MOLGROUP

EXPLORATION & PRODUCTION

UPDATE **2017**

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MOL GROUP UPSTREAM 2017

2016 PRODUCTION (mboepd)[1]

TOTAL: **112**

CEE	81
MIDDLE EAST AND ASIA	14
CIS	7
NORTH SEA	8
AFRICA	3

2016 Y/E 2P RESERVES (MMboe)[2]

TOTAL: **459**

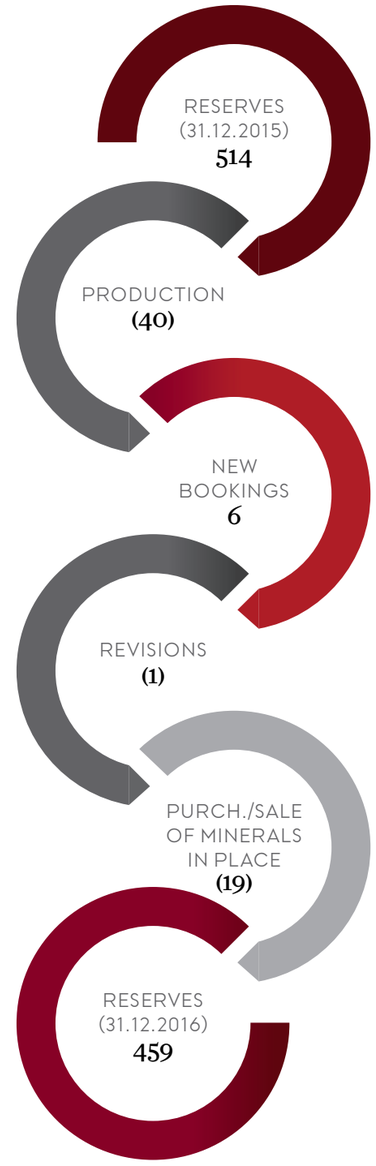
CEE	262
CIS	110
MIDDLE EAST AND ASIA	59
NORTH SEA	23
AFRICA	6

TOTAL 2016 CAPEX (USD mn)[3]

TOTAL: **424**

NORTH SEA	184
CEE	178
MIDDLE EAST AND ASIA	45
AFRICA	15
CIS	1

2P RESERVE CHANGES IN 2016 (MMboe)[4]



[1] Including JVs and Associates (Pearl: 2.4 mboepd, BaiTex: 5.8 mboepd)

[2] Including JVs and Associates (BaiTex: 49.8 MMboe; UGL: 60.4 MMboe)

[3] Excluding JVs and Associates (BaiTex: 19 USD mn; UGL: 5.7 USD mn)

[4] Including JVs and Associates (BaiTex: 49.8 MMboe; UGL: 60.4 MMboe)

KEY ACHIEVEMENTS IN 2016 AND THE 2017 OUTLOOK

In 2016 the Exploration and Production business proved that it can generate value even in a low oil price environment. The New Upstream Program (NUP) was succesfully completed through the implementation of several actions targeting efficient and sustainable operations. As a result the Upstream business delivered a simplified free cash-flow of over USD 250mn.
The implementation of the following actions supported the delivery of the NUP:

- Production rose again in 2016 by 6 mboepd, and an annual **average production of ~112 mboepd** was achieved supported mainly by production optimisation measures in the CEE and newly commissioned projects in the UK. The highest onshore production has been achieved in CEE since 2012. In 2017 production level is targeted to stabilize at ~110 mboepd with steady contribution from CEE assets and by capturing value from the international portfolio.
- **In 2016 ~USD 90 mn OPEX saving was delivered in line with New Upstream Program** aspirations, which resulted in 1.0 USD/boe reduction in direct unit cost (–14%) compared to previous year. The total direct unit production cost was 6.6 USD/boe on portfolio level.Our long-term aspiration is to keep direct unit production cost competitively low, in a single digit area on portfolio level.
- **Even more conscious CAPEX spending characterized 2016**, in order to sanction and execute only projects that break even at or below 50 USD/boe. **Total organic CAPEX spending was reduced by more than 30% versus 2015.** On the exploration side our efforts focused on near field and infrastructure-led projects. Furthermore, substantial capital cost savings have been delivered through capturing benefits from the supply-chain as well as internal efficiency improvement.

Moving forward the Upstream bussiness shall remain a key pillar to the integrated business model of MOL Group in line with the 2030 strategy.

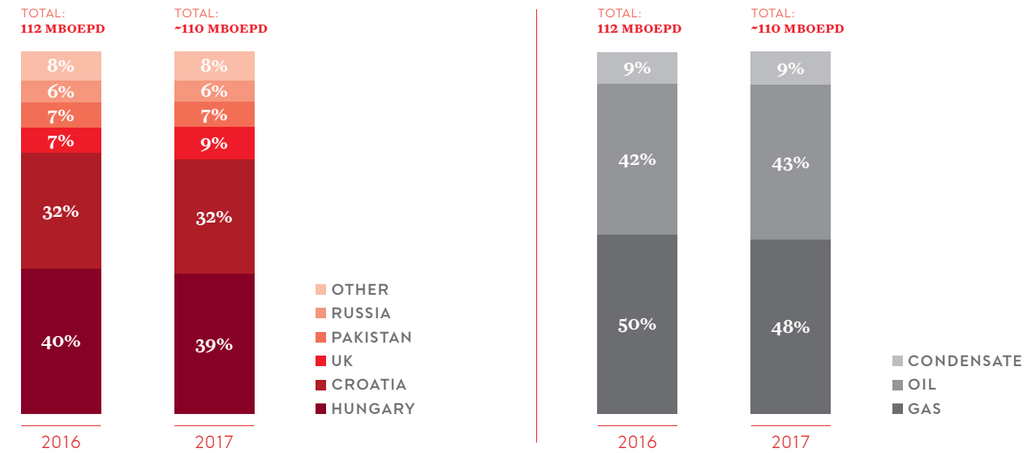
- Following the succesfull delivery of NUP, **self-funding and value generating operation is to be maintained** in 2017 and onwards even in a 50 USD/boe oil price world.
- In the mid-term **organic and potentially inorganic investments** are required to maintain current production levels.
- In order to ensure efficient organic reserve replacement MOL Upstream intends to achieve **more competitive unit finding and development costs** (12–16 USD/boe) .
- **Exploration CAPEX will be spent on near-field exploration activites**, mainly in CEE, Pakistan and Norway. **Development CAPEX will be used to unlock undeveloped 2P reserves** in CEE. International field development activity will mainly focus on the finalization of the ongoing developments in the UK and the continuation of Baitex drilling program in Russia.
- Key focus area for 2017 will be to comprehensiveley **optimize well costs** for our operated projects.
- The free cash-flows generated by the Upstream business shall be sufficient to cover **potential inorganic reserve replacement to maintain production at least at 2016 levels** even in an oil price environment of 50 USD /bbl.

During the year of 2016 12 exploration and appraisal wells were drilled and tested, out of which 6 were successful, and extended well test is ongoing on one additional well with promising indications.

