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Average electricity usage kwh per day

I'd like to know the average electricity consumption for a family of four in one year. We are using about 700 kilowatt hours a month and that seems high to me. How do we compare to the average? Answer from Green Energy Efficient Homes The average electricity consumption for a family of four will vary considerably depending on where you live. And the consumption of individual households can be quite far from that average. As I explain in my About me page, my family of four got our household use down to 180 kilowatt hours a month which is about one sixth the average of my home province of Ontario. In Costa Rica where I lived for a year, most families used almost no electricity - enough for a couple of lightbulbs, a semi-automatic clothes washer doing the wash once a week, and maybe a table top fan for very hot days. Many people in smaller towns didn't even own a refrigerator. Prices were high enough that people there couldn't really afford to use much more. All told, the average Costa Rican family probably used 2 kilowatt hours a day or less - or 60 kilowatt hours a month. And by developing-world standards Costa Rica is well off; in many other developing countries electricity isn't even available to most people, so the average is very low. On the other hand, if you live in Phoenix chances are you can't survive without air conditioning for much of the year, and whole house air conditioning on a hot day can account for up to 90% of your electricity use on such days. The average electricity consumption of a US family of four is in the neighborhood of 50 kWh per day, or 1,500 kWh per month. Similar figures apply for Canada. Assuming an average electricity cost of \$0.12 per kWh, that translates into about \$6 per day for electricity, or \$180 per month. Here's how I calculated these figures: Amount Item 3,741,000,000,000 Total kWh consumed in US in 2009 38% Used for residential 1,421,580,000,000 kWh residential use in 2009 308,745,538 US population 2010 4,604 kWh per person 18,417 kWh for a family of four 1,535 kWh per month (family of four) 50 kWh per day (family of four) \$184 cost per month (family of four) \$6 cost per day (family of four) That's the average. Of course, you can do much better than that. As I mentioned Canadian and US total electricity consumption per capita is about the same, but I have heard smaller figures for Ontario, my home province, for domestic consumption, where the average is closer to 35 kWh a day for a typical family (substantially lower than the 50 kWh above). My home city of Toronto gets pretty hot in the summer so some use of air conditioning is fairly typical. Toronto has a climate not that different from the midwestern states of the US, or New England states. We pay around \$0.15 for electricity here if you count all the extra costs they throw on our bill, so a typical household pays about \$150 a month for electricity or roughly \$1,800 per year. Consumption in the US tends to be a little lower because the Canadian average is heavily influenced by electric heating, especially in Quebec where the provincial electric utility heavily promoted electric heating for decades. Here are figures for various countries, note that the statistics for each country may not be from the same year as the others: Canada: 12,836 kWh per year (ours was 3,030 in 2007!) US: 10,654 kWh per year Europe: 4,667 kWh per year Japan: 5,945 kWh per year Since a family of 5 is probably larger than a typical household, but adding extra people doesn't make that much difference to the electrical load, I would guess 12,000 kilowatt hours per year is a reasonable average. Of course that is an average. Someone who leaves all the lights on, runs the air conditioner on high all summer, and has a big plasma screen TV on all the time will use more than that, as will anyone in a cold climate who heats with electric baseboard heaters. Meanwhile, someone who heats with natural gas, oil, wood, or solar, installs compact fluorescent lights, turns the lights off when not needed, and only runs the air conditioner when absolutely essential, will use a lot less. As I said, you can do much better than the average. My household (two adults, two kids) used about 300-400 kWh per month, or around a third of our local average. But by carefully tracking how much we consumed, and finding ways to cut back on waste, as I explain in How to save electricity, we managed to reduce our consumption to about 7 kilowatt hours a day. It's sometimes challenging to keep your consumption down that low - but it is doable. Since the beginning of time, people have gradually consumed more and more energy alongside technology advancements. Consumption was initially around 3 kWh per day