Australian Government
Department of Climate Change, Energy, the Environment and Water

EPBC 2024/10002

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Dear Mr Jeffries,

Further information required for preliminary documentation for Surat Gas Project (SGP) North Solar Farm, Kowguran, Queensland

I am writing to you about your proposal to develop a 17 megawatt solar farm and associated infrastructure to provide energy to approved coal seam gas operations in the northern Surat Basin (see EPBC Act referral 2024/10002).

On 17 February 2025, a delegate of the Minister for the Environment and Water decided that the proposed action is a controlled action and that it will be assessed by preliminary documentation. Further information is required to assess the relevant impacts of the proposed action.

I now request, under s95A(2) of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), further information as outlined in Attachments A and B.

Details on the assessment process for the project and the responsibilities of the proponent are set out in the EPBC Act — Environment Assessment process fact sheet. Further information on the referral and assessment process can be found on the department's website.

If you have any questions about the assessment process or the further information required, please contact the project manager Moss Thompson, by email to moss.thompson@dcceew.gov.au and quote the EPBC reference number shown at the beginning of this letter.

Yours sincerely,

Hamish Bartrim
A/g Director
Queensland South Assessments
19 March 2025

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Attachment A - Request for further information required for assessment by preliminary documentation

Surat Gas Project (SGP) North Solar Farm (EPBC 2024/10002)

Under s95A(2) of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), further information is required to inform the assessment of impacts of this action, including information about strategies for avoiding and mitigating any adverse impacts.

The preliminary documentation for the proposal must include:

a) specified information included in the original referral.

b) additional information you provide in response to this request.

c) any other information specified in this request or provided during the referral or assessment process.

Please note the department may require further information, in addition to the information required below, should new issues come to light during the assessment stage.

The preliminary documentation must address the matters set out below.

1. General content, format and style

The preliminary documentation must be written so that any conclusions reached can be independently assessed, and:

1.1) Include a reference table indicating where to find information and links within the document to relevant sections.

1.2) Where relevant information was provided in the referral, please incorporate, or cross-reference to this information as necessary in the preliminary documentation.

1.3) Contain sufficient information to allow the Minister (or delegate) to make an informed decision on whether to approve, under Part 9 of the EPBC Act, the taking of the action for the purposes of each controlling provision.

1.4) Contain sufficient information to enable interested stakeholders to understand the environmental consequences of the proposed development on matters of national environmental significance (MNES).

1.5) Ensure all work and conclusions:

a) are presented clearly, unambiguously, succinctly and objectively.

b) are evidence based, and the evidence is provided.

c) are supported by peer reviewed literature, with references provided, or expert opinion.

d) use scientifically robust methodologies appropriate to the purpose, including a justification of why the methodology/s was selected; details of the methodology

described in a manner that allows an independent suitably qualified practitioners to apply the method; and, state any limitations of the chosen approach.

e) are supported by maps, plans, diagrams, baseline surveys or other descriptive detail. Maps provided must be consistent with the department's Guide to providing maps and boundary data for EPBC Act projects (2021).

f) maps must clearly identify development footprints, buffer zones, and any conservation areas where impacts will be avoided, and areas of adjacent habitat that would be subject to indirect impacts, including areas that are to be retained within and adjacent to the site.

g) use active language and state clear commitments (e.g., 'must' and 'will') where appropriate, particularly in describing avoidance, mitigation and management actions and outcomes.

h) demonstrate the use of the most up to date statutory documents* including Approved Listing Advice(s), Conservation Advice(s), Recovery Plan(s), Threat Abatement Plan(s) or comparable policy guidelines, and approved survey methods.

i) demonstrate the use of up-to-date; policy guidelines, scientific methods, information, data and species-relevant survey methods.

j) appropriately reference all sources using the Harvard standard. The reference list must include the address of any internet pages used as data sources.

** Relevant documents include, but are not limited to, the resources found in the Species Profile and Threats Database (SPRAT database) and EPBC Act publications and resources.*

1.6) Are able to be read as a stand-alone document and must include summaries of all relevant information referenced or provided in appendices. Complex or detailed technical information, studies or investigations necessary to support the main text should be attached to the main document as appendices.

2. Description of the action

2.1) The preliminary documentation must include:

a) A description of all components of the proposed action (such as pre-construction, construction, operational, and decommission), including the staging, sequencing, duration and timing.

b) A description of the anticipated start and completion dates of all actions such as the extent, staging, progression, and timing of clearing undertaken over the construction period. The description should include at a minimum:

i) All infrastructure to be constructed and method/progression of construction.

ii) Proposed existing, temporary, and permanent fencing, including a description of each fencing type and location. Include a schematic diagram of fence types and a map of where fences are proposed to be located.

iii) Ancillary and supporting infrastructure including (but not limited to): temporary workforce accommodation camp, site office and maintenance building, internal access tracks, site access points, stockpile and laydown areas.

iv) Mapped locations, including the size in hectares, of any proposed fire breaks/asset protection zones.

v) Other actions, including but not limited to, material storage and disposal, temporary structures for soil or water quality management.

vi) Actions related to waste management and management of spills/ contaminants/ pollutants and method of treatment and disposal of waste and contaminated material, standards and minimum thresholds required for removal/disposal.

c) A description of the anticipated start and completion dates of all actions such as the extent, staging, progression, and timing of clearing undertaken over the construction period.

d) A description of the planned decommissioning after the completion of the action and any restoration or ongoing activities planned for the project location.

e) The location, extent, and size (in hectares) of the total project footprint, disturbance/impact footprint, and of any adjoining areas (beyond the impact area) that may be subject to indirect or facilitated impacts, including edge effects, noise or light spill, vehicle access or other associated activities.

f) A description, with supporting spatial information, detailing all site access roads and any other shared infrastructure with adjacent projects/areas to be constructed to facilitate the proposed action.

