

**THE STATE OIL COMPANY OF THE REPUBLIC OF AZERBAIJAN**



**2015 ANNUAL REPORT OF THE STATE OIL COMPANY  
OF THE REPUBLIC OF AZERBAIJAN**

**B A K U 2016**

## I. SOCAR WILL REALIZE ITS STRATEGIC PROJECTS SYSTEMATICALLY AND EXPEDIENTLY



Azerbaijan now stands in the same rank with leading countries of the world for pace of economic growth. Results of successful economic reforms are witnessed in our people's daily life and welfare. Historical importance of new energy strategy, which is the result of political courage and wise prescience of the architect of our independent statehood, great leader Heydar Aliyev are felt more clearly as time goes. This victorious conception which is the guarantee of our country's economic power, international reputation and our people's welfare moves ahead with Azerbaijan's dynamic development, opens ways to many bright victories, our oil industry conquers higher peaks.

This strategic course, become sustainable development and prosperity conception for bright tomorrows of our people, already enters its third decade. "Contract of the Century" – contract on the development and production sharing of "Azeri", "Chirag" and "Guneshli" deep-water fields, signed in Baku on September 20, 1994 was built on the principle of more effective usage of our rich natural resources for the welfare of the nation and was based on glorious customs of our country, known as an old oil land for centuries. As known, numerous progressive novelties in the field of oil and gas exploration, production, processing and transportation were firstly in the history applied in Azerbaijan, were improved and spreaded in the world practice through our oil workers' selfless labor. In the first years of our state independence, when we faced foreign aggression, internal political-economic crisis, Heydar Aliyev, returned to authority with persistent demand of the nation and with the aim of saving the country, succeeded in creating stability in a short period of time with his deep intellect, wise politics and rich governance experience, while our oil industry again played the key role for the development of our nation's welfare. Strengthening of country's economy, starting exploitation in the newly discovered fields in the deep-waters of the Caspian Sea, building cooperation with prestigious foreign oil companies that was based on our nation's interests, applying modern technologies and new generation equipments strategy was chosen. Thereby, one of the most significant global energy projects of the XXI century got started.

Comprehensive and wise politics of great leader Heydar Aliyev for rapid development of Azerbaijan is being continued by our honorable President Mr. Ilham Aliyev. Azerbaijan is now known all over the world as a reliable partner, having irreplaceable position in global energy security.

Our Republic, integrating fast to world economy, today also realizes significant projects towards transportation of Caspian energy resources to international markets. Countless achievements of the energy strategy realized in Azerbaijan contains the main development lines of country's economy. SOCAR, being the leading power of this strategy, as a logical continuation of such works realized till today, composed Complex Plan in 2011 for long-term strategic development till 2025. In the Plan, development trends for all activity areas of the Company, as well as, exploration, exploitation and production (Upstream), transportation and sale of crude (Midstream), refinery and sale of refinery products (Downstream) and other service activity types have been identified and are executed expediently. Today we already can say that, SOCAR has realized all of its pressing targets in 2015 and has made important achievements in all of its areas of activity.

As highlighted on February 29, 2016 during the second meeting of Advisory Committee of Southern Gas Corridor, which is our biggest project, all planned works of this project are executed according to the schedule and in some cases ahead of schedule. Seven countries of the world, 12 prestigious companies and 12 gas buyers are involved to Southern Gas Corridor, as 45 billion US dollars are planned to be invested, and this reflects regional and global importance of the project. As known, for the aim of realizing the Corridor, works continue in four projects: Complete exploitation of "Shah Deniz" field, Expansion of Southern Gas Corridor, construction of TANAP and TAP pipelines. Importance of these projects in the energy security of Europe has been repeatedly highlighted by high level officials. During the second meeting of Southern Gas Corridor Advisory Committee, once again was noted that, despite declining of oil prices, participant countries will continue their investments to this project.

It is planned to deliver gas that will be produced from "Shah Deniz" field to Turkey in 2018 and to Europe in 2020. It should be noted that, Balkan countries have great interest for further development of this project. Currently, fifty percent of the works for Shahdeniz-2 project has been completed and it is consistent with the goal of production of first gas in 2018. Large-scale works in all construction and production fields – both offshore and onshore, as well as in Sangachal terminal, Baku Deepwater Jacket Factory and through the route of the pipeline are going on in the country. Already more than 18000 people in Azerbaijan are involved to construction works over all main contracts. And this is one of the samples of benefits of realizing those projects to Azerbaijani economy.



Works for expansion of SGC pipeline are continuing successfully in Azerbaijan and in Georgia through the route of the pipeline. More than 50 percent of tubes required for Azerbaijani part has been delivered to fields. Although construction works started in 2015, the project has got high velocity.

Despite several landscape and weather challenges, works for TANAP project are also continuing successfully. In 2016, works will be done according to the schedule.

Nearly all of the main contracts of TAP project were signed during 2015. According to the agreement that was reached in the second meeting of Advisory Committee, it is planned to start construction works this year.

I would like to note again that, Southern Gas Corridor project will play an exclusive role in energy security of European countries, in sustainable development of Azerbaijan economy and will change energy map of the world.

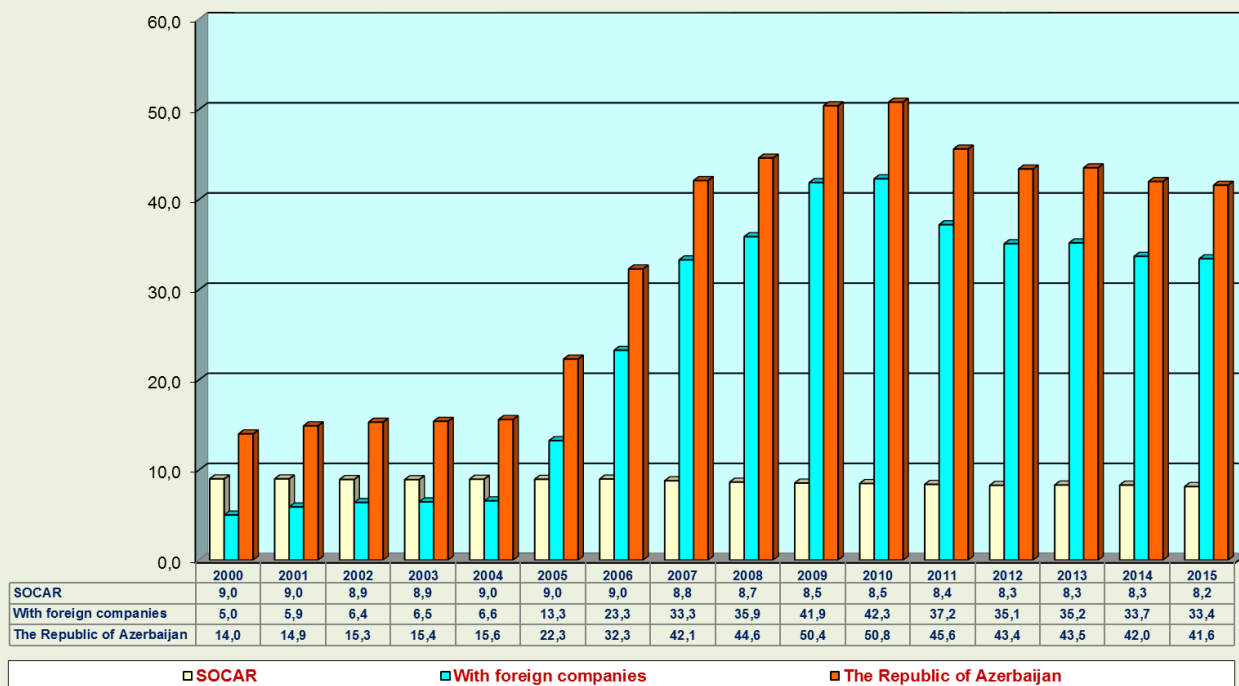
Last year reconstruction and modernization works of Heydar Aliyev Baku Oil Refinery and “Azerikimya” Production Union, which is one of the important downstream projects, got started. Also, 50 percent of works on SOCAR Turkey Aegean Refinery (STAR) project, which is being built in Aliagha, Turkey has been completed. This and other projects will be continued in 2016.

This year SOCAR plans to finish construction project of sixth generation new floating drilling rig which is realized currently. Using this rig, it will be possible to realize digging programs for wells having depth down to 12000 meters in “Absheron” and “Umid” fields, which are situated in Azerbaijani sector of deep-water Caspian Sea, and other new oil and gas structures. Construction of the rig is being continued successfully by “Azerbaijan Rigs” Ltd, a company organized by SOCAR and SOFAZ. It is planned to improve downstream projects both in the country and in Turkey. Among these, modernization projects of Heydar Aliyev Oil Refinery and “Azerikimya” Production Union, creating polyethylene and polypropylene and mineral fertilizer production plants, modernization project of our asset in Turkey – PETKIM Petrokimya Holding A.S. Complex, container port and electric station projects within the complex, as well as, construction of STAR plant will be our priorities.

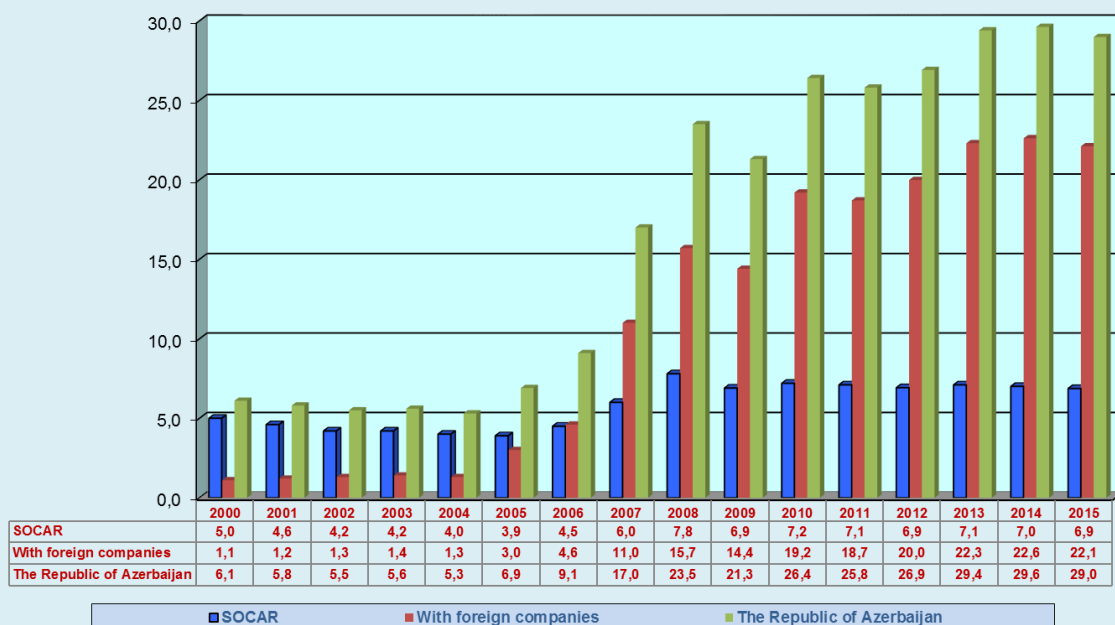
Expanding the sales network of oil products of SOCAR in Georgia, Ukraine, Romania and Switzerland and diversification of sales networks of Azerbaijan and third parties’ oil and oil products of SOCAR-Trading, headquartered in Switzerland, are also in spotlight. SOCAR intends to realize its projects systematically and expediently through constantly following processes on world energy markets.

**Rovnag Abdullayev**  
**President of SOCAR**

### Oil Production in Azerbaijan Republic (mln. tons)



### Gas Production in Azerbaijan Republic (bln.m3) Добыча газа в Азербайджанской Республике (млрд.м3)



## II. ORGANISATIONAL STRUCTURE of the SOCAR

At the date of December 31, 2015, the organizational structure of SOCAR is as follows:



\* SOCAR's direct subordinate organizations not having the status of legal entity

### **III. SUBSIDIARY ENTITIES, JOINT VENTURES, ASSOCIATES AND OPERATING COMPANIES FOUNDED BY SOCAR AND FOREIGN COMPANIES**

The following joint SOCAR and foreign company projects were implemented in 2015:

#### **SUBSIDIARY ENTITIES**

Azerbaijan (ACG) Ltd.	Cooperative Menkent U.A.
Azerbaijan (Shah Deniz) Ltd.	Cooperatief Saiph Holding
Alibayramlineft LLC	Loads of work 1 B.V.
Salyanneft LLC	SOCAR Trading Holding
Qobustanneft LLC	Super Beton Ltd.
Azerbaijan (SCP) LTD	Mercury Invest&Holdings LTD
SOCAR Assets Company	Bosshelf LLC
SOCAR Turkey Enerji A.Ş.	SOCAR Polymer LLC
SOCAR Energy Georgia LLC	Polymer Constrction Company LLC
Caspian Drilling Company (CDC)	SOCAR Petroleum CJSC
Hojaire	SOCAR International DMCC
SOCAR Overseas LLC	STAR Gulf
Azerbaijan (BTC) Ltd	SOCAR Energy Ukraine
Baku Shipyard Company	SOCAR Oil and Gas International Holding
SOCAR Gas Import-Export Ltd	SOCAR Balkans Sarl (SOCAR Energy Greece)
Blue Skyline Holdings AG	SOCAR Upstream Management International LLC
SOCAR Energy Holdings AG	SOCAR Midstream Operations LLC
SOCAR CNG LLC	EKOL Engineering Services CJSC
AAS- Ekol Ltd	Sermaye Investment Limited
SOCAR Aurora Terminal	SOCAR-Absheron LLC
SOCAR Russia LLC	SOCAR Invest LLC

#### **JOINT VENTURES**

Azgerneft MMC	SOCAR Turkey Yatirim A.Ş.
AZFEN	Azerbaijan Rigs LLC
Azəri M.İ. Drilling Fluids	SOCAR Foster Viller Engineering Services
Oil and Gas ProServ LLC	SOCAR KBR LLC
Caspian Shipyard Company	SOCAR DalgicLtd.
SOCAR KPS LTD	SOCAR Fugro LLC
SOCAR Construction LLC	Southern Gas Corridor CJCS
SOCAR Umid LLC	Caspian Geophysical Company LLC
Sarmatia LLC	AzLAB LLC
SOCAR Baglan MMC	Cross Caspian Oil and Gas Logistics LLC
SOCAR-Azeri Drilling Company	Interfax Azerbaijan
AGRI LNG Project Company	Ateshgah Insurance Company
SOCAR CAPE LLC	Caspian Pipe Coatings LLC

#### **ASSOCIATES**

Azerbaijan Gas Supply Company	BTC International Investment Co
South Caucasus Pipeline Company	BTC Holdings B.V.
South Caucasus Pipeline Company Hold Co	SOCAR Gas Operating Company
BTC Co	Electrogas Malta
	SOCAR Switzerland and other associates



## **OPERATING COMPANIES**

Azerbaijan International Operating Company  
BP Exploration (Shah Daniz) Ltd  
Gobustan Operating Company Ltd  
Salyan Oil Operating Company Ltd  
Karasu Operating Company Ltd  
Petro-HongKong-Pirsaat Oil Ltd  
Binagadi Operating Company  
Surakhani Oil Operating Copmany S.A

Absheron Operating Company Ltd  
Shirvan Operating Company Ltd  
Neftchala Operating Copmany  
Total E&P Absheron B.V.  
Bahar Energy Operating Company Ltd  
Balakhani Operating Company Ltd  
BP Exploration (Shafag-Asiman) Ltd  
BP Exploration Shallow Water Absheron Ltd





## IV. GEOPHYSICAL AND GEOLOGICAL WORKS

### 1. Geophysical works

Offshore and onshore geophysical and geotechnical works were performed by Geophysics and Geology Department of SOCAR in 2015.

**1.1. Geophysical prospecting works.** "Prospect Geophysics" Production Section of Geophysics and Geology Department carried out works to the extent of 216.5 km<sup>2</sup> 3D seismic and 29.2 linear km 2D seismic (600 f.n.), 345 linear km gravimetric (3450 f.n.), 345 linear km magnetometric (3450 f.n.) and 1940 m (386 f.n.) seismic logging-vertical seismic profiling works in 1 well and 1233 f.n. microseismic logging works in 22 wells throughout the year.

**3D seismic field surveys** by "Prospect Geophysics" Production Section were conducted to the extent of 38 km<sup>2</sup> (5567 f.n.) in Goshadash area of Absheron OGR at offshore field and to the extent of 178.5 km<sup>2</sup> (10834 f.n.) in Zerdab-Shikhabagi-Gishlag area of Yevlakh-Agjabedi OGR at onshore field under the order of "Azneft" PU.

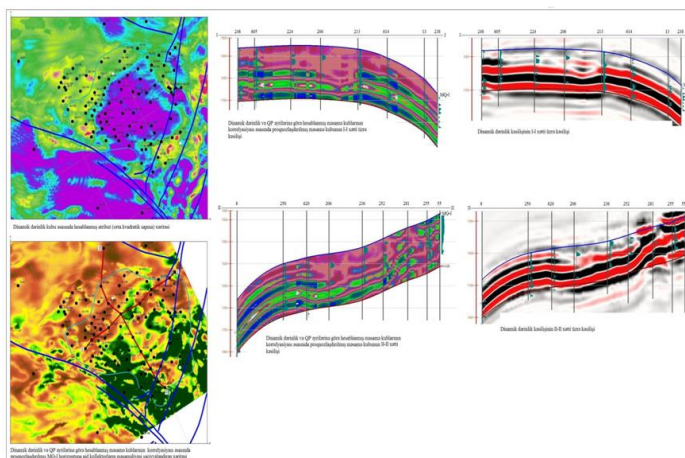
**2D seismic field surveys** by "Prospect Geophysics" Production Section were conducted to the extent of 29.2 linear km (600 f.n) in Ziyadkhanly-Chayly area of Ganja OGR at onshore under the order of "Azneft" PU.

**Gravimetric works** to the extent of 345 linear km in Zardab-Shikhabagi-Gishlag area of Yevlakh-Agjabedi OGR were executed.

**Seismic logging and vertical sonar planning works:** Seismic logging and vertical sonar planning works to the extent of 1940 m (386 f.n) were performed in well 1 drilled in Eldaroyugu area under the order of Complex Drilling Works Trust.

**Microseismic logging and vertical seismic profiling works:** Microseismic logging and vertical seismic profiling works to the extent of 1233 f.n were performed in 22 engineering geological wells drilled in Lokbatan, Bibiheybat and Yeni Yasamal sites for "Neftchi" housing-construction cooperative under the order of Social Development Department of SOCAR.

**1.2. Processing and interpretation works:** There processed 3D seismic data to the extent of 178.5 km<sup>2</sup>, 2D data to the extent of 5326.2 linear km, gravimetric data to the extent of 345 linear km and magnetometric data to the extent of 345 linear km, seismic logging and vertical sonar planning data to the extent of 1940 m (386 f.n) and microseismic data to the extent of 1233 f.n in 22 engineering geological wells under the order of Azneft Production Unit and foreign companies.



**1.3.** There interpreted 3D seismic data to the extent of 103 km<sup>2</sup>, 2D data to the extent of 5485.2 linear km, gravimetric data to the extent of 165 linear km and magnetometric data to the extent of 170 linear km.

**Processing works:** There processed 3D seismic data to the extent of 178.5 km<sup>2</sup> (10834 f.n) in Zardab-Shikhabi-Gishlag area of Yevlakh-Agjabedi OGR, 167 linear km in Jeyilakhtarma-Nardaranakhtarma area, 29.2 linear km in Ziyadkhan-Chayli area, 2 D seismic data to the extent of 5130 linear km in Yevlakh-Agjabedi OGR, gravimetric data to the extent of 345 linear km and magnetometric data to the extent of 345 linear km in Zardab-Shikhabi-Gishlag area under the order of Azneft Production Unit and foreign companies, seismic logging and vertical sonar planning works to the extent of 1940 m (386 f.n) was performed in well 1 drilled in Eldaroyugu area under the order of Complex Drilling Works Trust and microseismic logging and vertical seismic profiling works to the extent of 1233 f.n in 22 engineering geological wells.

**Interpretation works:** There interpreted 3D seismic data to the extent of 103 km<sup>2</sup> in Gazanbulag-Ziyadkhan area under the order of Azneft Production Unit and foreign companies, 167 linear km in Jeyilakhtarma-Nardaranakhtarma area, 29.2 linear km in Ziyadkhan-Chayli area, 5130 linear km in Yevlakh-Agjabedi OGR under the order of Azneft Production Unit, 2D seismic data to the extent of 159 linear km developed in shallow water sections of Absheron peninsula, gravimetric data to the extent of 165 linear km in Jeyilakhtarma-Nardaranakhtarma area and magnetometric data to the extent of 170 linear km under the order of BP company, and seismic logging and vertical sonar planning works to the extent of 1940 m (386 f.n) was performed in well 1 drilled in Eldaroyugu area under the order of Complex Drilling Works Trust and microseismic logging and vertical seismic profiling works to the extent of 1233 f.n in 22 engineering geological wells.

The following geological outcomes were obtained on the basis of the performed geophysical prospecting works.

Geological structure of survey area was specified based upon integrated analysis of data on Jeyilakhtarma-Nardaranakhtarma area, structural maps on different horizons were compiled and existence of favorable conditions for shaping of non-anticline traps was identified.

Speed rates of section of the survey area was specified in Eldaroyugu area and intervals and speeds were set and criteria of fluctuation of seismic wave depth speed were assessed.

3-dimension model of Gazanbulag-Ziyadkhan area was compiled, structural maps were compiled on different horizons based upon seismic and well data and probability of lithological-stratigraphic traps was forecasted within Eocene sediments, variation of petrophysical parameters was forecasted and drilling of exploration wells was recommended. There developed structural maps on sandy horizons and geological-geophysical profiles, which go through deposit laying different directions and deep wells situated in surface of Mezozoy and Medium Eocene sediments as a result of analysis and generalization of geological and geophysical data on Yevlakh-Agjabedi valley. According to derived data, exploration target of the structures was assessed and recommendations were given on the geophysical prospecting.

In 2015, 53 reports, 173 maps, 805 operator sheets and 1373 time sections were digitalized by Corporate base establishment group of "Prospect Geophysics" Production Section.

