

SEUWS

Smart Energy Usage Warning System

Innovators :

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Innovating Energy Management with
Smart Monitoring and Fault Detection



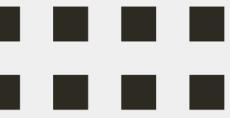
ABOUT US

We, Abhijith A and Jishnu Prakash, passionate engineering students pursuing a Bachelor's degree in Electrical and Electronics Engineering from APJ Abdul Kalam Technological University. With a shared vision to innovate and solve real-world challenges, we bring a combination of technical expertise, creativity, and problem-solving skills to every project we undertake.

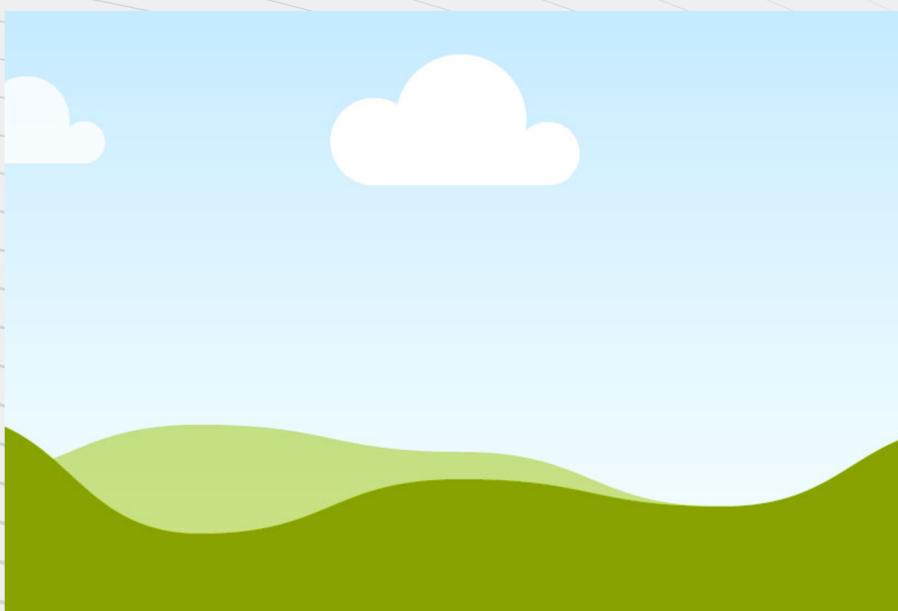
MARKET PAIN

- Rising electricity costs and inefficiency in usage.
- Lack of real-time energy monitoring.
- Unnoticed energy wastage and leaks.
- Absence of integrated fault detection systems.
- Limited actionable insights for optimizing appliance usage.





INNOVATION - TECHNOLOGY



- Real-time energy monitoring for connected appliances.
- Integrated fault detection system for early anomaly detection.
- Smart alerts for energy overuse warnings.
- Inverter power backup monitoring.

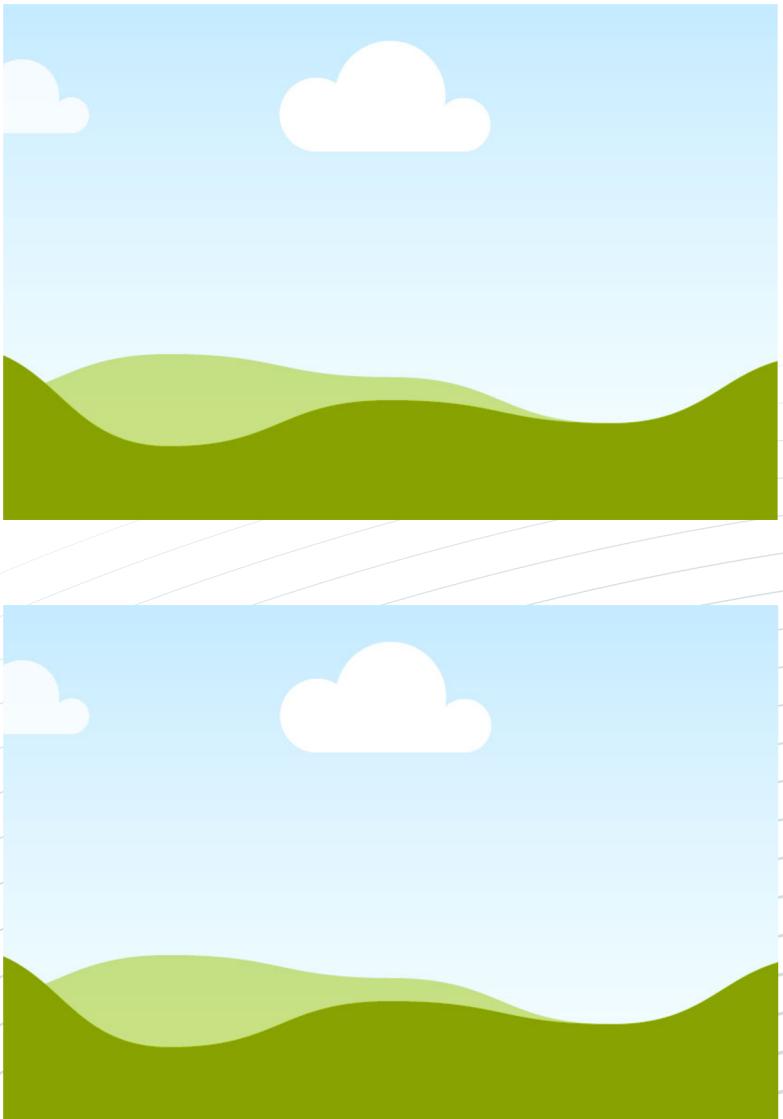
COMPARISON OF EXISTING AND PROPOSED PRODUCT

Feature	Existing Product	Proposed Product
Fault Detection	Not available	Integrated fault detection system
Usage Alerts	Limited or absent	Smart alerts for overuse and anomalies
Energy Monitoring	Basic	Real-time tracking for all appliances
Inverter Backup Monitoring	Not available	Displays remaining backup power
Energy Usage Reports	Minimal or generic	Detailed daily and monthly reports



