

Enviro-Mark Solutions Limited

We help you measure, manage and minimise environmental impacts

Actions speak louder than words

Independent certification from Enviro-Mark Solutions confirms that a company or product is taking credible action for a better environment.

Manage energy use, monitor environmental impacts and minimise carbon footprints with our business-tested tools and solutions. Our members leverage the commercial advantage of environmental responsibility, backed by the assurance of ISO certification and international best practice.



"Ricoh's commitment to sustainability is so strong because it makes good business sense. We improve our business and the environment through carboNZero certification."

Ricoh New Zealand

"We have reduced operating costs, learned new technology & provided a tangible example of New Zealand's environmental commitment and leadership on the world stage."

Antarctica New Zealand

"Since joining in 2006, we've cut our power use by two million kWh (-35%), kilometers of air travel by over 1 million (-28%) and company car fuel by over 30,000 litres (-25%)."

Toyota New Zealand

Inspiring Action for a Better Environment

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**ENVIRO-MARK
SOLUTIONS**

What do we do?

We help you meet your sustainability goals and credibly share your achievements in the marketplace.

Everything we do is business tested and supported by scientific research and international best practice. For every member, we provide flexible support, a comprehensive toolkit, expert advisors and hands-on workshops.

Independent Certification

We provide independent certification programmes to help you meet international best practice for your carbon, environment or energy management goals.



carboNZero programme

CEMARS programme

Target climate impacts with a carbon inventory and reduction plan or go carbon neutral.



Enviro-Mark programme

Target a range of environmental impacts, like waste and resource with a custom plan for continual improvement.



Energy-Mark programme

Target energy use and efficiency with a custom plan for continual improvement.

Technical Tools and Services

We can also provide assessment, verification and training services as well as technical tools and software. Here are just a few of our solutions:

- Audit and assessment services against a range of international standards and criteria
- Gap analysis of your existing work against a range of environmental standards
- Product carbon footprint specifications
- Emissions Factor review, development and provision
- Emissions calculation software
- Workshops and training across a range of environmental topics
- Supply chain sustainability assessments
- Assessment and provision of verified carbon credits
- Custom pre-verified carbon calculators for you, your customers or your suppliers
- Event carbon calculators

Ready to start taking action? Contact us:

0800 ENMARK | info@enviro-mark.com | www.enviro-mark.com

carboNZero certification

Accurately measure, reduce and offset the greenhouse gas footprint of your organisation, product or service



Our world leading certification programme ensures your carbon neutral claims are accurate and can stand up to any scrutiny.

- **carboNZero certified organisation:** Measure, manage and mitigate the operational emissions for your organisation, including business travel, electricity and vehicles. You will be certified in accordance with ISO 14064-1:2006 and receive a certification logo to promote your achievements, allowing you to make carbon neutral claims with ease and confidence in any market.
- **carboNZero certified product or service:** Measure, manage and mitigate the lifecycle emissions from your product or service, including sourcing ingredients, manufacturing, distribution, use and disposal. You will be certified in accordance with PAS 2050:2011 and receive a certification logo to promote your achievements, allowing you to make carbon neutral claims with ease and confidence in any market.

We provide flexible support, a comprehensive toolkit, expert advisors and hands-on workshops no matter your size or experience level. carboNZero certification is business tested and supported by over 15 years of scientific research and international best practice.



What makes our programme world leading?

- Programme requirements meet and exceed international standards and best practice
- carboNZero certification is currently available in 17 countries and the certification marks are recognised in over 60 countries, making it ideal for companies working in global supply chains or exporting products.
- carboNZero certification is accredited by the Joint Accreditation System of Australia and New Zealand (JAS-ANZ) and was the world's first to be accredited under ISO 14065.
- We offer the only carbon neutral product certification to PAS 2050 outside of the UK.
- carboNZero certified products earn an extra .5 point from the New Zealand Green Building Council's Green Star programme under the materials category.



"During our journey to carbon neutrality through emission reduction, we discovered the process is not too difficult and actually rather good for business. It doesn't necessarily require a large capital investment and it reduces overheads. In fact it saves us money, even after paying for carbon credits to offset the emissions we can't avoid."

Fred Soar, Managing Director, Soar Print Limited

carboNZero certification

Accurately measure, reduce and offset the greenhouse gas footprint of your business, product or service



How will certification benefit your business?

