

# Woodside open to onshore LNG export project in East Timor

*Damon Evans, Energy Voice, 1 Dec. 2022*

**Woodside Energy (ASX:WDS) is reconsidering the potential development of Greater Sunrise via an onshore liquefied natural gas (LNG) export terminal in East Timor. This marks a significant about-turn for the Australian LNG developer.**

In an investor briefing on Thursday, the company's chief executive Meg O'Neill put the undeveloped Sunrise and Browse gas projects back on its agenda, citing the long-term need for gas, particularly in Asia.

Woodside had previously insisted that only onshore processing of Sunrise gas in Darwin, northern Australia, would be acceptable. In July 2020, [Woodside said the carrying value of the Greater Sunrise project off East Timor, also known as Timor Leste, was zero following a US\\$170 million write down.](#)

O'Neill told investors today that the economics had always gone against processing Sunrise gas in East Timor as extensive infrastructure already exists at two LNG export projects in Darwin, which made processing the gas in northern Australia more commercial.

However, she said Woodside now recognised the importance of an onshore development in East Timor for that country and therefore Woodside had reopened talks around potential development concepts for Sunrise LNG.

Woodside has a 33.44% stake in Greater Sunrise. East Timor's national oil company Timor GAP holds 56.56% after buying out Shell and ConocoPhillips in 2018. Japan's Osaka Gas holds the balance of 10%.

About 70% of Greater Sunrise – consisting of the Sunrise and Troubadour fields – lies in East Timor's seabed following a 2018 maritime boundary deal with Australia. The fields are only about 150 km south of Timor Leste's coastline but in between lies the 3,300 metre-deep Timor Trench, [which creates significant challenges for laying pipelines.](#)

"Over the years we've looked at Sunrise many, many different times. We have done technical pipeline studies to understand the feasibility of going across the trench," O'Neill said at the company's investor briefing day in relation to an analyst question.

"Those studies have always indicated that with the right will, the right engineering, the right execution plan, that you can execute that scope of work," she said

"The challenge has away been the economics."

O'Neill noted that modular LNG facilities, which are now cheaper and quicker to build compared with legacy LNG projects, could be used for any potential development in East Timor.

## Woodside Energy considers exporting LNG to East Timor

*Offshore Technology, Dec. 1, 2022 By Smruthi Nadig*

[Woodside Energy](#) Group said it was open to exporting gas from the Greater [Sunrise](#) project to East Timor via an onshore liquefied natural gas (LNG) export terminal on Thursday.

In an investor meeting on Thursday, Meg O'Neill, CEO of Australian oil and gas operator Woodside Energy, introduced the underdeveloped Sunrise and Browse gas projects, emphasising the long-term need for gas in Asia.

O'Neill said at the briefing: "So the Timorese are very keen to have [technological] development in the country. And we recognise it's an important national project for them. So we feel like it's appropriate to reopen the concept evaluation, understand the technologies, understand the technical challenges."

Woodside executives have previously preferred to transport gas from the Sunrise project to Darwin, in Australia's Northern Territory, where two LNG plants are already in the works, [Argus Media](#) reported. It mentioned that several political changes this year have shifted Sunrise's outlook to make it unviable for the company.

According to [Energy Voice](#), when East Timor's current administration took office in 2020, it began reconsidering the country's petroleum development ambitions. This included the Greater Sunrise project after finding the economic analysis underlying the proposed projects unviable.

However, earlier this month, Jose Ramos-Horta's victory in East Timor's presidential runoff election against incumbent President Francisco "Lu-Olo" Guterres changed the outlook for the onshore greenfield LNG project.

The Sunrise project lies between East Timor and Northwest [Australia](#). Despite the distance, the company argued that the resource development by transporting gas to Darwin presents a cheaper option than transporting it to East Timor, as the Australian city has ports and LNG infrastructure.

The government of East Timor sees Sunrise, the largest untapped gas reserve under its control, as a nation-building initiative that it will use to develop the infrastructure needed for gas production.

