

BCSE Cogeneration Support Program



Australian
Business Council
for Sustainable
Energy

Information Guide for BCSE Members

1. Introduction

This document is a guide for Australian Business Council for Sustainable Energy (BCSE) members to the BCSE's cogeneration support program. It outlines the features of the program, how project proponents can register, the manner in which funding is to be allocated to projects and the role the BCSE will play in supporting projects through the process.

2. Background to the BCSE program

The Greenhouse Gas Abatement Program (GGAP) was part of the package of measures to reduce greenhouse gas emissions, committed by the Commonwealth Government with the introduction of the Goods and Services Tax. GGAP offers \$400 million over four years to projects that result in significant, sustainable and additional greenhouse gas reductions and are not subject to other measures such as renewable power projects that are eligible for Renewable Energy Certificates.

The previous Federal Environment Minister Robert Hill announced on 28 March 2001 that the BCSE (formerly the Australian EcoGeneration Association) was successful in its bid for GGAP funding support for small-scale cogeneration projects developed by BCSE members.

The projects that were successful in Round 1 of GGAP, together with the abatement cost and expected capital expenditure are as follows:

Proponent	Industry/Type	GGAP Emissions Funding \$million	GHG Saved ktpa	GHG cost per tonne (2008-2012)	Project Capital Cost \$ million
AFCAM	Flurocarbons Coal Waste Mine	3.56	200	3.56	6.3
Envirogen	Gas Coal Waste Mine	13.00	620	4.19	27.0
EDL	Gas	10.93	440	4.97	22.8
QAL	Alumina	11.00	400	5.50	164.1
Nabalco	Alumina	7.00	240	5.83	48.0
Douglas Shire	Ethanol	7.35	250	5.88	33.9
BP	Ethanol	8.80	220	8.00	89.8
AEA/BCSE	Cogeneration	10.00	250	8.00	70.0
Origin Energy	Cogeneration	16.00	400	8.00	120.0
		87.64	3020	5.80	581.8

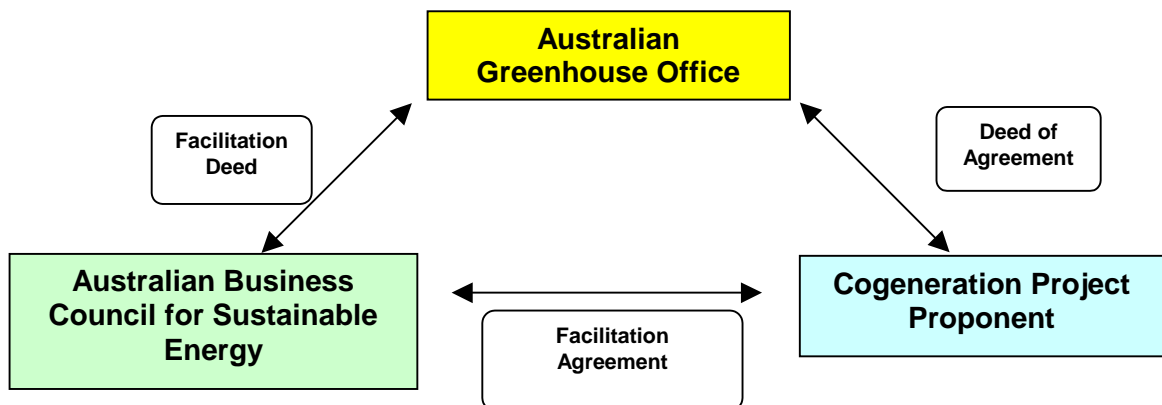
The BCSE was awarded \$10 million to fund a number of cogeneration projects that would result in emission abatement of 1,250,000 tonnes over the five year 2008–2012 period at \$8 per tonne. The projects covered by the BCSE program would amount to 50 to 60 MW and result in capital expenditure of over \$70 million.

The BCSE developed the program on behalf of its members so as to ensure that smaller cogeneration projects that would not otherwise have met the minimum abatement requirement of the program could still get funding support. The AGO had specified a minimum abatement of 250,000 tonnes per annum which is equivalent to a cogeneration project size of 50-60 MW.

