



Association of International
Energy Negotiators



SundaGas Banda
Unipessoal, Lda

BARON OIL Plc



AIEN SEMINAR

Legal and Contractual Aspects of Natural Gas Projects

Anatomy of a Generic Gas Project Offshore Timor-Leste

Before Sunrise, Jaco Island

Andy Butler

Dili, 19 April 2024

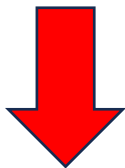
Why have a PSC? What Ingredients for a Successful PSC Project

State Gas Resources

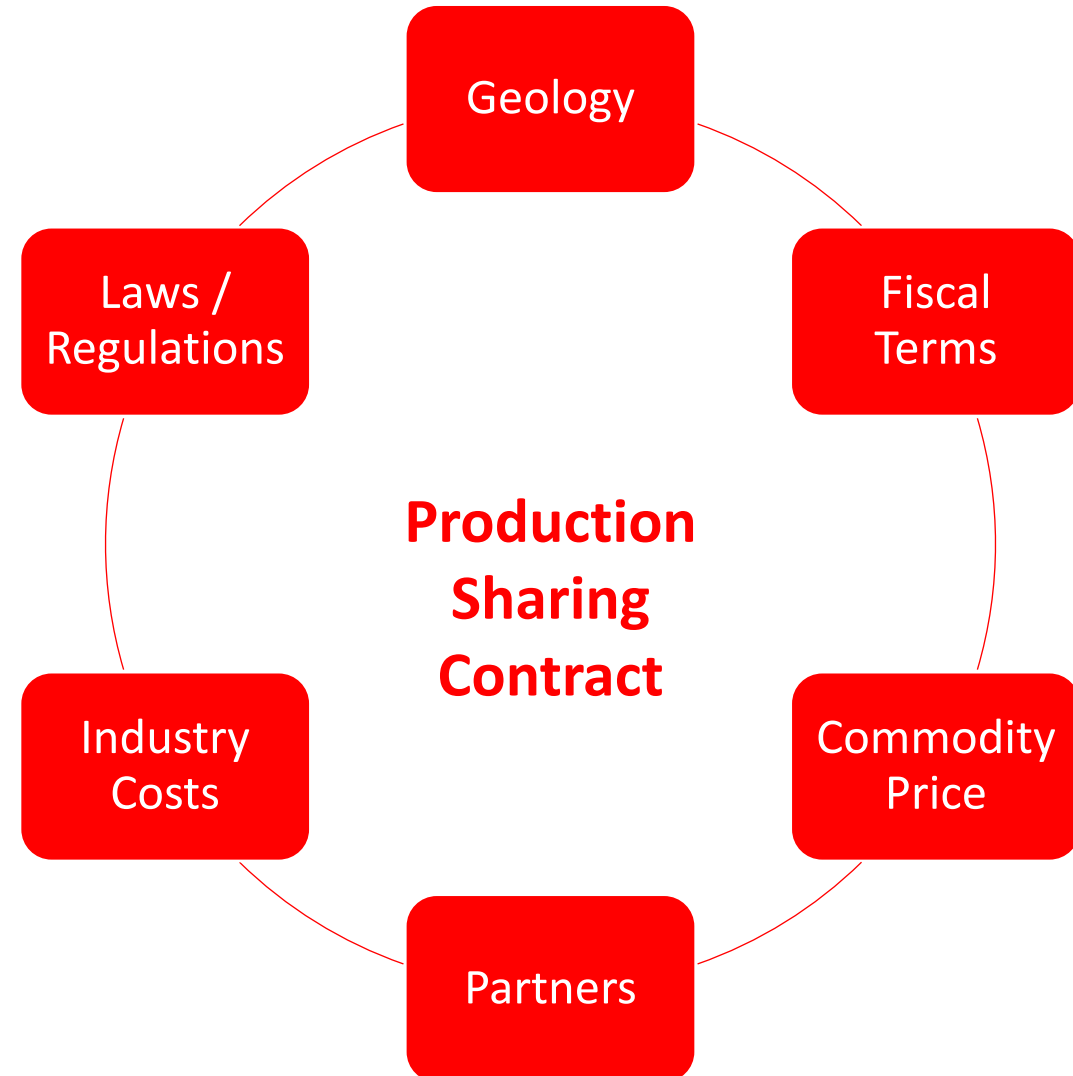
1. Is there a gas resource in this area?
2. How much gas is there?
3. Can it be commercially developed?



Engage Contractor to find out
(i.e. contractor takes risk)



