
# Australian Environment Business Network

# Submission on Green offsets for sustainable development:

# A NSW Government Concept Paper

**June 2002**

## Executive Summary

The Australian Environment Business Network (AEBN) welcomes the opportunity to comment on the NSW Government's Greens Offsets for sustainable development concepts paper.

Overall the concept of Green offsets is welcomed by industry, as it should provide an additional tool in which to operate while protecting the environment in a cost-effective manner.

For the scheme to operate in a fair and reasonable way AEBN believes the scheme should be entirely voluntary; mandating its use is considered unnecessary.

A major fundamental issue that is unaddressed by the paper is identifying the circumstances that will trigger the need for a green offset. AEBN considers the main method affecting industry is the use of load limits, which currently only affects licensed sites subject to Load Based Licensing. AEBN considers this approach flawed and calls for the introduction of a fairer system, based on scientific and economic reason, which identifies environmentally stressed areas. Consequently, the foundation for using load limits and other potential triggers for Green offsets should be applied to environmentally stressed areas. If such action is not undertaken the application of load limits is flawed.

The current regulatory framework suits the application of Green offsets schemes to new and existing developments that have environment protection licences. While there are some other regulatory mechanisms for agricultural developments, most new and existing developments have no regulatory mechanism in which green offset schemes would be considered. AEBN calls on the government to identify the regulatory basis for new and existing non-licensed sites to consider the use of Green offsets. Overall AEBN is concerned that load limits and use of Green offsets will be largely applied to licensed sites.

The paper introduces the term *zero extra environmental impact*, which AEBN considers is a poor choice of words and it is not defined. It implies that no extra emissions are permitted but does not link this with environmental harm or environmentally stressed areas. It is a connotation that could easily be misinterpreted to mean no emissions, an impossible outcome for any development.

Legal complications may also plague the operation green offset schemes if not remedied. AEBN considers that the responsibility for implementation, operation and management of any scheme must be shared. While the development paying for an offset is responsible for adequate funding it should not be responsible for environmental breaches at an offset site.

An additional beneficial use of an offset scheme would be to provide increased certainty that development approval would be given for a new development. AEBN considers that regulatory support would be required to support such actions where the development plus offset deliver positive environmental outcomes.

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R3 AEBN recommends the government identify how non-licensed new developments may use Green offsets schemes.

R4 AEBN recommends the government identify how existing non-licensed sites will be subjected to similarly effective pollution controls to licensed sites and therefore be users of green offset schemes.

R5 AEBN recommends that Green Offset and other environment protection measures be used fairly across all development types and not for the purposes of remedying one or a number of smaller developments pollution issues by the actions of pressured licence holder in a stressed environmental area.

R6 AEBN recommends that the term 'zero extra environmental impact', or terms to that effect, be defined:

- To refer to limiting contaminants in environmentally stressed areas where appropriate total load limits for the area are applied
- Relate to environmental impact and not emissions.

R7 AEBN recommends the legal mechanisms used to run green offset schemes be clarified and allocate appropriate liabilities to both the development initiating the offset and the site/s hosting the offsite infrastructure and other actions and would include:

- The development to be responsible for funding the offset scheme
- The hosting site/s would be responsible for breaches to regulations/licence covering the operation and performance of the offset infrastructure and onsite actions
- A contract between the development and the host be developed to address payment, alterations, dispute resolution processes, land ownership changes and other management issues**.**

R8 AEBN recommends that for new developments which use offset schemes and where their total environmental improvement is positive, planning approval support, through legislation be provided.

## 1. Introduction

The Australian Environment Business Network (AEBN) is an industry information and representation service for Australian businesses. AEBN currently has offices in Sydney and Melbourne working directly with industries from these jurisdictions.

AEBN welcomes the opportunity to comment on the NSW Government's concepts paper *Green offsets for sustainable development* (Green offsets). Overall AEBN supports the principles of Green offsets and recognises it as improving flexibility in the process of juggling a number of competing issues. Primarily AEBN sees the use of the Green offsets as a voluntary approach that can be undertaken by developments in environmentally stressed areas.