3. BCSE Cogeneration Support Program

The BCSE program is designed to support marginal greenhouse gas abatement projects that would not otherwise proceed. We estimate that 12 or more projects could be funded and range in size from less than 1 MW (eg. community recreation facilities) to over 25 MW (eg. industrial processing facilities).

The BCSE is performing a facilitation role with individual Project Proponents required to enter into a Deed of Agreement with the AGO. The BCSE will have a facilitation agreement with project proponents. The arrangements are shown diagrammatically as follows:



A summary of the roles and responsibilities under the various agreements is as follows:

Facilitation Deed (between the BCSE and the AGO)

Sets out the role of the BCSE as the proponent of the program that has been selected for funding (up to \$10 million) under GGAP Round 1. The BCSE's role is to put forward cogeneration proposals proposed by BCSE members for consideration under GGAP.

The role of the BCSE is to:

- Identify potential projects being developed by BCSE members that may be eligible for GGAP
- Assist members to develop proposals for submission to the AGO for assessment under GGAP
- On behalf of members submit project proposals that meet GGAP criteria
- Consult with the AGO regarding the potential eligibility of project proposals for GGAP

The AGO will

- assess each project proposal submitted in accordance with the eligibility and merit criteria (attached as APPENDIX A) set out in the AGO's GGAP Guidelines¹ (GGAP Guidelines)
- if a Project Proposal meets the relevant criteria, then:
 - notify the BCSE of the approval of the Project Proposal;
 - agree in principle to provide funding, subject to the parties agreeing project plans, timetables and payment schedules under the Deed of Agreement;
 - if requested by the Project Proponent, consult with the BCSE regarding the terms and conditions of a Deed of Agreement; and
 - once a Deed of Agreement is agreed and executed by all parties, provide funding in accordance with the terms of that agreement

Deeds of Agreement with proponents representing the following proportion of the \$10 million grant need to be signed by the following dates otherwise the remaining funding is forfeited.

- 30% of \$10 million by []
- 50% of \$10 million by []
- 100% of \$10 million by []

Note: the dates included in the initial agreement with the AGO are in the process of being extended.

Funding for an individual project will be capped at an amount that results in a real ungeared pre tax internal rate of return to the Project Proponent that is acceptable to the AGO in the circumstances of the particular project but, in any case, does not exceed 12%. In the case where the owner/operator of the facilities in which the cogeneration plant is to be located is undertaking the project then a higher rate of return may be warranted on the basis of additional risk surrounding the project.

Individual projects are expected to achieve a minimum abatement of 2,000 tonnes of carbon dioxide equivalent per annum in each year of operation. However the AGO will consider up to a maximum of five Proposed Projects achieving less than the 2,000 tonnes minimum abatement where they meet other desirable criteria as specified (refer to APPENDIX B) but the AGO is under no obligation to accept any such proposals;

Deed of Agreement (between the Project Proponent and the AGO)²

The AGO will make a grant of financial assistance to the Project Proponent subject to the Project Proponent:

- performing the Project in accordance with the agreed Project Plan and, in particular delivering all the Milestones as set out in the Project Plan;
- ensuring that it complies with and acts in accordance with the GGAP Guidelines.

The Project Proponent is required to submit a number of reports outlining how milestones have been achieved and the level of abatement that has been delivered.

The Project Proponent agrees to cooperate with the AGO in any evaluation of the Project and to demonstrate the extent to which the Project has contributed to the GGAP

¹ Basis upon which the BCSE made its initial proposal for \$10 million funding.

² Contact the BCSE for a copy of the draft Deed

objectives.

Where a mandatory national, or mandatory international, greenhouse gas emissions trading scheme is introduced (or other scheme that grants environmental credits³) then the AGO will be entitled to any environmental credits that may accrue to the project proponent. Where a mandatory scheme is introduced then the project proponent may opt to repay the grant funds (plus interest) and retain any such credits.

The AGO has advised that Gas Electricity Certificates (GECs) under the Queensland Governments 13% Gas Strategy and NSW Greenhouse Abatement Certificates (NGACs) under the NSW Electricity Retailer Benchmarks are not Environmental Credits for the Purposes of the GGAP Program.

