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CASE STUDY

BLUE TECH

ECO WAVE POWER

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1. Startup introduction:

Eco Wave Power is a leading blue tech startup that specializes in leveraging the power of ocean waves to generate clean and renewable electricity. Founded in 2011 by Inna Braverman and David Leb, the company is headquartered in Stockholm, Sweden. It has gained international recognition for its innovative technology, consisting of platforms designed to convert the motion of waves into usable energy.

The startup operates with a business-to-government (B2G) and business-to-business (B2B) model, allowing the company to engage with both governmental entities and commercial partners.

The company employs three primary business models: Build, Own, Operate (BOO), Build, Own, Transfer (BOT), and Joint Ventures. The BOO model allows full responsibility, whereas BOT model involves transferring the ownership to a third party. Finally, setting up joint ventures allow collaboration with partners to pursue mutually beneficial opportunities.

Driven by its vision of global sustainability and the pursuit of clean energy solutions, Eco Wave Power has actively pursued international expansion. The company has successfully established its presence in over fifteen countries, including Israel, China, Spain, UK, Netherlands, and Turkey. Through strategic agreements and feasibility studies, EWP has demonstrated its commitment to expanding its operations beyond its home country.

The Swedish firm's commitment to innovation is exemplified by its extensive intellectual property portfolio. With seventeen patents to its name, the company has demonstrated its technological expertise and the unique nature of its wave energy conversion technology.

a. Story line

2011 - Inna Braverman and David Leb met in a social event and after sharing their passion for the power of waves they decided to found Eco Wave Power.

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Inna was able to develop her technology thanks to the initial capital investment of David.

2012 - Frost & Sullivan awarded the startup for New Product Innovation.

2014 - The company conducts successful pilot projects and feasibility studies in Israel, demonstrating the viability of its technology.

2016 - First international agreement to construct a power station in Gibraltar, which would be the first grid-connected project. This would mark a significant milestone in the company's international expansion.

2019 - Expansion to new markets through partnerships and collaborations with local entities.

2020 - EWP secures additional funding through private investments and government grants.

2021 - It became publicly traded and only its American Depositary Shares trade on the NASDAQ.

b. Financial starting point

Eco Wave Power's financial starting point was bolstered by the support and investment of David Leb, an entrepreneur who believed in the potential of Inna's project. He became the first investor, contributing \$1 million to kickstart the company's development.

Then, it has attracted investments from venture capital firms, private investors, and international institutions, including grants from the European Union.

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c. Current financial point

Today, the total funding amounts to \$13.74 million. In terms of market capitalization, the value stands at \$15.37 million.

2. International market situation

a. Industry overview

The energy transition towards renewable sources has gained significant momentum in recent years, driven by the need to combat climate change and reduce reliance on fossil fuels. This shift has opened doors for innovative technologies capable of harnessing the power of natural resources sustainably. While solar and wind energy have seen substantial developments, the ocean energy industry encompasses a wide range of technologies aimed at exploiting the potential of our oceans.

Governments and organizations worldwide seek for green solutions. In the US, president Biden hopes to become zero by 2050. However, clean energy sources still provide 18% of global electricity generation. This creates a significant growth opportunity for wave energy, which has been proven to be more potent, it can produce twice as much energy as the world currently produces.

Many companies in the sector have faced challenges in commercialising their systems, particularly when installed offshore that can lead to higher costs, reduced reliability and environmental concerns.

EWP stands out from these companies with its nearshore installation technology which mitigates these disadvantages and improves project feasibility.

b. Market analysis

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The market is driven by several factors that include:

- a) Growing energy demand and transition: increasing energy demand, combined with the need for sustainable resources. Wave energy offers a promising solution due to its reliability and abundance.
- b) Favourable government policies and incentives to encourage the development of clean energies. These initiatives create a supportive regulatory environment.
- c) Technological advancements: the continuous progress of technologies has contributed to the viability of projects like this.
- d) Environmental benefits and sustainability: wave energy has enormous environmental advantages with zero greenhouse gas emissions and minimal visual impact.