**1.3 Mining geophysical works.** In the reporting year, "Mine Geophysics" Unit of GGD carried out mining geophysical works in the onshore areas of Azerbaijan and in the oil and gas wells as well as non-oil and gas wells under drilling and exploitation in Azerbaijan sector of the Caspian Sea under the orders of "Azneft" PU, Complex Drilling Works Trust, operating companies, joint ventures and outside companies working in Azerbaijan.

Geophysical survey and perforation (buried shot) works were carried out in wells under drilling and exploitation in 43 fields of Azerbaijan, including 12 fields offshore

(Absheron cup, Bulla-deniz, Chilov island, Darwin section, Duvanny-deniz, Gunashli, Western Absheron, Neft Dashlary, Palchig Pilpilesi, Pirallahy, North wrinkle and Umid); and 31 fields onshore (Ateshgah, Balakhany, Bibiheybat, Binagadi, Buzovna, Buzovna-Mashtaga, Candahar-Zarat, Duvanny, Eldaroyugu, Amirkhanly, Khilly, Korgoz, Kurovdagh, Gala, Galmaz, Garabagly, Garadagh, Garachukhur, Gushkhana, Lokbatan, Muradkhanly, Neftchala, Puta, Ramana, Seadan, Siyazan-Nardaran, Shubany, Surakhany, Tersteller, Umbaku, Yasamal and Zagly).

Number of orders for well geophysical surveys works made up 3545 (in 928 wells) of which 1366 (143 wells) were performed in the open hole, while 2179 (917 wells) in the cased hole. The fulfilled orders on well logging operations totaled to 2368 (the measured diagrams totaled to 9841 in 432 wells) and perforation works were performed to the extent of 1177 orders (144652 holes were perforated in 792 wells). Also, integrated geophysical surveys were conducted in 125 completed wells; out of them, construction of 69 wells was completed and put into commissioning.

6773 strata were appraised as per integrated geophysical survey works carried out in 2015. Out of them, 2506 strata were assessed as industrially significant oil and gas bearing, 10 strata as indefinite and 4257 strata as watery. Perforation works were performed in 134 strata out of the appraised 6773 strata. There recovered oil from 110 out of 114 strata assessed as oil & gas bearing and water was produced from 4 strata while there generated water from all strata out of 20 strata which appraised as watery.

Drilling geological-technological control and gas logging works were carried out in 23 wells (Bulla-deniz 124, 125, Eldaroyugu 1, Gunashli 30, 34, 35, 344, 345, 353, Western Absheron 22, 24, 28, Garadagh 482, 483, 485, 486, 487, Neft Dashlary 2593, 2594, 2598, 2603, 2604 and Umid 14) in the reporting year.



416 orders were performed in 256 wells in view of geophysical control over field development in 2015. Impulse-neutron-neutron logging works were carried out in 42 wells in Gunashli, Neft Dashlary, Darwin section, Pirallahy, Bibiheybat, Buzovna, Gala, Garadagh, Gushkhana and Kurovdagh areas.

More than 7498 logging curves on 1124 wells were transformed into PDF format and 233682 inclinometer points and 8292465 meter logging curves were digitalized in terms of corporative base and other orders by “Prospect Geophysics” Production Section in 2015.

**2. Geotechnical survey.** In the reporting year, the Complex Engineering Exploration Production Section of GGD carried out engineering-geological drilling totally 9455 m, including 8540 m offshore and 915 m onshore; 1460.3 km continuous seismo-acoustic profiling (CSAP), 1979.5 km sonar planning, 2677.5 km hydrographic surveys (bathymetry) and 44 km multi-beam survey (measurement of sea bed in 3D format)

works.

**2.1 Geotechnical drilling works.** In 2015 geotechnical drilling works, in total 9455 m drilling survey (including 7000 m within plan and 2455 m on a contractual basis). Such works to the extent of 8540 m were carried out offshore - Absheron section, Ateshgah, Darwin section, Western Absheron and drilling works onshore - at sites (Bibiheybat area and the area where warehouses, pump house, water reservoir and 2-floor office building to be fabricated, and north part of Lokbatan-Khojahasan roadway and in 18 km north part of Baku-Salyan highway) where residential buildings to be constructed by "Araz" housing-construction cooperative in several districts of Baku city with total transition 915 m under the order of Social Development Department.

The drilling works were carried out in Caspian aquatorium through "Zohrab Valiyev" vessel, and onshore through drilling rigs such as "Kamaz LBU-50", "Kamaz URB-2.5 A", Kamaz UGB-5 and other units.

Mechanical-and-physical properties of all rock samples taken in the course of geotechnical drilling works were surveyed in Central engineering laboratory of KMAIB. Besides, works were carried out for transition from well design position into natural position, from natural position into plan, identification of their locations and navigation arrangement.

**2.2 Seismo-acoustic profiling, sonar planning works and bathymetric survey.**

There carried out uninterrupted seismo-acoustic profiling to the extent of 1460.3 km (1411 km according to plan and 49.3 km under contracts), sonar planning works to the extent of 1979.5 km (1331 km according to plan and 648.5 km under contracts), bathymetry works (1389 km according to plan and 1288.5 km under contracts) to the extent of 2677.5 km current year. Such works were performed in Ateshgah, Western Absheron, Neft Dashlary, Darwin section, Absheron section, and project for subsea oil pipeline from deepwater jacket 8 in Gunashli field to ISG point located in Neft Dashlary, jacket 425 in Neft Dashlary, area between jetty pier platform 1 and jacket 15 in Bulladeniz, 35 kV cable line between Neft Dashlary and Chilov, area between deepwater 558 in 8 March and pier platform 627 in Sangachal, area between deepwater jacket 533 and platform 298 in Sangachal, and from new oil collection farms such as Ateshgah, Darwin section, Goshadash, Agburun, Gunashli, Neft Dashlary-Gunashli, Bulladeniz to Dubandi terminal, in the area of Deepwater Jackets Plant, in project site of deepwater jacket 8 in Gunashli field, jetty pier platform-2A-Dashgil project in Bulladeniz field and other areas.

Sonar planning, bathymetry, uninterrupted seismo-acoustic profiling and multi-beam survey works were carried out through "Mammad Suleymanov" ship.

**2.3 Multi-beam (measurement of sea bed in 3D format) survey works.** Multi-beam works totally to the extent of 44 km were carried out in respect to length calibration and 3-dimension model of bottom contours in points 10 and 54 in Western Absheron field as well as visual survey of the areas where hydraulic facilities, trestles and communications located at, under the order of "Azneft" Production Unit.

Survey works to the extent of 21.7 km were carried out across subsea 35 kV cable line between Chilov and Neft Dashlary areas through remotely operated vehicle under the order of "Azneft" Production Unit.

**3. Structural prospecting and exploration drilling works.**

Structural prospecting and exploration drilling works were executed at onshore and offshore fields of Azerbaijan Republic (oil & gas fields and exploration targets) on account of internal resources of SOCAR and jointly with foreign companies in 2015.

**3.1. Structural prospecting drilling works.** Drilling works to the extent of 1000 m were performed at Eldaroyugu area onshore under the order of "Azneft" PU in 2015.

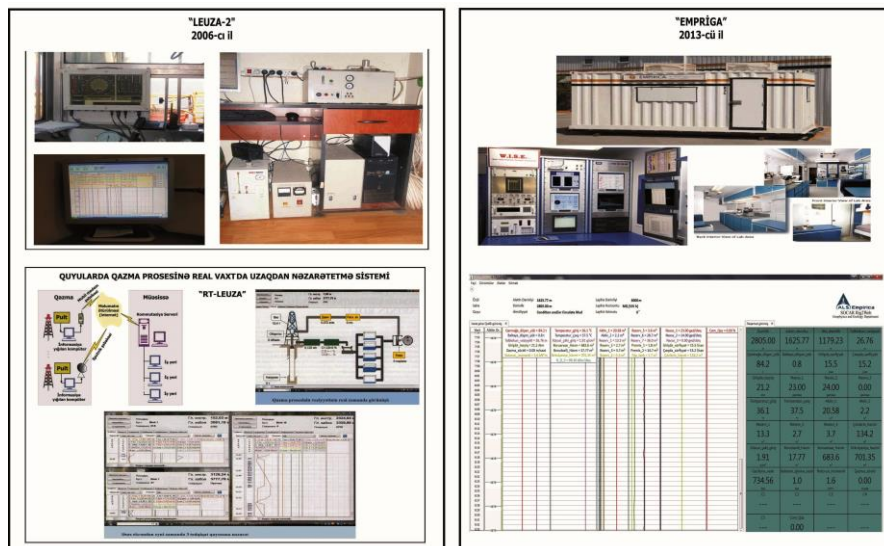
**"Eldaroyugu" structural prospecting well №1.**

The target depth of the well is 2000 m, target horizon is Miocene (Top Sarmatian). The well was designed to specify geological structure, lithology, stratigraphy and oil & gas content. Drilling of structural prospecting well №1 was started on 21 October 2014. The well went into 2015 with 1000 m deep-hole drilling. Drilling works to the extent of 1000 m were performed and the well was bored up to design depth throughout the year. Stratigraphic conditions and microfauna of sludge and rock samples taken up to 2000 m depth in some intervals were surveyed through laboratory. Test work was performed in the intervals positively appraised as oil & gas bearing pursuant to results of the integrated mine-geophysical surveys. The well was abandoned due to geological reason because of nonoccurrence of positive result while testing.

**3.2. Exploratory-prospecting drilling works.** Exploratory-prospecting drilling works to the extent of 767 m were carried out jointly with foreign companies in 2015. The exploratory-prospecting drilling works were performed at one area - onshore, Hovsan field (operatorship Absheron Operating Company №1870). No any exploratory-prospecting drilling works were carried out on internal resources of SOCAR.

**“Hovsan field” exploration well №1870.** Drilling of inclined exploration well №1870 at 4863 m design depth and Miocene target horizon was started on 30 September 2014 to determine oil and gas bearing of Miocene sediments in Hovsan field by Absheron Operating Company. The well passed into 2015 at 3961 m deep-hole drilling. Drilling works to the extent of 767 m were carried out throughout the year. Drilling works were stopped at 4728 m depth due to well hole complications occurred while drilling operations on 20 May 2015. As a result of mine-geophysical surveys conducted in the well, Miocene succession of strata was discovered. There recovered industrial gas and condensate from top Miocene formations based upon test & development (initially average daily gas production 450 ths. m<sup>3</sup>, condensate production 80 tons). Such outcome demonstrated oil and gas bearing level of Miocene formations in Absheron peninsula that it would foster expansion of exploratory-prospecting and drilling o additional new wells across the peninsula in subsequent years.

The geological structure and oil & gas bearing of fields were studied as a result of the prospecting and exploratory works in 2015.





## V. DEVELOPMENT OF OIL AND GAS FIELDS

There discovered 81 oil and gas fields in the territory of Azerbaijan Republic up to 01 January 2016. At the present, the hydrocarbon is extracted from 61 fields, 20 fields have not been involved to the operations for this or that reason and/or their development have been abandoned. 41 fields of those under development are onshore (including 17 fields are operated by "Azneft" PU, 24 fields by Joint Ventures and Operating Companies) and 20 of them are offshore (including 14 fields are operated by "Azneft" PU, 6 fields by Joint Ventures and Operating Companies) sites of Azerbaijan.

1926.8 mln. tons oil-condensate and 740.2 bln. m<sup>3</sup> gas were produced from the developed fields for the whole country from the beginning of the development up to 01 January 2016. Also, 973.6 mln. tons oil-condensate and 138.4 bln. m<sup>3</sup> gas were produced from onshore fields and 953.1 mln. tons oil-condensate and 601.8 bln. m<sup>3</sup> gas were produced from offshore fields.

385.3 mln. tons oil and 115.7 bln. m<sup>3</sup> gas have been produced on Azeri-Chirag-Gunashli oilfield from the beginning of the development (since 1997) by AIOC. Since May 2000 there started injection of water and gas to the Pereriv formation and 295.5 mln. m<sup>3</sup> water and 62.1 bln. m<sup>3</sup> gas were injected to the reservoir for maintaining pressure of the formation.

17.7 mln. tons oil-condensate and 67.9 bln. m<sup>3</sup> gas were produced on Shah Deniz field from the beginning of the development (since 2006).

Table V.10

		Oil, Mton		Gas, mln. m <sup>3</sup>	
		Yearly	From the beginning of development	Yearly	From the beginning of development
AZNEFT PU	Offshore	6446,4	503775	6116,2	260187
	Onshore	335,3	331700	70,1	81376
	<b>Total</b>	<b>6781,7</b>	<b>835475</b>	<b>6186,3</b>	<b>341563</b>
JV+OC	Offshore	119,1	46353	576	158059
	Onshore	1264,4	641926	149,8	57050
	<b>Total</b>	<b>1383,5</b>	<b>688279</b>	<b>725,8</b>	<b>215109</b>
ACG	Offshore	31159	385335	12217	115691
Shah Deniz	Offshore	2266,4	17669	9910	67853
<b>Cumulative</b>	<b>Offshore</b>	<b>40199</b>	<b>953132</b>	<b>28820</b>	<b>601790</b>
	<b>Onshore</b>	<b>1599,7</b>	<b>973626</b>	<b>219,9</b>	<b>138426</b>
	<b>Cumulative</b>	<b>41799</b>	<b>1926758</b>	<b>29040</b>	<b>740216</b>

Umid gas-condensate field was involved in commercial field development in 2012. Up to 01 January 2016, 153 ths. tons condensate and 955 mln. m<sup>3</sup> gas were produced from the aforesaid field. 2 wells are onstream in the field and gas to the extent of 900 ths. m<sup>3</sup>/day, condensate to the extent of 150 tons/day are recovered from these wells. At the present, drilling works are ongoing in well №14 in Umid field. Drilling works to the extent of 2601 m were performed in the field in the reporting year.

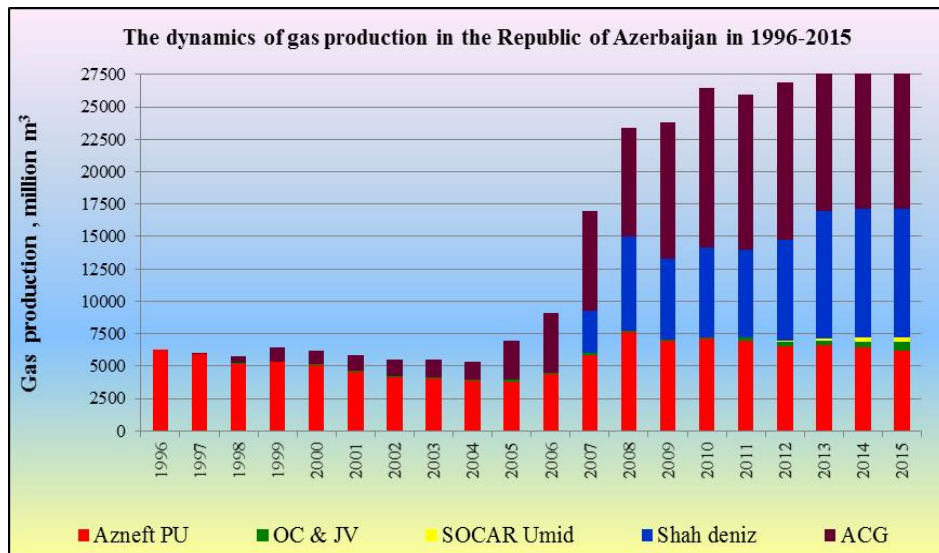


Diagram V.1

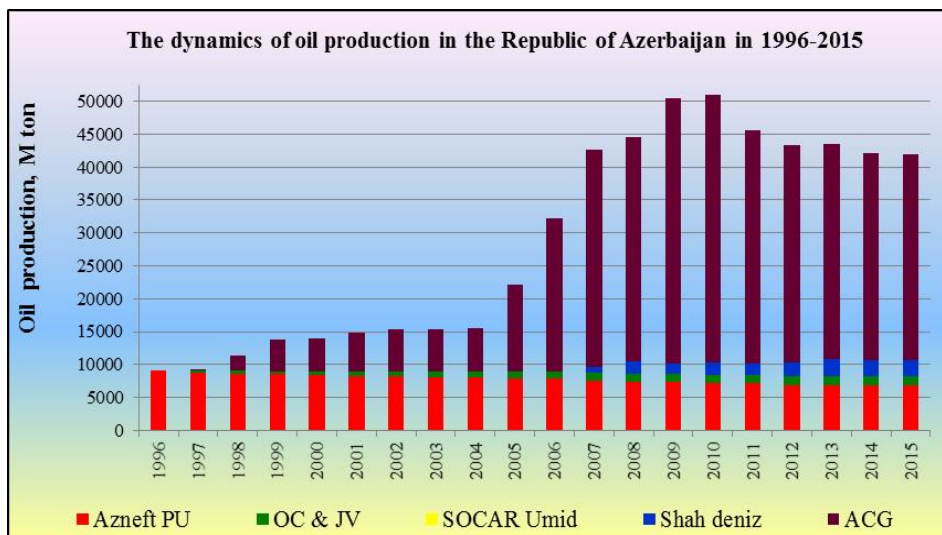
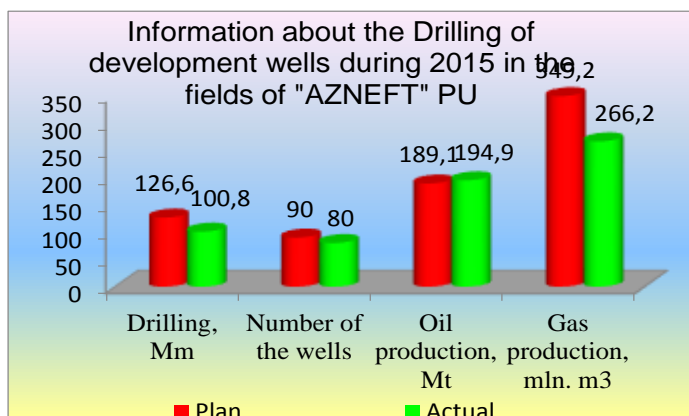


Diagram V.2

Development drilling to the extent of 100.8 thousand m were carried out in the fields operated by “Azneft” PU, 80 wells were put into operation (including 5 gas injection wells) and 195 thousand tons oil and 266.2 mln. m<sup>3</sup> gas were produced from these wells in 2015. 4.1 thousand tons oil was produced from 15 new wells drilled from onshore fields and 190.8 thousand tons oil was produced from 65 new wells drilled from offshore fields.





**Diagram V.3**

28 new wells were put into operation by Joint ventures and Operating companies in 2015.

There started drilling of horizontal wells through jacket 20 in Western Absheron field operated by Absheronneft OGPD as from 2014. Drilling of 10 wells was foreseen through the jacket. Three horizontal wells (22, 24 and 28) were drilled up to date and put into commissioning with 20 m<sup>3</sup>/day recovery. Presently, drilling of subsequent well 20 has been started at this jacket.

Analysis of results of the operation drillings carried out over the past years proves drilling and commissioning of new wells to be one of the key actions for stabilization and partial enhancement of production on wells. Well network being under development, was recovered partly through production drilling, and old wells out of operation are replaced with new ones and subsequently, there emerged opportunities for necessary technological operation of any field.

Lots of works were carried out in view of improvement of water injection into strata and application and deployment of new progressive methods in order to maintain formation pressure at the fields under development and oil flow rate of productive formation in 2015.

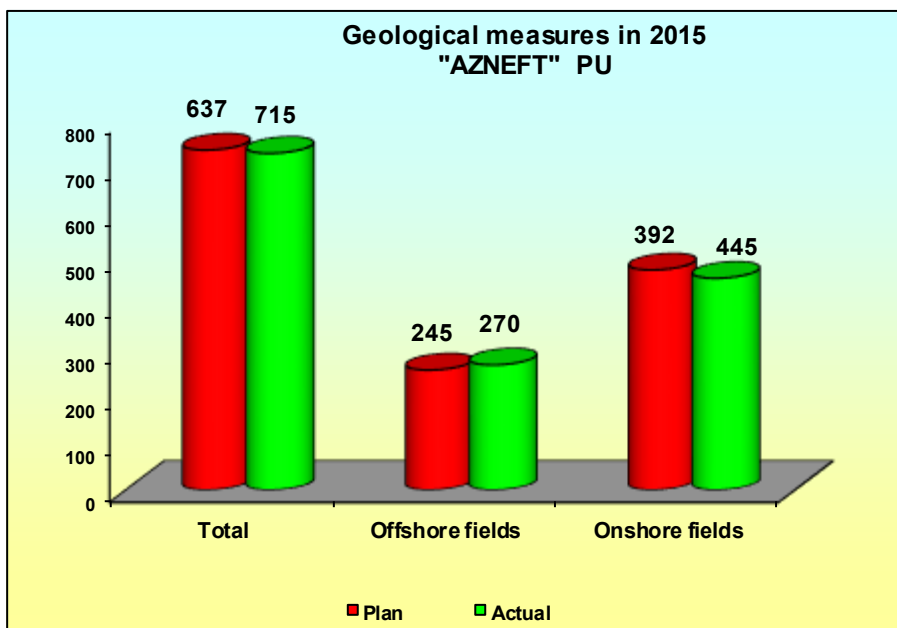
In respect to maintenance of pressure of the formation in the reservoirs on OGPDs of "Azneft" PU, there injected 3726.4 thousand m<sup>3</sup> water to the reservoirs and 104.2 thousand tons of additional oil was produced. Water to the extent of 3096.1 thousand m<sup>3</sup> were injected to the reservoirs for the purpose of the artificial conditions of the offshore fields and as a result, 88.1 thousand tons of additional oil was produced. Also, for the purpose of the artificial conditions of the onshore fields water to the extent of 630.3 thousand m<sup>3</sup> were injected to the reservoirs and as a result, 16.2 thousand tons of additional oil was produced.

In respect to maintenance of pressure of the formation in the fields operated by Joint ventures and Operating companies, there injected water to the extent of 8234.5 thousand m<sup>3</sup> in 2015.

