

## **ASX RELEASE**



30 October 2020

# **Activities Report For Quarter Ended 30 September 2020**

## **HIGHLIGHTS OF SEPTEMBER 2020 ENDED QUARTER ACTIVITIES**

## **Operations**

## **Austria - Zistersdorf and Gaiselberg Production Assets:**

- **Production** during the quarter averaged 308 BOEPD, a decrease of 1% compared to the previous quarter.
- Oil Price recovered during the quarter resulting in an average oil price US\$ 43.00 per barrel (Brent), an increase of 47% compared to the previous quarter.
- Field geotechnical and engineering review was ongoing utilising recently acquired and reprocessed 3D seismic to assess Gaiselberg and Zistersdorf fields infill drilling potential as well as the undeveloped Flysch reservoir potential.
- ▲ A baseline 3<sup>rd</sup> Party Reserves assessment of the Gaiselberg and Zistersdorf fields by an independent consultant was completed. The report will be available during the fourth quarter.
- **3D** seismic time domain reprocessing (PSTM) over the fields was completed with German contractor DMT. Based on the highly successful processing, a PSDM (depth migration) reprocessing was commissioned with final results expected by early November 2020.

## **Austria – Upper Austria Appraisal and Exploration Acreage:**

- ♠ Applications for areas proposed by ADX have been favourably received by Austrian Ministry for Sustainability and Tourism Energy and Mining section and discussions are ongoing to finalise licenses and concession agreement contracts.
- Drilling targets include multiple appraisal and exploration opportunities proximal to infrastructure which have been assessed utilising a 3D seismic data set obtained as part of the RAG production acquisition completed in December 2019.

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## Romania – lecea Mare Production and Parta Exploration License:

- *IMIC-1 testing* Acidisation of the well was undertaken with gas flow observed after lifting of acid and brine. Excellent gas quality confirmed by samples taken from gas flow (low impurities and inerts).
- ▶ *IECEA MARE 3D seismic* was reprocessed with a view to mapping IMIC-1, IMIC- 2 areas and re-assessing redevelopment opportunities identified by a previous operator in the production license lecea Mare.
- **3D seismic acquisition** was deferred due to the default by Tamaska Oil & Gas Limited in relation to the Farmin Agreement previously announced relating funding of the seismic work program.

## **Finance and Corporate**

▲ Austrian Funding Facility - EUR 1.13 million facility for ADX's wholly owned Austrian subsidiary, ADX VIE GmbH, via a program of Austrian state financing from Austria Wirtschafts ("Economy") Service (AWS) and Volksbank Wien AG (Volksbank) which is ADX local commercial bank.

## **PLANNED ACTIVITIES QUARTER 4, 2020**

- Austria Vienna Basin Zistersdorf and Gaiselberg Production Assets issue of independent reserves review, continue technical re-evaluation of the fields undeveloped and contingent resource potential (Flysch reservoirs) utilising high quality 3D seismic and plan work over program to increase production.
- ▲ Austria Upper Austria Appraisal and Exploration Acreage finalise appraisal and exploration applications and concession agreements.
- Onshore Romania lecea Mare Production License and Parta Exploration determine forward program for IMIC-1 well. Finalise acquisition of Parta exploration 3D seismic. Assess production license development potential based on new 3D processing and modern state of the art well logging data acquired in IMIC-1.





## **OPERATIONS REPORT Austrian Production, Appraisal and Exploration Activities**

ZISTERSDORF AND GAISELBERG PRODUCTION ASSETS - Vienna Basin

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

## **Production Operations**

Field production rate during the quarter averaged approximately 308 BOEPD, a decrease of 1% from the previous quarter (refer table 1 below) mainly due to a drop in gas sales. Average production rates for the 2020 to date are in line with the most likely (2P Reserves) forecast.



Average Brent reference oil pricing during the quarter strengthened by approximately 47% and gas prices recovered from summer seasonal lows with the onset of European winter (refer table 2 below).

The impact of the COVID-19 pandemic has not affected ADX operations despite border restrictions between some European countries. ADX has been able to continue the execution of planned facilities enhancements and maintenance programs required to maintain and enhance field production. A new export pipeline interconnection to connect the fields to regional Vienna basin crude pipeline and the OMV refinery has been completed and commissioned.





