

Environmental Protection Act 1986

Section 43A

NOTICE OF DECISION TO CONSENT TO AMEND A REFERRED PROPOSAL DURING ASSESSMENT

PERSON TO WHOM THIS NOTICE IS GIVEN

(a) Murchison Hydrogen Renewables Pty Ltd (ACN: 650 922 062)
Level 45, 108 St Georges Terrace
PERTH WA 6000

PROPOSAL TO WHICH THIS NOTICE RELATES:

Murchison Hydrogen Renewables Project
Assessment No. 2339

Pursuant to s. 43A of the *Environmental Protection Act 1986* (EP Act), the Environmental Protection Authority (EPA) gives approval to the assessment of the proposal being completed in respect of the proposal as amended in accordance with the proponent's request:

Physical elements

- Increase in the overall Development Envelope (DE) by 701.4 hectares (ha), from 89,555.3 ha to 90,256.7 ha. The change comprises of an increase in Marine, Power to Ammonia (PtA), and Solar Farm Areas of 699.6, 401.7 and 105.7 ha, respectively, and a reduction to the Wind Farm Area of 505.6 ha.
- Reduction in the permanent clearing for wind turbines by 70 ha, from 470 ha to 400 ha.
- Increase in the extent of permanent footprint of the solar farm by 200 ha, from 7,000 ha to 7,200 ha.
- Reduction in the access roads and supporting infrastructure lengths by 900 kilometres (km), from 1600 km to 700 km including an associated reduction to clearing by 200 ha, from 1,400 ha to 1,200 ha.
- Addition of up to 30 ha of permanent clearing within the DE for operational on-site accommodation
- Reduction in the onshore pipeline corridors between Main PtA plant, ammonia storage and seawater pumping station by 3,000 metres (m), from 7,000 m to 4,000 m, including an associated reduction of temporary clearing of nine ha, from 43 ha to 34 ha
- Addition of 2,150 m of pipeline partially or fully trenched on the seafloor from 850 m to 3,000 m, increasing benthic habitat disturbance of up to 6 ha, from

3.6 ha to 9.6 ha within the Marine Area increased by 880.6 ha, from 857.5 ha to 1,738.1 ha.

- Increase in the marine export facility distance offshore by 2,030 meters, from 2,600 m to 4,630 meters.
- Removal of the support craft facility from the proposal.

Construction elements

- Definition that the 59 ha of proposed disturbance for construction accommodation to constitute of 30 ha of permanent clearing and 29 ha of temporary clearing.
- Addition of up to 3,000 m of trenching of the seafloor for ammonia pipeline from point of emergence to the marine export facility
- Overall reduction of 4,500 m of onshore pipelines comprising of
 - a reduction of 5,500 m between the PtA and ammonia storage (from 7,000 to 1,500 m); and
 - an increase of 1,000 m to the trenched seawater pipeline between the shoreline pumps station and main PtA site (from 1,500 m to 2,500 m).

Operational elements

- Reduction in the number of wind turbines by 77, from 522 of 445 turbines and production of wind generated electricity by 0.6 gigawatt (GW) from 3.7 GW to 3.1 GW.
- Increase in solar farm capacity by 0.1 GW, from 2.5 GW to 2.6 GW.
- Reductions in the following parameters within the PtA
 - Electrolyser capacity by 0.5 GW, from 3.0 GW to 2.5 GW
 - Desalinated water demand by one (1) gigalitre per annum (GLpa) from six (6) GLpa to five (5) GLpa
 - Ammonia production by 0.2 megaton per annum (Mtpa) from two (2) Mtpa to 1.8 Mtpa
- Specification that the DE will include a permanent workforce accommodation servicing up to 700 pax during full production.
- Reduction in the ammonia export by 0.2 Mtpa from two (2) Mtpa to 1.8 Mtpa
- Decrease in vessel movements from weekly movements to three (3) per month.
- Reduction in proposed permanent terrestrial clearing by 40 ha, from 10,151 ha to 10,111 ha.
- Reduction in proposed temporary terrestrial clearing by 29 ha, from 147 ha to 118 ha.
- Reduction in proposed benthic communities and habitat clearing by 10 ha, from 26 ha to 16 ha.
- Reduction in proposed dredging volume by 41,000 m³, from 135,000 m³ to 94,000 m³.

