



Corporate presentation

# Natural Gas Production & Oil Exploration Türkiye

July, 2024

CSE: TCF | Frankfurt: Z620 | OTC: TRLEF



Trillion Energy Akçakoca Gas Production  
Platform, SASB Gas Field, Black Sea,  
Türkiye



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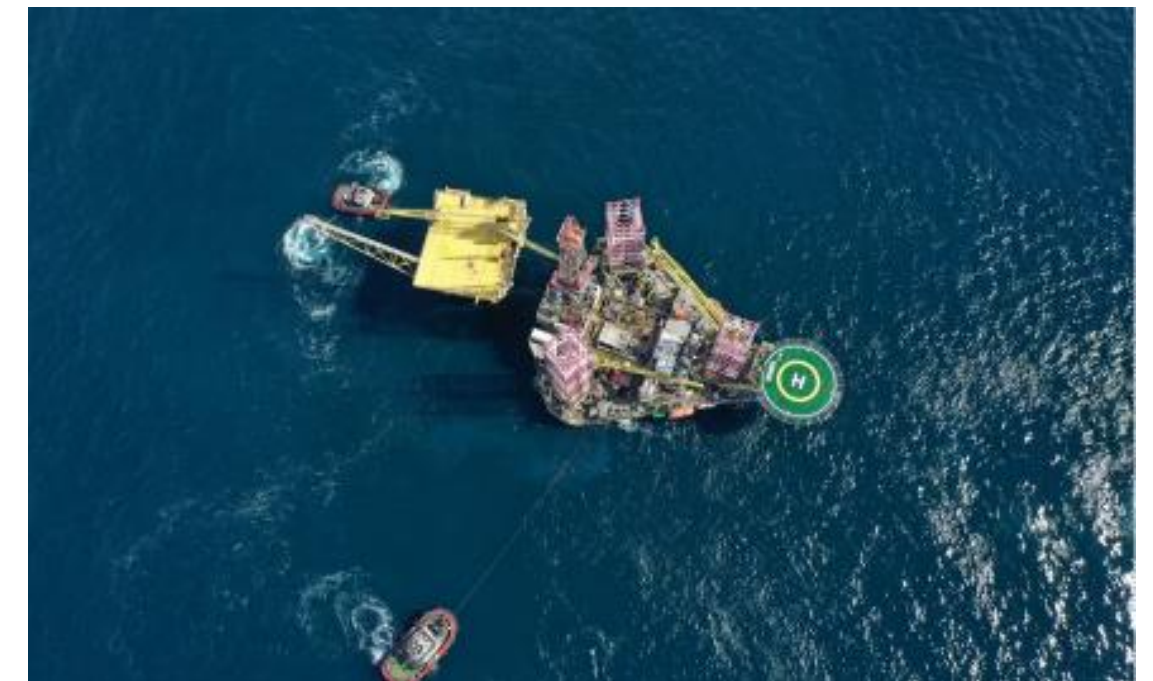
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## Market and Industry Data

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## Currency

References to dollars or "\$" are to U.S. dollars unless specified otherwise.



# Company Highlights



## ▶ European Gas Production- SASB Gas Field

- 49% Interest in SASB Gas Field, Black Sea, Turkiye – **323 BCF OGIP** (100%)  
Our NPV10=**\$421m**, 2P reserves **55.8 BCF** (Dec 31 '23) up from 42 BCF (2022)
- Development Program targeting ~ 17 + production wells
  - 2023 – 5 wells drilled in 2023
  - 2024 – 9 workovers (5 from 2023 program+4 additional) **Cost \$2.7m**
- Targeting production increase to **8.5mmcf/d** exit rate end of '24

## ▶ Oil Exploration SE Turkey

- Oil Exploration proximate to large recent discoveries (10,000–100,000 bopd fields ) S.E. Turkey

High Natural Gas Prices	Historical CAPEX SASB Gas Field (100% interest)	Low Royalty Rate	Reserves Growth
<b>USD\$11/MCF</b> (July, 2024)	<b>\$680m</b>	<b>12.5%</b>	<b>22.5%</b>

## 2023 Achievements

- Raised \$43 million equity +\$15m subordinated debt financing
- Successfully drilled 5 long reach Natural Gas production wells Black Sea using novel technology
- Production +300% from 2022 to 2023
- Acquired High Impact Oil Exploration opportunity
- 3D seismic for identification of new gas fields 90% completed

## Market Capitalization:

July 03 '24

Market Cap:	CND\$ 18.7m
Share Price	CND\$ 0.12
Basic Shares Outstanding	157,082,516
Warrants	81,911,142
Options	1,060,000
<b>F.D. Shares Outstanding</b>	<b>240,053,658</b>

\*\*See appendix for definitions. Management estimate for current 20+ well drilling program.  
\*Operator of drilling operations and work/drilling program; TPAO is operator for daily production activities



# Turkiye Advantage

## ► Strong Prices & Demand for Natural Gas & Oil

- 98% Imported Nat Gas
- 92% Imported Oil
- ~60% of gas imports from Russia/Iran

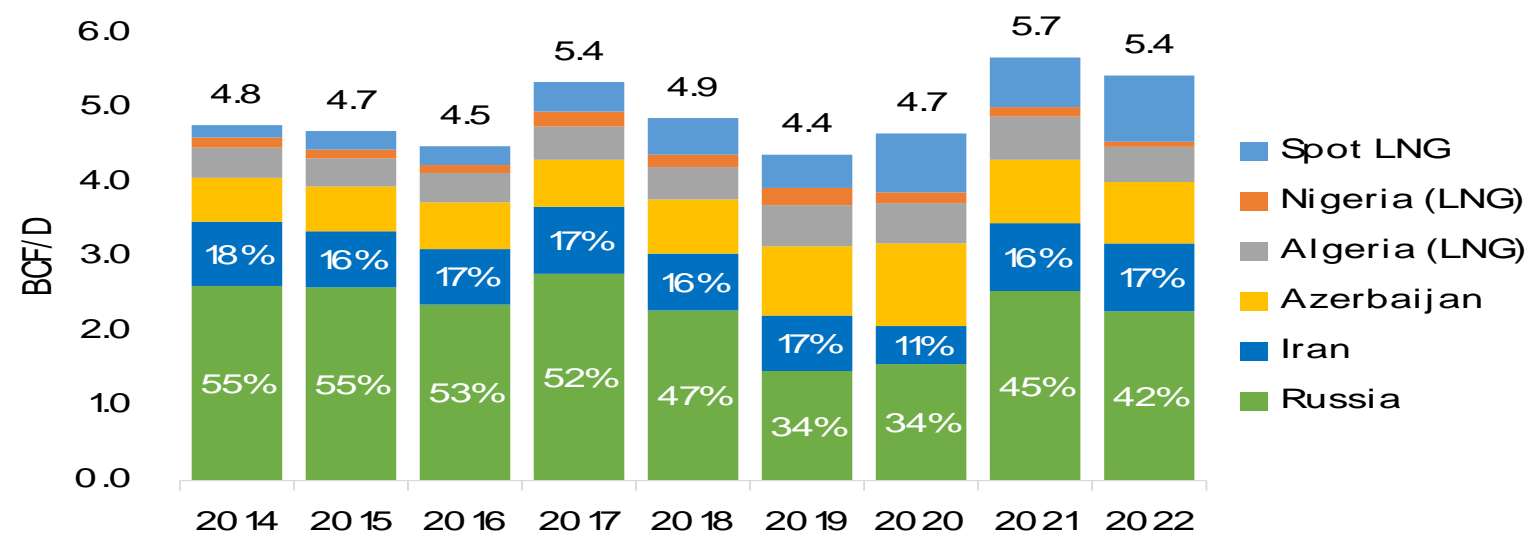
**USD\$11/MCF**

(Gas Price July 2024)

