# Data Analytics in Smart Meters for the Detection of Energy Theft

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**TL;DR:** Determine abnormal electrical energy consumption as probable energy theft

**Abstract:** *The smart meters allow to monitor the data of consumption/production of electric energy in certain periods of time and sending them to data servers for later billing. The objective of this work is to analyze the data directly from the device (edge computing) to determine if there are anomalous consumption/production patterns that allow determining if it is a possible theft of energy by the users or the electric company. To achieve this, the smart meter predicts through its historical data the following consumption value and based on previous and future estimates, it deduces if it is a possible energy theft or alteration of the production. The technique used is a variant of the ARIMA model in time series. The results show that the proposed model can predict with an acceptable margin of error a possible attempt to energy theft or tampering data production.*