The amended proposal content document and figures are attached.

SUMMARY OF REASONS:

- Increasing the proposed DE is related to moving the proposed export facility further offshore and will likely reduce the visual impacts of the proposal. While the DE has increased, the environmental values and works required in the [approved ESD](#) remain relevant and suitable to inform the EPA's assessment.
- Considering the proposed changes to disturbance extents of all proposal elements, the overall clearing has reduced by 69 ha and 10 ha for terrestrial environments and marine benthic habitats, respectively, likely decreasing the extent of impacts compared to the existing proposal.
- A reduction to the number of turbines and increase in the solar farm is likely to minimise the visual impacts associated with Kalbarri and adjacent land uses in addition to decreasing risks to avifauna and bats during operation. The remaining potential impacts will be considered by the EPA during assessment.
- The increase in pipeline length required for the relocated export facility and removal of the support craft facility results in
 - an overall reduction by 10 ha in the extent of benthic communities and habitat disturbance; and
 - reduction of dredging material volume by 41,000 m³
- Relocation of the pipelines associated with the export facility may alter the potential impacts and environmental outcomes associated with spill events. These are required to be investigated and modelled by the works within the approved ESD.
- The existing accommodation camp impacts of the referred proposal was to be assessed for construction phase and extending assessment of 30 ha of this element into the operation phase is unlikely to require additional information compared to the works required in the approved ESD. The EPA will consider the accommodation camp impacts over the life of the proposal.
- Changes to the electricity generation of the proposal are unlikely to impact the EPA's assessment.
- Reducing the production capacity of proposed infrastructure and sea vessel movements are appropriate as these changes may decrease impacts and associated with noise, visual amenity, discharges, and spill event risks.
- The draft ERD is required to be prepared consistent with the work items set out in the approved ESD
- There are no new environmental factors likely to be significantly impacted as a result of the proposed amendment.
- The EPA considered that:
 - there was sufficient information about the amendments to be able to make a decision whether to approve the change; and
 - the proposal as amended will be substantially the same character as the referred proposal.

EFFECT OF THIS NOTICE:

1. The assessment of the proposal is to be completed in respect of the proposal as amended in accordance with the decision set out in this notice.

2. The proposal as amended in accordance with this notice is taken to have been referred to the EPA under s. 38 of the EP Act.

RIGHTS OF APPEAL:

There are no rights of appeal under the EP Act in respect of this decision.

A handwritten signature in black ink, appearing to read 'Darren Walsh', written in a cursive style.

Darren Walsh
Delegate of the Environmental Protection Authority
CHAIR

02 June 2026

Proposal Content Document

Table 1: General proposal content description

Proposal title	Murchison Green Hydrogen Project (formerly Murchison Hydrogen Renewables Project)
Proponent name	Murchison Hydrogen Renewables Pty Ltd as trustee for the Murchison Hydrogen Renewables Trust
Short description	<p>The Proposal will use combined onshore wind and solar energy to produce up to 6-gigawatt (GW) generation capacity. Powering the electrolysis process the project will produce green hydrogen, which will be converted to an estimated 1.8 million tonnes per annum (Mtpa) of green ammonia for export to emerging green energy markets.</p> <p>The Proposal is located within the Shire of Northampton, Western Australia (WA), approximately 20 km north of Kalbarri.</p> <p>The Proposal comprises the following major components:</p> <ul style="list-style-type: none">– A wind and solar farm with a combined installed capacity of up to 6 GW– A Power-to-Ammonia (PtA) facility that will use electrolysis to produce green hydrogen, which will then be converted into ~1.8 Mtpa of green ammonia– A marine export facility including pipelines and a single-point mooring.

