

Proposed Turquoise Trail Solar Project



Neighborhood Meeting

December 19th, 2022

Presented by Kat Kelly, Matt Gordon, Joshua Mayer, and Holly Keifer

5 Mwac Community Solar Project, PV Only

Santa Fe County, New Mexico

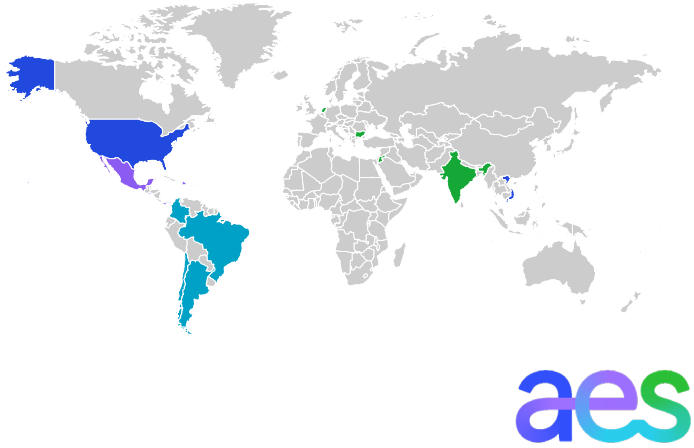




Presentation Agenda

- AES, Project Team, and Stakeholders
- New Mexico Community Solar Program Overview
- What is Community Solar?
- Project Overview
 - Site Layout
 - Studies and Reports
 - Community Benefits
- Construction, Operations & Decommissioning
- Q & A

The AES Corporation



31,459

Gross MW in operation*

* 20,183 proportional MW (gross MW multiplied by AES' equity ownership percentage).

\$11.1 billion

Total 2021 revenues

6,909 MW

Renewable generation under construction or with signed PPAs

\$34.6 billion

Total assets owned & managed

4 Continents

14 Countries

4 Market-oriented strategic business units

6 Utility companies

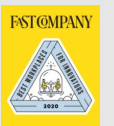
2.6 million

Customers served

8,450 people

Our global workforce

Recognized for our commitment to sustainability



Project Team and Stakeholders

Santa Fe County	Planning Staff Planning Commission Board of County Commissioners Community Members
AES Clean Energy	Kat Kelly, Lead Developer Matt Gordon, Permitting Lead Sneha Peri, Engineering Holly Keifer, Stakeholder Relations
SWCA (Environmental Consultant)	Kim Parker, Project Consultant
Landowners	Rancho Viejo Limited Partnership

New Mexico Community Solar Program

- Senate Bill 84
 - New Mexico Community Solar Act passed on 3/18/2021
 - 200 MWac Program split between three utilities – PNM, Xcel/SPS, and El Paso Electric
 - Each project is limited to 5 Mwac and will connect to the interconnecting utilities existing distribution network.
 - The program is aimed at providing savings for all NM residents, with a specific allocation towards low-income residents.
- InClima - Program Administrator appointed by the PRC
 - InClima will be scoring bids based on several non-price-based factors.
- RFP Bids Due 1/31/2023
- RFP Results Expected April 2023

How Community Solar Works

How does it work?