Please describe any changes to project or disturbance footprints that may have occurred since the original referral. Please note these changes may require a formal variation request.

2.2) Provide a description and accurate mapping of associated infrastructure beyond the project footprint (e.g. any access roads), and how the proposed action is connected to existing or proposed infrastructure.

2.3) Provide a description of the transmission line required to connect this project to other infrastructure, including any third-party responsibilities such as referral, ownership, construction, or operation.

2.4) Provide a description of the intended land uses proposed as part of the completed development, including of any proposed rehabilitation and/or conservation areas and associated ongoing activities, and details of the intended party that would be responsible for future management activities.

2.5) Details of any local or State Government planning scheme, or plan or policy under any local or State Government planning system that applies or is likely to apply to the proposed action. Details should include, but are not limited to:

a) what environmental assessment of the proposed action has been, or is being carried out under the scheme, plan or policy

b) application/approval numbers for existing applications where relevant

c) obtained approvals or additional approvals that are required.

3. Description of the environment and Matters of National Environmental Significance

The preliminary documentation must provide a description of the environment affected by and surrounding the proposed action area, over both the short and long term, including:

3.1) A description of the environment present within and in the vicinity of the referral area, including the total area (hectares) for each discrete land cover type/vegetation community present in the referral area.

3.2) A description of the environment more broadly including previous and current land use within and surrounding the proposed action area, including but not limited to the intensity, extent, and recovery of the site from past actions and natural disturbance (e.g. historical clearing, site management, fire history, land use for agriculture).

3.3) A description of surrounding vegetation, Regional Ecosystems (RE), natural and human features specific to the project area, including detailed mapping on the site boundaries.

3.4) A description of the current site cover by invasive flora and fauna, and any fencing or barriers to dispersal to listed threatened species or ecological communities including detailed mapping.

3.5) A description of any potential listed threatened species or ecological community (including but not limited to those listed in this request for information) that occur in the project area and adjacent areas.

Please ensure that a recent Protected Matters Search Tool report is generated and used during the assessment before submitting the draft preliminary documentation to identify any additional species (listed at the time of the controlled action area) that may be affected by the proposal.

3.6) For listed threatened species and ecological communities that have the potential, or are likely, to be present at and in the vicinity of the project site, including but not limited to those listed in this request, please provide a likelihood of occurrence assessment including the following:

a) Information on the abundance, distribution, ecology and habitat preference of the species or communities.

b) Quantification of the extent of habitat (including maps identifying known or potential habitat) on site and, where feasible, in the broader landscape.

c) Quality and importance of known or potential habitat for the species or communities.

d) Information detailing known populations or records within at least five kilometres of the development footprint and (if known) the size of these populations.

e) Conclusions on the likelihood of occurrence of listed threatened species and ecological communities within the project site, or within an area of impacts outside the project site.

Likelihood or occurrence and habitat assessments must be informed by up-to-date desktop and field surveys and informed by relevant departmental documents (e.g., approved Conservation Advice, Recovery Plans, draft referral guidelines and Listing Advice, and SPRAT Database) and/or species experts.

3.7) Up to date and site-specific baseline and survey data at the impact site(s), and if relevant, the proposed offset site(s) site, including:

a) Information on the survey methodology or technique used (e.g., thermal detection, camera trapping, tree hollow search, SAT surveys etc).

b) When surveys were conducted (e.g., dates, time of day, season, etc.) and survey effort (e.g., two hours for every one hectare within a 5-hectare area).

c) Map/s of survey points or transects and how the survey points or transects were selected.

d) An assessment of the adequacy of any surveys undertaken with reference to any relevant scientific literature and/or statutory documents. In particular, the extent to which these surveys were appropriate for the species and undertaken in accordance with relevant survey guidelines.

e) Results of all surveys undertaken. Include raw data sheets of all surveys undertaken as attachments to the documentation.

3.8) Based on survey data and with reference to relevant statutory documents, provide a clear description of the total extent and quality of habitat present within and surrounding the proposed action area for each species or ecological community potentially present or impacted by the proposed action.

For all species with residual significant impacts the method used to quantitatively assess the quality of habitat must be discussed and endorsed by the department before being applied.

Survey requirements

Survey timing

Please note that some surveys can take more than a year to complete to ensure they are undertaken in the correct season. The department generally cannot accept survey data that's more than 5 years old because:

- populations of species can change due to fires, drought, flooding and land management changes.
- some species' ranges can shift due to climate change.

If your data is older than 4 years when you start planning your project, the department recommends you undertake further up to date surveys.

