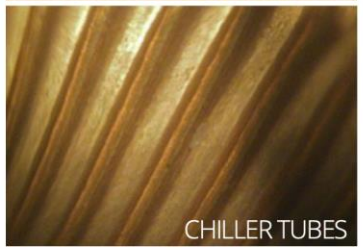
Water Savings: >1,320,000 gal, 6% of total consumption

> 2 Olympic swimming pools!

Payout time: 5.6 years

Electrocell Cooling Tower Water Reduction

"ElectroCell Systems continuous side-stream micro-cleansing of condenser open loops <500-tons, and chilled water/hot water closed loops"



FEATURES & BENEFITS

-Save cooling tower make-up water
-Save chiller energy
-Reduce maintenance
-Auto Bleed/Purge Cycle
-Enhance chemical program
-Reduce risk of bio growth
-Replaces traditional side-stream filters
-Increase equipment life cycles
-Remove 98% suspended solids down to 1 micron
-Increase thermal heat transfer
-ElectroCell technology is not a filter that requires media changes and backwash cycles
-ElectroCell's patented technology is a side-stream particle precipitator
-Two-year warranty on all parts

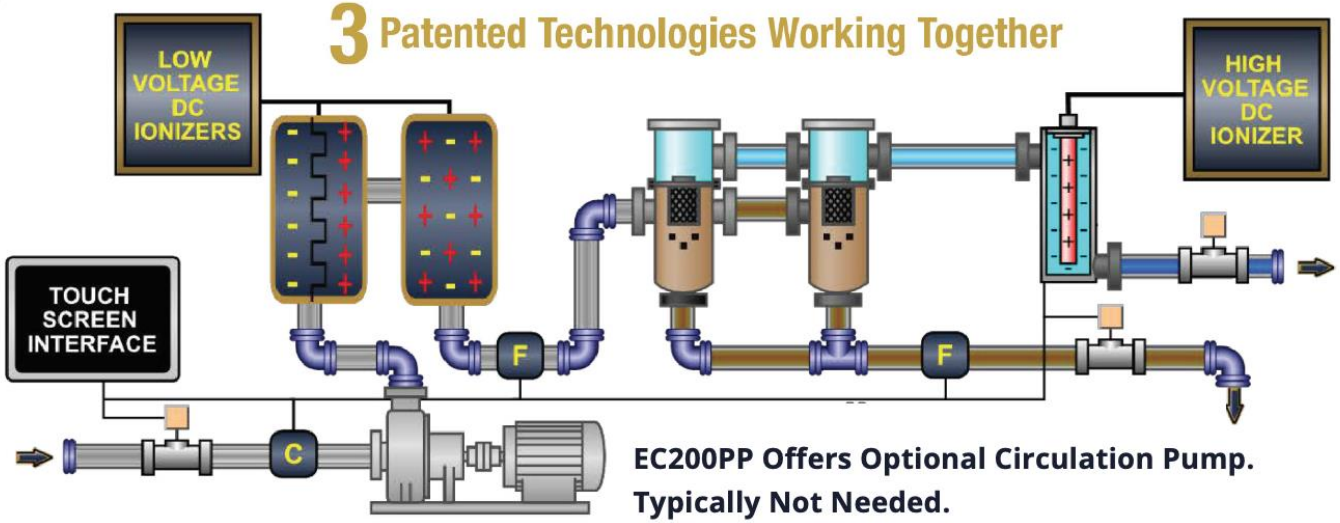
"20+ years experience in cleaning HVAC circulating loops, providing the cleanest possible water against the cleanest possible surfaces"

LESS SUSPENED SOLIDS DOWN TO ONE MICRON | LESS WATER USE | LESS MAINTENANCE

ELECTROCELL SYSTEMS
Address: 3320 NAZARETH ROAD
EASTON , PA 18045
800.949.3445
WWW.ELECTROCELLSYSTEMS.COM

SYSTEM

3 Patented Technologies Working Together



EC200PP Offers Optional Circulation Pump. Typically Not Needed.

