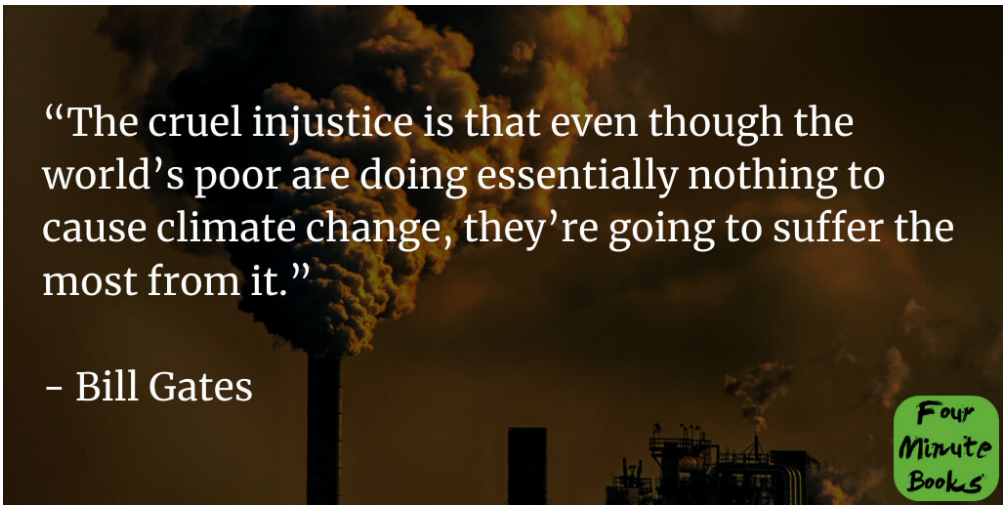
How To Avoid A Climate Disaster Summary

1-Sentence-Summary: *How To Avoid A Climate Disaster is Bill Gates' plea to the individuals, governments, and business leaders of the world to reduce greenhouse emissions by changing the way we make things, plug in, grow things, get around, and keep warm and cool.*

Read in: 4 minutes

Favorite quote from the author:



A lot of people might not associate billionaire Bill Gates with climate change activism. But what a lot of people don't know is that he has spent millions investing in solutions for it. And he's also spent a lot of time listening to people talk about it.

Not all of the climate change projects he has put money into have been successful. But one thing's for sure, he's learned quite a bit about what's at stake and what we have left to do if we're going to save the planet.

Through all of his extensive research, he has one clear message: our goal needs to be to get to zero emissions by 2050.

In *How to Avoid a Climate Disaster: The Solutions We Have and the Breakthroughs We Need*, Bill Gates tells us exactly how we can reach this lofty objective. He outlines five areas of focus that we need to work on to get to net-zero emissions:

1. Making things like plastic and steel, which is 31% of emissions.
2. Plugging in, or electricity, which is 27% of emissions.
3. Growing things like what we need for food, which is 19% of emissions.
4. Getting around, or transportation, which is 16% of emissions.

5. Keeping warm and cool, which is 7% of emissions.

Let's see what we can discover from his ideas about just 3 of these:

1. We're going to have to get pretty creative if we want to get our electrical requirements to zero emissions.
2. Improving the way we do transportation is worth the high price tag.
3. We can do things right now to help the climate situation by changing the way we heat and cool things.

Can't take the heat? Get out of the kitchen! Or just listen to Bill Gates because he's smarter than you are. Let's get right to it!

Lesson 1: We need to get creative so we can get our electrical energy uses to zero emissions.

One of the best places to begin is our electricity consumption. That's because it has such a big impact in the other categories that the effects can be widespread.

The reason we still use fossil fuels for electricity is that they're more efficient than planet-safe alternatives like nuclear and hydroelectric. Although these options have some drawbacks that make them difficult, they will be worth it in the end.

Nuclear, for instance, has had its name unfairly tainted by disasters like what happened at Chernobyl and Fukushima. **But if we compare death rates, nuclear is still much less deadly than fossil fuels.**

Wind and solar are also tough because they're not constant. We'll need big, expensive batteries to store excess energy when they produce a lot so we can use it at other times when these sources don't produce well.

To fix this, we need to not worry so much about innovating to be more efficient at alternative energy sources. Instead, we need to find new ways to update our outdated infrastructure like power grids that still rely on fossil fuels.

If we can find ways to change these over to renewables and supplement any deficiencies with nuclear power we will be well on our way to net-zero emissions!

Lesson 2: Fixing our transportation greenhouse emission problems is expensive but worth it.

One of the biggest components to consider when transitioning to clean energy is what's known as *Green Premiums*. These are the additional cost necessary to switch an energy source to more climate-friendly options.

Concrete, for example, costs about $125 to make. If we used carbon capture technology to make it cleaner, it would be upwards of $300. That's a 140% increase!

These numbers might scare us away from improving our energy cleanliness, but we have to know about them so we know where to focus our research and funding to make the switch more cost-effective.

When it comes to transportation, we've already made some progress. Public transportation in many areas has already been electrified, like in Shenzhen, China where every one of its 16,000 busses is electric.

Shorter travel requirements like this are easy to fix. It's the longer ones like planes and trucking that will be more difficult and expensive. If we want to move to the use of batteries, this presents a whole lot of issues with weight.

To make the same amount of energy as gasoline, your battery would need to be 35 times heavier than the gas!

Instead, we can look to biofuels and electrofuels, which derive energy from plants and combining carbon dioxide with hydrogen in water, respectively. Currently, however, their green premiums are 106% for biofuels and 237% for electrofuels.

This means we've got to invest in making breakthroughs in these areas before we can rely on them.

Lesson 3: Improving the way we heat and cool things is one area that we can make immediate adjustments to help stop climate change.

Sales of air conditioning units are skyrocketing around the world and they're expected to keep growing.

The good news is that although these present a problem for climate change, it's one that we can fix. In most places, there aren't great standards for energy efficiency. Many people will opt for a cheaper unit, which is worse for the planet.

If governments were to step in and implement policies for minimum energy efficiency, we could start to see a drop in the energy demand from AC units.

Heating is also a big place we can improve, especially as it accounts for about a third of all emissions from buildings. Because most of them run on fossil fuels, it's not possible to just change over to clean electricity.

Instead, Gates recommends switching your gas furnaces and heaters for an electric heat pump. These pump warm air inside when it's cold and outside when it's hot. And the great thing is that they're not only better for the planet but also for your wallet!

Although it might sound expensive to switch to clean energy, it's more cost-effective in the long run. According to estimates, if we put $1.8 trillion into these efforts, we'll get $7 billion of benefit over just ten years!

How To Avoid A Climate Disaster Review

Knowing how smart he is to have created Microsoft, how could anyone in the world disagree with Bill Gates? *How To Avoid A Climate Disaster* is a fantastic book that I think everybody needs to read. For the sake of my children's future, I really hope that big businesses and political leaders will listen and make the changes necessary to save our world!

Who would I recommend the How To Avoid A Climate Disaster summary to?

The 74-year-old conservative who thinks that climate change is a hoax, the 25-year-old that wants to know what they can do to help reduce carbon emissions, and every governmental and business leader in the world who has the power to stop the majority of our greenhouse gas emissions.