

NovaCore: AI-Assisted Micro-Fusion Reactor

A clean, compact energy concept designed using GPT-4, AI modeling, and fusion science.

By: Jarnell Chohan | Data Analyst | Visionary Builder | AI + CleanTech Explorer

Slide 2: What is NovaCore?

NovaCore is a concept for a compact, pulsed micro-fusion reactor.

It aims to provide clean, local fusion energy inspired by science fiction and guided by AI.

Think Iron Man's arc reactor — made real with modern tech and vision.

Slide 3: How It Works

- Uses pulsed micro-fusion bursts instead of continuous fusion.
- Fusion is contained using magnetic or laser-based systems.
- Thermal energy is converted into electricity via efficient heat exchangers.
- AI helps simulate, monitor, and optimize fusion control.

Slide 4: Why NovaCore is Unique

- Pulsed ignition — not sustained like ITER.
- No radioactive waste — unlike fission.
- AI-driven — intelligent self-monitoring and correction.
- Modular & scalable — suited for remote or urban deployment.

Slide 5: Vision & Impact

- Power rural villages, space stations, and smart cities.
- Enable off-grid energy independence.
- Inspire young minds and cross-disciplinary innovators.
- Strengthen global energy security and sustainability.

Slide 6: Call to Action

We are seeking:

- ■ Scientific collaborators (fusion, materials science)
- ■ University and lab partnerships
- ■ AI developers for control and modeling
- ■ Clean tech investors, incubators, and grants

Slide 7: Team & Roadmap

■■■ Lead: Jarnell Chohan – Visionary data analyst with a clean energy mission.

■■ Tools: GPT-4, Python, Fusion modeling suites (COMSOL, PyFusion)

■■ Roadmap:

- Q3 2025: Finalize deck, diagrams, prototype sim
- Q4 2025: Submit to XPRIZE, accelerators
- Q1 2026: Begin MVP build & advisor outreach
- Mid 2026: Launch open contributor program

Slide 8: Big Picture Future

NovaCore envisions a world where:

- Clean energy flows from micro-fusion cores in every region.
- Homes, vehicles, and data centers run without fossil fuels.
- Energy independence is a human right, not a luxury.

Join us. Let's build the future, together.