

Perenia

complete carbon solutions

www.pereniacarbon.com

Who we are

Perenia is a specialist firm with global reach, established to support organisations looking to proactively respond to the opportunities and challenges associated with the impact of climate change. As a joint venture between the prominent Australian companies SMEC (Snowy Mountains Engineering Corporation), Pacific Hydro and Mitsui & Co., Ltd., one of Japan's largest trading companies, Perenia offers a diverse and comprehensive spectrum of insight and expertise.

Perenia's heritage includes several decades of experience in the identification, design and operation of renewable energy and emission reduction projects, in-depth knowledge and relationships in carbon markets and internationally recognised consulting services. With current operations throughout Australia, Asia and South America and worldwide representation, Perenia has the global coverage to support our clients wherever they do business.

Our Services

The causes and consequences of climate change have emerged as a critical area of focus for the world's leading companies and organisations.

Governments and regulatory bodies are actively developing legislation that has a direct impact on business practices. Additionally, shareholders and the wider community are demanding that companies and organisations take a proactive role in reducing their environmental impact.

In this increasingly complex operating environment, Perenia offers complete carbon solutions.

Our service portfolio includes:

- Carbon Management Solutions
- Sustainable Energy Solutions
- Clean Development Mechanism (CDM) and Joint Implementation (JI) project registration and optimisation
- Transaction services for tradeable carbon units
- Project Development and Delivery

Carbon Management Solutions

Perenia assists clients in managing their carbon impact by balancing corporate objectives with legislative requirements and the demands of customers and shareholders. Each client's unique situation is assessed in detail to tailor a comprehensive carbon management solution.

Our carbon management solutions incorporate:

- **Audit and compliance:** Analysing operations to determine current and projected greenhouse gas (GHG) emissions in accordance with local and international standards and ensuring compliance with current and future legislation.
- **Risk and opportunity assessment:** Evaluating carbon risks against financial and environmental parameters while also identifying opportunities for investment to cost-effectively reduce GHG emissions.
- **Development of a carbon management plan:** Design and implementation of a comprehensive plan to monitor emissions, manage carbon liabilities and prioritise emission reduction opportunities.



Sustainable Energy Solutions

Perenia partners with clients to identify sustainable energy solutions, including:

- Mandatory assessment and reporting (e.g. Energy Efficiency Opportunities in Australia)
- Energy audits and process reviews
- Energy conservation measures and programs
- Carbon cost curves to rank potential emission reduction projects
- Energy monitoring and targeting systems
- Demand side and asset management programs to conserve energy
- Technology identification and assessment
- Innovative finance and delivery mechanisms

CDM and JI Project Registration and Optimisation

Perenia provides end-to-end management of CDM and JI projects with a focus on minimising risk through reduction of lead times for host country approval and project registration. Perenia also assists post-registration to ensure that optimal emission reductions are achieved and carbon credits are generated as planned.

Our CDM and JI services include:

- Project origination
- Eligibility assessment
- Project registration, including:
 - Preparing Project Design Document including the development of new baseline and monitoring methodologies
 - Validation, including engaging and managing a Designated Operational Entity (DOE)
 - Responding to comments raised by the CDM Executive Board during the registration process
- Project monitoring and verification, including engaging and managing a DOE
- Brokerage of tradeable carbon units
- Post-registration optimisation

Transaction services for tradeable carbon units

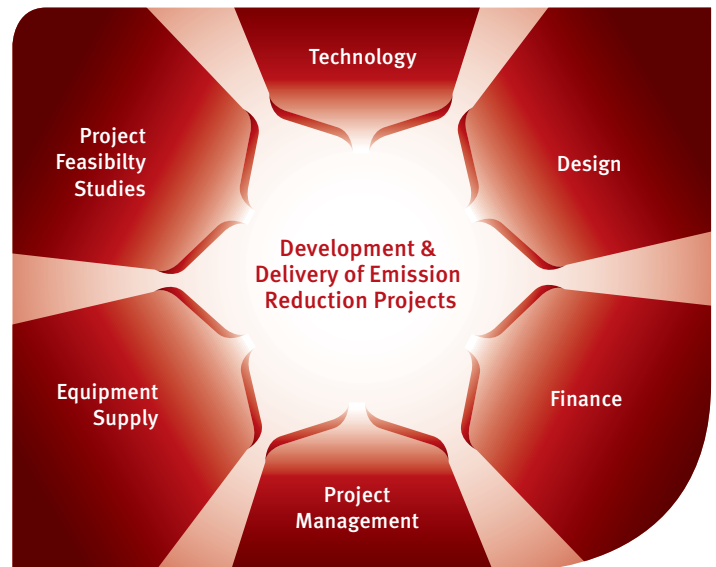
Perenia has an established network of buyers and sellers in Kyoto and non-Kyoto markets and can advise market participants on the structuring of transactions to optimise their requirements.

