

What is an "alternative energy portfolio standard?"

A portfolio standard requires the companies that deliver your electricity - utilities and electricity providers - purchase a certain percentage of their electricity from specified resources.

Why have an "alternative energy portfolio standard?"

A portfolio standard helps to ensure that more of our electricity is generated by domestic resources. It also ensures that we are not overly reliant on one or two resources for our electricity needs. The development encouraged by a portfolio standard also has meaningful environmental and economic benefits for the citizens of Pennsylvania.

What is Pennsylvania's Alternative Energy Portfolio Standard?

On Nov. 30, 2004, Governor Rendell signed into law a two-tiered portfolio standard that ensures in 15 years, 18 percent of all the electricity sold in Pennsylvania comes from clean, advanced sources. Today over 20 states

have portfolio standards or renewable energy goals.

Tier I requires 8 percent of electricity sold at retail in the state to come from traditional renewable sources such as solar photovoltaic energy, wind power, low-impact hydropower, geothermal energy, biologically derived methane gas, fuel cells, biomass energy or coal-mine methane. At least 0.5 percent of Tier I must be met by electricity from solar photovoltaic cells – the most ambitious solar energy requirement in the nation.

Tier II requires 10 percent of Pennsylvania retail electricity to be generated from waste coal, distributed generation systems, demand-side management, large-scale hydropower, municipal solid waste, generation from pulping and wood manufacturing byproducts, and integrated combined coal gasification technology (Clean Coal).

What are the environmental benefits of an alternative energy portfolio standard?

There are many environmental benefits associated with an alternative energy portfolio standard, including the clean-up of thousands of acres of Pennsylvania's

landscape to support waste coal electricity generation and the capture of methane gas - a potent greenhouse gas - that otherwise would be released to the atmosphere.

Additionally, the renewable resources developed as a result of this act are estimated to avoid 50,000 tons of sulfur dioxide, 6.5 million tons of carbon dioxide, and 14,000 tons of nitrogen oxide annually by 2020.

What are the economic benefits of an alternative energy portfolio standard?

The development of resources associated with the portfolio standard will have significant economic benefits for Pennsylvania. A study by Black and Veatch Consulting, Inc. compared the economic benefits created by the alternative energy portfolio standard with the economic benefits created by conventional electricity generation. Black and Veatch Consulting, Inc. found the following compared to conventional generation:

- Over 20 years, the AEPS would cost \$1.8 billion less;

- It would result in \$9 billion more in gross state output over 20 years;
- It would provide a \$2.7 billion earnings advantage over 20 years; and
- Over 20 years, it would generate 3,500 more jobs.

Pennsylvania's commitment to renewable energy – embodied by the Alternative Energy Portfolio Standard – was instrumental in Gamesa, a major Spanish-based wind equipment manufacturer, committing to locate their North American headquarters and manufacturing facility in Pennsylvania. Gamesa's Pennsylvania operations will create over 1,000 new jobs.

Will the alternative energy portfolio standard raise my electricity prices?

The study by Black and Veatch found that electricity costs would actually be lower with an alternative energy portfolio standard than they would be if the same amount of electricity were generated from conventional sources. The primary reason for this is the falling costs of renewable energy over time in

comparison with the rising costs of conventional fuels, especially natural gas. The study concluded that electricity cost savings from the portfolio standard would be equal to about \$0.46, \$3.12 and \$75.61 per month for the average residential, commercial and industrial customers, respectively.

Where can I learn more about renewable energy in Pennsylvania?

For more information visit the Department of Environmental Protection's Web site at www.depweb.state.pa.us, click on Energy Topics and select "Renewable Energy."

Alternative Energy Portfolio Standard



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