

"Investor Update - Focussed on Review of Welchau-1 Well Results"

# An ASX listed European Energy Producer and Explorer

"Reliable energy doesn't need to cost the earth"

#### **Disclaimer Statement**

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Pursuant to the requirements of the ASX Listing Rule 5.41 the technical and Prospective Resources information relating to Austria and Italy contained in this presentation has been reviewed by Paul Fink as part of the due diligence process on behalf of ADX. Mr. Fink is Technical Director of ADX Energy Ltd is a qualified geophysicist with 30 years of technical, commercial and management experience in exploration for, appraisal and development of oil and gas resources. Mr. Fink is a member of the EAGE (European Association of Geoscientists & Engineers) and FIDIC (Federation of Consulting Engineers).

Independent audit of developed reserves have been completed for ADX' Zistersdorf and Gaiselberg fields ("Fields") in the Vienna basin and Anshof in Upper Austria (Austria) by RISC Advisory Pty Ltd ("RISC"). RISC conducted an independent audit of ADX' Zistersdorf and Gaiselberg fields ("Fields") in the Vienna basin and Anshof in Upper Austria (Austria) by RISC as independent audit of ADX' Zistersdorf and Gaiselberg fields ("Fields") in the Vienna basin and Anshof in Upper Austria (Austria) by RISC as independent audit of ADX' Fields evaluations, including production forecasts, cost estimates and project economics. Production from existing wells is classified as Developed Non-Producing. RISC is an independent advisory firm offering the highest level of technical and commercial advice to a broad range of clients in the energy industries worldwide. RISC has offices in London, Perth, Brisbane and South-East Asia and has completed assignments in more than 90 countries for over 500 clients and has grown to become an international energy advisor of choice.

#### PRMS Reserves Classifications used in this presentation:

Developed Reserves are quantities expected to be recovered from existing wells and facilities.

Developed Producing Reserves are expected to be recovered from completion intervals that are open and producing at the time of the estimate.

Developed Non-Producing Reserves include shut-in and behind-pipe reserves with minor costs to access.

Undeveloped Reserves are quantities expected to be recovered through future significant investments.

- A. Proved Reserves (1P) are those quantities of Petroleum that by analysis of geoscience and engineering data, can be estimated with reasonable certainty to be commercially recoverable from known reservoirs and under defined technical and commercial conditions. If deterministic methods are used, the term "reasonable certainty" is intended to express a high degree of confidence that the quantities will be recovered. If probabilistic methods are used, there should be at least a 90% probability that the quantities actually recovered will be equal or exceed the estimate.
- B. Probable Reserves are those additional Reserves which analysis of geoscience and engineering data indicate are less likely to be recovered than Possible Reserves. It is equally likely that actual remaining quantities recovered will be greater than or less than the sum of the estimated Proved plus Probable Reserves (2P). In this context, when probabilistic methods are used, there should be at least a 50% probability that the actual quantities recovered will equal or exceed the 2P estimate.
- C. Possible Reserves are those additional Reserves that analysis of geoscience and engineering data suggest are less likely to be recoverable that Probable Reserves. The total quantities ultimately recovered from the project have a low probability to exceed the sum of Proved plus Probable plus Possible (3P) Reserves, which is equivalent to the high-estimate scenario. When probabilistic methods are used, there should be at least a 10% probability that the actual quantities recovered will equal or exceed the 3P estimate. Possible Reserves that are located outside the 2P area (not upside quantities to the 2P scenario) may exist only when the commercial and technical maturity criteria have been met (that incorporate the Possible Reserves must reference a commercial 2P project.

#### Prospective Resource Classifications used in this presentation:

Prospective Resources are those estimated quantities of petroleum that may potentially be recovered by the application of a future development project(s) related to undiscovered accumulations. These estimates have both an associated risk of discovery and a risk of development. Further explorations appraisal and evaluation is required to determine the existence of a significant quantity of potentially moveable hydrocarbons.

P(90) Estimate: means at least a 90% probability that the quantities actually recovered will equal or exceed the estimate.

P(50) Estimate: means At least a 50% probability that the quantities actually recovered will equal or exceed the estimate.

P(10) Estimate: means At least a 10% probability that the quantities actually recovered will equal or exceed the estimate.

#### Oil and Gas Conversions

BOE means barrels of oil equivalent. Bcfe means billion of cubic feet of gas equivalent. Gas to oil conversion used in this presentation: 6 mcf of gas = 1 barrel of oil. Mcf means thousand cubic feet of gas

# Investment Proposition and Operating Strategy



Increasing Operating Cashflow



Reserves and Production Growth from New Discovery



World-class
Exploration
Portfolio in the heart of Europe



Value Adding, Complementary Renewable Projects



Operating Capability

 Ability to generate and operate projects Active Drilling Program

- Funded by Farmouts
- Validation
   trisk
   reduction

**320** boepd net oil & gas production<sup>1</sup>

1.64 mmbbl 2P reserves @ Vienna Basin Fields only.

Anshof Field subject to review 2

**213** mmboe<sup>3</sup> prospective resources

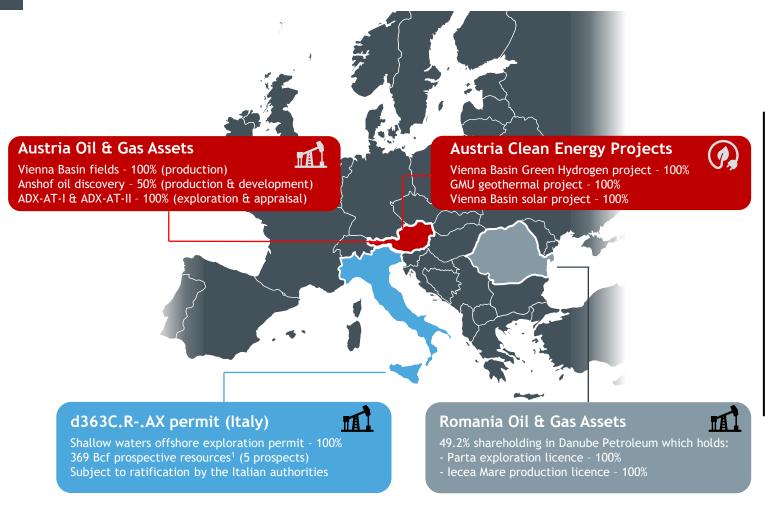
**47** MW combined renewable energy potential

**Prospective Resources** are those estimated quantities of petroleum that may potentially be recovered by the application of a future development project(s) related to undiscovered accumulations. These estimates have both an associated risk of discovery and a risk of development. Further explorations appraisal and evaluation is required to determine the existence of a significant quantity of potentially moveable hydrocarbons

<sup>1</sup> April 2023 average production from the Zistersdorf & Gaiselberg fields and Anshof field. <sup>2</sup> ref. Reserves Reporting Date & Valuation (Independently Audited) 04.11.2021 less production to 31 December 2023, <sup>3</sup> Best technical prospective resources for Upper Austria only. Prospective resources reporting date update 22.06.2023

## **Corporate and Asset Summary**

Positioned for a smarter, cleaner future for Europe



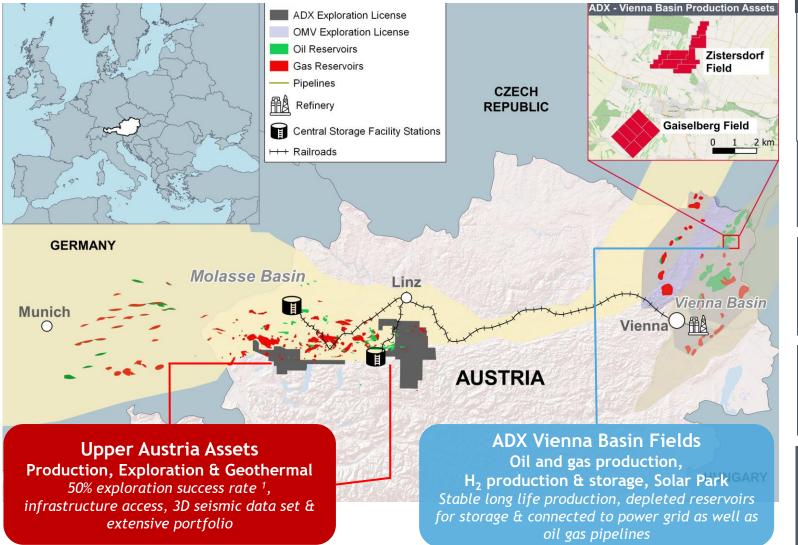
Refer to Cautionary Statement in relation to **Prospective Resources** on Page 3 of this presentation

