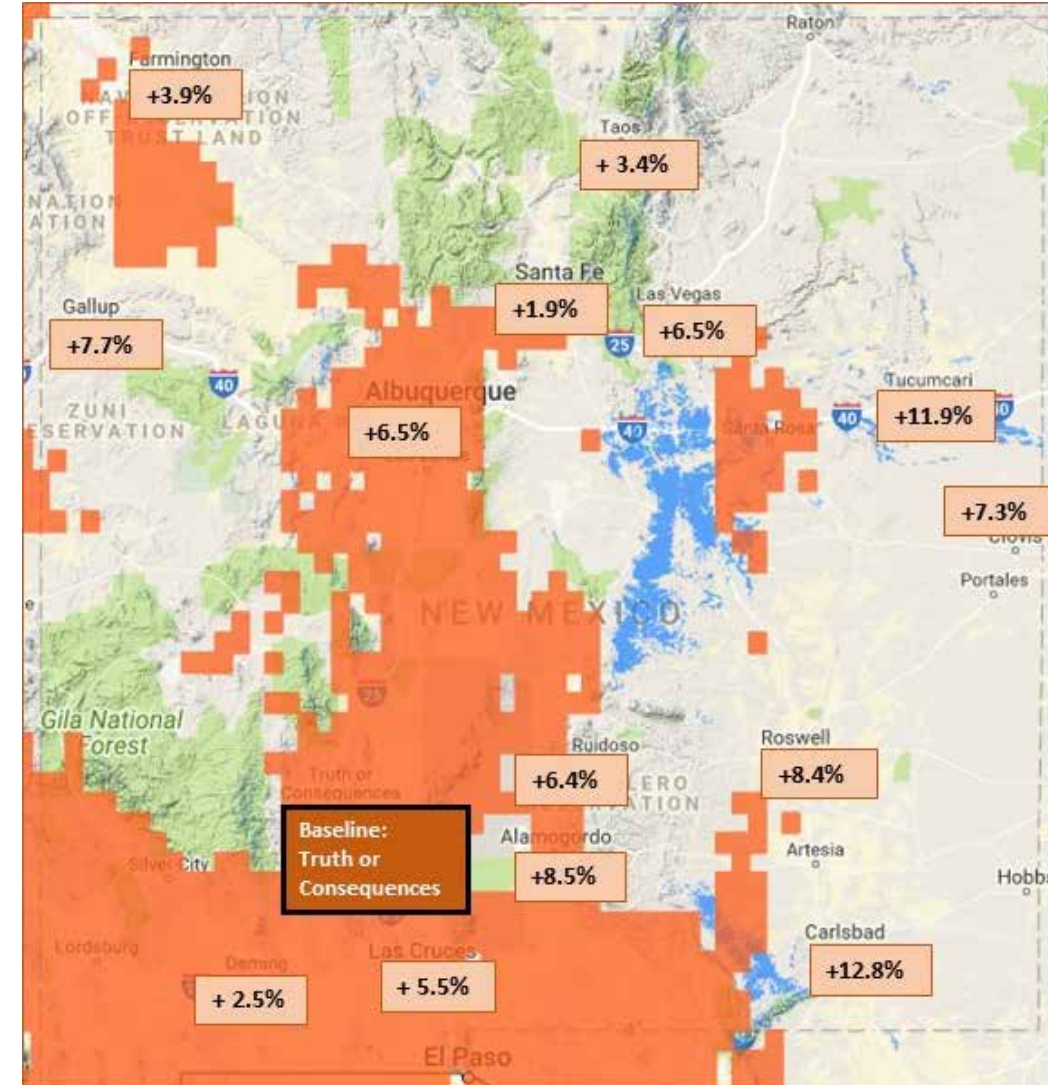
