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Community based marketing for renewable energy solutions

The Experience of Cleanwatts

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INTRODUCTION

The renewable energy industry has experienced significant growth in the last years, driven by technological advancements, increased awareness of climate change, and supportive government policies. Companies in the renewable energy field face the challenge of effectively marketing their products and services to a diverse and discerning customer base, as an industry that is not exclusively focused on B2B. Community-based marketing has emerged as a promising approach for promoting the adoption of renewable energy solutions, emphasizing the importance of engaging with local communities and building strong relationships with stakeholders. This project aims to provide an in-depth analysis of community-based marketing strategies in the renewable energy industry, with a focus on the strategy of Cleanwatts, a renewable energy multidomestic scale-up. By examining the benefits and challenges associated with community-based marketing efforts, this study seeks to offer valuable insights and recommendations for future research and practice.

Key questions guiding this research include:

- a. What are the key elements of successful community-based marketing strategies in the renewable energy sector?
- b. How can renewable energy companies effectively engage with local communities to promote the adoption of their products and services?
- c. What challenges and limitations do renewable energy companies face when implementing these highly localized community-based marketing initiatives?

The thesis will draw on academic literature, my personal experience at Cleanwatts, and examples from the renewable energy industry to address these questions. It will also explore the role of trust and credibility in fostering community engagement, the importance of balancing localization and standardization in marketing efforts, and the growing significance of technology and digitalization in shaping community-based marketing initiatives.

By offering valuable insights and recommendations for companies like Cleanwatts, this thesis seeks to contribute to the growing body of knowledge on community-based marketing in the renewable energy industry and help pave the way for a more sustainable and inclusive energy future.

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1. Literature Review

In this chapter, the literature review will provide an overview of the main concepts and theories that underpin the research, namely community-based marketing, social acceptance of renewable energy innovation, marketing strategies for renewable energy markets, and the role of digitalization and social media in energy citizenship. The review will delve into the definitions, principles, and factors influencing these areas, and how they relate to the promotion and adoption of renewable energy solutions. The discussion will also highlight the challenges and opportunities associated with implementing these approaches in the renewable energy sector, providing a solid foundation for the subsequent analysis of the Cleanwatts business model and marketing plan.

1.1. Community-Based Marketing: Definition and Principles

Community-based marketing is a marketing approach that focuses on engaging with local communities and leveraging social networks to raise awareness, build trust, and foster adoption of a product or service. This marketing strategy capitalizes on the social dynamics and shared values within communities to create a sense of belonging and encourage members to support and promote the offering.

Community engagement plays a crucial role in marketing, as it helps businesses better understand their target audience, address their concerns, and tailor their offerings to meet local needs and preferences. By engaging with communities, companies can develop more relevant and effective marketing messages, forge stronger relationships with customers, and cultivate brand loyalty. Moreover, community engagement can also contribute to positive word-of-mouth and enhance a company's reputation, leading to increased market share and long-term success.

Several key principles underlie community-based marketing, including:

- a. **Localization:** Tailoring marketing strategies and messages to resonate with local cultures, values, and preferences.
- b. Collaboration: Partnering with local organizations, institutions, and influencers to gain credibility and access to established networks.
- c. **Empowerment:** Encouraging community members to take an active role in promoting and supporting the product or service.
- d. **Sustainability:** Ensuring that the marketing approach considers and addresses the long-term social, economic, and environmental needs of the community.
- e. **Flexibility:** Adapting marketing tactics and strategies to accommodate the unique characteristics and evolving needs of different communities.

Adopting a community-based marketing approach can offer several benefits, such as improved customer relationships, enhanced brand reputation, increased local support, and more effective marketing campaigns. However, there are also challenges associated with this approach, including the need to balance localization and standardization, manage diverse stakeholder expectations, navigate complex social dynamics, and allocate resources efficiently to reach multiple communities. Despite these challenges, community-based marketing can be a valuable strategy for companies seeking to promote products or services with strong social and environmental dimensions, such as renewable energy solutions.

1.2. Social Acceptance of Renewable Energy Innovation

Wüstenhagen, Wolsink, and Bürer (2007) introduced the concept of social acceptance to describe the various factors that influence the public's support for and adoption of renewable energy innovations. They identified three dimensions of social acceptance: socio-political, community, and market acceptance. Socio-political acceptance refers to the general public's attitudes towards renewable

energy policies and technologies. Community acceptance involves the local approval of specific renewable energy projects and their impacts on the community. Market acceptance, on the other hand, pertains to the adoption of renewable energy technologies by consumers and investors.

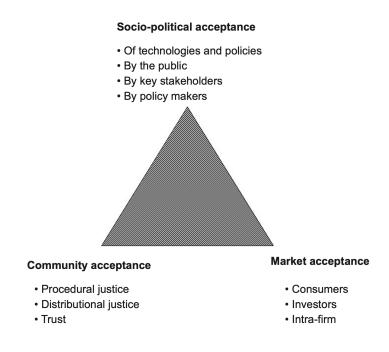


Figure 1 The triangle of social acceptance of renewable energy innovation

Several factors can influence public acceptance of renewable energy, including:

- a. **Knowledge and awareness:** The public's understanding of renewable energy technologies and their potential benefits.
- b. **Trust:** The credibility of the organizations, institutions, and stakeholders involved in promoting and implementing renewable energy projects.
- c. **Perceived benefits:** The public's perception of the economic, environmental, and social advantages associated with renewable energy.
- d. **Perceived risks:** The potential negative impacts of renewable energy projects on the environment, health, and quality of life.
- e. Cultural and social values: The alignment of renewable energy technologies with the public's beliefs, traditions, and preferences.

f. **Distributional justice:** The equitable distribution of benefits and burdens resulting from renewable energy projects.

Community engagement is vital for fostering social acceptance of renewable energy innovations, as it allows stakeholders to better understand and address local concerns, needs, and values. By involving community members in the decision-making process, renewable energy projects can gain legitimacy, enhance trust, and increase local support. Community engagement can also empower individuals to become advocates for renewable energy, contributing to positive word-of-mouth and broader public acceptance.

To enhance social acceptance of renewable energy innovations, several strategies can be employed, such as:

- a. Education and awareness campaigns: Providing accurate and accessible information about the benefits and potential risks of renewable energy technologies.
- b. **Participatory decision-making:** Involving community members in the planning, implementation, and evaluation of renewable energy projects.
- c. Collaboration with local stakeholders: Partnering with local organizations, influencers, and institutions to gain credibility and leverage existing networks.
- d. **Addressing distributional justice:** Ensuring that the benefits and burdens of renewable energy projects are equitably shared among the affected population.
- e. **Demonstrating local benefits:** Showcasing the positive impacts of renewable energy projects on the community's economy, environment, and quality of life.
- f. **Tailoring communication strategies:** Developing culturally appropriate and locally relevant messages to resonate with the target audience.

1.3. Marketing Strategies for Renewable Energy Markets

In their review of renewable energy marketing strategies, Matthes and Wüstenhagen (2015) examined various approaches used by companies in the renewable energy sector to promote their products and services. They identified key trends and best practices, highlighting the importance of integrating traditional marketing techniques with innovative strategies tailored to the unique characteristics of the renewable energy market. Their analysis underscored the need for effective communication, stakeholder engagement, and differentiation to successfully market renewable energy solutions.

The renewable energy sector employs both traditional and innovative marketing approaches to promote its products and services. Traditional marketing techniques, such as advertising, public relations, and sales promotion, remain relevant for building brand awareness, communicating product benefits, and stimulating demand. However, innovative marketing approaches, such as community-based marketing, influencer partnerships, and digital platforms, have gained prominence in the renewable energy sector due to their ability to engage target audiences, build trust, and foster social acceptance of renewable energy technologies. Combining these approaches allows renewable energy companies to tailor their marketing strategies to the specific needs and preferences of different customer segments.

Policy and regulation play a critical role in shaping renewable energy marketing strategies, as they influence the market environment, consumer behavior, and competitive landscape. Government policies, such as subsidies, tax incentives, and renewable energy targets, can create favorable conditions for renewable energy adoption and encourage companies to invest in marketing efforts. Regulatory frameworks, such as environmental standards, disclosure requirements, and product certification, can also affect the marketing strategies employed by renewable energy companies by shaping consumer expectations, trust, and perceived value.

Marketing renewable energy solutions presents both challenges and opportunities. Challenges include the need to overcome misconceptions and skepticism about renewable energy technologies, navigate the complex policy and regulatory landscape, and differentiate products and services in a crowded market. Opportunities, on the other hand, include leveraging the growing public interest in sustainability, harnessing the power of digital technologies and social networks, and capitalizing on innovative marketing approaches, such as community-based marketing, to engage target audiences and foster social acceptance of renewable energy innovations. By understanding and addressing these challenges and opportunities, renewable energy companies can develop effective marketing strategies to drive the adoption of their products and services.

