



Department of Planning and Environment

Biodiversity credit pricing guide

**Guidance for pricing biodiversity credits under
the Biodiversity Offsets Scheme – 2022**

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1. Introduction to this guide

This document provides guidance for pricing biodiversity credits created under the NSW Biodiversity Offsets Scheme, including ecosystem credits and species credits.¹ It can be used by developers seeking to estimate the likely cost of biodiversity credits, or landholders seeking to price credits on their land. The methods covered in this guide include typical inputs into credit pricing that all stakeholders can consider. The guide has been developed in response to stakeholder feedback that guidance on pricing of biodiversity credits would be useful.

This guide covers:

- intended uses and limitations of this guide
- typical inputs contributing to the price of biodiversity credits, and considerations for pricing input components
- credit pricing in direct negotiations with developers and for reverse auctions or expressions of interest.

2. Uses and limitations of this guide

The Biodiversity Offsets Scheme is market-based, and as with any market (including more developed markets such as housing or share markets), future prices are not guaranteed. This guide identifies issues for consideration and supports decisions about pricing, but it is not financial advice. All market participants should obtain their own expert advice, including legal and financial advice, carefully assess risks relevant to their situation and make independent investment decisions accordingly, as they would when making any significant financial decision.²

Credits can be priced using two main methods:

1. using market information to identify credit sales that are equivalent to those being priced, taking into account the types of credits, timing and other factors
2. using a costing method that prices the cost of supplying credits, including the costs associated with the establishment of a biodiversity stewardship agreement (BSA) (e.g. legal, business planning, biodiversity assessment costs), Total Fund Deposit (TFD), administrative fees, holding and transaction costs, and expectations of profit.

An independent valuer with the relevant skills and experience could also be employed to provide advice on pricing credits.

This guide is intended to support market participants in thinking about pricing of biodiversity credits; however, prices for credits in the open market depend on how much credit buyers and sellers are willing to pay, or accept, for them. The market price may be different from the cost of supplying credits in many situations. Prices for credits being bought or sold in the open market are the responsibility of the buyer and seller.

¹ For more information see the 'What are biodiversity credits?' webpage.

² Resources include the Australian Securities & Investments Commission's (ASIC) Financial Advisers Register, and the Legal Services Council's Australian Legal Profession Register.

The Biodiversity Offsets Payment Calculator (BOPC) should not be used to estimate the market price of biodiversity credits. This is because it includes a risk premium and administrative costs associated with making a payment to the Biodiversity Conservation Fund (BCF) as a way of transferring offset obligations to the Biodiversity Conservation Trust (BCT).

The BCT has developed a new BCF charge system to replace the existing BOPC. More information about this work is available on the 'A new approach to establishing the charge for payments into the Biodiversity Conservation Fund' webpage.

3. Using market information to identify credit sales

Market information can be used to identify credit sales that are equivalent to the credit being priced. Information to be considered includes the type of credit (same or similar credits), timing, and location. The BCT's *Biodiversity Stewardship Agreement Landholder Guide* (section 1.6) provides further information about biodiversity credits.

Market sales information may sometimes reflect other factors, and these should be considered when deciding how relevant market sales information is to the credits being priced; for example:

- some credit sales are between related parties (e.g. where the seller is a company owned by the buyer) and the price may be nominal or may reflect private negotiations
- some credit prices are based on an average price per unit where the seller has sold credits in bulk, rather than pricing each credit individually
- the price of the TFD for the site (relevant proportion – see Box 1) from which the credit was generated may be different, or having met the TFD, a landholder may sell remaining credits cheaply
- the price will vary according to the demand at the time of sale relative to the supply of those types of credits.

Currently available sources of information to support pricing of credits include the public credit registers and the BioBanking Spot Price Index, which provide prices of similar credits that have been sold.

Supply and demand for credits is also important to consider as part of credit pricing. The Department of Planning and Environment (the Department) has a credit demand register and the BCT has a 'credits wanted' register, and other market supply and demand support products, including an indicative demand analysis, which may assist you to better understand supply and demand trends.

Accredited assessors may be able to assist in interpreting data sources or guiding consideration of credit pricing; however, accredited assessors (or other independent valuers) are likely not financial advisers, and specific financial or other professional advice may be needed. Market participants should obtain advice from sources with appropriate qualifications and experience.

4. Using a costing method to price credits

Inputs typically considered when pricing ecosystem credits include:

- establishment costs to set up a BSA
- management costs at the stewardship site (the TFD) required to improve biodiversity and generate credits³
- opportunity or land costs
- profit and risk calculations.

Each of these components is covered in more detail below, with information to help price each one, and resources for obtaining more information. All resources referred to in this guide are provided as weblinks in section 8.

4.1 Establishment costs

Establishing a stewardship agreement involves a range of costs and fees that are often factored into the price of credits. Typical inputs are set out in Table 1, together with reference materials to help consider costs. You can use Table 4 of this guide to enter costs identified against these components.

