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Renewable Energy and Its Impact on Brand Image and Consumer Perception: An Indian Industry Perspective

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Abstract: ***Renewable energy, derived from natural sources, is crucial to building a cleaner future. With rising climate concerns and declining fossil fuels, it is rapidly expanding as a cleaner alternative. Increasingly, businesses are adopting Renewable Energy Initiatives (REIs) not only to reduce emissions but also to improve brand perception among sustainability-focused consumer segments. This study uses a mixed-methods approach to evaluate the impact of renewable energy adoption on brand reputation across Indian sectors. Findings indicate that REIs significantly improve brand image, enhance customer trust, and foster sustainable business growth. Although existing research has widely documented the ecological advantages of renewable energy, limited research has examined its impact on brand perception, particularly in the Indian context. By presenting sector-specific case studies, this research fills that gap and demonstrates how REIs enhance brand image and support long-term business success.***

Keywords: Renewable energy initiatives (REIs)**,** consumer perception**,** small businesses, sustainability, green certification, brand image, brand reputation, small and medium enterprises (SMEs)

1. Introduction

In a world facing environmental decline and social challenges, renewable energy initiatives have become a powerful solution. Renewable energy refers to the energy derived from natural sources, including solar, wind, hydro, and geothermal sources. The role of such initiatives has become increasingly significant in the context of running sustainable businesses. A sustainable business is one which aims to make a profit and tries to protect the environment and contribute positively to society. As Cameron Sinclair, a designer and co-founder of SmallWorld, once said, “When sustainability is viewed as being a matter of survival for your business, I believe you can create massive change.” This quote captures the exact meaning.

Sustainable development has emerged as a key priority worldwide, prompting deeper examination of how it impacts businesses. While the use of renewable resources has proven to positively impact the environment by promoting sustainable practices, many companies also utilize them as a powerful marketing tool, showcasing their commitment to sustainability and appealing to eco-conscious customers. Supporting this, a 2024 PwC survey revealed that 60% of Indian consumers are actively choosing sustainable products, with 46% viewing climate change as a significant threat [1]. These consumers are even willing to pay a premium of 13.1% for sustainably sourced goods [1]. This highlights a strong preference for environmentally friendly products. Earlier, most companies believed that consumers only preferred low-priced goods and didn’t value eco-friendly products, but this perception is changing as consumers become more aware and supportive of green choices [2]. As a result, green marketing is becoming an important strategy to stay competitive. Most existing research focuses on large corporations, with limited insight into how renewable energy initiatives affect small businesses, particularly in India. Given their growing role in the economy and increasing pressure to adopt sustainable practices, addressing this gap is important. This paper aims to examine how renewable energy adoption influences the brand image and consumer perception of SMEs. By doing so, this study seeks to understand whether going green also builds stronger market trust and reputation. As shown in fig1, the growth in the usage of renewable energy highlights the increasing adoption trends in the business sector.

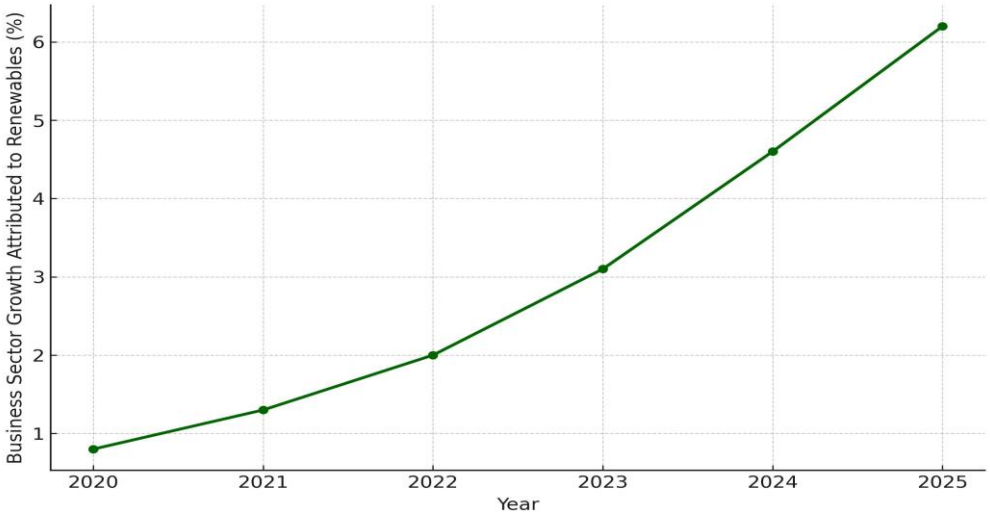

Figure 1: Growth in usage of renewable energy in the business sector

To gain a clearer perspective on the intersection of renewable energy and the SME sector, it is essential to examine a few critical aspects: global trends in renewable energy, India's advancements in renewables, the crucial contribution of SMEs to the economy, and the economic rationale for renewables influenced by savings and consumer choices. The table below emphasizes these parameters within the context.