Table 1 - Quarterly Production Summary									
				Current Qtr	Past Qtr	%age			
	July	August	September	Total	Total	Change			
Crude Oil Sold (Barrels)	8637	8437	7812	24,887	24,550	1%			
Gas Sold (M <sup>3</sup> )	183,480	177,340	158,300	519,120	641,431	-19%			
· ·									
Total Oil Equivalent (BOE)	9755	9518	8777	28,050	28,458	-1%			
Avg Production Rate (BOEPD)	325	307	293	308	313	-1%			

## Field Revenues and Product Pricing

Field revenues recovered from the previous quarter as a result of an increase in the average Brent crude oil price from US\$ 29.20 per barrel in the previous quarter to US\$ 43.00 per barrel in the September quarter (refer table 2 below). The increase in oil price generated a 39% increase in sales revenue from € 631,578 in the June quarter to € 874,783 in the September quarter (refer table 3 below). Hedging income of € 54,565 were received during the September quarter.

Table 2 - Quarterly Sales Price Summary											
							Cı	urrent Qtr	P	ast Qtr	%age
		July	Α	ugust	Sep	tember		Average		Total	Change
Avg Oil Pricing (US\$ / BBL)	\$	43.36	\$	44.82	\$	40.81	\$	43.00	\$	29.20	47%
Avg Gas Price (Euro per M <sup>3</sup> )	€	0.07	€	0.07	€	0.10	€	0.08	€	0.07	12%

ADX has fixed price swaps in place for an average Brent crude price from July 2020 to April 2021 representing 40% of the forecast proven (1P) oil production at USD 41.77 per Barrel and USD 50.64 to the end of December for a further 40% of the forecast proven (1P) oil production. The hedged position provides pricing certainty until year-end over approximately 80% of proven (1P) oil production at an average Brent price in excess of USD 46 per barrel.





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Table 3 - Quarterly Sales & Hedging Revenue Summary								
				Current Qtr	Past Qtr	%age		
	July	August	September	Total	Total	Change		
Oil Revenue (Euro)	€ 298,383	€ 292,066	€ 246,859	€ 837,308	€ 591,224	42%		
Gas Revenue (Euro)	€ 10,281	€ 11,171	€ 16,022	€ 37,475	€ 40,355	-7%		
Total Sales Revenue (Euro)	€ 308,665	€ 303,237	€ 262,881	€ 874,783	€ 631,578	39%		
Hedging Revenue (Euro)	€ 17,064	€ 7,892	€ 29,608	€ 54,565	€ 215,908	-75%		
"Swaps and Put Options"								
Total Revenue (Euro)	€ 325,729	€ 311,129	€ 292,489	€ 929,348	€ 847,487	10%		
Total Revenue (A\$)	\$ 533,982	\$ 510,048	\$ 479,491	\$ 1,523,521	A\$/ Euro =	0.5984		
Effective Oil Price (US\$/BBL)	\$ 36.52	\$ 35.55	\$ 35.39	\$ 35.82				

Well work over programme

Planning was commenced for well work over work which is expected to deliver approximately 50 barrels per day of additional production from the Gaiselberg field. The work will be done during the 4<sup>th</sup> guarter of 2020 or early 2021.

Reserves and Production Growth

ADX's Austrian technical team is utilising an already highly improved 3D seismic data set to identify additions to ADX existing reserves and resources at Zistersdorf and Gaiselberg. Further 3D processing has been commissioned (PSDM – depth migration).

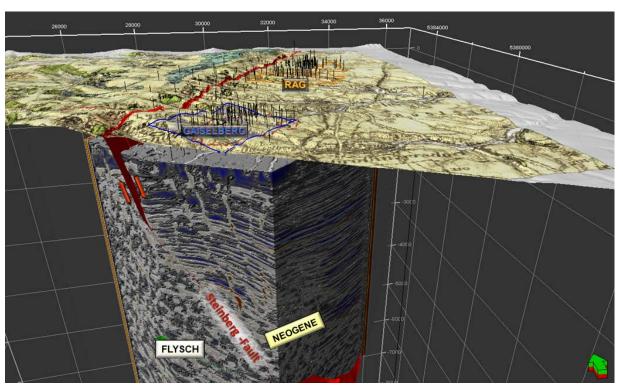
Ongoing activities are focussed on undeveloped reserves at Zistersdorf and Gaiselberg via infill drilling or the side track of existing wells as well as the appraisal of the large appraisal resource potential from the underdeveloped Flysch reservoir which can be accessed via the existing production footprint. The combination of existing field production and export infrastructure, high value crude quality and very low royalty (1%) makes any reserves and production additions very economically compelling.

