

LEVEL 7 ASSESSMENT SPECIFICATION

Module code: LCMB7004

Module: Entrepreneurship

**Assignment Title: Component 2- Individual
Presentation**

Renewable energy business idea- Sunrayz Energies

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OVERVIEW OF THE BUSINESS IDEA, PRODUCTS AND SERVICES

Business idea

- **Sunrayz Energies** will operate in the Indian solar lighting system industry.

Motivation

- The declined electricity supply resulted in rising power cuts in India since 2022 (Times of India, 2022).
- **Sunrayz Energies** will help to resolve issues by generating electricity from solar energy.

Products/services

- The products/services of the business will be divided into 2 main categories, such as **household lights** and **commercial solutions**.
- The **household lights** section will include portable lights, LED lights, solar panels and solar lanterns.
- The **commercial solutions** will feature solar-powered street/outdoor lights and high-powered solar panels and lights for industrial purposes.



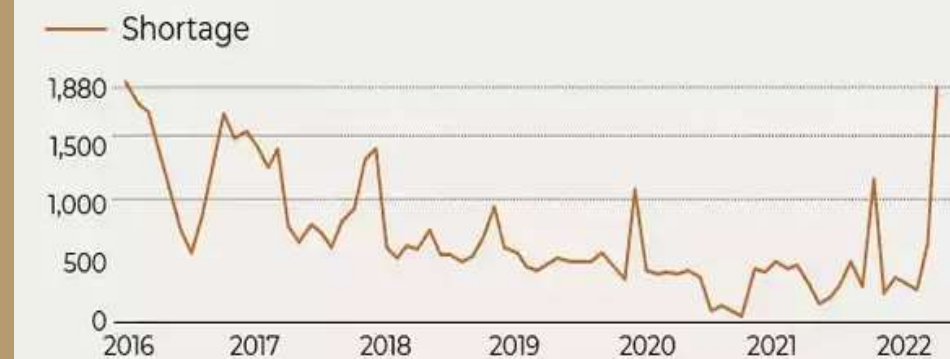
Objectives

- To save energy by redefining solar energy as a replacement for present non-renewable energy.
- To curb power supply expenses by using low-powered lighting solutions, such as CFL/LED lamps.
- To ensure optimal safety and quality while reducing the dependence on non-renewable energy sources.
- To offer smooth installation and low maintenance costs for the lights.



India April power shortage worst since January 2016

Electricity supply fell short of demand by 1,880 million units, or 1.6%, during the first 27 days of April, the worst monthly shortfall in over six years. With power cuts showing an increasing trend, April shortages could exceed January 2016.



OWNERSHIP, STAFFING AND PHYSICAL LOCATION

Ownership

- Ordinary Partnership in a business ensures equal distribution of responsibilities to obtain competitive advantage (Tsutsumi, Fenerich and Silva, 2019).
- It will help the firm reduce risks by curbing responsibilities.
- Sunrayz Energies will follow ordinary partnerships by partnering with local solar-powered light manufacturing businesses.

Staffing

- Sunrayz Energies will integrate a Direct recruitment strategy to hire employees.
- The company will recruit 40-50 employees for the first 2 years.
- Offer intensive training and knowledge to improve customer service.

Physical location

- Sunrayz Energies will open its direct stores in big cities of India, such as Delhi, Mumbai, Kolkata, and Bangalore.
- Sunrayz Energies will later shift in franchising strategy to offer its products/services across all urban and rural areas.

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LEGAL ENTITY AND REQUIREMENTS

Insurance

- Insurance plays a significant role in businesses to curb the risk associated with business operations and supply chains (Njegomir and Rihter, 2015).
- Sunrayz Energies* will protect its operation, stakeholders, intellectual properties, products and services by obtaining SME insurance.
- The insurance coverage will even help the firm to attract investors by featuring low risk.

Licencing

- Udyam registration* is a free MSME business licensing and registration program for innovative entrepreneurship in India (The Government of India, 2023).
- Udyam licensing offers collateral-free loans and special consideration for international trading (The Government of India, 2023).
- Sunrayz Energies will integrate *Udyam Registration* and *Ordinary Partnership* to obtain an improved position in the marketplace.

Patents

- Patents help new businesses to protect intellectual properties and obtain a competitive edge (Hernández and Galvis, 2021).
- Sunrayz Energies* will protect innovative and cost-effective business solar energy solutions to stabilise a competitive place within the industry.

