3 May 2021

Santos and Eni sign MOU to collaborate in northern Australia and Timor-Leste

Santos and Eni have signed a Memorandum of Understanding (MOU) to cooperate on opportunities in northern Australia and Timor-Leste.

The areas of cooperation include assessing the synergies of sharing possible infrastructures associated with gas field developments around Barossa and Evans Shoal, pipeline to Darwin and onshore associated gas processing leading to LNG expansion developments. This also includes investigating options to re-purpose the Bayu-Undan facilities to extend the life of the project, including a carbon capture and storage project, subject to the agreement of the Timor-Leste government.

Santos Managing Director and Chief Executive Officer Kevin Gallagher said the MOU built on the momentum for development of northern Australia following Santos’ FID announcement of the Barossa gas and condensate project and life extension for Darwin LNG for the next 20 years.

“Eni are already a highly valued partner in the Bayu-Undan project and this MOU strengthens our collaboration and cooperation,” Mr Gallagher said.

“CCS opportunities at Bayu-Undan are extremely exciting for Santos and Eni and today we are saying, we would like to be open for business to take your CO2.

“In 2019 the London Convention was amended to allow CO2 to be transported across jurisdictions to enable the establishment of storage hubs.

“A CCS project at Bayu-Undan could provide a new job-creating and revenue-generating industry for Timor-Leste with quality carbon credits increasing in both demand and value internationally.

“Capturing and storing CO2 from industries in the Northern Territory will help it meet its netzero emissions by 2050 target. That’s good for the environment, good for local jobs, good for local investment and good for regional development.”

Other areas of cooperation include the possible development of Petrel and Tern through Blacktip/Yelcherr gas plant facilities.

“As I said when I was in Darwin to announce our FID decision for Barossa, we have approval for two more trains at DLNG and we are open to third party gas opportunities,” Mr Gallagher said.

The non-binding agreement is a demonstration of intent by both parties to collaborate together and with other parties in the region to use existing infrastructure more efficiently, unlock the wealth of regional gas resources, and create new low-carbon business opportunities for both northern Australia and Timor-Leste.

This ASX announcement was approved and authorised for release by Kevin Gallagher, Managing Director and Chief Executive Officer.
Eni and Santos sign a memorandum of understanding on cooperation in northern Australia and Timor-Leste

Eni and Santos strengthen their cooperation seeking to identify potential new areas of collaboration in developments of offshore fields in northern Australia, synergies and sharing of infrastructure as well as CO2 capture and storage or utilization (CCUS) facilities in the Darwin area.

Perth (Australia), May 3rd, 2021 – Eni, through its subsidiary Eni Australia Limited, and Santos signed today a non-binding Memorandum of Understanding (MoU) to jointly seek cooperation opportunities in the following areas of interest:

- optimisations, synergies and sharing of infrastructure between the Barossa Project and the Evans Shoal development, including the potential expansion of Darwin LNG and options to repurpose and extend the life of Bayu-Undan;
- potential joint development of CO2 capture and storage or utilization (CCUS) facilities, serving not only assets owned by the two companies but open to any interested third-party project in the Darwin area, with the long term objective of facilitating the creation of a CO2 management hub in the Northern Territory;
- potential collaboration in new upstream development opportunities in relation to other offshore stranded resources located in northern Australia.

In northern Australia and Timor-Leste Eni and Santos (Operator) are already partners in the Bayu-Undan gas and condensate field and in the associated Darwin LNG plant and connecting gas pipeline. In northern Australia, Eni is the operator of the Evans Shoal and Blacktip gas fields; Santos is the operator of the Caldita Barossa and Tern gas fields and has a participating interest in the Petrel gas field.

For Eni this collaboration with Santos is an important step in the pathway to decarbonising upstream activity in Australia, leveraging both companies’ expertise with the aim of reducing CO2 emissions. This agreement demonstrates the importance of adopting a synergistic approach that promotes cooperation between different players in the sector. Eni has recently launched a new strategy, which will lead the company to be carbon neutral by 2050 in all its operations, processes and products. In the long term, gas – which will be increasingly decarbonised – will represent more than 90% of Eni’s production.

This memorandum sets the stage and is testimony to a mutual ambition to consolidate alliances for sustainable development, in order to tackle the energy transition challenge together, while protecting the environment and regenerating natural resources; a path undertaken by Eni since 2014.

