

## Arizona Impact

### IIJA, IRA & Other Legislation: Clean Energy Grants Allocated to the Project Level

May 3, 2023

The following climate, clean energy and electric vehicle projects with a direct impact and connection to Arizona are funded under the Infrastructure Investment and Jobs Act (Bipartisan Infrastructure Law, BIL), the Inflation Reduction Act or other legislation since the passage of the BIL.

#### Building Resilient Infrastructure and Communities

The following Arizona projects led by the Arizona Division of Emergency Management were selected for further review by FEMA:

- \$75,199.60 for landslide mapping along the US Route 60 corridor, Florence Junction to Show Low.
- \$196,174.21 for assessing post-wildfire flow hazards for mitigation in Gila County

[Building Resilient Infrastructure and Communities FY 2021 Subapplication and Selection Status | FEMA.gov](#)

#### Bus & Bus Facilities: Low or No Emission

The City of Phoenix Public Transit Department was awarded \$16,362,600 to buy hydrogen fuel cell buses, battery electric buses and charging equipment as well as worker training as part of the initial phase of the city's zero-emission transition plan. This project will improve service reliability and air quality throughout the city.

The City of Tucson (Sun Tran & Sun Van) was awarded \$12,112,400 to buy battery electric buses and charging equipment for fixed-route and regional paratransit services, connecting Tucson to the Sabino Canyon Recreation Area of the Coronado National Forest. The project will reduce emissions and improve air quality in Tucson metro region.

[FY22 FTA Bus and Low- and No-Emission Grant Awards | FTA \(dot.gov\)](#)

#### Clean School Bus Program

Eight Arizona school districts were awarded rebates totaling \$11.4 million toward the procurement of 52 clean buses. The following districts were awarded rebates:

- Cedar Unified District was awarded \$395,000 towards the purchase 1 bus from Nuvve Holding Corp.
- Isaac Elementary District was awarded \$2,370,000 towards the purchase of 6 buses from Canyon State Bus Sales, Inc.
- Littlefield Unified District was awarded \$1,185,000 towards the purchase of 3 buses.
- Mesa Unified District received \$750,000 towards the acquisition of 25 buses.
- Mohave Valley Elementary District received \$2,765,000 in rebates towards the purchase of 7 buses.

- Paloma School District was awarded \$395,000 in rebates towards the procurement of 1 bus.
- Red Mesa Unified District received \$1,185,000 for the purchase of 3 buses from Nuvve Holding Corp.
- Somerton Elementary District was awarded \$2,370,000 in rebates for the acquisition of 6 buses from Canyon State Bus Sales, Inc.

[List-of-CSB-Rebate-FY2022-Selectees-Final.pdf \(epa.gov\)](#)

### **Clean Transportation Manufacturing Loans/ Advanced Technology Vehicles Manufacturing Loan Program**

The effort to satisfy a vast demand for lithium for electric vehicle batteries moved one step forward with a \$375 million loan from the Department of Energy to Li-Cycle, a battery recycling company, to build a lithium-ion battery recovery plant near Rochester, New York. The Rochester facility is expected to support the battery needs of about 203,000 electric vehicles per year. The discarded lithium batteries that are its source material will be collected and readied for transport to New York at sites including Gilbert, Ariz., Tuscaloosa, Ala. and Kingston, Ontario, Canada. The Li-Cycle announcement is the fifth project related to critical materials and EV supply chain announced under the Advanced Technology Vehicles Manufacturing Loan Program, part of DOE.

[New lithium battery plants planned for New York, Arizona \(azcentral.com\)](#)

### **Community Clean Energy Coalition Prize**

The Green Business Council (Dream.org) was awarded \$30,000 to expanding and scaling up the Green Business Council to deploy community-level projects in clean energy, energy efficiency, clean transportation, and workforce development across 10 underrepresented communities in the United States, including Navajo County, Arizona.

[U.S. Department of Energy Announces First Round of Community Clean Energy Coalition Prize Winners | Department of Energy](#)

### **Enhanced Air Quality Monitoring for Communities Competitive Grant**

The Cocopah Indian Tribe was awarded \$185,029 to establish long term air quality monitoring capacity at the Cocopah Indian Tribe through the deployment of air monitors, data collection and analysis, staff training, and community outreach.

