Green Computing

**Green Computing is the new technique of minimization of CO2 level emitted from data centers of big companies by usage various techniques as demonstrated below.**

It is an initiative begun by many telecommunication companies to reduce the Carbon di oxide from base stations.

**Lesser energy consumed less strain on power production plant and eventually less pollution.**

TECHNIQUES

* Cloud computing (CO2 emission)(EXTERNAL HDD)

Server unit replaced by cloud computing options. (file storage to SAAS).

* VOIP(Voice over internet protocol) to relace phone in offices.

(Phone radiation unit SAR if SAR >1.6 watts per kg dangerous not good for environment)

* Virtualization(With [virtual networking](https://www.techopedia.com/definition/3308/virtual-network-computing-vnc), one server can take the place of multiple test servers, cutting down on energy consumption (not to mention office space). Virtual computing platforms are available for PC, Mac and Linux servers.)

Virtualization is the process of creating a virtual environment on an existing server to run your desired program, without interfering with any of the other services provided by the server or host platform to other users. The Virtual environment can be a single instance or a combination of many such as operating systems, Network or Application servers, computing environments, storage devices and other such environments.

Fewer machines mean less energy and less harmful emf radiations.

* Substituting telecommuting, remote administration and video conferencing for travel.
* POE(power over Ethernet). POE switch ports provide power for network devices as well as

Transmit data. Can scale back power when not required. (wire cost cut plastic production less).

Pollution >>>>>

Omnidirectional antennas

Routers

Computer

Cellphone

Laser printer (Co2 emission)

Emf rad from router, switch hub and various networking devices

Measuring Device – high frequency radiation

We will basically make a prototype of a working office and measure the radiation from high level radiation measuring device and then imply the counter measures and then recheck the

Radiation level. The level will be low and hence our principle will be applicable.

Radiation level before >>>

Replacing the instrument and applying new techniques like make a Cloud by using external HDD thus reducing machines

Radiation level now >>>