The state of the art 3D seismic dataset covering the ADX producing oilfields has enabled the field review to be undertaken at low cost as a result of a data trade with Austrian major oil company and adjoining license holder OMV.

The 3D seismic data set is being used to map and quantify with greater confidence future infill well drilling locations targeting undeveloped reserves from undrained attic oil locations, already producing Badenian (Middle Miocene) reservoirs beneath the main oil production reservoirs at Zistersdorf and Gaiselberg ("Sarmatian" age) as well as maturing drilling targets in the Mesozoic age thrusted "Flysch" sandstone reservoirs on the hanging wall of the ADX oil fields which carry a large oil in place resource which is underdeveloped but proven by both ADX and OMV production wells.

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3D seismic cube image showing on the hanging wall (right side) the younger highly productive Miocene & Pliocene ("Neogene") age oil & gas reservoirs (approx. 50) and on the footwall (left) the proven but underdeveloped Mesozoic "Flysch" sandstone reservoirs. The Gaiselberg and Zistersdorf ("RAG") production license outlines are shown in blue and yellow color on the rendered surface map.

The OMV 3D dataset was reprocessed by ADX (with German contractor DMT) and the new 3D seismic dataset has shown significant improvements which should allow better production well placement and further delineation of the large Flysch oil and gas resource potential. The Flysch is a proven producing reservoir in the ADX fields but due to structural complexity, and difficulties in seismic imaging the Flysch has not been fully developed to date. 3D PSDM (depth migration) based on the encouraging time reprocessing results is currently underway.

A number of highly successful Flysch wells in nearby OMV fields are examples of the large productivity potential utilising modern drilling and completion practices which can be successfully deployed on this reservoir. The better wells have produced between 0.5 and 1.0 million barrels each, with the best OMV Flysch production well being drilled horizontally close to the Zistersdorf ("RAG") field.

ADX intends to develop a drilling program including Zistersdorf and Gaiselberg infill wells as well as Flysch appraisal wells. In addition to that, the first interpretation of a drilling target on the new 3D dataset has surprisingly, for such a mature field has already uncovered an undiscovered appraisal opportunity in the Zistersdorf license. The improved seismic data set is also intended to be utilised for a review of the remaining reserves from the existing developed reservoirs at Zistersdorf and Gaiselberg.

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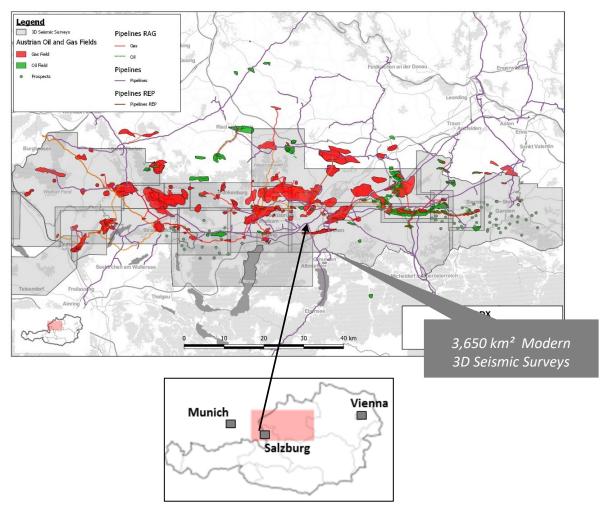
## Independent Reserves Review

ADX engaged an internationally accredited independent consulting group to provide a base line Competent Persons Review (CPR) of ADX Austrian developed reserves. The CPR is expected to be released during the 4<sup>th</sup> quarter of 2020.

ADX intends to engage a further independent review in early 2021 following completion of the current Zistersdorf and Gaiselberg field technical review utilising the new 3D seismic data set.

#### **Upper Austria Appraisal and Exploration Applications**

ADX has made applications to the responsible Austrian authorities for the award of two exploration, production and gas storage licenses ("AGS") in Upper Austria (Molasse Basin). Mutually agreed terms and conditions have been reached in accordance with fiscal and legal framework. ADX expects that the AGS contracts for the 3D seismic covered areas will be formally agreed during the 4th quarter of 2020.