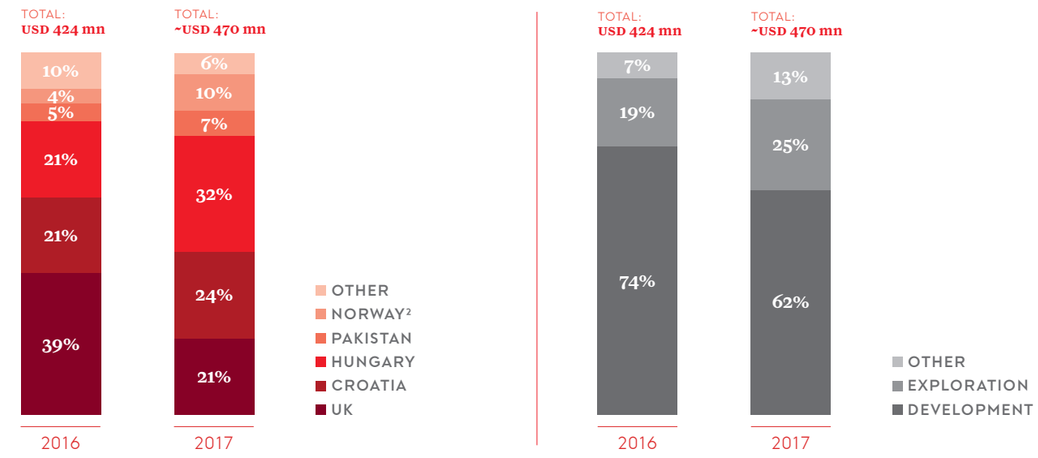
SUSTAINABLE OPERATIONS

MOL Group is committed to the key principles of sustainable operations, aiming at zero HSE incidents and accidents, protecting the environment by reducing the number of spills and decreasing greenhouse gas emissions by flaring and amongst other measures, by participating in the World Bank's Zero Flaring Initiative.

2016/2017 **PRODUCTION (mboepd)**



2016/2017 **CAPEX (USD mn)**[1]



[1] Excluding JVs and Associates
[2] Pre-Tax

SCHEDULE OF EXPLORATION AND APPRAISAL WORK PROGRAMS IN 2017

COUNTRY	BLOCK	G&G/WELL NAME	2017 PLAN
			Q1 Q2 Q3 Q4
Hungary	Battonya-Pusztaföldvár-North	Kunágota-5	
	Szeged-Basin-West	Kiskundorozsma-West-1	
	Okány-East	Mezősas-South-West 2	
	Bucsa	Tiszaszentimre-1	
	Dány	Tóalmás- North 1	
Croatia – Onshore	Drava-02	Mala Jasenovača-1	
	Drava-02	Severovci-1	
Pakistan	TAL	Mamikhel Deep Well	
	TAL	Tolanj East Well	
	TAL	Manzalai West Gravity acquisition & processing	
	TAL	Tal Upside 2D Seismic	
	TAL	Manzalai Deep Seismic Interpretation	
	TAL	Mamikhel South Seismic	
	Karak	Seismic data interpretation/mapping and integration	
	Margala	2D Seismic processing, interpretation and integration	
	D.G. Khan	2D seismic acquisition, processing & interpretation	
Norway – Offshore	PL677 – Block 25/4	Hyrokkin	
	PL790 – Block 34/2	Raudåsen	

- Seismic
- Well drilling
- Well test

LICENCE INFORMATION

Licence information as of 28 February 2017

COUNTRY	BLOCK/LICENCE		2P RESERVES END OF 2016 (MMboe)	2016 PRODUCTION (mboepd)	ACREAGE (km²)	PHASE	CONTRACT TYPE	OPERATOR	DILUTED SHARE* (%)	PARTNER(S) (%)
Hungary	Several		105.2	44.4	8 383	E / D	C	Yes	100	–
Croatia	On-shore – several		146.4	26.9	11 930	E / D	C	Yes	100	–
	Offshore – North Adriatic		9.9	9.3	1 665		PSC	No	50	ENI (50)
	Offshore – Aiza Laura				22				50	ENI (50)
	Offshore Izabela				345	D			30	Edison (70)
Pakistan	TAL		9.8	7.5	3 689	E&A	C	Yes	10.526	PPL (31.578), OGDCL (31.578), POL (26.315), GHPL (5 is carried in Exploration)
						D			8.421	PPL (27.7632), OGDCL (27.7632), POL (21.0526), GHPL (15)
	Margala				1 387	E		Yes	70	POL (30)
	Margala North				1 562	Being relinguished		Yes	70	POL (30)
	Karak				2 360	E&A		No	40	MPCL (Op. 60)
	Ghauri				1 292	E		No	30	MPCL (Op. 35), PPL (35)
	DG Khan				2 291	E		No	30	POL (Op. 70)
UK	Broom		23.2	8	10	D	C	No	29	Enquest (63), Ithaca (8)
	Catcher				176				20	Premier (50), Cairn (20), Dyas (10)
	Cladhan				30				33.5	Taqa (64.5), Sterling (2)
	Crathes				15				50	Enquest (50)
	Scolty				7				50	Enquest (50)
	Rochelle				29				15	Nexen (41), Endeavour (44)
	Scott				88				21.83	Nexen (41.89), Dana Petroleum (20.64), Edison (10.47), Maersk (5.16)
	Telford				338				1.59	Nexen (80.41), Edison (15.65), Maersk (2.36)
Russia	Baitugan		49.8	5.8	65	D	C	Yes	51	TPAO (49)
	Yerilkinsky		0	0	40	Being relinguished			51	TPAO (49)
Norway	Norway Northern North Sea	PL748	–	–	183	E	C	No	10	Aker BP (Op. 50), Wellesley (20), Capricorn (20)
		PL790			128			No	20	Aker BP (Op. 30), Wellesley (25), Capricorn (25)
	Norway South Viking Graben	PL102F, PL102G			56			No	10	Total (Op. 40), Petoro (30), Aker BP (10), Lotos (10)
		PL507			1 003			No	10	Statoil (Op, 45), Aker BP (45)
		PL626			202			No	10	Aker BP (Op. 50), ConocoPlillips (30), Fortis (10)
		PL672			101			Yes	50	Fortis (50)
		PL677			122			No	10	Aker BP (Op. 60), Fortis (30)
		PL773			62			Yes	60	Fortis (40)
		PL812			115			No	20	Statoil (Op. 40), Origo (20), Fortis (20)
		PL814			54			No	30	Aker BP (Op. 40), OMV (30)
		PL820S			48			Yes	40	Wintershall (30), Fortis (30)

