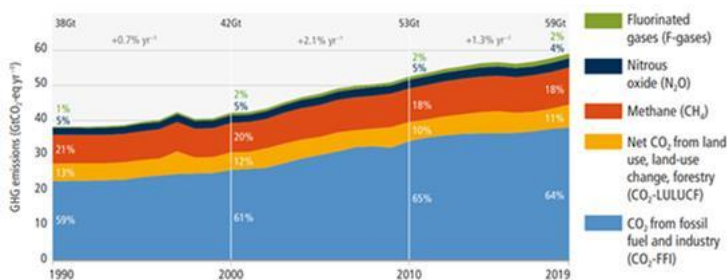


## Net Zero Concept - Environmental Management Accounting (EMA)

Consensus around climate change and global warming has been well entrenched over the last few years, especially with the increasingly higher anecdotal evidence being observed around us (intense heat waves in various parts of India, increasing forest fires in India, rising water levels leading to flooding, etc.)

Multitudes of research studies have pointed towards Green House Gas (GHG) emissions as the key culprit behind global warming. As per the Intergovernmental Panel on Climate Change (IPCC), as a civilisation, we need to achieve 'net zero' emissions of GHGs (explained below) - but as the figure shows, we are far from it – we continued to increase our emissions in the past 3 decades (1990-2019).



### What is 'Net Zero', and why is it important?

Put simply, net zero means cutting greenhouse gas emissions to as close to zero as possible, with any remaining emissions re-absorbed from the atmosphere, by oceans and forests for instance. Studies adopted by the Intergovernmental Panel on Climate Change (IPCC) show that in order to avert the worst impacts of climate change and preserve a livable planet, global temperature increase needs to be limited to 1.5°C above pre-industrial levels. Currently, the Earth is already about 1.1°C warmer than it was in the late 1800s, and emissions continue to rise. To keep global warming to no more than 1.5°C, as called for in the Paris Agreement, emissions need to be reduced by 45% by 2030 and reach net zero by 2050. If we were to miss the target by 2070, it would mean an increase in global temperature by about 2°C, certainly avoidable.

### 'Net Zero' in the context of recent developments:

While the initial phase of the Covid-19 pandemic saw lower emissions due to reduced human activity, it rebounded by the end of 2020. With the Ukraine-Russia war at hand, the European Union has approved an embargo on Russian Oil, largely phasing it out over the next six months. For context, the European Union imports approximately 25% of its oil from Russia. The REPowerEU plan adopted envisages significant investments (worth EUR 210 billion) towards energy savings and renewable power, both of which accelerate the road to Net Zero.

### India's strategy - Panchamrita, as unveiled at COP26:

- Get non-fossil energy capacity to 500 gigawatts (GW) by 2030
- Meet 50% of energy requirements from renewable energy by 2030
- Reduce the total projected carbon emissions by one billion tonnes from now onwards till 2030
- Reduce the carbon intensity of the economy by less than 45% by 2030
- Achieve the target of "Net Zero" by 2070.

### Case Study - Net Zero Concept of EMA