Location map showing Upper Austria Oil and Gas fields (Green and Red Areas) as well as area of 3D seismic available to ADX

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The key attributes of the AGS areas are as follows:

- ADX evaluation based on an exclusive 3D seismic data set with \$100 million replacement value.
- Low risk appraisal and high impact exploration prospects proximal to infrastructure where historical exploration success rates of 47% have been recorded over a number of different play types.
- Drill ready portfolio with drill sites ready for appraisal and exploration prospects.
- High impact, low cost, shallow gas thrust imbricates play, defined on 3D seismic and AVO anomalies.
- Several prospects have dual hydrocarbon and geothermal objectives. Geothermal reservoirs
  are proven in the area with extensive development already in the same basin ("Molasse"
  foreland basin) in nearby Germany.
- Strong additional demand and European subsidies available for geothermal developments adding further value potential to portfolio.

#### **Current Quarter Planned Activities include;**

- The Zistersdorf and Gaiselberg fields developed reserves CPR to be issued.
- Planning of well work over work on the Zistersdorf and Gaiselberg fields.
- Ongoing geotechnical evaluation utilising a new 3D seismic data set as well as engineering and planning work with a view to maturing infill development wells in the Zistersdorf and Gaiselberg fields as well as appraisal opportunities in the underdeveloped Flysch reservoirs.
- Ongoing pursuit of further collaboration opportunities pursuant to a non-binding letter of intent with RAG (seller of Zistersdorf and Gaiselberg fields) in relation to other assets in Upper Austria.
- ♦ The finalisation of exploration and appraisal licenses (AGS Areas) concession agreements with the Austrian government in Upper Austria.

## **Appraisal and Exploration Activities**

## PARTA APPRAISAL PROJECT and PARTA EXPLORATION PERMIT - Onshore 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 srl, holds a 100% interest in the Parta Exploration license (including a 100% interest in the Parta Appraisal Sole Risk Project) and a 100% interest in the Iecea Mare Production license. ADX is the operator of the permit pursuant to a Services Agreement with Danube.

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**IMIC–1 Well Testing:** Testing of the IMIC-1 well was ongoing during the quarter following installation of permanent production tubing and flow control equipment in the well prior to perforation and production testing of the well 19<sup>th</sup> of June 2020.

On 2 July 2020 ADX reported well production equipment had been run into the well and perforated to initiate flow from the Lower Pannonian "Pa IV" gas reservoir (the PaV and Pa III potential gas reservoirs were not perforated during the current program).

Initial flow test results suggested reservoir damage and mud filtrate build up around the well bore given that the IMIC-1 well encountered good reservoir porosity (20% within the net pay gas zone) and gas saturations in the Pa IV sandstone reservoir based on electric wireline logs and gas shows (gas inflow to the drilling mud) while drilling late last year. In addition, well test results from the nearby historic well drilled in the mid 80's flowed at up to 1 MMSCFPD and subsequent cuttings from IMIC-1 drilling analysis together with modern petrophysical analysis from the well logs indicated good Pa IV gas reservoir permeability.

The IMIC-1 well was acidised and back flowed on the 10th and 11th of September 2020 with the assistance of nitrogen injected to the bottom of well using coiled tubing.

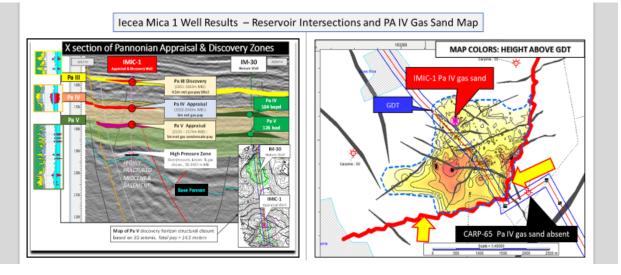
Liquids recovered from the well consisted of well completion brine, acidization fluid that was pumped into the reservoir, minor amounts of reservoir fluids and a yet to be analysed sludge like material most likely consisting of fine reservoir solids and precipitation materials formed by the reaction of acid with the reservoir.

Gas flow was observed at surface 12 hours after back flow with nitrogen on the morning of 12th of September. The gas was a combination of methane gas and nitrogen. A number of well blow downs of the well were undertaken over a period of 24 hours. Build-up of pressure at the well head was substantially faster than pre acidization indicating permeability improvement from acidizing. The pressure build up to near reservoir pressure indicated well inflow is predominantly gas. Gas samples taken conformed excellent gas quality.