Capital Structure	
Share price as at 11.04.2024	A\$ 0.12
Number of shares	438.8 m
Number of options	64.3 m
Market capitalisation	A\$ 52.7 m
Cash (unrestricted) as at 31.03.2024 - estimated	A\$ 7.0 m
Debt (net of restricted cash for debt)	A\$ 1.9 m
Enterprise value	A\$ 47.5 m
Number of shareholders	2,135

#### Political & Strategic Position

- ⇒ Stable jurisdictions with unmet energy demand
- ⇒ Excellent access to infrastructure
- ⇒ Strong focus on energy security since Ukraine war
- Operatorship capability & boots on the ground

## Our focus is on Austria Ideal place to build a diversified energy business



## Permits & Environment Approvals



A significant oil and gas industry

1 billion bbl oil & 2.7 Tcf gas
produced to-date

#### 75-Year oil & gas duopoly

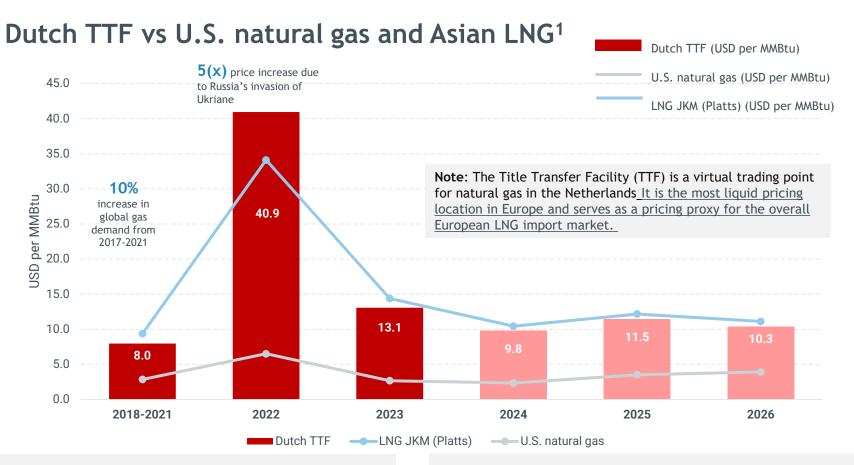
before ADX became the **third** operator in country

#### Energy Demand is unmet by local supply resulting in High Value Markets

Excellent Infrastructure that is highly accessible and Favourable Regulatory Processes

## Very favourable gas market dynamics

Large premium to US & structurally higher long-term prices



2018-2024 average TTF > 380% above US natural gas prices
European gas approx. 5x US gas price

2023-2026 TTF prices > 30% above 2018-2021 average tracking Asian LNG prices Long term trend of increasing gas price **Fundamental changes** to the European gas market since Russia's invasion of Ukraine in Feb-22:

Impact of the energy crisis distorted by mild weather in Europe for the past 2 winters

Despite step-up in LNG imports, security of supply remains a key concern

Reliance on spot LNG cargoes creates supply chain uncertainties and risk of diversion to Asian countries

Domestic gas production is down 33% since 2010 and expected to drop by an additional 7% by 2026

Further decline in Russian piped gas supplies from 2025 (expiry of Ukraine gas transit contract by end of Oct-24)

**Elevated gas prices in Europe** anticipated for the foreseeable future with increased correlation to LNG prices



## **Recent Highlights**

# **Finance**

- Share Capital Consolidation **of** 1 for 10
- Placement & SPP A\$ 6.4M funds from European & Australian Investors
- A\$1.3 M options exercised

# **Production**

- Stable production from Vienna Basin Fields
- Anshof-3 long term test outperformed expectation

Appraisal &

# **Transactions**

- MND Anshof Investment - EUR 6.6M for a 30% interest
- MCF Welchau Investment
  - EUR 2.9M for 25% interest
- MND Gas Exploration Investment
  - EUR 4.95M for 50% interest

Development

- Drilled Anshof-2 appraisal well
- Completed installation of permanent production facility at Anshof

## **Exploration**

- Drilled Welchau Gas Prospect
- Near Field Gas prospects matured to drill
- Oil and Gas exploration portfolio expanded

Vienna Basin Field Production

## 2024 Near term activities

Period of high activity focussed on Welchau resource definition, increasing cash flow and reserves growth

## Welchau gas

Testing & Appraisal
Large resource
potential definition

- Ongoing well data analysis and resource potential update
- Q4 2024
   Testing and well potential deepening
- Technical and commercial definition
- Permitting for follow up appraisal well for drilling in Q1 2025

## Anshof oil field

Appraisal & Development Cash flow growth

- April 2024
   Commission 3000
   BOPD capacity
   permanent oil facility
- Recommence oil production at ANS-3
- Q3 2024Drill ANS-2 ST1Appraisal well
- Drill ANS-3 Appraisal well
- Funding from MND transaction

## **Upper Austria**

Gas Exploration
Low risk, adjacent to
infrastructure

- Q4 2024Drill Further GasExploration Well
- Proximal to infrastructure
- Funding from MND transaction
- Further portfolio development & farmout opportunities

## Anshof field

Near field oil follow ups
Production tie-in
opportunities

- Multiple high value oil targets
- Tie into Anshof permanent facility
- High value reserves and cash flow growth
- Held at 100% equity

#### Vienna Basin Production Assets

Stable, high value production with long term potential

## Vienna Basin Fields (100% interest)

- Low emission, low decline production delivering long term cash flow (approx. 250 boepd)
- Ownership of 13.7 hectares of land suitable for Solar Park - 65 Km from Vienna
- High value sweet crude oil, very favourable fiscal terms (no royalties)

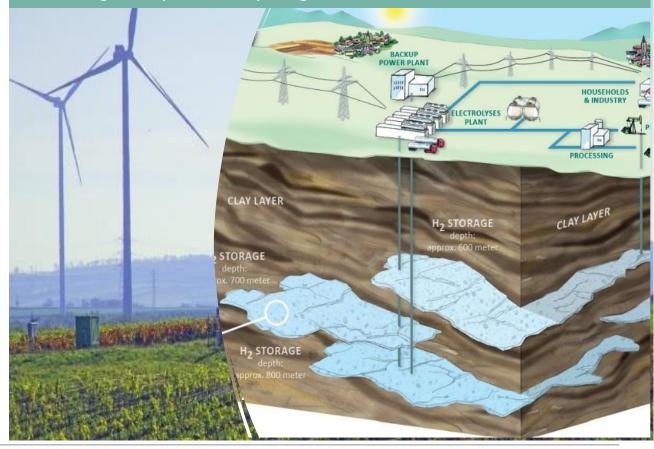


Multilayer field suitable for H<sub>2</sub> storage 1.64 mmbbl 2P developed reserves Note 1

Pipeline to Vienna refinery & gas pipeline

#### A long-term future for Vienna Basin Fields

- A unique position own the land + storage reservoirs + green power + connected to pipelines + availability of fresh water
- Addition of Solar Park, Hydrogen generation and Hydrogen Storage for planned hydrogen back bone