Woodside previously stated that LNG export facilities onshore in East Timor would be "commercially unviable". The Australian operator announced earlier this year that it might only participate in the upstream portion of the project, allowing East Timor to cover the costs of the onshore export facility and pipelines. At the time, these were estimated around \$14bn.

Argus

1 Dec. 2022

By Kevin Morrison

# Australia's Woodside mulling both Sunrise gas options

**Australian independent Woodside Energy is considering both development options for the Sunrise gas project in the Timor Sea, which are to pipe the gas to East Timor's southern coastline or to Australia's Darwin.**

Sunrise is located in a maritime jurisdiction jointly administered by Australia and East Timor. Dili views Sunrise, which is the largest undeveloped gas resource within East Timor's jurisdiction, as a nation-building project that it will utilise to build downstream gas production infrastructure.

Woodside has traditionally preferred piping the Sunrise gas to Darwin in Australia's Northern Territory, where two existing LNG projects exist. But a number of political developments this year have changed the prospects for Sunrise, from one that was consigned to a perennial deferred status to one that has some possibility if certain political and commercial agreements are made between the project partners and the two national governments.

"Sunrise has the potential to supply the long-term demand needs of the Asia Pacific region," Woodside executive vice-president of projects Matthew Ridolfi said. "We are looking at a pipeline to East Timor where a new LNG plant would have to be built, and we are looking at a pipeline to Darwin."

Woodside chief executive officer Meg O'Neill elaborated further about the Perth-based firm's change of mind over the prospect of piping the gas to East Timor. "A number of things have changed in LNG design since we last looked at development concepts," she said. "There has been a lot of advances in modular LNG construction methods and that is a possibility for building a liquefaction plant in East Timor."

"We also recognise that East Timor see Sunrise as an important project for their economy, and they also have a lot of international friends that would like to see a downstream LNG plant built on East Timor and so that has caused us to reconsider Sunrise's development concepts," O'Neill added.

The Australian federal government in October [appointed special representative Steve Bracks](#) to oversee the development of the Sunrise gas project. The appointment marks an elevation in the status of the Sunrise project and follows the election of the ruling Labor government in Canberra in May.

Dili has a controlling 56.56pc interest in Sunrise after buying the stakes of Shell and ConocoPhillips for \$650mn in 2018. Woodside has a 33.44pc stake, while the remainder is owned by Japanese utility Osaka Gas. Woodside is the project operator. Canberra is concerned that if Sunrise is not developed to the way Dili prefers it may seek assistance from China for the development of the 5.3 trillion ft<sup>3</sup> (150bn m<sup>3</sup>) gas field project.

East Timor and Australia worked together in the development of the Bayu-Undan gas field in the Timor Sea, which provides feedstock for the 3.7mn t/yr Darwin LNG plant. But Bayu-Undan is expected to halt output by the end of the year, according to its operator Australian independent Santos. This will consequently halt contributions from East Timor's largest revenue earner, with the country having built up \$18bn in savings in its sovereign wealth fund mainly from taxes and royalties from Bayu-Undan.

The second liquefaction plant located at Darwin is the 8.9mn t/yr Ichthys LNG venture operated by Japanese upstream firm Inpex.

## Woodside will re open the gas-to-Timor studies

**WOODSIDE Energy Group has made an unexpected about turn and now considers sending gas from its Greater Sunrise field to a greenfield LNG development on the south coast of Timor Leste a serious option.**



By [Helen Clark](#), Editor, 01 December 2022

Woodside holds 34.5%, national oil company Timor Gap 56.5% and Osaka Gas the remainder. Dili bought Shell and ConocoPhillips stakes in 2018 and 2019, using the sovereign wealth fund it amassed from its gas earnings at the Bayu-Undan field which is now close to the end of its life.

The twin issues have been the cost of a newbuild in a remote part of a developing nation, and geological challenges posed by the Timor Trench, whose seismicity could potentially rupture a pipeline.

“Over the years we’ve looked at Sunrise many, many different times. We have done technical pipeline studies to understand the feasibility of going across the trench,” Woodside CEO Meg O’Neill said at the company’s investor briefing day in relation to an analyst question.