Facilitation Agreement (between Project Proponent and the BCSE)

This Agreement sets out the role that the BCSE will play in:

- registering the project for the purpose of the program;
- assessing and reviewing proposals to ensure that they meet the GGAP criteria; and
- assist the project proponent in putting together a proposal to the AGO to have the project accepted for funding;

The Project Proponent will need to progress to Deed of Agreement stage within six months of the date of registration. This date may be extended under certain circumstances that will need to be negotiated. For example, an extension may be granted in the event that the Project Proponent is a Thermal Host who may not have yet selected a preferred developer and finalised project scope.

The BCSE will recover its costs from the Project Proponent on the basis of the fee structure outlined below.

4. BCSE cogeneration program process

The BCSE with assistance from its members, has established a Primary List of cogeneration projects and tabled this with the AGO. These projects were the most advanced and were seen as the type of projects that would be eligible for GGAP. The BCSE has worked with these members in delineating the greenhouse abatement and these projects have priority for registration in the BCSE's program. A Supplementary List of projects has also been established in the event that projects on the primary list do not proceed to execute Deeds of Agreement with the AGO.

The BCSE program requires that members pre-register their projects with the BCSE and enter into a Facilitation Agreement with the BCSE. The BCSE will then put the project forward to the AGO and assist the Project Proponent in working through the financial, technical and economic assessment process so as to be able to satisfy the AGO requirements. The BCSE will provide administrative support to ensure that projects proceed through this assessment process in a timely and cost-effective manner.

Principal steps in the process:

³ Including voluntary schemes

1. **Pre-registration:**
Project Proponent enters into the Facilitation Agreement and pays a pre-registration fee. The Project Proponent provides project details including abatement calculations so as to enable the BCSE to assess whether the project is likely to meet the AGO and BCSE criteria. Project proponent needs to complete the schedule attached as APPENDIX C as well as providing outline project details.
2. **Review and evaluation**
BCSE reviews and evaluates the information provided by the Proponent and determines whether the project is likely to meet the BCSE and AGO criteria as outlined in APPENDIX A. If the BCSE believes that the project is likely to meet the criteria the BCSE will provide the Proponent with a letter stating that it will put forward the Project to the AGO for funding support.
3. **Registration of project:**
To proceed to the next phase then the Proponent must provide the BCSE with further detailed information to enable a Project Proposal to be developed for submittal to the AGO and the Project Proponent pays Registration Fee.
4. **Proposal development:**
BCSE will work with Project Proponents in developing the Project Proposal in a form to enable assessment by the AGO. The AGO has appointed consultants to undertake the technical feasibility and financial analysis for each project.
5. **Deed of Agreement:**
Once the AGO approves the Project Proposal, the Proponent to sign the Deed of Agreement with the AGO and pay the Completion fee to the Facilitator.
6. **Implementation:**
Project implementation will be governed by the terms, schedules and milestones negotiated as part of each Deed of Agreement.

Eligibility criteria

Projects that are eligible for GGAP funding under this program need to meet the AGO's criteria outlined in Appendix A. The key criteria is for Project Proponents to demonstrate that abatement is technically feasible and is additional to that which would have occurred in the normal course of business. This means that the AGO needs to be satisfied that the project will not have proceeded in the absence of GGAP funding.

To be considered for this program projects will also need to meet criteria that have been established by the BCSE Board which include:

- Project Proponent or thermal host is a member of the BCSE
- Preference and priority given to new projects (rather than modifications to, or expansion of existing projects)
- Reserve tranche of approximately \$2.5 million for smaller projects (e.g. < 5 MW) is to be held open until six months prior to programs expiration and if not filled will be used to support larger projects.

- Maximum payment for an individual project to be no greater than \$4.0 million (equivalent to a project size of approx 25 MW)
- Projects that meet the above criteria will be registered on a “first come” first served basis.

Allocation of funding

The BCSE Executive Committee or a subcommittee delegated by the BCSE Board (the Committee) in concert with the AGO will administer the above criteria and will be the final arbiter as to which projects are registered for the BCSE program.