1.4. Digitalization and Social Media in Energy Citizenship

In their study, Klein, Kumar, Wolff, and Naqvi (2023) explored the role of digitalization and social media in energy citizenship, emphasizing the potential of these technologies to transform the way people interact with, understand, and participate in the energy sector. The authors examined various digital tools and platforms, such as mobile apps, online forums, and social media networks, and highlighted their effectiveness in fostering communication, collaboration, and knowledge sharing among energy consumers, producers, and stakeholders.

The rapid advancement of digital technologies and the growth of distributed energy resources have given rise to the concept of "prosumers" – individuals who both produce and consume energy. This shift towards decentralized energy systems and peer-to-peer energy transactions has contributed to the democratization of energy markets, empowering consumers to take greater control over their energy choices and actively participate in the energy transition. Digital platforms and social media have played a crucial role in this process by enabling prosumers to access

information, share experiences, and collaborate with others to advance renewable energy adoption.

Digital platforms and social media have emerged as powerful tools for community engagement in the renewable energy sector. They enable companies to reach a wider audience, share targeted and engaging content, and foster dialogue and interaction among community members. By utilizing digital technologies, renewable energy companies can gather valuable insights into the needs, preferences, and concerns of their target audience, and tailor their marketing strategies accordingly. Additionally, digital platforms and social media can facilitate collaboration between renewable energy companies and local stakeholders, influencers, and organizations, helping to build trust and credibility within the community.

While digital technologies offer numerous benefits for renewable energy marketing, they also come with potential risks and ethical considerations. These include concerns about data privacy and security, the potential for misinformation or "greenwashing," and the risk of exacerbating digital divides within communities. To address these issues, renewable energy companies should adopt responsible and transparent practices when using digital technologies for marketing purposes, such as ensuring data protection, providing accurate and verifiable information, and striving for inclusivity and equal access to digital resources. By doing so, they can harness the full potential of digital technologies and social media to promote renewable energy solutions while minimizing potential risks and fostering trust among their target audience.

2. The Cleanwatts approach

This section will delve into the Cleanwatts strategy and my personal experience as Marketing Operations Manager, providing an overview of the company and its offerings in the renewable energy sector. The discussion will focus on Cleanwatts' adoption of community-based marketing strategies and the development of its global to local marketing approach. By examining the company's marketing tactics, partnerships, and use of digital technologies, this section will explore how Cleanwatts has successfully engaged with local communities, built trust and credibility, and driven the uptake of its renewable energy solutions. The analysis will also highlight lessons learned and best practices for other companies looking to adopt community-based marketing strategies in the renewable energy sector.

2.1. Company overview

Cleanwatts is Portuguese scale-up founded in 2020 by a group of entrepreneurs with a shared vision of accelerating the global transition to renewable energy. The company initially focused on providing energy efficiency software solutions but quickly expanded its offerings to include energy generation, energy management, and community-based renewable energy projects. Over the years, Cleanwatts has successfully implemented numerous renewable energy initiatives across Portugal, earning a reputation as a leading climate tech scale-up and an innovative force in the renewable energy sector. Starting 2022, the company is leading an internationalization step in the USA, Italy, and Spain.

The unique business model involves installing solar panels on commercial and office buildings, and then inviting local stakeholders to join an energy community to consume the locally produced clean energy. Through its platform, Cleanwatts can connect virtually all the smart meters of the community members and provide access to excess capacity, resulting in a backlog of approximately 40 megawatts of aggregated capacity at the end of 2022. By consuming locally produced electricity

in real time, transport and transmission costs are reduced, resulting in lower energy bills.

Cleanwatts' mission is to accelerate the energy transition where it matters the most: locally. The company envisions a world where renewable energy is decentralized, digitalized, and democratized (widely adopted), significantly reducing the global carbon footprint and fostering sustainable development. To achieve this vision, Cleanwatts combines industry expertise, proprietary technology, financial capital, and management capabilities to handle every part of a Renewable Energy Community (REC), meeting the diverse needs of its customers and contributing to the broader societal and environmental goals.

Cleanwatts offers a comprehensive suite of renewable energy products and services, including:

- a. Residential energy solutions: Energy management solutions for homeowners, including a mobile application "Kiome" for the Energy Community consumers.
- b. Commercial and industrial solutions: Large-scale solar and wind projects for businesses and organizations, coupled with energy management and efficiency services. These customers usually become "anchor clients" for establishing an Energy Community.
- c. Renewable Energy Communities (RECs): Integrated solutions that enable community members to generate, share, and manage renewable energy resources collectively.
- d. **Consulting and project development:** End-to-end support for renewable energy projects, from feasibility studies and design to installation, operation, and maintenance.

Cleanwatts positions itself as a community-centric, innovative, and socially responsible multidomestic scale-up. The company differentiates itself from competitors by focusing on community engagement, tailored solutions, and value-added services that address the unique needs and preferences of its target audience. The uniqueness type of business model also allows a broad brand extension, as

Cleanwatts is the only company offering a complete solution from zero to Energy Community management. By leveraging its strong brand identity, industry expertise, and strategic partnerships, Cleanwatts has successfully carved out a niche in the competitive renewable energy market and continues to expand its reach and impact.

2.2. Renewable Energy Communities: Concept and Offerings

Renewable Energy Communities (RECs) are collaborative initiatives that bring together individuals, businesses, and organizations to collectively generate, share, and manage renewable energy resources. RECs typically involve the installation of decentralized renewable energy systems, such as solar panels, wind turbines, or biomass facilities, within a geographically defined area. Key characteristics of RECs include:

- a. Community ownership and decision-making: REC members have a direct stake in the renewable energy assets and participate in the decisionmaking process.
- b. **Local production and consumption:** RECs focus on generating and consuming renewable energy within the community, promoting energy self-sufficiency and resilience.
- c. **Grid interconnectivity:** REC members can feed excess energy back into the grid, providing additional revenue streams and grid stability benefits.
- d. **Social and environmental benefits:** RECs contribute to local economic development, environmental conservation, and social cohesion.

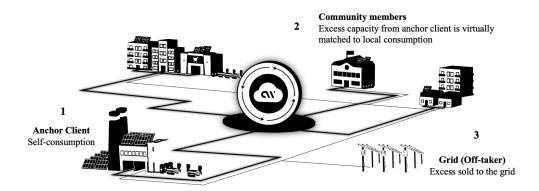


Figure 2 Renewable Energy Community example scheme

Participation in RECs offers numerous benefits for consumers and businesses, including:

- a. Cost savings: By collectively generating and consuming renewable energy,
 REC members can reduce their energy bills and achieve long-term energy cost stability.
- b. **Energy independence:** RECs empower members to take control of their energy production and consumption, reducing reliance on external energy providers and increasing energy security.
- c. Environmental stewardship: By adopting renewable energy sources, REC members contribute to reducing greenhouse gas emissions and mitigating climate change.
- d. **Social cohesion and collaboration:** Participation in RECs fosters a sense of community, shared values, and collaboration among members.

Cleanwatts offers a comprehensive REC solution that includes the design, installation, management, and ongoing support of these community-based renewable energy projects. The company's unique selling points for these communities include:

- a. **Customization:** Cleanwatts tailors its REC solutions to the specific needs and preferences of each community, considering local resources, infrastructure, and regulations.
- b. **Integration:** The company's REC offering seamlessly integrates with existing energy systems and smart grid technologies, enabling efficient energy management and data-driven decision-making.
- c. **Education and capacity building:** Cleanwatts provides extensive training and educational resources to REC members, empowering them to actively participate in the energy transition.
- d. Commitment to sustainability: Cleanwatts adheres to high environmental and social standards, ensuring that its REC projects contribute to long-term sustainability goals.

High level partnerships and collaborations play a crucial role in Cleanwatts' REC model, as they enable the company to access resources, expertise, and networks that enhance the value and impact of its REC offerings. Key high-level partnerships include:

- a. Local governments and regulatory bodies: Cleanwatts collaborate with local authorities to navigate regulatory frameworks, secure permits, and access incentives for renewable energy projects.
- b. **Technology providers and equipment manufacturers:** The company partners with leading technology providers to ensure access to high-quality, reliable, and cost-effective renewable energy equipment.
- c. **Financial institutions and investors:** Cleanwatts work with financial institutions and investors to secure funding for REC projects and develop innovative financing solutions for REC members.
- d. **Community organizations and influencers:** The company engages with local organizations, influencers, and stakeholders to build trust, foster community involvement, and facilitate the adoption of its REC solutions.

2.3. The "Energy as a Service" EaaS business model and increasing servitization

The energy-as-a-service (EaaS) business model is revolutionizing the way energy services are delivered, bringing together hardware, software, and services into a single offering. As analyzed also by Singh M, Jiao J, Klobasa M, Frietsch R. in *Servitization of Energy Sector: Emerging Service Business Models and Startup's Participation* (2022), by combining previously separate components into a bundled product, EaaS creates value by providing services for energy efficiency, demand management, and renewable energy integration. Digital technology and analytics are necessary to optimize these services, and EaaS models have the potential to operate on a large scale by connecting multiple sites.

