

## **Envirostep – a New Approach to Business Environmental Management**

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### **ABSTRACT**

A wide range of environmental management schemes are available to help businesses assess and manage their environmental performance. However, their use by small and medium sized enterprises (SMEs) in New Zealand has been limited by a number of barriers and an absence of compelling drivers. Consequently, many small businesses are unaware of their environmental risks and opportunities, or are not managing them in a systematic way.

Environmental management systems (EMS) were developed to help businesses manage their environmental impacts and risk. They can also help businesses to reduce their operating costs through improved resource efficiency, and provide an environmental credential that can be used for competitive advantage or market access.

ISO 14001:2004 is an internationally recognised standard for business EMS. It is widely applied by major companies around the world as a means of communicating business environmental performance to others, and forms the basis of a number of environmental management schemes available to businesses. The uptake of ISO 14001 certifications by New Zealand businesses is relatively low, and is dominated by our major exporters. More worryingly, the number of New Zealand businesses certified to ISO 14001 has been in decline since 2004. As ISO 14001 certifications continue to rise strongly overseas, our businesses may have difficulty accessing environmentally discriminating markets or supply chains unless they have recognised environmental credentials.

Overseas studies have shown that despite the trade globalisation, EMS uptake is principally driven by domestic drivers (Kolln K & Prakesh A, 2002). Recent research in New Zealand has indicated that major barriers to EMS uptake by small and medium sized enterprises (SMEs) include complexity, confusing options, participation cost and a lack of resources required for implementation. There have also been few incentives for uptake, as neither regulators nor procurers in New Zealand formally recognise EMS and few markets actively differentiate between suppliers on the basis of environmental performance.

As many of our SMEs currently have a less than satisfactory level of environmental performance, the lack of an effective EMS exposes them to easily managed risks, undermines opportunities to reduce their operating costs, and limits their opportunity to trade on their environmental credentials. This also represents a risk exposure for larger organisations that are supplied by SMEs, as their environmental reputation could suffer as a consequence of poor performance by a supplier.

The government's Eco-verification Initiative is helping SMEs to measure and improve their environmental performance, and to communicate their achievement via defensible environmental credentials. This Initiative is led by the Ministry of Economic Development, and one deliverable has been the development of a new business

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<sup>1</sup> Views and opinions expressed in this paper are those of the author, and do not necessarily represent the position of the Ministry of Economic Development or the government.

environmental assessment and reporting tool called Envirostep, which was launched on 15<sup>th</sup> July 2009.

Envirostep is a free entry-level self-assessment tool, comprising a questionnaire, a performance report, recommendations for improvement and over 400 links to other relevant websites. Recommendations can also be uploaded into an action plan, which helps users implement and track improvement actions.

Envirostep is designed to benefit both business and the environment. It helps SMEs to take easily achievable actions that can reduce their operating costs while also improving their environmental performance. Envirostep can also be tailored to the needs of larger organisations interested in assessing and reporting the environmental performance of their business units, suppliers or members etc. It is also freely available to business support groups and service providers, who can use it as a resource for their business support activities.

Reaction of the business community to Envirostep has been very encouraging, and MED will continue to support and monitor its application, and is working toward a target of 10,000 registered users by mid-2010. This paper provides a background to the design, development and delivery of the Envirostep tool, explores its use by business and reviews feedback from early adopters.

# 1. INTRODUCTION

## 1.1 The Eco-Verification Initiative

The Ministry of Economic Development (MED) Eco-verification Initiative originated as one of the six themes in the government's sustainability six-pack announced in November 2007 (MED, 2007). One focus area for the Eco-verification Initiative has been to enable businesses to quantify and substantiate improvements in their environmental performance (MED, 2008). MED has since emphasised the uptake of environmental management systems as an effective way for businesses to assess, improve and report their environmental performance and achieve recognisable environmental credentials.

The Eco-verification Initiative also has a particular focus upon small and medium sized enterprises (SMEs), as they appear less able than larger organisations to access and implement effective EMS. Table 1 indicates that 97% of businesses in New Zealand are SMEs (Statistics NZ, 2008), which are defined as having less than 20 employees (Ministry of Economic Development, 2008). Note that this definition may differ from that used in other countries.

**Table 1 Size Distribution of New Zealand Enterprises**

Employees	Enterprises <sup>2</sup>
0	67.8%
1-5	21.3%
6-19	7.9%
20-99	2.5%
100+	0.5%
Total	471,101

Source: Statistics NZ (2008)

## 1.2 Business Environmental Performance

A national survey in 2005 indicated that 36% of New Zealand firms had measures<sup>3</sup> in place to reduce their environmental impact (Statistics NZ, 2005). Although at first glance this appears encouraging, it does not necessarily mean that measures implemented were effective, or that the businesses were meeting minimum compliance standards.