“Those studies have always indicated that with the right will, the right engineering, the right execution plan, that you can execute that scope of work,” she said

“The challenge has always been the economics.”

Outwardly it is a remarkable change of opinion, but this year Woodside put Sunrise back on the table after writing its value down to zero during the 2020 oil price doldrums.

The company restarted PSC negotiations with Australia and Timor-Leste and O’Neill has been optimistic on these even as she noted the challenges of a two-nation agreement given Australia’s royalty regime is very different.

She noted this in May at the APPEA conference, a month after Nobel Laureate Jose Ramos-Horta was returned as president for a second, though non-consecutive term.

Ramos-Horta, in partnership with former president Xanana Gusmao, has been steadfast and very vocal in his belief the gas field would be developed and on Timor-Leste soil for decades.

That is a non-negotiable.

The prior government had put Sunrise on the backburner, questioned the huge spend on acquiring ConocoPhillips' and Shell's stakes organised by an out of office but influential Gusmao, and arbitrarily got rid of its most senior and experienced petroleum administrators at state oil company Timor Gap and its petroleum and minerals authority.

These were the men with the best understanding of the maritime boundary with Australia, who were part of the lengthy negotiations.

Willingness by Woodside to re-engage in PSC negotiations with a government that sees local development as a nation building venture could essentially have been tacit acceptance of an eventual greenfield development.

O'Neill confirmed this today.

"The cost of LNG processing capabilities is that you have a longer pipeline (to Darwin) but you just have to build a train and not all the associated green field equipment, which would have to be built in Timor," she said.

"That said, there's been a lot of work over the past several years and things that have been done in the Gulf of Mexico, for example. Look at modular construction."

Modular LNG facilities are typically quicker and cheaper to build and can be scaled up more quickly. She noted Commonwealth LNG, which her company signed an offtake agreement with for portfolio gas this year, is developing its plant this way.

"The Timorese are very keen to have that development in the country and we recognise its an important national project and we feel it's important to re-open the concept evaluation to understand the technical challenges," she said.

"The Timorese have a lot of international friends and the international fiends may be willing to help with the infrastructure that doesn;t exist today."

Her predecessor Peter Coleman had previously said he'd see a case for gas-to-Timor but only if Woodside had no equity stake in the plant but rather came on as third party downstream operator, a model he was familiar with during his time in Indonesia with ExxonMobil.

## Woodside open to considering LNG plant in Timor for Sunrise gas

*By Reuters, Dec 01, 2022*

MELBOURNE — Woodside Energy Group said for the first time on Thursday it was willing to consider sending gas from the huge Greater Sunrise field to East Timor, instead of its long-preferred option of Darwin in Australia.

Woodside, operator of Sunrise in the waters between East Timor and northwest Australia, has argued it would be cheaper to develop the resource by sending the gas to Darwin, even though it is farther away, as it has port and liquefied natural gas (LNG) infrastructure.

But the Timor government has been pressing for an LNG plant to be built on its shores to ramp up development of its small economy, which is about to lose its main source of revenue, the depleted Bayu Undan gas field.

Woodside Chief Executive Meg O'Neill said on Thursday new technology is available, including modular LNG, that did not exist when developing a project in Timor was previously evaluated.

“So the Timorese are very keen to have that development in country. And we recognize it’s an important national project for them,” O’Neill told analysts at a briefing. “So we feel like it’s appropriate to reopen the concept evaluation, understand the technologies, understand the technical challenges.”

She did not discuss cost estimates but said East Timor could seek outside funding to help pay for the infrastructure it would need to build from scratch.

“Timor Leste has a lot of international friends, and international friends may want to help with some of that infrastructure that doesn’t exist today in Timor that would exist if we went to Darwin,” O’Neill said.

East Timor President Jose Ramos-Horta said in September Indonesia, South Korea, Japan and China could be interested in investing in the gas field, discovered in 1974, which holds 5.3 trillion cubic feet of gas and 226 million barrels of condensate.

