Video streaming, as far as we know, is an entertainment service on the internet. Due to its network nature, it relies heavily on the ICT (Information and Communications Technology) sector. With the development of technology, more and more video streaming devices are used, so results of carbon emissions have attracted people's attention.

 Data center efficiency gains have stalled

### Let’s consider historical carbon footprint of ICT

Currently, Internet traffic is growing at a rapid rate as more and more human activities migrate to online platforms. However, according to IEA’s research, the emission of data centers kept stable from 2015 to 2021, even while internet traffic has tripled since 2015. It turns out to be the result of a rapid improvement of energy efficiency.

### For future trends in ICT carbon emissions footprint

It is uncertain to predict. Against the increase of efficiency, the consumption of media streaming is growing quickly. Many [new video streaming](https://www.consumerreports.org/streaming-media-devices/new-streaming-video-services-to-check-out/) have launched in recent years.

Moreover, emerging digital technologies are likely to further accelerate demand for data center and network services.

Besides, according to this picture, efficiency gains have stalled and even decreased slightly. The more power usage effectiveness is, the worse the efficiency becomes. So it is possible that the increase of efficiency cannot be able to keep pace with the growing data demand.

These are the reasons why we need to pay great attention to video streaming.