## ► Excellent fiscal regime:

- 12.5% Royalty rate
- 22% Corporate Tax Rate

## 7<sup>th</sup> Largest Nat Gas consumer in world – over 48 BCM/ year



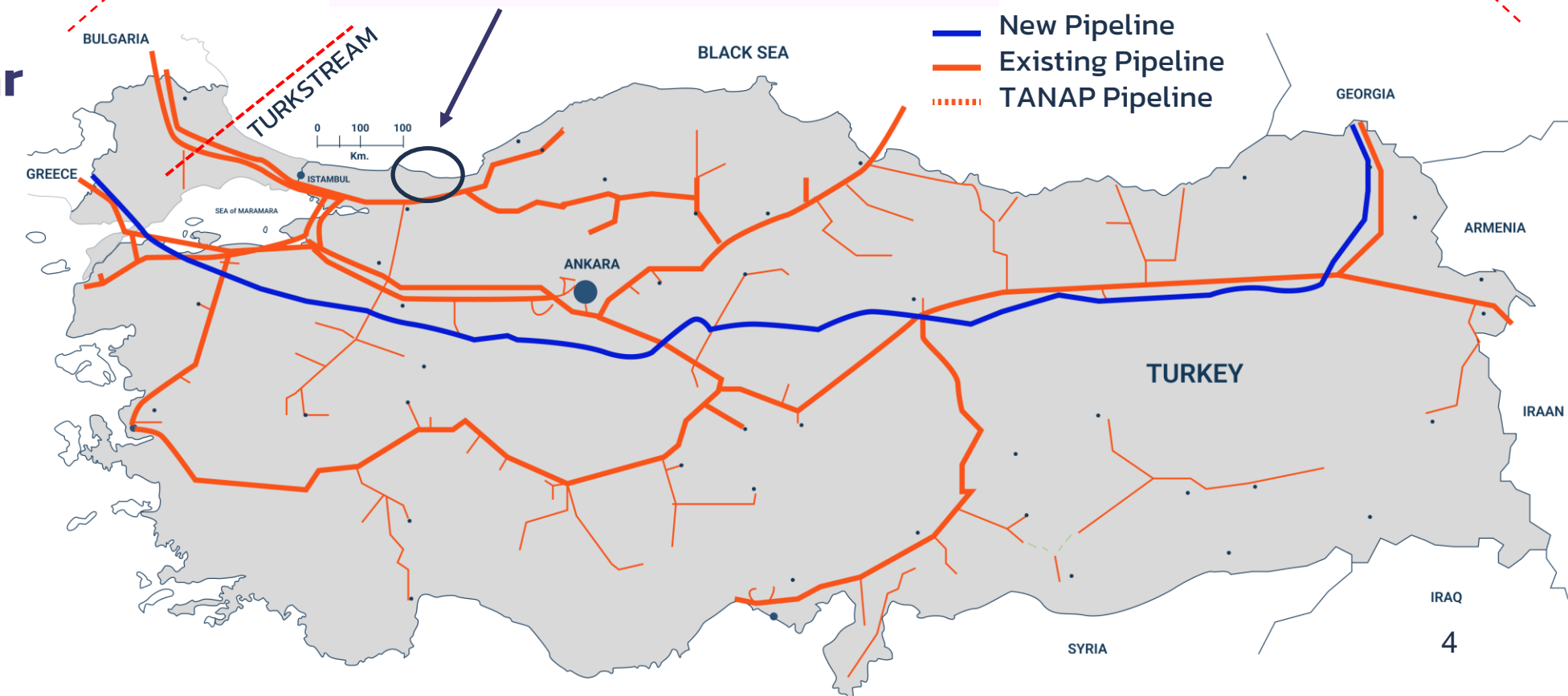
Turkiye Import Volumes of Natural gas

\*Source: S&P Capital IQ



## National Natural Gas Pipeline Grid in Türkiye

SASB tied into pipeline here



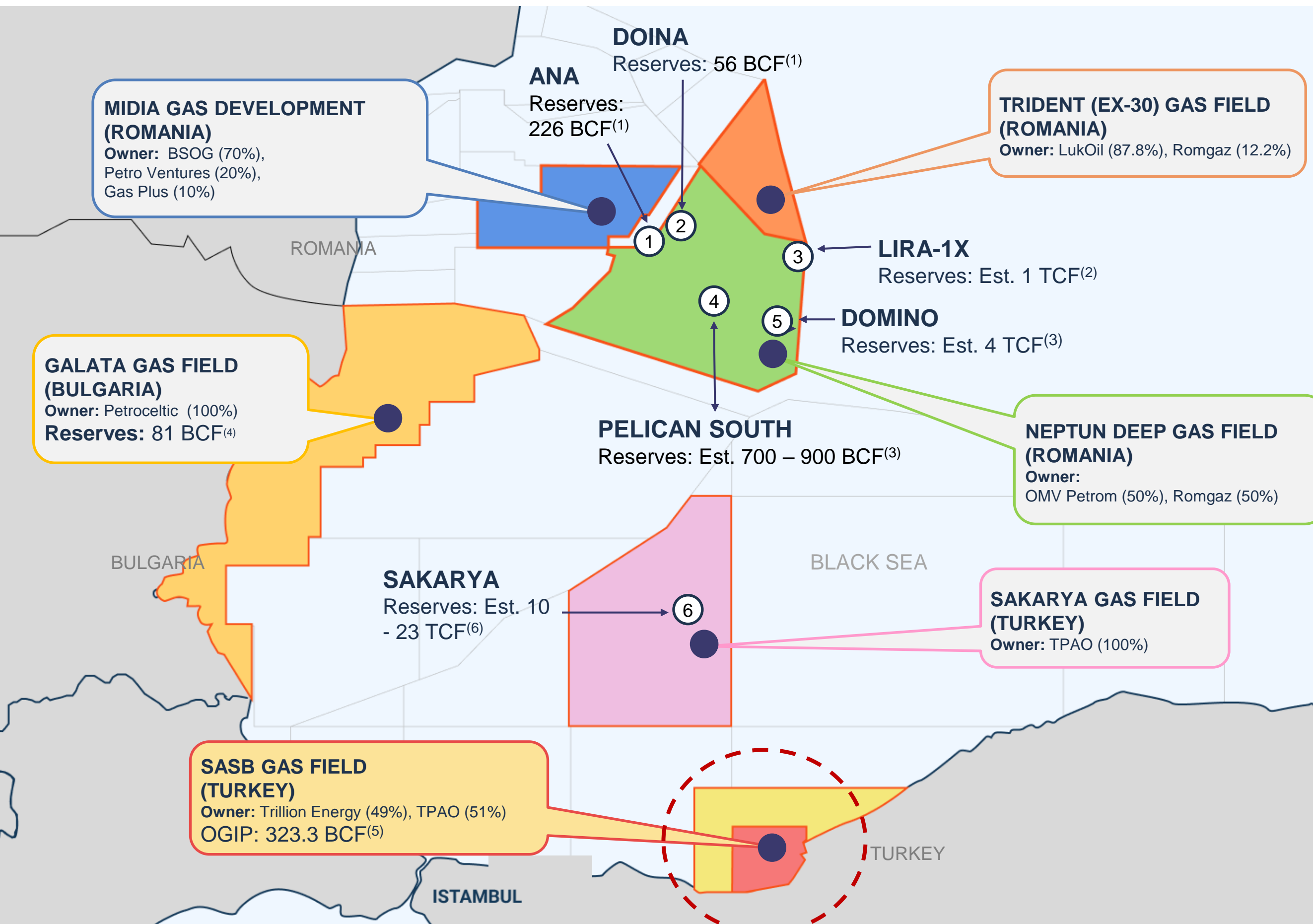


# **Black Sea – the new Natural Gas frontier fueling Europe**





# Black Sea Natural Gas Fields



The Black Sea is a key strategic area to regional energy future

- 1) Source: [www.blackseaog.com](http://www.blackseaog.com)
- 2) Source: <https://www.lukoil.com/PressCenter/Pressreleases/Pressrelease?rid=50864>
- 3) Source: S&P Global: Commodity Insights - E&P activity in the Romanian and Bulgarian waters of the Black Sea, Oct. 2017.
- 4) Source: <https://www.offshore-technology.com/projects/galata-field/>
- 5) Source: Trillion Energy GLJ Report, Reserves and Prospective Resources (Risky)
- 6) Source: <https://www.reuters.com/business/energy/turkeys-natural-gas-found-black-sea-now-comes-710-bcm-erdogan-2022-12-26/>

