



INVESTOR PRESENTATION

AUGUST 2023

SYNERGIA ENERGY

OVERVIEW



Strategy reset

- Renamed Synergia in July 2022 . **Focused on carbon reduction**
- Focus on 2 CCS projects and Cambay gas field development in India
- Solely AIM-listed with London-centric management following departure from ASX
- Panmure Gordon appointed as joint broker to drive long-term institutional investor interest

Medway Hub (UK)

- First carbon storage license issued in June 2023.
- License application was made jointly with Synergia's 50:50 partner, Wintershall Dea, with Synergia as operator. Wintershall Dea is a subsidiary of BASF
- Carbon capture and storage of CO2 from 3 major Combined Cycle Gas Turbine (CCGT) power stations

Cambay CCS (India)

- Cambay CCS scheme in India to make material carbon reduction contribution by transporting and storing over 40 Mtpa CO2 from coal-fired and CCGT power stations in proximity to the Cambay gas field.
- Cambay (100% WI) production restarted in April 2022 and full field development planned to commence Q1 2024 – 205 BCF of P50 reserves. Gas field currently generating revenue.

Carbon reduction strategy

- CCS in UK and India to make material carbon reduction contribution
- Gas production in India to help reduce coal-fired power station dependence

FOCUSSED ON CARBON REDUCTION



- Currently generating revenue from Cambay gas field in India – gas production to replace LNG imports and reduce dependence on coal-fired power generation
- **Medway Hub CCS** project in the UK – aims to transport and store up to 7.5 Mpta of CO₂ via merchant scheme offering emitters cost savings over the prevailing CO₂ emission cost. The transport and storage service will be offered on a long-term contracted basis.
- CCS scheme at Cambay will make material contribution to carbon reduction efforts by transporting and storing over 40 Mpta CO₂ from coal-fired and CCGT power stations in proximity to gas field

