ELECTRICITY & WATER CONSUMPTION METER

What are the Benefits?

Electricity Consumption Meter:

Households can refer to these meters which measure the energy consumed by each appliance. Individuals can use the information to make themselves more aware of how much electrical energy they are using and also how much are they paying for it. They can use this data wisely and this can help them to know which appliance they have to use lesser in-order to get an appropriate electricity bill at the end of the month.

Water Consumption Meter:

Households can use this meter to find out how much water their inlet is using and how much are they basically paying for it. Individuals can use this data wisely and this can help them to save a very important resource. This device can also be installed in individual flats of an unstable apartment system, as individual flat owners can pay exactly how much they have used instead of paying a common bill which pen-ultimately puts an innocent individual at more expense.

--- Basic Apparatus Used In Making These Meters ---

Electricity Consumption Meter:

Arduino Uno R3

ACS712 Hall Effect Current Sensor

OLED Display

Water Consumption Meter:

Arduino Uno R3

YF- S201 Hall Effect Water Flow Sensor

LCD Display (2x16, i2c interface

Both of these meters can work on one Arduino. But I had to put them on two different Arduinos for display purpose :)