# SASB Infrastructure – Solid platform for future growth

## Offshore platforms

@ SASB Gas Field, Black Sea



4 offshore production platform & tripods

Drilling radius reachable from existing platforms  
~ 3km

18km subsea pipeline + onshore pipeline

Onshore Gas Processing Facility rated 75MMcf/day, expandable to 150MMcf/day

US \$600m+ invested into historical wells & infrastructure

Processing facility tied into national Natural Gas pipeline grid

12,387 Hectare development lease valid until 2031 extendable to 2041

## Shore Base



## Onshore Gas Processing Facility



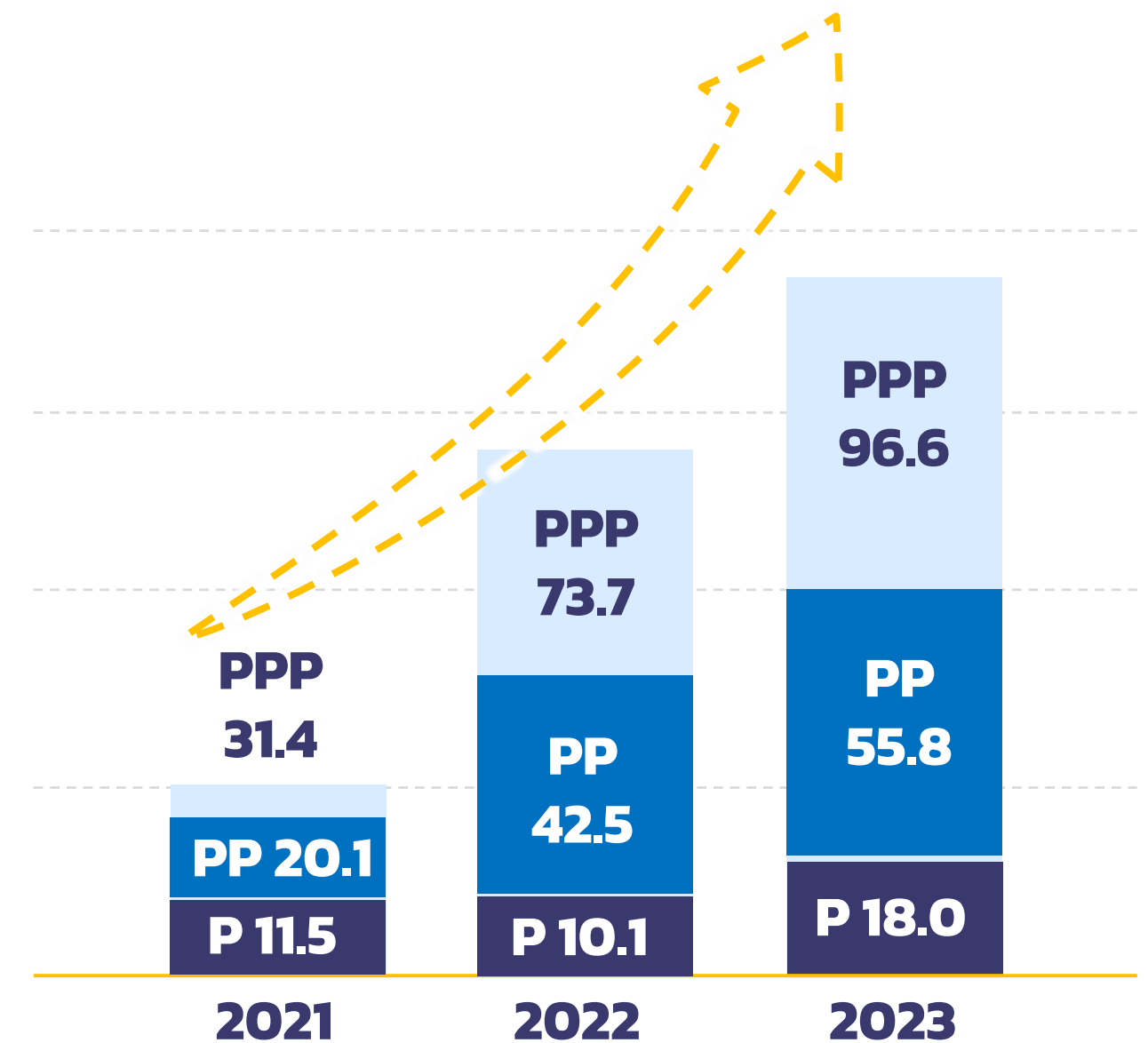
# Solid Reserves Growth



## Gross Reserves Summary and Net Present Value\*

	Conventional		NPV – 10%	
	Natural gas (Bcf)		Before Income Tax (US\$M)	
	Dec 31 '23	Dec 31 '22	Dec 31 '23	Dec 31 '22
<b>Proved</b>				
Producing	1.3	2.4	\$11.5	\$42.3
Developed Non-Producing	8.4	0.0	\$81.9	\$1.1
Undeveloped	8.3	7.7	\$40.9	\$80.3
<b>Total Proved</b>	<b>18.0</b>	<b>10.1</b>	<b>\$134.3</b>	<b>\$123.8</b>
Total Probable	37.8	32.4	\$286.2	\$307.8
<b>Total Proved + Probable</b>	<b>55.8</b>	<b>42.5</b>	<b>\$420.5</b>	<b>\$431.5</b>
Total Possible	40.8	31.2	\$292.2	\$299.1
<b>Total PPP</b>	<b>96.6</b>	<b>73.7</b>	<b>\$712.7</b>	<b>\$730.6</b>

## Strong Reserves Growth



\*See Appendix for Glossary of Oil and gas terms (page 17). All figures presented in accordance with COGEH standards. Reserves and resources represent Trillion's 49% interest at SASB conventional natural gas resources. \*See Trillion's Form 51-101F1 effective December 31, 2023 for third party reserve estimates. \*\* NPV 10 values assumes pricing as at December 31, 2023,. \*\*\* Future work programs include unrisks prospective resources and which are management estimates based on preliminary seismic data which is being reprocessed this year. Recovery factor used ranges between 57-70%.

