

5G and IoT could yield high carbon emission savings
 Doyan agrees. Comment.

The recent report from Ericsson has claimed that 5G and IoT can reduce carbon emissions by 15%. It is achievable to reduce emissions in India too.

The Climate Pledge

India targets to go net zero by 2070 and reduce CO₂ emissions by 1 billion tonnes by 2030. The IPCC report has been a wake-up call reporting 1.1°C rise in temperature since Industrial revolution.

Role of 5G and IoT in reducing emissions

The primary emitters such as energy manufacturing, transport which rely on communication.

The 5G with its low latency time of less than 1 millisecond can make communications at fast speed and negligible error rate.

In the electrical grids - it would help to detect power outages, peak load and automatic bundling with renewables when necessary.

5G can connect 1 million subscribers / ~~km~~ square km and can greatly reduce data asymmetry.

Efficient lighting systems with the use of automatic ~~on/off~~ on/off, with use of sensors and adjust intensity. Using smart thermostats can reduce the heating and cooling needs from fossil fuels.

Challenges

Required infrastructure for 5G and IoT, skilling the manpower and right policies with data protection is needed.

Way forward

India can immensely benefit both economically as these technologies can generate jobs and environmentally as they are efficient.