



Offset Reconciliation Statement Summary

July 2015 – December 2016

13 June 2017



ConocoPhillips



Australia Pacific LNG is progressing towards the successful delivery of the Queensland Government approved *Australia Pacific LNG Environmental Offset Strategy (Offset Strategy; Q-LNG01-15-EA-0021 / APLN-000-EN-R01-D-10201)* to compensate for significant, residual impacts on environmental values as result of its multibillion dollar, world-class coal seam gas to liquefied natural gas export project in Queensland (the Project).

The fourth annual offset reconciliation statement provides an update on Australia Pacific LNG's extensive offsets portfolio and details progress made over the 2015-2016 reporting period, which includes 18 months of data (July 2015 to December 2016) as changes were made to the Queensland Coordinator-General's conditions for the Project in 2016 to align this statement with the anniversary of the *Offset Strategy* approval (April 2012). A reconciliation of the Project's actual impacts on environmental values from Project commencement to December 2016 against secured direct and indirect offsets is provided by the data. The statement also provides a summary of the status of each direct offset site or indirect offset activity, progress to date and anticipated actions to be undertaken over the next reporting year (written as current in April/May 2017 to align with the April anniversary date).

The Australia Pacific LNG offset program has continued to produce ecologically beneficial direct and indirect offset outcomes. Over the last reporting period substantial progress has been made to legally secure all of Australia Pacific LNG's direct offset sites and progress indirect offset activities to acquit project offset requirements. Key milestones and ecological outcomes of the offset program achieved during this period include:

- The *Dukes Plain Offset and Rehabilitation Area Management Plan (version 2)* was approved and offsets legally secured as a Nature Refuge under the *Nature Conservation Act 1992*, with on-ground management and monitoring actions being undertaken.
- The *Colamba Offset Area Management Plan (version 2)* was approved and a Voluntary Declaration under the *Vegetation Management Act 1999* to legally secure the Colamba offset area issued by the Department of Natural Resources and Mines and the landholder.
- The salvaged and propagated *Cycas megacarpa* individuals planted on Inverness to date are being monitored, with an additional 2,014 propagated cycads planted in May 2017.
- A total of 4,880 propagated *Acacia pedleyi* were planted in May 2016, with another 1,097 planted in March 2017, all are now being monitored and maintained.
- The Inverness offset area has continued to be managed and monitored successfully in accordance with the *Inverness Offset Area Management Plan (Q-LNG01-15-MP-0544)* and the *Cycas megacarpa Management and Translocation Plan (Q-LNG01-15-MP-011834F)*.
- Ongoing monitoring and maintenance is being undertaken at the legally secured offset sites Pinehurst and Rockwood.
- Origin collaborated with Santos to acquit offset obligations for ooline (*Cadellia pentastylis*) individuals, with the four ooline required planted in May 2016 on the Santos offset property, Bottle Tree. Regular monitoring and maintenance is being undertaken.
- The transfer of the freehold lots to the Queensland Government to legally secure the Monte Christo offset continues to be progressed and negotiated.

- Construction of the Condamine Town Weir fishway was completed in late 2015 by the Queensland Murray-Darling Committee, and follow up monitoring undertaken with positive results determining improvement in fish passage. This facilitated Fisheries Queensland to sign-off on this indirect offset obligation being met.
- Fauna habitat modelling to assist in better quantifying Project impacts on threatened fauna habitat continues to be revised and improved, with scientific research being undertaken for Yakka skink and Dunmall's snake to better understand these species and feed back into the model.
- A number of the CSIRO GISERA research projects relevant to the offsets program have been completed.

Appendix A: This table provides a summary of the Australia Pacific LNG project's reconciled disturbance and offsets for the 2015-2016 period (detailed in the *Environmental Offset Reconciliation Statement 2015-2016*) and is to be uploaded to the Australia Pacific LNG website as per the *Coordinator-General's Report on the Environmental Impact Statement Appendix 1, Part 1, Condition 5, 3*) (h).