Pima County Flood Control received \$488,210 to deploy and operate additional low-cost outdoor air pollution sensors at Pima County schools. This will improve exposure measurements of selected air pollutants for the entire population, especially identified environmental justice locations.

The Salt River Pima-Maricopa Indian Community received a \$404,372 award to hire additional staff to support the air quality program activities. Additional staff will support the air program needs in quality assurance and data management to fulfill the EPA ambient monitoring requirements to ensure that the data meets its quality objective.

The Navajo Nation was awarded \$486,000 to evaluate whether emission of pollutants from oil and gas facilities impacts human health and environment of neighboring Navajo communities. The data collected will be used to address community concerns of health impacts of oil and gas facilities and the funds will address health outcome disparities from pollution combined with COVID-19 concerns.

[Enhanced Air Quality Monitoring for Communities Grant Selections 11-02-2022.pdf \(epa.gov\)](#)

### **EPA Thriving Communities Technical Assistance Centers**

The University of Arizona was awarded \$10,000,000 to stand up the “Western Environmental Science Technical Assistance Center for Environmental Justice” (WEST EJ Center). The WEST EJ Center will work as an authentic partner with communities to work towards environmental and energy justice (EEJ) by being a one-stop shop for hands-on technical assistance, multi-faceted training, and other eligible forms of assistance, resources, and support to program participants. The WEST EJ Center will serve EPA Region 9 communities and have organized their approach utilizing three initiatives specifically aligned to meet the objectives of this EJ TCTAC program, as follows: Initiative 1: Provide assistance and training to effectively identify, apply for and manage grants and other funding opportunities; Initiative 2: Increase community involvement in environmental and energy decision-making through training in advocacy, environmental science, climate change, public health, energy infrastructure, and through “Community Champion” and student internship programs; Initiative 3: Provide access to environmental and energy expertise that can assist program participants with EJ analysis, study design, protocol development, and project management. The WEST EJ Center utilizes a hub and spoke model and has established a coalition with five partners with deep community-based networks and knowledge about EEJ needs across region 9. The Central Hub includes several established units within the University of Arizona and will operate through the following teams: leadership, training, capacity building, technical assistance, marketing outreach, and evaluation. The WEST EJ Center will utilize innovative and participatory quantitative and qualitative evaluation techniques to provide a narrative for the project to monitor progress, share success stories, and improve WEST EJ Center activities. The EPA’s promise of clean air, clean water and safe land has not reached many historically marginalized communities, due to a complex interaction of physical, social, and economic factors. In developing the WEST EJ Center, we have brought together a diverse coalition with longstanding relationships and extensive expertise in working with communities to overcome these barriers to work towards EEJ with the aim of assuring self-determination and enabling the meaningful involvement of all people in developing and implementing environmental regulations and policies in their own communities. The University of Arizona will collaborate closely with the San Diego State University Foundation which has also been selected to receive an EJ TCTAC award to communities in EPA Region 9.

Arizona State University is also participating as a partner under San Diego State University’s TCTAC award.

[Project Summaries 2022-23 ENVIRONMENTAL JUSTICE THRIVING COMMUNITIES TECHNICAL ASSISTANCE CENTERS PROGRAM \(EJ TCTAC\) \(epa.gov\)](#)

## **Pollution Prevention Grants**

Arizona Department of Environmental Quality (ADEQ) received \$296,594 from the Environmental Protection Agency to provide technical assistance to the automotive manufacturing and maintenance industry to reduce the use of toxic substances and generation of hazardous waste and to conserve resources. The technical assistance will include designing an online training program and resource center targeted to automotive manufacturing and maintenance facilities in or near communities with environmental justice concerns.

[FY2022-FY2023 Bipartisan Infrastructure Law Pollution Prevention Grant Summaries \(epa.gov\)](#)

## **Renewables Advancing Community Energy Resilience (RACER)**

Navajo Technical University was awarded \$900,000 to develop a comprehensive energy decision support tool for the Navajo Nation using a people-centered approach where the value of energy is quantified from the perspective of its impact on the tribal community. Power system resilience for existing customers in the Navajo Nation is challenged by a myriad of factors such as high wind, drought, and flooding, creating a complex multi-hazard risk environment. This project will bring together an inclusive team of experts in social science and multiple engineering fields, community partners, local government, and utilities to increase energy resilience for those both near and far from high population centers on the reservation.