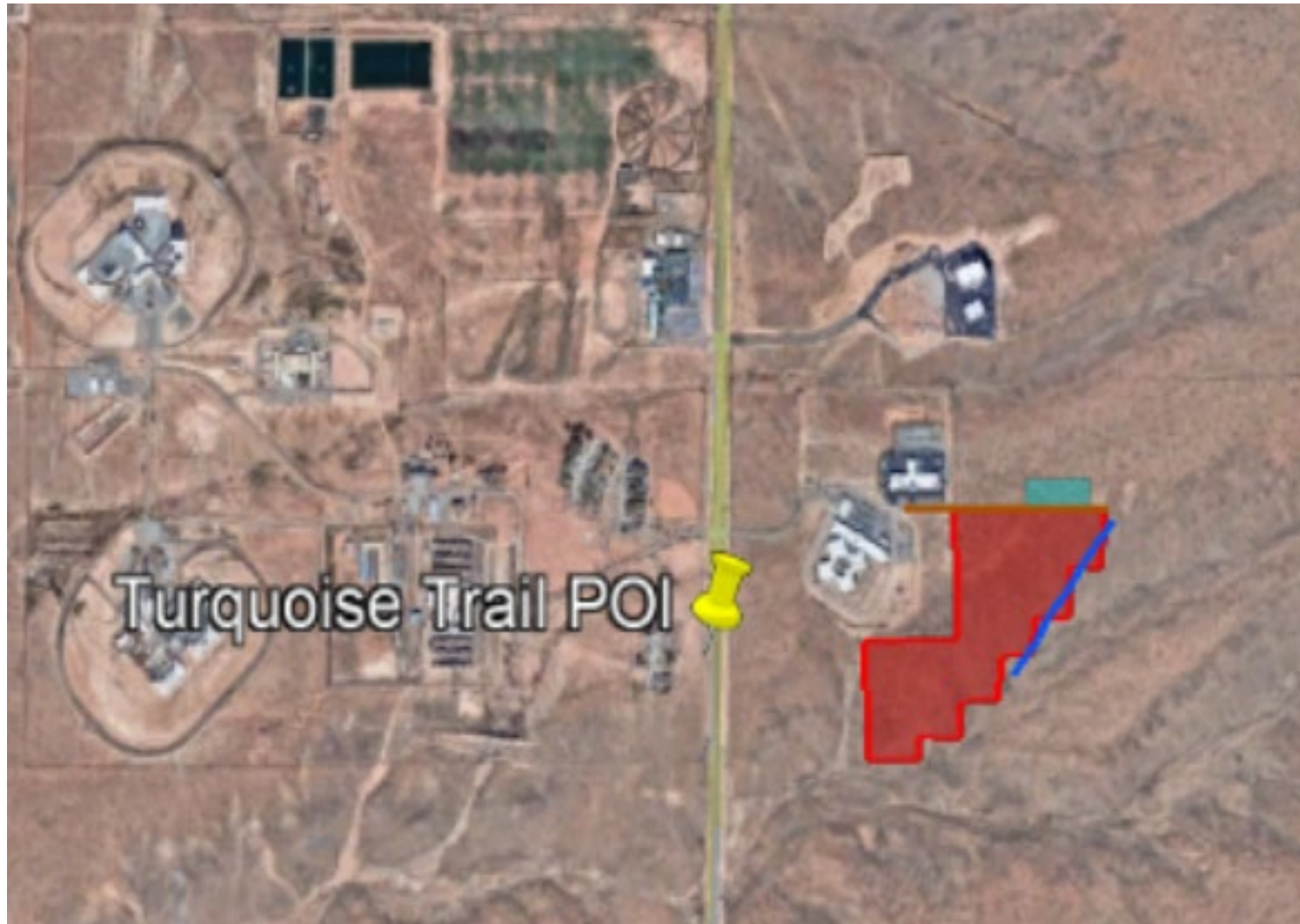


Source: Coalition for Community Solar Access. Photo provided by Nexamp

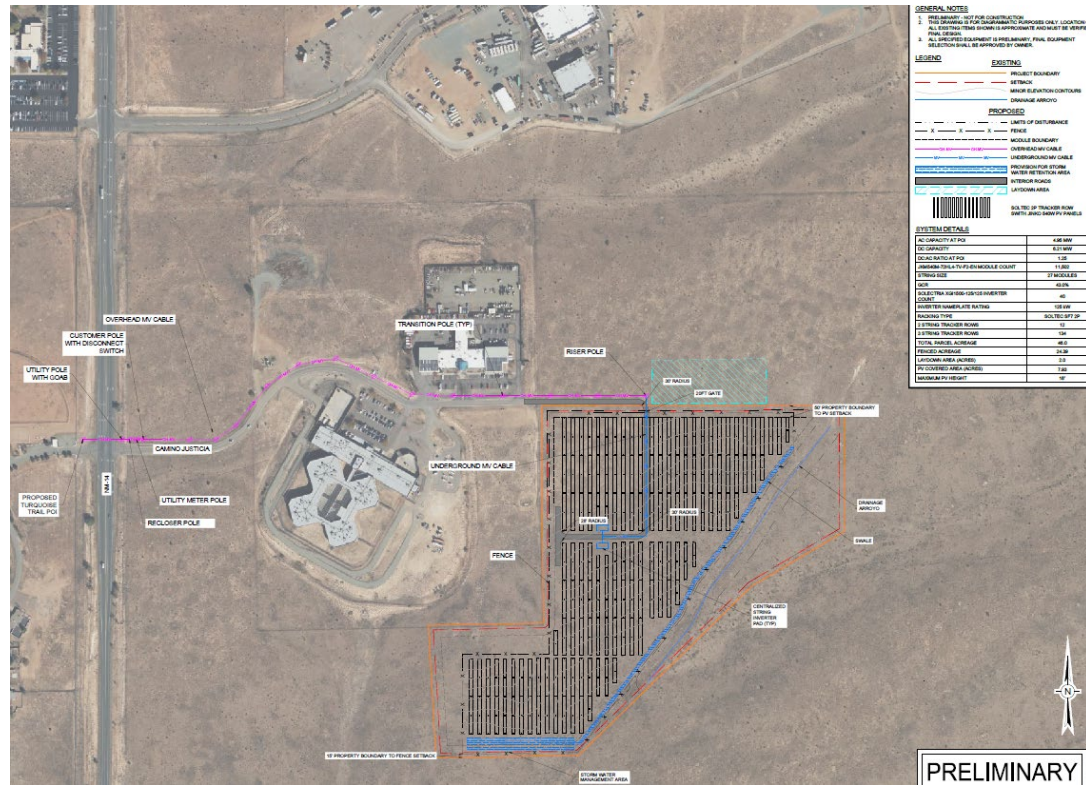
Project Location – Vicinity Map



Project Location – Vicinity Map 2



Project Overview



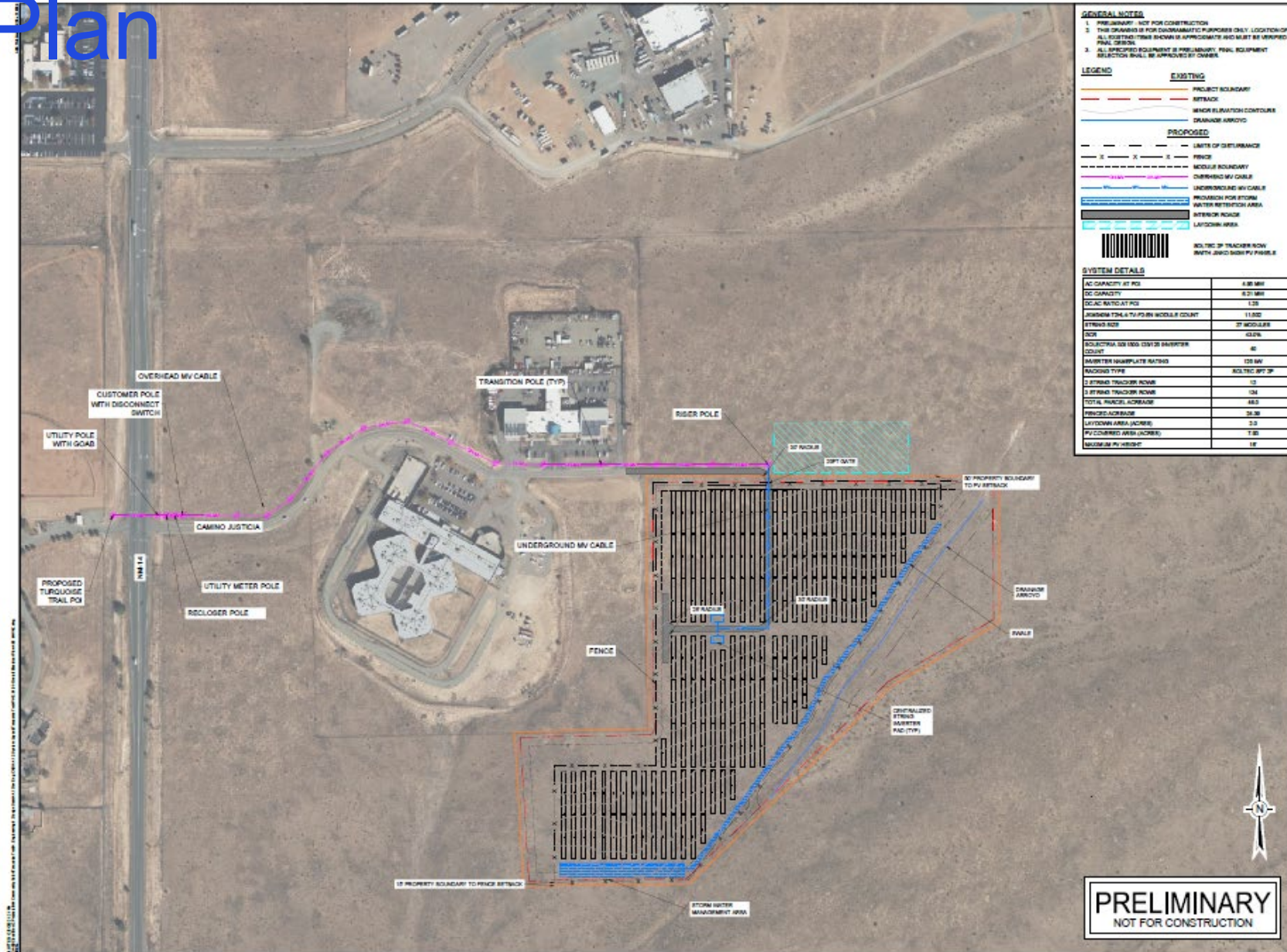
Technical Specifications

- 5 MW AC solar photovoltaic output
- Interconnected to existing PNM distribution network.
- Buildable area – 25-27 acres

Community Solar Project - PNM

- Project will serve PNM distribution system
- To be entered into the New Mexico Community Solar Program in January 2023
- 25–30-year Agreement
- Est. Sept 2024 Construction Operation Date **(SDP)**
- Santa Fe County Site Development Plan
 - Review and approval process
- Zoning: Mixed Use (MU)
