## Comparison of Public Support for Energy Sources

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In the US there are many ways that the public supports energy sources and influences choices that utilities make for generating the electricity that US consumers depend upon and pay for, as well as the rewards to stockholders of those utilities. The specific supports and the certainty of support provided to sources varies. This poster contains a comparison of public supports for energy sources in one state. Better understanding will allow consumers and decision makers to make the best energy choices for today and the future.

Supports include federal, state, and local income tax credits and other tax advantages, ability to use eminent domain, guaranteed return on investment, guaranteed customers, access to public land, and access to grants. While some choices are reviewed by state utility commissions (PUC) and only added to the rate consumers pay if they are determined to be reasonable, other choices are approved at the federal level and the PUC is required to include them in consumer rates. Examples of comparisons for several energy sources follow.

When a utility invests in natural gas infrastructure, the Federal Energy Regulatory Commission (FERC) declares that the investment is of public necessity and convenience and awards the company the right to use eminent domain to force unwilling landowners to accept the infrastructure on their land for a one-time easement payment. It is based on the value of the land, but generally less than \$1,000 per acre in rural areas. The landowner continues to pay local property tax on the land and must adapt use of the land to protect the pipeline infrastructure. Developers do not insure landowners from liability and will not remove the infrastructure when it is no longerused. However, when solar infrastructure is developed there is no right of eminent domain. This means developers of solar infrastructure must negotiate with willing landowners. Currently, landowners can earn \$1,250 per acre per year for hosting solar infrastructure. Developers also pay property taxes, liability, and for removing the infrastructure when it is no longer used.

This state has provided a state income tax credit to coal companies that results in them receiving money from the state after erasing any state tax liability. However, there is no such credit for renewable energy sources. In fact, there are limitations on the ability of consumers to sell to utilities any extra energy their private renewable sources generate. Most can only afford to invest in renewables if they do not need to sell energy to balance the cost of buying the infrastructure.

Another example is the rate of return on investment that the utility is allowed to earn when investing in specific energy infrastructure. When the FERC approves natural gas infrastructure, it currently assigns a 14% return for 30 years. The PUC is required to pass on that rate of return when calculating costs to utility customers. Thus, investors have long-term guaranteed return when natural gas investments are made. On the other hand, state law outlines the procedure for the public utility commission to set the utility's allowable rate of return, currently at about 10%. Thus, with no federally dictated return on investment by utilities in solar infrastructure, stockholders will earn at least 4% less for investments in solar. This encourages utilities to build natural gas infrastructure instead of solar infrastructure.

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