

Eco Wave Power

Category:

Best EcoHealth Solution

Organization/Company Name:

Provide the official name of your company or organization.

Eco Wave Power

Overview:

Provide key information about the company, including its origins, mission, and core philosophy. Describe the solution, impact, and sector focus (e.g., water management, renewable energy, circular economy, waste management, sustainable agriculture, net-zero initiatives, etc.).

Eco Wave Power is a leading onshore wave energy company revolutionizing clean energy with its patented, smart, and cost-efficient technology that converts ocean and sea waves into sustainable electricity.

Dedicated to combating climate change, Eco Wave Power operates the first grid-connected wave energy system in Israel, co-funded by EDF Renewables IL and the Israeli Energy Ministry, which recognized the technology as a “Pioneering Technology.”

Expanding globally, Eco Wave Power is preparing to install projects at the Port of Los Angeles, Taiwan, and Portugal, adding to its impressive project pipeline totaling 404.7 MW. The company has received support from prestigious institutions such as the European Union Regional Development Fund, Innovate UK, and the Horizon 2020 program, and was honored with the United Nations’ Global Climate Action Award.

Eco Wave Power’s American Depositary Shares (WAVE) are traded on the Nasdaq Capital Market.

Climate Health & Alignment with UN SDGs / National Policy Guidelines:

Please explain how your innovation mitigates or adapts to climate-related health risks and aligns with the United Nations Sustainable Development Goals (SDGs) and national climate policies.

Eco Wave Power's Contribution to Mitigating Climate-Related Health Risks and Alignment with the SDGs

The accelerating climate crisis threatens public health globally, with rising temperatures, extreme weather events, and environmental degradation contributing to diseases and health challenges. Eco Wave Power's innovative wave energy technology provides a sustainable solution to mitigate these climate-related health risks, contributing to both global health and climate resilience.

Mitigating Climate-Related Health Risks

Eco Wave Power harnesses ocean wave energy to generate clean electricity, reducing reliance on fossil fuels and mitigating the environmental impacts that directly affect human health. By providing a renewable, sustainable energy source, our technology helps reduce harmful emissions, including carbon dioxide, which are major contributors to respiratory illnesses, cardiovascular problems, and heat-related diseases. Moreover, as a coastal-based solution, our technology improves energy resilience in vulnerable coastal communities, enabling them to adapt to climate impacts such as rising sea levels and extreme weather events.

Alignment with the United Nations Sustainable Development Goals (SDGs)

Eco Wave Power's innovation addresses several key SDGs, promoting both environmental sustainability and public health:

1. **SDG 3 (Good Health and Well-being):** By reducing air pollution and mitigating the health risks associated with fossil fuel combustion, Eco Wave Power directly contributes to improved public health outcomes, reducing respiratory diseases and other climate-related health impacts.
2. **SDG 5 (Gender Equality):** Led by a female CEO, Inna Braverman, Eco Wave Power champions gender equality in the energy sector. Inna's leadership inspires women in the industry and promotes an inclusive, equal strategy across all company subsidiaries.
3. **SDG 7 (Affordable and Clean Energy):** Our technology taps into the vast renewable energy potential of the oceans, providing an affordable and clean energy source that can meet global electricity demand while reducing dependence on polluting energy sources.
4. **SDG 9 (Industry, Innovation, and Infrastructure):** With its modular and scalable design, Eco Wave Power's technology can be rapidly deployed in new locations, transforming unused marine structures into clean energy sources for ports, cities, and communities.

5. SDG 11 (Sustainable Cities and Communities): By integrating wave energy into coastal infrastructure, we reduce fossil fuel use, improving air quality and supporting climate resilience in cities and communities, which helps them meet their climate adaptation and resource efficiency goals.
6. SDG 12 (Responsible Consumption and Production): Eco Wave Power promotes the efficient use of abundant natural resources, harnessing ocean waves to produce clean energy, thus supporting responsible consumption and production practices globally.
7. SDG 13 (Climate Action): Our technology directly supports climate action by reducing emissions from fossil fuel-based energy sources, contributing to global efforts to mitigate climate change and transition to a low-carbon economy.

Alignment with National Climate Policies

Eco Wave Power's technology supports national climate policies by enhancing energy security and facilitating the transition to renewable energy. Our wave energy solution aligns with national and international commitments to reduce greenhouse gas emissions, promote sustainability, and protect vulnerable communities from climate impacts.

