

How does the local and regional socio-political context fit into the energy transition process in Pima County?

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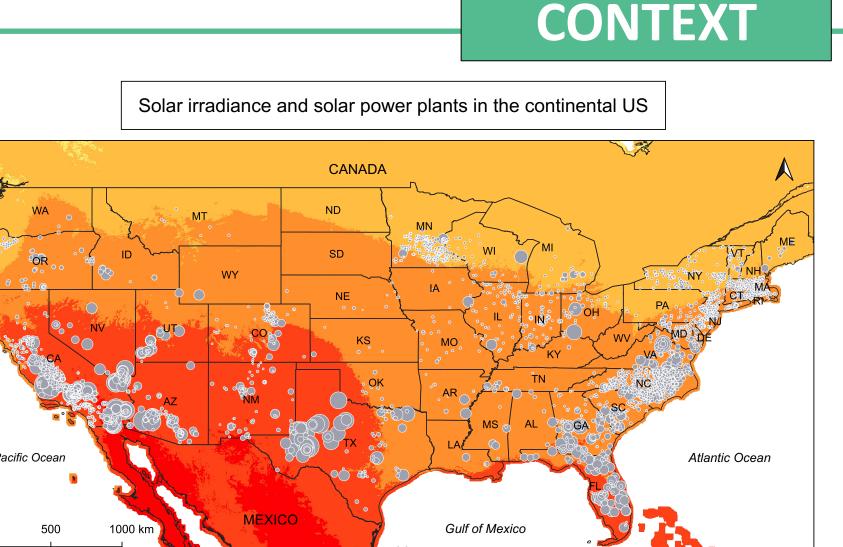
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How does the local and regional sociopolitical context fit into the energy transition process in Pima County?

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• High GHI (global horizontal irradiance)

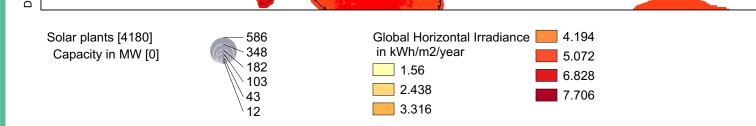
- An energy transition focused on solar power
- An under-exploited solar potential, despite a burgeoning market
- Significant demographic growth and increasing energy needs

INTRODUCTION

In Pima County, Arizona, where the consequences of global warming are particularly sensible, and where the solar potential is substantial, the deployment of solar energy has accelerated over the last years. This process of energy transition is inscribed in a complex and multi-scale network of actors, comprising of public and private sectors. Who are the protagonists of this process and what are their perceptions on the transition?

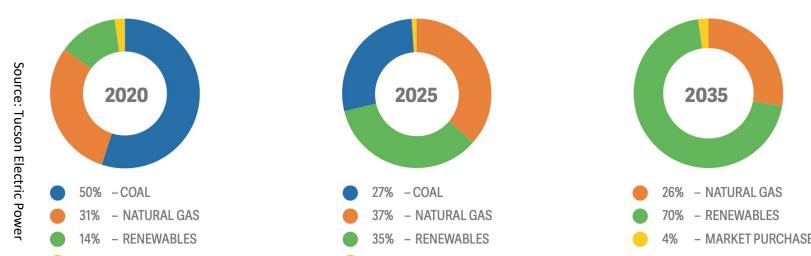
MATERIALS AND METHODS

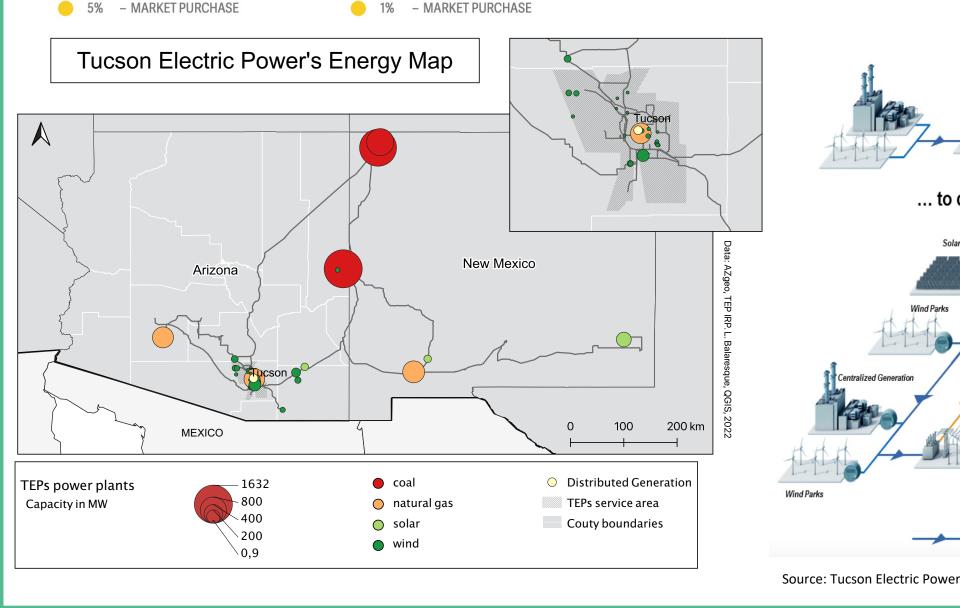
TUCSON ELECTRIC



Transition Roadmap: toward 70% solar energy by 2035

RETAIL ENERGY MIX - Tucson Electric Power

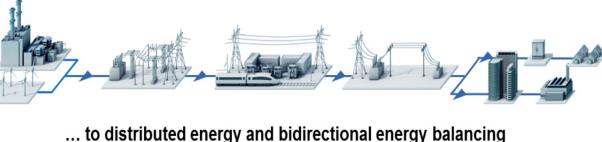








From centralized, unidirectional grid ...



