

# ASX RELEASE

23 October 2024

## Activities Report For the Quarter Ended 30 September 2024

ADX Energy Ltd (ASX: ADX, “ADX” or “the Company”) is pleased to provide an update of its activities for the quarter ended 30 September 2024.

### Past Quarter Highlights

- Austrian Net Production averaging 217 BOEPD with sales revenue A\$2.3 million for the quarter.
- The Anshof-2A side track oil appraisal well encountered a 6.5-metre net vertical oil column in high quality Eocene aged sandstone reservoirs.
- A revised range of Prospective Resources for the Welchau-1 discovery well was announced on 26 September 2024 with the advice that hydrocarbons are likely to be a high API light oil and associated gas discovery rather than a liquids-rich gas discovery as was predicted prior to drilling.
- The Lichtenberg-1 gas exploration well, located in the ADX-AT-I licence was spudded.
- Permitting, planning, procurement and design continued for the testing of the Welchau-1 oil and gas discovery during the fourth quarter of 2024.
- Follow up Welchau play exploration targets have been identified and evaluated including the deepening of Welchau-1 and the Rossberg step out lead.
- ADX’ cash at the end of the quarter was A\$ 16.1 million.

### Next Quarter Planned Activities

- Tie in and commencement of production from the successful Anshof-2A oil appraisal well.
- Drilling and evaluation of the Lichtenberg-1 gas exploration well.
- Production testing of the Welchau-1 oil and associated gas discovery.
- Continue to mature Welchau follow up exploration targets and large, high impact gas targets in 100% equity held acreage in the ADX-AT-I licence.

**ADX Executive Chairman, Mr Ian Tchacos, said,** *“The past quarter has been a period of exceptional operational activity including the drilling of the successful Anshof-2A oil appraisal well, commencement of drilling the Lichtenberg-1 gas exploration well, as well as finalising the necessary analysis work and preparations to production test the Welchau oil and gas discovery. Our Shareholders can now look forward to additional oil production from Anshof-2A, the results from the play opening Lichtenebrg-1 gas exploration well and production testing results from the potentially transformational Welchau-1 discovery. ADX’ goal from our ongoing appraisal and exploration activities is to develop a substantial oil and gas resources base in Austria, a country which is highly dependent on oil and gas imports in the heart of energy starved Europe.”*

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## OPERATIONS REPORT

### Production Activities

#### ZISTERSDORF AND GAISELBERG PRODUCTION ASSETS – Vienna Basin, Austria

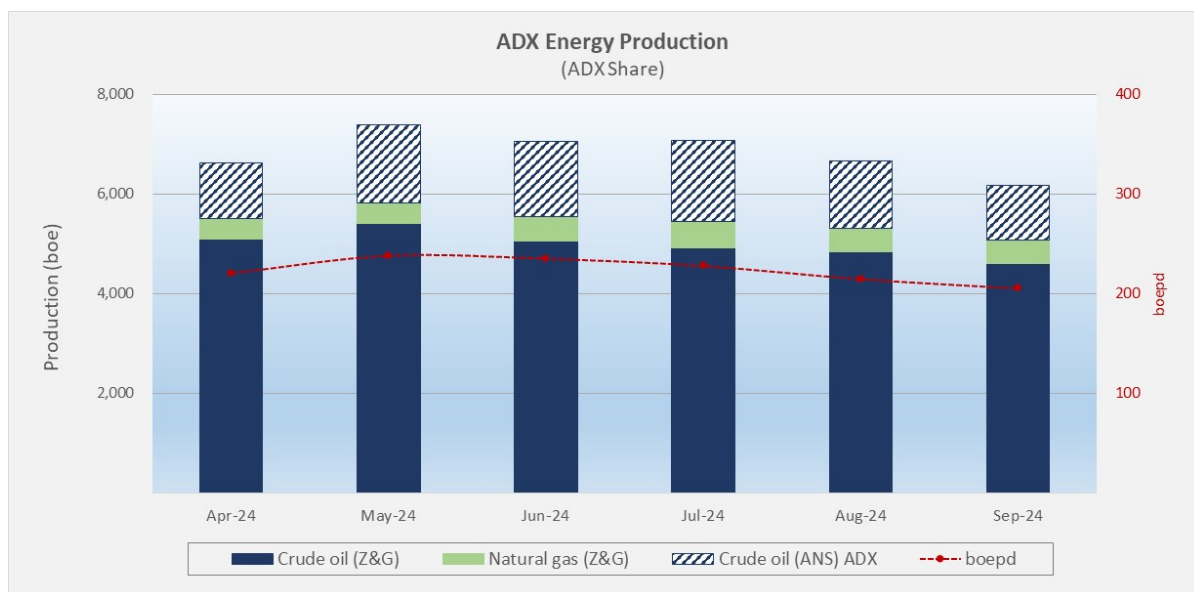
ADX is operator and holds a 100% interest in the production

#### ANSHOF OIL DISCOVERY – ADX-AT-II licence, Upper Austria

ADX is operator and holds an 50% economic interest in Anshof-3 production

#### Production Operations

Austrian oil equivalent sales during the quarter decreased by 7% primarily due to the shut-in of the Anshof -3 well for safety reasons during set up and rig down of the rig drilling the Anshof-2A appraisal well, as well as planned upgrades to the Anshof permanent production facility. Oil and gas production at the Vienna Basin fields averaged 172 BOEPD during the September quarter compared to 185 BOEPD in the previous quarter, an 8% decrease. The Anshof-3 well contributed 44 BOPD of net sales during the quarter despite down time of 17%. The total net sales during the quarter including the Anshof oil field and the Vienna Basin fields was 216 BOEPD.



Production histogram showing ADX net Austrian barrels of oil and gas (oil equivalent) production during the current quarter and the previous quarter

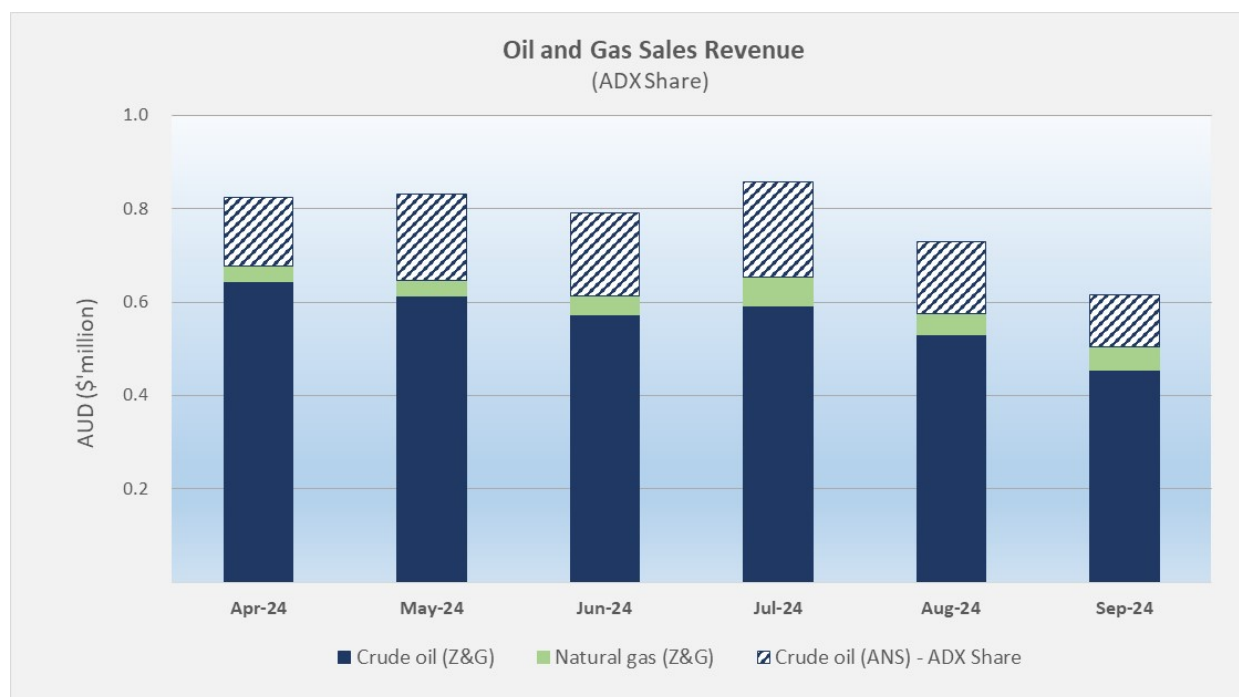
	July	August	September	Current Qtr Total	Prior Qtr Total	Change (%)
Avg Oil Pricing (US\$ / BBL)	\$ 85.31	\$ 80.91	\$ 74.33	\$ 80.18	\$ 84.94	-6%
Avg Gas Price (Euro / MWh)	€ 32.84	€ 31.06	€ 37.16	€ 33.68	€ 27.78	21%

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## Field Revenues and Product Pricing

Brent reference oil pricing weakened by 6%, averaging USD 80.18 per barrel for the September quarter. Gas prices strengthened by 21%, averaging EUR 33.68 per MWh for the September quarter.



**Oil and gas sales revenue histogram showing impact of production and oil and gas price on revenue**

Table 2 below shows sales revenues of EUR 1,344,622 for the September 2024 quarter compared to EUR 1,503,500 in the June 2024 quarter with stable production from Anshof and the Vienna Basin Fields. The drop in revenue during August and September was due to a combination of shut in production at Anshof and weakening oil price.

	July	August	September	Current Qtr Total	Prior Qtr Total	Change (%)
Oil Revenue (Euro) - Z&G	€ 354,847	€ 326,240	€ 282,914	€ 964,000	€ 1,124,751	-14%
Oil Revenue (Euro) - ANS (ADX Share)	€ 121,837	€ 95,058	€ 69,897	€ 286,791	€ 311,599	-8%
Gas Revenue (Euro)	€ 37,170	€ 26,980	€ 29,681	€ 93,831	€ 67,150	40%
<b>Total Sales Revenue (Euro)</b>	<b>€ 513,853</b>	<b>€ 448,278</b>	<b>€ 382,492</b>	<b>€ 1,344,622</b>	<b>€ 1,503,500</b>	<b>-11%</b>
Hedging Revenue (Euro) "Swap Contracts"	€ 11	€ 11,997	€ 29,661	€ 41,669	-€ 16,308	356%
<b>Total Revenue (Euro)</b>	<b>€ 513,865</b>	<b>€ 460,274</b>	<b>€ 412,152</b>	<b>€ 1,386,291</b>	<b>€ 1,487,192</b>	<b>-7%</b>
<b>Total Revenue (A\$)</b>	<b>\$ 842,420</b>	<b>\$ 754,565</b>	<b>\$ 675,675</b>	<b>\$ 2,272,660</b>	<b>A\$/Euro =</b>	<b>0.6100</b>

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## **Hedging**

ADX has continued to deploy a rolling hedging strategy seeking to provide stable near term revenue generation during volatile market conditions. A number of hedging transactions have been deployed during periods of favourable market conditions.