## Anshof appraisal and development

### Anshof-3 discovery well production

- ✓ Long term test production from Oct 2022 to Sep 2023 reaching regulatory limit (36,000 barrels) using production constrained interim facility
- ✓ Stable water free production average 115 bopd and peaked at 140 bpd with no pressure decline
- High quality crude oil (Brent equivalent) transported by truck to rail head and by rail to the Vienna refinery

#### Permanent facility Installation and recommencement of production

- √ 3000 bopd permanent production unit, storage and offloading tanks and
  gas fired power generation has been installed and commissioned
- $\checkmark$  Production recommenced on  $3^{rd}$  of April at approx. 134 bopd

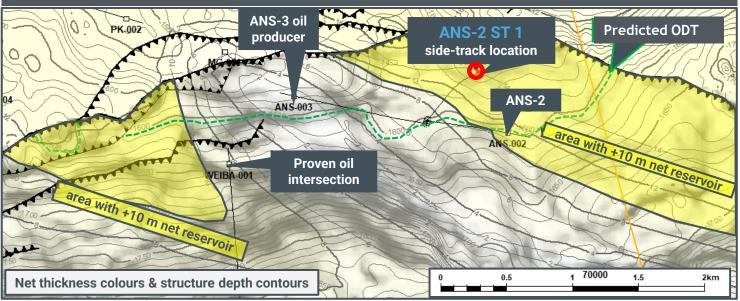




## Anshof appraisal and development

#### Anshof-2 ST1 - next appraisal / development well

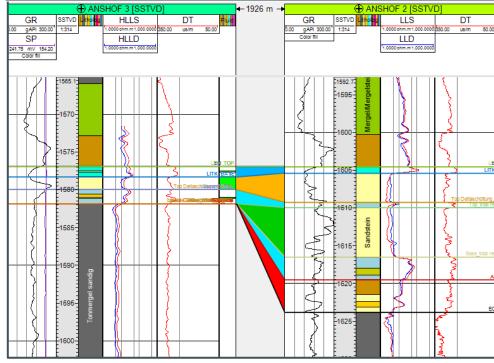
- Targeting thicker, better quality reservoir above the oil-water-contact
- Up-dip of Anshof-2 minimising well cost by using existing ANS-2 well and side-tracking below existing 9 5/8" casing shoe
- Anshof-2 ST1 will be partly funded by MND in accordance with Energy **Investment Agreement**
- Well slot likely to be available end Q3 to Q4 2024, well to be drilled in conjunction with ADX-AT-I gas exploration well

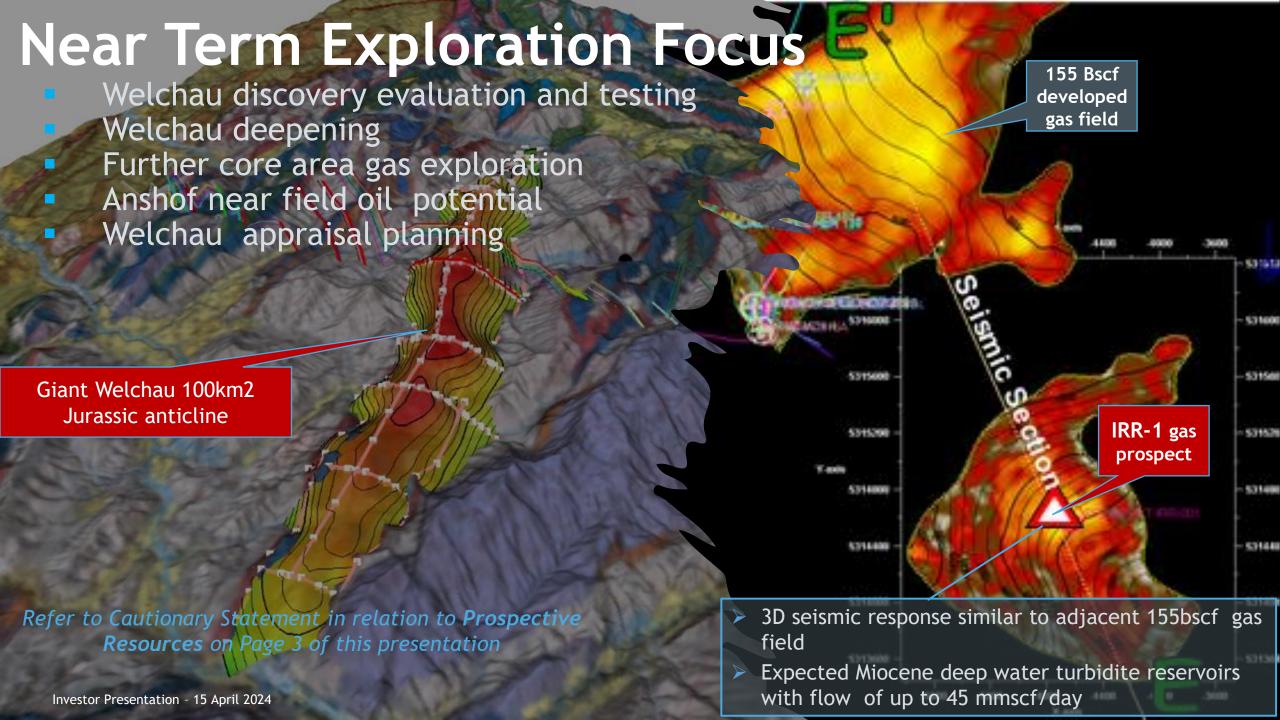


## "Stable, high value production with ongoing reserves growth"

#### Improved Productivity expected at Anshof-2 ST 1

Due to greater net vertical reservoir thickness (6 times that at Anshof-3) and higher porosity

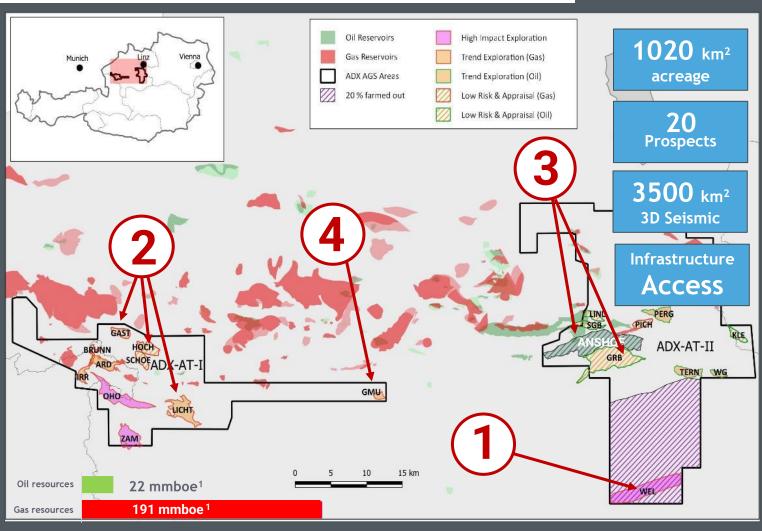




## **Exploration Activity in Upper Austria**

High impact, drill ready portfolio in the heart of Europe

- Welchau gas discovery to be tested in Q4 2024. Large resource potential to be appraised
- High Impact Gas Prospects & High Value Shallow gas play identified with state of the art Al seismic processing
- Anshof field appraisal & Near field oil prospects low risk follow up provide rapid pathway to further cash flow
- 18 MW Geothermal low risk, long term potential with shallow oil and gas targets provides new opportunity



Refer to Cautionary Statement in relation to Prospective Resources on Page 3 of this presentation.