For information on survey methodologies approved by the Australian Government, please refer to https://www.dcceew.gov.au/environment/epbc/advice/surveys-and-data

Precautionary principle

Failing to survey appropriately for threatened species that may be present at a site could result in the department applying the precautionary principle with regard to residual significant impact determinations.

That is, if no supporting evidence (such as survey results) is presented to support the claim of species absence, then the department may assume that the species is in fact present. The department will not accept claimed species absence without effective validation such as through application of survey guidelines, other survey techniques (for example, a state guideline or an accepted industry guideline), or statements from relevant species experts. Where a claim of absence is made, proposals must provide a robust evaluation of species absence.0p-

4. Impact Assessment

Based on the information provided in the referral, additional information provided in support of the referral, information provided in the SPRAT database, and online observation records, the department considers the proposed action is likely to have a significant impact on listed threatened species and communities (section 18 & section 18A), and on the following MNES, including but not limited to:

- Corben's Long-eared Bat (*Nyctophilus corbeni*) – Vulnerable
- Greater Glider (southern and central) (*Petauroides volans*) – Endangered
- Koala (Phascolarctos cinereus (combined populations of Qld, NSW and the ACT)) – Endangered
- South-eastern Glossy Black-cockatoo (*Calyptorhynchus lathami lathami*) – Vulnerable

Based on information in the referral documentation, suitable foraging and potential roosting habitat for Corben's Long-eared Bat is present within the project footprint. The species has been recorded within 2 km of the site. The proposed action would likely result in the clearing of 39.4 ha of habitat. Suitable microhabitat for roosting may be present in regrowth and burnt vegetation on the site.

The referral considers that suitable foraging habitat and dispersal habitat in low quality vegetation connecting to larger patches of high-quality habitat for the Greater Glider is present within the project footprint. There are several historical records of the species within 10 km of the site. The proposed action would likely result in the clearing of 39.4 ha of habitat critical to the survival of the species.

Based on information in the referral documentation, suitable habitat for breeding, foraging, shelter, and dispersal for the Koala is present within the project footprint. Historical records occur within 9 km of the project site. The proposed action would likely result in the clearing of 62 ha of habitat critical to the survival of the species.

In addition, the referral considers that suitable foraging habitat for the South-eastern Glossy Black-cockatoo is present within the project site. Historical records occur within 2 km of the site. The proposed action would likely result in the clearing of 39.4 ha of habitat critical to the survival of the species.

Based on all the information available to the department (including the PMST, which suggests the presence of the following species or communities in the area of the proposal), and without further detailed assessment of potential impacts, the department considers that the proposed action may significantly impact on other listed threatened species including but to limited to the following:

- Belson's Panic (Homopholis belsonii) – Vulnerable
- Curly-bark Wattle (Acacia curranii) – Vulnerable
- Diamond Firetail (Stagonopleura guttata) – Vulnerable
- Dunmall's Snake (Furina dunmalli) – Vulnerable
- Painted Honeyeater (Grantiella picta) – Vulnerable
- Squatter Pigeon (southern) (Geophaps scripta scripta) – Vulnerable
- Yakka Skink (Egernia rugosa) – Vulnerable

Note that this may not be a complete list and it is your responsibility, as the proponent, to ensure that any species or ecological communities listed under the EPBC Act at the time of the controlled action decision, which may be present or potentially significantly impacted, are assessed as part of the preliminary documentation.

The preliminary documentation must include an up-to-date assessment of potential impacts that may occur as a result of the proposed action.

Consideration of impacts must not be confined to the immediate area of the proposed action but must also consider the potential of the proposed action to impact on adjacent areas that are likely to contain populations and/or habitat for MNES.

4.1) Include a clear description of the total extent and quality of the following:

a) project footprint (including the total extent of habitat present for each relevant protected matter)

b) direct and indirect impact areas (including the total extent of habitat for each relevant protected matter to be impacted)

c) total areas proposed to be retained/avoided (including the total extent of habitat present for each relevant protected matter to be avoided).

d) any water courses, waterbodies, or drainage lines.

4.2) For all significantly impacted listed threatened species and ecological communities including but not limited to those listed in section 4 of this document, please:

a) Complete a revised, up-to-date, habitat suitability assessment of the referral area, considering species-specific habitat requirements in accordance with relevant statutory documents including but not limited to: listing advices, conservation advices, recovery plans, Significant Impact Guidelines 1.1 and publicly available information.

b) Provide mapping or revised and expanded mapping showing the extent of suitable habitat for the species in relation to the disturbance footprint and broader referral area.

c) Demonstrate that previous and any additional or new surveys for the species have been completed in accordance with relevant Commonwealth, State or local council guidelines (or best available peer reviewed information).

d) Provide information regarding the total area proposed to be retained/avoided (including the total extent of habitat present to be avoided) at the referral area.

e) Confirm the area of habitat that will be directly and indirectly impacted by the proposed action, including but not limited to areas where:

   i) Connectivity to surrounding habitat will be retained, removed or functionally compromised/lost.

   ii) Adjacent habitat will be subject to intensification of ongoing impacts (for example, through increased vehicle movement and/or hydrology changes).

f) Ensure that all classification and quantification of habitat, and all references to the extent of impact to protected matters, are consistent throughout the preliminary documentation and supporting mapping.

g) An up-to-date assessment of potential impacts that may occur as a result of the proposed action must also include the species-specific details.