Fan Wall Upgrades

6 New Fan Walls Installed

Universal, standardized, custom wall controller

160 tCO2e GHG reduced Per Year

Equivalent to taking **35 cars** off the road!

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Improving Boiler Exhaust Heat Recovery

Upgrading existing heat recovery system in the Powerhouse using heat pump technology to recover previously unusable, low grade waste heat.

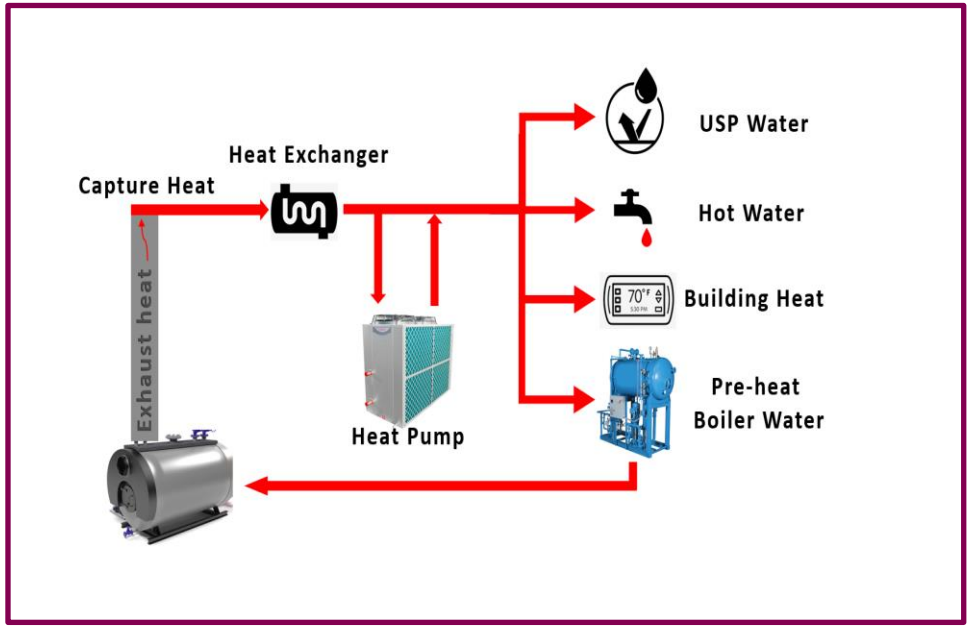
Exhaust gas recovery reduces Natural Gas consumption

electricity in = 4x electricity out in return

ROI: 5.7 yrs

GHGs Reduction of 1,433 tCO2e/yr (40% of 2024 goal)

Equivalent to taking **over 310 cars** off the road each year!

