



Metz Solar Farm (SSD 7931)

Biodiversity Offset Strategy

Prepared for
Infinergy Pacific Ltd

February 2017



DOCUMENT TRACKING

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Project Manager	Robert Cawley 02 8081 2689 92 Taylor Street
Prepared by	Alex Pursche
Reviewed by	Robert Cawley
Approved by	Dr Paul Frazier
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This report should be cited as ‘Eco Logical Australia 2017. *Metz Solar Farm (SSD 7931) – Biodiversity Offset Strategy*. Prepared for Infinergy Pacific Ltd.’

ACKNOWLEDGEMENTS

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Abbreviations

Abbreviation	Description
BAR	Biodiversity Assessment Report
BBCC	BioBanking Credit Calculator Version 4.0
BOS	Biodiversity Offset Strategy
CEMP	Construction Environment Management Plan
DP&E	Department of Planning and Environment
Ecosystem credit	A measurement of the value of EECs, CEECs, and threatened species habitat for species that can be reliably predicted to occur within a PCT
EEC	Endangered Ecological Community
EIS	Environmental Impact Statement
ELA	Eco Logical Australia Pty Ltd
EP&A Act	NSW Environmental Planning and Assessment Act 1979
EPBC Act	Commonwealth Environment Protection and Biodiversity Conservation Act 1999
EPBC Regulations	Commonwealth Environment Protection and Biodiversity Conservation Regulations 2000
FBA	Framework for Biodiversity Assessment
IBRA	Interim Bioregion of Australia
LEP	Local Environment Plan
LGA	Local Government Area
MNES	Matters of National Environmental Significance
NSW	New South Wales
PCT	Plant Community Type
SSD	State Significant Development
TEC	Threatened Ecological Community
the development site	lands within the existing Ivanhoe Estate proposed for re-development
the Project	Re-development of the Ivanhoe Estate, Macquarie Park
TSC Act	NSW Threatened Species Conservation Act 1995

Executive summary

Eco Logical Australia Pty Ltd (ELA) was contracted to undertake a biodiversity assessment of the proposed Metz Solar Farm development near Armidale NSW (the development site). The proposed development of the solar farm (the Project) has been declared a State Significant Development (SSD - 7931), and as such the environmental impacts of the proposal are to be assessed under Part 4.1 of the NSW *Environmental Planning and Assessment Act 1979* (EP&A Act).

As a SSD, the impacts of the proposed development must be assessed under the Framework for Biodiversity Assessment (FBA) (OEH 2014) and a Biodiversity Assessment Report (BAR) must be prepared. The purpose of this BAR is to assess the impacts to biodiversity, propose mitigating and ameliorating options, as well as calculate offsets for unavoidable residual impacts.

The development site is currently used for agricultural purposes and has been heavily cultivated. There are several extensive *Pinus radiata* (Radiata Pine) plantations which comprise the dominant woody vegetation type within the development site. There are native remnant trees throughout the development site within ploughed paddocks. There are three plant community types (PCTs) that occur within the development site:

- NR127: Blakely's Red Gum - Yellow Box grassy open forest or woodland of the New England Tableland Bioregion
- NR131: Broad-leaved Stringybark - Blakely's Red Gum grassy woodlands of the New England Tableland Bioregion
- NR282: Yellow Box - Broad-leaved Stringybark shrubby open forest of the New England Tableland Bioregion.

NR127 occurs within the north of the development site on alluvial soils that are relatively fertile. This PCT exists as scattered trees within cultivated paddocks. The dominant canopy species within this PCT is *Eucalyptus moluccana* (Grey Box). The mid-storey and native groundcover is absent due to extensive agricultural practices. This PCT is not consistent with Endangered Ecological Community (EEC) listings under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), or the NSW *Threatened Species Conservation Act 1995* (TSC Act).

NR131 occurs within the southern portion of the development site and is equally as depauperate as other PCTs within the development site. This PCT occurs on soils that intergrade between moderately fertile soils of the alluvium, and low fertility shallow soils with granite outcrops. The PCT only exists as scattered trees within ploughed paddocks. The dominant canopy species within this PCT are *Eucalyptus caliginosa* (Broad-leaved Stringybark), *Angophora floribunda* (Rough-barked Apple), and occasionally *Eucalyptus melliodora* (Yellow Box). The mid-storey and native groundcover has been removed. This PCT is not consistent with the EEC listings under either the EPBC Act or TSC Act.

NR282 occurs within the central portion of the site on shallow soils with granite outcrops. This PCT occurs in two condition states within the development site; moderate – good, and moderate – good (poor). Some areas of this PCT are degraded and occur within cultivated paddocks, however a small portion of this PCT occurs within the confines of a pine plantation whereby it has not been subject to the same persistent impacts of agriculture and has a more native ground-cover. This PCT is dominated almost exclusively by *E. caliginosa*. The mid-storey has been removed. This PCT is not consistent with the EEC listings under either the EPBC Act or TSC Act.

No threatened flora or fauna species were observed within the development site, however several individuals of *Eucalyptus nicholii* (Narrow-leaved Black Peppermint) were observed adjacent to the development site.