Environmental value requiring offset				Disturbance (to date)	Offset multiplier/condition ¹	Offset requirement (to date; grouped by offset value)	Offset proposed/provided ²	Offset on track ³	Surplus offset identified ⁴
Value	Status	Unit							
	Cth ⁵	State ⁶							
World Heritage values									
Great Barrier Reef World Heritage Area	World Heritage	-	ha	266.10 (230.60 LNG Facility; 35.50 Narrows Crossing)	5 (LNG Facility); 1 (Narrows Crossing) + Indirect offset	1,188.50 + indirect offset	Monte Christo (1/3 share) - 1,187.37; Removal of threatening processes (1/3 share) - 6,684.00 CIEMP offset (1/4 share) - 730.50 Indirect offset: \$200,000/year + \$100,000/LNG train/year	Yes	Yes
Threatened ecological communities									
Brigalow TEC	E	-	ha	37.43	Condition - 1000.20 (30% remnant, 70% HVR & regrowth)	374.25	Dukes Plain - 1000.20 (300.06 remnant, 311.19 mature regrowth, 388.95 regrowth) ⁷	Yes	-
Semi-evergreen vine thicket (SEVT) TEC	E	-	ha	1.85	Condition - 41.36	14.82	Dukes Plain - 41.36 ⁸	Yes	-
Brigalow and SEVT rehabilitation area offset	E	-	ha	-	Condition - 1,209.67	1,209.67	Dukes Plain - 300.54 Brigalow, 528.84 SEVT Colamba - 282.70 Brigalow Total - 1,112.08 ha ⁹	Yes	-
Endangered remnant and regrowth REs									

¹ Offset multipliers derived from State Government approved Offset Strategy and offset conditions prescribed by Australian Government approval conditions, with following exceptions: offset multiplier for impacts on near threatened flora species was revised from 3 (as stated in the Offset Strategy) to 1 (like-for-like through rehabilitation of impact sites) by Queensland Department of Environment and Heritage Protection (EHP; letter dated 4 December 2012); all offset requirements for flora species reclassified to least concern have been waived by EHP (letter dated 8 September 2014).

² Monte Christo and CIEMP offset areas approved in the Monte Christo Offset Proposal (8 August 2013) represent Australia Pacific LNG's share of the offset (1/3 and 1/4 respectively). Those areas on Monte Christo and CIEMP that have been used to draw down on to acquit additional fauna habitat offset requirements represent Origin's 10% entitlement to the Australia Pacific LNG share (except for squatter pigeon and glassy black cockatoo). Dukes Plain, Colamba and Inverness offset areas are as per respective approved offset area management plans.

³ Based on offset requirements to date presented in the 2015-2016 reconciliation statement, current progress on verifying environmental values, developing management plans and legally securing offsets.

⁴ Based on offset requirements to date presented in the 2015-2016 reconciliation statement, consequently surplus values on direct offset sites will be used as advanced offsets to draw down on to acquit future Project offset requirements.

⁵ Commonwealth status is based on *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) - Endangered (E), Vulnerable (V), Migratory, Marine, Migratory / Marine (M/M) or Cetacean.

⁶ State status is based on various Acts depending on the environmental value. Regional Ecosystems (REs) are based on the conservation status listed under the *Vegetation Management Act 1999* - Endangered (E), Of Concern (OC), Least Concern (LC); Marine habitat values are protected under the *Fisheries Act 1994*; fauna and flora are listed under the *Nature Conservation Act 1992* - Endangered (E), Vulnerable (V), Near Threatened (NT) and Special Least Concern (SLC).

⁷ Separate to Brigalow component of the Rehabilitation Area Offset on Dukes Plain.

⁸ Separate to SEVT component of the Rehabilitation Area Offset on Dukes Plain.

⁹ The Rehabilitation Area Offset shortfall of 97.59 ha will be addressed in conjunction with additional offsets for the Project as acknowledged by Department of Environment and Energy in letter dated 19 February 2016.

