

On average, the solar panels on Swonder Ice Arena generate 58 kwh of electricity from the sun every day.

1. The average household uses 29 kWh of electricity every day. Using as many solar panels as the Swonder Ice Arena does, how many households can use electricity from the sun?
2. Our refrigerator uses 11 kwh of electricity every day. For how many refrigerators could the Swonder's solar panels generate electricity?
3. In one week, how much electricity do the Swonder's solar panels generate?
4. The electricity price was 11 cents for 1 kwh in April 2020. How much money in dollars did the Swonder ice arena save a month (30 days) by not buying electricity from utility companies?



Answer Key

On average, the solar panels on Swonder Ice Arena generate 58 kwh of electricity from the sun every day.

1. The average household uses 29 kWh of electricity every day. Using as many solar panels as the Swonder Ice Arena does, how many households can use electricity from the sun?

$$58 \div 29 = 2 \text{ (households)}$$

2. Our refrigerator uses 11 kwh of electricity every day. For how many refrigerators could the Swonder's solar panels generate electricity?

$$5 \text{ refrigerators } (58 \div 11 = 5 \text{ R } 3)$$

3. In one week, how much electricity do the Swonder's solar panels generate?

$$58 \times 7 = 406 \text{ (kwh)}$$

4. The electricity price was 11 cents for 1 kwh in April 2020. How much money in dollars did the Swonder ice arena save a month (30 days) by not buying electricity from utility companies?

$$58 \text{ kwh/day} \times 11 \text{ cents/kwh} \times 30 \text{ days} = \\ 19,140 \text{ (cents)} = \$191.4$$

