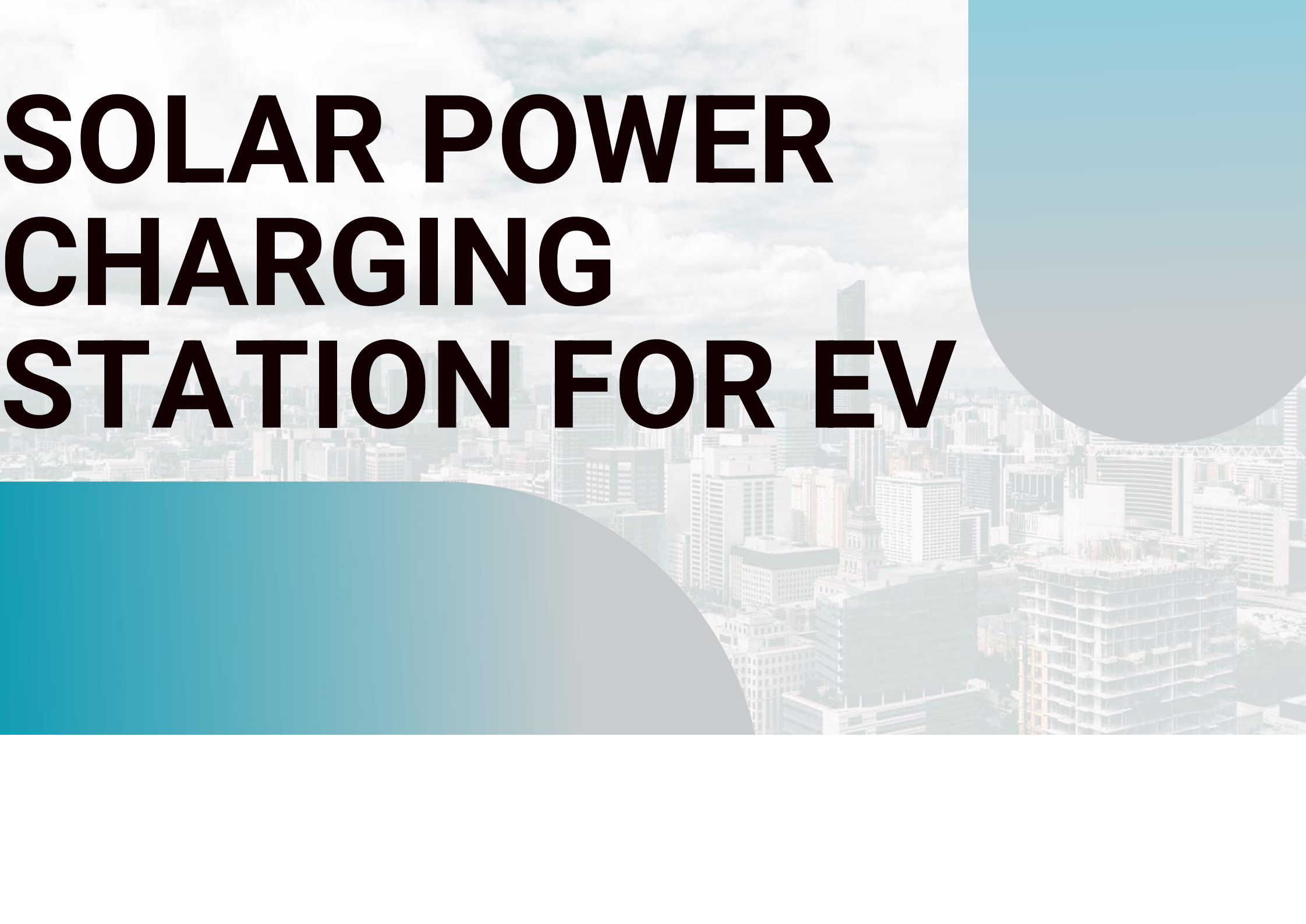


SOLAR POWER CHARGING STATION FOR EV

The background of the slide is a faded aerial photograph of a city skyline, likely New York City, showing numerous skyscrapers and buildings. A large, semi-transparent graphic is overlaid on the right side of the image, consisting of a teal-colored circle and a grey-colored circle that overlap each other. The text is positioned on the left side of the image, overlaid on the city background.

INTRODUCTION

The modern energy landscape is facing significant challenges, including dwindling fossil fuel reserves, rising costs, and environmental damage. In this context, renewable energy sources have emerged as a crucial alternative, offering a sustainable and environmentally friendly path to energy security.





