Fin Resources

Positive Sol Mar Scoping Study Completed

Fin Resources Limited (ASX: FIN) ("**FIN**" or the "**Company**"**)** is pleased to announce the results of a positive Scoping Study on its 80%-owned North Onslow Solar Salt Project in the Pilbara region, Western Australia. The project has now been renamed the Sol Mar Project ("**Sol Mar**" or the "**Project**") to reflect the broader strategy of producing a range of green products from seawater using renewable energy.

- **Highly compelling potential economics demonstrates Sol Mar's world class potential**
- **Further studies to commence immediately with results reported progressively**
- **Based on using 100% renewable energy and producing green products**
- **All proposed products have substantial existing markets in Australia and can be produced under current Mining Act legislation**
- **Positive Scoping Study results to accelerate partnering strategy**

Cautionary Statement

The Scoping Study referred to in this announcement has been undertaken to ascertain whether a business case can be made for proceeding to undertake more detailed studies on the technical and economic viability of the Sol Mar Project (the **Project**). It is a preliminary technical and economic study of the potential viability of the Project. It is based on low level technical and economic assessments that are not sufficient to support the estimation of salt production. Further evaluation work and appropriate studies are required before FIN will be in a position to provide any assurance of an economic development case.

The Project is proposing to produce a range of salt based green products from seawater. The JORC code is not applicable to such a project and accordingly mineral resources are not reported in the Scoping Study. However, the input resource, seawater from the ocean is abundant, has a known chemical composition and contains sufficient salt to support the range of production outcomes contemplated by the Scoping Study. The estimated salt production rate for the Project has been independently modelled by Actis Environmental, a consulting firm with significant knowledge and experience in operations producing salt from seawater.

The Scoping Study is based on the material assumptions outlined below. These include assumptions about the availability of funding. While FIN considers all of the material assumptions to be based on reasonable grounds, there is no certainty that they will prove to be correct or that the range of outcomes indicated by the Scoping Study will be achieved.

To achieve the range of outcomes indicated in the Scoping Study, significant additional debt and equity funding will likely be required. Investors should note that there is no certainty that FIN will be able to raise that amount of funding when needed. It is also likely that such funding may only be available on terms that may be dilutive to or otherwise affect the value of FIN's existing shares. It is also possible that FIN could pursue other 'value realisation' strategies such as a sale, partial sale or joint venture of the Project. If it does, this could materially reduce FIN's proportionate ownership of the Project.

Given the uncertainties involved, investors should not make any investment decisions based solely on the results of the Scoping Study.

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Forward Looking Statements

All statements, trend analysis and other information contained in this document relative to markets for FIN, trends in resources, recoveries, production and anticipated expense levels, as well as other statements about anticipated future events or results constitute forward-looking statements. Forward-looking statements are often, but not always, identified by the use of words such as "seek", "anticipate", "believe", "plan", "estimate", "expect" and "intend" and statements that an event or result "may", "will", "should", "could" or "might" occur or be achieved and other similar expressions. Forward-looking statements are subject to business and economic risks and uncertainties and other factors that could cause actual results of operations to differ materially from those contained in the forward-looking statements. Forward-looking statements are based on estimates and opinions of management at the date the statements are made. FIN does not undertake any obligation to update forward-looking statements even if circumstances or management's estimates or opinions should change. Investors should not place undue reliance on forward-looking statements.

Competent Persons Statement

The information in this Scoping Study that relates to the assessment of the estimated production rate for the Sol Mar Project is based on, and fairly represents, information and supporting documentation which has been prepared by James Barrie who is a Member of the Australasian Institute of Mining and Metallurgy (AusIMM) and a full-time employee of Fin Resources Limited. Whilst the JORC Code is not applicable to the Sol Mar Project, he has sufficient experience that is relevant to the type of project that is being considered and to the activity that is being undertaken to otherwise qualify as a Competent Person as defined in the JORC Code. He consents to the inclusion in this report of the matters based on his information in the form and context in which they appear.

Scoping Study Highlights

- Demonstrates the potential technical and economic viability of the Sol Mar Project
- The strategic location and ideal climatic conditions support the production of high-quality industrial salt, sulphate of potash ("**SOP**"), caustic soda and polyvinyl chloride ("**PVC**")
- Production is proposed to be powered by 100% renewable energy sourced from a combination of established renewable energy technologies
- Strong local demand and limited production of SOP, caustic soda and PVC provides the opportunity to displace imported products produced using fossil fuels with zero carbon emission products produced locally
- Given the products will be produced from salt sourced from seawater and using renewable energy, the Project is not resource constrained and could potentially operate indefinitely with appropriate sustaining capital
- A number of potential optimisations have been identified that could improve the economics of the Project including debt financing, carbon credits and/or 'green product' price premiums and the large scale co-production of green hydrogen
- FIN is proceeding immediately with time critical planning and permitting activities and additional studies
- FIN has also commenced engaging with potential partners and a broad range of potential counterparties and transaction structures are considered to exist for the Project

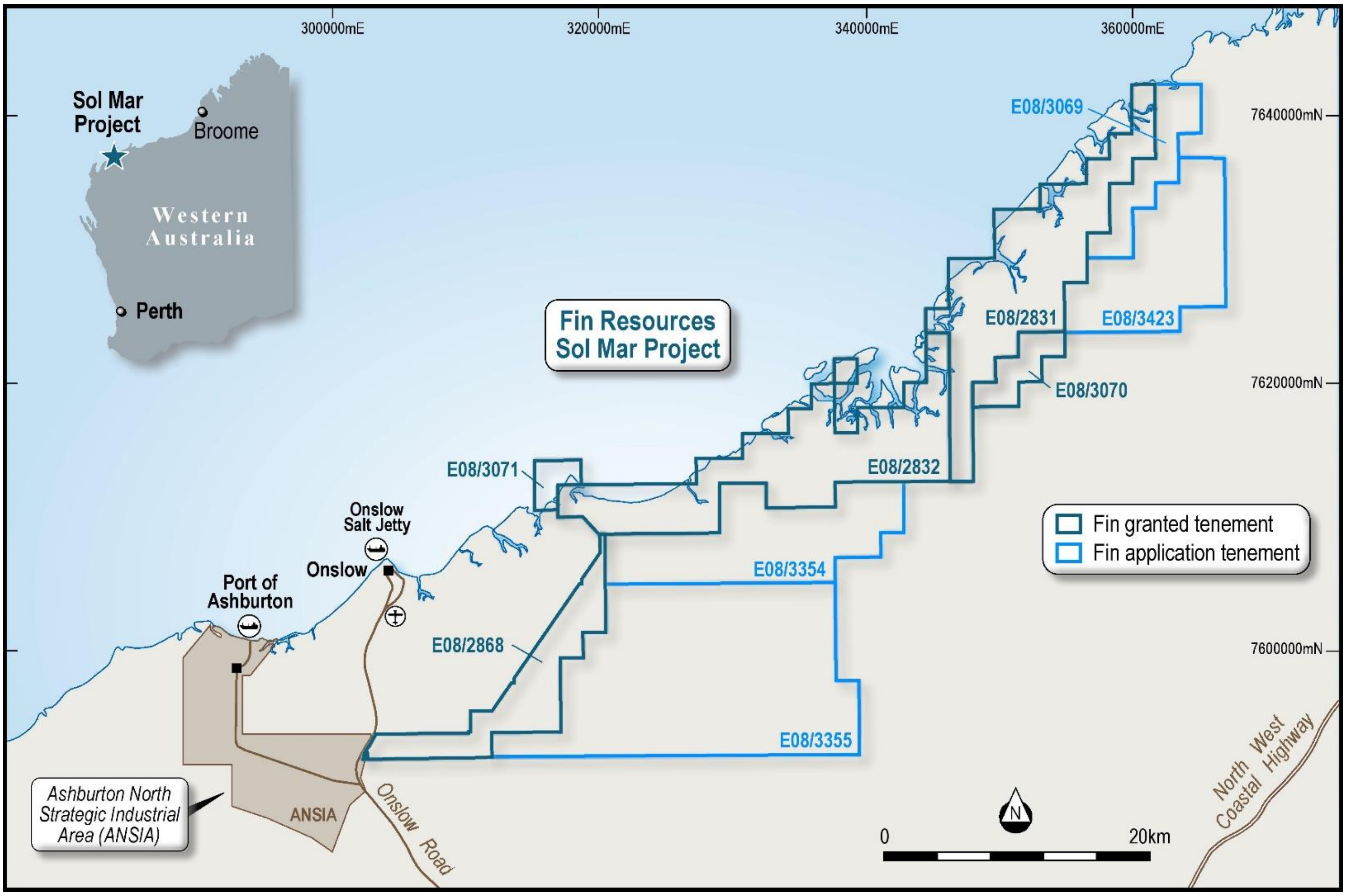

Figure 1 – Sol Mar Project Location

Sol Mar Project Founder and FIN Executive Director Ryan de Franck commenting on the Scoping Study results:

"Sol Mar is a world class project development opportunity. Producing high value and strategic green products from seawater using renewable energy is entirely sustainable and would contribute to global efforts to de-carbonise. The Scoping Study has not only demonstrated that this is technically viable today but that the potential economics are attractive and could be enhanced further.

Realising the full potential of this exciting opportunity will require a collaborative approach and the completion of the Scoping Study will allow us to progress our engagement with potential development, financing and product offtake partners to achieve this in a socially and environmentally responsible manner for the benefit of all stakeholders.

In the meantime, we are proceeding immediately with planning, permitting and additional studies."

Authorised for release by: Jason Bontempo - Non-Executive Director

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Sol Mar Project

Scoping Study Summary

November 2021

Fin Resources

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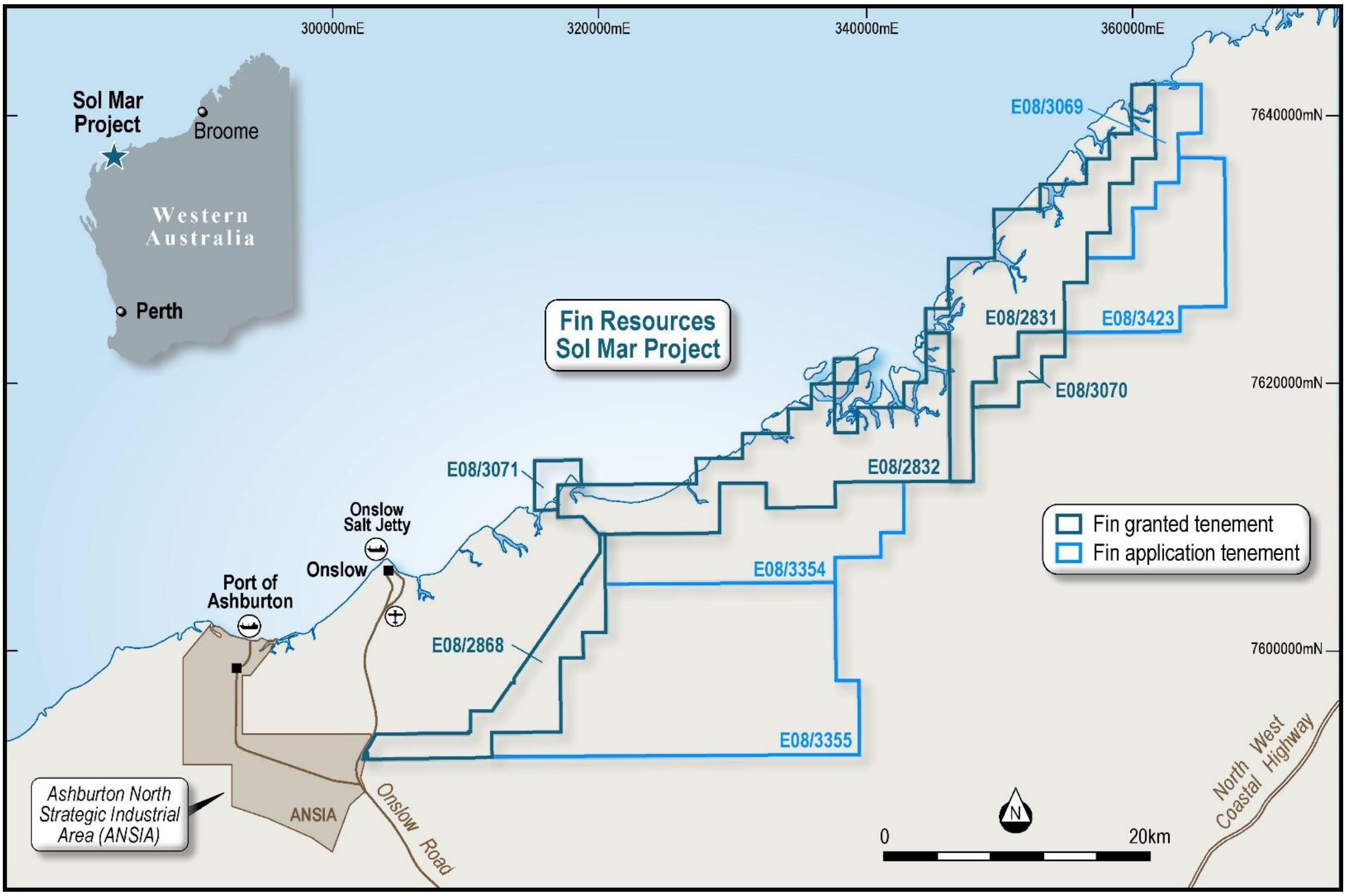
1. Executive Summary

1.1. Introduction

The Sol Mar Project ("**Sol Mar**" or the "**Project**") is located near the town of Onslow in the Pilbara region of Western Australia (Figure 1). The Scoping Study for the Project has identified a value-creating investment opportunity for an integrated hub producing multiple green products from seawater using established production processes and technologies. Production is proposed to be powered by 100% renewable energy sourced from a combination of renewable energy technologies.