In concept Green offsets are supported, however AEBN has a number of issues including:

- Mandatory and voluntary uses of the scheme
- Developments potentially subject to Green offsets
- Triggers for Green offsets
- Use of zero environmental impact
- Accountability for the on-going maintenance and operation of offsite environment protection infrastructure
- Use of Green offsets to provide economic benefits to industry and business.

For industry, the concept generates many questions about how the scheme will be implemented and how the regulatory structure supporting it may appear. In analysis of these questions AEBN suggests a number of improvements and additions to make the scheme more practicable, cost effective and workable for industry and business.

The above issues are addressed individually in this submission to provide an industry perspective and additional insight into the application of the scheme to benefit industry, business and the environment.

## 2. Mandatory or voluntary?

The Green offsets concept is intended to deal with the potential conflict between human development and environmental protection. As a consequence the most likely use of Green offsets is on new developments where the local environment is stressed. The Green offsets paper does not address whether the scheme will be imposed or offered on a voluntary basis. AEBN examined this omitted issue, which is important for industry.

Examples provided in the paper including:

- The Hunter River salinity scheme
- New York city's pilot phosphorous offset program
- Rahr Malting Co's offset scheme for phosphorous on the Minnesota River.

All represent stressed environments where additional emissions are not permitted above a mass limit. Based on these examples and the potential use of Green offsets AEBN can see no need to mandate such schemes. A voluntary approach is all that is required, as for new developments, the development could not proceed unless it used expensive pollution reduction equipment or an offset scheme. Economics will then dictate the outcome, by either going to onsite treatment, offsets or resiting to an area[1] without such emission restrictions.

Planning triggers for new developments or expansions to existing developments are or should be-tied to any load limits set by the EPA or other regulatory agency. Apart from the Hunter River salinity limits, AEBN is not aware of any defined environmental area that is constrained by a load cap. Load limits are currently applied to individual licences rather than a specific environmental area, such as a river or air shed. As a consequence, in the near future application of the green offset scheme will be minimal. Nevertheless, it points to the government potentially imposing load limits for selected pollutants on environmentally stressed areas, possibly requiring a new set of regulatory instruments. AEBN considers application of the scheme mandatorially to specific licensed sites would be unjustified if the area is not cited as environmentally stressed and the specific contaminant is not at its load limit.

***R1 AEBN recommends that Green offsets be a voluntary option, and the NSW Government promote the scheme as such.***

## 3 Triggers for Green offsets

AEBN considers the application of Green offsets as a voluntary action that can be undertaken by developments. There is concern in relation to when the only option left is to choose a green offset. The Green offsets paper states that 'O*ffsets will work along side other NSW Government programs including*':

- Load based limits and incentive fees–that only apply to licensed sites
- Action for Air, that does not provide load limits for environmentally stressed areas
- Water Sharing Plans under the *Water Management Act*—a resource issue with potential for environmental flow requirements imposed
- Biodiversity issues and threatened species, which prevents development on areas containing threatened species or plant species subject to propagation areas.

AEBN considers the above existing methods to trigger the potential use of Green offsets is inadequate. Under the EPA regulatory framework there is no means to identify and set criteria for an environmentally stressed area. If no clear means of setting local limits is used, Green offsets could be forced on largely licensed sites in a arbitrary manner with no economic or scientific justification for such an action. AEBN fears that EPA may use the approach that *any reduction is justified* as it must improve the environment[2]. Industry is

[1] Resiting may not be possible for some industries such as mines, where their location is based on location of ore bodies.

[2] Under Load Based Licensing (LBL) the fees are based on hitting the most environmentally harmful pollutants, such as oxides of nitrogen. With the introduction of LBL indicated that the use concentrations and load limits would be reduced. In practice

not a source of unlimited funds and the EPA must be mindful that application of pollution reduction must be cost effective.

While the paper discussed Green offsets it identifies another major regulatory issue. As offsets seems to be largely triggered by load limits onsite, how are load limits to be applied? AEBN believes that a scientific rationale should be used to set load limits, based on the local environment's ability to accept contaminants without impact. This brings up the concept of environmentally stressed areas. Some areas are already identified as environmentally sensitive, such as the classification of waters under the Clean Waters Regulation, but which sets concentration limits rather than load limits, more applicable for Green offsets.