*(Reporting by Sonali Paul; Editing by William Mallard)*

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*English translation on following page*

## **Última Hora - Woodside admite possibilidade de gasoduto do Greater Sunrise para Timor-Leste**

Díli, 01 dez 2022 (Lusa) – A petrolífera australiana Woodside admitiu hoje que está a reconsiderar a possibilidade de um gasoduto dos campos do Greater Sunrise para a costa sul de Timor-Leste, no que representa uma viragem na posição da empresa.

“Ao longo dos anos, olhámos de várias formas diferentes para o Greater Sunrise. Fizemos estudos técnicos para compreender a viabilidade de atravessar o fosso [no mar de Timor]”, disse presidente executiva da empresa, Meg O'Neill, num encontro com investidores, noticiou o portal *Energy Voice*.

“Esses estudos sempre indicaram que, com a vontade certa, a engenharia certa, o plano de execução certo, se poderia executar esse trabalho. O desafio eram as questões económicas”, afirmou.

O'Neill disse aos investidores que as instalações modulares de processamento de GNL [Gás Natural Liquefeito] são agora mais baratas e mais rápidas de construir do que no passado, podendo ser usadas para o potencial desenvolvimento do projeto em Timor-Leste.

A responsável da empresa referiu que a Woodside voltou a colocar o desenvolvimento dos campos de Greater Sunrise e de Browse na agenda, citando a necessidade de fornecimento de gás natural a longo prazo, especialmente na Ásia.

Até aqui, a empresa tem insistido que o processamento do gás seja feito em Darwin recorrendo a um gasoduto que já existe no mar de Timor e que foi 'alimentado' pelo poço Bayu Undan, cuja produção está agora prestes a terminar.

A empresa, vincou O'Neill, “reconhece agora a importância de um desenvolvimento 'onshore' em Timor-Leste para o desenvolvimento do país”, pelo que a Woodside reabriu o diálogo sobre as potenciais opções de desenvolvimento do Greater Sunrise.

A petrolífera timorense Timor GAP detém 56,56% do capital do consórcio do Greater Sunrise, na qual participação ainda a Woodside (a operadora) com 33,44% e a Osaka Gás com 10%.

O acordo de fronteira marítima permanente entre Timor-Leste e a Austrália determina que o Greater Sunrise, um recurso partilhado, localizado a 150 quilómetros de Timor-Leste e a 450 quilómetros de Darwin, terá que ser dividido, com 70% das receitas para Timor-Leste no caso de um gasoduto para o país, ou 80% se o processamento for em Darwin.

ASP // EJ  
Lusa/Fim



*[unofficial translation by La'o Hamutuk]*

## **Breaking news: Woodside admits the possibility of a pipeline from Greater Sunrise to Timor-Leste**

Dili, 01 Dec 2022 (Lusa) – The Australian oil company Woodside admitted today that it is reconsidering the possibility of a gas pipeline from the Greater Sunrise fields to the south coast of Timor-Leste, in what represents a turning point in the company's position.

"Over the years we've looked at Sunrise many, many different times. We have done technical pipeline studies to understand the feasibility of going across the trench [in the Timor Sea]," said company CEO Meg O'Neill at a meeting with investors, the *Energy Voice* portal reported.

"Those studies have always indicated that with the right will, the right engineering, the right execution plan, that you can execute that scope of work. The challenge has always been the economics," she said.

O'Neill told investors that modular LNG [Liquefied Natural Gas] processing facilities are now cheaper and quicker to build than in the past, and could be used for potential project development in Timor-Leste.

The company official noted that Woodside has put the development of the Greater Sunrise and Browse fields back on its agenda, citing the need for long-term natural gas supply, particularly in Asia.

Until now, the company has insisted that gas be processed in Darwin using an existing pipeline in the Timor Sea that was 'fed' by the Bayu Undan well, whose production is now coming to an end.

The company, O'Neill stressed, "now recognizes the importance of onshore development in Timor-Leste for the development of the country," and Woodside has reopened dialogue about potential development options for Greater Sunrise.

The Timorese oil company Timor GAP holds 56.56% of the Greater Sunrise consortium, which also includes Woodside (the operator) with 33.44% and Osaka Gas with 10%.