Cleanwatts structured its bundle for Renewable Energy Communities (RECs) in an energy-as-a-service model, making the offering easier to understand and purchase, since it is by nature an increasingly multifaceted service. When incorporating a full-bundle solution, the benefits become obvious for both the company and the customer:

- a. All-inclusive, well defined, and predictable package for customers.
- b. When an asset is in use, the client only pays for the output it produces—not for the asset itself or the components, maintenance, or servicing it needs. The service provider is interested to decrease downtime and deliver assets that function well.
- c. The service provider is responsible for covering all project costs, incl. those for the construction, operations, monitoring, and maintenance of the equipment.
- d. Information flows seamlessly between the hardware and the software.

 Products can be monitored from source to customer, or while they are in use, facilitating fast reactions to unknown energy consumptions.

2.4. Adoption of Community-Based Marketing Strategies

Cleanwatts recognized that the success of its Renewable Energy Community (REC) offerings heavily relies on the active participation and support of local communities. As a result, the company chose to adopt community-based marketing strategies to engage with potential customers, build trust and credibility, and foster a sense of ownership and commitment among REC members. This approach also enables Cleanwatts to leverage the power of social networks, word-of-mouth, and local influencers, which are particularly effective in driving the adoption of renewable energy solutions.

Cleanwatts has implemented various community engagement initiatives to promote its REC offerings and build strong relationships with its target audience. These initiatives include:

- a. Hosting educational workshops and seminars to raise awareness about renewable energy and the benefits of RECs.
- b. Organizing site visits and open houses for community members to experience firsthand the impact and benefits of RECs (also to employees for employer branding activities).
- c. Participating in local events, festivals, and gatherings to establish a presence in the community and engage with potential customers.
- d. Supporting local sustainability initiatives and projects, demonstrating the company's commitment to social and environmental goals.

Cleanwatts actively collaborates with local stakeholders and influencers to enhance the reach and credibility of its marketing efforts. By partnering with these entities, the company can tap into existing networks and leverage the trust and authority that these stakeholders hold within the community. Key local collaborations include:

a. Local government officials and regulatory bodies who can endorse Cleanwatts' REC offerings and provide policy support.

- b. Community organizations, such as environmental groups, homeowner associations, and local businesses, which can help disseminate information and mobilize their members.
- c. Local influencers and opinion leaders who can share their experiences and testimonials with Cleanwatts' REC solutions, amplifying the company's marketing messages.

Cleanwatts also harnesses the power of digital platforms and social media to enhance its community-based marketing strategies. By leveraging these channels, the company can reach a wider audience, share engaging and relevant content, and foster ongoing dialogue and interaction among community members. Key digital marketing tactics adopted include:

- a. Developing and maintaining a user-friendly website with detailed information about Cleanwatts' REC offerings and user cases, also targeting explicitly the different customer segments.
- b. Creating and sharing engaging content, such as blog posts, videos, and infographics, that educate and inspire community members about renewable energy and RECs.
- c. Utilizing social media platforms, such as Facebook and LinkedIn, to share updates, stories, and news related to Cleanwatts' REC projects and initiatives.
- d. Encouraging user-generated content, reviews, and testimonials from satisfied REC members to enhance the company's credibility and foster social proof.

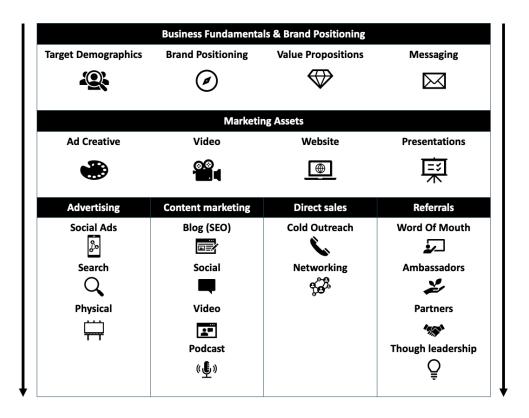


Figure 3 Marketing strategy structure for Cleanwatts

Cleanwatts regularly measures and evaluates the outcomes of its community-based marketing strategies to ensure their effectiveness and inform future marketing efforts. Key performance indicators (KPIs) include:

- a. Number of new REC members and overall growth in REC participation.
- b. Engagement metrics, such as website visits, social media likes, shares, and comments.
- c. Conversion rates, including the number of leads generated and the proportion of leads that become REC anchor clients or members.
- d. Customer satisfaction and retention, as measured through NPS surveys and reviews.

By closely monitoring these KPIs and analyzing the results, Cleanwatts can continuously refine and improve its marketing strategies to better serve its target audience and drive the adoption of its REC offerings.

2.5. Global to Local Marketing Strategy (GLOCAL)

Cleanwatts adopts a global to local (GLOCAL) marketing strategy that strikes a balance between standardization and localization. By standardizing core marketing messages and brand values, Cleanwatts ensures consistency and efficiency across its marketing efforts. At the same time, the company recognizes the importance of adapting its marketing strategies to cater to the unique needs, preferences, and cultural nuances of each local community. This approach enables Cleanwatts to resonate with its target audience while maintaining a cohesive brand identity.

To effectively implement a *GLOCAL marketing strategy* Kotler, P. and Keller, K. (2009), Cleanwatts tailors its marketing messages and tactics to the specific context of each local community. This process involves:

- a. Conducting extensive market research to understand local demographics, energy consumption patterns, regulatory environments, and cultural factors.
- b. Customizing marketing materials, such as brochures, advertisements, and web content, to reflect local language, imagery, and values.
- c. Aligning promotional activities and community engagement initiatives with local events, festivals, and traditions.
- d. Collaborating with local stakeholders and influencers to ensure marketing messages are relevant and resonate with the community.

Cleanwatts leverages its global branding and reputation as a leading clean tech scale-up to support its local marketing efforts. By showcasing its successful projects, partnerships, and achievements on the international stage, Cleanwatts enhances its credibility and trustworthiness among local communities. This global recognition also serves as a strong differentiator in the competitive renewable energy market, giving Cleanwatts an edge over other players that lack a global presence or reputation.

PRODUCT STRATEGY	COMMUNICATION STRATEGY		
	Standardized	Localized	
	Communications	Communications	
Standardized Product	Global Strategy:	Glocal Strategy:	
	Uniform Product /	Uniform Product /	
	Uniform Message	Customized Message	
Localized Product	Glocal Strategy:	Local Strategy:	
	Customized Product /	Customized Product /	
	Uniform Message	Customized Message	
	Glocal Strategy :		
	Customized Product / Customized Mess		

Figure 4 Framework for GLOCAL Marketing strategy

Cleanwatts recognizes the importance of combining physical and digital elements (PHYGITAL) in its marketing efforts, especially when operating in multiple countries such as Portugal, Spain, Italy, and the USA. A PHYGITAL strategy allows Cleanwatts to create a seamless and engaging customer experience, while capitalizing on the strengths of both physical and digital channels. Key components of Cleanwatts' phygital strategy in these countries include:

- a. Developing localized websites and digital content that cater to the specific needs, preferences, and cultural nuances of each country, while maintaining a consistent global brand identity.
- b. Participating at major events in strategic locations across the countries, where customers can interact with Cleanwatts' products, services, and knowledgeable staff in person.
- c. Utilizing social media and other digital channels to promote and support offline events, such as workshops, seminars, and community gatherings, and encourage online-to-offline (O2O) engagement.
- d. Placing physical graphic materials where a new Renewable Energy Community is established, to leave a recognizable footprint that creates a sense of closeness with the local community.

By adopting a PHYGITAL strategy in its multi-country operations, Cleanwatts can effectively engage with diverse audiences, bridge the gap between online and

offline experiences, and drive the adoption of its renewable energy solutions on a global scale.

Cleanwatts' GLOCAL and PHYGITAL marketing strategy is characterized by a continuous process of adaptation and innovation. The company closely monitors local market dynamics, customer feedback, and emerging trends to identify opportunities for improvement and growth. By staying attuned to the evolving needs and preferences of its target audience, Cleanwatts marketing team can quickly adapt its marketing strategies and offerings to better serve local communities. This flexible and responsive approach not only enhances the effectiveness of Cleanwatts' marketing efforts but also contributes to the company's overall success in driving the adoption of renewable energy solutions.

2.6. Marketing Strategy for Diverse Audiences (Business-Consumer-Investor)

Cleanwatts' distinct customer segments - businesses, consumers, and financial partners - each present unique characteristics and necessitate a differentiated marketing approach. Understanding and addressing these differences is pivotal to successfully communicating the value proposition of Cleanwatts' renewable energy solutions and achieving widespread adoption.

Marketing to Businesses

Business customers, including corporations and organizations interested in implementing large-scale renewable energy projects or becoming anchor clients in Renewable Energy Communities (RECs), respond to a value-driven approach. They seek solutions that provide tangible benefits, like cost savings, energy efficiency, enhancing their corporate social responsibility profile, and the promotion of sustainability. The principal challenge lies in the complex decision-making processes that characterize these entities, where securing buy-in typically involves multiple stakeholders, each with a relative amount of skepticism.

To navigate this complexity, Cleanwatts deploys relationship marketing with highly localized community partners, aiming to build enduring relationships with business customers. This approach emphasizes regular communication, personalized service, and value-added support, such as consultancy and end-to-end project development. Example success cases and stories are invaluable tools, underlining the real-world benefits and ROI of Cleanwatts' solutions.

