

Cost Comparison

This graph shows the estimated *increase* in cost of electricity from building each power plant type. Electricity used in your home is measured in kilowatt-hours. One kilowatt-hour can power a 100-watt light bulb for 10 hours. The average household in PA pays about \$0.11 per kilowatt-hour of electricity used. It also uses about 700 kilowatt-hours each month. Since $0.11 \times 700 = \$77$, the average PA monthly bill is \$77. Your bill may be more if your house has electric heating or electric water heating, if it is very large, or if it uses lots of air conditioning.

Since we need to build more power plants in the next 25 years, the cost of electricity will go up. The numbers on the bottom side of the graph show how much the cost of electricity will go up in dollars per kilowatt-hour. The numbers on the top side show how much the monthly bill would go up for the average PA household. The numbers on the bottom are multiplied by 700 kilowatt-hours to get the monthly bill numbers on the top.

Let's say the cost increase would be \$0.02 per kilowatt-hour. Since $0.02 \times 700 = 14$, the monthly bill increase would then be \$14. This means that the average PA household would now be paying $\$77 + \$14 = \$92$.

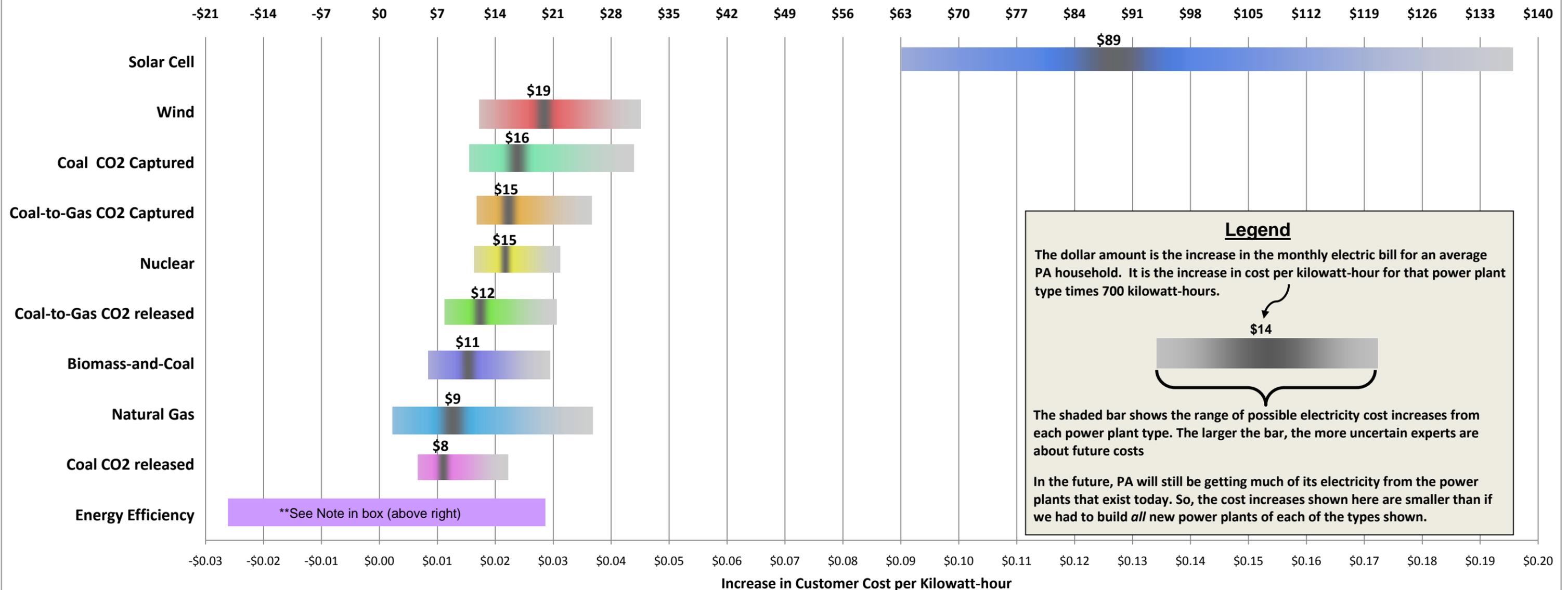
Experts are not certain about future electricity costs. So, each bar shows a range. The gray center of the bar (and the dollar value just to its left) show the most likely increase in the monthly electric bill. The longer the shaded bar, the more uncertain experts are about the costs. This is also explained in the Legend. Before reading on, look at the Legend and try to decipher the graph.

We use electricity outside of our homes too. For instance, it is needed to make clothing or produce groceries. So, the cost of electricity will affect more than just your monthly electric bill. Think about how building certain power plants could also change the cost of everything else you buy.

****Note:** The cost estimate for energy efficiency is different from the others. It depends on how much electricity you want to save. Efficient things like light bulbs are cheap. Others things like insulating a building are more expensive. People tend to buy the cheaper things first and the more expensive things later. So the more electricity you want to save, the more expensive it gets. The cost of the efficient products will eventually begin to greatly outweigh the savings on your electricity bill. The low end of this bar shows the costs for a small amount of energy efficiency. The high end of the bar shows the cost for a large amount of energy efficiency.

The cost shown here assumes that you only buy efficient products as a replacement for broken or old things. For instance, you wait until your light bulbs burn out or your dishwasher is broken to shop for an efficient replacement. If you buy efficient things when you otherwise wouldn't have needed a replacement, the cost is much higher.

Increase in Average Monthly Electric Bill from Each Power Plant Type



Legend

The dollar amount is the increase in the monthly electric bill for an average PA household. It is the increase in cost per kilowatt-hour for that power plant type times 700 kilowatt-hours.

\$14

The shaded bar shows the range of possible electricity cost increases from each power plant type. The larger the bar, the more uncertain experts are about future costs

In the future, PA will still be getting much of its electricity from the power plants that exist today. So, the cost increases shown here are smaller than if we had to build *all* new power plants of each of the types shown.