**P** – proven reserves

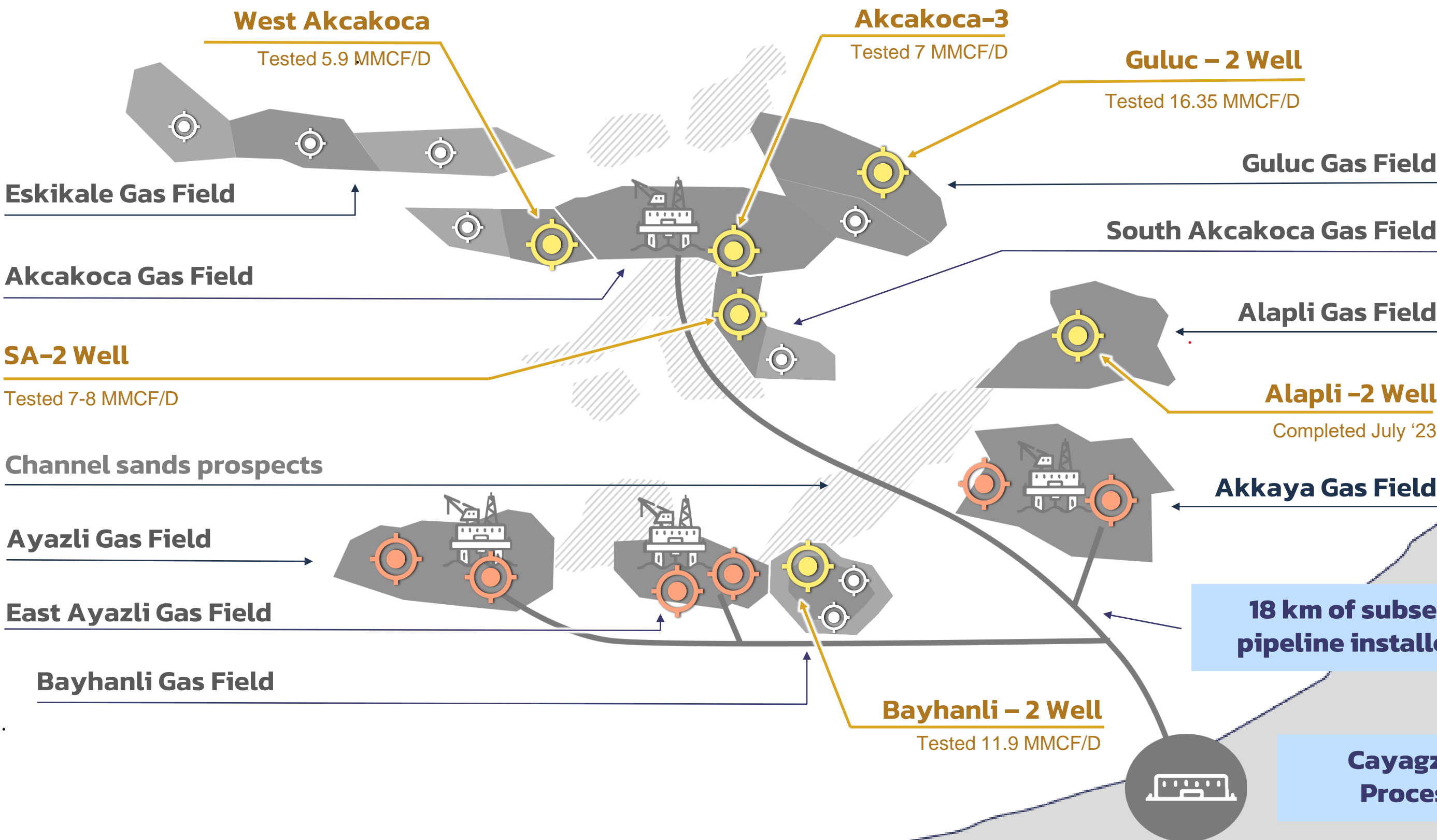
**PP** – proven and probable reserves

**PPP** – proven, probable and possible reserves



# SASB Production Ramp Up 17+ Wells

BLACK SEA



**Production Platform**

**2025+ Future Drilling Locations**

**2022-2023 Drilled locations**

**2024 Future Drilling Locations**





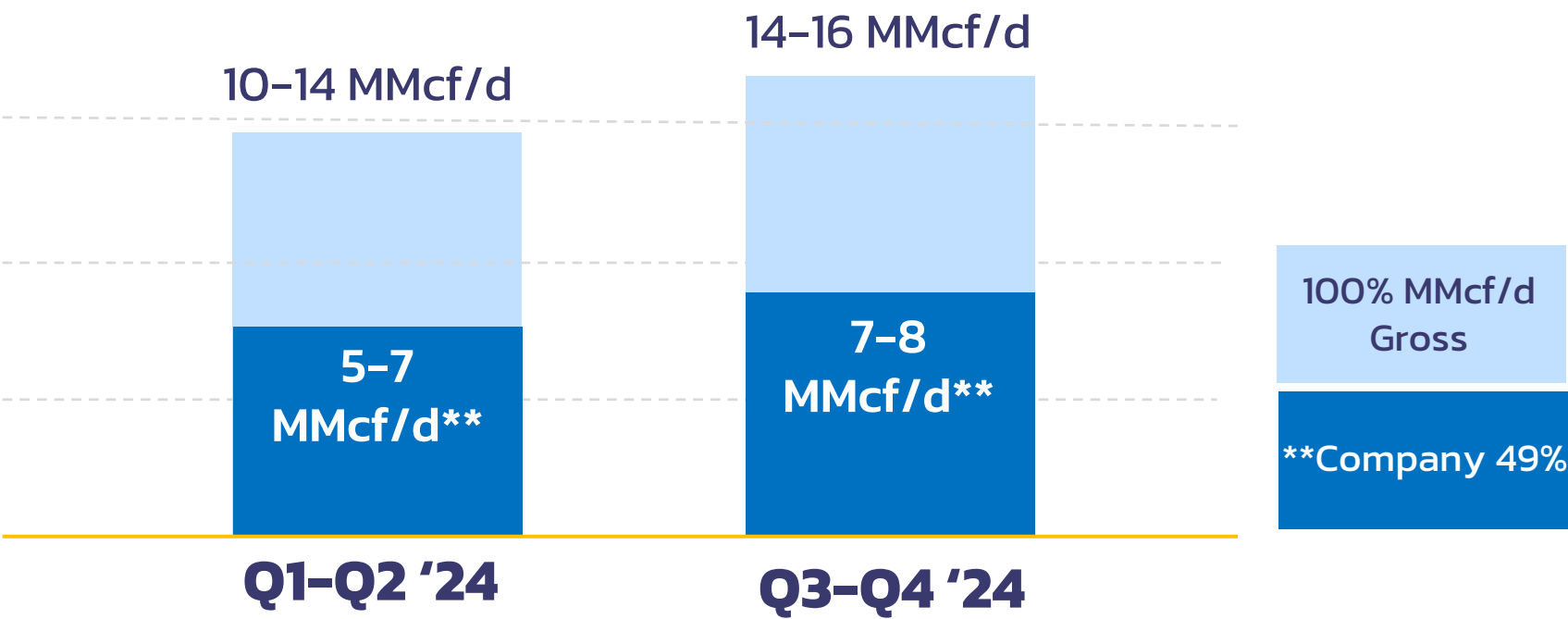
# SASB Work Program 2024

Ramping up production through ALS, new perforations and sidetrack wells



- ▶ Increase production on existing **8-9 wells** by installing Artificial Lift (water pumps) – **Cost \$2.7m**
- ▶ Add **1+ new sidetrack well** to SASB to commence in Q4 '24 – **Cost: \$4m each** (49% interest) + additional sidetracks to be drilled in 2025

Anticipated Production Exit Rates



## Program Timeline

Wells:	Q2 '24	Q3 '24	Q4 '24
Guluc-2	Perf. & Velocity String		
South Akcakoca-2	Perf. & Velocity String		
West Akcakoca-1	Perf. & Velocity String		
Akcakoca-3	Perf. & Velocity String		
Alapli-2	Artificial Lift		
Bayhanli-2	Artificial Lift		
East Ayazli-1	Artificial Lift		
East Ayazli-2	Artificial Lift		
Akcakoca-5	Artificial Lift		
Side-Track program commencement			1 sidetrack

6-7 Sidetrack Wells planned for 2025	
2022-2023	2024
6 wells drilled Production started 2024	9-10 workovers for long-term production + compressor upgrades