LICENCE INFORMATION

Licence information as of 28 February 2017

COUNTRY	BLOCK/LICENCE		2P RESERVES END OF 2016 (MMboe)	2016 PRODUCTION (mboepd)	ACREAGE (km²)	PHASE	CONTRACT TYPE	OPERATOR	DILUTED SHARE* (%)	PARTNER(S) (%)
Norway	Norway Central Graben South	PL019C	–	–	31	E	C	No	20	Aker BP (Op. 80)
		PL539			191			Yes	100	–
		PL617			112			Yes	70	Fortis (30)
		PL678S, PL678BS, PL678C, PL678SB			1 509			No	25	Wintershall (Op. 35), Lundin (20), Fortis (20) All PL678 licences planned to be relinquished
		PL724, PL724B			255			No	30	Aker BP (Op. 40), DEA (30)
		PL771			261			Yes	40	Fortis (30), DEA (30)
		PL808			159			Yes	80	Edison (20)
		PL860			407			Yes	40	Fortis (20), Petoro (20), Statoil (20)
		PL861			330			No	20	AkerBP (50), Centrica (30)
		PL872			53			No	20	AkerBP (40), Fortis (40)
Kurdistan Region of Iraq	Shaikhan		13	3.6	283	D	PSC	Yes	20	GKPI (75), Texas Keystone (5)
	Pearl	Khor Mor	0	2.4	102	E/D	HOA***	No	10	OMV (10), RWE (10), DANA Gas (35), Crescent (35)
		Chemchemal			1 310				10	
Kazakhstan	Fedorovsky		60.4	0	1 551	E	C	No	27.5	KMG EP (50), FIOC (22.5)
Oman	Block 66		0	0	4 899	E	PSC	Yes	100	–
Romania	Ex-5		0	0	1 093	E	CA	No	20	Sandhill (80)
	Ex-6				1 226			Yes	100	–
Egypt	Ras Qattara		2.5	2.1	247	D	PSC	No	25	IEOC (Op. 75)
	West Abu Gharadig				77				25	IEOC (Op. 45), Dana Petroleum (30)
	North Bahariya				117				20	Sahara North Bahariya (Op. 50), IPR (30)
	East Yidma – Sidi Rahman &Rizk				25			Yes	100	–
Angola	Block 3/05		3.3	1.1	226	D	PSC	No	4	Sonangol P&P (Op. 25), China Sonangol (25), AJOCO (20), ENI (12), Somoil (10), NIS (4), INA (4)
	Block 3/05				99				4	Sonangol P&P (Op. 25), China Sonangol (25), AJOCO (20), ENI (12), Somoil (10), NIS (4), INA (4)
Syria**	Hayan		35.9	0	645	D	PSC	Yes	100	–
	Aphamia		0		2 285	E				

* Diluted share is based on working interest.

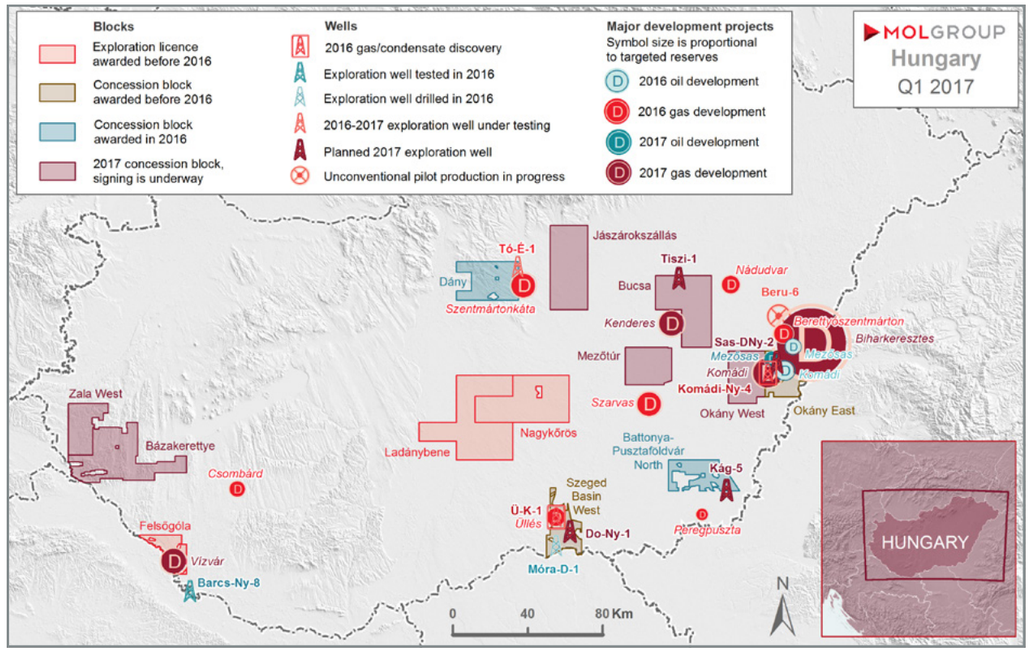
** In line with EU/UN sanctions, INA temporarily suspended all its business activities in Syria until the "force majeure" circumstances cease to exist.

*** UAC (Upstream Authorization Contract) modified to HOA (Head of Agreement).

C: Concession
PSC: Production Sharing Agreement
CA: Concession Agreement
HOA: Head of Agreement

DETAILED WORK PROGRAMS IN 2016/2017

HUNGARY



Hungary remains one of MOL's core countries in terms of production and reserves. An extensive geological knowledge of the country and a well-developed existing surface infrastructure have enabled low cost and quick field production start-ups thus supporting rapid cash flow generation. The key objective of the work program is the mitigation of natural decline by several actions and securing the exploration potential for a long term.

2016 YE 2P RESERVES

105.2 MMboe

2016 PRODUCTION

44.4 mboepd

2016 CAPITAL EXPENDITURE

TOTAL: **USD 87.1 mn**

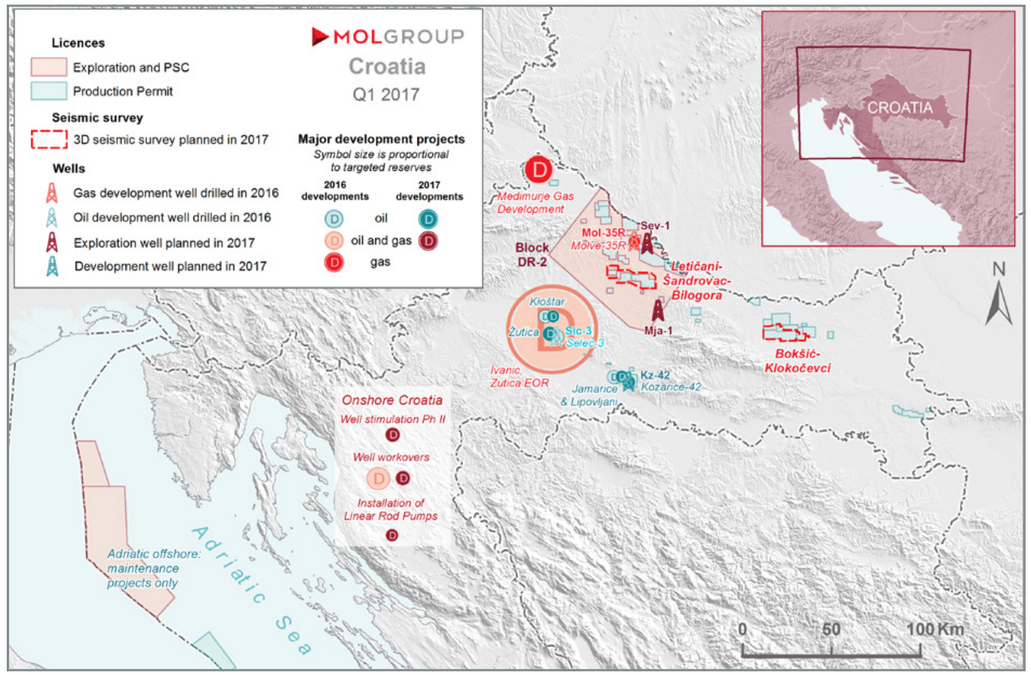
EXPLORATION	DEVELOPMENT	SUSTAIN & OTHER
USD 23.7 mn	USD 54.6 mn	USD 8.8 mn