Figure 1 Project Location



Source FIN Resources 2021

The Project is centred on the proposed production of high-quality industrial salt, sulphate of potash, caustic soda and polyvinyl chloride ("**PVC**").

1.2. Project and Study Overview

The Project is favourably located in Australia's major solar salt producing region and presents all of the key prerequisites for the production of salt from solar evaporation:

1. Access to natural channels feeding a brine resource (seawater) to the project area
2. Hot dry and/or windy climate with a predictable dry season, and
3. A large area of flat land with low permeability that is suitable for the construction of evaporation ponds.

FIN is pursuing a value-added downstream processing strategy through a staged, large scale integrated salt, SOP, chlor-alkali and PVC project development. The opportunity also exists to incorporate reverse osmosis desalination water treatment technology into the salt production process and the co-production of green hydrogen.

FIN has completed the Scoping Study which envisages the production of high purity industrial-grade salt from seawater via solar evaporation, crystallisation and raw salt purification. The study explored the economic and technical viability of downstream processing of salt at the project area through the chlor-alkali process. The chlor-alkali process produces multiple products, including caustic soda, for which there is a large existing market in Western Australia for the processing of critical minerals such as alumina and lithium. This market is currently filled by overseas manufacturers using fossil fuel-based energy.

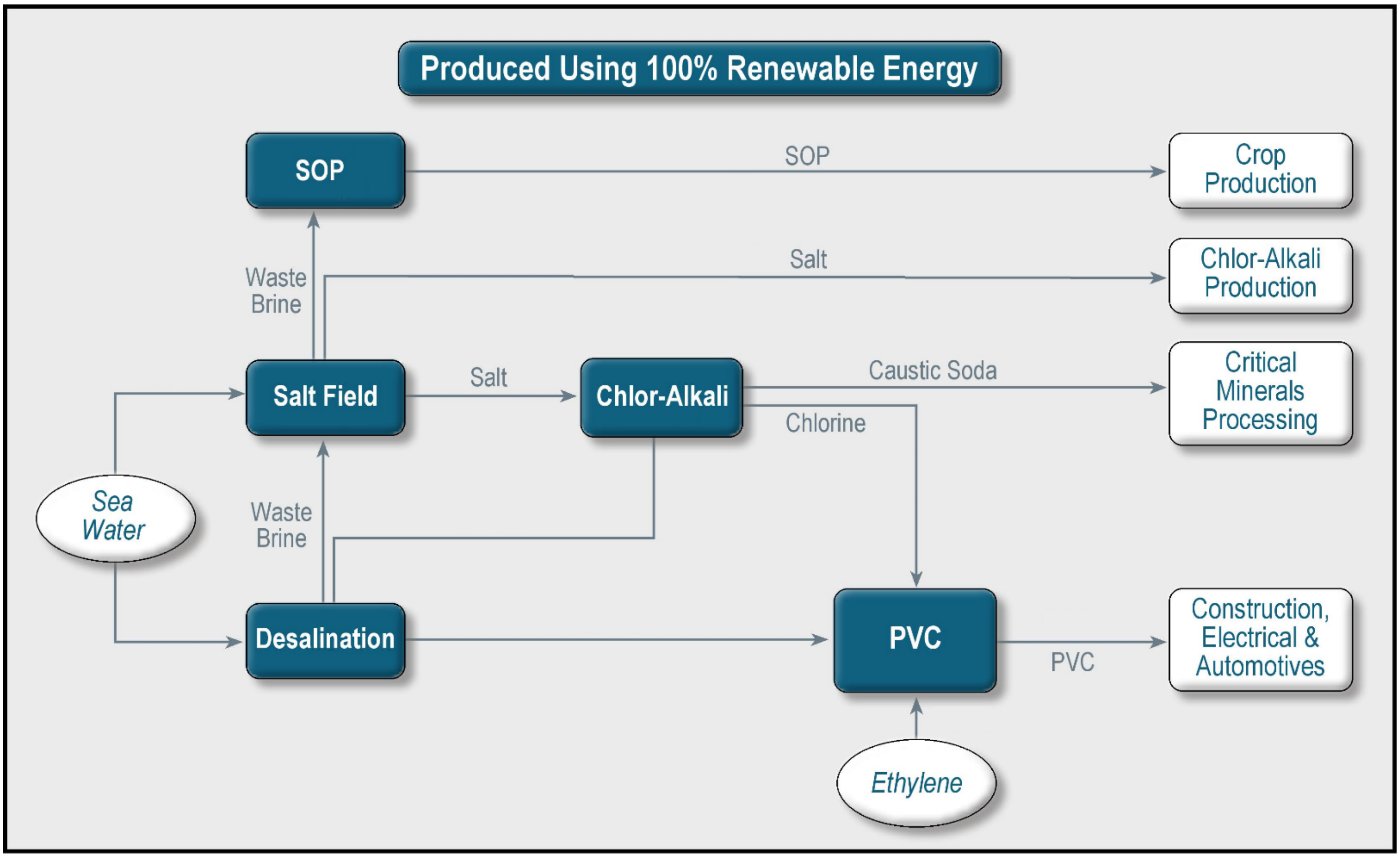
Chlorine is also produced as part of the chlor-alkali process. With the addition of ethylene or bio-ethylene to produce vinyl chloride monomer (VCM) it is used in the manufacture of PVC, a high demand material in the construction, electrical and automotive industries.

The chlor-alkali and VCM/PVC plants are proposed to be developed in two stages. The first stage, is sized to meet current Australian PVC demand. The second stage is sized to meet c.50% of Western Australian demand for caustic soda for the refining of Alumina with surplus chlorine used to produce PVC for export markets.

The study is based on the export of salt via a multi-user bulk commodity transhipment berth that FIN propose to establish at Coolgra Point, which is located approximately 15km north-east of Onslow, within the limits of the existing Onslow Port. FIN also propose to establish a bulk liquid import and export facility at Coolgra Point or alternatively at the existing Ashburton Port.

The integrated nature of the Project is represented by the block flow diagram in Figure 2.

Figure 2 – Integrated Project block flow diagram



Source FIN Resources 2021

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The power to service these production processes is proposed to be 100% renewable energy.

The Project will produce green products from seawater using renewable energy primarily from the sun and it could potentially operate indefinitely with an appropriate sustaining capital model.

The Scoping Study was prepared by FIN with input from leading industry consultants and specialists.

Table 1: Consultant Contributions

Consultant	Scope of Work
Actis Environmental	Salt Field Modelling
Biota Environmental Sciences	Environmental – Terrestrial
BMT	Marine Infrastructure
Calibre	Geotechnical
CQG Consulting	Bitterns Products
GHD	Water Technology, Green Products Review and Costs, Renewable Energy
Intratec	VCM and PVC Cost Estimates
Land Surveys	Topographic Survey
O2 Marine	Environmental – Marine
PAEMAC	Salt Cost Estimates
Platek Analytics	Financial Modelling
Preston Consulting	Planning and Approvals
Tecnon OrbiChem	Caustic Soda and PVC Market Data

1.3. Conclusion & Recommendations

Based on the results of the Scoping Study, FIN has resolved to immediately proceed with time critical planning and permitting activities and additional feasibility studies.

FIN intends to take a collaborative approach to progressing the Project and will consider partnering with interested parties who can contribute technical expertise and experience and financial resources to assist in the development of the Project.

2. Location and Tenure

The project area is located near the town of Onslow in the Shire of Ashburton in the Pilbara region of Western Australia. Existing access to the project area is by road, air and sea.

Onslow is located approximately 1,380km north of Perth and 360km south of Karratha which is the closest regional centre. Onslow is accessible by the Onslow Road which extends 82km off the North West Coastal Highway. Onslow Road and the North West Coastal Highway are major sealed transport routes in the area.

The project area comprises nine exploration licenses, five are granted and account for 386km^2. Four licenses are pending and will add to a total of 905km^2 (Figure 1).

Table 2: Exploration Licence Summary

Licence	Status	Area (km^2)	Annual Rent	Minimum Spend
E08/2831	Granted	140.2	$15,752	$66,000
E08/2832	Granted	152.9	$17,542	$98,000
E08/2868	Granted	64.3	$8,950	$37,500
E08/3069	Pending	38.3	-	-
E08/3070	Granted	19.1	$1,572	$20,000
E08/3071	Granted	9.6	$786	$15,000
E08/3354	Pending	111.4	-	-
E08/3355	Pending	270.5	-	-
E08/3423	Pending	98,8	-	-
Total		**905.1**	**$44,602**	**$236,500**

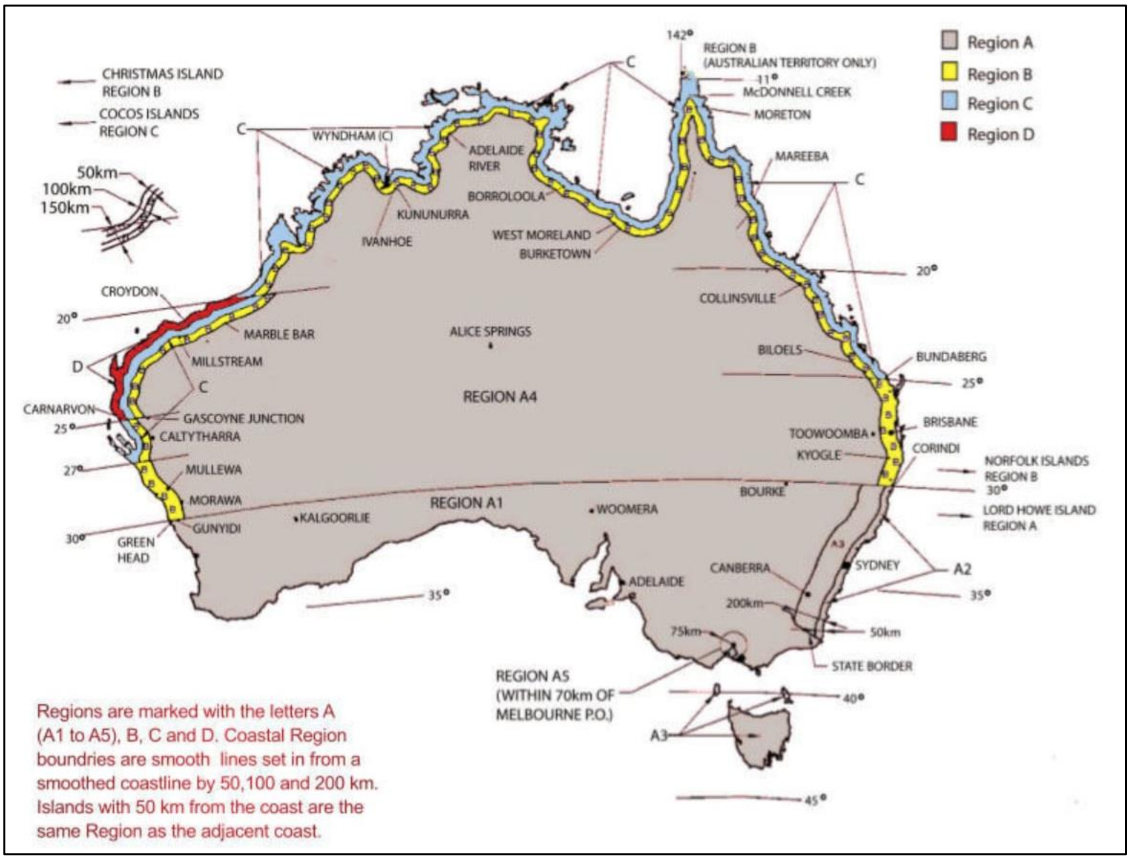
Source: Fin Resources 2021

2.1. Climatic Conditions

The climate of the coastal Pilbara region is arid and tropical with high temperatures and low irregular rainfall.

The region is within the Category D cyclone rating area which extends from Carnarvon in the south to near Broome in the north along the Western Australian coastline. The project area can be subject to tropical cyclones with an average annual occurrence of 0.4 to 0.6.

Figure 3: Australian Cyclone Rating Areas



Source: Australian Standards

The climatic conditions for the project area, typical of an arid and tropical climate in the coastal Pilbara region, are favourable for the establishment of an integrated solar salt and downstream green products development utilising renewable energy.

The key climatic considerations for a solar salt operation are rainfall and evaporation including a consideration of seasonal variations have been provided by Actis Environmental (2021).