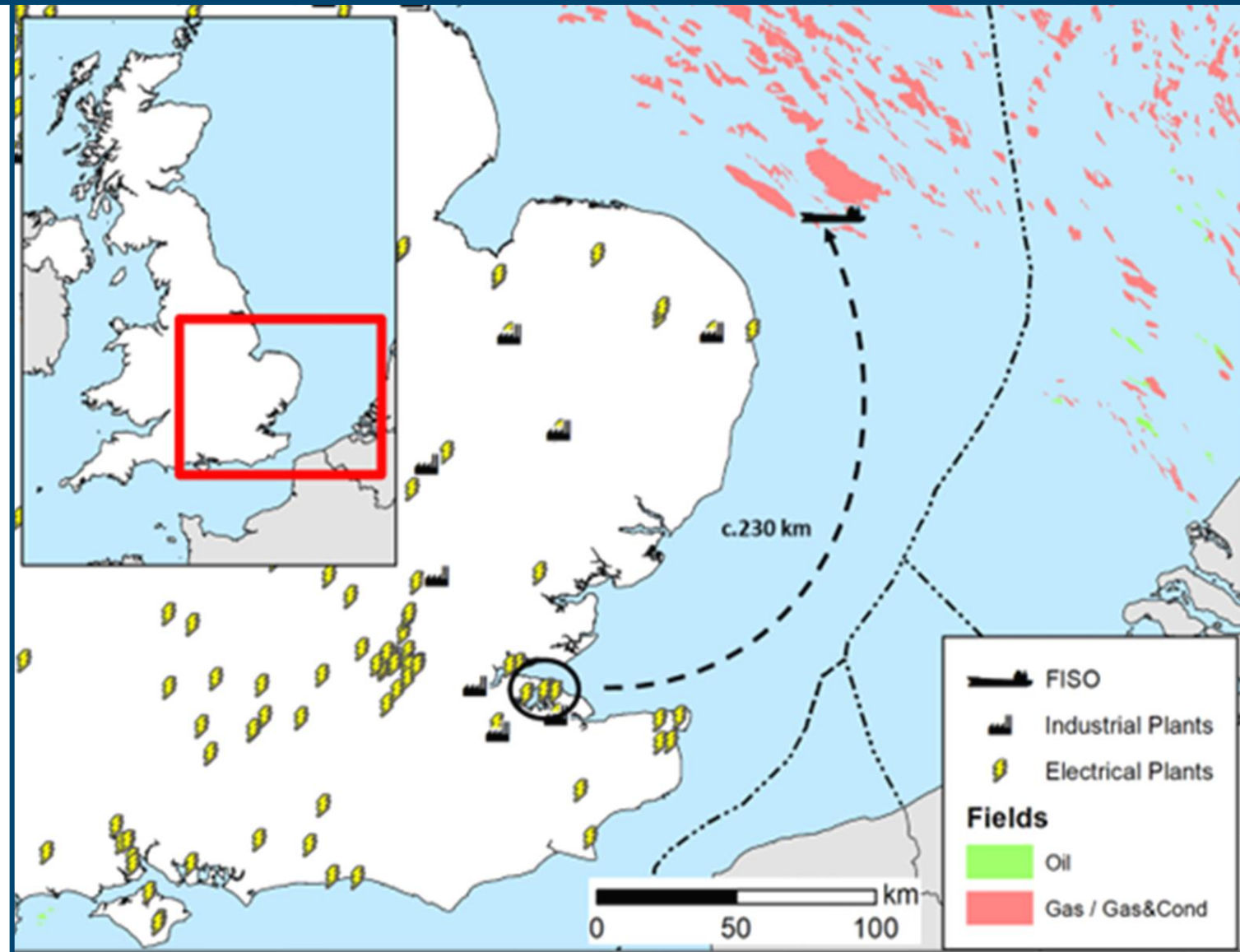
MEDWAY HUB CCS PROJECT

PROJECT OVERVIEW

- Carbon capture and storage of CO₂ from 3 major CCGT power stations located on the Isle of Grain near Rochester, Kent
- Scheme involves CO₂ extraction from exhaust stream at Medway, Damhead and Grain CCGT power stations
- Liquid CO₂ transported via tanker to depleted gas fields for permanent storage

