

# **AGM ASSET & CORPORATE UPDATE**



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#### **CONTINGENT RESOURCES & DEFINITIONS**

Tunisia: Refer to ASX announcements 26/9/2012 (contingent) and 6/9/2013 (prospective). Italy: Refer to ASX announcements 17/2/2016 & 14/2/2017 (contingent) and 21/4/2016 (prospective). ADX confirms that it is not aware of any new information or data that affects the information included in those market announcements and that all the material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed.

Contingent Resources: those quantities of petroleum estimated, as of 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 P<sub>90</sub> (90% probability), P<sub>50</sub>, and P<sub>10</sub>, respectively, for individual opportunities. Totals are by arithmetic summation as recommended under PRMS guidelines. This results in a conservative low case total and optimistic high case total.

#### Persons compiling information about Hydrocarbons.

Pursuant to the requirements of the ASX Listing Rules 5.41 and 5.42, the technical and resource information contained in this presentation has been reviewed by Paul Fink, Technical Director of ADX Energy Limited. Mr. Fink is a gualified 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 presentation 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) 2

## **Corporate Overview**



#### Summary

- An ASX listed international energy exploration and appraisal Company (ASX:ADX)
- Asset refocus on low cost, low risk, profitable asset commercialisation
- Portfolio of Appraisal, Development and Exploration assets with compelling 2C resource base
- Geographic focus Offshore
  Mediterranean and Onshore Europe
- Experienced Board and Management team
- 11.5% of Riedel Resources (ASX:RIE)
  - Current Value \$600,000

### **Capital Structure – Pre Rights Issue**

Shares on Issue	929 million
No of Shareholders	2,582
Market Capitalisation @ 1.3 cents	\$12 million
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### ASX 2C Resources / Enterprise Value



## **Recent Trends and Activities**



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### > 18 Month Focus of Activities and Share Price Performance



"Focus on Nilde Resources Evaluation and Concept Definition"

# **Rights Issue Summary**



- > 1 for 5 Non-renounceable Rights Issue to raise up to \$2,415,445.
  - Any Entitlement not taken up will form a Shortfall Offer that will remain open for up to three months following the Closing Date.
- Entitlement take up 86,534,242 Shares totalling \$1,124,945.
- Shares on issue following the completion of the Entitlement Offer and Shortfall Offer 1,114,820,924 shares
- Funding will focus on the following areas;
  - Dougga Rig Negotiations, Logistics and Drilling Planning
  - Nilde Appraisal Well Drilling and Completion Design
  - *Nilde* Appraisal Well Planning and Regulatory Approvals
  - Geophysical and Geological Studies for Dougga and Parta (Romania)
  - *Nilde and Dougga* Independent Resources Assessments
  - Dougga Project Feasibility Studies
  - Nilde Development Planning
  - Working capital & Administrative/Corporate Costs
- The funding will enable ADX to remain financially strong while seeking to deliver transformational farm ins to progress its appraisal and development assets.

## Geography



### - Sicily Channel (Tunisia and Italy) and Romania (Onshore)



### **Extensive Mediterranean Position** - All Permits at 100% equity



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Note 1. Prospective and contingent resources were calculated using the probabilistic method and are best estimates. Conversion factor: 1BOE = 5.62 scf. Reporting date: prospective resources 6 Sept 2013, contingent resources 26 Sept 2012.

# **Appraisal & Development Strategy**



- ADX has large existing Contingent Resource base at the Nilde Oil Redevelopment and Dougga Gas Condensate Discovery - converting these resources to reserves will create exceptional value growth;
  - Nilde is a low risk project with proven production performance and substantial 2C resource
     Now Farm out ready
  - 2. Dougga is a large liquid rich, tested gas condensate discovery well defined on Geostreamer 3D Seismic,
    - Feasibility Studies, Resources Re-evaluation & Sourcing Drilling Rig Underway for Appraisal Well
- Production Opportunities available in Romania capable of delivering immediate cash flow and value addition through production enhancement and reserves additions. Leverage in country knowledge, relationships, partnerships and experience as JV – operator.

Convert Large Resource Base to Reserves

> Compliment Resources with Production

Introduce New Sources of Capital in line with maturation of Asset Base

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### NILDE OIL FIELD REDEVELOPEMENT

Photograph shows oil stained Nilde cores

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# **Nilde Redevelopment Summary**

#### Background

Acquired as exploration permit, remaining potential of Nilde identified by ADX in late 2015, independently audited in February 2016 and project feasibility undertaken in 2016 / 2017

#### **Resource Attributes**

Substantial remaining resource (2C of approximately 33 MMBBL) defined by multiple wells, an extensive geological data base and production history

#### Preferred Development Option

A collaboration with Calm Oceans via a preferred development option utilising a self-installing Mono Column Platform (MCP) and a gravity based storage and offloading system (RPSO) which would enhance the overall viability of the Development in terms of economics, feasibility and operability