# Top Onshore Oil Play in Mid-Europe

**Cudi-Gabar Region Oil Blocks,  
South-East Turkiye**

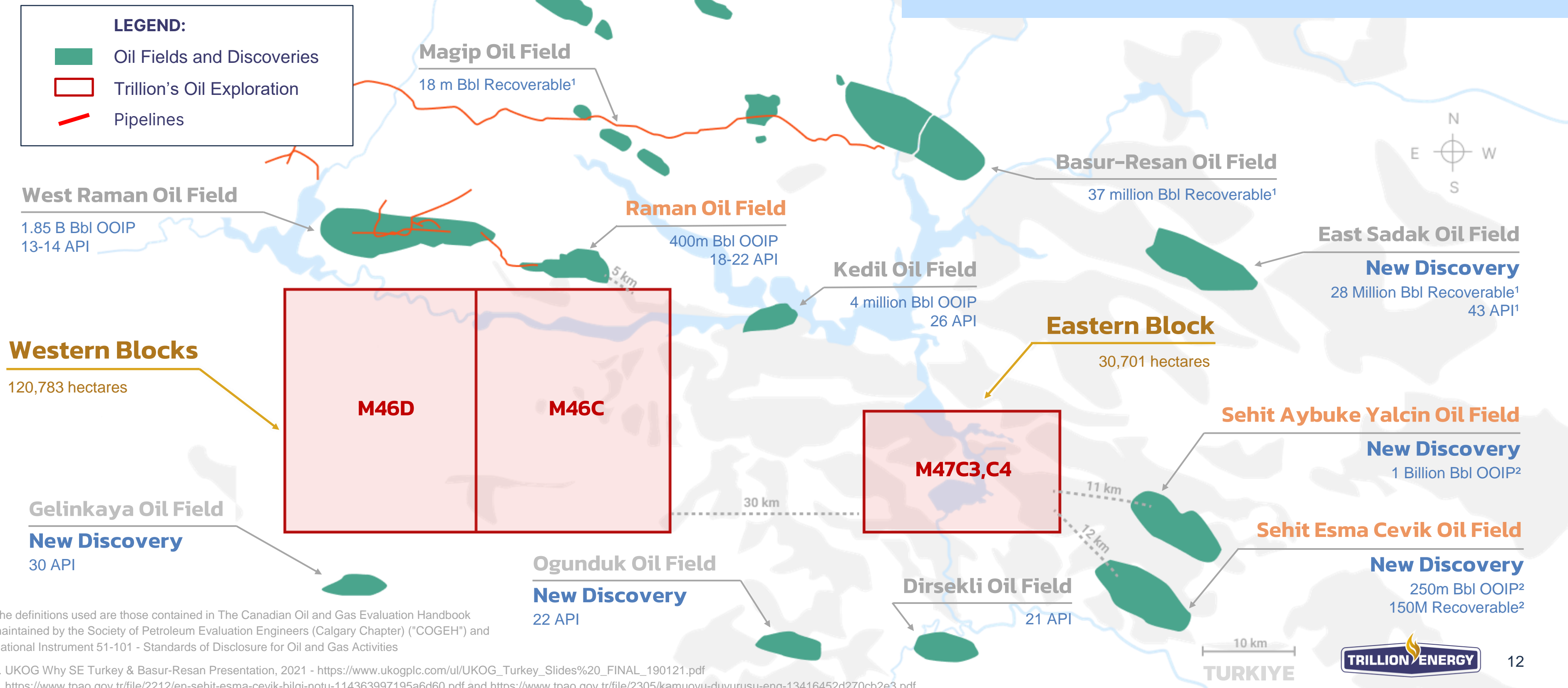




# Oil Fields Cudi-Gabar Province

## South-East Turkiye

**Trillion has farm-in on 3 oil exploration blocks consisting of a gross 151,484 hectares (374,325 acres)**



The definitions used are those contained in The Canadian Oil and Gas Evaluation Handbook maintained by the Society of Petroleum Evaluation Engineers (Calgary Chapter) ("COGEH") and National Instrument 51-101 - Standards of Disclosure for Oil and Gas Activities

1. UKOG Why SE Turkey & Basur-Resan Presentation, 2021 - [https://www.ukogplc.com/ul/UKOG\\_Turkey\\_Slides%20\\_FINAL\\_190121.pdf](https://www.ukogplc.com/ul/UKOG_Turkey_Slides%20_FINAL_190121.pdf)

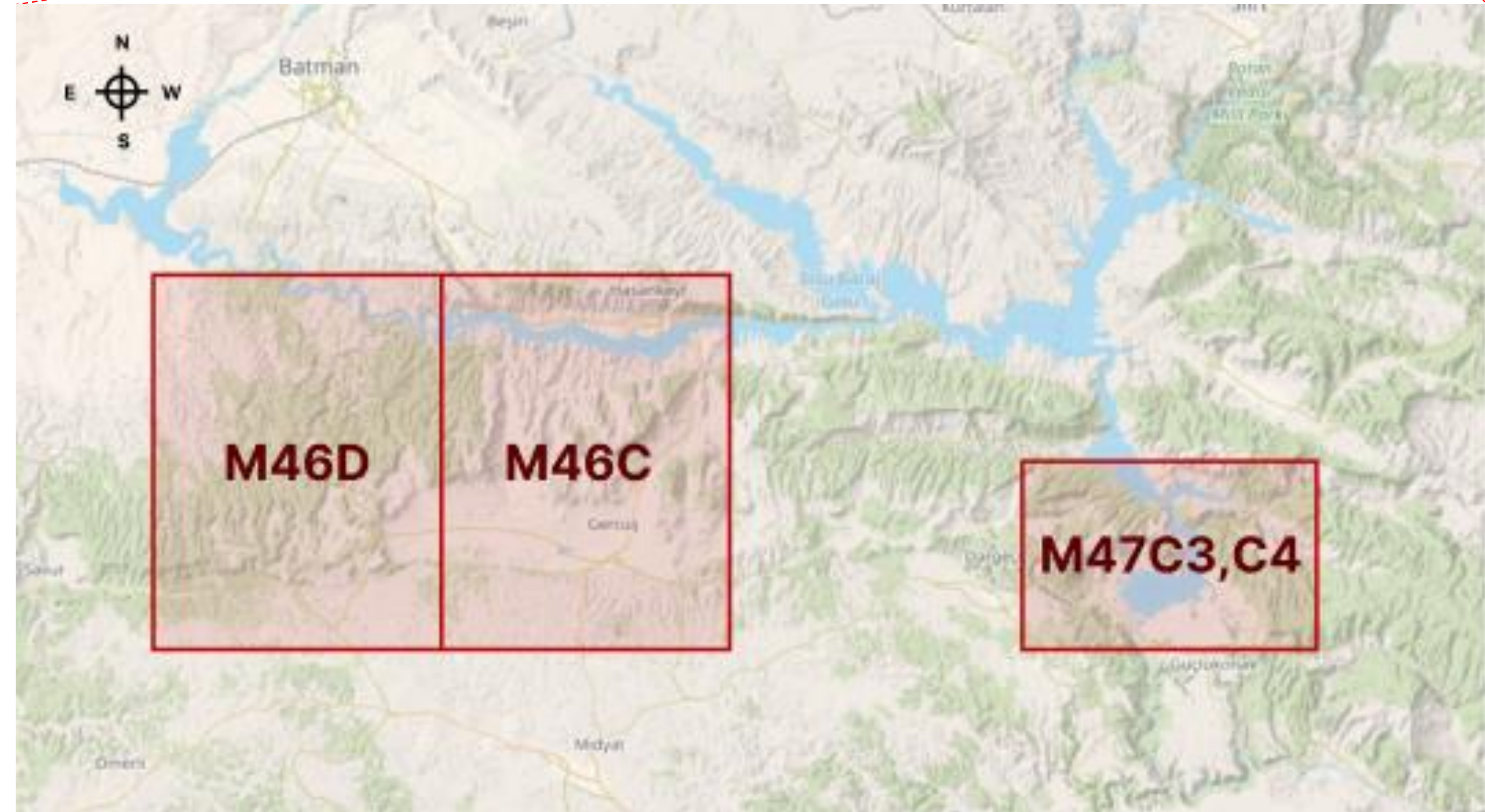
2. <https://www.tpao.gov.tr/file/2212/en-sehit-esma-cevik-bilgi-notu-114363997195a6d60.pdf> and <https://www.tpao.gov.tr/file/2305/kamuoyu-duyurusu-eng-13416452d270cb2e3.pdf>



# Oil Exploration Work Program



- ▶ Three blocks M47c3,c4 M46c,d total of 374,325 acres
- ▶ **10 wells program** targeting discovery of 10,000 – 100,000 bbl/day oil field discovery. PPE to drill 4 wells and shoot seismic to earn 50%
- ▶ Minimum 351 km 2D seismic to be shot over the **3 blocks**
- ▶ If a discovery is made, economics are pro-rata to respective interests
- ▶ Wells expected to cost USD \$3.5 million each (gross 100%)





# M47c3,c4 Geological Cross-Section over Prospective Area

Initial seismic identified from Jan 2024 one anticline structure two fault traps on M47 block

Esma Cevik and Aybuke Yalcin discoveries have 43° API oil found in anticline structures in Sayındere, Mardin Group and Cudi Group formations at 1,600–2,400m depth