Table 1: Renewable Energy and SME dynamics: Global and Indian perspectives.

Parameters	Global Context	India SME context
The Renewable Energy Share	Global renewable electricity generation is expected to climb to over 17000 TWh (60 EJ) by 2030, an increase of almost 90% from 2023. In 2023, 30% of electricity globally was occupied by renewable energy. This share in the electricity sector is forecast to expand from 30% in 2023 to 46% in 2030.	India's total installed power capacity reached a major milestone of 476 GW in June 2025. This included 240 GW of thermal power, 110.9 GW of solar power, and 51.3 GW of wind power. This is a big step toward renewable energy and energy security.
Role of SME in the Economy	SMEs are the backbone of the global economy. MSMEs (Micro-, small, and medium-sized enterprises) account for 90% of businesses, 60 to 70% of employment, and 50% of GDP worldwide.	The MSME sector represents 30.1% of India's GDP, 35.4% of manufacturing, and 45.73% of the country's exports, according to the Union Minister for MSME. 6.5 crore MSME units have been registered on the Udayam Portal, providing job opportunities to 28 crore individuals so far.
Cost Savings from Renewables	In 2023, 81% of new renewable energy sources were less expensive than fossil fuels, presenting countries with a strong business and investment rationale. In 2024, the worldwide average price of electricity produced by solar photovoltaics (PV) and onshore wind was 41% and 53% less expensive, compared to the most economical new fossil fuel- powered power plant.	Initiatives like PM Surya Ghar: Muft Bijili Yojana, Production Linked Incentive (PLI) Scheme, etc., are being introduced by the Indian government to boost renewable energy adoption in the nation. PM Surya Ghar: Muft Bijili Yojana anticipated to produce considerable savings for the government, approximated at Rs. 75000 crores each year in electricity expenses.
Consumer Preference	34% of worldwide consumers are more inclined to purchase products with sustainable features. Almost 70% of all shoppers are ready to spend more on sustainable items. The changing climate of Sustainability report indicates that 73% of consumers would change their habits to reduce their environmental impact.	Indian consumers are showing a significant inclination toward sustainable products, indicating a wider movement towards eco-friendly purchasing habits. 75% of consumers actively seek information on their food and sustainability consumption and 70% research independent sustainability score on food labelling when choosing a product.

2. Literature Review

The application of renewable energy makes a significant contribution to the sustainability of our planet [3]. Sustainable business has rapidly become a strategic priority for organizations worldwide. Accordingly, the adoption of renewable energy technologies (such as solar, wind, and biomass) is transforming operational practices across industries. In India, for the last two and half decades, there has been a vigorous pursuit of activities relating to the research, development, demonstration, production, and application of a variety of renewable energy technologies for use in different sectors [4]. The Government of India is focusing on promoting startups to support innovation, employment generation, and other benefits [5]. With policies such as the Grid-Connected Rooftop Solar Programme and rising energy costs, Indian businesses, especially SMEs, have increasingly turned to renewable energy as both a necessity and an opportunity [6]. However, to understand the modern adoption of renewable technologies, it is essential to trace how Indian businesses, particularly SMEs, initially responded to the government's policies on clean energy. At first, renewable energy was largely viewed as a costly and unreliable alternative to traditional power sources. However, national initiatives such as the Jawaharlal Nehru National Solar Mission (JNNSM), launched in 2010, laid the

groundwork for large-scale solar adoption by setting clear capacity targets and providing capital subsidies [7]. These trends reflect the growing role of REIs in operational contexts. They also reveal how consumer expectations regarding environmental responsibility influence the energy strategies of Indian SMEs.

