

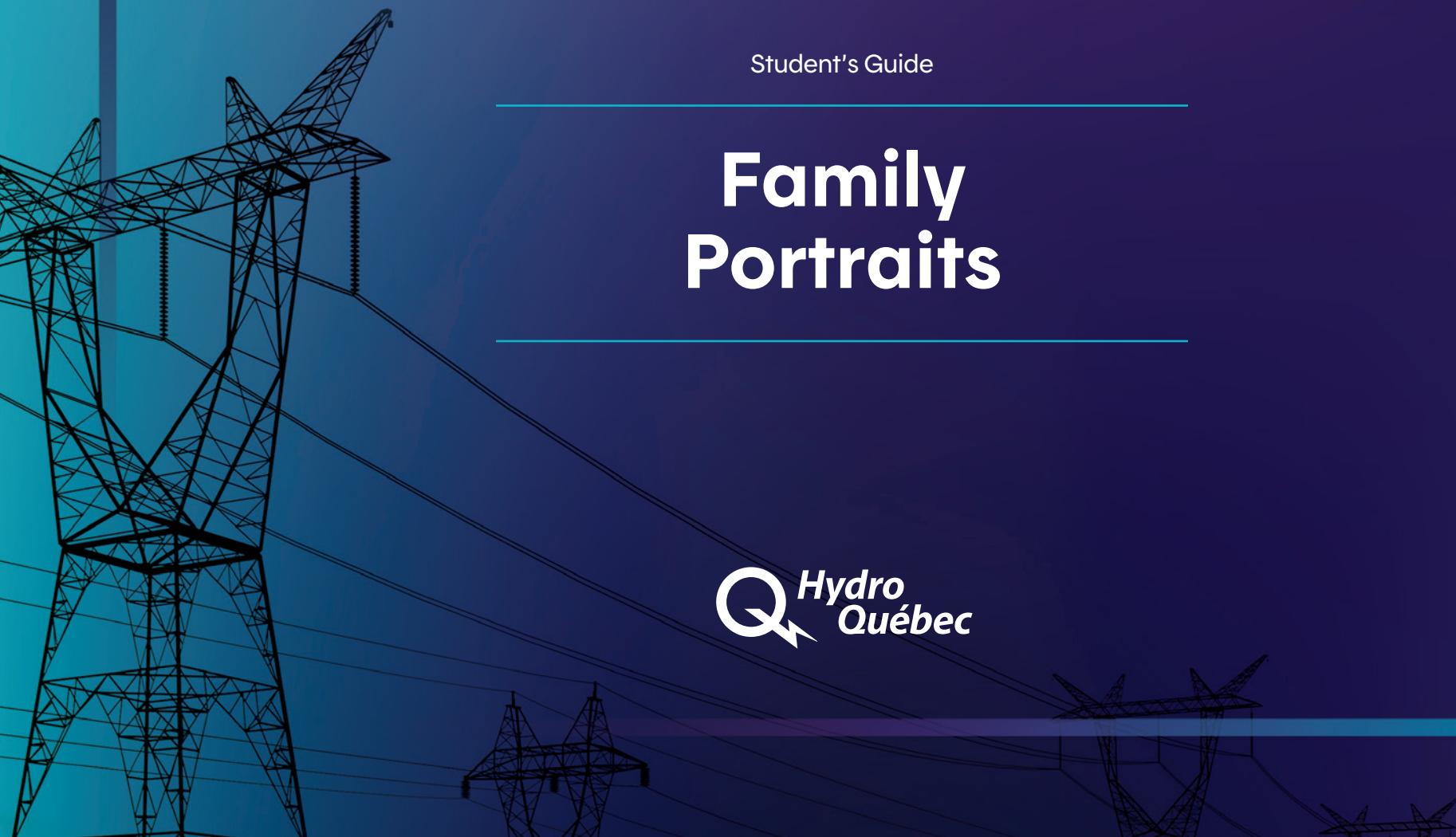


Student's Guide

---

# Family Portraits

---



# Family Portraits

## Scenario 1

A retired couple aged 63 and 65 lives in Montréal in a large two-story single-family home with a finished basement. The house has 3,600 square feet of living space, excluding the basement. It has 10 rooms, including one full bathroom and one powder room.

The couple had the house built 40 years ago and has maintained it well. The windows were changed three years ago. The insulation was redone seven years ago, and the roof, eight years ago.