As part of the BAR, avoidance measures to minimise impacts to biodiversity were proposed, including siting of the Project, alternative options, as well as methodologies to minimise impacts during construction and operation of the Project. Following consideration of minimisation methods, the residual unavoidable impacts of the Project were calculated in accordance with the FBA by utilising the BioBanking Credit Calculator (BBCC). The BBCC calculated that a maximum of 113 ecosystem credits are required to offset the unavoidable impacts of the Project. This included 24 NR127 credits, 50 NR131 credits, and 39 NR282 credits.

This BOS has been drafted to achieve the offset requirement for the Project. This BOS is guided by the *NSW Biodiversity Offsets Policy for Major Projects* (OEH 2014). The objectives of this BOS are to:

- propose a suitable offset strategy to fully compensate for all unavoidable direct impacts of the Project; and
- propose a suitable offset mechanism that will provide a transparent, enforceable and enduring offset for the impacts of the Project.

The strategy to achieve all offset requirements of the Project will be to acquire and retire, the full requirement of BioBanking ecosystem credits as required by the BBCC prior to commencement of construction of the Project.

1 Introduction

Infinergy Pacific Ltd (Infinergy) contracted Eco Logical Australia Pty Ltd (ELA) to undertake a biodiversity assessment for the development of the Metz Solar Farm, approximately 18 km east of Armidale (the Project). Infinergy propose to develop a commercial scale photovoltaic (PV) solar farm at Metz, NSW. The Project would have a capacity of up to 100 megawatts (MW).

1.1 Purpose

The purpose of this BOS is to provide a commitment to offset the impacts of the Project on threatened species, threatened species habitat, and threatened ecological communities. This BOS has been prepared as requested by the NSW Department of Planning and Environment (DP&E) within the Secretaries Environmental Assessment Requirements (SEARs).

Impacts of the Project are to be assessed under the *Framework for Biodiversity Assessment* (FBA) (OEH 2014) in the form of a Biodiversity Assessment Report (BAR) which has been prepared in conjunction to this BOS. The BAR determined that habitat for threatened species listed under the NSW *Threatened Species Conservation Act 1995* (TSC Act) would be impacted by the Project, and as such offsets would be required under both the TSC Act.

This BOS is therefore guided by the *NSW Biodiversity Offsets Policy for Major Projects* (OEH, 2014). The objectives of this BOS are to:

- Propose a suitable offset strategy to fully compensate for all unavoidable direct impacts of the project; and
- Propose a suitable offset mechanism that will provide a transparent, enforceable, enduring offset for the impacts of the project.

1.2 Objectives of the Biodiversity Offset Strategy

The objective of this BOS is to provide a pathway for delivery of a suitable offset to ameliorate the impacts of the project.

The purpose of determining offsets for the project is to achieve a long term biodiversity gain for threatened species, populations and ecological communities impacted by the project.

This BOS has been drafted to provide options for complying with the objectives of the NSW *Biodiversity Offsets Policy for Major Projects* (the NSW offsets policy) (Section 3).

1.3 Overview of the project

The proposed Metz Solar Farm would consist of PV panels, with a combined capacity of up to 100 MW. The final size of the development is dependent on a combination of factors:

- environmental impact assessment;
- solar design assessment;
- grid availability; and
- power purchase agreement.

The current EIS has been applied for in a way that gives a degree of flexibility to the size constructed.