The environmental compliance regime in New Zealand underwent substantial change in the 1990's. The Resource Management Act 1991 (RMA) and Hazardous Substances and New Organisms Act 1996 (HSNO) were introduced to rationalise environmental regulation, with the objective of improving environmental performance and reducing risk. The regulatory framework for business environmental performance is still considered overly complex by many firms. SMEs in particular struggle to understand environmental regulatory requirements (Small Business Advisory Group 2006 & 2008, Research New Zealand 2009), and in the absence of such understanding, non-compliance is likely to be widespread. In its 2007/8 report on resource consent compliance, the Ministry for the Environment (MfE) identified that although 84% of resource consent holders complied with their conditions, regulators received 161,257 complaints about alleged breaches of the RMA and 1,530 infringement notices were issued during the year (MfE, June 2009). SMEs exhibit

<sup>2</sup> Enterprises are defined as businesses with a GST turnover >\$300,000pa

<sup>3</sup> 'Measures' include recycling, triple bottom line reporting, environmental certification, and ISO14001 management systems.

high rates of non-compliance with the RMA (MfE 2008) and HSNO (Department of Labour 2007). A survey of HSNO regulatory officers revealed that only 10% of sites met regulatory requirements on the first compliance assessment visit, and that 42% of sites requiring test certificates had not applied for them (NZ Institute of Hazardous Substances Management 2008).

Despite indications of widespread SME non-compliance with environmental regulatory requirements, there is little incentive for businesses to act where they perceive little risk of detection and enforcement action (MfE 2008, Department of Labour 2007), and face little demand for environmental credentials from the New Zealand market. However, the growing use of environmental credentials in some of our key export markets (European Union, 2009) is likely to increase the demand for New Zealand businesses to implement some form of EMS in the future.

### **1.3 Environmental Management Tools**

There are a number of environmental management schemes<sup>4</sup> available to help New Zealand businesses to manage their environmental performance, some of which include formal conformance assessment and certification. Available schemes include:

- Certification to the international standard ISO 14001:2004, either directly, or via proprietary implementation schemes such as EnviroMark and Eco-Warranty. A total of 1,329 copies of ISO 14001 had been sold in New Zealand at the time of writing (Standards NZ 2009). The International Standards Organisation (ISO) is currently drafting ISO 14005, which is a stepped EMS model developed for small<sup>5</sup> businesses.
- Sector-specific environmental management schemes (e.g. Qualmark Green, Green Globe and the Marine Stewardship Council's sustainable fisheries scheme).
- Composite schemes which integrate safety, health and environment (e.g. Responsible Care, the Global Environmental Management Initiative and Loss Control Management Systems).
- Sustainability and corporate social responsibility schemes, where environment is one of many factors considered (e.g. The Natural Step, the Get Sustainable Challenge, St James Corporate Responsibility Index).
- Thematic schemes (such as carbon footprinting, waste exchange initiatives and product stewardship schemes).

It should be noted that ecolabels are excluded from the scope of this paper, as they differ significantly from EMS schemes. Ecolabels are credentials that describe the environmental attributes of a product or service, whereas EMS schemes are a credential that describes organisational performance.

Some EMS schemes have been available to New Zealand organisations for several years, such as EMAS, Enviro-Mark, EnviroSmart, the Get Sustainable Challenge, the PRINCE performance accreditation scheme, the Loss Control Management System and Green Globe. Several other schemes have become available more recently, including Get Sust, The Natural Step, Sustainable Business Management, Grow Me the Money, Eco-Warranty, EWof and GreenBizCheck, and new schemes continue to

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<sup>4</sup> In this paper, 'Scheme' refers to an environmental management approach that supports organisational performance and requires active participation. It specifically excludes ecolabels (which are specific to products or services), memberships and registrations.

<sup>5</sup> Which for ISO means businesses with less than 100 employees.

emerge. In addition, there are also several regional schemes that are currently available, including Target Sustainability (in Canterbury), eMission (in Wellington) and Carbon Save (in the Waikato). Some overseas schemes could also potentially be applied in New Zealand, including ISO-easy and BS8555 (with its STEMS and Acorn implementation schemes).