Table 2 Proposal content elements

Proposal element	Location / description	Existing Proposal extent, capacity, or range	Proposed amendment	Combined extent, capacity, or range
Physical elements				
Development Envelope	Figure 1	<p>Maximum extent of 89,555.3 ha.</p> <p>Indicative extents of activity areas:</p> <p>Access Road Area – 3,642.5 ha Marine Area – 857.5 ha PtA Area – 604.1 ha Solar Farm Area – 10,788.2 ha Wind Farm Area – 73,663.0 ha</p>	<p>Additional total area of 701.4 ha</p> <p>Indicative extents of activity areas:</p> <p>Access Road Area – 3,642.5 Marine Area – increase of 699.6 ha PtA Area – increase of 401.7 ha Solar Farm Area – increase of 105.7 ha Wind Farm Area – reduction of 505.6 ha</p>	<p>Maximum extent of 90,256.7 ha.</p> <p>Indicative extents of activity areas:</p> <p>Access Road Area – 3,642.5 ha Marine Area – 1,557.1 ha PtA Area – 1,005.8 ha Solar Farm Area – 10,893.9 ha Wind Farm Area – 73,157.4 ha</p>
Wind turbines	Figure 2	<p>470 ha permanent footprint, including native vegetation clearing, within the development envelope.</p> <p>Permanent footprint of 0.9 ha per turbine</p>	Reduction of 70 ha	<p>400 ha</p> <p>Permanent footprint of 0.9 ha per turbine</p>
Solar farm	Figure 2	Up to 7,000 ha permanent footprint.	Increase of 200 ha	Up to 7,200 ha permanent footprint.
Power Transmission infrastructure	Contained within the Development Envelope (Figure 1)	Up to 900 ha of clearing.	Nil	Up to 900 ha of clearing.

Proposal element	Location / description	Existing Proposal extent, capacity, or range	Proposed amendment	Combined extent, capacity, or range
PtA plant Includes: <ul style="list-style-type: none"> - Seawater Pumping Station - Desalination plant - Electrolysers - Ammonia plant - Battery storage system - Substation - Ammonia chiller and storage tanks - Onshore support facilities 	Figure 2	381 ha permanent footprint (total clearing). 6 ha laydown at Coastal site (temporary)	Nil	381 ha permanent footprint (total clearing). 6 ha laydown at Coastal site (temporary)
Access roads and other supporting infrastructure	Figure 2 (Contained within the Development Envelope [Figure 1])	Up to 1,600 km of roads, including a main access road from the highway to the PtA plant. Total clearing of up to 1,400 ha.	Reduction of 900km of road lengths. Reduction of 200 ha of clearing.	Up to 700 km of roads, including a main access road from the highway to the PtA plant. Total clearing of up to 1,200 ha.
Operational accommodation	Figure 2 (Contained within the Development Envelope [Figure 1])	Nil	Up to additional 30 ha of permanent clearing to support on-site accommodation for operation.	Up to 30 ha of clearing.

Proposal element	Location / description	Existing Proposal extent, capacity, or range	Proposed amendment	Combined extent, capacity, or range
Onshore pipeline corridors between Main PtA plant, ammonia storage, and seawater pumping station	Figure 2 (Contained within the Development Envelope [Figure 1])	Approximately 7,000 m of onshore pipeline corridor between shoreline infrastructure hub and PtA plant. Total temporary clearing of approximately 43 ha.	Reduction of 3,000 m of pipeline corridor. A decrease by 9 ha of temporary clearing.	4,000 m of pipeline corridor and 34 ha of clearing.
Seawater intake and discharge pipe	Figure 2 (Contained within the Development Envelope [Figure 1])	Disturbance of up to 2.4 ha of benthic habitat within the 857.5 ha Marine Area. Intake pipeline approximately 705 m from shoreline. Brine outfall pipeline approximately 1,230 m from shoreline.	Nil	Disturbance of up to 2.4 ha of benthic habitat within the Marine Area. Intake pipeline approximately 705 m from shoreline. Brine outfall pipeline approximately 1,230 m from shoreline.
Cryogenic ammonia export pipeline	Figure 2 (Contained within the Development Envelope [Figure 1])	1,750 m pipeline in HDD tunnel, which emerges onto the seabed and then runs along the sea floor for 850 m, at a depth of approximately 37 m. Disturbance of up to 3.6 ha of benthic habitat within the 857.5 ha Marine Area.	No change to sub-sea tunnelling extent. Additional 2,150 m pipeline on sea floor, to be partially or fully trenched for pipeline protection. Increase of 6 ha of benthic habitat disturbance within the larger (increase of 699.6 ha) Marine Area.	1,750 m pipeline in HDD tunnel, which emerges onto the seabed and then partially or fully trenched along the sea floor for approximately 3,000 m . Disturbance of up to 9.6 ha of benthic habitat within the 1,557.1 ha Marine Area.

