

The Interconnection to Improving Air Quality

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Objectives



- YDSP Environmental Division
- Defining the interconnection to improving air quality “using the tree analogy”
- Our focus for improving air quality; Energy Star and Tire Amnesty Day

Ysleta del Sur Pueblo Environmental Division



Introducing the YDSP Environmental Division



Currently work with the Indian General Assistance Program.
An EPA Federal grant



Work with storm water pollution prevention



Environmental clearances for federal agencies involved with
construction on pueblo land



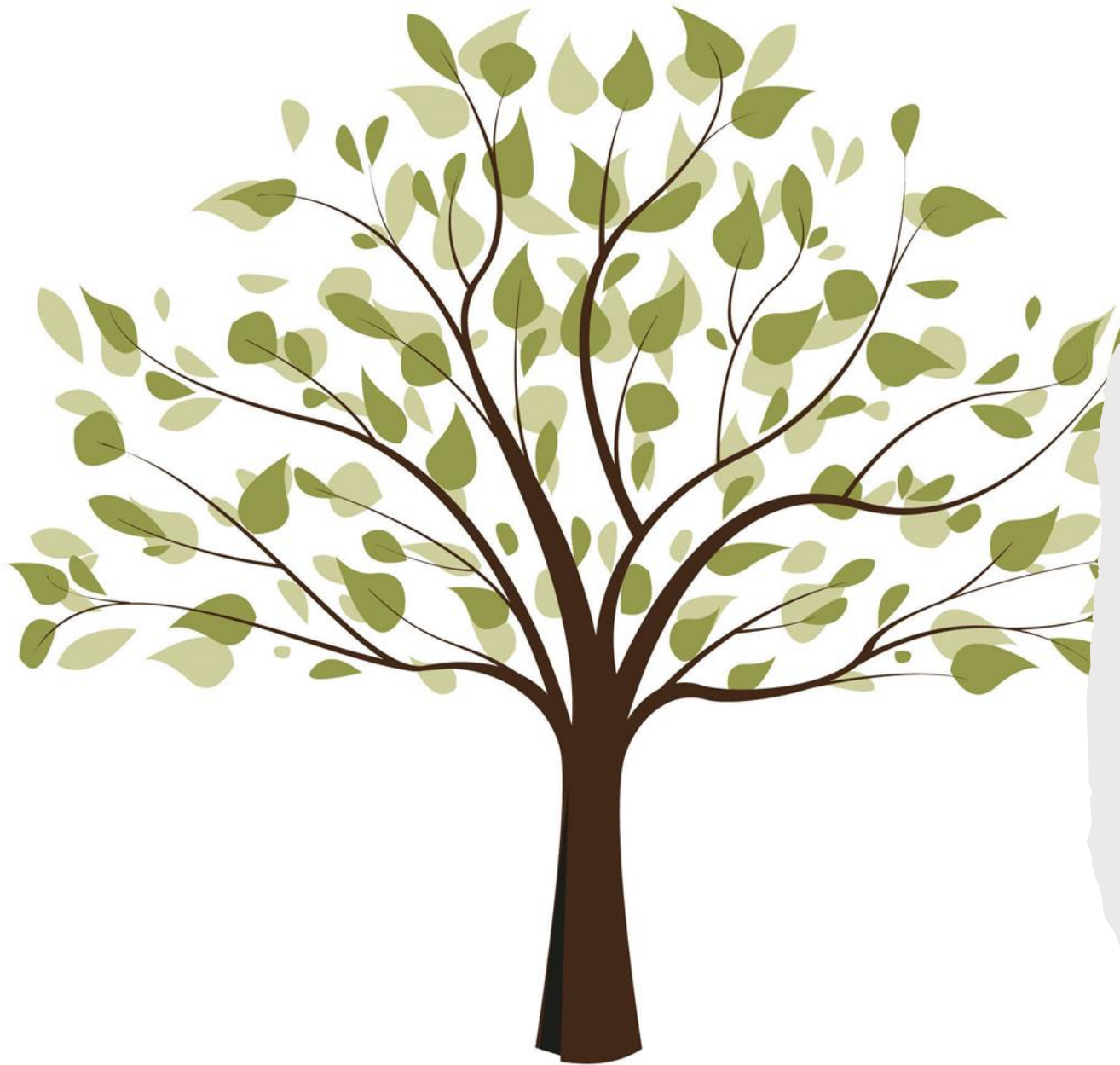
Energy star and benchmarking energy data for YDSP Pueblo
building



