An aerial photograph of San Antonio, Texas, showing a dense urban grid, highways, and green spaces. A bright red, semi-transparent map of the city's outline is overlaid on the right side of the image. The text is positioned on the left side, partially overlapping the red map.

# Energy Generating Artwork for San Antonio

LAND ART GENERATOR COMMUNITY WORKSHOP



LAGI Community Workshop  
Thursday, April 6, 2017  
San Antonio, Texas

On April 6, 2017, the Local Initiatives Support Corporation (LISC) hosted the Land Art Generator Initiative for a workshop in San Antonio in partnership with the Land Heritage Institute, LiftFund, and AIA San Antonio.

During the day long workshop, community members investigated how renewable energy technologies can be incorporated into public art and creative placemaking opportunities around San Antonio. The event was an open forum for the exchange of ideas within a variety of contexts to address multifaceted issues around the environment and social equity through a design lens, and without constraints on individual creativity.

Over the next decade as San Antonio continues to build on its rich cultural heritage through exciting developments around the city, it will be important to maintain a focus on how the outcomes of economic growth will bring benefits to everyone and not only to those who live in more affluent districts. It will also be important to consider the environment and incorporate sustainable infrastructures for energy, water, and food.

Perhaps there are opportunities to bring site specific design solutions to key sites around San Antonio that can proactively address these issues and serve as an example and catalyst for equitable development throughout the region.

This is the challenge that the participants in the workshop set out to solve with artful and creative proposals for speculative design interventions in public space.

The discussion brought out many ideas for potential applications in San Antonio, including vacant lots, the Mission Reach, and major development projects where a public art component could also add to sustainable development goals by generating clean energy on site.

Conversation pointed to how such projects could involve the school systems to invigorate science, technology, engineering, and math education by inspiring creativity and supporting STEM to STEAM initiatives. Sites could serve as destination field trips for learning about closed-loop systems, sustainable technologies, ecology, and biomimicry.

Innovative projects with roots in San Antonio could even spread to other cities, supporting the local economy through research, design, manufacturing, and fabrication.



land art generator initiative  
RENEWABLE ENERGY CAN BE BEAUTIFUL

## Workshop Process

1

Focus groups think in depth about their chosen site.

Begin to establish relevant themes/concepts in five key words or phrases.

Possible considerations: History of the site or neighborhood, personal stories, community narrative, local culture, population served, etc.

Break to share early thoughts with the room.

2

Brainstorm design parameters and develop ideas further:

Who is it for? What is its use? How does it give back?

Discuss environmental considerations/constraints of their site.

Talk about example projects (precedents) that are similar uses.

Produce sketches of key ideas.

Talk about roadmap from concept to installation: (partners, community engagement plan, fundraising, fabrication, economic development potential, life-cycle environmental impact, maintenance, programming, operations, etc.).