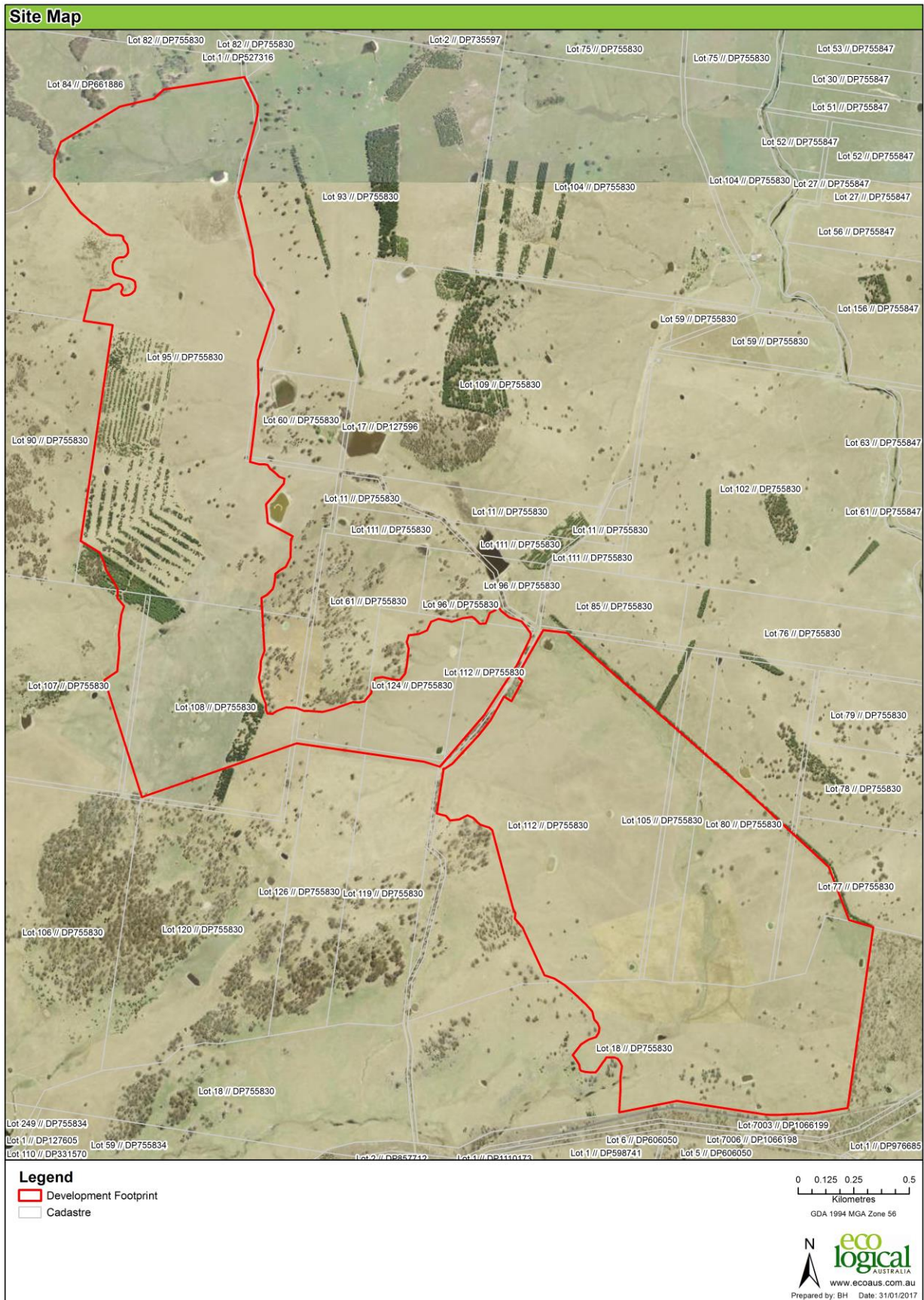


Figure 1: Proposed location of the development site

2 Summary of impacts

2.1 Impacts of the development

Impacts associated with the Project are assessed and documented in the BAR (ELA, 2017). The Project will involve impacts to native vegetation and fauna habitat within the development footprint. Depending upon the final design chosen, the Project will unavoidably impact up to 8.40 ha of native vegetation. A summary of the areas to be directly impacted by the Project is shown in **Table 1**.

Table 1: Direct loss of native vegetation

Vegetation zone	PCT name	Area to be removed
NR127 Moderate – Good	Blakely's Red Gum - Yellow Box grassy open forest or woodland of the New England Tableland Bioregion	2.04
NR131 Moderate – Good (poor)	Broad-leaved Stringybark - Blakely's Red Gum grassy woodlands of the New England Tableland Bioregion	4.09
NR282 Moderate – good	Yellow Box - Broad-leaved Stringybark shrubby open forest of the New England Tableland Bioregion	0.78
NR282 Moderate – good (poor)	Yellow Box - Broad-leaved Stringybark shrubby open forest of the New England Tableland Bioregion	1.48
Total		8.40

2.2 Impacts requiring offsetting

Up to 8.40 ha of native vegetation will be removed as part of the construction and operation phase of the project, and will require offsetting. The offsetting requirement has been calculated using the BioBanking Credit Calculator (BBCC). A summary of the vegetation zones, loss in landscape value, loss in site value, and ecosystem credits required to offset the impacts of the project are shown in **Table 2**. A copy of the BBCC report is shown in **Appendix A**.

Table 2: Loss in landscape value, site value, and ecosystem credits required

Zone	PCT	Loss in Landscape Value	Loss in Site Value	Area	Required Ecosystem Credits
1	NR127: Moderate – good	10.20	12.50	2.04	24
2	NR131: Moderate – good	10.20	13.02	4.09	50
3	NR282: Moderate – good	10.20	51.04	0.78	24
4	NR282: Moderate – good (poor)	10.20	9.89	1.48	15
Total				8.40	113

2.3 Impacts not requiring offsetting

Impacts to cleared land within the Development Footprint do not require offsetting.