PROBLEM

- Rising global reliance on electric vehicles (EVs) to combat climate change and shift towards sustainable energy sources.
- Transportation sector contributes significantly to greenhouse gas emissions (24% in 2021).
- Need for clean energy solutions in transportation to mitigate climate change.
- Limited availability of charging infrastructure and range anxiety hinder widespread EV adoption



SOLUTION

- Solar-powered EV charging stations offer a promising solution to address these challenges.
- Utilize solar energy as a reliable and renewable source of electricity for EV charging.
- Reduce reliance on non-renewable energy sources and decrease greenhouse gas emissions and air pollution.
- Strategic placement of solar charging stations in key areas can alleviate range anxiety and promote EV adoption.

GAPS IN THE MARKET

1. INCOMPLETE CHARGING INFRASTRUCTURE:

THE LACK of stations in rural areas and along highways creates "range gap" anxiety for EV owners.

2. VARIABLE SOLAR POWER OUTPUT:

Inconsistent charging speeds due to weather conditions can cause frustration and limit adoption.

3. MAINTENANCE AND DURABILITY CONCERNS:

Exposure to harsh weather and high usage can lead to frequent maintenance and decreased reliability.

4. FINANCIAL CONSTRAINTS:

High upfront costs and long payback periods discourage investment and limit infrastructure growth.



- **Individual EV Owners:**

- Environmentally conscious demographic.
- Prioritize convenience, cost, and charging speed.
- Influential factors in EV charging station selection (Akash & Panwar, 2022).

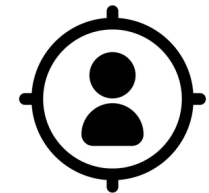
- **Businesses with EV Fleets:**

- Vital for electric transport, ride-sharing, and public transportation.
- Growing demand for reliable charging infrastructure (McKinsey & Company, 2022).

- **Property Owners and Developers:**

- Attract EV drivers for increased revenue.
- Ideal for parking garages, shopping centers, and commercial properties.

TARGET MARKET





LOCATION OF BUSINESS AND LEGAL ENTITY



LOCATION

- Chicago, Illinois: 42% growth in EVs (2022) and scarce charging infrastructure.
- Supportive regulatory environment with grants, tax credits, and simplified permits.
- Diverse landscape offers strategic locations like shopping centers and major hubs.
- Abundant sunshine for solar energy, reducing grid reliance and aligning with city's green goals.

LEGAL ENTITY

- LLC structure provides limited personal liability.
- Pass-through taxation eliminates double taxation, lowering tax burden.
- Adaptable and simple to manage, ideal for dynamic market conditions.

STRENGTHS

- Growing EV market in Chicago
 - Limited existing charging infrastructure
 - Supportive government policies
- Strategic station locations
 - Solar energy utilization
- Positive community impact
 - Scalable business model

WEAKNESSES

- High initial investment
- Weather dependence for solar energy
 - Limited range of EVs
 - Emerging charging technologies
 - Grid dependence



OPPORTUNITIES

- Growing global EV market
- Financial incentives and partnerships
 - Data monetization
- Service diversification
- Smart grid technology integration

THREATS

- Government regulations
 - Competition from existing infrastructure and technologies
- Battery degradation
- Economic downturn

SUBSCRIPTION MODEL:

- Offer monthly or annual subscriptions for unlimited charging or discounted rates. This model provides recurring revenue and builds customer loyalty.
- Works well for individuals and businesses with frequent charging needs

PAY-PER-USE MODEL:

- Charge customers based on the amount of energy consumed or the duration of charging. This model provides flexibility and is suitable for occasional users.
- Works well for individuals with limited charging needs or those who travel frequently



INITIAL INVESTMENT: \$2.4 MILLION

- Equipment: \$1.5 million
- Installation: \$0.5 million
- Permits and licenses: \$0.05 million
- Marketing and outreach: \$0.2 million
- Contingency: \$0.1 million

PROJECTED ANNUAL REVENUE: \$0.8 MILLION

- Charging fees: \$0.5 million
- Subscription plans: \$0.2 million
- Data analytics services: \$0.1 million

Annual Operating Costs: \$0.35 million

- Land lease or rent: Variable
- Grid connection fees: \$0.02 million
- Maintenance and repairs: \$0.05 million
- Insurance: \$0.03 million
- Marketing and advertising: \$0.1 million
- Administrative and overhead: \$0.15 million



- **High Demand:** Growing EV market in Chicago with a 42% increase in 2022.
- **Strategic Location:** Chosen city with supportive policies and diverse locations for charging stations.
- **Innovative Solutions:** Addresses market gaps like range anxiety and maintenance concerns.
- **Sustainability:** Aligns with green initiatives, utilizing solar energy.
- **Financial Viability:** Demonstrated by diversified revenue streams and strategic partnerships.

**JOIN US IN
REVOLUTIONIZING
THE FUTURE OF
TRANSPORTATION!**

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