Table 1 Typical establishment costs considered in pricing ecosystem credits

No.	Component	Information and how to estimate price	Resources
1	Preliminary advice	<p>A landholder may wish to obtain preliminary advice, as part of the process of establishing a BSA and generating credits.</p> <p>This can include undertaking a feasibility assessment or business case, which can provide indicative costs, credit potential and supply and demand information.</p> <p>These are optional steps but should contribute to and reduce the cost of a full assessment. An accredited assessor can advise about options.</p>	<p>BCT <i>BSA Landholder Guide</i></p> <p>BCT 'Feasibility assessment for a BSA' webpage</p> <p>Accredited Assessor Public Register</p> <p>ASIC Financial Advisers Register</p> <p>Legal Services Council Australian Legal Profession Register</p>
2	Site assessment	<p>A key establishment cost component is the biodiversity assessment of the proposed site. This includes engaging an accredited assessor to apply the BAM and prepare a Biodiversity Stewardship Site Assessment Report.</p> <p>This cost will vary depending on the size of the site, its biodiversity and survey requirements.</p> <p>The cost of biodiversity assessments is set by providers in the market. Landholders may wish to seek a quote/pricing advice from several accredited assessors.</p>	<p>Accredited Assessor Public Register</p>

³ The cost of all management actions at the stewardship site is the minimum that credit prices should cover, because this amount needs to be transferred to the Biodiversity Stewardship Payment Fund when the credits are sold, to cover annual management payments.

No.	Component	Information and how to estimate price	Resources
3	Professional advice	<p>The third component typically contributing to the cost of generating credits is any professional advice a landholder may require when considering or establishing a BSA. This could include financial, legal, tax or other professional advice.</p> <p>The cost of professional advice will vary based on individual circumstances and requirements. The BCT landholder and tax guides may assist when considering these issues.</p>	<p>BCT <i>BSA Landholder Guide</i></p> <p>BCT Landholder guide on taxation issues</p> <p>ASIC Financial Advisers Register</p> <p>Legal Services Council Australian Legal Profession Register</p>
4	Any administrative fees	For example, BSA application fees. Further information on fees is available on the Department's website.	Department's 'Scheme fees' webpage

4.2 Management costs

Site management costs or management action costs are a central component of credit prices. Management costs are site specific and can include the cost of fencing, weed management, regeneration and other relevant actions, as set out in a stewardship site management plan.

The present values of all management action costs for a stewardship site make up the TFD that must be paid into the Biodiversity Stewardship Payment Fund for ongoing management. The TFD is then used to make annual management payments to the landholder or land manager.

Information and links to estimate the pricing of site management are set out in Table 2. You can use Table 4 of this guide to enter the costs you identify.

Table 2 Management cost component of ecosystem credit prices

No.	Component	Information and how to estimate price	Resources
5	Ongoing site management costs	<p>The BCT has developed guidance material to assist in costing management actions. These are often costed at contractor rates.</p> <p>Each management action, as well as the timing and cost of implementation must be outlined within the Department's TFD calculator. See the landing page and Tabs 1 and 2 of the calculator to enter costings.</p> <p>Landholders typically engage a specialist practitioner to undertake development of these costings.</p>	<p>BCT <i>Total Fund Deposit Guideline</i></p> <p>Department's Total Fund Deposit Calculator</p>

4.3 Establishing a biodiversity stewardship agreement limits the ways in which land can be used in future

Depending on zoning and a range of other regulatory requirements, as well as the BSA itself, establishing a BSA will change how this land can be used. Some credit sellers may factor this into their pricing of credits. In Table 4 of this guide you can factor this into the credit price as an ‘opportunity cost’.

4.4 Factoring in profit

In pricing credits, sellers will want to include an amount as a profit from the investment and business activity. In line with expectations from other business and investment decisions, this could range from 5–25% depending on the difficulty and risk that has been involved. In addition, where there is limited supply and strong demand, it is expected that profits may be higher, or where there is good supply and less demand, profits would be lower.

Factoring in profit can be informed by:

- the level of supply and demand in the market
- comparisons with expected profits from other investments
- other individual preferences, such as how long a seller is willing to wait to find a buyer for their credits or to factor in risks.

Table 3 suggests resources to help price profit and risk including public registers and professional advice; for example, from financial advisers. You can use Table 4 of this guide to enter the costs you identify.

Table 3 Profit and risk considerations in biodiversity credit prices

No.	Component	Information and how to estimate price	Resources
6	Profit and risk	Relevant considerations around profit and risk are best discussed with professional advisers, and with a view to the public registers that provide information about the demand for and supply of particular credits (noting section 3 of this guide discusses interpreting market information).	Biodiversity Offsets Scheme public registers, including: <ul style="list-style-type: none"> • Credit supply register • Credit demand register • Transactions register BCT Wanted Credits List

5. Worksheet for credit pricing

Table 4 is a simple worksheet using the inputs set out in this guide to help estimate an average price for biodiversity credits.