[Renewables Advancing Community Energy Resilience \(RACER\) Funding Program | Department of Energy](#)

## **Rural Energy for America Program**

- East Flank Vineyards, LLC (Portal, Arizona) received \$11,125 to install an 8.79-kilowatt solar renewable energy system. The installation will include a battery backup system which will enable the business to maintain necessary operations during the frequent power outages experienced in this very isolated area of rural Arizona.
- AZCA Drilling & Pump Inc. Received \$12,500 to help purchase and install a 19.2-kilowatt roof-mounted solar PV. The system will generate 34,301 kilowatt hours of renewable electricity per year, which is enough to power 5.2 gasoline powered passenger vehicles driven for one year. The solar array will replace 74.65 percent of the business's energy use with renewable electricity, reducing its utility bill by \$5,488 per year.
- Arizona Autowash #10, LLC received \$20,000 to purchase and install a 60.4 KW roof-mounted and grid-tied solar PV system. Arizona Autowash is an established rural business supplying gas and conveyance to motorists in Wickenburg, Arizona. This project will create enough energy with this renewable energy system to displace the equivalent of 16.6 passenger vehicles driven in one year. After the solar system is paid off, it will save about \$19,000 a year in utilities costs.
- Crossroads Self Storage, LLC was awarded \$13,942 to help purchase and install a 20.6-kilowatt roof-mounted solar PV. The system will generate 33,648 kilowatt hours of renewable electricity per year, which is enough to power 5.1 gasoline powered passenger vehicles driven for one year. The solar array will replace 98 percent of the business's energy use with renewable electricity, reducing its utility bill by \$5,780 per year.

- CC Deer Trail, LLC (Sedona Conscious Healing Retreat) was awarded \$19,958 to help install a 31.68-kilowatt solar renewable energy system. This project is expected to save the company \$907 in electrical costs per month.
- GLF9 Route 66 Ranch, LLC received \$7,372 to help their farming operation in Kingman Arizona replace a portable generator with an off-grid 6.8-kilowatt solar renewable energy system for the farm shop/office. This project is expected to result in savings of \$1,200 a year in electrical costs.
- Echo Canyon Vineyard, LLC received \$19,983 to help install a 29.92-kilowatt solar renewable energy system. Echo Canyon Vineyards is a winery located in Cornville, Arizona. This project will eliminate the need for the business to purchase electricity from the local utility company, resulting in a savings of \$724 dollars per month that can be invested back into agritourism activities.
- Intention Property Management was awarded \$19,969 to help Saddlerock Ranch Bed and Breakfast in Sedona install a 25.52-kilowatt solar renewable energy system. This will eliminate the need for the business to purchase electricity from the local utility company, resulting in savings of \$482 dollars per month.
- Page Springs Cellars, Inc. Received \$19,000 to help Page Springs Cellars Inc. purchase and install a battery backup system designed to augment the previously installed solar generation systems. Page Springs Cellars is a winery and vineyard. The new battery system is rated as a 54-kW battery that could save the business a full day's revenue in a power outage, saving \$8,000 a day per incident. This business has averaged about five outages a year. The battery system will offer backup power to allow the business to continue operating in case of an outage.

[USDA Rural Development Climate Change Chart](#)

### **Strengthening Mobility and Revolutionizing Transportation (SMART) Grants Program**

Arizona Commerce Authority was awarded \$1,747,708 to demonstrate back of queue (BOQ) warning, work zone warning, and transit signal priority (TSP) along Phoenix's I-17 and I-10 corridors.

City of Phoenix Street Transportation received \$1,965,000 for passive detection for cyclists and pedestrians at existing HAWK signals as well as for vehicles, all along Phoenix's Grand Canal.