- Construction, Operations & Decommissioning

Site Plan



GENERAL NOTES

- PRELIMINARY - NOT FOR CONSTRUCTION
- THIS DRAWING IS FOR DIAGNOSTIC PURPOSES ONLY. LOCATION OF ALL ELECTRICAL ITEMS SHOWN IS APPROXIMATE AND MUST BE VERIFIED IN FINAL DESIGN.
- ALL ELECTRICAL EQUIPMENT IS PRELIMINARY. FINAL EQUIPMENT SELECTION SHALL BE APPROVED BY CH2M HILL.

LEGEND

EXISTING	PROPOSED
PROJECT BOUNDARY	LIMITS OF DISTURBANCE
SETBACK	FENCE
MINOR ELEVATION CONTOUR	MODULE BOUNDARY
DRAINAGE ARROYO	OVERHEAD MV CABLE
	UNDERGROUND MV CABLE
	PROVISION FOR STORM WATER RETENTION AREA
	INTERIOR FENCE
	LANDSCAPE AREA
	LOCATION OF TRACKER ROW WITH 20'0" MIN PV SETBACK

SYSTEM DETAILS

AC CAPACITY AT PDI	4.95 MW
DC CAPACITY	8.21 MW
DC/AC RATIO AT PDI	1.25
NUMBER TMLA TYPICAL MODULE COUNT	11,000
