

Energy Efficiency in the Border Regions

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Energy Efficiency: More than Demand Reduction

- Public policy should promote effective delivery of energy to all residents
- This implies a responsibility to develop efficient and effective delivery technologies that are affordable
- Texas Engineering Experiment Station is working with the Texas State Energy Conservation Office on projects that promote efficient energy delivery to underserved populations in the Border Region



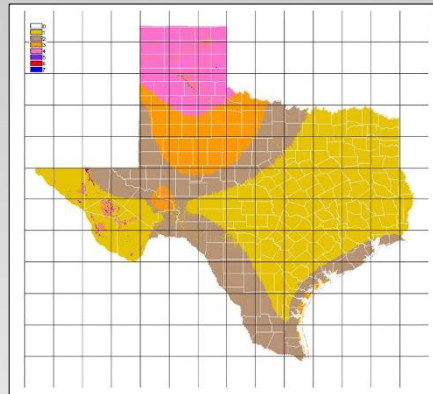
Dual Approach: Minds and Materials

- The Mind: Give youth an opportunity to make a difference in their communities – create local capabilities to meet local needs
- The Materials: Promote technology development to provide solutions to underserved populations – identify, develop, and test cost effective solutions to existing energy needs



Local Capabilities for Small Wind Energy

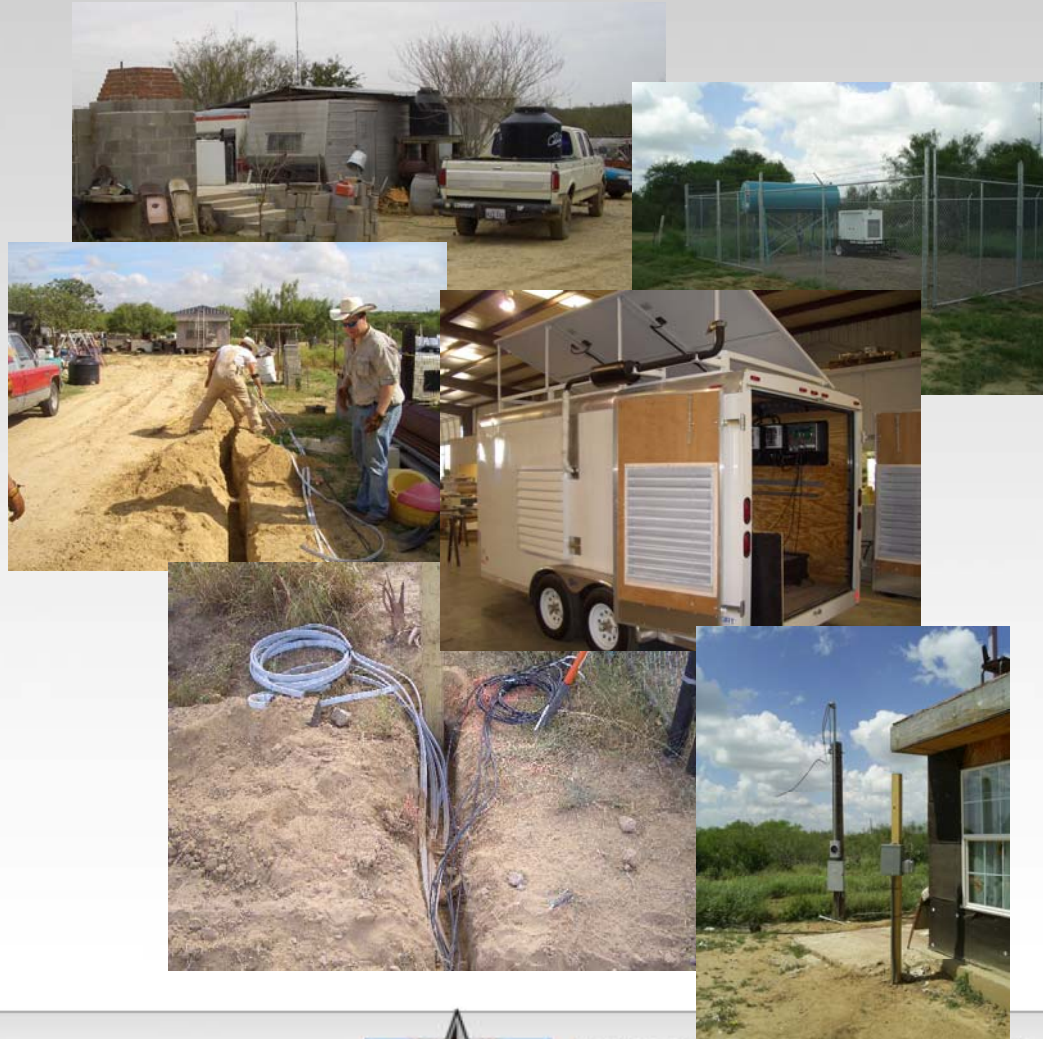
- Teaching Students to build small wind turbines
- Provides local resources to implement renewable wind energy in Colonias
- Increases the probability that those students become interested in science and mathematics



TEXAS ENGINEERING
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Micro-Grid Technology for Colonias and Emergency Applications

- For various reasons some Colonias do not have access to grid power
- Developing technology to provide temporary access to electrical power until grid connection is available
- Renewable fuels and innovative storage technology create opportunity to provide power



Leveraging our Resources

- Energy Efficiency doesn't have to just mean demand reduction
- Leverage technology to efficiently provide renewable power to underserved populations
- Help the communities to invest in themselves