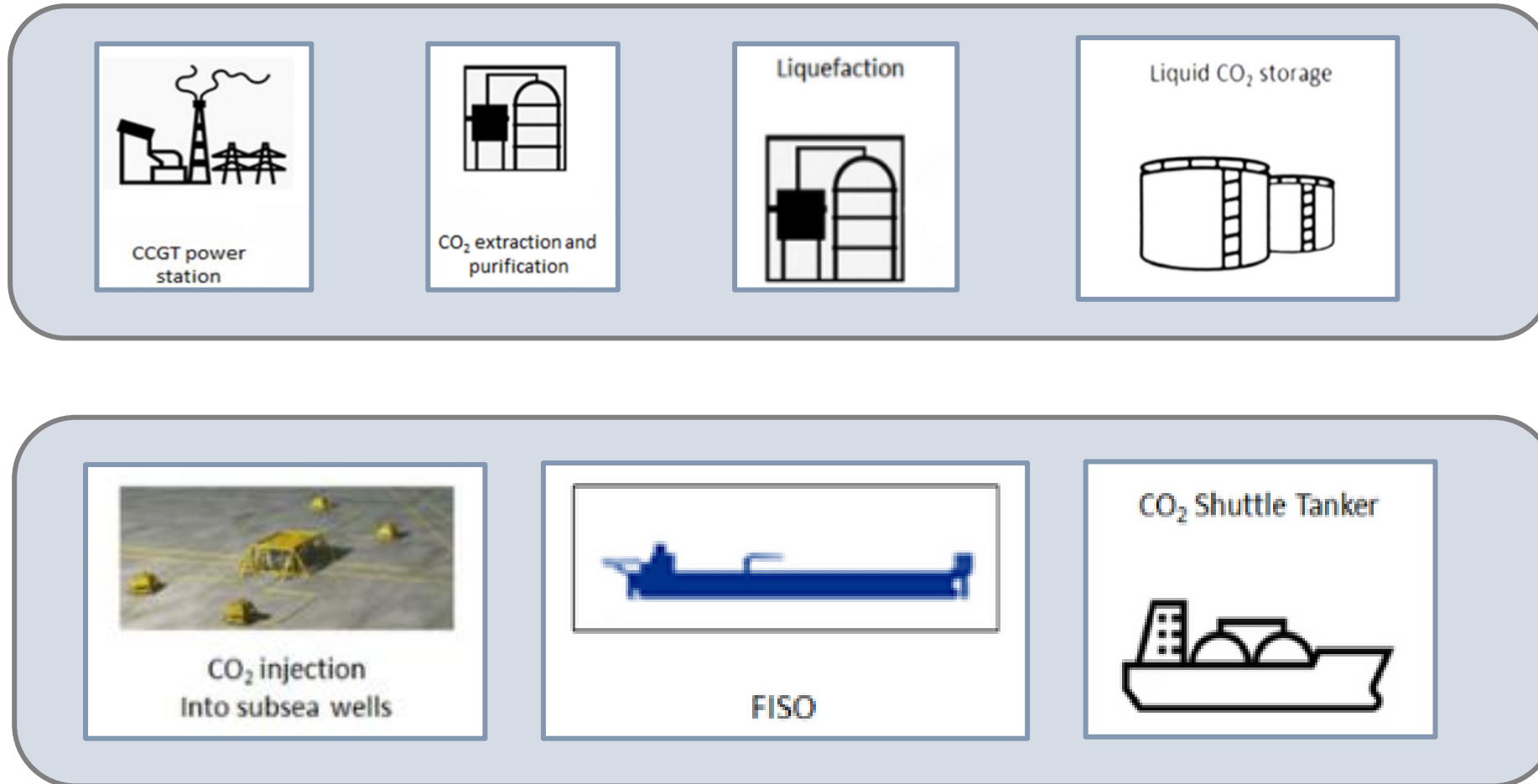
Medway Hub CCS Project Specifications

CCGT Peak capacity, MW	3077
CO ₂ emissions, tonnes per GWh	371
CO ₂ emissions, tonnes per hour	1,142
CO ₂ emissions per day, tonnes	27,398
CO ₂ emissions per day, 80% load, 95% recovery, tonnes	20,822
Net CO ₂ emissions per year, tonnes	7,600,096
Gaseous CO ₂ emissions per day, m ³	11,577,133
Liquid CO ₂ emissions per day, m ³	18,532



MEDWAY HUB CCS PROJECT

PROJECT OVERVIEW (contd.)



MEDWAY HUB CCS PROJECT

COMMERCIAL HIGHLIGHTS



- Synergia / Wintershall recently awarded a CCS license for the **Camelot** reservoirs by the North Sea Transition Authority (NSTA).
- Multiple discussions have been held with primary emitter customers as well as NG Grain (who would liquefy, store and load CO₂ at their Isle of Grain LNG terminal)
- Commercial model is a “merchant scheme” not predicated by UK Government funding or subsidies
- Emitter customers to enter into a long-term offtake agreement with Synergia / WD acting as T&S contractors.
- Emitter customers will be offered a T&S price that offers cost savings over the prevailing emitting cost
- Emitter customers to save on emission costs and have the benefit of carbon zero power generation

MEDWAY HUB CCS PROJECT

THE DEVELOPERS

SynergiaEnergy



Synergia Energy (Operator):

The principals of Synergia have significant gas storage background including the design, construction and commissioning of the Humbly Grove gas storage facility in Hampshire, UK as well as offshore gas storage projects in the UKCS and Celtic Sea.

Wintershall Dea (50% JV partner):

Germany's largest O&G company with a significant corporate commitment to CCS development. Existing major projects in Norway (with Equinor) and Denmark (with INEOS).

Wintershall plan the development of a major CO₂ hub at Willemshaven with CO₂ cargoes planned to be shipped to Norway and potentially to the UK for sequestration.

MEDWAY HUB CCS

PROJECT TIMELINE & RESPONSIBILITIES

The project is a simple carbon capture and storage scheme and involves:

CCGT operators responsible for in-situ CO₂ capture - separation of CO₂ from exhaust streams of CCGT power stations

Synergia responsible for:

- liquefaction of CO₂ at Isle of Grain LNG terminal
- Storage of liquid CO₂ in storage tanks at IoG LNG terminal (liquid CO₂ maintained at -41°C and 9.8 bar through to wellhead)
- Batch loading of liquid CO₂ onto CO₂ tanker at the IoG LNG terminal
- Transport of liquid CO₂ to depleted gas fields for injection into depleted reservoirs or aquifers
- Average CCGT CO₂ emissions of 371 metric tons per GWh to be reduced to close to zero
- Transport by sea tanker to **Floating Injection, Storage and Offloading vessel (FISO)** at depleted fields / aquifers
- FISO incorporating CO₂ offloading from sea tanker, CO₂ storage and injection pumping facilities
- CO₂ injection wells with subsea manifolds



MEDWAY HUB CCS

FISO FEATURES AND ADVANTAGES

Moored vessel incorporates CO₂ loading facilities from CO₂ tankers, CO₂ storage, pumping equipment for CO₂ injection via umbilicals into depleted gas reservoirs and saline aquifers via subsea manifolds

FISO is CCS equivalent of FPSO and can be positioned over any suitable storage reservoir and relocated once a particular reservoir has been filled

