



White Paper – Energy Auditor

Commercial –in-Confidence

Introduction

Consideration of developing Independent Third Party Certification training, assessing and examination for energy and emissions auditors supporting the compliance and measurement verification functions emerging under legislative frameworks addressing the global issue of a carbon constrained economy.

Executive Summary

The emerging energy and emissions auditing framework will need to address individual nation's legislative frameworks underpinned by International standards such as provided by the Organization for International Standardization (ISO) and the Global Reporting Initiative (GRI).

Within Australia this framework can be summarized within the Federal Governments *National Greenhouse and Energy Reporting Act 2007*, *National Greenhouse and Energy Reporting Regulations 2008*, the *National Greenhouse and Energy (Audit) Determination 2009* and the *National Greenhouse and Energy Reporting (Auditor Registration) Instrument 2009 (NGERS)* and *Energy Efficiency Opportunities Act* which are converging both in implementation timeframes and functionalities.

National (Australian) registrations for a panel of competent auditors have recently been opened to suitable candidates. The qualifications required for entry into this class of auditor are detailed by supporting regulation and range from an understanding of assurances standards, auditing of international quality, environmental and carbon management standards as well as direct experience in energy and emissions measurement within complex organisations where the operational boundaries need definition. The personal attributes are also defined and are commensurate with a role in which conflict of interests must be avoided.

Particular types of energy and emissions sources are needing to be understood in respect of engineering aspects. Specialist chemical and mechanical engineering expertise may need to be available to a team of auditors where equipment, plant, product and processes may need investigating in order to obtain robust, transparent and reliable data.

In 2006 Australian corporations using more than 0.5 peta joules of energy per year were required to participate in the Energy Efficiency Opportunities program. There are 226 corporations now registered and assessed their energy use and abatement opportunities with a financial pay back of under 4 years. In 2007 the *National Greenhouse and Energy Reporting Act* required the top 900 Australian polluters to measure and report on their annual greenhouse gas emissions into the OSCAR on-line data base which is now used to support Australia's reporting responsibilities under our international agreements. The two reporting systems are now under transitional arrangements to converge onto the NGERS framework.



The implementation of the verification arm of the NGERs legislation is scheduled to begin in the 2010/11 financial year. It is expected that the verifiers will emerge from the financial accounting, compliance auditing and engineering sectors. However, the multi skills necessary for this type of auditing indicate that no sector has all the attributes necessary and there is likely to be insufficient supply of professional services to meet the growing demand.

This White Paper seeks to consult with various levels of Government , industry sectors and higher education institutions initially within Australia but ultimately Globally to develop a formal process for the training, examination and assessment of energy and emissions which covers all the relevant issues and subjects necessary to provide a high quality professional Competency Based Professional to be able to conduct auditing of energy and emissions to meet both International and National Governments and Corporate Governance expectations throughout the world.

The underpinning standards are to be the Global Reporting Initiative protocol for GHG reporting and sustainability practices, Assurance Standard ISAE3000 or ASAE 3000, ASAE3100, audits under the Corporations Act 2001, ISO 19011:2002 or ISO19011 2003, ISO 14064-3:2006 or AS ISO 14064.3-2006, or energy audits under AS/NZS 3598:2000.

The training, assessment and examination would be in line with ISO/IEC 17024:2003 guidelines endorsed by internationally Recognized Certification Bodies such as RABQSA International Inc (RABQSA), The International Registrar for Certified Auditors (IRCA) or the European Organization for Quality (EOQ) and be fully compliant with both International and National Government's registration requirements of Greenhouse Gas and Energy auditors.

The training, assessment and examination would be initiated locally and available internationally. Delivery would be by way of registered training providers under the "Energy Auditor" Personnel Certification Scheme providing individual facilitation for each student and where required, on site experience and supervision.

The following leaders in Energy and GHG emissions auditing have joined together to form an International Consortium which can deliver "Competency Based Outcomes" as a pre-requisite for the registration of Certified Personnel within the Greenhouse Gas and Energy Auditing field. The Personnel Certification Scheme provided by RABQSA.

Personnel Certification Scheme Title "Energy Auditor"

Possible Scheme Owner/s

RABQSA International Inc;

International Registrar of Certified Auditors;

European Organization for Quality



Sub Scheme Owners

ACI Global Group

Carbon Managers

Sub Scheme Members

CARBONControl Pty Ltd;

By invitation – Interested Global Industry Players;

By invitation - Macquarie University;

By invitation - Melbourne University;

By invitation - Sydney University Institute for Sustainability;

By invitation - Institute of Engineers;

By invitation - Risk Managers Institute;

By invitation - Institute of Environmental Managers

Entry levels of students will be assessed by assigning a facilitator to each applicant who will establish their record of prior learning and competence, experience and qualifications. A formal learning agreement is then developed and the required course of learning, assessment and examination is established.