Table 3: Key Climate Data

Month	Days	Evaporation	Rainfall	Net Evaporation
January	31	10.8	334.8	36.4
February	28	10.0	280.0	69.7
March	31	10.1	313.1	45.6
April	30	9.0	270.0	18.2
May	31	7.1	220.1	29.9
June	30	6.0	180.0	36.6
July	31	6.1	189.1	11.6
August	31	7.2	223.2	4.0
September	30	8.9	267.0	1.3
October	31	10.7	331.7	0.8
November	30	11.8	354.0	1.2
December	31	11.7	362.7	12.3
Total	**365**	**9.1**	**3,325.7**	**267.6**

Source: Actis Environmental 2021

2.2. Geology

The surface geology of the project area is considered appropriate for the establishment of a solar salt operation due to the prevalence of existing tidal salt flats and the availability of materials for the construction of concentration and evaporation ponds.

The surface geology of the project area comprises:

1. Tidal salt flats and tidal channels
2. Beaches and coastal dunes
3. Sandplains including some residual deposits
4. Alluvium in drainage channels and floodplains

2.3. Native Title

In applying for tenure under the Mining Act, the provisions of the Native Title Act apply. FIN's current tenure is not subject to any Native Title applications or determinations.

2.4. Environment

Potentially significant environmental impact risks have been mapped by Biota Environmental (2021) and O2 Marine (2021) and concept designs for the Project were developed within the potential constraints that are known to exist.

The key risk of impacting tropical arid zone mangroves and algal mats has been addressed in the proposed evaporation pond layout by:

- Avoiding areas listed as important by the Environmental Protection Authority, and
- Situating the western pond walls well inland from the coast, thereby preserving the majority of the mangroves and algal mat habitats.

The proposed evaporation pond layout also provides east-west channels for storm surface water and potential nutrient flow to travel to the ocean following the larger of the natural creek lines.

The Coolgra Point location is within the existing Port of Onslow boundary with access to 5m water depth for transhipment at a short distance from the shoreline. A dredged access channel will not be required and a local dredged pocket is unlikely. This significantly reduces marine environmental impact.

Comprehensive environmental studies are planned to include marine and terrestrial ecology, geological and hydrogeological surveys.

3. Integrated Production Model

3.1. Salt and SOP Production

The Project intends to produce high quality industrial grade salt from seawater for the chlor-alkali process either for export or as internal feedstock for the integrated downstream aspects of the Project. SOP is proposed to be produced from the bitterns generated as part of the salt production process.

The basic operation of a solar salt field incorporates the progressive concentration of seawater in a series of large open concentration ponds, followed by further concentration of the brine in an additional series of crystalliser ponds. Through evaporation, the density of the brine is increased to a point where sodium chloride precipitates in the crystalliser ponds.

The crystallised salt is then mechanically harvested from the crystalliser ponds and upgraded by various washing processes which ensure the final product meets customer specifications.

3.1.1. Estimated Production Rate

The estimated salt production rate was calculated by Actis Environmental (2021) using a salt field model that incorporates seasonal, reflection, lake and salinity factors, along with pan evaporation and rainfall. The model has been used at several salt-fields and shown to be robust in practice against operating salt-fields.

The assumptions of the model are provided in Table 4.

Table 4: Production Rate Estimation Inputs

Description	Design Parameter	Units
Seawater Intake Density	1,027	kg/m^3
Crystalliser Feed Density	1,218	kg/m^3
Bitterns Density	1,250	kg/m^3
Washing Losses	13	%
Annual Evaporation	3,326	Mm
Annual Rainfall	268	Mm
Runoff Crystallisers	Nil	% of non-ponded catchment
Runoff Concentrators	50	% of non-ponded catchment

Source: Actis Environmental 2021

The areas of the evaporation ponds are defined by the topography and general availability of land for the ponds. This area may be modified by the final design and the environmental approval process.

3.1.2. Seawater and Seawater Intake

The Scoping Study is based on a prevailing ocean salinity of 35 grams per litre, being a widely supported figure and consistent with values published by Baseggio in "The Composition of Seawater and Its Concentrates" (1974).

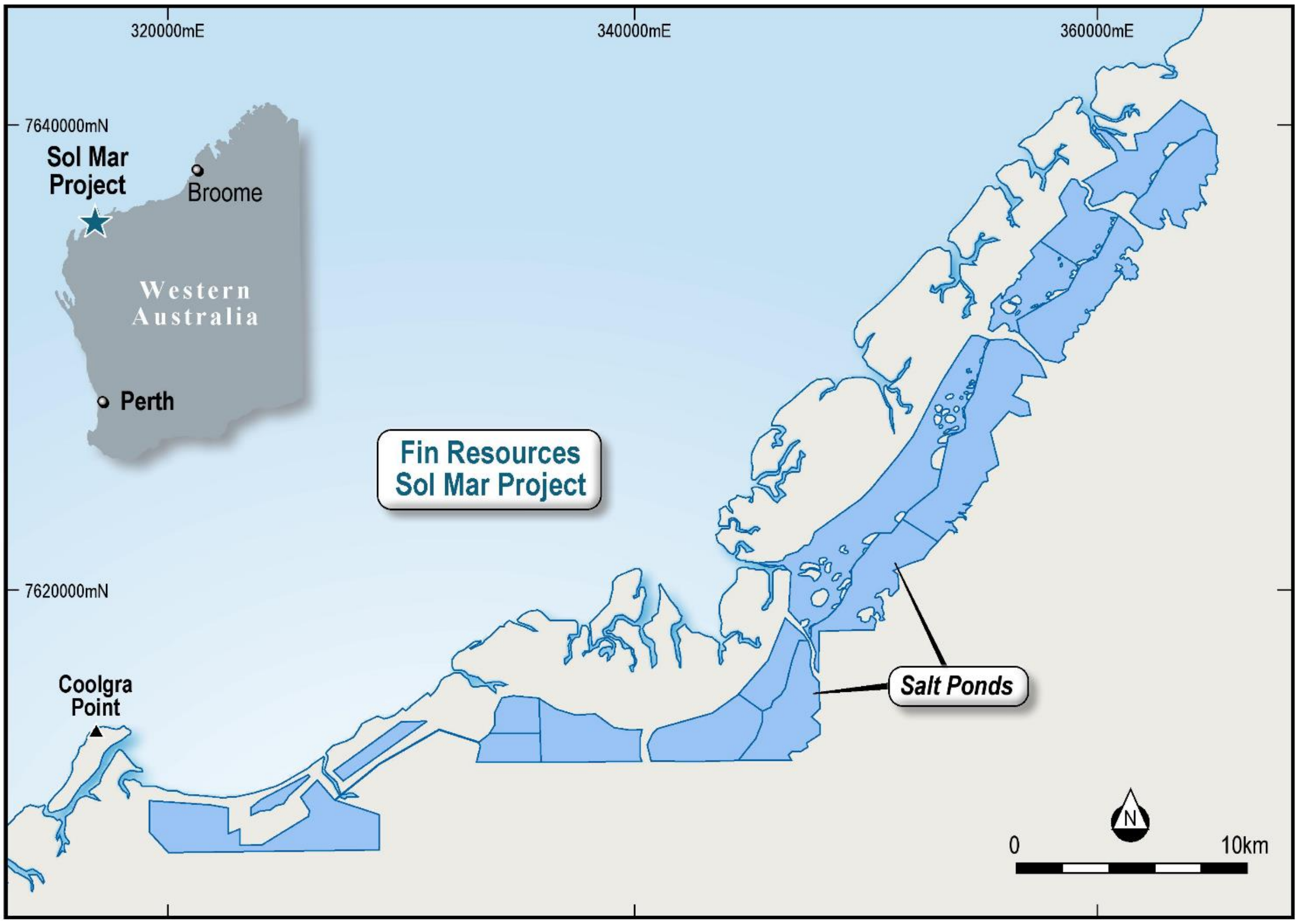
Seawater intake utilising a fixed pump station to feed a settling pond to remove suspended solids prior to transfer to the first concentration pond is proposed from Yammadery Creek. The proposed intake is within the G1 regionally significant mangrove area but due to the low impact of the intake the location is expected to be suitable.

3.1.3. Evaporation Ponds

The current concentration and crystallisation pond design has been based on LiDAR survey, assessment of terrestrial environmental constraints by Biota, marine environmental constraints by O2 Marine, geotechnical study by Calibre and engineering design by Actis Environmental.

Evaporation ponds are proposed to be constructed on the existing tidal salt flat areas using primarily clay material at the surface. Locally sourced general fill material is proposed to be used to form the bunded pond walls. The pond wall design will follow a standard of an inner core of clay bound by an aggregate and then rock armoured on the inner and outer walls with rock reflecting the likely force of pond wave action. The walls will be well set back from the coastal shore and armoured to withstand storm surge associated with cyclonic activity.

Figure 4: Solar Salt Field Layout



Source: Fin Resources 2021

Table 5 below sets out the estimated concentrator pond sizes, average solution density and material balance. The modelling considers the evaporation rate at a specific density, derating factor for large pond areas and losses through leakage to yield an estimated production rate.

Table 5: Concentration Ponds Mass Balance

Pond	Pond Size	Starting Brine				Seepage Losses	
		Density	Evaporation	Volume	NaCl	Total	NaCl
	Ha	kg/m^3	10^6*m^3/year	10^6*m^3/year	10^6 t/year	m3/year	t/year
P1	1,199	1,029	21.5	255.2	7.4	359,700	11,268
P2	1,123	1,032	20.0	233.4	7.4	336,900	11,567
P3	604	1,033	10.8	213.0	7.4	181,200	6,559
P4	586	1,035	10.4	202.0	7.4	175,800	6,716
P5	911	1,038	16.3	191.5	7.4	91,100	3,812
P6	849	1,041	15.1	175.0	7.4	84,900	3,896
P7	1,088	1,047	19.2	159.8	7.4	108,800	5,690
P8	1,722	1,059	29.9	140.4	7.4	172,200	11,490
P9	977	1,068	16.7	110.4	7.3	97,700	7,703
P10	867	1,080	14.5	99.9	7.8	86,700	8,025
P11	443	1,087	7.3	85.3	7.8	44,300	4,494
P12	915	1,106	14.6	77.9	7.8	91,500	11,485
P13	824	1,132	12.6	63.2	7.8	82,400	13,051

Pond	Pond Size	Starting Brine				Seepage Losses	
		Density	Evaporation	Volume	NaCl	Total	NaCl
	Ha	kg/m³	10^6*m³/year	10^6*m³/year	10^6 t/year	m3/year	t/year
P14	866	1,173	12.2	50.5	7.8	86,600	18,158
P15/16	618	1,218	7.9	38.2	7.8	61,800	16,388
Total	**13,592**		**229.2**			**2,061,600**	

Source: Actis Environmental 2021

Concentrated brine is transferred from the final concentrator pond into the crystallisers at a density marginally less than 1.218 g/cm3. The concentration process continues in the crystalliser ponds until NaCl crystallises and precipitates. The remaining 'bitterns' solution is then removed from the crystallisers.

A permanent salt "floor" nominally 300mm thick will be built up by evaporation prior to commencement of harvesting and is expected to consume 12 months of salt crystallisation. Salt will also be required to line the floor of the salt stockpiles to prevent contamination.

Optimisation of the evaporation pond layout will continue as future studies report on construction materials, methodology and costs, surface hydrology and process performance. The area and layout of the ponds has been benchmarked against similar operations in Western Australia.

3.1.4. Salt Harvesting

The Scoping Study assumes a dry harvesting method using a dedicated harvester that runs along the top of the crust cutting into the floor and conveying the harvested salt into a truck running alongside the harvester. The Scoping Study assumes two mechanical harvesters and five prime movers with trailers operating 24hrs in two shifts.

Figure 5: Typical Harvesting Method - A Wirtgen 2200SM Loading a B-Double Haul Truck

Source: Global Surface Mining, 2018

3.1.5. Salt Processing

At the washing plant, the B-Double haul trucks will discharge directly into a hopper system.

It is proposed to use the HYDROSAL-XP salt purification plant developed by Salt Partners. The HYDROSAL-XP salt purification plant will produce high quality industrial solar salt with a sodium chloride purity expected to be approximately 99.5 to 99.8%, on dry basis, and a moisture content of approximately 3 to 5%. Processing losses are expected to be as low as 2 to 3%.

3.1.6. Bitterns Processing

CQG Consulting (2021) reported that the residual brine remaining after the salt production process, containing elevated levels of potassium and magnesium, is generally discharged into the ocean with a specific gravity of 1,250kg/m^3. The exploitation of bitterns to extract the residual compounds for commercial use has been conducted throughout the world for many years.

SOP salts can be extracted from bitterns originating from seawater. 24 kg of SOP can be extracted from a cubic metre of bitterns at 1,250kg/m^3.

CQG Consulting (2021) has also identified that further bitterns processing beyond SOP permits the production of bromine, magnesium products (chloride, hydroxide and magnesium metal) and other salts. These will be investigated further in future studies.

3.2. Chlor-Alkali Production

GHD (2021b) was engaged to assess wind and solar PV power supply options and the green product potential for the Project. A chlor-alkali process was studied to produce caustic soda, chlorine and hydrogen. Both technical and economic factors were assessed in determining the feasibility of various options and subsequent recommendations. Proposed flow sheets, mass and energy balances and plant layouts were also provided.

