

## CLIMATE CHANGE AS A MATTER OF FAITH AND JUSTICE

Climate change is a tremendous challenge for the global community. Many see it as *the* critical issue of our time. As people of faith, it is an issue that reaches to the core of who we are and how we are to live in God's world.

"Climate change is a global problem with grave implications: environmental, social, economic, political and for the distribution of goods; it represents one of the principal challenges facing humanity in our day."

—Pope Francis

What is climate change? Climate change refers to the human-induced increase of atmospheric greenhouse gas (GHG) concentrations beyond normal levels of variation. Although earth's climate has always fluctuated, the average surface temperature has increased dramatically – <u>by roughly 0.85°C</u><sup>1</sup> – due to human activity since the industrial revolution.

**Why is climate changing?** GHGs absorb some of the solar energy entering and exiting Earth's atmosphere. The transfer of energy to and from various gases then heats up the atmosphere.

GHGs are good, to an extent. They exist naturally to help keep the Earth warm enough to support life. But concentrations of GHGs in the atmosphere have now surpassed the levels of natural variability that can be assimilated by Earth systems. This higher quantity of GHGs is a problem.

The Intergovernmental Panel on Climate Change (IPCC) reports that <u>78% of the increase in GHG emissions</u> between 1970 and 2010 have been driven by economic and population growth.

Why is climate change a problem? Climate change is negatively impacting physical, biological, and human systems everywhere. Ocean acidification, caused by the increased uptake of CO<sub>2</sub> by oceans, is negatively affecting marine ecosystems and fisheries. Increased average global surface temperatures are changing precipitation and snowmelt patterns, impacting the quantity and quality of water resources for human consumption and ecological life-support. They are also increasing the risk of both flooding and drought. Permafrost temperatures are increasing, glaciers and sea-ice sheets are shrinking, sea levels are rising, and the frequency of heat waves is up.

Further warming presents increased risk to coastal systems and low-lying areas, marine systems, food security and production systems, urban and rural inhabitants (particularly the poor), economic sectors and services, and human security.

Why is climate a justice issue? Developed nations have contributed most GHG emissions to date by using industrialization as a vehicle for national wealth. These emissions have put pressure on nations in the Global South, where rising temperatures increasingly threaten food and water security. The socially and economically marginalized are the most vulnerable to climate change.

**What is the solution?** In December 2015, the historic <u>Paris Agreement</u> on climate change was established based on a global consensus – informed by the international scientific community – that all nations must work together to "strengthen the global response to the threat of climate change ... [by] holding the increase in the global average temperature to well below 2°C above pre-industrial levels." It was recognized that going beyond this range risks triggering abrupt and irreversible changes in physical landscapes or ecosystems like strong sea level rise or the collapse of marine ecosystems.

What is the Canadian contribution? The government of Canada has committed to reduce GHG emissions 30% below 2005 levels by 2030 (to 524 megatonnes-Mt of carbon dioxide equivalent- $CO_2$ e emissions annually) and has presented a <u>national plan</u> that outlines how they intend to reach this target.

<sup>&</sup>lt;sup>1</sup> For references, visit cpj.ca/for-the-earth.

In 2014, Canada emitted 732 Mt, or 20.6 tonnes of GHGs per capita. To keep warming within 2°C, the <u>Deep Decarbonization Pathways Project</u> (DDPP) calls for all nations to limit GHG emissions to 1.7 tonnes per capita by 2050. The DDPP has suggested that to reach this target, <u>Canada needs to reduce its emissions by around 90%</u> (to 73 Megatonnes by 2050).

Even modest estimates suggest that the minimum required by the Paris Agreement would see Canada aligning with the <u>IPCC recommended reductions of 25-40 per cent below 1990 levels by 2020</u>. Canada's current target translates to only about 14 per cent below 1990 levels by 2030.

**How should Christians respond?** As Christians, we are called to respect the dignity of every human being as image-bearers of God. We know that God gifts every person with both rights and responsibilities. We all have a rightful claim to live in dignity, be respected by others and have access to resources needed to live out God's calling. And we also have a duty to act justly, care for creation and work for peaceful and just relations within society.

Throughout scripture we read of repentance, community, and loving compassion: from the Genesis call "to work and take care of [the Earth]" (Genesis 2:15) through to the Psalmist's celebration of "God's handiwork" (Psalm 19:1) and the rejoicing too of the trees (Psalm 96:12) to the prophets' devastation at the destruction of the land (Hosea 4:3; Jeremiah 12:11) and the New Testament message of renewal and life eternal (Romans 8:22).

"For God so loved the world that he gave his only Son, so that everyone who believes in him may not perish but may have eternal life."

[ohn 3:16]

This must inform the way we live, work, and play. Future generations have a right to the goods of creation; we cannot over-consume and deny our children's children a healthy and secure life.

We must seek to live into God's call to love and care for all the Earth; to respond to the human and ecological devastation of climate change with love and justice.

Our economy, ecology, and society are all wrapped up in one another. So, we need to take a holistic approach that considers the health of the economy, and also the well-being of plants and animals in the natural environment, as well as the sustainable livelihoods, lifestyles, and health of individuals, families, communities, and future generations.

This is done in part by considering how we, as individuals, households, and communities consume, waste and navigate our landscape. Also essential, however, is acknowledging that the scale of the climate crisis requires more than individual action. It is a Christian imperative that we engage as citizens in advocating on behalf of creation.

According to the Rev. Dr. Mishka Lysack, "Creation advocacy [protecting what God loves] is a modern Pentecost where God's Spirit calls the church to listen faithfully and act courageously to protect creation and participate in the Holy Spirit's redemptive healing of all of creation."

"Is not this the fast that I choose: to loose the bonds of injustice, to undo the thongs of the yoke, to let the oppressed go free, and to break every yoke? Is it not to share your bread with the hungry, and bring the homeless poor into your house; when you see the naked, to cover them, and not to hide yourself from your own kin?

The Lord will guide you continually, and satisfy your needs in parched places, and make your bones strong; and you shall be like a watered garden, like a spring of water, whose waters never fail. Your ancient ruins shall be rebuilt; you shall raise up the foundations of many generations; you shall be called the repairer of the breach, the restorer of streets to live in." Isaiah 58:6-7,11-12