4.3) To inform points 4.1 and 4.2, please provide an assessment of the direct, indirect, facilitated and cumulative impacts that may occur as a result of the proposed action at a site-specific, local, and regional scale.

The assessment should include consideration of:

a) the nature, likelihood, significance, and extent of impacts and whether any relevant impacts are likely to be unknown, unpredictable or irreversible.

b) timing and whether the impact is temporary or permanent.

c) species specific habitat requirements such as number and location of hollow bearing trees, number and location of nest trees, refuge habitat, foraging and breeding habitat, sheltering or other microhabitat features relevant to the species within and surrounding the development footprint (if applicable).

d) whether connectivity and movement opportunities in the surrounding area may be retained, removed or functionally lost or compromised.

e) adjacent areas of habitat that may or will be subject to intensification of ongoing impacts (for example, through increased human and vehicle presence) including mapping.

f) direct, indirect or facilitated impacts that may result from the proposed action including, but not limited to, the following:

i) Edge effects – including the potential for the introduction of weed species and pathogens in the referral area and adjacent environment.

ii) Vehicle movement – potential increase of vehicles to strike fauna in the pre-construction, construction, and operation phase of the project.

iii) Areas demarcated for stockpiles and laydown.

iv) Increased presence of vertebrate predators (e.g., dogs, cats, foxes, pigs, rodents) – pre-construction, construction and operation phases have the potential to increase dog presence in the referral area and adjacent environment.

v) Earthworks – potential to generate dust emissions from the removal of vegetation and movement of soil in the pre-construction and construction phase of the project.

vi) Disturbance from increased noise, artificial light, sediment generation and other relevant stressors during construction and operation of the proposed action.

vii) Chemical pollution and contamination to surrounding waterways during the construction, operation, and decommissioning of the solar farm.

viii) Contamination of the environment and potential hazards including but not limited to fire and chemical leeching from solar panels and associated infrastructure.

g) Cumulative impacts, where potential project impacts on MNES are in addition to existing impacts of other activities (including current or future developments by the proponent and other proponent in the region and vicinity).

h) Please review the following policy statement, providing guidance on what impacts constitute a 'indirect consequences(s)', under paragraph 527E(1)(b) of the EPBC Act.

i) Facilitated impacts may include (but are not limited to) the risk of injury or mortality to MNES from vehicle strike as a result of increased traffic within and surrounding the site.

4.4) Include current maps and coordinates/shapefiles showing the total project footprint, total disturbance/direct and indirect impact areas, areas of habitat for MNES proposed to be retained.

4.5) Include details of any policy guidelines, relevant studies, surveys, or consultations with species experts/field specialists, which were not included in the referral or additional information provided in support of the referral.

5. Avoidance, mitigation and management measures

The information available in the referral indicates that there is substantial area within the project footprint with protected matters present or likely to be present.

The mitigation hierarchy is a process that is used to limit the amount of damage an action, such as a development, will have on the environment. There are three steps, and each step must be followed in order and to the greatest extent possible before moving on to the next. These steps are:

1. **avoid** harm to the environment within and surrounding the project area.
2. **reduce** or mitigate environmental damage within and surrounding the project area.
3. identify **offsets** within the region that compensate for the significant residual impacts to listed species or ecological communities.

The preliminary documentation must provide information on proposed avoidance, safeguards and mitigation measures to deal with the relevant impacts of the proposed action on MNES.

5.1) Demonstrate that you have applied the mitigation hierarchy and exhausted all options to avoid and mitigate harm to protected matters, before resorting to environmental offsets.

In doing this, you must demonstrate that any avoidance or mitigation measures will provide ecological benefits to the species in the long-term. For example, on-site avoidance/ conservation areas must be connected or provide connectivity opportunities for species in the broader landscape, and must include enduring mitigation of impacts from adjacent development.

5.2) Provide details (including a summary list or table) of avoidance and mitigation measures proposed to be undertaken to prevent or minimise impacts on protected matters (or their habitat) from the proposed action area, including:

a) a description of avoidance measures that have been considered and applied. For example, project site selection to avoid valuable habitat, micro-siting of infrastructure to avoid impacts on habitat on site, or avoidance of any activity that may indirectly impact on essential lifecycle processes for species.

b) a description of proposed safeguards and mitigation measures to minimise and manage relevant impacts of the action, with reference to relevant statutory or policy documents at the Commonwealth and State level (e.g., Guideline: State Development Assessment Provisions (State Code 25))

c) pre-clearance and clearance procedures to ensure that species are detected and managed to minimise mortality, stress, injury, or introduction of disease.

d) measures for avoiding key features relevant to impacted threatened species such as preferred roosting trees or microhabitat features (e.g., comprehensive survey and mapping of tree, soil, and habitat features and implementation of a vegetation management plan to guide vegetation clearing).

e) measures to address the risk of species, for example; the Koala, entering the solar farm and becoming trapped/isolated without resources for shelter whilst in the site and safe movement opportunities to get out of the solar farm, along with sufficient information on the location and design of these measures.

f) fine particle and dust control management and erosion and sediment control management.

