

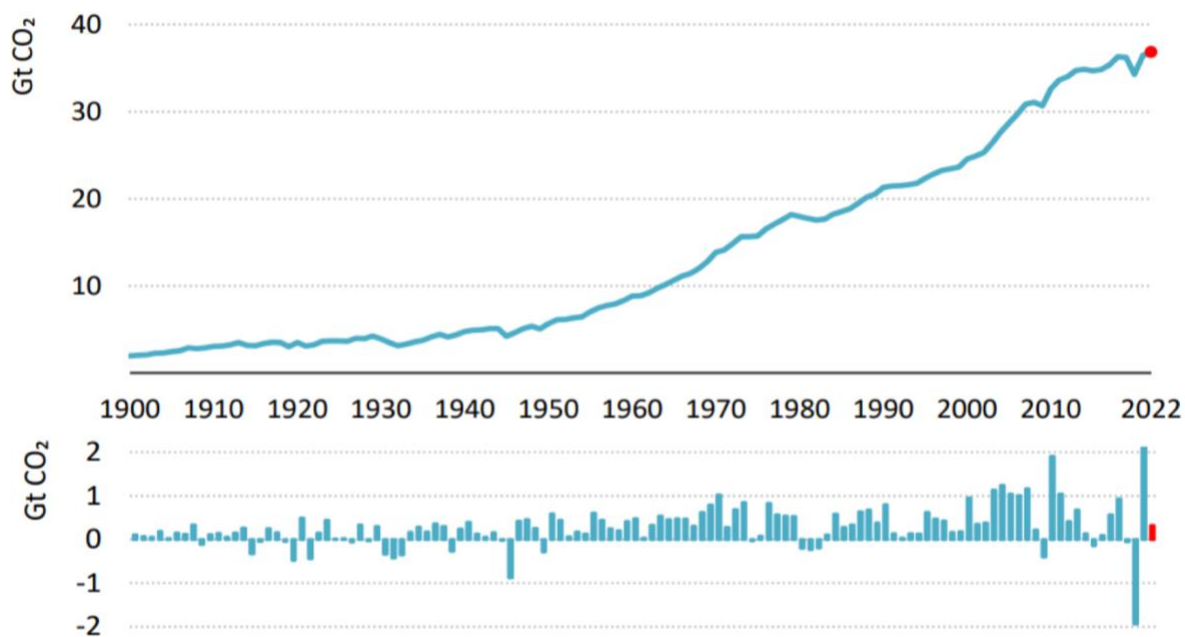


LOCAL ECONOMY & CLIMATE CHANGE

Climate Change is a consequence of the extractive economy (take-make-waste) and is forcing us to confront the inevitable outcome of our consumptive lifestyle: genuine scarcity for which the market has no remedy.

GHG emissions from industry (Source: International Energy Agency 2022)

Figure 1: Global CO₂ emissions from energy combustion and industrial processes and their annual change, 1900-2022



IEA. CC BY 4.0.

Emissions from energy use in industry: **24%** of total global emissions¹

Emissions from transporting goods: 5 %	Unallocated fuel combustion: 7.8%
Energy use in commercial buildings: 6.6%	Fugitive emissions from energy production 5.8%

Emissions from Direct Industrial processes: **5.2%**

Cement: 3%	Chemicals & Petrochemicals: 2.2%
------------	----------------------------------

Emissions from Waste: **3.2%**

Wastewater: 1.3%	Landfills: 1.9%
------------------	-----------------

Emissions from Agriculture, Forestry and Land Use: **18.4%**

Livestock and manure: 5.8%	Cropland: 1.4%	Rice cultivation: 1.3%
Crop Burning: 3.5%	Agricultural soils 1.4%	Grasslands: 0.1%
Deforestation: 2.25		

¹ Our World in Data, 2022, derived from Carbon Project 2022, based on 2016 data

What is Economy?

The word *economy* originated from the Greek words *oikonomia*, meaning household management and thrift, *oikonomos*, meaning manager and steward, and *oikos*, defined as house, abode and dwelling. Notice the focus is local!

In today's world, economy is the act of exchange. Money has become our predominate means of exchange, extraction underlies wealth, and GDP has become the measure of economic success. These have led to many of the climate change consequences. Fortunately, there are other types of economy, and other ways of measuring success.

Changing the Story

The story underlying the type of economy that created the CO2e depicted in the preceding data can be changed. Co-operatives, the sharing economy, the circular economy, and the gift economy—stories focused on the local—can provide us with an economically just, environmentally sustainable economy. These stories can operate alone, or in parallel to the destructive economic systems.

Co-operatives: Co-ops are different from profit-driven, investor-owned businesses. Co-ops are founded on the idea that people—no matter what their economic class or educational levels are—know what's best for themselves. Through cooperation, people work together to meet their common interests. Co-ops empower individuals and encourage healthier, stronger communities by pooling resources and sharing risks. (BC Cooperative Association).

Circular Economy: The circular economy changes the linear “take–make–waste” model of extractive economy and turns it into a circle in which reuse, sharing, repair, refurbishment, remanufacturing and recycling create a closed-loop system, reducing the use of resource inputs and the creation of waste, pollution and carbon emissions.

Sharing Economy: The sharing economy is based on people sharing goods and services, either free or in an exchange. Examples include the commons (land), library, tool library, car- or bike-share co-ops, carpooling, GIRO, online platforms for free items, buy-nothing communities (buynothingproject.org), and gleaning.

The Gift Economy: (excerpts from [The Serviceberry: An economy of abundance](#), by Robin Wall Kimmerer)
Gratitude and reciprocity are the currency of a gift economy, and they have the remarkable property of multiplying with every exchange, their energy concentrating as they pass from hand to hand, a truly renewable resource. I accept the gift from the bush and then spread that gift with a dish of berries to my neighbor, who makes a pie to share with his friend, who feels so wealthy in food and friendship that he volunteers at the food pantry. You know how it goes...

...[W]hat we crave is not trickle-down, faceless profits, but reciprocal, face-to-face relationships, which are naturally abundant but made scarce by the anonymity of large-scale economics. We have the power to change that, to develop the local, reciprocal economies that serve community rather than undermine it.

Measuring Success: Frameworks and indices including Doughnut Economy (Oxford), Gross National Happiness (Bhutan), Genuine Progress Indicator (Canada), Human Development Index (UN), Ease of Living Index (India), Gross Ecosystem Product (England), have all been put forward as alternatives to a money-based GDP (Gross Domestic Product). These alternatives measure well-being of humans and eco-systems.

Investing in our Grandchildren's Future

This section is aimed at those who have savings and pensions. Most pension plans invest in fossil fuels and most financial advisors recommend investing in fossil fuel companies. It is possible to take money out of those activities that increase GHG emissions and put that money into local and regenerative initiatives either directly (as savings) or through joining with others to call for disinvestment (for pension plans). The Gabriola Island Community Investment Co-op offers community members an opportunity to invest in local regenerative initiatives (investingabriola.ca).