Our certification programme can help you:

- Identify business **efficiencies** and cost **savings**
- Anticipate and manage **risks**
- Win market access and export **advantage**
- Satisfy stakeholder and supply chain **demand**
- Improve staff **engagement**
- Build internal **capability** and institutional **knowledge**
- Gain a moral and reputational **advantage**
- **Demonstrate** good corporate citizenship



How do you achieve certification?

We help each step along the way. Our expert guidance and bespoke software help you identify what data you need to measure your inventory. Our tools and resources help you set real and achievable goals to manage your emissions.

We then arrange an independent audit to verify your result is accurate and complete. You can optionally choose from a selection of carbon credits to mitigate your emissions.

We provide certification documents and logos to promote your achievement. This is an annual cycle to keep you on a journey of continual reduction.

A small to medium sized organisation can typically achieve certification in 3-6 months by spending a few hours a week on the inventory. The time it takes to prepare for and successfully pass an audit varies from business to business, depending on how well developed your existing systems are when you start. We can help you develop a realistic project plan to guide your progress.



Start taking action

Contact us to join the businesses already earning market access, increasing efficiency, and credibly backing good corporate citizenship, get in touch. You'll improve your business and together we can create a better environment.

0800 ENMARK | info@enviro-mark.com | www.enviro-mark.com

Warren and Mahoney Architects Limited is one of New Zealand's most successful and highly acclaimed architectural practices. Warren and Mahoney has been practicing for over 50 years and have a wealth of experience in all types of architectural work from one-off housing designs to multi-million dollar developments for commercial developers and government clients. It has a reputation for high-quality award-winning work and for a continuing track record of innovation in design. It is also known for its commitment to sustainability, demonstrated in part by its carboNZero certification.

Sustainable design, sustainable practice

Warren and Mahoney was an early leader in the Building Industry's move towards more environmentally sustainable building design and construction. After all, decisions made during the design stage have a significant impact on the environment and operating costs over the life of a building. This presents huge challenges but also huge opportunities to reduce the effect of the built environment on the natural environment. The right choices in the design stage reduce the impact of the building over its lifespan.

Warren and Mahoney continues to look at innovative ways to incorporate environmentally sustainable design principles into their building designs. Initial projects included developing minimum standards within their own organisation and involvement in several environmental pilot schemes. Warren and Mahoney knows this is an exciting time for architecture in New Zealand. Advancements in sustainable design technology, building science and passive design strategies are informing more holistic building and landscape designs. The industry is moving towards a more science led, performance based design and Warren and Mahoney maintains their position at the forefront of this by incorporating real-time performance analysis into their concept design process.

While Warren and Mahoney leads the way in designing environmentally sustainable buildings for the future, they also wanted to inspire the sector and demonstrate low impacts with their own business operations. They realised that though they have minimal control over their leased office spaces, they could, however, change internal behaviours to reduce their environmental impacts. The first step was to measure those impacts so Warren and Mahoney could identify potential areas for reduction, and as Cheryl Kilpatrick explains, "the carboNZero programme allowed us to measure our impacts and set the right targets with confidence".

First

carboNZero certified architects in New Zealand.

8 years

The number of years certified (since 2006).

194

Staff members across New Zealand

“The carboNZero programme allowed us to measure our impacts and set the right targets with confidence.”

The Awly Building, Christchurch



“Just start. The process is actually much simpler than you would expect.”



Deloitte Centre, Auckland

carboNZero certification is a clear statement that Warren and Mahoney is considerate of its impact on the environment. It shows staff, clients, and other building professionals that their designs will have an extra dimension which will not only benefit them – but society as a whole.

Measure, Manage, and Maintain Momentum

Air travel is a key feature in Warren and Mahoney's carbon footprint. As an architectural firm, sometimes being on site is crucial, but the company wanted to ensure staff are able to collaborate easily without having to travel. Technology can allow staff to work as “one office” nation-wide and talk face-to-face, but without having to travel. Though Warren and Mahoney has video conferenced for over ten years, these facilities were limited to specific rooms. Warren and

Mahoney has kept pace with technology and upgraded their systems to now enable anyone to video conference from any room or desktop. This tool also enables video conferencing with external parties, so Warren and Mahoney can avoid unnecessary travel and emissions.