g) a demonstration of the process of avoidance and mitigation measures applicable to impacts to MNES and associated habitats. This includes a detailed explanation involving site selection during the feasibility study, including the assessment of cleared land/already disturbed land. Provide figures and/or a summary where applicable.

h) ongoing management of direct and indirect impacts due to increased likelihood of human presence, attacks by vertebrate pests, and injury caused by negotiating various fence types.

i) details of how speed reduction is to be achieved (e.g., traffic calming devices) and plans showing the locations of each of these features and the manner in which they will be implemented).

j) information on safe road design and placement, including installation of crossing warning signs, wildlife threshold marking on road (include maps and imagery).

k) the locations and size of any proposed fauna movement solutions, fire breaks, no-go or buffer zones (including buffers between the construction footprint or remaining habitat in the referral area and adjacent to the site), and potential fencing, including:

    i) the location of any movement solutions, fire breaks, buffer zones, or fencing.

    ii) the characteristics of the fauna movement solutions, fire breaks, buffer zones and fencing (height, length, wildlife proof measures etc.).

    iii) whether the proposed measures, such as fencing will provide a wildlife barrier to/from/within the proposed action area.

l) a description of the environmental outcomes the measures are expected to achieve including provision of any baseline data or proposed monitoring to demonstrate progress towards achieving these outcomes.

m) information on the timing, frequency, and duration of the measures to be implemented.

n) an actual or estimated cost of the mitigation measures.

o) any proposed management plans including (but not limited to) the Weed and Pest Management Plan, and Bushfire Management Plan.

5.3) Provide an assessment of the predicted effectiveness of each proposed avoidance or mitigation measure, noting that the effectiveness of a particular measure is a reflection of confidence in the anticipated outcome. The assessment of effectiveness should be evidence based and include examples of demonstrated success of a particular measure to achieve the desired avoidance/mitigation outcome.

5.4) For each measure proposed, indicate the:

a) impacts that are being avoided and/or the significance of impacts being reduced through mitigation.

b) scientific basis for conclusions being drawn

c) an evidence-based likelihood of success/risk assessment

d) responsible party

e) environmental outcomes to be achieved

f) milestone/performance/completion criteria

g) proposed monitoring and evaluation program

h) contingency measures.

5.5) Proposed management plans need to be consistent with the Environmental Management Plan Guidelines - DCCEEW, and must include:

a) A table of commitments made in the plan to achieve the environmental outcomes, and a reference to exactly where these commitments are detailed in the plan.

b) Commitments capable of ensuring that the environmental outcomes are achieved.

c) Reporting and review mechanisms to demonstrate compliance with the commitments made in the plan.

d) An assessment of risks relating to achieving the environmental outcomes and risk management strategies and/or mitigation measures that will be applied to address identified risks.

e) Impact avoidance, mitigation and/or repair measures, and the timing of those measures.

f) Details on each proposed management action including (but not limited to): soil and topsoil management, erosion and sediment control, stormwater management, dust control, regular cleaning or solar panels, weed management, rehabilitation of the project site to its original state or to an agreed-upon condition.

g) A monitoring program of the effects of management measures which must include:

i) Performance indicators,

ii) Trigger values for corrective actions,

iii) The timing and frequency of monitoring, ensuring monitoring is capable of detecting trigger values and changes to the performance indicators,

iv) Proposed corrective actions if trigger values are reached,

v) Links to other relevant plans or conditions of approval (including state or territory approval conditions).

5.6) Describe any statutory or policy basis for the proposed measures, including reference to the SPRAT Database and relevant approved conservation advice, recovery plan or threat abatement plan, and a discussion on how the proposed measures are not inconsistent with relevant plans.

For example, the National Recovery Plan for the Koala states the goal:

'*To stop the trend of decline in population size of the listed Koala, by having resilient, connected, and genetically healthy metapopulations across its range, and to increase the extent, quality and connectivity of habitat occupied.'*

Please provide a discussion on how the proposed action is not inconsistent with relevant species' objectives or alternatively, how the proposed avoidance, mitigation/management and offsetting actions will compensate for any residual significant impacts, thereby ensuring consistency with the objective for relevant EPBC Act species.

5.7) All proposed measures must consider the 'S.M.A.R.T' principle:

S – Specific (protected matter-specific objectives, methods, outcomes, and repeatability)

M – Measurable (baseline information, quantifiable, auditable)

A – Achievable (timeframes, financial and human resources)

R – Relevant (conservation advice, recovery plans, threat abatement plans)

T – Time-bound (set implementation, performance and completion timeframes).

6. Proposed offsets

Where residual significant impacts to listed threatened species or ecological communities remain after application of all reasonable avoidance and mitigation measures, a compensatory environmental offset in accordance with the *Environment Protection and Biodiversity Conservation Act 1999 Environmental Offsets Policy* (EPBC Offsets Policy) is required.

Offsets must be specific to the species or ecological community being impacted, must address the attribute of the protected matter that is impacted, and must deliver an outcome for the protected matter that is demonstrably equal or better than if neither the impact nor the offset occurred. Offsets are not intended to make proposed actions with unacceptable impacts, acceptable.

