North Sea Transition Authority

# 33rd Petroleum Licensing Round

## Southern North Sea: SNS Cluster Rationale

September 2022

# Cluster Rationale

North Sea Transition Authority

## Context

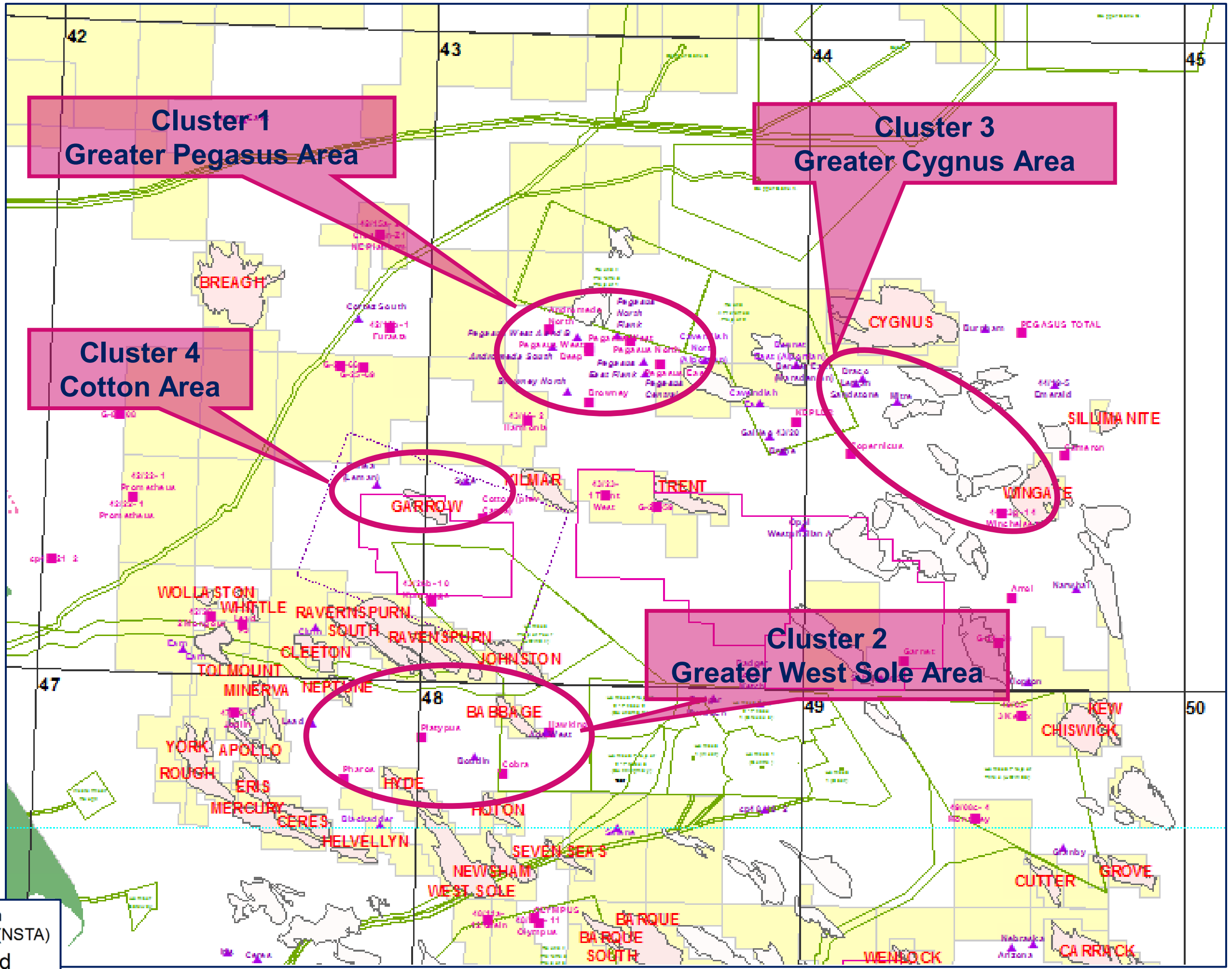
The Southern North Sea ("SNS") has a number of unlicenced, undeveloped hydrocarbon accumulations that include material hydrocarbon volumes that have historically been technically matured but have failed to progress to development. In addition there are associated prospects with a range of Geological Chance of Success ("GCOS").