Without a clear regulatory framework that spells out which areas are stressed and the pollutant/s that stress an area, the use of load limits and Green offsets, and other controls will be flawed.

***R2 AEBN recommends that the government clearly identify environmentally stressed areas so that equitable application of pollution controls, including the use of load limits and Green offsets can be applied across all developments, licensed, unlicensed, new and old, existing and expanding.***

## 4 Developments potentially subject to Green offsets

AEBN has stated that it fears that Green offsets will be applied to mainly licensed sites. While licensed sites are areas for environmental concern, they are not the only developments that generate emissions to the environment. It may be easy for government to impose tough load limits on licensed sites, forcing some to choose a green offset program. However, this approach defeats the government's goal of improving the quality of the environment[3] as it would ignore diffuse and non-licensed emissions. Diffuse emissions are the major source of oxides of nitrogen in the Sydney area, with motor vehicles representing 82% of total emissions, while industry, licensed and unlicensed represent about 13% according to the EPA's 1997 State of the Environment Report. Oxides of nitrogen are also the most heavily targeted pollutant under the Load Based Licensing scheme, with the vast majority of load fees being paid on theses emissions.

Hence a fundamental issue of concern is which developments will be targeted. The Green offsets paper cites the word 'development' over 80 times in the paper. So what does the term development mean?

Use of Green offsets will certainly apply to new developments. But what about existing developments? Certainly developments that trigger an EIS through expansion could use the scheme. Will it be applied to existing non-designated developments?

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this is not the case with many licensed sites stating the EPA is increasing it vigour in the application of Pollution Reduction Programs and setting load limits.

[3] From the Protection of the Environment Administration Act, (quoted:)

(1) The objectives of the Authority are:

(a) to protect, restore and enhance the quality of the environment in New South Wales, having regard to the need to maintain ecologically sustainable development, and

(b) to reduce the risks to human health and prevent the degradation of the environment,

Environmentally speaking, newer developments are usually more efficient, generate less waste and have environmental protection design built into the process. However, relocation has its problems.[4]

The question is how much should new development be penalised for past practices? Should not some existing developments be accountable for their contribution to a locally stressed environment?

If an area is deemed to be environmentally stressed, what action will the government take on new and existing developments? AEBN again fears that existing licensed sites will be largely targeted with load limits forcing the use of Green offsets. Such action is unfair and ignores the contribution that other existing developments to stressing an environment. This is particularly apparent in the Green offsets paper that diffuse sources of pollution are to be in part controlled and paid for by new and potentially existing licensed sites.

***R3 AEBN recommends the government identify how non-licensed new developments may use Green offsets schemes.***

AEBN is concerned how the method in which Green offsets will be used to control diffuse sources of pollution. The paper has a heading '*Offsets – a great way to tackle diffuse-source pollution*' which largely shows how new and existing licensed developments are to pay for the reduction of pollution from diffuse sources. As an example, the paper shows how a sewage treatment plant can pay for market gardens to reduce their phosphorous contribution to a creek. This raises a number of issues.

The paper suggests that the market gardens are polluting, most likely in violation of section 120 of the *Protection of the Environment Operations Act 1997*[5](POEO Act). Hence the paper seems to condone that a third party is responsible for someone else's pollution. By setting up a green offset scheme to manage discharges offsite, makes the sewerage treatment plant responsible for the market garden's failure to meet it environmental requirements under the POEO Act.

So where is the equity in enforcement of environmental law? If the appropriate agency enforced the POEO Act correctly then the circumstances surrounding the South Creek example may not have arisen. Potentially the creek could accept the increase phosphorus load from the sewerage plant. This is assuming that no phosphorous pollution other than from the licensed sites are being discharged in accordance to the POEO Acts requirements. In other words the market gardens and other unlicensed sites should not be emitting phosphorous to the creek. If they complied then a green offset scheme could not be used as there would be nothing to offset. Under this example the green offset scheme appears to support AEBN's fears that licensed sites will be required to fix up diffuse

[4] The chemical industry has been frustrated in the past by community opposition at the planning stage to relocate new production plants. Older plants not designed to today's stringent standards must operate their older plants in densely populated areas, with increasing risk exposures to their new encroached neighbours. Changing production to move to cleaner production and energy efficient operations is out of the question as this triggers an EIS and community opposition. The usual answer is to move out of NSW, generally offshore.