Logo

- The business logo helps brands create a separate identity in the industry (Kaur and Kaur, 2019).
- Sunrayz Energies* will develop a logo for the business with a distinct colour palette and tagline.



Factsheet of MSME (Udyam) Registration Including Udyam Assist Platform (UAP)

Facts Dated:- 05/12/2023 12:00:2 PM

Total Registration	Total Classified	Micro	Small	Medium	Total Employment
3,16,79,539	3,16,16,672	3,09,77,645	5,84,767	54,260	15,49,13,020

Factsheet of MSME (Udyam) Registration

Total Registration	Total Classified	Micro	Small	Medium	Total Employment
2,12,60,338	2,11,97,471	2,05,58,444	5,84,767	54,260	14,26,93,425

Factsheet of Udyam Assist Platform (UAP)

Total Registration & Classified	Micro	Total Employment
1,04,19,201	1,04,19,201	1,22,19,595

UNIQUE SELLING POINT OF THE BUSINESS (USP) AND SWOT

Competitor 1: Adani Solar	My company: Sunrayz Energies	Competitor 2: EMMVEE Solar
● Fast delivery with a strong presence in various states and regions of India. ● Diversified portfolio of renewable energy sources with great quality (Adani Solar, 2023).	● Aims to operate the Indian solar energy-powered light manufacturing industry with the fastest delivery system. ● Best quality products ○ Affordability ○ Sustainable solar panels ○ Innovation and customisation.	● Fast delivery with a network of dealers and distributors across India. ● High-quality and reliable products within a reasonable price range and solar products include monocrystalline and polycrystalline solar modules (Emmvee, 2023).