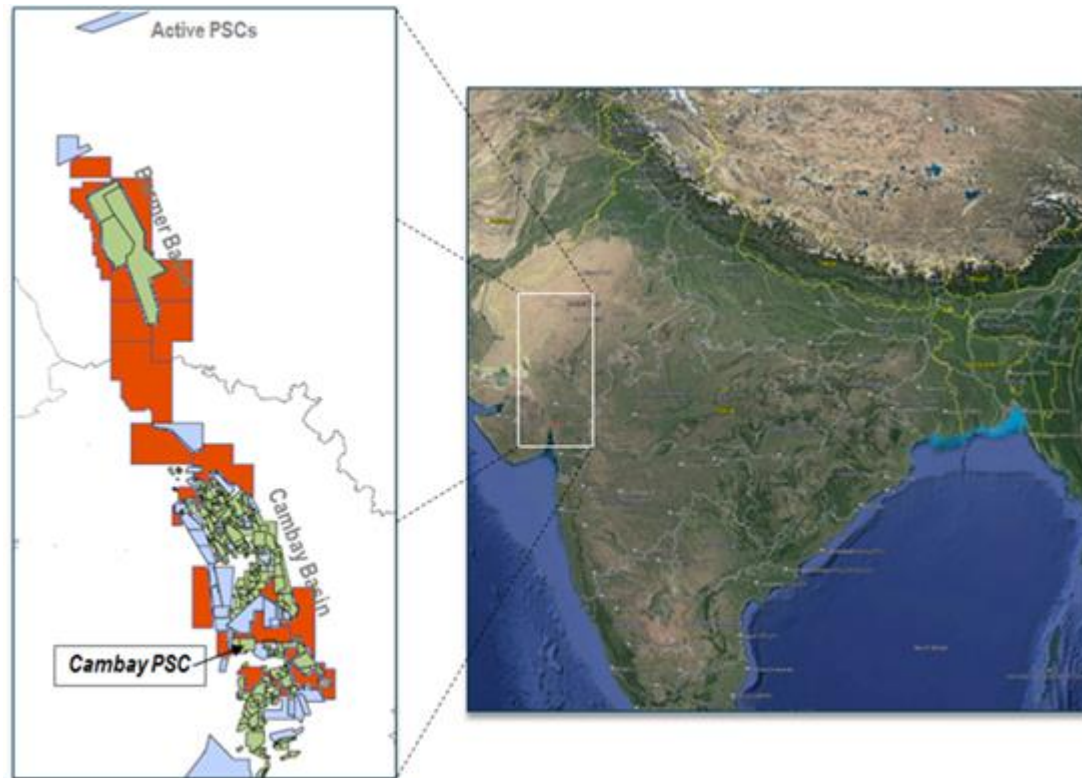
Can accept CO₂ cargoes from multiple locations via CO₂ tanker

Eliminates the need for CO₂ seabed pipelines which have inherent technical challenges



