Business Model Development

1. Proposed Solution

Our company partners with residential homeowners to install our solar panels on their rooftops at no cost to them. By utilizing underused rooftop space, we transform these areas into sources of renewable energy, providing mutual benefits without any installation fees for the homeowners. Importantly, we retain ownership of the solar panels, managing their maintenance and operation.

Before installation, we assess each home to determine its suitability for solar panel placement, ensuring that the location is optimal for energy production. Factors such as roof orientation, sunlight exposure, and local climate conditions are considered to maximize efficiency and effectiveness.

Residents benefit from our partnership through a reduction in their electricity bills by receiving a credit equivalent to 10% of the solar energy they generate. For example, suppose at the end of November, a homeowner's solar panels generate 100 kWh of energy. They receive a credit of 10 kWh (which is 10% of 100 kWh) towards their electricity usage. If the homeowner consumes 50 kWh of electricity during November, they are only billed for 40 kWh after applying the credit. Assuming a tariff rate of $0.12 per kWh, the customer pays $4.80 instead of $6.00, resulting in a savings of $1.20 on their electricity bill.

We offer an integrated solution that combines a user-friendly app with advanced machine learning capabilities to provide real-time data on solar energy production, estimated reductions in household electricity usage, and projected monthly savings. Our machine learning models also predict the current month's energy production and usage, allowing homeowners to estimate their upcoming bills in advance.

2. Customer Value

a. Cost Savings: Residents benefit from a reduction in their electricity bills by receiving a credit equivalent to 10% of the solar energy they generate. This model effectively lowers their electricity costs and provides tangible financial benefits.
b. Sustainability: Transitioning to solar energy reduces reliance on non-renewable energy sources, helping residents lower their carbon footprint and contribute to a greener environment.
c. Transparency: A mobile app offers real-time tracking of energy production, estimated electricity usage reduction, and detailed savings metrics, ensuring residents are always informed about their energy contributions.

3. Target Market

a. Residential homeowners with accessible rooftops for solar installations, focusing on suburban and urban areas.
b. Small commercial establishments aiming to reduce electricity costs.

4. Revenue Streams

a. A significant portion of the solar energy generated is sold back to the grid. This can be achieved by integrating the generated solar energy into the existing power infrastructure.

b. Subscription Model: Residents pay a monthly subscription fee for access to our user-friendly mobile app. The app offers real-time tracking, usage reduction estimates, detailed savings metrics, predictive analytics.

5. Market Positioning

5.1. What Makes Us Unique?

a. Collaborative Approach: Our business covers the upfront installation costs, making solar energy accessible to residents without financial barriers.
b. Savings-Driven Incentive: Directly link residents' electricity savings to the energy produced, ensuring transparency and trust.
c. Tech-Enabled Engagement: Our app shows real-time solar energy generated and provides actionable insights into energy usage and savings.

5.2. Competitors

a. Solar leasing companies and power purchase agreement providers. For example,

    i. Swell Energy: https://swellenergy.com/

    ii. Sunrun: https://www.sunrun.com/

b. Traditional utility companies that supply grid electricity generated from non-renewable sources such as coal, natural gas, and nuclear energy. Renewable energy solutions might seem to present a significant disruption to these established energy providers.

5.3. Attracting Customers

a. Sustainable, clean energy solutions through rooftop solar installations.

b. Cost savings for customers by reducing their electricity bills through energy credits.

c. No upfront costs for residents, making the solution accessible to a broader audience.

d. Advanced machine learning and a user-friendly app enhance customer engagement and provide predictive analytics for energy usage and savings.

e. Customer Support:

    i. Proactive performance monitoring and maintenance.

    ii. 24/7 app-based troubleshooting support.