The program will remain open until Deeds of Agreement are in place for the 250,000 tonnes of abatement, within the allowed timeframe⁴ or until the BCSE’s agreement with the AGO is terminated.

The cogeneration Project Proponent will not be able to access any additional funding in the event that the nameplate rating (and abatement) for a project increases between the registration and AGO approval phase unless capacity is available in the program.

In the event that projects that have been registered with the BCSE for GGAP do not proceed to Deed of Agreement stage or subsequent to signing a Deed of Agreement do not proceed then cogeneration projects that are on the “Supplementary List” will be invited to register. The Committee in concert with the AGO will determine which project(s) from the Supplementary List will be invited to move to registration.

The criteria used by the BCSE Committee to determine which Supplementary List projects will be considered for registration will be based on the eligibility and merit criteria set out in the GGAP Guidelines (included as APPENDIX B) as well as:

- Best fit with available funding
- Company not already receiving GGAP (Round 1) funds from the BCSE for another project
- Maximise market transformation benefits

5. BCSE cost recovery

BCSE costs in administering the program will be recovered through fees to participate in the program and charges for work undertaken on the following basis:

1. Pre-registration fee of \$100 per application (non refundable) once Facilitation Services Agreement signed
2. Non-refundable Registration fee on registration of project (based on nameplate rating) payable on registration:
 - \$1000 for projects less than 1 MW
 - \$3000 for projects from 1 MW and up to 5 MW
 - \$7500 for projects from 5 MW and up to 10 MW
 - \$12,500 for projects from 10 MW and up to 15 MW
 - \$17,500 for projects from 15 MW and up to 20 MW
 - \$20,000 for projects above 20 MW

⁴ Registrations will only be accepted up to the value of the \$10 million funding limit.

3. Final non-refundable Completion fee of two times the Registration fee (based on nameplate rating) once the project has been accepted by the AGO for funding and Deeds of Agreement signed with the AGO. This reflects the expected services that the BCSE provides in assisting the Project Proponent in reaching this stage.
 - \$2000 for projects less than 1 MW
 - \$6000 for projects from 1 MW and up to 5 MW
 - \$15,000 for projects from 5 MW and up to 10 MW
 - \$25,000 for projects from 10 MW and up to 15 MW
 - \$35,000 for projects from 15 MW and up to 20 MW
 - \$40,000 for projects above 20 MW

Once the project has been accepted by the AGO and a Deed of Agreement signed then any further services that the BCSE provides will be charged to Project Proponents on an hourly rate basis agreed in advance with the Project Proponent.

Costs incurred by the BCSE in administering the program and recovered from Project Proponents cannot be paid out of any funding provided by the AGO in relation to a GGAP project and cannot form part of the budget for a GGAP project.

6. Funding amount

The maximum amount of funding is determined by multiplying the total expected abatement over the period 2008 to 2012 (tonnes) by a factor of \$8/tonne.

The payment of GGAP grant funds to proponents will be on the basis of agreed milestones broadly as follows:

- 50% of funds available after execution of equipment supply contract
- 30% of funds available after core engine tests have been performed by equipment manufacturer
- 20 % of funds available at agreed completion date

Payment of the above will be subject to the AGO not paying more than 50% of total project costs at that point in time. No bank guarantees or other security will need to be provided to the AGO.

6. Determining emission factors and methodology

Following considerable negotiation and analysis the methodology and emission factors to be used in determining the level of abatement are set out as follows:

Abatement 2008-2012 (Mt CO₂) =

Electricity previously imported by host (net of any exports) (MWh) * End use electricity emission factor + Gas (or other fuel) previously used by the host (GJ) * Gas (or other fuel) emission factor

less

[Gas (or other fuel) consumed by the cogeneration facility + any other gas (or other fuel) consumed by the host] * Gas (or other fuel) emission factor.