More than just a sustainability plan, environmental credentials are part of Warren and Mahoney's overall business plan. They strive for excellence in everything they do and recognise the best way to measure performance is an independent audit using internationally recognised standards. carboNZero certification is a key component of Warren and Mahoney's overall Integrated Management System (IMS) and is just one of the ways in which they can provide internationally recognised evidence that they walk the talk. For their IMS, Warren and Mahoney sought certification in compliance with ISO9001 (Quality), AS/NZS 4801 (Safety) and ISO 14001 (Environment). Warren and Mahoney's sustainability work, including carboNZero certification to ISO 14064-1, meant they met the ISO requirements for the environmental portion of their IMS certification without further need of development.

Warren and Mahoney recognises that to be a truly sustainable organisation, it must be a companywide effort. From the board to the office junior, engagement is vital for success. Keeping momentum going can be challenging. Initially there will be easier wins as the first measurements highlight reduction targets. At the start of the project, a company has the most room to improve. Warren and Mahoney is committed to continue monitoring and making progress and has various ways of keeping staff apprised of projects and encouraging involvement in reduction projects. Monthly Green Group meetings include updates on work done by the practice, audits, architectural projects, and successes. Ongoing recognition, even of small wins, ensures the momentum is maintained.

Warren and Mahoney encourages those who haven't yet started their sustainability journey to just start. Cheryl affirms that “The carboNZero programme team are so helpful; they want you to succeed so the process is actually much simpler than you would expect. And once you get underway it will get easier to collate the information because you know what to monitor and how to monitor it.”

Asterion Centre, Wellington



FOR FURTHER INFORMATION

 **WARREN AND MAHONEY®**

carboNZero Programme
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What are carbon credits?

Carbon credits are awarded for defined projects that **sequester** (store [e.g. through regeneration of native forest]), **avoid** (e.g. renewable energy generation as opposed to business-as-usual fossil fuel based energy generation) or **reduce** (e.g. through energy efficiency initiatives that are additional to business-as-usual) greenhouse gas (GHG) emissions to the atmosphere.

One carbon credit is equivalent to one tonne of CO₂ equivalent emissions.

Why do you need carbon credits?

Reduction of greenhouse gas (GHG) emissions is of fundamental importance and is the key principle guiding the carboNZero programme. However, it is not possible to reduce all of your GHG emissions. To achieve carboNZero certification and claim carbon neutrality, you need to offset your remaining unavoidable emissions with carbon credits, to create a net zero emissions balance.

Carbon credit quality – not all credits are equal

Carbon credits come from many projects, however, not all meet recognised quality standards. Poor quality offsets can put your organisation at risk of greenwash accusations. Claims of carbon neutrality may be subject to investigation by regulators of advertising standards or consumer protection laws, therefore it is important to ensure good quality credits are used. Carbon credits offered through carboNZero certification are stringently assessed to ensure they are of acceptable quality.

Additional to business-as-usual:

- A project that can demonstrate it would not have occurred without revenue from the creation of the carbon credits.

Examples of poor quality carbon credits:

- Carbon credits based on debatable additionality (see definition above).
- Large scale hydro power projects may meet the standard for carbon credits, but the overarching environmental and social impacts means the project is considered poor quality and less desirable

What credits does the carboNZero programme use?

To ensure the integrity of carboNZero certification, carbon credits used for offsetting go through an assessment process by the programme to ensure they are of acceptable quality. The programme sources a portfolio of credits from:

- A range of compliance and voluntary standards
- A range of countries
- A range of project types (e.g. renewable energy generation, forest sequestration, landfill methane capture)



Windfarm development avoids business-as-usual fossil fuel electricity generation



Landfill gas capture prevents business-as-usual release of emissions to the atmosphere.



Forest regeneration that is additional to the business-as-usual land use captures and stores atmospheric carbon

Additional benefits of carbon credits

The purchase of quality carbon credits also benefits the larger community. Research conducted by the International Carbon Reduction and Offset Alliance (ICROA) shows that "offsetting one tonne of carbon dioxide brings an additional \$664 in benefits to the communities where carbon reduction projects are based", which is impressive given a tonne of carbon is typically under \$20 ¹. So not only do businesses purchasing the offsets neutralise their carbon footprint and therefore reduce their impact on the global climate, but they also provide social and community benefits.

¹ See details at: www.icroa.org/42/icroa-research

The carboNZero programme has seen evidence of this with two New Zealand projects. The programme regularly uses credits from two Permanent Forest Sink Initiatives (PFSI) in Pigeon Bush (near Wellington) and Hinewai (near Akaroa in Banks Peninsula). The PFSI projects are permanent carbon sinks of native forest. The landowners agree to permanently retire the land and allow it to regenerate to native forest, and in return are able to sell carbon credits from the verified carbon sink. The carboNZero programme is one of the primary supporters of these voluntary credit projects, providing these as New Zealand credit options for its clients and in its community calculators.



