



# Mix Model : Calculations

$$\begin{aligned}
 & \left( \frac{\text{Activity Unit SV}_{[KSV/Unit]}^{AP0, ST}}{\text{Qty Per Unit}_{[Item/Unit]}^{AP1, ST}} \right) * \left( \frac{1}{1 - \text{Scrap}_{[\%]}^{AP0, ST}} \right) + \\
 \text{Activity Item SV}_{[KSV/Item]} = & \left[ \begin{array}{l} \text{if } \text{SV Per Period}_{[KSV/Day]}^{AP0, ST} > 0 \text{ Then} \\ \left( \frac{\text{SV Per Period}_{[KSV/Day]}^{AP0, ST}}{\text{Sum Activity Demand}_{[Item/Day]}^{AP0, ST} + \text{Sum Customer Demand}_{[Item/Day]}^{AP0, ST}} \right) \\ \text{Else} \\ 0 \\ \text{End If} \end{array} \right]
 \end{aligned}$$

$$\text{SB Period SV}_{[KSV/Year]} = \sum_{\text{SUM}} \text{Pipe Period SV}_{[KSV/Year]}^{AP0, DPS} + \sum_{\text{SUM}} \text{SB Period SV}_{[KSV/Year]}^{AP0, DPTS}$$

$$\text{SB SV Per Item}_{[KSV/Item]} = \sum_{\text{SUM}} \text{Pipe Item SV}_{[KSV/Item]}^{AP0, DPS} + \sum_{\text{SUM}} \text{SB SV Per Item}_{[KSV/Item]}^{AP0, DPTS}$$

eVSM Mix includes process based equations for calculation:

- Sustainability equation's like those shown understand the life cycles
- Equations are already built-in