CAMBAY INDIA

PROJECT OVERVIEW

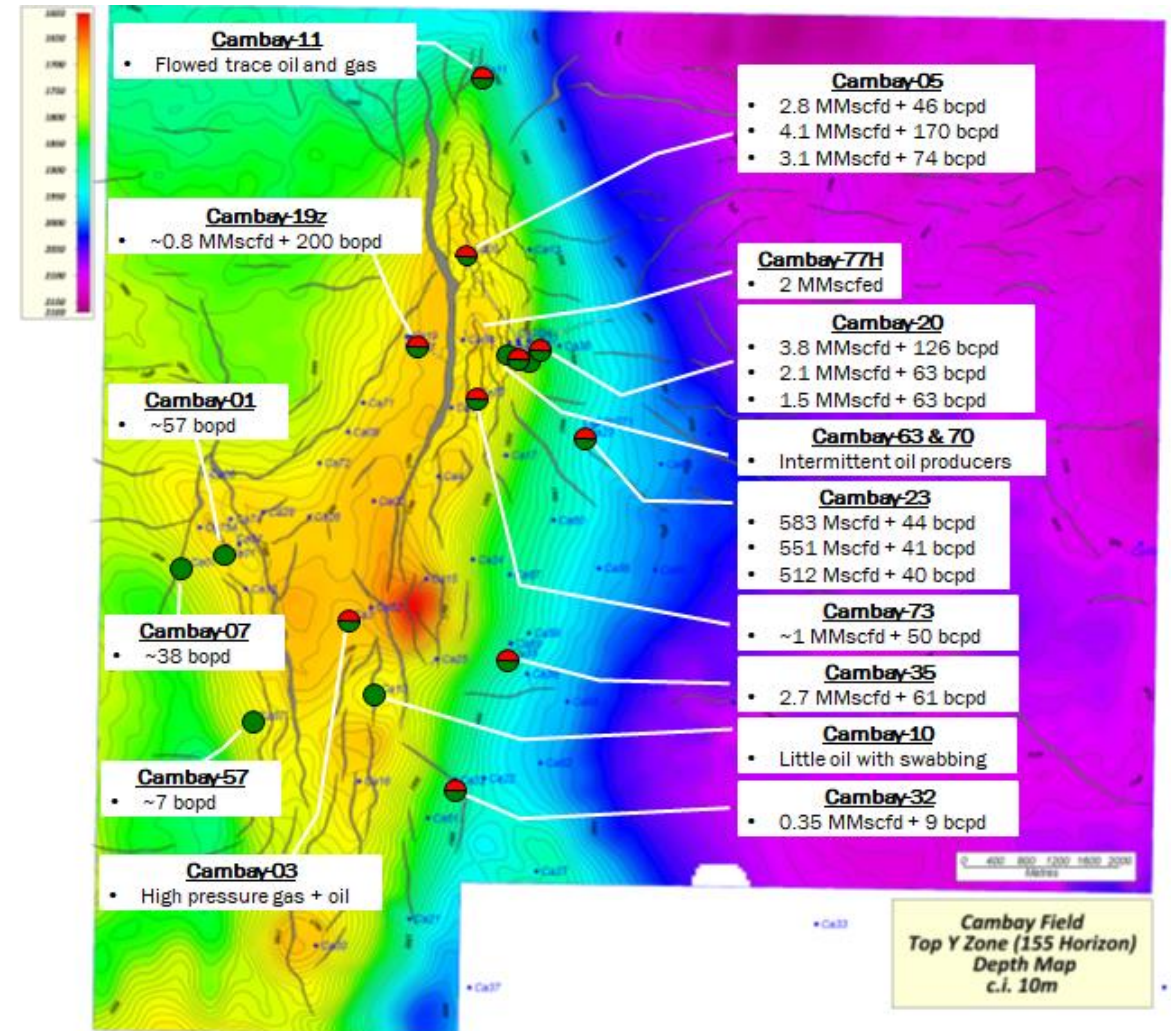


- Cambay PSC currently licensed through 2029 and can be extended
- Synergia WI: 100%
- Full operational team based in Vadodara
- Processing facilities and export connection currently to low pressure grid
- Production resumed April 2022 after a 3.5 year hiatus
- Some oil production from legacy wells but main producer is C-77H gas well
- C-77H is a horizontal fracked well producing from Eocene tight siltstone formation
- Full field development planned to commence early 2024

CAMBAY INDIA GAS FIELD

EOCENE GAS RESERVOIR DEVELOPMENT

- Field development plan focused on Eocene tight gas reservoir
- c. 1 TCF contingent gas resources with 205 BCF P50 reserves
- C-77H well used to test field development thesis – was producing c. 1 mmscfd intermittently from 4 fracked zones
- July 2022 re-frac of 2 zones with continuous plateau production of 150,000 – 250,000 scfd despite current lack of artificial lift
- Artificial lift to be installed in C-77H well to increase plateau production to > 1 mmscfd
- Eocene gas reservoirs 50-90m thick across field as demonstrated by numerous (>30) test wells