On 3 April 2024, ADX executed hedging transactions with Britannic Trading Limited with a fixed price swap contract for 15,000 barrels of oil at a fixed Brent crude oil price for June 2024 to October 2024 inclusive of USD 85.31 per barrel. The quantity of hedged oil equates to approximately 100 BOPD during the period.

On 5 July 2024, ADX executed further hedging transactions with Britannic Trading Limited with a fixed price swap contract for 6,000 barrels of oil at a fixed Brent crude oil price for November 2024 and December 2024 inclusive of USD 83.15 per barrel.

The balance of the crude oil production from the Vienna basin fields and Anshof production remains unhedged during the period allowing ADX to maintain exposure to upside in Brent crude oil pricing. Gas production from the Vienna basin fields is also not hedged.

## **Appraisal & Development Activities**

### **ANSHOF EOCENE OIL PROJECT – Anshof Field Area, ADX-AT-II LICENCE, Upper Austria**

***ADX is operator and holds a 50% economic interest in the Anshof Field Area and a 60% interest in Anshof-2A well. ADX is operator of the ADX-AT-II exploration licence and holds a 100% interest in the licence other than the Anshof Field Area, Anshof-2A well and the Welchau Investment Area.***

*(Refer to location map on next page)*

### **Anshof-3 Production**

Anshof-3 produced at an average daily rate of 89 BOPD during the quarter with 83% uptime over 92 production days. The total production of 8,183 barrels for this quarter was a 11% decrease on the last production quarter (Q2 2024, 8,369 barrels). There were 15.2 days of production shut-in during the quarter primarily due to planned upgrades to the Permanent Production Facility and safety related production shut-in for the rig up of the RED E202 drilling rig for Anshof-2A drilling operations.

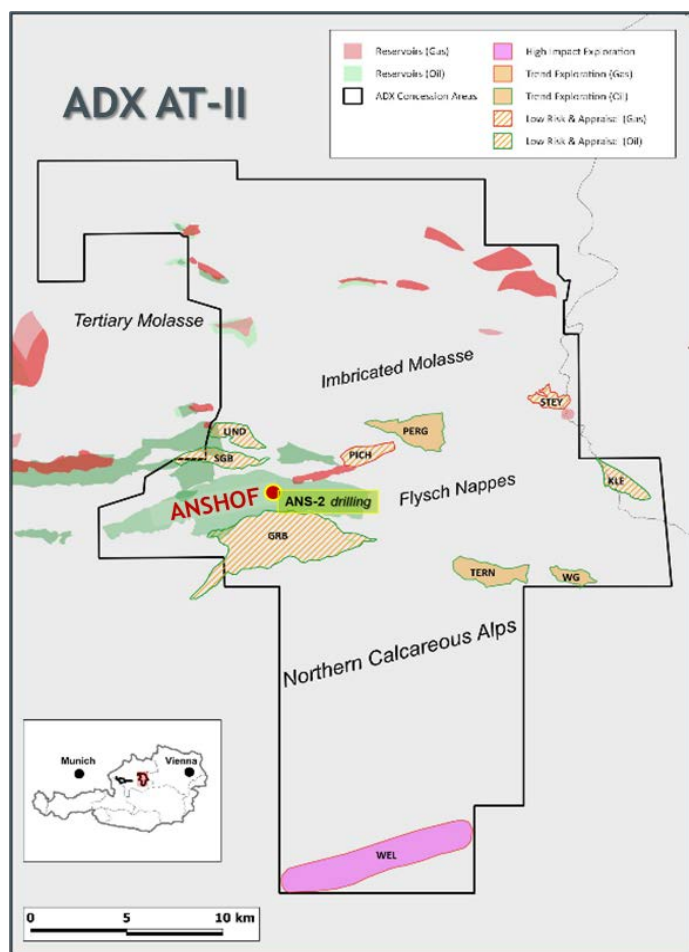
A high level summary of the reasons for Anshof-3 down-time is shown below;

- Troubleshooting and replacement of level measurement sensors in the 3-phase separator,
- Shut in for safety reasons whilst the RED E202 drilling rig was rigged up and down for the Anshof-2A drilling, and
- Planned upgrades to address issues with the Permanent Production Facility (refer to “*Permanent Production Facilities Installation, Engineering and Commissioning*” section below) .

At the end of the quarter, Anshof-3 was producing at 104 bopd. The well continues to show strong performance with no impairment to well productivity.

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**Location map for the Anshof Field Area within the ADX-AT-II licence. The low-risk appraisal follow up satellite prospects where ADX has a 100% economic interest are also shown**

### **Development Drilling Program – Anshof-2A Well**

The Anshof-2A (“ANS-2A”) side track oil appraisal well, located in the ADX-AT-II licence in Upper Austria was spudded at 06:00 am Central European Time on the 7<sup>th</sup> of September 2024. ADX is the operator and has a 60% economic interest in the well.

The well successfully targeted thick and high porosity Eocene reservoirs up dip from the Anshof-2 well which previously intersected similar quality reservoirs below the oil water contact. The well objectives were to further appraise and develop the Anshof Oil Field which was discovered by the Anshof-3 well in January 2022. The ANS-2A will be completed as the second oil producer in the Anshof Oil Field when it is tied in to the adjacent Anshof permanent production facility (“PPF”).

### **ANS-2A Well Results**

The ANS-2A well has encountered a 6.5 m net vertical oil column in high quality Eocene aged sandstone reservoirs within a 10 m net sand (refer to the figure below). This oil column compares very favourably with the Anshof-3 discovery well which had a 2.5 m net oil column and has produced since October 2022 at stable rates averaging approximately 110 BOPD. The net oil reservoir intersection at ANS-2A is approximately 3 times that of Anshof-3 with approximately 20% higher porosity and permeability.

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Figure showing a comparison of the Eocene sand thickness (shown in yellow) encountered in the Anshof-3 well (LHS), the ANS-2A well (Middle) and the Anshof-2 well (RHS)

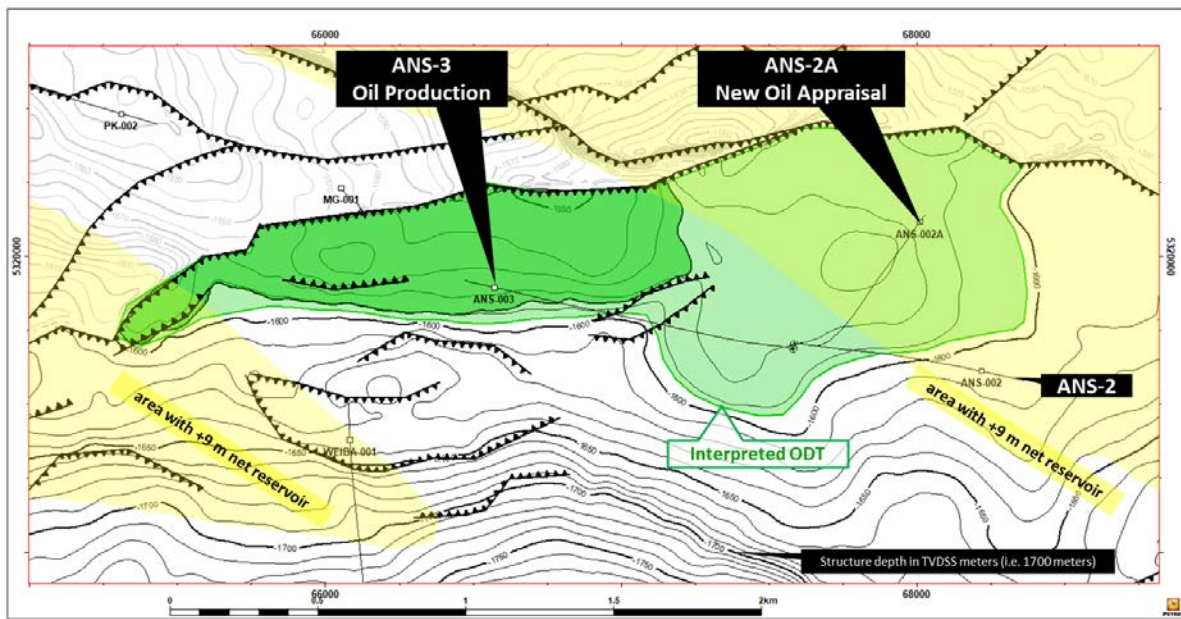


Figure showing the Anshof Oil Field outline appraised to date and areas of greater Eocene reservoir thickness with the bottom hole location of the Anshof-3 discovery well, the Anshof-2A sidetrack well and the Anshof-2 well. The depth figures shown are TVDSS metres

The Eocene reservoirs encountered at ANS-2A are similar in thickness and quality to the reservoirs encountered in the down dip Anshof-2 well, confirming that thicker and more productive reservoirs are prevalent in the Eastern part of the field compared to the Anshof-3 discovery well to the west. The ANS-2A well top Eocene intersection is slightly down dip from the Anshof-3 discovery well which is now interpreted to be near the crest of the Anshof structure.

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Based on electric line logging data and pressure data recovered, the well has encountered Eocene sandstone reservoirs between 1586.5 m Total Vertical Depth Sub Sea (“TVD SS”) and 1599 m TVD SS. An oil water contact is interpreted at a depth of 1593 m TVD SS. Pressure data recovered from ANS-2A and the producing Anshof-3 well confirms a continuous oil pool (refer to the figure above).

### ***Anshof-2A Participating Interest***

In accordance with Anshof Field Area Partnership agreements, the economic interests in the Anshof-2A (“ANS-2A”) well will be 60% ADX and 40% MND Austria a.s. (MND).