Proposal element	Location / description	Existing Proposal extent, capacity, or range	Proposed amendment	Combined extent, capacity, or range
Marine export facility	Figure 2 (Marine Area)	<p>Located in water depth of approximately 37 m, 2,600 m from shore.</p> <p>Swing basin radius of approximately 950 m.</p> <p>Vessel manoeuvring area of approximately 2,500 m.</p> <p>Disturbance of up to 4 ha of benthic habitat within the 857.5 ha Marine Area.</p>	<p>Increase distance offshore of approximately 2,030 m.</p> <p>Disturbance of up to 4 ha of benthic habitat within increase of 699.6 ha of Marine Area.</p>	<p>Located approximately 4,630 m from shore.</p> <p>Swing basin radius of approximately 950 m.</p> <p>Vessel manoeuvring area of approximately 2,500 m.</p> <p>Disturbance of up to 4 ha of benthic habitat within the 1,557.1 ha of Marine Area.</p>
Support Craft Facility Option 1 - Coastal	Figure 2 (Marine Area)	<p>Disturbance of up to 16 ha of benthic habitat within the 857.5 ha Marine Area.</p> <p>Dredging within the maximum combined pipeline dredge extent of 135,000 m³.</p>	Removed from proposal	nil
Support Craft Facility Option 2 - Kalbarri	n/a	Removed from proposal.	Removed from proposal	nil

Proposal element	Location / description	Existing Proposal extent, capacity, or range	Proposed amendment	Combined extent, capacity, or range
Construction elements				
Temporary laydown areas and construction footprints	Laydown areas will be located at multiple locations across the DE.	9 ha of temporary laydown for the substations. 30 ha temporary laydown for PtA Plant	No change	9 ha of temporary laydown for the substations. 30 ha temporary laydown for PtA Plant
Construction Accommodation	Within Development Envelope	Up to 59 ha.	Definition of 29 ha of temporary disturbance and 30 ha of permanent disturbance	Up to 59 ha, (of which 29 ha will be temporary during construction, with 30 ha of permanent clearing (allocated under operation elements)).

Proposal element	Location / description	Existing Proposal extent, capacity, or range	Proposed amendment	Combined extent, capacity, or range
Tunnelling/HDD/ trenching - marine	Dual ammonia export pipelines, marine communications, seawater intake and discharge pipelines.	<p>Up to 1,750 m subsea length (HDD) emerging at a water depth of approximately 29 m for pipelines to marine export facility.</p> <p>Up to 1,000m subsea length (HDD) to a water depth of approximately 29 m for pipelines to brine discharge structure.</p> <p>Up to 700 m tunnelling to a water depth of approximately 20m to seawater intake structure.</p>	Addition of up to 3,000 m trenching for ammonia pipeline	<p>Ammonia pipelines - Up to 1,750 m under the sea floor using horizontal direct drilling (HDD), before rising to the seabed. Up to 3,000 m trenching of the sea floor from point of emergence to the marine export facility.</p> <p>Up to 1,000m subsea length (HDD) to a water depth of approximately 29 m for pipelines to brine discharge structure.</p> <p>Up to 700 m tunnelling to a water depth of approximately 20m to seawater intake structure.</p>