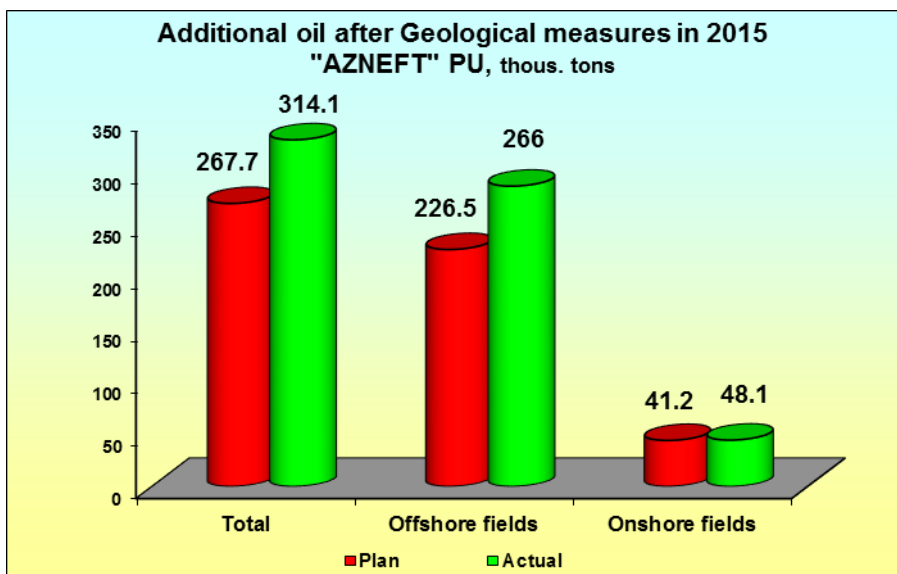
8.0 thousand tons of additional oil (including 7.6 thousand tons oil offshore and 0.4 thousand tons oil onshore) was produced by "Azneft" PU through other methods (III stimulation methods) for enhancement of the oil output of strata.

"Azneft" PU carried out 715 geological actions in 2015 and as a result, 314.1 thousand tons of additional oil was produced. 270 geological actions were carried out at offshore fields and as a result, 266 thousand tons of additional oil was produced. Also, 445

geological actions were carried out at onshore fields and as a result, 48.1 thousand tons of additional oil was produced.



**Diagram V.4**



**Diagram V.5**

Drilling works to the extent of 9265 m were carried out and 5 gas injection wells were drilled in "Garadagh" underground gas storages in 2015. There injected gas to the extent of 920.7 mln. m<sup>3</sup> at Galmaz field and 886.8 mln. m<sup>3</sup> at Garadagh field (totally 1807.5 mln. m<sup>3</sup>) and active gas volume on gas storages 2694.6 mln. m<sup>3</sup> in the course of season.

Different range of hydrodynamic mining-geophysical study works were implemented and water, oil and gas samples were taken from deepwater and wells for analysis in laboratory in respect to control over oil & gas fields development according to plans and tasks foreseen for 2015.

Several measurements were made in respect to formation pressures in 520 wells, bottom pressures in 501 wells, static level in 1546 wells and dynamic level in 1278 wells and regular production in 5861 wells and physical-chemical analysis of 4082 oil, 197 gas and 3621 water samples were made in the reporting year. In view of field development control,

INNk measurement works were carried out in 27 wells, AKS measurement works in 28 wells and, flow profiles were fixed in 16 wells, watering interval in 98 wells, absorption profile in 11 wells and strata temperature were measured in 510 wells and technical condition of pipeline was inspected through geophysical method in 30 wells. Survey works were carried out in set point in 180 wells (including 19 water injection wells), through build-up of pressure in 13 wells, setting of hydrorelation in 3 wells. Also, fluid level was determined in 151 wells, and formation and bottom pressures in 71 wells, formation temperature in 75 wells, flow profiles in 16 wells, GK-NGK in 3 wells, INNk in 3 wells, AKS in 2 wells were measured and survey was conducted through build-up of pressure in 3 wells.

The following actions should be taken by SOCAR in the long term in order to stabilize oil & gas production, enhance partially and improve production-financial condition of the Company:

- Completion of construction of deepwater jacket №7, drilling of 20 new wells, expansion of the jacket as per the results and improvement of water injection system at Gunashli field;
- Drilling of additional 6 operating wells in view of outcomes of well №112 drilled from jacket №112 which constructed at "Chilov" field;
- Expansion of jacket №2585 and drilling of additional 6 wells, drilling of additional 9 operating wells through jacket №1954a, and completion of construction of jackets №1637a, 602a, 620 and drilling of 36 new wells at "Neft Dashlary" field; erection of jacket № 1541a for 14 wells, jackets № 331, 1646, 1779, 363, 360, 750 for 10 new wells and launching of drilling works in these jackets;
- Construction of deepwater jackets №1351, 1352, 1353, 1354, 1355 at "Palchig Pilpilesi" field and drilling of 50 operating wells through these jackets;
- Completion of drilling works in deepwater jacket №122 at "Bulla-deniz" field, completion of construction of deepwater jacket №6 and drilling of 4 operating wells through this jacket;
- Drilling of 16 operating wells through deepwater jacket №1150 at Pirallahy field;
- Construction of deepwater jackets №700, 730, 790, 750, 760 at Darwin section field and drilling of 66 operating wells through these jackets;
- Continuation of drilling of horizontal wells through jacket №20 at "Western Absheron" field, construction of deepwater jackets №10, 54 and drilling of 10 new wells through each of these jackets;
- Construction of jacket №90 at Absheron section field and drilling of 8 operating wells through this jacket;
- Continuation of drilling works in deepwater jacket №1 at "Umid" field, designing of deepwater jacket №2 through which drilling of 12 operating wells is foreseen;
- Involvement of "Babek", "Absheron", "Garabagh" and "Ashrafi" fields into development.

## **VI. DRILLING**

The drilling works were carried out to the extent of 104411 m against plan of 138569 m by the drilling organizations of SOCAR in 2015 and the plan for both purposes was fulfilled as 75.3%. The plan for development drilling was fulfilled as 78.3%, i.e. 103411 m against plan of 132069 m. 73 operating wells were handed over against 89 wells to be completed with construction. The plan for exploration drilling was fulfilled as 15.4%, i.e. drilling works to the extent of 1000 m against plan of 6500 m.

Plan for offshore drilling works was fulfilled as 67.1%, totally 65397 m against plan of 97519 m, including production drilling to the extent of 65397 m such as 70.3% against plan of 93019m. In 2015, planned construction of 53 wells, at the end of year 39 (-14 wells) wells were completed and delivered to the customer. No exploration works were carried out against the plan of 4500 m for the exploration drilling.

Plan for onshore drilling works was fulfilled as 95.0%, totally 39014 m (against plan of 41050 m), including production drilling to the extent of 38014 m (against plan of 39050 m) such as 97.3%, exploration drilling to the extent of 1000 m (against plan of 2000 m) such as 50.0%. 34 onshore operating wells (against plan of 36 wells) were finished with construction in 2015.

Offshore production drilling works were carried out at the fields of Bulla-deniz, Umid, Gunashli, Chilov, Neft Dashlary, Darwin section area and Western Absheron.

Onshore production drilling works were carried out at the fields of Garadagh, Pirallahy, Seadan, Zarat and exploration drilling works at the field of Eldaroyugu.

There performed drilling works to the extent of 91091 m against plan of 108869 m by "Complex Drilling Works" Trust. The plan was fulfilled on both targets to the extent of 83.7%, production drilling plan was fulfilled to the extent of 84.3%; the drilling works were performed to the extent of 90091 m against plan of 106869 m. Exploratory drilling plan was fulfilled as 50% in the reporting period, so drilling works were performed to the extent of 1000 m against plan of 2000 m. The plan on wells finished with construction by the Trust was fulfilled as 86.3%, totally 69 wells (-11) were handed over against plan of 80 wells. Neft Dashlary Production Section handed over 28 wells (-6) against plan of 34 wells; Absheron Production Section handed over 19 wells (-4) against plan of 23 wells; Gunashli Production Section handed over 6 wells (-3) against plan of 9 wells; Garadagh Production Section handed over 5 wells (-1) against plan of 6 wells; Siyazan Production Section handed over 10 wells (3) against plan of 7 wells; Bulla - 8 March Production Section handed over 1 well and Umid Production Section handed over 1 well as planned.

SOCAR-AQS LLC fulfilled the drilling progress plan to the extent of 44.8% in 2015. The drilling works to the extent of 13320 m were performed actually against plan of 29700 m and 4 wells (-5) against 9 wells to be completed with construction, were put into operation.

SOCAR continued a number of works on upgrading of facilities/hardware and usage of high technology concerning development of the drilling works in 2015.

Certain works were implemented in dissemination of application of hydrocarbons and water based polymer solutions through fixing into Top drive drilling rigs which meet high standards in drilling operations. LWD, MWD, PWD telemetric measurement systems, hydrocarbon based drill mud, hydraulic underreamers, well engines, Yass-accelerator and other applications of Schlumberger company which meet high

standards, were used and drilling control and the operations were automatized based upon electronics in view of necessity of new technologies in order to achieve high economic indicators in drilling a number of wells. Remotely operated vehicle system is being used in drilling deep-hole wells. State-of-the-art drilling rigs were widely used in regard to qualitative treatment of drilling mud in 2015. Application of water-based polymers and hydrocarbon based muds led to high technical and economic parameters while drilling in wells 124, 125 at "Bulla-deniz" site and wells 2604, 2593, 2594, 2598 at "Neft Dashlary" field. Drilling works were successfully completed in wells 485, 486, 487 in "Garadagh" area by application of "Invermul" diesel based cheaper drill mud through "Base oil" mud.

Wide use of "SWACO" treatment facilities was planned and implemented in wells 124, 125 at "Bulla-deniz" site and wells 2598, 2603, 2604, 2680, 2688 at "Neft Dashlary" field as well as wells located at "Garadagh" site and "Pirallahy" site within 2015. Application of nanotechnology ("Nanomay" reagent) was followed up while drilling operations and was practiced in 3 wells (wells 771, 772, 773) located at Darwin section area in 2015. Technical parameters of the mud remained unchanged for a long time as a result of nanotechnology application.

Construction of jacket 7 for 32 wells planned to be drilled through two modern drilling rigs and construction of jacket 6 for 4 wells were completed to ensure full operation of hydrocarbon reserves in Bulla-deniz site in respect to full field development of "Gunashli" site and fabrication of hydro dynamic facilities was started.

Drilling of horizontal wells, which developed through filter bottom from jacket 20 in Western Absheron field, was started and such two wells will be handed to the customer till the end of current year.

Construction works were continued as per approved project for new and modern semisubmersible floating drilling rig DSS 38E in order to run exploration and drilling works in the deepwaters of Caspian Sea. The process of replacement with state-of-the-art rigs of drilling rigs, which used for a long time by SOCAR in drilling of deep oil & gas wells at offshore/onshore fields, was continued. Therefore, two modern drilling rigs "ZJ-50" with high load bearing capacity and flexible handleability, which produced in foreign country and satisfy high standards in drilling operations, were purchased in 2015 and use of them is planned for drilling of new wells at "Gunashli" field.

Application of modern technology (PDC with high hydromonitor effect, as well as bicentric bits, well bottom motors, MWD devices, stabilizers, JASS, thick-wall drill pipes and usage of polymer and hydrocarbon-based drill muds etc.) upon the wells were important in view of acceleration of the drilling and prevention of the risks and accidents in the procedure.

Use of such facilities resulted positively for regular control of well hole parameters in drilling of the horizontal wells. Also, replacement of obsolete rig fleet started by SOCAR as from 2013 and in total, eight modern drilling rigs (4 rigs ZJ-50, 2 rigs ZJ-70 and 2 rigs ZJ-40) were procured within 2013-2014.

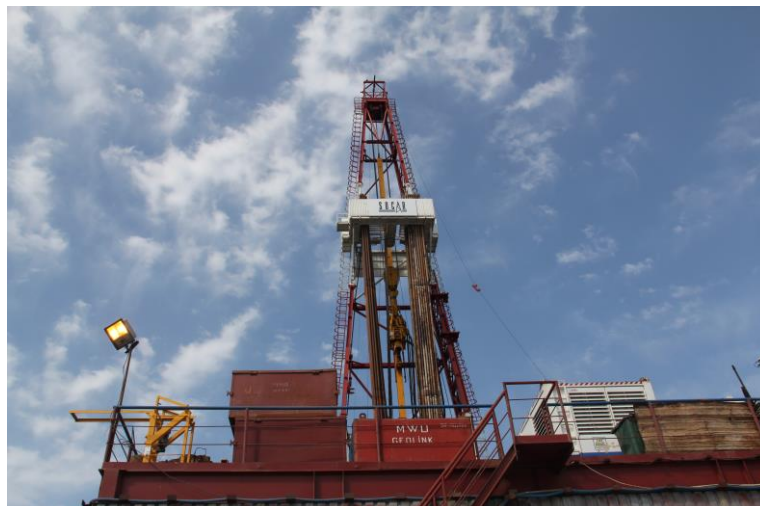
Several softwares were purchased and delivered in industrial facilities in order to implement increase of process control over well drilling by SOCAR and to provide direct visual control of parameters of drilling practices. It has been positively influencing upon well drilling.

Fulfilment of the drilling works to the extent of 143928 m and consequently, commissioning of 87 wells on SOCAR has been forecasted for 2016.

## **Proposals on drilling area concerning the improvement of the operational-financial situation of SOCAR:**

Arrangement of drilling works according to international standards and wide use of the modern technologies are important for safe and efficient development of the drilling works. Implementation of the following actions has been planned for achievement of the forthcoming purposes:

- Deployment of application of new modern mobile drilling rigs for improvement of quality indicators of well drilling;
- Achievement of drill upside by using services of competent subcontractors through more innovative techniques;
- Continuance of the drilling of operating wells through current offshore drilling rigs in Umid, Bulla-deniz, Gunashli, Neft Dashlary, Darwin section, Western Absheron and Chilov fields as well as new jackets to be constructed for keeping annual oil and gas production stable;
- Application of new type muds used for maintenance of ecological cleanness as well as prevention of pollution of reservoirs while well drilling;
- Succession in casing running in well construction and use of “liner -hanger” systems for cementing at zero pressure;
- Use of modern casing guns reducing pollution of reservoirs and performance of such works through brines for casing puncher;
- Achievement of well completion with casing pipe and perforation through alternative technologies by gravel pack on back of filter pipe or filter by bottoming of extending filter and by cementation in compliance with every method selected;
- Continuation of exploratory-prospecting works in Bulla-deniz and start-up of preparation works in Babek and other structures;



## VII. OIL AND GAS PRODUCTION

41.6 mln. tons oil and 29 bln. cubic meters gas were produced in the country in 2015. The oil production was less to the extent of 0.437 mln. tons and gas production was less to the extent of 0.64 bln. cubic meters as compared to 2014;

31159 thousand tons oil was produced from ACG fields and 2266.4 thousand tons condensate was produced from Shah Deniz field in 2015.

### Oil production on SOCAR, thousand ton

Table VII.1

	2015				2015 actual	2015/2014 difference + ; -
	forecast	actual	+ / -	%		
<b>SOCAR</b>	8300,0	8160,6	-139,4	98,3	8320,4	-159,8
“Azneft” PU	6810,0	6777,8	-32,2	99,5	6817,1	-39,3
OC/ JV	1430,0	1327,8	-102,2	92,9	1448,4	-120,6
SOCAR Umid LLC	60,0	55,0	-5,0	91,7	54,9	0,1

0

8160.6 thousand tons oil was produced from fields developed by SOCAR in 2015 that subsequently forecast was fulfilled less to the extent of 139.4 thousand tons, i.e. 98.3%. The actual oil production in 2015 was less to the extent of 159.8 thousand tons as compared to 2014.

### Gas production by SOCAR, million m<sup>3</sup>

Table VII.2

	2015				2015 actual	2015/2014 difference + ; -
	forecast	forecast	forecast	forecast		
<b>SOCAR</b>	6510,0	6871,5	361,5	105,6	7222,8	-351,3
“Azneft” PU	5710,0	6146,2	436,2	107,6	6399,3	-253,1
OC/ JV	450,0	387,5	-62,5	86,1	466,3	-78,8
SOCAR Umid LLC	350,0	337,8	-12,2	96,5	357,2	-19,4

The gas production forecast in 2015 was fulfilled to the extent of 105.6 % and totaled to 6871.5 mln. m<sup>3</sup> within SOCAR. This figure was less to the extent of 351.3 mln. m<sup>3</sup> as compared to 2014.

There produced gas to the extent of 3259.0 mln. cubic meters from ACG field and to the extent of 3073.4 mln. cubic meters from Shah Deniz field by SOCAR in the reporting period.

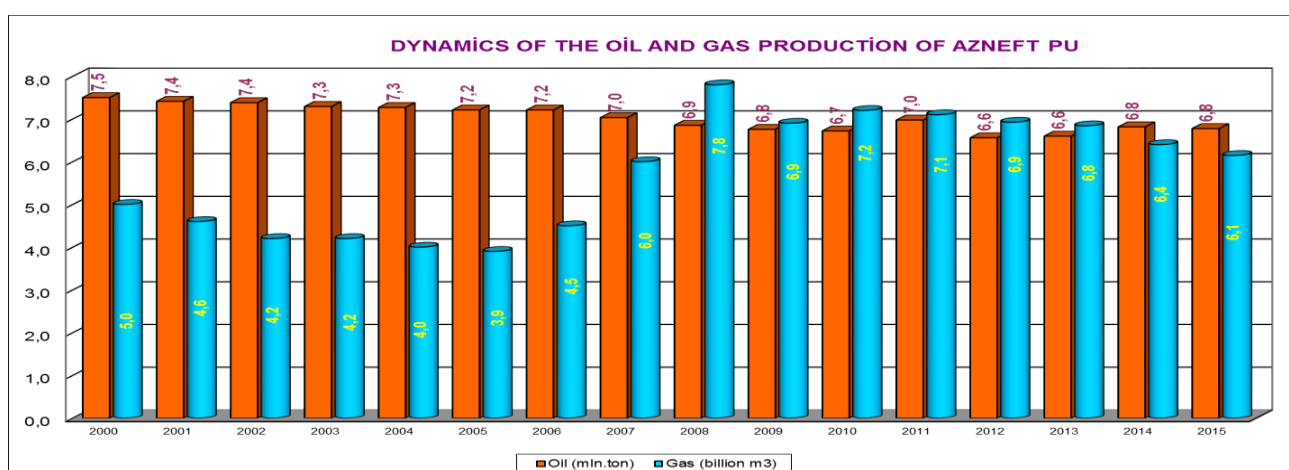


Diagram VII.1



96.1% of the produced oil was extracted from declining well stock, 2.9% from the new wells and 0.96% from the non-operating stock in 2015:

Table VII.3

	Total oil production, ths. tons	Including:					
		On declining well stock		On wells of non-operating stock		On new wells	
		Production, ths. tons	Share in total production, %	Production, ths. tons	Share in the total production, %	Production, ths. tons	Share in the total production, %
<b>SOCAR</b>	<b>8160,6*</b>	<b>7840,8</b>	<b>96,1</b>	<b>78,7</b>	<b>0,96</b>	<b>239,1</b>	<b>2,9</b>
"Azneft" PU	6775,8	6494,0	95,8	58,3	0,86	223,5	3,3
OC/ JV	1327,8	1291,8	97,3	20,4	1,5	15,6	1,2
SOCAR Umid LLC	55,0	55,0	100,0				

\* 1.98 thousand tons condensate generated from Underground Gas Storage (UGS) is added.

18.5% of the total oil production was carried out by blowout, 61% by gaslift and 20.5% by borehole pump methods:

Table VII.4

	Total oil production, ths. tons	Including:					
		Blowout		Gas lift (air-lift)		Borehole pumps and swabbing	
		Production (ths. tons)	Share in the total production, %	Production (ths. tons)	Share in the total production, %	Production (ths. tons)	Share in the total production, %
<b>SOCAR</b>	<b>8160,6*</b>	<b>1508,2</b>	<b>18,5</b>	<b>4979,9</b>	<b>61,0</b>	<b>1670,1</b>	<b>20,5</b>
"Azneft" PU	6777,8	1407,0	20,7	4872,3	71,9	496,1	7,3
OC/ JV	1327,8	46,2	3,5	107,6	8,1	1174	88,4
SOCAR Umid LLC	55,0	55,0	100,0				

\* 1.98 thousand tons condensate generated from Underground Gas Storage (UGS) is added.

The well stock on SOCAR up to 01.01.2016 is shown in the following table: the operating well stock totaled to 8638 wells (including 174 gas wells), the development well stock totaled to 6311 wells (including 117 gas wells):

Table VII.5

	Operating well stock		Development well stock		Non-operating well stock		Well development after drilling	
	01.01.2014	01.01.2015	01.01.2014	01.01.2015	01.01.2014	01.01.2015	01.01.2014	01.01.2015
<b>SOCAR</b>	<b>8769</b>	<b>8638</b>	<b>6560</b>	<b>6310</b>	<b>2176</b>	<b>2302</b>	<b>33</b>	<b>26</b>
"Azneft" PU	3342	3279	3068	3038	256	230	18	11
OC/ JV	5425	5357	3490	3270	1920	2072	15	15
SOCAR Umid LLC	2	2	2	2				
<b>UGS</b>	<b>161</b>	<b>142</b>	<b>151</b>	<b>132</b>	<b>10</b>	<b>10</b>	<b>0</b>	<b>0</b>

**Integrated actions developed and carried out on oil & gas recovery by SOCAR in 2015 are as follows:**

- Surveys were carried out for involvement of exploration targets to intensive development, oil and gas resources were reestimated and infrastructures were expanded through designing of new hydrotechnical facilities and construction works in view of optimization of field development projects and remaining oil & gas reserves. 310 thousand tons oil was produced current year as a result of successful continuation of drilling in platforms 1887, 2521, 2585, 2150, 418a and 1954 a at Neft Dashlary field. So, the works carried out for construction of 4 platforms in 2015 are as follows:

### **On Neft Dashlary field**

- Construction of platform 1954a planned for drilling of 10 wells was completed, one well was drilled and put into commissioning and drilling of second operating well was started;
- 14 well holes were fixed within construction of platform 1637a for drilling of 14 wells and erection of drilling unit is ongoing;
- 7 substructures, 6 intermediate sections, 2 footbridges were fabricated within deepwater jacket 620a, which foreseen for drilling of 8 wells, and 42 piles were lined for jacket piling and the works are ongoing;
- 14 well holes were fixed within construction of deepwater jacket 602a for drilling of 14 wells and preparatory works for erection of drilling unit are ongoing;
- Construction works were continued within the fabrication of enlarged oil collector 2a. Erection of produced water disposal units and precommissioning of the site were planned for I quarter of 2016;
- 13773 tons of additional oil was produced as a result of injection of new makeup substances into annular space in order to take back mechanical mixtures from the wells, and application of technology for consolidation of well bottom with polymer (LAPROL) plugback material, of "PADUS-2" paraffin cutters and cleanup units, and regulation of watering in operating wells with elastic-solid mass, prevention of sand ingress from strata, injection of new liquid (NSA-1) reagent for enhancement of permeability of well bottom and other actions;

### **On Western Absheron field**

- As a result of repair and rebuild of the existing facilities and construction of new facilities at "Western Absheron" field, increase of oil production was achieved;
- Construction of jacket 20, which planned for drilling of 10 wells, was completed and two wells were put into operation after drilling. At the present, drilling of third well was started;
- Preparatory works for sea transportation of assembled substructures are ongoing in order to construct deepwater jackets 10 and 54 through which 10 wells are to be drilled;
- 658.7 tons of additional oil was produced as a result of well bottom consolidation through gasified plug-back in 33 wells, prevention of sandy deposits in lift pipes through application of nanosystem, cleanup units, application of technology for consolidation of well bottom with polymer (LAPROL) plugback material, technology for microbiological treatment (stimulation of formation) by usage of different outputs (activated sludge, serum, output of champagne factory etc.), consolidating nanosystems in prevention of sand ingress from strata, nanosystems in isolation of produced waters, consolidation of well bottom with A-4 reagent, KAB 2014 reagent for corrosion protection of watery oil recovery wells and grid filter complex of wells completed after drilling.