The permanent maritime boundary agreement between Timor-Leste and Australia states that Greater Sunrise, a shared resource located 150 kilometers from Timor-Leste and 450 kilometers from Darwin, will have to be divided, with 70% of the revenues going to Timor-Leste in the case of a pipeline to the country, or 80% if processing is in Darwin.

ASP // EJ  
Lusa/FIm

# Woodside reopens talks on potential development concepts for Sunrise in Timor-Leste's onshore

DILI, 02 december 2022 (TATOLI) – Woodside Energy has now reopened to discuss the concept for the development of the Greater Sunrise project in Timor-Leste's onshore.

The chief executive of Australia's Woodside Energy, Meg O'Neill said her company is now open to revisiting a greenfield LNG export development on the South Coast of Timor-Leste known as the Tasi-Mane Project.

O'Neill made the comments at an investor briefing on thursday (01/12), which many saw as a surprising turnaround decision because it totally contradicts Woodside's previous position to develop the sunrise project in Darwin.

In a meeting on thursday (01/12) with the Minister of Petroleum and Minerals, Vítor da Conceição Soares, in Díli, Australia's Special Representative for the Greater Sunrise gas project, Steve Bracks, who was appointed in october, said that concerning where the Sunrise oil and gas to be processed is up to the Sunrise joint venture company (Woodside, Osaka Gas, and Timor Gap).

"Where the gas is processed really matters for the joint venture to determine and Australia does not have a position on this at all. That's a matter that will be determined by the joint venture," he said.

During the meeting, Minister Soares conveyed Timor-Leste's Greater Sunrise Strategic Plan to Bracks.

"We brief Bracks on Timor-Leste's position and our strategic plan for the development of Greater Sunrise in onshore Timor-Leste. Timor-Leste needs Australia's support to advance the development of this project," Soares said.

In august 2022, Minister Soares told the Australian Financial Review in an exclusive interview that Woodside and the Australian Government should be "fair" by allowing the processing of Sunrise's liquefied natural gas to be undertaken on the south coast of Timor-Leste, rather than Woodside's preferred option of Darwin.

It looks like Timor-Leste's dream of piping oil and gas from the Greater Sunrise fields to be developed in onshore Timor-Leste is close to becoming a reality.

After the meeting with Bracks, the President of the National Petroleum and Minerals Authority (ANPM), Florentino Soares Ferreira said that the document of the Production Sharing Contract (PSC) and the Petroleum Mining Code (PMC) has already been delivered to the Sunrise Joint Venture.

"Meanwhile, the Australian government has agreed to use Timor-Leste's tax regime," he said.

Ferreira reiterated that the development of the Greater Sunrise project in Timor-Leste's onshore is commercially viable, adding that all efforts that had been made would lead to the first production of natural gas from the fields before 2030.

The Sunrise project is operated by Joint Venture between TIMOR GAP (56.56%), Woodside Petroleum (33.44%), and Osaka Gas (10%).

The Sunrise field is estimated to contain 5.13 trillion cubic feet of recoverable natural gas and 226 million barrels of condensate (oil), which could give Timor-Leste US\$50 billion in revenues.

# Woodside softens its stance on Sunrise and has multiple routes to growth

## Australian operator highlights oil, gas and LNG opportunities

*Russell Searancke, Upstream Online, 5 December 2022*

Australian energy giant Woodside has softened its stance on the Sunrise offshore gas field being developed into a liquefied natural gas facility in Timor-Leste, and outlined a number of other growth projects it will be pursuing.

At Sunrise, Woodside has long maintained that it was not economically viable to build an offshore pipeline across the Timor Trench and a new onshore LNG facility in Timor-Leste.

Woodside's position has been that it would be an upstream investor in Sunrise but not a midstream or LNG investor.

At the company's Investor Day on 1 December, chief executive Meg O'Neill said it was now "appropriate to reopen the concept evaluation" on the Timor-Leste option.

"The Timorese are very keen to have that development in country and we recognise it is an important national project for them."

She said the company's pipeline feasibility studies of going across the trench had always shown it was technically possible, but "the challenge has always been the economics".