Proposal element	Location / description	Existing Proposal extent, capacity, or range	Proposed amendment	Combined extent, capacity, or range
Tunnelling/HDD/ trenching - terrestrial	From PtA plant to ammonia storage and seawater pumping station	<p>Approximately 7,000 m of onshore pipeline corridor between shoreline infrastructure hub and PtA plant.</p> <p>Up to 1,000 m trenched ammonia and brine pipelines from coastal PtA site to the HDD entrance.</p> <p>Up to 1,500 m trenched seawater pipeline from shoreline pump station to coastal PtA site.</p>	<p>Total reduction of 4,500 m of pipelines.</p> <p>Reduction of 5,500 m of pipelines between PtA plant and ammonia storage site.</p> <p>No change to pipelines from ammonia storage site to HDD entrance.</p> <p>An increase of 1000 m to trenched seawater pipeline from shoreline pump station to main PtA site.</p>	<p>Approximately 1,500 m trenched ammonia and brine / utilities pipelines from PtA plant to ammonia storage site.</p> <p>Up to 1,000 m trenched ammonia and brine pipelines from ammonia storage site to the HDD entrance.</p> <p>Up to 2,500 m of trenched seawater pipeline from shoreline pump station to main PtA site.</p>
Seawater intake	Figure 2 (Marine Area)	Vertical risers drilled into seabed. Ground anchors and seabed preparation.	No change.	Vertical risers drilled into seabed. Ground anchors and seabed preparation.
Brine discharge	Figure 2 (Marine Area)	Vertical risers drilled into seabed. Ground anchors and seabed preparation.	No change.	Vertical risers drilled into seabed. Ground anchors and seabed preparation.
Dredging / Blasting	Figure 2 (Marine Area)	Dredging / blasting requirements dependent on extent of seabed obstacles.	No change.	Dredging / blasting requirements dependent on extent of seabed obstacles.