Table 2 summarises current business participation in some of the more prominent environmental management schemes in New Zealand for which data were available. This shows that formal participation in such schemes represents only 0.5% of New Zealand's 471,100 businesses. It should be noted that many businesses may be using an effective EMS without having their conformance certified (and so are not included in participation statistics), while many businesses are unlikely to pose any significant risk to the environment and so would not require an EMS, or benefit from having one. MED estimates that less than less than 3% of New Zealand businesses that could benefit from an EMS scheme currently have one in place<sup>6</sup>.

**Table 2 Indicative Uptake of Environmental Tools & Schemes**

Scheme	Participants (at 1 August 2009)
ISO 14001:2004	150
Enviro Mark	170
Eco-Warranty (not yet launched)	34
Green Globe	61
Target Sustainability	120
PRINCE (Responsible Care NZ)	115
Get Sustainable Challenge	186
Qualmark Green	1,700

**Source:** Data obtained via scheme websites & administrators

#### **1.4 EMS Trends**

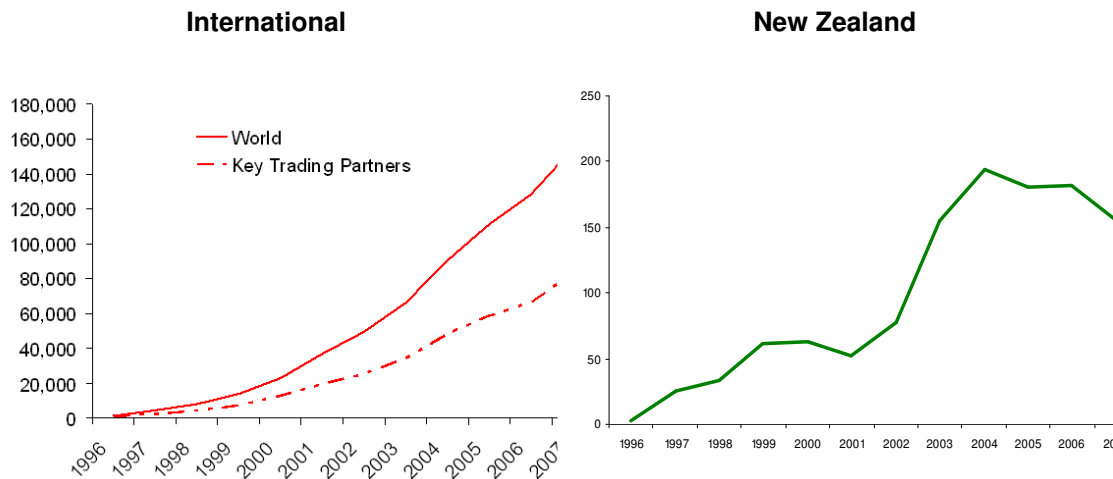
ISO 14001 is the most widely applied EMS certification standard in Australasia (Zutshi & Sohal 2004). Figure 1 illustrates the growing uptake of ISO 14001 certifications around the world and with New Zealand's key trading partners (Australia, USA, UK, Germany, Japan, South Korea and China). Figure 1 also illustrates how the number of New Zealand firms certified to ISO 14001 has declined 20% since 2004, which is contrary to trend amongst our major trading partners, where certifications have increased 72% over the same timeframe.

ISO 14001 and many EMS schemes require users to consider the environmental aspects of their suppliers, which can result in a demand for environmental reporting and credentials down supply chains. This is likely to increase the demand for suppliers to assess and communicate their environmental performance and to demonstrate that they have effective measures in place to manage known issues and anticipated risks. Although only approximately 20% of New Zealand SMEs trade internationally (Statistics NZ 2008), many more are in export supply chains, and so have the potential to either boost or tarnish an exporter's image.

<sup>6</sup> This figure is based on the assumptions that: (a) Tools and schemes listed in Table 2 are EMS, (b) only 30% of businesses could benefit from an EMS, and (c) for every organisation certified to ISO 14001, 10 organisations have implemented some form of EMS without certification.

Overseas interest in 'food miles' and 'buy local' highlighted government awareness that although our larger exporters may have an EMS in place, this is not always the case for businesses that make up their supply chains in New Zealand.

**Figure 1 Comparison of ISO 14001 Certification Trends**



Key trading partners considered are Australia, China, South Korea, Japan, USA, UK & Germany.

### 1.5 Barriers to EMS Uptake

There are drawbacks to the wide range of EMS schemes available to businesses in New Zealand. Diversity makes it difficult to compare the environmental performance of one business with another where they use different environmental management schemes. It is also difficult for individual firms to select an appropriate EMS, as few are able to differentiate between available options, select an appropriate starting point, or understand how to best progress from one tool to another.