Table 4 Estimating the average cost per credit

No.	Item	Cost
1	Preliminary advice	
2	Site assessment	
3	Professional advice	
4	BSA application fee	
5	Ongoing management costs including the TFD (see calculator below)	
6	Opportunity cost	
7	Profit	
Estimated total costs		
Estimated number of credits generated		
Estimated average cost per credit		

The Total Fund Deposit Calculator may also be of assistance for considering costs and estimating prices. Sheet 1 of the calculator includes a credit pricing worksheet and detailed instructions, Sheet 2 includes a way to calculate a TFD after considering annual costs and discount factors, and Sheet 3 offers a way to identify cost per credit. Use of the Total Fund Deposit Calculator should be discussed with an accredited assessor and/or financial adviser.

Box 1: How do Total Fund Deposits affect credit prices?

The TFD is the amount of money to be set aside in the Biodiversity Stewardship Payments Fund to provide funding for management of the land under each BSA. The TFD is set as part of establishing the BSA and can be an important consideration in the pricing of credits.

The TFD will usually be only a portion of the total credit price. The total price may be made up of the TFD plus the seller's set up costs, land value and expectations of profit. The proportion of the credit price made up by the TFD will vary depending on market conditions and the preferences of buyers and sellers.

If a sale is for all credits created by the BSA, the full TFD must be paid. If the sale is for a portion of the credits created by the BSA, the amount payable towards the TFD is based on the proportion of credits sold. The sale price of credits needs to match or exceed the amount required to be paid towards the TFD. The *BSA Landholder Guide* (section 5.4.1) provides an example of determining the TFD requirement.

6. Developer-initiated agreements

Landholders may establish a BSA over their land after an approach from a developer seeking a site to meet their offset requirements. This includes mining companies or government infrastructure agencies. These developer-initiated agreements can provide more certainty for landholders (by having a known buyer), and the developer may pay for the upfront costs in establishing the BSA. For example, the developer could engage an accredited assessor to undertake site assessment and agrees to purchase all or many of the credits at the site.

Under this type of arrangement, landholders should consider similar factors to pricing credits as set out in this guide in the upfront negotiations, and adjust to take into account the specific details of the offer being provided by the developer. The landholder should consider closely the long-term management requirements of the site and ensure long-term commitments under a proposed BSA are appropriate for them. This guide may assist landholders in thinking through this proposition. Landholders should seek independent advice before proceeding.

7. Pricing for expressions of interest or reverse auctions

Proponents of major projects (private or government) may use mechanisms such as reverse auctions or competitive tenders to facilitate purchasing large numbers of credits from multiple sellers. These processes can also be referred to as an expression of interest. Proponents may be seeking to buy established credits or may also seek expressions of interest for setting up new stewardship sites on land owned by others.

Generally, buyers who are using these mechanisms will rank competing bids according to factors such as price, readiness to sell, and take into account the specific needs of the project, before selecting the most suitable bids according to defined criteria.

Proponents can seek further information and guidance from the Department if interested in exploring purchasing credits using reverse auctions or competitive tenders.

Landholders who are entering into these processes should consider how they would like to price their credits and may find this guide useful in deciding how to quantify this amount either for established credits or to establish a new BSA. Buyers will often require specific conditions to be met and potential sellers should carefully review these to ensure the credits or site are eligible.

8. Resources

The resources below include publications to assist with pricing, information about aspects of the Biodiversity Offsets Scheme and biodiversity credits, public registers, and general financial and professional services and registers that may be of use to scheme market participants.

- [A new approach to establishing the charge for payments into the Biodiversity Conservation Fund](#)
- [Accredited Assessor Public Register](#)
- [ASIC Financial Advisers Register](#)
- [BCT Biodiversity Stewardship Agreement Landholder Guide](#)
- [BCT Feasibility assessment for a BSA](#)
- [BCT Landholder guide on taxation issues \(PDF 709KB\)](#)
- [BCT Biodiversity stewardship agreement \(BSA\) information](#) (key resources for landholders at any stage of the BSA application process)
- [BCT Total Fund Deposit Guideline \(PDF 582KB\)](#)
- [BCT Wanted Credits List](#)
- [BioBanking Spot Price Index](#)
- [Biodiversity Offsets Scheme and BioBanking public registers](#)
- [Biodiversity Stewardship Payment Fund](#)
- [DPE Biodiversity Assessment Method \(PDF 1.8MB\)](#)
- [DPE Credit Demand Register](#)
- [DPE Scheme fees](#)
- [DPE Total fund deposit and discount rate](#)
- [DPE Total Fund Deposit Calculator](#)
- [Indicative demand for ecosystem credits](#)
- [Legal Services Council Australian Legal Profession Register](#)
- [What are biodiversity credits?](#)