### **On Gunashli field**

- Construction-assembly works in site of "Fabrication of deepwater jacket 7" were completed and installation of equipment is under completion and start-up of drilling works is pending.



### **On Bulla-deniz field**

- Construction works in site of “Fabrication of deepwater jacket 6” for drilling of 4 wells were completed and installation of drilling units by “SOCAR AQS” was started;
- Construction of substructures at Zygh area in fabrication of deepwater jacket 12 for drilling of 5 wells was started;
- 32910 tons of additional oil was produced by usage of chemical reagent SNPX-2005 and “PADUS” wax cutter in order to prevent asphalt-resin-wax sediments;
- Integrated actions program was developed and implemented in respect to stabilization of oil & gas recovery in the fields “Gunashli”, “Neft Dashlary”, “Bulla-deniz”, “Absheron section” etc.
- Works on fixing of vacuum compressors in platforms were continued in order to collect low-pressure gases at “Neft Dashlary” OGPD and daily average gas to the extent of 1.1 mln. m<sup>3</sup> were collected and delivered through overall 85 compressors and elimination of environmental damage was achieved;

Five wells were drilled and put into operation within Gas Storages Maintenance Department in 2015. The site “Expansion of new gas distributing point at Garadagh Underground Gas Storage” was categorized into 2 complexes. Installation of processing units and laying of sleeve pipelines and yard pipes was planned for I complex. 12-well manifold was fabricated and sleeve lines to the extent of 19983 m made of 114 mm steel pipe were laid and put into operation for 12 wells accordingly in view of I complex under reconstruction of Garadagh Underground Gas Storage. After the works such as construction of the pending methanol pumphouse, assembly of heating system, improvement and acknowledgement of electricity and automatics, a pumphouse at 15.0x15.0 m dimensions was constructed, 46 dosator pumps were fixed, and boiler house at 9.0x9.0 m dimensions and greenhouse at 3.0x4.5 m dimensions with 0.4 kV capacity were constructed. At the present, construction-assembly works are ongoing in the site. II complex of the site is planned to be put into commissioning for the end of 2016.

426 mm lines to the extent of 1998 m were laid for connection of old and new Gas Distributing Points. Sleeve line to the extent of 13400 m was laid for 5 wells located at old Garadagh Gas Distributing Point.

Scientific-research and engineering works were expanded and state-of-the-art technologies were tested and applied in the production in order to optimize oil and gas recovery processes from technological and economic standpoints. Furthermore, positive outcomes were resulted from application of different structured depth pumps, chemical compositions, nanotechnologies, new repair and maintenance equipment and such works are successfully continued.

## VIII. GAS COLLECTION AND TRANSPORTATION

**The actions implemented in gas collection and transportation are as follows:**

- Associated gas to the extent of 1.0 - 1.1 mln. cubic meters per day is collected from the wells and returned to the system by 85 OGC vacuum compressors which installed in sites for collection of low pressure gas at “Neft Dashlary” OGPD.
- Gas-lift compressor station at deep water jacket 4 of “28 May” OGPD was put into operation.

*Information on the works carried out within 2014-2015 for underground gas storages:*

- 6 wells were drilled in 2014 (3 wells such as 627, 630, 636 at Galmaz Underground Gas Storage and 3 wells such as 469, 478, 480 at Garadagh Underground Gas Storage);
- 5 wells were drilled in 2015 (5 wells such as 482, 483, 485, 486, 487 at Garadagh Underground Gas Storage);
- 12-well manifold system was constructed at new Gas Distributing Point of Garadagh Underground Gas Storage and the works are under completion;
- 5-well manifold system was constructed at old Gas Distributing Point of Garadagh Underground Gas Storage and put into operation;
- Two new dust catchers at the capacity of 5 million were erected at old Gas Distributing Point of Garadagh Underground Gas Storage and put into operation;
- Two 10 mln. separators were erected at new Gas Distributing Point of Garadagh Underground Gas Storage and put into operation;
- The works within terms of reference for enhancement from 7 mln. m<sup>3</sup>/day up to 10 mln. m<sup>3</sup>/day of the capacity of Compressor Station 2 at Garadagh Gas Compressor Station, were completed and the facility was put into commissioning;
- Two 10 mln. dust catchers were erected at Galmaz Gas Compressor Station and put into operation;
- Construction-assembly works were completed for transition from individual water cooling system into overall water system at Compressor Station 2 of Garadagh Gas Compressor Station and the facility was put into commissioning.



**The actions carried out in gas transportation in 2015 are as follows:**

- Construction-assembly works for 24 km gas pipeline and laying of Fibro optic cable were completed for 114-138 km part at I output complex and were connected to current pipeline. State Acceptance Commission held a meeting in the facility on 11 November 2015 and the site was put into operation;
- Construction-assembly works for 9.2 km gas pipeline and laying of Fibro optic cable were completed for 138-148 km part at II output complex and were connected to current pipeline. State Acceptance Commission held a meeting in the facility on 11 November 2015 and the site was put into operation;
- Construction-assembly works for 27.5 km gas pipeline and laying of 13.2 km Fibro optic cable were completed for 170-210 km part at III output complex and were connected to current pipeline. Construction-assembly works are ongoing in the site;
- Ø530 mm used pipes were utilized to repair of 14646 r/m corroded section of “Kursangi-Shirvan Gas Distributing Station” gas main;
- Ø720 mm sleeve gas pipeline to the extent of 5450 r/m of “Shirvan Heating Electric Station” used pipes was reconstructed and preparatory works are ongoing for connecton into current line;
- Ø530 mm pipeline to the extent of 1584 r/m at 22-24 km section of “Duvanny-Garadagh” gas main was reconstructed;
- Ø530 mm pipeline to the extent of 2074 r/m newly laid at 15-17.4 km section of “Goychay-Ujar” gas main was connected into onstream gas pipeline;
- Ø325 mm sleeve pipeline to the extent of 4856 r/m section of “Goranboy Gas Distributing Station” gas main was overhauled and the works are ongoing;
- Ø325 mm pipeline to the extent of 1702 r/m at 129-131.2 km section and Ø325x8 mm pipeline to the extent of 1036 r/m at 49-50 km section of “Yevlakh-Sheki-Balaken” gas main were overhauled and put into operation;
- Ø325x8 mm pipeline newly laid to the extent of 13083 r/m was overhauled and put into operation in relation to capital repair of 26-48 km section of Ø700 mm “Yevlakh-Nakhichevan” gas main;
- Ganja river crossings (I and II lines), Zayam river crossing (II line), Gushgara river crossings (I and II lines), Jayir river crossing (I line), Shamkir river crossing (I line), Agstafa river crossing (I line) of Ø1020 mm “Gazimammad-Gazakh” gas main were overhauled through Ø1020x16 mm concrete pipes;
- Pipelines to the extent of 4953 r/m at 32-46 km section and to the extent of 6028 r/m at 62-99 km section of “Azadkend-Imishli” gas main were overhauled and put into operation;
- Valve 5 at technological parts of 21 Gas Distributing Points and 3 gas measurement junctions was reconstructed and new module station was installed and put into operation at Mashtaga and Mehdiabad Gas Distributing Station in 2015;
- Underground reservoirs of 34 units and 44 units at the gas distributing stations at the subordination of MGCSs were procured, fabricated and put into operation;
- 31 new cathodic protectors and 1 drainage facility was laid and put into operation for corrosion protection of gas mains;
- 252 sets of insulating flanges were fixed over input and output lines of the gas distributing stations in 2015;
- 1 flow gas chromatograph was fixed at service areas of MGCSs belonged to Gas Export Department, including interstate gas measuring stations in respect to identification of physical and chemical properties of gas;

- Construction works were completed in the site of reconstruction works for collection and delivery of low-pressure associated gas recovered from the fields developed by Balakhany Operating Company.

So, length of newly laid gas pipelines on gas main area was 44.4 km, overhauled gas pipelines was 42.3 km in 2015.

Number of newly installed gas distributing and regulatory points was 3, overhauled gas distributing and regulatory points was 21 in 2015.

**The actions carried out in gas supply in 2015 are as follows:**

Gas pipelines totally to the extent of 518.5 km on “Azerigaz” Production Unit were overhauled in 2015, including gas supply network of Baku city to the extent of 255.4 km, gas supply network of the regions to the extent of 263.1 km.

New gas pipelines totally to the extent of 12224.8 km were installed in 2015, including gas supply network of Baku city to the extent of 41.8 km, gas supply network of the regions to the extent of 12183.0 km.

In total, 197172 domestic gas meters were installed and replaced in apartments of the subscribers in the reporting year, including 56791 meters in Baku city, 140381 meters in the regions. The provision level of domestic gas meters for subscribers who supplied with natural gas reached to 100% for overall Republic.

90866 “smart-card” type domestic gas meters were fixed and replaced for subscribers, including 55785 meters in Baku city and 35081 meters in the regions.

430 localities were supplied with gas by “Azerigaz” PU in 2015 and they received natural gas.

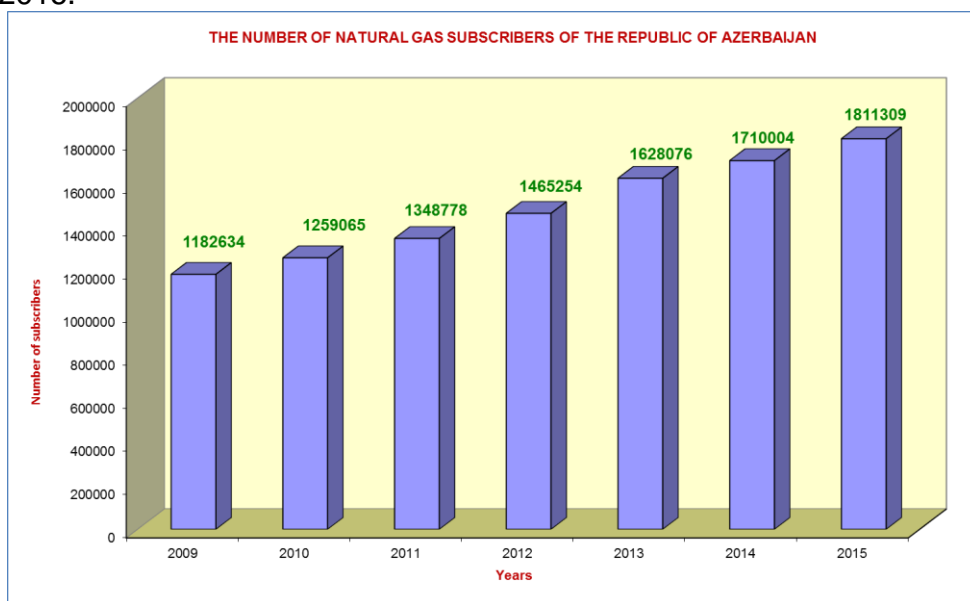
Number of newly installed gas distributing and regulating points totaled to 5.

Number of new subscribers supplied with gas totaled to 104309, including 23609 subscribers in Baku city and 80700 subscribers in the regions in 2015.

Number of the subscribers using natural gas was 1811309, including 742949 subscribers in Baku city and 1068360 subscribers in the regions up to 01 January 2016.

Number of the subscribers provided by gas meters was 1811309, including 742949 subscribers in Baku city and 1068360 subscribers in the regions up to 01 January 2016.

Number of the subscribers provided by “smart-card” type gas meters was 952704, including 698203 subscribers in Baku city and 254501 subscribers in the regions up to 01 January 2016.



**Diagram VIII.1**

## IX. OIL REFINERY

**Oil refinery.** In 2015 the employees of SOCAR oil refinery complex worked successfully for providing the demand of our country on oil derivatives and for implementing the commitments of the Company on exporting oil derivatives as every year. 6478.9 thousand tons crude oil was processed at SOCAR refinery complex in 2015. Out of the crude oil refined in the reporting period, there derived 1223.9 thousand tons gasoline, 688.3 thousand tons jet kerosene, 2053.4 thousand tons diesel fuel, 157.6 thousand tons liquid gas, 171.8 thousand tons petroleum bitumen, 24.6 thousands lubricants, 254.8 thousand tons coke and other products. The processing depth totaled to 91.4% as a result of actions taken in 2015 (Table IX.1).

### Oil refinery and production of oil derivatives in 2014-2015

Table IX.1 (in thousand tons)

	2015			2014	
	Forecast	Actual	%	Actual	%
<b>Oil refinery - total</b>	<b>6551,8</b>	<b>6478,9</b>	<b>98,9</b>	<b>6740,5</b>	<b>96,1</b>
<b>Gasolines - total</b>	<b>1576,5</b>	<b>1419,2</b>	<b>90,0</b>	<b>1442,2</b>	<b>98,4</b>
including petrol	1305,0	1223,9	93,8	1238,2	98,8
Oil fractions for chemistry	271,5	195,3	71,9	204,0	95,7
Jet kerosene	641,6	688,3	107,3	709,0	97,1
Diesel fuel:	2189,7	2053,4	93,8	2264,9	90,7
<b>Light-colored products</b>	<b>4407,8</b>	<b>4160,9</b>	<b>94,4</b>	<b>4416,1</b>	<b>94,2</b>
Liquid gas, in total	261,2	157,6	60,3	184,2	85,6
Treated dry gas	74,0	64,9	87,7	57,2	113,5
Engine fuel DT	303,7	63,6	20,9	106,1	59,9
Lubricant oils	61,3	24,6	40,1	53,1	46,3
<b>Furnace fuel oil</b>	<b>403,6</b>	<b>313,0</b>	<b>77,6</b>	<b>205,4</b>	<b>152,4</b>
Oil bitumen	297,5	171,8	57,7	262,9	65,3
Oil coke	216,2	254,8	117,9	260,1	98,0
Vacuum gas oil	0,0	689,4		578,5	119,2
Processing depth	89,9	91,4	101,7	93,2	98,1

62% of overall petroleum derivatives produced within the year was exported to domestic market, the remaining 38% was exported abroad. 55% of the exported products consisted of diesel and coke.

Output of petroleum derivatives was considered in Table IX. 2 subject to dependency from loading of running processing units with crude in refineries.

### Information on loading of processing units with crude in refinery complex of SOCAR

Table IX.2 (in thousand tons)

Units	2015			2014	
	Forecast	Actual	%	Actual	%
Roughing-out unit N21	4477,10	5040,06	112,6	4790,47	105,2
Roughing-out unit N202	1000,00	907,73	90,8	1136,78	79,9
Roughing-out unit N305	1100,00	645,62	58,7	891,80	72,4
Total for pretreatment	<b>6577,10</b>	<b>6593,41</b>	<b>100,2</b>	<b>6819,05</b>	<b>96,7</b>
Catalytic reforming unit	583,36	600,32	102,9	589,12	101,9



Delayed coking unit	1207,57	1122,26	92,9	1333,88	84,1
Fluid catalytic cracker	1865,55	1608,91	86,2	1593,56	101,0
Hydrotreatment section N100	2299,54	2013,03	87,5	2147,11	93,8
Bitumen output unit	299,00	172,54	57,7	264,02	65,4
Hydrotreatment unit N501	812,15	191,58	23,6	225,27	85,0

Off-schedule overhaul and maintenance of processing units caused to non-fulfilment of refinery forecast in some processing units.



Data on output interests of designated products in processing units featuring efficient refinery of crude and consumption of crude for designated products in plants are reviewed in Table IX.3.

#### Information on output interests of designated products in processing units (%)

Table IX.3

Units	2015			2014	
	Forecast	Actual	Difference	Actual	Difference
Roughing-out unit N21	48,3	45,3	-3,0	45,1	0,2
Roughing-out unit N202	54,8	52,8	-2,0	54,8	-2,0
Roughing-out unit N305	52,5	47,5	-5,0	50,7	-3,2
Total for pretreatment	<b>50,0</b>	<b>46,6</b>	<b>-3,4</b>	<b>47,2</b>	<b>-0,6</b>
Catalytic reforming unit	83,0	83,0	0,0	83,0	0,0
Delayed coking unit	67,7	69,4	1,7	67,7	1,7
Fluid catalytic cracker	58,0	53,3	-4,7	56,0	-2,7
Bitumen output unit	99,5	99,6	0,1	99,5	0,1

As evident from the Table that plan on output interests of designated products in all processing units was not fulfilled except to roughing-out unit and fluid catalytic cracker in 2015. In the reporting year output of designated product in roughing-out unit was fulfilled as 3.4 % and in catalytic cracker fulfilled as 4.7 % shortage.

**About the losses of oil and petroleum derivatives.** Design and regulation documents of each processing unit operated in oil refinery complex show data on loss norms generated during the process. Therefore, the formation of the losses depends on the volume of the raw material processed in roughing-out units during forecast in

plants. The staff of the oil refinery plants carried out systematic works in the direction of the minimizing the losses. As a result, the amount of the losses were lower from the expected amount by norms for the actually refined raw material to the extent of 10.31 thousand tons or 0.16% in H. Aliyev Oil Refinery in 2015.

**About the consumption of catalyzer and reactant.** Different catalyzers and reactants are used for the normal operation of each process according to the regulations in technological units running at the plants. Different catalyzers and reactants were saved to the extent of 2.0 thousand tons at the refineries in the reporting year.

**About the consumption of fuel and energy resources.** Taking into consideration the major role of the consumption of fuel and energy resources in the formation of expenses concerning the production of petroleum derivatives, information related to their consumption were reviewed in the reporting year (Table IX.4).

#### **About the consumption of fuel, thermal and electrical power in oil refinery complex in 2015**

Table IX. 4

Indicators	Unit of measurement	Consumption on norm	Actual consumption	Savings (-) surplus consumption (+)
Fuel	tfe	610030	556445	-53585
Electrical power	ths. kW/h	484856	406032	-78824
Thermal power	Hcal	813579	651086	-162493

\*tfe - ton fuel equivalent

Analysis of the information on the consumption of fuel and energy resources indicates that process fuel, thermal and electrical power resources were utilized efficiently. As a result of different organizational and technical actions carried out in the direction of the reducing of energy resources at the refineries, process fuel was saved to the extent of 53.6 thousand tons, electrical power was saved to the extent of 78.8 mln. kW/h and thermal power was saved to the extent of 162.5 thousand Hcal.

**Gas processing and derivatives from gas processing.** Main indicators about the processing of natural gas and output of finished products on Gas processing plant were as follows in 2015 (Table IX.5):

#### **Information on processing of natural gas and output of finished products in gas processing plant in 2015**

Table IX. 5

Products	Unit of measurement	2015			2014	
		Forecast	Actual	%	Actual	%
Natural gas	mln m <sup>3</sup>	3700,00	3401,82	91,9	3655,32	93,1
Treated dry gas	mln m <sup>3</sup>	3630,30	3361,10	92,6	3611,63	93,1
Technical butane	ths. tons	23,60	15,03	63,7	17,75	84,7
Gas-gasoline (naphtha)	ths. tons	25,30	26,53	104,9	28,77	92,2

Evidently, actually gas to the extent of 3401.82 mln m<sup>3</sup> were processed in the plant and the forecast parameters were complied to the extent of 91.9% in the reporting year. The compliance of the processing forecast with shortage was related to the low volume of the gas as compared to the forecast handed over to the plant by "Azneft"

PU. This indicator was to the extent of 93.1% in comparison with the relevant indicator of 2014. Technical butane was produced to the extent of 15.03 thousand tons and gas gasoline to the extent of 26.53 thousand tons alongside with the treated gas to the extent of 3361.10 mln. m<sup>3</sup> in the plant during 2015.

The whole volume of output gas gasoline was delivered to “Azneft” PU as a crude for reprocessing and 68.5% of technical butane was delivered to “Azerikimya” PU as a crude and 31.5% to sales for the internal market.

**The production of petrochemicals.** As a result of the stabilization of the production activity and improvement of the level of raw material, material and technical support in the processing enterprises “Azerikimya” PU finished the reporting year with the following technical-economic indices as compared to 2014 (Table IX.6).