Recycling waste tires and oil wherever needed on Pueblo
land



Networking with other Pueblos, involved with Programs and
committee meetings



What is the Interconnection to Improving Air Quality (lets think of a tree to describe the concept of interconnection)

- We have the major portion, the trunk; this is where major projects are implemented, for example diesel emission replacement with electrical components, controlling air pollution with advanced technology (smelter, oil refineries, etc.)
- Think of the leaves as a branched-out community such as ours and many others that contribute to efforts in improving air quality; although at a micro scale they have the potential to prevent large scale wildfires that could result in catastrophic events and minimize our carbon footprint.
- Within the analogy of the tree, we are all included in this system whether big or small and rooted in the same concept and efforts of improving air quality.

Our Focus for Improving Air Quality

We Work with Energy Star Portfolio Manager



Recycling Tires and Other Waste







How are We Using Energy Star to Improve Air Quality

When we work on reducing fossil fuel energy, we decrease green house gas emissions

Benchmark energy performance for YDSP buildings using the energy star portfolio manager

- Energy data is uploaded into the website for each building and calculates metrics such as how well the building is performing in comparison to other buildings nation wide; the percentage of fuel that is used on site or at the source (raw fuel); energy cost and the total green house gas emissions intensity.
- Determine what buildings are underperforming, targets efficiency improvements, identify best practices from efficient buildings, set investment priorities, decide where to allocate capital energy efficiency, verify efforts are resulting in reduced energy, share energy performance.

[Change time period](#)

Metrics Summary			
Metric 	Aug 2022 (Other) 	Jul 2023 (Energy Current) 	Change 
ENERGY STAR Score (1-100)	83	87	4.00 (4.80%)
Source EUI (kBtu/ft ²)	105.6	98.0	-7.60 (-7.20%)
Site EUI (kBtu/ft ²)	37.7	35.0	-2.70 (-7.20%)
Energy Cost (\$)	7,615.68	6,277.14	-1,338.54 (-17.60%)
Total (Location-Based) GHG Emissions Intensity (kgCO ₂ e/ft ²)	4.1	3.8	-0.30 (-7.30%)

Example of Using Energy Star to Identify an Underperforming Building

The Recreation and Wellness Bldg. 24,500 sq ft.

Sept 1, 2019 – Aug 31, 2020

Aug 1, 2022 – Jul 31, 2023

Metrics Summary Recreation and Wellness Bldg.			
Metric	Aug 2020 (Other)	Jul 2023 (Energy Current)	Change
ENERGY STAR Score (1-100)	Not Available	Not Available	N/A
Source EUI (kBtu/ft ²)	147.6	153.5	5.90 (4.00%)
Site EUI (kBtu/ft ²)	52.7	54.8	2.10 (4.00%)
Energy Cost (\$)	33,982.49	40,108.37	6125.88 (18.00%)
Total (Location-Based) GHG Emissions Intensity (kgCO ₂ e/ft ²)	6.0	6.0	0.00 (0.00%)
Water Use (All Water Sources) (kgal)	Not Available	Not Available	N/A
Total Waste (Disposed and Diverted) (Tons)	Not Available	Not Available	N/A