As far as the onshore LNG facility in Timor-Leste was concerned, she pointed to modular construction as an example of a different approach.

"The Commonwealth LNG project that we've signed offtake agreements with is one that's using a modular construction and very different designs."

O'Neill also spoke of the advantages of piping Sunrise gas to Darwin, which has two existing LNG facilities with nearly all the necessary infrastructure already in place.

She implied that Timor-Leste could partner up with other investors to achieve its goal of having an LNG facility.

"Timor-Leste has a lot of international friends. International friends may want to help with some of that infrastructure that doesn't exist today in Timor that would exist if we went to Darwin."

Despite the mixed messages, Sunrise is high on Woodside's list of growth projects given its close proximity to Asian LNG customers.

"The current focus is on agreeing the terms of the production sharing contract between the two countries and the joint venture, and selecting the development concept," Woodside added.

Sunrise has a gross contingent resource of 5.3 trillion cubic feet of dry gas and 226 million barrels of condensate.

The project co-owners are the operator Woodside on 33.44%, Timor-Leste national oil company Timor GAP on 56.56% and Osaka Gas on 10%.

## Other growth prospects

At the Investor Day, Woodside outlined several other major oil, gas, LNG and new energy opportunities that are being taken through the development gates at the same time as it executes the Scarborough/Pluto 2 and Sangomar projects.

The large Trion oil deep-water project offshore Mexico is first off the conveyor belt. Woodside is targeting a final investment decision in 2023, and said it is currently focused on securing major contractors in the first half next year and a post-final investment decision regulatory requirement.

Trion was "a significant discovered oil resource that has a fast pay-back period. We have built a strong relationship with our joint venture partner Pemex", said the Australian operator, adding that the Trion subsea infrastructure was designed to allow tie-backs and in-field opportunities and also included a gas export link to existing infrastructure in Mexico.

In the US Gulf of Mexico and Australia, growth would come from future subsea tie-back opportunities to existing production fields.

LNG growth post Scarborough would come from Sunrise and the giant Browse project, which will include a carbon capture and storage solution from the outset.

"Most of the previous iterations of Browse had developments where we would be venting the (carbon dioxide) that comes out of the reservoir. We recognise in today's world to confront climate change and take action; we can't do that," said O'Neill.

"Our base case will now incorporate CCS from the beginning."

Another growth project is Calypso, a series of discoveries in the deep water of Trinidad & Tobago.

To date, the company has discovered more than 3.2 Tcf of gross best estimate contingent resource "in a country with a great market outlook", said Woodside's executive vice president for exploration and development, Andy Drummond.

"First, there are LNG trains with ullage. Second, there is a petrochemicals industry that relies on gas as a feedstock and third, there is a domestic gas market."

The field sits about 250 kilometres from the south-east coastline in Trinidad & Tobago.

## New Energy

Another major project for Woodside is the H2OK hydrogen scheme in Oklahoma, US, where the company said it secured electrolyzers in October and expects to finalise FEED this month in preparation for being ready for a final investment decision in 2023.

The proposed initial phase of H2OK is targeting up to 60 tonnes per day of liquid hydrogen, a large portion of which is wind-powered. It is ideally located for the US truck market

Other hydrogen opportunities include H2Perth, H2TAS, and Southern Green Hydrogen in New Zealand.



# INVESTOR BRIEFING DAY 2022

1 December 2022

[www.woodside.com](http://www.woodside.com)  
[investor@woodside.com](mailto:investor@woodside.com)



## Sunrise – development

### Concept and resource

- 5.3 Tcf (dry gas) and 226 MMbbl condensate (gross contingent resource, 2C)<sup>1</sup>
- Development concept screening in progress

### Strategic fit

- Large resource with multiple development options
- LNG opportunity supported by expected future gas demand

### Focus areas

- Commercial and marketing alignment
- Select appropriate development concept



Woodside licences

1. 1.8 Tcf and 75.6 MMbbl (net contingent resource Woodside share, 2C) including 0.1 Tcf of fuel. Gross gas 2C estimate includes 0.2 Tcf of fuel.