Further assessment was recommended on basis of:

- Optimisation and integration of the chlor-alkali plant into the salt production process
- This integration may include:
  - Power load management of downstream processing facilities to better align with solar renewal profile – potentially leading to improved power costs and / or renewable penetration levels
  - Further process integration of facilities to improve production efficiency, reduce capital and operating costs and reuse products / waste streams within an integrated operation
  - Market assessment of caustic soda, chlorine and hydrogen to determine market pricing (and potential premiums) for the products in the local region
  - Viability of 100% renewable powered processes. Market premiums and external funding for carbon neutral production to be considered.

Discussions were also held with manufacturers and EPC contractors to determine the capital and operating costs of a chlor-alkali plant of suitable size to meet a substantial portion of the Western Australian market that is currently met by imports.

A nominal plant size was selected as the basis of financial analysis. The caustic soda and PVC use cases in the context of the local market were considered as the basis for sizing the chlor-alkali plant, however hydrochloric acid (HCl) is widely used locally and due to the co-production of hydrogen, HCl could also be produced to meet market demand in the processing of rare earths, high purity alumina and gold.

It is recommended that further studies investigate the chlorine use cases in more detail and this should be undertaken in collaboration with a chlor-alkali technology, production or end user group.

3.3. PVC Production

The Project proposes to produce PVC through the polymerisation of Vinyl Chloride Monomer (VCM), an organic compound.

It is proposed that VCM will be produced from ethylene and chlorine via the balanced process comprising four major sections: direct chlorination, oxychlorination, cracking and purification.

A key feedstock for the VCM and PVC process plant is ethylene which can be sourced from various producers globally. While all manufacturers export ethylene, this is mostly achieved through traders. Customs duties and shipping costs will determine country of origin.

Ethylene can also be sourced from bio-ethanol which is currently produced from sugar cane at Braskem's 200Ktpa bio-ethylene plant at the Triunfo Petrochemical Complex in Brazil. Bio-ethylene could be produced locally from agricultural waste.

There are synergies between the VCM and PVC plant and other parts of the Project. For example, use of a common desalination plant to produce demineralised water for steam (produced by renewable energy instead of gas fired boilers), hydrogen and oxygen produced from electrolysers used in chlor-alkali and hydrogen production process also be utilised in the VCM production process. Cooling water can be sourced from sea water or potentially the evaporation ponds to enhance the evaporation process.

Intratec (2021a and 2021b) were engaged to provide Class 4 capital and operating cost estimates for a VCM and PVC polymerisation plant located in Australia. Proposed flow sheets, mass and energy balances and plant layouts were also provided.

The production of bio-ethylene and the synergies of an integrated operation should be investigated further in future studies.

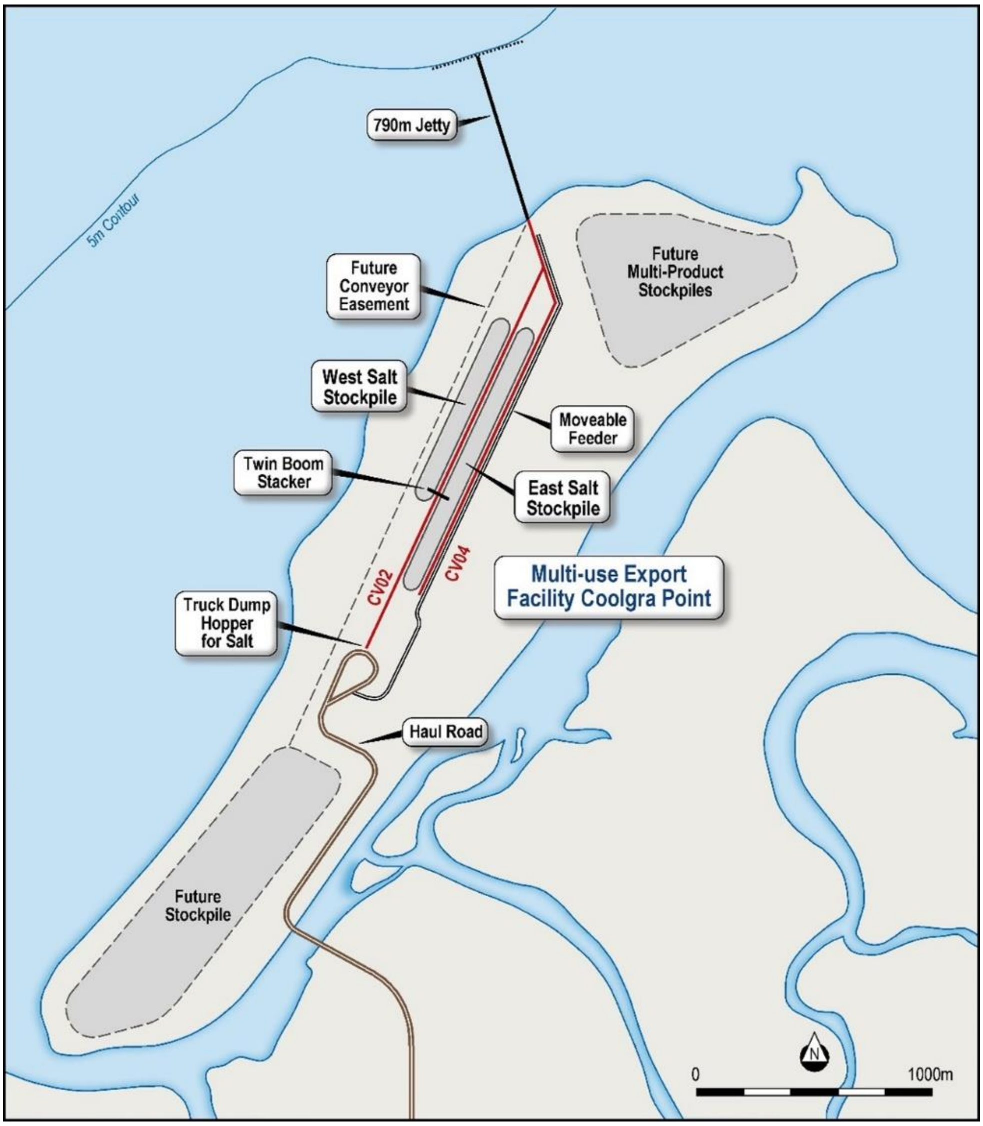
3.4. Transport and Shipping

Coolgra Point has been confirmed as the most favourable location for a scalable, bulk commodity transhipment facility in the West Pilbara region.

It is proposed that a new berth is established within the existing Onslow Port limits to be managed by the Pilbara Port Authority (PPA). The preliminary design by BMT (2021) has confirmed a short jetty length and no dredging is expected which significantly reduces the marine environmental impact and reduces approvals risk.

A new bulk commodity transhipment berth at Coolgra Point would provide an efficient export solution for salt, SOP and PVC products from the Project. Coolgra Point is a scalable location that could also be utilised by other third parties seeking to export bulk commodities from the region. It is also proposed that a bulk liquid loading and unloading facility would need to be established to facilitate the import of an ethylene source and the export of caustic soda.

Figure 6: Multi User Export Facility at Coolgra Point



Source: Fin Resources 2021

Coolgra Point being located within FIN's licence footprint provides additional strategic opportunities.

The PPA manages the existing Port of Ashburton facility which was originally established by Chevron as part of the Wheatstone gas development. Located within ANSIA, services and facilities at the Port of Ashburton include:

- An LNG export berth owned and operated by Chevron
- Marine operations and supply
- Materials offloading facility, and
- Quarantine and customs.

Access to the port is through a 13.5m deep dredged channel which has a limited vessel movement capacity.

The Port of Ashburton could potentially be expanded to include bulk liquid and dry bulk loading and unloading facilities as part of a new berth. Subject to a development application being approved and reaching commercial agreement with the PPA, the Port of Ashburton is considered to provide an alternate export location for the Project.

4. Supporting Infrastructure

In addition to the production infrastructure, the following additional supporting infrastructure will need to be established:

- Site access roads
- Drainage diversions
- Onsite buildings such as offices, storage and workshops
- Power generation facilities and/or reticulation
- Water supply and pipeline facilities
- Fuel storage sites, and
- Sewage treatment and waste disposal facilities.

It is FIN's intention to make use of the existing Onslow Airport and town residential accommodation. Any additional or non-residential accommodation requirements for the Project are proposed to be met through existing workforce accommodation facilities in Onslow.

The proximity of the Project to Onslow and the ability of the Project to utilise existing supporting infrastructure is considered a key competitive and cost advantage.

5. Renewable Energy

GHD (2021b) was engaged to assess opportunities for incorporating solar PV and wind energy into the future power supply infrastructure for the Project. The assessment comprised a detailed review of available information for the site including lease areas, to establish a baseline energy usage and the theoretical solar PV and wind energy generation potential of the project area.

Table 6: Solar and Wind Resource Summary

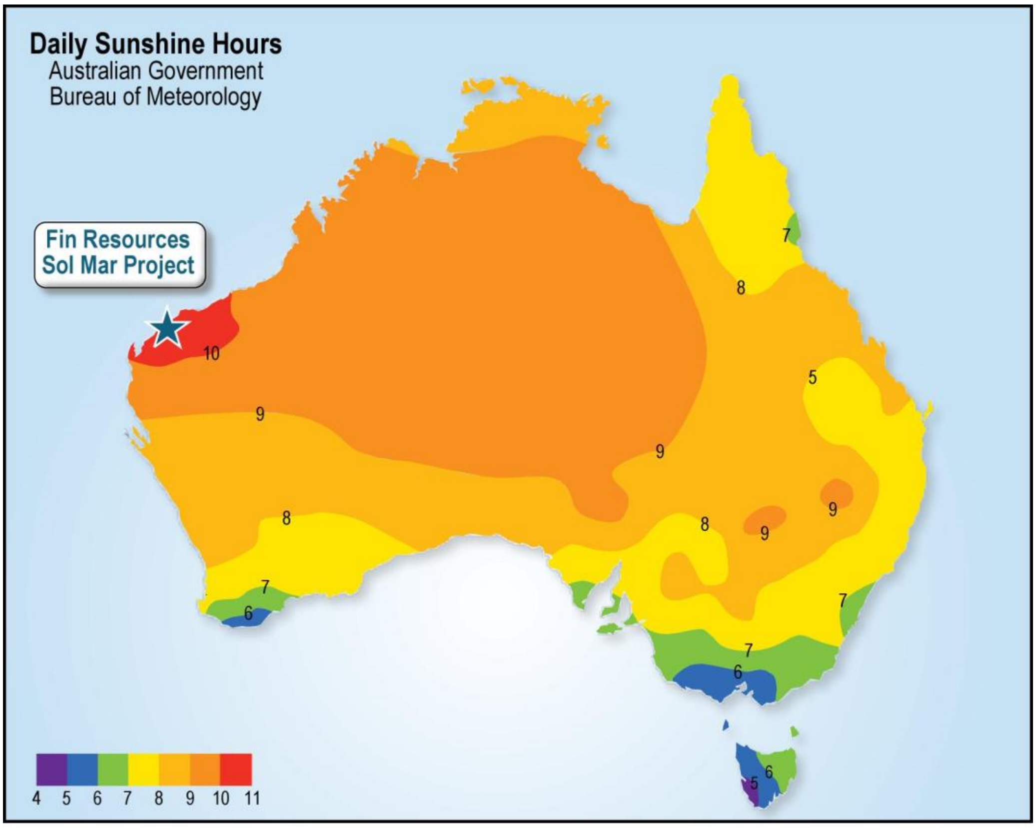
Tenement			Solar			Wind		
No	**Tenure**	**Area km^2**	**Solar Resource kWh/m^2 /yr**	**Maximum Theoretical Capacity GWh/yr**	**Maximum Theoretical Installed GW**	**Wind Resource m/s @ 100m Hub Height**	**Maximum Theoretical Capacity GWh/yr**	**Maximum Theoretical Installed GW**
1	E 08/3069	38.3	2359	4,864	3	6.4	1,341	1
2	E 08/2831	140.2	2356	17,826	9	6.2	4,913	2
3	E 08/3070	19.1	2359	2,430	1	6.3	670	0
4	E 08/2832	152.9	2362	19,093	10	6.4	5,262	3
5	E 08/3071	9.6	2347	1,214	1	6.8	335	1
6	E 08/3354	111.4	2359	14117	7	6.5	411	1
7	E 08/2868	64.3	2344	8,163	4	6.6	2,250	1
8	E 08/3355	270.5	2354	34,370	18	6.5	9,473	5
9	E 08/3423	98.8	2355	12521	7	6.3		1
Total		**905**		**101,970**	**60**			**15**

Source: GHD 2021b

5.1. Solar Resource

The project area experiences good solar insolation and a high number of daily sunshine hours as shown in Figure 7 below, making solar PV and solar thermal storage an attractive option.

Figure 7: Australian Daily Sunshine Hours



Source: Fin Resources 2021

Key findings from GHD (2021b) were:

- The overall solar resources are considered above average for Western Australia leading to a lower levelized cost of energy (LCOE) than for other similar sites in Western Australia
- Solar is the preferred renewable energy source with a lower LCOE than wind
- Results identify that the site is economically viable for solar renewables at less than 40% renewable penetration
- Technology developments that may improve the solar outcomes are:
    - Integration of renewable and electrolyser plant power systems via DC current (up to 10% efficiency)
    - Development of Cyclone region Category D Single Axis Tracking panels (less than 2% improvement)

5.2. Wind Resource

The project area experiences a reasonable wind resource. Wind speeds improve with height, so when micro siting locations of turbines, the favourable locations will always be the higher points in the landscape. Table 8 displays how the mean wind speed changes with hub height for a nominal location within the project area.