Production Sharing Contract



PSC Governs All Stages of Resource Exploration & Production

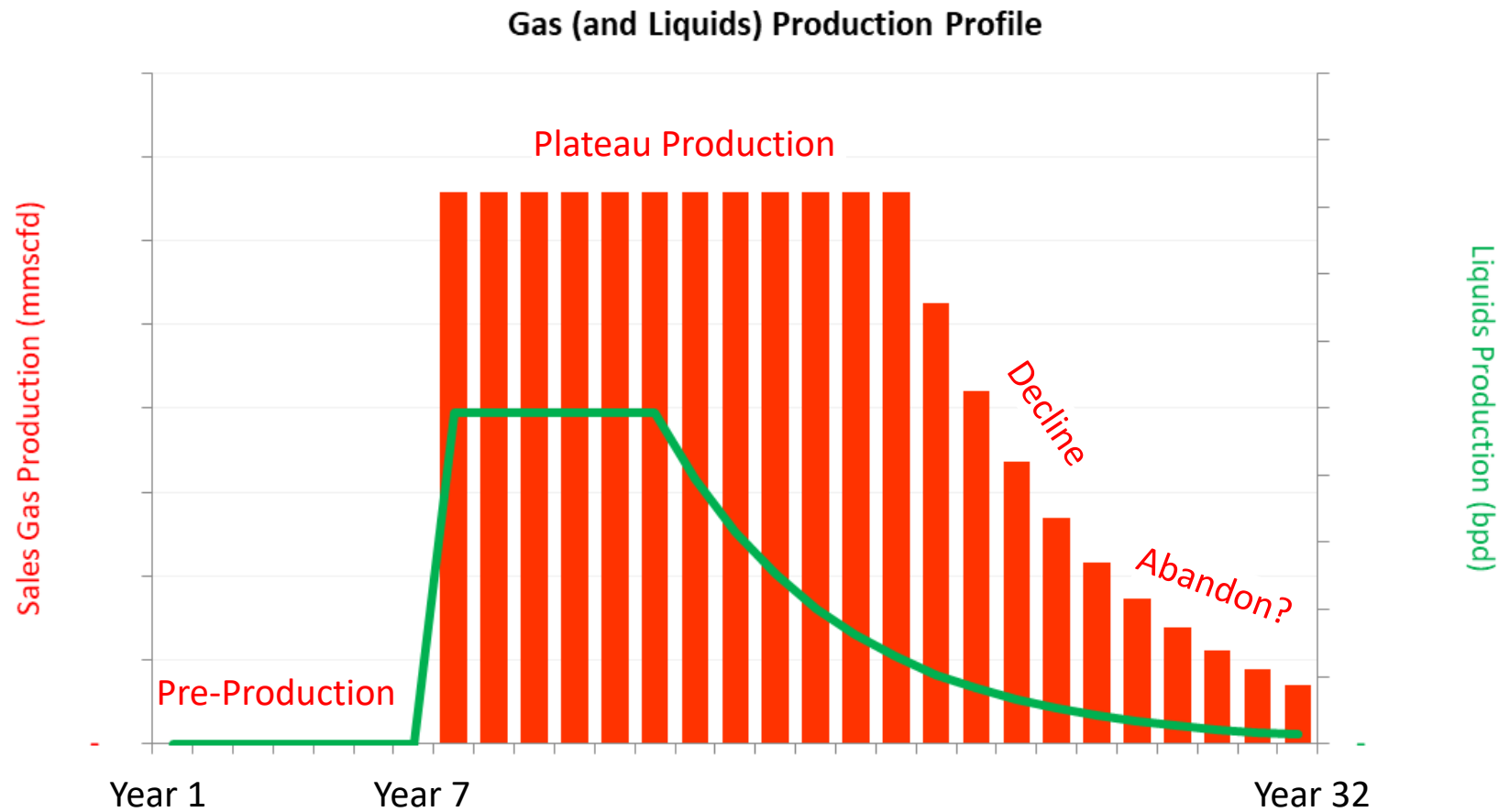


Petroleum Contract

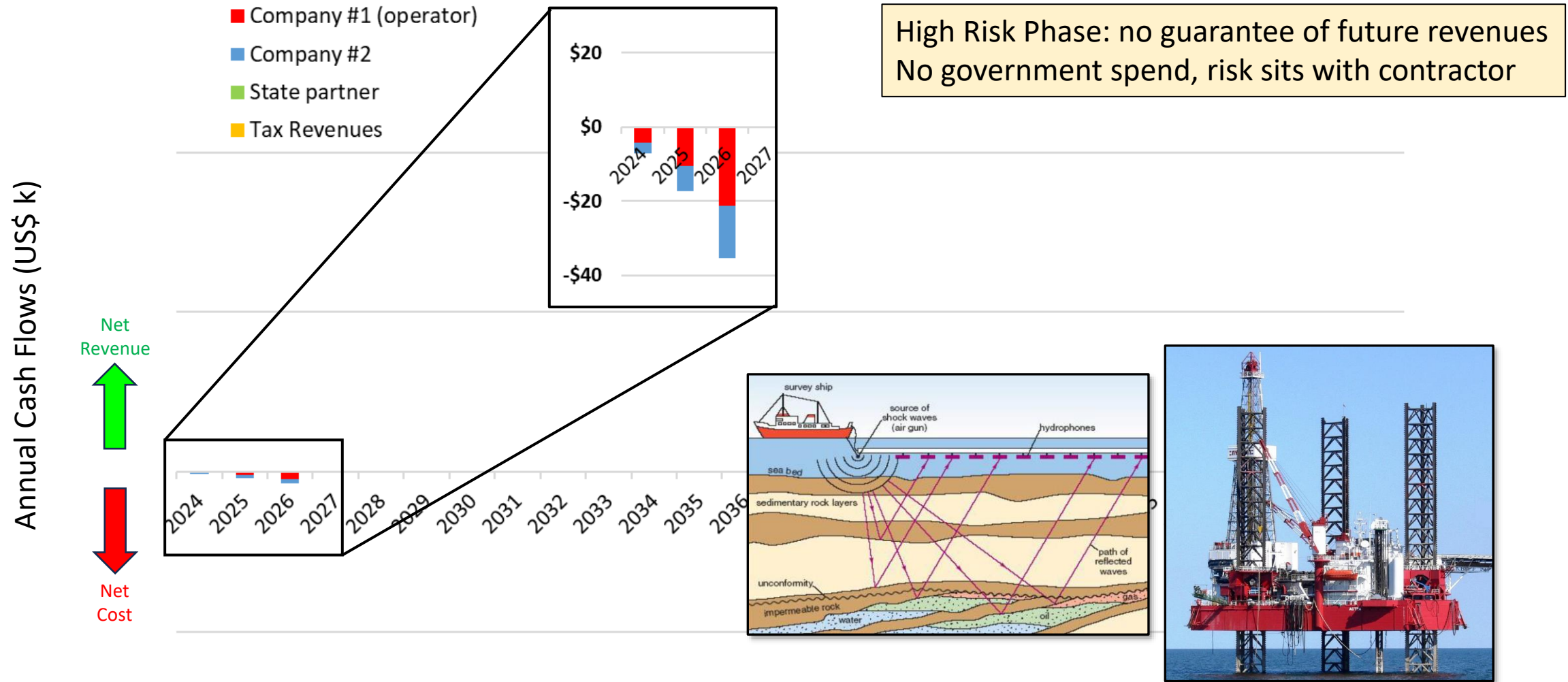
(Right to explore, appraise, develop and produce petroleum)

MIRANDA

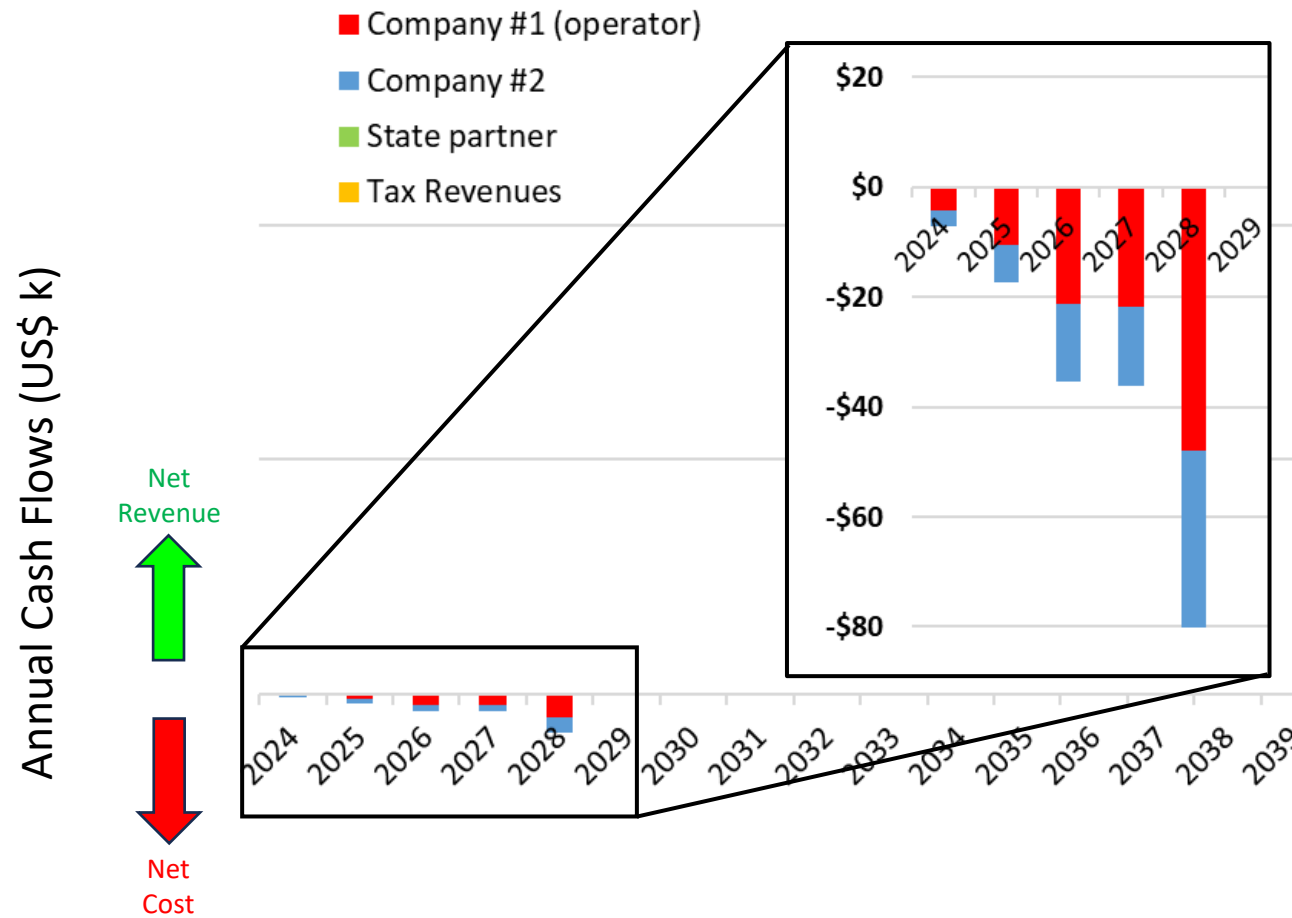
Typical Production Profile for Gas (and Liquids) Project



Typical Gas Project Cash Flow: Early Exploration



Typical Gas Project Cash Flow: Appraisal / FEED



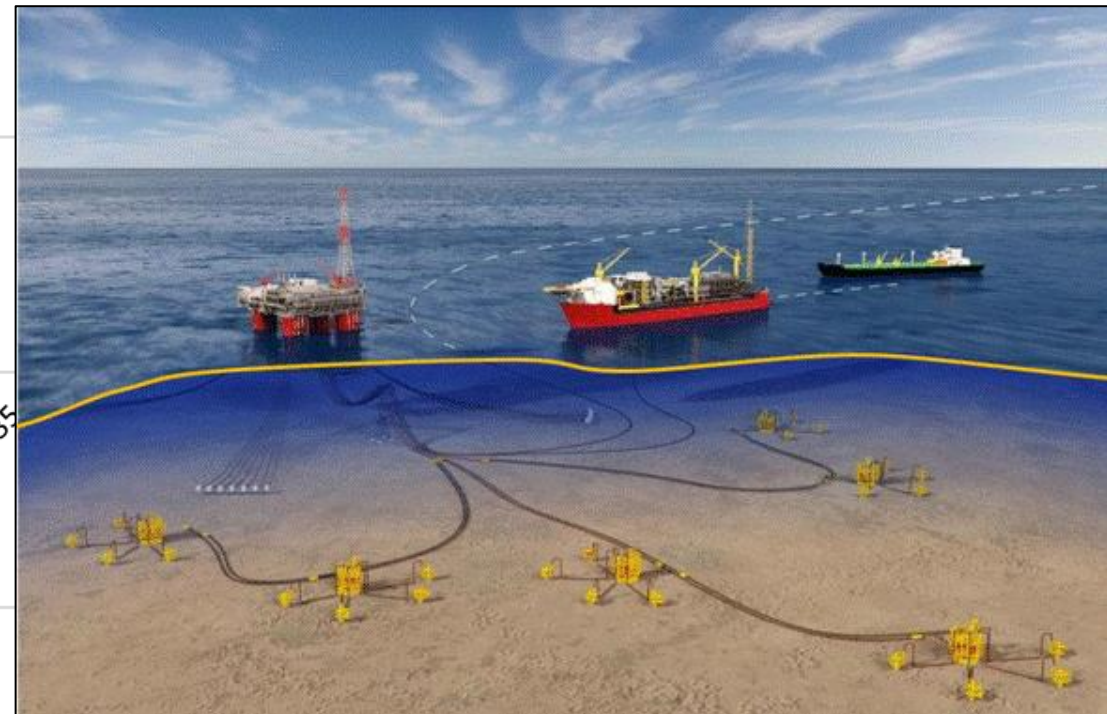
Moderate Risk Phase: possible future revenues
Further drilling for further resource investigation
No government spend, risk sits with contractor