Measurable Impact:

Explain how you benchmark success and impact using scientific validation and quantifiable metrics where possible (e.g., peer-reviewed publications, Life Cycle Assessment (LCA) data, partnerships, net-zero targets, CO₂ reduction, resource efficiency, waste diversion rates, improved health outcomes, etc).

Measurable Environmental and Social Impact of Eco Wave Power

Eco Wave Power's wave energy technology has proven to deliver significant environmental and social benefits, aligning with global sustainability goals and national renewable energy strategies. Below are the key measurable impacts:

Environmental Results

1. Reduction in Carbon Emissions

Eco Wave Power's technology generates clean electricity from ocean waves, reducing dependence on fossil fuels. A 1MW power station with a 40% capacity factor can prevent approximately 2,477 metric tons of CO₂ emissions annually, contributing to global efforts to combat climate change.

2. Utilization of Existing Infrastructure

The system can be installed on existing marine infrastructure, such as breakwaters, minimizing ecological disruption. This avoids the need for new underwater cabling or mooring, protecting marine habitats and reducing environmental intrusion.

3. Minimal Marine Impact

Eco Wave Power's system has no negative impact on local ecosystems. The materials used, including biodegradable hydraulic fluid, are environmentally safe, ensuring no harmful contaminants enter the water, even in the event of an unlikely spill.

4. Minimal Land and Visual Footprint

The technology avoids the need for land conversion or deforestation. The systems are mounted on existing structures, making them nearly invisible from land and preserving the aesthetic integrity of coastal areas. Additionally, the operation is silent, ensuring no noise pollution.

Social Results

1. Job Creation and Economic Growth

The implementation of wave energy projects supports local employment, providing jobs in engineering, construction, and maintenance, while fostering skills development in the renewable energy sector.

2. Energy Security and Independence

By diversifying the energy mix, Eco Wave Power enhances energy security, providing a reliable, renewable energy source that complements intermittent resources like solar and wind.

Conclusion

Eco Wave Power's wave energy technology offers tangible environmental and social benefits, advancing sustainability, energy resilience, and climate action through innovative, renewable solutions.

Current Stage & Market Potential:

Describe the current stage and potential for scaling your solution to new markets, industries, or geographies. If any, include details on market demand, regulatory considerations, barriers to scale, adoption strategy and long-term sustainability.

Current Stage of Development

Eco Wave Power (EWP) is in a dynamic growth phase, demonstrating its ability to scale wave energy technology to new markets and industries. The company's wave energy

conversion systems have been successfully integrated into the grid in locations such as the Port of Jaffa in Israel and Gibraltar, where it has accumulated nearly six years of operational experience. In August 2023, the Jaffa Port project became the first wave energy project to connect to Israel's national grid, marking a major milestone in the region's energy transition.

Market Demand and Opportunities

Wave energy is gaining global attention as countries seek to diversify their energy mix and meet sustainability goals. The U.S. Department of Energy estimates that wave energy along U.S. coastlines could generate up to 2,640 TWh annually, which is nearly 64% of the country's total electricity generation. The global wave energy market is valued at over \$1.08 trillion annually, with onshore wave energy representing \$432 billion of that total. This presents a significant opportunity, particularly in the U.S., with its vast coastlines and growing renewable energy mandates. Eco Wave Power has already secured strategic partnerships, such as with Shell MRE for the Port of Los Angeles project, demonstrating its capacity to tap into this market.

Scaling Strategy and Regulatory Considerations

EWP is actively pursuing opportunities in high-potential regions, with upcoming projects in Portugal, Taiwan, and India. The company has secured essential permits, including the Nationwide Permit from the U.S. Army Corps of Engineers for the Los Angeles project, ensuring regulatory compliance and clearing the path for future installations. Additionally, a 20 MW project at the Port of Leixões in Portugal is scheduled to begin in 2025. These efforts highlight Eco Wave Power's strategy for global expansion and scaling of its technology.

Barriers to Scale and Adoption Strategy

Despite the promising market potential, scaling wave energy technology faces challenges such as regulatory complexities, infrastructure limitations, and capital investment requirements. Eco Wave Power overcomes these barriers by navigating complex regulatory environments and building strong local partnerships. Its strategy focuses on leveraging existing infrastructure, such as breakwaters and port facilities, to minimize costs and environmental disruption. Moreover, Eco Wave Power's modular and scalable technology reduces implementation time and cost, accelerating the adoption of wave energy solutions.