per person and was mostly used for nourishment. Because of the necessity and possibility of heating for warmth, consumption in prehistoric times rose to 6 kWh primary energy per day. In the Middle Ages, people in Europe wore more clothes and created more elaborate houses and churches, increasing the daily energy consumption to 24 kWh. Today, we use less than 6 kWh for pure nourishment, with more than 12 kWh for the preparation and transportation of food. US and German citizens consumed in 2019 about 219 and 120 kWh per day, respectively. The 2019 data on energy consumption (BP) and population (PRB) show that the average daily energy consumption of a person in India is still just 19 kWh. But China at 75 kWh is already above the world average and will consume approximately the same amount of energy as industrial nations in the next few decades. In 2019, the world primary energy consumption was 13.9 billion toe (ton of oil equivalent). With a world population of about 7.7 billion, we now have a world average consumption of primary energy of 58 kWh per day per person. If the world population increases to 10 billion as expected, and all countries advance to match the present consumption of US, the world energy demand will eventually increase nearly sixfold. You will become energy conscious. If you know that your building consumes 30 units per day, you might want to ask: Where is it going? This question will give an invaluable opportunity to evaluate how you are currently consuming power. The next question might be: What can I do to reduce this number? Energy conservation will certainly help. Is it possible to maintain your standard of living and conserve energy at the same time? Efficient use of energy will help to lower your consumption. The use of LED lights, class A fridges, solar geysers etc. will make a big difference! Make an effort to learn more about energy and how to use it wisely and efficiently. Ultimately it will not only benefit your pocket but also our Planet! See How to save electricity for more detailed information. How to determine your daily energy consumption? If you are currently using energy that is provided by Eskom or your municipality, there will be an electricity meter installed somewhere. Whether a prepaid meter or an older revolving disc meter, do the following to establish your daily energy usage: Write down the number on your meter at a convenient time, say in the evening after work. At the same time the next day (24 hours later), write down the number again. Subtract the two figures from each other. 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Ultimately it will not only benefit your pocket but also our Planet! See How to save electricity for more detailed information. How to determine your daily energy consumption? If you are currently using energy that is provided by Eskom or your municipality, there will be an electricity meter installed somewhere. Whether a prepaid meter or an older revolving disc meter, do the following to establish your daily energy usage: Write down the number on your meter at a convenient time, say in the evening after work. At the same time the next day (24 hours later), write down the number again. Subtract the two figures from each other. The number you are left with is the amount of units or more correctly, kilowatt-hours (kWh) that your household has consumed in a 24 hour period. This number is the amount of kWh that an independent solar electric system would need to generate every day. If you keep a daily record, you will be able to see the effect of energy conservation techniques. You will even be able to measure the consumption of specific appliances. For instance, switch off the pool pump for 24 hours and see how much lower the number will be! The lower you can get your daily consumption, the lower your electricity bill , the lower the initial investment cost of a solar electric system to suit your requirements. What number to expect? What number to aim for? The national average daily consumption for a typical household according to Eskom is over 30 kWh. Way too high in my humble opinion! My personal house consumes less than 3 kWh per day! We have many clients who are happily living with solar systems producing anything between 3 - 36 kWh per day. Of course larger systems are possible for specific applications. You can download the spreadsheet below if you want to calculate your daily energy requirement. Complete this form and send it to your nearest ALLSOLAR branch for analysis and further feedback: Energy analysis DIY spreadsheet 2,229 472 1,236 12 18 150.54 287,526 572 21.94 125.57 2,808,352 1,028 12.77 131.31 1,388,358 1,156 9.81 113.36 13,591 152 546 18.84 102.90 2,326,976 691 12.15 83.90 1,503,701 724 21.20 153.46 432,449 977 12.53 122.43 274,613 787 12.84 