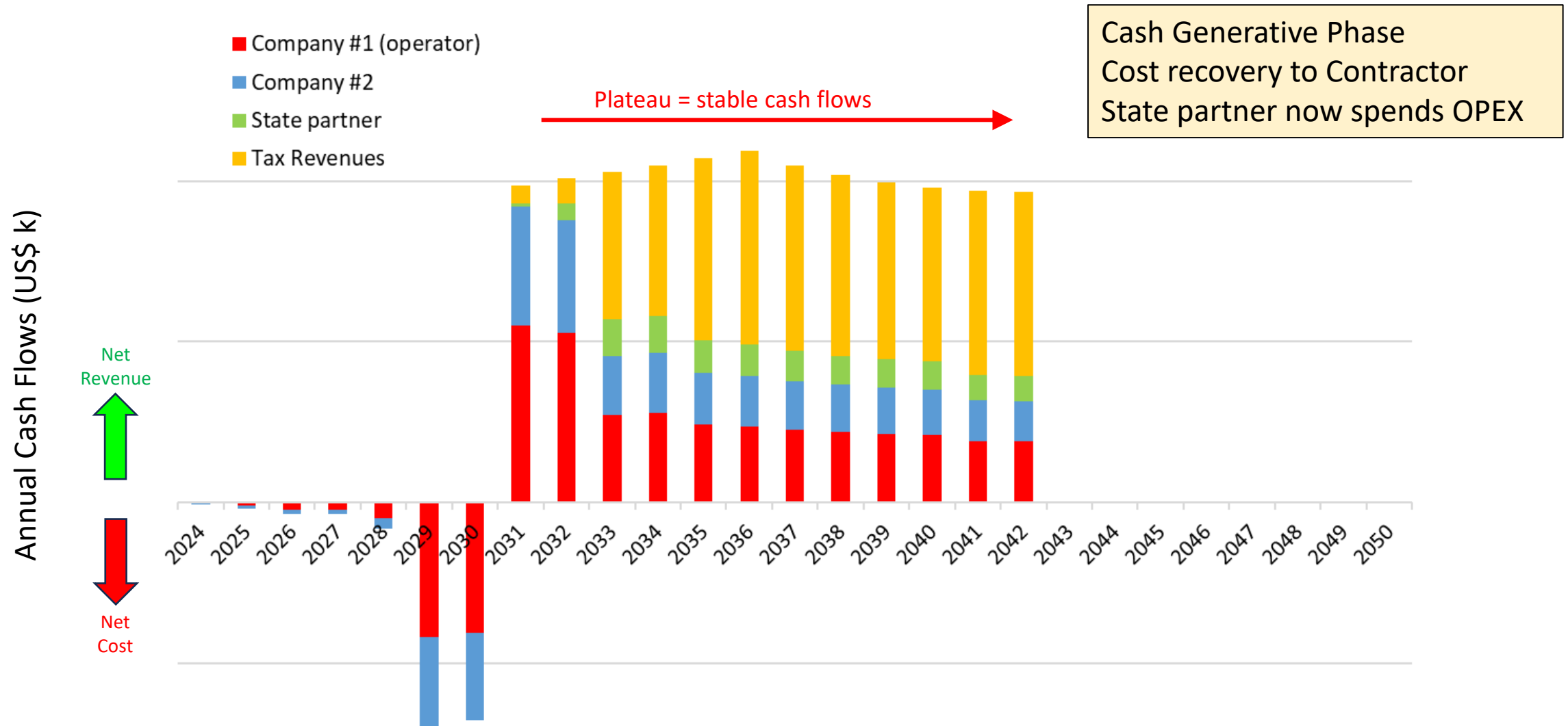
Typical Gas Project Cash Flow: Development

- Company #1 (operator)
- Company #2
- State partner
- Tax Revenues

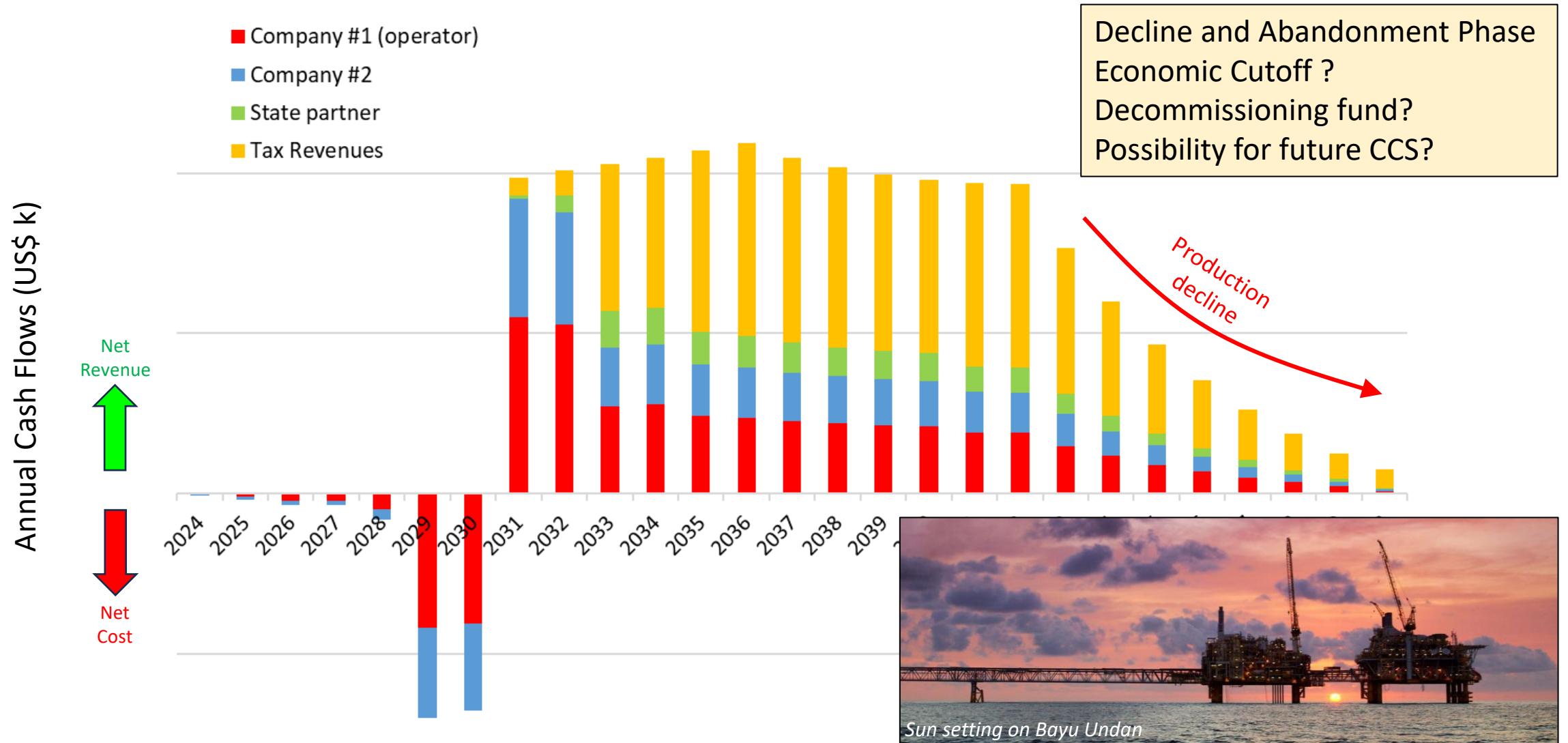
Low Risk / High-Cost Phase: expected future revenues
Construction and installation of offshore facilities
No government spend, risk sits with contractor



