

29 January 2021

## Activities Report For Quarter Ended 31 December 2020

### HIGHLIGHTS OF DECEMBER 2020 QUARTER ACTIVITIES

#### Operations

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

- ◆ **Production** during the quarter averaged 240 BOEPD, a decrease of 22% compared to the previous quarter. *The reduction was due to an electrical interruption resulting from an unprecedented flooding event in early October causing pump failures in 5 production wells. A well work-over program commenced in mid December 2020 which is expected to restore well production by the end of January 2021.*
- ◆ **Workover Program** in addition to the above work, a program of additional behind pipe potential and sand control measures is being planned to add further production.
- ◆ **Oil Price** continued to stabilise during the quarter resulting in an average oil price US\$ 43 per barrel (Brent), an increase of 3% compared to the previous quarter.
- ◆ **Gas Price** increased dramatically with the onset of winter resulting in a price increase of 81% 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 largely 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. As announced on 5 November 2020 the audited developed reserves as at 31 December 2019 exceed ADX pre-acquisition expectation for 1P (Proven) and 2P (Proven and Probable) developed reserves by 13% and 4% respectively.
- ◆ **H<sub>2</sub> Storage Pre-Feasibility Studies** for the Gaiselberg and Zistersdorf fields to identify reservoirs for future hydrogen storage. Subsequent to the quarter end, in January 2021, ADX entered into a collaboration with Horváth and Partners to support the development of a viable hydrogen business establishing ADX as a provider of large-scale hydrogen and green gas underground storage.

## Austria – Upper Austria Appraisal and Exploration Acreage:

- **Concession Agreements** signed for the exploration, production and gas storage in Upper Austria (Upper Austria AGS) between ADX and Federal Ministry responsible for Mining (“BMLRT”) on behalf of the Republic of Austria.
- **Infrastructure Agreement** with RAG E&P (REP) covering principal legal and commercial terms for guaranteed access to modern and extensive oil and gas infrastructure for discoveries within ADX AGS licenses in Upper Austria.

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

- **IMIC-1 testing** – An acidisation of the well was undertaken based on the initial encouraging pressure build up observed after the well started to flow with nitrogen lift. Excellent gas quality was confirmed by samples taken from the gas flow (low impurities and inerts) and a significantly faster pressure build up than after the first lifting job was measured.
- **IECEA MARE 3D seismic** was reprocessed with a view to re-evaluate IMIC-1, IMIC-2 areas and re-assessing redevelopment opportunities identified by a previous operator in the production license Iecea Mare.
- **3D seismic acquisition** was deferred due to the default by Tamaska Oil & Gas Limited in relation to a Farming Agreement to fund the seismic work program.

## Finance and Corporate

- **A placement** was successfully completed to sophisticated investors raising A\$ 1.3 million at A\$ 0.006 per share. One unlisted placement option was issued for every two placement shares at a strike price of A\$ 0.008 per share with an expiry date of 15 June 2021.
- **A share purchase plan** allowing shareholders to invest on same terms as placement. The share purchase plan closes on 29 January 2021.

## PLANNED ACTIVITIES QUARTER 1, 2021

- **Austrian Onshore - Zistersdorf and Gaiselberg Production Assets** – ongoing work over operations, continued technical re-evaluation of the fields undeveloped and contingent resource potential (including underdeveloped Flysch reservoirs) utilising recently reprocessed high quality 3D seismic and H<sub>2</sub> storage pre-feasibility studies.
- **Austria – Upper Austria Appraisal and Exploration Acreage** – ongoing farmout discussions in relation to the recently secured appraisal and exploration AGS licenses.

- **Onshore Romania – Iecea Mare Production License and Parta Exploration** – determine the forward program for IMIC-1 well and the related gas discovery Pa IV and Pa V reservoir potential. Assess production license re-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 was substantially affected due to pump failures in five wells due to an unprecedented flooding event that resulted from an extended electricity outage during early October 2020 (Refer table 1). The outages resulted in a 22% drop in average production to 240 BOEPD during the quarter. The majority of the pump failures were due to sand settling in the well bores during the extended shut down and seizing down hole pumping systems. Restoration of well production is almost complete after a well work-over program (see below).

#### *Well Work-over Program*

A work program was commenced utilising a workover rig to restore production from the affected wells mentioned above. In addition, further work will be undertaken in a number of wells to access additional production potential by perforating new zones in wells or installing sand control in wells that are under performing due to sand production. Following a brief shutdown during the festive season well work will be ongoing during January and early February 2021.



**Winter production operations at Gaiselberg and Zistersdorf**

Average Brent reference oil pricing stabilised during the quarter and strengthened slightly (up 3% compared to the previous quarter) and gas prices recovered dramatically with an 80% increase from summer seasonal lows with the onset of European winter (refer table 2 below).

Despite the severe second wave in the COVID-19 pandemic across Europe and a number of ADX employees requiring quarantining; operations have not been substantially affected due to the successful distancing measures that have been deployed. A number of border restrictions with some European countries has resulted in some delays in accessing services and equipment, however, ADX has been able to continue to execute planned facilities enhancements and maintenance programs required to restore field production.

**Table 1 - Quarterly Production Summary**

	October	November	December	Current Qtr Total	Past Qtr Total	%age Change
Crude Oil Sold (Barrels)	7017	6116	6405	19,538	24,550	-20%
Gas Sold (M <sup>3</sup> )	132,150	110,320	129,700	372,170	519,120	-28%
<b>Total Oil Equivalent (BOE)</b>	7822	6788	7195	<b>21,805</b>	<b>28,050</b>	<b>-22%</b>
<b>Avg Production Rate (BOEPD)</b>	<b>261</b>	<b>219</b>	<b>240</b>	<b>240</b>	<b>308</b>	<b>-22%</b>

### Field Revenues and Product Pricing

Field revenues dropped in line with production compared to the previous quarter while oil prices remained stable. The decrease in oil equivalent production of 22% resulted in approximately 19% drop in sales revenues from € 874,783 in the September quarter to € 708,119 in the December quarter (refer table 3 below). Net hedging gains of € 34,114 were received during the December quarter.

**Table 2 - Quarterly Sales Price Summary**

	October	November	December	Current Qtr Average	Past Qtr Total	%age Change
Avg Oil Pricing (US\$ / BBL)	\$ 40.15	\$ 42.66	\$ 49.86	\$ 44.23	\$ 43.00	3%
Avg Gas Price (Euro per M <sup>3</sup> )	€ 0.13	€ 0.15	€ 0.15	€ 0.15	€ 0.08	81%

**Table 3 - Quarterly Sales & Hedging Revenue Summary**

	October	November	December	Current Qtr Total	Past Qtr Total	%age Change
Oil Revenue (Euro)	€ 218,365	€ 201,245	€ 239,851	€ 659,462	€ 837,308	-21%
Gas Revenue (Euro)	€ 21,464	€ 11,171	€ 16,022	€ 48,657	€ 37,475	30%
<b>Total Sales Revenue (Euro)</b>	<b>€ 239,829</b>	<b>€ 212,416</b>	<b>€ 255,873</b>	<b>€ 708,119</b>	<b>€ 874,783</b>	<b>-19%</b>
Hedging Revenue (Euro) "Swaps and Put Options"	€ 33,497	€ 18,160	-€ 17,502	€ 34,155	€ 54,565	-37%
<b>Total Revenue (Euro)</b>	<b>€ 273,326</b>	<b>€ 230,576</b>	<b>€ 238,372</b>	<b>€ 742,273</b>	<b>€ 929,348</b>	<b>-20%</b>
<b>Total Revenue (A\$)</b>	<b>\$ 433,030</b>	<b>\$ 365,302</b>	<b>\$ 377,652</b>	<b>\$ 1,175,983</b>	<b>A\$/ Euro = 0.6312</b>	
<i>Effective Oil Price (US\$/BBL)</i>	<i>\$ 35.89</i>	<i>\$ 35.88</i>	<i>\$ 34.72</i>	<i>\$ 35.49</i>		

### Independent Reserves Review

A Year-End 2019 developed reserves audit has been completed for ADX' Zistersdorf and Gaiselberg fields (Fields) in the Vienna basin. The competent person's report (CPR) was prepared by ERC Equipoise Pte Ltd (ERCE). Refer ASX announcement dated 5 November 2020.

