

The Clean Energy Economy Roadmap

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October 19, 2020

Presentation to the
NM Energy and Rural Development Committee

**Innovation and Commercialization
for a
Clean Energy Workforce**



**North American
Intelligent Manufacturing
Initiative**

The Clean Energy Economy Roadmap

The North American Intelligent Manufacturing Initiative (NAIMI) and New Mexico State University are working on the Innovation and Commercialization for a Clean Energy Workforce (i-CREW) with EDA funding to develop a Clean Energy Economy Roadmap.

The Roadmap will identify the needs, issues, and opportunities that affect the growth of a clean energy economy in New Mexico and develop a set of actions and recommendations for the next five years that will kick start a clean energy economy in NM.

The Roadmap has three parts:

Compile information on clean energy technologies and workforce and economic development efforts in New Mexico.

Carry out a needs and issues assessment that reflect strengths,, challenges, and opportunities for a NM Clean Energy Economy.

Provide a set of prioritized actions needed that will directly support growing a clean energy workforce and businesses.

The ICREW Roadmap will be completed by June 31, 2022.*

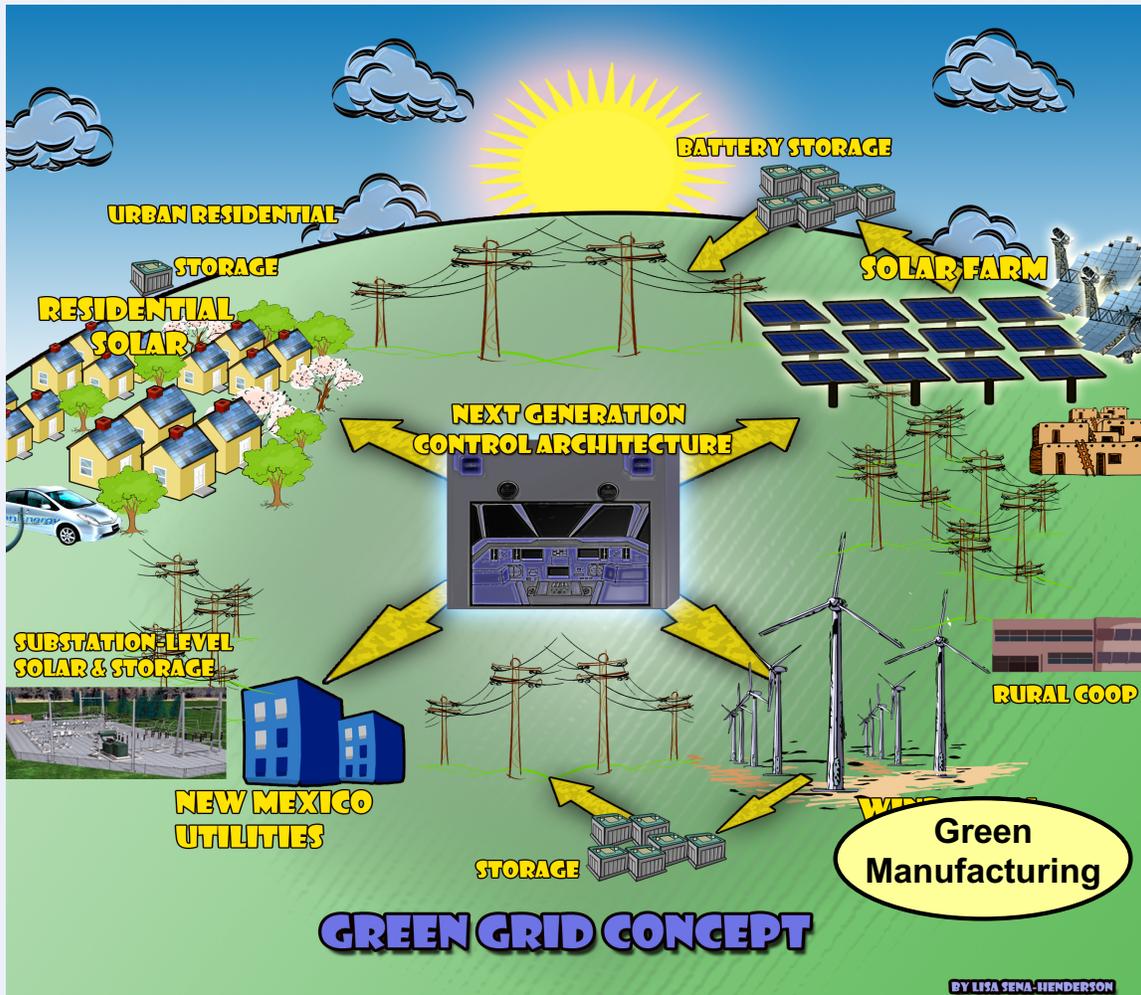
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The New Mexico Green Grid

New Mexico has abundant resources for clean energy
Ranks 5th now in the U.S. with 32% of electricity from wind and solar
Ranks 3^d for solar energy potential and 11th for wind