DETAILED WORK PROGRAMS OF MAJOR PROJECTS (2016/2017)

- In 2016 MOL successfully continued its Production Optimization Program, with annualized production uplift of 3.5 mboepd. This program will be extended in 2017, bringing additional incremental volumes to production.
- In 2016, 2 field development wells were drilled and tied in, with significant 2P reserve transfer. In 2017 five field development projects will be launched, and the installation of the Algyő Power Plant efficiency project will be completed.
- Szeged West Basin exploration program continued in 2016, with one well drilling. Several exploration programs went on with positive results, Dány Exploration program continued with one drilling, (the test is in progress with good indications), Komádi-West-4 and Üllés-East-1 drilling were successful with both wells tested, and categorized as productive.
- In order to increase exploration potential, MOL applied for six new hydrocarbon exploration and production licences on the 4th bid round, and successfully acquired all of them, in the areas of Bázakerettye, Bucsa, Jászárokszállás, Mezőtúr, Okány-West and Zala-West. As a result MOL doubled its exploration acreages in Hungary. The committed work program includes drilling of 6 wells and 722 km² new 3D seismic acquisition.
- In 2017 an extensive exploration program is planned, by drilling and testing of 5 new wells, and expanding the work program to the recently acquired new areas.

YEAR	TYPE	WORK PROGRAM IN DETAILS
2016	Exploration	Móra South-1 (Szeged Basin West) was drilled, tested and categorized as sub-commercial.
		Barcs West-8 tested to be dry.
		Üllés East-1 Well was tested to be gas-condensate producer. Production started in December 2016.
		Komádi West-4 (Okány-East) was drilled and tested as gas-condensate producer.
		Tóalmás North-1 (Dány concession) was drilled and the testing has been started with promising indications.
		MOL was awarded six new hydrocarbon exploration and production licences in the areas of Bázakerettye, Bucsa, Jászárokszállás, Mezőtúr, Okány-West and Zala-West.
	Development	Komádi West-3 well drilling and tie-in was completed.
		Mezősas West-21 well drilling and tie-in was completed.
		Additionally 7 field development projects were completed.
	Production	Within Production Optimization Program (PO) 29 well workovers, 4 acid jobs, 7 frackings, 21 interventions on Artificial Lifting System, choke optimization on 26 wells were completed, adding 3.5 mboepd annualized incremental production.
2017	Exploration	Drilling and testing of 5 new wells within Szeged West, Okány East, Dány, Battonya-Pusztaföldvár and Bucsa exploration areas. Tóalmás-É-1 Extended Well Test (EWT) has started in early 2017.
	Development	Finish Komádi West-4 discovery well's tie-in, start drilling of one well in Mezősas West.
		Implementation of Biharkeresztes, Somogy (Vízvár) and KAF -TVK gas projects will start with well interventions, tests and surface facility preparation.
		Completion of Algyő Power Plant installation.
	Production	Production Optimization (PO) Program to be continued with several interventions: 19 fracking, 10 acid jobs, 30 well workovers, 5 ALS (artificial lift system) optimization.

CROATIA



INA started the Croatian onshore exploration and production activities more than 50 years ago. This accumulated knowledge of geological structures and experience makes INA the most efficient company to exploit the remaining sizable hydrocarbon potential of the continental part of Croatia. The biggest challenge for INA is to mitigate production decline. In order to achieve this aspiration INA successfully continued Full Field Optimization (FFO) concept in 2016 and targets to continue this program in 2017.

2016 YE 2P RESERVES

156.3 MMboe

2016 PRODUCTION

36.3 mboepd

2016 CAPITAL EXPENDITURE

TOTAL: **USD 90.0 mn**

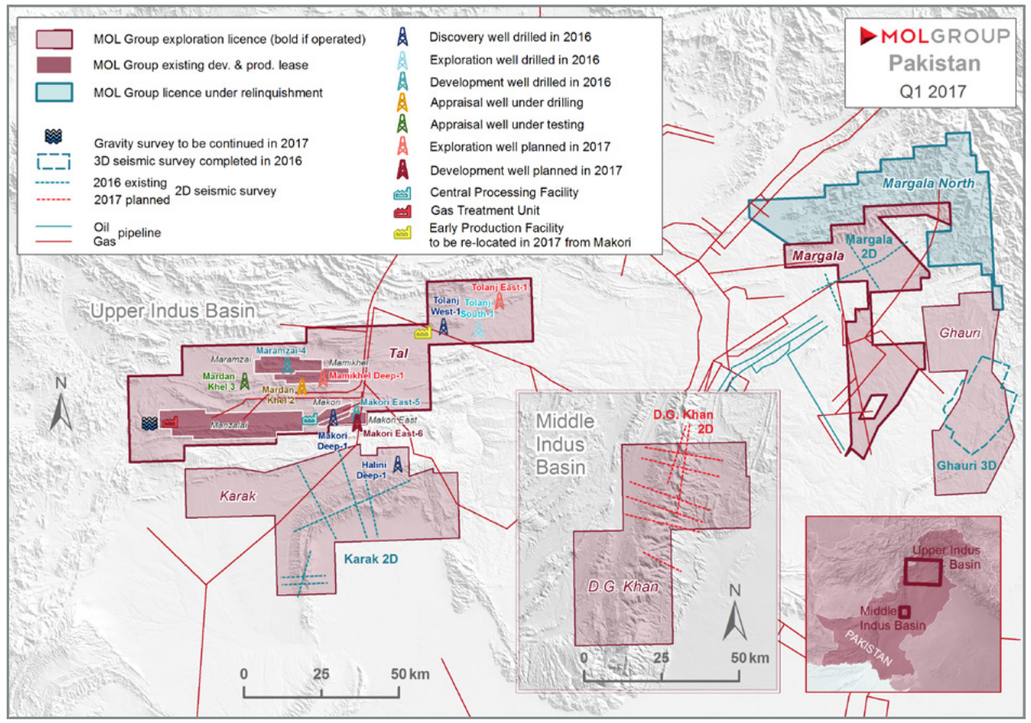
EXPLORATION	DEVELOPMENT	SUSTAIN & OTHER
USD 1.0 mn	USD 72.0 mn	USD 17.0 mn