Joint Venture:

MCF Energy Ltd.: 25%

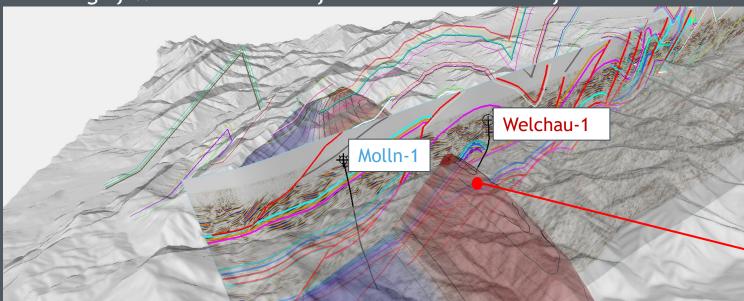
**Drilling Contractor: RED** 

ADX: 75%

## Welchau Gas Liquids Discovery

Overview of potential

"A potentially transformational resource in the heart of Europe. Our confidence in Welchau's potential remains undiminished. The evaluation and testing of Welchau is a core focus and value driver for ADX"



ADX predrill estimate best technical **Prospective Resources of 807 BCFE** (134 MMBOE)<sup>1</sup>. **Welchau** targeted the same reservoirs (*Steinalm Formation*) as the nearby Molln-1 well which tested condensate rich, pipeline quality gas at rate of 4.0 MMSCFPD in 1989

Refer to Cautionary Statement in relation to Prospective Resources on Page 3 of this presentation

adx

Spud-in Point:

Elevation (NN): 544.93 m RT above GL: 6.23 m

N: 5301005.23 m

#### Preliminary Well Log

Well Name: WELCHAU 1 UWI: WEL-001

Result: condensate-rich gas / light oil discovered

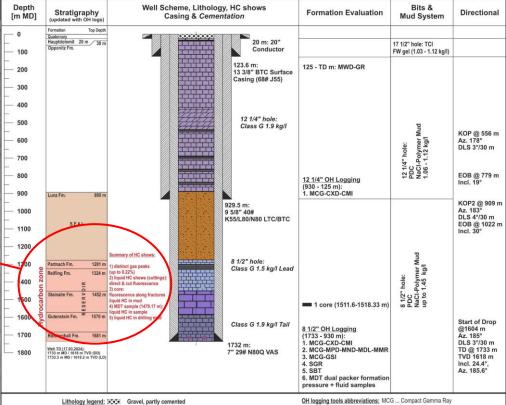
Main Target: Middle Triassic Steinalm Fm., target shape: Polygon Depth: 1452 m MD / 1371 m TVD

Additional Target(s):

Total Depth: 1733 m MD / 1618 m TVD (drilling depth) 1733.3 m MD / 1618.2 m TVD (logging depth)

Analogue Well(s): MOLLN 1 (OMV)

Date: 11 April 2024





Light grey, massive/bedded Limestone
Dolomite
Grey, graded or fine-bedded allodapic Limeston
Grey, wavy-bedded Limestone

Grey, wavy-bedded Limestone
+ Chert and Marlstone
Light grey, massive/thick-bedded Limestone
Dark grey, thin-bedded, bituminous Limestone
Dark grey Dolomite (Dolomite Breccia)

Grey, thin-bedded Limestone/Dolomite + Rauwacke

+ Anhydrite & Limestone

Shale calcareous, Clay- and Mariston

Light grey, bedded Dolomite

+ Gypsum & Anhydrite Siltstone, Sand- and Claystone

MND ... Compact Prior Density
MND ... Compact Dual Neutron
MDL ... Compact Dual Laterolo
MMR ... Compact Micro Laterol

MMR ... Compact Micro Laterol GSI ... Geochemical Spectrosc SGR ... Spectral Gamma Ray

CMI ... Compact Micro Imager

SBT ... Sector Bond Log

MDT ... Modular Formation Dynamics To

Investor Presentation - 15 April 2024 1 Best Technical Prospective Resources Prospective Resources reporting date 22.06.2023

## Welchau Gas Liquids Discovery

Results to date and next steps

### Key findings from drilling phase

- 450m of hydrocarbons shows in a giant 100 km2 structure (refer Well Data Review)
- Structural interpretation on prognosis
- Confirmed good trap seal quality which was a major predrill risk
- Confirmed hydrocarbon column of condensate rich gas and potential liquids
- Produceable hydrocarbons indicated from down hole sampling and well inflow
- Recovered core, drilling results and preliminary log evaluation indicates storage and flow potential
- Well drilled successfully approx. 30% below budget
- Still over 1000m of exploration potential below current well TD

Ticked all the boxes of a technical discovery - *P*(*success*) *from 20% to 100%* 

"Next Steps"

Data QC

Data Analysis

Resource review

Resource update

Well testing design

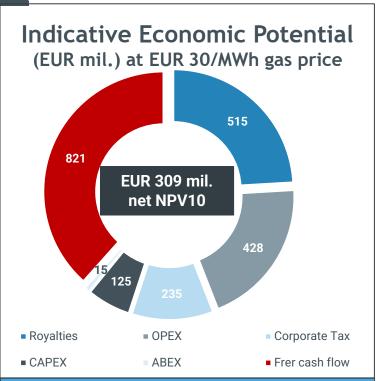
Well testing

Define Commercial Potential and the likely appraisal program



## Welchau Gas Liquids Discovery

Indicative economics and profitability benchmarking



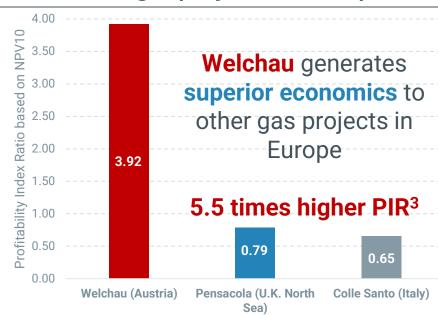
Economics derived from Gaffney Cline & Associates' 1U case (332 Bcf gross gas resources) excludes any contribution from high value liquids (45° API) generate a NPV10 (ADX' share) representing 10(x)ADX' market capitalisation<sup>1</sup>

### Compelling potential

- Large gas and liquid resource potential at an onshore location in premium energy market
- Excellent availability of infrastructure for gas (18 kms) and liquids (40 Kms)
- Shallow and relatively cheap drilling costs
- Relatively short development time frames especially in the case of liquids
- Excellent demand and pricing for gas (Dutch TTF) & liquids (Brent)
- Deeper exploration potential in Welchau well
- Play opening discovery with multiple follow up targets

Refer to Cautionary Statement in relation to **Prospective Resources** on Page 3 of this presentation

### Welchau Profitability Index Ratio<sup>2</sup> vs other gas projects in Europe



	Welchau	Pensacola <sup>4</sup>	Colle Santo <sup>5</sup>
Location	Austria (onshore)	U.K. (offshore)	Italy (onshore)
Gross resources	55 mmboe (1U)	51 mmboe (2C)	11 mmboe (2P)
Gross CAPEX	USD 177 mil.	US\$ 884 mil.	US\$ 95 mil.
Gross NPV10	USD 694 mil.	US\$ 663 mil.	US\$ 62 mil.

## Welchau's potential is of national significance

Austria's gas supplies remain highly vulnerable & Russia dependent

"Our dependence on Russian natural gas threatens the prosperity, security and future of our country. Our goal is to get out of Russian natural gas. As a sovereign country, we cannot simply accept that the share of Russian gas increases instead of decreases. That is why we will now present the next measures," says Climate Protection and Energy Minister Leonore Gewessler.