Given the SNS is a region of ageing infrastructure, there is a risk of hydrocarbons becoming stranded and remaining unexploited. The SNS requires a strategic approach to deliver developments that can expedite hydrocarbon production in the near term as well as potentially enabling further exploration activity in the mid-term before the export routes reach Cessation of Production ("COP").

Commitment by licensees to strategic plans that will deliver hydrocarbon recovery at pace will be key for the SNS.

## Licence Round Area of Focus

The SNS is largely well understood, but an historic piecemeal approach to development has proved unsuccessful. Four priority clusters in the SNS have been identified that offer an opportunity to strategically develop a critical mass of hydrocarbons to ensure timely development and optimal use of available infrastructure.




- ▪ Terminal

**Offshore Fields**

- Oil
- Condensate
- Gas
- Gas (producing)

- Wind Farm Leases (TCE)
- Wind Farm Export Cable Agreement (TCE)
- Wind Round 4 Preferred Projects (TCE)
- Offshore Minerals Evaporites Site Agreements (TCE)
- CCS Leases (TCE)
- CS Licences (NSTA)
- Petroleum Licences (NSTA)
- Selected Discoveries
- Selected Prospects

Map data as of 21 September 2022. May be subject to change.

Information compiled by the North Sea Transition Authority

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# Cluster 1 – Greater Pegasus Area (Quad 43)



## Rationale

Cluster 1 contains a number of undeveloped discoveries with varying degrees of technical maturity. This cluster is discovery-led to facilitate the development of sufficient critical mass to enable production within 5 years.

Development at pace is required to ensure ullage within available processing hosts is maximised. A cohesive and integrated plan for development has the potential to improve the economics of the key developments whilst providing sufficient material volumes. This may influence key host decisions to ensure hydrocarbon recovery can be maximised.

Development alignment for the area is required; a piecemeal approach without a commitment to a strategic development of this cluster has the potential to lead to material hydrocarbon regret.  Demonstration of a clear plan to mitigate the risk of ullage competition and the erosion of pace will be key; factors such as JV misalignment and/or cherry picking could result in the sterilisation of the area.

## Infrastructure

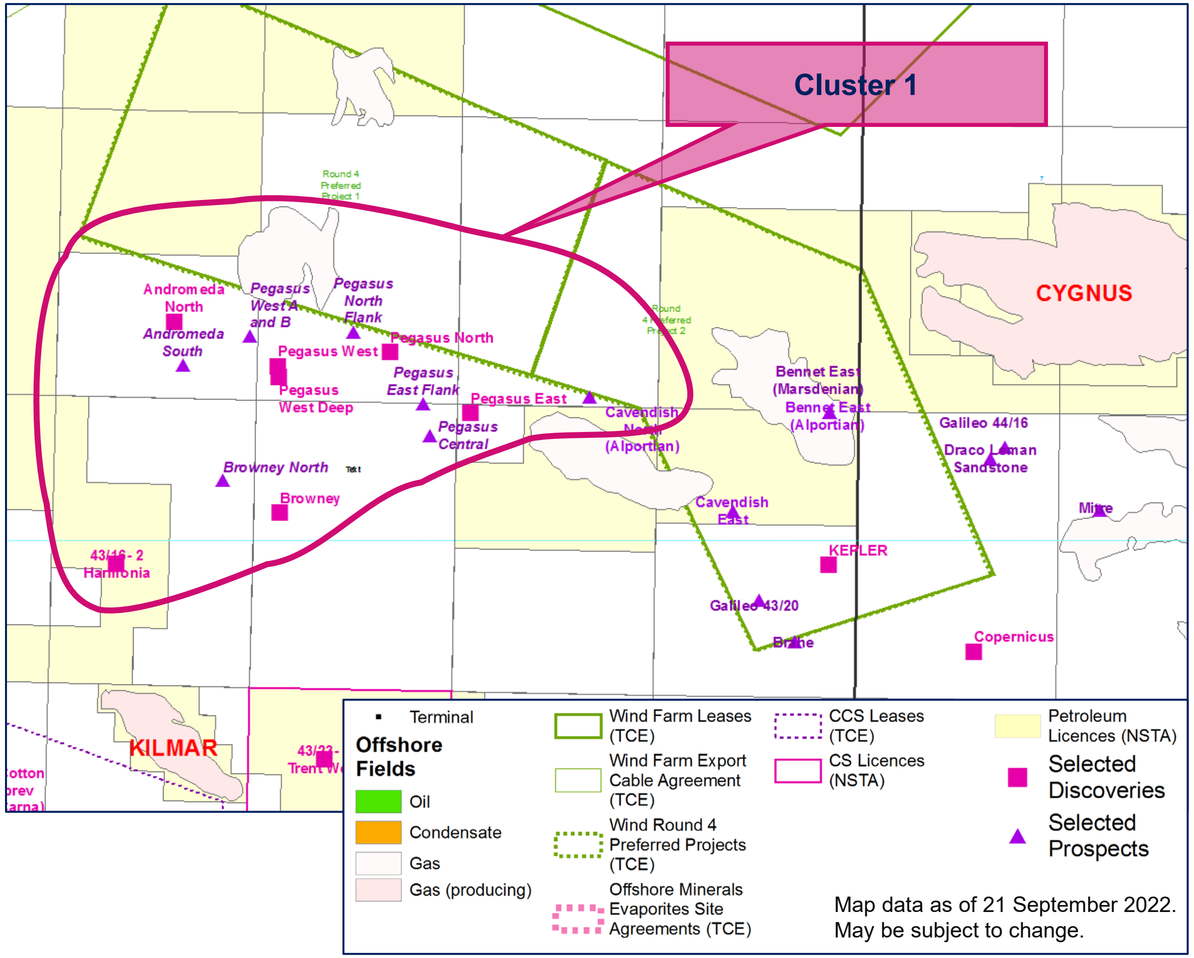
Existing processing and export infrastructure within a 50km radius.