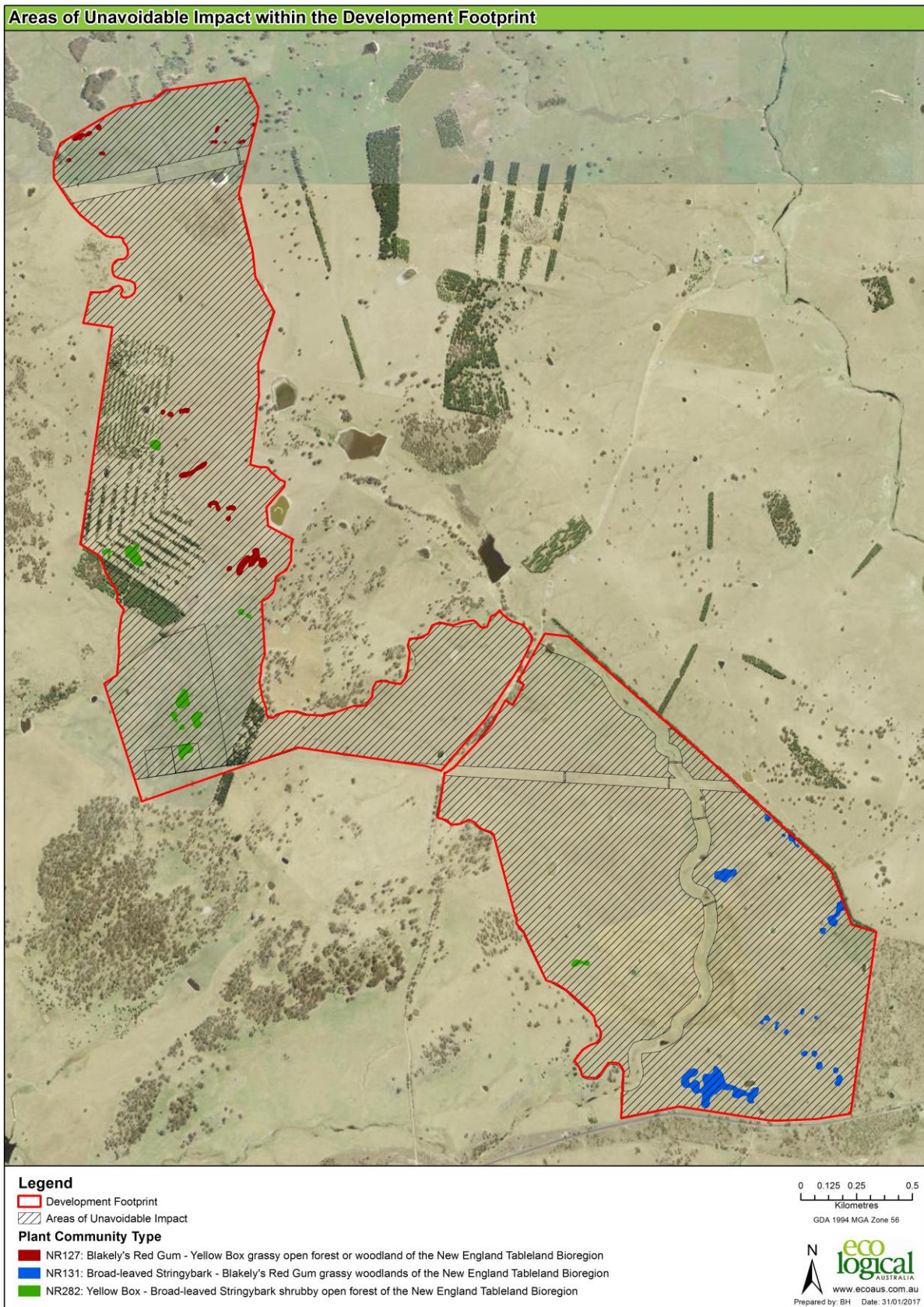


Figure 2: Vegetation to be impacted within the development site

3 Policy framework of the offset strategy

This BOS is guided by policy frameworks under NSW legislation. The *NSW Biodiversity Offsets Policy for Major Projects* (the NSW offsets policy) provides clarification and standardisation for offsets to impacted threatened species, populations, and ecological communities under the TSC Act.

The NSW offsets policy is guided by principals to ensure the security, effectiveness, and transparency of offsets. These are discussed below.

3.1 NSW legislation

3.1.1 NSW Biodiversity Offsets Policy for Major Projects

For projects declared as State Significant Development (SSD), impacts must be assessed under the FBA in the form of a BAR, and a BOS drafted under the NSW offsets policy to propose offsets for any unavoidable impacts. The NSW offsets policy identifies that the suitability of offsets are guided by six principles. Details of how this BOS complies with the six principles of the NSW offsets policy are provided below.

Principle 1: Before offsets are considered, impacts must first be avoided and unavoidable impacts minimised through mitigation measures. Only then should offsets be considered for the remaining impacts.

The Project has been located within areas that are mostly cleared. The location of the development has been sited within existing paddocks to minimise impacts to biodiversity.

The BAR provides detailed measures to avoid and minimise direct and indirect impacts during both the construction, operation and decommissioning phase of the Project. Offsets have only been considered following consideration of all avoidance measures.

Principle 2: Offset requirements should be based on a reliable and transparent assessment of losses and gains.

Offset requirements have been assessed under the BAR (ELA, 2017). All losses of the project have been calculated using the BBCC. The BBCC also measures any gains at any offset site providing for a transparent and reliable methodology for assessing the offsetting requirement of the Project.

Principle 3: Offsets must be targeted to the biodiversity values being lost or to higher conservation priorities.

