

NM SMART GRID CENTER Summer 2022 Externship

GIS and Energy Transition Policy Extern:

New Mexico Energy, Mineral and Natural Resources Department (EMNRD)

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The signing of the Energy Transition Act (ETA) in 2019 by Governor Michelle Lujan Grisham was a crucial step in transforming energy policy in New Mexico. The ETA, also known as SB 489, is proactive legislation that sets requirements for renewable and zero-carbon sourced energy in the portfolios of the state's electric utilities. My externship consisted of working with representatives from the Energy Conservation and Management Division (ECMD) of EMNRD to develop a product that will be used as an educational tool for the public. This is now a resource that can be used to gain a better understanding of the background, importance, and implications of the ETA. Data from many sources was aggregated into a StoryMap (a web-based platform that allows sharing of multimedia content, narratives, interactive maps, and more). This storytelling platform can be accessed from any web-enabled device.

New Mexico's energy transition story is now compiled into a tool that can be easily navigated to explore; why the energy transition is necessary, what steps state leadership is taking to support the initiative, projects in that state that are helping to achieve declared goals, challenges that must be addressed for an effective transition, information about the networked energy systems in the state, and what this all means for the electric consumer in New Mexico.

The first section: Why Transition?, details the energy related changes taking place at the national level and why it is important for New Mexico to take advantage of its renewable energy resources, to take part in the larger transition, and reduce local impacts of electricity production externalities. Section two: State Leadership, provides information about the ETA and gives a

timeline of the transition. This section also describes departments within the state government with responsibilities for developing and implementing strategies to meet ETA standards and providing accountability. Section 3 of the StoryMap is a guided tour of over 30 projects around New Mexico that are related to the energy transition. The fourth section: Challenges, lists some of the most difficult obstructions that must be overcome to meet the ETA goals. These challenges are environmental, technological, and policy related. Modernizing the Grid is the fifth section that demonstrates that there are many outside factors that must also be considered because of the shared power grid infrastructure in our country. Lastly, section six: What about electricity consumers, illustrates that consumers of energy have the ability to be active participants in the transition. Technology, legislation, accountability, and social awareness of the issues facing New Mexico's energy systems are all key components of a successful transition.

Using a framework developed by my advisor at EMNRD, I gathered resources that would expand upon the content of the ETA and provide a tractable narrative for the public. This externship was extremely beneficial to me because I was able to deepen my understanding of policy, economics, technology, community synergy, environmental issues, and utility management that are components within the energy nexus of New Mexico.

New Mexico's Energy Transition Story is published at the following website:

<https://storymaps.arcgis.com/stories/58d14dd5279948b6840c913f5a55f6b7>