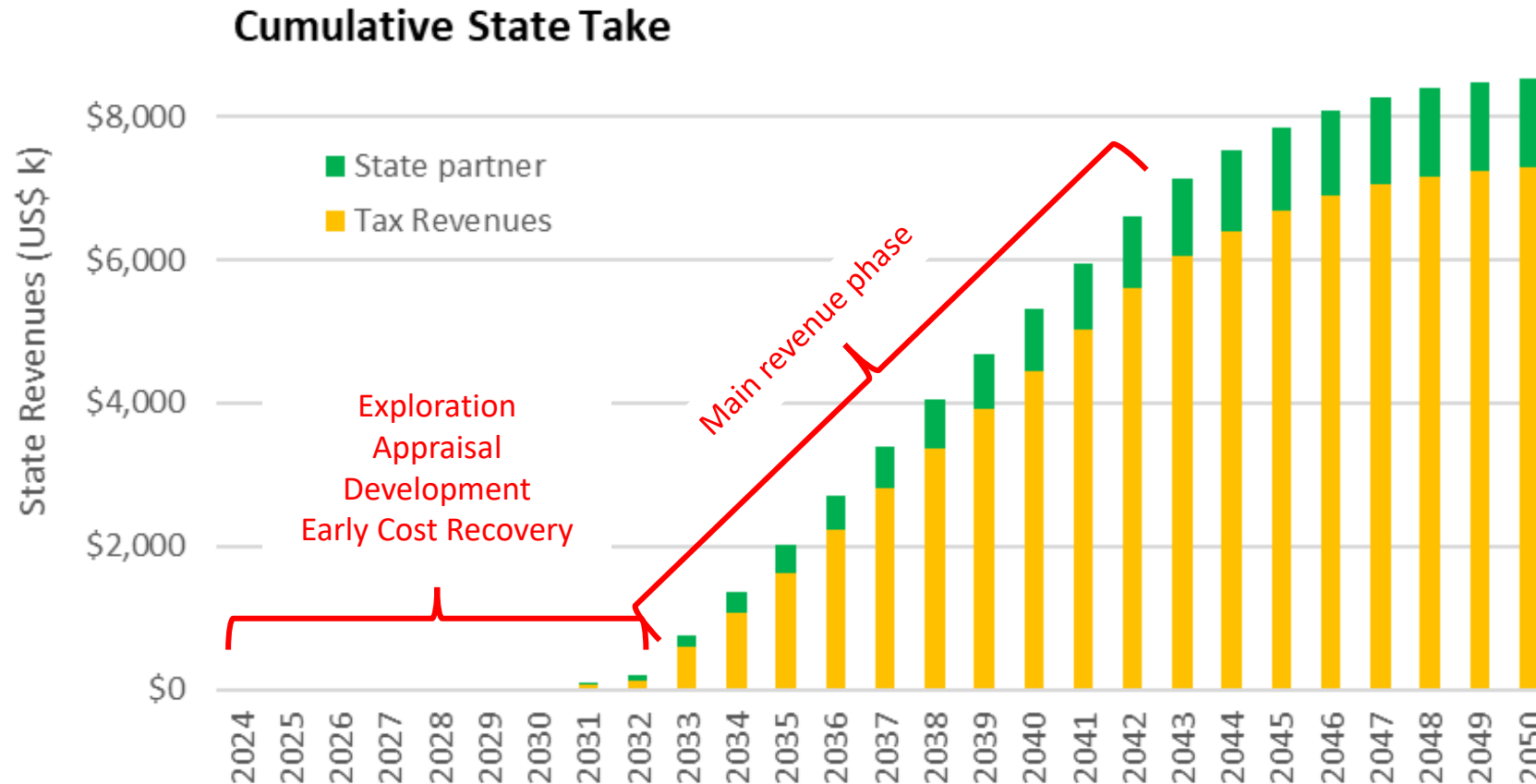
Typical Gas Project Cash Flow: Plateau Production



Typical Gas Project Cash Flow: Late Life and Decommissioning

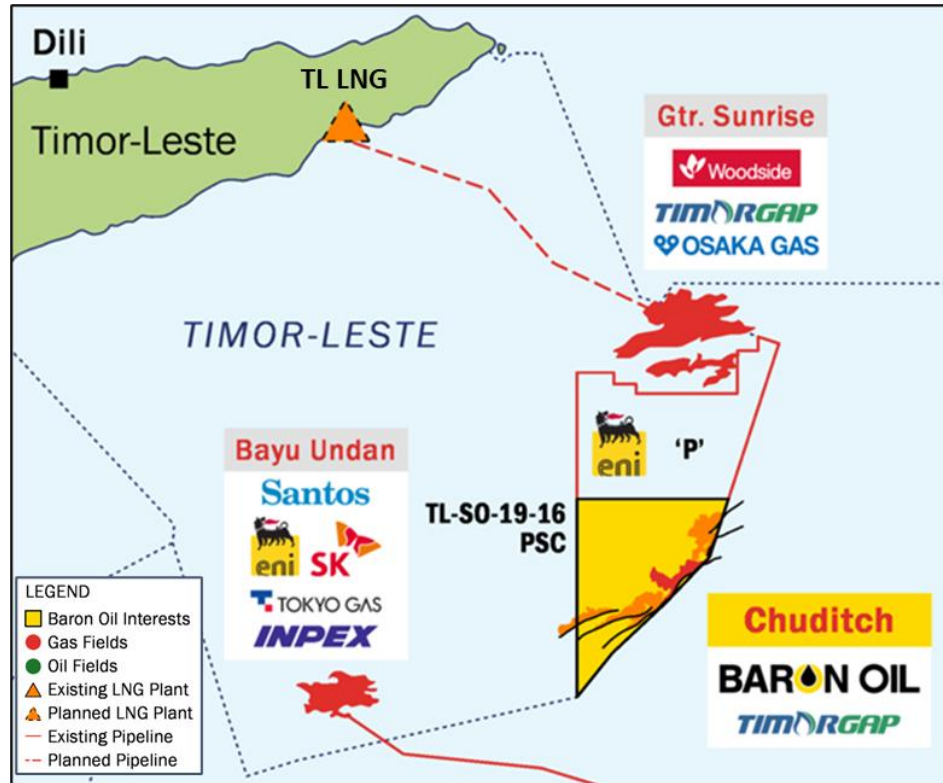


Resources Can Deliver Significant State Revenues (Eventually)

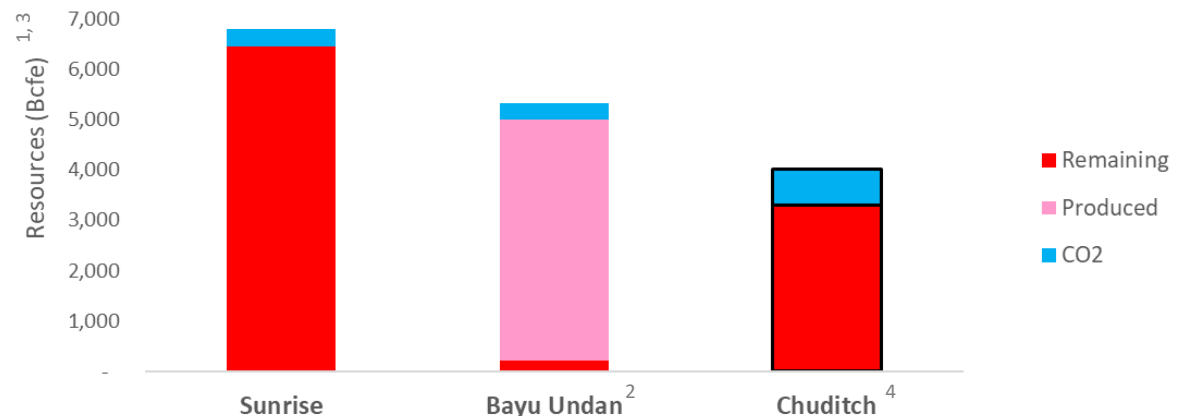


Timor-Leste Offshore : All Stages of the Gas Cycle

Gas fields, key players and infrastructure



- **Bayu Undan (Santos):**
 - Late in field life; undergoing FEED for CCS conversion
- **Greater Sunrise (Woodside):**
 - Ongoing negotiations between JV / governments
- **Chuditch (Baron/SundaGas):**
 - Now Timor-Leste 2nd largest field, appraisal planned
- **Exploration:**
 - ENI signed PSC for Block P, plan 3D and drilling



¹ Approximations based on latest publicly available information

³ Includes gas equivalents of condensate liquids

² Estimated remaining

⁴ Discovery + prospects based on 2D mapping



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Chuditch: History of a Timorese Gas Field (in the context of the Maritime Boundary)