#### Economic Potential at US\$ 40/bbl

Excellent project economics due to reservoir high productivity, light sweet crude, shallow drill depths, shallow water depth and low royalties

### Post Tax **NPV10 = US\$200 to 650 million** @ approx US40/bbl for 1C to 3C case



#### **Additional Potential**

2 Tested Oil Discoveries – 2 MMbbls (1C) to 15 MMbbls(3C) resource potential

Near Field Exploration - 90 MMbbls best est. Prospective Resource



## **Nilde - Recent Progress**



Resource Revision & Reservoir Simulation

Production Profiles for 1C, 2C & 3C Resources Case :

33 mmbo for 2C



**Concept Selection & Collaboration**  COPL self-installing Mono Column Platform (MCP) Major CAPEX & OPEX savings



Development Economics US\$ 350MM Post Tax NPV(10) @40\$/bbl, for 2C case (33 mmbbls)



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"Project Well Defined and Farm out Ready"

# **Nilde Resource Definition**



2C Contingent Resource (most likely) of 33 million barrels

Nilde/Nilde Bis Contingent Resources <sup>1</sup>	1C <sup>2</sup>	2C <sup>2</sup>	<b>3C</b> <sup>2</sup>	
2017 – Detailed Reservoir Modelling	21.7	32.8	49.8	
2016 – Probabilistic Volumetrics (Senergy) <sup>2,3</sup>	18.0	28.4	38.8	
Variance	3.7	4.4	11.0	
Note 1&2 below right; Note 3 : Nilde and Nilde Bis volumes from Senergy Report have been arithmetically added.				

- Detailed reservoir modelling updated probabilistic contingent resource numbers from early 2016 by Senergy GB Limited (Senergy).
  - Senergy are well respected independent reserves certifier from Lloyds Group of Companies
- Expanded range, particularly to the upside results from
  - Core evaluation; more significant fracture system
  - Detailed Petrophysics & Saturation Height modelling; deeper
    oil water contact, improved porosity in lower oil layers

#### Notes regarding Oil Resource Volumes

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 1 C, 2C, 3C Estimates: in a probabilistic resource size distribution these are the P<sub>90</sub> (90% probability), P<sub>50</sub>, and P<sub>10</sub>, respectively, for individual opportunities.
 Totals are by arithmetic summation as recommended under PRMS guidelines. This results in a conservative low case total and

optimistic high case total.

# Nilde Development Concept Selection ad

#### **MCP & RPSO Facilities Option**

- Calm Oceans Pte Ltd (COPL) COPL has developed and constructed a selfinstalling Mono Column Platform (MCP)
- The MCP is capable of supporting a drilling rig, production processing equipment water and gas reinjection facilities as well as accommodation
- Enables field to be redeveloped with reduced well costs (less 60%) enabling dry trees and reinjection of produced fluids
- MCP provides significant capex and opex savings over an FPSO as well as superior operability and well intervention.

#### **MCP – Leased Production Platform**



The MCP option schematic – incorporating production and drilling capability with dry well heads. *Source: Calm Oceans Pte. Ltd, Mono Column Platforms are proprietary and patented.* 

# **Nilde Economic Summary**

#### **Comments on Economic Results**

- NPV10 Range at current oil price between US\$ 200 to 650 Million
- All resources cases demonstrate high profitability, rapid paybacks and low oil price profitability (sub US\$ 30/bbl)
- High profit investment ratios are the result of low pre production costs and robust NPV's
- Lease costs are favourable compared to an FPSO option but deliver significantly lower drilling and completion capex

#### **Profitability Measures**

Resource Case	1C	2C	3C
Profit Investment Ratio (PIR)	1.6	3.3	5.4
Payback <i>(months)</i>	12	9	6
IRR (post tax)	55%	83%	101%
Net Revenue / Bbl <i>(US\$)</i>	12.8	17.8	24.5
Capex /Bbl (US\$)	4.80	3.37	3.37
Opex / Bbl <i>(US\$)</i>	8.97	5.86	5.86

Note: Opex / Bbl includes all facilities lease rates

Post Tax NPV 10 vs's Oil Price



#### **Key Cost & Schedule Assumptions**

- Nilde appraisal well drilled first half 2018 suspended as producer.
- Tie back appraisal well, drill 2 platform development wells and 1 platform disposal well end 2019
- First Production January 2020



# Nilde Immediate Way Forward



#### **Funding and Farmout**

- Taken longer than expected to get all required data & information for credible value proposition
- Resource, project feasibility and economics results to date are highly compelling
- Asset already generating significant interest in UK
- Commenced formal financing and farmout process

#### **Project Development Planning and Appraisal**

- Ongoing discussions with Italian Authorities to enable license operations
- Goal is to progress appraisal well planning and Nilde Redevelopment planning in parallel to enable submission of development plan after drilling a successful appraisal well.
- An appraisal well is pre-investment to ensure an optimal subsurface development plan and secure project finance.

