Raiyan Mugdho

ID : 2211394042

Faculty : SZN

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Persuasive Speech:

Is Nuclear Energy a Good Way to Fight Climate Change?

Slide 1 — Title Script

“Good morning everyone.
Today I will speak about a topic that is extremely relevant to our generation:
Is nuclear energy a good way to fight climate change?

Climate change is no longer something we read about in textbooks — it’s real, it’s happening right now, and it is impacting countries like Bangladesh faster than the global average. Rising temperatures, floods, heatwaves, and coastal erosion are becoming part of our daily reality.

So the question is not whether we need clean energy — the real question is: Can we solve climate change without including nuclear energy in the solution?

By the end of my speech, I hope to give you a clear and scientifically grounded answer.”

Slide 2 — Climate Change Context

“To understand whether nuclear energy is useful, we first need to understand the scale of the climate problem.

Over the past century, the Earth has warmed by 1.2 degrees Celsius. That might sound small, but in climate science, it is enormous.

CO_2 concentration is now 420 ppm, the highest in about 3 million years, long before humans even existed.

Every single year, the world emits around 37 billion tons of CO_2, mostly from burning coal, oil, and natural gas.These fossil fuels are responsible for 75% of all greenhouse gas emissions.

Renewables like solar and wind are growing, but they have one big weakness — they depend on weather.No sunlight? No solar power. No wind? No wind energy.This means renewable energy cannot provide the constant, stable electricity that modern societies require.

This energy gap is why searching for a reliable clean energy source is so important.”

Slide 3 — Why Nuclear Energy Matters

“Nuclear energy is one of the few technologies that can produce large quantities of electricity without emitting carbon.

Unlike renewables, nuclear power plants operate non-stop, 24 hours a day, 7 days a week, in any season and any weather.This makes nuclear energy incredibly reliable.

A single pellet of uranium — which is literally the size of your fingertip — generates the same amount of energy as one ton of coal.So instead of burning massive amounts of fossil fuels, nuclear plants need only a tiny amount of fuel.

More than 30 countries already use nuclear power safely.
France is the best example — it generates 70% of its electricity from nuclear energy and has one of the lowest carbon emissions in Europe.

This shows that nuclear energy is not a theory or a dream — it works successfully at a national scale.”

Slide 4 — Evidence and Data

“Let’s look at what the scientific data actually says.

According to the IPCC — the world’s top climate authority — nuclear energy produces just 12 grams of CO_2 per kilowatt-hour.To compare, coal produces 820 grams, and natural gas produces about 400 grams.So nuclear energy is one of the cleanest energy sources on the planet.

Another important point is electricity reliability.Nuclear plants operate at a 92% capacity factor.This means they run almost the entire year.Solar power runs about 24% of the time, and wind about 34%.

A big concern people still have is safety.The truth is that modern nuclear reactors are far safer than the older designs from the 1980s.Today’s next-generation reactors are engineered with automatic shutdown systems, passive cooling, and multiple safety barriers that make meltdown scenarios extremely unlikely.

If we compare deaths caused by energy sources, air pollution from coal kills millions every year, while nuclear has caused far fewer deaths overall.

So when we look at the facts, the data clearly shows that nuclear energy is both clean and safe.”

Slide 5 — Future Scenarios

“Now, let’s look into two possible futures — one with nuclear energy and one without it.

A future with nuclear energy gives us:

- Massive reductions in carbon emissions
- Stable electricity prices
- Reliable energy for hospitals, industries, schools, and homes
- The realistic possibility of reaching global net-zero emissions

But a future without nuclear energy is far more concerning:

- We would continue relying on coal and gas
- Global temperatures would rise faster
- Disasters like heatwaves, cyclones, droughts, and floods would intensify
- Developing countries would suffer the most
- Energy insecurity would increase, harming economies and human lives

The reality is — renewables alone can't carry the full load of global electricity demand.Without the support of nuclear energy, the world's climate goals will remain out of reach."

Slide 6 — Conclusion & Call to Action

"In conclusion, nuclear energy is not the enemy — it is one of the strongest tools we have to fight climate change.

If we want a clean, stable, and sustainable future, we cannot rely on a single solution.
Solar, wind, hydro, and nuclear must work together.

We need to shift public perception from fear to facts.
We must support investment in next-generation reactors, which are safer, cleaner, and more efficient.Countries like Bangladesh are already moving forward with the Rooppur Nuclear Power Plant — a step in the right direction.

Nuclear energy alone will not save us, but without it, we have almost no chance of achieving net-zero emissions in time.

To protect the planet for future generations, nuclear energy must be part of the global clean-energy strategy.

Slide 7 — Closing

“Thank you for listening.
Remember: The choices we make today will decide the world our children live in tomorrow.”

References

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