To be drilled 2024

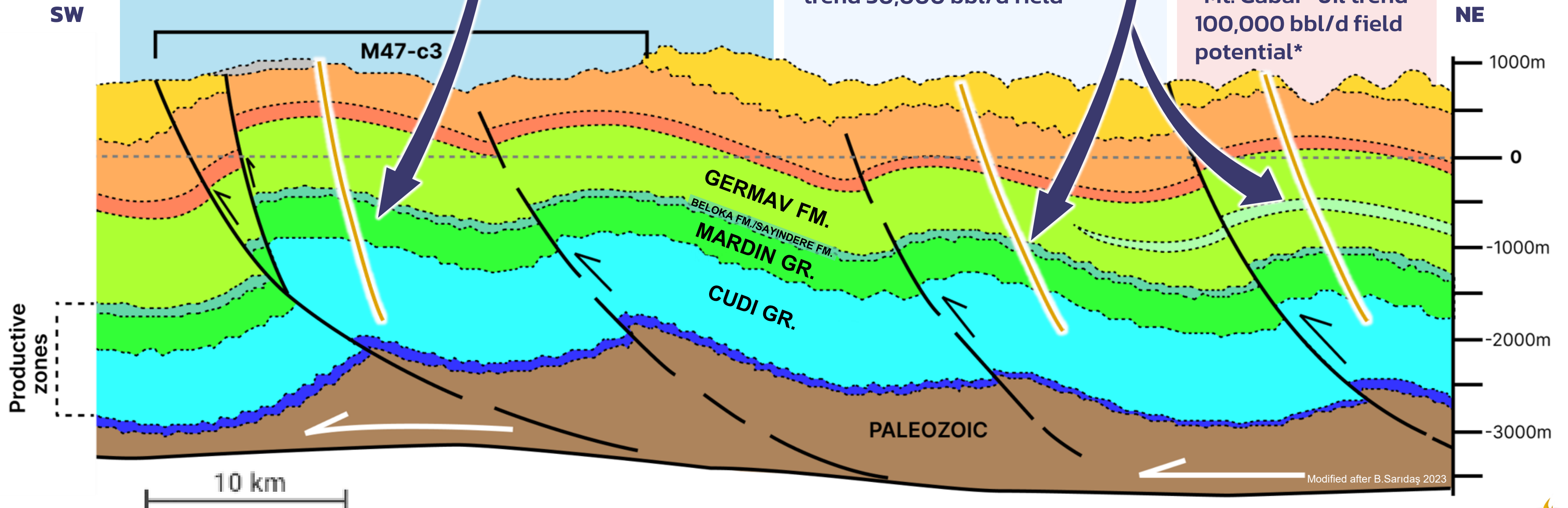
Discovered 2021

Discovered 2023

Unexplored area

Sehit Esma Çevik "Esma" oil trend 30,000 bbl/d field\*

Sehit Aybuke Yalcin "Mt. Gabar" oil trend 100,000 bbl/d field potential\*



\* TPAO Official Announcement Dec 2023 – [https://www.linkedin.com/posts/trpetrolleri\\_tpao-enerjidebaafbaftmsaftztaesrkiye-activity-7139938970196504576-VMo7?utm\\_source=share&utm\\_medium=member\\_desktop](https://www.linkedin.com/posts/trpetrolleri_tpao-enerjidebaafbaftmsaftztaesrkiye-activity-7139938970196504576-VMo7?utm_source=share&utm_medium=member_desktop)

\*\* TPAO Press Release May 2023 <https://www.tpao.gov.tr/file/2305/kamuoyu-duyurusu-eng-13416452d270cb2e3.pdf>



# M47c3,c4 Production Potential for 2024\*

\*Subject to discovery being made

## Early production through tank farm

- ▶ 250 bbls tanker trucks can take oil from discovery to the **refinery 130 km away**
- ▶ Early production does **not require** water separation, but down the road it will need a **simple water separator**. Initial production is trucked for fast revenue

Estimated number of wells:	10
Est. per well production:	1,000 bbl
Est. daily field production:	10,000 bbl
Tank capacity:	11,800 bbl
Per truck capacity:	250 bbl
Number of trucks:	20
Distance to refinery:	130 km

## Future Pipeline access potential

- ▶ A **pipeline** will be constructed by TPAO, from **Esma and Yalkin** fields to the refinery which provides future access without trucking as pipeline develops





# Block 46c,d Oil Exploration Opportunity

## West Raman Oil Field 1.85 Billion Bbl OOIP\*

Old Discovery

## Raman Oil Field 400 m Bbl OOIP\*

Old Discovery






## Kedil Oil Field 4m Bbl OOIP\*

Old Discovery

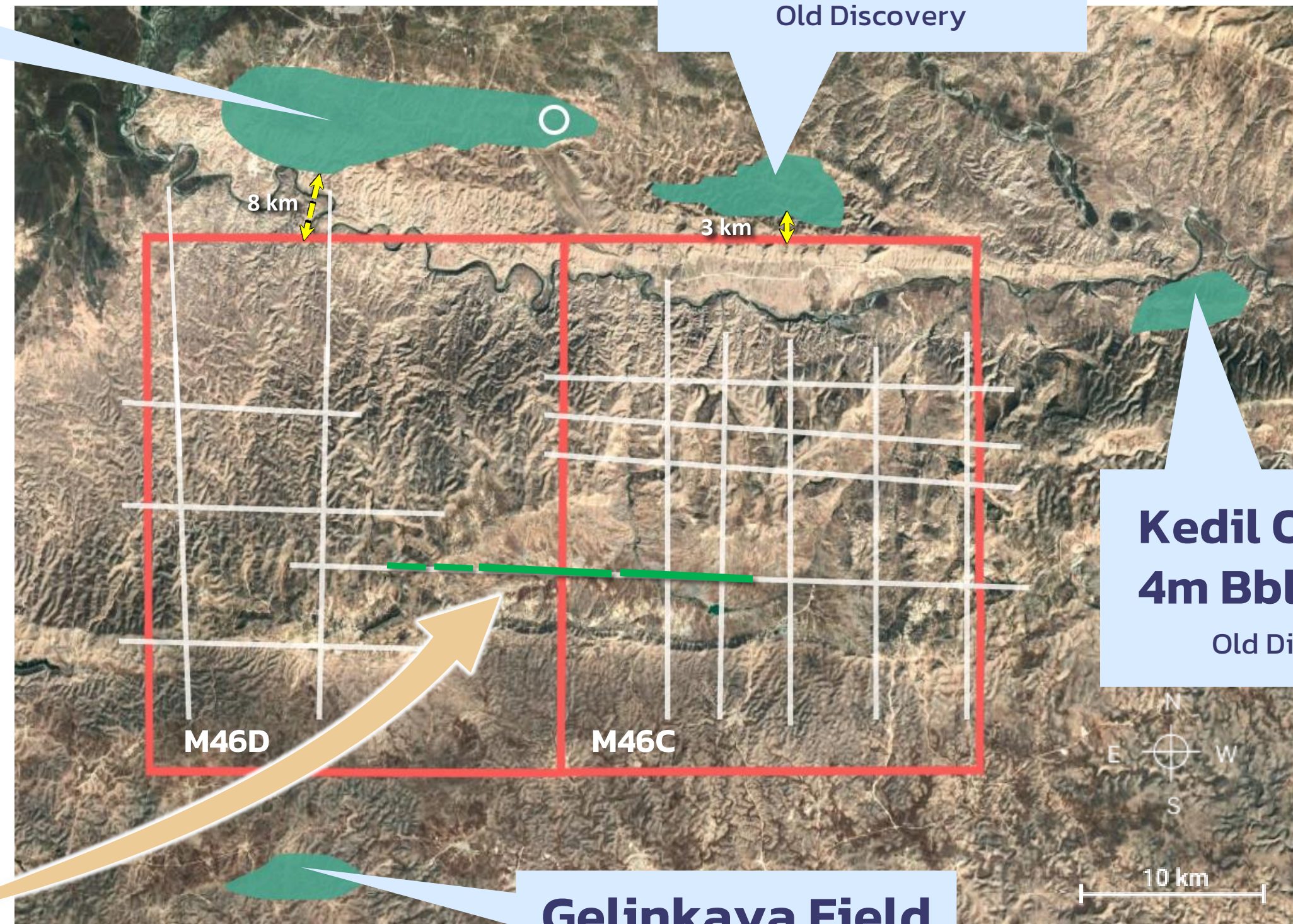
## Gelinkaya Field

New Discovery

### Legend:

-  Farmin block boundaries
-  Discovered oil pools
-  Seismic data collection area
-  Completed seismic data collection area
-  Existing producing oil well

- The exploration targets are Kiradag, Garzan and Mardin Group formations, which are between 1,000–2,000m depths
- Nearby existing oil fields are Kedil, Raman, and West Raman
- A new Paleozoic-aged oil field (Gelinkaya) was discovered in the Bedinan formation at about 2,500m depth