Pandemic Started in March 2020

Sep 1, 2020 – Aug 31, 2021

Aug 1, 2022 – Jul 31, 2023

Metrics Summary Recreation and Wellness Bldg.			
Metric	Aug 2021 (Other)	Jul 2023 (Energy Current)	Change
ENERGY STAR Score (1-100)	Not Available	Not Available	N/A
Source EUI (kBtu/ft ²)	123.9	153.5	29.60 (23.90%)
Site EUI (kBtu/ft ²)	44.3	54.8	10.50 (23.70%)
Energy Cost (\$)	31,089.60	40,108.37	9018.77 (29.00%)
Total (Location-Based) GHG Emissions Intensity (kgCO ₂ e/ft ²)	4.8	6.0	1.20 (25.00%)
Water Use (All Water Sources) (kgal)	Not Available	Not Available	N/A
Total Waste (Disposed and Diverted) (Tons)	Not Available	Not Available	N/A

Normal Business Hours Resumed March 26, 2021

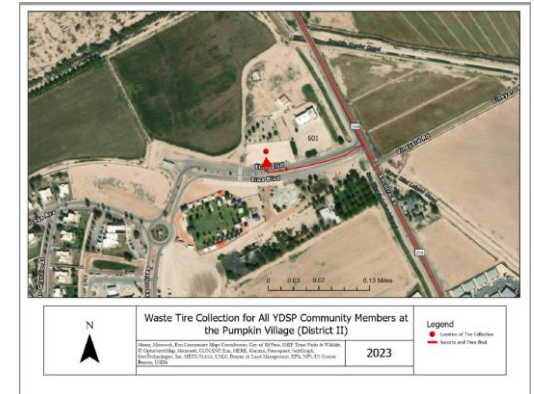
Energy Efficiency and Verifying Results

- Example of capital energy efficiency and verifying the results for the Recreation and Wellness Center
- We have adopted energy efficiency components for some of the other YDSP buildings and HUD homes.

Metrics Summary			
Metric 	Aug 2022 (Other) 	Jul 2023 (Energy Current) 	Change 
ENERGY STAR Score (1-100)	Not Available	Not Available	N/A
Source EUI (kBtu/ft ²)	155.1	153.5	-1.60 (-1.00%)
Site EUI (kBtu/ft ²)	55.4	54.8	-0.60 (-1.10%)
Energy Cost (\$)	46,632.67	40,108.37	-6524.30 (-14.00%)
Total (Location-Based) GHG Emissions Intensity (kgCO ₂ e/ft ²)	6.1	6.0	-0.10 (-1.60%)
Water Use (All Water Sources) (kgal)	Not Available	Not Available	N/A
Total Waste (Disposed and Diverted) (Tons)	Not Available	Not Available	N/A

Other Focus for Improving Air Quality is Tire Amnesty Day

- Tire collection is important for our community to prevent fire hazards and prevent catastrophic events
- Tire Amnesty Day is held at least twice a year.
- Tres Pesetas has been our service provider for the past 3 years in my tenure.
- We have collected at least 300 tires of all types within the past 3 years.
- Tres Pesetas has a cradle to cradle approach.
 - They receive on avg. 14,000 tires per week.
 - Tires are shredded into tire derived fuel TDF producing a 4”-6” tire chip.
 - Inventory is sold to cement company in Mexico.
 - TDF is used as fuel and considered very clean due to the “super filters” used in the process.
 - <https://nepis.epa.gov/Exe/ZyPURL.cgi?Dockey=P1004TZU.txt>



2023 Waste Tire Collection

Collection Guidelines

YDSP Tribal members

YDSP Enrollment Card Required

Rims acceptable on passenger and truck tires only

NO Farm, Tractor, Lawnmower, Forklift Tires

FRIDAY, July 14
8 A.M. TO 12 P.M., Drop off at District II located at parking lot NEXT to 601 Tiwa Blvd. See map for details

RECYCLING TIRES IS EASY. IT'S FREE!

IT'S GOOD FOR THE COMMUNITY

CONTACT: BARBARA VALDIVESO(315) 859-9136 EXT. 532A / BVALDIVESO@YDSP-NM.IGOV

Thank you!

Questions?