Marketing to Consumers

Consumer marketing, on the other hand, necessitates a more emotional appeal. Homeowners and residents of the RECs are more likely to respond to personalized benefits that renewable energy can offer – cost savings, energy independence, and the opportunity to contribute to environmental preservation. The primary challenge in B2C marketing is raising awareness among consumers who may have limited knowledge or misconceptions about renewable energy.

To overcome this challenge, Cleanwatts adopts an education-focused marketing approach. By providing comprehensive resources and information, Cleanwatts empowers consumers to understand the benefits of renewable energy and their role in the energy transition. A community-centric strategy complements this, leveraging local influencers and community organizations to foster trust and credibility among consumers.

Marketing to Financial Partners

Communicating with financial partners, such as venture capitalists, private equity investors, and lending institutions, calls for a distinct approach. These stakeholders are keenly interested in the financial viability of Cleanwatts' projects and seek compelling evidence of potential return on investment. However, the perceived risks and uncertainties associated with renewable energy investments can make this a challenging audience to persuade.

To assuage these concerns, Cleanwatts focuses on transparency and robust communication. It provides detailed financial projections, risk assessments, and market analyses to showcase the potential ROI and mitigate perceived risks.

Cleanwatts also highlights its strong track record, strategic partnerships, and commitment to sustainability to enhance its credibility and attractiveness to financial partners.

3. Community Engagement Tactics

In this chapter, we turn our attention to the pivotal role of community engagement tactics in the promotion and acceptance of renewable energy solutions. In today's interconnected world, companies' success hinges largely on how well they engage with their local communities. As such, a focus on community-based marketing is no longer an option but a necessity. We explore a range of engagement tactics that are central to the successful adoption of renewable energy solutions. In a step-by-step approach, we unpack various facets of community engagement, providing a comprehensive guide that includes everything from leveraging local influencers to harnessing the power of digital platforms.

Each facet of community engagement presented in this chapter offers valuable insights, strategies, and concrete steps that companies can incorporate to foster community engagement, ultimately accelerating the acceptance of renewable energy solutions. By weaving together these different tactics, organizations can build a robust, holistic community engagement strategy. As a blueprint for such a strategy, this chapter underscores the transformative potential of community engagement in driving a more sustainable future.

3.1. Identifying and Targeting Local Influencers

Local influencers play a crucial role in community-based marketing, as they have the power to shape opinions and drive decision-making within their social networks. By collaborating with these individuals, companies can enhance the credibility and reach of their marketing messages, and more effectively persuade potential customers to adopt their solutions.

To identify suitable local influencers, companies can employ the following tactics:

a. Conducting social listening and market research to identify individuals who hold significant influence within the target community.

- b. Analyzing social media engagement, such as likes, shares, and comments, to gauge the impact and reach of potential influencers.
- c. Seeking referrals and recommendations from existing partners, customers, and community stakeholders.

Once potential influencers have been identified, companies can use the following approaches to engage and collaborate with them:

- a. Offering incentives, such as exclusive access to products and services or financial rewards, to encourage influencers to endorse and promote the company's solutions.
- b. Inviting influencers to participate in events, workshops, and other community initiatives to showcase their support for the company and enhance their connection with the target audience.
- c. Collaborating on content creation, such as blog posts, videos, or social media posts, that highlights the benefits of the company's solutions and showcases the influencers' experiences and testimonials.

3.2. Partnering with Local Organizations

Partnering with local organizations is a valuable strategy for companies aiming to establish a strong presence in their target communities. By collaborating with these organizations, companies can leverage existing networks, resources, and relationships to enhance their community engagement efforts. These partnerships also demonstrate the company's commitment to supporting local initiatives and addressing community needs, which can help build trust and credibility among potential customers. Additionally, partnering with local organizations can provide valuable insights into local market dynamics, preferences, and potential barriers to adoption.

Companies can collaborate with various types of local organizations, including:

a. Community associations and neighborhood groups

- b. Environmental and sustainability-focused organizations
- c. Educational institutions and research centers
- d. Local businesses and industry associations
- e. Non-profit organizations and social enterprises
- f. Government agencies and public institutions

Partnering with politically or religiously oriented organizations can present risks, such as polarizing the community or associating the company with specific ideologies, limiting broader appeal. To mitigate these risks, companies should carefully assess values, objectives, and potential implications before partnering with such organizations. There is also a risk to brand security when partnering with local organizations, as any issues or controversies involving the partner may reflect negatively on the company, potentially damaging its reputation and customer trust.

To ensure the success of their partnerships with local organizations, companies should adopt a more holistic and long-term approach. This includes identifying shared goals and objectives that align with both the company's mission and the interests of the partner organization. Establishing clear expectations and open communication channels is also essential to facilitate collaboration and coordination between the partners.

Regular evaluation and measurement of the partnership's outcomes are necessary to ensure its effectiveness and identify areas for improvement. This process should involve both partners and consider the perspectives of all stakeholders involved. Involving partner organizations in joint decision-making and planning processes can foster a sense of ownership and mutual accountability, which is crucial for maintaining strong and lasting partnerships.

Providing resources, training, and support to enhance the capacity of partner organizations can enable them to contribute more effectively to the partnership. This investment not only strengthens the partnership but also empowers local organizations to continue their work in the community. Finally, recognizing and celebrating the achievements and contributions of partner organizations is essential

to reinforce their value and strengthen the relationship, ensuring the partnership's long-term success.

3.3. Implementing Localized Events and Initiatives

Localized events and initiatives serve multiple purposes in the realm of community-based marketing. First, they create a more direct and personal connection with the target community, fostering awareness and engagement with the company's renewable energy solutions. By organizing events and initiatives tailored to the local context, companies can demonstrate their commitment to addressing community-specific needs and concerns. Moreover, these events provide a platform for companies to showcase their expertise, build credibility, and interact directly with potential customers, thereby facilitating two-way communication and feedback.

Various localized events and initiatives can be designed to engage the target community and promote renewable energy solutions. Some examples include:

- a. Workshops on renewable energy technologies: Conducting hands-on workshops that educate community members about the benefits and workings of renewable energy systems, empowering them to make informed decisions.
- b. Community clean-up campaigns: Organizing community-wide clean-up events that emphasize environmental responsibility and showcase the company's dedication to sustainability.
- c. Local energy fairs: Hosting energy fairs featuring demonstrations, exhibits, and information sessions on renewable energy solutions, where community members can learn about and experience the company's offerings firsthand.
- d. Collaborations with schools to promote environmental education: Partnering with local schools to integrate renewable energy concepts into their curricula, raising awareness among young generations and fostering a culture of environmental stewardship.

These events can also involve the participation of local influencers and partner organizations to strengthen community ties, enhance credibility, and broaden the reach of the company's message.

Effective promotion and management of localized events and initiatives are crucial for maximizing their impact. Some strategies include:

- a. Clear communication of objectives and benefits: Ensuring that the goals and advantages of the events are communicated clearly to the target audience, highlighting the relevance of the events to their specific needs and concerns.
- b. Utilization of digital platforms and social media: Leveraging digital channels, such as social media, email marketing, and online communities, to reach a wider audience, generate buzz around the events, and encourage participation.
- c. Engaging local stakeholders in planning and implementation: Involving local influencers, partner organizations, and community members in the planning and execution of events, fostering a sense of ownership and collaboration.
- d. Ensuring proper logistics and organization: Allocating resources and personnel to ensure that events are well-organized, run smoothly, and provide a positive experience for participants.
- e. Gathering feedback and evaluating outcomes: Collecting feedback from participants, analyzing event outcomes, and identifying areas for improvement to refine and enhance future events and initiatives.

By implementing these strategies, companies can optimize the impact of their localized events and initiatives, fostering stronger relationships with the local community and driving the adoption of renewable energy solutions.

3.4. Utilizing Social Media and Digital Platforms

Social media and digital platforms play a crucial role in community engagement, as they provide a means to connect with and influence a broader audience. As

highlighted by Klein et al. (2023), digitalization and social media have significantly impacted energy citizenship by democratizing information access and enabling more direct communication between companies and consumers. These platforms facilitate the sharing of information, experiences, and opinions, fostering dialogue and empowering community members to make informed decisions about renewable energy solutions.

To leverage social media and digital platforms effectively for community engagement, companies should adopt the following strategies, drawing from the insights of Klein et al. (2023):

- a. Developing a consistent and authentic online presence: Creating and maintaining a strong brand identity on social media and digital platforms to build credibility and trust among the target audience.
- b. Sharing valuable and relevant content: Curating and producing content that informs, educates, and engages the community, addressing their concerns and interests related to renewable energy solutions.
- c. Encouraging dialogue and interaction: Facilitating two-way communication by responding to comments, questions, and messages, and encouraging community members to share their experiences and perspectives.
- d. Utilizing targeted and sponsored content: Leveraging paid advertising and sponsored posts to reach a wider audience and increase the visibility of the company's offerings.
- e. Monitoring and adapting to trends: Keeping up with the latest trends in social media and digital platforms and adjusting marketing strategies accordingly to maintain relevance and engagement.