[5] There is no limit for phosphorous under the Clean Waters Regulation for classified waters. Hence any discharge of phosphorus is a breach of section 120 POEO Act.

sources of pollution. Such a scheme undermines the *polluters pays principle* as it appears that some licensed sites will pay for other non-licensed sites pollution and, the others do not have to pay at all!

***R4 AEBN recommends the government identify how existing non-licensed sites will be subjected to similarly effective pollution controls to licensed sites and therefore be users of green offset schemes.***

***R5 AEBN recommends that Green Offset and other environment protection measures be used fairly across all development types and not for the purposes of remedying one or a number of smaller developments pollution issues by the actions of pressured licence holder in a stressed environmental area.***

## 5 Use of zero environmental impact

AEBN is concerned the Green offsets paper introduces the concept of *zero extra environmental impact* with out any definition, refinement or constraint as to when such a concept should be applied.

It would be dangerous to extend the concept that zero extra environmental impact means zero increase in emissions. The concept of Environment Protection licences is to permit a level of emission where there is minimal or no environmental impact. Contaminants are currently permitted, via licences and regulations, to be discharged into the environment at a level where their rate of emission can be absorbed with no adverse harm.

Only when a local area's environment is stressed to the point that no more mass of a contaminant can be permitted could the term *zero extra environmental impact* be appropriately used.

Again AEBN is concerned that if the EPA uses vague definitions of when an area is environmentally stressed, arbitrary load limits would be applied to licensed industrial sites. Such action is already being experienced by industry. EPA inspectors are using last year's emissions loads as a starting point for setting load limits for sites subjected to Load Based Licensing[6]. To prevent the load limits threatening to cap the potential production potential of a site, the licence holder can make a submission to the EPA to increase its proposed load limits. The submission must be based on:

- Capacity utilisation: the site was operating below approved operating capacity for the load reporting period
- Abnormal year of operation: emission loads from a premises may fluctuate according to the variations and combinations of activities on the site.
- Approved expansion not yet in place: if expansion of your operation has been approved but the plant is not yet in full operation
- Load limits should reflect the total load of a pollutant rather than only the emissions calculated from activities included in the current load calculation protocol. For many

**6** Determining Load Limits For Environment Protection Licences Guide Notes For Licensees

activities the emissions included in the LBL scheme represent only a subset of the emissions from a site. For example, not all fugitive emissions for air and water pollutants are yet included in the protocol.

AEBN considers the applications of load limits are not based on the receiving environment, but on the ability the EPA to cap the site at a previous year's emission load. While there may be scope to apply for an increase in the load limit, once it is set, this has not yet been attempted and is expected to be difficult. Consequently, AEBN is concerned that some sites not considering the issue of load limits seriously at the time of licence negotiation could be forced to use green offset, rather than the EPA agreeing to increase their load limit. Nevertheless, AEBN regards the current method of applying load limits is arbitrary, flawed and bias by targeting only LBL licensed sites.

***R6 AEBN recommends that the term 'zero extra environmental impact', or terms to that effect, be defined:***

- ***To refer to limiting contaminants in environmentally stressed areas where appropriate total load limits for the area are applied***
- ***Relate to environmental impact and not emissions.***

## 6. Accountability for offsite infrastructure

AEBN is concerned that where large existing and new developments use Green offsets they may expose themselves to conditions they have little control over.

The Green offset paper suggests that a scheme manager oversee the implementation and on going operation and maintenance of offset schemes operating offsite of the development claiming them. Also that the offsetting development pay for the management of the scheme manager and the expenses in running the offset. This sounds like an expensive operation to pay for the management of an offset. AEBN is particularly concerned over the management and power a development invoking an offset has over any scheme manager, particularly if the scheme manager must report to the government rather than to the paying development. The option for self managed contracts should be permitted under the Green offsets scheme, but this still raised further issues.