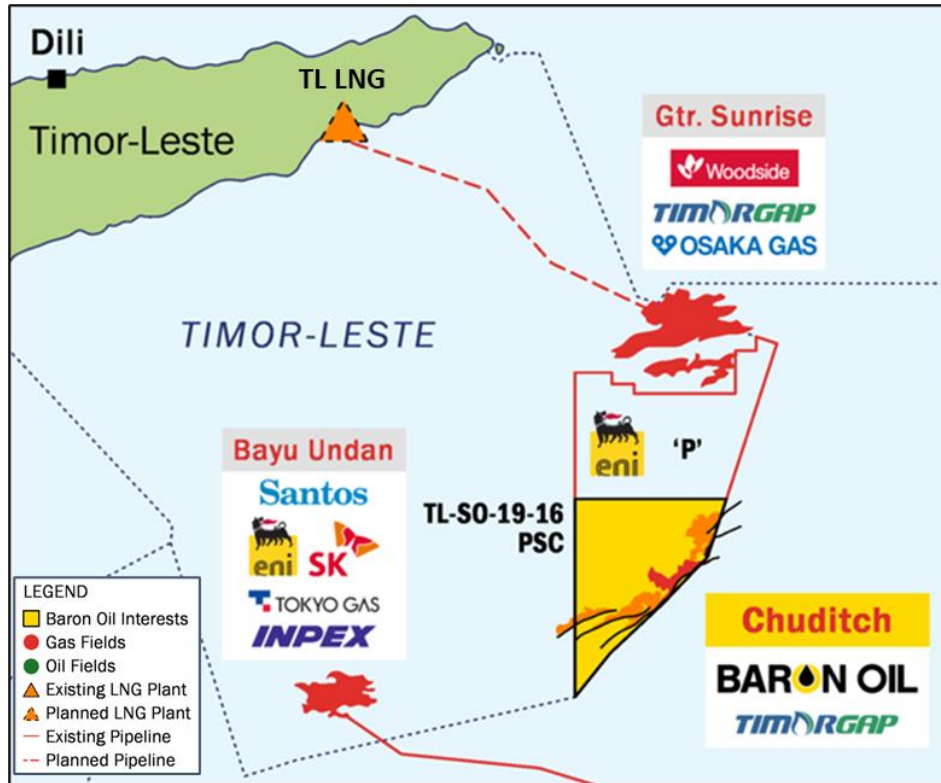
Before Sunrise, Jaco Island

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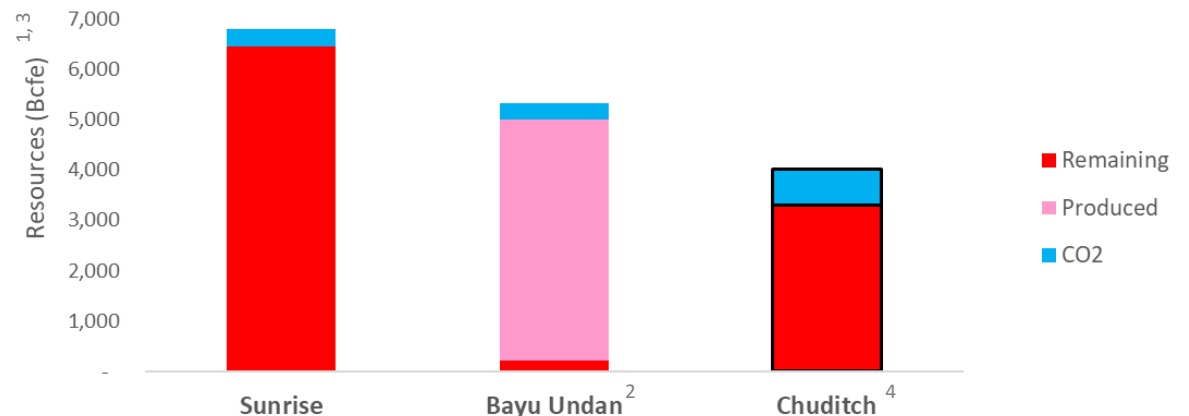
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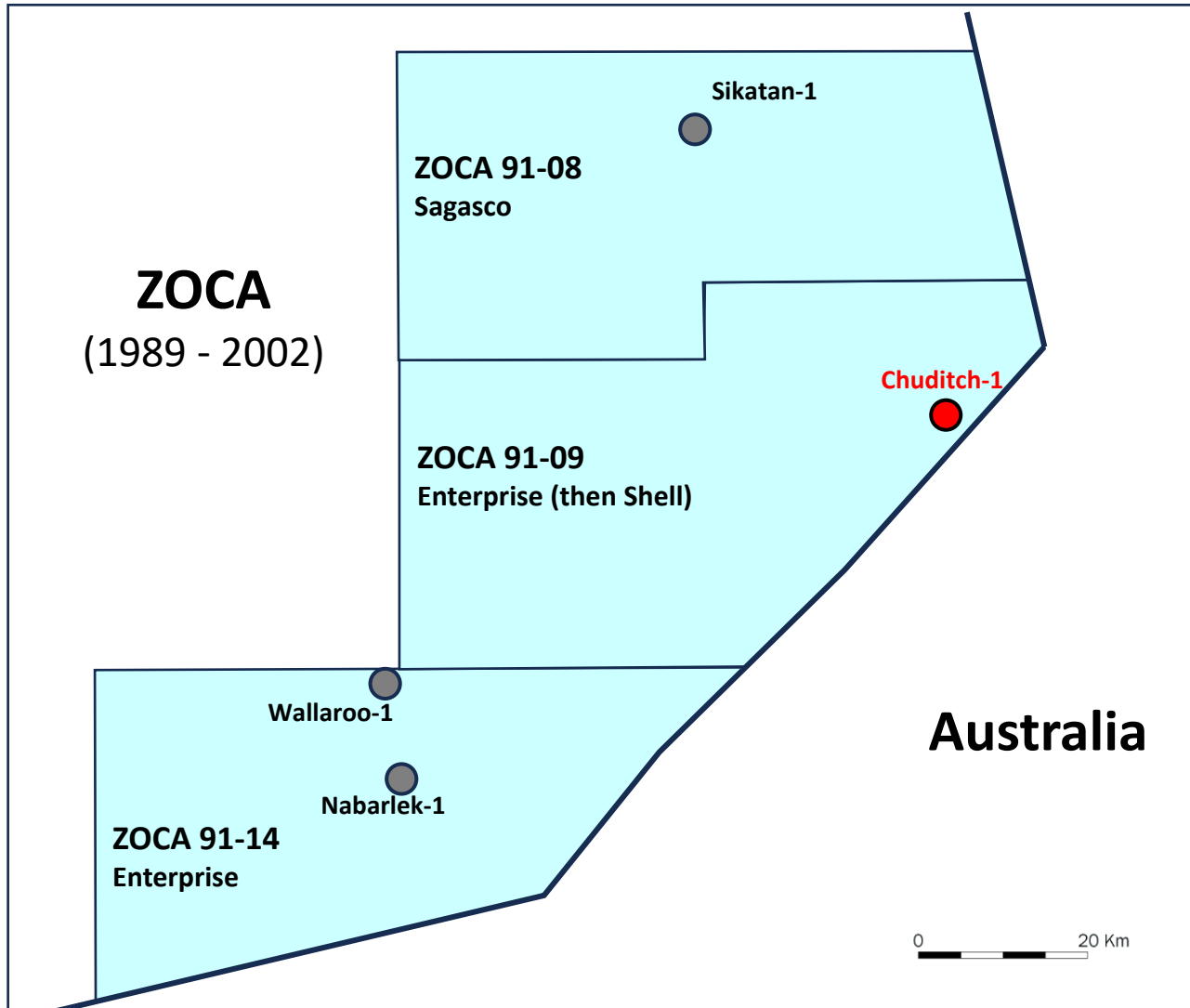
¹ Approximations based on latest publicly available information

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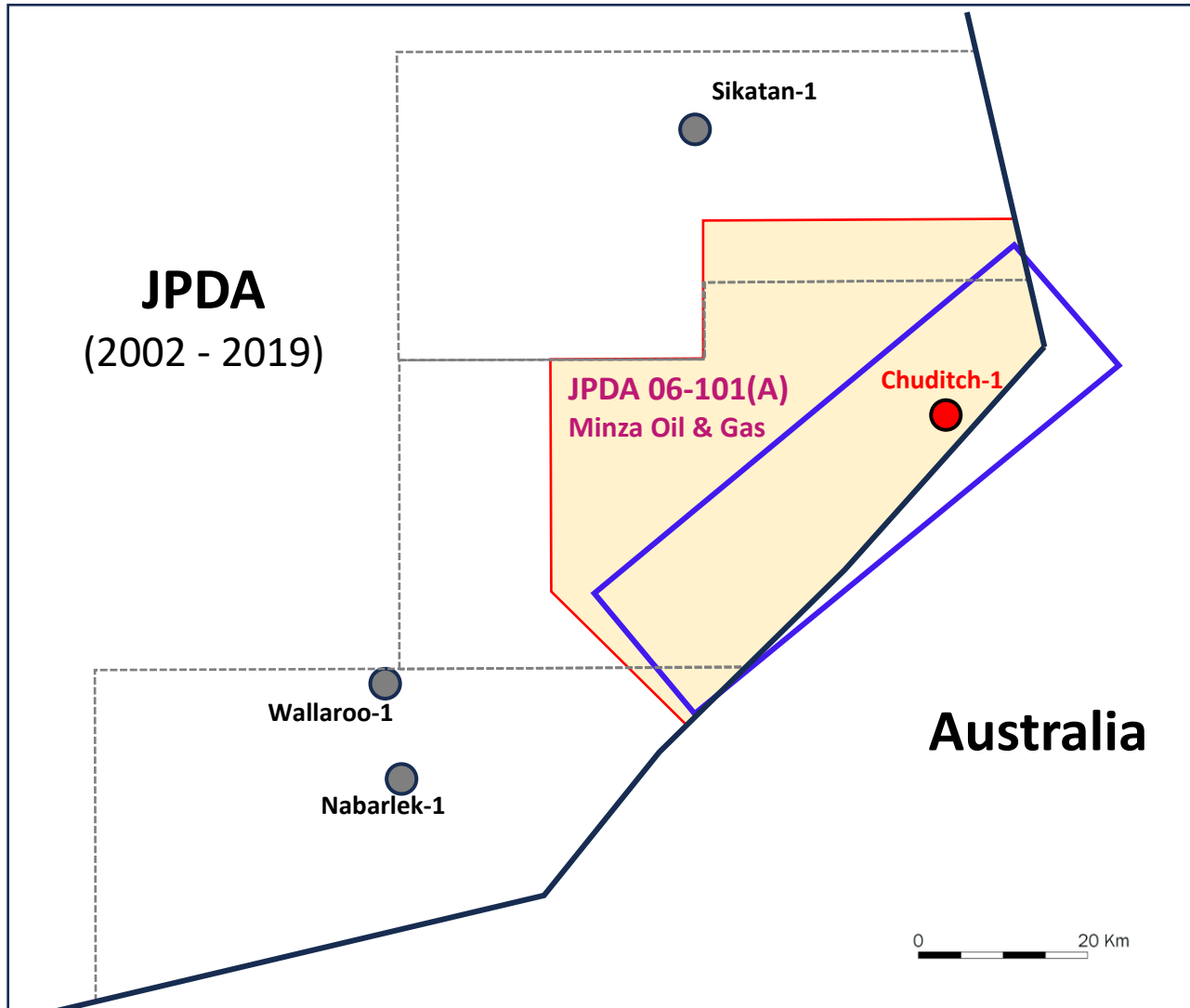
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Chuditch Area: Earlier Licence History