The market size and growth potential are substantial with significant room for expansion. As the industry continues to evolve, a competitive market is emerging, with various companies vying for market share. Nonetheless, ECP possess a great competitive advantage that positions itself as a key player in this growing market.

3. **Internationalisation strategy**

a. Strategical Option Available

Prior to entering a new market, it is essential to conduct market research to gain an in-depth understanding of the market, regulatory environments, potential competitors... Such insights help companies tailor their strategies and identify the most viable opportunities for expansion.

The next step is to explore the different strategic options to enter new markets that best fit the firm.

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The first option considers market entry through concession agreements, which grant the necessary permits to operate in specific locations. Another alternative is by setting up partnerships with local firms, government entities or established players in the sector. With collaborations, companies can leverage the local expertise, resources and networks of their partners. Joint ventures enable companies to share risks and costs while pooling resources and market knowledge. These options are very adequate for startups which are not yet consolidated. In addition, governments offer subsidies and grants to encourage the transition to renewable energies. Another viable option is through technology licensing or transfer agreements to local firms in the markets considered, facilitating the deployment of projects in new countries.

b. Startup internationalization strategy

Expanding its operations beyond its local market has always been a focus for the company. Choosing an attractive and interesting market is key for firms as it directly impacts on their growth.

One key strategy employed is the achievement of concession agreements. This permits the startup to operate in target markets. Portugal has been one of the markets where EWP has signed a collaboration agreement with a local firm, Painhas, that will provide support and resources for its operations in the country. This enables to leverage Painhas' local expertise and network, facilitating its market entry and expansion in the country.

Eco Wave Power also decided to settle on Spain for several reasons. It has been a strategic location because of its well-established renewable energy industry supportive policies and incentives to promote sustainable projects. The country has set ambitious targets for clean energy as outlined in its National Integrated Energy and Climate Plan for 2030. This plan aims to achieve a 74% share of renewable energy in the electricity industry and ultimately transition to a 100% renewable electricity industry by 2050. This commitment provides a supportive environment for the startup.

Moreover, it participates in a program carried out by the ICEX-Invest, called "Rising UP Spain" which aims at attracting foreign entrepreneurs. This has

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provided the company with numerous resources, a better understanding of the market and a network of contacts.

Expanding its international presence, it has recently entered in the United States through a partnership with Altasea. The Port of Los Angeles has been selected for its first installation, providing a huge opportunity for further expansion.

Finally, it has also secured commercialization rights in Turkey, enabling to deploy its wave energy systems.

4. **Results and Metrics**

a. Success stories

Eco Wave Power's journey has been marked by several key success factors that have contributed to its growth.

The company demonstrated the importance of thorough market research, allowing them to identify viable opportunities and strategic target markets.

Additionally, collaborating with established players, such as EDF Renewables, facilitated financing support and gain expertise. As seen in the Israeli project where the energy company and the Israeli Ministry of Energy provided co-financing. Achieving the connection of the wave energy to the electricity grid in Israel was one of the greatest advances.

The CEO, Inna Braverman, recognized the importance of securing grants and support from various sources. The company actively pursued funding from the European Union Regional Development Fund, Innovate UK, the European Commission's Horizon 2020 program and private groups.

EWP has been honoured with various awards for its pioneer and innovative technology. They received the "Global Climate Action Award" in 2019, highlighting

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the recognition and validation of their contributions to the clean energy industry. Frost and Sullivan awarded the startup in their beginnings for New Product Innovation.

Overall, the biggest accomplishment has been that the startup has demonstrated how such a pioneer technology is viable and can be commercialised.

b. Lessons learned

They also encountered several challenges:

- I. Access to financing, particularly, debt financing. They raised funding through grants and equity, which more expensive.
- II. The lack of legal framework in several countries remains a challenge.
- III. Obtention of licenses which slows down the processes.

DISCLAIMER: The information provided is based on the public information available of each company.

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