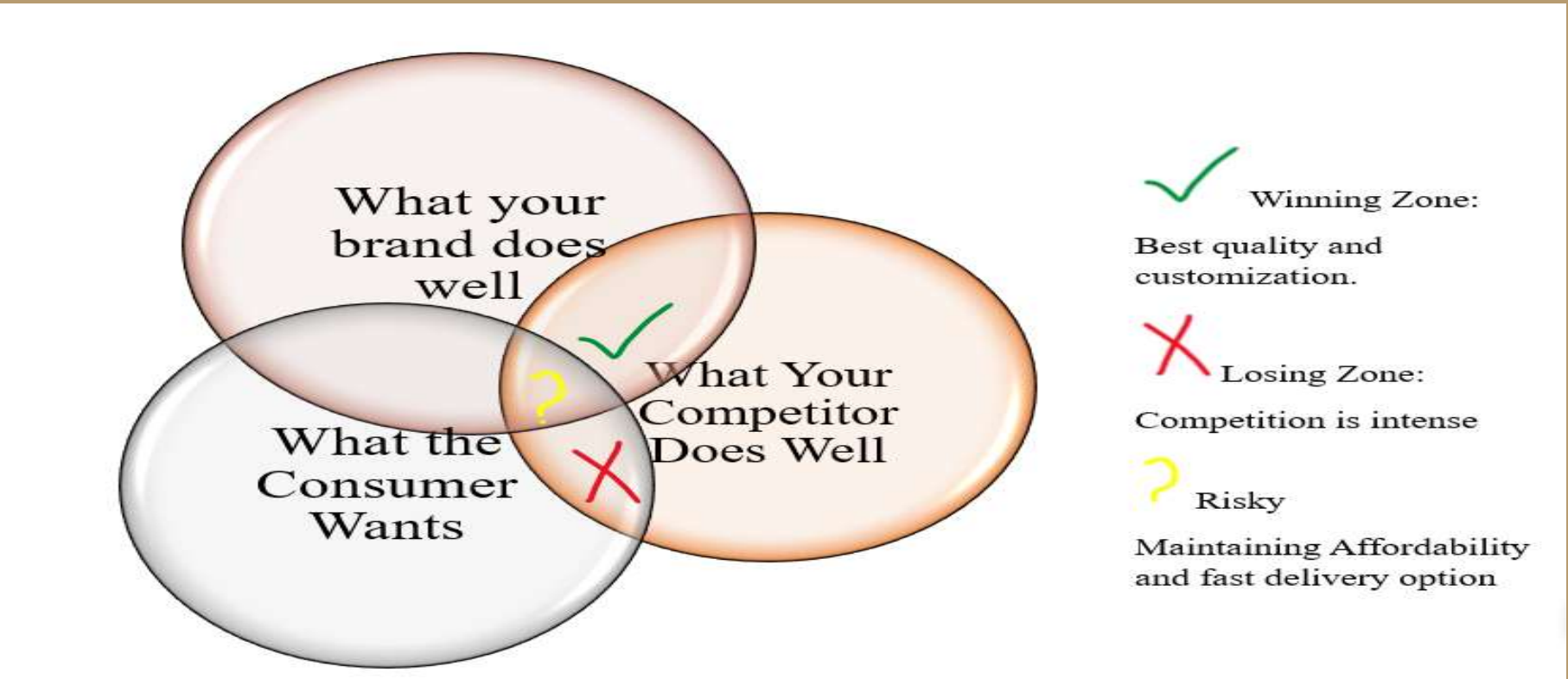


Figure: Unique Selling Proposition

Strength	Weakness
● Affordable, customised low-maintenance and sustainable solar solution. ● High-quality products with durability and reduced carbon footprint along with energy bill reduction.	● The lack of human and material resources at the initial stage for the execution of the business plan can impact its efficacy. ● Limited financial resources are the major issue to the business plan.
Opportunities	Threats
● Growing demand for solar energies and sustainable solutions in an affordable range is the opportunity of the business plan (Long, 2020). ● The technological utilisation for ensuring efficiency, maintaining affordability and reliability helps the business plan to create a place in the Indian marketplace.	● This startup may face challenges in establishing a brand name in the competitive solar market in India. ● Legal and regulatory hurdles may impact operational activities and profitability.

MARKET RESEARCH, TRENDS AND COMPETITION

- The solar energy market is projected to amount to 39.95bn KWh in the year 2023 with the expected annual growth of 7.13% within CAGR 2023-2028 (Statista, 2023).
- The trend of Solar electricity generation and solar power production in India is growing up to 95 terawatt-hours with a capacity of 63 gigawatts in 2022 (Fernández, 2023).
- The target of India is to grow its solar capacity installation and increase it to up to 280 gigawatts by the year 2030 (Fernández, 2023a).
- The competitive market of the solar energy industry is intense and the rival organisations are Adani Solar and EMMVEE.

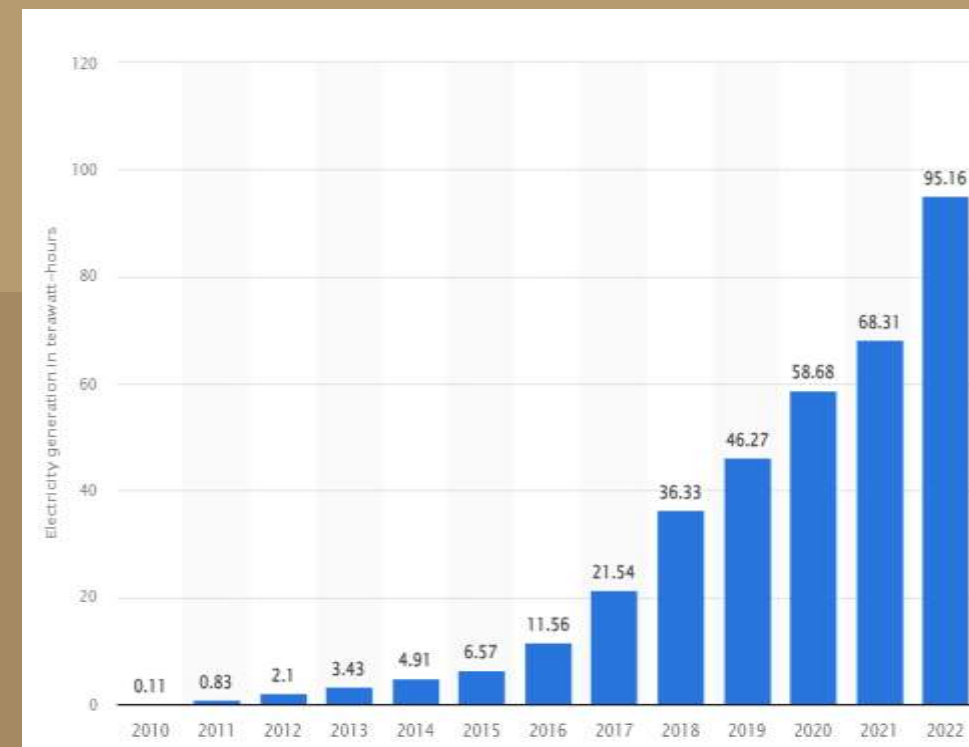


Figure: Solar power production in India 2010-2022

(Source: Fernández, 2023)

