

City of Vergas Energy & Resilience Action Plan

Energy				
<p>Goal: Reduce city operational energy use by 40% from 2025 baseline by 2035 thru renewable energy, energy efficiency and electrification.</p> <p>Goal: Install at least 1 type of renewable energy technology on every municipal building by 2035. (Solar photovoltaic (PV), Solar Thermal, Battery Storage, Cold Climate Air Source Heat Pumps (CCASHP), Geo Exchange heat pumps, micro Weather Energy Conversion System (WECS), thermal energy storage, low & ultra-low Global Warming Potential (GWP) refrigerants, Electric Vehicle (EV) charging).</p>				
<p>Planning:</p> <ul style="list-style-type: none"> • Adopt energy independence goals and objectives in policy. • Plan and budget for motor maintenance and upgrades to assure the most energy-efficient, durable, and appropriate equipment is available when upgrades or breakdowns occur. • Continue adoption of GreenStep program best practices. 				
<p>Policy:</p> <ul style="list-style-type: none"> • Become an EV-ready city and solar ready city. (GSC BP6.5) • Phase in operational changes, equipment changes, including electric vehicles and no-idling practices for city fleet. (GSC BP12.3) • Adopt a renewable energy ordinance that allows, enables and encourages appropriate renewable energy installations. (GSC BP13.3) • Become a solar ready community, including adopting ordinances/zoning language and expedited permit process for residents and businesses to install solar energy systems. (GSC BP 26.7) 				
<p>Projects:</p>				
Enter and update utility information in B3 benchmarking. (GSC BP1.1)	5yr			
Use LED/solar-powered lighting in street, parking lot and park projects. (GSC BP4.5)	5yr			<i>Current status : LED lighting in all municipal buildings & street lighting.</i>
Install islanding capability and storage for a clean energy system in publicly accessible building to provide back-up power that can sustain function during extreme weather events. (GSC SP23.5) <ul style="list-style-type: none"> ○ Designate a safe shelter with a plan that arranges adequate provisions and back up power sufficient to meet daily run-time requirements as a shelter for 1 week or longer. ○ Create a plan for resilience hub that describes community services provided during disruptions and into recovery after natural hazard events. 	5yr			<i>Current status: Battery hub to be installed in VEC as part of solar installation,</i>
Replace small combustion engine lawn and garden equipment with electric tools to decrease emissions and costs and increase efficiency. (GSC SP23.1)		10 yr		
Install renewable energy technology (i.e. solar PV/Solar Thermal) on all municipal buildings. GSC BP26.5)			15 yr	
Resilience				
<p>Goal: Increase community connectedness and civic participation through sustainability, resilience, and civic-focused events, training, engagement, and information. <i>Host up to 1 event per year.</i></p>				

<p>Goal: Educate, plan, and prepare for local climate impacts. Specifically address extreme weather events, heat events, and extreme precipitation in city planning <i>and infrastructure projects</i>. Educate city businesses and residents through timely social media posts on personal planning and preparedness for extreme weather.</p>					
<p>Planning:</p> <ul style="list-style-type: none"> Inclusive and coordinated decision making; use a city commission or committee to lead, coordinate, report to and engage committee members on the identification and implementation of sustainability best practices. Incorporate climate resilience into city planning, policy, operations, and budgeting process. 					
<p>Policy:</p> <ul style="list-style-type: none"> Incorporate working landscapes into the city by adopting an ordinance for one or more of the following: <ul style="list-style-type: none"> agriculture and forest protection district local food production district Incubator farms, emerging farmers and land access Prairie designation Pollinator-friendly and natural landscaping to revitalize current turfgrass areas 					<p><i>Current status: Have prairie designation in city ordinance</i></p>
<p>Projects:</p>					
<p>Increase walking and biking within the community by being recognized as a walk friendly, bicycle friendly or age friendly community. (GSC BP12.1C)</p>		<p>5yr</p>		<p><i>Current status: Have walking trail from downtown, to Long Lake Park and via bridge along lake.</i></p>	
<p>Inclusive and coordinated decision making; use of a city commission or committee to lead, coordinate, report to and engage community members on identification and implementation of sustainability best practices. (GSC BP24.1)</p>		<p>5yr</p>		<p><i>Current status: Have a Energy & Resilience Advisory Board</i></p>	
<p>Communicate progress on goals; organize goals and outcome measures from city comprehensive plan, energy and resilience plan and other foundational documents and report to community members the data that shows progress toward meeting goals. (GSC BP 24.2)</p>		<p>5 yr</p>			
<p>Public education and action; conduct or support broad sustainability education, building on existing city and community relationships, networks, and events that involve: (GSC BP24.4)</p> <ul style="list-style-type: none"> The entire community, community leaders Homeowners, landlords, tenants Community organizations 		<p>5 yr</p>		<p><i>Current Status: Lions organization collects plastic bags at city municipal building that are made into benches placed throughout the community. To date, 7 benches placed.</i></p>	
<p>Conduct or participate in a buy local campaign for community members and local businesses. (GSC BP27.3)</p>		<p>10 yr</p>		<p><i>Current Status: Vergas Community Club on an ongoing basis does buy local campaign thru events & use of Looney & Holiday Bucks</i></p>	

