Carbon as an Organizational Problem

Paul Shrivastava

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Bon Jour, Good Morning. Welcome to the Ripco Research Day on Organizational Behavior Stewardship. Supported by your efforts and Silvester’s leadership RIPCO is making excellent progress in publishing significant research in Organizational Behavior. Thank you Silvester for your leadership. Thanks also for inviting me to share my thoughts on Carbon as an organizational problem, and the role of organizations in stewarding our planet's resources.

You all are well aware of the many crises we are facing globally due to inadequate management of planetary resources and systems. The most urgent and dangerous of them is the Climate Change crisis. This crisis is caused by excessive Carbon emissions into the earth's atmosphere by human activities. For a million years atmospheric carbon has stayed between 180 and 270 ppm. It started rising around 1750s when we discovered coal as an energy source. It rose steadily for 200 years past historical limits. Then in mid 1950s fueled by rising world population Carbon emissions accelerated to 400ppm. This year Carbon is recorded as reaching 420ppm. Carbon forms a heat trap in Earth's atmosphere. Excessive carbon causes heat to build up and cause global warming. Global warming has many negative impacts on earth including severe weather events, losses to agriculture and ocean productivity, and randomized movement of disease vectors.

Science tells us we need the carbon to be maintained under 350ppm for planet to remain under 2C rise in temperature. So the planet has a fixed carbon budget. Emitting a total of 565 GT Carbon will raise global Temp by 2C. This is the top carbon limit we need to avoid. Because after 2Deg C rise in temperature the climate and weather destabilize catastrophically. Humans currently burn 40GT C/yr. If we continue to do that we will exhaust the carbon budget in 12.5 years. In order to survive humans need to move to a low carbon economy and low carbon life style globally.

How is Carbon an Organizational Problem.

You may think of Carbon Cycle as an ecological phenomenon, which it is, yes,  ... but it is also an organizational problem. Both the economy and life styles are deeply determined by decisions and activities of businesses and other organizations. Moreover, the effects of perturbed climate impact all sorts of organizations, virtually all around the world. Consider what is going on in Western USA now. Next month 130 locations in the Western parts of USA, will experience the highest temperatures in their history.  Forest fires (which burned a record number of acres just last year)  have started burning in Calif and Utah and expected to continue throughout summer. 5 states (CA, UT, OR, NV, AZ) are in 100% or severe and exceptional draught. The San Jose County water authority is seeking to buy water rights that this year are 10X the price they were two years ago. All sorts of organizations, agricultural farms, lumber industry, furniture industry, paper manufacturers, municipalities, water treatment plants, .... are impacted directly by these climactic changes. It is estimated that by mid-century the Global economy may suffer up to 20% decline due to climate change.

The global economy is dominated by organizations that influence how people consume goods and services. The business and financial models of these organizations are built on a ideal of “consumer societies”. They promote mass consumption. To support mass consumption they engage in mass production and mass waste. The ideal of consumer driven economic growth is in conflict with low carbon economy and lifestyle.

Let us Consider Who Owns the Carbon, and What can Organizations do about it?

Businesses/States currently own about 2,795 GT of discovered fossil fuel reserves. These assets are already listed in the accounts of corporations and sovereign funds.  At 2020 prices these assets were worth US$ 27Trillion.  That is about one third of the Global economy.

But as I said the total budget for carbon is only 565 GT. So to remain within the 2C carbon budget we must somehow NOT burn 2795-565 = 2200 GT of carbon that is owned by companies. We need to leave it in the ground, abandon it. How can this be done without toppling the world economy. This is the most fundamental question that organizations now need to address.

Moving to Low Carbon will be decided largely by about 100 organizations who own majority of carbon assets. And within these organizations, probably a small group of say by 1000 Managers are likely to make the strategic decisions about the future of carbon.

Are we ready to address the central challenge of our time – managing a low carbon economy? Do businesses, policy makers, Organizational Behavior scholars understand the Carbon Cycle, Carbon ethics, and Carbon responsibility. I hope you all will think about carbon cycle as a part of your own research.

Let me end with this provocation Carbon is not only a problem for organizations, it is THE most important problem for organizations and for the human race.

Thank you for listening,….My best wishes for your discussion today.