Evaluating the impact of social media and digital platform engagement is essential to optimize marketing efforts and ensure their effectiveness. Companies can draw from Klein et al. (2023) to measure the impact of their digital initiatives through various metrics:

a. Reach and impressions: Tracking the number of people exposed to the company's content and the number of times that content is displayed.

- b. Engagement rate: Monitoring the level of interaction with the content, including likes, comments, shares, and clicks.
- c. Follower growth: Assessing the increase in the company's social media following over time, as a reflection of brand awareness and community interest.
- d. Conversion rate: Analyzing the percentage of social media users who take a desired action, such as signing up for a newsletter, downloading a resource, or making a purchase.
- e. Sentiment analysis: Evaluating the overall sentiment of the online conversation surrounding the company and its offerings to gauge the perception of the brand and the effectiveness of marketing efforts.

By understanding and implementing these strategies and measurement techniques, companies can harness the power of social media and digital platforms to enhance their community-based marketing efforts and drive the adoption of renewable energy solutions.

4. Building Trust and Credibility

We now delve into the critical role of building trust and credibility in fostering the acceptance of renewable energy solutions. Trust and credibility, earned over time, are the pillars of enduring relationships between companies and their communities. Therefore, they are fundamental to successful community-based marketing strategies.

Initially, we focus on the indispensable role of transparency and open communication in developing trust. The chapter explains how honesty and openness in operations, intentions, and outcomes can create a solid trust base. To help companies realize these ideals, we provide various strategies that demonstrate commitment to transparency and inclusivity. At the same time, we address the necessity of safeguarding confidential information and business interests, guiding on how to strike the right balance.

The chapter then emphasizes the power of storytelling as a mean to build trust. By highlighting success stories and testimonials, companies can humanize their offerings, fostering an emotional connection that encourages potential customers to adopt renewable energy solutions. We provide an array of practical ways to gather and share these stories and testimonials, utilizing different formats and platforms to reach a wide audience.

Subsequently, we turn our attention to the importance of demonstrating local impact and benefits. The chapter explains how showcasing the positive effects of renewable energy solutions on the community can strengthen trust and credibility. The approach discussed addresses the economic, social, and environmental benefits, underlining how partnerships with local stakeholders can amplify the impact message.

Finally, we acknowledge the existence of concerns and skepticism about renewable energy solutions within communities. Companies are encouraged to identify common concerns and develop targeted strategies to address them. The chapter

discusses common misconceptions about cost, reliability, scalability, environmental impact, return on investment, and complexity of renewable energy solutions, and suggests ways to proactively educate and engage the community.

4.1. Transparency and Open Communication

Transparency plays a pivotal role in establishing trust between a company and the community it serves. By being open about their operations, intentions, and outcomes, companies can demonstrate their commitment to honesty, ethical practices, and accountability. This helps create a strong foundation of trust, which is essential for effective community-based marketing and the adoption of renewable energy solutions. Trust, as a cornerstone of strong relationships, encourages the community to engage with the company and its offerings, thus enabling successful marketing efforts and promoting renewable energy adoption.

To maintain open communication with the community and promote trust, companies can adopt a variety of strategies that demonstrate their commitment to transparency and inclusivity:

- a. Regular updates: Keeping the community informed about progress, achievements, and challenges through newsletters, blog posts, and social media updates, demonstrating the company's ongoing commitment to transparency.
- b. Dialogue opportunities: Creating forums for dialogue, such as town hall meetings, webinars, and online discussion platforms, where community members can ask questions, voice concerns, and provide feedback. This fosters a sense of openness and responsiveness on the part of the company.
- c. Community participation: Inviting community members to participate in decision-making processes, thereby demonstrating the company's commitment to inclusivity and responsiveness to local needs.
- d. Proactive engagement: Being proactive in addressing concerns and misconceptions about renewable energy solutions by providing accurate

and accessible information to the community, emphasizing the company's dedication to educating and supporting its audience.

While transparency and open communication are crucial, companies must also strike a balance between openness and the need to protect confidential information and business interests. This delicate balance can be achieved through several approaches:

- a. Defining boundaries: Clearly delineating the boundaries of information sharing to ensure that sensitive data and trade secrets are not inadvertently disclosed, maintaining the company's competitive edge while fostering trust with the community.
- b. Data privacy and security: Implementing robust data privacy and security measures to safeguard customer information, ensuring compliance with relevant regulations, and demonstrating the company's commitment to protecting its stakeholders.
- c. Communicating rationale: Providing explanations for certain decisions or actions that may not be immediately apparent or well-received by the community, fostering understanding, and mitigating potential backlash.
- d. Internal culture: Establishing and promoting a culture of transparency within the company, encouraging employees to prioritize open communication and ethical behavior in their interactions with the community and stakeholders, thus reinforcing the company's overall commitment to transparency.

4.2. Highlighting Success Stories and Testimonials

Storytelling is a powerful marketing tool that allows companies to connect with their audience on a deeper, more personal level. By sharing success stories and testimonials, companies can demonstrate the real-life impact of their renewable energy solutions, making it easier for potential customers to envision how these solutions could benefit them. Stories have the power to evoke emotions, which can

influence decision-making processes and encourage people to take concrete actions. Furthermore, storytelling humanizes a company's offerings, creating a relatable narrative that resonates with the audience. Through emotional connection, personalization, and social proof, storytelling can be a highly effective approach to promoting renewable energy solutions.

To effectively leverage the power of storytelling, companies should actively collect and share success stories and testimonials from their customers. Encouraging feedback from customers, both positive and negative, can help identify success stories and areas for improvement. Conducting interviews with satisfied customers can gather in-depth information about their experiences, providing a rich and detailed narrative to share with the community. By proactively seeking out and sharing these stories, companies can build trust, demonstrate the effectiveness of their renewable energy solutions, and inspire others to adopt these solutions.

To maximize the impact of success stories and testimonials, companies should leverage various formats and channels to reach a broad audience:

- a. Multimedia formats: Utilizing different formats, such as written testimonials, videos, and podcasts, to cater to diverse audience preferences and enhance the overall storytelling experience.
- b. Social media platforms: Sharing success stories and testimonials on social media platforms, such as Facebook, Instagram, Twitter, and LinkedIn, to reach a wider audience and encourage engagement.
- c. Company website: Featuring success stories and testimonials prominently on the company's website, providing easily accessible social proof for potential customers.
- d. Community events: Showcasing success stories and testimonials during community events, such as workshops, webinars, or local gatherings, to reinforce the impact of the company's renewable energy solutions and foster a sense of community pride.

4.3. Demonstrating Local Impact and Benefits

To build trust and credibility, companies should actively showcase the positive effects of their renewable energy solutions on the local community. This involves highlighting specific examples of how their offerings have improved the quality of life, reduced energy costs, and contributed to a more sustainable future. By providing concrete evidence of local impact, companies can demonstrate their commitment to the community and help potential customers understand the tangible benefits of adopting renewable energy solutions.

A comprehensive approach to demonstrating the impact of renewable energy solutions should address the economic, social, and environmental benefits of the company's offerings. This may include discussing job creation and economic growth opportunities, improved energy security and reliability, enhanced community resilience, and reduced greenhouse gas emissions. By effectively communicating these benefits, companies can foster a better understanding of the value of renewable energy solutions and encourage wider adoption.

As mentioned before, collaborating with local stakeholders, such as community leaders, educational institutions, and environmental organizations, can help amplify the impact message and lend credibility to the company's claims. These partnerships can facilitate the dissemination of information, provide additional resources for community engagement, and create opportunities for joint initiatives that showcase the benefits of renewable energy solutions. By working together with local stakeholders, companies can strengthen their position within the community and create a more compelling narrative of the positive impact their renewable energy solutions can have on the local community.

4.4. Addressing Concerns and Skepticism

Identifying common concerns and skepticism about renewable energy solutions

To effectively build trust and credibility, it is essential for companies to identify and address common concerns and skepticism about renewable energy solutions. These concerns may include:

- a. Misconceptions about the cost, reliability, and scalability of renewable energy: Some people may believe that renewable energy sources, such as solar or wind, are too expensive or not reliable enough to replace traditional fossil fuels. Companies should provide clear information about the decreasing costs of renewable technologies, as well as advances in energy storage and grid integration that have improved their reliability.
- b. Potential negative impacts on the environment, local communities, or traditional industries: Concerns about the visual or noise impacts of renewable energy installations, the potential displacement of local communities, or the loss of jobs in traditional energy sectors can lead to skepticism. Addressing these concerns requires showcasing best practices in site selection, design, and community engagement, as well as demonstrating the net environmental and social benefits of renewable energy solutions.
- c. Uncertainty about the return on investment or long-term performance of renewable energy solutions: Some individuals and businesses may be hesitant to invest in renewable energy solutions due to concerns about their long-term performance or the financial returns they can expect. Companies should provide transparent information about the expected performance, maintenance requirements, and potential cost savings associated with their solutions to alleviate these concerns.
- d. Perceived complexity and lack of knowledge about renewable energy technologies: The general public might perceive renewable energy technologies as complex and difficult to understand, leading to hesitation in adopting these solutions. Companies should invest in educational initiatives that simplify and clarify the technology, making it more accessible and comprehensible to potential customers.