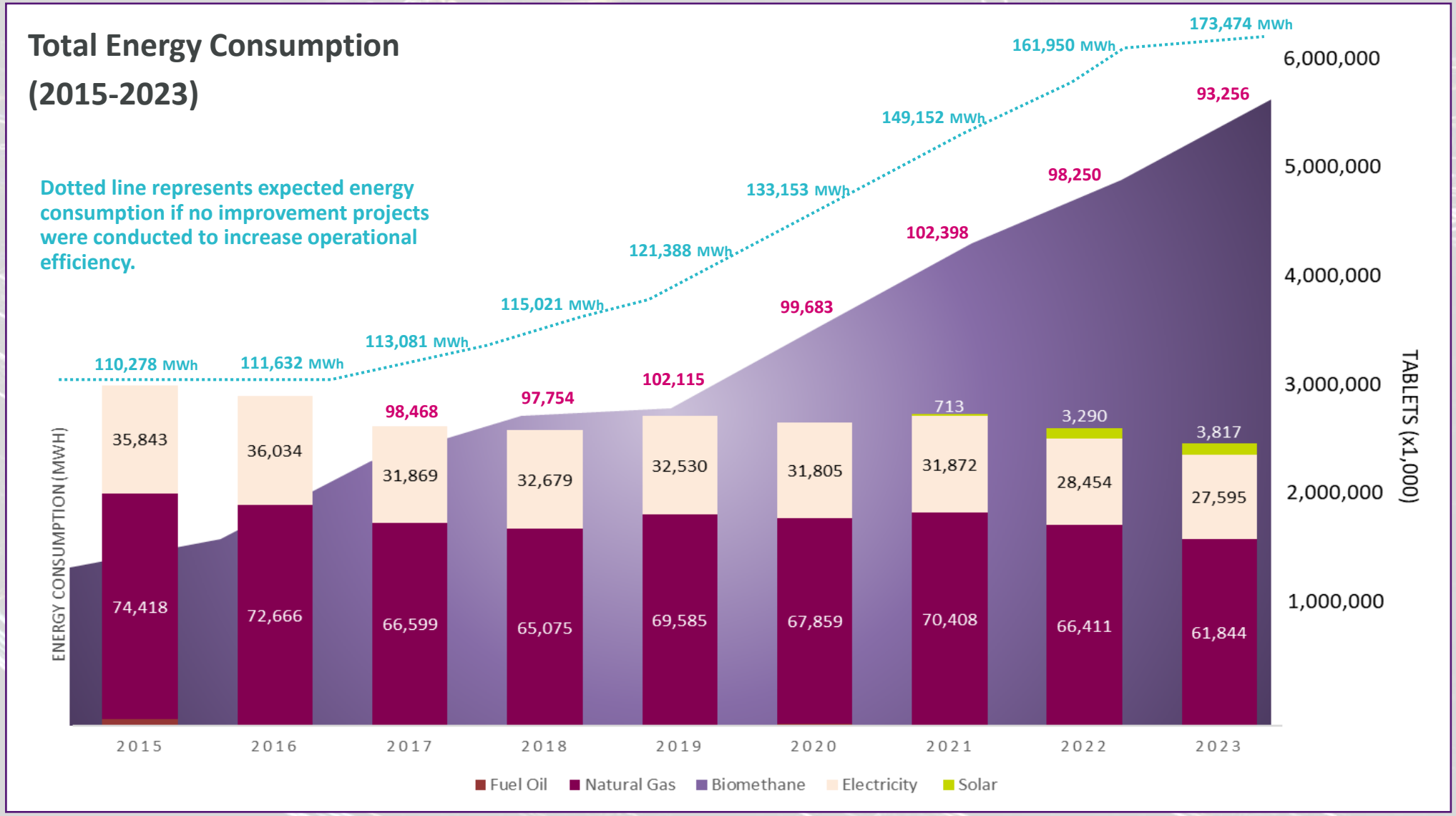


August 2024

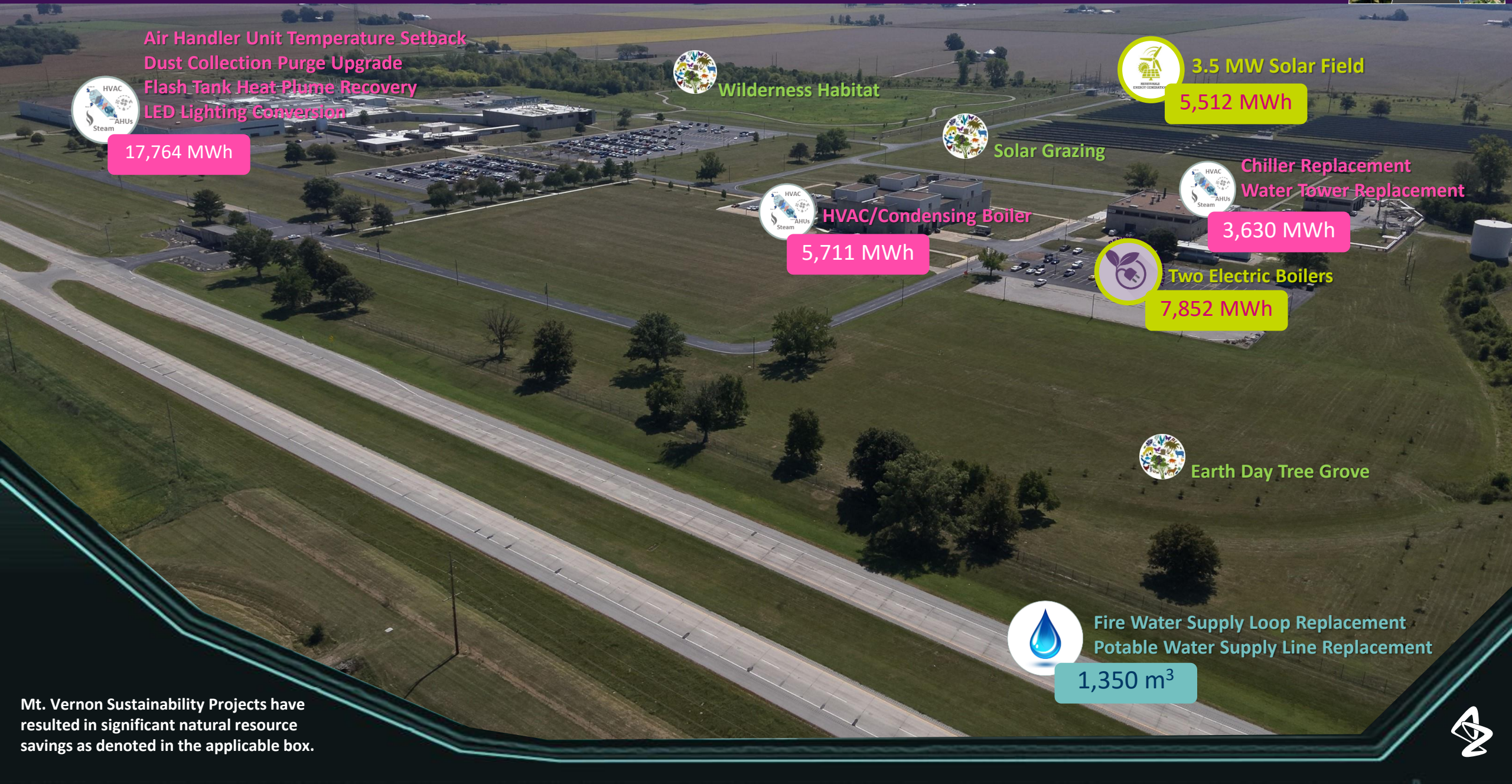
Operational

August 2025

Mt. Vernon's Total Energy Consumption Comparisons



“Moving the Business Forward”



Mt. Vernon Sustainability Projects have resulted in significant natural resource savings as denoted in the applicable box.

Reference Slides

How RNG gets to sites

Visual Representation of RNG to US Sites

VANGUARD RENEWABLES

Constellation.

AZ purchases biomethane and its Environmental Attribute Certificates (EACs) from Vanguard at the injection location

AZ immediately sells the gas to Constellation (index pricing) but retains the EAC.

Dinner Bell Farm: WI
Ramp begins 6/15/25

Pipeline quality biomethane

Oakmulgee Farm: VA
Ramp begins ~7/1/25

Pipeline quality biomethane

Peterson Farm: WI Ramp begins ~8/1/25

Pipeline quality biomethane

Gas interconnector

Constellation sells the gas-only into the US natural gas market

Gas Supplied to sites

Sites consume fossil gas supplied by various entities including but not limited to:

Constellation.

CenterPoint. Energy

nrg

PG&E

Dominion Energy

Fossil gas + EAC = RNG

2025: AZ retires Vanguard EAC (total will be slightly under 60% target); cost allocated to sites based on consumption of fossil natural gas

2026 and beyond: AZ retires Vanguard EAC and allocates costs to site to match 100% of fossil natural gas consumption at each site

Note: Full path transportation (where capacity along all segments of the pipeline between injection and consumption is paid) is not currently feasible for any site due to directional flow of gas in pipeline segments or ability to secure capacity. If more proximate farms are made available by mutual agreement with Vanguard AND pipeline capacity can be secured at that time, full path transportation will be sought from Constellation or other gas transporter/marketer as long as it is not in violation of FERC buy-sell transaction prohibition