XST elected not to participate in the Anshof-2 well and the subsequent ANS-2A well. ADX and MND have funded XST’s share of well costs on 50:50 basis and will in turn obtain the right to 60% and 40% respectively of production from the well unless XST opts to buy back into the well at a premium of 500% to well costs. XST retains its 20% economic interest in the remainder of the Anshof Field Area Partnership (i.e. Anshof Field Area less the Anshof-2 and ANS-2A wells) with both ADX and MND’s economic interests remaining at 50% and 30% respectively.

### ***Future of ANS-2A Well Operations***

Operations commenced with a workover rig on 30 September 2024 to run tubing, perforate and acid stimulate the ANS-2A well. Completion operations on the ANS-2A well during the fourth quarter include the installation of a rod pump. The well will be tied-in to the Anshof PPF as a producer in December 2024 following the installation of pipework and the connection of the well to the PPF electrical system and remote control systems. Following tie-in, the ANS-2A well will be tested to determine a long-term optimal rate. Commercial production can commence immediately in conjunction with the already producing Anshof-3 well.



***Figure showing the RED E202 rig drilling the ANS-2A well at the Anshof PPF location. On the left hand side of the rig the rod pump on the Anshof-3 discovery well can be seen.***

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### ***Permanent Production Facilities Installation, Engineering and Commissioning***

The Permanent Production Facility (PPF) continues to perform very well.

Key development activities during the quarter were as follows;

- The initial teething problems with measurement sensors in both the 3-phase separator and the storage tanks (oil and water) were successfully resolved at the beginning of this quarter,
- The increased temperature in the settling tanks and utilising waste heat to the heat exchanger has increased the efficiency of the settling process. The oil delivered has a consistently very low water cut,
- Electrical inspection and certification were completed in August 2024, and
- The PPF was shut-in from 9 to 17 September and underwent significant planned maintenance (190 hours), fixing of defects and improvements.

The PPF provides the following opportunities to optimise field production at Anshof;

- Increased production capacity (3,000 barrels of liquids per day),
- Capability to process oil from multiple wells,
- Additional oil storage capacity,
- Use of associated gas for power generation and process heat, and
- Enhanced automation requiring less manual operations.

The PPF will be mostly unmanned and operate 24 hours per day with wireless data transmission.

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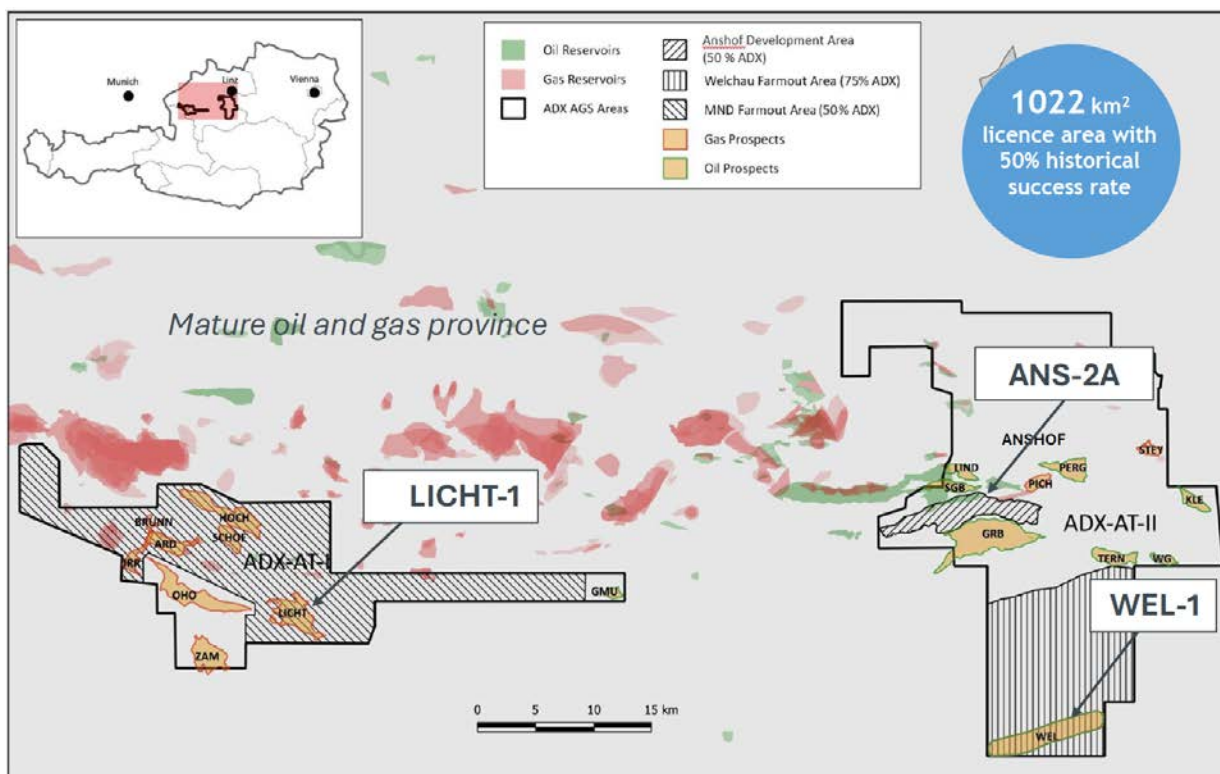
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## Exploration Activities

### Upper Austria AGS Licences – Austria

ADX is operator and holds the following interests in Upper Austria:

- **ADX-AT-I:** ADX holds a 100% interest in the ADX-AT-I exploration licence. ADX' interest in part of this licence, the MND Investment Area, will reduce to 50% upon the completion of MND's investment obligations under the energy investment agreement relating to the MND Investment Area.
- **ADX-AT-II:** ADX holds a 100% interest in the ADX-AT-II exploration licence, except as follows:
  - ADX holds a 75% interest in the Welchau Area of the ADX-AT-II licence; and
  - ADX holds a 50% interest in Anshof Field Area of the ADX-AT-II licence other than the Anshof-2A well where ADX holds a 60% interest.



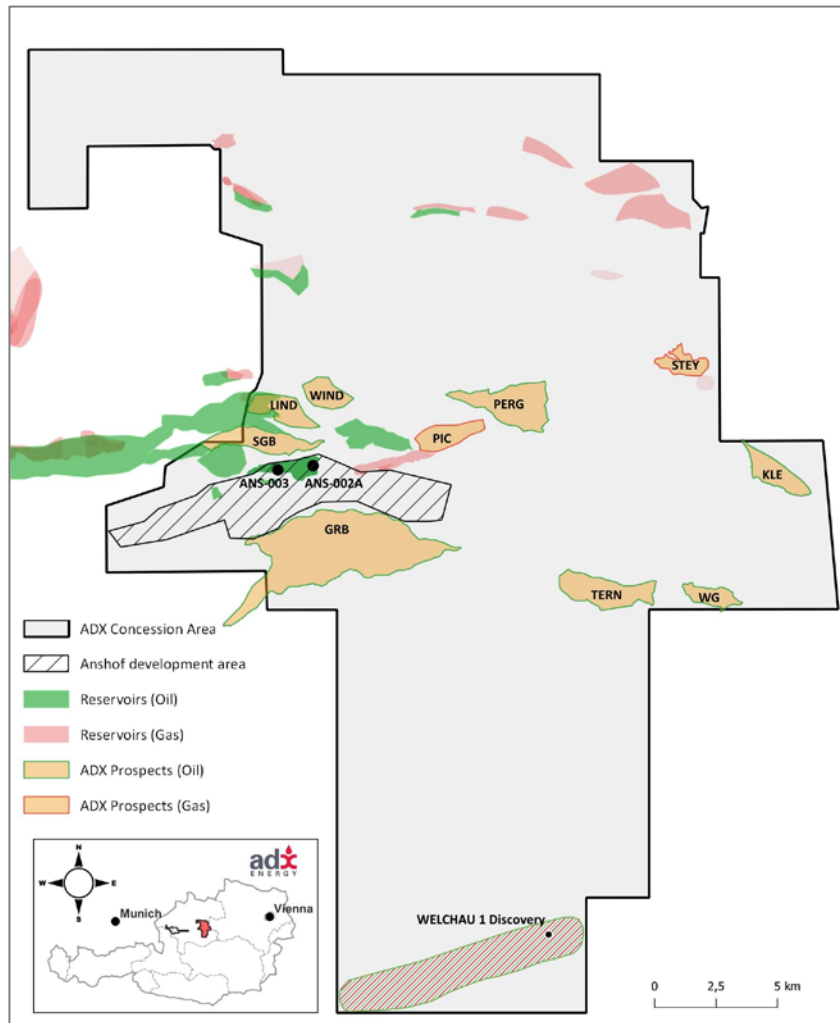
Map showing the Upper Austria AGS Licences

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## Welchau Gas Liquids Discovery

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**The Welchau-1 drilling location in the Northern Calcareous Alps, in the ADX-AT-II licence area**

During the quarter, the significant amount of well data gathered from drilling and evaluating the well has been utilised for structural interpretation, reservoir characterisation, resource estimation and well test planning. 3D modelling work was completed with a resource estimate made. The well test is planned to commence in early November 2024.

