

Analysis of HB19-

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HB19- focuses on expanding the implementation of community solar gardens (CSGs) in Colorado. The bill proposes two changes to current legislation regarding CSGs:

1. Increasing the maximum size of a CSG from 2 megawatts to 10 megawatts; and
2. Removing stipulations that require a CSG subscriber to live within the same county as the CSG to which they subscribe.

The bill retains the stipulation that subscribers must reside within the same service territory of the utility company who sponsors their CSG.

A community solar garden is a field of photovoltaic (PV) panels placed in an environmentally advantageous location, i.e. one with ample sunlight. Subscribers from nearby communities invest in

That on average, customers save money in comparison to their traditional energy costs due to these solar credits and the tax incentive². This allows residents whose homes cannot support solar panels or who live in environmentally disadvantageous locations to promote the environmental benefits of solar energy and likely save money on the energy they consume. Due to current regulation however, opportunities to subscribe to CSGs are extremely limited.

A major impact is the competitive imbalance in the energy market. Because of its extreme economies of scale, providing energy to a wide range of households and buildings in an area is most efficiently done through a single, cohesive power grid. Since the gargantuan fixed costs involved with power generation and power lines is paid, each additional unit of electricity costs very little; the more units sold, the more the fixed costs can be spread, creating a reasonable price for the consumer. Having two electric companies split electricity production, each with their own power source and power lines would lead to a near doubling of price.³ Since all customers in an area are connected to one power grid and all must pay a single overseeing company, a competitive energy market cannot exist and the price is not determined by the competitive equilibrium.

In Colorado, 65 independent entities, most of which are run by governments of the municipalities they service, control energy creation and distribution. Below is a map of Colorado utility company distribution⁴.

As currently implemented, community solar gardens predominant utility company.

Subscribers pay Xcel-sponsored companies who manage their CSGs. Xcel Energy then adds the solar-created energy into the grid supply and awards subscribers with a credit on their monthly energy bill.

Under current law, each CSG can produce a maximum of two megawatts of electricity.

future growth. As there is no obvious reason to limit energy generation from CSGs, this bill would be improved by removing the cap altogether.

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energy usage⁵. This limit exists to prevent a few subscribers from dominating a CSG, promoting the widespread availability of investment in solar energy, and ensuring that an increase in megawatt capacity will result in widespread investment in solar power. By expanding the consumer capacity of the market for CSG use, this bill will increase quantity sold. In other words, HB19-1003 promotes use of solar energy by allowing more consumers to exercise their power in the energy market.

Recently, a contract commissioning the construction of six new CSGs in Colorado was

According to a release, SunShare was selected in a competitive bidding process and will be able to serve more than 2,500 residential households in the Denver metro area as well as additional municipal, governmental, and educational entities⁶. This estimate is based on the current limit of two megawatts per CSG, meaning that the increase to a ten megawatt limit could provide service to an additional 10,000 households in this type of contract.

area from which CSGs draw their subscribers. Current legislation states that consumers can only subscribe to CSGs located within their own county. Much in the same way that some hopeful solar-energy users are precluded from doing so because their home

Work Cited

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