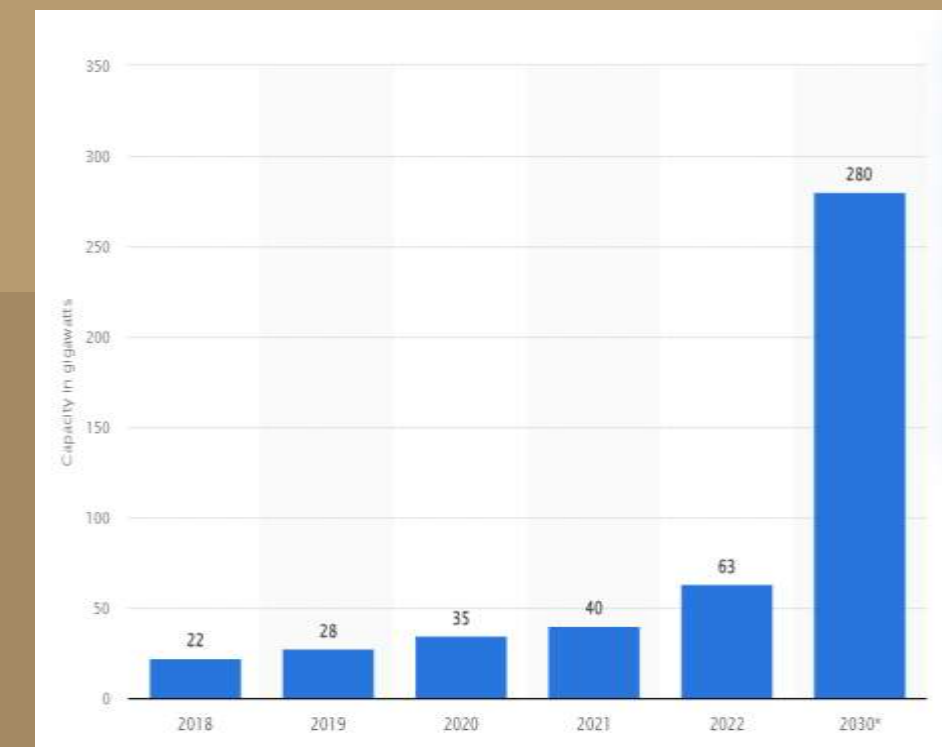


Figure: Solar power capacity installation target in India 2018-2030

(Source: Fernández, 2023)

MARKET SEGMENTATION, CUSTOMER PROFILING AND MARKETING STRATEGIES

- The target market of the company will be India.
- People from middle and lower-income and commercial places will be the target customers of the company
- The target age group of the company will be from 25 to 50 years old.
- The rural areas of India will be chosen for selling the products
- Online campaign using Facebook, and Instagram will be conducted, and for selling the products stores in Delhi, Mumbai, Kolkata, and Bangalore will be opened initially followed by a social media marketing strategy.



Table: 4 P's Marketing Mix of SunRays Energies

SALES AND PRICING OF PRODUCTS AND SERVICES

- 📍 Value value-based pricing strategy will be followed during the price planning of the products
- 📍 The value-based pricing allows an organisation to set the price of the products based on the customer value and pricing of the compatriots (Stobierski, 2020).
- 📍 The prices of the products and the services will be set based on the perceived tendency of investment from the customer side and the price of the products.

OPERATIONS AND LOGISTICS



Third-party logistics such as Flipkart and Amazon will be utilised for the online delivery of the products.