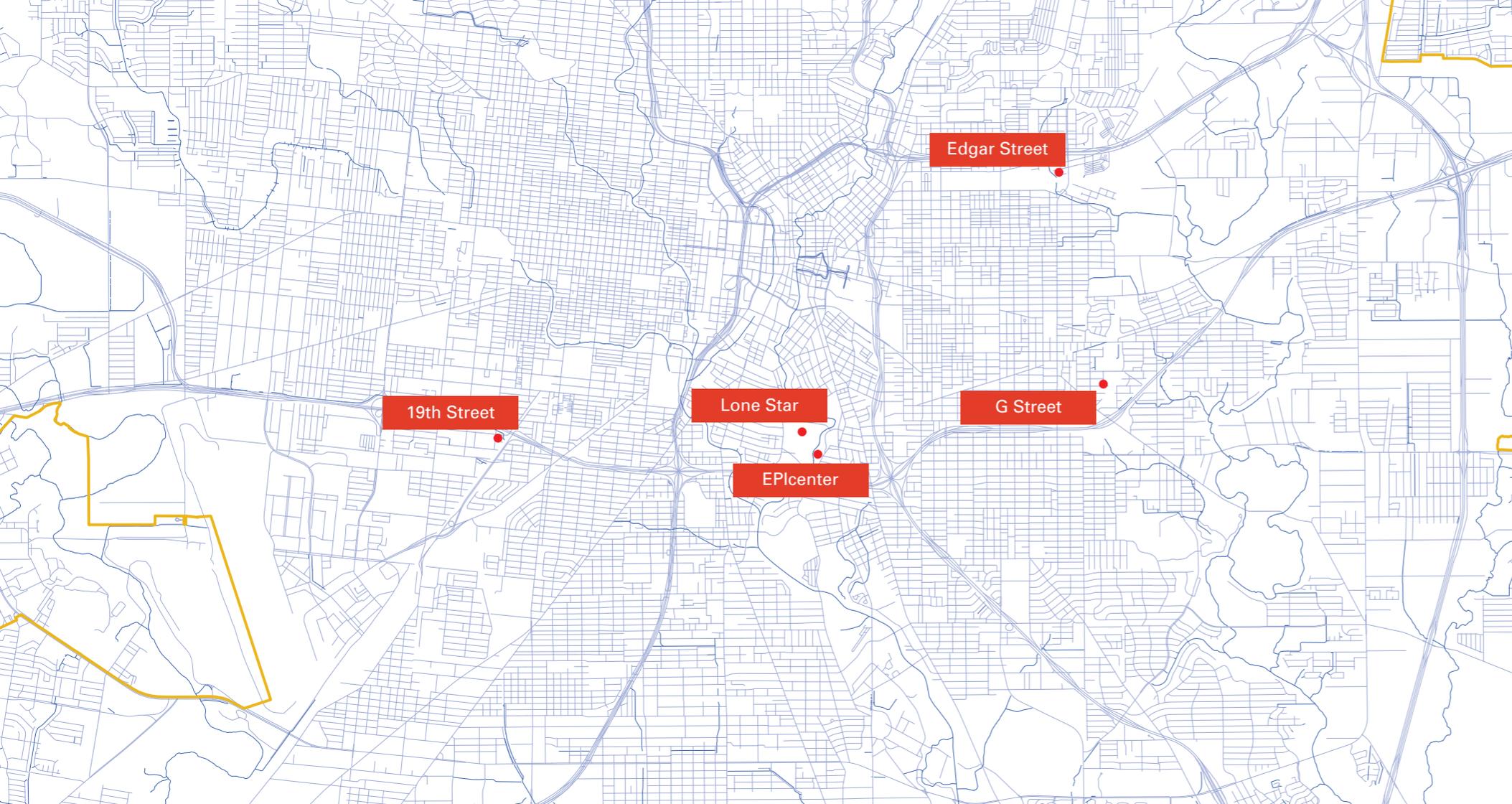
Share outcomes with the entire room.

## Workshop Idea Generation

Following a lunch break during which ideas were shared in conversation, the room reconvened to give more thought into how such projects could be implemented for specific locations. To provide a wide variety of contexts, the group focused on five sites around the city.

Because there is not yet any earmarked project funding or request for proposals from any site owner, the goal of the day was less about arriving at any concrete design direction, but rather to explore speculatively about what could be possible. Some of the sites offered a blank slate within the context of a primarily residential neighborhood, and others offered more complex conditions around some of San Antonio's more prominent development projects.





## The Workshop Design Sites

- Edgar Street
- G Street (corner of Anita Street)
- 19th Street
- Lone Star Brewery
- EPIcenter