Eni has been present in Australia since 2000 and Timor-Leste since 2006.

Contatti societari:
Ufficio Stampa: Tel. +39.0252031875 – +39.0659822030 ufficio.stampa@eni.com
Numero verde azionisti (dall’Italia): 800940924 segreteriasocietaria.azionisti@eni.com
Numero verde azionisti (dall’estero): + 80011223456 investor.relations@eni.com
Centralino: +39.0659821
Sito internet www.eni.com
Santos, ENI looking to repurpose Bayu-Undan field


Santos Ltd. and ENI are considering options to repurpose and prolong the life of Bayu-Undan field infrastructure in the East Timor sector of the Timor Sea. Ideas include establishment of a carbon capture storage (CCS) scheme, a move that would require approval of the East Timor government.

The field joint venture partners signed a wide-ranging memorandum of understanding to cooperate on opportunities in northern Australia and East Timor.

Areas of cooperation include assessment of synergies of sharing possible infrastructures associated with Barossa and Evans Shoal gas fields, the undersea pipeline to Darwin, plus associated onshore gas processing that could lead to expansion of LNG infrastructure.

Santos said a CCS project at Bayu-Undan could create a revenue-generating industry for East Timor at a time when quality carbon credits are increasing in demand and value internationally.

Significantly, Santos needs to offset carbon emissions from the Barossa project which has a high percentage of carbon dioxide in the gas reservoir. Nearby Evans Shoal field also has a high CO₂ content.

A final investment decision for the $3.6 billion Barossa project was announced at the end of March. That decision triggered the beginning of a $600-million investment in Darwin LNG and pipeline tie-in projects that will extend the life of the infrastructure for another 20 years.

The LNG plant, operated by Santos, can produce about 3.7 million tonnes/year of LNG. Santos has approval for two more LNG trains and said it is open to third party gas opportunities.

Other areas of collaboration include the possible development of Petrel and Tern gas fields in the Bonaparte Gulf through ENI’s existing 100%-owned Blacktip-Yelcherr gas plant infrastructure on the eastern Bonaparte coast in the Northern Territory.
Eni, Santos assessing Timor Sea gas collaborations

Offshore staff, 3 May 2021

ADELAIDE, Australia – Santos and Eni have agreed to cooperate on offshore gas field opportunities in northern Australia and Timor-Leste.

Areas identified under their memorandum of understanding (MoU) include assessing potential for:

- Shared infrastructure between the Barossa field project and the Evans Shoal development
- Expansion of the onshore Darwin LNG complex
- Collaboration in new upstream developments connected to other stranded resources offshore northern Australia. This could include the development of the Petrel and Tern fields through the Blacktip/Yelcherr gas plant facilities
- Options for repurposing and extend the life of the Bayu-Undan offshore facilities in the Timor Sea, including a carbon capture and storage (CCS) project, subject to approval by the Timor-Leste government.

The MoU follows Santos’ recent FID announcement concerning the Barossa gas and condensate project and life extension for Darwin LNG for the next 20 years.

Santos managing director and CEO Kevin Gallagher said: “CCS opportunities at Bayu-Undan are extremely exciting for Santos and Eni and today we are saying, we would like to be open for business to take your CO₂.

“In 2019 the London Convention was amended to allow CO₂ to be transported across jurisdictions to enable the establishment of storage hubs.

“A CCS project at Bayu-Undan could provide a new job-creating and revenue-generating industry for Timor-Leste with quality carbon credits.”

The two companies are already partners in Bayu-Undan, Darwin LNG and the connecting gas pipeline. Eni operates the Evans Shoal and Blacktip gas fields, while Santos operates the Caldita Barossa and Tern gas fields and is also a partner in Petrel.

Eni’s long-term goal is for gas – increasingly decarbonized – to represent more than 90% of its production.
Eni and Santos to collaborate on projects in Australia and Timor-Leste

*Offshore Energy, May 3 2021. By Nermina Kulovic*

**Italian oil and gas player Eni and Australian energy giant Santos have agreed to cooperate on projects in northern Australia and Timor-Leste.**

Eni said on Monday that, through its subsidiary Eni Australia Limited, it had signed a nonbinding Memorandum of Understanding (MoU) with Santos to jointly seek cooperation opportunities in three areas of interest.