Table 7: Average wind speeds at different hub heights

Height AGL (m/s)	Estimated Mean (m/s)
10	4.0
50	5.5
100	6.6
150	7.7

Source: GHD 2021b

Key findings from GHD (2021b) were:

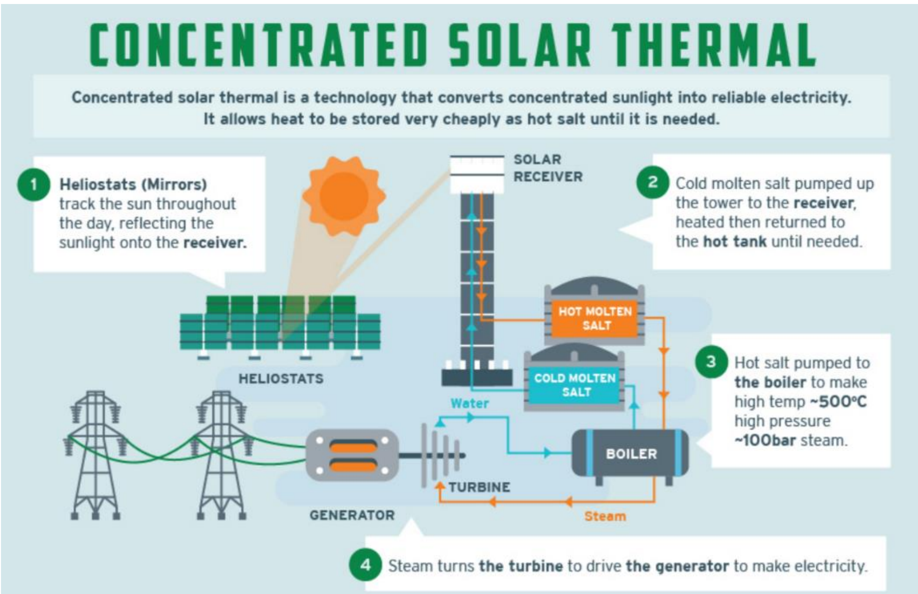
- The site was determined to have a limited wind resource, lower than for other similar sites in Western Australia. This was primarily due to the largely flat terrain
- The opportunity exists to optimise the wind resource by micro siting turbines at elevated locations within the project area
- The project area is within the Category D cyclone rating area which may limit the range of turbine choices available and the hub heights achievable
- Technology developments that may improve the wind outcome are a larger range of cyclone region category D turbines

5.3. Renewable Energy Penetration

Renewable energy penetration is proposed to be increased to 100% by focussing on the solar resource through the combination of solar PV and solar thermal energy storage. With current technology, this can supply electricity for 24 hours at a lower LCOE than other types of intermittent renewable energy sources when combined with battery storage.

The LCOE was benchmarked against other projects in Australia, UAE and Chile of a similar size, irradiation and escalated to Australian costs. The LCOE assumption is considered conservative since technology efficiency improvements and cost reductions for the coming years are not taken into account. For example, for 200 MW on 24/7 baseload basis, RayGen (2021b) forecasts a 55% reduction in the LCOE over the next 8 years from A$98/MWh for 38hrs storage in 2022 falling to A$44/MWh in 2030.

Figure 8: Concentrated Solar Thermal Energy Storage System



Source: ARENA 2021

Table 8: Project Power Requirements by Development Stage

Item	Unit	Stage 1	Stage 2
Nominal Power	MW	82	360
Concentrated Solar	MW	410	1,800
Thermal Storage	MWh	2,050	9,000

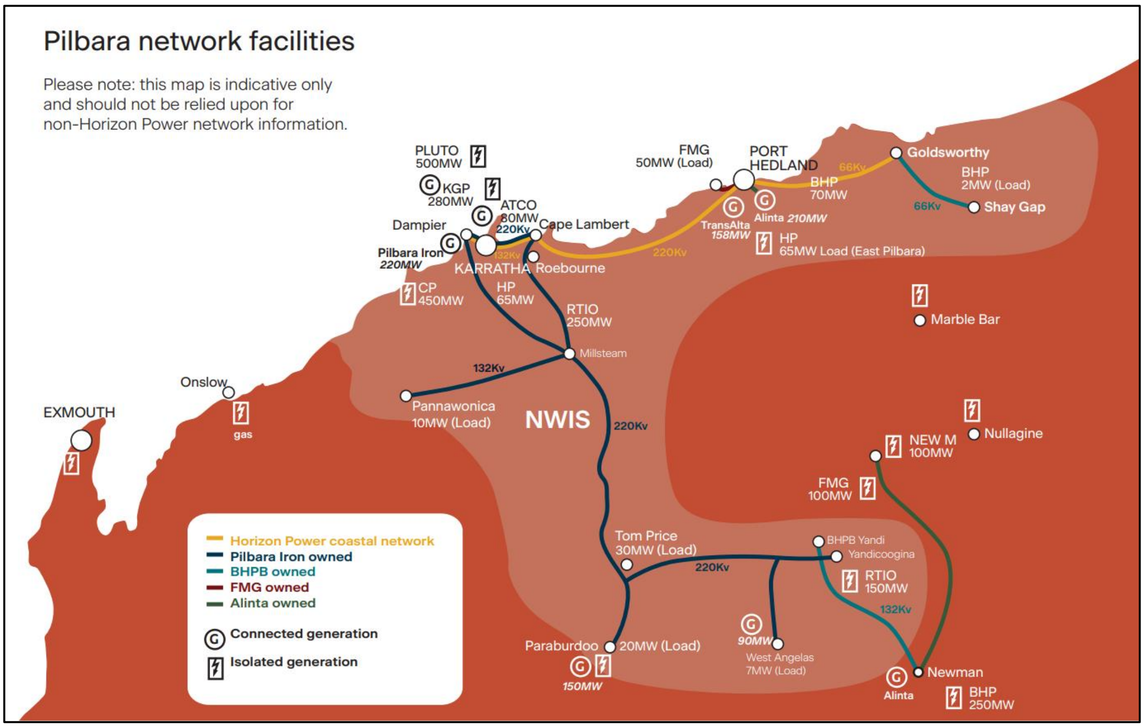
Source: FIN Resources 2021

The total power requirement is 360 MW for the integrated development.

The ability to produce significant renewable energy and provide to a baseload industrial customer is expected to be attractive to independent power producers (IPP) under a build own operate (BOO) model with a power purchase agreement (PPA).

The installation of a transmission line from Onslow to the North West Interconnected System (NWIS) at Pannawonica would also provide an opportunity for an IPP to feed surplus renewable energy into the grid and for the grid to potentially provide backup power to the Project.

Figure 9: North West Interconnected System



Source: Horizon Power 2021

Synergies with the NWIS should be investigated in future studies.

5.4. Green Hydrogen Production

GHD (2021a) were engaged to assess the technical and economic viability of various sea water treatment technologies. Seawater reverse osmosis (SWRO) is considered the most attractive technology to be incorporated into the production of green products as part of an integrated operation.

Incorporating SWRO, or another desalination type technology, through the utilisation of the concentrated brine stream into the solar salt production process and beneficially increasing the salt field production. This would also allow the demineralised water stream to be used for electrolysis and enable the production of green hydrogen on a larger scale than envisaged under the chlor-alkali process.

As the cost of electrolysers reduce and the market for green hydrogen is developed, the opportunity exists to supply a green hydrogen or derivative product, such as ammonia as part of an integrated operation.

A number of factors make the Onslow area an attractive location for a hydrogen hub to be established. These include:

- Synergies with FIN's integrated operation
- Established gas export infrastructure at the Port of Ashburton
- Gas transmission infrastructure that joins the Dampier to Bunbury Natural Gas Pipeline (DBNGP)
- Close proximity to undeveloped mineral resources that could be subjected to value-adding processing utilising hydrogen and renewable energy, and
- The Ashburton North Strategic Industrial Area (ANSIA)

This should be further evaluated in future studies.

6. Cost Estimates

Capital and operating cost estimates (to a +/- 35% level of accuracy) to establish, operate and maintain an integrated operation at the project area have been undertaken.

7. Product Markets

7.1. Salt

High quality salt is primarily used in the chemicals industry to produce chlorine, caustic soda and soda ash. These chemicals facilitate key industrial processes such as the processing of critical minerals including alumina and lithium, manufacture of plastics, glass production and water treatment. Other key industries requiring salt include the food, pharmaceuticals and road de-icing. In Asia, the chemical industry is the largest consumer of salt using 73% of the total production.

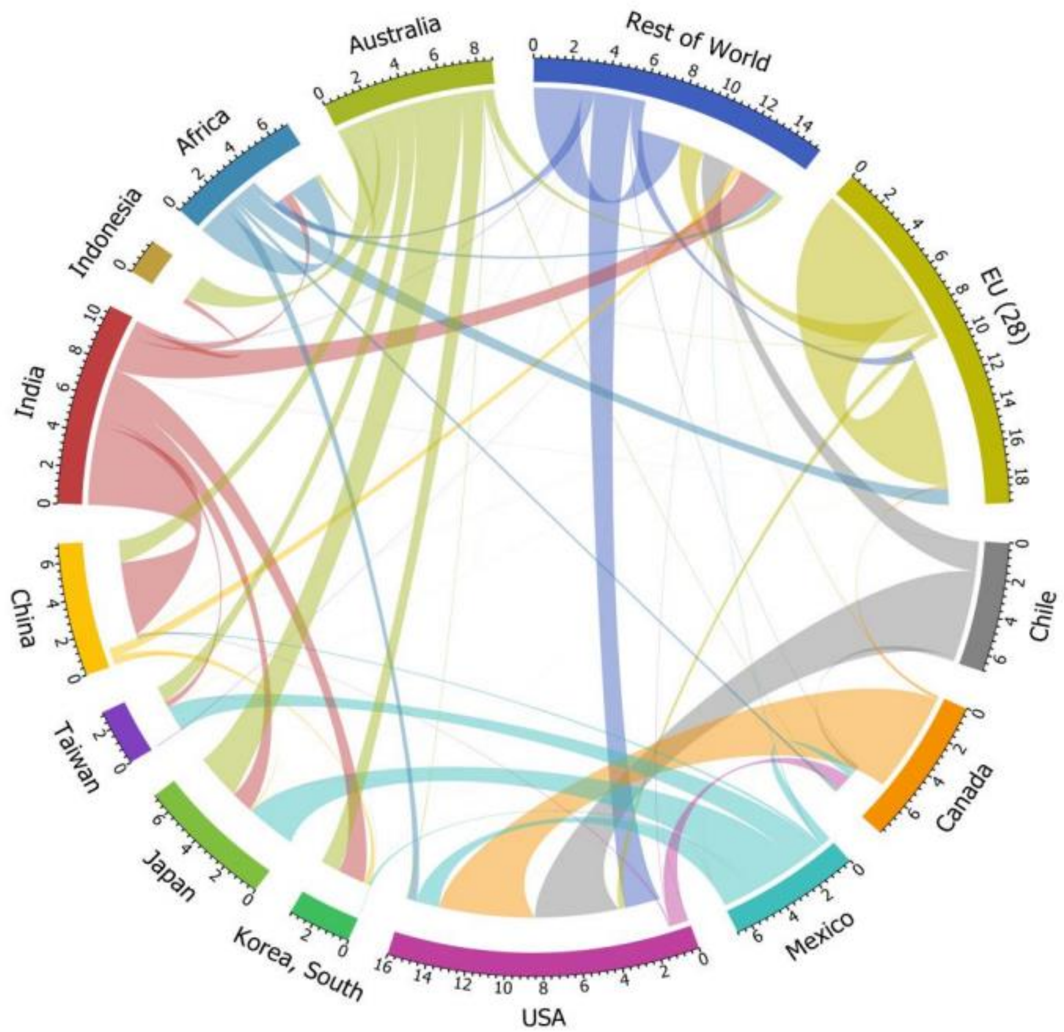
Salt is produced by three main methods:

- Solar evaporation of seawater
- Mining of rock salt, and
- Solution mining of brines.

The solar evaporation of seawater, referred to as solar salt, represents approximately 40% of global production with a product purity of between 99.5% and 99.8%. Product quality is heavily influenced by location with Australia and Mexico producing high quality solar salt with a purity of 99.7% to 99.8%. Rock salt and brines represents approximately 25% and 35% of global production respectively.

Asia is the largest producer with 135Mtpa in 2019, from which 90Mtpa are produced in China and 30Mtpa in India. Australia produces up to 13Mtpa from five solar salt operations in WA. Global trade flows are shown in Figure 10.

Figure 10: 2020 Regional Salt Trade



Source: Roskill 2020

Roskill forecasts annual consumption to increase from 335Mt in 2020 to 421Mt in 2030, representing an average growth rate of 2.3% per annum. Growth in demand is expected to be driven by Asia, where annual consumption is expected to increase from 174Mt in 2020 to over 228Mt in 2030, representing an annual growth rate of 2.8% per annum. Over 80% of this growth is expected to be from the chlor-alkali sector.