WORKSHOP DESIGN SITE 1  
Edgar Street



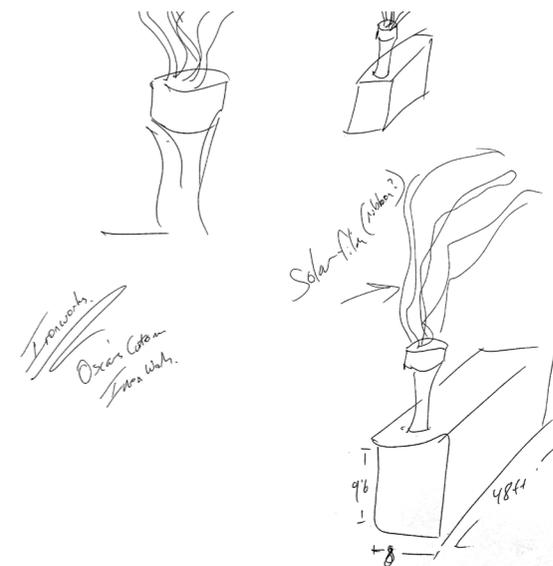
**Edgar Street** The site offers a connection between the housing and homeless services development that is planned by San Antonio Catholic Worker and the adjacent Eastside residential community. The lot is connected to the future Catholic Worker facility by two bridges over the headwaters of Salado Creek, which eventually connects to the San Antonio River much further south. One of the bridges is a beautiful old railroad trestle that offers a great opportunity for artful reflection and inspiration. The workshop offered Catholic Worker the chance to further explore ways in which the Edgar Street lots can help to support their mission and provide greater outreach to the public. The site has great solar exposure on all sides.

**Themes/Keywords**

Housing, Rail Cars, Native Plants, Bridges, Energy, Local Art, Gardens, “manly cute”, connection to community.

**Design Ideas**

Floating gardens on the creek, venue for sale of produce, murals along the creek embankment, native vines and flowers along paths, railroad cars as art studios, shipping containers include organic photovoltaic ribbons as an artwork reminiscent of “steam plumes.”



WORKSHOP DESIGN SITE 2  
G Street (corner of Anita Street)



## G Street

The site is a great lot on the corner of G Street and Anita Street with solar exposure on both the east and south. The longest dimension faces to the east where a park across the street does not cast any shadows on the lot. The park is connected to Sisters of the Holy Spirit and Crosspoint, which provide social services to the surrounding community.

### Themes/Keywords

Crossroads, meeting space, mental health, privacy for adjacent house, bring back nature, Gee Anita!

### Design Ideas

Solar panels provide shade (solar trees with vines), tables and benches, privacy wall with integrated solar, micro wind turbines within a trellis (with jasmine), hummingbird attractors, water feature, play garden of people-powered energy producers, swings hanging from the solar trees, interpretive signs for learning.

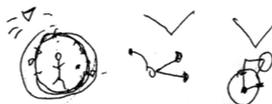
Who is it for:

- Crosspoint community
- mental health community
- neighbors

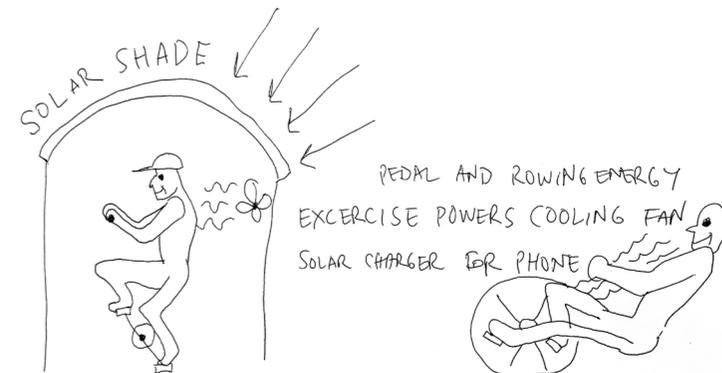
Environmental considerations/constraints of site:

- no trees
- space size
- maintenance

Examples



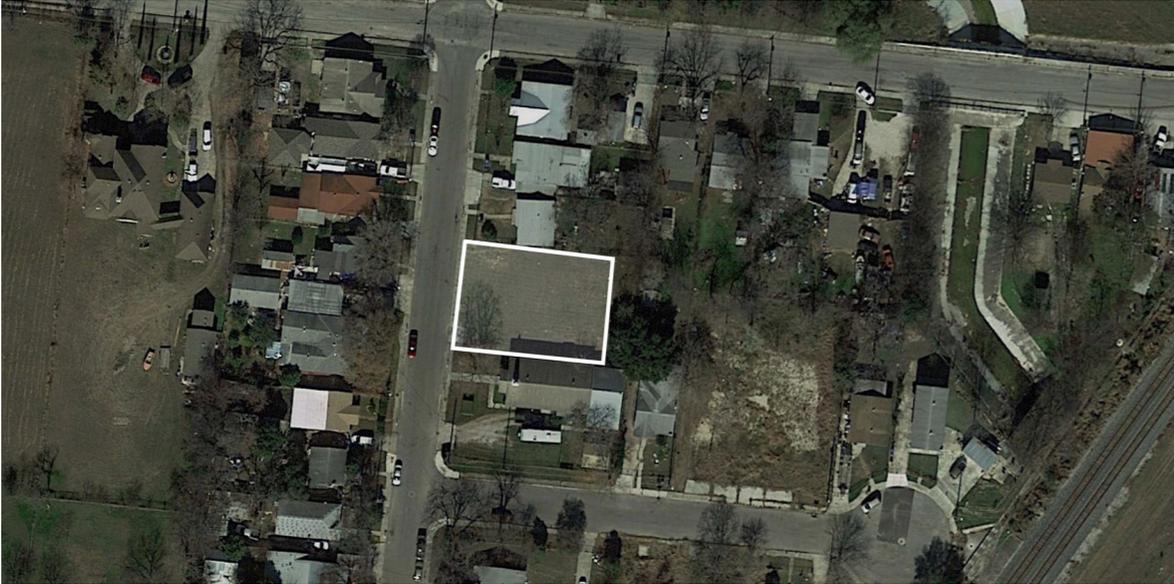
Exercise playgrounds



Local Community Asset → Mental Health + Physical Health



WORKSHOP DESIGN SITE 3  
19th Street



# 19th Street

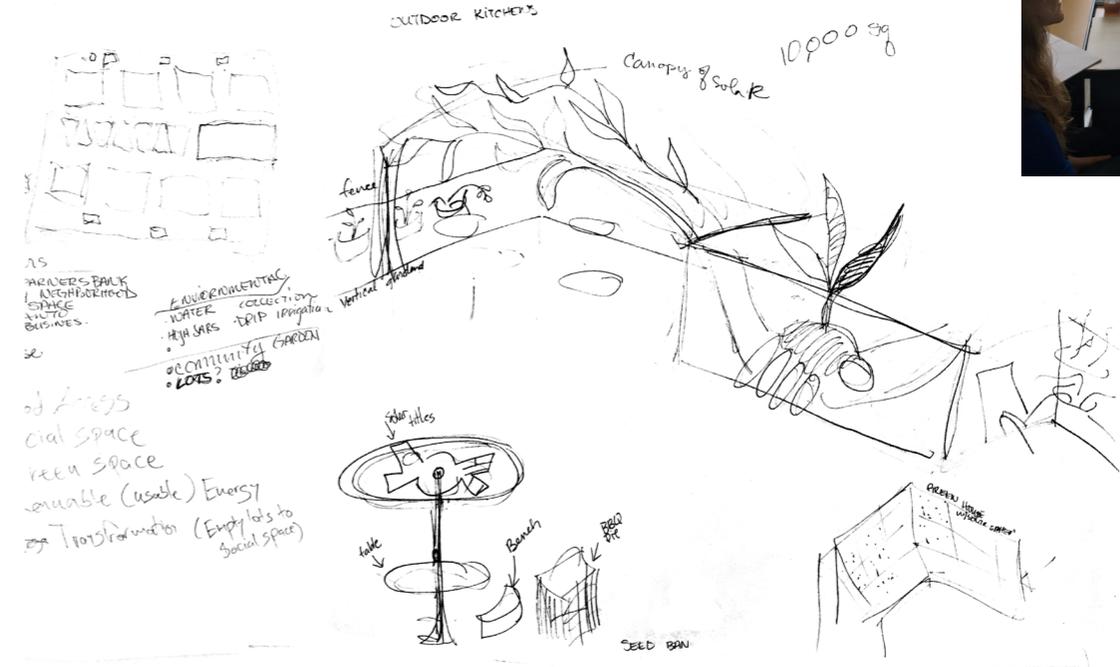
The lot is on 19th Street between Meneffee Boulevard and Menarby Place and offers excellent solar exposure, especially to the west and south. It's adjacent to a Pentecostal church and in a quiet neighborhood. The site is within easy walking distance of Community Housing Resource Partners San Juan Square properties. CHR Partners is looking to expand food security programs for the surrounding community and sees the site as a great opportunity. LISC has identified the site as one of a dozen city-owned lots available for community development projects, and is interested in providing financing and assistance with project development there.