By understanding the sources of skepticism, companies can develop targeted strategies to address these concerns and build confidence in their renewable energy solutions. This will help create a more receptive environment for the adoption and expansion of renewable energy technologies in local communities.

One effective way to address concerns and skepticism is through proactive education and dialogue. This may involve:

- a. Providing accurate and up-to-date information about renewable energy technologies
- b. Debunking myths and misconceptions about renewable energy
- c. Sharing examples of successful renewable energy projects
- d. Engaging in open and honest conversations with community members and stakeholders

This approach should be tailored to the specific concerns and needs of each community, considering local context, culture, and values. By fostering trust and creating a more informed and supportive environment for renewable energy adoption, companies can overcome skepticism and promote wider acceptance of their solutions.

Finally, companies should demonstrate their commitment to continuous improvement and responsiveness to feedback. This involves being open to criticism, acknowledging areas for improvement, and actively working to address identified concerns. By showing that they value the feedback of the community and are committed to making positive changes, companies can build trust, credibility, and a strong reputation as responsible and accountable renewable energy providers. This ongoing commitment to improvement and responsiveness can ultimately contribute to the long-term success and acceptance of renewable energy solutions within the community.

5. Challenges and Limitations of Community-Based Marketing

Chapter 5 of this thesis seeks to delve into the intricacies of community-based marketing, specifically focusing on the challenges and limitations that often emerge within this approach. While community-based marketing can serve as a powerful tool in promoting renewable energy solutions, its effective implementation demands a deep understanding of the inherent obstacles and constraints.

In this chapter, we first explore the issues of scalability and replicability in Section 5.1. Community-based marketing initiatives are typically highly localized, which can pose considerable challenges when efforts are made to scale or replicate them across diverse cultural, social, and political contexts. Furthermore, we will examine strategies that have proven effective in overcoming these challenges and fostering successful expansion and replication of such initiatives.

Section 5.2 then shifts focus to the balancing act between localization and standardization within marketing strategies. A successful marketing approach must resonate with local audiences while maintaining a consistent brand identity, a feat that requires a careful equilibrium. The challenges and strategies related to achieving this balance will be discussed in depth.

Resistance to renewable energy solutions and the phenomenon of NIMBYism (Not In My Back Yard) form the crux of Section 5.3. We aim to unpack the roots of such resistance and propose strategies to mitigate these issues, effectively promoting the acceptance and support for renewable energy projects within communities.

Lastly, in Section 5.4, we will delve into the pivotal aspect of managing stakeholder expectations. This involves not only the local community but also investors, partners, government entities, and other organizations involved in the project. Clear communication, inclusive decision-making, and regular performance tracking are among the strategies to be explored for effective stakeholder management.

Through an in-depth exploration of these challenges and limitations, as well as potential mitigation strategies, this chapter aims to provide a comprehensive understanding of the complexities involved in community-based marketing for renewable energy solutions.

5.1. Scalability and Replicability

Scaling community-based marketing efforts can face several challenges. The highly localized nature of these initiatives requires significant investment in human resources, time, and money to adapt marketing strategies to different communities. Additionally, the diverse cultural, social, and political contexts in which these efforts are implemented can present unique challenges and limitations. As Peattie and Peattie (2009) argue, "community-based marketing must be adapted to the specific conditions, needs, and aspirations of each local community." Moreover, some barriers, such as logistical constraints, limited resources, or varying legal frameworks, can hinder the expansion of community-based marketing initiatives across different regions.

Despite these challenges, it is possible to replicate successful community-based marketing initiatives. Key strategies include:

- a. Creating a flexible framework that allows for adaptation to different contexts while maintaining core principles.
- b. Leveraging lessons learned from previous experiences to guide future efforts.
- c. Building strong partnerships with local stakeholders who can provide insights and support for adaptation to new contexts, especially when they are more digital savvy than the other community members.
- d. Investing in capacity building and training for staff to ensure effective implementation of community-based marketing strategies.

e. Developing a knowledge-sharing platform that facilitates the exchange of experiences, best practices, and lessons learned among practitioners in different regions.

Other examples analyzed by Minuto, Francesco Demetrio & Lanzini, Andrea & Olivero, Sergio. (2023), but also my direct experience in competitor's analysis at Cleanwatts, value-sharing of community-based marketing initiatives for renewable energy solutions offer valuable insights into the challenges and opportunities associated with scaling and replicating these efforts. Key lessons include:

- a. The importance of a strong, adaptable marketing framework that can be tailored to different contexts.
- b. The value of leveraging local knowledge and relationships to better understand and respond to unique community needs and dynamics.
- c. The need for ongoing monitoring and evaluation to identify areas for improvement and adapt strategies as needed.
- d. Recognizing the potential limitations and constraints in each target market and developing tailored strategies to overcome those challenges.
- e. Fostering a culture of continuous learning and innovation within the organization to ensure the ongoing evolution and adaptation of community-based marketing initiatives.

By learning from the experiences of other companies and organizations, businesses can improve their ability to scale and replicate community-based marketing initiatives effectively, enhancing their overall impact and reach in promoting renewable energy solutions.

5.2. Balancing Localization and Standardization

Balancing localization and standardization in marketing strategies is essential to ensure that marketing messages resonate with local audiences while maintaining a consistent brand identity. Localization allows companies to cater to the unique needs, preferences, and cultural nuances of different communities, increasing the likelihood of marketing success. On the other hand, standardization ensures that a company's core values, messaging, and branding remain consistent, which is crucial for building a strong brand reputation and identity. De Mooij (2018), discusses the complexities of global marketing and the challenges companies face when trying to balance global and local strategies. For example, she observes that global marketers often propose a unified global youth segment with homogeneous desires. However, when global youth cultural styles become readily available, a localized version of youth culture tends to emerge, indicating the importance of localization in marketing strategy.

Maintaining consistency while adapting marketing strategies to local contexts can be challenging. The need to tailor marketing messages and tactics to different communities may result in inconsistencies in branding, messaging, or visual elements, which can weaken the overall brand image. Moreover, localizing marketing efforts may also entail additional costs and resource requirements, as well as logistical challenges in coordinating marketing activities across different locations.

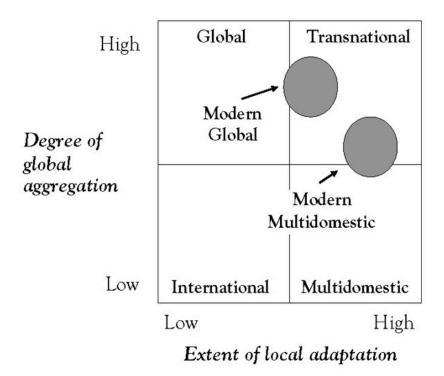


Figure 5 Difference between Modern Global businesses and Modern Multidomestic businesses

To effectively balance localization and standardization, companies can employ several strategies and best practices:

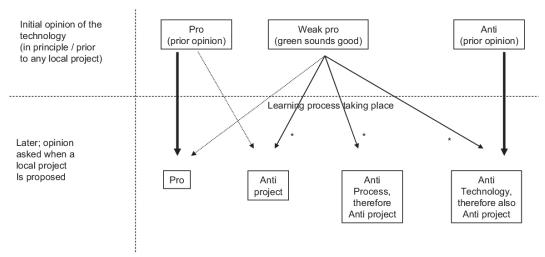
- a. Develop a strong global brand identity that can be adapted to local contexts while maintaining core elements and messaging.
- b. Establish a set of guiding principles and values that inform localized marketing efforts, ensuring that they align with the overarching brand strategy.
- c. Invest in market research and cultural intelligence to understand local needs, preferences, and cultural nuances, allowing for more effective localization of marketing messages and tactics.
- d. Create a centralized marketing team responsible for overseeing global branding and messaging consistency, while empowering local marketing teams to adapt and execute strategies tailored to their specific communities.
- e. Leverage technology and digital platforms to streamline marketing efforts, maintain brand consistency, and facilitate communication and collaboration between global and local marketing teams.

By adopting these strategies and best practices, companies can successfully balance localization and standardization in their marketing efforts, maximizing the potential for marketing success in promoting renewable energy solutions.

5.3. Overcoming Resistance and NIMBYism

Resistance to renewable energy solutions often stems from various factors, including misconceptions, lack of information, or fear of change. NIMBYism (Not In My Back Yard) is a specific form of resistance where people oppose the development of renewable energy projects in their vicinity, despite supporting the broader goals of clean energy and environmental sustainability. Wolsink (2000) highlights that common reasons for NIMBYism include concerns about the visual impact, noise, property values, and potential health effects of renewable energy

installations. Understanding the roots of resistance and NIMBYism is crucial for developing targeted strategies to address and mitigate these issues.