### Some main indices of “Azerikimya” PU in 2015

Table IX.6

Description of products	Unit of measurement	2015			2014	
		Forecast	Actual	%	Actual	%
Crude	ton	368450,0	374765,0	101,7	373355,1	100,4
Polyethylene	ton	101258,0	103481,7	102,2	101035,5	102,4
Ethylene	ton	103792,0	106699,6	102,8	104041,5	102,6
Propylene	ton	53609,0	56392,0	105,2	56493,0	99,8
Butane-butylene fraction	ton	31133,0	24785,0	79,6	30164,0	82,2
Liquid pyrolysis resin	ton	73174,0	73350,1	100,2	71770,0	102,2
Hard pyrolysis resin	ton	16544,0	22077,6	133,4	18723,3	117,9
Pure IPS	ton	10000,0	12252,2	122,5	10570,3	115,9
<b>Total of commodity output</b>	<b>thousand Manat</b>	<b>111569,4</b>	<b>157353,4</b>	<b>141,0</b>	<b>155298,2</b>	<b>101,3</b>

Petrochemistry raw material to the extent of 374.76 thousand tons were processed and 106.7 thousand tons ethylene, 56.4 thousand tons propylene, 120.2 thousand tons other valuable pyrolysis products were delivered in “Azerikimya” PU in 2015. Actual output interest of olefins in pyrolysis unit EP-300 totaled to 43.5%. Number of polyethylene produced within the year totaled to 103.5 thousand tons.

Information on the fuel, thermal and electrical power used at “Azerikimya” PU in 2015 are shown in the following table (Table IX.7).



## The consumption of fuel, thermal and electrical power in Azerikimya PU

Table IX.7

№	Energy resources	Unit of measurement	Consumption on norm	Actual consumption	(-savings) (+surplus consumption)
1	Total for fuel, including natural gas, methane-hydrogen fraction	ths. m <sup>3</sup>	<b>381090,0</b> 230874,0 150216,0	<b>385733,0</b> 235517,0 150216,0	<b>4643,0</b> 4643,0 -
2	Electrical power	ths. kW/h	242516,6	238753,0	-3763,6
3	Thermal power	hcal	1831765	1637461	-194304
4	Technical water Jeyranbatan	ths. m <sup>3</sup>	4857,9	4756,3	-101,6

13% of petrochemicals produced and sent for sale were sold in the domestic market and 87% were exported in 2015.

## X. PRIME COST

The ultimate products of SOCAR are oil, gas and petroleum derivatives. 85-90% of prime cost of petroleum derivatives constituted the expenses spent for crude oil. Therefore, analysis of prime cost of oil and gas are important. Prime cost is reviewed only on oil and gas production departments of SOCAR.

Production prime cost for per ton oil was 94.74 Manat in 2015 and it increased to the extent of 3.11 Manat or 3.4% as compared to the appropriate period of the previous year.

The actual costs spent by Company to the oil production are shown in the following table.

Table X.1

Cost items	Unit of measurement	2015	Share	2014 (comparison)	Share
Utilized materials and components	thousand Manat	29912	4,3	37597	5,7
Fuel costs	-»-	1023	0,1	1402	0,2
Electricity costs	-»-	8051	1,2	8496	1,3
Salary expenses	-»-	101527	14,6	104356	15,8
Social insurance and expenses of pension fund	-»-	20508	2,9	21060	3,2
Depreciation of fixed assets	-»-	122362	17,5	102474	15,6
Overhaul expenses	-»-	72529	10,4	82716	12,6
Maintenance costs for fixed assets	-»-	14663	2,1	14330	2,2
Exploitation of transport and transport means	-»-	129401	18,6	110914	16,8
Security expenses	-»-	13666	2,0	14289	2,2
Mine tax	-»-	74927	10,7	75369	11,4
Other taxes	-»-	35455	5,1	29408	4,5
Other services	-»-	35777	5,1	30958	4,7
Other costs	-»-	37429	5,4	25103	3,8
<b>Total production expenses</b>	-»-	697230	100,0	658472	100,0
<b>Spent expenses for the commercial product</b>	-»-	639315		621491	
Commercial product	ton	6748448		6782935	
<b>Cost price of per ton oil</b>	<b>Manat</b>	<b>94,74</b>		<b>91,63</b>	
Administrative costs of OGPDs		50255		32206	
Assessment of change of internal turnover and residuals	thousand Manat	7660		4776	

Share of the material and component costs in the composition of total output expenses spent for oil production on SOCAR amounted to 4.3%, salary to 14.6%, social allocations to 2.9%, depreciation of fixed assets to 17.5%, repair costs to 10.4%, maintenance costs to 2.1%, transportation costs to 18.6% and mine tax to 10.7% etc.

The actual productional prime cost of 1000 m<sup>3</sup> gas was 39.74 Manat in 2015 and it increased to the extent of 2.55 Manat or 6.8% as compared to the previous year.

The actual costs spent for the gas production on Company are shown in the following table.

Table X.2

Cost items	Unit of measurement	2015	Share	2014 (comparison)	Share
Utilized materials and components	thousand Manat	8404	3,5	9695	4,0
Fuel costs	-»-	224	0,1	411	0,2
Electricity costs	-»-	754	0,3	796	0,3
Salary expenses	-»-	23738	9,9	25737	10,6
Social insurance and expenses of pension fund	-»-	4762	2,0	5164	2,1
Depreciation of fixed assets	-»-	74794	31,1	71499	29,4
Overhaul expenses	-»-	21665	9,0	25613	10,5
Maintenance costs for fixed assets	-»-	4387	1,8	4439	1,8
Exploitation of transport and transport means	-»-	41258	17,2	39978	16,5
Security expenses	-»-	4146	1,7	3398	1,4
Mine tax	-»-	35773	14,9	37402	15,4
Other taxes	-»-	9860	4,1	8217	3,4
Other services	-»-	5064	2,1	5776	2,4
Other costs	-»-	5313	2,2	4684	1,9
<b>Total production expenses</b>	-»-	240142	100,0	242809	100,0
<b>Spent expenses for the commercial product</b>	-»-	211165		208052	
Commercial product	thousand m <sup>3</sup>	5313972		5593939	
<b>Cost price of 1000 m<sup>3</sup> gas</b>	<b>Manat</b>	<b>39,74</b>		<b>37,19</b>	
Administrative costs of OGPDs		20467		27376	
Assessment of change of internal turnover and residuals	thousand Manat	8510		7381	

Share of the material and component costs in the composition of total output expenses spent for gas production on SOCAR amounted to 3.5%, salary costs to 9.9%, social allocations to 2.0%, depreciation of fixed assets to 31.1%, repair costs to 9.0%, maintenance costs to 1.8%, transportation costs to 17.2% and mine tax to 14.9% etc. Prime costs of 1000 m<sup>3</sup> commercial gas increased as 2.55 Manat (6.8%) as compared to 2014 on SOCAR. Therefore, let us compare production prime cost of total output unit (without mine tax) indicators on table.

Table X.3

	Production prime cost of total output (without mine tax), in Manat		In comparison with 2014	
	2015	2014	%	+,-
1. Oil, 1 ton	83,63	80,51	3,9	3,12
2. Gas, 1000 m <sup>3</sup>	33,01	30,51	8,2	2,50

As evident from the Table, the prime cost of oil and gas increased in all activities of SOCAR. Increasing of the prime cost of oil was due to depreciation of fixed assets, transportation expenditures, other taxes, other services and miscellaneous costs as compared to the last year. So, expenses for depreciation of fixed assets increased as 19888 thousand Manat (19.4%), expenses for maintenance of fixed assets as 333 thousand Manat (2.3%), transportation expenditures as 18487 thousand Manat (16.7%), other taxes as 6047 thousand Manat (20.6%), other services as 4819

thousand Manat (15.6%), miscellaneous costs increased as 12326 thousand Manat (49.1%).

Increasing of the prime cost of gas was due to depreciation of fixed assets, transportation expenditures, security costs, other services and miscellaneous costs as compared to the last year. So, expenses for depreciation of fixed assets increased as 3295 thousand Manat (4.6%), transportation expenditures as 1280 thousand Manat (3.2%), security costs as 748 thousand Manat (22.0%), other taxes as 1642 thousand Manat (20.0%), and miscellaneous costs as 629 thousand Manat (13.4%).





## **XI. PERSONNEL AND SALARY**

Personnel and salary division (hereinafter referred to as Division) covers preparation of guidance documents, organization and control over application of proper legislative provisions upon such documents relative to labor (work, management) organization, payment and norming in structural units of SOCAR. The Division relies on applicable law and other statutory documents in view of the aforesaid activities; makes studies for execution of such activities abided by existing rules and procedures; gives opinions and proposals on results.

Furthermore, it ensures execution of other issues which not foreseen in Action Plan of the Division, but relevant to its functions. So, numerous requests of SOCAR departments and of the employees working in such departments concerning working conditions are reviewed and performed duly.

As a rule, works related to functions of the Division are reviewed by the Commission and recorded in a proper manner according to Regulation of “Standing Commission on determination of labour norms, organizational charts and cost-benefit calculations within the departments of the Company management structure” which established under due order of SOCAR.

At the same time, works related to lines of activity of the Division are carried out in respect to new methods study and its application to be implemented on organizational structure of SOCAR meeting the requirements. It ensures arrangement and execution of works in view of statutory documents on labour organization and norming for Project team established under the Order 164 dated 21.11.2012 of SOCAR.

Approximately, 5500 occupational standards were developed for “Azneft” Production Unit, Investments Department and Head Office pursuant to Order № SOCAR/15-1000/01/SM-04-000099 “On approval and implementation of standards in labour arrangement and norming” dated 28 December 2015 of SOCAR.

So, overall activity of the Division in 2015 is as follows:

The Division received 1944 documents in 2015. The received documents were duly executed after proper review by the relevant division.

Upon appropriate surveys, 231 requests out of the received documents were handed over to “permanently functioning Commission on determining the worktime standards, income and costs estimate and the organizational structure in the bodies constituting the management structure of the Company”. 138 requests dealt with necessary amendments to be made in the personnel lists, approval of the organizational structure and review of optimal number of the employees of structural bodies of the Company, 5 requests dealt with stimulation of laying off of surplus labor forces due to implementation of actions for optimization of number of SOCAR employees, 2 requests dealt with the application of “Rules on payment of the additional salary to the employees of SOCAR who participated in the execution of the commitments intended in the contracts signed between the enterprises and organizations of SOCAR and third parties”, 44 requests dealt with annual estimates of the administrative and maintenance expenses and budget costs of the organizational structure of SOCAR, affiliate oil companies and representative offices, 2 requests dealt with fixing “the additional payments for the senior administrative employees and according to authority” for the employees working in the organizational structure of the Company, 7 requests dealt with approval of “List of the determined professions and occupations

with hard and harmful working conditions in the enterprises and organizations of SOCAR”, 7 requests dealt with approval of the Regulations of the divisions and job descriptions of the employees of Head office, 1 request dealt with rewarding, 12 requests dealt with discussion of works carried out for analysis of operational activity and cost reduction in the structural units of the Company and 13 requests dealt with on miscellaneous issues.

Out of the aforesaid 207 requests were replied positively and 15 requests were replied negatively at the sessions of the Commission, however 9 requests were approved through revisions by the Commission and/or the managements of the enterprises were entrusted with a task to address the issues within the framework of their authorities.

Also, the other 1614 requests and reports received were addressed properly and fulfilled accordingly.

Average number of SOCAR employees in 2015 totaled to 52576 persons that as a subsequence, 3884 persons were reduced as compared to 2014 (56460 persons).

The main reasons of reducing average number of employees of the Company as 3884 persons (6.9%) in 2015 were related to execution of the following orders and statutory orders:

- According to statutory order on “Stimulation of laying off surplus labor forces due to implementation of actions for optimization of number of SOCAR employees under order 81 and 14-29a dated 03 July 2012 of SOCAR and the Republican Committee for Oil and Gas Industry Employees Trade Unions”, 1694 employees were paid 4865612 Manat, including 511 pensioners were paid 1723074 Manat as lump-sum dismissal payment to the extent of 5-fold of average monthly salary;
- Exclusion of Plugging and Strata Flow Rate Unit from organizational structure of “Azneft” Production Unit according to order SOCAR/14-1000/01/SM-04-000095 dated 22.09.2014;
- Liquidation of “Azerneftiyag” Oil Refinery, which was functioning as a legal entity in the subordination of SOCAR, and amalgamation with Heydar Aliyev Oil Refinery as from 01.01.2015, under the Order SOCAR/14-1000/01/SM-04-000135 dated 24.12.2014 “On liquidation of “Azerneftiyag” Oil Refinery”;
- Restructuring of “Azerigaz” Production Unit respectively pursuant to the Order SOCAR/14-2900/02/02-000199, Order SOCAR/14-290/02/02-000200, Order SOCAR/14-2900/02/02-000201 dated 28.11.2014; Order SOCAR/15-2900/02-06-000154 dated 06.03.2015; Order SOCAR/15-2900/02-06-00068454 dated 10.11.2015 of SOCAR;
- Liquidation of “Kimyalayihe” Design Institute and Warehousing of “Azerikimya” Production Unit as well as restructuring of the Production Unit respectively according to Order SOCAR/14-1000/01/SM-04-000057 dated 16.05.2014 and Order SOCAR/14-1000/SM-04-000101 dated 10.10.2014
- Restructuring respectively pursuant to the Order SOCAR/15-1000/01/SM-04-000051 dated 07.05.2015 “On re-organization of structure of “Oil and Gas Construction” Trust of SOCAR;
- Proper actions were carried out regularly for optimization of number of employees in the enterprises and organizations of SOCAR within 2015 in relation to execution of statutory order on “Stimulation of laying off surplus labor forces due to implementation of actions for optimization of number of SOCAR employees” under order 81 and 14-29a dated 03 July 2012 of SOCAR and the Republican Committee for Oil and Gas Industry Employees Trade Unions.

Reduction of average number of employees of enterprises in 2015 in comparison with 2014 (3884 persons) was as follows:

- Azneft Production Unit	405 persons;
- Azerigaz Production Unit	493 persons;
- Azerikimya Production Unit	496 persons;
- Geophysics and Geology Department	90 persons;
- Oil Pipelines Department	30 persons;
- IT and Communication Department	92 persons;
- H.Aliyev Baku Oil Refinery	764 persons;
- H. Aliyev Baku Deep Water Jackets Plant	17 persons;
- Social Development Department	223 persons;
- Security Department	407 persons;
- Gas Export Department	143 persons;
- "Oil and Gas Construction" Trust	288 persons;
- Complex Drilling Works Trust	207 persons;
- "Oil and Gas Scientific Research Design" Institute	59 persons.

Transportation sectors (together with employees) running in SOCAR structures were transferred to the newly established Transport Department in respect to execution of the Order SOCAR/14-1000/01/SM-04-000003 dated 17.01.2014 "On re-organization of transport management structure".

Average number of employees of Transport Department totalled to 8261 persons by increasing as 2829 persons.

Salary structure is reviewed and adequate proposals are developed on the basis of reports on salary and other payments being its equivalent calculated for enterprises included in structure of the Company.

Totally calculated salaries and other payments on SOCAR amounted to 563.68 mln. Manat in the reporting period that so, this figure is lower as 33.94 mln. Manat or 5.7% as compared to 2014 (597.62 mln. Manat). Within the totally calculated salaries and other payments for the employees the amount of the tariff salaries was to the extent of 304.61 mln. Manat or the share in the wage fund was to the extent of 54% in 2015.

Average monthly salary of the Company employees amounted to 887.34 Manat. In comparison with 2014 (882.08 Manat), it increased as 5.26 Manat or 1%.

The information on status of the balance of usage of the working time in structural organizations of the Company is analysed and proper proposals are developed.

Thus, maximum possible working time fund made 10712008 man/day in 2015 and 94% or 10073873 man/day of this time was used efficiently. Average monthly working time per one person is 16 man/day, overtime work per man made 1053884 man/hour totally. Overtime work per one person constituted 2.9 man/day.

The outcomes of attestation of work places conducted duly in the enterprises and organizations upon review by the division were submitted to the Central Attestation Commission to be considered and necessary documentation works were provided for relevant actions according to decision of the Commission.

Proper measures were assumed in order to determine and formalize list of work places at unfavorable climatic conditions and adequate statutory increase coefficients of tariff salaries.

The performers were encharged with appropriate methodical instructions and were supervised concerning rational application of the established increases to tariff salaries of the employees working in the enterprises and organizations, including statutory mark-ups due to hard and hazardous production factors and unfavorable climatic conditions.

In respect to establish compliance of payment of salary of the employees working in the organizational structure of the SOCAR to the applicable legislation and statutory documents of the Company, significant monitorings were carried out and there implemented general control over correct calculation of salaries of the employees.



## ***XII. MECHANICS AND ENERGETICS***

The following works were carried out in overall electricity supply for enhancement of reliability in uninterrupted power energy at SOCAR departments and enterprises in order to fulfill government tasks on oil & gas production, delivery and other indices as well as to stabilize their level and to increase partially in 2015.

Mechanics and energetics division of SOCAR closely took part in carrying out appropriate measures for fulfillment of government tasks in relation to timely and qualitative performance of overhaul and current repair works for electrical units and power transmission lines by providing technical and methodical instruction over energetics and mechanics services in structural units on the basis of norms and guidelines in exploration and development of oil & gas fields, and production, processing, storage, transportation, distribution and usage of oil within January-December 2015. The performance of current repairs of pump jacks, pumping plants and electricity units and equipment of control panels of electrical engines under the plan and the replacement of electric engines with the new ones were provided in mechanics and energetic facilities accordingly.

The electrical power was supplied on time for launching newly onstream drilling wells in line with erection of ZJ-40, ZJ-50 and ZJ-70 hi-tech electronic drilling units made in China and installation of casing in the newly drilled wells were implemented.

### **The works carried out in 2015 are as follows:**

#### **On "Azneft" Production Unit**

Electric equipment was installed and power supply works were completed according to design on facilities "Construction of pier platform 1954A (Call-off №10644) and 1637A (Call-off №10645) in Neft Dashlary field".

Overhaul works were carried out for electricity supply of DWJ-13 and of living quarters at DWJ-14 in Gunashli field. 6 kV subsea cables were repaired between DWJ-15 and DWJ-13, DWJ-11 and DWJ-2, DWJ-11 and DWJ-4.

Electric equipment was installed and put into operation for electricity supply of oil & gas recovery wells according to projects of post-drilling accomplishment in deepwater jackets 620 (Call-off №10579), 740 (Call-off №10931) and 1100 (Call-off №10401) at "Darwin section field.

New subsea cable at 6 kV capacity to the length of 1 km was laid from substation 6 into substation 8 located at North trestle instead of unsafe 6kV power transmission lines in regard to reliability of electricity supply at 6 kV capacity of 6/0.4 kV substations 8, 9 to the extent of 500 m within deepwater jacket 740 (Call-off №10687).

Substations 6 and 401 fabricated over trestle were provided with voltage in the project "Reconstruction of substation premises 16, 2, 3, 4, 5, 6, 401 and equipment (Call-off №10558)" within "Replacement of 17 kV electric transmission lines onshore with self-carrier insulated wires (SIP cables)" (Call-off №10709) in the site of OGPA 1 at Pirallahy field and construction of substation buildings 11, 13, 14, 23, 26, 28 was completed.

6 kV subsea cable line to the extent of 1 km was laid and 2 new cable lines each to the extent of 3.3 km were laid out from ashore - 35/6/0.4 kV substation 403 to trestle - 6/0.4 kV new Distributing Unit 6 in respect to reliability of electricity supply between pier platform 562 and Distributing Unit 401 erected at pier platform 290 (Call-off №10558).

Subsea cable line to the extent of 2300 m between pier platform 618 and pier platform 643 within modification of electricity system of N.Narimanov OGPD (Call-off №11197) and GPB system comprised by 4 “BAIL” units was put into use at pier platform 444 in Dashgil area.

Construction-assembly works were completed for the electricity facilities “Switchover from 2 kV circuit to 6 kV circuit” (Call-off №10128) and “Modification of electricity supply of OGPD 2, 3” (Call-off №10551) at A.C. Amirov OGPD.

Power transmission lines to the extent of 1.1 km was laid into well M-211 and integrated transformer substation was fabricated in Muradkhanly Enlarged Oil Mine.

Lighting works were completed in the site of mechanical repair workshop, welfare building and compressor station (Call-off 11XM/E-2014), and industrial machines were ordered on request for mechanical repair workshop in view of modernization of Experimental Production Enterprise for Maintenance and Rent of Submersible Units (Call-off №10993).

Electric works were completed according to electric heating cables planned for “Simultaneous running of old and new gas distributing points”, “Enhancement and expansion of 5 well manifold system” and prevention of freezing at processing gas lines and units in “Garadagh Underground Gas Maintenance Storage” of Gas Storages Maintenance Department.

### **On Azerikimya PU**

Repair-maintenance works were carried out in electricity supply of Ethylene-polyethylene plant of “Azerikimya” Production Unit and a number of proper actions were taken in 2015 in respect to reduction of power supply losses:

110/6/6 kV cable lines at 5220 m length and 150 mm<sup>2</sup> cross section were laid from MPM-3 substation to Distributing Unit 2 of site 14, and overhead lines to the extent of 1400 m were laid from substation L-40 to site 4, and high-voltage power transmission lines to the extent of 4500 m at 1x120 mm<sup>2</sup> cross section were laid up to TAM site and all of them were put into operation.

Installation works, such as erection of 630 kVA CTP in newly constructed Balakhany Compressor Station within the area of Absheron Main Gas Compressor Station belonged to **Gas Export Department**, of 25 kVA CTP in each of Ovchubere, Khirmandaly, Nerimankend and Ordahal Gas Distributing Stations within the area of Astara Main Gas Compressor Station, of 25 kVA CTP at 260 km Maraza junction within the area of Hajigabul Main Gas Compressor Station, of 10 kVA OMP in Shabran-Takhtalar Gas Distributing Station within the area of Siyazan Main Gas Compressor Station, of 4kVA CTP at 309 km and 16 kVA CTP at 330 km section of “Gazimammad-Shirvanovka” gas main, of 16 kVA CTP in 28 May Gas Distributing Station within the area of Agdash Main Gas Compressor Station and of 16 kVA CTP at 104 km section of “Yevlakh-Balaken” gas main.

Installation and setting of 35/6 kV electric equipment and cell relay protection at 35/6 kV substation 512 (2 sets x 10 MVA) feeding from 35 kV circuit of “Azerishig” JSC, which ensured power supply of Gas Processing Plant, and repair of 6-0.4 kV voltage asynchronous and synchronous electric engines running centrifugal pumps, ventilators and compressors in all facilities and processing units and lighting systems were carried out. The wires at AS-70 mm<sup>2</sup> section to the extent of 12384 m of 6kV overhead power transmission lines of the plant were replaced with new ones. Due to long-term exploitation of 6 “Lankashir” steam boilers at steam boiler-house for heating supply of Gas Processing Plant, replacement of them with “EREANSAN” HDR-300 new steam boilers is envisaged.