Long-Term Sustainability

Eco Wave Power is committed to long-term sustainability by promoting clean energy, reducing emissions, and enhancing global energy resilience. The company's projects, including those in Israel, the U.S., and Portugal, are designed to integrate seamlessly

into local energy grids, providing a reliable and renewable source of power. As renewable energy policies evolve and the world shifts toward decarbonization, Eco Wave Power is well-positioned to be a key player in the global transition to clean energy.

Staff and Advisors:

Describe your team's expertise (e.g., academic standing, intellectual property contributions, research collaborations, and professional communications). Highlight the team's role in innovation, policy influence, and industry leadership.

Inna Braverman, Founder and CEO of Eco Wave Power, co-founded the company at just 24 years old. Under her leadership, Eco Wave Power installed its first grid-connected wave energy array and developed a strong project pipeline of 404.7 MW. Inna's innovations in clean energy have earned global recognition, including being named one of Wired Magazine's "Females Changing the World" and Fast Company's "Most Creative People in Business." She also received the United Nations Global Climate Action Award. Inna holds a BA in Political Science from Haifa University and has authored 18 patents registered in Israel, the U.S., and Europe. She has played a key role in shaping marine energy policies, including the Marine Energy Technologies Acceleration Act, a \$1 billion investment to advance marine energy.

David Leb, Co-Founder, provided the initial \$1 million investment in 2011, demonstrating early confidence in the potential of wave energy. A serial entrepreneur and angel investor, Mr. Leb has made successful exits in sectors such as medical, blockchain, and real estate. He holds several patents for advertising and computerized platforms.

Hilary E. Ackermann, Advisory Board Member, is a leader in energy sustainability and risk management. She serves on the Board of Directors of Vistra Energy, chairing the Sustainability and Risk Committee. With over three decades of experience, she has previously served on the boards of Dynegy Inc., Credit Suisse, Apollo Investment Corporation, and was the Chief Risk Officer of Goldman Sachs Bank USA.

Aharon Yehuda, Chief Financial Officer, is a Certified Public Accountant with a B.A. in Economics and Accounting and an M.B.A. from Tel Aviv University. With a decade of experience in advisory and audit services, he has guided Eco Wave Power through strategic financial growth and capital market engagement.

Ran Atias, VP Engineering, holds a Master of Engineering in Mechanical Engineering from Technion, Israel, and has over 15 years of engineering experience. He has managed engineering teams across Israel, Spain, and Australia, specializing in materials engineering, production processes, and product development.

Emil Agakolayev, Project Manager and Mechanical Engineer, holds a BSc in Mechanical Engineering from Ort Braude College, Israel, with eight years of experience in engineering and project management. He ensures the seamless deployment of Eco Wave Power's technologies.

Yuval Shavit, Mechanical Engineer, graduated with a BSc in Mechanical Engineering from Monash University, Australia, bringing five years of experience in manufacturing, feasibility studies, and value engineering to the team.

Aleksi Tretiakov, Electrical Engineer, holds a Specialist Degree in Power Engineering from Tavria State University, Ukraine, with eight years of experience in electrical engineering. He ensures the development of efficient and robust energy systems for Eco Wave Power.

Eden Lagnado, Executive Corporate Affairs Manager, holds a B.S. in Environmental Science from the University of Texas. She oversees corporate strategy and business development initiatives, providing executive support to the CEO and ensuring effective communication within the organization.

Financial Structure:

Describe how your innovation is funded and sustained (e.g., key investors, funding sources, financial stakeholders, royalties, grants, revenue-sharing agreements, strategic partnerships such as academic institutions, equity groups, corporate alliances, and angel investors, etc.).

Eco Wave Power's innovation is primarily funded through the proceeds of its Initial Public Offering (IPO), which has provided the company with the financial resources necessary to support its growth, development, and global expansion. This funding model has allowed Eco Wave Power to advance its wave energy technology and execute projects, such as the grid-connected installations at Jaffa Port in Israel and ongoing initiatives in the U.S., Portugal, and other global markets.

In addition to the IPO proceeds, Eco Wave Power has secured multiple grants that support its research, development, and commercialization efforts. These grants include significant contributions from various governmental and institutional sources, such as:

- Iliad Grant (part of the European Green Deal): This grant supports Eco Wave Power's ongoing efforts to contribute to the European Union's renewable energy transition, with a focus on reducing carbon emissions and achieving sustainable energy goals.
- Innovate UK: A funding program designed to support innovative technology companies in the U.K., Innovate UK has enabled Eco Wave Power to accelerate its wave

energy development and expand its reach in the region.

