

CASE STUDY



GO GREEN WITH ENVIROSTEP ONLINE SELF-ASSESSMENT

CUSTOMER: **MINISTRY OF ECONOMIC DEVELOPMENT**

As Kermit the Frog famously said, it's not easy being green. But it's a lot easier with Envirostep, a free web-based self-assessment tool for small to medium sized enterprises (SMEs).

Envirostep was built by Optimization for the Ministry of Economic Development and is designed to encourage businesses to take practical steps that benefit both the environment and their bottom line. Envirostep provides SMEs with a simple web-based questionnaire that assesses their environmental sustainability performance, then helps them to make improvements and gain business benefits by doing so. After completing the web-based assessment, users automatically receive a customised report containing a score, profile, comparison with the national average, recommendations for improvement and links to further information. They can also upload the recommendations into the Envirostep Action Plan, which helps them to implement improvement actions and monitor progress. Once an initial benchmark is established, businesses can use Envirostep to conduct further assessments.

Web-based solution maximises ease-of-use

After viewing an online business self-assessment system we developed for NZTE and the Business Capability Partnership, MED approached us for a solution that was conceptually similar (web-based, simple to manage and intuitive to use), but which took a different development path that made the most of new Microsoft technologies including the ASP.NET MVC development framework.

"We found Optimization's team to be flexible, resourceful and communicative, which made it a pleasure to work with them," says Howard Markland, Senior Adviser on the Ministry of Economic Development's Eco-Verification Team. "Almost everyone who has used Envirostep comments on its ease of use and the practicality of its recommendations, and that has been critical to engaging people in the assessment process."

BUSINESS DRIVERS

- Help small and medium-sized businesses assess and improve environmental sustainability without adding additional costs or administrative burdens
- Encourage uptake by making the assessment tool simple and attractive to use
- Enable businesses to generate detailed reports that show their current levels of sustainability and also provide clear recommendations and resources for improvement
- Build in flexibility to allow the system to be adapted for new requirements
- Manage long-term costs by leveraging existing infrastructure and skills





Flexible design meets diverse business needs

"We're pleased with the modular format and the ease with which Envirostep can be extended or modified," says Markland. "This enables us to use the same platform for a diverse range of applications, and reduces our reliance on input from specialist technical staff."

The flexible design framework has attracted the attention of larger organisations that see potential in adapting the tool for performance assessment and reporting across their corporate structure and supply chains. Those interested to date have included large corporate organisations, councils, the military, certification bodies and volunteer groups.

Envirostep comprises a backend database that supports the creation of custom questionnaires, and a web-based application running on the Envirostep public website. The Questionnaire Definition Tool is used by MED to set questions on key environmental sustainability issues, set weightings for each answer, create contextual links to further information, provide recommendations, and convert them into actions for future improvement. Users work through it at their own pace and can access their customised assessment report at any stage. Users also have the option to upload the recommendations into the Envirostep Action Plan.

Collaborative approach delivers regular business outcomes

Envirostep evolved through constant collaboration between MED and our development team, with an agile development approach used to rapidly and regularly deliver business outcomes. The initial set of requirements defined basic functionality, although this was substantially refined and augmented as the project progressed. This agile approach has resulted in a very tight and efficient process where the right software was developed without requiring extensive meetings and documentation to determine the requirements.

New Microsoft technologies for standards-compliance

The website application is written in C# using the ASP.NET MVC framework. The MVC framework was chosen because it enabled us to more easily deliver standards-compliant web pages and meet eGov standards. The jQuery Javascript library was selected for making the web pages more interactive. For example, as each question is answered the database is updated and the user interface refreshed to show progress through the questionnaire. 1000minds decision support software was also used to provide an objective and defensible basis for setting the weightings used in the assessment tool.

Envirostep can be accessed at www.eco-verification.med.govt.nz/envirostep.

WE DELIVERED:

- Software architecture and development of a web-based self-assessment system
- Flexible design that allows MED to make changes without needing input from specialist technical staff
- A modular framework that can be easily modified and extended for other applications, such as health and safety assessments or online customer qualification
- A collaborative, agile approach that enabled the design and functionality to evolve during the development process while still ensuring delivery to budget and timeframes
- On-going support and enhancements

TECHNOLOGIES AND TOOLS

- ASP.NET MVC framework to deliver standards-compliant web pages and meet eGov standards.
- Microsoft Windows Server
- Microsoft SQL Server
- jQuery Javascript
- 1000minds decision support software

Want to know more? Talk to our team.

WELLINGTON BRANCH MANAGER
James Roberts +64 4 472 7218

AUCKLAND BRANCH MANAGER
Verdon Kelliher +64 9 309 7918

Email us: enquiry@optimization.co.nz

T +64 4 472 7218
F +64 4 472 7219
www.optimization.co.nz

L2, Optimization House
1 Grey Street
PO Box 10616
Wellington 6143
New Zealand

©Optimization NZ Ltd 2009