If an offset is required, prior to publication, the preliminary documentation must include an:

1. **Offset Proposal** – The Offset Proposal must provide detail about the proposed offset site or sites including baseline survey information (including threats such as weed cover and pest species surveys), habitat or vegetation quality scores, how the offset will be managed, and evidence that the protected matter is present or uses the offset site. The Offset Proposal must demonstrate how the proposed offset is suitable and meets the principles of the EPBC Offsets Policy and must include sufficient information for the department to assess it using the EPBC Offsets Assessment Guide.

2. **Offset Management Plan (OMP)** – The OMP supports the Offset Proposal and must detail all the management activities to be undertaken at the offset site including setting environmental objectives, milestones, monitoring and reporting measures. Management plans and activities must be targeted towards the specific plant, animal or ecological community (protected matter) that is being offset. If there is more than one offset site, then a separate OMP must be prepared

for each site.

For further details regarding offset requirements and the requirements of an Offset Proposal and OMP, see Attachment B.

7. Habitat quality assessment

A methodology that is suitable for each listed threatened species or threatened ecological community (i.e., endorsed by the department or supported by literature) where there is a residual significant impact must be used to assess habitat quality, noting the same scoring mechanism must be used at both impact and offset sites.

The department encourages proponents to consult and seek endorsement from the department on a proposed method prior to undertaking any habitat quality assessment at both impact and offset site(s).

The department currently prefers habitat quality scoring methods for each prescribed matters to be consistent with the Modified Habitat Quality Assessment (MHQA) method. The MHQA tool derives habitat quality scores using an adaptation of the Queensland Government's Guide to determining terrestrial habitat quality version 1.2 (DEHP Guide).

The MHQA aligns, as far as possible the DEHP Guide with the requirements of the EPBC Act Environmental Offsets Policy for determining habitat quality scores. In aligning with this policy, all habitat quality scoring methods are required to generate future scores for 'with' and without' offset scenarios. Forecast gains or loss in habitat quality score must be substantiated by scientific information and via the endorsed MHQA (or alternative) method.

To support the habitat quality assessment, a link to the DEHP Guide, a MHQA scoring guide, and a MHQA scoring spreadsheet template (.xlsx) are provided herein. When calculating offsets, please refer to the department's published guidance: How to use the Offsets Assessment Guide.

A precautionary approach to forecasting scores should be applied, with all limitations and uncertainties considered, documented and integrated within the 'Confidence in Result % (Quality)' value applied in the Offset Assessment Guide (offset calculator). Please also note the following:

- If you propose a habitat quality gain of more than 2 points, or an achieved future habitat quality score 'with offset' of 9 or 10, it becomes less certain that the conservation outcome can be achieved. The justification of effectiveness of your proposed management measures and associated habitat quality score improvements and (reflected in the confidence in result) must be supported by substantial evidence.
- Higher habitat quality gains will generally be associated with lower 'confidence in result' scores in the Offset Assessments Guide to reflect the difficulty associated with achieving the conservation outcomes. In these cases, it is likely that outcomes-based commitments will be required in the associated management plan for the site, including specifying binding metrics to be met to demonstrate quality improvement. For further information, please contact the department to discuss the metrics that will be used to demonstrate achievement of quality standards.

If you intend to propose an alternative methodology for assessing and scoring habitat quality for any/all of the prescribed matters likely to experience significant residual impacts as a result of the

proposed action, the alternative methodology must:

- directly relate to habitat requirements of the species and factors associated with the viability of the prescribed matter, and align with information contained in the SPRAT database and relevant statutory/departmental documents, and
- be substantiated with appropriate field surveys in accordance with the relevant survey guidelines or using a scientifically robust and repeatable methodology.

Where there are any inconsistencies between the habitat assessment approach and information contained in the SPRAT database, the inconsistencies must be discussed with the department prior to the submission of the assessment documentation and must be supported by scientific evidence including published research, independent expert advice and information derived from field surveys.

8. Economic and social matters

If not previously provided in the referral documentation, the preliminary documentation must:

8.1) Provide details on the social and economic costs and/or benefits of undertaking the proposed action, including the basis for any estimations of costs and/or benefits. Where possible, please include the total economic capital investment and economic ongoing value of the project.

8.2) Identify if economic benefits and employment opportunities are in addition to what would have been expected if the action were not to take place.

8.3) Provide details of any public stakeholder consultation activities, including the outcomes of those consultations.

8.4) Provide details on the potential annual emissions abatement (tCO2-e) achieved by the proposed action.

Indigenous engagement

8.5) Identify existing or potential native title rights and interests, including any areas and objects that are of particular significance to Indigenous peoples and communities, possibly impacted by the proposed action and the potential for managing those impacts.

Describe any Indigenous consultation that has been undertaken, or will be undertaken, in relation to the proposed action and their outcomes. This should include:

a) details regarding the specific Indigenous groups and Traditional Owners consulted and an indication of the areas, both tangible and intangible, of cultural significance across the project site; and

b) a discussion about how impacts to areas and/or objects of Indigenous cultural significance (tangible and intangible) are avoided, mitigated or minimised.

The department considers that best practice consultation, in accordance with the *Interim Engaging with First Nations People and Communities on Assessment and Approvals under the EPBC Act 1999 (2023)* includes:

a) identifying and acknowledging all relevant affected Indigenous peoples and communities.

b) committing to early engagement.

c) building trust through early and ongoing communication for the duration of the project, including approvals, implementation and future management.

d) setting appropriate timeframes for consultation and submission formats; and

e) demonstrating cultural awareness and ensuring cultural safety.