Environmental value requiring offset									
Value	Status		Unit	Disturbance (to date)	Offset multiplier/condition ¹	Offset requirement (to date; grouped by offset value)	Offset proposed/provided ²	Offset on track ³	Surplus offset identified ⁴
	Cth ⁵	State ⁶							
BVG 17a	-	E	ha	1.75 (remnant) + 9.52 (regrowth)	2	3.51 (remnant) + 19.04 (regrowth)	Surplus of concern remnant and regrowth BVG 17a on Dukes Plain	Yes	-
BVG 25a	-	E	ha	34.79 (remnant) + 27.07 (regrowth)	2	69.58 (remnant) + 54.14 (regrowth)	Dukes Plain - 1,300.77 (387.83 remnant, 912.94 regrowth) Colamba - 263.27 (141.38 remnant, 121.89 regrowth)	Yes	Yes
BVG 7a	-	E	ha	0.24 (remnant)	2	0.48 (remnant)	Surplus of concern remnant and regrowth BVG 7a on Dukes Plain	Yes	-
Unknown endangered regrowth	-	E	ha	5.53	2	11.05 (regrowth)	Surplus endangered remnant and regrowth BVG 25a on Dukes Plain and Colamba	Yes	-
Of concern remnant and regrowth REs									
BVG 13c - South East Queensland bioregion	-	OC	ha	42.31 (remnant)	2	84.62 (remnant)	Monte Christo (1/3 share) - 29.91; Removal of threatening processes (1/3 share) - 200.00; CIEMP offset (1/4 share) - 10.49	Yes	Yes
BVG 13c - Brigalow Belt bioregion	-	OC	ha	2.79 (regrowth)	2	5.59 (regrowth)	Surplus of concern remnant and regrowth BVG 25a, 7a, 16c 17a on Dukes Plain	Yes	-
BVG 16c - Brigalow Belt bioregion	-	OC	ha	8.17 (remnant)	2	16.33 (remnant)	Dukes Plain - 60.70 (60.20 remnant; 0.50 regrowth)	Yes	Yes
BVG 16c - South East Queensland bioregion	-	OC	ha	28.22 (remnant)	2	56.44 (remnant)	Monte Christo (1/3 share) - 6.80; Removal of threatening processes (1/3 share) - 73.33 CIEMP offset (1/4 share) - 39.59	Yes	Yes
BVG 17a	-	OC	ha	31.27 (remnant) + 11.91 (regrowth)	2	62.54 (remnant) + 23.82 (regrowth)	Dukes Plain - 246.56 (166.20 remnant, 80.36 regrowth)	Yes	Yes
BVG 17b	-	OC	ha	-	2	-	No disturbance to date	N/A	-
BVG 25a	-	OC	ha	6.29 (remnant) + 0.51 (regrowth)	2	12.59 (remnant) + 1.02 (regrowth)	Dukes Plain - 1,300.77 (387.83 remnant, 912.94 regrowth)	Yes	Yes
BVG 7a	-	OC	ha	1.88 (remnant) + 0.12 (regrowth)	2	3.76 (remnant) + 0.24 (regrowth)	Dukes Plain - 570.10 (225.80 remnant, 344.30 regrowth)	Yes	Yes
Unknown of concern regrowth	-	OC	ha	16.84	2	33.68 (regrowth)	Surplus of concern remnant and regrowth BVG 16c, 17a, 25a, 7a on Dukes Plain	Yes	-

Threshold REs									
Threshold RE 11.5.5 (remnant and regrowth)	-	LC	ha	106.79 (remnant) + 2.78 (regrowth)	Indirect offset	Indirect offset	Indirect offset: Threshold REs	Yes	-