Approximately 30Mtpa of additional salt production capacity is in various stages of development in countries including Australia, Canada, Mexico and Spain. Western Australia has a competitive advantage over many other countries because of its low population density, availability of land near the coast, low pollution for contaminants and low sovereign risk. FIN anticipates that an opportunity exists for the Project to supply into the forecast growth in global salt consumption with a particular competitive advantage in the Asian market.

The Project is proposing to utilise modern washing technology to produce a high purity product with a sodium chloride (dry) content of 99.8% that is suitable for consumption in chlor-alkali and soda ash plants.

The market strategy is to focus specifically on the Asian region, which is forecast to be a near term growth market. The proximity of the project area to key Asian markets is expected to provide a structural cost advantage over alternate supply sources in India and Mexico. Product quality and shipping logistics are expected to be key differentiating factors for the Project.

7.2. Sulphate of Potash (SOP)

SOP is a premium quality fertiliser used on high value chloride intolerant crops like fruits, vegetables and nuts. SOP increases crop yields by providing a source of potassium and sulphur, two key nutrients required by plants. Potassium enables the uptake of water by the plant and improves resistance to drought and disease while sulphur enables plant growth and development through photosynthesis.

SOP can be produced via two methods: “primary” production from evaporation brines or seawater or “secondary” production by reacting muriate of potash (MOP) and sulphuric acid in the Mannheim process. Much of the world's SOP production, particularly in China and Europe, is from secondary production which is significantly more expensive than primary production. Stricter environmental controls are also causing secondary production to be idled or closed.

SOP has a positive market outlook with the main driver being the increasing global demand for high quality and high value produce. Australia is currently a net importer of SOP.

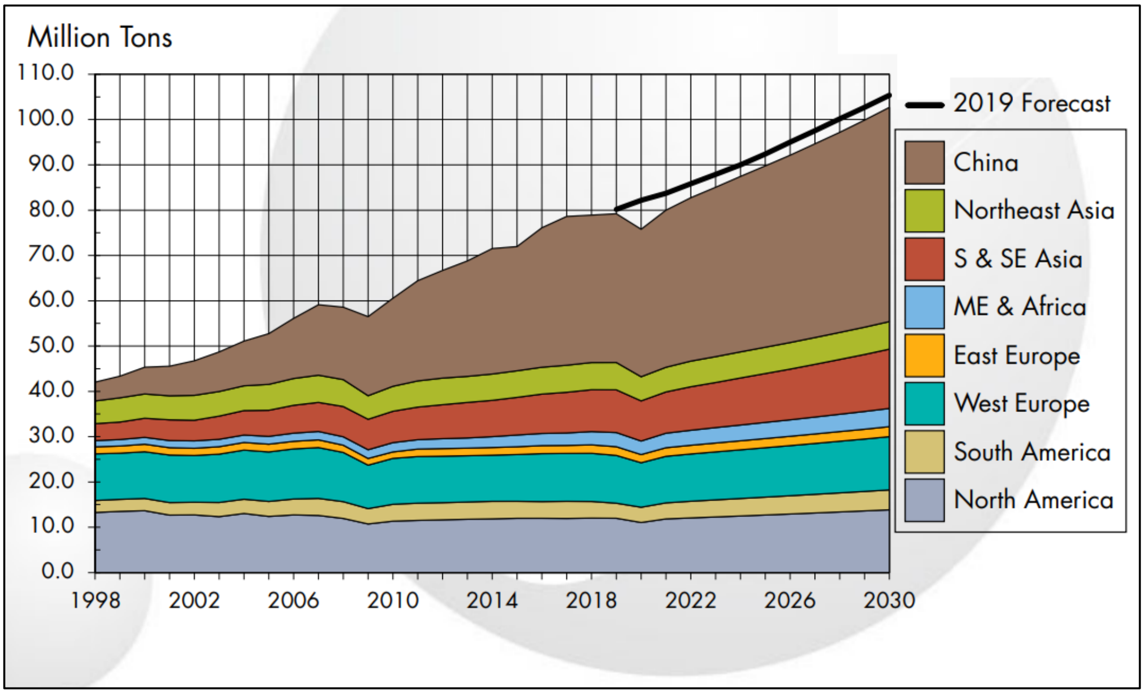
The Project is proposing to produce a >52% K_2O product suitable for transport to Australian and international customers.

The proximity of the project area to the export infrastructure on the coast and more efficient transport logistics are expected to be key differentiating factors for the Project.

7.3. Caustic Soda

Sodium hydroxide or caustic soda is a clear white material that is highly soluble and generally handled in bulk as a liquid solution. It is highly alkaline and is used extensively in the manufacturing of metals, paper, soap, detergents and textiles. Other applications include water treatment and food processing.

Figure 11: 2020 World Caustic Soda Consumption

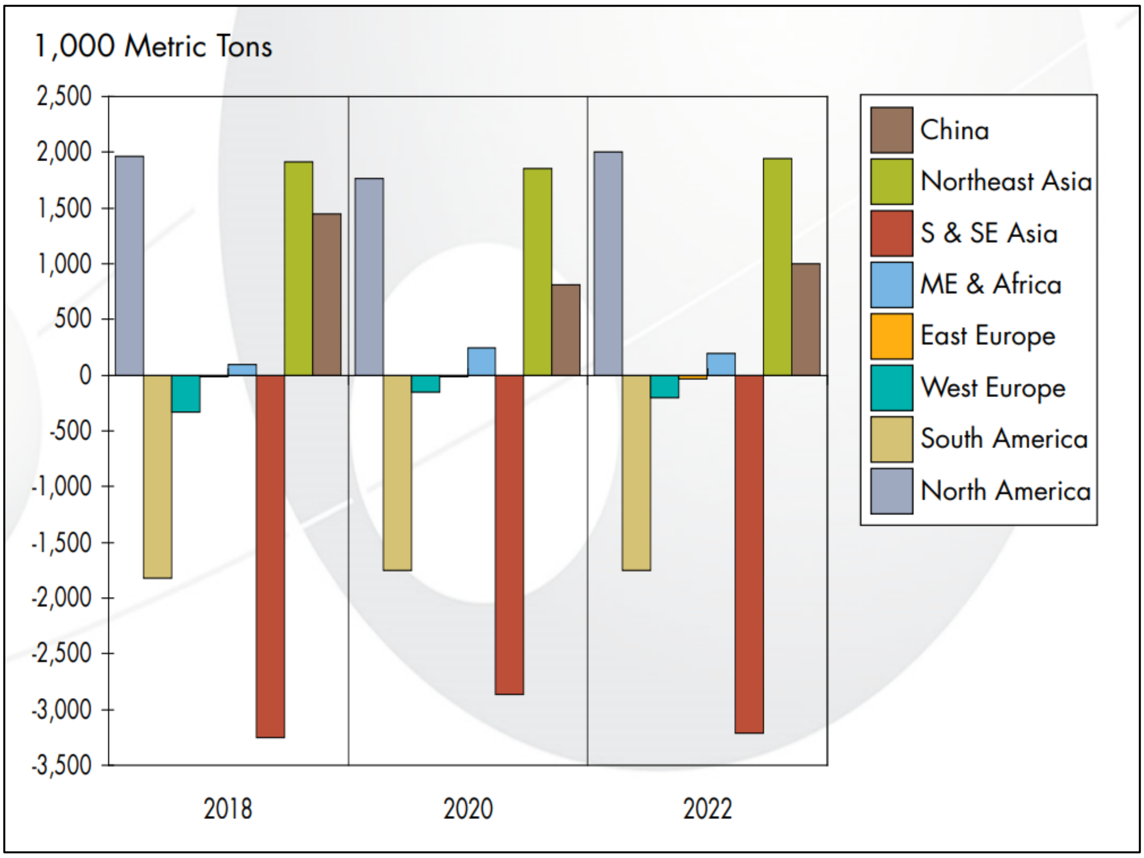


Source: Tecnon OrbiChem 2020

Globally, North America, China and North East Asia are net exporters of caustic soda to South East Asia and South America.

In Australia, caustic soda is primarily imported from North East Asia and China for use in the alumina refining process. Alumina is used to make aluminium which is widely used in the transport, packaging and energy industries. Caustic soda is also used locally in the processing of gold and lithium and in water treatment. Chinese producers export a substantial proportion of their output to Australia, although this is decreasing with competition from other suppliers and reduced levels of production due to domestic energy control policies.

Figure 12: 2020 Regional Caustic Soda Trade



Source: Tecnon OrbiChem 2020

The Project is proposing to utilise electrolysis to produce a 50% solution suitable for transport to Western Australian customers including alumina and lithium processing plants and water treatment facilities.

The market strategy is to focus primarily on supply to critical minerals processing customers, which is forecast to be a strong and growing market. The proximity of the project area to key Western Australian users is expected to provide a structural cost advantage over alternate imported supply sources and the lower carbon footprint and the opportunity for customers to reduce carbon emissions in their supply chains are expected to be key differentiating factors for the Project.

7.4. Polyvinyl Chloride (PVC)

PVC is the third most commonly produced synthetic polymer. It is a white brittle solid material and comes in two basic forms: rigid and flexible. The polymer is usually stored in silos with a capacity of 100 to 500 tonne and transported in 20 tonne road tankers. It can also be transported in 1 tonne bulker bags and 20 tonne ISO containers. It is widely used in a range of applications including construction (pipes and tubing), consumer goods, packaging, electrical fittings and wire/cable coatings.

PVC can be produced through a number of pathways as shown in Table 9.

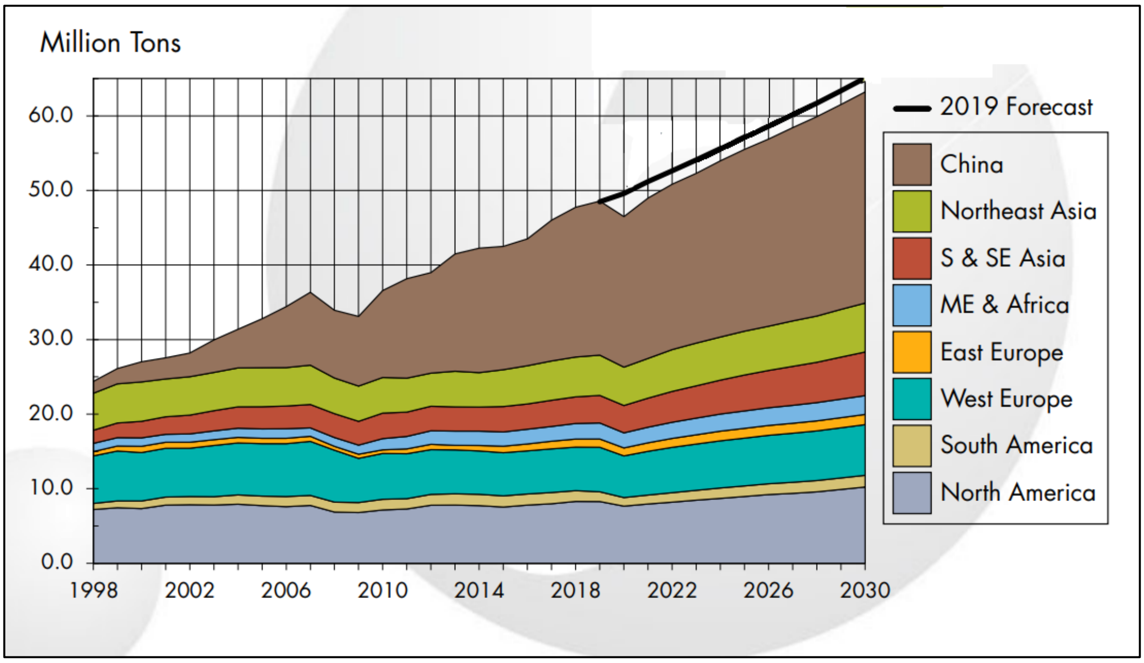
Table 9: PVC Production Pathways

Pathway	Process	Raw Material(s)
A	Polymerisation	Vinyl chloride monomer
B	Direct Oxychlorination / Cracking / Polymerisation	Ethylene, chlorine
C	Cracking / Polymerisation	Ethylene dichloride
D	Direct Chlorination / Cracking / Polymerisation	Ethylene, chlorine
E	Oxychlorination / Polymerisation	Ethylene, ethylene dichloride
F	Chlorination / Oxychlorination / Polymerisation	Ethane, chlorine
G	Hydrochlorination / Polymerisation	Acetylene, hydrochloric acid

Source: Intratec 2021b

China is the largest producer and consumer of PVC including a large proportion of lower grade acetylene derived material.