Assessment of biodiversity impacts associated with the Project and the proposed offsets are provided under a 'like for like' methodology, whereby biodiversity credits of the same PCT are assessed for the impacts and proposed for the offsets. Under the FBA there are variation rules whereby the consent authority may approve the variation to the offset rules for matching ecosystem credits where like-for-like offsets are not available. The proponent may vary the biodiversity credits used to offset an impact with a BOS, provided the proponent can demonstrate to the consent authority that:

- all reasonable steps to secure a matching ecosystem credit have been taken by the proponent; **and**
- the required ecosystem credit is not for a PCT associated with a Critically Endangered Ecological Community (CEEC) under the TSC Act or an ecological community listed under the EPBC Act; **and**

- the PCT from the same vegetation formation has a percent cleared value of the PCT in the major catchment area equal to or greater than the percent cleared of the PCT to which the required ecosystem credit relates; **or**
- where the required ecosystem credit is for a PCT that is associated with a CEEC/EEC, the PCT from the same formation is also associated with a CEEC/EEC.

Reasonable steps to secure a matching ecosystem credit includes:

- Checking the BioBanking public register and having an expression of interest for credits on it for at least six months;
- liaising with an OEH office and relevant local councils to obtain a list of potential sites that meet the requirements for offsetting;
- considering properties for sale within the required area; and
- providing evidence of why offset sites are not feasible. The cost of an offset site is not a suitable factor, unless it can be demonstrated the landowner is charging significantly above market rates.

Principle 4: Offsets must be additional to other legal requirements.

Offsets proposed under the FBA must be sourced from biobank sites established under a BioBanking Agreement. A BioBanking Agreement is a voluntary scheme entered into by land holders for the purpose of managing the land for biodiversity. A BioBanking Agreement stipulates management actions that must be undertaken at the biobank site in perpetuity as guided by a Management Action Plan (MAP). The MAP guides management actions that are additional to all other legal requirements.

Standard management actions that are required at a biobank site include:

- management of grazing for conservation;
- weed control;
- management of fire for conservation;
- management of human disturbance;
- retention of regrowth and remnant native vegetation;
- replanting or supplementary planting where natural regeneration will not be sufficient;
- retention of dead timber;
- erosion control; and
- retention of rocks.

Additional management actions that may apply at a biobank site includes:

- control of feral and overabundant native herbivores;
- vertebrate pest management;
- nutrient control;
- control of exotic fish species; and
- maintenance or reintroduction of natural flow regimes.

Principle 5: Offsets must be enduring, enforceable and auditable.

A BioBanking Agreement entered into at the biobank site is a legally binding agreement that operates in perpetuity. BioBanking Agreements are guided by the MAP, which contains a reporting and review schedule. Management of the biobank site is funded through annual stipends to the landholder as determined within the Total Fund Deposit spreadsheet (TFD). The condition and compliance with the MAP at all biobank sites must be provided to OEH annually to ensure continued funding of the biobank site. If the landholder is found to be non-compliant with the MAP, OEH has the capacity to recommend to withhold funding to the landholder.

In addition to annual audits, the MAP is also reviewed every 5 years by both a qualified consultant as well as OEH to ensure the MAP remains applicable to the quantum of management required to improve biodiversity at the biobank site.

Principle 6: Supplementary measures can be used in lieu of offsets.

If the proponent can suitably demonstrate that offsets cannot be provided for the impacts, in accordance with Section 10.5 of the FBA, then the proponent may propose the use of supplementary measures to compensate for impacts.

The consent authority may approve supplementary measures for ecosystem credits proposed within a BOS provided:

- all reasonable steps have been taken by the proponent to secure a matching ecosystem credit; **and**
- the PCT to which a required ecosystem credit relates is associated with a CEEC/EEC or for which the impact of development does not require further consideration according to Subsection 9.2.4; **and**
- the supplementary measure applies to that CEEC/EEC; **and**
- the supplementary measure is carried out in accordance with the rules governing supplementary measures, including calculating the financial contribution of the supplementary measures in accordance with Appendix B of the NSW Biodiversity Offsets Policy for Major Projects.

The consent authority may approve supplementary measures for species credits proposed within a BOS provided:

- the proponent can demonstrate that all reasonable steps have been taken to secure the number and types of species credits impacted on at the development site; **and**
- the species to which the species credit relates is not listed on the EPBC Act or listed as critically endangered on the TSC Act.

No supplementary measures are currently proposed within this BOS.

4 Biodiversity offset strategy

4.1 Proposed offset measures

The proposed offset measures for the Project are to acquire and retire the full quantum of ecosystem credits required for the impacts of the Project as calculated within the BBCC. Ecosystem credits can either be purchased from credit holders as identified on the BioBanking public register, or by establishment of a biobank site under Section 127d of the TSC Act.

All credits will be formally retired prior to commencing construction of the Project. Retirement of credits will be made prior to issue of the Construction Certificate for the development site. The quantum of BioBanking credits to be retired is shown in Table 3.

The proponent is currently reviewing options to establish a biobank site within Bailey Park. As Infinergy is not the landholder, a commitment establish an onsite offset cannot be made in earnest. Should this option be unviable, the proponent will seek to purchase credits from a third party.