The audited developed reserves as at 31 December 2019 exceed ADX pre-acquisition expectation for 1P (Proven) and 2P (Proven and Probable) developed reserves by 13% and 4% respectively.

### Audited versus ADX Pre-acquisition Reserves Comparisons

The unaudited estimated remaining 2P developed reserves of 0.98 MMboe as at 31 December 2018 was announced by ADX on 2 July 2019. Field production between 31 December 2018 to 31 December

2019 was 0.12 MMboe. Table 4 shows the equivalent previously reported reserves calculated at 31 December 2019 by deducting production during 2019. A positive variance of 13% and 4% respectively is estimated for the 1P and 2P developed reserves categories between the audited reserves announced in this release and the ADX previously reported, preacquisition estimates. All reserves are based on PRMS Reserves classifications refer below. 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.

**Table 4: Comparison of Previously Reported and Audited Developed Reserves**

(ADX 100% Working Interest)			
	1P MMboe <sup>Note 1</sup>	2P MMboe	3P MMboe
Previous Reported Reserves @ 31/12/18 <sup>Note 2</sup>	0.60	0.98	N/A <sup>Note 3</sup>
less 2019 field production	0.12	0.12	0.12
Previous Reported Reserves @ 31/12/19	0.48	0.86	N/A
<b>Audited Reserves @ 31/12/19 <sup>Note 4</sup></b>	<b>0.54</b>	<b>0.89</b>	<b>1.51</b>
<b>%age variance</b>	<b>13%</b>	<b>4%</b>	<b>N/A</b>

**Notes:**

1) MMboe - million of barrels of oil equivalent including solution gas. Barrels of oil equivalent calculated based on: 5,841 scf = 1 boe. The term Barrels of Oil Equivalent (BOE) allows for a single value to represent the sum of all the hydrocarbon products that are forecast as resources. Gas quantities are converted to an oil equivalent based on a conversion factor that is recommended to be based on a nominal heating content or calorific value equivalent to a barrel of oil.

2) Unaudited Developed Reserves Estimates reported by ADX at 2 July 2019 (Refer ASX Release)

3) 3P Reserves not previously reported by ADX.

4) ERCE Audited Developed Reserves at 31 December 2019

**PRMS Reserves Classifications used in this report**

**1P** Denotes low estimate of Reserves (i.e., Proved Reserves). Equal to P1.

**2P** Denotes the best estimate of Reserves. The sum of Proved plus Probable Reserves.

**3P** Denotes high estimate of Reserves. The sum of Proved plus Probable plus Possible Reserves.

1. **Developed Reserves** are quantities expected to be recovered from existing wells and facilities.
  - a. *Developed Producing Reserves* are expected to be recovered from completion intervals that are open and producing at the time of the estimate.
  - b. *Developed Non-Producing Reserves* include shut-in and behind-pipe reserves with minor costs to access.
2. **Undeveloped Reserves** are quantities expected to be recovered through future significant investments.

**A. Proved Reserves** 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 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 Proved Reserves but more certain 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 of 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.

*Hydrogen (H<sub>2</sub>) storage pre-feasibility studies.*

During the quarter ADX identified a number of ideally suited reservoirs in the Gaiselberg field in terms of depth, pressure, sealing capacity, productivity, well coverage and fluid contents for future hydrogen storage.

An example of a suitable reservoir is shown below, which is a Pannonian age reservoir covered with a large number of wells and excellent quality modern 3D seismic. The reservoir has produced around 18 million cubic meters of sweet methane gas at high well rates and is ideally suited for safe hydrogen storage. It is estimated that this single reservoir could hold around 60 GWh of energy as hydrogen (not accounting for potential energy losses when the hydrogen is again brought to surface and possibly used for electricity generation or re-injecting into the ADX pipeline infrastructure).

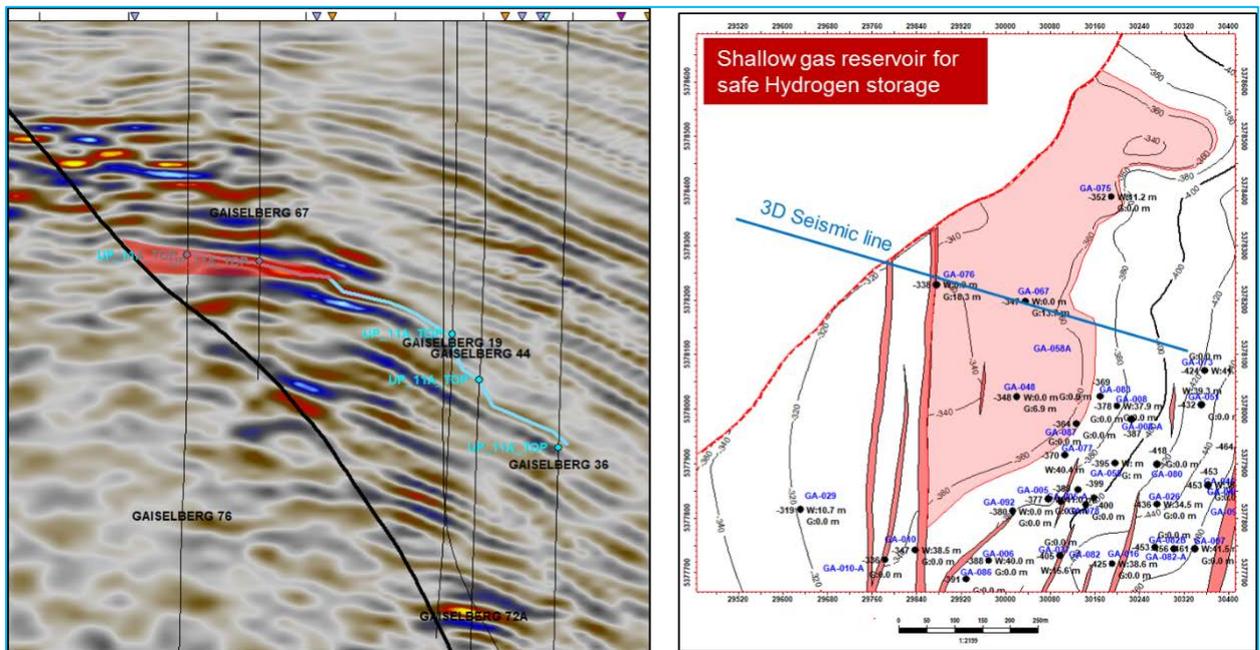


Figure above shows 3D seismic through depleted gas reservoir (red) and structure map with extensive well control on the right. This reservoir is technically ideal for H<sub>2</sub> storage.

