Ecotelecare:

Reinventing Rural Healthcare with Solar-Powered Telemedicine

Created by: S. Reyana, A. Divya Sree, K. Sneha Sri

Stage: Conceptual Prototype | Ready for Pilot Deployment

Vision

Ecotelecare is India's first fully solar-powered mobile telemedicine unit, designed to deliver essential healthcare services to rural and disaster-prone regions. Our mission is to eliminate healthcare deserts by bringing diagnostics, consultations, and preventive care directly to the doorstep — sustainably, affordably, and reliably.

Why This Matters

- 3.5+ billion people globally lack access to basic healthcare
- Rural India faces chronic shortages in medical infrastructure
- Power outages and climate disruptions cripple service delivery
- Long travel times and high costs delay critical care

Ecotelecare solves this with a mobile, off-grid, tech-enabled solution.

What We've Built

A modular, solar-powered van equipped with:

- Basic diagnostic tools (BP, glucose, pulse oximeter, etc.)
- Telemedicine platform for remote consultations
- IoT-enabled vitals monitoring
- Cloud-based health records

- Satellite/4G connectivity for uninterrupted service
- HIPAA-compliant data encryption and secure APIs

Impact Potential

| Metric | Target Outcome |
|-----------------------|--------------------------------------|
| Villages Served | 100+ in Phase 1 |
| Patients Reached | 10,000+ annually |
| Local Jobs Created | 6–10 per unit |
| Carbon Footprint | Net-zero operation |
| Cost per Consultation | ₹50-₹100 (vs ₹500+ in urban clinics) |

Sustainability Model

- 100% solar-powered no fuel dependency
- Local workforce training builds community ownership
- Modular design scalable across geographies
- Low operating cost ideal for public-private partnerships

Execution Plan

Phase 1: Pilot Deployment

- Launch in 3 districts across Andhra Pradesh
- Partner with local PHCs and NGOs

- Collect health data to refine service delivery

Phase 2: Scale-Up (2026)

- Expand to 10+ states
- Integrate with Ayushman Bharat and NHM
- Introduce AI-powered diagnostics and predictive analytics

Technology Stack

| Layer | Tools & Features |
|--------------|--|
| Hardware | Solar panels, IoT sensors, diagnostic kits |
| Connectivity | Mobile networks, satellite, IoT |
| Software | Telemedicine app, cloud storage, analytics |
| Security | HIPAA encryption, secure APIs |

Competitive Edge

- First-of-its-kind in India
- Designed for last-mile delivery
- Combines sustainability, accessibility, and affordability
- Ready for integration with national health infrastructure

Funding Ask

We are seeking ₹5 Lakhs to:

- Build and deploy 3 pilot units
- Develop and refine the telemedicine platform
- Train local staff and health workers
- Conduct impact assessment and prepare for scale

Let's Build the Future of Healthcare

Ecotelecare is not just a product — it's a movement.

Join us in transforming rural health access, one village at a time.

Contact:

📧 ecotelecare.innovation@gmail.com