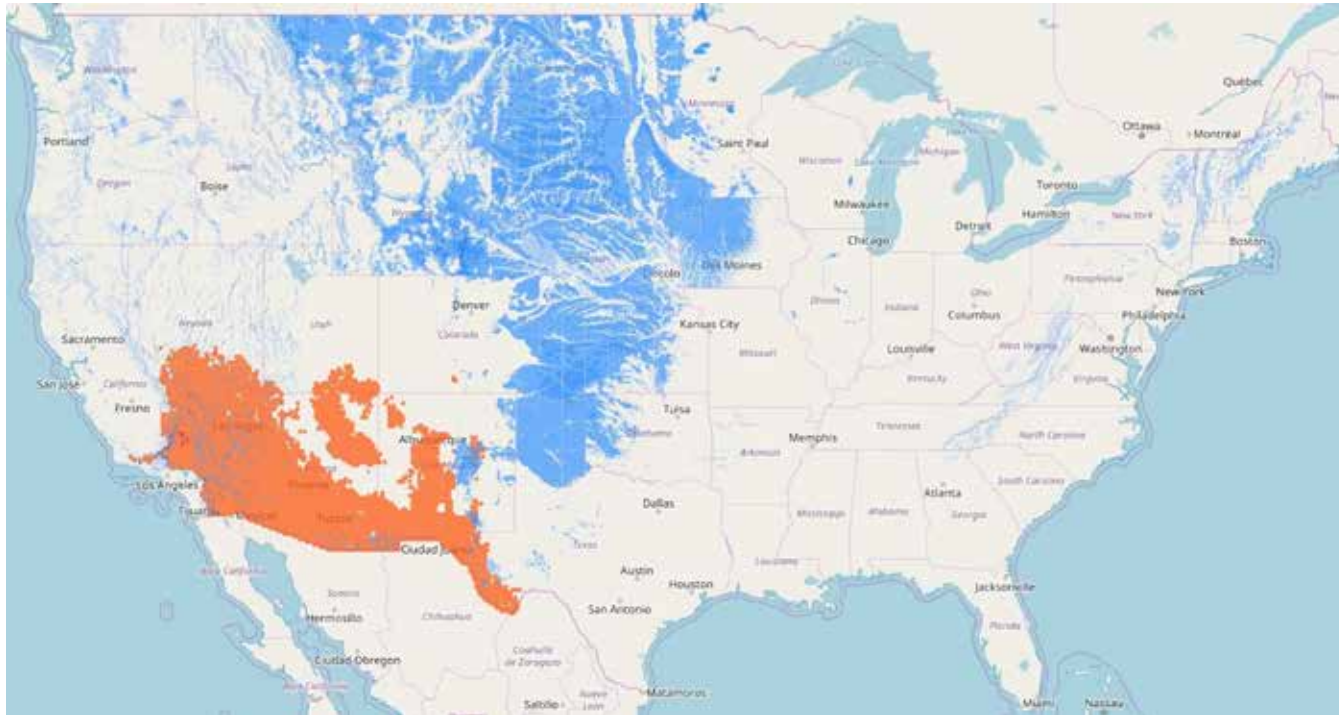