The first area of interest is optimisations, synergies, and sharing of infrastructure between the Barossa Project and the Evans Shoal development, including the potential expansion of Darwin LNG and options to repurpose and extend the life of Bayu-Undan.

Santos Managing Director and Chief Executive Officer, **Kevin Gallagher**, said the MOU built on the momentum for the development of northern Australia following Santos’ FID announcement of the Barossa gas and condensate project and life extension for Darwin LNG for the next 20 years.

It is worth reminding that Santos has recently completed the sell-down of a 25 per cent interest in Bayu-Undan and Darwin LNG to SK E&S.

The second area of collaboration between Eni and Santos is a potential joint development of CO₂ capture and storage or utilization (CCUS) facilities, serving not only assets owned by the two companies but open to any interested third-party project in the Darwin area.

The long term objective of this is facilitating the creation of a CO₂ management hub in the Northern Territory.

Gallagher also said: “Capturing and storing CO₂ from industries in the Northern Territory will help it meet its net-zero emissions by 2050 target. That’s good for the environment, good for local jobs, good for local investment and good for regional development”.

The third area of interest is potential collaboration in new upstream development opportunities in relation to other offshore stranded resources located in northern Australia.

In northern Australia and Timor-Leste, Eni and Santos (operator) are already partners in the Bayu-Undan gas and condensate field and in the associated Darwin LNG plant and connecting gas pipeline.

In northern Australia, Eni is the operator of the Evans Shoal and Blacktip gas fields; Santos is the operator of the Caldita Barossa and Tern gas fields and has a participating interest in the Petrel gas field.

For Eni, this collaboration with Santos is an important step in the pathway to decarbonising upstream activity in Australia, leveraging both companies’ expertise with the aim of reducing CO₂ emissions, the Italian company said.

Eni said that this agreement demonstrates the importance of adopting a synergistic approach that promotes cooperation between different players in the sector.

Eni has recently launched a new strategy, which will lead the company to be carbon neutral by 2050 in all its operations, processes and products.

In the long term, gas – which will be increasingly decarbonised – will represent more than 90 per cent of Eni’s production.

According to Eni, this memorandum sets the stage and is testimony to a mutual ambition to consolidate alliances for sustainable development, in order to tackle the energy transition challenge together, while protecting the environment and regenerating natural resources; a path undertaken by Eni since 2014.
Santos and Eni eye carbon capture opportunities at East Timor’s Bayu Undan

Australia’s Santos and Italy’s Eni are investigating options to re-purpose the Bayu Undan facilities to extend the life of the project, including a carbon capture and storage (CCS) scheme.

*Energy Voice, 3 May 2021. By Damon Evans*

The CCS project would be subject to the agreement of the government of East Timor, also known as Timor Leste, Santos said today.

Santos and Eni have signed a memorandum of understanding to collaborate in Northern Australia and East Timor. Santos operates Bayu Undan on behalf of partners Eni, Inpex and SK E&S.

“CCS opportunities at Bayu-Undan are extremely exciting for Santos and Eni and today we are saying, we would like to be open for business to take your carbon dioxide (CO₂),” said Santos managing director Kevin Gallagher.

Significantly, Santos needs to offset carbon emissions from its Barossa project, which was recently sanctioned. The offshore Barossa gas field development off Australia’s Northern Territory has the unfriendly tag of having more carbon dioxide than any gas currently made into liquefied natural gas (LNG), according to a report from the Institute for Energy Economics and Financial Analysis (IEEFA).

Gallagher added that “in 2019 the London Convention was amended to allow CO₂ to be transported across jurisdictions to enable the establishment of storage hubs.” Presumably, Santos would like to ship CO₂ from Barossa to Bayu Undan for storage.

“A CCS project at Bayu-Undan could provide a new job-creating and revenue-generating industry for Timor-Leste with quality carbon credits increasing in both demand and value internationally,” said Gallagher.

“Capturing and storing CO₂ from industries in the Northern Territory will help it meet its net-zero emissions by 2050 target. That’s good for the environment, good for local jobs, good for local investment and good for regional development,” he added.