* underlying 'selfish NIMBY' motivation can be difficult to measure or to rule out

Figure 6 Impact of education on renewable energy projects related NIMBYism

To address resistance and NIMBYism in community-based marketing, several strategies can be employed:

- a. **Proactive communication:** Devine-Wright, P. (2005) emphasizes the importance of engaging with the community early in the project development process, maintaining open lines of communication to address concerns and share accurate information about the project.
- b. Education and awareness: Providing clear, evidence-based information about the benefits of renewable energy solutions and addressing common misconceptions that may contribute to resistance (Wüstenhagen, Wolsink, & Bürer, 2007).
- c. Community involvement: As highlighted by Gross (2007), involving community members in the planning and decision-making process ensures their voices are heard and their concerns are addressed. This approach fosters a sense of ownership and commitment to the project, promoting support for renewable energy initiatives.
- d. **Tailoring messaging:** Developing marketing messages that emphasize the direct benefits of renewable energy projects to the local community, such as

job creation, economic development, and environmental improvements (Wolsink, 2012). By highlighting these benefits, companies can counteract negative perceptions and foster community support.

One successful example of overcoming resistance and NIMBYism is the case of the Danish Island of Samsø, which became a net exporter of renewable energy within a decade (Samsø is the world's first 100% renewable energy-powered island). The key to the project's success was the early involvement of the local community in decision-making and the clear communication of the economic and environmental benefits that the renewable energy projects would bring to the island (Sperling, Karl. 2017). This approach effectively addressed concerns, built trust, and created a sense of ownership among community members, ultimately leading to broad support for the renewable energy initiatives.

Another example is the Community Windpower Project in Findhorn, Scotland, where the local community was actively involved in the planning and implementation of a wind turbine project (Okkonen, Lasse & Lehtonen, Olli. 2016). By engaging in transparent and inclusive decision-making processes, the project organizers were able to address concerns, build trust, and gain the support of the majority of the community.

These examples demonstrate the importance of adopting a proactive and inclusive approach to community engagement, as well as the need for effective communication and education strategies in overcoming resistance and NIMBYism in the renewable energy sector.

5.4. Managing Stakeholder Expectations

Managing stakeholder expectations is critical for the success of renewable energy projects, as it helps to avoid potential conflicts and misunderstandings. Stakeholders include not only the local community but also investors, partners, government entities, and other organizations involved in the project. Setting realistic expectations is especially important in the context of renewable energy

projects financing, where investors seek assurances about the project's viability, returns, and timeline.

Several strategies can be employed to manage stakeholder expectations effectively:

- a. **Clear communication:** Providing stakeholders with accurate, timely, and consistent information about the project, its goals, and progress. This helps to set realistic expectations and minimize potential misunderstandings.
- b. **Inclusive decision-making:** Engaging stakeholders in the decision-making process, allowing them to voice their concerns and contribute to the project's development. This approach fosters a sense of ownership and commitment, promoting support for the initiative.
- c. **Performance tracking and reporting:** Regularly monitoring and reporting on the project's performance, sharing updates with stakeholders, and addressing any deviations from the initial plan or expectations.
- d. Investor relations: Maintaining open and transparent communication with investors, providing them with regular updates on the project's progress and financial performance, and addressing any concerns or questions they may have.

By employing these strategies, companies can effectively manage stakeholder expectations in community-based marketing, ensuring the successful implementation of renewable energy projects and fostering long-term support from the local community, investors, and other stakeholders.

6. Recommendations for Future Research and Practice

In this chapter, we analyze strategic approaches to enhancing and innovating community-based marketing within the renewable energy sector. We place emphasis on the necessity of implementing robust measurement and evaluation methodologies, the significance of utilizing emerging technologies and platforms, and the prospect of integrating environmental and social objectives into marketing strategies.

The discussion also outlines the necessity of active stakeholder involvement in the evaluation process, the relevance of real-time data, and the need of continuous adaptation. It explores the possibilities offered by augmented reality, social media platforms, mobile notifications, and artificial intelligence, as tools to deepen community engagement.

The chapter highlights the need for aligning marketing strategies with sustainability principles and social inclusivity and underscores the value of showcasing long-term commitment to these objectives. It also advocates for cross-sector collaboration as a potent strategy for amplifying the reach and impact of community-based marketing efforts. The insights shared aim to guide renewable energy companies and researchers towards an increasingly effective and responsive approach to community-based marketing.

6.1. Improving Measurement and Evaluation of Community-Based Marketing

To effectively measure the success of community-based marketing efforts, it is crucial to identify relevant key performance indicators (KPIs) that align with the campaign's objectives. These KPIs should provide insight into community engagement, awareness, and the adoption of renewable energy solutions. Examples

of suitable KPIs include the number of attendees at local events, social media engagement, and the conversion rate of potential customers to actual clients. It is essential to establish clear benchmarks for these KPIs to track progress and measure the impact of marketing strategies accurately.

A comprehensive evaluation of community-based marketing initiatives requires a mix of qualitative and quantitative assessment methods. Quantitative methods, such as surveys and web analytics, can help track the reach and impact of the campaign. Meanwhile, qualitative methods, such as interviews and focus groups, can provide valuable insights into the community's perception of the renewable energy solutions being marketed and the effectiveness of the marketing efforts. Integrating both types of data can paint a more holistic picture of the campaign's success, allowing for a deeper understanding of community engagement and the drivers of adoption.

Involving stakeholders, including community members, local partners, and employees, in the evaluation process can provide valuable perspectives on the strengths and weaknesses of community-based marketing initiatives. This feedback can help identify areas for improvement and inform the development of future marketing strategies. Regular communication and feedback loops with stakeholders can ensure that their insights are consistently integrated into the evaluation and improvement processes. Additionally, establishing a dedicated stakeholder advisory panel or hosting regular forums can facilitate the ongoing exchange of ideas and recommendations, creating a more robust and responsive marketing strategy.

The process of measuring and evaluating community-based marketing efforts should be ongoing, with regular adjustments made to address any identified weaknesses or capitalize on emerging opportunities. Utilizing real-time data, such as social media analytics and website traffic, can help monitor the immediate effectiveness of marketing tactics and inform adjustments as needed. Periodic evaluations can also provide a broader understanding of long-term trends and the overall success of the community-based marketing approach, ensuring that the strategy remains relevant and effective in promoting renewable energy solutions.

6.2. Leveraging Emerging Technologies and Platforms

Emerging technologies, such as virtual and augmented reality, could offer new opportunities for engaging communities in renewable energy initiatives. These technologies can create immersive experiences that help individuals understand the benefits and impacts of renewable energy solutions on a deeper level (Ahn, 2018). For example, virtual reality can be used to provide a virtual tour of renewable energy facilities or demonstrate the environmental impact of adopting clean energy solutions. By incorporating these innovative communication technologies into their marketing efforts, companies can foster stronger connections with their target communities and facilitate deeper engagement.

As new digital platforms emerge, marketers must adapt their strategies to remain relevant and effective. New social media platforms, such as TikTok, have gained popularity in recent years and offer unique opportunities for community-based marketing. For example, short-form video content on TikTok can be utilized to share success stories, educate users about renewable energy solutions, and showcase the positive impact of clean energy on the community. Adapting marketing strategies to capitalize on these novel platforms can help companies reach new audiences and strengthen their community-based marketing efforts.

In case of software companies, incorporating mobile push notifications in the marketing strategies for renewable energy communities has the potential to significantly improve user engagement. These notifications can be tailored to individuals, providing relevant updates, personalized suggestions, and timely reminders, all of which contribute to a more user-centric experience. By leveraging integrated software platforms powering renewable energy communities, companies can deliver real-time, context-aware notifications that drive engagement and encourage users to take action (Li, Huang, & Sharma, 2020).

To effectively leverage emerging technologies and platforms for community-based marketing, it is crucial for marketers to stay informed about the latest advancements in the field. This may involve attending industry conferences, participating in

professional networks, and staying up-to-date on relevant research and news articles. By remaining current on technological advancements and trends, marketers can identify new opportunities for engaging communities and promoting renewable energy solutions more effectively. For example, the use of chatbots and artificial intelligence in customer support and community engagement has shown promising results in various industries, and renewable energy companies can explore incorporating these technologies into their marketing strategies to enhance community interactions and support.

6.3. Integrating Environmental and Social Goals

To successfully integrate environmental and social goals into marketing strategies, companies should embed sustainability principles in all aspects of their marketing initiatives. This can be achieved by prioritizing eco-friendly materials and practices in promotional materials, emphasizing the environmental benefits of renewable energy solutions, and promoting sustainable consumption patterns among target audiences (Belz & Peattie, 2012). By doing so, companies can not only contribute to the global sustainability agenda but also build a positive brand image and foster customer loyalty.

In addition to environmental goals, companies should also focus on social inclusivity and equity in their marketing efforts. This can involve actively targeting and engaging with diverse segments of the community, ensuring that marketing messages are accessible and relevant to all potential customers, and addressing any barriers that might prevent certain groups from adopting renewable energy solutions (Bhattacharya & Korschun, 2008). By promoting social inclusivity and equity, companies can demonstrate their commitment to social responsibility and foster a sense of community belonging among their target audience.