An additional direct benefit of utilising ADX' Fields for hydrogen storage will be the extension of the life of the Fields and resultant increase in oil and gas profitability due to shared operations and infrastructure.

The business case for underground energy storage has been established with the ever-increasing capacity of intermittent wind and solar energy. In Austria alone a six-fold increase from currently 3.8 GW in wind and solar energy is necessary to meet the minimum European Union (“EU”) renewable energy targets by 2030. It is a fortunate coincidence for ADX that the largest wind and solar capacity is located close to its Vienna basin oil and gas fields.

ADX’ Fields are ideally located in the centre of Europe, proximal to extensive renewable energy generation infrastructure which is expected to be rapidly expanded due to the recently announced Austrian government target to increase wind and solar generated electricity by a factor of 6 before 2030. This Austrian policy initiative is supported by a commitment from the European Union for the building of a hydrogen based energy landscape backed by a minimum € 150-billion budget of “hydrogen” related grants and loans to be utilised between 2021 and 2027.

On 20 January 2021 (post quarter end) ADX announced a co-operation Agreement with highly reputed and experienced hydrogen experts Horváth & Partners (Horváth) to evaluate deployment of ADX Gaiselberg and Zistersdorf production assets for hydrogen storage.

Horváth has the proven capability to support the establishment of a viable hydrogen business establishing ADX as a provider of large-scale hydrogen and green gas underground storage. The first phase seeks to reach the following milestones:

- Utilise Horváth’s extensive hydrogen and green energy network and project experience of to establish partnerships with major green energy providers such as the wind power operators next to the Zistersdorf and Gaiselberg fields of ADX.
- Establish the technical viability of reservoirs within ADX’ Fields as large-scale subsurface hydrogen storage facilities as well as the potential of converting Green Hydrogen and carbon dioxide into Green Methane which can be sold through the gas pipeline infrastructure as well as pure hydrogen.
- Form a joint venture with one or several green nearby energy providers to access European Green Energy Transformation funding in order to execute a number of projects establishing the technical viability of underground energy storage at the Fields and ADX as a certified participant in Europe’s rapidly expanding energy storage market.

Horváth is a worldwide management consulting firm originating from Germany. Horváth has approximately 1,000 employees and a turnover of over US\$ 250 million with a strong presence in Europe, the United States of America and the United Arab Emirates. It has a proven track record of consulting the creation and implementation of hydrogen businesses with a focus on Germany.

### *Reserves and Production Growth*

ADX’s Austrian technical team is utilising a recently highly improved 3D seismic data set to identify additions to ADX existing reserves and resources at Zistersdorf and Gaiselberg. Further 3D processing

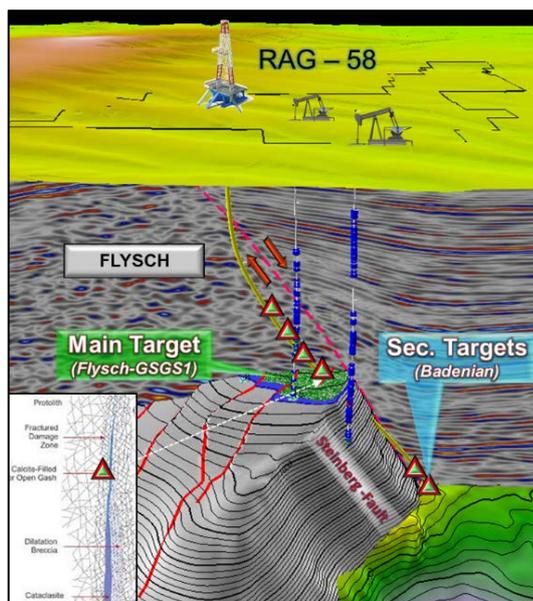
has been commissioned (PSDM – depth migration).

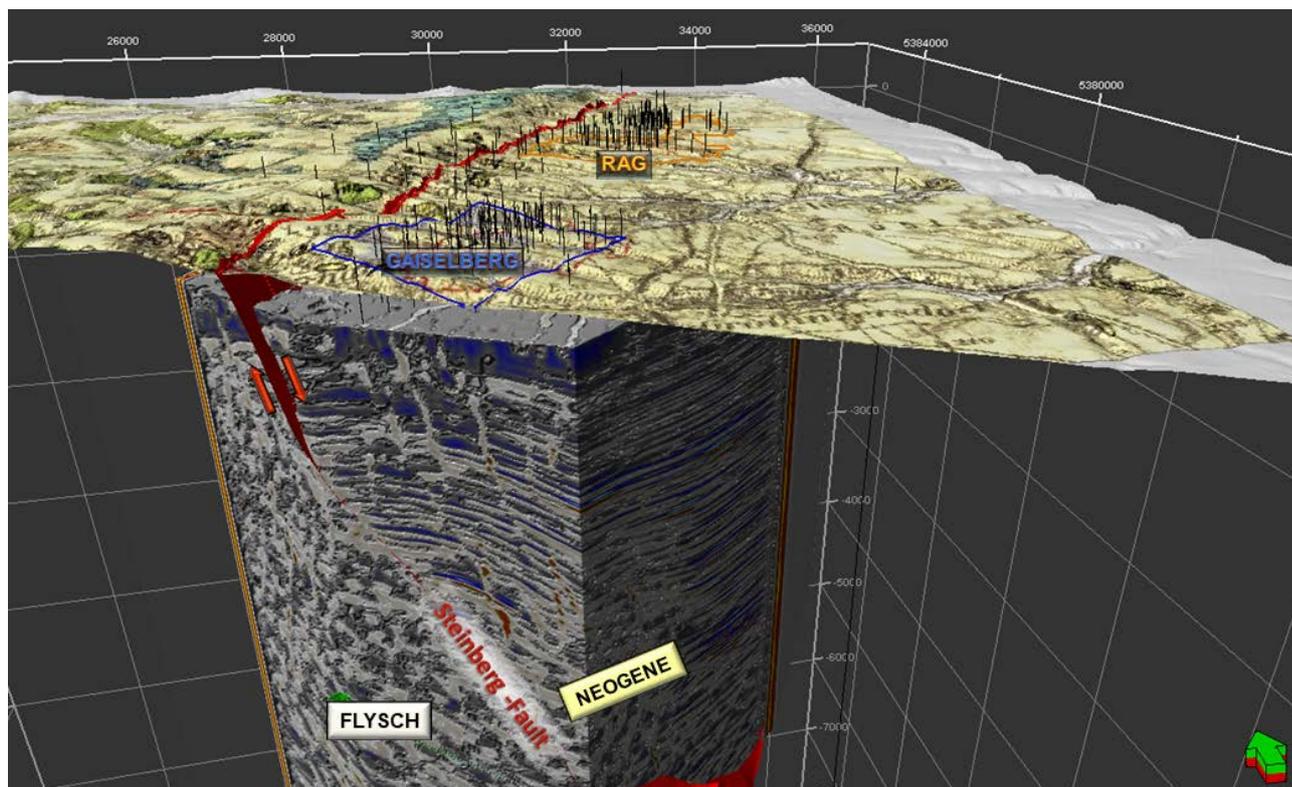
Ongoing activities are focussed on undeveloped reserves at Zistersdorf and Gaiselberg via infill drilling or the sidetrack of existing wells to undrained compartments which have been identified on the newly reprocessed 3D seismic. The 3D seismic is also used to newly evaluate and rank the many behind pipe opportunities which still await perforation and being put on production. Another newly started project is the mapping and quantification 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.

