

# Towards Transition

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"Dinner's ready," announced Aunt Susan. Uncle Bob, her husband, hurriedly made his way to the kitchen to help her out, and Aunt Lily followed.

We had all gathered that evening for a family dinner at Uncle Bob and Aunt Susan's house. Every year, the family got together on grandfather Bill's birthday to remember him, and usually all his three sons and their wives would be present. But this year my parents were in France, and I filled in for them. Bob was the oldest son followed by my father, David and the youngest, Peter.

Uncle Bob's house is on the hillside in Twillingate. One could see the harbour and all the boats while standing on the front lawn. Growing up, I remember spending a lot of time at this house during summer holidays. We went for a picnic at the nearby lake, where we did swimming, fishing, and boating on Uncle Bob's mahogany wooden boat. In all these years, nothing much has changed.

Uncle Bob didn't do too many renovations in the house and instead, retained its old features, including the use of natural gas. The food was cooked on a natural gas stove, the water and house were heated with gas, as was the fireplace. At the time, Uncle Bob took me around the town in his diesel powered SUV, which is now driven by Aunt Susan for her daily chores. A few years ago, he bought himself a gasoline engine SUV for going to work. I realised within a few minutes that this house and its people had stood still in time, detached from the energy-use awareness prevalent in other parts of the country.

"Next time when you visit, I'll take you all fishing on the new speed boat we are going to buy. It's 25 ft, powerful twin marine engines, stylish cockpit, leather seats and large deck space. Look at these pictures," Uncle Bob had said earlier to Uncle Peter, who loved fishing.

As we sat around the dinner table, Aunt Susan looked at me and asked, "Ty, I heard you are studying business at Ivey."

"Yes, that's right," I replied confidently. "At least 20% of carbon emissions come from households. Canada needs to hit some aggressive reduction targets by 2030 and I'm studying how we can convince people to reduce their home emissions."

"Well, that's great. But why do they always want the little guy to take action? If you ask me, it's the government who needs to fix their act. They have all the money and power. There is only so much we can do in our homes," Uncle Bob said from the end of the dining table with a complaining tone. The others in the table

nodded slightly in approval at his comment. He always held strong views and never shied away from expressing them.

"While the government is making policy changes and providing incentives, the residential sector, which accounted for 14% of energy use, can make a significant impact by making changes in its energy use behaviours. Households in Canada produced 65.6 megatonnes of CO<sub>2</sub>. The main culprit is space heating, and 52 percent of it is natural gas which has 95 percent of methane. That's why the government is banning fossil fuel heating in new homes." I retorted to drive home the lesson that we learned in our classroom.

"Are you suggesting we buy electric vehicles, change everything to electric and install solar panels? That is going to be expensive. My friend in Quebec spent upwards of \$100,000 for home electrification. She is not sure in the end if it was cost efficient. Gas is so much cheaper," Aunt Lily, Peter's wife, said while looking at Uncle Bob and Aunt Susan for approval.

"Exactly. Back in the day when we used to chop and burn wood for cooking, they told us 'Natural Gas is cheapest, safest, cleanest and quickest'. And they were right. I remember our struggle in the kitchen, and I'm glad we have a gas stove at home now. It's an easily accessible energy source for us here," continued Aunt Susan with conviction about her choices.

My family was right in suggesting the two main obstacles for energy transition - Cost and Availability. Financial considerations are the most important reason for both making the switch and not doing so. Fossil fuels are easily available, which makes it an attractive option for homeowners. This is also why oil lamps were used well into the 20th century. It was an older but proven cheap technology that relied on easily available oil.

"You're both right. But we learnt that emissions can be reduced by doing the little things to gain energy efficiency. It might not be as attractive as buying an electric car, but effective. Turning the thermostat down 1°C will save around 13% of space heating energy. And during office hours, if you lower it to 16°C, we can save 10% of daily energy use. In essence, one-third of our Paris emissions commitment could be achieved by improving energy efficiency, leaving more money in the pocket for consumers with minimal investment. Insulating, installing a heat pump and double or triple glazing are recommended steps households can take next for more savings in the long-term. Over the years, homes can switch to electrification by which time more federal and provincial support will be announced."

Both my aunts shifted forward in their seats after hearing about money savings. But Uncle Bob remained silent. Uncle Peter was also interested as he had heard of these points before from his younger daughter. School programmes for children have proven to encourage energy awareness in households, with subsequent energy reductions of 5 to 20 per cent.

"You make some good points, Ty," Uncle Peter said to me with a pat on my back and a wide smile. "One aspect is about transition while the other aspect is ensuring future purchase decisions are aligned towards lower emissions. We can all do our bit," he said while looking at the others on the table.

The rest of the dinner was uneventful. Everyone shared news about their personal lives, careers and children. After the dessert, both my aunts went to the kitchen to clean up while Uncle Peter and I sat near the fireplace. Uncle Bob went missing for a couple of minutes, after which he came back out with an antique iron. It was a self-heating iron from Coleman, which needed gasoline to be poured into the fount. It was unlike the current electric irons in our homes.

"This belonged to your grandfather," Uncle Bob said, looking at me directly with the iron in his hand. "He bought it before I was born, but we used it for a long time. Your grandmother was fond of it. But one fine day, he bought a new electric iron. Everyone was complaining. We could easily get gasoline and fire this up, so why make a switch, I asked. Grandmother even had a fight with him. But he held the electric iron firmly in his arms and called it the future that's already in the present. You reminded me of him today."

The next day, we had breakfast and left for our respective homes in the city. As I was driving to the airport, I saw the harbour again bustling with activity, and the boats returning with the day's fresh catch. The exhaust fumes floated in the air as the waves exploded on the harbour wall. I'm not sure if our dinnertime discussion last night will provoke a change, but it is definitely something I want to share with my Ivey classmates. Maybe I will return next year to find out.