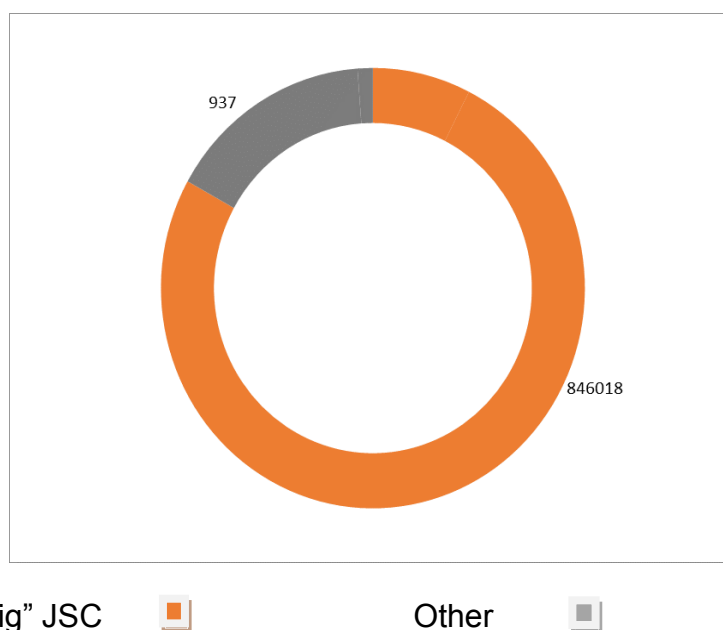
The following works were implemented in respect to increase of reliability of electricity supply of production sections within **Complex Drilling Works Trust**:

Drilling pump control system, which enabled circulation of clay-based mud in jacket 1954a at Neft Dashlary field, was renovated. So, each pump was provided with direct current engines made in PRC, which regulated 800 kWt rotations. Such direct current engines were adjusted by SCR electronic control panel through feeding by CAT 3512 type two main diesel generators at 1200 kWt capacity and CAT 3406 ancillary generators at 400 kWt capacity. In total, power transmission lines to the extent of 19.6 km were laid across drilling rigs, which put into operation in 2015. Consumption of electrical energy per 1 m drilling was less as 7.2 kWt/hour (3%) in 2015 as compared to 2014 that it was resulted from handling of drilling operations through ZJ type drilling rigs in Absheron and Garadagh-Galmaz production sections.

Repair and maintenance works were carried out in electricity supply of the facilities of Oil Pipelines Department to provide uninterrupted power supply and a number of actions were taken to reduce losses of power supply.

SOCAR enterprises and organizations consumed a total of 846955 thousand kW/h electric energy from energy supplying enterprises in January-December of 2015.

Including, 846018 thousand kW/h electric energy was purchased from “Azerishig” JSC and 937 thousand kW/h from other enterprises.

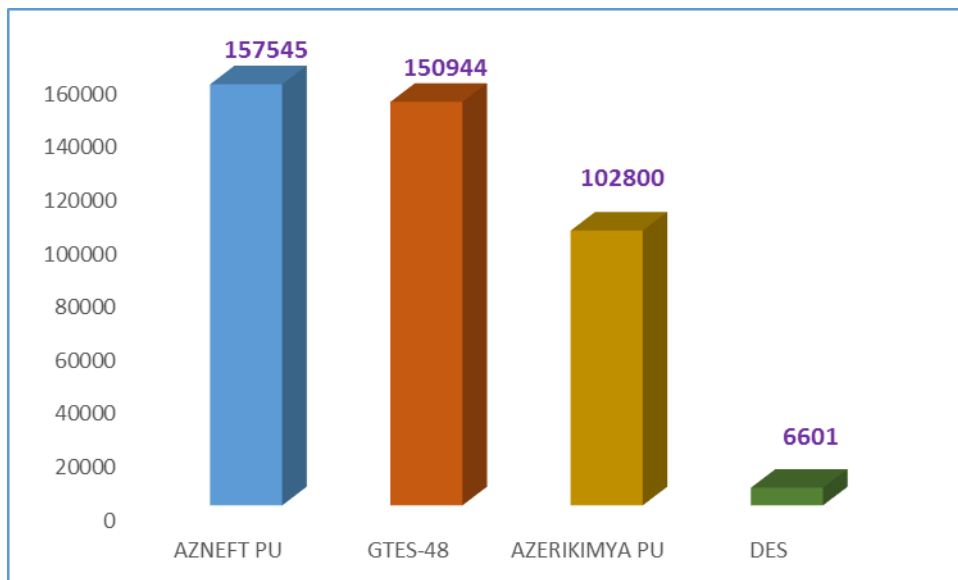


**Diagram XII.1**

**Electric energy used in SOCAR enterprises and organizations in January-December of 2015:**

“Azerikimya” PU	102800 thousand kW/h
“Azneft” PU	157545 thousand kW/h (including, GTPS-48 - 150944 thousand kW/h; DES 6601 thousand kW/h)

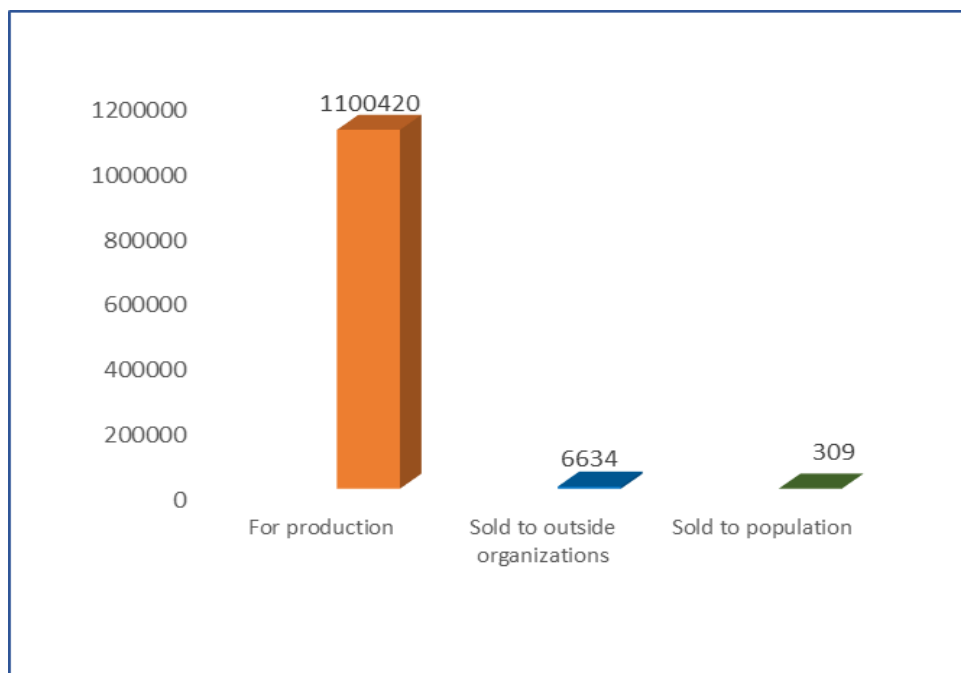




**Diagram XII.2**

**Electric energy consumed in SOCAR enterprises and organizations in January-December of 2015:**

For production	1100420 thousand kW/h
Sold to outside organizations	6634 thousand kW/h
Sold to population	309 thousand kW/h



**Diagram XII.3**

Relevant works were regularly controlled in respect to taking actions on efficient use of energy resources and prevention of illegal consumption of electric energy. Although there were interruptions in power supply to the enterprises, departments and organizations of SOCAR due to failures in the electric system and network of energy supplying enterprises, no any stagnation was allowed through the fault of personnel operating the intra-field power network.

Testing and adjustment works to the extent of 2822 thousand Manat were carried out in electrical installations and equipment, while overhaul works were performed for 152

sets of electric equipment to the extent of 682 thousand Manat and for 1629 sets of drilling and oil-mine facilities to the extent of 1690 thousand Manat in 2015.

Appropriate measures were taken to procure and stockpile 49514 tons of ferrous and 75.16 tons of non-ferrous scrap and waste metal written off from the balance sheet of installations and equipment unfit for production. No standby cases were allowed due to early failure and lack of spare parts under the operation of drilling, oil-mine equipment and processing units. Concerning fire protection, "Vikhr" type fire-fighting vessels kept a vigil on intended oil and gas fields. Oil & gas fields, oil refineries and gas processing plant were provided with primary fire extinguishing equipment and foam generating liquid. Fire extinguishers, water spray systems, circular fire extinguishing water lines, oil & gas compressed overhead lines running under high pressure, firefighting supports, shafts of dive pumps and mooring berths in need of repair, were repaired. Large-scale works were carried for replacement of manifold systems as well as low pressure and high pressure separators with new ones.

Furthermore, lots of works were carried out in safe operation and maintenance of lifting machines and mechanisms by "Azneft" Production Unit as resulted from technical actions:

1 HAK-300 crane was erected in deepwater jacket 8 at Gunashli field, 2 cranes in site 1954A at "Neft Dashlary" field, 1 crane in site 1637A, 1 HAK-250 crane in site 602A and all of them were tested and put into operation.

3 HAK-300 cranes were erected and put into commissioning in Fixed Offshore Platform 6 of N.Narimanov OGPD and 3 HAK-300 cranes in Fixed Offshore Platform 20 of "Absheronneft" OGPD. Four Centaur-40 gas turbine engines and one C-306 centrifugal compressor were overhauled, installed and put into operation and 3 HAK-300 cranes were erected at SCS 2 of "28 May" OGPD.

The works for upgrading of equipment in production areas of Complex Drilling Works Trust were implemented and continued in the reporting year. The works are as follows: New compressors for different type cementation system, ASDU power aggregates and DOOSAN PU 180TI diesel engines were procured and installed at new derricks of "Neft Dashlary" field. Different type casing heads and blowout preventors were timely procured and fixed in the wells according to the design. Oil & gas wells were provided with wellheads and high-pressure blowout pipes upon drilling that it positively influenced to oil & gas recovery.

Moreover, implementation of the following actions aimed at improvement of power supply, enhancement of energy security and saving of energy within SOCAR facilities in 2016 is deemed to be necessary:

- Provision of electricity supply of jackets at "28 May" OGPD with new GTPS through demolition of two 6/35 kV power transformers at 10000 kVA capacity through existing GTPS and replacement of gasturbogenerator 4 with repaired new gasturbogenerator;
- Completion of electricity supply for fabrication of pier platforms in deepwater jackets 602A (Call-off №10593), 620A (Call-off №10586), 1541A (Call-off №10646A) and INYM 2A (Call-off №9577A-08) at "Neft Dashlary" field. Construction of 3 Distributing Units within project "Upgrading of Distributing Units 1, 2, 3 and 22" (Call-off №11048);
- I output complex should be finalized in I quarter for electric installation works related to "Fabrication of deepwater jacket 7 in Gunashli field". Electric installation works should be performed in respect to reconstruction of deepwater jacket 10. Electricity supply of deepwater jackets 3, 5, 11 and 14 should be overhauled. Overhaul of electricity supply of deepwater jackets 95 at Chilov island and surrounding area. Laying out subsea cables in deepwater jackets 123, 80 and 95 around Chilov island.

- Provision of two-circuit power reliability of deepwater jackets 340, 660 and 600 through dislocation of 3 subsea cables at 6 kV capacity into 6kV DU newly constructed and commissioned (Call-off №10579) at Fixed Offshore Platform 620 at “Darwin section” field of “Absheronneft” OGPD. Organization of 35/6 kV toptrestle cables from master substation 403 ashore to newly constructed and equipped DU 6 under upgrading of substation buildings 2, 3, 4, 5, 6, 401 in order to ensure to improve electricity supply of “Absheronneft” OGPD;
- Completion of electric installation works within reconstruction of fire extinguishing system at “Dashgil” Main Distribution Point of N.Narimanov OGPD, completion of electric installation works for new oil injection pump house at “Dashgil” Main Distribution Point and modification of electricity supply circuit and stage-by-stage implementation of the OGPD in view of current status of trestle and pier platforms;
  - The works to be done under the project “Modification of power supply system” (Call-off №11197) (laying out subsea cable to the extent of 34 km and construction of 5 Distributing Units at 6 kV capacity). Launching of Gas Distributing Sections at pier platform 272 and pier platform 618;
  - Construction and putting into usage of 6/0.4 kV Distributing Unit 80 under the project “Construction of new transformer substation” in the site of OGPA 3 of “Bibiheybat” OGPD (Call-off №10595) and construction and putting into usage of new 6/0.4 kV Distributing Unit and upgrading of new Distributing Units 21, 43 under the project “Modification of current Distributing Units 21, 43” (Call-off №11070, 2014) and construction and putting into usage of new 6/0.4 kV Distributing Unit 44 in the site of OGPA 3 under the project “Construction of tank farm of NSKH and NS” (Call-off №10708, 2013);
  - Fabrication of new Distributing Unit and switchover of 6 and 0.4 kV cables to such Distributing Unit due to relocation of 6/0.4 kV distributing unit 36. (Terms of reference is under development);
  - Launching of 6/0.4 kV substation was planned for the project “Construction of administrative and ancillary premises of electricity supply and electric equipment workshop” of “Siyazanneft” OGPD (Call-off №10620);
  - Testing-setting and repair works will be continued under schedule at 110/35/6 kV substation, 35 kV power transmission lines Kurdamir-Muradkhanly and 110 kV overhead lines Sabirabad-Muradkhanly in view of maintenance of normal working conditions for electricity supply of Muradkhanly Enlarged Oil Mine;
  - Procurement and setting of industrial machines ordered for mechanical repair workshop in respect to reconstruction of Experimental Production Enterprise for Maintenance and Rent of Submersible Units (Call-off №10993, 11XM/E-2014);
  - Provision of electricity supply within “Expansion of new Gas Distributing Point in Garadagh Underground Gas Storages” (Call-off №10663 for 12 wells) by “Gas Storages Maintenance Department”;
  - Completion of project “Installation of electric heating cables for prevention of freezing in technological gas lines and facilities at Garadagh Underground Gas Storages”. Switchover from 2 kV to 6 kV circuit of Gala site of Tagiyev OGPD;
  - Installation of ZJ-40, ZJ-50 and ZJ-70 electronic system drilling rigs manufactured in PRC on the basis of new technologies in order to use electric energy more efficiently and without loss at drilling facilities of Complex Drilling Works Trust;

- Fabrication of 2 sets of 500-ton 800 HP “AKER” Top Drives, one will be erected in derrick 354 in Fixed Offshore Platform 14 at Gunashli Production Section and the other set will be erected in Fixed Offshore Platform 10 at the same Production Section;
- Elimination of challenges in transfer lines between DR-211÷214 furnaces of catalytic reforming 31 and furnaces operated in H.Aliyev Oil Refinery. Installation and putting into operation of cable lines of launching unit for hydrocutting pumps N322/1,2 of production section 4 and of power equipment for Nitrogen compressor at workshop 12 of the plant;
- Due to long-term exploitation of 6 “Lankashir” steam boilers at steam boiler-house for heating supply of Gas Processing Plant, replacement of them with “EREANSAN” HDR-300 new steam boilers;
- Commissioning of the circular water spray and foam fire-extinguishing systems newly installed in Puta OTS of Garadagh Oil Pipelines Office of Oil Pipelines Department;
- Development of a project for upgrading the fire-extinguishing system of “Dashgil” OTS and commencement of construction and installation operations;
- Saving of fuel and lubricants as well as of spare parts required for oil-mine facilities within the enterprises;
- Delivery of overhaul of drilling and oil-mine facilities on internal resources;

Implementation of the following actions aimed at ensuring safe work conditions and saving power energy in all facilities of SOCAR is one of crucial points:

- Continuation of works in more reliable operation of lifting cranes and rescue boats;
- Full implementation of scheduled-running maintenance works of electric equipment planned for the year;
- Replacement of electric lamps with DRL, LB, LD and spiral lamps where possible, switching off the lights at day, switching on the light at night where needed as well as turning off welding machines in work places during time-outs at drilling rigs of production sections;



### **XIII. CAPITAL INVESTMENT**

Capital investment program within SOCAR for 2015 was planned to the extent of 1340819.2 thousand Manat, including for drilling 351430.5 thousand Manat, for construction 871622,0 thousand Manat, for equipment not to be installed 115166,7 thousand Manat, geological exploration works 2600.0 thousand Manat. Actual capital investment within SOCAR for reporting period was fulfilled to the extent of 967562,4 thousand Manat (72.2%), including for drilling 219661,9 thousand Manat (62.5%), for construction 649021,3 thousand Manat (74.5%), for equipment not to be installed 82780,7 thousand Manat (71.9%), geological exploration works 16098,5 thousand Manat (6.2 d).

#### **Comparison with 2014 of key indices included in structure of capital investment**

Table XIII.1, thousand manat

	2015			2014		
	plan	actual	%	plan	actual	%
Capital investment	1340819,2	967562,4	72,2	1368195,4	1127417,3	82,4
including:						
Drilling	351430,5	219661,9	62,5	396030,2	319714,9	80,7
- prospecting	39248,0	1846,8	4,7	17693,4	10620,8	60,0
- operation	312182,5	217815,1	69,8	378336,8	309094,1	81,7
Geological exploration works	2600,0	16098,5	6,2 d	2600,0	25432,5	9,8 d
Construction	871622,0	649021,3	74,5	832174,9	638764,9	76,8
Equipment not to be installed	115166,7	82780,7	71,9	165035,5	197656,6	119,8
Capital investment for non-industrial construction	35011,6	18115,8	51,7	46171,6	32591,5	70,6
including:						
- construction of housing	6500,0	-		12000,0	8,2	0,1
- construction of education facilities	21387,3	16764,1	78,4	27037,3	30160,4	111,6
- construction of healthcare facilities	7124,3	1351,7	19,0	7134,3	2422,9	34,0

**Capital investment on SOCAR departments for 2015 is as follows:**

Table XIII.2, thousand manat

No	Name of enterprises	Plan	Fakt	%
1	"Azneft" PU	610000,0	449601,7	73,7
2	"Azerigas" PU	359890,5	299229,5	83,1
3	"Azerkimya" PU	13669,4	5564,0	40,7
4	H.Aliyev Oil Refinery Plant	47446,1	16280,3	34,3
5	Gas Processing Plant	600,4	404,6	67,4
6	Oil Pipelines Department	2825,0	2356,0	83,4
7	H.Aliyev Baku Deep Water Jackets Plant	260,0	115,9	44,6
8	Marketing and Economical Operations Depart.	350,0	33,6	9,6
9	Geophysics and Geology Department	12676,0	9959,6	78,6
10	Sosial Development Department	94781,6	79408,7	83,8
11	Investment Department	33,9	-	
12	Security Depatment	132,0	8,5	6,4
13	Ecology Department	26077,8	5645,8	21,6
14	Gas Export Department	70430,0	29474,6	41,8

15	"IT& Communications" Department	16419,5	7042,6	42,9
16	Oil and Gas Construction Department	11670,1	7715,5	66,1
17	Oil and Gas Research and Design Institute	8000,0	649,5	8,1
18	Complex Drilling Works Trust	35314,3	35136,2	99,5
19	Education, Training and Certification Depart.		96,9	
20	Emergency-Response Department	1971,1	815,9	41,4
21	Transportation Department	28271,5	18023,0	63,7

### Comparison with 2014 of handover data of fixed assets within SOCAR

Table XIII.3, thousand manat

	2015			2014		
	plan	actual	%	plan	actual	%
Handover of fixed assets	1978182,7	873527,9	44,2	2030673,3	1167854,3	57,5
including:						
- drilling	343854,4	287108,6	83,5	322960,1	270909,5	83,9
- construction	1519161,6	438363,4	28,9	1570322,9	753439,8	48,0
- equipment	115166,7	82780,7	71,9	137390,3	143505,0	104,5
- geological exploration works		65275,2				

As evident from the table, the handover of fixed assets within the SOCAR in 2015 made up 873527,9 thousand Manat that it is less to the extent of 294326.4 thousand Manat as compared to 2014. The handover of fixed assets on drilling totaled to 287108.6 thousand Manat that it is higher to the extent of 16199.1 thousand Manat as compared to 2014. The handover of fixed assets on construction totaled to 438363.4 thousand Manat that it is less to the extent of 315076.4 thousand Manat as compared to 2014.