Today's consumers are more inclined to support brands that demonstrate long-term sustainability. As supported by Mercom India's 2023 survey, 91% of surveyed businesses recognize solar as their preferred renewable energy source due to its reliability and the positive brand associations it provides [8]. Approximately 70% of consumers consider environmental concerns when purchasing products, though only 45% are willing to pay a premium for green options [9]. Academic reviews further validate that businesses adopting renewable energy tend to see an enhanced brand image and greater customer loyalty. This behavior is particularly pronounced among younger consumers, such as Millennials and Generation Z, who tend to prioritize sustainability and ethical practices in their purchasing decisions [10]. Companies that balance profit with people (social) and planet (environmental) considerations are more likely to build sustainable competitive advantages and enhance brand loyalty [11]. Maninder Singh Nayyar, Founder and CEO of the CEF Group, notes that growing interest from the MSME sector is encouraging, as more businesses are beginning to recognize that adopting sustainable practices can strengthen their credibility, unlock new market opportunities, and safeguard their long-term growth [12]. In SME clusters such as Aurangabad, Tiruppur, Jodhpur, and Bengaluru, early rooftop solar projects served as confidence-building examples, boosting stakeholder trust and reinforcing SME reputation for innovation [13]. A late-2022 FedEx/ET Brand Equity report found 9 in 10 Indian consumers now expect SMEs to operate sustainably, and 80% prefer brands with ESG credentials—raising SME brand image simply by meeting consumer norms [14]. A May 2024 study highlights that SMEs using green marketing strategies gain market differentiation and customer loyalty, reinforcing a more premium and authentic brand image [15]. A DBS/Bloomberg study found that 92% of Indian SMEs believe that adopting Environmental, Social, and Governance (ESG) increases their reputation, competitiveness, and investor appeal, suggesting that sustainability becomes a key credibility signal [16]. 90% of MSMEs see cost reduction as the primary motivation for green practices. When brands can tie sustainability to operational savings, it enhances the authenticity of their brand messaging [17].

While India's transition to renewable energy has generated substantial academic and industry attention, the focus has largely remained on major corporations operating in urban centers. Well-known firms such as Tata Power Solar, ITC, and FabIndia are frequently showcased for their sustainability initiatives and how these efforts enhance their public image. These companies have the visibility and resources to publicize their environmental efforts, often improving their consumer trust and brand value. In contrast, smaller businesses are rarely studied in this context. Particularly in rural areas, the impact of renewable energy initiatives on brand image and consumer perception remains poorly understood. Companies such as Bharat Bricks (construction materials), Oorja Development Solutions (solar energy for farming), Dela Grain Foods Pvt Ltd (food processing), and Resham Sutra (textiles and handicrafts) are actively adopting renewable solutions, including solar rooftops, bioenergy, and energy-efficient machinery. However, little is known about how these transitions affect day-to-day operations, reduce electricity costs, or enhance long-term customer loyalty and brand positioning. This study aims to examine how renewable energy installations (REIs) influence brand image, consumer perception, operational costs, and power consumption in Indian SMEs. By focusing only on small and mid-sized enterprises across diverse sectors, this paper contributes a more balanced perspective to India's sustainability, helping to fill a critical gap in green entrepreneurship research.

3. Methodology

To examine the effects of renewable energy installations (REIs) on Indian SMEs, this study adopts a qualitative research design. This approach provides a grounded understanding of how REIs shape brand perception, consumer trust, operational costs, and energy usage. Since these factors are closely tied to context and behavior, they are best explored through qualitative methods. In particular, case studies were chosen because they provide a practical way to explore real-life business scenarios. They capture not just what changed after REIs were implemented but also how and why those changes unfolded in each unique SME. Unlike surveys or abstract datasets that provide limited insight, case studies reveal the everyday decisions, challenges, and customer reactions that shape a business's sustainability journey. More importantly, case studies make research easier to understand and more relatable to a wider audience. They also make it possible to compare diverse business environments, highlighting factors like carbon footprint reduction, shifts in consumer trust, and improvements in brand visibility. For a topic like this, which covers regional business practices, consumer behavior, and financial constraints, case studies provide the most effective approach to reveal meaningful patterns and lessons.