VALUE PROPOSITION

- **Accurate Appliance Monitoring:** SEUWS provides real-time, appliance-level energy insights, helping users identify inefficiencies and faults, unlike traditional smart meters.
- **Proactive Warnings:** Users receive alerts on exceeding energy limits, enabling better budget control, safety, and cost savings.
- **All-in-One Solution:** SEUWS combines household energy monitoring, appliance tracking, and inverter performance in a single, user-friendly app.





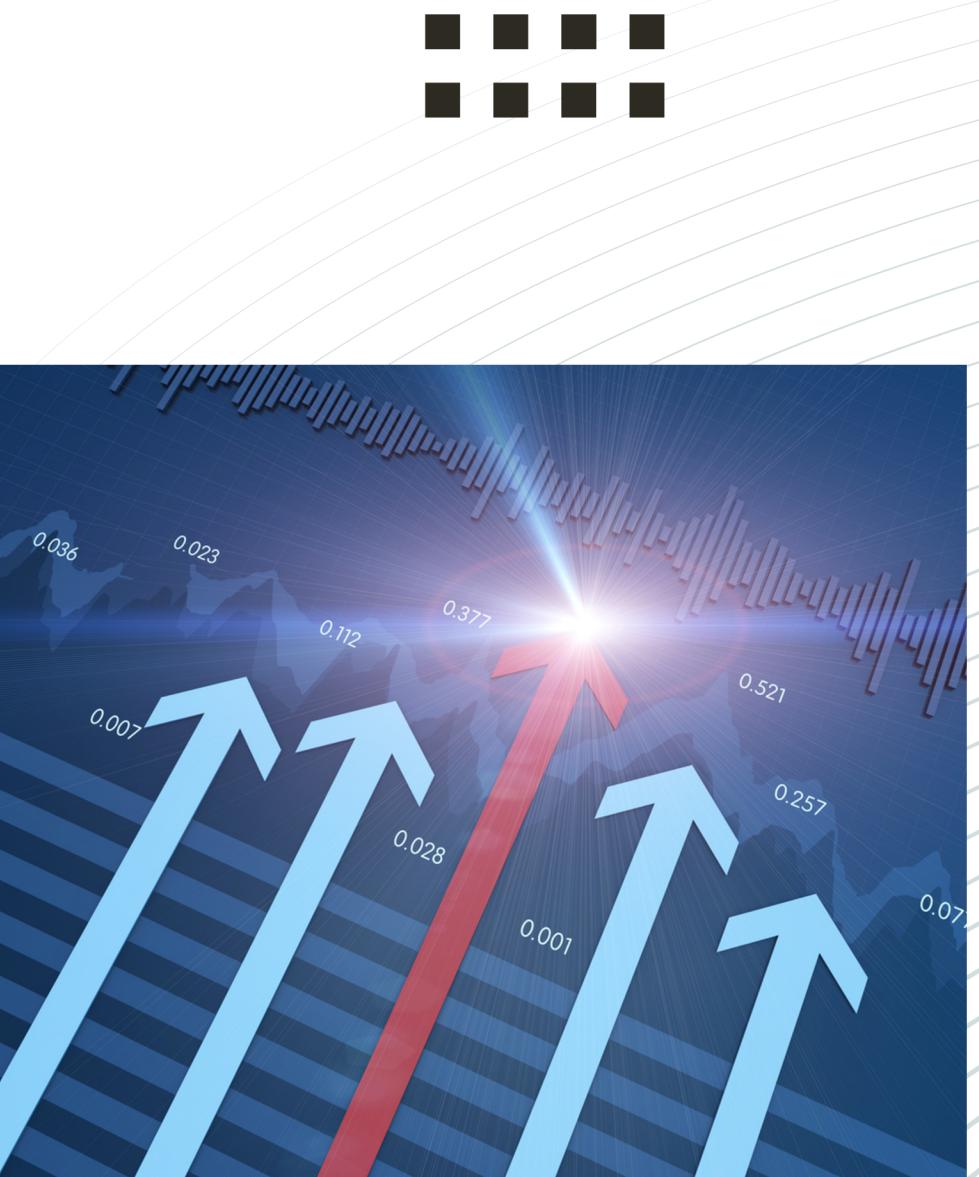
MARKET

- SEUWS operates as a B2C business targeting residential households and small businesses seeking smarter energy management.
- The global smart energy market, valued at \$120 billion in 2022 with residential energy management making up nearly 40% of this market.
- SEUWS appeals to household customers and energy-conscious users, helping them save costs and optimize consumption.
- Its scalable design allows for product integration with renewable energy systems and smart home solutions, positioning it well in the growing IoT and sustainability sectors..



CURRENT DEVELOPMENT STATUS

- SEUWS is currently in the conceptualization phase, with the features, architecture, and hardware/software requirements clearly defined.
- The project can be completed in 4 months. In Month 1, we finalize the concept, procure components, and prototype the smart meter and plug-in meters.
- Month 2 focuses on app development, including energy monitoring, alert systems, and inverter integration.
- In Month 3, we integrate hardware with the app for real-time data transmission and ensure smooth functionality.
- Month 4 will involve system-wide testing, debugging, and final deployment



THANK YOU

We look forward to the journey ahead, where
we can turn our shared vision into reality.