During the quarter ADX has evaluated FMI data to identify and understand the Flysch reservoir natural fracture system which can greatly enhance flow rates of this normally low productivity reservoir. Initial oil flow rates in the order of 300 bopd per Flysch reservoir have been observed in the past in the ADX fields. A nearby horizontal OMV Flysch well has produced around 0.8 mmbœ from a reservoir also proven in the ADX fields.

Based on integrated reservoir studies and new 3D seismic mapping ADX has already been able to complete a new development and appraisal well proposal (“RAG – 58”) which will target several Cretaceous Flysch reservoirs in a fracture corridor and be completed in the conventional high productivity Neogene reservoirs of the Badenian (Middle Miocene) to ensure immediate cash flow from this well. The proposed well path is shown in the figure below.

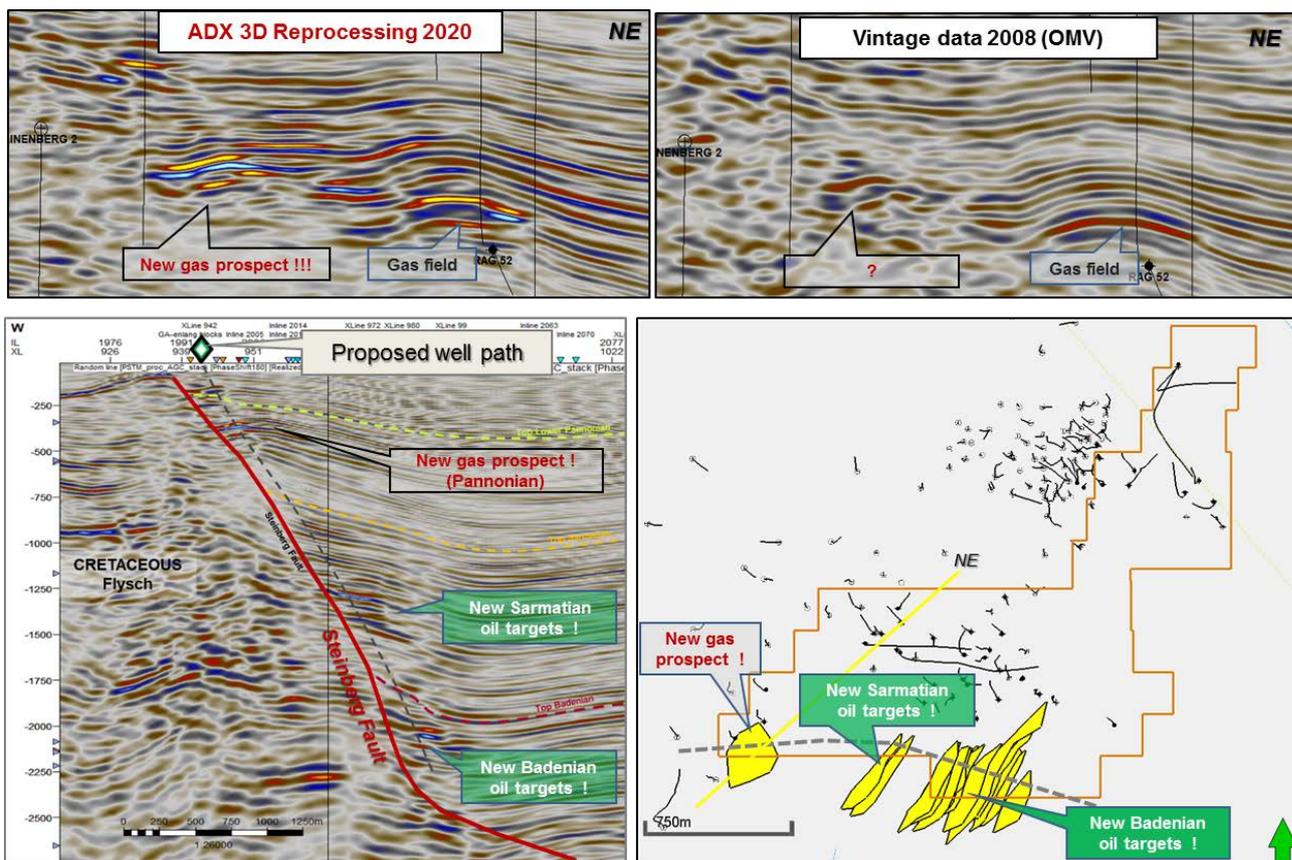




**3D seismic cube image showing on the hanging wall (right side) the younger highly productive Miocene & Pliocene (“Neogene”) age oil & gas reservoirs (approx. 50) and on the footwall (left) the proven but underdeveloped Mesozoic “Flysch” sandstone reservoirs. The Gaiselberg and Zistersdorf (“RAG”) production 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 developed to date in a systematic way.

ADX intends to develop a drilling program including Zistersdorf and Gaiselberg sidetrack wells, (attic oil) infill wells as well as Flysch appraisal wells. In addition, the first interpretation of a new drilling target based on the new 3D dataset has surprisingly, for such a mature field uncovered an untested appraisal opportunity in the highly productive Zistersdorf license area. 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. An example of such an already matured opportunity and related well proposal is shown below, also featuring the significant 3D seismic reprocessing improvements:



New high quality reservoir Neogene infill drilling opportunity identified on the newly processed 3D seismic. The proposed well path will line up around 20 oil and gas reservoirs which are expected to be completely undrained and hence will initially produce with very low water cut.

**Upper Austria Appraisal and Exploration Application Award**

ADX signed concession agreements for exploration, production and gas storage in Upper Austria (Upper Austria AGS) on the 8<sup>th</sup> of January 2021 with the Federal Ministry responsible for Mining (“BMLRT”) on behalf of the Republic of Austria.