Marine Habitat

Mangroves	-	Fisheries	ha	6.49	1	82.72	Monte Christo (1/3 share) - 103.88; Removal of threatening processes (1/3 share) - 1,483.18 CIEMP offset (1/4 share) - 15.07	Yes	Yes
Saltpan	-	Fisheries	ha	39.02	1				
Marine environments containing seagrass	-	Fisheries	ha	15.89	1				
Sub-tidal areas (bare substrate)	-	Fisheries	ha	21.32	1				
Wetlands									
Referrable Wetlands - refer to Table 2 for definitions used.	-	Wetland	ha	4.09	1	4.09	Colamba - 81.10 palustrine wetland and gilgai surrounding wetland	Yes	Yes
Watercourses									
Watercourse crossings (stream order 3 and above) - Fitzroy catchment & Murray Darling Downs	-	Fisheries	# crossings	128	Indirect offset	Indirect offset	Indirect offset: Removal of waterway barrier works	Yes	-
Shorebirds (shorebird habitat)									
Eastern curlew (<i>Numenius madagascariensis</i>)	CE, M/M	E	ha	39.02	2	78.04	Monte Christo (1/3 share) - 103.88; Removal of threatening processes (1/3 share) - 1,483.18; CIEMP offset (1/4 share) - 15.07	Yes	Yes
Whimbrel (<i>Numenius phaeopus</i>)	Migratory	SLC	Ha						
Red-necked Stint (<i>Calidris ruficollis</i>)	Migratory	SLC	Ha						
Beach stone-curlew (<i>Esacus magnirostris</i>)	Marine	V	Ha						
Fauna in seagrass habitat									
Dugong (<i>Dugong dugon</i>)	Migratory	V	ha	15.89	2	31.78	Indirect offsets \$150k: Long-term marine turtle monitoring program Research undertaken through GISERA	Yes	Yes
Green turtles (<i>Chelonia mydas</i>)	V	V	Ha						
Australian snubfin dolphin (<i>Orcaella heinsohni</i>)	Migratory	NT	Ha						
Fauna in bare substrate									
Loggerhead turtles (<i>Caretta caretta</i>)	E	E	ha	21.32	2 + Indirect offset	42.64			
Indo-Pacific humpback dolphin (<i>Sousa chinensis</i>)	Migratory	NT	Ha						
Bottlenose dolphin (<i>Tursiops aduncus</i>)	Cetacean		Ha						
Other fauna									

Death adder (<i>Acanthophis antarcticus</i>)	-	V	ha	122.78	2	245.56	Dukes Plain - 1,193.80	Yes	Yes
Dunmall's snake (<i>Furina dunmalli</i>)	V	V	ha	67.76	2	135.52	Dukes Plain - 2,568.60	Yes	Yes
Golden-tailed gecko (<i>Strophurus taenicauda</i>) - incl. EH (VM Act)	-	NT	ha	365.15	2	730.30 (incl. EH 0.56)	Dukes Plain - 2,568.60; confirmed presence	Yes	Yes
Grey snake (<i>Hemiaspis damelii</i>)	-	E	ha	22.71	2	45.42	Colamba - 411; confirmed presence	Yes	Yes
Woma (<i>Aspidites ramsayi</i>) - incl. EH (VM Act)	-	NT	ha	206.65	2	413.30 (no EH disturbed to date)	Colamba- potential habitat	Yes	-
Yakka skink (<i>Egernia rugosa</i>)	V	V	ha	72.47	2	144.94	Dukes Plain 2,568.60	Yes	Yes
Pale imperial hairstreak (<i>Jalmenus eubulus</i>) - incl. EH (VM Act)	-	V	ha	159.32	2	318.64 (no EH disturbed to date)	Dukes Plain - 951.30 Colamba - 32.10	Yes	Yes
Eastern osprey (<i>Pandion cristatus</i>)	Marine, Migratory	SLC	ha	1.51	2	3.02	Monte Christo (Origin entitlement 10% of 1/3 share) - 14.98; Removal of threatening processes (Origin entitlement 10% of 1/3 share) - 56.68 CIEMP offset (Origin entitlement 10% of 1/4 share) - 12.58	Yes	Yes
Glossy-black cockatoo (<i>Calyptorhynchus lathami</i>)	-	V	ha	117.32	2	234.46	Monte Christo (Origin entitlement 10% of 1/3 share) - 105.85 + additional 128.61 (part of Conoco Phillips 30% entitlement); Removal of threatening processes (Origin entitlement 10% of 1/3 share) - 266.67 Colamba - Confirmed presence	Yes	Yes
Rainbow bee-eater (<i>Merops ornatus</i>)	Marine	-	ha	58.05	2	116.10	Monte Christo (Origin entitlement 10% of 1/3 share) - 118.73; Removal of threatening processes (Origin entitlement 10% of 1/3 share) - 668.40 CIEMP offset (Origin entitlement 10% of 1/4 share) - 73.30	Yes	Yes
Red goshawk (<i>Erythrotriorchis radiatus</i>)	V	E	ha	6.34	2	12.68	Monte Christo (Origin entitlement 10% of 1/3 share) - 118.73; Removal of threatening processes (Origin entitlement 10% of 1/3 share) - 668.4 CIEMP offset (Origin entitlement 10% of 1/4 share) - 73.30	Yes	Yes
Rufous fantail (<i>Rhipidura rufifrons</i>)	Marine, Migratory	SLC	ha	2.23	2	4.46	Monte Christo (Origin entitlement 10% of 1/3 share) - 105.85; Removal of threatening processes (Origin entitlement 10% of 1/3 share) - 462.19 CIEMP offset (Origin entitlement 10% of 1/4 share) - 68.69	Yes	Yes
Satin flycatcher (<i>Myiagra cyanoleuca</i>)	Marine, Migratory	SLC	ha	1.05	2	2.10	Monte Christo (Origin entitlement 10% of 1/3 share) - 108.35; Removal of threatening processes (Origin entitlement 10% of	Yes	Yes