#### Supply and Demand Summary

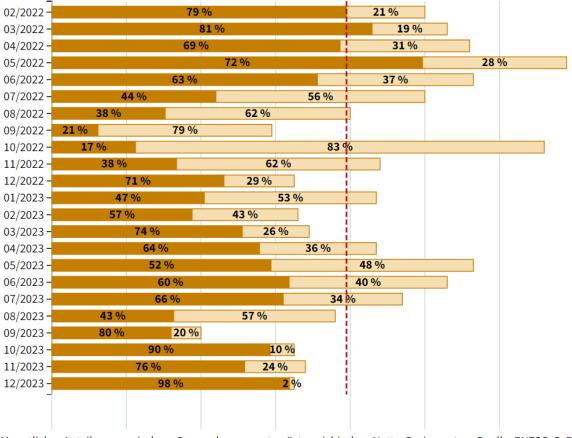
- Austria imports 87% of its gas requirements
- There is a high dependence on Russian gas
  - 65% of imported gas during 2023
  - Other sources mostly LNG and Norwegian gas
  - In December 2023 98% of imported gas came from Russia
- Insufficient alternative sources of gas imports
- The majority of gas imports coming though Ukraine making Austria highly vulnerable - gas transfer contract expires in October 2024
- Desperate need for alternatives to meet energy demand and meet EU obligations to diversify

#### Russian Imports as a Percentage of Total

Russian imports as a percentage of total

Other imports as a percentage of total

-- Referenz: Russische Importmenge zu Kriegsbeginn im Februar 2022



Monatlicher Anteil von russischem Gas an den gesamten österreichischen Netto-Gasimporten. Quelle: ENTSO-G. E-Cc

# Welchau Gas Liquids Discovery Challenges and Opportunities

"Welchau is a resource of potential national significance > With additional evaluation can come increasing value and reduced risk > We are starting from a very encouraging place"

#### Challenges

- Overcome the language problem in relation to carbonate reservoirs which are not well understood in Australia
- ✓ Timely communication of ongoing data analysis and resource estimates
- ✓ Efficiently progress ongoing evaluation, testing and appraisal objectives of project while meeting environmental and social obligations
- Bring key stakeholders with ADX on the journey
- ✓ Increase organisational capability in line with project development

#### **Opportunities**

- Commercialisation of a large, strategic, high value resource base at a high equity level
- ✓ Deepen Welchau-1 well to assess exploration potential which can be accessed at low relative cost
- ✓ Potential for early commercialisation of liquids
- Engagement with market to provide development finance
- ✓ Mature large play potential to drillable stage



## Complementary renewable energy projects

Complementary projects with in ADX acreage



Green H<sub>2</sub> project pilot phase (Vienna Basin)

Production & storage of green H<sub>2</sub> at the Zistersdorf field

**2.5** MW electrolyser

**370** MT p.a. (green H<sub>2</sub>)

**75 GWh** of storage capacity already identified



Green H<sub>2</sub> project scaleup phase (Vienna Basin)

Production & storage of green H<sub>2</sub>

30 MW electrolyser

5,200 MT p.a. (green  $H_2$ )

**100+ GWh** of storage capacity already identified



Solar power project (Vienna Basin)

Generation of renewable electricity with PV plants

1 or 2 PV plants considered

**1.5** MWp initial capacity with possibility to ramp-up

**Grid feed-in** (additional revenues) & **self-consumption** 



Gmunden geothermal project (Upper Austria)

Geothermal as well as oil & gas targets

15 MW plant capacity potential

**90%** success rate for geothermal wells in the area

Strong interest by local offtakers

"Drill wells with multi target potential"

"Value add to Vienna Basin Fields using depleted reservoirs to store hydrogen, facilities for production and land to install PV plants"

## ADX role in European energy transition

Ideally positioned in the near term and the longer term

- > Oil & gas demand continues to increase
  The transition to renewables is taking longer than expected
- ➤ Gas is a transition fuel in the EU

  Financial and greenhouse reduction benefits but gas supply is tight for foreseeable future
- Oil and gas industry can make a significant transition contribution

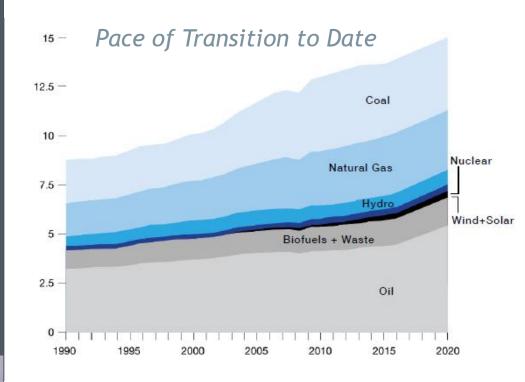
Geothermal, hydrogen &  $CO_2$  storage are all needed to achieve net zero goals >> ADX well placed for all

"Oil and gas reservoirs have a big role to play in energy transition if coincident with infrastructure"





#### **Growth in Global Energy Demand**



**84%** of global energy supplied by coal, oil and gas

Source: BP, Statistical Review of World Energy 2022

"ADX Vienna Basin oil and gas fields are the potential site for a **Green Hydrogen Production and Storage Project** and a **Solar Park** for self consumption and sales into power the grid"

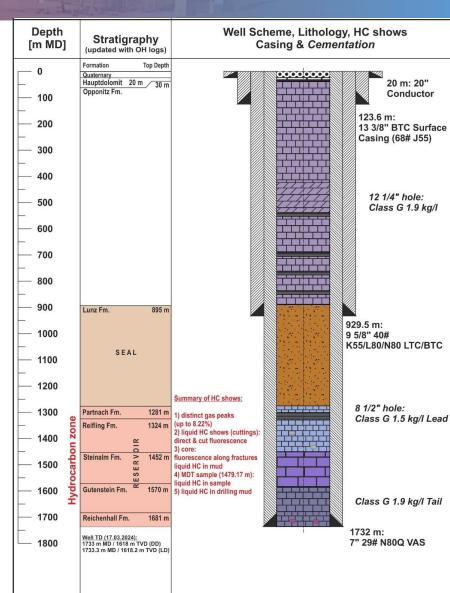


#### **Welchau Status Summary**

- » Welchau-1 well is a fractured carbonate hydrocarbon discovery with significant potential, meeting key measures proving:
  - hydrocarbon charge, a trapping mechanism, a reservoir for storage and a sealing mechanism, with
  - o a recovered downhole hydrocarbon sample to surface
- » Substantial data set (static and dynamic) to be calibrated and evaluated.
- » Welchau-1 is suspended with 7" casing
- » Production test planned for Q4 2024

#### Welchau Overview

- » Prediction vs Actual (Trap/Seal/Reservoir)
- » Evaluation Process to Resource Estimate
- » Hydrocarbon System (Preliminary)

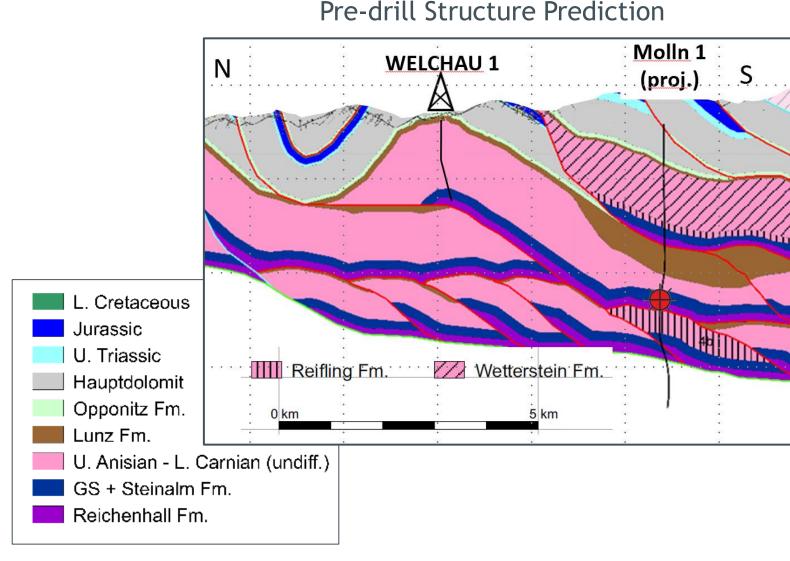




## Welchau-1 data review: Trap prediction

## » Trap 🗸

- Located in the foothills of the Austrian Alps
- Pre-drill the trap was mapped as a thrust anticline (outcrop mapping, balanced cross section, 2D seismic along dip and down dip well Molln-1 well) with an estimated area closure of 100 km² and a maximum relief of 2140 m.
- The structural model will be updated on completion of the ongoing borehole image bed dip analysis.