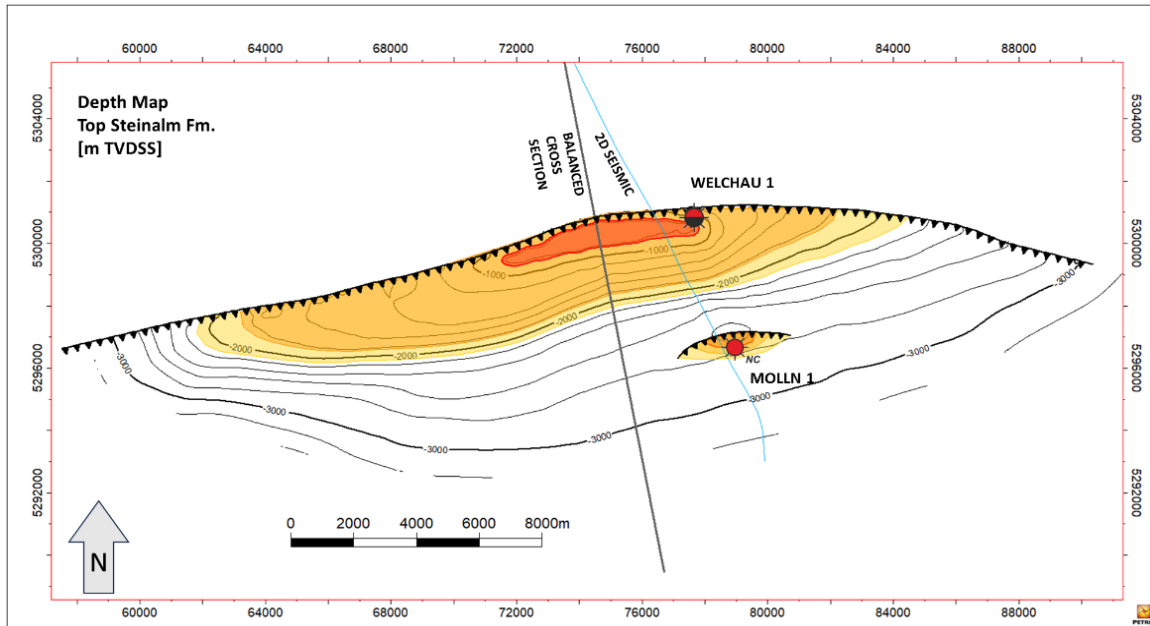
Based on the data analysis to date, ADX believes it is most likely that Welchau is a high API hydrocarbon liquid (or light oil) and associated gas discovery rather than a liquids-rich gas discovery that was predicted prior to drilling.

### **Welchau-1 Structural Definition**

The Welchau-1 well is mapped as being at or near the crest of an East-West trending, asymmetric anticline. This structural interpretation is in line with the pre-drill structural model prediction. The slight change in the strike of the fold axis makes the structure less cylindrical than predicted (in the Eastern part of Welchau anticline). The reservoir intersection at Welchau-1 interpreted to be significantly

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greater across three reservoirs than in the Molln-1 well. Given that oil was recovered at Welchau-1 up dip of Molln-1 which tested gas and condensate, it is now interpreted that Molln-1 is in a separate accumulation to Welchau-1. More details on the thrusting and faulting resulting in a potential boundary between Molln-1 and Welchau-1 wells is shown below.



**Welchau-1 Top Steinalm Formation simplified post drill map. The 1989 Molln-1 gas discovery is interpreted as a separate accumulation that is not connected to Welchau-1**

## Welchau-1 Data Analysis

The three primary carbonate reservoirs in the Welchau-1 well, promising for testing and ongoing appraisal, are the Reifling (128 metres), Steinalm (118 metres) and the Guttenstein (111 metres). The Steinalm reservoir flowed condensate rich gas at a rate of 4 MMSCFPD in the nearest discovery well (Molln-1) located just some 3 km away and tested in 1989.

The analysis of Welchau-1 well results including hydrocarbon shows, formation cuttings while drilling, electric line logging, formation sampling and coring were used to update the resource range for Welchau and finalise the well testing design.

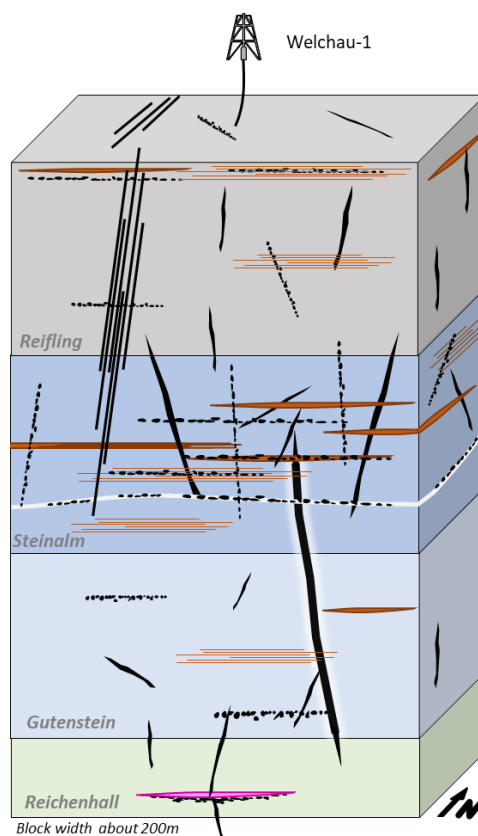
Third-party petrophysical consultants have evaluated the three key reservoirs and integrated the routine and special core analysis measured data from the 7-metre Steinalm core into their evaluation. They have interpreted all three reservoirs to be hydrocarbon bearing. It is noted however, that estimation of hydrocarbon saturation in tight fractured carbonates can be difficult to assess in the presence of micro fractures due to uncertainty in relation to formation water properties (i.e. electrical conductivity – salinity).

A 43° API light sweet oil was recovered from the Steinalm Formation in a Modular Dynamic Tester (MDT) down hole sample tool. The vertical extent of this light oil in the Steinalm or in the shallower Reifling and deeper Guttenstein is uncertain at this stage. There is no clear evidence of a hydrocarbon water contact in any of the reservoir formations based on the open hole wireline log data.

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***Welchau Carbonates Conceptual Model of an Open Permeable Fracture Network and other transmissibility events seen in the well such as reactivated beddings***

Wellbore image analysis specialists have built a conceptual 3D model of the open permeable fracture network (“Network”) in the vicinity of the Welchau-1 well. The Network consists primarily of fractures with some “reactivated beddings” associated with folding of the rock. These “reactivated beddings” are also expected to contribute to well flow and recovery.

The 3D model is based on detailed fracture and fault analysis using the Welchau-1 image log data, the open hole log data together with the dynamic drilling data (i.e. mud losses to the formation and gas shows from the formation). The analysis includes the identification of the many fracture types as well as their frequency, orientation, etc. The multiple open fractures and resulting fracture networks that have been identified are critical to hydrocarbon flow and hydrocarbon recovery. This 3D conceptual modelling work has been utilised for resource estimation, well test strategy, well test planning and future appraisal drilling.

### ***Welchau-1 Revised Resource Estimate***

Based on the data analysis to date, ADX believes it is most likely that Welchau is a high API hydrocarbon liquid (or light oil) and associated gas discovery rather than a liquids-rich gas discovery as was predicted prior to drilling.

Due to the uncertain nature of the Welchau reservoir performance prior to testing, ADX does not believe it is appropriate to provide a definitive or detailed resources range at this stage. However, ADX provided the following unrisks Prospective Resources range (ASX release on 26 September 2024), as

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guidance to shareholders, of the oil and associated gas potential of reservoirs intersected in the Welchau-1 well. The range of Prospective Resources estimated using probabilistic methodology is very large from a low case of 12 MMBOE to a high case of 217 MMBOE<sup>1</sup> (refer to Figure below). The resources estimate include associated gas determined from the analysis of oil recovered from Welchau-1 and converted to BOE using a 5.6 MCF/BOE conversion factor. The previous reporting date of the best technical Prospective Resources was 22 June 2023 (prior to the drilling of Welchau-1 in March 2024 and the subsequent data analysis work).

<b>Welchau Prospective Resource Estimates <sup>1</sup></b>				
<small>(100% Economic Interest)</small>				
	<b>Low</b>	<b>Best</b>	<b>Mean</b>	<b>High</b>
<b>Oil and Associated Gas (MMBOE)</b>	<b>12</b>	<b>46</b>	<b>85</b>	<b>217</b>

*Welchau Prospective Resources Estimates where MMBOE means million barrels of oil equivalent*

<sup>1</sup>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.

ADX intends to revise Welchau resource estimates following the planned testing program, subsequent analysis of test results and further ongoing mapping work. ADX will also provide an update on the follow up exploration potential at the nearby Rossberg lead, as well as the deeper potential at Welchau in reservoirs below the 7" casing at the well's TD (1733 metres) that have yet to be drilled.

### **Welchau-1 Well Test Permitting**

Operational and environmental permits have been submitted to the designated authorities for an extended testing program during the Austrian winter months from 1 October 2024 to 31 March 2025. Permitting at the Welchau-1 location has required extra environmental precautions given the well sites proximity to a national park.

### **Welchau-1 Well Test Operations**

Testing operations at Welchau-1 are expected to commence late October following the anticipated receipt of environmental clearance and the mobilisation of a workover rig. The workover rig will be used to run a test string, which includes tubing and a down hole packer system into the cased and suspended well.

The environmental clearance will allow for up to six months of continuous (24-hour) testing operations providing ADX with ample time to carry out an extensive testing program.

A testing program has been developed to primarily determine:

- reservoir fluid type present in key reservoirs;
- the flow capacity in key reservoirs; and
- the reserves potential of the reservoirs.

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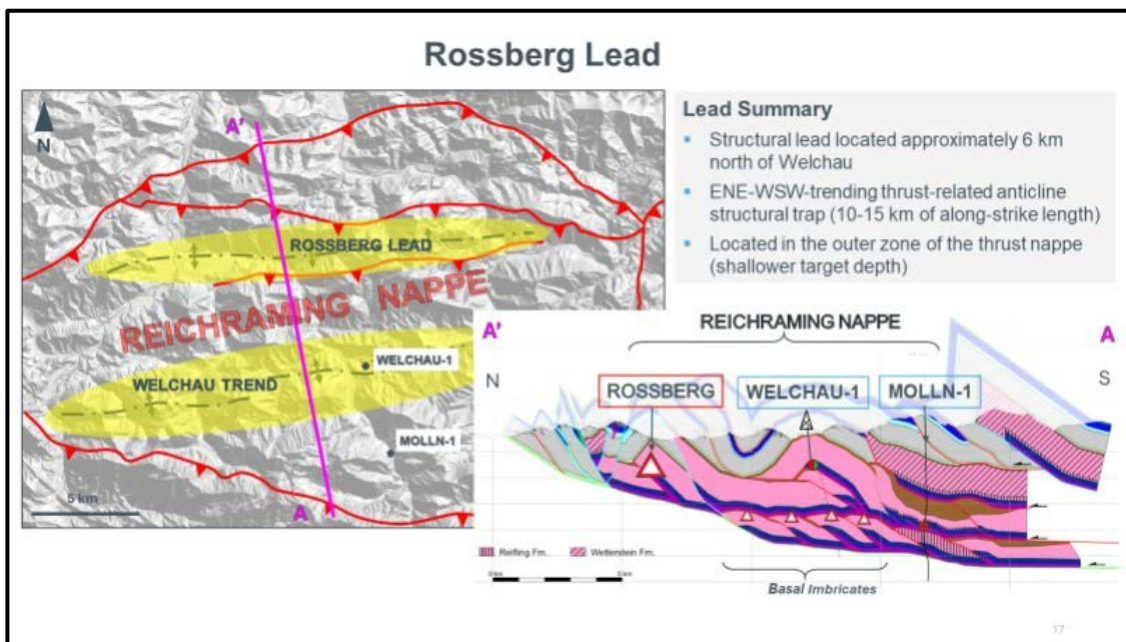
Initially the test will focus on the two major reservoirs, starting with the deeper Steinalm and then the shallower Reifling. If good flow performance is achieved, the Steinalm test may be extended to obtain longer term flow data, noting that under Austrian legislation it is permitted to produce up to 30,000 barrels from a long-term testing operation. A workover rig used at ADX' Vienna Basin fields has been mobilised to Upper Austria to complete the Anshof-2A well and then undertake test program well work at Welchau. Utilisation of this rig across ADX' projects along with other synergies such as using experienced production personnel to supervise Welchau testing provides ADX with the operational flexibility to vary the program without significantly increasing costs.