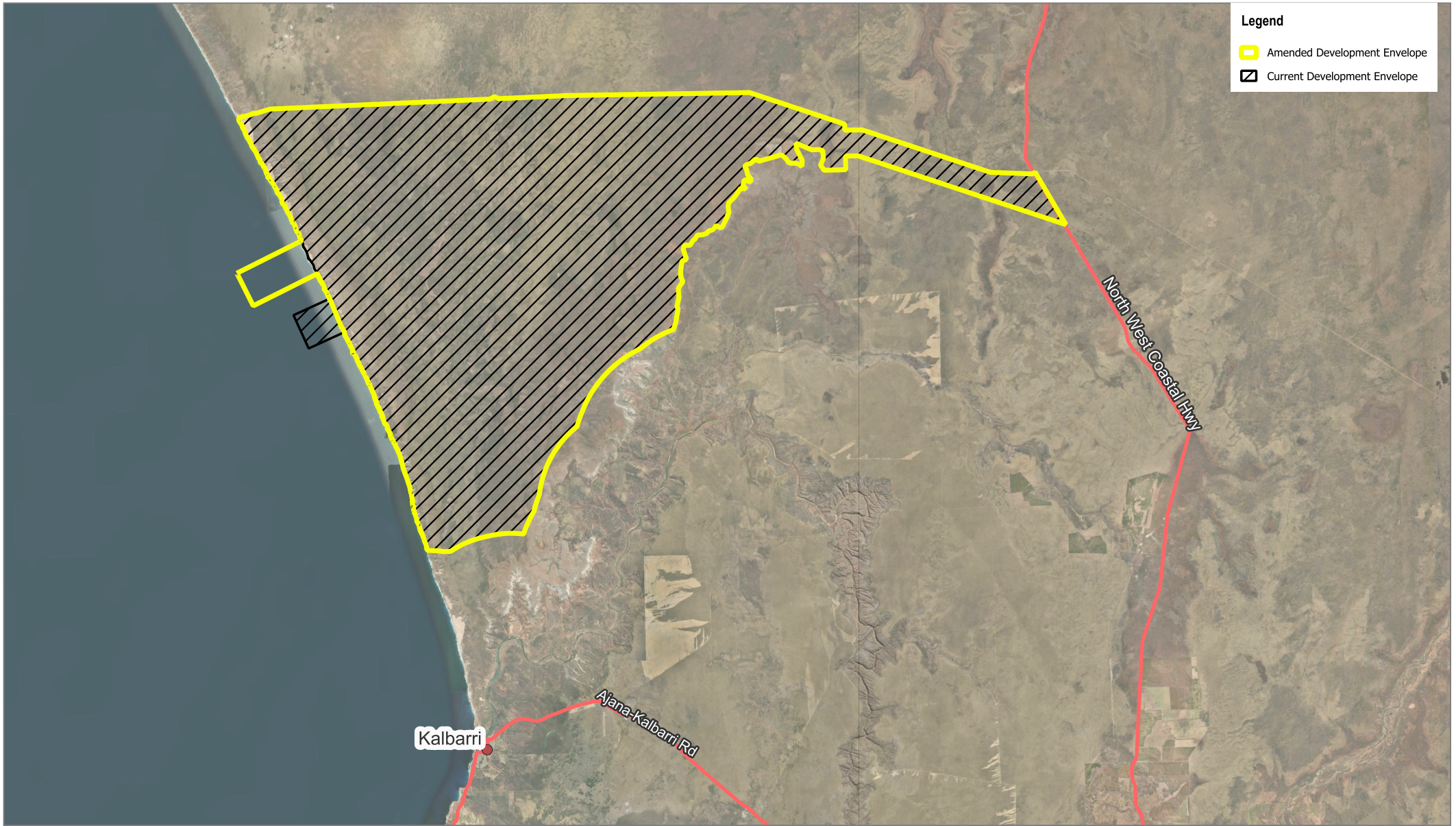
Proposal element	Location / description	Existing Proposal extent, capacity, or range	Proposed amendment	Combined extent, capacity, or range
Operational elements				
Wind energy production	Figure 2 (Wind Farm Area)	Up to 522 turbines Total 3.7 GW	Reduction of 77 turbines and 0.6 GW	Up to 445 turbines Total approximately 3.1 GW
Solar farm energy production	Figure 2 (Solar Farm Area)	2.5 GW	Increase of 0.1 GW	Approximately 2.6 GW
PtA plant Includes: <ul style="list-style-type: none"> - Seawater pumping station - Desalination plant - Electrolysers - Ammonia plant - Battery storage system - Substation - Ammonia chiller and storage tanks - Onshore support facilities. 	Figure 2 (PtA Area)	Electrolyser <ul style="list-style-type: none"> - capacity of 3.0 GW - 6 GLpa of desalinated water demand Ammonia production plant <ul style="list-style-type: none"> - 2 Mtpa 	Reduction of <ul style="list-style-type: none"> - 0.5 GW electrolyser capacity - 1 GLpa desalinated water demand - 0.2 Mtpa ammonia production 	Electrolyser <ul style="list-style-type: none"> - capacity of 2.5 GW - 5 GLpa of desalinated water demand Ammonia production plant: 1.8 Mtpa

Proposal element	Location / description	Existing Proposal extent, capacity, or range	Proposed amendment	Combined extent, capacity, or range
Operational accommodation	Contained within the Development Envelope (Figure 1)	Not specified	Inclusion of permanent workforce accommodation	Servicing up to 700 pax during full production.
Ammonia export	-	Approximately 2 Mtpa ~ Weekly vessel movements	Reduction of 0.2 Mtpa. ~ 3 offtake vessels per month	Approximately 1.8 Mtpa ~ 3 offtake vessels per month
Total permanent terrestrial clearing	-	10,151 ha	Reduction of 40 ha	10,111 ha
Total temporary terrestrial clearing	-	147 ha	Reduction of 29 ha.	118 ha
Total benthic communities and habitat clearing	-	26.0 ha	Reduction of 10 ha	16.0 ha
Total dredging volume	-	135,000 m ³	Reduction of 41,000 m³	94,000 m³

Proposal element	Location / description	Existing Proposal extent, capacity, or range	Proposed amendment	Combined extent, capacity, or range
Proposal elements with greenhouse gas emissions				
Construction elements:				
Scope 1	Scope 1 GHG emissions (associated with land use changes and use of plant and equipment for construction) are expected to be close to the 100,000 tonnes CO2-e per annum threshold , as defined under the Australian Government's Safeguard Mechanism. Estimate to be calculated during assessment.		No change	Scope 1 GHG emissions (associated with land use changes and use of plant and equipment for construction) are expected to be close to the 100,000 tonnes CO2-e per annum threshold, as defined under the Australian Government's Safeguard Mechanism. Estimate to be calculated during assessment.
Scope 2	None.		No change	None.
Scope 3	Emissions during manufacturing and construction of facility and equipment will be calculated during assessment stage.		No change	Emissions during manufacturing and construction of facility and equipment will be calculated during assessment stage.