STRINGS PER TMLA	37 MODULES
DCV	420V
INVERTER USE (DC/AC INVERTER COUNT)	40
INVERTER NAMEPLATE RATING	205 kW
RACKING TYPE	ROTTIC 870 3P
2 STRAND TRACKER ROWS	13
3 STRAND TRACKER ROWS	134
TOTAL RACKING AREAS	483
FENCE ACRES	28.36
LANDSCAPE AREA ACRES	2.3
PV COVERED AREA ACRES	1.35
MAXIMUM PV HEIGHT	15'

aes
2000 ROAD, 10000 ROAD, SANTA FE, NM 87507
(505) 479-3000

REVISIONS:

NO.	DATE	DESCRIPTION
0	08/20/2023	CONCEPTUAL LAYOUT
1	08/20/2023	UPDATED PROJECT AREA
2	08/20/2023	UPDATED AC CAPACITY

PROJECT TITLE:
TURQUOISE TRAIL

PROJECT LOCATION:
SANTA FE, NM
SANTA FE COUNTY
(35.561590°
-106.046356°)

SHEET TITLE & DESCRIPTION:
OVERALL ELECTRICAL LAYOUT

4.95 MWAC

PREP: S. SHRESTHA
CHK: Z. ELLERBY
APP: J. BRINEY
DATE: 08/20/2023

SCALE: AS SHOWN
1" = 150'