### Welchau-1 follow up Potential

The Welchau-1 well has confirmed a highly prospective hydrocarbon play. The well has confirmed the existence of hydrocarbon liquids and associated gas across multiple extensive carbonate reservoir intervals, trapped by a large hydrocarbon charged seal in a structural setting capable of containing large volumes of hydrocarbons.

Two immediate, follow up exploration targets have been identified:

- **Welchau-1 Deepening:** There remains over 1000 metres of exploration potential below the current Welchau-1 well TD (1733 metres). The opportunity to deepen the Welchau-1 well after testing the existing zones of interest continues to be assessed in conjunction with ongoing structural modelling of the Welchau discovery.
- **Step-out Exploration Lead:** ADX has already identified several follow up target structures in the same gross trend as Welchau. An example is the Rossberg lead which has a similar anticlinal structure and shallow drill depths to Welchau. Rossberg is located approximately 6 kilometres to the north-west of Welchau-1. The Rossberg structure has been identified from surface imaging, dynamic structural balancing techniques together with detailed mapping of the surface geology. As was the case with Welchau the existing 2D seismic may help to detail the closure. Additional field work is being undertaken to mature this prospect as a potential follow up exploration well.

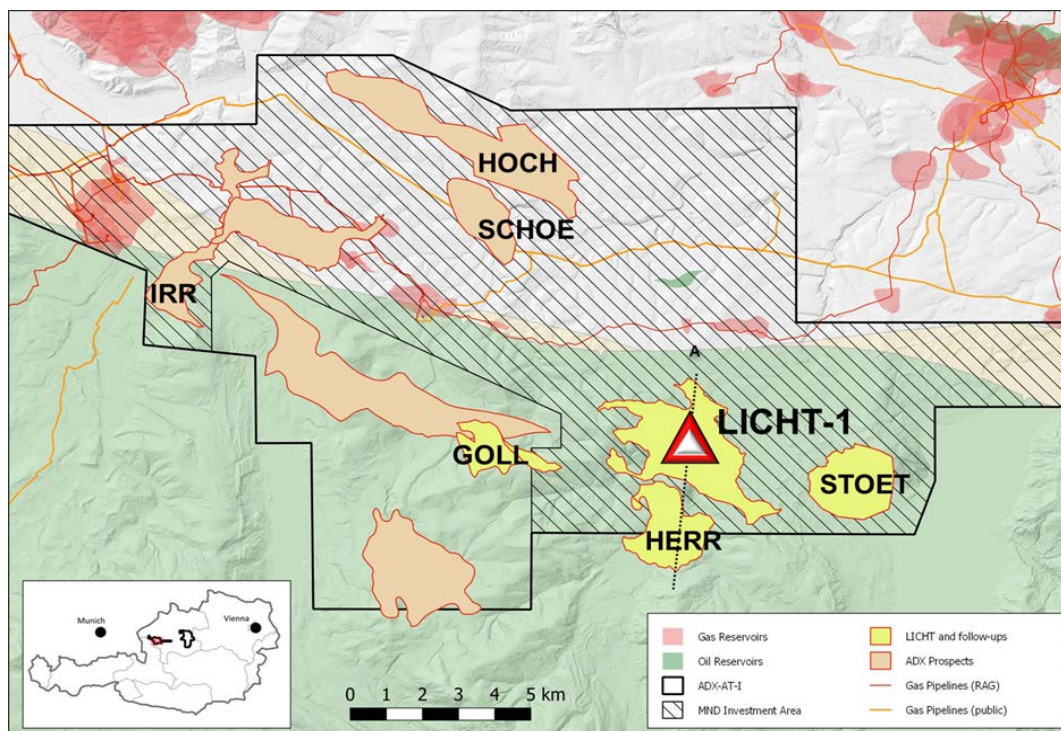


Rossberg lead follow-up exploration to Welchau

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## ADX-AT-I 2024 Gas Exploration – Lichtenberg-1 exploration well



**Upper Austria ADX-AT-I Exploration Licence, including the MND Investment Area (since December 2023), the location of the LICHT-1 exploration well and the follow-up leads**

The Lichtenberg-1 (“LICHT-1”) gas exploration well, located in the ADX-AT-I licence in Upper Austria, spudded at 07:00 am Central European Time on the 26th of September 2024. Approvals from both Mining Authorities (part of Austrian Federal Ministry of Finances) and the Upper Austrian Nature Conservation Department were received in a relatively fast time. The RED Drilling & Services GmbH (RED) E-202 rig is being used to drill the LICHT-1 well. This rig was recently used to drill the successful Anshof-2A appraisal well which will soon be completed as an oil production well.

ADX is the operator and will retain a 50% economic interest in the well and the MND Investment Area after completion of earn in obligations by MND Austria a.s. (MND). ADX will retain a 100% interest in the remainder of the ADX-AT-I licence. MND will fund the first EUR 4.5 million of Lichtenberg-1 well costs in addition to a previous EUR 0.45 million cash payment to earn a 50% economic interest in the well and part of the ADX-AT-I licence.

The LICHT-1 well’s primary target is an Upper Oligocene sandstone reservoir as well as a few slightly shallower, geologically similar reservoirs. These sandstone reservoirs typically produce at relatively high production rates, more than 10 MMSCFPD based on offset production wells in the area. LICHT-1 is expected to take approximately 30 days to drill to the total depth (TD) of approximately 2900 metres measured depth (MD). If successful, detailed logging, casing and suspension of the well will take approximately a further 10 days.

At time of Reporting, gas sold into the domestic market in Austria was achieving approximately US\$13 per MCF equivalent pricing meaning any discoveries the Company makes could be extremely valuable.

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The first Oligocene gas reservoirs are expected from around 2000 metres MD, with the main primary target reservoir expected from approximately 2500 metres MD.



*The RED E-202 rig on location at the LICHT-1 well site*

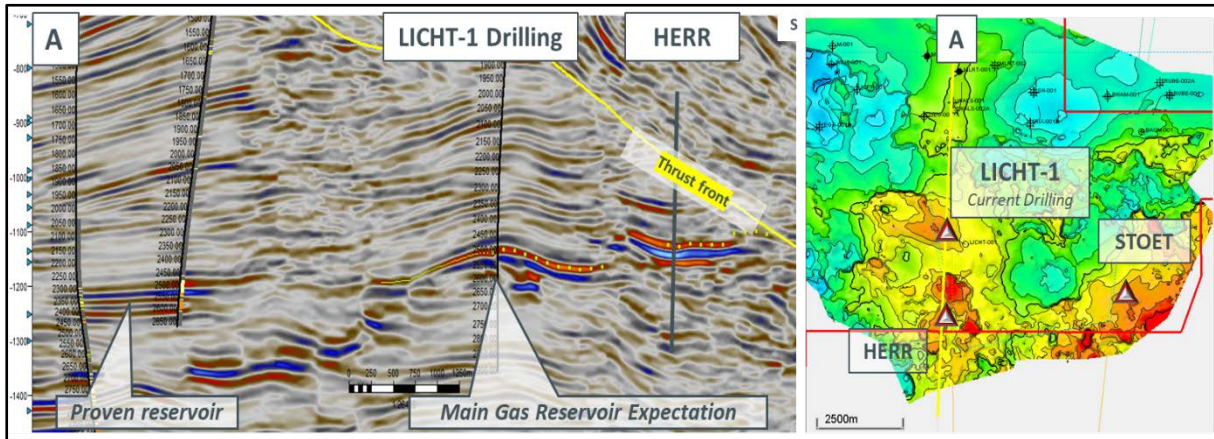
ADX believes there is strong evidence for the likely presence of marine sandstones of Oligocene age. The likelihood of high quality reservoirs at LICHT-1 is based on data from previously drilled offset wells to the north with similar seismic amplitude or brightness anomalies which have encountered highly productive gas sands.

Success at LICHT-1 will significantly upgrade and de-risk the three very close by follow up prospects shown in the previous map. Further prospects in this area within the main Flysch geology thrusts are available too. Due to the large structural extent of these prospects, the upside potential (i.e. P10) of both STOET and HERR could be twice as large as currently targeted by the LICHT-1 which is considered the lowest risk prospect in this area. In the past, the further South shallow Flysch thrusting front area was totally avoided due to seismic definition issues. The Figure on the next page shows that these issues have now been largely resolved by ADX. The LICHT-1 expected main gas reservoir target is now very clearly imaged from reprocessed 3D seismic image.

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**High quality 3D seismic provides confidence in relation to structural definition and the presence of marine sandstone gas reservoirs**

The LICHT structure is below a major “Flysch” thrust front which influences the wide range of prospective resource potential at LICHT-1 shown in the Figure above.

In addition to the relatively low risk and shallow Oligocene sandstone targets at LICHT-1, further high impact exploration potential exists at LICHT-1 approximately 1200 metres below the Oligocene. A future “LICHT – DEEP” well could target both Eocene oil reservoirs proven elsewhere by ADX in the Anshof-3 and Anshof-2A oil wells as well as deeper potential within the Jurassic Carbonates for both oil and gas. ADX is currently undertaking seismic reprocessing to de-risk these deeper opportunities (see *Additional ADX-AT-1 Gas Prospect Maturation* section below).