The majority of environmental management tools currently available in New Zealand require a financial commitment from users, either via a membership fee, purchase price or participation costs. In most cases this can exceed \$1,500 per year, once training, audits, certification and access to supporting resources are taken into consideration.

Massey University's Centre for SME Research survey of 59 New Zealand firms (Cassells 2008) revealed that the main barriers to uptake of EMS were high cost, confusing choice and lack of resources to implement an EMS, and that the barriers faced by SMEs were relatively greater than those for larger organisations. Other researchers have confirmed that SMEs are significantly less likely than larger organisations to have a certified EMS, due to the proportionally greater cost and effort associated with doing so (Zutshi & Sohal 2004).

Implementing an EMS can be considered to be an organisational innovation, so it is interesting to note the findings of the government's biennial business innovation survey (Statistics NZ 2008). This revealed that SMEs exhibited lower rates of innovation than larger organisations and that half of the SME respondents spent less than \$1,000 per year on innovation. Over 30% of SME respondents identified the main barriers to innovation were lack of management resources, implementation cost and lack of appropriate personnel. The survey also revealed that for SME's that did innovate, their main drivers were customer demand and revenue or productivity

gains, with much less emphasis on reducing energy consumption or environmental impact.

There are also many who question the value of the EMS approach, claiming that it is possible for a business to have a conformance certificate for its documented systems while having poor environmental performance, and there are compelling arguments both for (Wells, 2000) and against (Aragón-Correa & Rubio-López, 2007) their use. However, there can be little doubt that a systematic approach can improve business environmental performance where it takes into consideration all significant environmental impacts, compliance requirements, risk exposures and opportunities.

## **1.6 Drivers for EMS Uptake**

A number of high profile environmental disasters in the latter half of the 20<sup>th</sup> Century clearly demonstrated the possible adverse consequences of industrial activity, the most notorious being Love Canal in 1955 (Carson 1962), Minamata Bay from 1956 (Yukiko, 2006) the Torrey Canyon in 1967 (Cormack D, 1999), Flixborough in 1974 (Department of Transport, 1975), Sveso in 1976 (Fuller J G, 1979), Bhopal in 1984 (Browning J B, 1993) and Chernobyl in 1986 (Chernobyl Forum, 2005). Regulators in many countries subsequently strengthened their environmental compliance regimes to reduce the risk of future such incidents. At the same time, the business community began to develop a more proactive and systematic approach to environmental risk assessment, reduction and emergency response, which led to the first EMS schemes. Several larger corporations developed their own schemes, while the first widely recognised generic EMS models were the Chemical Industry Association's Responsible Care programme in 1985 (Brown CS, 2005) and BS7750 from the British Standards Institute in 1992 (Jackson SL, 1997), which was later replaced by ISO 14001 in 1996.

The business community has come to recognise EMS as an effective means for managing aspects of organisational risks. This is illustrated by the willingness of some overseas insurers to consider an organisations EMS when setting premiums (Voorhees J & Woellner R A, 1998), and by courts in some jurisdictions to accept an EMS as evidence in a due diligence defence (Wilson & McCutcheon, 1999).

Some businesses are also choosing to manage their environmental risk exposure by demanding performance assurances (such as EMS) from their suppliers, and actively favour those which demonstrate superior environmental performance (Wisner et al, 2005, Vachon & Klassen, 2006). Some New Zealand exporters have made substantial efforts to meet demand for environmental assurance from clients who have chosen to make environmental sustainability a key element of their market profile, with the supermarket chains Tesco, Waitrose, Walmart and Carrefour being particularly prominent in 2009. To support their market claims, these organisations are currently driving environmental standards along supply chains, which may require their suppliers to demonstrate formal credentials such as registrations, ecolabels, performance reporting systems or EMS (Campbell et al, 2000). Larger new Zealand sector groups have already responded to such growing pressures, with prominent examples being Zespri's 'Kiwigreen' orchard management system (Zespri, 2009), Fonterra's 'Clean Stream Accord' (Fonterra, 2003) and Qualmark's requirement for its members to complete its 'sustainable tourism assessment' (Qualmark Green).

Consumer expectation is another key driver for EMS uptake. A recent survey in Europe showed that consumer choice is more influenced by a product's environmental impact than its brand (European Union, 2009), although there was substantial variation in consumer attitudes between different countries.

## **1.7 EMS Delivery**

Most environmental management schemes currently available to businesses in New Zealand use a supported delivery approach, where users receive access to subsidies, consultancy advice, training, resources, networks or other support. Supported environmental management initiatives in New Zealand have traditionally struggled due to the small number of participants, limited availability of service providers and relatively high operating costs (to access professional services, proprietary tools, technical resources and independent certification). These constraints typically limit the delivery of supported schemes to a few hundred members, making them relatively expensive to implement. Even where schemes enjoy a subsidy, many SMEs do not consider them attractive business propositions (and even less so once the funding is removed).