							1/3 share) - 586.44 CIEMP offset (Origin entitlement 10% of 1/4 share) - 71.79		
Squatter pigeon (<i>Geophaps scripta scripta</i>) - - incl. EH (VM Act)	V	V	ha	116.84	2	233.68 (incl. EH 13.46)	Monte Christo (Origin entitlement 10% of 1/3 share) - 108.35 + additional 111.87 (part of Conoco Phillips 30% entitlement); Removal of threatening processes (Origin entitlement 10% of 1/3 share) - 586.435 CIEMP offset (Origin entitlement 10% of 1/4 share) - 71.791	Yes	Yes
White-bellied sea eagle (<i>Haliaeetus leucogaster</i>)	Marine	-	ha	1.51	2	3.02	Monte Christo (Origin entitlement 10% of 1/3 share) - 14.982; Removal of threatening processes (Origin entitlement 10% of 1/3 share) - 56.678 CIEMP offset (Origin entitlement 10% of 1/4 share) - 12.583	Yes	Yes
Coastal sheathtail Bat (<i>Taphozous australis</i>) - EH (VM Act)	-	√-NT	ha	4.48	2	8.96	Monte Christo (Origin entitlement 10% of 1/3 share) - 25.354; Removal of threatening processes (Origin entitlement 10% of 1/3 share) - 155.667 CIEMP offset (Origin entitlement 10% of 1/4 share) - 13.873	Yes	Yes
Koala (<i>Phascolarctos cinereus</i>) - incl. EH (VM Act)	V	V	ha	28.11	2	56.22 (incl. EH 56.22) ¹⁰	Monte Christo (Origin entitlement 10% of 1/3 share) - 399.11; Removal of threatening processes (Origin entitlement 10% of 1/3 share) - 833.33	Yes	Yes
Large-eared pied bat (<i>Chalinolobus dwyeri</i>) - incl. EH (VM Act)	V	V	ha	42.17	2	84.34 (no EH disturbed to date)	Dukes Plain - 2,988	Yes	Yes
South-eastern long-eared bat (<i>Nyctophilus corbeni</i>)	V	V	ha	102.15	2	204.30 (incl. EH 6.10)	Dukes Plain - 2,956.90	Yes	Yes
Water mouse (<i>Xeromys myoides</i>)	V	V	ha	35.50	2	54.20	Monte Christo (1/3 share) - 167.51; Removal of threatening processes (1/3 share)- 2,731.35 CIEMP offset (1/4 share) - 18.11	Yes	Yes
Murray cod (<i>Maccullochella peelii</i>)	V	-	# crossings	12	Indirect offset	Indirect offset	Indirect offset: Removal of waterway barrier works	Yes	-
Fitzroy River turtle (<i>Rheodytes leukops</i>)	V	V	# crossings	4	Indirect offset	Indirect offset	Indirect offset: Fitzroy River Turtle nest protection	Yes	-
Flora									
<i>Acacia pedleyi</i> (Pedley's wattle) - incl. EH (VM Act)	-	V	ha/# plants	2,300 plants (12.75 ha EH)	3.5 (2 EH)	8,050 plants (incl. 24.5 ha EH)	Inverness - capacity for 8,050 plants (5,977 plants currently established, incl. 25.5 ha EH)	Yes	-

