

## **New Mexico Clean Energy Standard**

# A Simple, Cost-Effective Program for New Mexico Utilities to Reduce Carbon Pollution

## **Summary**

Western Resource Advocates is proposing a Clean Energy Standard in New Mexico, which directs electric utilities to reduce their carbon pollution by 4% per year for twenty years. This is consistent with the reductions scientists indicate are needed to limit global warming to 1.5 °- 2° Celsius and prevent the most catastrophic impacts of climate change.

Adopting the Clean Energy Standard would assure that New Mexico utilities reduce their carbon pollution and manage future environmental costs and risk. This would protect New Mexico ratepayers, shareholders, and the public interest. If the standard is adopted by the Public Regulation Commission (PRC), New Mexico would also be joining other states, cities and businesses in taking an important step to address climate change, which is critical in the wake of federal inaction.

### **The Clean Energy Standard**

- Rewards utilities for investing in clean, low-carbon sources of energy;
- Is simple to implement, transparent, and market-based, incentivizing utilities to adopt the most cost-effective reductions in carbon pollution first; and
- Minimizes costs and risks for consumers.

In New Mexico, utilities have already made significant progress reducing carbon pollution; the Clean Energy Standard would certify the reductions in pollution already underway, and assure needed progress continues.

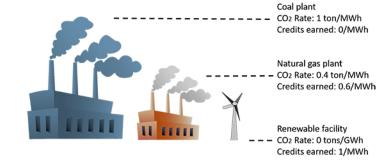
#### **How It Works**

Implementing the Clean Energy Standard requires three simple steps:

- 1. **The PRC establishes each utility's baseline emissions**, which, under the proposed standard, are the utility's average annual emissions from 2010 to 2012.
- 2. Each year, the PRC awards clean energy credits to utilities for electricity generated by clean, low-carbon energy sources (explained in greater detail below). One clean energy credit is equal to one metric ton of reduced CO<sub>2</sub> pollution.
- 3. Each utility retires clean energy credits to demonstrate that it is complying with the standard. Under the proposed Clean Energy Standard, each utility must reduce its emissions by 4% each year for 20 years an 80% reduction by 2040. For example, a utility that emitted 100 tons in its baseline period would only emit 96 tons in the first year of the standard, 92 tons in the second year, and so on.

<u>Earning Credits</u>: Power plants or renewable facilities earn credits based on how much cleaner they are than a conventional coal plant. Specifically,

- A typical coal plant emits 1 metric ton of CO<sub>2</sub> per megawatt-hour (MWh); it would earn no credits.
- A modern combined-cycle natural gas plant emits roughly 0.4 tons CO<sub>2</sub>/MWh and would earn 0.6 credits for each MWh generated.
- A wind, solar or other plant that does not emit CO<sub>2</sub> would earn 1 credit for each MWh of electricity generated.



<u>Complying with the Standard</u>: To earn clean energy credits and comply with the Clean Energy Standard, a utility could increase generation at clean, low-carbon power plants and reduce generation and emissions from carbon-intensive plants. Alternatively, a utility could purchase credits from utilities that have excess reductions and credits. The standard provides utilities with a strong incentive to invest in energy efficiency measures, because each megawatt-hour of electricity saved reduces by one the number of credits the utility needs for compliance.

The table below illustrates a simple example of how a utility could change operation of its power facilities, earn credits under the Clean Energy Standard, and reduce its emissions by 4%.

Type of Power Plant		Baseline Period	Year 1: A Utility Reduces Emissions by 4%, by Changing Operations of its Power Plants	
Coal		<ul> <li>1,000 MWh         electricity         generated</li> <li>1,000 tons CO<sub>2</sub>         emitted</li> <li>0 credits earned</li> </ul>	<ul> <li>Generation reduced:         960 MWh electricity         generated</li> <li>960 tons CO₂ emitted</li> <li>0 credits earned</li> </ul>	<ul> <li>Key results:         <ul> <li>The utility's emissions fall from 1,000 tons of CO<sub>2</sub> in the baseline period to 960 tons, a 4% reduction (40 tons)</li> <li>The utility earns 40 additional clean energy credits at its wind facility, and retires those credits, demonstrating that it has reduced CO<sub>2</sub> by 40 tons</li> </ul> </li> </ul>
Wind	Y	<ul> <li>0 MWh electricity generated</li> <li>0 tons CO<sub>2</sub> emitted</li> <li>0 credits earned</li> </ul>	<ul> <li>Generation increased:         <ul> <li>40 MWh electricity</li> <li>generated</li> </ul> </li> <li>0 tons CO<sub>2</sub> emitted</li> <li>40 credits earned</li> </ul>	

In sum, the Clean Energy Standard provides a simple mechanism to assure utilities reduce their carbon pollution, protect their customers and investors from costs of future regulatory compliance and, importantly, do their part to limit global warming to the 1.5°- 2° Celsius that scientists believe is needed to avert the most severe impacts of climate change.