Exploiting LCORE*: New Mexico's Unique Sustainable Competitive Advantage

* LCORE: Lowest Cost of Renewable Electricity in the U.S.A.



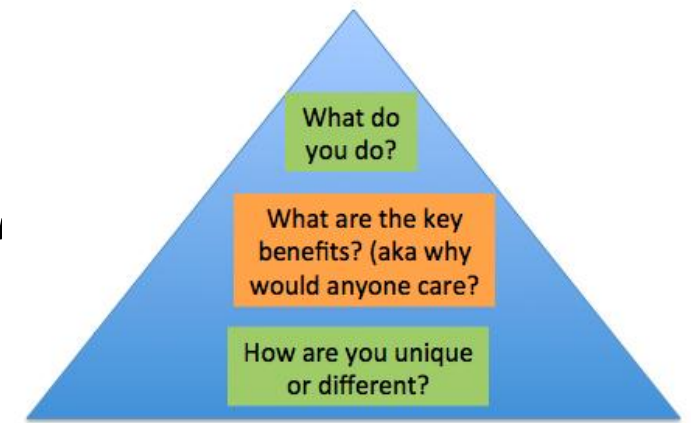
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Value Proposition: “New Mexico Has the Lowest Cost Renewables in the United States”

ü VP: Telling people what you offer, the key benefits, and why you are the best competitive option

- § An LCOE economic value proposition is particularly important to companies with committed carbon-reduction goals, high electricity consumption, and operational cost sensitivity
- § Sustainable competitive advantage: Unless other states directly subsidize, no other state will ever beat N.M.'s solar and wind COE's

- **Solar:** Lowest COE in N.A., by wide margins.
 - Lower due to latitude, cooler temperatures, and fewer cloudy days
 - Advantage ranges from 4.6% to 75% vs. other WECC states
 - California is 7% to 20% more costly; Denver 23% and SLC 28% more costly
- **Wind:** At competitive parity with lowest COE wind states...“lowest COE in WECC” according to University of WY Center for Energy Economics & Policy
- Considered together, no state can match N.M.'s renewables cost profile
- There is an Economic Rate of Renewables Implementation: 5% of load/year is first order estimate.



The Companies & Industries Opportunities

§ Strategy: Bring large renewables consuming businesses to N.M.

- Exporting renewables by building power plants and transmission lines is not a big jobs or economic driver. Power is sold at wholesale prices and renewables power plants are not huge job creators.

§ Opportunity 1: RE100 company list

- Data centers, large and small
 - Backup data centers...where latency is not important
 - Banks: back office operations
 - Credit card companies
 - Mobile phone carriers
-importing and exporting photons

§ Opportunity 2: Largest carbon-emitting industries

- Cement, steel, ammonia, ethylene industries.
 - McKinsey estimates that sub-\$20/mWhr clean electricity is the lowest cost option to decarbonize these industries, as compared to Carbon Capture and Storage (CCS) technologies. N.M. is already at these LCORE levels.
- Aluminum, glass, food, fertilizers

RE100: US Companies Publicly Committed to 100% Renewables

Electricity intensive industries (not all have placed priority on shifting to renewables)

ABInBev
 Adobe
Apple
 AutoDesk
Bank of America
 Biogen
 Bloomberg
 citi
 Clif Bar
 ebay
Equinix
 Etsy
facebook
 GM
Goldman Sachs
Google
Hewlett Packard Enterprise
HP
Iron Mountain
 Johnson & Johnson

JP Morgan
 Jupiter Asset Management
 Kellogg's
 Mars
Microsoft
Morgan Stanley
 Nestle
 Nike
 P&G
 Prudential
rackspace
salesforce
SAP
 Schneider Electric
 Starbucks
 Steelcase
 T Mobile
 Vail Resorts
Visa
 Walmart

1. Aluminum & alumina
2. Iron & steel
3. Cement & lime
4. Glass
5. Petroleum refineries
6. Bulk chemicals
7. Paper products
8. Food products
9. Fertilizers and nitrogen compounds
10. Industrial gases
11. Inorganic basic chemicals
12. Non-wovens
13. Clays and kaolin
14. Veneer sheets, plywood, fiberboard, etc.

How to Exploit our LCORE Sustainable Competitive Advantage

1. Market it

- State economic development apparatus
- Private company consortium interested in N.M. economic development
- Individual companies in selling and business development mode

§ Opportunities for N.M. Companies

- Support in-state companies with a state level plan for 5% conversion to renewables per year. Utilities, COOP's, PRC.
- Wind
 - Wind project development activities are largely being driven by out-of-state companies (Pattern). Wind project development takes significant capital backing.
 - Wind "EPC's" and construction subcontractors: foundations, 100 ton/100meter lifts, roads, electrical, etc.
- Solar
 - Solar project development is occurring with in-state companies.
 - In-state solar "EPC's" and construction companies are desired. "Factory in a field".

§ Other N.M. opportunities

- Renewables Economics Study Center: If N.M. is to adopt LCORE as a core state economic message and economic driver, we ought to setup a renewables economic study center within the state to measure and monitor it.
- N.M. renewables technology focus areas: The next technology frontier on clean energy transformation is how to most cost effectively achieve 7 x 24 x 365 renewables. Nobody knows how to do this today, and it is a highly complex problem. N.M. could lead in this area since our raw materials are LCORE.

Discussion