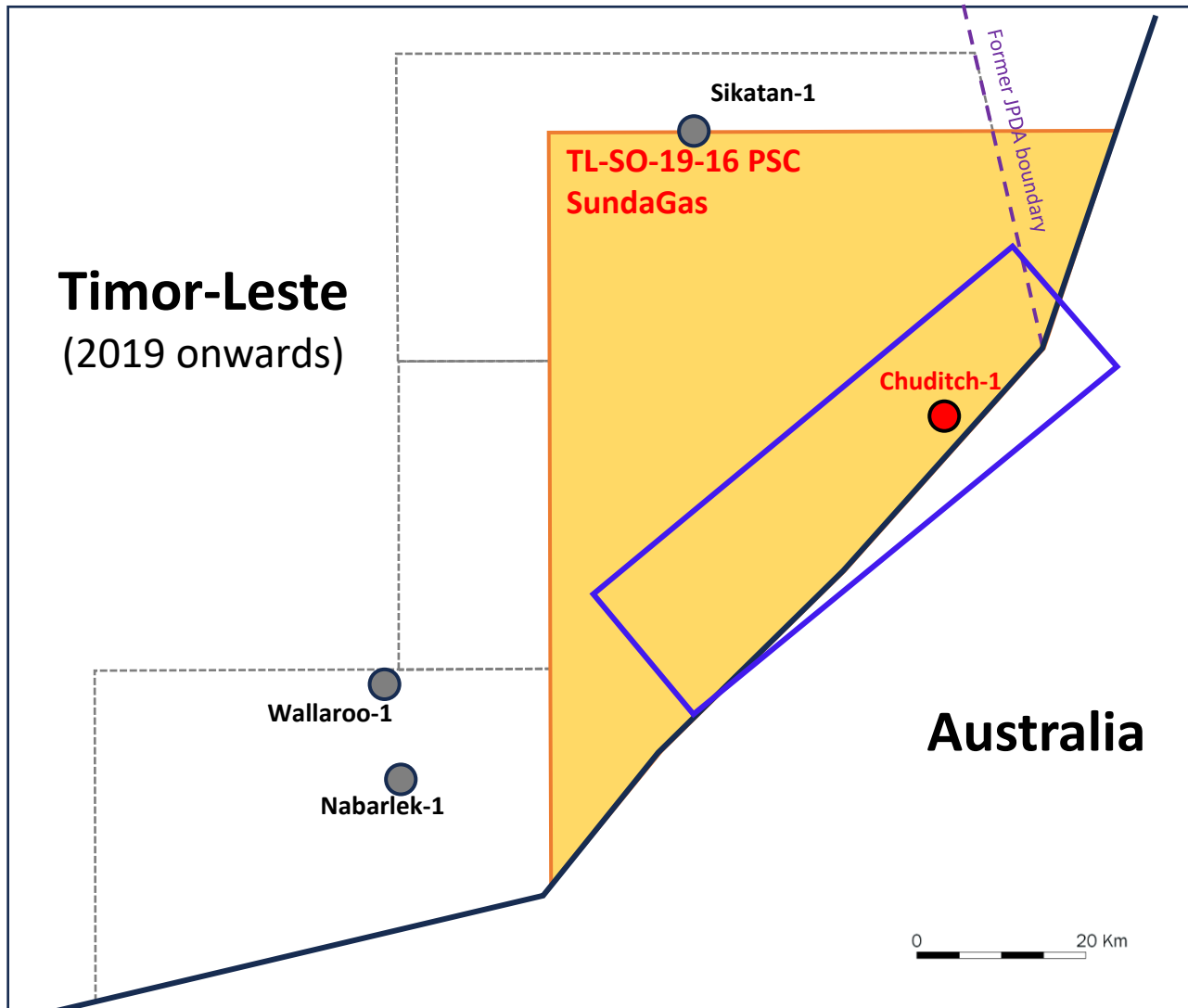
- ZOCA 91-08 – Sagasco / Petroz (1991 - 1997)
 - Sikatan-1, 1994, Dry hole
- ZOCA 91-09 – Enterprise (1991 - 2001)
 - Farm-in 1996, Shell (operator) and Mitsubishi
 - **Chuditch-1, 1998, Gas Discovery**
- ZOCA 91-14 – Enterprise / Nippon (1991 - 1997)
 - Nabarlek-1, 1994, Dry hole
 - Wallaroo-1, 1996, Dry hole

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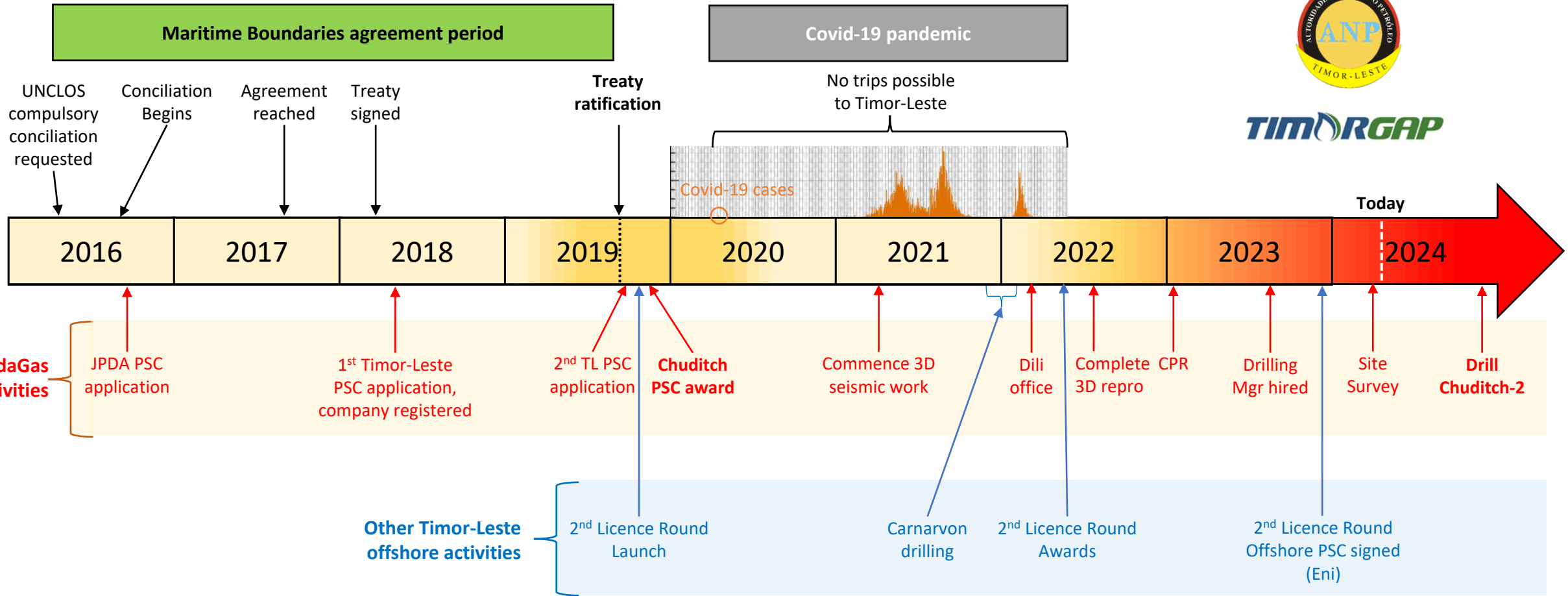
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- JPDA 06-101(A) – Minza Oil & Gas (2006 - 2013)
 - 3D seismic acquired 2012
 - No wells drilled
 - Exited in 2013

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- **JPDA 06-101(A) – SundaGas (2019 onwards)**