<p>Create, assist with and promote local food production/distribution within the city. (GSC BP27.3)</p> <ul style="list-style-type: none"> ○ Farmers market or coop buying club ○ Urban agriculture businesses or community-supported agriculture arrangement between local producers and consumers ○ Community or school garden, orchard, or forest. 		10 yr		<p><i>Current Status: Vergas serves as a site for the Bridge Community Pantry, which provides temporary food support one time monthly in the community to provide food support for individuals and families facing food insecurities. (second Wed each month)</i></p>
<p>Protect water and wastewater treatment facilities to reduce physical damage and sustain future function during extreme weather events. (GSC BP29.7)</p>			15 yr	
<p>Improve local energy resilience by installing distributed renewable energy systems and developing microgrids that can improve energy system resiliency. (GSC BP29.8). Install a public sector/municipally owned renewable energy technology. (GSC 26.5)</p>			15 yr	
Greenspace and Trees				
<p>Goal: Increase tree canopy in new and planned housing developments. <i>Plant 10 public trees per year</i></p>				
<p>Goal: Create plans and policies to support public and private planning of resilient tree species. <i>Increase the number of trees being planted by residents and businesses to 20 trees per year.</i></p>				
<p>Goal: Increase access and use of greenspace and blue space (i.e. lake) by community members and visitors. <i>Establish additional walking loops or trails that highlight local ecological features.</i></p>				
<p>Policy:</p>				
<ul style="list-style-type: none"> ● Create an EAB (Emerald Ash Borer) management plan and educate community on best practices ● Adopt a complete streets/living streets policy that addresses landscaping and stormwater management (GSC BP11.1) ● Adopt a tree preservation and or/native landscaping ordinance (GSC 16.5) ● Create Park/City land management practices/standards that maximize at least one of the following: <ul style="list-style-type: none"> ○ low maintenance turf management; native landscaping, organic or integrated pest management, pollinator/monarch safe policies ○ sources of non-potable water or surface/rain water for irrigation ● At least 20% of total land area is in protected green infrastructure or that 90% of residents are within 10 minute walk or within 1 mile to park or other public green/blue space. (GSC 18.3) 				
<p>Projects</p>				
<p>Certify as a Tree City USA . (GSC BP16.5)</p>		5yr		
<p>Plant and maintain at least 2-3 climate resilient trees for each public tree lost.</p>		5yr		
<p>Preserve environmentally sensitive, community valued land by placing a conservation easement on city lands by encouraging/funding private landowners. to place land in conservation easement. (GSC BP10.5)</p>		10 yr		
<p>Build city capacity to protect existing trees by one or more of the following: (GSC BP16.6)</p>		10 yr		

<ul style="list-style-type: none"> ○ Trained tree specialist ○ Volunteer forestry effort ○ Adopting ESB management plan ○ Participate in Tree Steward Program ○ Engage community in annual restoration or cleanup of natural resources. 				
<p>Conduct a tree inventory or canopy study of public and private trees. (GSC BP16.7)</p>		10 yr		

Water

Goal:

- Plan and prepare for changing precipitation patterns and water availability. *(Shorter term: implement green infrastructure rain water capture, and native vegetation inflow and infiltration projects in vulnerable areas in and around Vergas)*
- Integrate climate projections into water planning and wastewater management. *(Long term: lower flood risk for vulnerable areas and avoid damage from extreme events)*

Planning:
 Complete a complete GreenStep Municipal Stormwater management assessment. (GSC BP17.2)

Policy:

- Adopt and report on measurable, publicly announce surface water improvements targets for lakes. (GSC BP19.3) *-Is completed by local lake associations*
- Conserve/protect drinking and groundwater resources by creating a waterwise landscaping ordinance and/or guidance on rainwater harvesting and home water softener use. (GSC BP2.5)
- Adopt and implement guidelines or design standards/incentives for at least one of the following: (GSC BP17.5) *Have ordinance for 25% of lot to be impervious*
 - Rain Gardens
 - Rainwater harvesting
 - Green alleys or green parking lots
 - Pervious/permeable pavement or pavers
 - Tree trenches/tree boxes
- Incorporate compost and/or native landscape design.

Projects:

<p>Create/assist a lake improvement district. (GSC BP19.7)</p>	5yr			
<p>Improve smart-salting by reducing chloride use in winter maintenance and dust suppressants to prevent permanent surface water and groundwater contamination. (GSC BP17.6)</p>	5yr			
<p>Conduct or support a multi-party community conversations, assessments, plans, and actions around improving local water quality and quantity. (GSC BP19.2)</p>	5yr			