This study focuses on small and medium-sized enterprises (SMEs) that operate in sectors where renewable energy adoption can significantly influence both operational performance and public perception. To gain complete insight into these practices, this study monitored two enterprises from distinct industries: Resham Sutra, a rural social enterprise in the textiles and handicrafts sector, and Dela Grain Foods Pvt. Ltd., a semi-urban company in the food processing industry. By selecting SMEs from different sectors, the research captures a broader perspective on how REIs interact with varied production processes, consumer expectations, and branding strategies. Both enterprises meet the formal criteria of Indian SMEs in terms of scale, employee size, and revenue, and are situated in semi-urban or rural regions where access to reliable and affordable energy is often challenging. The nature of REIs adopted also differs across the two: Resham Sutra employs solar-powered silk reeling and weaving equipment to support rural women artisans, while Dela Grain Foods utilizes rooftop solar energy systems to power its food-manufacturing operations.

4. The Case Studies

Case Study 1: Resham Sutra

Founded in 2015 by Kunal Vaid, Resham Sutra is a Delhi-based social enterprise that designs and distributes renewable-energy-powered silk-processing machines for rural women working in the wild silk value chain [18]. The company was created to eliminate the inhumane and low-income practice of thigh reeling which was traditionally done by hand and largely performed by women under physically demanding conditions [18]. By 2016, within a year of its founding, Resham Sutra introduced its first solar-powered reeling machine prototype, "Unnati" [19].

Each machine cost between ₹15,000 and ₹40,000, depending on the type and configuration [20]. Soon after the machines were first distributed, technical issues began to appear in several villages. Since many of the women never worked with such equipment before, they were struggling with basic maintenance and operation. These initial problems raise concerns regarding long-term adoption. In response, the team implemented training at the Rural Experience Centres, providing 2–4 weeks of hands-on instruction, guiding women in forming self-help groups, and helping them access machines and raw materials with support from partner institutions [21].

Over the next eight years, the company expanded rapidly. The adoption of solar-powered machinery had led to a 200–400% increase in productivity compared to manual thigh reeling [22]. Each machine used only 10–15 W of power, which was only approximately 10% of the consumption of standard motorized alternatives [23]. As a result, users saw their daily income rise from roughly ₹100 to ₹250–₹300, bringing their total monthly earnings to about ₹8,000 [22]. The network of machines collectively saved over 17,000 t of CO_2 per year [24].

Despite early challenges, Resham Sutra's machines have had a significant impact. Programs such as Powering Livelihoods have provided loans, enabling widespread adoption and helping women transition from irregular wage work to managing small-scale silk-production units [25]. Resham Sutra's efforts improved income security and helped rural women become more financially independent [25]. The enterprise has received multiple awards and recognitions, including the Ashden Award (UK), the ISHOW Award from ASME, and being named one of India's 'Top 10 Agri-Tech Startups' in 2020 [26], [27]. Growing to a national scale, Resham Sutra has established itself as a leading organization in rural clean-tech, with features in YourStory, The Better India, Acumen, and Ashden [18], [23], [27]. In summary, the journey of Resham Sutra brings clear benefits. It has reduced costs, increased income, and saved carbon, while also strengthening brand reputation, building trust with consumers and investors, and improving its position in the market through sustainable and socially supportive practices.

Case Study 2: Dela Grain Foods Pvt Ltd.

Founded in 2016 by Eva Chawla in Ratlam, Madhya Pradesh, Dela Grain Foods Pvt Ltd (formerly Dela Foods) is a woman-led microenterprise that began with basic grain milling and food packaging [28]. The company originally sourced basic agricultural inputs from nearby farms, primarily for traditional products, such as wheat flour and regional spice blends.

However, the business model evolved significantly by 2022, as Dela Grain began addressing India's increasing food waste crisis. They recovered leftover and visually defective crops produced directly by farmers, which would otherwise go unsold or discarded [28]. This farm-to-factory initiative formed the foundation for a larger transformation that emphasized sustainability and zero-waste processing [29]. Over 2022 and 2023, Dela Grain invested in energy-efficient processing lines and waste-reduction systems, phasing out older, high-consumption equipment. The transition came with challenges. Upgrading machinery while continuing production caused temporary pauses in operations. Additionally, modifying sourcing and delivery processes to manage farm-level collection and handling of imperfect produce required farmer training and local coordination [29]. However, these hurdles were overcome through adaptive planning.