## **2. ENVIROSTEP**

### **2.1 Consultation**

The Ministry of Economic Development's Eco-Verification Team consulted over 30 organisations in early 2008, in its attempts to better understand business needs and their reaction to past and present environmental management schemes. Those consulted ranged from SME owners, business groups and environmental service providers through to major corporations, scheme owners, certification and accreditation bodies, regulators, government departments and academics. MED also reviewed a number of publicly available web-based environmental and sustainability management schemes that were available at the time. This led to a conclusion that there was a gap in the market for an affordable yet credible tool that SMEs could easily access and use for entry-level environmental performance assessment and reporting.

### **2.2 Concept**

MED determined that the most appropriate means of filling this gap in New Zealand's EMS infrastructure was to develop a nationally recognised entry-level tool, which would introduce businesses to environmental management and let them see the benefits of taking action. It would need to introduce users to minimum performance requirements, show the business benefits of taking specific improvement actions, and take them to a point at which they could easily move on to a more sophisticated scheme should they wish to do so. It should also have the capability to incorporate more specific requirements, in the event that a sector or group wanted to make it more relevant to their needs.

To ensure minimal barriers for SMEs, it would be web based, free to access, easy to understand and quick to use, while providing practical advice that achieves a tangible improvement (ideally both financially and environmentally). All data provided by users would also need to be treated as confidential to encourage appropriate use. It was acknowledged that a web-based approach would not be available to the 7% of businesses without internet access (Statistics New Zealand 2008), but it was considered that the costs associated with other delivery models were prohibitive, and that internet accessibility will rapidly become a necessity for all businesses in the near future.

Users should be able to easily interpret the results, change their answers over time to reflect improvements made, and to monitor their performance trend. It should also be possible to communicate performance to others in a way that is widely understood. In

the event that users wanted formal recognition of their performance, there should be an option to validate or certify user performance.

Given the challenges experienced by many supported EMS schemes in New Zealand, a decision was made to take a mass market approach targeting 10,000 SME users, with no dependence upon funding following establishment, and no provision of ongoing user support. However, funders, service providers sector groups and others would be actively encouraged to build their services around the tool, thus providing support in response to perceived market demand.

MED was also aware that the current infrastructure of auditors and other service providers was not sufficient to meet the possible demand from a 10,000 member scheme. However, it was anticipated that demand for supporting services would grow over years, and that if the tool were 'pitched' at a relatively basic level, it would be possible for non-specialists to be competent providers of basic support services, thus strengthening the supporting infrastructure. The Ministry of Economic Development also recognised the inherent value in many existing environmental management schemes, and a design fundamental was to direct users to existing tools, providers, information resources, funding streams and networks wherever appropriate.

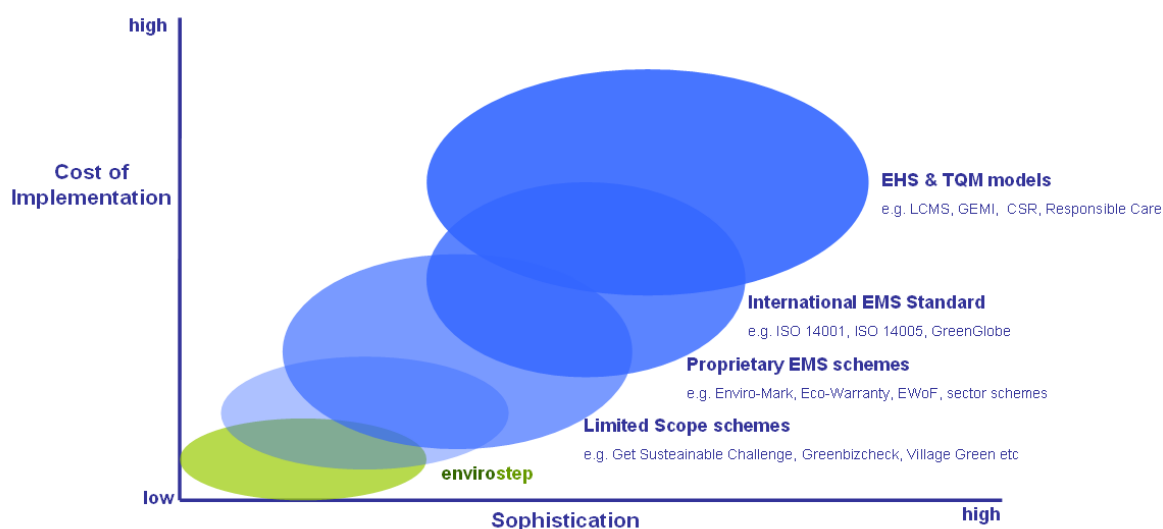
Although the original concept was for a sustainability assessment tool, an early decision was made to limit the scope to provide a basic environmental sustainability assessment (see Figure 2), with the potential to extend its scope to include social and economic sustainability should there be future demand.