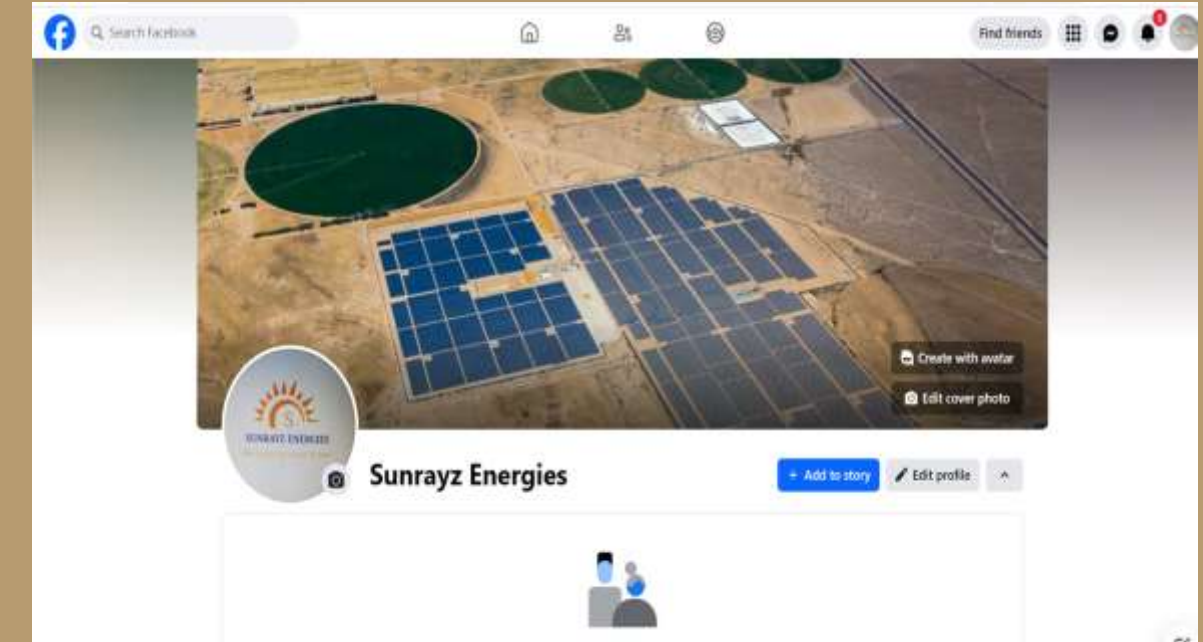


In-store selling from the brick-and-mortar stores of Delhi, Kolkata, Mumbai Bangalore will be used for direct engagement of the customers.

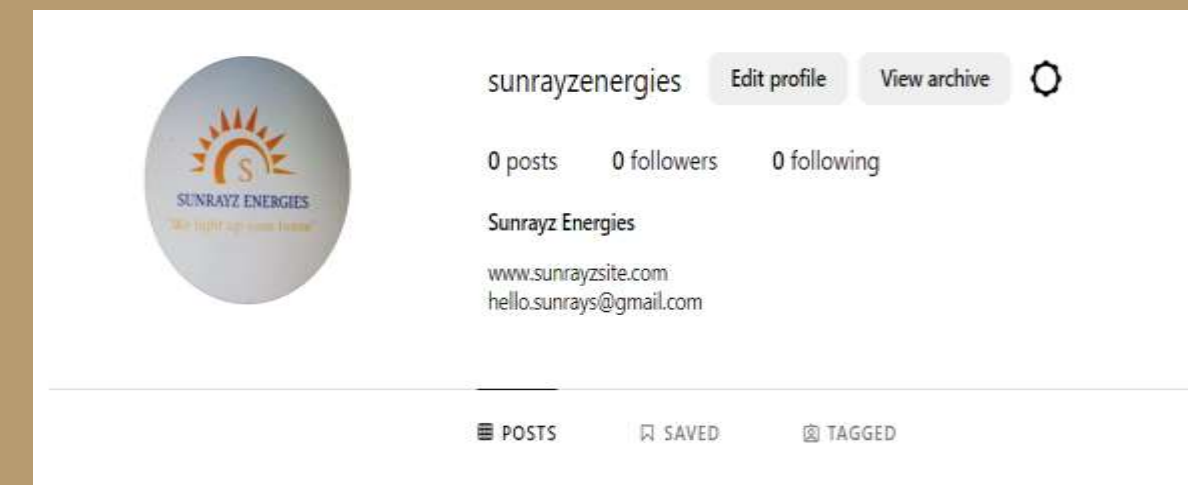


WEBPAGE, ONLINE VISIBILITY AND SOCIAL MEDIA

- A business plan requires a successful implementation strategy to increase the organisational visibility (Blackwell, 2011).
- A Facebook account will be created for Sunrayz Energies to increase its online visibility in social media.
- An Instagram page will be created in terms of attracting more audiences in India.