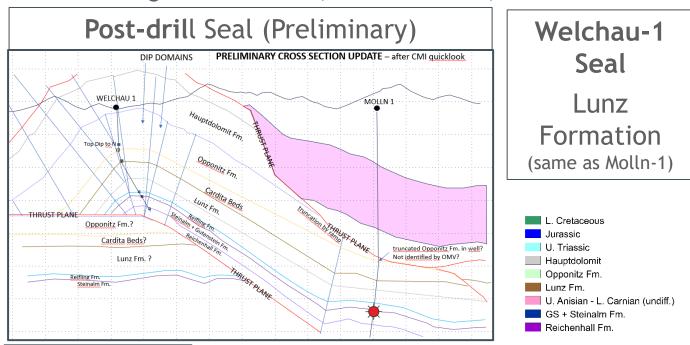


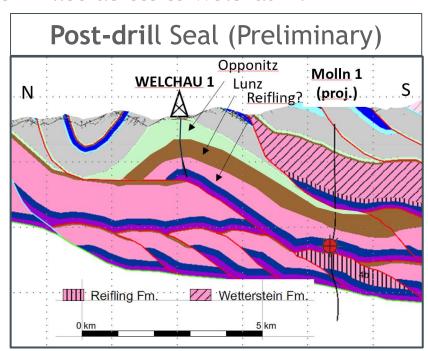


### Welchau-1 data review: Presence of seal

#### » Seal ✓

- Seal was the single biggest risk in Welchau-1's 20% probability of technical success (i.e. geological discovery)
- Seal is composed of the thick Lunz formation (350m MD) with the Partnach formation (43m MD) immediately above top reservoir
- The Partnach was predicted to be overlain by thick carbonate units. The sediment of the excellent sealing Lunz formation, seen in Molln-1, was found to be basin filled across to Welchau-1.





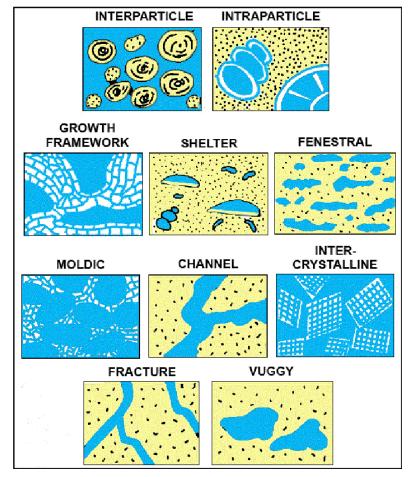
#### Welchau-1 data review:

#### Carbonate vs Sandstone Reservoirs

#### » Carbonate reservoir characteristics

- Reservoir characterisation is more complicated in carbonates than sandstones
- In sandstone reservoirs, depositional stratigraphy is the dominant control on reservoir petrophysics and geobody geometry
- In carbonates, there are other additional complexities of diagenetic history and structuration (especially fracturing)
- A detailed understanding of all aspects of a carbonate reservoir is required for a subsurface model to approximate subsurface reality

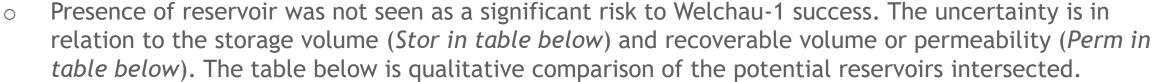
#### Carbonate Porosity Types



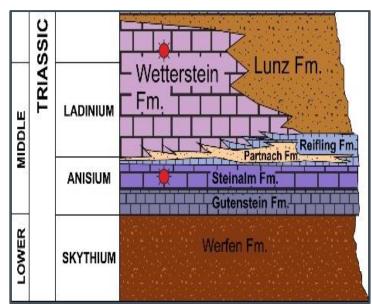


## Welchau-1 data review: Reservoir quality

#### » Reservoir



		,					_		•		
Welchau-1	Partnach 43m		Reifling 128m		Steinalm 118m		Gutenstein 111m		Reichenhall 50m		
(450m MD)	Stor	Perm	St	or	Perm	Stor	Perm	Stor	Perm	Stor	Perm
Drill Data											
Mud Losses			√√		<b>V V V</b>		<b>/</b> /		✓		
Gas Shows	✓	✓	<b>✓</b>	<b>√</b>	<b>/</b> /	<b>////</b>	<b>///</b>	<b>//</b> /	/		
Log Data											
Porosity	✓		,	/		<b>//</b>		✓		✓	
Stoneley	N/A		N.	/A		N/A	<b>///</b>	N/A	✓	N/A	
Borehole Image (fractures/vugs)				<b>~</b>	<b>/ /</b>	<b>//</b> \	<b>/ /</b>		<b>√</b> √		✓



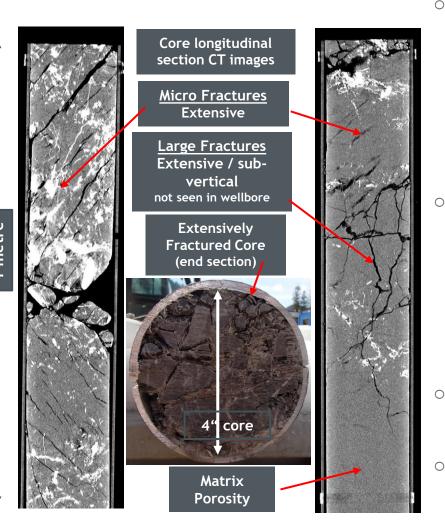
The Reifling and
Steinalm carbonates are
the most permeable
from wellbore evidence

The challenge is to connect the wellbore to the vertical fracture network (e.g. perforation / acidisation) that the 8.5" diameter sub-vertical borehole has not penetrated or only partially penetrated

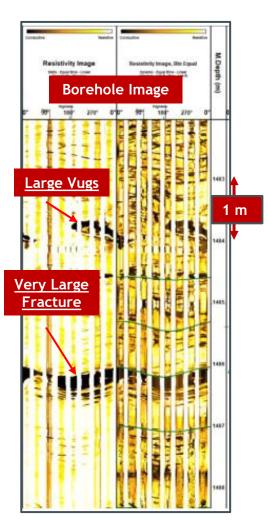
Permeable fracture network system in the Gutenstein or Reichenhall carbonates cannot be ruled out

## Welchau-1 data review: Reservoir quality (evidence of fractures)

» Reservoir



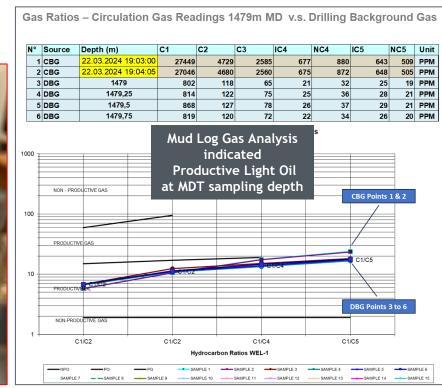
- In fractured carbonate reservoirs the fracture network extent is not fully evident in a near-vertical borehole
- The Steinalm core Computerised Tomographs (CT) scans show internal vertical fracturing not always evident at the core circumference or on the borehole image log.
- The net pay volumes for a fractured carbonate is determined by the interconnection of matrix porosity with the higher permeability vugs and the fractures thereby enhancing the relatively low permeability of the matrix.
  - Matrix ⇒ vugs ⇒ fractures (micro) ⇒ fractures (large) ⇒ wellbore
- The fractures provide the primary flow pathways through the reservoir to the well bore.
  - Completion, reservoir perforation and acidisation strategy is critical to connect the fracture network to the wellbore to maximise well productivity.