DETAILED WORK PROGRAMS OF MAJOR PROJECTS (2016/2017)

- 62 well workovers were completed in 2016, bringing an average of ~1.6 mboepd annualized incremental volume on a full year basis. Offshore production dropped sharply in 2016 due to natural decline and water cuts but it was partially offset by WWOs and regular maintenance.
- Two projects were started as part of the Full Field Optimization (FFO) concept, which aims to fully utilize the resource potential by optimization of the entire production system of each fields.
- The production optimization program will be carried on in 2017 with a well stimulation campaign, and continuing the well workover campaign, focusing on the FFO concept.
- The EOR project on Ivanić and Žutica fields continued throughout 2016 and brought 0.3 mboepd incremental production on an annual basis.
- In the framework of Medimurje project, first gas achieved on Vučkovec and Zebaneč, adding 0.8 mboepd annualized incremental production in 2016, while the third field is expected to come on stream in 2017.
- INA was awarded a new onshore exploration concession (Drava-02) at the Pannon Bid round, and PSA has been signed. The exploration program will start in 2017 with drilling of two wells.

YEAR	TYPE	WORK PROGRAM IN DETAILS
2016	Exploration	PSA regarding to Drava-02 exploration concession have been signed.
	Development	Medimurje project was put into production, as first oil achieved on Vučkovec (July) and Zebaneč (August), respectively, adding 0.8 mboepd incremental production in 2016.
	Production	35 wells were completed in the frame of General Workover project bringing an average 1.6 mboepd annualized increment on a full year basis.
		16 wells were completed in the frame of workover projects Jamarice and Lipovljani fields. Further 11 workovers were delivered on Kloštar field.
		Within EOR project CO_2 was being injected on Ivanić field into 8 wells and on Žutica North into 3 wells. 0.3 mboepd incremental production was achieved on an annual basis. Relining was performed on 16 wells.
2017	Exploration	Within Drava-02 concession two committed exploration wells for 2017 will be drilled, Severovci-1 and Mala Jasenovača-1.
	Development	Kozarice-42 development well will be drilled and tested.
		3D development seismic survey on the fields of Bokšić–Klokočevci (154 km²) and Letičani–Šandrovac–Bilogora (200 km²) are planned for 2017. Completion of Vukanovec development program and bringing into production third field of Međimurje is targeted for 2017.
	Production	Within the well stimulation campaign 21 fracks are planned on 9 onshore oil and gas fields.
		Full Field Optimization (FFO) concept is aiming to fully utilize the potential of onshore fields by optimizing the entire production system. The project will implement Linear Rod Pumps on the wells, which is a new artificial lift technology.

PAKISTAN



MOL Group has interests in 5 blocks in Pakistan and operates the TAL Block, one of the largest gas-condensate blocks of the country. After multiple discoveries our operated production exceeded 80 mboepd in the last quarter of 2016. While existing production remains stable, expected tie-ins of recent discoveries will contribute to the volumes in short term. The ongoing drillings of development and appraisal wells and the planned exploration wells have further significant production potential.

2016 YE 2P RESERVES	2016 PRODUCTION
9.8 MMboe	7.5 mboepd

2016 CAPITAL EXPENDITURE — TOTAL: **USD 19.3 mn**

EXPLORATION	DEVELOPMENT	SUSTAIN & OTHER
USD 14.3 mn	USD 4.9 mn	USD 0.1 mn

DETAILED WORK PROGRAMS OF MAJOR PROJECTS (2016/2017)

TAL BLOCK (MOL 10.5% – EXPLORATION WI; 8.421% – DEVELOPMENT WI, OPERATED)

MOL Pakistan is the operator of the Tal Block Consortium. Since 1999, the consortium has made 9 discoveries and MOL Pakistan has become one of the most successful operators of the region.

- TAL block Q4 2016 average production exceeded 80 mboepd (gross), as a result of successful tie-ins of new wells.
- The Mardankhel-1 well was successfully tied in to the production facilities in November 2016. Current production from the Mardankhel-1 well is around 13 mboepd (gross).
- Meanwhile the Makori East-5 development well tie-in was completed after the installation of permanent facilities in Q4 2016. Current production is around 1.9 mboepd (gross).
- Further development activities included the successful completion of the Maramzai-4 production well. Additionally, the surface facility and flowline construction for Maramzai-4 and Makori Deep will be completed.
- In 2016 two discoveries were made in Tal Block, Tolanj West and Makori Deep-1.
- In 2017 two exploration wells will be drilled and tested, and the work program includes data acquisition campaign on several fields.
- Early Production Facility on Makori field will be moved to Tolanj field and the previous discoveries of the area will be tied in. Several further completions and tie-ins are planned for 2017 which will have contribution to production.

YEAR	TYPE	WORK PROGRAM IN DETAILS
2016	Exploration	Tolanj West was successfully drilled, gas and condensate discoveries achieved.
		Makori Deep-1 was drilled, and oil and gas discovery was achieved.
	Development	Makori East-5 development well drilling was completed.
		Maramzai-4 development well was drilled tested and completed.
	Production	Makori East -5, Mardan Khel-1 were successfully tied in.
2017	Exploration	Two exploration wells will be drilled, Tolanj East-1 and Mamikhel Deep-1.
		Several data acquisition and interpretation work is planned for 2017, gravity acquisition and interpretation of Manzalai West area and seismic interpretation of Manzalai Deep and Mamikhel South potential new leads.
	Development/ Appraisal	Drilling of Makori East 6 development well, Mardankhel-2 and Mardankhel-3 appraisal wells are planned for 2017.
		Mamikhel Well Head Compression Project will be completed in 2017.
	Production	Makori Early Production Facility will be moved to Tolanj field, and the tie-in of the two earlier discoveries will be completed.
		Several wells tie-in completion is planned for 2017, including Mardankhel-2 and Mardankhel-3, Makori Deep-1, Tolanj West-1, Tolanj X-1 and Maramzai-4.

KARAK BLOCK (MOL GROUP 40% WI, NON-OPERATED)

MOL Pakistan farmed in to Karak Block in 2008, by acquiring 40% in Mari Petroleum Company Limited (MPCL) in 2008. Since then 3 discoveries were made.

- Halini Deep-1 well marked as the third discovery in the Karak Block in 2016. The well was tied in successfully and the surface facility was completed.
- Kalabagh Early Production Facility installation was started in 2016, and will be continued in 2017.
- 2D seismic job and wide-line activities were completed in 2016, data processing is in progress. In 2017 further exploration activity is planned, with seismic job.

MARGALA AND MARGALA NORTH BLOCKS (MOL 70% WI, OPERATED)

MOL Pakistan acquired Margala Exploration Licence in 2006, with an area of 1 386.73 km² is located in the Islamabad Capital Territory, Punjab and Khyber Pakthunkwa Provinces. Exploration Phase 1 has been extended by 15 months until 31 March 2017 for additional seismic work leading to a drill-or-drop decision.