(Source: <https://www.facebook.com/profile.php?id=6155421096389>)



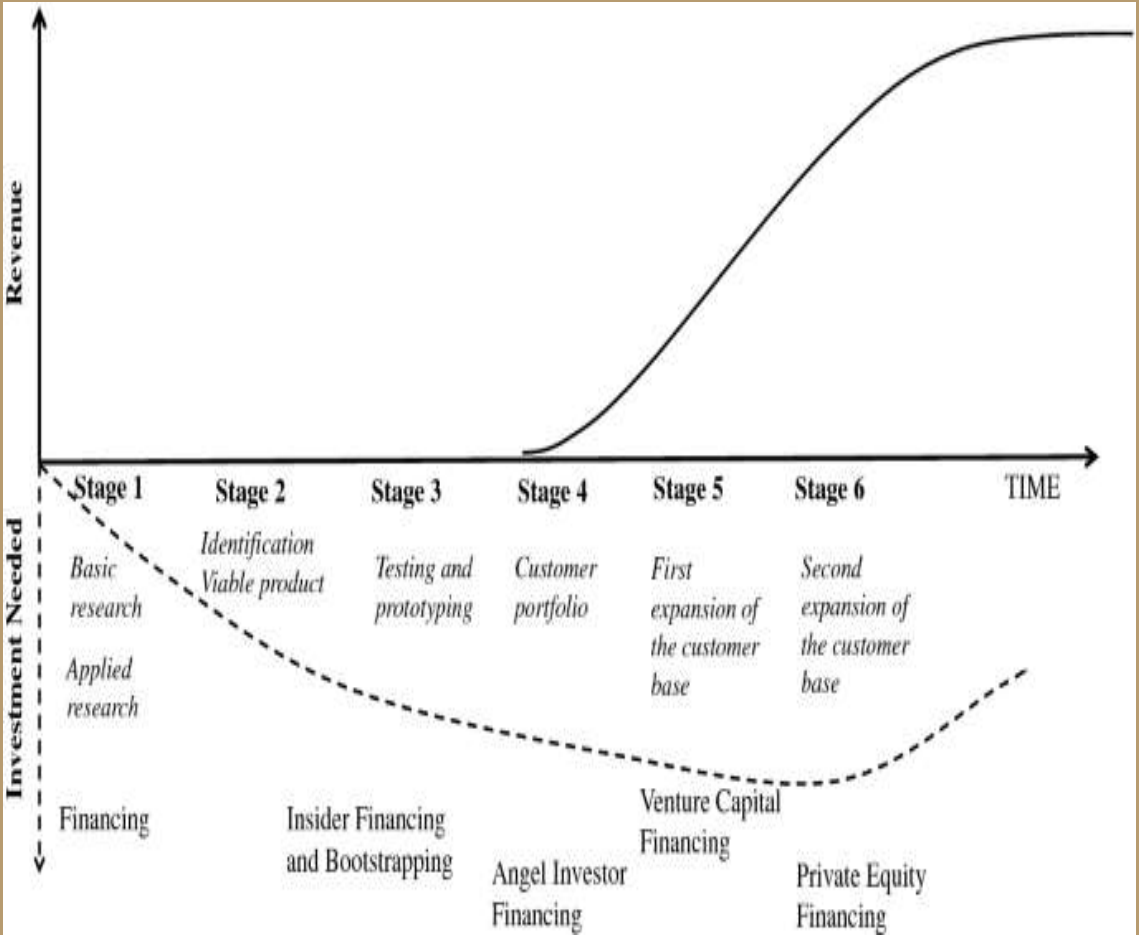
(Source: <https://www.instagram.com/sunrayzenergies/>)



(Source: <https://www.instagram.com/sunrayzenergies/>)

FUNDING AND FINANCIAL PROJECTION

- The cycle of startup financing includes financing, bootstrapping, angel investor financing, venture capital financing and private equity financing (Carrete and Faria, 2019).
- Sunrayz Energies will be required to indemnify its viable products through testing and prototyping for initial financing and insider financing and bootstrapping.
- A customer portfolio will help the mentioned organisation in attracting angel investor financing.
- The first exemption of the customer base helps ensure the growth of the organisation through venture capital financing.