Proposal element	Location / description	Existing Proposal extent, capacity, or range	Proposed amendment	Combined extent, capacity, or range
Operation elements:				
Scope 1	Scope 1 GHG emissions associated with operation are not expected to be greater than 40,000 tCO ₂ -e per annum (taking a conservative approach with respect to cleared vegetation and no rehabilitation following construction considered), which places the Proposal below the 100,000 tonnes CO ₂ -e per annum threshold, as defined under the Australian Government's Safeguard Mechanism.		No change	Scope 1 GHG emissions associated with operation are not expected to be greater than 40,000 tCO ₂ -e per annum (taking a conservative approach with respect to cleared vegetation and no rehabilitation following construction considered), which places the Proposal below the 100,000 tonnes CO ₂ -e per annum threshold, as defined under the Australian Government's Safeguard Mechanism.
Scope 2	None		No change	None
Scope 3	Scope 3 GHG emissions associated with the transport of ammonia by sea tanker are estimated at no greater than 288,489 tCO ₂ -e/yr. Offset of 5,300,000 tCO ₂ emissions annually		No change	Scope 3 GHG emissions associated with the transport of ammonia by sea tanker are estimated at no greater than 288,489 tCO ₂ -e/yr. Offset of 5,300,000 tCO ₂ emissions annually
Rehabilitation				

Proposal element	Location / description	Existing Proposal extent, capacity, or range	Proposed amendment	Combined extent, capacity, or range
Areas temporarily cleared for laydown will be rehabilitated following construction. Final closure and rehabilitation following cessation of operations.				
Commissioning				
Integration pipeline: pressure testing and disinfection of construction works. Reuse of water where practical, sourced from desalination plant. Water neutralised and discharged to marine environment using direct discharge.				
Decommissioning				
Removal of all above-surface infrastructure following cessation of operations. Below-ground infrastructure to be decommissioned and left in situ.				
Seawater intake and brine discharge will be cut to below seabed surface, removed, and disposed of.				
Other elements which affect extent of effects on the environment				
Proposal time	Maximum project life	30+ years (construction + operations).	No change.	30+ years (construction + operations).
	Construction phase	Approximately 5.5 years including pre-construction phase.	No change.	Approximately 5.5 years including pre-construction phase.
	Operations phase	25+ years.	No change.	25+ years.
	Decommissioning phase	Estimated 5 years post operations.	No change.	Estimated 5 years post operations.



Legend

- Amended Development Envelope
- Current Development Envelope

Paper Size ISO A4
 0 5 10 km

Map Projection: Mercator Auxillary Sphere
 Horizontal Datum: GDA 2020
 Grid: MGA Zone 50