Margala North was relinquished with effect from January 01, 2016, the regulatory approval is in progress.

- In 2016 2D seismic acquisition (70 line km) of Margala Block was successfully completed, the interpretation will be carried out in 2017.

GHAURI BLOCK (MOL 30% WI, NON-OPERATED)

MOL Pakistan farmed in to the Ghauri block operated by Mari Petroleum Company Limited in 2013 with 30% working interest. Since then, there was one discovery in the block.

- In 2016 3D seismic job and interpretation was completed.

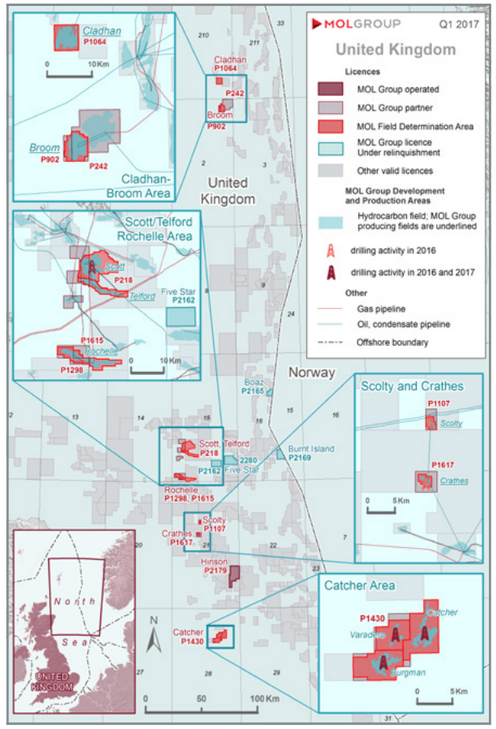
D.G. KHAN BLOCK (MOL 30% WI, NON-OPERATED)

MOL Pakistan farmed in to D.G. Khan Block, by acquiring 30% working interest from Pakistan Oilfields Limited (POL) in 2010.

- 2D seismic data acquisition, processing and interpretation on 200 line kms is planned. The work program is subject to security concerns and approval of licence extension.

UNITED KINGDOM

MOL Group entered the UK in 2014, after acquiring a portfolio of assets in exploration, development and production phases. The major achievement in 2016 was the delivery of Scolty and Crathes first oil ahead of schedule and below budget. The key focus of the work program is the control of unit costs and proper project delivery.



DETAILED WORK PROGRAMS OF MAJOR PROJECTS (2016/2017)

SCOLTY-CRATHES (MOL 50% WI, NON-OPERATED)

- First oil achieved in November 2016, ahead of schedule and below budget, adding 0.8 mboepd annualized average volume to 2016 production. In 2017 the development project will be completed with the replacement of a gas compressor.

CATCHER (MOL 20% WI, NON-OPERATED)

- The 2016 drilling program was successfully completed with six additional wells, and good subsurface and operational results. The subsea work and FPSO construction continued, and all major subsea equipment were installed. In 2017 an additional five wells will be completed.

SCOTT-TELFORD AND ROCHELLE AREA (SCOTT (MOL 21.8% WI, NON-OPERATED), TELFORD (MOL 1.6% WI, NON-OPERATED) AND ROCHELLE (MOL 15% WI, NON-OPERATED)

- On Scott infill drilling program continued in 2016 with drilling of the second well in the program commenced. Further 3 wells are planned for 2017.

CLADHAN (MOL 33.5% WI, NON-OPERATED)

- Production declined faster than expected in 2016.

2016 YE 2P RESERVES

23.2 MMboe

2016 PRODUCTION

8.0 mboepd

2016 CAPITAL EXPENDITURE

TOTAL: **USD 165.4 mn**

EXPLORATION	DEVELOPMENT	SUSTAIN & OTHER
USD 0.7 mn	USD 163.1 mn	USD 1.6 mn

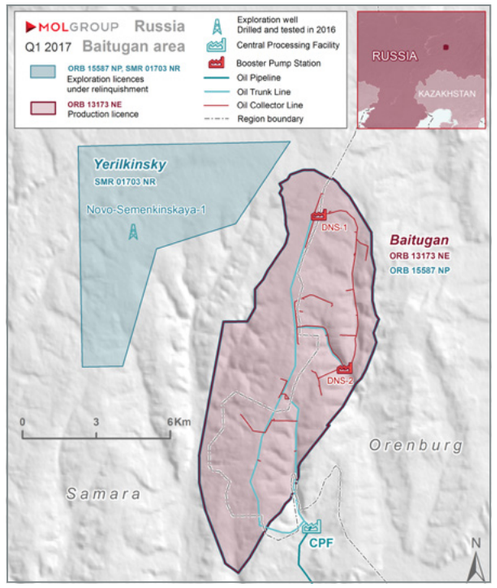
RUSSIA

MOL Group entered into a strategic partnership with TPAO by divesting 49% of shares in BaiTex in 2014, where MOL Group remained the operator. Baitugan is a compact field with developed infrastructure, which supports low energy and operational costs. The main target of the work program is to enhance production level with a high density drilling campaign and workovers.

DETAILED WORK PROGRAMS OF MAJOR PROJECTS (2016/2017)

BAITUGAN (MOL 51% WI, OPERATED)[1]

- In the frame of High Density Drilling program 65 wells were drilled in 2016, within the planned schedule and budget. A new subsurface approach was introduced, which yields higher flow rates per new wells. As a result, total production increased by 20% (year-on-year). Intensified drilling program to be continued in 2017 with drilling of further 40 wells.
- In 2016 a well-workover campaign was carried on, including bottom-hole treatments, perforation and commingling. The campaign will be carried on in 2017, with 57 workovers, including fracking, pump replacements, commingling, acid jobs and treatments.
- In 2016 an infrastructure development project was started with the expansion of nominal capacity of the Baitex pipeline. The works were completed, and the pipeline was put into operation by the end of the year. In 2017 a wide infrastructure development program will be carried out, including pipeline integrity program, telemetry, road development, construction of pipelines and powerlines to new wells.
- In order to optimize the reservoir development, a full-scale geological model building was started in 2016. The program will be completed in 2017, and the dynamic model will be used as a platform for the new Field Development Plan to be submitted in 2017.



- The Yerilkinsky Exploration has been completed, Novo-Semenkinskaya-1 well was dry, and abandoned.

MATYUSHINSKY BLOCK (MOL 100% WI, OPERATED)

- As part of the active portfolio management the Matyushinsky Block was divested in 2016. The sale didn't have a significant effect on the annual production of MOL in Russia, as the production intensification program on Baitugan field successfully offset the production shortfall as a result of the divestment.

