Simplifying the Math:

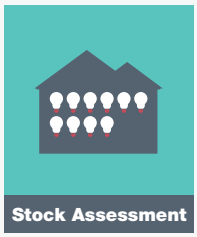
How Are Momentum Savings Calculated?

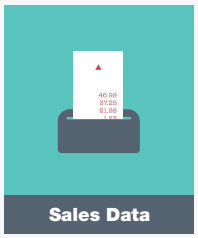
Many people have heard about Momentum savings but don't understand how these types of savings are calculated.

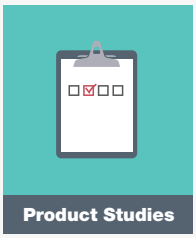
The short guide below explores (1) how we gather the data we need and (2) how we use this data to calculate Momentum savings.

How data is gathered:

To find our savings, first we collect data from commercial and residential building stock assessments, sales information, and product studies. This information gives us a great deal of insight about the product flow into the market.







How we calculate Momentum Savings:

From here, we are able to pull out the savings that we know come from utility programs and incentives. We get this information from the forms and other types of paperwork consumers submit to receive their incentives from utilities.

Once these savings have been subtracted, we know that what remains are Momentum Savings.

Sales & Stock Data is used to determine Total Energy Savings

Programmatic is subtracted from Total Energy Savings

Only Momentum Savings are remaining.

Seems simple, right? Well, in reality the concept is simple but the calculations can be fairly complex. Here, we'll show you a basic equation that was used to calculate Momentum Savings for the non-residential lighting market.

Want to learn more about how Momentum Savings can benefit your program?

Contact Carrie Cobb at clcobb@bpa.gov today for more information.

Example:

How we calculate Momentum Savings (for non-residential lighting)

We calculate the following values:

Lighting Demand
Baseline Efficiency
Actual Efficiency

We divide lighting demand by baseline & current efficiency values:

$$\frac{\text{Lighting Demand}}{\text{Baseline Efficiency}} = \text{Baseline Energy Demand}$$

$$\frac{\text{Lighting Demand}}{\text{Actual Efficiency}} = \text{Actual Energy Demand}$$

Then we subtract the actual demand from the baseline demand:

$$\begin{array}{l} \text{Baseline Energy Demand} \\ - \ \text{Actual Energy Demand} \\ \hline \text{Total Energy Savings} \end{array}$$

Finally we subtract Programmatic Savings from Total Energy Savings. What's left is Momentum Savings.

$$\begin{array}{l} \text{Total Energy Savings} \\ - \ \text{Programmatic Savings} \\ \hline \text{Momentum Savings} \end{array}$$