[FY22 SMART Project List.pdf \(transportation.gov\)](#)

### **Technology Commercialization Fund**

The Pacific Northwest National Laboratory was selected to standardize technology transfer workflows to accelerate the transition of lab-developed technologies to the market in collaboration with five other labs and funds cost-shared by partners in Arizona and California.

Sandia National Laboratories was awarded funding to create a strong regional clean energy commercialization ecosystem in New Mexico for manufacturing in collaboration with six other labs and funds cost-shared by partners in Arizona, California, Minnesota, and New Mexico.

[DOE Announces \\$18 Million to Streamline Commercialization of Clean Energy Technologies | Department of Energy](#)

## **Tribal Climate Resilience**

The Havasupai Tribe was awarded \$5 million for planning grants to reach decisions and prepare for relocation or increased climate resilience measures due to climate risks faced by the community.

The White Mountain Apache Tribe (WMAT) was awarded \$143,147 for Tribal climate resilience training and workshops. WMAT plans to improve their capacity to improve climate change monitoring and to devise climate change adaptation strategies developed with input from the tribal community and stakeholders. WMAT natural resource programs will evaluate appropriate data to identify and evaluate climate change impacts on the Fort Apache Indian Reservation while engaging with local Traditional Ecological Knowledge (TEK) holders, federal and state agencies to develop varying type of media to educate the tribal community about climate change impacts.

The Inter-Tribal Council of Arizona (ITCA) is receiving \$142,063 for adaptation workshops and trainings in an evolving southwest climate. ITCA has the goal of promoting American Indian self-reliance through public policy development, and to provide member Tribes with the means for action on matters that affect them collectively and individually. With the funding ITCA will organize, execute, and assess four workshops and one Tribal Leaders Water Policy Council focused on extreme climate events and the emerging environmental associated challenges using established partnerships with representatives from public universities and organizations in Arizona. The council will focus on five different areas that are of prominent concern to Tribes in Arizona and will provide knowledge and resiliency tools aimed at adapting to climate related events.

ITCA was also awarded \$50,000 for Tribal opportunities for preparedness in Arizona (TOPAZ). The TOPAZ Internship Program aims to develop a cadre of American Indian/Alaska Natives (AI/AN) to pursue climate change and climate change-related professions upon completing their undergraduate/graduate training program. The internship will consist of four training pillars 1) Direct climate change work experience 2) traditional and ecological knowledge (TEK) and tribal languages 3) Federal Indian/Environmental policy 4) Professional Development. The four training pillars were developed out of numerous years of tribal and professional development roundtables coordinated by ITCA to strengthen the general tribal workforce in other areas.

ITCA received another \$50,000 for preparing future Tribal climate leaders for an evolving Southwest. Tribes are challenged with major environmental concerns and climate change impacts that negatively impact the health of American Indians and their environments. ITCA, in partnership with climate subject matter-experts, intends to strengthen their relationship with Tribal communities in the Southwest and engage Tribal youth in climate change and environmental health issues. These workshops will support the integration of climate resilience education and engage students in science, technology, and engineering while incorporating Indigenous Traditional Ecological Knowledge.

The Navajo Nation Department of Fish and Wildlife Climate Change received \$399,953 for a climate change program. This category will help continue the Navajo Nation's climate change program's efforts by sponsoring implementation strategy project goals in accordance with the

Climate Adaptation Plan of the Navajo Nation (CAP). This category award will serve as the next step in addressing climate change effects by financially supporting CAP's implementation strategy goals. Once in place, the proposed plans and projects will allow the Navajo communities, Navajo Nation Divisions, and other Navajo organizations to start initiating implementation strategies across the Navajo Nation where negative impacts of climate change have hit hard.

[Biden-Harris Administration Makes \\$135 Million Commitment to Support Relocation of Tribal Communities Affected by Climate Change | U.S. Department of the Interior \(doi.gov\)](#)

### **Vehicle Technologies Office Program-wide Funding**

GTI Energy out of Des Plaines, IL was awarded \$1,250,000 for innovative regional fueling corridor plans for medium- and heavy-duty vehicles. The plan covers the Houston to Los Angeles I-10 corridor for Hydrogen fueling.

[VTO Fiscal Year 2022 Program Wide Selections - AOI 10 \(energy.gov\)](#)