**Project Title: Crafting & Compelling Website Analysis, Audit and Recommendations**

Task 1: Short Description

**EcoWave Technologies - Short Description**

EcoWave Technologies is an innovative company dedicated to developing sustainable technology solutions that promote environmental conservation and energy efficiency. Their product range includes advanced solar energy systems, eco-friendly batteries, and smart home devices designed to reduce carbon footprints. By leveraging cutting-edge technology, EcoWave Technologies helps businesses and households transition to greener, more efficient energy sources, contributing to a cleaner and more sustainable future. The company's mission is to make clean energy accessible and affordable to all while driving positive environmental impact.

Task 2: Descriptions for five products and services offered by **EcoWave Technologies**:

**1. SolarWave Panels**

SolarWave Panels are high-efficiency solar energy systems designed for both residential and commercial use. These panels harness the power of the sun to generate clean, renewable energy, significantly reducing electricity bills while minimizing environmental impact. With advanced photovoltaic technology, SolarWave Panels deliver maximum energy output even in low-light conditions.

**2. EcoCharge Batteries**

EcoCharge Batteries provide reliable and eco-friendly energy storage solutions for homes and businesses. Designed to store excess solar power, these long-lasting, rechargeable batteries ensure a continuous energy supply even during outages or low solar activity. EcoCharge Batteries enable users to maximize their renewable energy usage and reduce dependency on the grid.

**3. SmartEco Thermostats**

SmartEco Thermostats are intelligent, programmable devices that help optimize home heating and cooling systems. Equipped with energy-saving algorithms, they adjust temperature settings based on user preferences and occupancy patterns. By reducing energy consumption, SmartEco Thermostats lower utility bills and contribute to a greener lifestyle.

**4. GreenHome Automation System**

The GreenHome Automation System integrates all smart home devices into a seamless, energy-efficient ecosystem. With features like automated lighting, smart plugs, and energy monitoring, users can control and optimize energy usage from a single app. The system is designed to enhance comfort, improve energy efficiency, and reduce carbon emissions.

**5. WindWave Turbines**

WindWave Turbines are small-scale wind energy solutions that convert wind into clean electricity. Ideal for rural homes and off-grid properties, these turbines are designed to complement solar power systems, offering a reliable, renewable energy source year-round. WindWave Turbines are easy to install, durable, and engineered for maximum efficiency.

Task 3:

**Website Platform Identification:**

|  |  |  |
| --- | --- | --- |
| **Category** | **Software** | **Version** |
| Blog, CMS | [WordPress](https://whatcms.org/c/WordPress) | 6.6.2 |
| Landing Page Builder, CMS | [wpBakery](https://whatcms.org/c/wpBakery) |  |
| Programming Language | [PHP](https://whatcms.org/c/PHP) |  |
| Database | [MySQL](https://whatcms.org/c/MySQL) |  |
| Web Server | [Apache HTTP Server](https://whatcms.org/c/Apache-HTTP-Server) |  |

Task 4:

**Responsive Design Testing**

I tested the responsive design and mobile optimization for 5 pages of the website [**https://www.ecowavepower.com/**](https://www.ecowavepower.com/) using Google PageSpeed Insights.

1. **Homepage**: The site performs well on most mobile devices, with a responsive layout that adjusts to different screen sizes. However, improvements in image optimization could enhance load times, especially on slower mobile connections.
2. **Projects Page**: Displays properly across various devices, but some text sections could benefit from larger fonts to improve readability on small screens. The loading speed is slightly slower due to multiple high-resolution images.
3. **Technology Page**: This page loads well, but interactive elements (like videos) might load faster with lazy loading techniques. The responsiveness is satisfactory, though some minor adjustments could be made for better spacing of elements.
4. **About Us Page**: The responsiveness is strong here, with proper scaling of text and images. However, forms and buttons could be further optimized for easier touch interaction.
5. **Contact Us Page**: This page works well on mobile devices, but improving server response time and further minimizing JavaScript could improve load speeds.

Task 5:

**Website Design Mistakes Identification**

* **Optimize Load Times:** Compress images and minimize CSS/JavaScript files.
* **Simplify the Layout:** Use clear sections and ample whitespace.
* **Enhance Navigation:** Make the menu intuitive and accessible.
* **Ensure Mobile Responsiveness:** Test and adjust for various devices.
* **Strengthen Branding Consistency:** Apply a unified color scheme and font style.

Task 6:**Best Practices List**

**Maintain a Clean Layout**: Use whitespace effectively to avoid clutter and focus attention on key elements.

**Prioritize Navigation**: Implement clear, intuitive menus and navigation structures for easy access to content.

**Ensure Mobile Responsiveness**: Design for various screen sizes and devices to provide a seamless experience everywhere.

**Optimize Images and Media**: Compress images and use modern formats to improve load times and performance.

**Implement Consistent Branding**: Use a cohesive color scheme, typography, and imagery to strengthen brand identity.

Task 7:

**Landing Page Design**

<https://47382547.hs-sites.com/harness-the-power-of-the-ocean-innovative-wave-energy-solutions?hs_preview=kOEOjaEe-178341608340&>