## Hydrocarbon Potential

The cluster area is focussed on discovered volumes and exploration opportunities with a credible and reasonably high gCOS.

Predicted >200bcf recoverable gas from undeveloped discoveries located in close geographical proximity.

Notable additional prospectively located local to the undeveloped discoveries. This could be matured in parallel and utilising the same infrastructure, providing it did not impair the maturation of the undeveloped discoveries. Any COP extension gains within host facilities could be an enabler to the wider prospectivity.






See 33rd Round Greater Pegasus Area information pack for more detail.

Information compiled by the North Sea Transition Authority

# Cluster 2 – Greater West Sole Area (Quad 47 and 48)

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**Rationale**

Cluster 2 contains a number of undeveloped discoveries. This cluster is discovery-led to facilitate the development of sufficient critical mass to provide production within 5 years.

Timely development is required to ensure ullage within available processing hosts is maximised. Although discoveries have the potential to be standalone developments, a piecemeal approach, with the resulting competition for ullage, could slow the pace of developments with potential late life regret as infrastructure COPs approach. Opportunities could have some impurities; however, it is believed that these would be within the limits of any potential hosts' existing entry specifications. An increase in cumulative total volumes of a development could improve the economics of the development and reduce the risk profiles.

A strategic plan with a common vision for the area would be an enabler to pace with rapid delivery of hydrocarbons, as well as ensure that development synergies could be identified to improve economics and maximise hydrocarbon recovery.