Describe any state requirements for approval or conditions that apply, or that the proponent reasonably believes are likely to apply, to the proposed action with regards to Indigenous peoples and communities.

9. Ecologically sustainable development

If not previously provided in the referral, the preliminary documentation must:

Provide a description of how the proposed action meets the principles of ecologically sustainable development, as defined in section 3A of the EPBC Act, which are as follows:

a) decision making processes should effectively integrate both long-term and short-term economic, environmental, social and equitable considerations.

b) if there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation.

c) the principle of inter-generational equity – that the present generation should ensure that the health, diversity and productivity of the environment is maintained or enhanced for the benefit of future generations.

d) the conservation of biological diversity and ecological integrity should be a fundamental consideration in decision making.

10. Environmental record of the person proposing to take the action

Include details of any past or present proceedings under a Commonwealth, State or Territory law for the protection of the environment or the conservation and sustainable use of natural resources against:

a) the person proposing to take the action

b) for an action for which a person has applied for a permit, the person making the application

c) if the person is a body corporate—the history of its executive officers in relation to environmental matters

d) if the person is a body corporate that is a subsidiary of another body or company (the parent body)—the history in relation to environmental matters of the parent body and its executive officers.

11. Ecological data provision

The preliminary documentation must include an appendix of occurrence records (both sightings and evidence of presence) for all listed threatened and migratory species identified during field surveys for the proposed action. This data may be used by the department to update the relevant species distribution models that underpin the publicly available Protected Matters Search Tool (PMST).

The species occurrence records must be provided in accordance with the department's *Guidelines for biological survey and mapped data* (2018) using the *species observation data template*. Ecological data will be managed in accordance with the department's *Policy on Accessing and Sharing Biodiversity Data*.

Attachment B – Information requirements for EPBC Act Offset Proposals and Offset Management Plans

An EPBC Act offset proposal must demonstrate that the relevant species or ecological communities significantly impacted by the proposed action is not worse-off when compared to a situation where neither the impact nor the offset occurred.

1. Offset Proposal requirements

Further to Section 6 of the PD request, the offset proposal must include, but not be limited to, the following:

1.1) A detailed project description, including a site description and how and to what extent your action will impact on protected matters.

1.2) Details of the protected matters being impacted by the proposed action, including the total number of individuals and/or extent of habitat being impacted.

1.3) Details about the offset proposal/offset site, including:

a) A description of the proposed offset site(s) including location, size, and relevant ecological/species habitat features, landscape context and cadastre boundaries of the offset site(s) (supported by mapping).

b) Information about how the proposed offset/s area will provide connectivity with other relevant habitats and biodiversity corridors.

c) Information how the proposed offset site/s contribute to relevant State and/or regional plan/s or initiatives for the conservation of the protected matter.

d) evidence of the presence of, or usage by, relevant MNES on, or adjacent to the proposed offset site(s)

e) Evidence that the location of the offset site is suitable and provides a conservation benefit to the impacted protected matter. Note: The EPBC Offsets Policy states that in most cases, the offset site should be as close to the impact as possible.

f) Up to date surveys and baseline data confirming the current condition/quality of vegetation on site (including number of hollow bearing trees if relevant), the extent and presence of weeds, and the extent of threats.

g) Information about the ecosystems present, current usage of the site, its general condition and location in the landscape/region

h) An assessment of how the offset and impacts sites are like-for-like, i.e., the environmental values for the MNES at the offset are of the same type or equivalent to that affected by the proposed action.

i) The methodology, with justification and supporting evidence, used to inform the inputs of the Offsets Assessment Guide in relation to the offset site for each relevant MNES, including:

i) total area of habitat (in hectares)

ii) habitat quality (as discussed in section 8)

iii) time over which loss is averted (maximum 20 years)

iv) time until ecological benefit

v) risk of loss (%) without offset

vi) risk of loss (%) with offset

vii) confidence in result (%).

1.4) The Offset Proposal must demonstrate how the offset meets the principles of the EPBC Offsets Policy and EPBC Offsets Assessment Guide to inform the Minister's decision on whether or not the project should be approved under the EPBC Act.

1.5) Details of the actual or estimated cost of the offset proposal including costs associated with proposed mitigation and management measures onsite.

1.6) Details of the execution timing of the protective mechanism to legally secure the environmental offset/s (minimum covenant or otherwise accepted method) proposed to be applied at any offset site/s to provide enduring protection (for at least the duration of the impact), including a draft of the protective mechanism and its terms. Note that protective mechanisms for permanent impacts should continue in perpetuity.

2. Offset Management Plan (OMP) requirements

An offset management plan is a practical document that outlines what must be done to manage an offset site. A plan must detail all the management activities at the offset site and how progress will be monitored and reported. An OMP provides confidence that the outcomes described in an offset proposal can and will be achieved. The OMP must include, but may not be limited to:

2.1) A description of the proposed offset site(s) including location, size, condition, existing and future tenure, and relevant ecological/species values present and surrounding land uses.