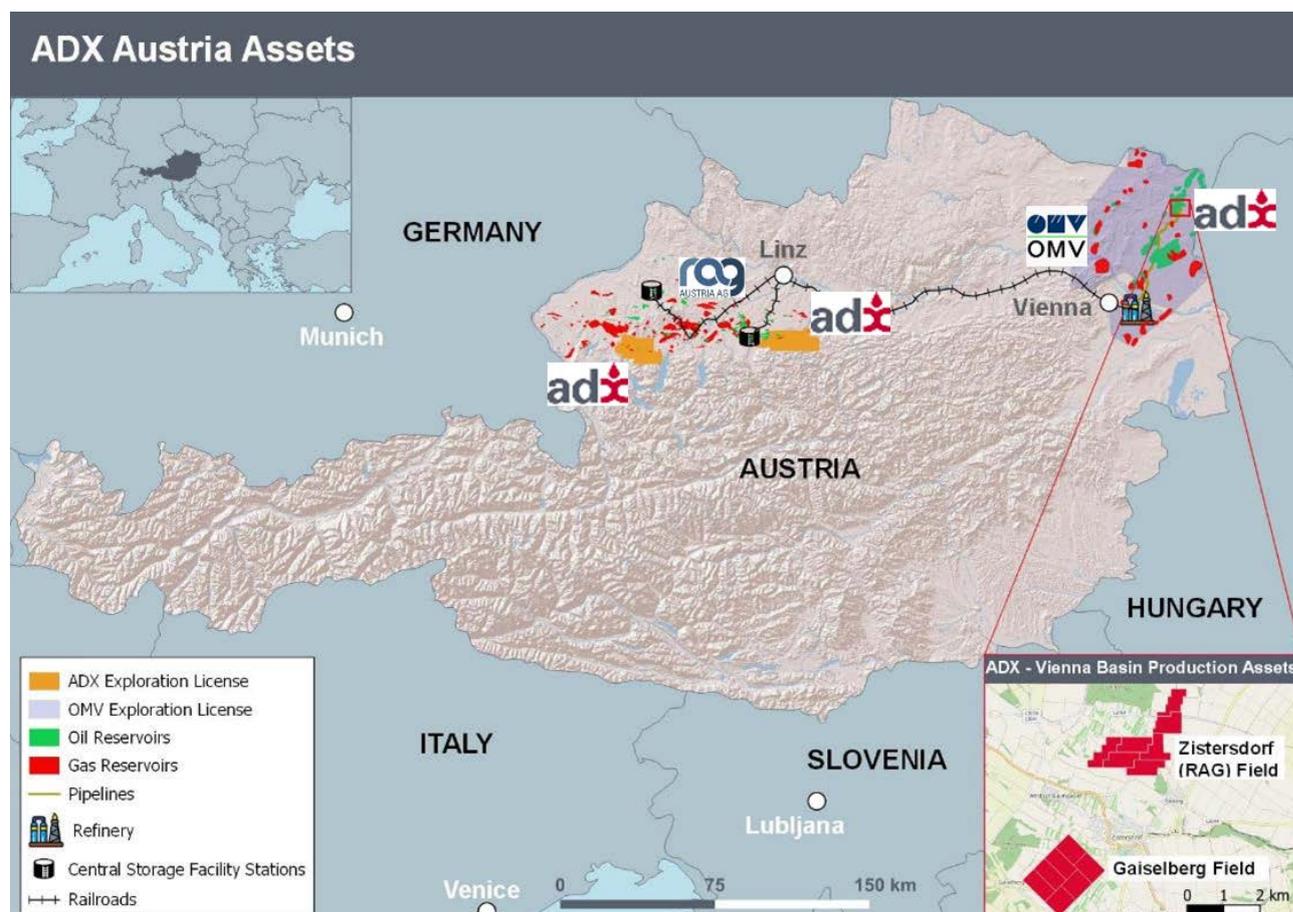
The signing of the Upper Austria AGS followed a comprehensive federal approval process including the Finance Ministry which demonstrates Austria’s continued commitment to domestic energy sector investment. Austria’s energy policy is premised on a preference for oil and gas produced in country where strict greenhouse gas emissions and environmental standards can be guaranteed.

The Upper Austria AGS is the culmination of over 18 months of technical work, commercial discussions and relationship building with RAG Exploration & Production GmbH (RAG E&P) and the Austrian designated authorities resulting in the achievement of the following important milestones;

- The execution of a data trade agreement with RAG in July 2019 in conjunction with the acquisition of Gaiselberg and Zistersdorf asset acquisition providing access to high-quality 3D seismic and well data in Upper Austria (“Data Set”) with a replacement value of EUR 90 million;

- Utilising the Data Set to high grade an area of 450 km<sup>2</sup> (“AGS area”) that includes 10 drill ready exploration prospects with a best technical prospective resource estimate of 42 million barrels of oil equivalent <sup>note 1</sup> (MMBOE) (“Prospect Inventory”). Refer ASX release dated 30 November 2020;
- Demonstration of financial and technical capability to Austrian regulators and negotiation of the concession agreement on favourable terms for the Upper Austria AGS; and
- Finalisation of an infrastructure access agreement with RAG E&P which enables access to nearby RAG E&P owned oil and gas infrastructure on attractive tariffs (“Infrastructure Access Agreement”). Refer to ASX announcement 22<sup>nd</sup> December 2020.

As a result of the above arrangements ADX has secured a highly prospective drill ready exploration and appraisal acreage position proximal to infrastructure in a highly productive basin where an exploration success rate of 48% has been achieved. Drilling can commence within a short time and hydrocarbons can be developed quickly, cost effectively and with a high degree of commercial certainty.

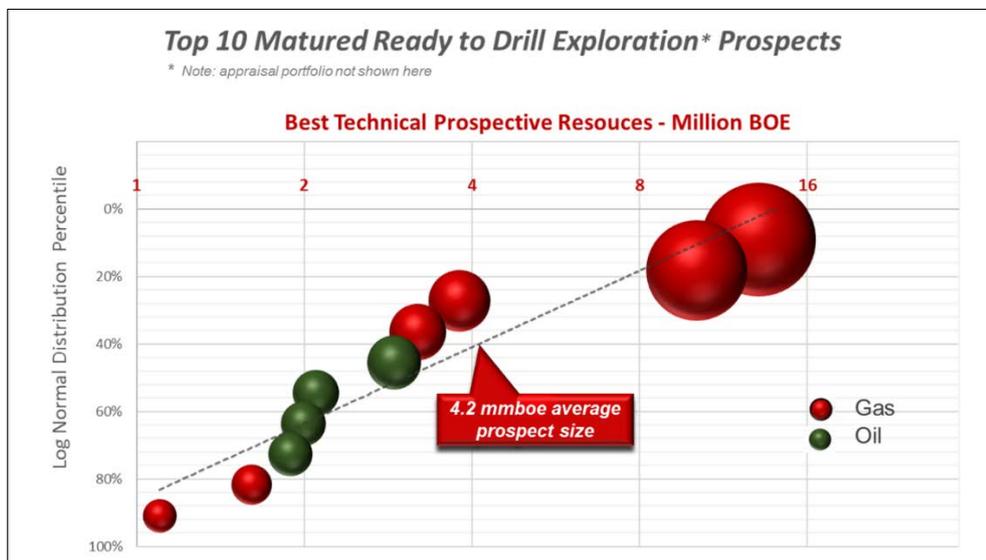


**ADX Asset Position Overview showing ADX production areas within the OMV dominated Vienna Basin in the East and the now government ratified ADX Upper Austria AGS licenses (orange) proximal to the RAG oil and gas production area of the Molasse Basin east of Munich.**

Note1: 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.

*Prospect Inventory*

The drill ready exploration prospect inventory for the Upper Austria AGS licenses is summarised in the below prospective resources histogram showing the best technical case resources (“Resources”) for each prospect. The prospects range from just over 1 to over 15 MMBOE of Resources. The average prospect Resource size is 4.2 MMBOE. Prospects less than 1 MMBOE are profitable due to proximity to modern infrastructure. The larger prospects exceeding a 10 MMBOE Resources if successful are highly valuable in an onshore setting proximal to infrastructure. Refer to ASX release 30 November 2020 when above resource estimates were first announced.