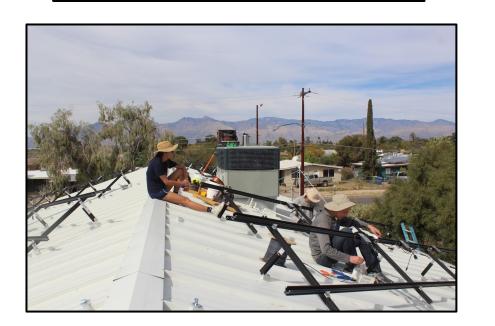
Bidirectional Power Flow

DISCUSSION

• The local energy transition seems to be on the road towards depolitization.

- Documentation from the utility company
- Ethnography and participant observation with local solar companies and associations
- Exploratory and semi-structured interviews with numerous local stakeholders

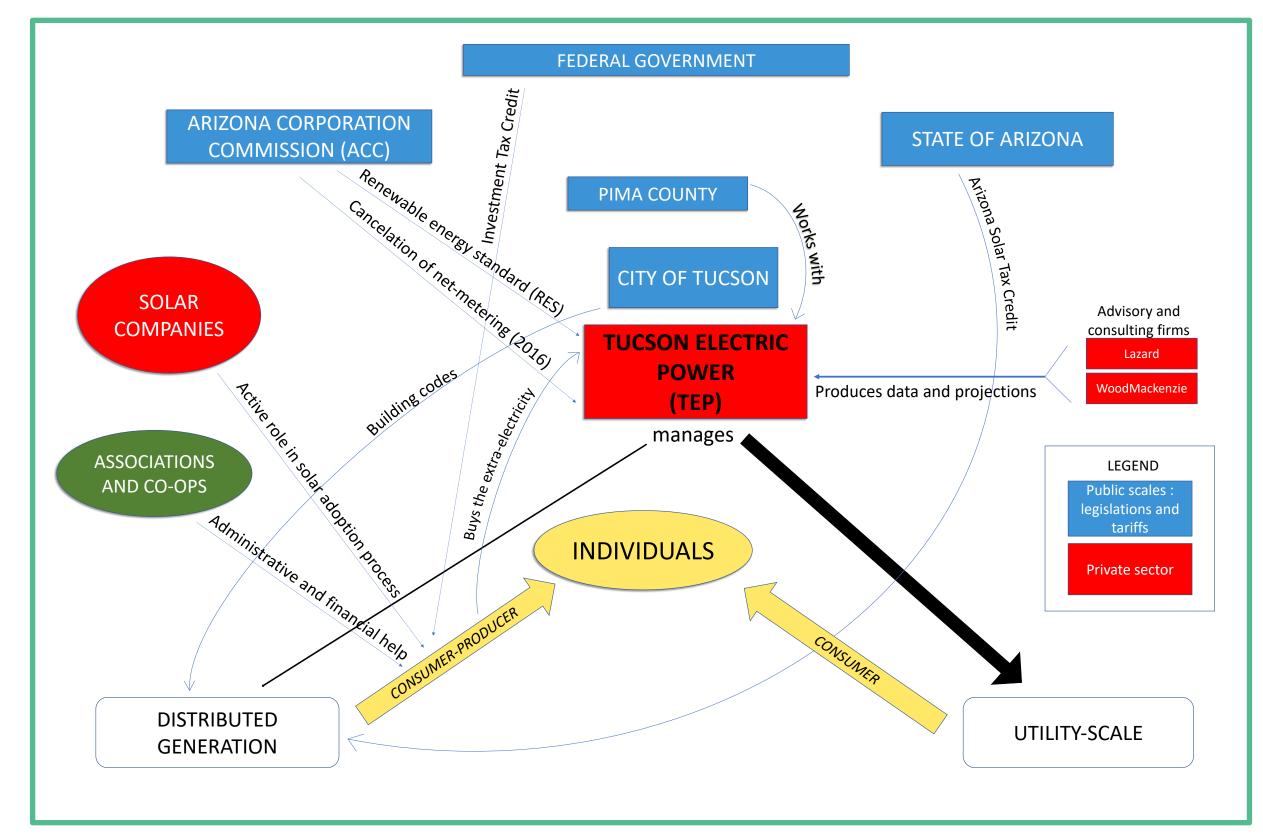




RESULTS

Actors of the energy transition in Pima County

A complex and multi-scalar interlocking of public and private actors



- Solar is expected to cover the energy needs of Tucson, at the price of minimizing technical and environmental challenges, with an increasing impact on landscapes.
- Additional incentives for distributed generation, which is more expensive than utility-scale generation, should be implemented to help assist the transition.

Interviews: what are the blocking points and challenges to the transition? energy transition? The many and varied roadblocks explain why the solar potential is still under-exploited "People want this transition to "Arizona has been **Blocking points** efficiency a occur without noticing any change very, very stingy, or without having to sacrifice odes Cost even with tax credits anything." (for solar)." incentives egislature Political will Technology Social acceptance "It's almost always true that it (solar) costs more upfront and then has radically lower operating business 🔒 costs...but if you don't have good "Most of the challenges (..), federal **G** republican credit or access to credit, that's a they're political right? When "It takes time to "The big solar farms I think, are big roadblock." you have a conflict in the rebuild energy where we will find conflict, political sensibilities, that's systems." especially if you have people Energy transition amalgamates a number of challenges and issues where everything stagnates" living nearby."

What words were most used in speaking about