## Welchau-1 data review: Presence of hydrocarbons

- » Hydrocarbon charge ✓
  - Steinalm formation (118m MD, Primary Target): Downhole Sample Recovery
    - MDT down hole sample of 'light oil' direct evidence of producible hydrocarbons despite significant mud losses to high permeable fractured formation and contamination of MDT sample.
    - The recovered API 43-45<sup>0</sup> API light oil (below) is in agreement with the gas ratio analysis from the gas mud log of a productive light oil at the MDT sampling depth.
    - PVT Sample Analysis is ongoing

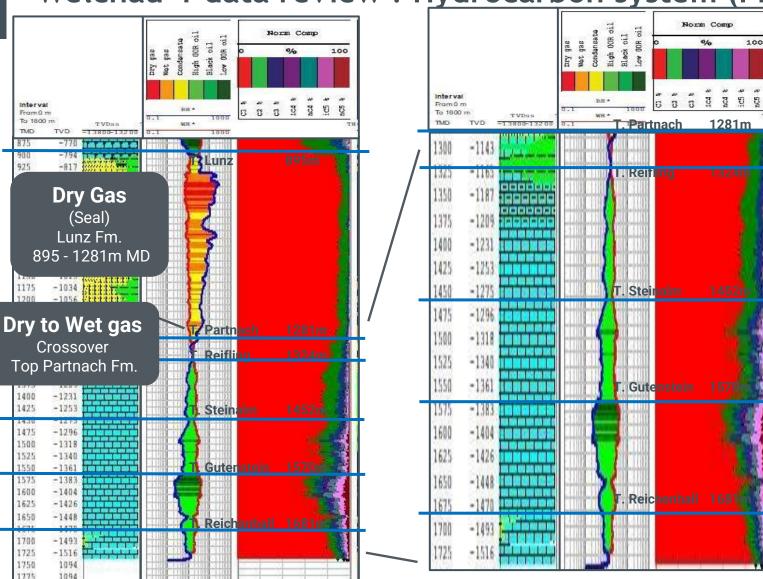




The Steinalm formation is the same reservoir that the down dip Molln-1 well located 4kms away encountered and was tested at 4 MMSCFPD with a condensate gas ratio of 40bbls/MMscf (1989)



Welchau-1 data review: Hydrocarbon system (Preliminary)



### Formation (450m MD)

'In-borehole' Direct Evidence\*

Storage Productivity

#### Partnach (43m)

**HC System: Productive?** 

#### Reifling (128m)

**√ √ √** 

HC System: Productive Light-oil/ Gas-condensate

#### Steinalm (118m)

HC System: Productive Light-oil /
Gas-condensate

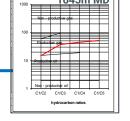
#### **Gutenstein (111m)**

√√

**HC System: Productive?** 

Reichenhall (50m)

**HC System: Productive?** 



\*'In-borehole Direct Evidence: Gas Log / Mud Losses / Borehole logs (Porosity / Stoneley / Image) / MDT / Core

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## Welchau-1 data review: Data analysis program

#### **Complete Dataset**

(Well drill data/Gas Log/Wireline Logs)

#### Structure Size

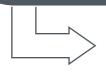
- Structure Analysis / Molln-1 Correlation

#### **HC 'Storage' Characteristics**

- Geochemical log: Mineralogy (matrix density / porosity
- Borehole Image: Fractures (size / frequency / orientation)
- Conventional Logs: Density/Res. (porosity / HC saturation)

#### HC 'Flow' Characteristics (Direct)

- Gas Log
- Drill mud losses
- Sonic (Stoneley)
- Sampling (MDT)



### HC Storage Parameters

- Structure
- Porosity (Matrix / Fractures)
- Saturation

#### **HC Flow Parameters**

- Connected Porosity
- Permeability

#### 'Updated' Resource Estimate

- Reifling / Steinalm / Gutenstein / Reichenhall
- HC System (Gas/Oil vs Light Oil)
- In-place and Recoverable Volumes
- Ranges (P90 / P50 / P10)

## Wellbore Sample 'Measurement' Analysis

- Drilled cuttings
- HC IsoTubes
- Core (7m) Steinalm
  - \* Porosity / Permeability
  - \* Saturation (Capillary Pressures/ Residual)
  - \* Fractures (Surface & Internal CT Scans)
- MDT (Reservoir HC) Steinalm
  - \* HC Characteristics (API / Gas Comp. / Bubble point)

Well Data Calibration (with 'measurement analysis') - carbonate formations

Well Test

Data QC

Analysis/Calibration/Re-evaluation

Update Resource Estimate Well Test Preparation (finalisation)

 $\mathsf{T}_{\mathsf{0}}$ 

 $T_0$  + 1 month

 $T_0 + 3$  months

 $T_0 + 4$  months

 $T_0$  + 6 months

## Welchau-1 data review: Resource estimation certainty

The Welchau-1 hydrocarbon discovery has i) eliminated the risk of a discovery and ii) reclassified most of the predrill resource estimate from 'prospective' to 'contingent', as per the "Petroleum Resources Management System"

and Gaffne	y Cline Prosp	ective Resource	Estimates <sup>2</sup>					
ADX Gross Prospective Resource Estimates (Reported 20 June 2022)								
Unit	Minimum	Best Technical	Maximum					
BCF	171	651	1315					
MMBL	6.8	26	52.6					
BCFE	212	807	1631					
tive Resource E	stimates - Calculate	ed on gas equivalent b	asis.					
Unit	1U	2U	3U					
BCFE	365	645	1128					
	ource Estimates Unit BCF MMBL BCFE stive Resource Estimates	Ource Estimates (Reported 20 Junit Minimum  BCF 171  MMBL 6.8  BCFE 212  Stive Resource Estimates - Calculate Unit 1U	Unit         Minimum         Best Technical           BCF         171         651           MMBL         6.8         26           BCFE         212         807           etive Resource Estimates - Calculated on gas equivalent built         5           Unit         1U         2U					

<sup>&</sup>lt;sup>1</sup> Gas to condensate conversion used is 6 mcf of gas = 1 barrel of oil

#### Resource Updates (Planned)

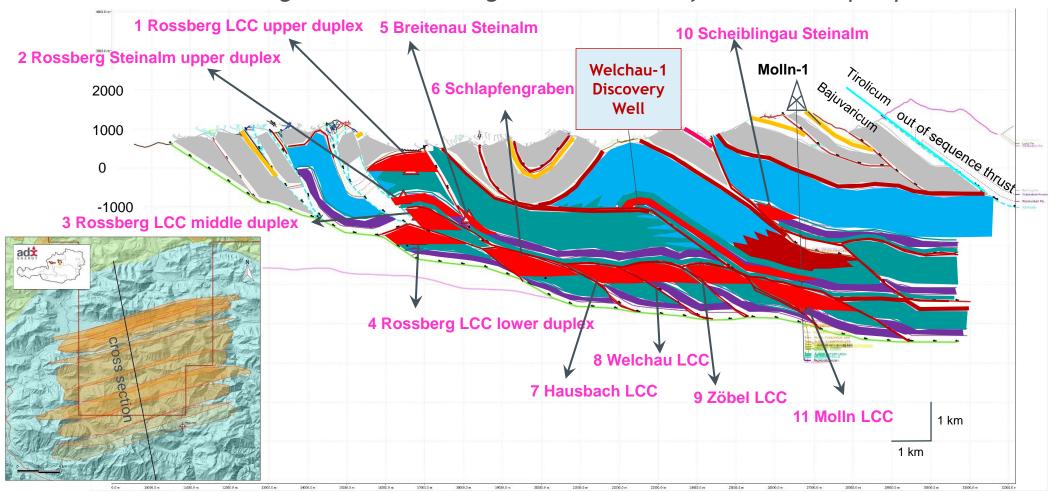
- Pre-well test: A company update on the volume estimates to be carried out once relevant data analysis is complete
- Post-well test (plus 1 month): A high level update to be released
- Post-well test (plus 4 months): Third-party certification of volumes and classifications (contingent / reserves) to be released