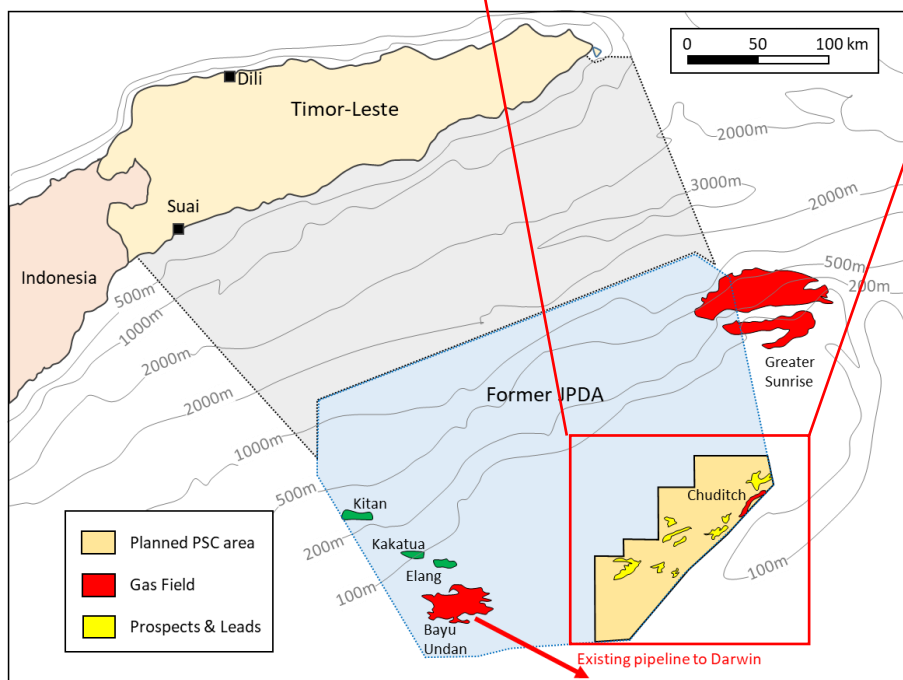
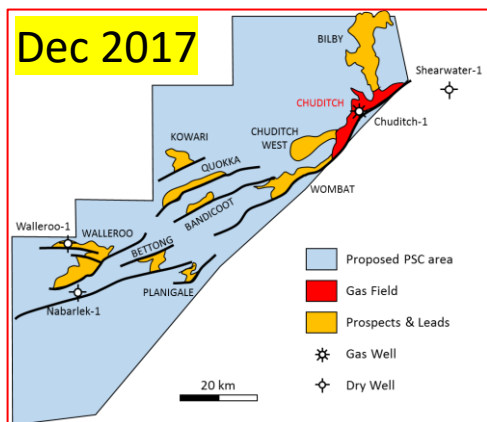
History of SundaGas and Chuditch to date



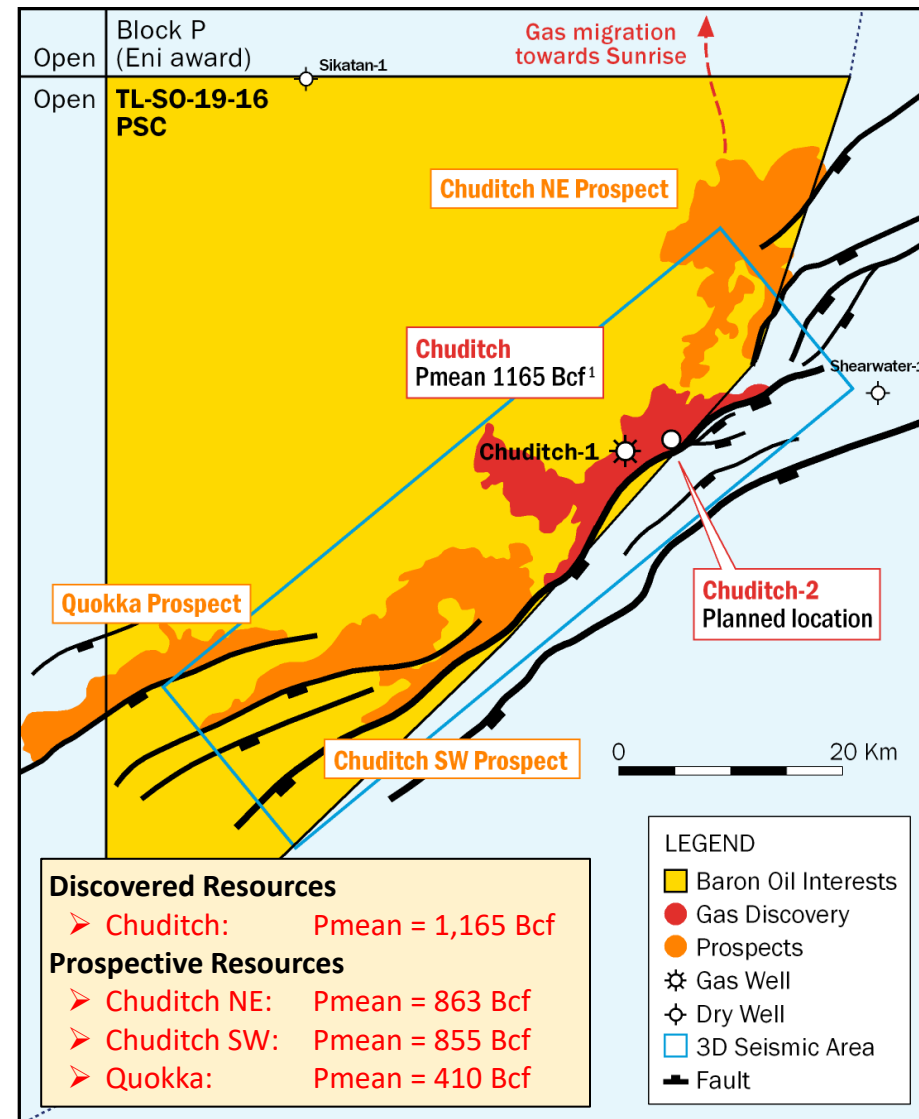
Chuditch PSC: What has been achieved?