BioBanking credits will be sought to be purchased in accordance with the rules of Table 5 of the FBA which allows for minor variations in the credits used to offset. All credits acquired for the Project will be sought in accordance with the following criteria:

- the PCT for which the ecosystem credit is required for the impacts of the development; **and**
- a PCT of the same vegetation class that has a percent cleared value within the major catchment area equal to, greater than, or up to 10% lower than the PCT required; **and**
- a PCT that occurs within the same IBRA subregion in which the development occurs; **or**
- a PCT that occurs within adjoining IBRA subregions within the same IBRA region in which the development occurs; **or**
- a PCT that occurs within any other IBRA subregions that immediately adjoin the IBRA subregion in which the development occurs; **or**
- any other IBRA subregions that have the same geographic distribution of the threatened species assessed for the ecosystem credits predicted within the development site.

Table 3: PCT formation, percent cleared and required ecosystem credits

PCT	Formation	Percent cleared	Area	Required Ecosystem Credits
NR127: Blakely's Red Gum - Yellow Box grassy open forest or woodland of the New England Tableland Bioregion	New England Grassy Woodlands	80	2.04	24
NR131: Broad-leaved Stringybark - Blakely's Red Gum grassy woodlands of the New England Tableland Bioregion	New England Grassy Woodlands	75	4.09	50
NR282: Yellow Box - Broad-leaved Stringybark shrubby open forest of the New England Tableland Bioregion	New England Grassy Woodlands	65	2.26	39
Total			8.40	113

In accordance with the criteria above, the proponent may acquire ecosystem credits from the following IBRA subregions within the New England Tablelands IBRA Region:

- Armidale plateau (development site region);
- Bundarra Downs;
- Eastern Nandewars;
- Ebor Basalts;
- Glen Innes – Guyra Basalts;
- Moredun Volcanics;
- Round Mountain;
- Walcha Plateau;
- Wongwibinda Plateau; **or**
- Yarrowyck – Kentucky Downs

In addition to these IBRA subregions, the proponent may also acquire ecosystem credits from the Coffs Coast & Escarpment, and the Macleay Gorges IBRA subregions, although the likelihood of PCTs with the correct formation within these subregions is unlikely.

A map showing the location of the development site relative to the distribution of suitable IBRA subregions is shown in **Figure 3**.

4.2 Additional information requirements of the BOS

The minimum information requirements for the BOS are described in Table 22 of the FBA. At the time of drafting this BOS, the following information was not known regarding the offset site:

- location of the offset site;
- improvement in biodiversity values at the offset site; and
- the nature and extent of any proposed supplementary measures

As such this information has not been included within this BOS. All information regarding the location and improvement in biodiversity values at the offset site will be described in detail within the BAR for the biobank site (BioBank BAR) once this has been identified.