<b>LICHT-1 Prospective Resources Estimates <sup>2, 3</sup></b>				
<b>(100% Economic Interest)</b>				
	<b>Low</b>	<b>Best</b>	<b>Mean</b>	<b>High</b>
<b>BCF Recoverable</b>	8	21	28	56

**Lichtenberg Prospective Resource Estimates**

<sup>2</sup>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 exploration appraisal and evaluation is required to determine the existence of a significant quantity of potentially recoverable hydrocarbons.

<sup>3</sup>The Original Prospective Resources reporting date on 22 June 2023, updated on 20 August 2024.

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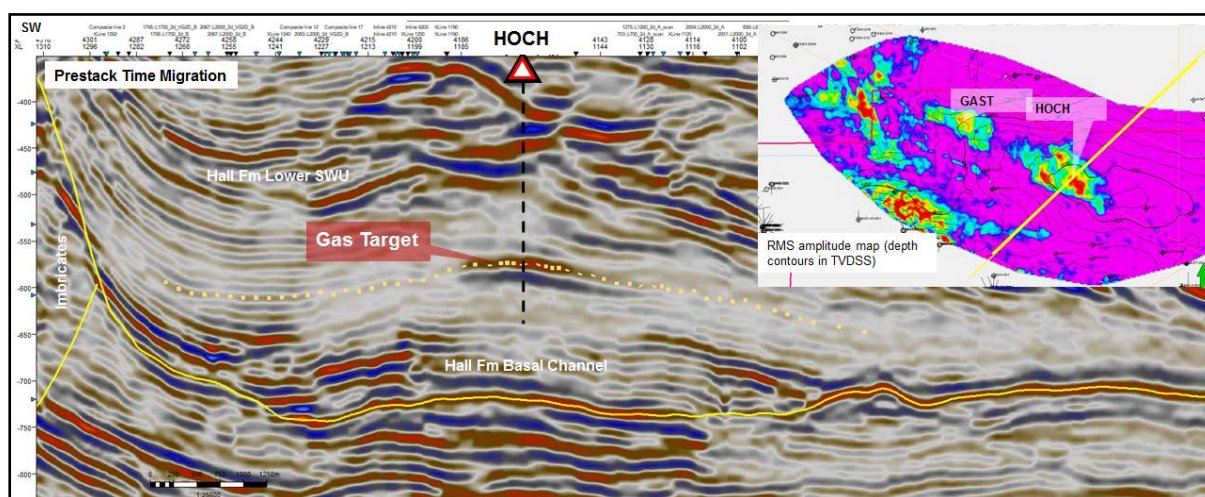
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## ADX-AT-I Shallow Gas Prospects

In addition to drilling the Lichtenberg-1 well, ADX continues to mature low risk, shallow gas exploration prospects such as HOCH and SCHOE in the Northern part of the ADX-AT-I licence shown in the Figure below. The HOCH and SCHOE prospects can potentially be drilled with a smaller and lower cost rig from the same location thereby reducing the monetary risk versus reward.

ADX is undertaking a budget inquiry to secure a suitable rig that will provide a more cost-effective alternative for drilling shallower prospects in the future. These prospects are very close to gas infrastructure and expected to contain easy to process dry natural gas (methane) only which would reduce the development time and cost for any discovery.

The 3D seismic section below and the inserted reservoir amplitude map is indicative of gas reservoir presence. It also summarises the most important technical features of the combined HOCH-GAST prospect that has a combined large area of close to 10 km<sup>2</sup>. The depth contours also show that the prospect has a very low risk 4-way dip closure component and a large structural – stratigraphic upside potential being located in the axis of a structural nose plunging to the North West. A drill site has been secured and permitting will commence after rig selection.



Seismic cross section of HOCH prospect

### Additional ADX-AT-I Gas Prospect Maturation (ADX has a 100% interest in these areas)

In addition to the work undertaken on preparing gas prospects for drilling within the MND Investment Area, ADX is completing additional prospect maturation work on areas within the remainder of the ADX-AT-I licence where it holds a 100% interest. Notably, two large 3D seismic covered prospects have been identified (ZAM and OHO) with large prospective resource potential individually in excess of 100 BCF. (Refer to ASX Prospective Resources Update dated 22 June 2023).

Planned prospect maturation work includes refining the stratigraphic horizon interpretation and identifying tectonic events of each prospect. Data clearly indicates especially for ZAM several possible production reservoirs. The third-party study will focus on establishing a kinematically consistent 3D structural model which is expected to significantly de-risk the large resource potential of the prospects in readiness for potential third-party co-investment and drilling.

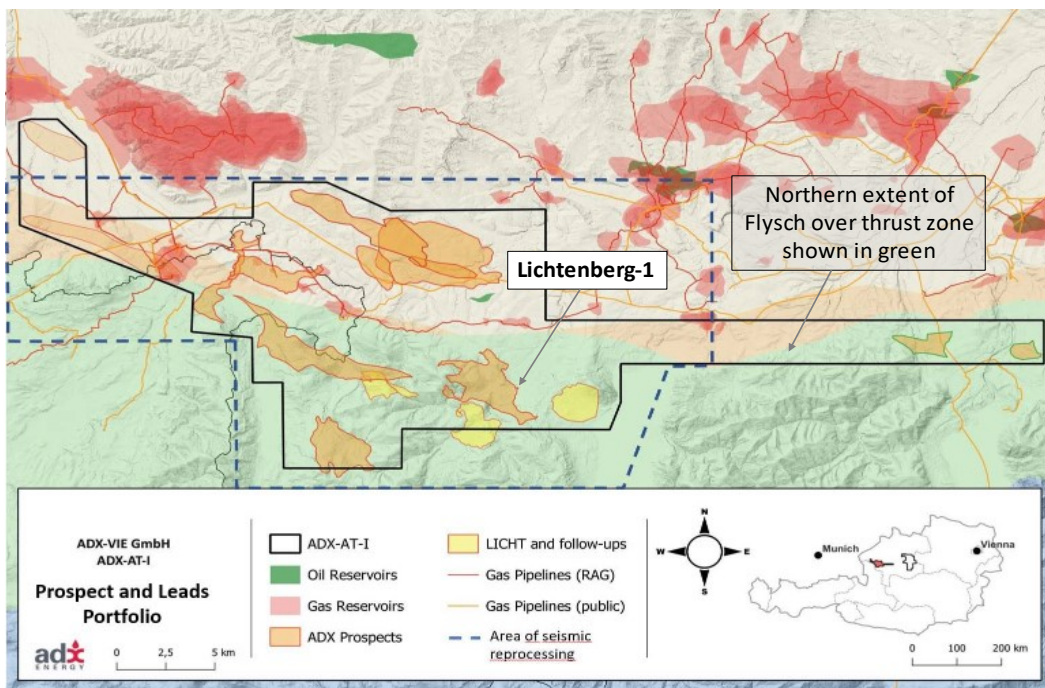
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## Seismic Reprocessing in the ADX-AT-I Licence Area

Reprocessing of 3D seismic within the ADX-AT-I licence area is in progress with a suitably qualified and experienced contractor (DMT in Germany). Several additional leads with approximately 50 MMBOE prospective resources potential have been identified (mainly below the imbricated sedimentary section that affects seismic imaging of the deeper structures of interest that are now more clearly visible) which could be further de-risked by the use of state-of-the-art Pre tacked Depth Migration (PSDM) reprocessing. The PSDM reprocessing work is expected to be finalised by the end of Q1 2025. The first results (time processing was completed in the beginning of October 2024) are already showing promising data improvements, including much improved imaging of the imbricated Flysch and Molasse sediments. The enhanced imaging will help define the seismic velocity field for depth migration. The large gas and partly oil potential below the Flysch thrusting is well known based on the large gas fields to the north which have been discovered without the Flysch thrusting above them. Hardly any drilling was undertaken previously because of seismic data quality issues. The recent seismic reprocessing conducted by ADX has significantly improved the imaging to the south of the ADX-AT-I licence area (but within the licence area) of the proven Jurassic, Cretaceous, Eocene, and Oligocene gas and oil producing reservoirs which exist to the north.

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**Map showing area of reprocessing of 3D seismic in the ADX-AT-I licence in Upper Austria**

The depth migration will significantly reduce risk for all leads and opportunities identified by ADX below the overthrust zone such as the deep Jurassic leads of the ZAM and OHO prospects as well as LICHT follow up leads and other opportunities in the Puchkirchen Channel system.

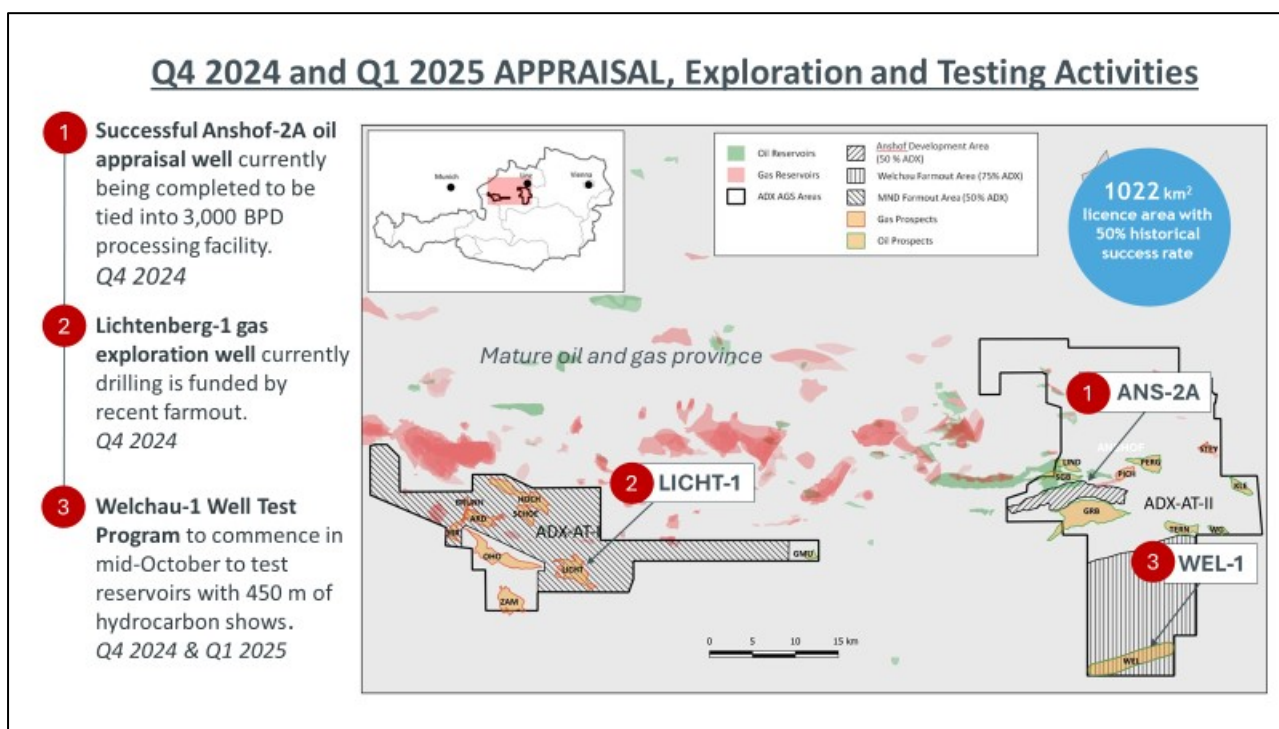
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## Summary of fourth quarter 2024 and first quarter 2025 activities