Lastly, it is crucial for companies to demonstrate a long-term commitment to their environmental and social objectives. This can be achieved by setting clear and measurable targets for sustainability performance, regularly reporting on progress toward these goals, and engaging in ongoing dialogue with stakeholders about the company's environmental and social impacts (Epstein & Buhovac, 2014). By consistently communicating their commitment to sustainability and social responsibility, companies can build trust and credibility with their target audience, ultimately contributing to the success of their community-based marketing efforts.

One way for companies to showcase their long-term commitment to environmental and social objectives is to align their marketing strategies with the United Nations' Sustainable Development Goals (SDGs). The SDGs provide a comprehensive framework for addressing various environmental, social, and economic challenges globally. Renewable energy companies can particularly contribute to several of these goals, such as:

- a. SDG 7 Affordable and Clean Energy: Renewable energy companies can help increase access to affordable, reliable, and sustainable energy sources.
 By promoting renewable energy solutions, they contribute to reducing dependence on fossil fuels and promote a clean energy transition.
- b. SDG 11 Sustainable Cities and Communities: Renewable energy communities can support the development of sustainable, resilient, and inclusive urban environments. By integrating renewable energy solutions into local infrastructure and urban planning, companies can contribute to the reduction of greenhouse gas emissions and enhance overall urban sustainability.
- c. SDG 12 Responsible Consumption and Production: By promoting the responsible use of resources, renewable energy companies can encourage more sustainable consumption and production patterns. This includes increasing energy efficiency and promoting the use of cleaner energy sources.
- d. SDG 13 Climate Action: The widespread adoption of renewable energy solutions plays a crucial role in mitigating climate change. Renewable energy companies can actively contribute to climate action by reducing greenhouse gas emissions and supporting global efforts to limit global warming.

To demonstrate their commitment to the SDGs, companies can incorporate these goals into their marketing messages, highlighting the positive impact of renewable energy solutions on global sustainability challenges. They can also set targets that align with the SDGs, regularly report on their progress, and engage stakeholders in conversations about their contributions to these global objectives (Sachs et al., 2016).

By aligning marketing strategies with the SDGs, companies can strengthen their commitment to environmental and social objectives, enhance their reputation, and foster long-term customer loyalty.

6.4. Encouraging Cross-Sector Collaboration

Cross-sector collaboration can play an important role in enhancing the reach and effectiveness of community-based marketing strategies. By partnering with organizations from different sectors, such as public institutions, private companies, non-profit organizations, and academic institutions, renewable energy companies can access new resources, knowledge, and networks that can bolster their marketing efforts. These partnerships can facilitate knowledge exchange and help identify innovative solutions that address common challenges faced by the renewable energy sector (Huxham & Vangen, 2013). Furthermore, collaborations with organizations that share similar values and goals can create a stronger and more unified voice in promoting renewable energy solutions and advocating for environmental and social issues.

One way to improve community-based marketing strategies is to look for inspiration from best practices in other industries. For instance, the healthcare sector has successfully implemented community-based marketing initiatives to promote health education and disease prevention (Young et al., 2018). The tourism industry has also leveraged community-based marketing to promote sustainable and responsible travel (Budeanu, 2005). By adapting and applying these successful models, renewable energy companies can develop more effective marketing

campaigns tailored to their target audiences, and can learn valuable lessons on engaging with communities and generating grassroots support for their initiatives.

Leveraging the synergies and collaborative efforts of cross-sector partnerships can significantly amplify the impact of community-based marketing initiatives. For example, a partnership between a renewable energy company and an environmental non-profit organization could result in joint marketing campaigns that capitalize on their combined resources, networks, and expertise. This collaborative approach can help create a larger impact, raise awareness, and drive the adoption of renewable energy solutions more effectively than individual efforts (Koontz & Newig, 2014). Additionally, working together with other stakeholders can lead to the development of shared goals, mutual understanding, and joint problem-solving, ultimately resulting in more sustainable outcomes for both the renewable energy sector and the wider community.

7. Conclusion

7.1. Summary of Findings

Community-Based Marketing Strategies and Cleanwatts experience

Throughout this dissertation, we have explored the concept of community-based marketing and its application in the renewable energy industry, with a particular focus on the Cleanwatts experience. The analysis has shown that Cleanwatts has effectively employed community-based marketing strategies, engaging local influencers, partnering with local organizations, implementing localized events and initiatives, and utilizing social media and digital platforms to promote their Renewable Energy Communities (RECs).

The Benefits and Challenges of Community-Based Marketing

Our discussion has highlighted the numerous benefits of adopting community-based marketing strategies, including increased trust and credibility, enhanced social acceptance of renewable energy innovations, and the promotion of energy citizenship (Wüstenhagen et al., 2007; Matthes & Wüstenhagen, 2015; Klein et al., 2023). At the same time, we have identified challenges and limitations, such as scalability and replicability, balancing localization vs standardization, overcoming resistance and NIMBYism, and managing stakeholder expectations.

Recommendations for Future Research and Practice

Based on the findings, I have provided several recommendations for future research and practice in community-based marketing for renewable energy companies. These recommendations include improving measurement and evaluation of community-based marketing efforts, leveraging emerging technologies and platforms, integrating environmental and social goals into marketing strategies, and encouraging cross-sector collaboration. As the renewable energy sector continues

to evolve, it is essential for companies to stay informed about new advancements and adapt their marketing strategies accordingly to remain competitive and relevant.

7.2. Implications for Cleanwatts and the Renewable Energy Industry

Adapting to Local Contexts and Strengthening Community Engagement

Our analysis suggests that Cleanwatts and other renewable energy companies should continue to focus on adapting their marketing strategies to local contexts and strengthening community engagement. By tailoring marketing messages and tactics to local needs and preferences, companies can foster more genuine connections with their target audience, thus enhancing the acceptance and adoption of renewable energy solutions (Matthes & Wüstenhagen, 2015). In addition, implementing localized events and initiatives, and collaborating with local influencers and organizations, can further deepen community ties and promote energy citizenship (Klein et al., 2023).

Managing Stakeholder Expectations and Building Trust

Successfully managing stakeholder expectations and building trust are crucial for renewable energy companies like Cleanwatts. Ensuring transparency, open communication, and setting realistic expectations are key to establishing credibility and fostering long-term relationships with stakeholders. By highlighting success stories, demonstrating local impact, and addressing concerns proactively, Cleanwatts can effectively enhance trust and social acceptance of their RECs - Renewable Energy Communities (Wüstenhagen et al., 2007).

Fostering Collaboration and Innovation in the Industry

Finally, our findings underscore the importance of fostering collaboration and innovation in the renewable energy industry. Encouraging cross-sector collaboration can help companies like Cleanwatts expand their marketing reach,

learn from best practices in other industries, and amplify their impact. Leveraging emerging technologies and platforms, such as mobile push notifications and innovative communication tools, can also enable renewable energy companies to stay ahead of the curve and capitalize on new opportunities for growth and customer engagement (Li, Huang, & Sharma, 2020; Klein et al., 2023).

7.3. Future Outlook and Research Directions

The Evolving Landscape of Renewable Energy Marketing

As the renewable energy sector continues to grow and mature, its marketing landscape will also evolve. Companies like Cleanwatts will need to stay agile and adapt to changes in the industry, regulatory environment, and customer preferences. The clean tech scale-up context presents both challenges and opportunities for renewable energy companies as they navigate the transition from niche markets to mainstream adoption (Hockerts & Wüstenhagen, 2010). As renewable energy solutions become increasingly popular, companies may face new challenges related to market saturation, competition, and changing customer needs. Future research could focus on identifying new marketing strategies and tactics that address these challenges and capitalize on emerging opportunities in the renewable energy sector.

The Role of Technology and Digitalization in Community-Based Marketing

Technology and digitalization will continue to play a pivotal role in shaping community-based marketing efforts in the renewable energy industry. As communication technologies advance and new platforms emerge, companies like Cleanwatts must explore innovative ways to engage with their target audience and foster a sense of energy citizenship. The clean tech scale-up context offers opportunities to leverage advancements in digital technology to enhance marketing efforts and increase the reach and impact of community-based marketing initiatives. Future research could examine the effectiveness of various digital tools and platforms in enhancing community engagement and promoting the adoption of renewable energy solutions. Moreover, research could investigate the potential

benefits of integrating artificial intelligence, big data analytics, and other advanced technologies in renewable energy marketing strategies.

Potential Areas for Further Exploration and Study

In addition to the above research directions, several other areas warrant further exploration and study. For instance, researchers could investigate the role of public policy and regulatory frameworks in shaping renewable energy marketing strategies and industry dynamics within the clean tech scale-up context. Another area of interest could be the examination of the interplay between environmental and social goals in marketing strategies and the impact of these efforts on the broader sustainable development agenda, including the United Nations Sustainable Development Goals (SDGs) (United Nations, 2015). Furthermore, future research could explore the role of cross-sector collaboration in driving innovation and market growth in the clean tech scale-up environment, identifying best practices and successful partnership models for companies operating in the renewable energy sector.

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