- The Israeli Chief Scientist of Energy: Through this program, Eco Wave Power has received financial support from the Israeli government, underscoring the country's commitment to advancing renewable energy technologies.
- European Regional Development Fund (ERDF): Eco Wave Power has also benefited from the ERDF, which provides funding for projects that promote innovation and sustainable economic development within the European Union.

These funding sources, combined with strategic partnerships with stakeholders like EDF Renewables, Shell MRE, Bharat Petroleum (a Fortune 500 Governmentally owned company in India) and other corporate alliances, have been essential in enabling Eco Wave Power to scale its technology and pursue new opportunities. By diversifying its funding streams, Eco Wave Power ensures a stable financial foundation for continued growth, while maintaining its focus on long-term sustainability in the renewable energy sector.

Through these multiple sources of funding, Eco Wave Power continues to advance its innovative technology and expand its global footprint, positioning itself as a key player in the clean energy transition.

Regulatory Compliance & Certifications (Optional Uploads):

If appropriate, provide any regulatory approvals, environmental certifications, or compliance documents demonstrating adherence to sustainability standards (e.g., ISO 14001, B Corp Certification, LEED, WELL, SBTi commitments, REACH, USDA, etc.).

N/A

Community & Social Impact:

Explain how your innovation benefits local communities, underserved populations, or public health (e.g., job creation, social equity, environmental justice, improved quality of life, tourism, etc.).

Eco Wave Power's technology provides significant benefits to local communities, underserved populations, and public health by delivering clean, renewable energy, fostering economic growth, and supporting environmental sustainability.

Energy Access and Affordability

Eco Wave Power offers a sustainable solution for coastal and island communities that often struggle with high electricity costs and limited grid access. Many of these communities rely on expensive and polluting diesel generators for power. By integrating wave energy into the local energy mix, Eco Wave Power reduces dependence on fossil fuels, lowers electricity costs, and enhances energy security.

Environmental and Public Health Benefits

By reducing reliance on fossil fuels, Eco Wave Power directly contributes to lower air pollution levels, improving public health. Diesel-generated electricity releases harmful pollutants that contribute to respiratory diseases and other health problems. The adoption of clean wave energy helps mitigate these risks, fostering healthier communities.

Furthermore, Eco Wave Power's technology does not disrupt marine ecosystems. Unlike other renewable energy solutions requiring large land areas or underwater infrastructure, Eco Wave Power attaches its system to existing marine structures, preserving coastal and ocean environments. This ensures that local fisheries, marine biodiversity, and tourism-dependent economies remain unaffected.

Job Creation and Economic Growth

The development and deployment of Eco Wave Power's technology stimulate job creation in multiple sectors. Throughout the different project phases—licensing, feasibility studies, environmental impact assessments, and detailed planning—new direct and indirect employment opportunities emerge.

A wide range of professionals, including mechanical, hydraulic, civil, electrical, and automation engineers, are needed for system design and implementation. During construction, the project generates jobs for local civil engineers, welders, electricians, and technical workers. Once operational, wave energy stations require ongoing maintenance, providing long-term employment for technicians and support staff for at least 25 years—the expected lifespan of the stations.

A 20 MW wave energy project can create approximately 240 jobs, while a pipeline of 404.7 MW can generate nearly 4,900 jobs. Scaling up to 100 GW of ocean energy could establish an entire new industrial sector in Europe, potentially supporting 400,000 skilled jobs across the supply chain.

Boosting Local Economies and Tourism

Eco Wave Power installations can enhance local economies by creating new business opportunities. Lower energy costs attract investment, allowing businesses to thrive. Additionally, clean energy infrastructure can boost eco-tourism, drawing visitors

interested in sustainable innovation.

By integrating wave energy into local energy grids, Eco Wave Power strengthens communities, fosters economic resilience, and promotes environmental justice. The technology offers a sustainable, long-term solution to energy challenges while supporting job creation, public health, and climate change mitigation.

Document Uploads: Supporting Data & Evidence and References:

Include letters of support, endorsements, or formal commitments from third parties, such as pilot partners, policymakers, academic institutions, news articles, or industry leaders, validating your approach and impact. Provide quantifiable metrics, case studies, third-party assessments, or regulatory approvals to support your application. Please label all files with your company name and asset name.

N/A