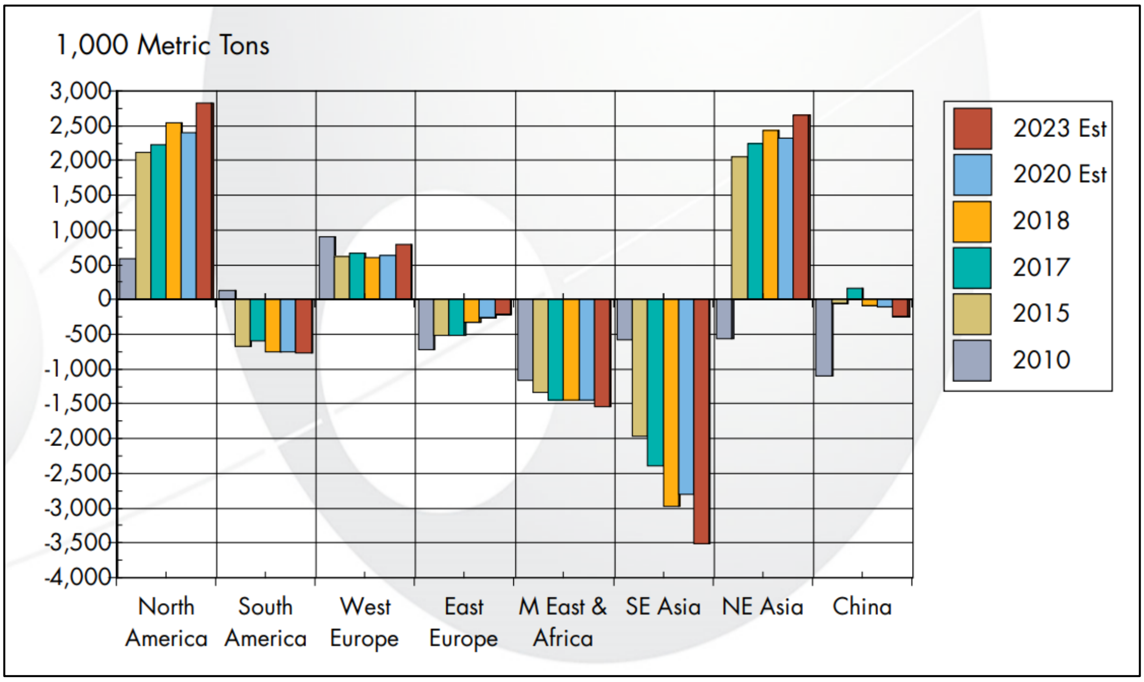
Figure 13: 2020 World PVC Consumption



Source: Tecnon OrbiChem 2020

North America, North East Asia (excluding China) and Western Europe are key PVC production regions and net exporters to South East Asia, the Middle East, South America and Eastern Europe.

Figure 14: 2020 Regional PVC Trade



Source: Tecnon OrbiChem 2020

The Project is currently proposing to utilise the polymerisation from VCM production pathway to produce a K67 product suitable for transport to Australian and international PVC customers.

The market strategy is to initially focus on supply to the Australian market before expanding production and exporting to international customers. The proximity of the project area to Australian users is expected to provide a structural cost advantage over imported supply sources and the lower carbon footprint and the opportunity for customers to reduce the carbon emissions in their supply chains are expected to be key differentiating factors for the Project.

8. Product Pricing

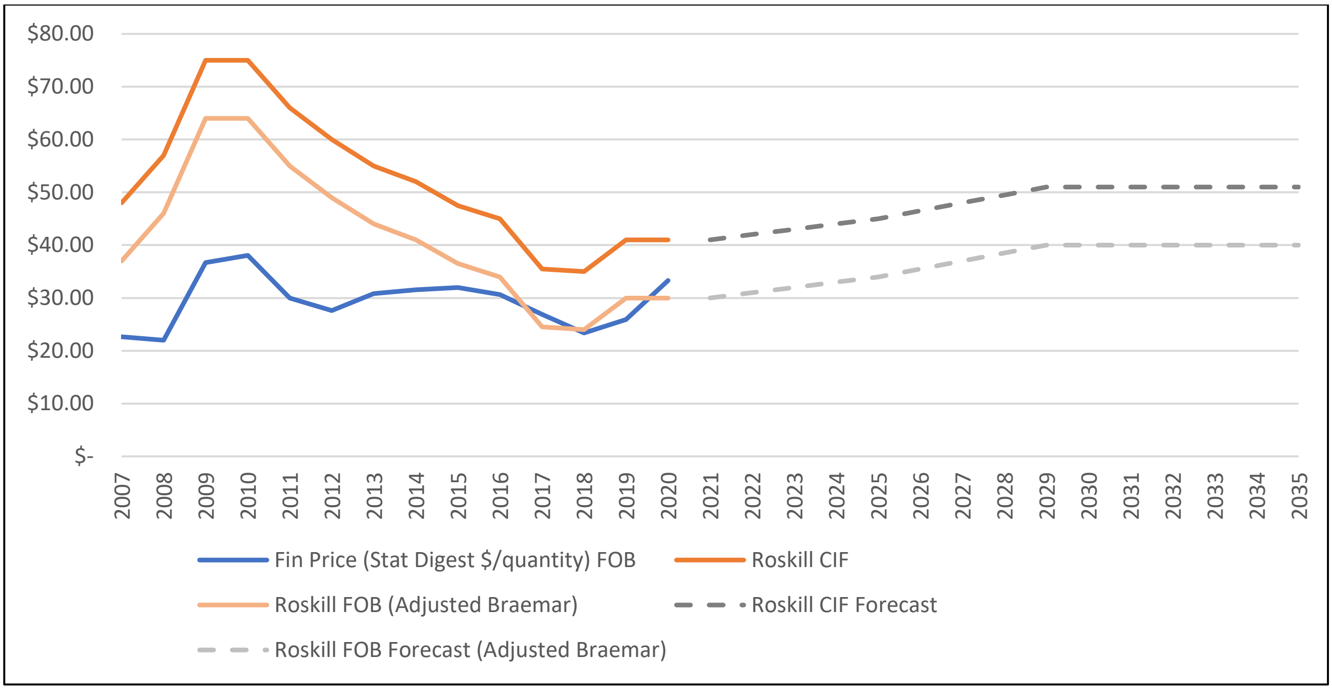
Base case and spot pricing assumptions were evaluated in the Scoping Study.

8.1. Salt

There is no published spot or benchmark price for salt, with prices typically based on individual contracts. The price received is dependent on the method of extraction, process, purity, application and location.

Historical and forecast prices for salt and long-term seaborne freight costs from the Pilbara were determined by publicly available data from various sources.

Figure 15: Historical and Forecasted Salt Prices

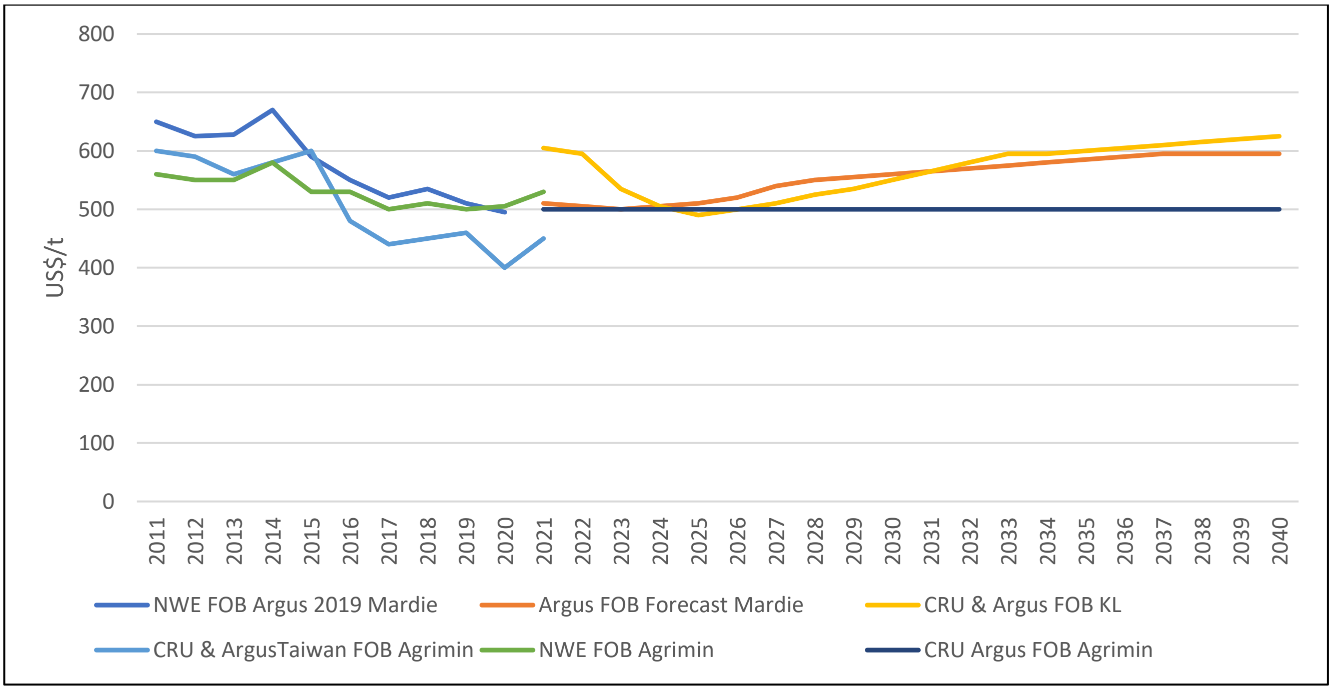


Source: Roskill, Braemar ACM 2020

8.2. Sulphate of Potash (SOP)

Historical and forecast prices for SOP were determined by publicly available data from various sources.

Figure 16: Historical and Forecasted SOP Prices

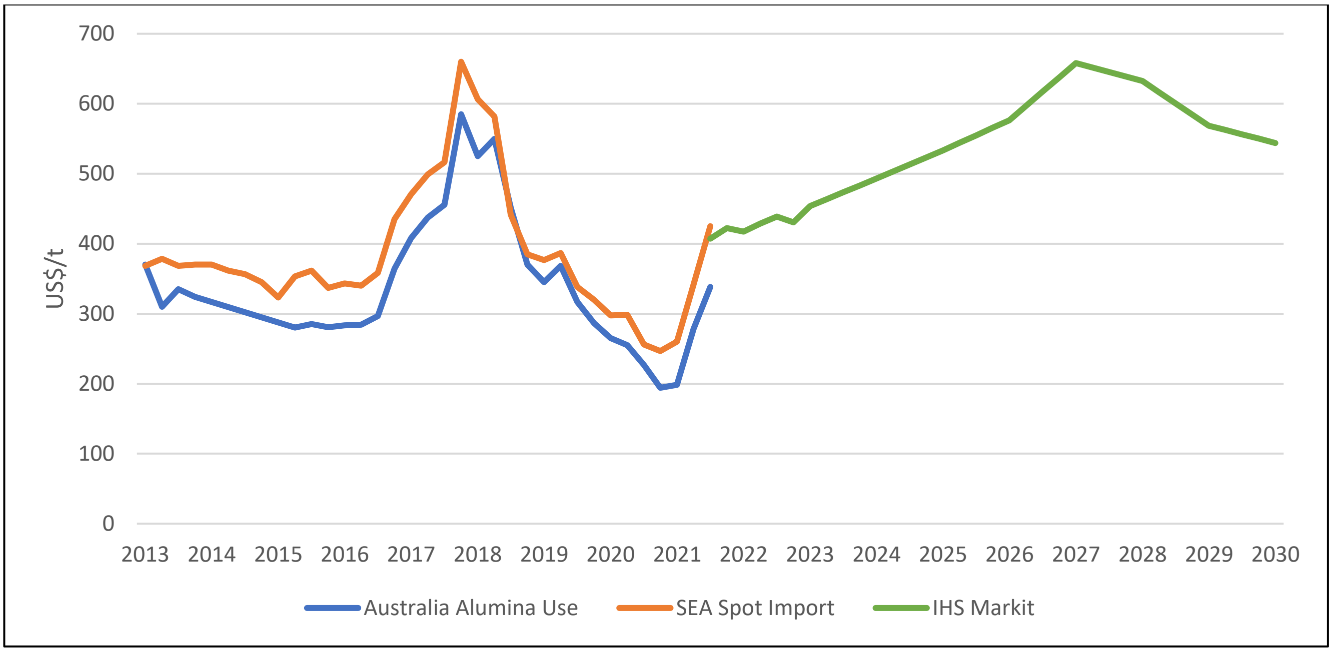


Source: Argus Media, CRU, Agrimin, BCI

8.3. Caustic Soda

Caustic soda is priced and sold on a 100% concentration dry metric tonne basis and shipped to Western Australia on a 50% concentration liquid basis. Historical and forecast prices for dry caustic soda is shown in Figure 17.