#### **Contractor Collaboration**

 Collaboration with capable contractors is enabling ADX to progress a material project at low cost while ensuring the appropriate skills and experience is deployed on the project



## DOUGGA GAS CONDENSATE FIELD

Photograph shows fractured Abiod reservoir outcrop, Tunisia

### **Dougga Gas Condensate Field**

### - Background (100% equity)





#### Dougga Gas Condensate Discovery

#### Large Prospective Resource Potential

ADX Best Case Estimate: 1,027 mmboe

Note 1. Prospective and contingent resources were calculated using the probabilistic method and are best estimates. Conversion factor: 1BOE = 5.62 scf. Reporting date: prospective resources 6 Sept 2013, contingent resources 26 Sept 2012.

- The Dougga 1 well intersected approx 300 m gross gas column and tested condensate rich gas in 1981.
- Dougga 1 is located in 328m of water, 45kms east of Cap
  Bon. Dougga gas is liquids-rich but also contains 18% to
  30% CO2.
- ADX acquired 3D seismic over the field and near field prospects.
- Prior to the Arab spring, highly reputable independent expert AGR Tracs assessed that the field was likely to be commercialised.
- Previous project economics assumed offshore floating facilities.
- Near field discovery tie in opportunities and large exploration potential defined on 3 D seismic.

#### What Has Changed Recently

- Improvement in the political landscape and willingness of Tunisian Authorities to consider revised fiscal terms
- Potential to significantly reduce Capex with revised development option.
  - Tunisia has become net importer of gas

## Dougga Gas Condensate Field

### - Contingent Resource Potential

<b>Contingent Resources Estimates</b>	1C	2C	3C
Total Oil Equivalent [mmboe]	88	173	268
Liquids: Condensate & LPG [mmbls]	47	91	142
Sales Gas [bcf]	264	517	804

*Sources:* Competent persons reports (CPR) by TRACS and ISIS, Development Plan by Genesis **Dougga** Gas Condensate Appraisal – Contingent unrisked resources The Tracs CPR from July 2012 estimates a 70% chance of success for a commercial development.





#### 300 meter gas column intersected in Dougga #1 well

mapped and supported by RFT pressure data. 600 meter max. gas column

#### 300 Meters of Up dip potential

based on 3D seismic not included in current resource assessment.

#### Dougga West Oil Prospect

located within 9kms of Dougga

### Dougga – Recent Progress



Renegotiate licence work program focussing on Dougga Area Appraisal Revise work program from 3D Seismic and Exploration Well to Geological Modelling, Development Concept Studies, Drill a Dougga Updip Well and Productivity Test the Well.

3D Petrel Reservoir Model including Fracture Network and 3D Petrophysics model Basis for new & fully integrated Resources Estimate & productivity simulation



TechnipFMC Development Concept Study Undertake Study to Determine Optimal Concept and provide optimal CAPEX & OPEX estimate



"Revised Technical and Commercial Case being Generated"

### **Recent & Near Term Dougga Activities**

- Recent variation to work program enabling drilling of Dougga Sud
- 100% increase in Gas In Place Estimates based on recent geological studies
- Positive response to Drilling Rig EOI >> Q4 17 to Q218
- TechnipFMC Dougga Concept Studies near completion
- Very positive engagement with Gas & Power Authorities





- Results of TechnipFMC Concept Study
- Submit 3 year permit Renewal
- Secure Rig Option for Dougga Sud
- Commence Farm out Discussions

Top Abiod reservoir 3D structure showing proposed Dougga-South appraisal well location and Dougga-1 discovery well Colors show net Abiod reservoir section, based on 3D geological modeling constrained by seismic attributes. The best expected reservoir sections (matrix) coincide with orange colors, blue to purple areas are relatively lower net reservoir.





## Parta Romania Exploration

Photograph shows Petrom oil field facilities a few kilometrs north of ADX Parta block

## Parta – Romania Permit Progress

### - 50% equity interest and Operator

- 30 months extension ratified with government in December 2016.
- 3D seismic over existing oil field indicating excellent "low hanging fruit" exploration potential
- 3D seismic permitting process completed
- As a result 3D seismic now can be acquired for prospects close to producing fields
- 3D Seismic Tender completed, award decision pending
- > ADX well positioned for farm out





### PARTA 3D Seismic Value Creation Potential Appraisal Opportunity Example





Small 3D seismic inside ADX license already demonstrates potential to identify low risk appraisal drilling targets

# **ADX Forward Strategy**



- A three pronged approach to build a sustainable growth platform with nearly all the necessary pieces in place
  - A transformational near term development *at Nilde*
  - Substantial value development at *Dougga*
  - Exploration potential in the Sicily Channel and Romania
- Our large resource base can provide extraordinary value development by converting it to reserves and then production
- Our 18 month ambitions a series of transformational opportunities
  - A. Nilde Farm out
  - B. Nilde Appraisal Drilling
  - C. Completion of Dougga resource and feasibility review
  - D. Dougga farmout
  - E. Dougga Appraisal Drilling
  - Re rate Company & Target Romanian Reserves and Production Acquisitions



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