The non-binding agreement is a demonstration of intent by Eni and Santos to collaborate together and with other parties in the region to use existing infrastructure more efficiently, unlock the wealth of regional gas resources, and create new low-carbon business opportunities for both northern Australia and East Timor, said Santos.
Eni and Santos Sign Memo to Strengthen Ties

Matthew V. Veazey (mveazey@rigzone.com), Rigzone  May 4 2021

Santos (ASX: STO) and Eni (NYSE: E) reported Monday that they have signed a memorandum of understanding (MOU) to cooperate on opportunities in northern Australia and Timor-Leste.

The non-binding MOU reflects both companies’ intent to collaborate – along with other parties in the region – to use existing infrastructure more efficiently, develop regional gas resources, and create new low-carbon business opportunities for northern Australia and Timor-Leste, Santos noted in a written statement emailed to Rigzone.

The companies already partner in the Santos-operated Bayu-Undan gas and condensate field and in the associated Darwin LNG plant and connecting gas pipeline, Eni stated separately. In addition, Eni pointed out that it operates the Evans Shoal and Blacktip gas fields and Santos operates the Caldita Barossa and Tern gas fields. Moreover, it observed that Santos holds a participating interest in the Petrel gas field.

“Eni are already a highly valued partner in the Bayu-Undan project, and this MOU strengthens our collaboration and cooperation,” remarked Kevin Gallagher, Santos’ managing director and CEO.

Gallagher added the MOU builds upon momentum for northern Australia development following Santos’ final investment decision for the Barossa gas and condensate project and 20-year Darwin LNG life extension.

According to Eni, the companies will seek cooperation opportunities under the MOU in the following areas:

- optimizing and sharing infrastructure between the Barossa Project and Evans Shoal development, including potentially expanding Darwin LNG and options to repurpose and extend the life of Bayu-Undan

- potentially embarking on a joint development of carbon dioxide (CO₂) capture and storage or utilization (CCUS) facilities for Santos and Eni as well as third parties in the Darwin area – with the long-term objective of supporting the creation of a Northern Territory CO₂ management hub

- potentially collaborating on new upstream developments to exploit other offshore stranded resources in northern Australia.

Santos stated that possibly developing the Petrel and Tern fields through the Blacktip/Yelcherr gas plant facilities represents another cooperation opportunity. Gallagher pointed out that a carbon capture and storage (CCS) project at Bayu-Undan could provide Timor-Leste with a new industry that creates jobs and generates revenue.

“CCS opportunities at Bayu-Undan are extremely exciting for Santos and Eni and today we are saying, we would like to be open for business to take your CO₂,” commented Gallagher, adding that a 2019 amendment to the London Convention allows CO₂ to be transported across jurisdictions so that storage hubs can be established.

“Capturing and storing CO₂ from industries in the Northern Territory will help it meet its net-zero emissions by 2050 target. That’s good for the environment, good for local jobs, good for local investment, and good for regional development.”
Carbon Capture and Storage

Santos & ENI team up to tackle dirty gas and decommissioning

Analysis in Boiling Cold 11 May 2021. By Peter Milne

Santos and ENI are looking for solutions for CO2 and removing old facilities in the waters north of Darwin. Time will tell if the problems are solved or just delayed.

Santos and Italian ENI will work together on two problems they have in common in the waters off northern Australia: gas full of CO2 and expensive cleanups of offshore infrastructure becoming due.

In the past 12 months, the companies came to have shared predicaments in very different ways.

Santos completed the purchase of assets no one else wanted – ConocoPhillips’ equity in the declining Bayu Undan gas field and the Darwin LNG plant.

ENI failed to sell assets it did not want – including Bayu Undan and Darwin LNG – after buyers lost interest when it became clear that decommissioning costs in Australia were becoming harder to avoid.

For years the two companies competed to ensure the field it had an interest in would fill the Darwin LNG plant when gas stopped flowing from Bayu Undan.

In mid-2019, Santos emerged the winner when the Barossa joint venture it owns 25 per cent of won exclusive rights to negotiate with Darwin LNG operator ConocoPhillips.

However, Santos still had a problem: US-major ConocoPhillips wanted to exit Australia, not stay around to develop the CO2-rich Barossa field and decommission the extensive Bayu Undan offshore facilities.