To ensure an ongoing professional leadership development, a programme of training, assessment and examination is formalized with the auditor to ensure he/she is kept up to date with best practices and any regulatory changes/developments.

Certification

On completion of the Energy and Emissions auditor training, certification is provided by ACI Global with a recommendation for registration into the “Energy Auditor” Personnel Certification Scheme owned by RABQSA, IRCA, EOQ or a combination of Independent Personnel Certification Bodies

ACI Global International Auditor Professionals Register

This database registers all business auditor professionals allowing those who have completed the course to promote their credentials to a global audience. The register indicates the individuals commitment to on-going competency assessment partnership made with ACI Global as their nominated training, assessment and examination provider.



RABQSA International Inc (RABQSA)

RABQSA is a leading personnel and training certification body created in 2004 from the acquisition of the personnel certification activities of United States of America-based Registrar Accreditation Board (RAB) by Australia-based Quality Society of Australasia (QSA). Its activities are to design, develop, and deliver personnel and training certification services for various industries. It offers certification for personnel and training courses based on competency and qualifications at an International standard. It holds ISO/IEC 17024:2003 accreditation from JAZANZ and is a registered not for profit entity in the USA. Personnel Certification provides confidence that certified auditors have demonstrated the specific competencies defined by industry as requirements for auditors who work in each industry sector. To achieve this, RABQSA examines the auditor's knowledge, skills, personal attributes and qualifications specific to the scheme and/or scope of certification.

RABQSA has registered over 8,300 certified personnel worldwide and provides 283 certified courses through over 70 international training providers. It has been growing at 10% per annum and is expected in 2010 to reach 50% of its total product offerings as industry developed competency based programmes.

Target Audience

The target audience will include but not be limited to:

- Accountant auditor professionals;
- Engineering specialist;
- Systems compliance auditor professionals;
- Risk management and climate change advisors;
- Environmental specialists;
- Industry Specialists;

Each group will be consulted as to their particular area and level of training needs once the generic course or programme is developed.

Proposed Outcomes

1. The creation of an Energy and GHG emissions auditor development program underpinned by independent Third Party Personnel Certification will enable auditor professionals to advance their skills within a quality/assurance/ISO standards



framework encompassing the particular subject matter of energy and GHG emissions measurement.

2. The design of a specific competency based training, assessment and examination process which includes assessing knowledge, skill, attitude and personal attributes tailored for registration at both national and international personal certification.
3. Ongoing professional development outcomes examinable on a regular basis by both the training provider and the independent certification body thereby ensuring the highest level of competency is maintained by the individual.

Features to Include

1. Facilitation to candidates to ensure immediate feedback throughout the course and or programme.
2. Modular based Competency Units to enable technical specialisation for specific industries and their energy/emissions peculiarities e.g. mining, metal manufacturing or transport.
3. Endorsement from the regulatory entities such as DCC and EEO to ensure currency of knowledge of regulations.
4. The Independent Third Party (RABQSA, IRCA or EOQ) maintains relationships between the sub scheme owners thereby ensure not just compliance to ISO/IEC 17024:2003 Guidelines but Industry relevance.
5. Training, assessment and examination outcomes will be consistent with International standards and globally transportable for a skilled auditor professional's future career prospects.
6. Australia maintains its global competitiveness in training and certification in personal certification based on competency outcomes.
7. Course programs can be continually reviewed and improved as this area develops.
8. The certification scheme can be used to provide KPI data to maintain industry standards.
9. Appropriately trained professional auditors will enhance certainty and core business strategy development through awareness of interrelated disciplines.

Existing Training Scheme



GHG Emissions and Energy auditing is a relatively new business issue and only relatively recently being underpinned by legislative instruments. As such there are few organised training programs and none specifically addressing personal certification through a Independent Third Party Certification Body such as RABQSA, IRCA or EOQ for ISO14064 combined into either the National (Australian) or International reporting context.



Conclusion

Initial discussions and research has indicated that there is a need for the development of a competency based energy and emissions auditors' professional development program which has independent personnel certification and registration at both national and international levels.

An independent personnel certification and registration program of trained auditors specifically for this area which is endorsed by the regulator would serve to raise the bar to ensure robust, reliable and accurate auditing of the nation's energy and emissions reporting data. It will serve to further educate individuals in their chosen field and give appropriate recognition. Structured direction will provide opportunity to reach career targets in agreed time frames and will provide insight as to other disciplines' capacities to value add in an area where no one profession can provide the complete perspective.