Work to strengthen incentives for uptake focused upon helping SMEs appreciate the business benefits of uptake, and encouraging the influence of larger organisations which stand to benefit from standardised environmental performance reporting by the SMEs that make up their members, branches or suppliers. The prevailing financial crisis has dramatically reduced the likelihood of financial incentives from government, while substantial policy shifts would be required for government procurers or regulators to formally differentiate between SMEs by virtue of their environmental credentials. A frequently heard criticism from business is that neither procurers nor regulators give preference to those holding the government's own ecolabel (Environmental Choice NZ), despite the accolades it received overseas (DEFRA 2008).

### **2.3 Development**

The concept for a web-based business environmental assessment tool (BEAT) was presented back to many of the groups involved in the initial consultation, and received strong support from the majority. There was of course resistance from some with commercial interests in proprietary environmental management schemes, but once they appreciated the basic scope proposed and the intended scale of uptake, they realised that it was more likely to generate future business for their schemes rather than erode their client base.

**Figure 2 Envirostep Positioning Concept**



Given the strength and breadth of this support, it was agreed to proceed with development, and a software developer was commissioned to build a preliminary version. Meanwhile, the Eco-Verification Team continued its liaison with a range of organisations involved in improving SME environmental performance, to determine the questions that could be included in the tool. Eventual contributors of questions were the Ministry of Economic Development, Ministry of Transport, Automobile Association, New Zealand Transport Agency, Energy Efficiency and Conservation Authority, Water New Zealand and the Waste Minimisation Institute of New Zealand. The Ministry of Economic Development also developed numerous questions designed to assess the user's environmental management system, which was effectively a simplification of most of the elements of ISO 14001:2004.

Once a comprehensive suite of questions was defined, the Ministry of Economic Development convened an Evaluation Panel (see Table 3) to refine the questions and the weightings that would be assigned to all possible answers. The Evaluation Panel used 1000minds decision support software to provide an objective basis for assigning weightings for questions and categories. This process required a minimum of 80% consensus for a weighting to be confirmed, which is consistent with that required when establishing national standards. The Evaluation Panel also went on to refine the explanatory notes and recommendations that users would view in response to their answers.

**Table 3 Envirostep Evaluation Panel**

Organisation	Representative	Perspective
Ministry for the Environment	Andrew Walters	Government
Small Business Advisory Group	Robyn de Bruin-Judge	SME owner
Business New Zealand	Jacinta Syme	Business group
NZ Centre for SME Research	Martina Battisti	Academic
Tonkin & Taylor	Marje Russ	Practitioner
Landcare Research (NZ) Ltd	Charlie Bartlett	Practitioner
Sustainability by Design	Paul Barrett	Practitioner
Wellington Technical College	Bob Robinson	Practitioner

The confirmed questions were then built into a demonstration version of BEAT, comprising a generic web-based questionnaire and basic performance report. The majority of questions had a binary response option ('yes' or 'no'), although some required the user to select the most appropriate descriptor from a list (e.g. 'less', 'the same' or 'more'). Users also had the alternative to select 'don't know' or 'not applicable'. This was considered sufficient to generate a score that provides a reliable estimate of overall environmental performance, given the large number of questions, objective weighting and comprehensive range of environmental themes covered (assuming that appropriate answers are provided).

The Evaluation Panel used recognised experts and an objective process to assign weightings, which differentiates Envirostep from most other environmental assessment tools currently available and provides users with the assurance that their score is relevant and defensible, presuming of course that their answers are appropriate.

## **2.4 Pilot**

Once the questions, weightings, recommendations and explanatory text are confirmed, they were uploaded into BEAT and presented as a pilot release to 40 SMEs and several larger organisations (NZ Post, the NZ Defence Force, Zespri, Westpac, Toyota, Meridian, Business New Zealand and the Community Recycling Network).

SME users involved in the pilot strongly endorsed the simplicity and practicality of the tool and its potential business benefits. As anticipated, the pilot also revealed a keenness by SMEs to use the self-assessment score as an environmental credential, albeit tempered by a corresponding reluctance to accept the score of another SME without it being certified.