Our transaction services include:

- Analysis of the carbon market
- Advising on the structuring and contracting of carbon-based transactions
- Identifying and engaging potential buyers and sellers to negotiate and prepare Emission Reduction Purchase Agreements
- Managing the issuance and transfer of carbon credits, including the establishment of registry accounts

Project development and delivery

By integrating its specialist carbon sector expertise with the financial and technical resources of its shareholders, Perenia is able to provide a complete project development and delivery service for emission reduction projects within time, cost and quality parameters.



Recent Successful Projects

CDM Project Registrations

Perenia and its shareholders have successfully registered several CDM projects. The registration process includes the preparation of a Project Design Document, consultation with stakeholders and the local community, facilitation of host country approval, engagement and management of a Designated Operational Entity for validation and verification and responding to queries by the CDM Executive Board. These projects include:

- Jorethang Loop, a 96 MW project in the State of Sikkim, India, registered in 2008. Perenia will manage and broker over 400,000 CERs per annum from this project
- The 55MW Lihir Geothermal Power Project, being the first project to be registered under the CDM in Papua New Guinea. Perenia will assist the project owner in the commercialisation of 285,000 CERs produced annually
- Pacific Hydro's joint venture La Higuera hydro project was the first large hydro project to be registered under the CDM in Chile. La Higuera will generate about 450,000 CERs annually.

Sustainable Energy Solutions for the Resources Sector

Perenia has undertaken a number of energy management studies for the resources sector to identify opportunities to reduce energy use and GHG emissions. Assessment reports have been prepared to comply with relevant legislation and in some instances, carbon cost curves have been prepared to identify the lowest cost emission reduction and/or investment solution. Projects have covered the extraction and processing of iron ore, gold, nickel, copper and coal.

Agribusiness Carbon Management Strategy

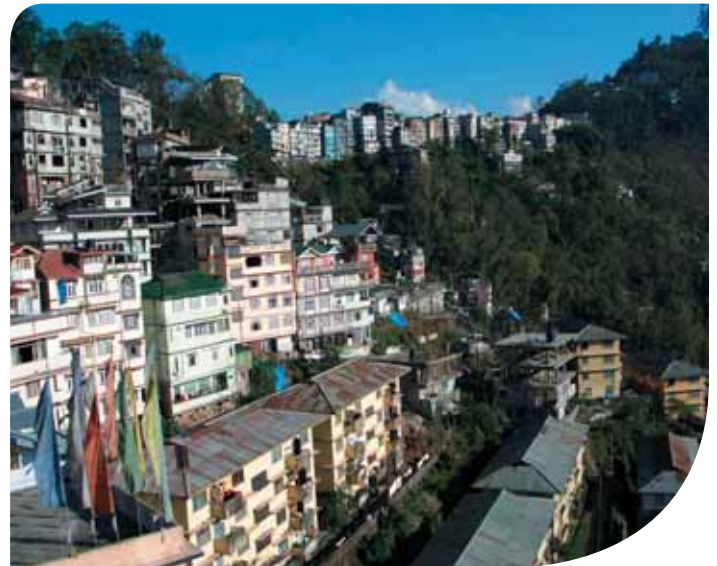
Perenia is providing specialist carbon management services to one of Australia's largest agribusinesses. Tasks undertaken include the preparation of a GHG emission inventory for several financial years, preparing for compliance under the National Greenhouse and Energy Act and the identification of strategies to mitigate potential liabilities under the proposed Carbon Pollution Reduction Scheme.

Water Corporation Energy Management

Perenia's Energy Management staff undertook a detailed assessment of the energy efficiency of four aeration blower units for one of Australia's largest wastewater utilities. A number of energy efficiency options were identified and assessed.

Global Carbon Management Strategy

Perenia has been commissioned by one of the worlds leading food manufacturing businesses to assist in the development of it's global carbon management strategy. This project includes a comprehensive global audit of GHG emissions; assessment of opportunities to develop CDM projects by capturing bio-gas at their operations in Central America and Asia, which could potentially offset emissions in developed countries; review of compliance requirements and potential impacts from GHG legislative frameworks and policies in North America, Australia and Europe; and internal workshops to build capacity in these areas within the core operations of the business.



See more examples of our projects at
www.pereniacarbon.com





- **Complete** carbon solutions for the world's leading companies
- In-depth **knowledge** of carbon markets with a global network of buyers and sellers
- Several decades of **experience** in identifying, designing and developing renewable energy and emission reduction projects
- A comprehensive service portfolio underpinned by global **insight** and capabilities
- Able to draw on the resources and **expertise** of our shareholders to offer tailored solutions

Offices and representation

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To find out more about Perenia visit www.pereniacarbon.com



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