Heating is provided by electric baseboard heaters in each room; they alone consume 28,154 kWh of energy. In the summer, the house is cooled by a 15,000-BTU wall-mounted air conditioner. Installed in 2015, it runs continuously from mid-June to late August. It allows the couple to live comfortably, since they use the stove every day.

The couple also has a small spa, which they use once (1) a week, only in the summer. They take advantage of it a little, but they prefer to stay inside, trying new recipes and watching the news 24/7.

Both retirees take 7-minute showers, in turn, every day. They don't take baths. They have installed Hydro-Québec's kit of water- and energy-saving products.

The couple doesn't spend much on making sure their home is trendy. They prefer to repair or replace anything that breaks rather than trying to keep up with the latest fashions. Their major appliances are old. Every week, the couple runs the dishwasher twice (2) and does 4 full laundry loads, using a top-loading washer and dryer. The refrigerator is still in good shape, but it's over 12 years old and has a top freezer. The two (2) LCD televisions, measuring 40 and 52 inches, are over 10 years old.

Family income (net): \$70,000 a year.



# Family Portraits

## Table/Scenario 1

# Family Portraits

## Scenario 2

A couple with two children (6 and 11 years old) lives in Val-d'Or in a one-story single-family home with 1,800 square feet of living space and no basement. There are seven rooms, including a full bathroom, and a garage (partially heated). The house has an electric central heating system with ducts in every room. Heating needs alone eat up 21,145 kWh of energy.

Built 25 years ago, the house has seen little upkeep over the years. Only the roof has been redone, four years ago. However, the rooms are redecorated regularly. The home appliances were all changed over the last 5 years, except for the refrigerator in the garage, which is 14 years old. All the refrigerators have a top freezer.

In the summer, 2 window-mounted air conditioners purchased in 2012—a 12,000-BTU model and a 6,000-BTU model—are installed in the 2 bedrooms. They run roughly 10 hours a day for 60 days.

The 18-ft. above-ground pool is equipped with an electric water heater that operates from mid-May to mid-September to keep the water at a comfortable temperature. Even though the family has a solar pool cover, they rarely use it because they don't like putting it on and taking it off.

The family members take 4 showers a day, each 10 minutes long. They use a low-flow showerhead. They run the dishwasher 5 times a week. With four members, the family does an average of 7 loads of laundry a week. They wash their clothes in warm water using a front-loading machine. They also use the dryer twice (2) a week.

Family income (net): \$80,000 a year



# Family Portraits

## Table/Scenario 2

# Family Portraits

## Scenario 3

In the city of Québec, five students (18 to 20 years old) share a four-bedroom apartment on the second floor of a three-story building. The apartment has 1,500 square feet of living space. They use 2,889 kWh of electricity a year to heat it.

The building was constructed nine years ago using standard materials that are up to code. The 60-gallon water heater is installed in a closet.

The kitchen is minuscule, but the roommates cook in it only once (1) every 5 days or so. The rest of the time, they eat at the school's cafeteria or a restaurant because they don't like doing dishes. They don't have a dishwasher.

The refrigerator with bottom freezer is 5 years old, while the stove is 13 years old. Both appliances were purchased used. They do their laundry at their parents' homes.

The apartment has baseboard heaters in each room. Old 6,000-BTU window-mounted air conditioners are installed in 3 of the rooms and run day and night all summer long (a 90-day period).

Three of the occupants like to take bubble baths. The 2 others take 20-minute showers every day, using a standard showerhead because they don't want to waste 100 litres of water for a bath like their roommates do. They follow a set bathroom schedule because they sometimes run out of hot water. They dry their hair and get ready in their bedroom. They share the same blow dryer and both use it every day for a total of 15 minutes.

Household income (net): \$50,000 a year, plus loans and bursaries



# Family Portraits

### Table/Scenario 3

© Hydro-Québec

DIRECTION – PROGRAMMES COMMERCIAUX,  
EXPERTISE ÉNERGÉTIQUE ET AFFAIRES RÉGLEMENTAIRES

REPRODUCTION AUTHORIZED WITH ACKNOWLEDGEMENT OF SOURCE.

ISBN: SEE THE WATTSON KIT TEACHER'S GUIDE

2021G745A-10

*This is a translation of the original French text.  
Ce document est également diffusé en français*