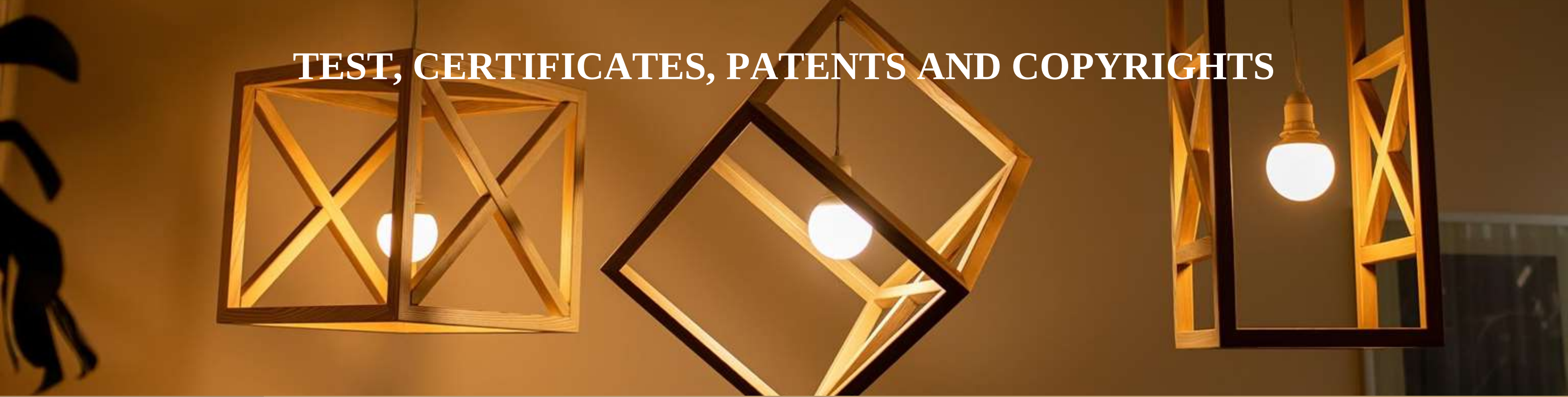


(Source: Carrete and Faria, 2019)

5-year Financial projection of Sunrayz Energies from 2020 to 2023					
	Year 1	Year 2	Year 3	Year 4	Year 5
Number of customers	30	50	80	90	150
Revenue (INR)	100,000	200,000	350,000	400,000	500,000
Expenses	75,000	60,000	85,000	95,000	5,0000
Cash flow	175000	2600000	435000	495000	656000

Table: Financial projection of Sunrayz Energies

TEST, CERTIFICATES, PATENTS AND COPYRIGHTS



- The certification and test of Renewable Energy Certificate Energy will be required for Sunrayz Energies which is set based on the Electricity Act, 2003 and National Action Plan on Climate Change.
- The technology of photovoltaic of Sunrayz Energies will require the utilisation of patents in terms of avoiding commercial misuse of the mentioned technology.
- The Copyright Act 1957 of India will be utilised in terms of protecting the logo and names of the organisation.