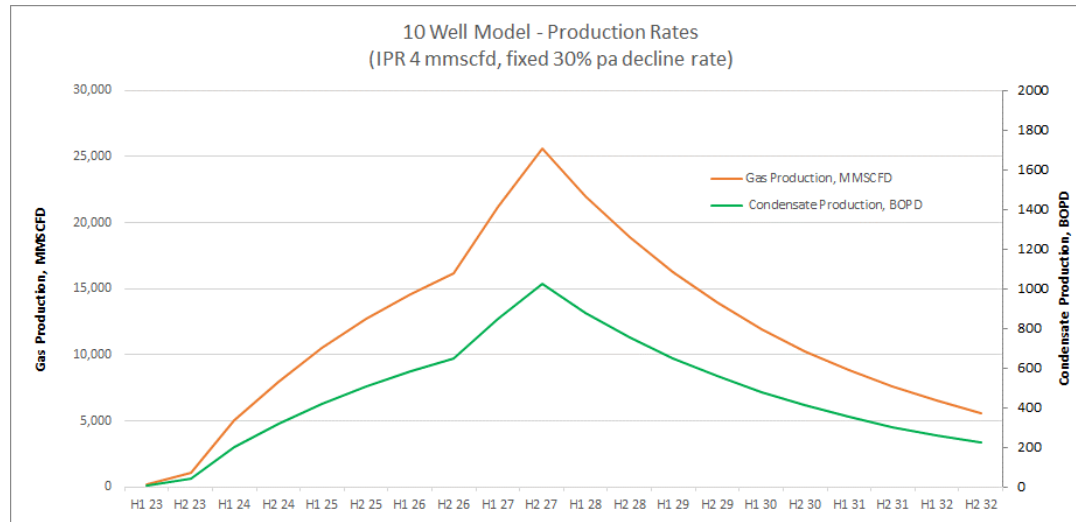
CAMBAY INDIA GAS FIELD

DEVELOPMENT PLAN

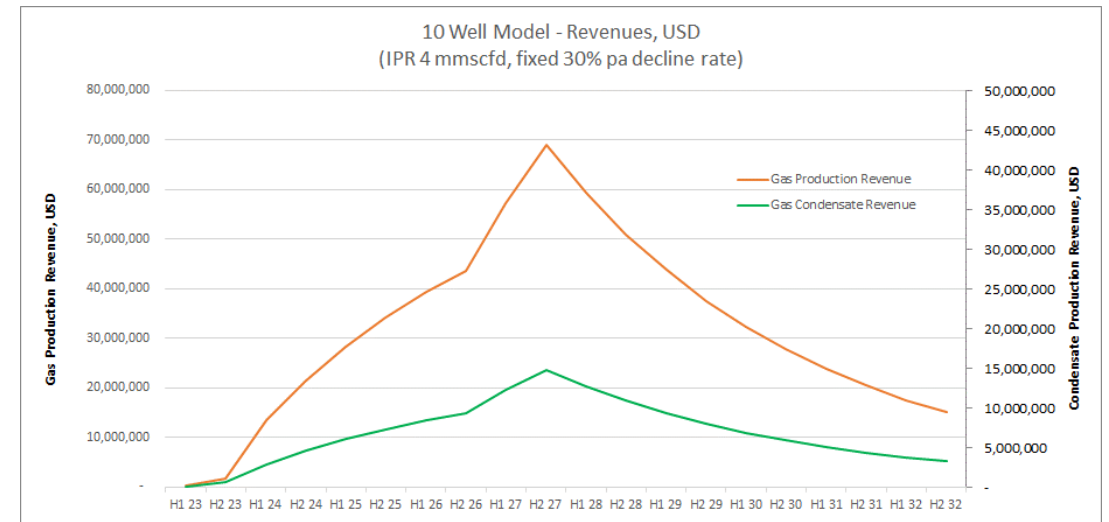
- Eocene certified reserves: P50 205 BCF (\$3 bn gross revenues @ \$15/MCF)
- 10 well model is illustrative and produces 63 BCF
- C-77H re-frac success proved development methodology
- 30+ wells required to fully exploit reserves
- Field development is self-funding after first two new wells
- Initial 10 wells to be drilled from existing drilling pad
- New wells to be horizontal and multi-stage fracked (as per C-77H)
- All necessary permits in place for wells and surface facilities