Figure 17: Historical and Forecasted Caustic Soda Prices

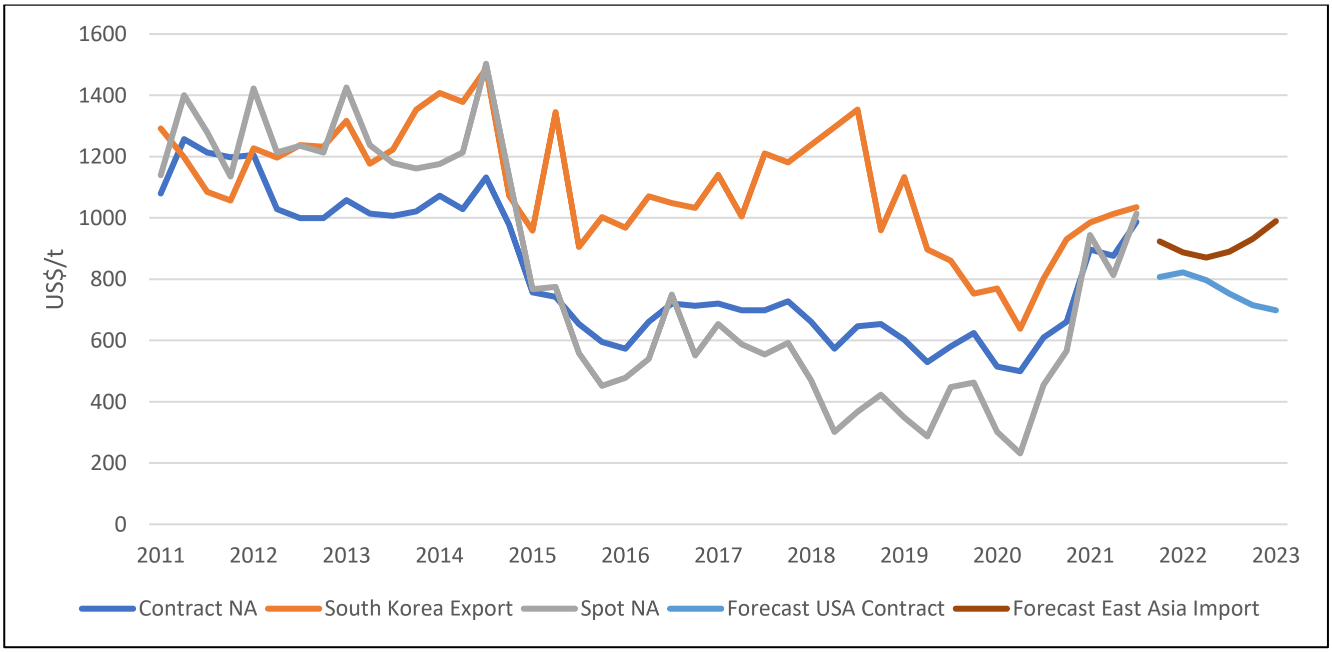


Source: Historical Tecnon OrbiChem, Forecast IHS Markit 2021

8.4. Ethylene Feedstock

Given ethylene is a key input and cost in the production of VCM and PVC, importation or local manufacture of ethylene is a key consideration for the integrated operation.

Figure 18: Historical and Forecasted Ethylene Prices

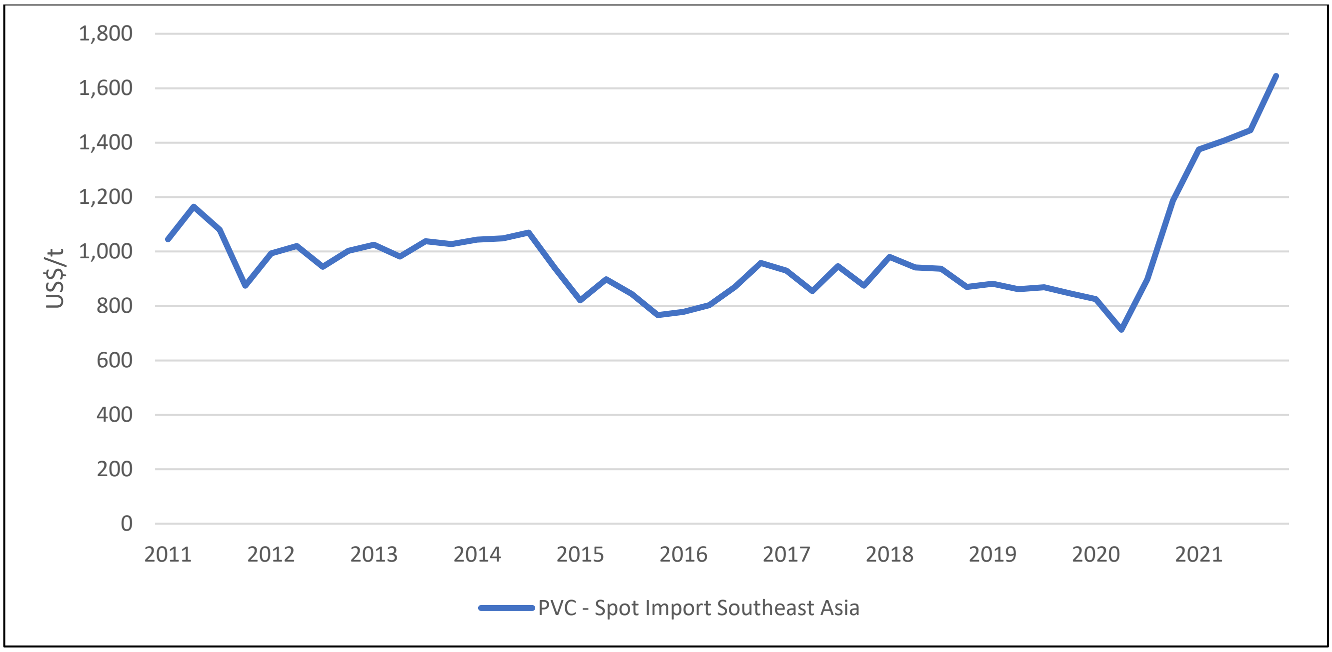


Source: Tecnon OrbiChem 2021

8.5. Polyvinyl Chloride (PVC)

PVC is generally sold in dry packed form in containers on both a contract and spot basis, with the spot market being a greater proportion of the market in Asia. Historical prices for PVC are shown in Figure 19.

Figure 19: Historical PVC Prices



Source: Tecnon OrbiChem 2021

9. Financial Evaluation

FIN has undertaken a financial evaluation of the Project as a preliminary assessment of the economic viability of establishing an integrated operation at the project area.

The financial evaluation included the development of a discounted cash flow model (Model) and undertaking a sensitivity analysis considering defined variances from the base case for selected key assumptions used in the Model. Key financial metrics are also presented based on current spot pricing for comparison purposes.

No specific funding structure has been applied in the financial evaluation. All key financial metrics are ungeared and presented on both a pre and post-tax basis using a real discount rate of 8%.

The Project is most sensitive to changes in discount rate, exchange rate and pricing assumptions, followed by changes in operating costs and then capital costs.

10.Financing

Financing for the Project has not yet been secured, however based on the positive preliminary financial metrics and on receiving the required regulatory approvals, there is a reasonable basis to assume that the substantial amount of funding to implement the Project is obtainable from a broad range of potential debt and equity sources including through the introduction of project partners.

FIN has commenced engaging with potential partners across various aspects of the Project. Opportunities for partnering are currently envisaged for:

- Green Products – Salt and SOP, Chlor-Alkali and PVC, Hydrogen and other(s)
- Renewable Energy, and
- Infrastructure.

A broad range of potential counterparties and transaction structures are considered to exist for the Project.

FIN will consider a range of funding sources to undertake future planning, permitting and study activities, with the objective of securing the most cost competitive and value maximising option. FIN considers the zero-emission nature of the integrated operation and the potential of the Project to reduce the carbon emissions of existing supply chains to enhance the Project's fundability.

Given the potential of the Project to generate substantial free cash flow per annum year, it is considered reasonable that the Project could support a meaningful level of gearing which would enhance the potential financial returns to equity investors. A range of potential debt sources, including Government linked concessional debt sources are considered to exist.

11. Forward Work Program

The proposed forward work program currently comprises:

Corporate

- Progress discussions with potential partners across various aspects of the Project
- Investigate the potential to generate carbon credits or realise 'green' product price premiums
- Apply for Government grant funding

Project Integration

- Determine salt field, desalination, downstream processing plant locations and renewable energy generation layouts
- Commence broader stakeholder briefings and consultation
- Environmental Impact Assessment (EIA) baseline surveys
- Geological, geotechnical, hydrogeological, weather, met ocean and bathymetric surveys to support project engineering
- Design integration to capture synergies of salt, SOP, chlor-alkali, PVC and potentially other processes
- Preparation of Class 3 capital and operating cost estimates including for all material facilities
- Preparation of a Class 3 master schedule for the go-forward development configuration
- Preparation of a detailed plan for the definitive feasibility study (DFS) phase

Salt and SOP

- Finalise locations of the sea water intake, bitterns outfall and jetty locations for hydrodynamic modelling
- Determine the optimum size of the salt field to meet the needs of the integrated project and within the environmental constraints that exist
- Salt field levee and crystalliser layout design to optimise construction methodology and locally available materials
- Investigate the opportunity to increase salt field production through bitterns processing, the use of hypersaline ground water and desalination technologies
- Further investigation into the processing of bitterns to produce SOP, bromine and magnesium products

Chlor-Alkali

- Further investigate the use cases of chlorine from the chlor-alkali process
- Investigate the local sourcing and/or production of bio-ethylene to support the PVC use case
- Determine the optimum size of the chlor-alkali plant
- Determine preferred location and preliminary design for a bulk liquids import and export facility

Renewable Energy

- Deployment of Sodar weather station to collect data to determine the preferred renewable energy technologies to meet the anticipated power demand
- Progression of concentrated solar thermal energy design to decide conventional or alternate technologies
- Investigate access to the NWIS for the supply and/or sourcing of renewable energy

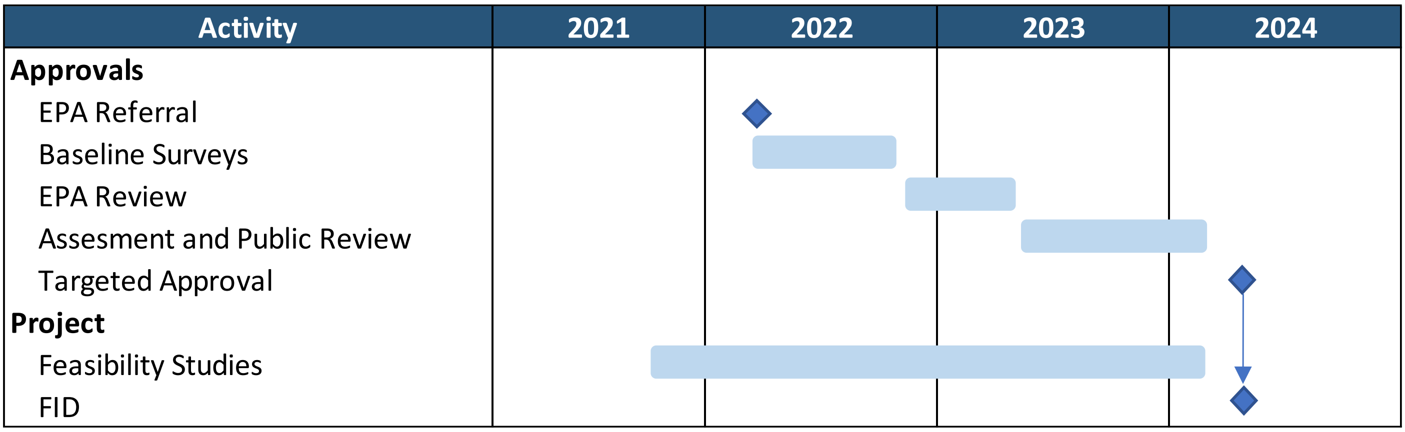
Additional Downstream Processing Opportunities

- Further investigation into the production of green hydrogen and its derivatives (methanol, ammonia, urea)
- Investigate the opportunity to utilise CO_2 emissions from adjacent gas projects in downstream processing
- Investigate other potential downstream processing opportunities

12.Project Implementation

The proposed schedule for the implementation of the Project is provided in Figure 22.

Figure 22: Proposed Schedule



Source: Fin Resources 2021

13. References

Actis Environmental Services, 2021	North Onslow Solar Salt Project: Conceptual Design Report, September 2021
Biota Environmental Sciences, 2019	North Onslow Solar Salt Project: Terrestrial Fauna and Flora Desktop Assessment, August 2019.
BMT Commercial Australia, 2021	North Onslow Solar Salt Project, August 2021.
Calibre, 2021	Geotechnical Desktop Study – North Onslow Solar Salt Project, August 2021
CQG Consulting, 2021	North Onslow Solar Salt Project - Bitterns Study, August 2021
Fin Resources Limited, 2021	Sol Mar Project Scoping Study, November 2021
GHD, 2021a. North Onslow Salt Project	Sea Water Treatment Technology Scoping Study, August 2021.
GHD, 2021b. North Onslow Salt Project	Green Products Scoping Study, September 2021.
Intratec, 2021a	Vinyl Chloride from Ethylene and Chlorine (Balanced Process) Report, October 2021
Intratec, 2021b	Polyvinyl Chloride from VCM (Suspension Polymerization) Report, October 2021
LandSurveys, 2021	Peedamulla Aerial Survey, June 2021
O2 Marine, 2021	Desktop Site Investigation: Marine Infrastructure North Onslow Solar Salt Project, July 2021.
PAEMAC, 2021	North Onslow Solar Salt Project: Basis of Estimate, October 2021.
Platek Analytics, 2021	Financial Model, November 2021.
Preston Consulting, 2021a	North Onslow Solar Salt Project: Environmental Approvals Management Plan, August 2021
Preston Consulting, 2021b	North Onslow Solar Salt Project: Strategic Tenure and Approval Advice Report, September 2021.
RayGen Resources, 2021a	The story of RayGen: Part 1 – Commercial Assessment Report, May 2021 p.23.
RayGen Resources, 2021b	The story of RayGen: Part 2 – Technical Assessment Report, May 2021 p.10
Tecnon OrbiChem, 2021.	https://orbichem360.orbichem.com/ Accessed October 2021.

Fin Resources