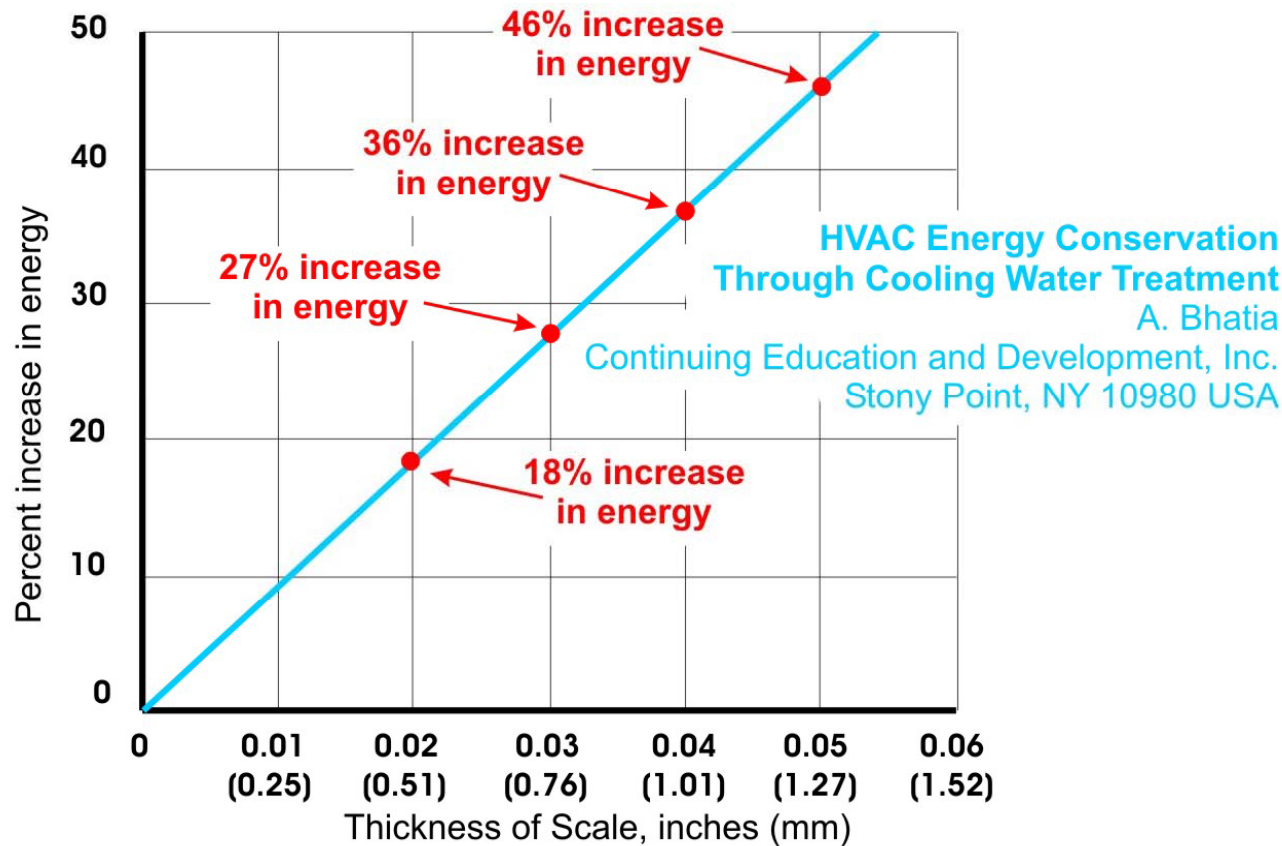


Scale thickness results in an increase in energy usage.

Biofilm causes up to four (4) times the energy usage increases than does calcium carbonate scale for the same thickness of buildup.



Effect of Condenser Tube Scale (CaCO_3) on Energy Consumption

The graph shows that a calcium carbonate scale thickness of 0.02 inches (0.5 mm) represents an increase of 18% in electrical energy compared to the same unit free of scale. A thickness of 0.05 inches (1.27mm) increases electrical energy usage by 46%.

Biofilm (slime) thickness of 0.012 inches (0.3mm)
can increase energy usage by 46%.