**Handover data of fixed assets on SOCAR departments for 2015 are as follows:**

Table XIII.4, thousand manat

No	Name of enterprises	Plan	Fakt	%
1	"Azneft" PU	872680,7	500136,0	57,3
2	"Azerigas" PU	471869,5	232670,7	49,3
3	"Azerkimya" PU	7501,4	4514,1	60,2
4	H.Aliyev Oil Refinery Plant	65713,1	14974,7	22,8
5	Gas Processing Plant	60,0	3785,0	63,1 times
6	Oil Pipelines Department	1869,0	2292,5	122,7
7	H.Aliyev Baku Deep Water Jackets Plant	2955,0	-	
8	Marketing and Economical Operations Depart.	350,0	1937,8	5,5 times
9	Geophysics and Geology Department	12735,9	9699,0	76,2
10	Sosial Development Department	416990,7	74,5	0,02
11	Investment Department	33,9	-	
12	Security Department	132,0	8,5	6,4
13	Ecology Department	1116,0	56,8	5,1
14	Gas Export Department	14603,3	44821,5	306,9
15	"IT& Communications" Department	16306,5	8414,3	51,6
16	Oil and Gas Construction Department	14201,8	859,2	6,0
17	Oil and Gas Research and Design Institute	16700,0	21,5	0,1
18	Complex Drilling Works Trust	37883,6	34532,1	91,2
19	Education, Training and Certification Depart.	-	68,9	
20	Emergency-Response Department	144,0	513,3	3,6 times
21	Transportation Department	24336,3	14147,5	58,1

The performance of the overhaul of fixed assets of SOCAR enterprises in 2014 is shown in the following table:

Table XIII.5

№	Names of Customer enterprises	Plan for 2015	Performed in 2015			Fact for 2014
			Performed actually	%	Difference +, -	
1	2	3	4	5	6	7
1	"Azneft" PU	84037,0	84570,6	100,6%	533,6	100679,8
2	"Azerigaz" PU	26654,0	16401,6	61,5%	-10252,4	11529,5
3	"Azerikimya" PU	1087,0	1008,3	92,8%	-78,7	0,0
4	H. Aliyev Oil Refinery	9000,0	3703,9	41,2%	-5296,1	4509,4
5	Gas Processing Plant	1200,0	441,5	36,8%	-758,5	1369,7
6	H. Aliyev Baku Deep Water Jackets Plant	100,0	108,0	108,0%	8,0	99,0
7	Oil Pipelines Department	5000,0	6074,7	121,5%	1074,7	6494,5
8	Marketing and Economic Operations Department	519,0	395,3	76,2%	-123,7	729,4
9	Geophysics and Geology Department	500,0	258,6	51,7%	-241,4	44,6
10	Social Development Department	10000,0	2872,2	28,7%	-7127,8	165455,2
	including:					
	For SOCAR enterprises	10000,0	2872,2	28,7%		3977,3
11	Information Technologies and Communication Department	700,0	52,9	7,6%	-647,1	365,5
12	Ecology Department	200,0	0,0	0,0%	-200,0	0,0
13	"Gas Export" Department	30000,0	11858,3	39,5%	-18141,7	25040,2
14	"Oil and Gas Construction" Trust	800,0	622,9	77,9%	-177,1	2150,9
15	"Complex Drilling Works" Trust	700,0	65,6	9,4%	-634,4	219,2
16	Diving and Salvage-Rescue Department	100,0	0,0	0,0%	-100,0	0,0
17	Transport Department	1000,0	1333,6	133,4%	333,6	548,2
18	Oil and Gas Research and Design Institute	500,0	202,6	40,5%	-297,4	165,2
19	Training, Education and Certification Department	100,0	148,0	148,0%	48,0	351,8
	<b>Total:</b>	<b>172197,0</b>	<b>130118,5</b>	<b>75,6%</b>	<b>-42078,5</b>	<b>319752,1</b>

Capital repair and overhaul works within SOCAR carried out in 2015 totalled to 130118.0 thousand Manat (against annual plan of 172197.0 thousand Manat). Performance of capital repair and overhaul works by structural units of SOCAR is stated in the following table.

Overhaul and capital repair works to the extent of 27997.2 thousand Manat were carried out by outsourcing contractors and same works to the extent of 102121.3 thousand Manat were performed through internal resources of SOCAR, including construction-assembly works to the extent of 96098.8 thousand Manat by "Oil and Gas Construction" Trust in the reporting period.

Refurbishment and repair of current hydraulic structures was under focus by "Azneft" Production Unit in the reporting year in order to stabilise mainly oil & gas production and to create safe working condition. As evident from the table, capital repair works to the extent of 84570.58 thousand Manat were performed by "Azneft" Production Unit in



2015. So, refurbishment of hydraulic structures totalled to 61367.16 thousand Manat. Overhaul works for DWJs 4, 6, 14 and Jacket "Chilov 123" at Gunahli field were completed by "28 May" OGPD. Overhaul works for jetty trestles 1741, 1773, 1304, 2223, trestle bridges and piers "Chvanov-1741", "Chvanov-203", "OGPA-1-810" were completed by "Neft Dashlary" OGPD. Pier platform at 8311 m<sup>2</sup> capacity was overhauled and put into usage by N.Narimanov OGPD.

Total area, such as 5 pier platforms (North wrinkle - 890, Darwin Bank 78, 735, 390) and L=460 m trestle bay between "autopass 3 and bay 108" to the extent of 4939 m<sup>2</sup> were put into commissioning by "Absheronneft" OGPD. In total, jackets and pier platforms to the extent of 44700 m<sup>2</sup> and 2645 pm trestles were overhauled and put into operation by "Azneft" Production Unit in 2015.

Overhaul and capital repair works for **Gas recovery** to the extent of 28259.9 thousand Manat were carried out. Such works to the extent of 16401.6 thousand Manat were performed by "Azerigaz" Production Unit and to the extent of 11858.3 thousand Manat were performed by Gas Export Department. Repair works to the extent of 5644.9 thousand Manat were carried out by Construction and Maintenance Section of "Azerigaz" Production Unit. 30015 gas meters were fixed and various diameter gas pipelines to the length of 518.7 km were repaired. Overhaul works were fulfilled mainly in two directions within the reporting period:

First direction - overhaul of unserviceable gas pipelines to reduce gas losses;

Second direction - overhaul works for upgrading of communication system of gas supply subject to wear and tear;

**In respect to processing**, enhancement of processing depth at processing units, and provision of safe and uninterrupted running of units and communication systems were under focus in 2015. In total, overhaul works for processing to the extent of 5153.6 thousand Manat were carried out in 2015. So, overhaul works were carried out by H.Aliyev Oil Refinery to the extent of 3703.9 thousand Manat, by Gas Processing Plant to the extent of 441.5 thousand Manat and by "Azerikimya" Production Unit to the extent of 1008.3 thousand Manat.

### **Expertise of design-estimate documents**

Design-estimate documents expertise division received design-estimate documents for 29 facilities (including 12 construction sites, 10 overhaul sites and 7 wells to be constructed) to be expertised in 2015. Remarks noted for design-estimate documents of 9 facilities which handed over within the reporting period, were eliminated in the course of the expertise. In total, design-estimate documents for 23 facilities were agreed with proper specialists of the SOCAR and were approved by the top management. Overall estimate costs of the facilities to be approved totalled to 33605.055 thousand Manat as per base prices dated 1991. Overall estimate costs of the facilities were reduced as 1656.53 thousand Manat through elimination of remarks on the expertise of design-estimate documents and approved in the amount of 31948.525 thousand Manat. Design-estimate documents of 3 facilities were rejected and approval of design-estimate documents for other 3 facilities fell on 2016. Moreover, 2 regional site designs and development plans which elaborated under the order of State Town-Planning and Architecture Committee, were given due opinions. 151 terms of references to be approved were received by the relevant division, 143 terms of references for the facilities were agreed with the proper specialists of the Company and approved by the top management within the year. Approval of 8 terms of references for the facilities were deemed unexpedient and returned to the customer organizations.

Monthly reports of Oil and Gas Research and Design Institute were reviewed and annual work programmes and action programmes of the structural units were addressed and expertized as well as other correspondences related to functions of the relevant division were made within the year.



#### **XIV. LOGISTICAL SUPPORT**

Storehouses in related points were controlled and supervised on the basis of the monthly references submitted on storehouse remainders in order to ensure the purposeful use of the residue stock of inventories available in the storehouses of SOCAR enterprises, the avoidance of purchase of inventories generating remainder, and the purchase of necessary material resources in compliance with allocated funds.

According to monthly reports, total remainder to the extent of 487449599 Manat for structural units of SOCAR was recorded up to 01.01.2015. The remainder was 419037555 Manat up to 01.01.2016.

Including:

Table XIV.1, thousand manat

Name of structural units	Remainder up to 01.01.2015	Remainder up to 01.01.2016
"Azneft" PU	130910,68	113799,88
Complex Drilling Works Trust	146843,94	146154,34
H.Aliyev Oil Refinery Plant	50096,6	41595,6
Ecology Department	2298,33	1815,87
Marketing and Economical Operat. Depart.	276,8	245,1
Oil and Gas Research and Design Institute	8,76	2,02
"Azerkimya" PU	7112,83	5334,46
Emergency-Response Department	1991,86	2072,45
Sosial Development Department	11 959,000	9148
Geophysics and Geology Department	487,375	666,31
"IT& Communications" Department	9 507,080	5216,69
Security Department	109,000	2011
Oil Pipelines Department	3086,990	2108,015
H.Aliyev Baku Deep Water Jackets Plant	1382,920	1116,790
Oil and Gas Construction Department	67346,606	49333,053
"Azerigas" PU	41262,880	25022
Gas Processing Plant	3 204,240	2679,82
Gas Export Department	4216,708	6021,257
Transportation Department	5347,000	4681
<b>Total for SOCAR:</b>	<b>487449,599</b>	<b>419037,555</b>

As evident from the figures, there was no increase on storehouse remainder for overall activity of SOCAR. But as to several departments, an increase in storehouse remainder of Complex Drilling Works Trust is noticed. Pipes and equipment purchased for wells to be drilled at Umid field caused to the increase. The pipes and equipment remained unused in storehouse as the drilling works to be performed at Umid field were assigned to another organization. Such pipes and equipment have been planned to be used in the next wells to be drilled.

In general, **563714397 thousand Manat** was spent for procurement of inventories on the basis of requests submitted by the structural units of SOCAR in 2015.

Including:

Table XIV.2, thousand manat

Name of structural divisions	Amount spent on inventories within a year (thousand manat)
"Azneft" PU	78520,29
Complex Drilling Works Trust	103043
H.Aliyev Oil Refinery Plant	36698,8
"Azerkimya" PU	83006,22

Oil and Gas Research and Design Institute	299,94
Ecology Department	1131,78
Emergency-Response Department	1441,20
Marketing and Economical Operat. Depart.	308,2
Sosial Development Department	3224
Geophysics and Geology Department	14712,8
"IT& Communications" Department	13159,41
Security Deptatment	2077
Oil Pipelines Department	1896,427
H.Aliyev Baku Deep Water Jackets Plant	71,11
Oil and Gas Construction Department	141290,7
"Azerigas" PU	32085,9
Gas Processing Plant	1834,48
Gas Export Department	14593,81
Transportation Department	34305,630
Mines Rescue Militarized Service of Blow Out Control	13,7
<b>Total for SOCAR:</b>	<b>563714,397</b>

A number of proposals can be mentioned in order to minimize costs laid out for sustainable development of procurements and material assets of SOCAR and to ensure cost-effective and efficient use of the allocated funds:

1. Centralized procurement on the same equipment and items;
2. Signing of annual and semiannual contracts;
3. Involvement of vendors to procurement process;
4. Ensuring prepayment (10-15%) to winner companies in the course of procurement;
5. Establishment of logistics department working together with procurement within SOCAR and opportunities directly with plants;
6. Introduction of rating for bidder companies participating in the procurement process.



## ***XV. SCIENCE AND TECHNOLOGY***

As one of the advanced companies, SOCAR - State Oil Company of Azerbaijan Republic plays a crucial role in countrywide economy. Also, it is involved in exploration of onshore and offshore oil and gas fields, and production, processing and transportation of oil, gas and gas condensate, marketing petroleum derivatives and petrochemicals in domestic and international markets, and supplying natural gas to industry and the public in Azerbaijan. SOCAR does not only provide major part of internal demand of our country for oil & gas as well as a wide range of petroleum derivatives, but also uses opportunities to sell surplus part of such products in international markets because of its international company status. The Company develops highly qualified engineers, technicians and labours who are capable to apply new technologies by addressing the issues related to exploration, development and accomplishment of oil, gas and gas condensate fields onshore and offshore being at new and final stage of development in order to carry out all such works and therefore, retains its worldwide influence owing to their diligence.

Up to 01 January 2016, 261 employees (200 men, 61 women) of SOCAR hold scientific degree on various disciplines that 2 of them are full member of Azerbaijan National Academy of Sciences, 1 person is correspondent member, 31 persons (27 men, 4 women) are doctor of sciences and 230 persons are candidate of sciences (173 men, 57 women) who played an important role in scientific researches towards solution of oil industry problems.

Science and Scientific Progress Foundations Established by SOCAR jointly with Azerbaijan National Academy of Sciences and Azerbaijan National Aviation Academy are involved in development of fundamental and applied research projects in the discipline of natural and engineering sciences in Azerbaijan Republic and scientific studies in respect to oil & gas and petrochemical industry; promotion of academic activity of the scientists and shaping additional creativity opportunities.

The projects started in 2014 in line with Science Foundation of SOCAR were continued by Scientific Progress Foundation of SOCAR within the reporting period.

Thematic plan on "Works for scientific-research, pilot testing, development and design of regulatory documents" was approved by Scientific-Technical Council of SOCAR in 2015. 85 scientific-research works were planned within the Thematic Plan, which approved by SOCAR for 2015 that 22 works were transit and 63 works were new ones.

Operative changes are inserted into the thematic plan and new contracts are signed in the cases when technical and economical problems are arisen in the course of procurement of foreign equipment and reagents required for implementation of the planned works within the year; the economic potential is not available and more efficient methods are discovered. For this reason, there emerges a necessity of certain differences between the planned works and actual works.

**Planned number and actual number of works under the Thematic Plan on Scientific Research within SOCAR enterprises for 2015 are stated in the following table.**

Table XV.1

Number of planned and actual scientific-research works within SOCAR in 2015	Planned			Actual		
	Total	Transitional works	New works	Fully performed works	Postponed to next year for different reasons	Works performed beyond the plan
"Azneft" PU	47	18	29	60		8
Complex Drilling Works Trust	12	4	8	12		1
Gas Export Department	5	0	5	5		
H.Aliyev Oil Refinery	2	0	2	2		
Head office of SOCAR	5	0	5	0	5	
Total	71	22	49	79	5	9

Such works were fulfilled by relevant scientific-research institutes (Oil & Gas Research and Design Institute) and departments of SOCAR as well as other national scientific organizations in 2015. Topics included in the Thematic plan are developed in several directions, including geology, development and geophysics of oil & gas fields - 14 topics, technology of oil & gas recovery - 40 topics, corrosion protection - 2 topics, hydraulic engineering - 1 topic, patent and metrology - 1 topic, economy - 1 topic, collection and transportation of oil & gas - 2 topics.

Dynamics of numbers of transitional and new works under the Thematic Plan on Scientific Research by SOCAR over the past 3 years is stated in the following table.

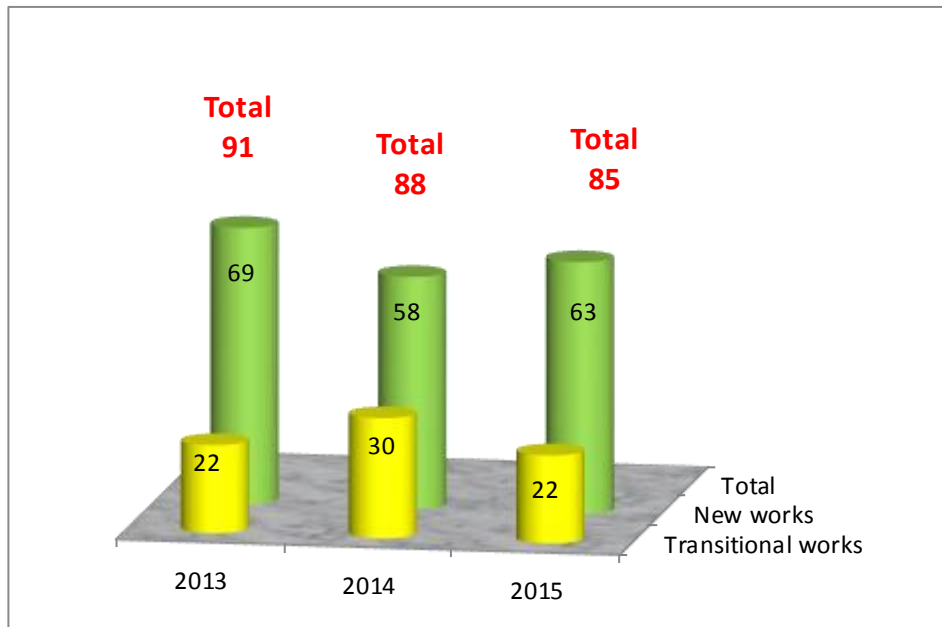


Diagram XV.1

Cost (thousand Manat) of transitional and new works under the Thematic Plan on Scientific Research by SOCAR over the past 3 years is stated in the following table.

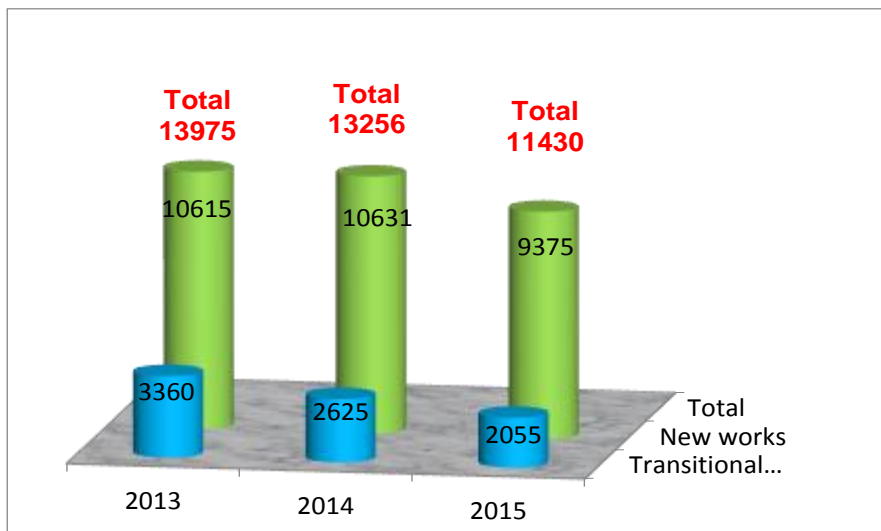


Diagram XV.2

**Oil & Gas Research and Design Institute**

Scientific-research and design-survey-development (engineering design) works to the extent of 27743.902 thousand Manat, including 26179.272 thousand Manat by SOCAR enterprises plus 1564.63 thousand Manat by foreign organizations) were carried out by the Institute in 2015.

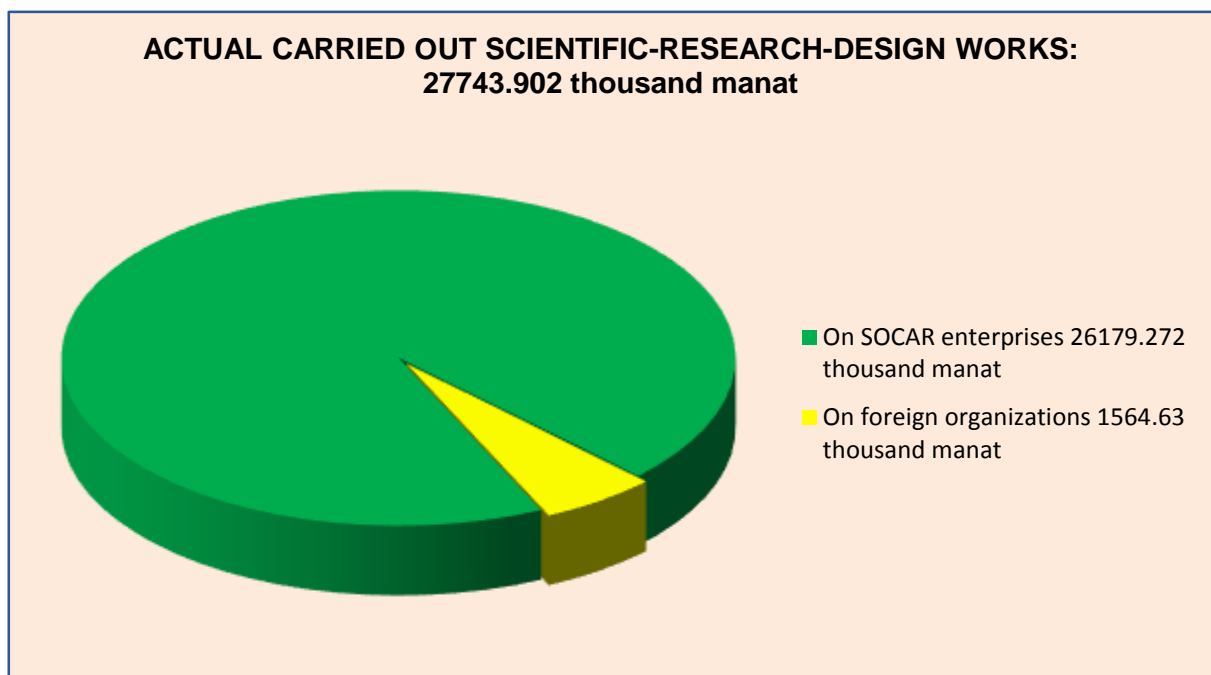
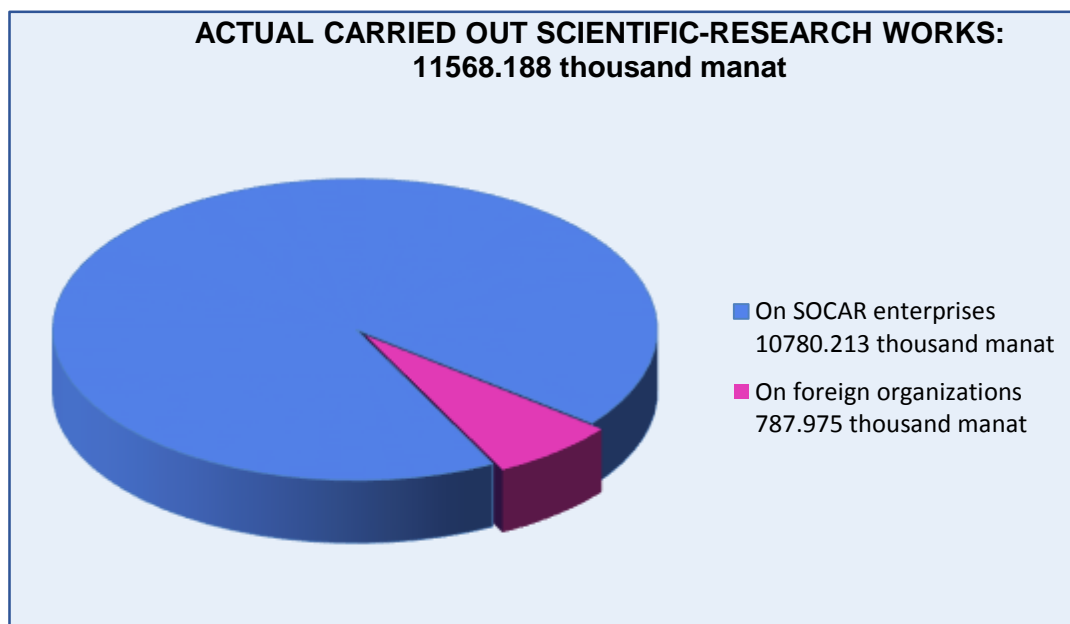


Diagram XV.3



Scientific-research (engineering design) works to the extent of 11568.188 thousand Manat (10780.213 thousand Manat by SOCAR enterprises plus 787.975 thousand Manat by foreign organizations) were carried out by the Institute in 2015.