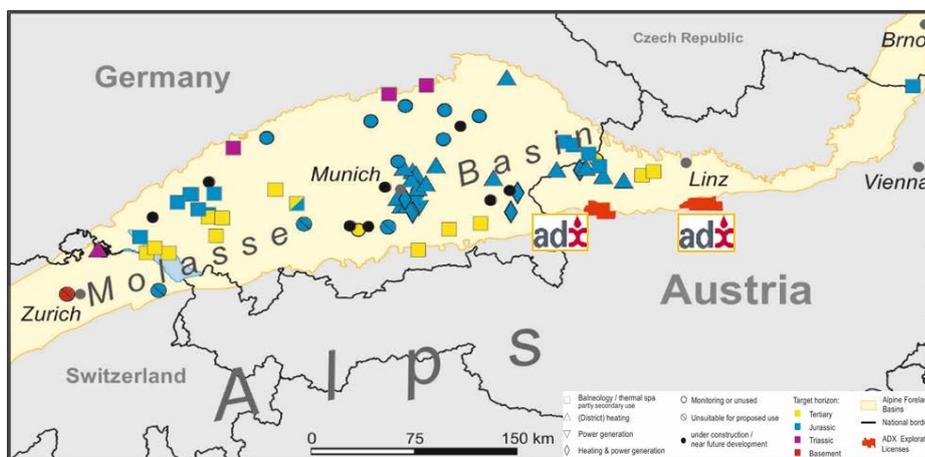


**Resource Size Distribution for top ten matured exploration prospects (lognormal fit)**

The recent historical exploration success ratio utilising 3D seismic has been approximately 48%. The licenses also include lower risk appraisal opportunities or RAG field extensions within ADX exploration license areas. ADX is fortunate to have an experienced and successful exploration team that has worked the basin for RAG prior to joining ADX.

*Geothermal Potential*

In addition to the above-mentioned hydrocarbon opportunities, the western part of the Molasse basin has proven geothermal potential that is already being exploited in a growing number of projects especially around Munich across the border in Germany. The Molasse geothermal potential is not yet exploited to its potential in Austria. ADX is fortunate to have a number or prospects with both hydrocarbon and geothermal potential in already proven high productivity reservoirs.



**Molasse Basin Geothermal Potential Map with blue symbols showing operating plants with highly productive Jurassic geothermal reservoirs used also for directly for electricity generation (source: Bavarian Ministry for Environment).**

*Farmout Discussions*

ADX has been approached by a number of interested parties and has commenced an informal farmout discussions ahead of a formal data room process planned for February 2021.

ADX is confident of being able to complete a successful farmout process because it can offer interested investors or companies competitive advantages compared to other opportunities available on the market. The important attributes of the farmout offering can be summarised as follows;

- A ready to drill well balanced portfolio mapped on modern 3D seismic with low drilling costs (ranging from € 1.2 million to max. € 7 million, on average € 2.6 million for the typical trend exploration prospects). *This is in contrast to many other projects where large upfront time and costs are required for a country entry, acquiring seismic, mapping and prospect maturation.*
- Low political risk country with extensive oil and gas infrastructure, efficient license administration and short approval times for wells and development projects as well as highly profitable economics resulting in short pay out times. Excellent fiscal and licensing terms with 16 years exploration period without obligatory relinquishment and easy extension of license areas. *This is in contrast to many other jurisdictions where the authorities may change terms, are not supportive of oil and gas investment and take a long time to approve operational activities.*
- Infrastructure agreement with RAG E&P enables the certainty of costs and time required for development facilitating the rapid development of projects and the commercialisation of even smaller reserves sizes. *This is in contrast to projects where after a successful exploration campaign the economics and shareholder value can get destroyed due to an inability to access infrastructure or be disadvantaged in comparison to larger established players which stifle competition or attempt to take over small successful exploration operators.*

- The presence of a proven and highly experienced local exploration and production team with an outstanding track record which provides confidence and ensures efficient and low-cost operation. *This is in contrast to many opportunities where getting a competent team with “boots on the ground” has not yet been established resulting in uncertainty and a high initial cost for building an efficient operations team.*

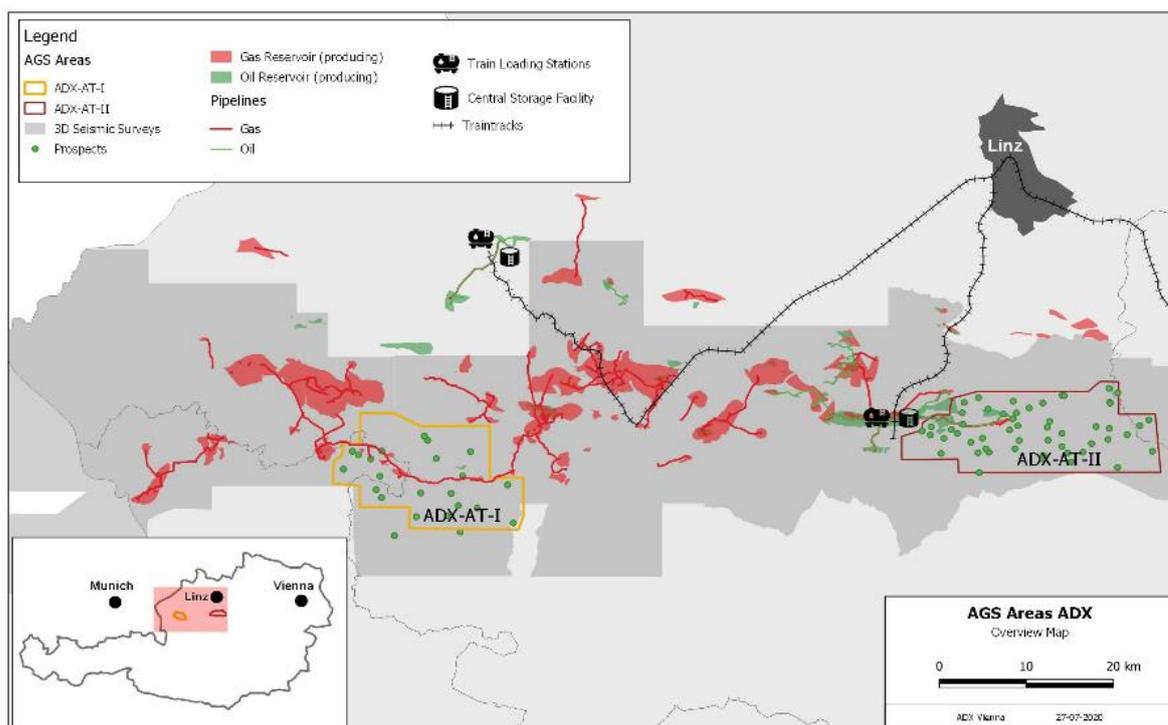
### *Infrastructure Access Agreement*

A key milestone enhancing the commercial potential of the Upper Austria AGS was achieved in December 2020 when ADX signed an infrastructure agreement with RAG E&P covering principal legal and commercial terms for a guaranteed access to a modern and extensive oil and gas infrastructure (refer ASX release 23<sup>rd</sup> December 2020).

The agreement secures greater economic certainty for development of hydrocarbons discovered and appraised in the licenses ranging from relatively small appraisal prospects to large exploration prospects. This enables the reduction of capital expenditures and the time taken from drilling to commercial production due to the tie into RAG E&P’s existing hydrocarbon gathering, processing and storage facilities connected to Austria’s oil and gas infrastructure network.

