Rolsa Technologies requested the development of a web-based digital solution that provides customers with information about green energy products and guidance on reducing their carbon footprint. The system was also required to support users in scheduling consultations and installations, as well as calculating and tracking their energy usage and overall carbon footprint. In addition, the client specified that users should be able to register accounts to manage their consultations and personal data securely, and that the platform must include accessibility features for users with additional needs.

The proposed web solution was developed with these client requirements and user needs in mind. It is freely accessible online, and compatibility across modern web browsers ensures users can access it via desktop and mobile devices, including those running Android and iOS operating systems.

The digital platform offers two levels of access: a basic free tier, which includes general information about green technologies and how to reduce environmental impact, and a full membership tier, which includes advanced features like personalised carbon footprint reports, energy usage tracking, and priority access to scheduling tools. Clear on-screen guidance was implemented to assist users through the registration and upgrade process. Once users upgrade, they receive an automated email confirming their membership, outlining how to access premium services, and addressing relevant legal and ethical standards, including data protection.

The user interface is designed to be accessible and easy to navigate, using high-quality visual content and intuitive layout. Accessibility support, such as screen reader compatibility and adjustable font sizes, was implemented to meet the needs of users with visual impairments and aligns with industry best practice.

The platform features a carbon calculator tool, allowing users to input energy usage data and receive immediate feedback through daily, weekly, or monthly summaries displayed in colour-coded graphs and text. No advanced technical knowledge is required to use the system, and on-screen prompts assist users through all major tasks.

A key feature is the inclusion of educational content related to solar energy, EV charging, and smart home energy systems. This content was verified for copyright compliance and licensed appropriately. External links to trusted green technology sources and government initiatives were also added, allowing users to explore related advice, grants, and regulatory support.

In response to market research, integration with social media platforms was also included to help promote Rolsa Technologies' services and reach a wider audience. Users are encouraged to share tips, read posts, and engage with sustainability-related discussions through integrated blog and forum areas.

Testing feedback showed that users found the solution to be professional, secure, and informative. The registration and login system was secured through encrypted protocols, and all transactions, including any payments for premium features, are processed securely, complying with data protection regulations.

A walkthrough video was created to help users maximise their use of the website. This includes explanations on how to use tools such as the carbon calculator, how to book consultations, and how to customise energy usage tracking reports based on the systems they have installed at home.

Testers praised the platform's user-friendly interface, accessibility, and its role in educating users about sustainable living. It was also noted that future improvements could include support for integration with smart devices such as home energy meters or EV chargers, allowing automatic data syncing and real-time tracking.

The solution successfully meets both functional and non-functional requirements, as well as legal, ethical, and accessibility standards. It provides Rolsa Technologies with a scalable, professional system that promotes customer engagement, supports sustainability goals, and positions the company as a forward-thinking provider in the green technology sector.