The suppliers at Pigeon Bush and Hinewai have reported to the carboNZero programme that this income from carbon sales has helped the owners of the land to look at purchasing more land for restoration, therefore extending the area of the carbon sinks. The Native Forest Restoration Trust, owners of Pigeon Bush, have been able to hire a general manager to formalise management of their sites, help with maximising the success of the sites in term of regrowth and conservation, and oversee communications and news.

Transparent and credible

The credits cancelled by the carboNZero programme can be found on one of three registers: the New Zealand Emissions Unit Register (NZEUR), APX VCS registry, Markit Environmental registry and Gold Standard registry. The carboNZero programme opts to publicly disclose each transaction on these registers ensuring our carbon credit operations are fully transparent and traceable. The carboNZero programme is one of the only NZEUR participants that actually cancels credits – meaning the credits are permanently cancelled against an individual or organisation and cannot be double counted — rather than trading them as a commodity.

More information

- See our website for an overview of credit projects, key guiding key principles for credit quality, information on credit registries and frequently asked questions: www.enviro-mark.com
- For carboNZero programme members, the Mitigate guide is available in the password protected member area of the website

Contact us

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- www.enviro-mark.com



CEMARS certification

Certified Emissions Measurement And Reduction Scheme

Accurately measure and reduce the greenhouse gas footprint of your business, product or service



Our world leading certification programme ensures your carbon reduction claims are accurate and can stand up to any scrutiny.

- **CEMARS certified organisation:** Measure and manage the operational emissions for your organisation, including business travel, electricity and vehicles. You will be certified in accordance with ISO 14064-1:2006 and receive a certification logo to promote your achievements, allowing you to make carbon responsible claims with ease and confidence in any market.
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- CEMARS certification is currently available in 17 countries and the certification marks are recognised in over 60 countries, making it ideal for companies working in global supply chains or exporting products.
- CEMARS certification is accredited by the Joint Accreditation System of Australia and New Zealand (JAS-ANZ) and was the world's first to be accredited under ISO 14065.
- CEMARS certification is accredited by the CDP. In fact, companies reporting to the CDP through CEMARS certification earn 10-15% more points. In the UK CEMARS is also licensed by the UK Environment Agency and recognised by the UK Energy Savings and Opportunity Scheme (ESOS) as a route to compliance.
- CEMARS certified products earn an extra .25 point from the New Zealand Green Building Council's Green Star programme under the materials category.



"CEMARS is the most robust standard internationally for emissions measurement, management and reduction claims."

David Fairhurst, Environmental Performance Manager, Scottish Parliament Corporate Body

CEMARS certification

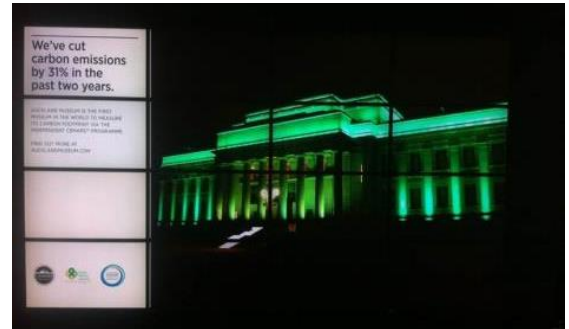
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How will independent certification benefit your business?

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CEMARS case study

Kāpiti Coast District Council



Kāpiti Coast District Council is the territorial authority for its area. Council is committed to the principle of sustainable development, including protecting the environment, and seeks to manage and reduce its carbon footprint as part of this.

What triggered your interest in greenhouse gas emissions management?

Kāpiti Coast District Council (KCDC) is committed to reducing its emissions of greenhouse gases (GHG), improving the resilience of its operations and mitigating increasing energy costs. It recognises that climate change has serious implications for Kāpiti Coast District. More extreme weather and sea level rise have the potential to cause severe effects on the community, either directly or via its trading partners. KCDC began working with EECA's EnergyWise programme in 2003, and became a member of Cities for Climate Protection New Zealand (CCP-NZ) in 2004. When the CCP-NZ ended in 2010, there remained a need for a body to oversee and independently verify Council's progress. KCDC joined the CEMARS certification programme in 2011. The Programme fits well with KCDC's existing plans and goals, and provides a formal framework for measuring and reporting emissions as well as our reduction and management plans.