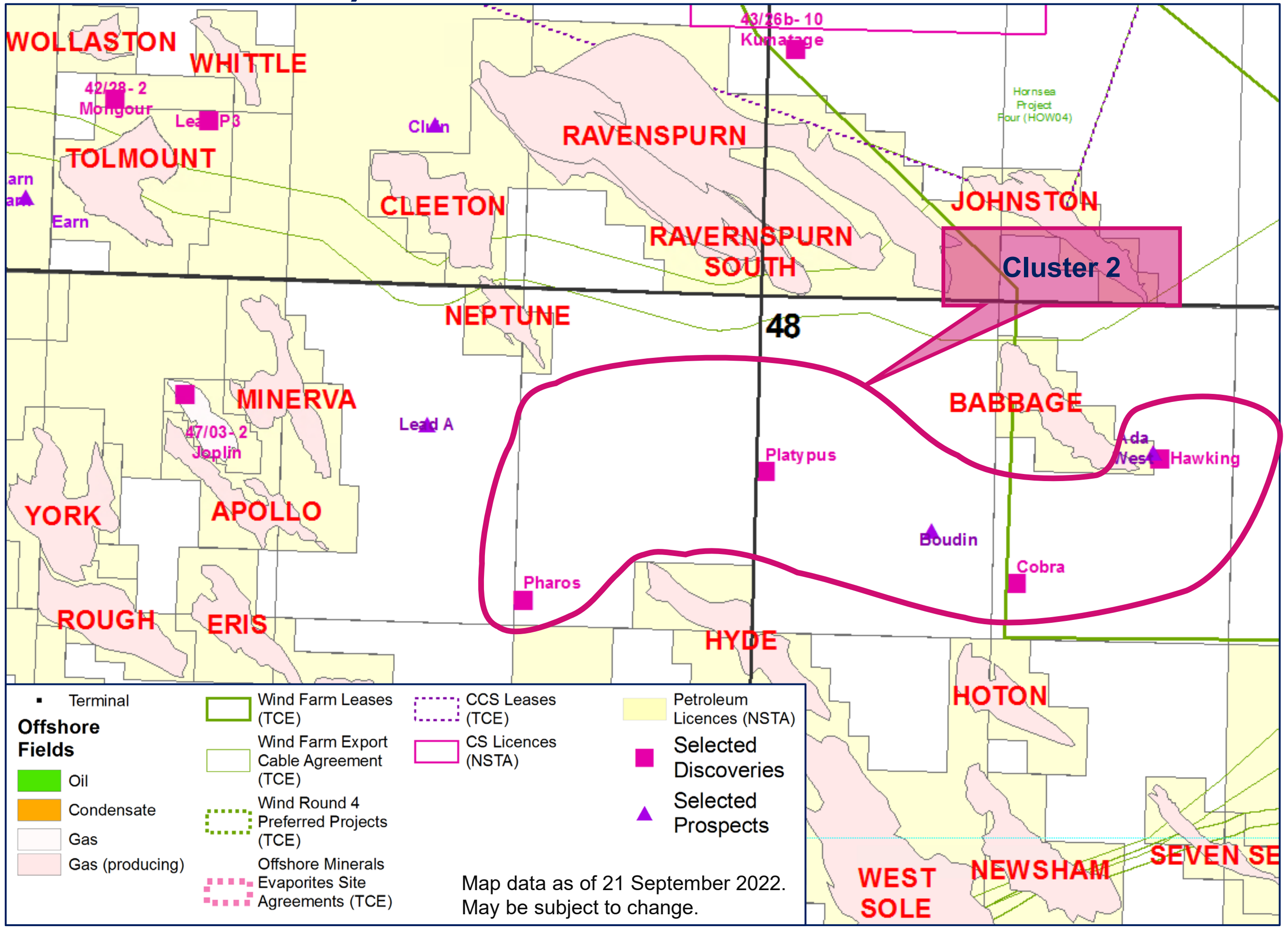
**Infrastructure**

Existing processing and export infrastructure within a 30km radius.

**Hydrocarbon Potential**

The cluster area is focussed on discovered volumes and exploration opportunities with a credible and reasonably high gCOS.

Potential >350bcf recoverable gas from undeveloped discoveries located in close geographical proximity.

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See 33rd Round Greater Dimlington / West Sole information pack for more detail.

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# Cluster 3 – Greater Cygnus Area (Quad 43 and 44)

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**Rationale**

Cluster 3 contains a number of undeveloped discoveries which are conventionally considered ‘off-spec’. This cluster is discovery-led to facilitate the development of sufficient critical mass, to provide production within as short a timeframe as possible to reduce hydrocarbon regret from infrastructure COP.

A strategic development is required to ensure that regional ullage within available processing hosts is maximised and that development plans are complementary.

The ‘off-spec’ nature of the hydrocarbons have historically made individual developments more technically and economically challenging. However, larger volume developments can help to improve these economics. The opportunities here are considered together distinct from Cluster 1, despite being located geographically close-by. This is because the composition challenges necessitate a longer development timeline and have the potential to be enabled by emerging low carbon projects, such as blue hydrogen, which could unlock regional ‘off-spec’ gas.

A strategic plan with a common vision for the area would be an enabler to ensure development synergies between geographically close discoveries and other regional developments can be identified to improve development economics and maximise hydrocarbon recovery.