It is envisaged that the arrangements will be beneficial for both parties ensuring that hydrocarbons from the basin can be produced efficiently and cost effectively by utilising available capacity and maximising throughput through RAG E&P’s facilities, thereby lowering the production costs for both parties. The arrangements are the result of ongoing cooperation between the RAG and ADX management teams which is expected to enable the ongoing exploitation of the prolific Molasse basin in Upper Austria in an economically viable and environmentally sustainable manner.

The agreement also enhances ADX prospects for favorable farmout terms. The combination of a multi prospect portfolio, mature and drill ready prospect inventory focused on proven exploration plays with certainty of access to infrastructure on beneficial terms is expected to be attractive for prospective farminees who are seeking a rapid pathway from exploration or appraisal drilling to production cash flow.



Map showing ADX Upper Austria AGS exploration areas proximal to RAG's infrastructure and fields. The round green dots indicate a rich portfolio of oil and gas prospects & leads covered by 3D seismic

**Current Quarter Planned Activities in Austria include;**

- Ongoing 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 sidetrack and infill development wells in the Zistersdorf and Gaiselberg fields as well as appraisal opportunities in the underdeveloped Flysch reservoirs.
- Undertake an independent reserves review for the Zistersdorf and Gaiselberg fields following completion of the current Zistersdorf and Gaiselberg field technical review utilising the new 3D seismic data set.
- Initial results of prefeasibility studies and project formation potential for H<sub>2</sub> storage Zistersdorf and Gaiselberg.
- Progress farmout discussions in relation to the recently finalised exploration and appraisal licenses (AGS Areas) in Upper Austria.
- 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.

## Romanian 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 Iacea Mare Production license. ADX is the operator of the permit pursuant to a Services Agreement with Danube.**

**IMIC-1 Well Testing:** As reported in the last quarterly report on 30<sup>th</sup> October 2020 and related ASX announcement on 14 September 2020, the acidisation of the Pa IV gas discovery perforation interval resulted in gas flow to surface confirming excellent dry gas quality (methane) and a significantly faster pressure build up than previously observed. The failure to flow at commercial gas rates without any well stimulation is interpreted as drilling and completion induced localised reservoir damage rather than an intrinsic reservoir quality issue of the Pa IV reservoir. This is also in line with excellent gas shows while drilling, permeability estimates from rock typing and petrophysical data which all indicated the presence of good quality gas filled reservoir, hence supporting ADX' decision to test the IMIC-1 gas discovery at Pa IV reservoir level with a cased hole perforation.

The well has been since put under pressure build up observation and built up very quickly to a bit over 160 bar wellhead pressure caused by gas inflow with significantly less associated water volumes compared to the first build up tests. The first pressure build up test prior to the second acid job resulted in a surface well head pressure of only ca. 120 bar. The observed build up time was also significantly longer.

Based on these positive indications ADX has progressed several activities during the quarter:

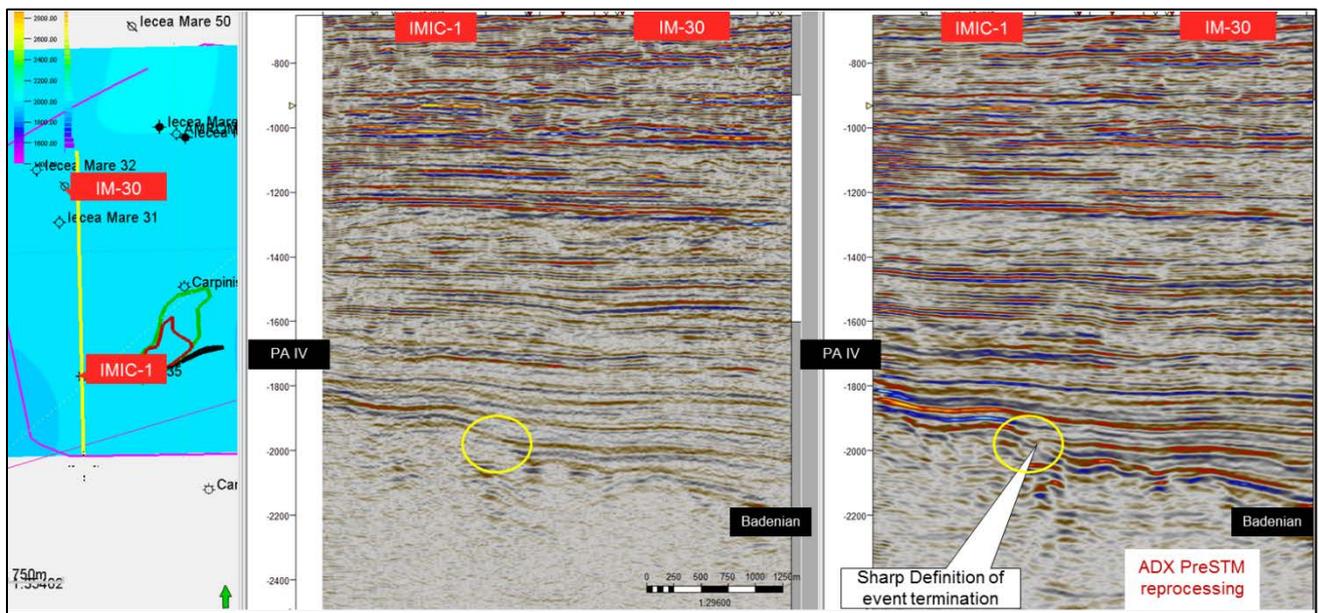
#### *Additional Well Stimulation and testing strategies*

ADX together with locally experienced well testing and engineering companies such as Tacrom have designed a potential skin frac job to test the concept of increasing the effective near wellbore flow area of the Pa IV reservoir perforation in discovery well IMIC-1.

The completed operational execution program also foresees a relatively low-cost option to perforate the slightly deeper PA V reservoir zone which was a proven oil producer in the ADX Iacea Mare production license just a few kilometres further north (IM-30 well, 2.5 km north of IMIC-1) and is gas and condensate bearing in well IMIC-1 (ASX release from 29 August 2019).

*Reprocessing and integrated evaluation of the 3D Seismic covering IMIC-1 discovery and IMIC-2 proposed exploration and appraisal well.*

Prior to a final decision on well stimulation operations and the drilling of the nearby IMIC-2 prospect ADX has completed the reprocessing of the Iecea Mare 3D seismic and commenced a detailed and integrated technical evaluation of the remaining prospectivity of the area covered by the 3D seismic. The figure below shows a comparison example of the newly reprocessed (PreSTM) seismic relative to the original data. While the improvements in the shallower section – including the IMIC-1 Pa IV reservoir- are good, the deeper Miocene to basement section has significantly improved. Both the Badenian and basement are proven reservoirs in the area and hence a prospectivity upgrade is expected once the ongoing technical evaluation based on IMIC-1 well results and the newly reprocessed 3D seismic has been completed.



**3D Reprocessing (right hand seismic section) has resulted in significant improvements especially in the deeper prospective section.**

The integrated interpretation of the 3D area with a special focus on IMIC-1 results, implications for planned IMIC-2 well and remaining (deeper) prospectivity has commenced during the quarter and is expected to be completed in Q1 2021.