2016 YE 2P RESERVES

49.8 MMboe

2016 PRODUCTION

7.0 mboepd

2016 CAPITAL EXPENDITURE TOTAL: **USD 19.9 mn**

EXPLORATION	DEVELOPMENT	SUSTAIN & OTHER
USD 0.2 mn	USD 19.6 mn	USD 0.1 mn

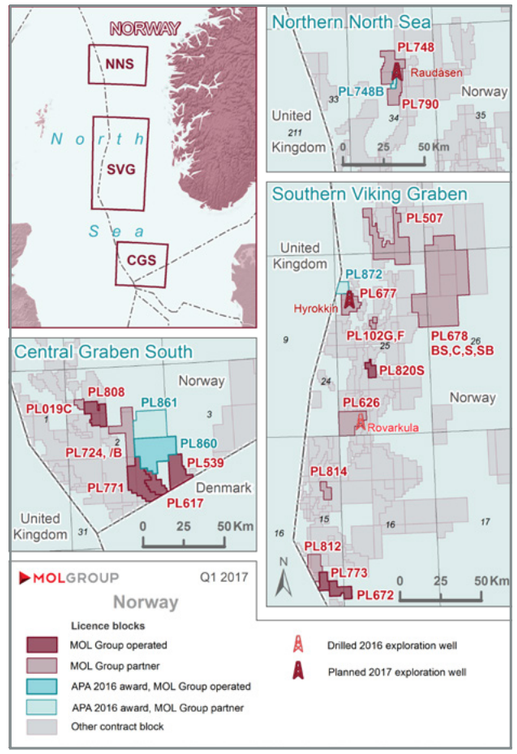
[1] BaiTex is reported under JVs and Associates

NORWAY

MOL Group entered Norway in 2015, after acquiring Ithaca Petroleum Norge. MOL Norge's licence portfolio is located in three strategic core areas in the North Sea and comprises 21 licences of which 8 are operated. In 2016 MOL Norge further matured its exploration portfolio and successfully participated in the APA licensing round adding four licences (o/w one extension) on the top of current asset fleet.

DETAILED WORK PROGRAMS OF MAJOR PROJECTS (2016/2017)

- In 2016 Rovarkula well (PL626) was drilled dry, plugged and abandoned, within budget and with no HSE issues or harm to the environment.
- In 2016 MOL Norge was approved as new operator of two additional licences (PL539 and PL672).
- MOL Norge submitted four applications for new licences in the APA (Norwegian 2016 Awards in Predefined Areas) licensing round and an additional application for extending an existing licence area of Northern North Sea. The company has been offered operatorship of one licence and partnership in the other licences. MOL Group built partnership with the best in class North Sea explorers (Petoro, Statoil and Aker BP) and expanded its operated positions in the Mandal High Area.
- In 2017 Hyrokkin (licence PL677) and Raudåsen (licence PL790) wells will be drilled, both within a non-operated licence.



2016 YE 2P RESERVES

–

2016 PRODUCTION

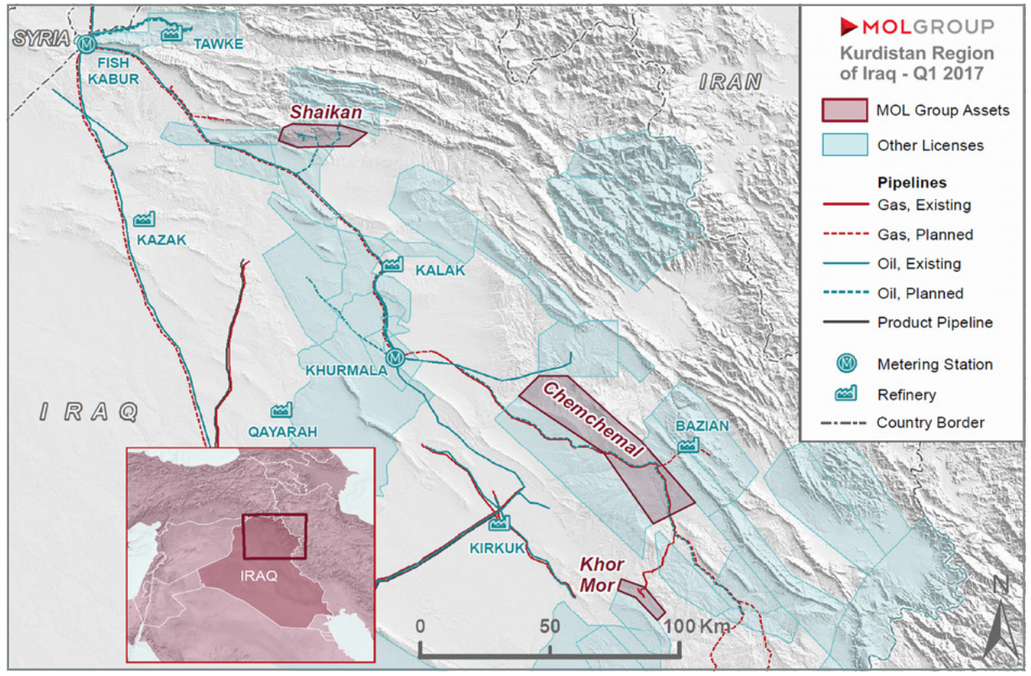
–

2016 CAPITAL EXPENDITURE[1] TOTAL: **USD 18.5 mn**

EXPLORATION	DEVELOPMENT	SUSTAIN & OTHER
USD 18 mn	–	USD 0.5 mn

[1] Pre-tax figures

KURDISTAN



MOL Group entered Kurdistan Region of Iraq in 2007, where currently Kalegran (MOL's 100% subsidiary) is a minority partner in Shaikan PSC. The Block is currently producing from 8 wells through two production facilities with a production capacity of 40 mboepd.

DETAILED WORK PROGRAMS OF MAJOR PROJECTS (2016/2017)

SHAIKAN (MOL 20% WI, NON-OPERATED)

- In 2017 operator aims to extend the lifetime of the production facilities and to improve cost efficiency.

PEARL (MOL 10% WI, NON-OPERATED)

- MOL acquired 10% in Pearl Petroleum Company (Khormor and Chemchemal fields) in 2009 from Crescent Petroleum and Dana Gas in the Kurdistan Region of Iraq. The Khormor field is currently producing from 6 wells.