A number of other legal issues arise especially if an EPA licensed site is made responsible and potentially liable for pollution on another site it has no direct control over. Take the example the paper gives on the sewerage plant offsetting its phosphorous emissions by putting catchment devices and management practices offsite at a local market garden.

Initially the sewerage plant installs a number of dams and runs training programs at the market garden to limit phosphorous emissions. The sewerage plant operation is responsible for the up keep and ongoing good environmental management practices at the market garden, but up to a point. What happens if the market garden management changes its mind and ignores the management practices? Should the sewerage treatment plant be solely responsible if the market garden's effluent exceeds its limits? What regulatory or contractual controls should be available to the sewerage plant to control what they pay for? Surely the market garden management must be exposed to some

regulatory instrument—perhaps an EPA water licence—or they could hold the sewerage plant to environmental ransom by ignoring their responsibilities or sabotaging infrastructure.

AEBN believes, the development using Green offsets should be responsible for establishing a scheme, implementing it and providing on-going funding for its continuation. The other sites, which accept the funding to reduce their emission load, must be subject to similar environmental regulations to ensure they meet the conditions of the contract and environmental regulatory conditions such as a licence.

Provisions for the shutting down of a site operating an offset for another company would also need to be considered. Change in responsibility should also follow change in ownership of the land where offset infrastructure or actions are being undertaken, if there is to be no change in emissions. If there is a reduction or the polluting practice at the other site ceases then the development using the offset should receive the credit for this change in practice. This provision may also provide incentive for the development using the offset to purchase the property and change its activity.

Dispute resolution between the parties would be complicated due to the differences between criminal environmental breaches and civil contractual issues. Such issues need to be addressed before any offset scheme can operate.

***R7 AEBN recommends the legal mechanisms used to run green offset schemes be clarified and allocate appropriate liabilities to both the development initiating the offset and the site/s hosting the offsite infrastructure and other actions, and would include:***

- ***The development would be responsible for funding the offset scheme***
- ***The hosting site/s would be responsible for breaches to regulations/licence covering the operation and performance of the offset infrastructure and onsite actions***
- ***A contract between the development and the host be developed to address payment, alterations, dispute resolution processes, land ownership changes and other management issues.***

## 7 Economic benefits to industry and business

In certain circumstances industry and business may find the use of an offset scheme will offer some advantages including:

- Being able to operate in an environmentally stressed area
- Using the Green offsets to overcome community opposition to a new development

The latter issue is one that has not been addressed in the concepts paper. In practice AEBN considers Green offsets can be used to support a new controversial but necessary development that will bring overall community benefits, such as a waste treatment facility. New developments needing to overcome stiff local community opposition should be able to call on the use of an offset scheme to improve its chances of being accepted.

AEBN considers that where Green offsets are used for new developments there should be supporting legislation to assist the development gain consent. This would be particularly effective when the offsets are greater than the total emissions from the site. When such developments offer overall improved environmental outcomes or negative emissions, then the acceptance of the development should be greatly enhanced, if not made automatic.

If environmental issues were the only issues that affected a new development's planning approval then such a site should be given consent based on its environmental merits. However, many other non-environmental, especially financial issues cloud a development applications' approval. Consequently, AEBN considers that legislative support is required to counter act any non-environmental issues in the planning approval process.

***R8 AEBN recommends that for new developments which use offset schemes and where their total environmental improvement is positive, planning approval support, through legislation be provided.***

## 8 Conclusion

AEBN considers the use of green offset schemes as a positive inclusion to the regulatory framework for environmental protection. Ensuring Green offsets are offered as a voluntary tool is essential to providing it as a benefit to both industry and the environment.

Green offsets should be available voluntarily to all developments, especially when they are emitting to stressed environmental areas. Application of load limits and green offsets to non-licensed existing developments needs to be developed as it is unfair to impose restrictions to only new and licensed developments. What is needed is a balance between existing and new development to share the costs and management of environmentally stressed areas.

Developing how regulatory agencies deal with environmentally stressed areas will be clarified and made equitable. The use of load limits and other controls will be transparent and scientifically based and applied equitably across a wide selection of developments.

A comprehensive regulatory structure will ensure that the responsibility for implementation, operation and management of any scheme will be shared.