A proposal has also been received for an acid frac with view to achieve further permeability improvements. The acid frac proposal will be assessed in conjunction with remapping of reprocessed lecea Mare 3D seismic.

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3D geoseismic section through IMIC-1 discovery well and hydrocarbon gross pay thickness map of Pa IV reservoir (Upside Case realization)

#### Iecea Mare 3D seismic reprocessing

A small 3D seismic survey has been purchased over the Iecea Mare production license (inside Parta) from the previous operator Amromco. The seismic is good quality and has been reprocessed previously by US based contractors. During the quarter, ADX reprocessed the 3D data set within the Iecea Mare production license to take advantage of significant improvements in seismic processing technology during the last few years. ADX has been able to achieve significant improvements in 3D seismic data set in Austria utilising a highly experienced German contractor DMT.

ADX contracted experienced German contractor DMT to reprocess the lecea Mare 3D seismic data set. The data set will be remapped during the 4<sup>th</sup> quarter to further assess the potential of the PA 3, PA 4 and PA 5 sands encountered in the well as well as the deeper basement play underlying the IMIC -1 well where DMT and ADX could already achieve good improvements.

#### 3D Exploration Seismic Acquisition

ADX had made good progress during the quarter in preparation to acquire 3D seismic with in the Parta exploration license on behalf Danube Petroleum Limited (Danube) and Tamaska Oil & Gas Limited (Tamaska), the farminee in the Parta licence. All key landowner and necessary authority permits had been obtained with the final environmental permit expected prior to mobilisation of the seismic acquisition crew in September 2020.

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## Tamaska Farmin Agreement Payment Default

On the 7<sup>th</sup> of September 2020 a notice was received from Parta Energy Pty Ltd (PE) (being a wholly owned subsidiary of ASX listed Tamaska that the board of Tamaska have decided not to proceed with the farmin transaction relating to the EX-10 Parta Exploration licence in Western Romania pursuant to the terms of the previously announced farmin agreement between ADX Energy Panonia Srl, Danube and PE (Farmin Agreement).

ADX was surprised and disappointed with Tamaska's notice given that ADX had no previous correspondence or discussions with Tamaska that indicated in any manner whatsoever that Tamaska did not intend to proceed with the planned acquisition of 3D exploration seismic in accordance with PE's farmin obligations. There had been regular verbal and detailed written correspondence between the parties in relation to the upcoming work program obligations and payment of cash calls by Tamaska prior to mobilisation of seismic contractors. That included very recent correspondence on technical and financial details of the 3D survey.

Due to the actions of Tamaska, ADX has had to put on hold the mobilisation of the 3D exploration seismic crew and has minimised ongoing financial exposure in relation to the 3D exploration seismic program operations with the seismic contractor.

#### **Current Quarter Planned Activities include:**

- Remapping of reprocessed lecea Mare 3D seismic data set.
- Further evaluation of lecea Mica-1 (IMIC-1) well test results and evaluation of proposal for an acid frac program.
- ♦ ADX will consider appropriate legal recourse in relation to Tamaska's default under the Farmin Agreement.

## Nilde Oil Field Redevelopment Project (Permit d 363C.R-.AX ) – Offshore Italy

#### ADX is operator and holds 100% interest in the d 363C.R-.AX Exploration Permit

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.

No further activities have been undertaken on the Permit since ADX was advised on the 4<sup>th</sup> of February 2019 that the Italian Parliament passed legislation to suspend exploration activities in permits that have been approved or are in the process of being approved for a period of up to 18 months to enable the government authorities to evaluate the suitability of exploration areas for sustainable hydrocarbon exploration and production activities.

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ADX has been informally advised by the Italian Licensing Authorities that it has demonstrated sufficient financial capability for the ratification of the permit upon resumption of oil and gas activities following earlier announced Farmin by SDP Services Limited (SDP).

Due to the COVID-19 pandemic the suspension of exploration activities is expected to be extended until the fourth quarter of 2021.

## Dougga Gas Condensate Project (Kerkouane Permit) - Offshore Tunisia

Further to ASX Announcement on 6<sup>th</sup> of September 2019, activities in Tunisia are being suspended in favour of the abovementioned more stable and fiscally attractive jurisdictions. ADX is currently finalising arrangements for withdrawal from Tunisia and the closing its branch office as soon as practically possible.