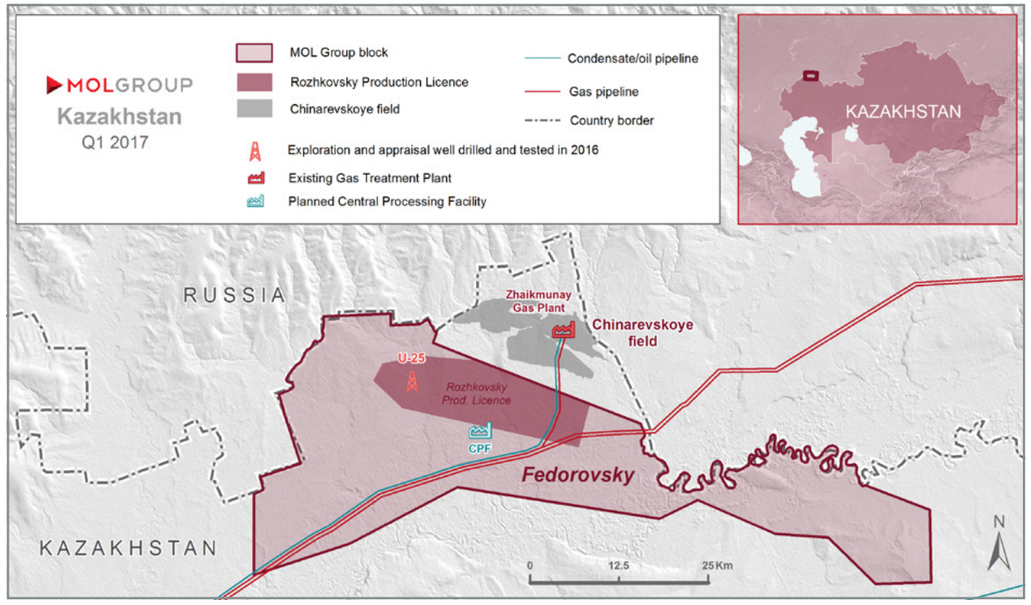
2016 YE 2P RESERVES[1]	2016 PRODUCTION[2]
13.0 MMboe	6.0 mboepd

2016 CAPITAL EXPENDITURE[1] TOTAL: **USD 4.7 mn**

EXPLORATION	DEVELOPMENT	SUSTAIN & OTHER
–	USD 1.9 mn	USD 2.7 mn

[1] Excluding Pearl | [2] Including Pearl

KAZAKHSTAN



MOL Group is in partnership with KMG EP and FIOC in its Kazakh operation in the Fedorovsky block.

DETAILED WORK PROGRAMS OF MAJOR PROJECTS (2016/2017)

- Drilling of U-25 well was completed. Tournasian layer was successfully tested for gas and condensate.
- In 2017 surface engineering works will be carried out at Rozhkovsky gas condensate discovery in the frame of Trial Production Project (TPP).

2016 YE 2P RESERVES	2016 PRODUCTION
60.4 MMboe	–

2016 CAPITAL EXPENDITURE TOTAL: **USD 6.1 mn**

EXPLORATION	DEVELOPMENT	SUSTAIN & OTHER
USD 0.5 mn	USD 5.6 mn	–

Reported under JVs and Associates

OTHER COUNTRIES

OMAN

MOL Group entered Oman in 2006, and currently has a 100% interest in Block 66. It was acquired in 2013 and is located in the Mid-Western part of the country close to the Saudi border.
After the execution of a large seismic campaign in 2014, drilling program has been started. Two wells were completed in 2016, Maisoorah-1 was water bearing and Husna-1 was dry. The work plan for 2017 includes further geological and geophysical works and analyzing all potential options going forward.

ROMANIA

In Romania, MOL Group's focus is on exploration of conventional hydrocarbon potential.
In 2010, three concession blocks (Ex-1, Ex-5 and Ex-6) were awarded to MOL (in a Consortium).
The Concession Agreements were ratified by the Romanian Government in 2012 for EX-6, and in 2015 for EX-1 and EX-5. The committed exploration program for the licences include 3D seismic acquisition, data interpretation and drilling.
In order to derisk its exploration efforts in Romania, MOL Group farmed down its interests in EX-1 and EX-5, retained 30% in EX-1 and 20% in EX-5.

EGYPT

INA is involved in exploration and production activities in Egypt since 1989. Currently INA holds interest as a non-operator with several partners on 3 concessions in the Western Desert of Egypt (Ras Qattara, West Abu Gharadig and North Bahariya) and has East Yidma concession as operator.
In 2016 2 wells were drilled on North Bahariya and regular maintenance activities were performed across all concessions. 2017 work program includes well workovers and surface facility maintenance. On North Bahariya 5 new producers and 1 injector well are planned to be drilled in 2017.

ANGOLA

INA entered Angola in 1981. Currently INA has 4% interest in two blocks as non-operator with several partners. (3/05 and 3/05A).
In 2016 facility maintenance and well workovers were completed across Block 3/05. The 2017 work program includes surface system upgrades, maintenance and well interventions.
In 2016 engineering activities were performed and studies were prepared in Block 3/05A, related to the forthcoming Final Investment Decision about further development of Block's Caco-Gazela and Punja Development areas. 2017 work program includes Gazela-101 post-drilling studies preparation and Punja wells engineering.

SYRIA

INA announced "force majeure" in February 2012, in line with EU/UN sanctions, and temporarily suspended all its business activities in Syria until the "force majeure" circumstances cease to exist.

GLOSSARY

ABBREVIATIONS

ALS:	Artificial Lifting System
Boe (barrel of crude oil equivalent):	Volume equivalent obtained after conversion of the heating value of gas to crude oil on the basis of its thermal quantity. In its practical application, 1 boe is, in general, 6000 cubic feet (about 170 normal m^3) of gas.
Boepd:	Barrel of oil equivalent per day
CAPEX:	Capital Expenditures
Dry well:	An investigated borehole which does not confirm the existence of a hydrocarbon site or is not able to profitably produce crude oil or natural gas.
EOR:	Enhanced Oil Recovery. The third stage of hydrocarbon production during which sophisticated techniques that alter the original properties of the oil are used. Its purpose is not only to restore formation pressure, but also to improve oil displacement or fluid flow in the reservoir.
Field development:	Process of implementing surface and sub-surface facilities necessary for the recovery of hydrocarbon reserves.
FPSO:	Floating Production, Storage and Offloading
mboepd:	Thousand barrel of crude oil equivalent per day
Probable reserves:	Those additional reserves which analysis of geosciences' and engineering data indicate are less likely to be recovered than Proved reserves but more certain to be recovered than Possible Reserves.
Proved reserves:	Those quantities of petroleum, which by analysis of geosciences' and engineering data, can be estimated with reasonable certainty to be commercially recoverable, from a given date forward, from known reservoirs and under defined economic conditions, operating methods, and government regulations.
2P:	The sum of proved reserves plus probable reserves
Production Sharing Agreement (PSA):	Agreement for Sharing the Production of an oil field or a gas field between the State and the Investors, having the production license for the field.
SPE:	Society of Petroleum Engineers
Unrisked resources:	Resources without taking into consideration the exploration risk (probability of success)
WHC:	Wellhead compression

PARTNERS (ABBREVIATIONS)

AJOCO	Angola Japan Oil Company
DEA	Deutsche Erdoel AG
FIOC	First International Oil Corporation
GHPL	Government Holding Private Limited
GKPI	Gulf Keystone Petroleum International
IEOC	International Egyptian Oil Company
IPR	Improved Petroleum Recovery
KMG EP	KazMunaiGas Exploration Production
MPCL	Mari Petroleum Company Limited
NIS	Naftna Industrija Srbije
OGDCL	Oil and Gas Development Company
POL	Pakistan Oilfields Limited
PPL	Pakistan Petroleum Limited
TPAO	Türkiye Petrolleri Anonim Ortaklığı