IDENT: PV-E.01.01

SHEET NO.: 2

PRELIMINARY
NOT FOR CONSTRUCTION

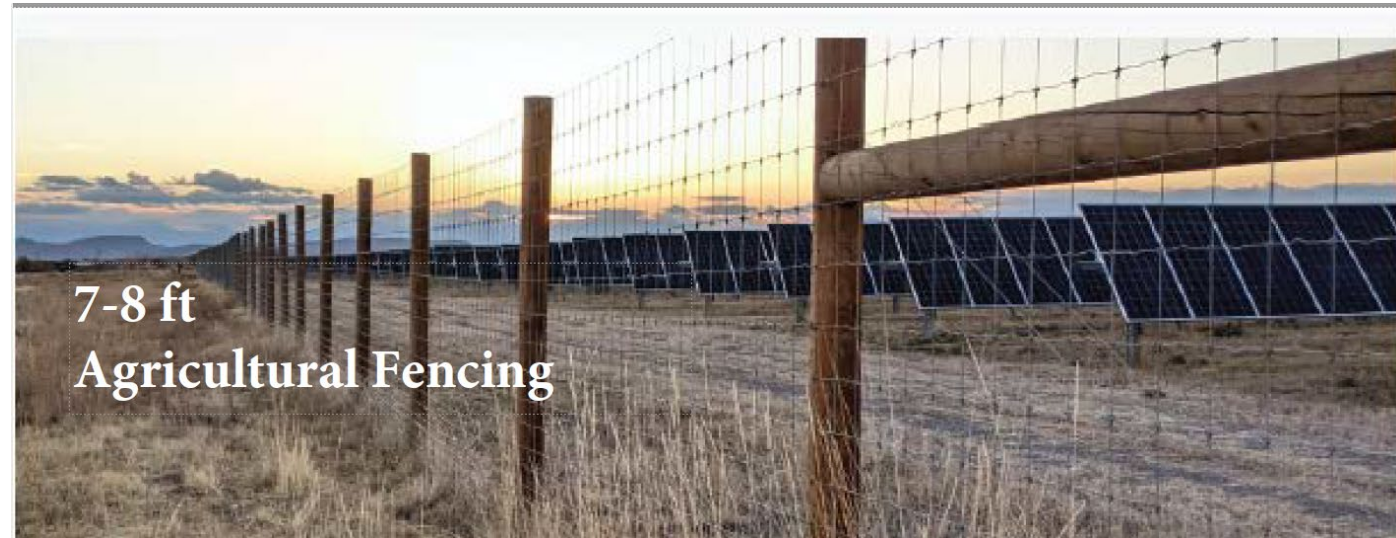


Project Overview - Solar Photovoltaic Modules

Structure Dimensions

- Approximately 15' max height
- 7' clearance at central rack and at flat tilt or stow mode.
- Approximately 30' aisles between modules
- Agricultural Fencing – 7-8' high

All solar panels used by AES pass the EPA's Toxic Characteristic Leaching Procedure (TCLP) test and are classified as non-hazardous and are not regulated as toxic materials.



Environmental Diligence

Completed

- **Biological Survey Report:** March 2022
 - No Threatened or Endangered Species
- **Phase I Environmental Site Assessment:** October 2022
 - No Recognized Environmental Conditions (RECs) identified
- **Cultural Resources Study:** March 2022 / **Pedestrian Survey:** December 2022
 - No archaeological sites or historical properties identified
- **FAA Study:** April 2022
 - Notice criteria filing completed. No additional permitting required
- **Site Development Plan:** Refreshed November 2022
 - To be submitted to Santa Fe County for review/approval
- **Drainage Calculations:** October 2022
 - To support appropriate sizing of detention basin in Site Development Plan

In Progress

- Site Threshold Analysis

Construction, Operations & Decommissioning

Construction Start / timeline – Anticipated Fall of 2024 , 6-8 months

Ground Treatment / Natural Vegetation - Solar racking system does not require leveling the land or installing complex foundations. Installation method - either pile or screw driven poles, depending on soil compactness.