*Parta 3D Seismic Acquisition*

The encouraging reprocessing results together with positive indications on the Pa IV gas discovery well test operations further highlight the prospectivity of the PaIV reservoir within the Parta license and support the initial strategy to cover the northern part of the Parta license with 3D seismic.

While all landowner, local authority and environmental permits had been obtained for the approx. 100 sqkm survey, the survey had to be cancelled because the 3D funding farminee Parta Energy Ltd, a wholly owned subsidiary of Tamaska Oil & Gas (“Tamaska”) had informed ADX on extremely short notice that it would not proceed with the farmin transaction. This came as a surprise to ADX and its Hungarian seismic contractor who had already mobilised to Romania for the survey on good faith (refer to ASX announcement from 8 September 2020).

ADX has continued discussions with the seismic contractor to seek cost efficient options for a later survey start up and is also in discussions with the Romanian authorities to consider the unforeseeable event caused by the surprise withdrawal of funding partner Tamaska for an additional license extension of the current period. ADX is also engaging with landowners and local authorities to extend all necessary permits.

### *Tamaska Farmin Agreement Payment Default*

As a result of default by Parta Energy Pty Ltd (PE) (being a wholly owned subsidiary of ASX listed Tamaska) in relation to a farmin obligation pursuant to a farmin agreement between ADX Energy Panonia Srl, Danube and PE (“Farmin Agreement”), 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.

ADX has prepared all supporting evidence and a writ of summons with a reputed Perth-based law firm to pursue on behalf of Danube what ADX is advised is a fair claim of damages caused by Tamaska’s default.

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

- Remapping of reprocessed Iacea Mare 3D seismic data set.
- Further evaluation of Iacea Mica-1 (IMIC-1) well test results and evaluation of proposal for an acid frac program based on the encouragingly fast pressure build up seen for the PaIV reservoir.
- ADX will progress an appropriate legal recourse in relation to the default under the Farmin Agreement by Tamaska.

## 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.

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 has finalised arrangements for withdrawal from Tunisia, deregistered the ADX subsidiary which was the permit holder and closed its branch office. No further reporting is anticipated in relation to the Kerkouane permit.

## Finance and Corporate

### *Operations*

During the December 2020 quarter, revenue received from oil and gas operations in Austria totalled A\$ 1.38 million (for sales for the period September to November). December revenue of A\$ 0.58 million was received after the quarter end.

## *Placement and Share Purchase Plan*

On 15 December 2020, ADX announced that it had successfully completed a placement to sophisticated investors to raise A\$ 1.3 million at A\$ 0.006 per share. One unlisted Placement Option was issued for every two Placement Shares at a strike price of A\$ 0.008 per share with an expiry date of 15 June 2021.

At the same time, ADX announced a share purchase plan (“SPP”) allowing shareholders to invest on same terms as Placement. The share purchase plan closes on 29 January 2021, with the results to be announced on 3 February 2021. One free attaching unlisted option will be granted for every two (2) shares issued under the SPP (“SPP Options”). The exercise price of the SPP Options is A\$ 0.008 with an expiry date of 15 June 2021. The offer of SPP Options will be made separately under a prospectus (“**Prospectus**”). The Prospectus will be mailed to Eligible Shareholders who subscribed for and were issued shares under the SPP. The issue of the SPP Options under the Prospectus is subject to Shareholder approval at a General Meeting to be held on 19 February 2021.

Funds raised by the Placement and the SPP will be used to supplement ADX’s cash requirements for the Company’s key projects as well as growth opportunities in Austria and for working capital purposes. The Austrian growth opportunities include the payment of a bank guarantee to the Austrian Mining Authority for the recently announced Molasse basin exploration and appraisal licenses in Upper Austria as well as well work overs on its producing Gaiselberg and Zistersdorf fields in the Vienna basin.

## *Borrowings*

### *Bank Loans*

During the quarter, ADX drew an additional € 200,000 from the facilities provided by Austrian state financing from Austria Wirtschafts (“Economy”) Service (AWS) and Volksbank Wien AG (Volksbank) which is ADX local commercial bank. As at 31 December 2020, € 300,000 of these facilities remain unused.

### *Other Loans*

On 23 November 2020, ADX announced an amendment to the repayment terms of the Company’s A\$ 3.5 million loan notes (“Loan Notes”). The repayment of the A\$ 3.5 million principal will now be repaid in two tranches – Tranche 1 of A\$ 1.75 million to be repaid semi-annually with 4 equal payments over a period of 2 years commencing from 26 May 2021 and ending on 26 November 2022; and Tranche 2 of A\$ 1.75 million repayable as a bullet payment at the end of 2 years on 26 November 2022.

The variation to the terms of the Loan Notes was necessary as a result of the COVID-19 pandemic which caused a significant deterioration in oil prices. The Company will cancel existing options previously issued in relation to the Loan Notes (having been granted a waiver of ASX Listing Rule 6.23.3) and, subject to shareholder approval, grant to the Loan Note holders 2 equal tranches of 67,500,000 options each, one tranche with an exercise price of A\$ 0.01 maturing on 26 May 2022 and the other tranche with an exercise price A\$ 0.015 maturing on 26 November 2023 respectively. The changes to the terms of the options will require shareholder approval at the Company's upcoming general meeting to be held on Friday 19 February 2021.

### *Cash Balances*

ADX's cash at the end of the quarter was A\$ 2.33 million. This cash balance includes A\$ 0.4 million held by 49.2% owned subsidiary Danube Petroleum Limited and its' Romanian subsidiary ADX Energy Panonia srl for Romanian Operations.

### *Additional ASX Information*

- ASX Listing Rule 5.4.1: Exploration expenditure during the quarter was A\$ 322,000, 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\$ 926,000, excluding staff costs. Appraisal expenditure in Romania during the quarter was A\$ 372,000, 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. There were no new farm-in or farm-out agreements entered into during the quarter. ADX has no farm-in or farm-out agreements as at the quarter end which reduces the Group's 100% interest in its tenements.
- ASX Listing Rule 5.4.5: Payments to related parties of the Company and their associates during the quarter was A\$ 164,000. This consists of A\$ 7,800 paid for office rental to an entity related to Director Andrew Childs, and A\$ 156,000 for executive directors consulting fees, salaries and non-executive director fees.

### Tenement Table

Tenements 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 License	100%	100%	-
Upper Austria AGS Licenses <sup>1</sup>	0%	0%	-
Onshore Romania, Parta <sup>2</sup>	100%	100%	-
Onshore Romania, Iecea Mare Production Licence	100%	100%	-
Offshore Italy, d363C.R.-AX <sup>3</sup>	100%	100%	-
Offshore Tunisia, Kerkouane <sup>4</sup>	100%	-	(100%)

**Note 1:** Concession agreements for exploration, production and gas storage in Upper Austria (Upper Austria AGS) finalised during the quarter and signed on the 8<sup>th</sup> of January 2021 between ADX and Federal Ministry responsible for Mining ("BMLRT") on behalf of the Republic of Austria.

**Note 2:** 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 Iecea Mare Production license. ADX is the operator of the permit pursuant to a Services Agreement with Danube.

**Note 3:** 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 4:** ADX has withdrawn from Tunisia and wound-up its wholly owned subsidiary holding the interest in this permit.

Yours faithfully,



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

*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.