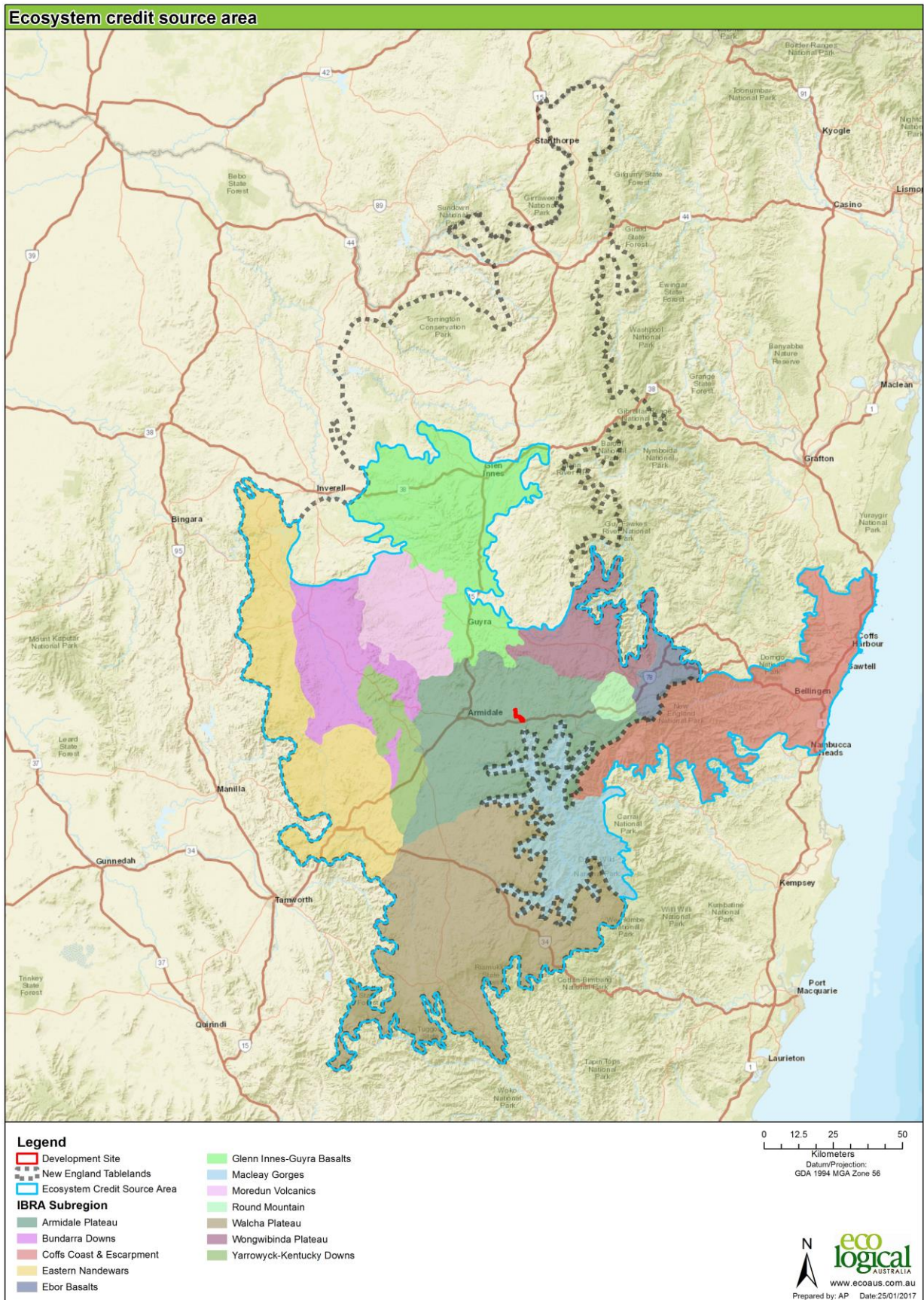


Figure 3: IBRA regions and IBRA subregions whereby ecosystem credits can be acquired for the Project

References

Department of Planning (DP&E) 2016. *NSW Planning Portal*. Available at: <https://www.planningportal.nsw.gov.au/>

Eco Logical Australia February 2016. *Metz Solar Farm Preliminary Environmental Assessment*. Prepared for Infinergy Pacific Ltd

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Office of Environment and Heritage (OEH) 2014. *NSW Biodiversity Offsets Policy for Major Projects*

Office of Environment and Heritage (OEH) 2016. *BioNet Atlas of NSW Wildlife*. Available at: <http://www.bionet.nsw.gov.au/>

Office of Environment and Heritage (OEH) 2016. *BioBanking Credit Calculator version 4.0*

Office of Environment and Heritage (OEH) 2016. *BioBanking Assessment Methodology and Credit Calculator Operational Manual*

Appendix A BioBanking Credit Report

Biodiversity credit report



This report identifies the number and type of biodiversity credits required for a major project.

Date of report: 27/02/2017

Time: 2:18:16PM

Calculator version: v4.0

Major Project details

Proposal ID: 227/2016/4059MP

Proposal name: Metz Solar Farm

Proposal address: Grafton Road Argyle NSW 2350

Proponent name: Infinergy Pacific Limited

Proponent address: 44 Quayle Street Sandy Bay, Tasmania

Proponent phone: 0418 632 727

Assessor name: Alex Pursche

Assessor address: Suite 28 & 29, Level 7 19 Bolton Street Newcastle NSW 2300

Assessor phone: +61 2 4910 3406

Assessor accreditation: 227

Summary of ecosystem credits required

Plant Community type	Area (ha)	Credits created
Blakely's Red Gum - Yellow Box grassy open forest or woodland of the New England Tableland Bioregion	2.04	24.00
Broad-leaved Stringybark - Blakely's Red Gum grassy woodlands of the New England Tableland Bioregion	4.09	50.00
Yellow Box - Broad-leaved Stringybark shrubby open forest of the New England Tableland Bioregion	2.27	39.00
Total	8.40	113

Credit profiles

1. Blakely's Red Gum - Yellow Box grassy open forest or woodland of the New England Tableland Bioregion, (NR127)

Number of ecosystem credits created	24
IBRA sub-region	Armidale Plateau

Offset options - Plant Community types	Offset options - IBRA sub-regions
Blakely's Red Gum - Yellow Box grassy open forest or woodland of the New England Tableland Bioregion, (NR127) Fuzzy Box open forest of the New England Tableland Bioregion, (NR165) Yellow Box - Grey Box - Red Gum woodland of the central eastern parts of the New England Tableland Bioregion, (NR283) Ribbon Gum - Rough-barked Apple - Yellow Box grassy woodland of the New England Tableland Bioregion and NSW North Coast Bioregion, (NR300)	Armidale Plateau and any IBRA subregion that adjoins the IBRA subregion in which the development occurs

2. Broad-leaved Stringybark - Blakely's Red Gum grassy woodlands of the New England Tableland Bioregion, (NR131)

Number of ecosystem credits created50

IBRA sub-regionArmidale Plateau

Offset options - Plant Community types	Offset options - IBRA sub-regions
Broad-leaved Stringybark - Blakely's Red Gum grassy woodlands of the New England Tableland Bioregion, (NR131) Blakely's Red Gum - Yellow Box grassy open forest or woodland of the New England Tableland Bioregion, (NR127) Fuzzy Box open forest of the New England Tableland Bioregion, (NR165) Yellow Box - Grey Box - Red Gum woodland of the central eastern parts of the New England Tableland Bioregion, (NR283) Ribbon Gum - Rough-barked Apple - Yellow Box grassy woodland of the New England Tableland Bioregion and NSW North Coast Bioregion, (NR300)	Armidale Plateau and any IBRA subregion that adjoins the IBRA subregion in which the development occurs