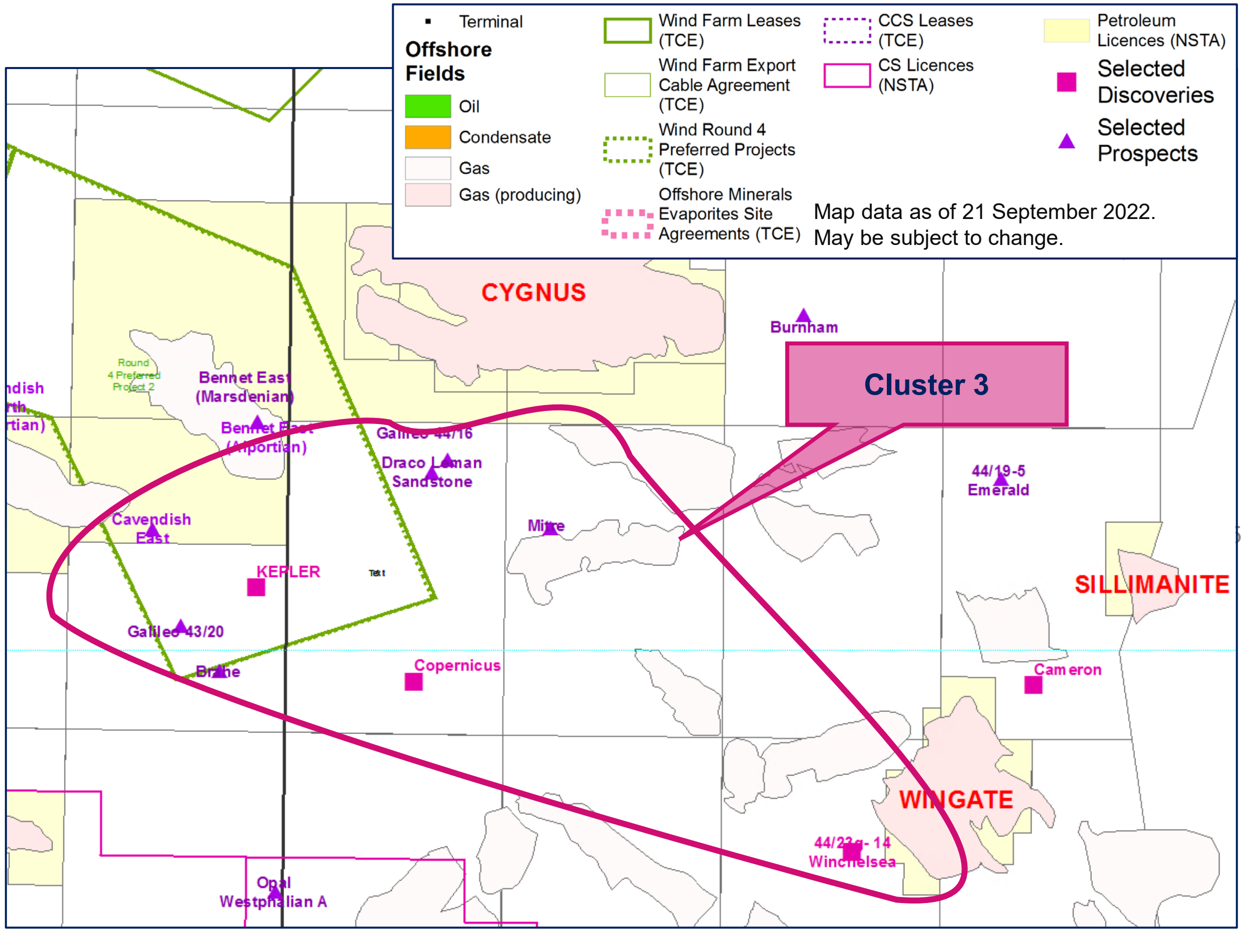
**Infrastructure**

Existing processing and export infrastructure within a 25km radius.

**Hydrocarbon Potential**

The cluster area is focussed on discovered volumes and exploration opportunities with a credible and reasonably high gCOS.

Potential >350bcf recoverable gas from undeveloped discoveries located in close geographical proximity.




See 33rd Round Greater Cygnus Area information pack for more detail.

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# Cluster 4 – Cotton Area (Quad 42 and 43)

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**Rationale**

Cluster 4 contains undeveloped volumes located geographically close to proven hydrocarbon fields which have ceased production but are believed to have remaining reserves.

This is a discovery-led cluster, **not** a redevelopment cluster. Strategic development is required to ensure focus is given to maximise the hydrocarbon potential in this area. Without a clear plan to develop all of the area potential, there is a risk that the low risk, proven hydrocarbon opportunities will take precedent and maturation of the larger undeveloped hydrocarbons will not be progressed in a timely fashion. Focus on progressing the wider prize is required rather than the 'easiest target' approach; for this reason, this is a Cotton area development rather than a redevelopment cluster which could lead to a sub optimal outcome.