A summary of planned Exploration activities during second half of the year includes the following:

1. The drilling and evaluation of the LICHT-1 gas exploration well (spudded on 26 September 2024) in the ADX-AT-I licence;
2. Testing of the Welchau-1 light oil discovery and the assessment of results;
3. Assessment of Welchau-1 deepening potential and Rossberg lead maturation;
4. Ongoing near field, follow up oil prospect maturation in the ADX-AT-II licence proximal to the Anshof field; and
5. Evaluation of LICHT-1 drilling results and ongoing gas portfolio development in the ADX-AT-I licence.

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Map showing location of planned portfolio activities in Upper Austria

ADX expects to update its prospect inventory during the fourth quarter of 2024 with a view to recommencing farmout activities early in 2025.

The combination of drill ready prospects, strong demand for hydrocarbons, a favourable regulatory framework in Austria and a proven participation framework developed by ADX and approved by the Austrian ministry of finance (for the Anshof Oilfield Area and the MND Investment Area within the ADX-AT-I licence) is expected to provide a favourable environment for ongoing co-investment transactions.

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## PARTA EXPLORATION PERMIT AND IECEA MARE PRODUCTION LICENCE – Romania

***ADX holds a 49.2% shareholding in Danube Petroleum Limited (Danube). The remaining shareholding in Danube is held by Reabold Resources Plc. Danube via its wholly owned subsidiary, ADX Energy Panonia S.R.L., holds a 100% interest in the Parta Exploration licence (including a 100% interest in the Parta Appraisal Sole Risk Project) and a 100% interest in the Iecea Mare Production licence. ADX is the operator of the permit pursuant to a services agreement with Danube.***

On behalf of Danube, ADX is engaged in ongoing discussions with the regulatory authorities (NAMR, National Agency for Resources and Minerals) in relation to options for the extension of the Parta exploration licence (the “Discussions”). ADX has provided a number of reports requested in support of the Discussions. The Iecea Mare production licence which has a validity (or term) of 20 years is not affected by the Discussions.

In addition to the Discussions, ADX has extended discussions with NAMR to include work programs for exploration and/or appraisal wells outside of its Parta licence.

Options to exploit the geothermal potential of the Romanian part of the Pannonian Basin are being investigated together with a subsurface review of the likely prospectivity. Legislation for the exploitation of geothermal energy is currently being created. However, the regulator has stated that a petroleum licence needs to be converted into a geothermal licence, before any non-petroleum operations can be performed. Furthermore, a geothermal licence can only be awarded after finalising all petroleum operations as defined in the relevant petroleum licence agreement.

## Permit d 363C.R-.AX – Offshore Italy

***ADX is operator and upon grant, will hold a 100% interest in the d 363C.R-.AX Exploration Permit***

### ***Background regarding d 363 C.R-.AX ‘Nilde’ permit (“Permit”)***

The Permit in the Sicily Channel, offshore Italy is located in a water depth of 90-100 metres just over 60 km from the shore of the island of Sicily and comprises the Nilde Oil Field, which previously produced 20.5 million barrels of 39° API oil in the 1980s, two further oil discoveries Norma-1 and Naila-1, as well as an exploration inventory of 5 oil leads. Across the permit there are Contingent Resources of 19.2 to 65.6 million<sup>1</sup> barrels of remaining oil and Prospective Resources of 40 to 201 million barrels oil (arithmetically added)<sup>2</sup>.

The total best technical prospective resource potential of five high graded gas prospects is 369 BCF (refer ASX announcement 30 August 2022). The five high graded prospects are considered relatively low risk since they are simple 4-way dip anticline closures featuring a seismic amplitude response commonly known as Direct Hydrocarbon Indicators (DHIs).

Note 1: Contingent Resources Reporting Date for Nilde was 29 March 2018 and Prospective Resources Reporting Date in d 363 C.R-.AX 21 April 2016 (oil) and 30 August 2022 (gas).

Note 2: 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

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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.

## ***Current Status of Permit***

The approval of the technical, financial and organisational capacity of ADX' wholly owned Italian subsidiary, Audax Energy S.r.l. (Audax) has resulted in authorising Audax to hold and operate any exploration and production licence in Italy. The Permit is currently expected to be formally granted by the end of 2024, after a meeting has been convened with all the local authorities involved.

A reversion of the 2018 legislative decree which introduced the PiTESAI, is underway. The new Energy Decree could enable the oil potential as well as the gas potential to be exploited within d 363C.R-.AX permit area. This is the result of the recent annulment of the Plan for the Sustainable Energy Transition of Eligible Areas (PiTESAI). The PiTESAI plan limited the extent of hydrocarbon activities preventing oil redevelopment, appraisal and exploration activities including the extensive oil potential described below within Audax' d 363C.R-.AX permit.

In November 2022, a number of companies appealed against the PiTESAI in the Tribunale Amministrativo Regionale (TAR), the Regional Administrative Court. On 12 February 2024, the TAR ruled in favour of the companies and decided to abolish the PiTESAI which will result in reversion back to 2018 reference legislation and allow ADX to pursue the oil potential in the licence if not contested.

## **New Ventures**

### **European Portfolio Expansion Opportunities**

In addition to Austrian portfolio development and expansion opportunities, ADX continues to critically review new opportunities in Europe that include existing production in combination with appraisal and exploration opportunities.

## **Renewable Energy Projects – Austria**

### **Vienna Basin Green Hydrogen and Solar Projects**

It remains ADX' long-term plan to enhance the value and life of its Vienna Basin Fields through the transformation of the assets into a multi-energy hub combining the existing low emissions oil and gas production operations, renewable energy production and hydrogen storage activities.

### ***Vienna Basin Solar Projects Feasibility Studies***

Further to the review of its strategy for the Vienna Basin Solar Project, ADX engaged an Austrian consultancy firm with extensive renewable energy and solar power generation project development experience to undertake feasibility studies based on the scope of work developed in Q2 2024 including:

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- Review of potential photovoltaic (PV) plant configurations (locations and PV capacity based on suitable land and infrastructure);
- Review of PV panels orientation;
- Review of permitting environment for self-consumption and grid feed-in;
- Cost estimates (capital expenditures and operating expenditures);
- Project optimisation with battery systems;
- Review of available subsidies and price support schemes; and
- Economic modelling.

These feasibility studies were completed during the quarter. However, the final results and recommendations were received by ADX after the end of the reporting period. ADX is planning to evaluate the results of the studies in the next weeks with the view of making a final investment decisions by the end of Q4 2024.

During the quarter, ADX also resumed discussions with a group which expressed interest in the Vienna Basin Hydrogen Project as an offtaker and partner. The interest of this group is primarily focused on securing long-term underground storage capacity for renewable hydrogen and access to green hydrogen produced in Austria. ADX anticipates that discussions will progress further in Q4 2024.

### Oil, Gas and Geothermal Multi Energy Project in Upper Austria

The GMU prospect, located in the Eastern part of the ADX-AT-I exploration licence in Upper Austria (Molasse basin), was highlighted, presented and discussed in detail in the ASX release on the 22 June 2023. It combines a geothermal opportunity (fractured Jurassic limestone with 110°C reservoir temperature) and stacked overlying oil and gas targets defined on high quality 3D seismic.

The GMU prospect provides the combination geothermal potential representing 18 MW of thermal power together with overlying oil and gas potential identified on high quality 3D seismic. The combination of geothermal and hydrocarbon potential is increasingly attractive due to elevated energy prices and growing local industry demand seeking sustainable long-term alternatives to expensive oil, gas and electricity.