Why does greenhouse gas management matter in the public services area?

Climate change will require adapting to issues such as increasing storm damage, flooding and sea level rise. GHG management is key in the effort to minimize our impact on the environment. As leaders in our community, Council must also show leadership in adapting to climate change and GHG management. Reducing our impact is the first stage in this process, although our ultimate goal is to have a net zero carbon footprint.

The Local Government Act, although it was amended in 2012, still has sustainable development as a guiding principle, meaning we must take into account the need to preserve the environment and the reasonably foreseeable needs of future generations. What's more, it says we must exercise prudent stewardship of resources and use them efficiently.

What have you accomplished as part of your environmental plan?

KCDC is proud to be the first local authority to be CEMARS certified. We have developed a long term plan with the intention of reducing emissions by 80% by 2021-22. At the moment, we are working on a variety of projects. For example, we have had great success in reducing our diesel emissions by converting our fuel source at the Paraparaumu Waste Water Treatment Plant. Instead of a diesel powered boiler to dry the sewage we switched to wood chip fuel. Not only did this reduce our emissions,

3,675

tCO₂e reduced by 2011-2012

45%

reduction target by 2014-2015

80%

reduction target by 2021-2022

\$1.31 million

Estimated annual savings by 2021-22

“As leaders in our community, we must also show leadership in adapting to climate change and GHG management.”

Jake Roos, Senior Advisor
Climate Change and Energy,
Kāpiti Coast District Council



CEMARS case study

Kāpiti Coast District Council

but has reduced operating costs significantly; those savings will create a budget for other reduction projects, continuing the cycle of energy and cost savings. Our intention is for most emissions reduction projects to be self-funding, using the operational cost savings they achieve. This will yield net savings for ratepayers over their life.

We are also working in the community. We have put in insulation and solar water heaters in council owned homes to improve energy efficiency. We are also looking at ways we can provide grants and assistance to homeowners. We have given away 49,000 energy efficient light bulbs, which was very popular.

What has been the key to the success of your CEMARS certification?

Top level commitment is crucial as it allows for the carbon management process to go into all parts of the business to get the data you need. Achieving CEMARS certification involved a commitment and effort to put together our emissions inventory, forecast and scope reduction projects and targets, and get approval on our plans. Through that process we created a cross-council working group to look at carbon and energy, which is chaired by a senior level manager. This allows for various aspects of Council business to efficiently identify opportunities and take action.

What is KCDC's vision of the future?

We aim to have net zero carbon emissions, with targets to reduce emissions by 45% in 2014-15 and 80% in 2021-22. To reduce our emissions so significantly, we are working on projects like changing streetlights to LED bulbs, changing how we process sewage sludge, and making greater use of wood chip fuel. We are also working on improving the quality of our data, which will help us be more effective in managing our emissions hot spots. We hope to develop our own native forest carbon sink in the district as well, which would help with our ambition to be carbon neutral in the future.

How has your participation in the CEMARS programme assisted?

The CEMARS programme provides the framework and motivation for our plans. In the first audit, questions from the auditor brought to light our practice of putting greenwaste from sewage sludge in the landfill. We were able to make a change in practice and reduce our emissions significantly early in the process. Our working group allows us to communicate more easily, which improved the process of identifying and correcting energy and carbon issues across the Council.

The process has been extremely valuable to articulate exactly what our council's emissions are. The third party verification and certification means we have transparency, structure, and credibility when we communicate what our emissions are and how we are managing them. Local authorities have an ever-increasing role in managing climate change impacts - so although, it is a global problem, we need to be able to demonstrate leadership in addressing the root cause of climate change.

How have your staff responded to being in the programme? What about your ratepayers and community?

The staff response has been really positive, particularly within the carbon and energy focus group. They are able to share ideas and take it really seriously. Spreading sustainability through the supply chain and procurement policy from a grassroots process is a great way to be leaders in the community

“The savings that result from emissions reductions will create a budget for other reduction projects, continuing the cycle of energy and cost savings.”



FOR FURTHER INFORMATION

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www.kapiticoast.govt.nz

CEMARS Programme

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Enviro-Mark Solutions

Enviro-Mark Solutions is the leading provider of independent environmental certification in New Zealand. Though developed for New Zealand business needs, Enviro-Mark Solutions currently serves hundreds of clients worldwide.

Enviro-Mark Solutions is a wholly-owned subsidiary of Landcare Research, a Government-owned Crown Research Institute.

Get in Touch



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