Growth-hungry Santos chief executive Kevin Gallagher went all in and removed ConocoPhillips from the scene by buying it out of Bayu Undan, Darwin LNG and Barossa for $2 billion and tripling Santos’s exposure to Bayu Undan’s decommissioning costs.

Now a Barossa go-ahead was vital for Gallagher. Never mind moving on to Woodside, his position at Santos would have become untenable if the buyout of ConocoPhillips had been for nothing.

Gallagher did get Barossa over the line in March after loading up the project with risk.

Santos increased the lease component and described it as a cost reduction; signed up to sell the LNG at the spot price, leaving it exposed to a volatile market; and committed to Barossa before it finalised a sell down to Japan’s JERA.

While the deal was spun and reported as a huge win, a more sober and independent assessment reached a different conclusion.

Wood Mackenzie principal upstream analyst Rob Morris analysed 26 global upstream projects sanctioned, or likely to be sanctioned, in 2021.
Barossa achieved the 2021 double wooden spoon award of the lowest return and the highest emissions intensity.

Wood Mackenzie calculated the return of about six per cent with a conservative price for Brent crude of $US50 a barrel, but a higher price would not change the ranking of the projects.

The sanction of Barossa has allowed Santos to defer the decommissioning costs of the Darwin LNG plant.

**A Problem Shared is a Problem Solved**

Santos is left with 43 per cent of the Bayu Undan decommissioning cost of Bayu Undan of about $US1 billion and very dirty LNG from Barossa just when the market is looking for the opposite.

ENI has 11 per cent of the Bayu Undan cleanup bill and the Evans Shoal field that contains up to 30 per cent CO2 and now cannot send gas to Darwin.

The memorandum of understanding between Santos and ENI signed last week positions the companies to grab a share of the Federal Government’s plan to support carbon capture and storage with $264 million that nominated the Bonaparte Basin as a potential CCS hub.

And those taxpayer’s dollars could help the gas producers solve a few immediate issues of their own.
ENI’s Blackwood retention lease next to Evans Shoal expires in June.

The Italian company must convince the National Offshore Petroleum Title Administrator that the resource could be commercially viable in 15 years or lose the lease. If judged uneconomic, offshore environment regulator NOPSEMA could apply its newly toughened approach to decommissioning and insist wells are plugged and abandoned at great expense.

For NOPTA to judge Evans Shoal and Blackwood viable ENI needs a plan to handle enormous amounts of CO2.

A proposal to send CO2 to the Bayu Undan field for reinjection not only justifies a delay in ENI decommissioning the wells at Evans Shoal, but both companies benefit by pushing back the removal of the offshore infrastructure at Bayu Undam.

*Boiling Cold* understands the Timor Leste Government supports carbon capture and storage at Bayu Undan as decommissioning costs would be deductible against its royalty income, and it could charge a fee for CO2 storage.

An industry consultant said not all the Bayu Undan facilities would be needed for CO2 injection, so some decommissioning work would not be deferred.

The Barossa project plans to vent most CO2 from the reservoir offshore, but its LNG could be less carbon-intensive if CO2 currently vented at Darwin was instead buried at Bayu Undan 500km away.

Inpex’s Ichthys LNG plant near the Darwin LNG is a potential customer for Bayu Undan CCS, especially when emissions increase by about 30 per cent next decade when Inpex develops a new formation.

In 2019 Inpex dismissed CCS for Ichthys as unaffordable at about $100 a tonne of CO2 but is now revisiting the plan.
ENI, Santos and Inpex all committed to the remote CO2-rich gas off northern Australia when gas was a forever fuel, not a transition fuel, and investors did not consider climate change a business risk.

Now Santos appears stuck in a loop of ever-deepening commitment to the Bonaparte Basin.

First, it bought out ConocoPhillips, complete with substantial Bayu Undan decommissioning costs; then it sanctioned low return and dirty Barossa to justify the initial purchase.

Now Gallagher’s company is chasing carbon storage in deep and distant offshore waters to delay the decommissioning costs of the first deal and partially offset the greenhouse emissions of the second deal.

Chevron has spent more than $3 billion at Gorgon to transport CO2 a few kilometres and inject it underground from onshore wells. The system is yet to be fully operational.

