

Do you think that generation of nuclear energy is good enough to handle the existing climate change crisis? Critically analyse (200 words)

World moving towards phasing out of carbon emissions require huge amount of energy and cleaner energy to achieve that. Some experts opine that nuclear energy could also be an alternative to fossil fuels like natural gas, coal along with solar and wind energy.

Why some experts feel nuclear can be alternative?

1. Huge amount of energy can be produced in comparatively less emission compared to fossil fuels.
2. They opine that it is a immediate solution to face energy crisis

Yet it has more defects compared to other renewable resources.

Nuclear Energy and its lack of climate friendly characters

1. When compared to other renewables it takes longer time for construction and more emissions are released during construction process - due to safety norms.
2. Moreover it requires huge area for storage and disposal of waste (nuclear) Eg: Kudankulam.
3. The emissions amount to 13 times more than that of wind power generation and around 30 times higher than hydropower.
4. Apart from this decommissioning of a plant is a tedious and crucial process.

Eg: Improper decommissioning could be disaster.
Some cases like Fukushima are example.

5. Similarly it requires huge time to attain criticality for energy generation compared to other renewables.

Eg: Solar PV can be installed and used immediately

6. Finally world facing water crisis will require huge amount of water resource to cool the reactors.

What can be the solution?

Looking at nuclear energy optimistically will affect our march towards Net zero emission. The fund transferred to renewables will be blocked by nuclear projects if done so.

So better idea is to invest on renewable energy researches rather than investing on nuclear energy.