

# Linear trend CALCULATING APPLICATION OF HOUSEHOLD ELECTRICITY USE WITH Least Square Method

Elly Agustina Julisawati  
STMIK Jakarta STI&K  
E-mail: [elly@jak-stik.ac.id](mailto:elly@jak-stik.ac.id)

## ABSTRACT

One to analyze the electricity consumption of households are using the calculation method with a Linear Trend Least square method. Linear trend values can be calculated the amount of electricity consumption for households with the formula:

$$Y_t = a + bt$$

Where:  $Y_t$  = total electricity consumption in KWH

constants  $a = b =$  coefficient  $t =$  year  $t$

The value of  $a$  and  $b$  are first found using the least square method. After determining the value of  $a$  and  $b$ , the linear trend equation can yield how much per KWH of electricity use each month.

Based on the Value of Linear Trend, it is concluded fluctuations in electricity consumption darim every household, whether increased or decreased every month in a period. With so can dikethui households which reflects the principle of saving in electricity usage.

Keywords: Linear Trend, Electricity, KWH