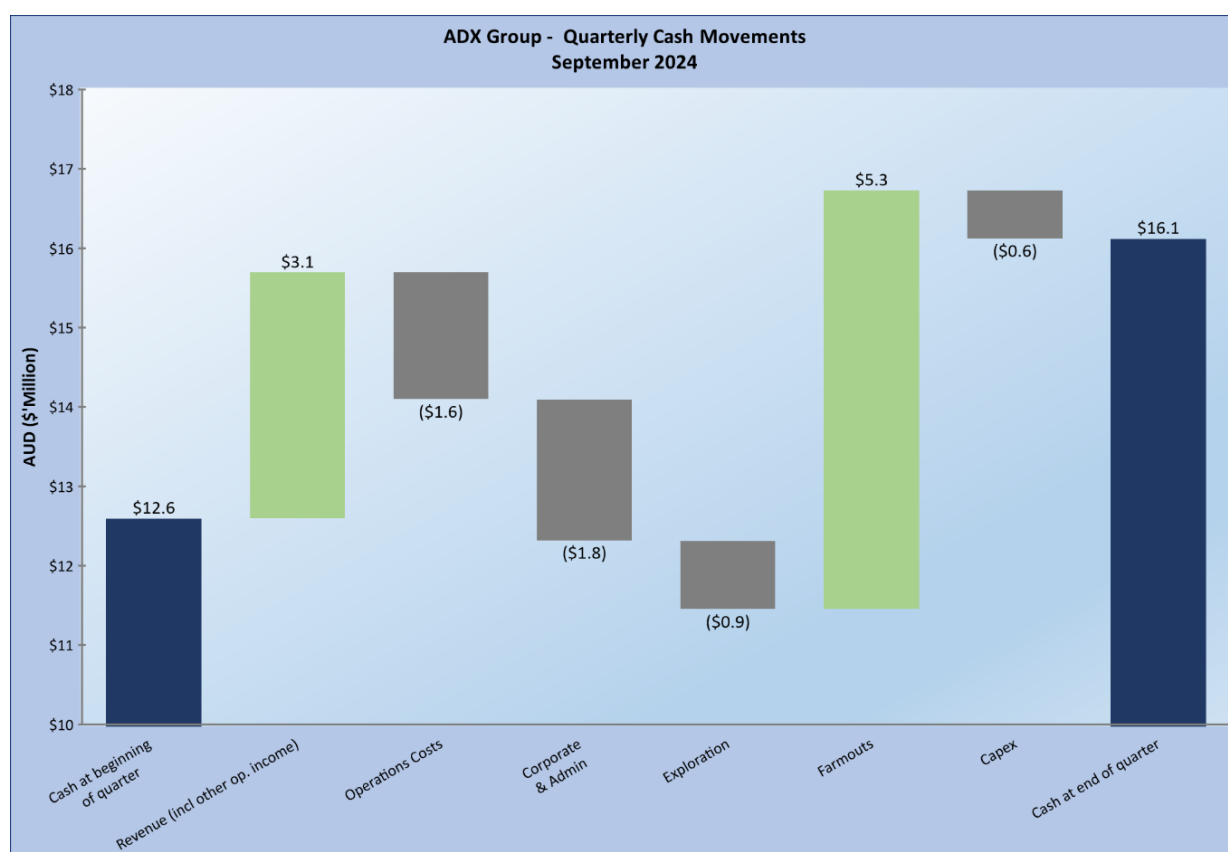
Due to ADX' continued focus on its oil and gas activities in the near term, there is nothing further to report on this project for the reporting period.

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## Finance and Corporate

### Operations

During the September 2024 quarter, cash revenue received from oil and gas operations in Austria totalled A\$ 2.9 million (for oil and gas sales for the period June 2024 to August 2024). Gross September 2024 oil and gas revenue of EUR 0.45 million (A\$ 0.8 million) was received after the quarter end. Revenues and production costs are based on 100% of operations, with net distributions to partners to be shown as a separate outflow. During the quarter, no distributions were paid to partners.



### Cash Balances

ADX' cash at the end of the quarter was A\$ 16.1 million.

Cash excludes funds secured for bonds and guarantees. Secured cash totalled A\$ 1.1 million at the end of the quarter.

During the quarter:

Operating cashflows consisted primarily of the following:

- Steady production revenue and production costs;
- Higher exploration costs (Welchau area and AT-I areas)

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Investing cashflows consisted primarily of the following:

*Funds from Farmouts and Partners of A\$5.28 million, primarily consisting of:*

- A total of EUR 1.64 million (A\$ 2.64 million) for commitments for ADX-AT-I was received from MND.
- A total of EUR 1.5 million (A\$ 2.4 million) for commitments for Anshof-2A and other capex was received from MND.

*Capex Outflows:*

- Net payments, excluding VAT, of \$ 0.61 million, primarily Anshof-2A well costs. The majority of Anshof-2A well costs were paid after quarter end.

Financing cashflows consisted primarily of the following:

- No significant activities.

### **Additional ASX Information**

- ASX Listing Rule 5.4.1: Exploration expenditure during the quarter was A\$ 641,000 excluding staff costs. Full details of exploration activity during the quarter are included in this Quarterly Activities Report.
- ASX Listing Rule 5.4.2: Production expenditure in Austria during the quarter was A\$ 1,283,000 excluding staff costs. Appraisal expenditure in Romania during the quarter was A\$ 7,000, excluding staff costs. Full details of production and appraisal activities during the quarter are included in this Quarterly Activities Report.
- ASX Listing Rule 5.4.3: A tenement schedule is provided at the end of this Activities Report.
- ASX Listing Rule 5.4.5: Payments to related parties of the Company and their associates during the quarter was A\$ 217,928. This consists of A\$ 7,598 paid for office rental to an entity related to Director Ian Tchacos and A\$ 210,330 for executive directors consulting fees and salaries and non-executive director fees.

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## Tenement Table

Permits held at the end of the quarter, their location, ADX percentage held at the end of the quarter and changes thereof:

Permit	% held at the beginning of the Quarter	% held at the end of the Quarter	% change
Onshore Austria, Zistersdorf and Gaiselberg Production Licence	100%	100%	-
Upper Austria ADX-AT-I AGS Licence <sup>(a)</sup>	100%	100%	-
Upper Austria ADX-AT-II AGS Licence <sup>(b)</sup>	100%	100%	-
Onshore Romania, Parta <sup>(c)</sup>	100%	100%	-
Onshore Romania, Iecea Mare Production Licence <sup>(c)</sup>	100%	100%	-
Offshore Italy, d363C.R-.AX <sup>(d)</sup>	100%	100%	-

**Note a:** ADX-AT-I Concession agreement for exploration, production and gas storage in Upper Austria.

ADX holds a 100% interest in the ADX-AT-I exploration licence. ADX' interest in part of this licence, the MND Investment Area, will reduce to 50% upon the completion of MND's investment obligations under the energy investment agreement relating to the MND Investment Area (refer ASX release 8 January 2024).

**Note b:** ADX-AT-II Concession agreement for exploration, production and gas storage in Upper Austria

ADX holds a 100% interest in the ADX-AT-II exploration licence, except as follows:

- ADX holds a 75% interest in the Welchau Area of the ADX-AT-II licence; and
- ADX holds a 50% interest in Anshof Field Area of the ADX-AT-II licence other than the Anshof-2A well where ADX holds a 60% interest.

**Note c:** ADX holds a 49.2% shareholding in Danube Petroleum Limited (Danube). The remaining shareholding in Danube is held by Reabold Resources Plc. Danube via ADX Energy Panonia holds a 100% interest in the Parta Exploration licence (including a 100% interest in the Parta Appraisal Sole Risk Project) and a 100% interest in the Iecea Mare Production licence. ADX is the operator of the permit pursuant to a Services Agreement with Danube.

**Note d:** ADX has commenced a process with the Italian Designated Authority to convert the exclusively awarded application to a ratified licence. This process was commenced after the award by the Ministry of Industry.

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Yours faithfully,

A handwritten signature in black ink, appearing to read 'Ian Tchacos', written over a light grey rectangular background.

Ian Tchacos

Executive Chairman

+61 (08) 9381 4266

[ian.tchacos@adxenergy.com.au](mailto:ian.tchacos@adxenergy.com.au)

**Authorised for lodgement by Ian Tchacos, Executive Chairman**

**Persons compiling information about Hydrocarbons:**

Pursuant to the requirements of the ASX Listing Rule 5.41 the technical and reserves information relating to Austria and Italy contained in this release 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).

**Previous Estimates of Reserves and Resources:**

ADX confirms that it is not aware of any new information or data that may materially affect the information included in the relevant market announcements for reserves or resources and that all material assumptions and technical parameters underpinning the estimates in the relevant market announcements continue to apply and have not materially changed other than where specifically noted elsewhere in this report.

**PRMS Reserves Classifications used in this release:**

**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.

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## Prospective Resource Classifications used in this release:

**Low Estimate** scenario of Prospective Resources - denotes a conservative estimate of the quantity that will actually be recovered from an accumulation by an oil and gas project. When probabilistic methods are used, there should be at least a 90% probability (P90) that the quantities actually recovered will equal or exceed the low estimate.

**Best Estimate** scenario of Prospective Resources - denotes the best estimate of the quantity that will actually be recovered from an accumulation by an oil and gas project. It is the most realistic assessment of recoverable quantities if only a single result were reported. When probabilistic methods are used, there should be at least a 50% probability (P50) that the quantities actually recovered will equal or exceed the best estimate.

**High Estimate** scenario of Prospective Resources - denotes an optimistic scenario of the quantity that will actually be recovered from an accumulation by an oil and gas project. When probabilistic methods are used, there should be at least a 10% probability that the quantities actually recovered will be equal or exceed the high estimate.

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 than 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 development scope). Standalone Possible Reserves must reference a commercial 2P project

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### Resource Classifications used in this release.

**Contingent Resources** are those quantities of petroleum estimated, as at a given date, to be potentially recoverable from known accumulations but, for which the applied project(s) are not yet considered mature enough for commercial development due to one or more contingencies. 1C, 2C, 3C Estimates: in a probabilistic resource size distribution these are the estimates that have a respectively 90% (P90), 50% (P50) and 10% (P10) probability that the quantities actually recovered will be exceeded.

**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.

**Low Estimate** scenario of Prospective Resources - denotes a conservative estimate of the quantity that will actually be recovered from an accumulation by an oil and gas project. When probabilistic methods are used, there should be at least a 90% probability (P90) that the quantities actually recovered will equal or exceed the low estimate.

**Best Estimate** scenario of Prospective resources - denotes the best estimate of the quantity that will actually be recovered from an accumulation by an oil and gas project. It is the most realistic assessment of recoverable quantities if only a single result were reported. When probabilistic methods are used, there should be at least a 50 % probability (P50) that the quantities actually recovered will equal or exceed the best estimate.

**High Estimate** scenario of Prospective Resources - denotes an optimistic scenario of the quantity that will actually be recovered from an accumulation by an oil and gas project. When probabilistic methods are used, there should be at least a 10% probability that the quantities actually recovered will be equal or exceed the high estimate. ADX has only reported Best Estimate Prospective Resources Scenarios in this release.

### Prospective resources have been estimated on the following basis.

ADX has calculated resource estimates probabilistically under the PRMS guidelines outlined in chapter 4.2.3 (June 2018 revision), following the interpretation of all available well data and seismic data including 3D seismic data within the licences and within the basin.

Historical success rates for exploration in the basin have been high when utilizing 3D seismic. A similar success rate is expected for future drilling given the proximity to oil and gas fields. Given the availability of infrastructure and high-quality productive reservoirs in the basin there is a high probability that successful exploration or appraisal will result in commercial production.