Larger businesses showed a strong interest in use of the tool to assess and report environmental performance across their supply chain, property portfolio and branch structure. Most were interested in how they could tailor it to their specific needs, and use it as a basis for collecting semi-quantitative data to support corporate environmental reporting requirements. Others were interested in using it as a supporting resource for their business customers. Some also saw the opportunity to use the underlying software for other purposes.

## **2.5 Final Design**

Feedback arising from the pilot release was used to refine the content of the tool, which by this time had been re-branded as Envirostep, the current version of which can be found at:

<http://www.eco-verification.med.govt.nz/envirostep/>

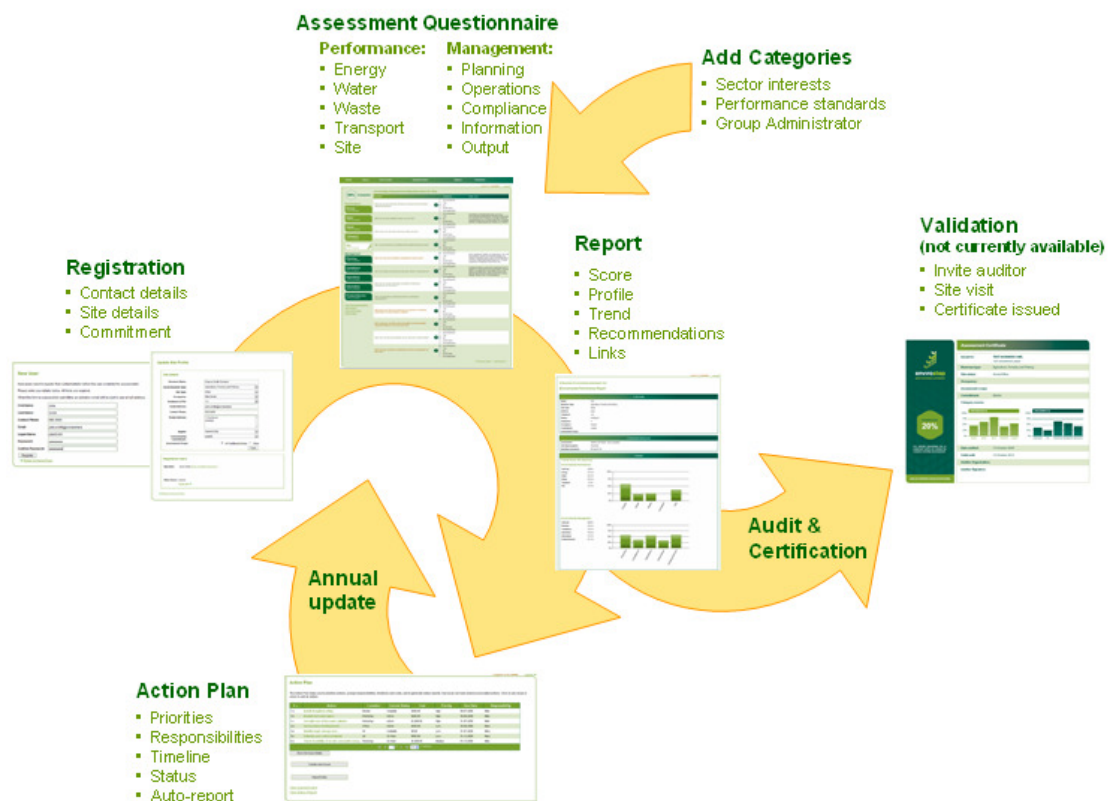
Once registered, users can access a site-specific questionnaire of between 33 and 119 questions, the actual number being determined by their stated 'Site Type' and 'Environmental Commitment' during site registration. Questions range from very achievable starter-level questions such as *'Do your hosepipes have a flow control?'* and *'Do you maximise your use of natural light?'*, through to more challenging performer-level questions, such as *'Do you generate your own electricity from renewable resources?'* and *'Do you recycle greywater?'* Each answer has a pre-defined weighting which contributes to the overall score. Users receive a score (to describe their overall performance), a profile (that shows how their performance varies across the categories), and practical recommendations for improvement (with links to other websites that will provide further information or support). The recommendations can also be uploaded into an action plan, which allows users to

assign risk-based priorities to issues, assign responsibilities, timeframes and costs to individual actions, and to monitor how their implementation is progressing. Users are encouraged to improve their environmental performance (and score) over time by implementing recommendations and amending their answers accordingly. Users are also able to compare their score with national and sector averages, to get a better appreciation of their relative position.

