



How to understand your utility costs

Your utility bills or pre-paid receipts hold much of the key information you will need to audit your electricity and water consumption. Here's how to read them:

How much do I use?

For billed electricity accounts

All Eskom or municipal accounts show the total number of kWh units you have used for the month. This is the amount of electricity you are paying for. If you're confused about what a kWh is, it's explained simply here in this [Eskom presentation on Appliance Electricity Usage](#). Other line items that you might see are for things like fixed levies and service charges that aren't affected by your consumption.

The monthly figures will be useful for tracking your savings in the coming year (and longer), since it's best to compare usage to the same month or season in previous years. Take note of any months that are billed based on **estimated**, not **actual** readings. You may want to calculate a monthly average from one actual reading to the next.

For pre-paid electricity meters

Some pre-paid vouchers do not mention kWh, but only 'units'. A unit is always a kWh, however. Whenever you buy electricity, you are buying kilowatt hours.

For water bills

A home's monthly water consumption is referred to in kilolitres. A kilolitre, or kl for short, equals 1,000 litres of water. Compared to kilowatts, kilolitres are easy to visualize. Picture the water that would fill a (square) cube which is 1 meter wide, 1 meter tall and 1 meter deep.

How much do I pay?

Electricity tariffs for residential consumers in South Africa generally range from R1,10 to R1,75 per kWh in early 2014, and the tariff goes up each year in April for Eskom customers or July for municipalities. With Eskom and most municipalities, the more you use, the higher the rate you pay for each extra kilowatt hour. This is called an 'inclining block' or 'step' tariff. Look for the highest rate listed on your account and add 14% VAT to the given rate to know your real cost. (Calculator shortcut: tariff x 1.14) That's what you will save for each kWh you save above the highest tariff threshold.

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You might want to set a target to keep your monthly kWh below the limit for the highest tariff you are currently paying. For example, the Ngewana family are aiming to keep their electricity use to under 600 kWh per month which is their threshold above which they pay a higher tariff. Of course it might be harder to achieve in the forthcoming winter months with the added use for winter warming.

Pre-paid tariffs per kWh usually do not appear on vouchers, and simply dividing the rand total by the number of units may not be accurate because of service charges which may be included in the total. Most South Africans can find their prepaid tariffs listed [here](#), or from their municipality. Again, you will need to add VAT.

Use your tariff per kWh to work out how much you will save if you reach your target, or insert the tariff in various calculators, such as [Eskom's Comprehensive Energy Audit Calculator](#) or the [Eurolux Energy Saving Calculator](#), to estimate your savings from going green.