



The Colorado Renewable Energy Society (CRES) is the state's largest membership-based organization dedicated to advancing energy efficiency and renewable energy. We believe in the sensible adoption of renewable energy for the long-term benefit of Colorado's environment and economy.

CRES is a chapter of the American Solar Energy Society.

Our major activities in 2002 are:

- ▶ **CRES 2002 Conference**
June 28 – 30, 2002 • Colorado College, Colorado Springs
Keynote Speaker: *Amory Lovins, Rocky Mountain Institute*
- ▶ **Colorado Renewable Energy in Buildings Awards**
June 30, 2002
- ▶ **Colorado Tour of Solar Homes**
October 5, 2002

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PRINTED ON RECYCLED PAPER

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FEBRUARY 2002

Minimum Clean Energy Requirement



The right energy policy for Colorado.



Why support a minimum clean energy requirement?

- ▶ Inexpensive method to promote power generation from renewable energy resources.
- ▶ Long-term economic benefit for rural Coloradans.
- ▶ Increase diversity—and energy security—of the state's mix of energy resources.
- ▶ Moving forward in 14 states, including Texas, Pennsylvania, and Nevada.

What is a Renewable Portfolio Standard (RPS)?

- ▶ All electricity suppliers include a minimum percentage of clean, renewable energy in their mix of resources.
- ▶ If they produce less than the minimum, they can buy the balance from other suppliers or purchase credits.
- ▶ Starts small and increases to 10% by 2010, so costs are minimal.



The Colorado Renewable Energy Society (CRES) supports a minimum clean energy requirement for Colorado because it is the best way to advance renewable energy in the state. It is moving forward in other states, and it is the least-cost method for promoting electricity generation from renewable power.

What is a Minimum Clean Energy Requirement?

This policy sets a minimum amount of electricity that each producer must obtain from renewable energy resources — wind, solar, biomass from plants and crops, or geothermal energy.

The requirement is a market standard that depends entirely on the forces of supply and demand for its implementation. It therefore rewards the low-cost producers and provides a strong incentive to steadily reduce the cost of renewable energy technologies.

How much will a Renewable Portfolio Standard (RPS) cost?

Since almost all renewable energy resources currently cost more than their conventional fossil counterparts, generators will be allowed to pass on the extra cost to consumers. Although renewable energy technologies are much less “mature” than their conventional counterparts, costs are decreasing.

Most industry and government forecasts show real energy costs declining in Colorado over the next two decades, with or without a minimum clean energy requirement. Plus, this policy provides a buffer against future increases in the cost of natural gas.

Who benefits the most?

Communities on the eastern plains of Colorado stand to gain from such a policy because they are in areas with large wind energy resources. There are also windy areas in other parts of the state.

Furthermore, Colorado has a huge solar energy resource and ample resources of plants and crops that could someday be used for energy. A minimum clean energy requirement has the potential to stimulate industries using these native energy resources.

How does the Minimum Clean Energy Requirement Work?

The Colorado legislature sets the policy for the state as a whole. Under this policy, an increasing fraction of the electricity sold in the state will be produced from renewable energy resources until that fraction reaches 10% in 2010.

An electricity supplier can choose to generate its own electricity produced from renewable energy resources or purchase credits. These credits are at the heart of making the system work.

A credit is a tradable certificate proving that one kilowatt-hour (kWh) was generated from renewable energy (RE). Under a 10% requirement, a generator will have a minimum number of credits equal to 10% of its total sales. In other words, if an electricity generator sells 1 million kWh per year, it must generate or purchase RE credits equal to 100,000 kWh of renewable energy produced.

These RE credits are a separate commodity from the electricity itself, and thus can be held onto (if a generator thinks they might increase in value) or traded. This way, capital investors and electricity generators make all of the decisions as to how the policy is carried out. The government’s role is only to verify that credits are bought and sold legally.

The RPS would be monitored and enforced by the Colorado Public Utilities Commission. Enforcement would be modeled after the federal SO₂ trading system, which has proven extremely successful in reducing sulfur emissions.