

What Do You Know About Your LPG Gas Supply

We have created this document to make it easy for us to share interesting information with you regarding your LPG gas supply. This is information which most of you are unaware of but are commonly in search for. Hopefully this information will serve as a starting point when comparing appliances that run off gas to those powered by electricity.

How Much Energy Is There In A LPG Gas Bottle?

This has been a common question asked by our clients over the years, when they are wanting to compare gas to electricity. Here are some simple facts about LPG gas versus electricity:

- *1 kg of LPG gas contains 50.4 MJ [Mega Joules] of energy*
- **1 kWh of electricity = 3.6 MJ of LPG gas**
- **One 45 kg LPG gas bottle [45 kg x 50.4 MJ = 2268 MJ of energy**
- *Other bottle sizes are: 9 kg = 453.6 MJ : 2 x 45 kg bottles = 4536 MJ*

Other interesting information:

- *Green House Gas [CHG] Emissions 3.6 MJ Gas = 0.2 kg CHG*
- *CHG for coal fired electricity = 1.4 kg CHG*
- *1000 Mega Joules [MJ] = 1 Giga Joule [GJ]*
- **1 x 45 kg LPG gas bottle = 630 kWh of electrical power**
- **1 X 45 kg LPG gas bottle contains 88 litres of LPG [Propane] gas**
- *Dimensions of a 45 kg bottle are height 125 cm X diameter 37.5 cm*
- *1 litre of LPG gas weighs 0.51 kg*
- *1 kg of LPG gas has a volume of 1.96 litres*
- *1 MJ of LPG gas equals 948 BTU [Imperial system of measurement]*
- *Weight of empty 45 kg LPG gas bottle [Tare weight] 33 kg [Older bottles more, newer less]*

What Is Cheaper Per Unit Of Energy, Gas Or Electricity?

Let us say you pay \$135 for a 45 kg bottle of LPG gas, which has the equivalent electrical energy of 630 kWh.

Maths being $\$135 / 630 \text{ kWh} = 0.21 \text{ cent per kWh}$ of comparable electrical energy. So are you paying more or less than this 21 cent per kWh figure?

The above does not take into account the efficiency of any appliance [most appliances are not 100% efficient, see the star ratings for more information] and other operational variables such as ambient temperature. The figure is a starting point for further investigation.

This information document brought to you by **Aussie Home Energy** an Australian business leader in electricity reduction services and products for homes and business.