PRODUCTION RESERVES TOTAL PETROLEUM INITIALLY-IN-PLACE (PIIP) DISCOVERED PIIP Possible Proved Probable CONTINGENT RESOURCES 2C UNRECOVERABLE PROSPECTIVE RESOURCES Best Estimate Estimate Estimate UNRECOVERABLE Range of Uncertainty Not to scale

<sup>\*</sup> Refer to Cautionary Statement in relation to Prospective Resources on Page 3 of this presentation

## Welchau-1 data review: Follow up lead inventory

"Welchau-1 is a play opening discovery - 11 follow up leads have been defined based on structural modelling undertaken during the maturation of the Welchau prospect"

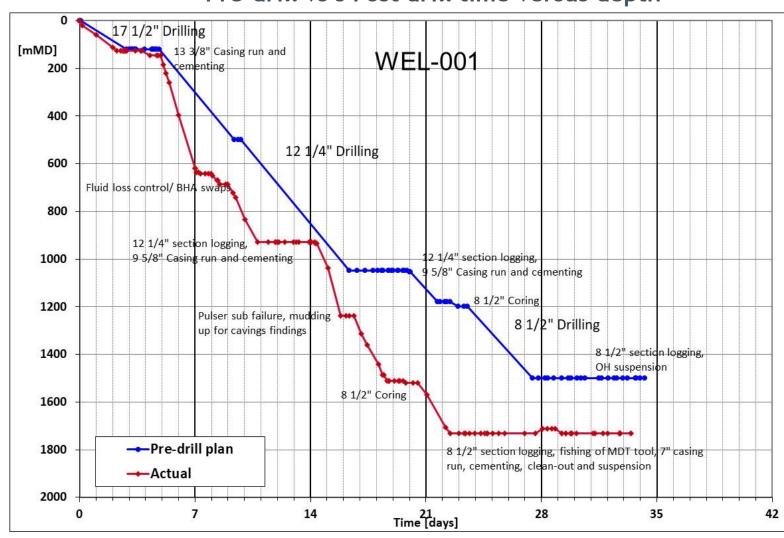


## Welchau-1 data review : Drilling operations overview

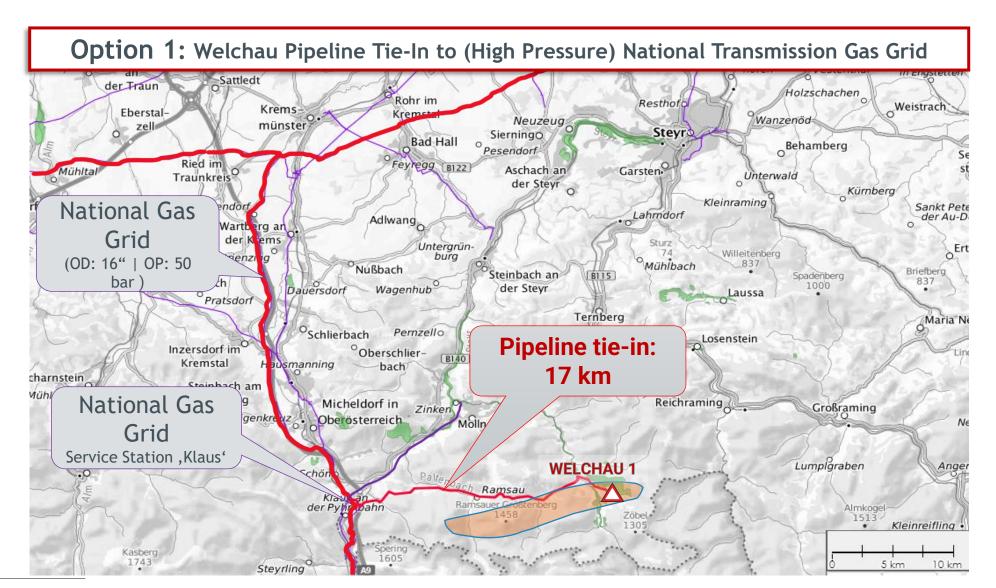
## » Drilling performance and cost

- Welchau-1 penetration rates exceeded pre drill estimates by approximately 30% to 40%
- The actual dry hole drill time was 35% less than the planned drill time.
- The resulting success case cost including evaluation, casing, cementing and suspension approximated the predrill estimate of dry hole cost.
- The reduction in drilling costs is a positive outcome for the current well and future appraisal or development wells.

#### Pre-drill vs's Post drill time versus depth

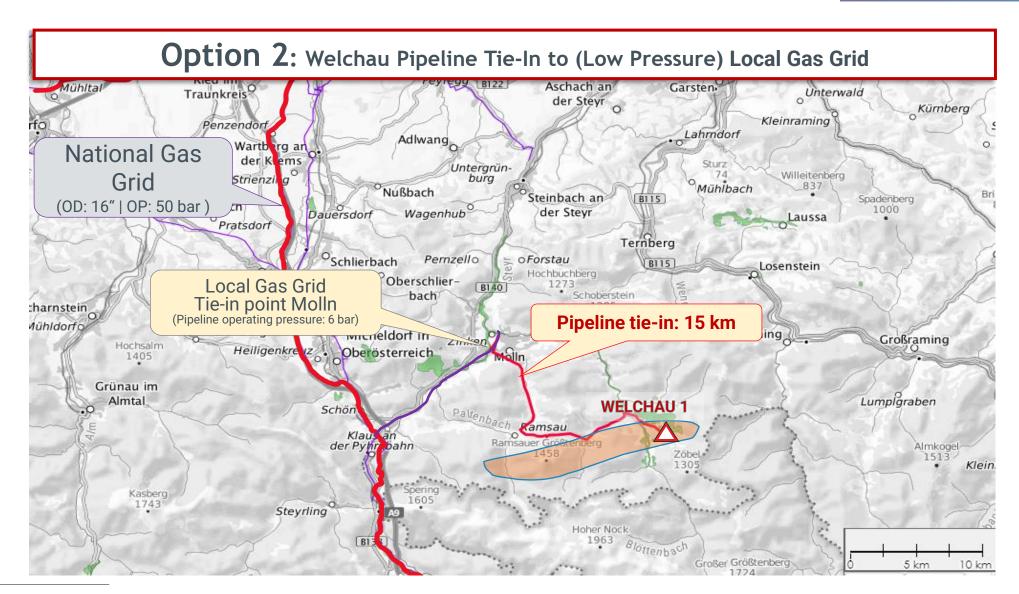


## Welchau-1 data review : Gas export infrastructure options





## Welchau-1 data review: Gas export infrastructure options



# The ADX Team Experience of our Board and Management Team



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A cleaner smarter future for Europe

#### Mr Ian Tchacos, Executive Chairman

35 years oil and gas professional and Corporate Leader. Petroleum Engineer, Operations and Corporate Development

#### Mr Paul Fink, CEO and Executive Director

30 years oil and gas professional. Geophysicist, New Ventures and Exploration Management (on medical leave)

#### Mr John Begg, Non Executive Director

35 years oil and gas professional. Geoscientist, Corporate Development

#### **Mr Edouard Etienvre, Non Executive Director**

20 years oil and gas professional. Finance and Corporate Development

#### Ms Amanda Sparks, Finance Manager & Co Company Secretary

20 years oil and gas professional. Finance and Company Secretarial, Chartered Accountant

#### Mr Peter Ironside, Co Company Secretary

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Ian Tchacos

**Executive Chairman** 

35 years resources professional. Finance, Chartered Accountant and Corporate Development

#### Mr Alan Reingruber, Managing Director ADX VIE

20 years oil and gas professional. Reservoir Engineer, Operations and Corporate