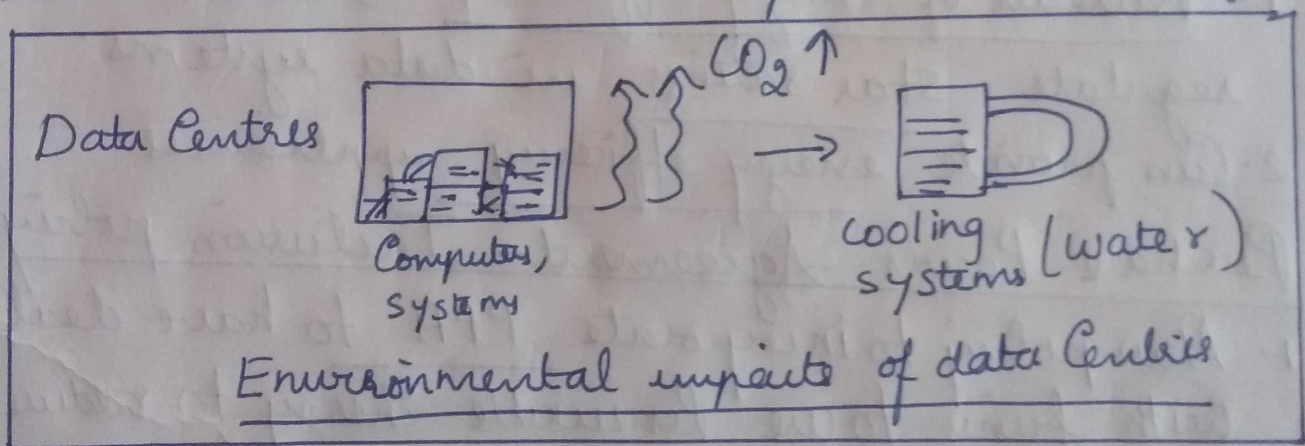


4 The central government needs to have a holistic policy that ensures that the environmental impact of data centres does not go unnoticed - analyse.

The data centres are physical warehouse of computers, network communications, storage systems etc, for diagnosis, storage and dissemination of informations for the benefit of data-driven business companies. The natural resources usage, exploitation and green House emission are the concerns that need to be incorporated in policy.



### Environmental impacts of the data Centres:

#### 1. Emission of CO<sub>2</sub>:

1. UNFCCC reports data centres over globe, emits 14% of CO<sub>2</sub> annually for functionary
2. IT is equal to emission by airline Industry
3. Cause increase in global warming, climate change, droughtification etc;

## 2. Usage of Natural Resources - Water:

1. Cooling systems of data centre exploits water
2. Non-renewable water converted to waste heat thereby damaging the environment atmosphere.

## Holistic policy requirements:

### 1. Environment acts:

1. Environment Protection act 1986, Air pollution act, Water pollution act etc, has no provisions regarding data centres.

### 2. Provision of Rating Systems:

1. Bureau of Energy Efficiency by policy can regulate star ratings in data systems.
2. Can provide energy efficiency appliances

### 3. Purchase Power Agreement - Inclusion policy:

1. New policy to incorporate PPA to have deals with firms to use Renewable Energy to reduce  $CO_2$
2. Thus the global warming impact can be mitigated

### 3. Inclusion to reduce waste heat:

1. Some present policy lack this provision, the waste heat can be transformed & reused.
2. Thereby reduces the local increase in atmosphere temperature

## Future Prospects:

1. Not only new policy, but amendment in existing pollution act is essential.
2. MOU with foreign firms to Transfer of Technology