101.01 9,423,022 1,110 11.54 128.10 4,354,021 1,142 11.47 131.05 436,266 518 32.47 168.13 743,567 944 10.15 95.84 5,289,573 744 12.77 94.98 2,863,358 1,006 12.26 123.39 1,385,756 892 12.24 109.27 1,266,044 934 13.35 124.68 1,980,209 1,166 10.60 112.57 2,085,055 1,282 9.59 122.86 709,848 572 16.84 96.32 2,332,517 1,005 13.30 133.68 2,784,243 607 21.61 131.20 4,365,529 671 15.45 103.59 2,420,325 786 13.14 103.34 1,290,281 1,247 11.12 138.63 2,792,459 1,118 11.34 126.79 509,526 850 10.96 93.19 849,898 1,021 10.70 109.27 1,183,660 947 11.85 112.18 622,671 621 19.69 122.27 3,568,044 690 15.41 106.28 889,841 639 12.68 81.08 7,190,906 604 18.52 111.93 4,550,420 1,129 11.09 125.17 382,596 1,118 10.25 114.60 4,964,855 914 12.56 114.80 1,764,980 1,139 10.30 117.28 1,750,240 901 10.98 99.00 5,390,428 864 13.89 120.04 442,005 589 20.55 121.05 2,290,200 1,159 12.44 144.20 400,150 1,045 11.59 121.16 2,882,992 1,283 10.71 137.35 11,148,784 1,176 11.20 131.63 1,091,162 742 10.41 77.25 315,138 560 18.02 100.83 3,431,574 1,165 11.73 136.59 3,076,868 957 9.75 93.34 859,039 1,133 11.18 126.70 2,700,651 693 14.02 97.09 272,427 841 11.29 94.90 The Fridge/Freezer is the one appliance in your home that never gets turned off. Combi fridge-freezers are the most expensive to run, with a standard combi using 427kWh/year costing £64.However, if you own a combi fridge-freezer with an A+ energy rating, it will likely use around 200kWh/year costing £30. It's important to look at energy ratings of the appliance when you are buying, as they can help save you money over a long period.Cooker energy usage varies with type, energy rating and usage. Electric cookers use on average 317kWh/year costing £47.55.TIt has been estimated that a 32" LED TV that is used for 4 hours every day, uses 50kWh/year costing £7.50. However, an LCD flat screen uses 198kWh/year costing £29.85. The steep increase again comes down to modern LED technology and improved efficiency ratings.If investing, make the move to LED TV's and save yourself money every year or allow yourself a few extra hours in front of the TV.Washing MachinesIt comes as no surprise that washing machines use a lot of electricity. With an average of 270 cycles every year per home, your machine could be using 166kWh/year costing £24.90. Each cycle can vary between 0.3kWh and 1kWh, depending on the spin cycle, temperature, size (kg load) and efficiency rating.Tumble DryerIf you have a tumble dryer in your home, with an average 150 cycles a year, your dryer could be using 394kWh/year costing £59.10.The cost can vary depending on how much you use it, the type of tumble dryer, the load size, the setting and energy efficiency rating on the appliance.LightingIf you've updated the lighting in your home to LED, then you will already be saving money every year. Based on an average two hour usage each day, LED lighting uses 9kWh/year costing £1.35. However, if you still use halogen light bulbs, then you might consider switching as they use an average 31kWh/year costing £4.65.Saving money with LED light bulbs comes as no surprise, as they are more efficient with where the energy generated goes. Halogen light bulbs waste most energy produced on heat, whereas LED's do not get hot and use most of the energy produced on light - they also have a longer lifespan!Other common appliancesThe cost of using other appliances in your home can vary, depending on how often they are used. A toaster is likely to use an average of 21.9kWh/year costing £3.28 to run.Kettles can prove to be expensive when more water than what is needed is boiled. The average kettle uses 167kWh/year costing £25.05 to run. It's important that you only boil the amount of water you need, so you don't use more electricity than necessary.Kitchen appliances are notorious for using a lot of power, which is why if you can get a more energy efficient appliance, it can help save you money in the long term. Dishwashers use on average 294kWh/year costing £44.10 to run. Most dishwashers will have eco settings where you can select a lower temperature or a shorter cycle.Games consoles get lots of use in homes and the cost of that can rise quite quickly. Different gaming systems have different power ratings and can cost more, however the average games console uses 47.6kWh/year costing £7.14 to run. Wii consoles are cheaper than this to run, but Playstations are often more.Dehumidifiers are considerably the most expensive item you could run in your home. On average, they use 525kWh/year costing £78.75 to run. They are more expensive than you might be. What can I do to reduce this number? Energy conservation will certainly help. Is it possible to maintain your standard of living and conserve energy at the same time? Efficient use of energy will help to lower your consumption. The use of