Add

[Electricity exported (if any) from the site * Sent out electricity emission factor] - [Electricity imported (if any) to the site (MWh) * End use electricity emission factor]

Agreed factors

	2008	2009	2010	2011	2012
End use electricity (t CO ₂ -e/MWh)	1.02	1.02	1.01	1.00	1.00
Sent out electricity (t CO ₂ -e/MWh)	1.00	1.00	0.99	0.98	0.98
Natural Gas (kg/GJ)	56.7	56.7	56.7	56.7	56.7

Where other fuels are used (such as LPG or coal) then emission factors will be separately determined and agreed with the AGO.

Where a Facility will exports electricity to the transmission network the sent out electricity factor shall be adjusted by a transmission loss factor that will be agreed on a case by case basis using loss factors published by the National Electricity Market Management Company, where applicable.

REQUIREMENTS FOR PROJECT PROPOSALS

Extract of Clause 3.2 of the Facilitation Deed between the AGO and the Facilitator

In addition to any other criteria in the Guidelines, all Project Proposals submitted by the BCSE under clause 3.1 must meet the following criteria:

- (a) they must specify the amount of the Grant Funds to be allocated to the Proposed Project, which must be calculated on a basis that does not exceed \$8 per tonne of estimated greenhouse gas abatement from the Proposed Project;
- (b) the amount of the Grant Funds to be allocated to the Proposed Project will not exceed 50% of the total funds necessary to carry out and complete the Proposed Project;
- (c) the Grant Funds to be allocated to the Proposed Project will be capped at an amount that results in a real ungeared pre tax internal rate of return to the Proponent from the Proposed Project that is acceptable to the AGO in the circumstances of the particular project but, in any case, does not exceed 12%. In the case where the owner/operator of the facilities in which the cogeneration plant is to be located is undertaking the project then a higher rate of return may be warranted on the basis of additional risk surrounding the project;
- (d) the Proposed Project is expected to achieve a minimum abatement of 2,000 tonnes of carbon dioxide equivalent per annum in each year of operation. Up to a maximum of five Proposed Projects achieving less than the 2,000 tonnes minimum abatement may be considered where they meet other desirable criteria as specified in the Guidelines, but the AGO is under no obligation to accept any such proposals;
- (e) the Project Proposal must use the abatement methodology and emission factors for electricity and gas set out in Item 3 of Schedule 1;
- (f) all Project Proposals must contain an indicative milestone and payment schedule in the form set out in Schedule 2; and
- (g) the Project Proposal must include a completed draft deed of agreement for that particular Proposed Project (including completed schedules) in the form set out in Schedule 3.

APPENDIX B

AGO GGAP Merit Criteria

Primary criteria

All project proposals will be assessed according to the extent to which:

- *the project will achieve significant greenhouse gas reduction or sink enhancement within Australia, that contributes towards meeting Australia's target under the Kyoto Protocol.* Priority will be given to projects that will deliver abatement exceeding 250,000 tonnes of CO₂-e per annum. Projects that do not meet this threshold but meet other criteria to a high degree may be selected.
- *the project is cost-effective, as measured by the amount of greenhouse gas abatement relative to the amount of GGAP funds to be invested;*
- *the project is cost-effective, as measured by the amount of greenhouse gas abatement relative to the total economic, social and environmental costs and benefits of the project;*
- *the project demonstrates that it will achieve long lasting results leading to sustained reduction in emissions in the period 2008 – 2012 and/or beyond; and*
- *in-kind and other sources of funding from the proponent leverage GGAP funds.*

The level of contribution by the proponent should be proportional to the extent and immediacy of any private benefits expected to result from the project.

Desirable criteria

The extent to which a project provides additional benefits in the following areas will be taken into account:

- *builds upon the measures announced by the Prime Minister in his 1997 statement, **Safeguarding the Future: Australia's Response to Climate Change**, the 1998 **National Greenhouse Strategy** and the Prime Minister's 1999 environment package **Measures for a Better Environment**;*
- *provides opportunities for rural and regional Australia;*
- *contributes to ecologically sustainable development, for example biodiversity conservation and natural resource management;*
- *provides for employment growth;*
- *accelerates efforts to research, develop and deploy new technologies or innovative processes; and*
- *acts as a catalyst for further non-government investment.*