

Case Study Part 4 – “Planet”

4.2 Global Warming

It is undeniable that after decades of abuse, the burning of fossil fuels and the release of huge quantities of carbon dioxide and methane through our modern lifestyles have contributed to climate change. Droughts, flooding, and wildfires are clear evidence that the planetary system is out of balance. Planet Earth is our earthly dwelling, and we have a direct and personal responsibility to do our part to take care of it - as individuals, as families, and as businesses.

Methane, which is invisible to the human eye, is the primary component of fossil gas and has more than 80 times the warming power of carbon dioxide during its first 20 years in the atmosphere. Halting the release of this gas from fossil fuels is widely viewed as one of the cheapest and fastest way to curb global warming in the short term, buying time to make the deep carbon dioxide cuts needed to avert serious climate harm. (Bloomberg, 14 Feb 2024)

Psalms 8:6-8 “You made them rulers over the works of your hands; you put everything under their feet. All flocks and herds, and the animals of the wild, the birds in the sky, and the fish in the sea, all that swim the paths of the seas.” (NIV)

Genesis 1:26 “Then God said, “Let us make man in our image, after our likeness. And let them have dominion over the fish of the sea and over the birds of the heavens and over the livestock and over all the earth and over every creeping thing that creeps on the earth.” (ESV)

Genesis 2:15 “The LORD God took the man and put him in the garden of Eden to work it and keep it.” (ESV)

Case Study

Annie owns a restaurant by the beach. She has operated it for a decade. In recent times, she has observed that the sea level has been rising, and the water is now reaching the edge of her restaurant during high tide. She can no longer place the outdoor tables and chairs at their usual areas, which are approximately

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two to three metres from the beach. Perplexed, she conducted some research to determine the cause of this occurrence.

She learned about global warming, which refers to the phenomenon of the planet warming, including at both the North Pole and South Pole. The rate of ice melting is accelerating, affecting mountain glaciers, and the ice sheets that cover Antarctica, and the Arctic Sea Ice.

Over the last 50 years, there has been significant increase in the average global surface temperature. Many species have also been impacted by the rising temperatures – affecting their breeding, causing potential extinction, and forcing some animals to relocate to cooler regions at higher elevations. In the event that global warming continues, it is anticipated that sea levels will continue to rise. It is probable that typhoons and other storms will intensify, the availability of fresh water will decrease, and the frequency of floods and droughts will increase. Diseases will also spread as ecosystems change.

To combat global warming, Annie learns that carbon dioxide is the most significant threat to the climate, emitted when coal, oil and other fossil fuels are burned for energy – the same energy that powers our homes, businesses, vehicles, and smartphones. The goal is to reduce our consumption of these resources.

Some examples include:

- 1) Opting for renewable energy or collaborating with utility providers that do so
- 2) Using energy-efficient appliances
- 3) Building energy-efficient homes or making building improvements (e.g., by ensuring adequate insulation)
- 4) Conserving water, which requires large quantities of energy to pump, heat and treat.
- 5) Minimising food waste and reducing meat consumption, given that livestock production is highly resource-intensive.
- 6) Unplugging devices that are not in use or are already fully charged
- 7) Driving a fuel-efficient vehicle.

As a Christian business owner, Annie is keen to be an advocate for saving the Earth that God has entrusted to humanity. She recognises that the state of the environment will ultimately affect her business and her home. Therefore, she has approached us for help, to discuss and explore actionable

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steps that individuals and businesses can take to reduce global warming with the various business groups in our community.

Discussion

1. What can we, both as an individual and as a business owner do?
2. Which bible principles or verses convict you to act?

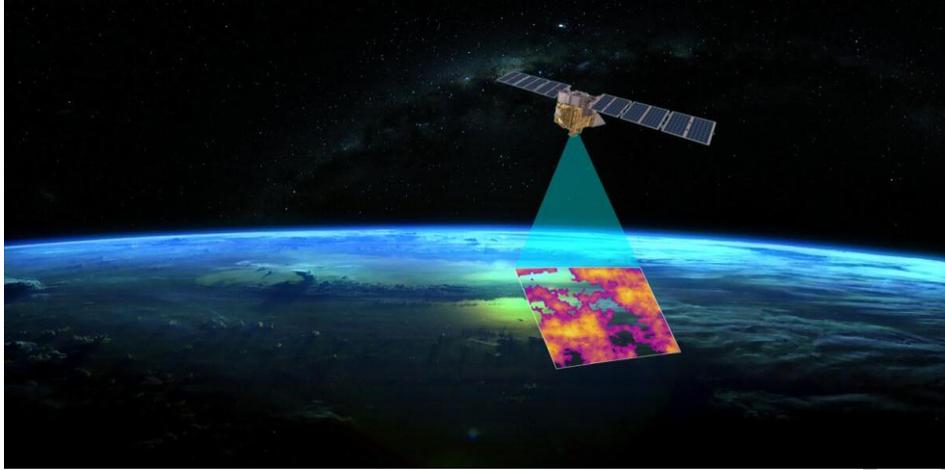
Tracking methane emission from Space- Bloomberg, 14 Feb 2024

Alphabet Inc.'s Google will work with a unit of the Environmental Defence Fund to help track and attribute methane emissions observed by the non-profit's MethaneSAT satellite that's scheduled to blast into orbit on a SpaceX rocket in March 2024.

The effort harnesses artificial intelligence and mapping expertise from one of the world's most influential technology companies and applies it to data from a high-powered satellite dedicated to observing some of the world's most devastating and avoidable greenhouse gas emissions. The goal is to better identify opportunities to reduce emissions and unlock more aggressive climate action from governments and fossil fuel operators, many of which have committed to significant reduction by 2030.

"Our mission is about action and helping countries, companies and communities track and reduce emissions faster while documenting their progress," Steve Hamburg, chief scientist at EDF.

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An artist's rendering of MethaneSAT mapping emissions. *Source: MethaneSAT, LLC*

[Resources for Business Owners in Singapore \(and as a reference for those overseas\)](#)

<https://www.nea.gov.sg/our-services/climate-change-energy-efficiency/climate-change/carbon-tax>