#### **Finance and Corporate**

#### **Funding**

## **Operations**

During the September 2020 quarter, funds received from oil and gas operations in Austria totalled \$1.64 million (for sales from the period June to August). September revenue of \$0.48 million was received after the quarter end.

#### **Borrowings**

During the quarter, ADX secured EUR 1.13 million funding for its wholly owned Austrian subsidiary ADX VIE GmbH via a program of Austrian state financing from Austria Wirtschafts ("Economy") Service (AWS) and Volksbank Wien AG (Volksbank) which is ADX local commercial bank. The loan guarantee is provided by the Austrian state.

The facility consists of two parts:

• EUR 500,000, zero interest, repayment starts 30 June 2022 and ends latest 31 December 2024. ADX VIE has drawn these funds in August 2020; and

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• EUR 630,000, 1% interest, same repayment terms as above. ADX VIE has drawn EUR 130,000 of these funds in September 2020.

Collateral of EUR 120,000 is held in an ADX account with Volksbank.

The use of funds is very flexible including all ADX VIE operating costs, capital costs and servicing of existing debts.

The additional source of funding enables ADX to continue to build its Austrian business activities during a challenging period. Key investment initiatives being pursued by ADX in Austria that this funding can assist are as follows;

- Ongoing production and reliability enhancements at the Company's Zistersdorf and Gaiselberg producing fields (Z&G).
- Geotechnical work to enhance the current field reserves position at Z&G as well as the maturing for drilling of the large but underdeveloped resource potential (Mesozoic deep water Flysch reservoirs) that can be accessed from the existing Z&G production footprint.
- Securing a highly prospective appraisal and exploration acreage position surrounding RAG's producing oil and gas fields in Upper Austria.
- Pursuing further production acquisitions in Austria where ADX can enhance its production position within or in very close proximity to its exploration and appraisal acreage which ADX expects to be awarded in Q4 2020.

The AWS funding program has been initiated as a result of the COVID-19 pandemic in conjunction with commercial banks to help companies with robust business models to exit the crisis in a strong position for the ongoing growth of their business. In order to secure Austrian state guaranteed AWS funding it was necessary for ADX to demonstrate the ongoing viability of its business because AWS funding is not available for struggling companies or companies without a business model likely to succeed in the future.

#### Cash Balances

ADX's cash at the end of the quarter was \$2.06 million. This cash balance includes \$0.84 million held by 49.2% owned subsidiary Danube Petroleum Limited and its' Romanian subsidiary ADX Energy Panonia srl for Romanian Operations.





## **Tenement Table**

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

	% held at	% held at	
	the	the	
	beginning	end	
Downit	of the of the		%
Permit	Quarter	Quarter	acquired
Onshore Austria, Zistersdorf and Gaiselberg Production	100%	100%	-
License			
Onshore Romania, Parta <sup>1</sup>	100%	100%	-
Onshore Romania, Iecea Mare Production Licence	100%	100%	-
Offshore Italy, d363C.RAX <sup>2</sup>	100%	100%	-
Offshore Tunisia, Kerkouane <sup>3</sup>	100%	100%	-

**Note 1:** 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 license (including a 100% interest in the Parta Appraisal Sole Risk Project) and a 100% interest in the lecea Mare Production license. ADX is the operator of the permit pursuant to a Services Agreement with Danube.

**Note 2:** 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.

**Note 3:** ADX has commenced a process of withdrawal from Tunisia and Kerkouane license. Withdrawal from Tunisia including closure of the Tunisian branch office is expected during the fourth quarter.

Yours faithfully,

Paul Fink

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**Executive Chairman** 

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**END OF THIS RELEASE** - Authorised for lodgement by Ian Tchacos, Executive Chairman

# ADX Energy Ltd (ASX:ADX) ASX RELEASE



Persons compiling information about Hydrocarbons:

Pursuant to the requirements of the ASX Listing Rule 5.31, 5.41 and 5.42 the technical and reserves information relating to Austria 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 Limited is a qualified geophysicist with 23 years of technical, commercial and management experience in exploration for, appraisal and development of oil and gas resources. Mr. Fink has reviewed the results, procedures and data contained in this release and considers the resource estimates to be fairly represented. Mr. Fink has consented to the inclusion of this information in the form and context in which it appears. Mr. Fink is a member of the EAGE (European Association of Geoscientists & Engineers) and FIDIC (Federation of Consulting Engineers).

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.