## Themes/Keywords

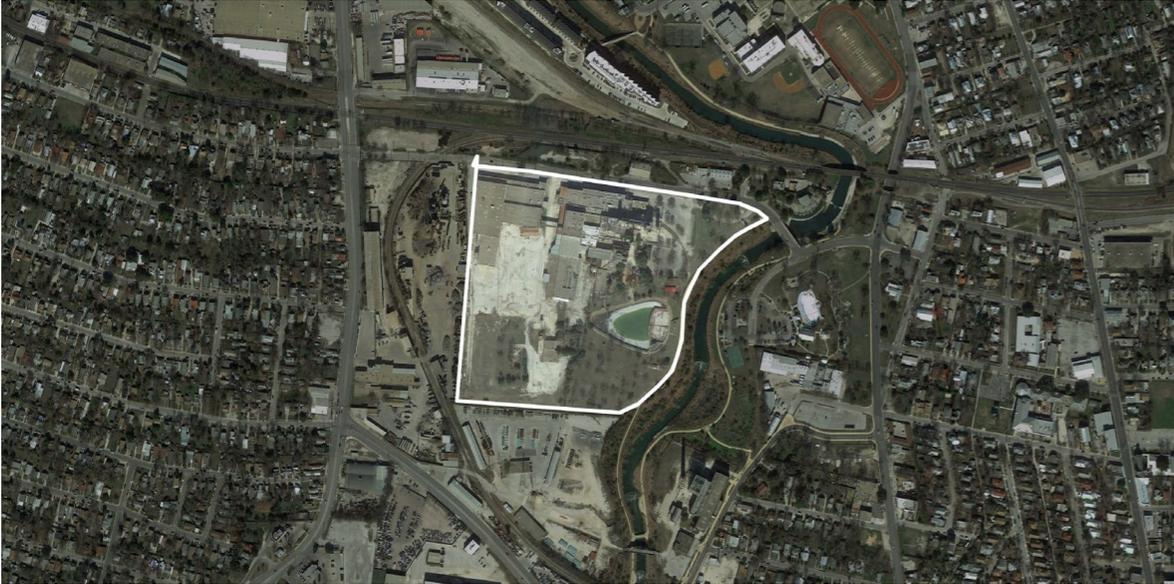
Outdoor kitchens, canopy of solar, food box for the community, solar fence, community gardens, grasses, picnic sites with covered tables and solar tiles.

## Design Ideas

Food access facilities, social spaces, green spaces, all designed as public artwork, and all powered sustainably with onsite renewables. The design will include water collection in sculptural leaves (hoja) for sustainable irrigation of community gardens. The site will have multiple uses so that it is activated at many times throughout the day and week. Partners will include food banks, San Anto, CHR Partners, LISC, other local groups.



WORKSHOP DESIGN SITE 4  
Lone Star Brewery



**Lone Star Brewery** The site is around the old Lone Star Brewery and offers ways to think about the integration of renewable energy into the \$300 million+ mixed use redevelopment project that is taking place there (lonestarbrewerydistrict.com). The overall site is 32 acres, which offers plenty of opportunities for wind, solar, and other renewable energy technologies to find creative expressions. The site is adjacent to a recycling and salvaging plant and there may be opportunities there as well.

#### Themes/Keywords

Monumental scale, icon, bottles, history, environmental challenges, bring back cultural and community activities, pool, accessibility, mitigate gentrification effects.

#### Design Ideas

The new development makes use of its rooftops and public spaces to give back to the surrounding community through clean power. How can the stack and silos become renewable energy generators? How can renewable energy installations celebrate the rich history of the site, including the public pool, where water dancers would put on epic shows in the 50s and 60s? A public artwork that celebrates this history could use renewable energy technology as the media. Think about ways to incorporate affordable housing into the project. How does the residential side of the site respond to the riverfront and EPIcenter context?