The Envirostep assessment questionnaire comprises 10 discrete environmental categories. The first five are environmental performance themes (energy, water, waste, transport and site) while the remainder are key environmental management themes (operations, planning, compliance, information and outputs). Figure 3 provides an overview of Envirostep components and its application.

To ensure minimal cost to users, Envirostep is a self-assessment and there is no requirement for users to have their results validated or certified. However, it does include an auditing module that can be activated in the future if a decision is made to provide users with the option of validating their self-assessment score. An un-validated score is sufficient for in-house recognition, although it is anticipated that businesses will soon want to demonstrate their Envirostep credentials to others. This will create a market demand for audit and certification services, and MED is currently evaluating options to establish an affordable and credible certification framework.

**Figure 3 Overview of Envirostep Functionality**



Information provided by users remains confidential, unless they either seek to validate their score (when answers are reviewed by an approved auditor), or where they opt to participate in a group scheme (where a Group Administrator would have access to their answers for the group-specific questions).

Large organisations can set up group schemes, where they add their own specific questions (as one or more additional categories) which are only accessible by their members or suppliers. A 'Group Administrator' is then established, with the ability to view the overall scores and category for participating organisations. In this way, the Group Administrator can use Envirostep to characterise performance and trends of participants, plan interventions and track their effectiveness.

## **2.6 Current Status**

Envirostep was launched by the Minister of Commerce on 15<sup>th</sup> July 2009, and was endorsed by SBAG and the Chief Executive of Business New Zealand as "a good step towards being able to meet more stringent 'green' standards that are likely to emerge internationally in the future" (Business NZ, 2009).

One month after the launch, there were over 370 registered users, making Envirostep the most widely used generic<sup>7</sup> EMS in New Zealand, albeit without the option of formal certification at the time. User feedback has been positive and relatively consistent, with strong support for its free access, simplicity and ability to tailor it to sector needs. However, some businesses continue to seek clarity regarding the confidentiality of data entered, the recognition of overall scores by government, and whether the score can be used for promotional purposes.

In addition to the Envirostep tool itself, the underlying software platform was designed so that its content can be amended or replaced by simply uploading an Excel spreadsheet. This avoids the need to use software specialists for minor edits or updates, and also allows the entire content to be easily replaced, to create an entirely new web-based assessment and reporting tool that can be audited.

## **2.7 Promotion & Development**

MED will spend the 2009-2010 financial year actively promoting, supporting and enhancing Envirostep. This activity will focus in particular on working with sector groups, large companies and business organisations to tailor Envirostep to their environmental assessment and reporting needs. It is anticipated that in 2010, Envirostep will be sufficiently established to transfer its ownership to an appropriate independent group charged with its ongoing hosting, update, maintenance and promotion on behalf of businesses in New Zealand.

Envirostep can be accessed and used by environmental service providers, who may wish to develop and deliver services to support Envirostep, or link users into their proprietary tools and schemes.

## **3. CONCLUSIONS**

Despite strong growth in EMS certifications amongst our key trading partners and the availability of several EMS schemes, uptake in by businesses in New Zealand is poor, and declining. Without formal environmental credentials, our businesses may find it more and more difficult to engage and compete in overseas markets, or participate in environmentally discerning supply chains. There is also a risk to our key exporters and New Zealand's green branding, which could be undermined by poor performance of businesses back in New Zealand.

MED developed Envirostep to help SMEs understand, improve and communicate their environmental performance. It is an entry-level EMS that is designed to be affordable, practical, effective, credible, confidential and nationally consistent. SME

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<sup>7</sup> i.e. excluding the larger sector specific schemes.

users should gain an improved understanding of their environmental performance, risks and opportunities, while larger organisations can use it to assess and report environmental performance of their branches, suppliers or members etc. Although recognition of a self-assessment score is likely to be limited, it can be used as a formal environmental credential where it is independently validated.

Envirostep already has more registered users than any other generic EMS scheme in New Zealand, but its long term impact will largely depend upon the scale of uptake and ongoing use by the business community. MED has set a target of 10,000 registered Envirostep users by mid-2010, and is currently working with sector groups, business organisations and large organisations to encourage uptake.

Envirostep has gone some way to meeting the Small Business Advisory Group's recommended that "publications be produced that give practical and implementable advice and support for SMEs to improve their environmental performance and to derive business benefit from the recognised or certified environmental sustainability of their products and processes" (Small Business Advisory Group 2008). It is also hoped that it will help the New Zealand business community to improve its level of environmental compliance and to respond to the growing demand for environmental credentials.

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