This transformation has produced significant operational and social impacts. Energy-efficient systems and waste reduction measures allowed Dela Grain to cut energy consumption per kilogram of product and expand its product line to include ketchup, pickles, sauces, and ready-to-cook meals under the "Dela" and "Tom-chi" brands [28]. Farmer incomes rose as previously unmarketable produce found a stable buyer in Dela Grain. The company's margins also improved due to the cost-effectiveness of its raw materials and energy use. As a result, Dela not only enhanced its profit margins but also expanded its capacity for growth. The company now operates with an estimated workforce of 20–50 employees and maintains direct relationships with small-scale farmers. Its focus on circular production has earned it credibility in retail markets, especially among buyers conscious of food traceability and environmental impact. Dela's transparent supply chain and quality consistency have secured demand from HoReCa (hotels, restaurants, and catering) clients, expanding its brand visibility [30].

Within two years of this green shift, the company gained widespread recognition in the industry. In 2024, it was selected as the "Fastest Growing MSME" by The Economic Times, chosen from over 15,000 nominations nationwide across 22 categories [29]. In conclusion, Dela Grain Foods illustrates how a small, woman-led MSME can transition to a sustainability-first model by adopting clean technologies, reducing food waste, and building inclusive value chains. The company's transformation yielded operational and financial returns, elevated its brand image, reinforced consumer trust, and positioned it as a blueprint for scalable, eco-conscious agri-processing in India.

5. Discussion and Analysis

Both companies implemented REIs to reduce energy costs, improve operational efficiency, and enhance social and environmental sustainability. While Resham Sutra focuses on rural silk production using solar-powered machines to support women artisans, Dela Grain Foods targets semi-urban food processing by adopting energy-efficient systems and reducing

the food waste. Despite operating in different sectors and regions, these enterprises successfully aligned sustainability with business strategy, strengthening their brand image and appealing to environmentally conscious consumers. Each company faced initial challenges in implementing their REIs. Resham Sutra encountered technical issues with the solar-powered machines, requiring frequent maintenance and causing operational downtime. Dela Grain Foods struggled to integrate new energy-efficient systems into its existing processes, leading to temporary disruptions in production. However, the enterprises demonstrated resilience and adaptability in overcoming these obstacles. Resham Sutra addressed their technical challenges by developing a maintenance program and training local technicians to provide quick and efficient support. This approach not only resolved immediate issues but also created additional employment opportunities in the community. Dela Grain Foods overcame its integration challenges by introducing the new systems gradually and providing comprehensive training to staff at each stage. These adaptive strategies highlight the importance of flexibility and problem-solving in successfully implementing REIs in SMEs. The analysis provided below offers a clearer understanding of the strengths, weaknesses, opportunities, and threats associated with the adoption of renewable energy initiatives by Resham Sutra and Dela Grain Foods Pvt. Ltd.

Resham Sutra

- **Strengths**: Innovative solar-powered silk machines, empowerment of rural women, and significant carbon savings.
- **Weaknesses**: Initial technical issues and need for ongoing maintenance and support.
- **Opportunities**: Expansion to new regions, increased demand for eco-friendly silk, and potential partnerships with sustainability-focused organizations.
- **Threats**: Competition from traditional silk producers and dependency on continued community engagement.

Dela Grain Foods

- **Strengths**: Energy-efficient processing systems, reduction in food waste, strong farmer networks, and diversified product lines.
- **Weaknesses**: Operational disruptions during machinery upgrades and dependence on farmer cooperation.
- **Opportunities**: Expansion of farm-based micro-manufacturing models, scaling of zero-waste practices, and entering new retail and HoReCa markets.
- **Threats**: Supply chain challenges, integration of new technology, and competition from conventional food processors.

5.1 Comparative Analysis of Case Studies

A comparative look at Resham Sutra and Dela Grain Foods demonstrates the different approaches SMEs take to implement renewable energy initiatives (REIs) and the outcomes of these strategies. Both companies operate in distinct sectors, but share a common focus on sustainability and efficiency. This section examines their operational outcomes, social and environmental impacts, and market responses, highlighting both the similarities and differences in how REIs contribute to business performance, community engagement, and brand positioning. The following table summarizes the key metrics and achievements of each enterprise.