Revegetation - establishment of native vegetation/certified weed free seed mix

Dust Mitigation - Water from trucked-in resources for dust mitigation. Project shall comply with all applicable County, State and Federal standards and regulations

Traffic - Construction period - 1-10 max deliveries per day - construction crew traffic

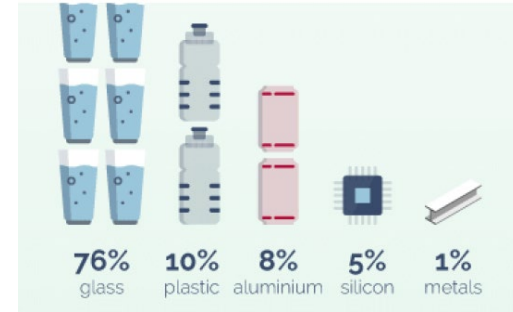
- During operation - Remote operated with limited site traffic - Est. >1 trip per month

Decommissioning and Restoration - End of project useful life

- Decommissioning & Restoration Plan & Estimate
 - Removal of all installed equipment
 - Dismantle, reuse where possible, recycle
 - Site restoration – return to pre-construction condition
- Decommissioning and restoration guaranty

Project Overview - Recycling

PV Modules



- 90% of module material by weight is glass and aluminum.⁽¹⁾
- 95% of the materials in PV modules are recyclable with 2022 technologies.⁽¹⁾
- Emerging market, with advancements in recycling technology expected.
- AES is in discussions with Equitable Solar Solutions for panel reuse / recycling upon decommissioning of all projects

1 - <https://www.energy.gov/sites/default/files/2022-03/Solar-Energy-Technologies-Office-PV-End-of-Life-Action-Plan.pdf>

Turquoise Trail Community Solar

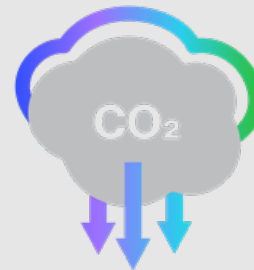
Benefits: Environmental



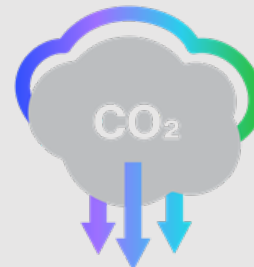
Assist Santa Fe County in reaching its Net-Zero greenhouse gas emissions goal by 2050



Renewable power for equivalent of approximately **1,500** homes' annual electricity use



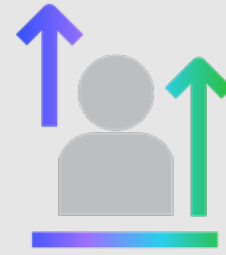
Reduces approximately **24,000** tons of carbon dioxide emissions annually



Reduced carbon dioxide emissions are equivalent to **2,000,000** gallons of gas

Turquoise Trail Community Solar

Benefits: Community



~30 construction jobs

Contributions to local services

(accommodation, restaurants, professional services)

Local Socio-economic partnerships

Local and statewide community partnerships

- Donated subscriptions, curriculum, and site visits to local schools.
- Investment in programs that serve local tribes, groups, and workforce development.



Subscribers will save on their energy bills.

Workforce Development in New Mexico

- AES has partnered with Solar Energy International (SEI), a leading solar training educational non-profit organization
- SEI provides workforce development services in New Mexico
- 15 AES-funded scholarships for New Mexico residents
- Includes:
 - enrollment in SEI's North America Board of Certified Energy Practitioners (NABCEP) PV Associates online- self-paced training package
 - PVOL101 and PVOL203 classes
 - NABCEP PV Associates test
- AES and Santa Fe Community College are in conversations to partner on a workforce development training program for solar installation and low-voltage electrical training, with the possibility of a spring semester launch of the program.
- AES and SFCC are committed to supporting the new workforce that will be created through these renewable energy projects and programs.

Interested in being a **subscriber**?



These projects are highly anticipated and will fill up quickly, if you're interested in being a subscriber add your name to the waitlist today!

Sign up for the waitlist here:

<https://forms.office.com/r/Ywn434vGdJ>

*Signing up for the waitlist is not a commitment to a subscription and only adds your name to the top of the list for offerings. The waitlist does not guarantee an offering for a subscription.





To create a better future,
we need to accelerate a
100% carbon-free
energy grid

For a truly 100% carbon-free grid, load
and carbon-free generation must be
matched on an hourly basis

Questions

Thank you

Email: Santafecommunitysolar@aes.com

Phone: 505-353-3393

Webpage pending