# LONE STAR

1. MONUMENTAL SCALE ICON → BOTTLES
2. HISTORICAL VALUE → 2nd brewery
3. ENVIRONMENTAL CHALLENGES →  
↳ recycling landfill
4. BRING BACK THE CULTURAL AND COMMUNITY ACTIVITIES → old huge pool and cultural events and cultural community
5. INTEGRATE THE RENEWABLE ENERGY TO THE MONUMENTAL SCALE ICON  
(solar, green roof, harvesting water/recycling, wind, etc...)
6. ACCESSIBLE & INCLUSIVE TO ALL  
↳ No gentrification



WORKSHOP DESIGN SITE 5  
EPIcenter



**EPIcenter** The site is the area on and around the old Mission Road power plant, which once provided electricity for much of the city by way of natural gas fired steam generators. There are two sites, one on each side of the San Antonio River and connected by a pedestrian/bicycle bridge. In 2015, CPS Energy and its New Energy Economy (NEE) partners, OCI Solar, Silver Spring Networks and Landis+Gyr announced the launch of EPIcenter as a non-profit, private operating foundation. The concept that EPIcenter commissioned by Lake Flato sets out a vision of how the old power plant can be transformed into a hub for innovation, renewable energy research, education, and community engagement. The site will also be a place for performance, public art, and creativity.

### Themes/Keywords

Power plant, flood plain, R&D, adjacency, steel frame as camouflage (history of WWII), daylight, adaptive reuse, future tech, connection to neighborhood, mixed uses.

### Design Ideas

Installation that speaks to the idea of global energy independence. Includes entertaining and educational (family-oriented) activities. The footbridge to the site across the river includes kinetic energy harvesting through piezoelectric pavers, and thin-film solar rails.

The smoke stack could serve as a solar updraft tower taking advantage of the hot air temperatures at ground level and the relatively cool air at the top of the tower to create convection that runs a set of turbines set into the base of the tower.

The steel frame structure could integrate a thin film solar mural and thin film fritted glazing. Wind turbines are set into the frame at key locations, and additional power is generated through foot traffic (piezo pavers).

An acequia through the site could provide an opportunity for pico hydro power generation with an Archimedes screw and waving ribbons of thin film will stretch across the river to reflect the movement of the water.

WHO: CITY / REGION /

WHAT: GLOBAL ENERGY INDEPENDENCE

HOW: ENTERTAINING : EDUCATIONAL / FAMILY-ORIENTED INSIGHT / INSPIRATIONAL

ENVIRONMENTAL : FLOODPLAIN / BROWNFIELD PROXIMITY

### BRAINSTORMING FOR EPICENTER

- FOOTBRIDGE TO PARKING ACROSS THE RIVER : KINETIC ENERGY GOLF VIA FOOT BRIDGE  
VIBRATION - PIEZO-ELECTRICS  
- THIN FILM HANDRAILS
- SMOKE STACK - DRAFT THE STACK FOR A INTERNAL WIND TURBINE
- STEEL FRAME STRUCTURE - MURAL THIN FILM / SILICON SPHERULES FRITTED GLASS / FLOORS GENERATING POWER VIA FOOT TRAFFIC / TURBINES WITHIN THE FRAME
- ACEQUIA ADDITION TO THE SITE TO ALLOW FOR ADDITIONAL GENERATION  
- ARCHIMEDES SCREW / WAVE-TECH
- ON-SITE PV - STACK WRAP IDEAS. SUSPENDED PV (FRESH HILLS) RIBBONS REACHING FOR SOLAR : WIND PIEZO GENERATING SHADE STRUCTURE REACHING ACROSS THE RIVER.  
FENCES AS ART / PV DISPLAYS



# Thank You

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Candid Rogers, UTSA

Pegah Giovannetti, LPA

Anae Wallace, Artist

Adriana Garcia, San Anto Cultural Arts

Cuahatli Reyna, San Anto Cultural Arts

Chris Plauche, San Antonio Catholic Worker

Claudia Padilla, Tri Design Lab

Mrs. Rose



[www.landartgenerator.org](http://www.landartgenerator.org)

Community Ideas Workshop, San Antonio, Texas  
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