CCS offshore hundreds of kilometres from the source of the CO2 is unlikely to have fewer problems than Chevron’s work on Barrow Island.

If storing CO2 at Bayu Undan is eventually judged to not be feasible Santos and ENI would at least have delayed decommissioning for a few years and temporarily been able to answer the question: what are you doing about emissions?
Hydrogen and carbon capture receive extra funding, as Morrison prepares for Biden summit

By Michelle Grattan in The Conversation, 20 April 2021

Prime Minister Scott Morrison has announced next month’s budget will include a further $539.2 million government investment in new clean hydrogen and carbon capture, use and storage projects.

This comes ahead of this week’s summit on climate convened by US President Joe Biden, which Morrison will address overnight Thursday (AET). The virtual summit of some 40 leaders will have two sessions of two hours, spread over two days.

Morrison said in a Tuesday night statement that given a fast-changing world “Australia will need to be competitive in a new energy economy to support the jobs of Australians, especially in our heavy industries and regional areas that depend on affordable and reliable energy”.

“We cannot pretend the world is not changing. If we do, we run the risk of stranding jobs in this country, especially in regional areas”.

The breakdown of the funding is:

- $275.5 million to accelerate the development of four additional clean hydrogen “hubs” in regional areas and implement a clean hydrogen certification scheme
- $263.7 million to support the development of carbon capture, use and storage projects and “hubs”.

Hydrogen hubs are where users, producers and exporters are located in the same region, aimed at maximising the use of and investment in hydrogen. Potential areas for the hubs include the Latrobe Valley (Victoria), Darwin (Northern Territory), the Pilbara (Western Australia), Gladstone (Queensland), the Hunter Valley (NSW), Bell Bay (Tasmania) and the Eyre Peninsula (South Australia).

Potential CCS hub areas include Moomba (SA), Gladstone, the Darling Basin (NSW), the North West Shelf and Bonaparte Basin (WA), Darwin, and south-western WA.

The hydrogen funding is over five years; the CCS component is over a decade. CCS is a controversial technology.

As Morrison seeks to pivot towards embracing a 2050 target of net-zero emissions, ahead of the Glasgow climate conference late this year, he is caught between the pressure from the United States administration, and some resistance in Coalition ranks.
Queensland Nationals senator Matt Canavan tweeted on Tuesday, “Australiatriy- ing to go for net zero emissions is like the 10 year old boy who thinks he is superman and jumps off his parent’s roof. He doesn’t have the technology, and he is going to fall flat on his face”.

A speech this week from US Secretary of State Antony Blinken underlined the determination of the Biden administration to push other countries hard on the climate issue.

“Our diplomats will challenge the practices of countries whose action – or inaction – is setting the world back,” Blinken said.

“When countries continue to rely on coal for a significant amount of their energy, or invest in new coal factories, or allow for massive deforestation, they will hear from the United States and our partners about how harmful these actions are.”

Blinken said the US would “seize every chance we get” to raise climate issues “with our allies and partners, and through multilateral institutions”.

“We will convey a strong message to the meeting of the G7 next month, whose members produce a quarter of the world’s emissions.”

Australia has been invited to attend the G7 meeting, although it is not a member.

Morrison said in his announcement, “It is essential we position Australia to succeed by investing now in the technologies that will support our industries into the future, with lower emissions energy that can support Australian jobs.

"There is a strong appetite from business for the new emissions reduction technologies that they know will be needed to run their operations and keep employing Australians and grow jobs for the future.”

Meanwhile Labor leader Anthony Albanese attacked Morrison’s Monday comment that “we’re not going to achieve net zero in the cafes, dinner parties and wine bars of our inner cities”, saying it showed “his heart isn’t in this”.

“He couldn’t resist have a snipe at people who are concerned about climate change as being all somehow inner city latte sippers,” Albanese said.

“He still just doesn’t get it.”

He said Morrison was “crab-walking towards announcing net zero by 2050”.

Asked whether there should be a ban on new coal mines, Albanese said, “As a general principle, I’m not into banning things. But what is of course happening is that the markets are speaking, and the markets are all headed in one direction”.

Albanese denied it was contradictory to support both net zero by 2050 and continued coal exports. “The international system that we’ll participate in counts emissions where they occur.”

Michelle Grattan is a Professorial Fellow, University of Canberra