Table 2: Key metrics and achievements of the SMEs (references)

Attribute	Resham Sutra	Dela Grain Foods
ROI / Business Impact	Productivity increased by 200–400%, daily incomes rose from ₹100 to ₹250–300, and higher silk quality led to better market prices.	Reduced costs via energy-efficient systems and expanded product lines, including ketchup, pickles, sauces, and ready-to-cook meals.
Customer Feedback / Market Response	Positive responses from sustainability-conscious consumers and growing domestic and international demand.	Positive feedback from eco-conscious consumers strengthened brand trust and loyalty.
Client / Beneficiary Growth	Reached 22,000+ women in 400+ villages across 14 states and created jobs through a local technician network.	Expanded to HoReCa clients and retail markets, maintained 20–50 employees, and direct relationships with farmers.
Carbon Emission / Energy Savings	Machines use only 10–15 W, saving over 6,000 t CO_2 annually compared with motorized alternatives.	Significant energy savings per kg of product and minimized food waste through circular production.
Sustainability Impact & Community Benefits	Empowering rural women with higher incomes, improved working conditions, and local employment opportunities.	It supported farmers by using unsellable produce, reducing food waste, and creating sustainable, eco-conscious production practices.

From this comparison, it is evident that Resham Sutra had a quicker and more visible impact due to direct income and productivity gains, while Dela Grain Foods' impact was broader, influencing the supply chain, operational efficiency, and food waste reduction. Both enterprises effectively used sustainability as a branding tool. Resham Sutra emphasized social empowerment and eco-friendly production, whereas Dela Grain Foods highlighted energy efficiency, circular production, and traceability, thereby strengthening brand credibility and consumer loyalty.

6. Conclusion

The case studies of Resham Sutra and Dela Grain Foods demonstrate that Renewable Energy Initiatives (REIs) in Indian SMEs provide benefits far beyond mere cost reduction. This addresses a gap in the literature that has largely focused on large corporations or urban contexts. For Resham Sutra, solar-powered silk reeling machines increased artisan productivity by 200–400%, raised daily incomes from ₹100 to ₹250–300, and reduced carbon emissions by over 6,000 t annually [21], [22], [23]. Dela Grain Foods' energy-efficient food processing and waste-reduction systems lowered operational costs, extended the shelf life of grains and pulses,

and improved profit margins, while directly benefiting small farmers and employing 20–50 staff [29], [30]. By analyzing these SMEs, this study addresses the lack of studies on small enterprises' renewable energy adoption, providing data on operational efficiency, income growth, carbon savings, and social impact. Both companies also experienced enhanced brand credibility, stronger consumer trust, and positive market responses. Resham Sutra reached over 22,000 women across 400+ villages [21], and Dela Grain expanded its presence in retail and HoReCa markets [31]. These findings demonstrate that REIs can be a strategic tool for SMEs. They provide measurable business, environmental, and social benefits. This fills the research gap on how sustainability initiatives can drive holistic transformation in India's SME sector.

7. Future Scope

The findings from Resham Sutra and Dela Grain Foods highlight the potential of REIs to drive operational, financial, and social benefits for Indian SMEs. Future research could explore the scalability of such initiatives across different sectors, regions, and enterprise sizes, including micro and medium-sized enterprises, beyond the current sample. Comparative studies of urban and rural SMEs may reveal distinct challenges and opportunities for renewable energy adoption. Finally, further studies could explore how supportive frameworks and business strategies can enhance renewable energy adoption in SMEs, contributing to sustainable economic and environmental outcomes.

References

[1] PwC. 2024. "82% of Indian Consumers Consider Protection of Personal Data as Most Crucial Factor in Building Trust: PwC's Voice of the Consumer Survey 2024." PwC. 2024. https://www.pwc.in/press-releases/2024/82-of-indian-consumers-consider-protection-of-personal-data-as-most-crucial-factor-in-building-trust-pwcs-voice-of-the-consumer-survey-2024.html.

[2] Tamboli AS, Haque M, Jojare Y, Ohol A. Consumer Preference for Eco-Friendly Products in Relation to Sustainability Awareness [Internet]. ResearchGate. Auricle Technologies Pvt., Ltd.; 2023. Available from: https://www.researchgate.net/publication/375819594_Consumer_Preference_for_Eco-Friendly_Products_in_Relation_to_Sustainability_Awareness

[3] Chang RD, Zuo J, Zhao ZY, Zillante G, Gan XL, Soebarto V. Evolving theories of sustainability and firms: History, future directions and implications for renewable energy research. Renewable and Sustainable Energy Reviews [Internet]. 2017 May;72(72):48–56. Available from: https://www.sciencedirect.com/science/article/abs/pii/S1364032117300333

[4] Kumar A, Kumar K, Kaushik N, Sharma S, Mishra S. Renewable energy in India: Current status and future potentials. Renewable and Sustainable Energy Reviews. 2010 Oct;14(8):2434–42.