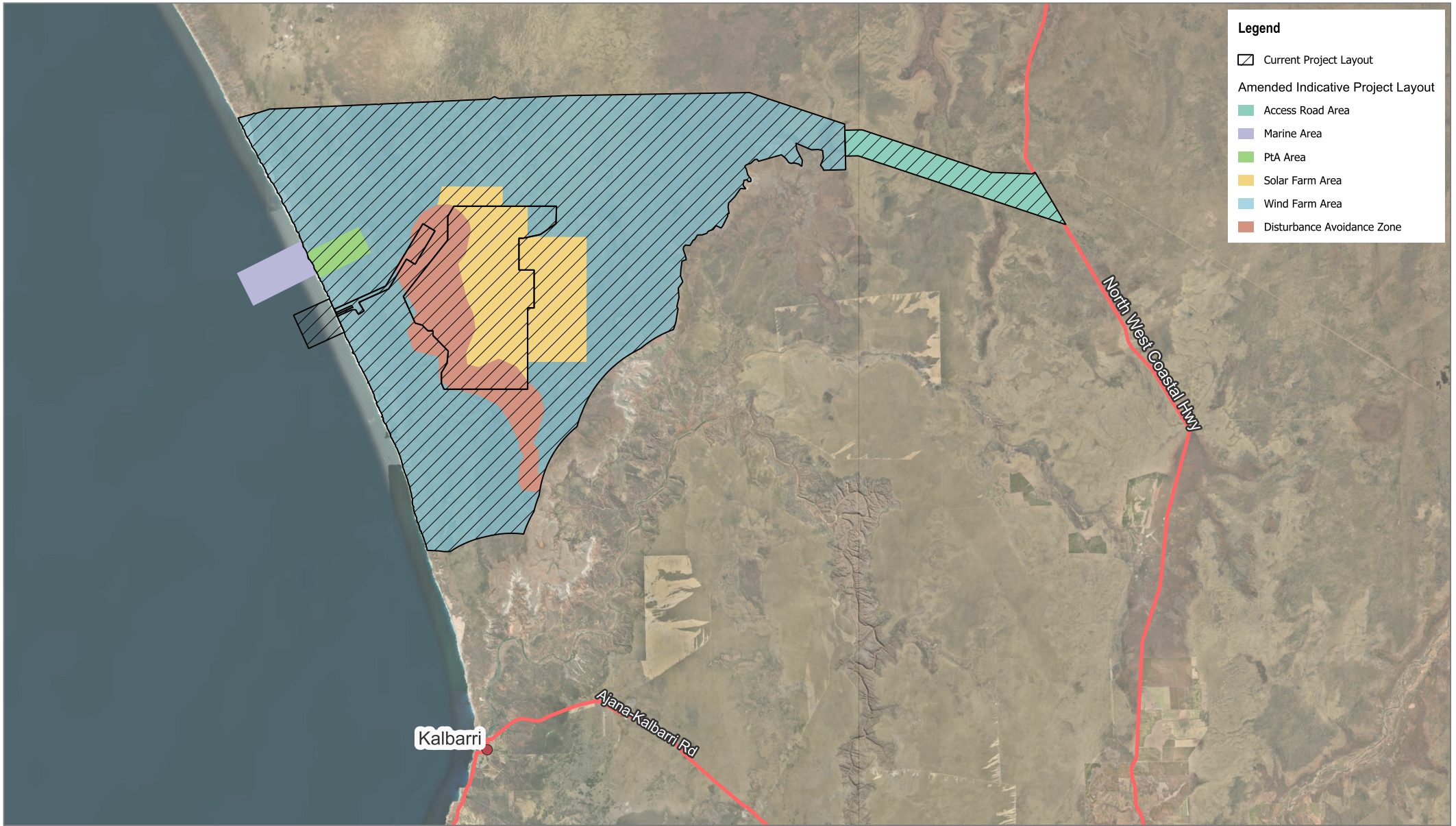
**MURCHISON
GREEN
HYDROGEN**

CIP
Copenhagen Infrastructure Partners


MURCHISON GREEN HYDROGEN

AMENDED DEVELOPMENT ENVELOPE







FIGURE 1
 Data Source: WANow
 Created By: Tristan Sleigh




Legend

-  Current Project Layout

Amended Indicative Project Layout

-  Access Road Area
-  Marine Area
-  PtA Area
-  Solar Farm Area
-  Wind Farm Area
-  Disturbance Avoidance Zone

Paper Size ISO A4
 0 5 10 km

 Map Projection: Mercator Auxillary Sphere
 Horizontal Datum: GDA 2020
 Grid: MGA Zone 50



 MURCHISON
GREEN
HYDROGEN

 CIP
Copenhagen Infrastructure Partners

MURCHISON GREEN HYDROGEN
AMENDED INDICATIVE SITE LAYOUT

FIGURE 2
 Data Source: WANow
 Created By: Tristan Sleigh