Chuditch Field

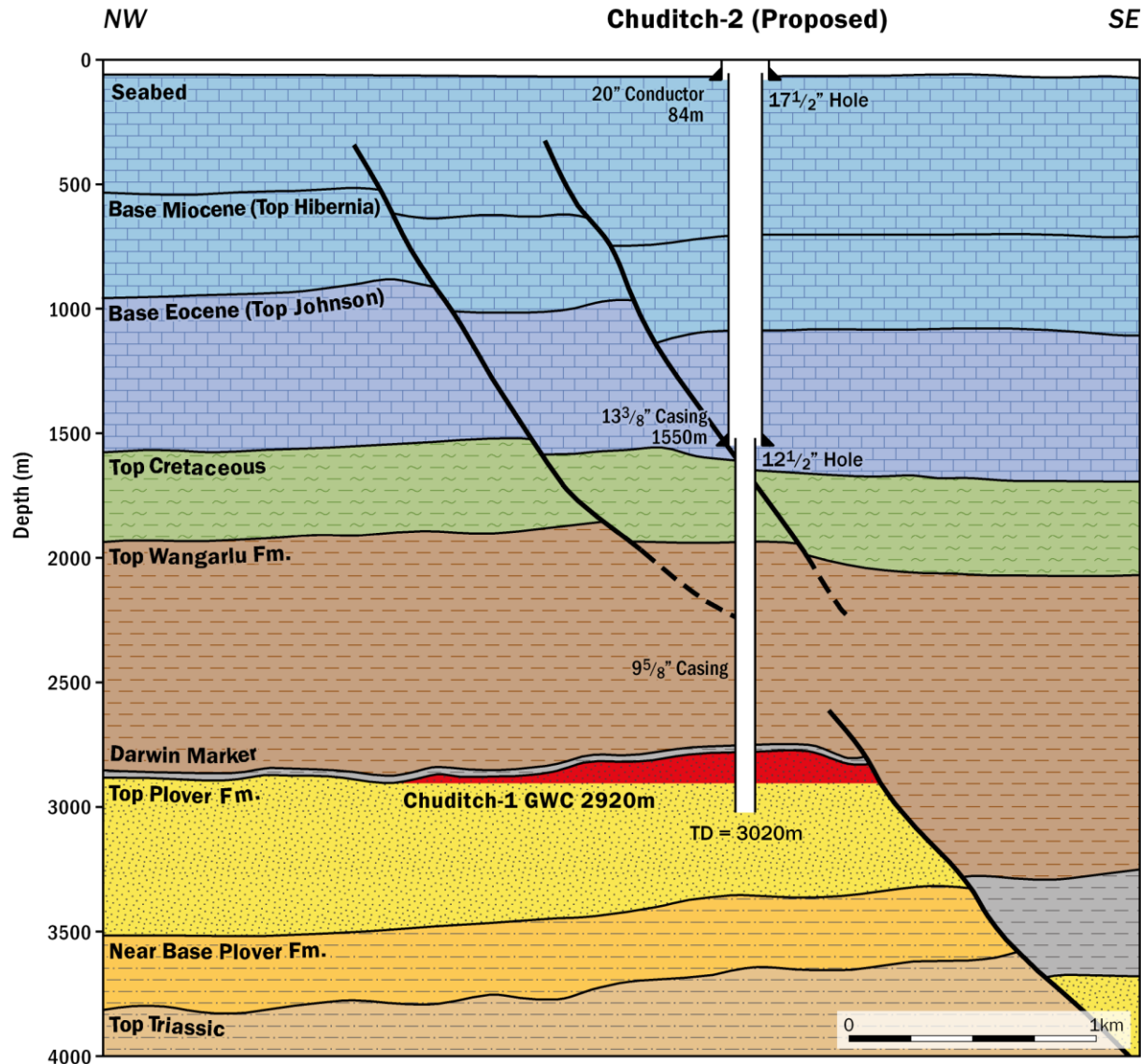
- Estimated resources of c.700 Bcf



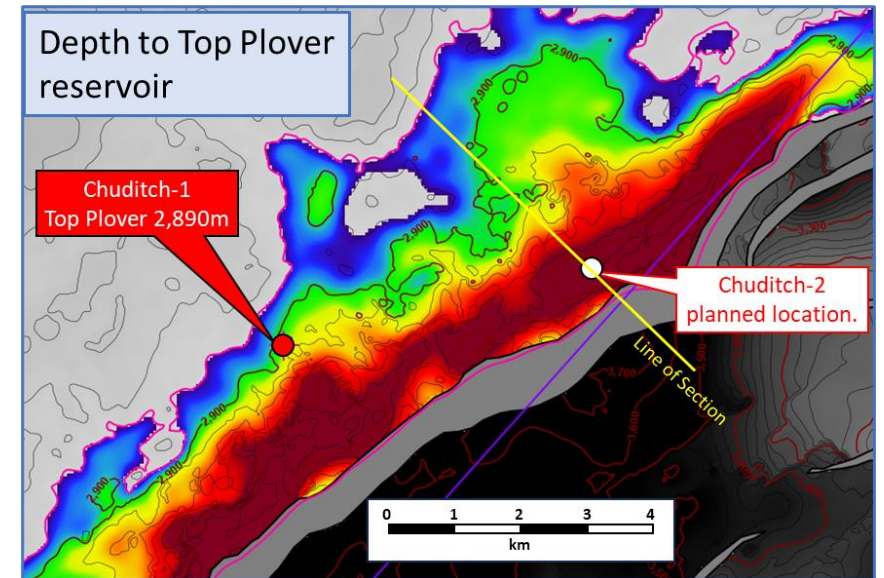
Today



Chuditch-2 Appraisal Well: Plan and Status

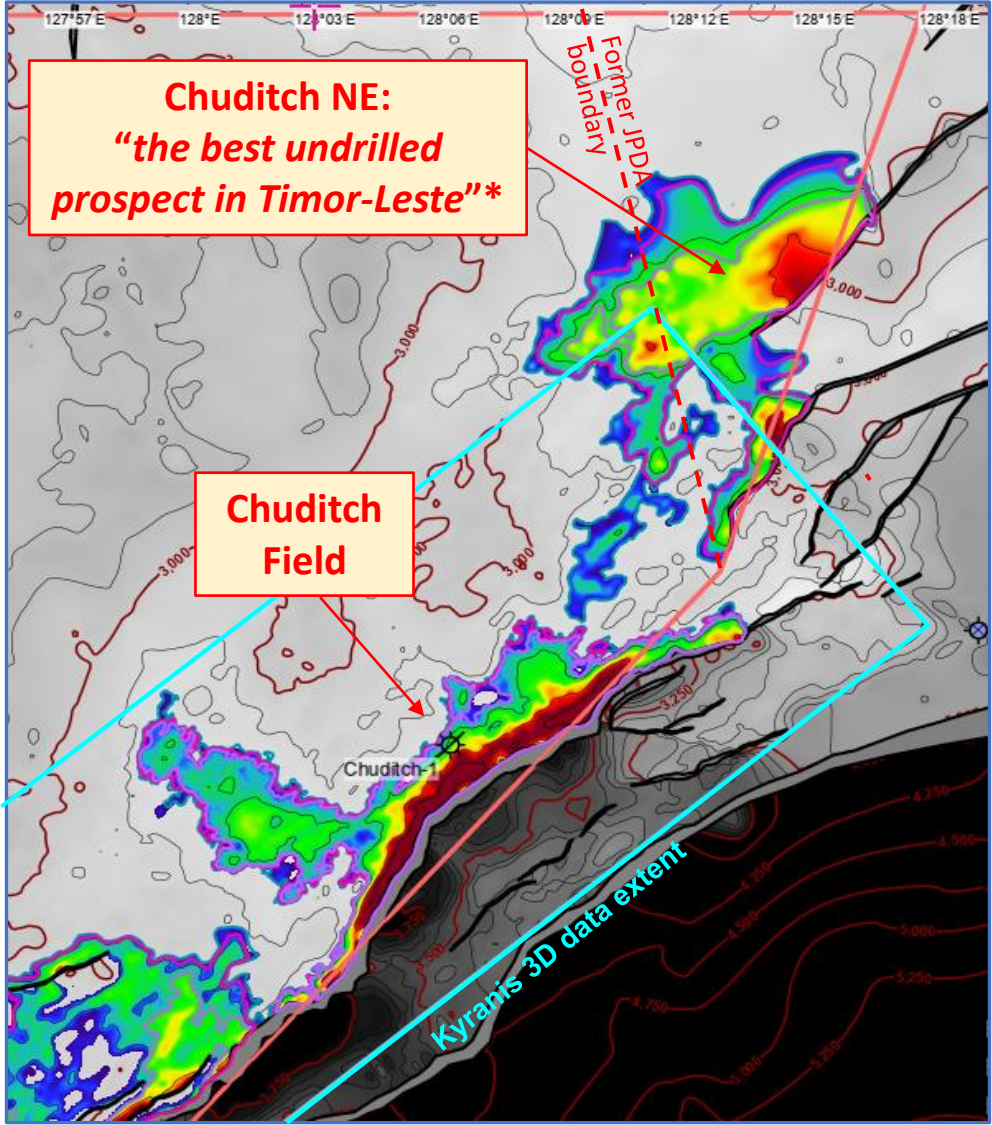
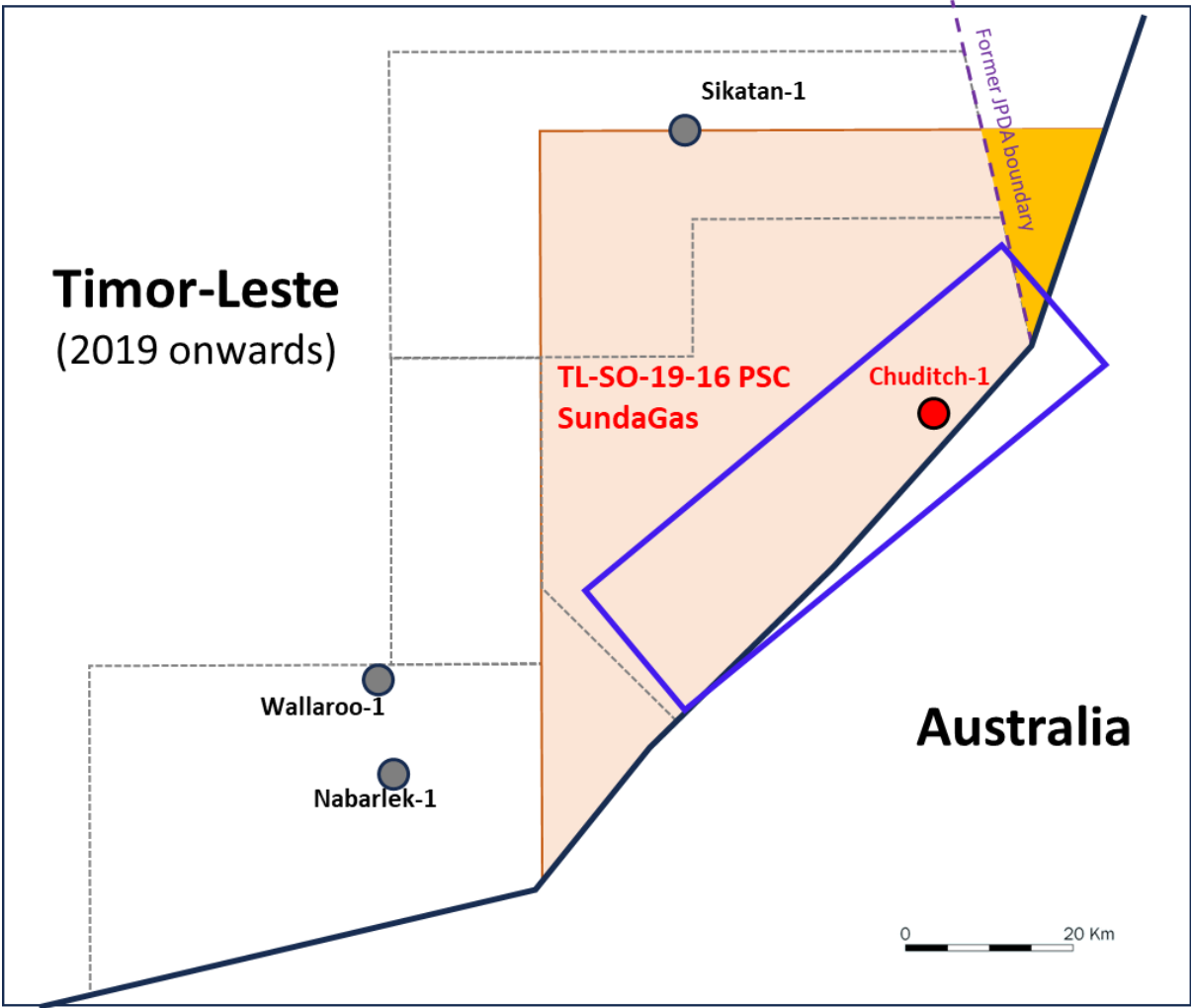


- Plan to drill in Q4 2024
- Appraisal 5.1 km from discovery, in 68m water
- 149m gas column predicted (vs 30m at Chuditch-1)
- Simple vertical well, including DST
- Drill team assembled; well planning progressing
- Site survey completed



All depths are metres below mean sea level

Chuditch NE Prospect 'captured' through Maritime Boundary change



* Andy Butler, April 2024

Example Chuditch Field Development Concept