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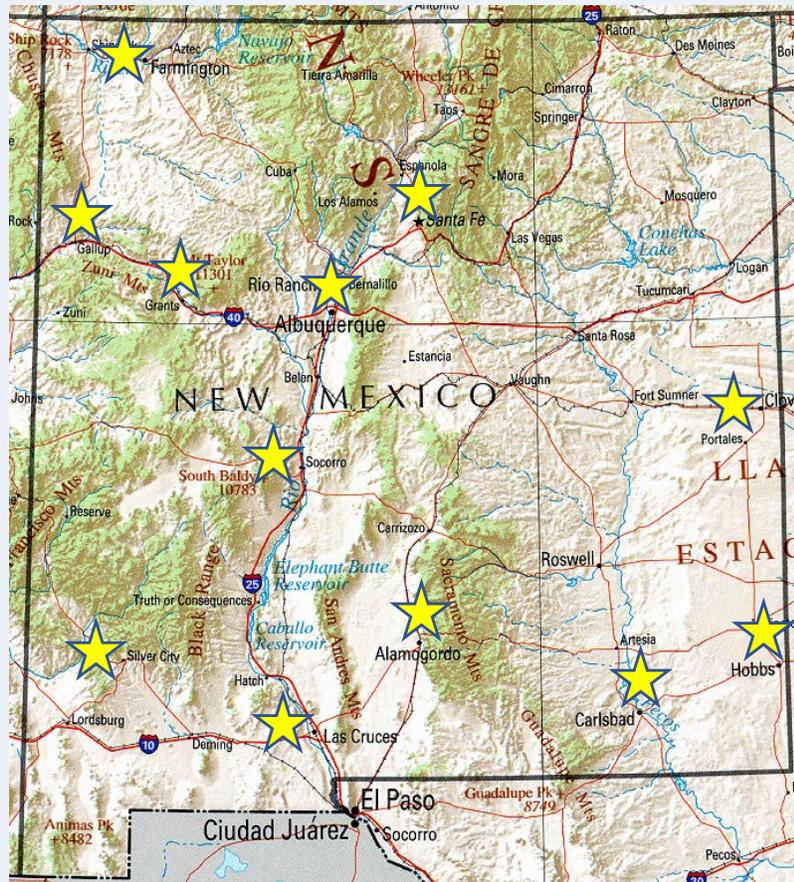


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Roadmap Advisory Groups

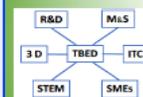
NAIMI has established twelve advisory groups around NM to gather input and recommendations for the Roadmap.

Alamogordo
Albuquerque
Carlsbad
Farmington
Gallup
Grants
Hobbs
Las Cruces
Portales
Santa Fe
Silver City
Socorro



NAIMI is establishing a Statewide Advisory Group to assess and develop a consensus for recommendations.

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Roadmap Working Groups

Alamogordo

James P. Miller, Dean Emeritus, ENMU Ruidoso, NM Renewable Energy Transmission Authority Board Member

Albuquerque

Abbas Akihl, NM State Representative

Carlsbad

Mike Espiritu, Director – Roswell Chaves County Economic Development
John Waters, Executive Director – Carlsbad Dept of Development

Farmington

Steve Grey, Board Chair -- Four Corners Economic Development
Arvin Trujillo, CEO -- Four Corners Economic Development

Gallup

Michael Sage, Deputy Director, Greater Gallup EDC

Grants

Eileen Yarborough, Director - Cibola County Economic Development

Hobbs

Missi Currier, Director – Hobbs Economic Development Corp

Las Cruces

Davin Lopez, President/CEO – Mesilla Valley Economic Development Authority
Kathryn Hansen – Director – NMSU Arrowhead Center

Portales

Chase Gentry, Director – Clovis Economic Development

Santa Fe

Camilla Bustamante, Dean – Santa Fe Community College

Silver City

Priscilla Lucero, Executive Director – Southwestern Council of Governments

Socorro

Van Romero, VP Research – NM Tech



Roadmap Focus Areas

Clean Energy

- Clean Energy Providers**
- Transmission and Distribution**
- Energy Storage**
- Smart Grid**
- Energy Efficiency**
- Economics**

Information Technology

- Modeling of immediate and future grid performance**
- Cybersecurity**

Emerging Technologies

- Clean Energy R&D**
- Technology Commercialization**
- Growing emerging tech companies**
- Reshoring of manufacturing/supply chain**

Workforce

- Education Institutions**
- National Labs, universities, private companies**
- Workforce training**

Possible Roadmap Issues

Clean Energy – Smart Grid

Educate the public on how the Smart Grid can provide energy savings and flexibility in how homes use electricity

Information Technology – Cybersecurity

Cybersecurity needs to be improved for the electric grid
Cyber attacks are already underway and will likely increase
NMSU and NMT have resources that support grid security
Projected there will be 2.1M unfilled cybersec jobs in 2021

Emerging Technologies

Reshoring of manufacturing/supply chain

Scott Bryant – Manufacturing Extension Partnership NIST

COVID has shown the danger of relying on foreign suppliers
for PPE, ventilators, ...

Similar danger exists for clean energy suppliers

Need to investigate possibility of reshoring of the clean energy manufacturing/supply chain in NM

Workforce

Opportunity for clean energy job growth exists under
new leadership in State government

Need to ensure NM people fill the clean energy jobs that will be created

Progress

Held initial meetings of the Regional Advisory Groups.

NAIMI and NMSU held a Zoom Town Hall meeting on August 5 with 160 participants to get statewide input on the Roadmap.

Presentations were made by State leaders in clean energy and economic and workforce development with five breakout sessions focused on specific issues.

Issues

The Advisory Groups raised widespread needs:

**Improved broadband access
New electricity transmission lines
Cost effective long-term energy storage
Improved transportation infrastructure**

Next Steps

**Hold follow-up meetings with the Advisory Groups
Hold a meeting of the Statewide Advisory Group
Develop a first (incomplete) draft of the Roadmap by the end of the year.**