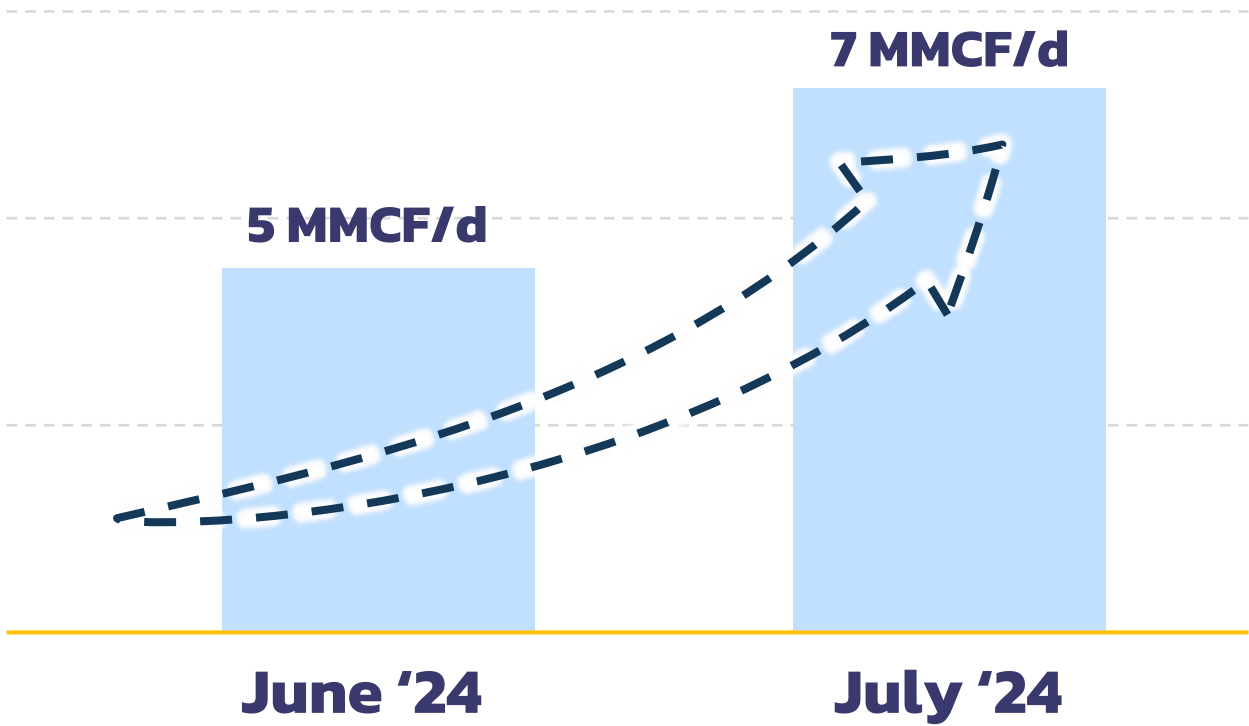
## ▶ SASB Gas Field Highlights

- Multi-well natural gas development program
- **US\$410m** NPV10 proved probable reserves
- **57 BCF** proved probable reserves
- Selling gas into worlds **6<sup>th</sup> largest market** that is 90% **dependent on imports**

## ▶ High Impact Oil & Exploration projects

- **Oil field exploration** in Cudi-Gabar Oil Petroleum Province S.E. Turkey
- **2D seismic** data collection is ongoing for all 3 blocks (minimum 351 km)
- **2 exploration wells** planned to be drilled in 2024 on M47c3,c4

## Rapid Production Ramp-up Planned



Oil blocks	SASB
2 Exploration Wells planned for 2024	7 Sidetrack Wells planned for 2025



# Directors & Management Team



**Dr. Arthur Halleran** ▶ PRESIDENT, CEO & DIRECTOR

Dr. Halleran has served as a director of Trillion Energy since October 4, 2011. He has a Ph.D. in Geology from the University of Calgary and 40 years of petroleum exploration and development experience. His international experience includes countries such as Canada, Colombia, Egypt, India, Guinea, Sierra Leone, Sudan, Suriname, Chile, Brazil, Bulgaria, Turkiye, Pakistan, Peru, Tunisia, Trinidad Tobago, Argentina, Ecuador and Guyana. Dr. Halleran has worked for Petro-Canada, Chevron, Rally Energy, Canacol Energy and United Hydrocarbon International Corp. In 2007, Dr. Halleran founded Canacol Energy Ltd., a company with petroleum and natural gas exploration and development activities in Colombia, Brazil and Guyana which made a billion-dollar natural gas discovery in Colombia.



**Al Thorsen** ▶ COO

Mr. Al Thorsen is leading the production enhancement initiatives and responsible for the production operations of SASB gas field as well as future drilling activities in Turkey and abroad. Highlights of his career include Valeura Energy Inc. as operations manager in Turkey; Journey Energy, leading a production team; he has also held positions with Rio Alto Exploration, as country manager and production manager, Zargon Oil and Gas as VP of Operations, Orleans Energy as VP of Operations, and Central Petroleum as COO. He holds a Bachelor of Science in Petroleum Engineering and graduated 1986 from Montana College of Mineral Science & Technology, Butte, Montana



**Sean Stofer** ▶ DIRECTOR

Sean Stofer has over 20 years of renewable energy experience. Mr. Stofer is a graduate of the University of British Columbia in Engineering and is a registered Engineer in California. He is a founder of several successful renewable energy companies including for the arctic's largest solar array; 250 MW of solar in the USA; 200+MW of wind projects and over 300MW of hydroelectric projects. He is COO of Green Data Center Real Estate, which uses renewable energy to power data centers. Sean is leading a project of over 500 MW using wind, solar and hydropower. Sean has worked closely with Government to guide policy and has consulted to a wide range of companies. Sean was awarded the Top 40 Under 40 in Vancouver, Canada for his business achievements.



**Jay Park, KC** ▶ DIRECTOR

Mr. Park is a renowned energy lawyer with a particular focus on upstream oil and gas transactions. He has worked on energy projects in more than fifty countries, including Turkey. He has advised international energy companies, including oil and gas explorers, producers, marketers, pipeline companies, state oil companies, governments, banks and multilateral agencies such as the World Bank. Mr. Park was formerly CEO and then Chairman of ReconAfrica exploring for oil & gas in Namibia and Botswana. During this period ReconAfrica was twice named to the TSX Venture 50 and was the top performing 2021 TSX Venture 50 company from the energy sector. Mr. Park is currently Executive Chairman of MCF Energy Ltd. exploring for gas in Europe.



**David Thompson** ▶ DIRECTOR, AUDIT COMMITTEE CHAIR

Mr. Thompson has 30 years of financial experience in the oil and gas industry. He successfully founded an oil trading company in Bermuda, with offices in the U.S. and Europe, and was responsible for the company's Turkmenistan production operations in the Lhamov and Zhdanoy oil fields (offshore Caspian Sea — part of the Turkmenistan project), which discovered producing reserves of 365M barrels oil and 2 TCF gas and successfully raised over \$100M in equity. He is Managing Director of AMS Limited, a Bermuda based Management Company. He has served as Founder, President and CEO of Sea Dragon Energy Inc. (London exchange: SDX 21.00 GBP), Financial Director of Forum Energy Plc (AIM) and SVP at Larmag Group of Companies. Mr. Thompson is a Certified Management Accountant since 1998.