[5] Gaurav JK, Rathi V, Burnwal K, Chaturvedi A. IC Centre for Governance Governance [Internet]. [cited 2025 May 7]. Available from: https://moef.gov.in/uploads/2019/10/SpecialEdition_Journal-of-Governance.pdf#page=236

[6] Grid Connected Rooftop Solar Programme | MINISTRY OF NEW AND RENEWABLE ENERGY | India [Internet]. Mnre.gov.in. 2023. Available from: https://mnre.gov.in/en/grid-connected-solar-rooftop-programme/

[7] Solar N. Jawaharlal Nehru National Solar Mission (Phase I, II and III) – Policies - IEA [Internet]. IEA. 2025 [cited 2025 Sep 7]. Available from: https://www.iea.org/policies/4916-jawaharlal-nehru-national-solar-mission-phase-i-ii-and-iii?

[8] Mercom Capital Group's India Consumer Survey Reveals Consumer Attitudes Towards Renewable Energy Sources, Impact of Power on Business [Internet]. Mercomindia.com. 2017. Available from: https://www.mercomindia.com/mercom-capital-groups-india-consumer-survey-reveals-consumer-attitudes-towards-renewable-energy-sources-impact-power-business?

[9] Sudirjo F, Sudarsono S, Usup U. The Influence of Green Marketing Campaign, Sustainability Commitment, and Community-Based Marketing on Brand Preference in Bandung FMCG Sector. West Science Interdisciplinary Studies [Internet]. 2025 Feb [cited 2025 Sep 7]; Available from: The Influence of Green Marketing Campaign, Sustainability Commitment, and Community-Based Marketing on Brand Preference in Bandung FMCG Sector

[10] R Dr Radhakrishna. IJFANS INTERNATIONAL JOURNAL OF FOOD AND NUTRITIONAL SCIENCES. -I) Journal [Internet]. 2012 [cited 2025 Sep 7];11:2022. Available from: https://ijfans.org/uploads/paper/321d70d49f97b5661d803464f8b34e14.pdf?

[11] Ebele E, Iyelolu V, Idemudia NC, Ignatius T. Exploring the Relationship between Sustainable Business Practices and Increased Brand Loyalty. International Journal of Management & Entrepreneurship Research [Internet]. 2024 Aug 3;6(8):2463–75. Available from: https://www.researchgate.net/profile/Tochukwu-Ijomah-2/publication/383847817_Exploring_the_relationship_between_sustainable_business_practices_and_increased_brand_loyalty/links/66dc447d2390e50b2c7212e7/Exploring-the-relationship-between-sustainable-business-practices-and-increased-brand-loyalty.pdf

[12] Pandey A. Sustainable development: the Rise of Green MSMEs [Internet]. The Economic Times. Economic Times; 2025 [cited 2025 Sep 7]. Available from: https://economictimes.indiatimes.com/small-biz/sme-sector/sustainable-development-the-rise-of-green-msmes/articleshow/121876042.cms?

[13] Garg S. Solar Rooftop PV Installations by MSMEs with Bank Financing [Internet]. 2018 Oct [cited 2025 Sep 7]. Available from: https://energyforum.in/fileadmin/india/media_elements/publications/20190827_PWC_Solar_Rooftop/PWC_Solar_Rooftop_MSME_Bank_Financing.pdf?

[14] Staff B, ET BrandEquity. Indian Consumers Want SMEs to Deliver Goods sustainably: Report [Internet]. ETBrandEquity.com. ETBrandEquity; 2022 [cited 2025

Sep 7]. Available from: https://brandequity.economictimes.indiatimes.com/news/research/indian-consumers-want-smes-to-deliver-goods-sustainably-report/96125731?

[15] Amar V, Jamnekar. Green Marketing Strategies for Small and Medium-sized Enterprises (SMEs) Exploring Opportunities and Challenges in India's Sustainable Market Green Solutions: a Handbook for Sustainable Business Strategies and Models [Internet]. Research Gate. 2024 [cited 2025 Sep 7]. p. 55 to 64. Available from: https://www.researchgate.net/publication/380711189_Green_Marketing_Strategies_for_Small_and_Medium-sized_Enterprises_SMEs_Exploring_Opportunities_and_Challenges_in_India%27s_Sustainable_Market_Green_Solutions_A_Handbook_for_Sustainable_Business_Strategi

[16] Soni S. The Financial Express [Internet]. Financialexpress.com. Financial Express; 2022 [cited 2025 Sep 7]. Available from: https://www.financialexpress.com/business/sme-msme-green-sustainability-indian-smes-lead-key-asian-markets-in-according-high-priority-to-esg-measures-in-business-2811525/?