2.2) Maps and shapefiles to clearly define the location and boundaries of the offset area/s, accompanied by the offset attributes (e.g., physical address of the offset area/s, coordinates of the boundary points in decimal degrees, the relevant MNES that the environmental offset/s compensates for, and the size of the environmental offset/s in hectares).

2.3) Baseline survey information showing MNES presence and the extent and quality of the respective habitat(s) at the proposed offset site(s) in accordance with the relevant survey guidelines or using a scientifically robust and repeatable methodology.

2.4) Baseline survey information showing present threat levels to MNES (e.g., invasive flora and fauna).

2.5) Summarised details of the nature of the conservation gain to be achieved for relevant MNES, including the creation, restoration and revegetation of habitat in the proposed offset area/s.

2.6) Information about how the proposed offset area/s will provide connectivity with other habitats and biodiversity corridors and/or will contribute to a larger strategic offset for the relevant MNES. This should include information about how the proposed offset/s area contributes to any state and/or regional plan/s for the conservation of the protected matter.

2.7) Completion criteria and, if necessary, performance targets that evidence protection or improvement of EPBC Act listed communities, species and their habitat. For the purpose of the plan, completion criteria are longer term time-bound values, specified for measurable parameters, that if attained and maintained ensure the plan's environmental objectives are achieved.

For example: 'By Year 20, the approval holder must reduce non-native plant cover to within 5% of the benchmark value associated with each Regional Ecosystem.'

Performance targets are time-bound short and medium term targets, for management interventions and environmental condition, that are used to monitor, evaluate, review and improve the effectiveness of the plan to offset impacts.

For example: 'By Year 10, the approval holder must reduce non-native plant cover to within 10% of the benchmark value associated with each Regional Ecosystem.'

a) interim performance targets (e.g. at years 5, 10 and 15 out of 20 years) for each attribute must be identified to demonstrate offset site quality improvement and must be measurable and related to the completion targets identified; and

b) corrective actions must be identified should anticipated habitat quality improvements are not achieved prior to the subsequent interim performance target event.

2.8) The plan includes management measures that will protect or improve EPBC Act listed threatened ecological communities and/or species and their habitat. Each management measure:

a) is specifically linked to the attribute of the protected matter for which the management measure applies

b) has timeframes for implementation

c) is described sufficiently to avoid ambiguity and to inform plan implementation;

d) is related to attaining/maintaining completion criteria and/or performance targets

e) is derived from recognised principles, practice, or guidelines, and is justified - technically, scientifically and legally (e.g. by recommendation in a national recovery plan) – as an effective and appropriate measure to attain and/or maintain the plan's completion criteria and/or performance targets

2.9) The plan identifies and manages uncertainty. To this end the plan specifies:

a) key data/information used to formulate the plan

b) the limitations and/or uncertainty associated with the use of that data/information

c) the risks that limitation and/or uncertainty represents for plan failure

d) How limitations and/or uncertainty, and associated risks, are mitigated during plan implementation. For example, where a margin of safety is applied to management measures until uncertainty is reduced to an acceptable level or performance targets/completion criteria are attained/maintained.

2.10) The plan assesses the risk of failure to achieve the plan's performance targets and/or completion criteria. To this end, the plan:

a) states the plan's performance targets and/or completion criteria

b) identifies events or circumstances that prejudice attainment/maintenance of address scientific/ecological uncertainty, stochastic events and legal/land use planning factors that may represent risks

c) includes a qualitative assessment of the likelihood and consequences of those events or circumstances, and the residual risk of failure to achieve those criteria due to identified events or circumstances (assuming management measures will be implemented)

d) characterises risk as low, medium, high or severe, and derived from likelihood (highly likely, likely, possible, unlikely, rare) and consequence (minor, moderate, high, major and critical); and

e) outlines how consequence, likelihood and risk level for each risk have been determined.

2.11) The plan describes the monitoring methods that will be implemented, and:

a) the relevance of the monitoring methods to the protection of the relevant aspect of the protected matter(s) for which the offset is implemented

b) includes quantitative (e.g. on-ground survey results) and qualitative baseline data (e.g. photo-point monitoring sites) that establish the start quality/condition of the environment, and which can be used to measure performance against

c) describes the sampling strategy (including monitoring area, site selection and sampling intensity over space and time) and statistical analyses to be employed

d) justifies the sampling strategy/monitoring methods, including through:

i) an assessment of effectiveness and constraints to use

ii) capacity to detect change in environmental condition due to management interventions

iii) capacity to demonstrate attainment of performance targets and/or completion criteria

iv) the statistical power of the strategy/method.

e) commits to engage appropriately qualified experts to design and conduct monitoring and

survey activities, and analyse monitoring results

f) accounts for seasonal/climatic variability

g) details the location, nature and number of monitoring sites, including benchmark/reference sites to evaluate management performance.

2.12) The plan includes commitments to report on plan implementation and success as well as opportunities for improvement. This is achieved by:

a) if the project is approved, identifying relevant reporting obligations under the EPBC approval, or otherwise proposing appropriate regular reporting intervals, objectives and methods

b) specifying how plan/strategy implementation will be reported in accordance with those obligations

c) including a reporting template specifying key risk management, management measures, monitoring and adaptive implementation outcomes for the reporting period

d) including a schedule and triggers for reporting types (e.g. annual compliance, incident, non-compliance, contingency).