¹⁰ The koala (combined populations of Queensland, New South Wales and the Australia Capital Territory) was listed as vulnerable under the EPBC Act on 27 April 2012 and vulnerable under the NC Act in June 2015. These listings occurred after the Queensland and Australian Governments approved the Project, and therefore offsets are not required for impacts on this species in the Brigalow Belt bioregion. Note that the Koala in South East Queensland bioregion was listed as vulnerable under the NC Act at the time the Project was approved, and therefore offsets are required for impacts on this species in the South East Queensland bioregion (i.e. resulting from the LNG facility, and a small section of the main pipeline).

<i>Cadellia pentasyllis</i> (ooline)	V	V	# plants	1 plant	3.5	4 plants (rounded up)	4 plants established in collaboration with Santos at their Bottle Tree property, Arcadia Valley	Yes	-
<i>Cycas megacarpa</i> (Large-fruited zamia) - incl. EH (VM Act)	E	E	ha/# plants	292 plants (12.37 ha EH)	6 (2 EH)	1,800 plants (min. 141 ha) ¹¹ (incl. 24.7 ha EH)	Inverness - Capacity for 1,800 plants (2,508 plants currently established within 192.7 ha offset area secured; incl. 24.7 ha EH)	Yes	-
<i>Micromyrtus carinata</i> (Gurulmundi heath-myrtle) - EH (VM Act)	-	E	ha	-	2 EH	-	No disturbance to date	N/A	-
<i>Rutidosia lanata</i> (red-soil woolly wrinklewort) ¹² - incl. EH (VM Act)	-	VNT	ha/# plants	38,209 plants, 53.71 ha (3.27 ha EH)	3.5 (2 EH)	182,458 plants + 53.71 ha (incl. 6.55 ha EH)	Pinehurst and Rockwood - prior to reclassification, previous plantings undertaken, management plans approved and offset areas secured <i>R. lanata</i> reclassified 12 May 2017 from vulnerable to near threatened, offsets no longer required, rather 'like for like' rehab at impact site	Yes	-
<i>Homopholis belsonii</i> (Belson's panic) - EH (VM Act)	V	E	ha	1.77 ha EH applied for in clearing permit	2 EH	3.54	Pre-clearance surveys undertaken confirmed no <i>H. belsonii</i> or <i>P. minutiflorum</i> individuals were disturbed during clearing activities therefore no offsets required	N/A	-
<i>Polianthion minutiflorum</i> - EH (VM Act)	V	V	ha	1.68 ha EH applied for in clearing permit	2 EH	3.36			

¹¹ Australia Pacific LNG will provide 1,800 *C. megacarpa* individuals and an offset site of at least 141 ha in accordance with Commonwealth approval EPBC 2009/4976, more individuals have been planted (and more offset area secured) to allow for a 30% mortality rate.

¹² *R. lanata* was reclassified from vulnerable to near threatened 12 May 2017.

Appendix B: A table providing a summary of the Australia Pacific LNG project's cumulative disturbance and rehabilitation for the 2015-2016 period cannot be uploaded to the Australia Pacific LNG website as per the Coordinator-General's Report Appendix 1, Part 1, Condition 5, 3) (f) given the reinstated disturbance footprint is currently being monitored to record the progress of land stability and rehabilitation of the floristic ground cover. Current progressive rehabilitation monitoring aims to record a point in time status of rehabilitation and where necessary inform maintenance requirements to maintain accessibility and stability for ongoing operations. This will be reviewed again next reporting period.