[17] 90% of MSMEs View Cost Reduction as the Biggest Motivation to Implement Sustainability Initiatives [Internet]. Dun & Bradstreet. 2023 [cited 2025 Sep 7]. Available from: https://www.dnb.co.in/media/press-release-details/2082?

[18] Apurva P. How Resham Sutra Is Making the Lives of Rural Silk Weavers Better [Internet]. Yourstory.com. YourStory; 2021 [cited 2025 Sep 7]. Available from: https://yourstory.com/socialstory/2021/10/resham-sutra-rural-silk-weavers-kunal-vaid

[19] Unnati [Internet]. Reshamsutra.com. 2025 [cited 2025 Sep 7]. Available from: https://www.reshamsutra.com/machine/unnati

[20] Tahir M. "Resham Sutra", Gives Fresh Hope to Weavers in Rural India [Internet]. The Patriot. 2023 [cited 2025 Sep 7]. Available from: https://thepatriot.in/profile/resham-sutra-gives-fresh-hope-to-weavers-in-rural-india-41873

[21] SNS. Making a difference, One Rural Home at a time': Resham Sutra [Internet]. The Statesman. 2022 [cited 2025 Sep 7]. Available from: https://www.thestatesman.com/features/making-a-difference-one-rural-home-at-a-time-resham-sutra-1503054937.html

[22] Resham Sutra Weaves Livelihoods for Rural Women through Sustainable Silk Production [Internet]. Forum for the Future. 2025 [cited 2025 Sep 7]. Available from: https://www.forumforthefuture.org/resham-sutra-weaves-livelihoods-for-rural-women-through-sustainable-silk-production

[23] Chaturvedi T. Entrepreneur's Solar Silk Machines Help 12000 Weavers Earn Upto 10 Times More [Internet]. The Better India. 2022 [cited 2025 Sep 7]. Available from: https://thebetterindia.com/273535/entrepreneur-builds-solar-silk-machine-helps-weavers-earn-more-resham-sutra/

[24] Huang L. Solar-powered Looms Boost Income and Safety for India's Silk Spinners [Internet]. Dialogue Earth. 2023 [cited 2025 Sep 7]. Available from: https://dialogue.earth/en/energy/solar-powered-looms-boost-income-and-safety-for-indias-silk-weavers/?

[25] India's I. Upaya Social Ventures Successfully Exits from Resham Sutra, Celebrates Creation of Dignified Jobs in India's Silk Industry [Internet]. Upaya Social Ventures. 2024. Available from: https://www.upayasv.org/blog/2024/8/7/upaya-exits-from-resham-sutra

[26] India iSHOW. Congratulations ISHOW 2019 India Winners! [Internet]. ASME ISHOW. 2019 [cited 2025 Sep 7]. Available from: https://thisishardware.org/blog/congratulations-ishow-2019-india-winners

[27] Resham Sutra - Ashden [Internet]. Ashden. 2022 [cited 2025 Sep 7]. Available from: https://ashden.org/awards/winners/resham-sutra/

[28] Dela Foods. Dela Foods [Internet]. Dela Foods. 2016 [cited 2025 Sep 7]. Available from: https://delafoods.co.in/

[29] ET Spotlight. From Farm to factory: Dela Foods Is Rewriting the Rules of Food Processing in India [Internet]. The Economic Times. Economic Times; 2025. Available from: https://economictimes.indiatimes.com/small-biz/sme-sector/from-farm-to-factory-dela-foods-is-rewriting-the-rules-of-food-processing-in-india/articleshow/122070477.cms

[30] agronfood. Dela Foods Sets New Benchmark in Sustainable Food Processing with Farm-to-Factory Model - Agro & Food Processing [Internet]. Agro & Food Processing. 2025 [cited 2025 Sep 7]. Available from: https://agronfoodprocessing.com/dela-foods-sets-new-benchmark-in-sustainable-food-processing-with-farm-to-factory-model/