A strategic plan with a common vision for the area would be an enabler to ensure maturation of a larger hydrocarbon potential whilst identifying development synergies that could also improve development economics and maximise the hydrocarbon recovery from the proven hydrocarbon fields.

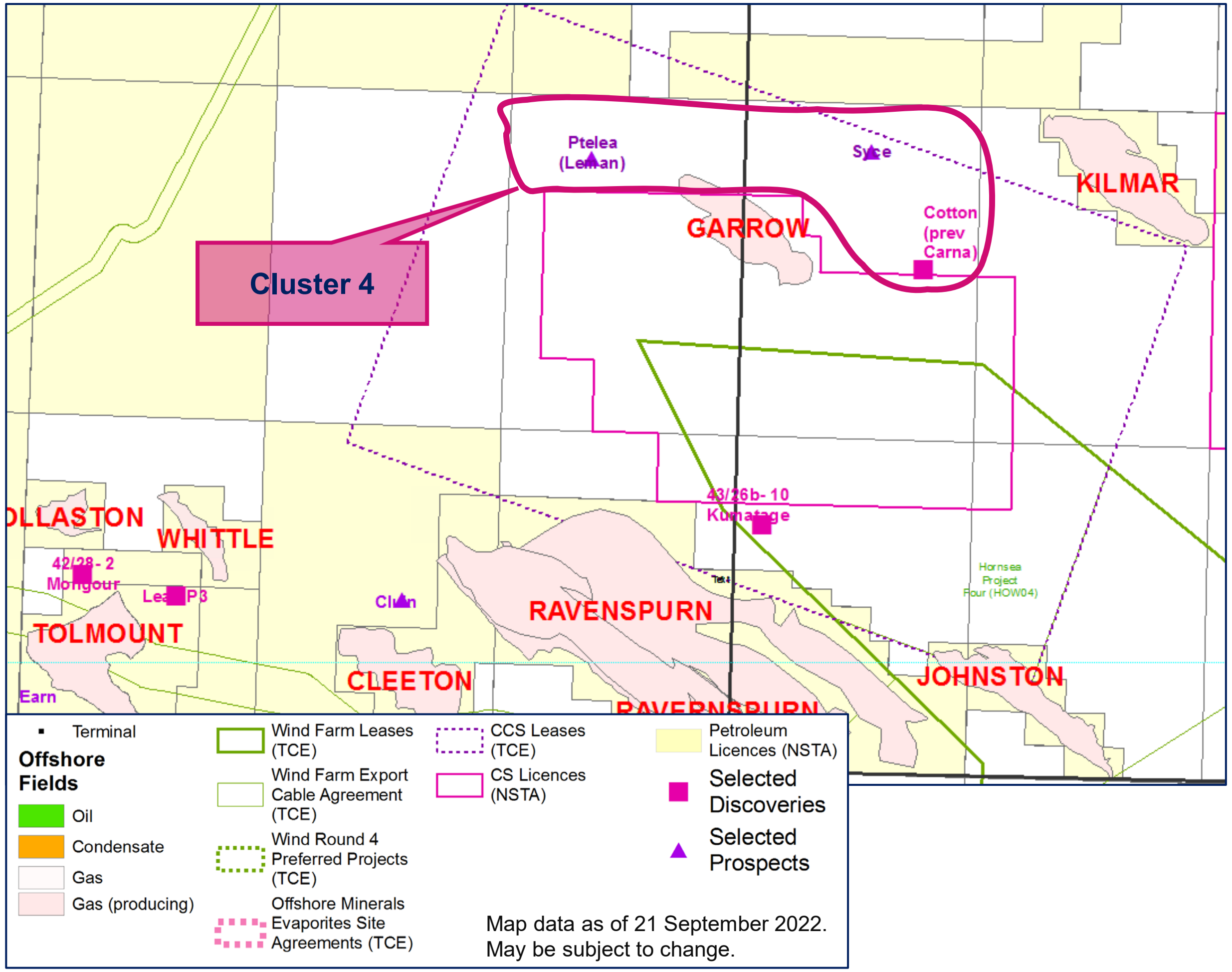
**Infrastructure**

Existing processing and export infrastructure within a 35km radius.

**Hydrocarbon Potential**

The cluster area is focussed on discovered volumes with a credible and reasonably high gCOS.

Potential >100bcf recoverable gas from undeveloped discoveries and hydrocarbon fields located in close geographical proximity.




See 33rd Round Cotton Area information pack for more detail.

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