3. Yellow Box - Broad-leaved Stringybark shrubby open forest of the New England Tableland Bioregion, (NR282)

Number of ecosystem credits created

24

IBRA sub-region

Armidale Plateau

Offset options - Plant Community types	Offset options - IBRA sub-regions
Yellow Box - Broad-leaved Stringybark shrubby open forest of the New England Tableland Bioregion, (NR282) Blakely's Red Gum - Yellow Box grassy open forest or woodland of the New England Tableland Bioregion, (NR127) Broad-leaved Stringybark - Blakely's Red Gum grassy woodlands of the New England Tableland Bioregion, (NR131) Fuzzy Box open forest of the New England Tableland Bioregion, (NR165) Silvertop Stringybark grass/herb forest of the Brigalow Belt South and Nandewar Bioregion and western New England Tableland Bioregion, (NR235) Yellow Box - Grey Box - Red Gum woodland of the central eastern parts of the New England Tableland Bioregion, (NR283) New England Peppermint grassy woodland on granitic substrates of the New England Tableland Bioregion, (NR287) Ribbon Gum - Rough-barked Apple - Yellow Box grassy woodland of the New England Tableland Bioregion and NSW North Coast Bioregion, (NR300)	Armidale Plateau and any IBRA subregion that adjoins the IBRA subregion in which the development occurs

4. Yellow Box - Broad-leaved Stringybark shrubby open forest of the New England Tableland Bioregion, (NR282)

Number of ecosystem credits created

15

IBRA sub-region

Armidale Plateau

Offset options - Plant Community types	Offset options - IBRA sub-regions
Yellow Box - Broad-leaved Stringybark shrubby open forest of the New England Tableland Bioregion, (NR282) Blakely's Red Gum - Yellow Box grassy open forest or woodland of the New England Tableland Bioregion, (NR127) Broad-leaved Stringybark - Blakely's Red Gum grassy woodlands of the New England Tableland Bioregion, (NR131) Fuzzy Box open forest of the New England Tableland Bioregion, (NR165) Silvertop Stringybark grass/herb forest of the Brigalow Belt South and Nandewar Bioregion and western New England Tableland Bioregion, (NR235) Yellow Box - Grey Box - Red Gum woodland of the central eastern parts of the New England Tableland Bioregion, (NR283) New England Peppermint grassy woodland on granitic substrates of the New England Tableland Bioregion, (NR287) Ribbon Gum - Rough-barked Apple - Yellow Box grassy woodland of the New England Tableland Bioregion and NSW North Coast Bioregion, (NR300)	Armidale Plateau and any IBRA subregion that adjoins the IBRA subregion in which the development occurs

Summary of species credits required



HEAD OFFICE

Suite 2, Level 3
668-672 Old Princes Highway
Sutherland NSW 2232
T 02 8536 8600
F 02 9542 5622

CANBERRA

Level 2
11 London Circuit
Canberra ACT 2601
T 02 6103 0145
F 02 9542 5622

COFFS HARBOUR

35 Orlando Street
Coffs Harbour Jetty NSW 2450
T 02 6651 5484
F 02 6651 6890

PERTH

Suite 1 & 2
49 Ord Street
West Perth WA 6005
T 08 9227 1070
F 02 9542 5622

DARWIN

16/56 Marina Boulevard
Cullen Bay NT 0820
T 08 8989 5601
F 08 8941 1220

SYDNEY

Suite 1, Level 1
101 Sussex Street
Sydney NSW 2000
T 02 8536 8650
F 02 9542 5622

NEWCASTLE

Suites 28 & 29, Level 7
19 Bolton Street
Newcastle NSW 2300
T 02 4910 0125
F 02 9542 5622

ARMIDALE

92 Taylor Street
Armidale NSW 2350
T 02 8081 2685
F 02 9542 5622

WOLLONGONG

Suite 204, Level 2
62 Moore Street
Austinmer NSW 2515
T 02 4201 2200
F 02 9542 5622

BRISBANE

Suite 1, Level 3
471 Adelaide Street
Brisbane QLD 4000
T 07 3503 7192
F 07 3854 0310

HUSKISSON

Unit 1, 51 Owen Street
Huskisson NSW 2540
T 02 4201 2264
F 02 9542 5622

NAROOMA

5/20 Cauty Street
Narooma NSW 2546
T 02 4302 1266
F 02 9542 5622

MUDGEES

Unit 1, Level 1
79 Market Street
Mudgee NSW 2850
T 02 4302 1234
F 02 6372 9230

GOSFORD

Suite 5, Baker One
1-5 Baker Street
Gosford NSW 2250
T 02 4302 1221
F 02 9542 5622

ADELAIDE

2, 70 Pirie Street
Adelaide SA 5000
T 08 8470 6650
F 02 9542 5622

1300 646 131

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