# Contact

## General Inquiries

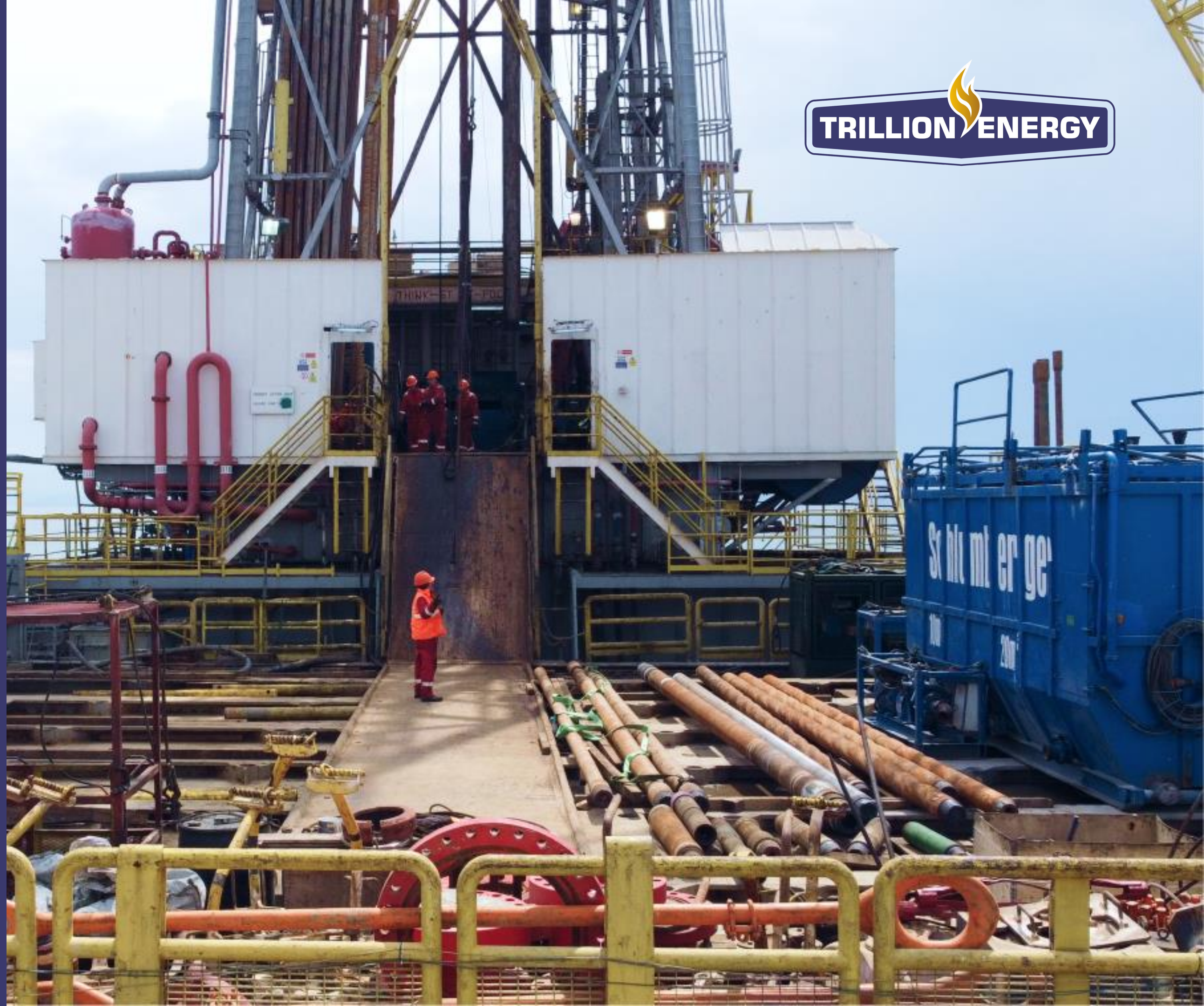
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Cankaya, Ankara, Türkiye





# Appendix

# Presentation of Oil & Gas Information



## Presentation of Oil & Gas Information

BOEs have been converted on the basis of six thousand cubic feet ("Mcf") natural gas to 1 barrel of oil. BOEs may be misleading, particularly if used in isolation. A BOE conversion ratio of 6 Mcf: 1 bbl is based on an energy equivalency conversion method primarily applicable at the burner tip and does not represent a value equivalency at the wellhead. In addition, given that the value ratio based on the current price of oil as compared with natural gas is significantly different from the energy equivalent of six to one, utilizing a BOE conversion ratio of 6 Mcf: 1 bbl would be misleading as an indication of value

## Definitions

In this presentation:

- "2P" are 1P reserves plus probable reserves.
- "3P" are 1P plus 2P plus possible reserves.
- "developed producing reserves" are those reserves that are expected to be recovered from completion intervals open at the time of the estimate. These reserves may be currently producing or, if shut-in, they must have previously been on production, and the date of resumption of production must be known with reasonable certainty.
- "GAAP" means generally accepted accounting principles in the United States of America.
- "NPV" means net present value.
- "NPV10" means NPV discounted at 10%.
- "possible reserves" are those additional reserves that are less certain to be recovered than probable reserves. There is a 10% probability that quantities actually recovered will equal or exceed sum of proved plus probable plus possible reserves. Possible reserves may be developed or undeveloped.
- "probable reserves" are those unproved reserves that are less certain to be recovered than proved reserves. It is equally likely that actual remaining quantities recovered will be greater or less than sum of estimated proved plus probable reserves. Probable reserves may be developed or undeveloped.
- "proved developed reserves" or "PDP" are those proved reserves that are expected to be recovered from existing wells and installed facilities or, if facilities have not been installed, that would involve a low expenditure (e.g., when compared to cost of drilling a well) to put reserves on production. Developed category may be subdivided into producing and non-producing.
- "proved reserves" or "1P" are those reserves that can be estimated with a high degree of certainty to be recoverable. It is likely that actual remaining quantities recovered will exceed estimated proved reserves.
- "reserves" are estimated remaining quantities of oil and natural gas and

related substances anticipated to be recoverable from known accumulations, as of a given date, based on: (a) analysis of drilling, geological, geophysical and engineering data; (b) use of established technology; and (c) specified economic conditions, which are generally accepted as being reasonable. Reserves are classified according to degree of certainty associated with estimates.

- "undeveloped reserves" are those reserves expected to be recovered from known accumulations where a significant expenditure (e.g., when compared to the cost of drilling a well) is required to render them capable of production. They must fully meet the requirements of the reserves category (proved, probable, possible) to which they are assigned.
- Certain terms used in this presentation but not defined are defined in NI 51-101, CSA Staff Notice 51-324 – Revised Glossary to NI 51-101 Standards of Disclosure for Oil and Gas Activities ("CSA Staff Notice 51-324") and/or the COGEH and, unless the context otherwise requires, shall have the same meanings herein as in NI 51-101, CSA Staff Notice 51-324 and the COGEH, as the case may be.

## Reserves Information

Unless otherwise expressly stated, all reserves values, future net revenue, ancillary information and any measure of oil and gas activities contained in this presentation is as at January 31, 2023 and has been prepared and calculated in accordance with Canadian National Instrument 51-101 – Standards of Disclosure for Oil and Gas Activities ("NI 51-101") and the Canadian Oil and Gas Evaluation Handbook ("COGEH") and derived from a report with an effective date of January 31, 2023 prepared by GLJ Ltd. ("GLJ"), Trillion's independent qualified reserves evaluator and auditor (the "GLJ Report"). Any reserves estimate or related information contained in this presentation as of a date other than January 31, 2023 has an effective date of January 31 of the applicable year and is derived from a report prepared by Trillion's independent qualified reserves evaluator and auditor as of such date, and additional information regarding such estimate or information can be found in Trillion's applicable Statement of Reserves Data and Other Oil and Gas Information on Form 51-101F1 filed on SEDAR at [www.sedar.com](http://www.sedar.com).

Estimates of reserves provided in this presentation are estimates only and there is no guarantee that estimated reserves will be recovered. Actual reserves may be greater than or less than estimates provided in this presentation and differences may be material.

## Oil & Gas Non-GAAP Terms.

**Operating netback:** Oil and gas sales less operating and transportation expenses. Operating netback per boe as presented is defined as oil and gas sales price less forecasts of transportation and quality discount, royalties, operating costs and pipeline transportation from the Brent oil price forecast.

**Funds flow from operations:** is defined as net income or loss adjusted for DD&A expenses, asset impairment, goodwill impairment, deferred tax expense or recovery, stock-based compensation expense, amortization of debt issuance costs, non-cash lease expense, lease payments, unrealized foreign exchange gains or losses, financial instruments gains or losses, other non-cash losses, cash settlement of financial instruments and other gains or losses.

**EBITDA and Adjusted EBITDA:** Net income adjusted for DD&A expenses, interest expense and income tax expense or recovery ("EBITDA") and adjusted EBITDA, as presented, is defined as EBITDA adjusted for non-cash lease expense, lease payments, unrealized foreign exchange gain or loss, stock-based compensation expense or recovery, unrealized derivative instruments gain or loss, gain on repurchase of Senior Notes, other financial instruments gain or loss and other loss.

**Free cash flow (FCF):** GAAP "net cash provided by operating activities" less projected capital spending. Management believes that free cash flow is a useful supplemental measure for management and investors to in order to evaluate the financial sustainability of the Company's business.

**Net Debt:** Comprised of cash and senior notes (gross).

**Finding and development costs (F&D Costs):** F&D costs are calculated as estimated exploration and development capital expenditures, excluding acquisitions and dispositions, divided by the applicable reserves additions both before and after changes in FDC costs. The calculation of F&D costs incorporates the change in FDC required to bring reserves into production.

These non-GAAP measures do not have a standardized meaning under GAAP. Investors are cautioned that these measures should not be construed as an alternative to net income or loss or other measures of financial performance as determined in accordance with GAAP. Gran Tierra's method of calculating these measures may differ from other companies and, accordingly, it may not be comparable to similar measures used by other companies. These non-GAAP financial measures are presented along with the corresponding GAAP measure so as to not imply that more emphasis should be placed on the non-GAAP measure.