CAMBAY INDIA GAS FIELD

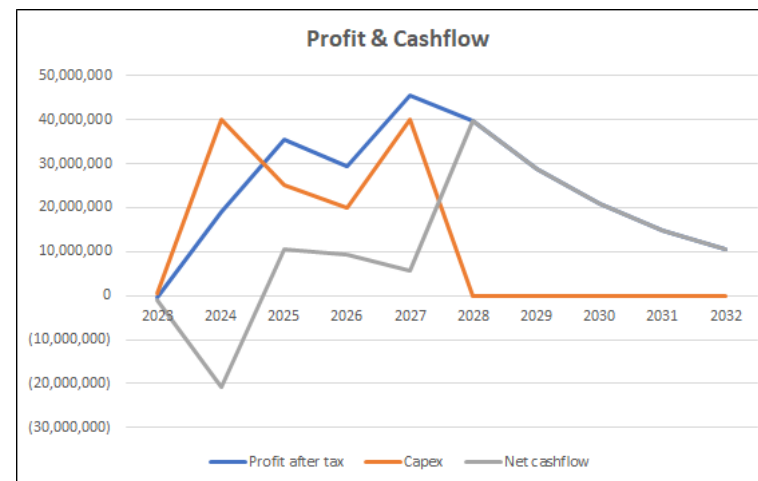
DEVELOPMENT ECONOMICS – BASE CASE



10 Well Model - Production



10 Well Model - Revenues

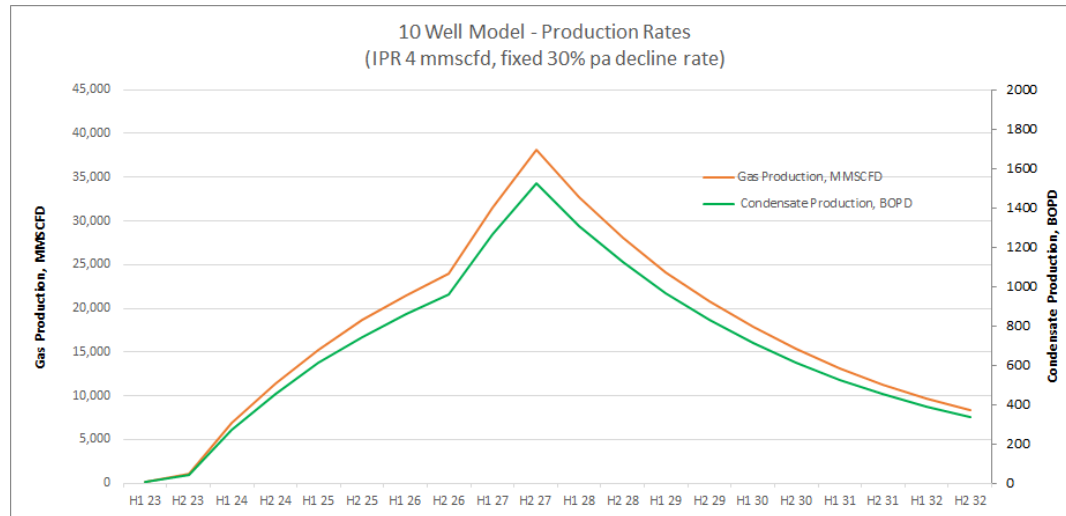


Key Assumptions

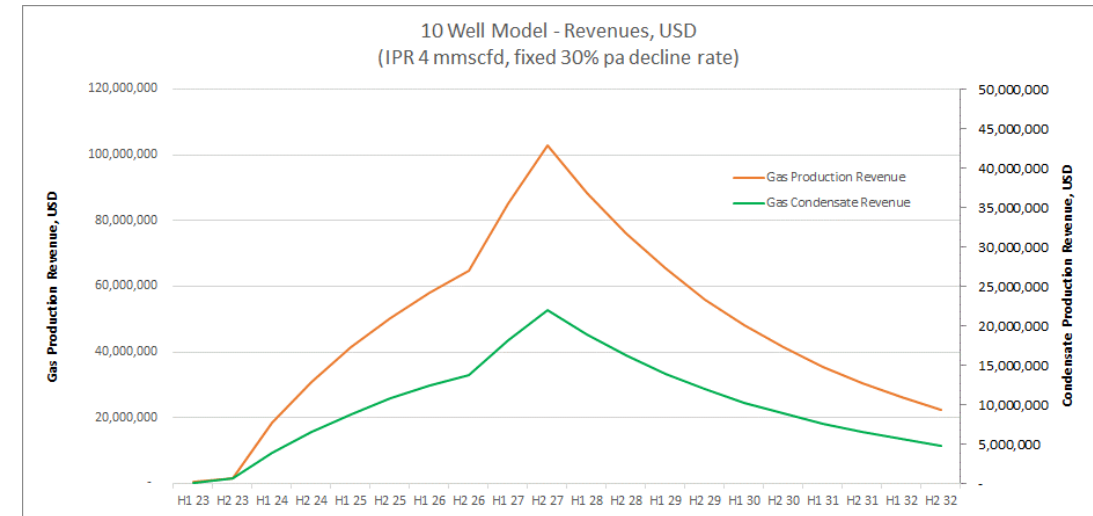
- Initial gas production rate for new wells 4,000 mscfd
- Decline rate 30% pa
- Low pressure gas sales price \$8.57/MCF
- High pressure gas sales price \$15/MCF
- Condensate price \$80/bbl
- New horizontal well drilling capex \$7.5m
- New well fracking & completion cost \$2.5m
- NPV₁₀ \$58.3 million**