REFERENCES

- Adani Solar (2023). *Adani Solar*. [online] Adani Solar. Available at: <https://www.adanisolar.com/> [Accessed 5 Dec. 2023].
- Baker, M. (2008). *Marketing Theory, London, Thomson Learning*. Routledge.
- Blackwell (2011). *How to Prepare a Business Plan*. [online] Available at: http://www.untag-smd.ac.id/files/Perpustakaan_Digital_1/BUSINESS%20PLAN%20How%20to%20Prepare%20a%20Business%20Plan%200749441917.pdf [Accessed 5 Dec. 2023].
- Blackwell, E. (2008). *How to prepare a business plan*. [online] London ; Philadelphia: Kogan Page. Available at: https://books.google.co.in/books/about/How_to_Prepare_a_Business_Plan.html?id=4F0FraQ5e-MC&redir_esc=y [Accessed 5 Dec. 2023].
- Boyarchenko, S.I. (2021). Life cycle of startup financing. *SSRN Electronic Journal*. doi:<https://doi.org/10.2139/ssrn.3835495>.
- Carrete, L.S. and Faria, A.M. (2019). The Financing of the Startup Life Cycle. *Startups and Innovation Ecosystems in Emerging Markets*, pp.69–95. doi:https://doi.org/10.1007/978-3-030-10865-6_5.
- Crail, C. (2023). *Solar Energy Pros And Cons: What Are The Advantages And Disadvantages?* [online] Forbes Home. Available at: <https://www.forbes.com/home-improvement/solar/solar-energy-pros-and-cons/#:~:text=Renewable%20Energy%20Source>.
- Emmvee (2023). *Emmvee | About Us - The Premier Solar PV Module Experts*. [online] Emmvee Group. Available at: <https://emmvee.com/about-us/#:~:text=Emmvee%20Photovoltaic%20Power%20Pvt>. [Accessed 5 Dec. 2023].
- Fernández, L. (2023a). *India: solar capacity installations & targets 2030*. [online] Statista. Available at: <https://www.statista.com/statistics/1373575/solar-power-capacity-installations-and-targets-india/#:~:text=Between%202018%20and%202021%2C%20the> [Accessed 5 Dec. 2023].
- Fernández, L. (2023b). *India: solar power generation 2022*. [online] Statista. Available at: <https://www.statista.com/statistics/1401414/india-solar-power-generation/#:~:text=Solar%20power%20production%20in%20India%202010%2D2022&text=Solar%20power%20generation%20in%20India> [Accessed 5 Dec. 2023].
- Hernández, Y.G. and Galvis, J.F.R. (2021). Innovation and patents as a business success factor. *Journal of Economics, Finance and Administrative Science*, [online] 26(51), pp.143–159. doi:<https://doi.org/10.1108/jefas-09-2019-0218>.
- Kaur, H. and Kaur, K. (2019). Connecting the dots between brand logo and brand image. *Asia-Pacific Journal of Business Administration*, [online] 11(1), pp.68–87. doi:<https://doi.org/10.1108/apjba-06-2018-0101>.
- Khan, A. (2023). *India is at risk of experiencing blackouts this summer; how solar power and energy storage could help - ET EnergyWorld*. [online] ETEnergyworld.com. Available at: <https://energy.economictimes.indiatimes.com/blog/india-is-at-risk-of-experiencing-blackouts-this-summer-how-solar-power-and-energy-storage-could-help/99782714> [Accessed 5 Dec. 2023].
- Li, F., Larimo, J. and Leonidou, L.C. (2020). Social Media Marketing strategy: definition, conceptualization, taxonomy, validation, and Future Agenda. *Journal of the Academy of Marketing Science*, [online] 49(1), pp.51–70. doi:<https://doi.org/10.1007/s11747-020-00733-3>.
- Njegomir, V. and Rihter, J.D. (2015). The Role and Importance of Insurance of Business and Supply Chain Interruptions. *Management - Journal for theory and practice of management*, [online] 20(77), pp.53–60. doi:<https://doi.org/10.7595/management.fon.2015.0025>.
- Statista (2023a). *Top online stores India 2020*. [online] Statista. Available at: <https://www.statista.com/forecasts/1218264/india-top-online-stores-india-ecommercedb>.
- Statista. (2023b). *Solar Energy - India | Statista Market Forecast*. [online] Available at: <https://www.statista.com/outlook/io/energy/renewable-energy/solar-energy/india> [Accessed 5 Dec. 2023].
- Stobierski, T. (2020). *A Beginner’s Guide to Value-Based Strategy*. [online] Harvard Business School. Available at: <https://online.hbs.edu/blog/post/value-based-strategy>.
- The Government of India (2023). *Udyam Registration : Zero cost, No Fee and Free Registration of MSMEs. This is official website of Govt. of India, Ministry of MSME. No other website/portal/app is official. MSMEs are requested to do MSME Registration here only*. [online] udyamregistration.gov.in. Available at: <https://udyamregistration.gov.in/Government-India/Ministry-MSME-registration.htm> [Accessed 5 Dec. 2023].
- Times of India (2022). *Explained: Why India is facing longest power cuts in 6 years | India News - Times of India*. [online] The Times of India. Available at: <https://timesofindia.indiatimes.com/india/explained-why-india-is-facing-longest-power-cuts-in-6-years/articleshow/91198487.cms> [Accessed 5 Dec. 2023].
- Tsutsumi, D.P., Fenerich, A.T. and Silva, T.H. (2019). Towards business partnership recommendation using user opinion on Facebook. *Journal of Internet Services and Applications*, [online] 10(1). doi:<https://doi.org/10.1186/s13174-019-0110-2>.