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Definition of Metrics used in the 2014 Customer Profile Report[1]

DNV GL analyzed the PAs' tracking and billing data at the individual-record level. These records were then aggregated depending on the grain of analysis required for the different metrics. The metrics used in the Customer Profile report are:

- **Account Participation.**[2] This statistic identifies the ratio of accounts within the analysis population (e.g., industry sector, PA, etc.) that participated in energy efficiency programs. It can answer questions such as: "What percent of manufacturing accounts participated in an efficiency program for each PA?"

$$\frac{(Number\ of\ Participating\ Accounts\ within\ Analysis\ Population)}{(Number\ of\ Accounts\ within\ Analysis\ Population)}$$

- **Consumption-Weighted Participation.** This statistic looks at the consumption of efficiency participants within a specific analysis population (e.g., industry sector, PA, etc.) relative to the consumption of the total analysis population. It can answer questions such as: "What percent of total manufacturing consumption for each PA participated in an efficiency program in 2013?"

$$\frac{(Sum\ of\ Consumption\ for\ Participating\ Accounts\ within\ Analysis\ Population)}{(Sum\ of\ Consumption\ of\ all\ Accounts\ within\ Analysis\ Population)}$$

- **Population Savings Achieved.**[3] This statistic looks at the energy savings of efficiency participants within a specific analysis population (e.g., industry sector, PA, etc.) relative to the consumption of the total analysis population. It can answer questions such as: "How much energy did the Massachusetts Manufacturing sector save relative to its total consumption?"

$$\frac{(Sum\ of\ Savings\ for\ Participating\ Accounts\ within\ Analysis\ Population)}{(Sum\ of\ Consumption\ of\ all\ Accounts\ within\ Analysis\ Population)}$$

- **Participant Savings Achieved.**[4] This statistic looks at the energy savings from participant accounts relative to the consumption for those participants only. It can answer questions such as: "How much energy did participating manufacturers save relative to their consumption?"

$$\frac{(Sum\ of\ Savings\ for\ Participating\ Accounts\ within\ Analysis\ Population)}{(Sum\ of\ Consumption\ of\ Participating\ Accounts\ Only\ within\ Analysis\ Population)}$$

[1] Definition of metrics start on page 15 of the report

[2] In the 2011 and 2012 reports this was referred to as the "participation rate."

[3] Formerly called "percent savings achieved" in the 2011 and 2012 reports, DNV GL renamed this class to accommodate the PA and EEAC request to have less similar names for the analysis statistics in order to improve readability.

[4] Formerly called "average savings percent" in the 2011 and 2012 reports, DNV GL renamed this class to accommodate the PA and EEAC request to have less similar names for the analysis statistics in order to improve readability.

- **Proportional Consumption Ratio.** This statistic looks at the proportional savings contribution to total savings for a specific analysis bin relative to the proportional consumption contribution to total consumption. This lens provides a more normalized view of a bin's savings relative to consumption by incorporating population level weights.

$$\frac{\left(\frac{Savings\ for\ analysis\ bin}{Total\ savings\ for\ all\ analysis\ bins}\right)}{\left(\frac{Consumption\ for\ analysis\ bin}{Total\ Consumption\ for\ all\ analysis\ bins}\right)}$$

- **Contribution Ratio.** This statistic offers a unique look into the relative savings and consumption that each PA's customer market contributes to energy efficiency measures. This adds deeper insight into each PA's customer market, as the ratio is normalized for each of the PAs. A ratio of 1 would indicate that the proportional savings from a single bin is equal to the proportional consumption from said bin. For more details, see Section **Error! Reference source not found.**.

$$\frac{Proportion\ of\ Total\ Savings_{PA,Bin}}{Proportion\ of\ Total\ Consumption_{PA,Bin}}$$

- **Energy Use Intensity (EUI).** This statistic offers insight into the annual energy use for the account(s) identified at that location normalized by the square footage of this location. When multiple accounts are identified at a location, the consumption for those accounts is aggregated and then divided by the location square footage to avoid understating the EUI.

$$\frac{Sum(Annual\ Consumption\ for\ all\ Accounts\ at\ Location)}{Square\ Footage\ for\ Location\ per\ MA\ Level\ 3\ Tax\ Data}$$