CAMBAY INDIA GAS FIELD

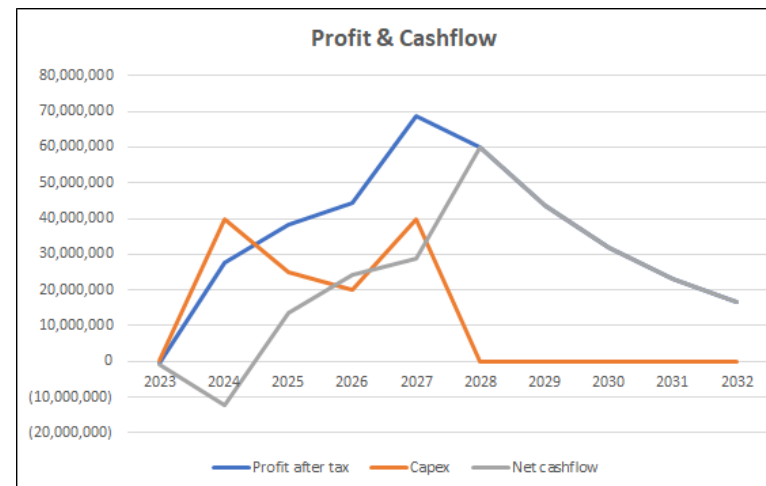
DEVELOPMENT ECONOMICS – UPSIDE CASE



10 Well Model - Production



10 Well Model - Revenues



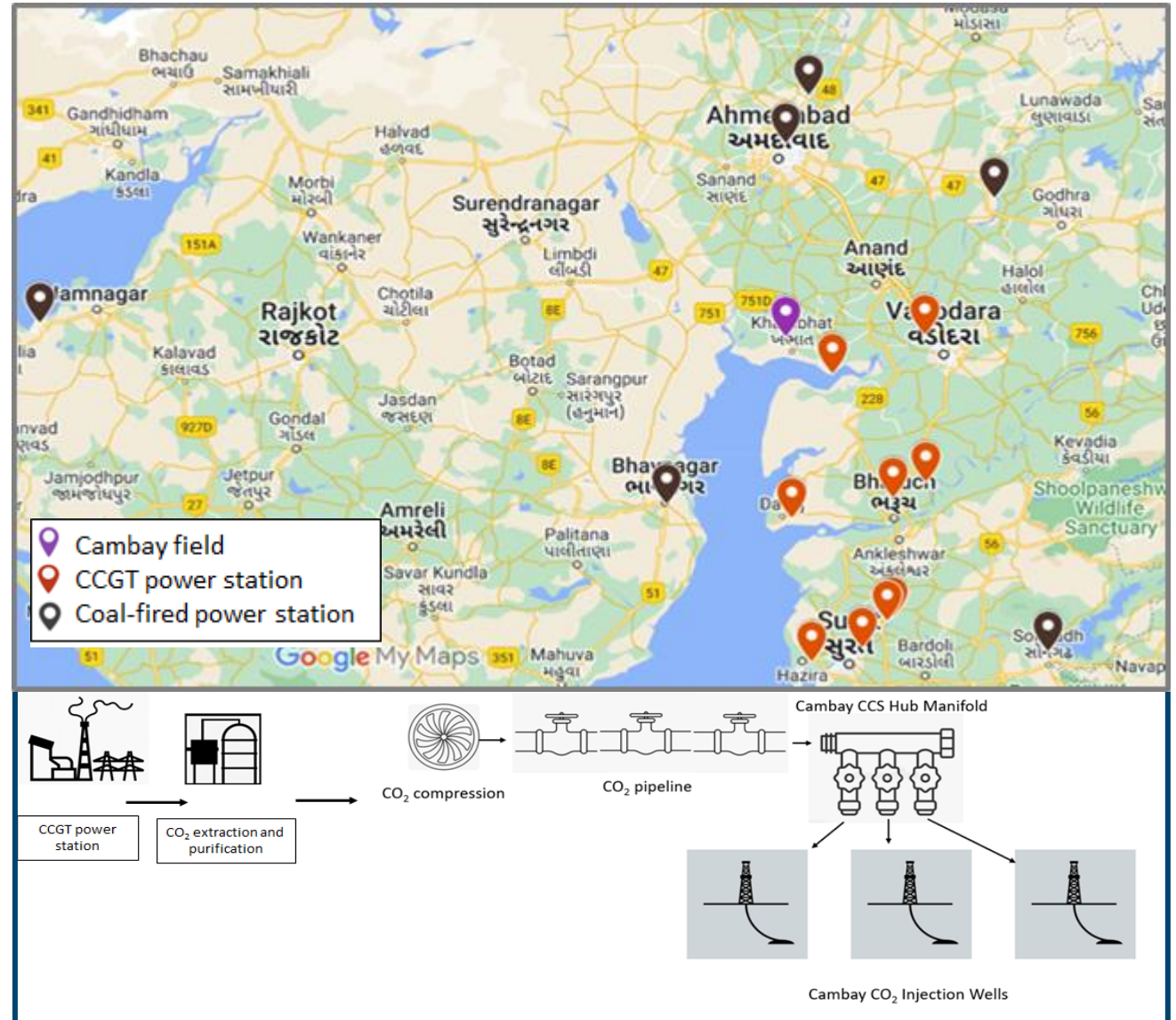
Key Assumptions

- Initial gas production rate for new wells 6,000 mscfd
- Decline rate 30% pa
- Low pressure gas sales price \$8.57/MCF
- High pressure gas sales price \$15/MCF
- Condensate price \$80/bbl
- New horizontal well drilling capex \$7.5m
- New well fracking & completion cost \$2.5m
- NPV₁₀ \$120.6 million**

CAMBAY INDIA CCS

PROJECT HIGHLIGHTS

- Cambay CCS scheme introduced to Govt. of India regulators in January 2023 and well received
- First end-to-end CCS solution in India
- Govt. of India needs to develop a regulatory framework to incentivise emitters
- Cambay is an ideal location for a CCS hub due to its proximity to multiple large CCGT and coal-fired power stations and presence of extensive and thick Olpad formation suited to CO₂ sequestration
- Further technical work is required to assess Olpad injectivity and storage capacity at Cambay and surrounding areas
- Synergia is working with regulators and other stakeholders to progress CCS in India
- Scheme is subject to funding



43 Mta
CO₂
Regional emissions

500+
MT CO₂
Target Storage Capacity

GLOSSARY

- **CCGT:** Combined Cycle Gas Turbine power station
- **CCS:** Carbon Capture and Storage
- **AIM:** Alternative Investment Market – London Stock Exchange
- **BCF:** Billion cubic feet
- **Mta:** Million tonnes per annum
- **FISO:** Floating Injection, Storage and Offloading vessel
- **NSTA:** North Sea Transition Authority – UKCS licensing regulator
- **O&G:** Oil and Gas
- **P50:** Reserves terminology for 50% probability
- **SSE:** Scottish and Southern Electricity
- **T&S:** Transportation and Storage
- **UKCS:** UK continental shelf
- **VPI:** Vitol Power generation subsidiary