**Diagram XV.4**

Works to the extent of 10780.213 thousand Manat were carried out for “Azneft” Production Unit out of 6852.830 thousand Manat for SOCAR enterprises.

Out of them:

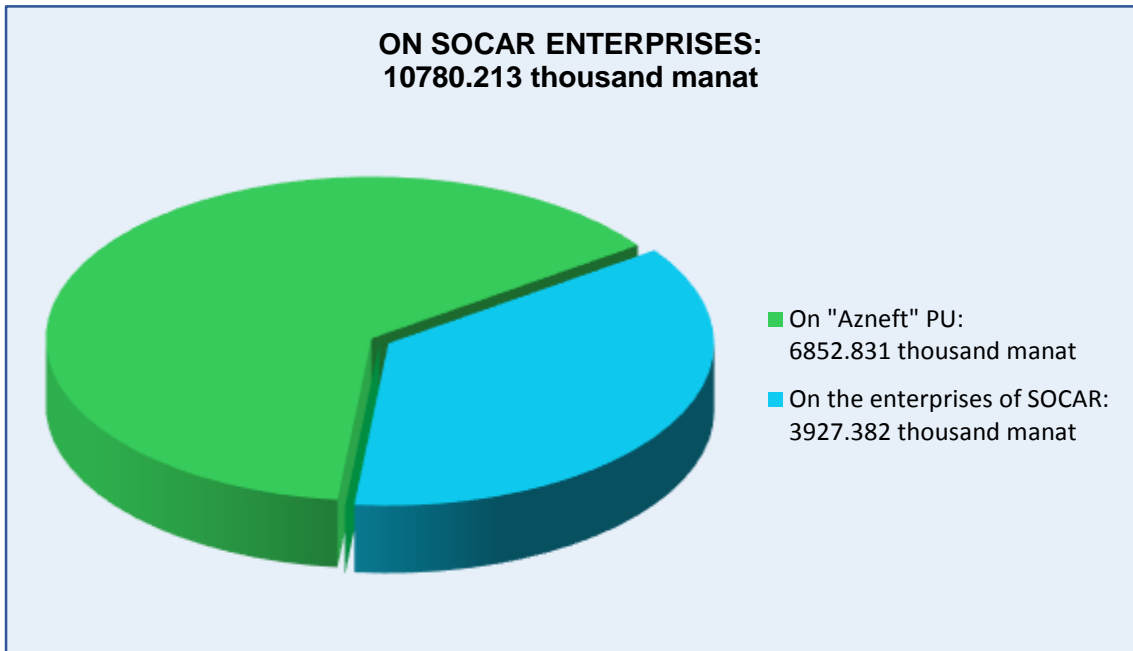
The works were handed over to the extent of 6187.0 thousand Manat on 40 topics under thematic plan for 2015, however works on 3 topics beyond thematic plan to the extent of 62.870 thousand Manat and 602.96 thousand Manat which completed in 2014 and handed over 2015.

The works were delivered to the extent of 3927.383 thousand Manat at the enterprises which included in organizational structure of SOCAR.

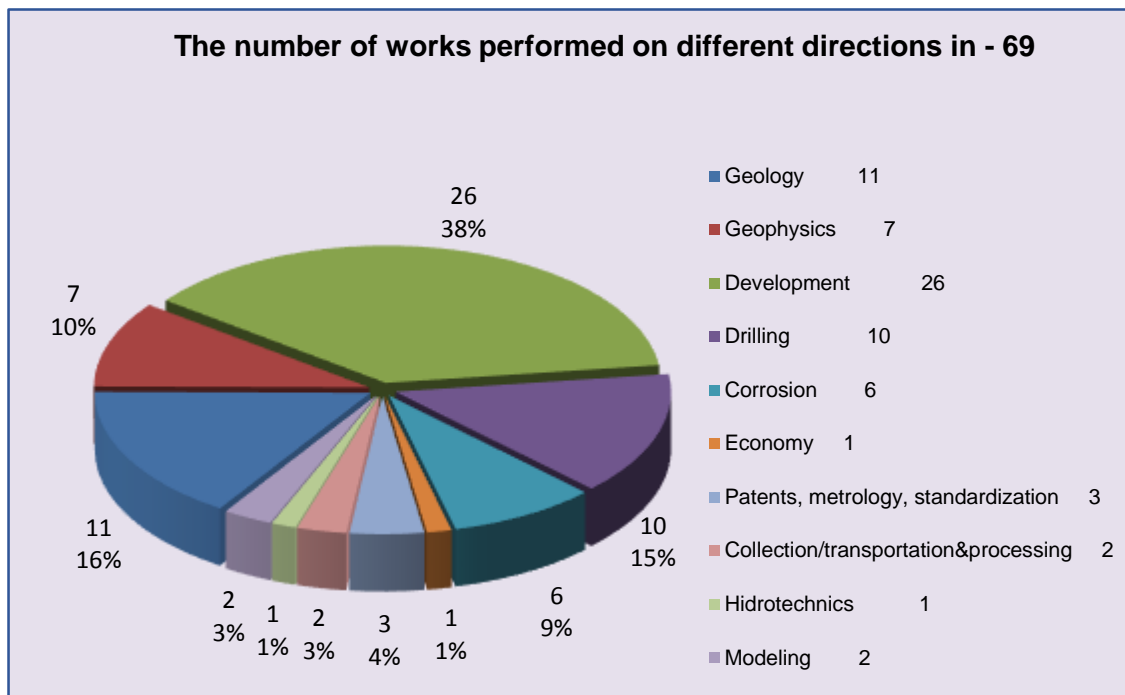
Out of them:

The works were delivered to the extent of 3621.0 thousand Manat on 18 topics under thematic plan for 2015, however works on 1 topic beyond thematic plan to the extent of 40.012 thousand Manat and 266.371 thousand Manat which completed in 2014 and handed over 2015.

The works were delivered to the extent of 787.975 thousand Manat at the enterprises which not included in organizational structure of SOCAR.



**Diagram XV.5**



**Diagram XIV.6**

**Note:** figures in the line “Others (foreign)” of the following table were distributed among production, drilling and modeling in the above diagram.  
Reference on scientific-research and pilot testing carried out in 2015 (numbers refer to 2015, scope of work refer to 2015+postponed from 2014).

Table XV.2

		New		Transitional		Total	
		number	volume, thousand Manat	number	volume, thousand Manat	number	volume, thousand Manat
1	Geology	7	1240	4	866,66	11	2106,66
2	Geophysics	1	125	3	487	4	612
3	Production	18	4259	5	941,47	23	5200,47
4	Drilling	6	660,012	4	672	10	1332,012
5	Corrosion	5	652,8868	1	182	6	834,8868
6	Economy	1	100		12	1	112
7	Patent, metrology, standard	2	200	1	16,784	3	216,784
8	Collection/transportation, processing	2	210		21,4	2	231,4
9	Hydraulic engineering	1	120		14	1	134
10	Others (foreign)	5	229,17928	3	558,79616	8	787,97544
	<b>TOTAL (for all organizations)</b>	<b>48</b>	<b>7798,40908</b>	<b>21</b>	<b>3771,44616</b>	<b>69</b>	<b>11568,18824</b>

#### Application of new techniques and technologies

According to the order №SOCAR/14-1100/01/ink-05-000171 dated 17 December in 2014 of “Azneft” PU, application of new techniques and technologies were planned in oil gas production departments, “Muradkhanly” enlarged oil mine and Gas Storages Maintenance Department in order to increase efficiency of the production in 2015. Out of thirty two actions, which planned to be applied in 405 facilities within the year, twenty actions were formed under the proposal of “Oil & Gas Research and Design” Institute, five actions under the proposal of “Nanotechnologies” department, one action under the proposal of “Oil & Gas Geotechnological Problems and Chemistry” Research Institute, one action under the proposal of Izolith plant, one action under the proposal of Cybernetics SCB, one action under the proposal of “Oil & Gas ProServ” LLC and three actions under the proposal of “Azneft” PU.

20 actions were fully implemented and 8 actions were partly carried out at 495 facilities against application of 32 new techniques and technologies which planned for 405 facilities in 2015. Four actions were not taken due to lack of procurement of necessary equipment and reagents. 90 offschedule well operations were realized. Additional oil to the extent of 37607 tons were produced against 5560 tons which intended in the reporting year.

Table XV.3

Facilities		Number of actions				Additional oil, ton	
Plan	Actual	Plan	Actual			Plan	Actual
			Fully	Partly	Unperformed		
405	495	32	20	8	4	5560	37607

More efficient actions, which taken in the reporting year, are as follows:

- Plug cleaners were applied in 166 wells and 860 tons of additional oil was produced;

- Injection of new compositions (sulphanole) upon external casing/annulus for offtaking mechanical impurities from the wells was applied in 21 wells and 2800 tons of additional oil was produced at “Neft Dashlary” OGPD;
- Technique for consolidation of holeback zone technique with polymer (LAPROL) plugback material was applied in 34 wells and 2073.5 tons of additional oil was produced;
- Technique for regulation of watering in operating wells with elastic-solid mass was applied in 8 wells and 180 tons of additional oil was produced at “Neft Dashlary” OGPD;
- “PADUS-2” paraffin cutter was applied in 9 wells and 7638 tons of additional oil was produced at “Neft Dashlary” OGPD and it was applied in 20 wells and 21291 tons of additional oil was produced at N.Narimanov OGPD as well;
- Technology for microbiological treatment (stimulation of formation) was applied in 4 wells and 251 tons of additional oil was produced by usage of different outputs (activated sludge, serum, output of champagne factory etc.);
- New liquid (NSA-1) reagent for enhancement of permeability of well bottom was applied in 11 wells and 128 tons of additional oil was produced;
- Consolidation of well bottom was applied in 7 wells through gasified grouting and 199 tons of additional oil was produced;
- Development of hole back zone with A-4 reagent was applied in 54 wells and 376 tons of additional oil was produced;
- Consolidating nanosystem was applied in 16 wells in order to prevent ingress of sand taking from strata and 1506 tons of additional oil was produced;

The following 4 actions were not taken due to lack of procurement of necessary equipment and reagents:

- Application of KD-1 saline sediments;
- MORE reagent;
- Application of pack-off mechanisms in abandoned wells in offshore mining;
- Prevention of sand sediments inside lift pipes through application of nanosystem.

### **Exhibitions and conferences**

Innovations and new technologies of several countries and well-known oil & gas companies of the world were intensively applied in SOCAR enterprises over the past years. It was mainly resulted from the organization of international conferences by SOCAR and its close participation in such international conferences dedicated to oil & gas of other countries regularly every year in terms of rapid development of oil & gas industry of Azerbaijan.

List of international exhibitions and conferences held by SOCAR in Azerbaijan and foreign countries is as follows:

- 6-9 May, “Iran Oil Show - 2015” XX International Oil & Gas Exhibition, Tehran city, Islamic Republic of Iran;
- 3-5 June, International Conference & Exhibition “XXII Caspian oil & gas, refinery and petrochemistry”, Baku EXPO Centre;
- 2-4 September, International Forum & Exhibition “XXII Oil & gas and petrochemistry”, Kazan city of Tatarstan Republic, Russian Federation;
- 15-18 September, International Exhibition & Conference “Development of oil & gas reserves of continental shelf belonged to Russian Arctic and CIS countries”, Saint-Petersburg city, Russian Federation;
- 9-11 October, International Exhibition “Education and Career”, Baku EXPO Centre;

- 21-23 October, International Exhibition & Conference “PetroVietnam - 40 years integration and development”, Vietnam Socialist Republic, KhoshiMinh city;
- 4-6 November, II International Exhibition & Conference “Society of Petroleum Engineers”, Baku, “Flame Tower” Business Centre;
- 17-19 November, XX International Exhibition & Conference “Oil & gas of Turkmenistan - 2015” in Ashgabad city, Turkmenistan;
- 18-20 November, VI International Environment Exhibition “Caspian: technologies for the environment”, Baku EXPO Centre.

In addition, Oil & Gas Research and Design Institute of SOCAR held on Travelling conferences and seminars, including:

Table XV.4

Travelling conference by Oil & Gas Research and Design Institute with “Azneft” Production Unit	“28 May” OGPD	14.05.15
Travelling conference by Oil & Gas Research and Design Institute with “Azneft” Production Unit	Neft Dashlary OGPD	15.05.15
Travelling conference by Oil & Gas Research and Design Institute with “Azneft” Production Unit	Absheronneft OGPD	20.05.15
Travelling conference by Oil & Gas Research and Design Institute with “Azneft” Production Unit	A.C.Amirov OGPD	26.05.15
Travelling conference by Oil & Gas Research and Design Institute with “Azneft” Production Unit	H.Z.Tagiyev OGPD	09.06.15
Travelling conference by Oil & Gas Research and Design Institute with “Azneft” Production Unit	Gas Storages Maintenance	17.06.15
Travelling conference by Oil & Gas Research and Design Institute with “Azneft” Production Unit	Bibiheybatneft OGPD	19.06.15
Travelling conference by Oil & Gas Research and Design Institute with “Azneft” Production Unit	Siyazanneft OGPD	23.06.15
Travelling conference by Oil & Gas Research and Design Institute with “Azneft” Production Unit	N.Narimanov OGPD	05.07.15

Oil & Gas Research and Design Institute held 5 travelling conferences with “Azneft” Production Unit in the subject “Innovations in oil & gas recovery” within the framework of Programme “Rapid development of professionalism of young specialists” in 2015.

Table XV.5

1	Travelling conference by Oil & Gas Research and Design Institute with “Azneft” Production Unit and foreign companies	Neft Dashlary OGPD	06.02.15
2	Travelling conference by Oil & Gas Research and Design Institute with “Azneft” Production Unit and foreign companies	N.Narimanov OGPD	12.02.15
3	Travelling conference by Oil & Gas Research and Design Institute with “Azneft” Production Unit and foreign companies	H.Z.Tagiyev OGPD	14.02.15
4	Travelling conference by Oil & Gas Research and Design Institute with “Azneft” Production Unit and foreign companies	Siyazanneft NQÇI	27.02.15
5	Travelling conference by Oil & Gas Research and Design Institute with “Azneft” Production Unit and foreign companies	A.C.Amirov OGPD	14.03.15

Joint seminars were held by Oil & Gas Research and Design Institute with SOCAR and foreign companies in the reporting year:

1. Seminar held with Schlumberger company in the subject of “Technology day of Schlumberger SIS and ALS for “Oil & Gas” Research and Design Institute, 17 February 2015;
2. Seminar held with Oil and Gas ProServ LLC 6-7 March 2015;
3. Seminar held with Schlumberger company in the subject of “Technology day of Schlumberger SIS and ALS for “Oil & Gas” Research and Design Institute, 17 March 2015;
4. Seminar held with ROXAR company on “Programme modelling complex for collection and transportation as well as METTE integrated modelling”, 16-17 April 2015;
5. Seminar held by “Bahar Energy Operating Company” in the presence of specialists of Oil & Gas Research and Design Institute, 5 May 2015;
6. Seminar held by “SHIRVAN OIL JV” company in the presence of specialists of Oil & Gas Research and Design Institute, 5 May 2015;
7. Seminar held with HUNTSMAN company, Manufacturer of chemical reagents, 15 July 2015;
8. Training held within the framework of conference “SPE Annual Caspian Technical Conference & Exhibition”, 26 October 2015.

The Institute held 12 internal seminars on oil & gas recovery:

1.6 International relations of the Institute: Employees of the Institute took part in the conference “Global Science and Innovation” held in US by 1 speech, in Kiev city of Ukraine by 1 speech, in Russia by 10 speeches, in Tehran city of Iran by 2 speeches, in Visbaden city of Germany by 1 speech, in Bosnia-Sarajevo on “1 international Turkic World Conference on Chemical Sciences and Technologies” by 2 speeches and in Uzbekistan by 1 speech. In general, they participated by 18 speeches and presentations in the international conferences held in foreign countries and 34 articles were published in foreign press.

Memorandum of Cooperation was signed with Naphtha and Gas Institute in Ivano-Frankovsk city in September 2015.

Tashkent State Technical University named after A.R.Biruni addressed by a letter on cooperation and presently, works are ongoing for signing of Memorandum of Cooperation.



## **XVI. PERSONNEL AFFAIRS, TRAINING AND DEVELOPMENT**

On 01 January 2016 actual number of the employees of the Head Office of State Oil Company of Azerbaijan Republic totaled to 493 persons. 30 persons were recruited by Head Office of SOCAR in the reporting year that out of them 21 persons were working in the enterprises of SOCAR and 9 persons from outside organizations. 2 persons out of the employed ones were alumni of Foreign Scholarship Program of SOCAR. Labor book was issued for 2 persons because of first job place. 29 persons were dismissed in the same period.

Up to 01 January 2016, out of employees working for Head Office 173 persons are key employees, 313 persons are specialists, 5 persons are technical staff and 2 persons are labourers. Moreover, 144 persons are women, 13 persons are pensioners and 94 persons are the youth under the age of 29. Average age limit of the employees working for the Head office makes up 41.5. Out of the employees 476 persons are highly educated, 3 persons are doctors of science and 36 persons are doctors of philosophy (candidates of science).

63 employment contracts were signed and labor contracts of 99 employees were duly amended by president of SOCAR and the Personnel Management Committee in view of appointment in 2015. Employment contracts of 73 persons were terminated within the same period. Out of them 66 persons were dismissed by their initiative, 4 persons due to personnel reduction, 2 persons due to expiry of employment contracts and 1 person due to death.

In total, 2 orders of SOCAR and 233 decisions of the Personnel Management Committee were developed and executed within the Head office and nomenclature staff (appointment, deployment, dismissal, amendment to employment contracts, assignment of official duties) in 2015.

Appointment of 143 persons for relevant positions was allowed subject to agreement with heads of relevant structural units of SOCAR Head Office which to be appointed in agreement with the heads of relevant structural units of the Company pursuant to order 72 dated 03 June 2010 of SOCAR. Nomination of 6 employees for appointment was not deemed expedient to the relevant positions.

Labor books of employees of Head office of SOCAR and managerial staff included in SOCAR nomenclature are maintained in the Personnel record division, proper notes are made and recorded duly.

757 work references were compiled and handed over to employees of SOCAR Head Office and heads of structural units for submission upon requests.

Number of employees within SOCAR declined as 2610 persons in 2015 and totalled to 52104 persons up to 01 January 2016. Reduction of the number of the employees was resulted from restructuring and optimization of the number of the employees in enterprises of SOCAR, such as Oil Refineries and Gas Processing Plant, "Azerigaz" Production Unit and Oil and Gas Construction Trust.

Table XVI.1, persons

<b>Name of enterprises</b>	<b>01.01.2015</b>	<b>01.01.2016</b>	<b>Annual average number of employees</b>
Head office of SOCAR	492	493	489
"Azneft" PU	11418	11100	11211



"Azerigaz" PU	9252	8660	8666
"Azerikimya" PU	2938	2509	2493
Geophysics and Geology Department	1061	1047	1093
Oil Pipelines Department	723	676	679
Marketing and Economic Operations Department	327	312	319
Investments Department	61	63	59
"Azernefityagh" Oil Refinery	2020	7	0
H. Aliyev Baku Oil Refinery	2172	3641	3775
H. Aliyev Baku Deep Water Jackets Plant	119	114	114
Gas Processing Plant	608	540	567
Social Development Department	300	268	274
Security Department	1652	1602	1572
Ecology Department	393	385	377
Gas Export Department	2633	2640	2616
Information Technologies and Communication Department	999	1006	995
"Oil and Gas Construction" Trust	4113	3881	3987
"Complex Drilling Works" Trust	2656	2614	2637
Oil and Gas Research and Design Institute	1068	1060	1011
Editorial office of journal "Azerbaijan Oil Industry"	21	21	20
"Development of Work Condition Norms" Department	105	99	97
Training, Education and Certification Department	292	288	290
Carbamide plant	24	28	27
Baku High Oil School	75	89	79
Oil & Gas Processing and Petrochemical Complex	75	71	72
Diving and Salvage-Rescue Department	562	558	555
Anti-blowout Mine-Rescue Militarized Unit	143	139	141
Transportation Department	8330	8162	8261
Companies on international projects of SOCAR	82	31	0
<b>TOTAL:</b>	<b>54714</b>	<b>52104</b>	<b>52421</b>

11892 persons were employed by enterprises of SOCAR in 2015.

Including:

- 10102 persons due to internal rearrangement;
- 1790 persons from outside.

14502 employees were dismissed in 2015. Including:

- 7826 persons on their own initiatives (including internal rearrangements within the enterprises);
- 1135 persons dismissed due to job cuts;
- 67 persons due to absence from work without valid reason and other labor violations;
- 631 persons due to expiry of employment contracts;
- 2 persons due to military service;
- 179 persons due to death;
- 106 persons due to health condition (disability);
- 4556 persons due to other reasons

Out of 14502 dismissed persons, contracts of 10102 persons were terminated due to internal rearrangements for 4400 persons as a result of structural changes within SOCAR in the reporting year. Upon deduction from this number which involves block release of 1135 persons resulted from internal rearrangements, death of 179 persons, call to military service of 2 persons, expiry of employment contracts of 631 persons and dismissal of 106 persons for disability (health conditions), employment contracts of 1447 persons within SOCAR were terminated due to fluctuation of personnel in the reporting year. So, number of dismissed persons under fluctuation of personnel

totalled to 1514 persons upon calculation of employees dismissed due to labor violations. So, the fluctuation of personnel within SOCAR made up 2.9% in 2015.

Up to 01 January 2016 number of the youth under the age of 29 was 6242 persons, thus it totaled to 11.98% of overall number of the employees. Out of them 4.0% managerial staff and specialists, 21.9% highly educated and 10.4% of them are women. Majority of the youth works in Oil & Gas and Petrochemical Complex (40.85%), Carbamide Plant (32.14%), Baku Higher Oil School (30.33%) Investments Department (30.2%), Head Office of SOCAR (19.07%).

However, it should be noted that up to 01 January 2016 the number of pensioners was 3976 persons, thus constituting 7.63% of the total number of the employees. Out of them, 3116 persons retired on a pension on preferential terms, while 186 persons retired due to age and 674 persons due to disability.

1135 persons were dismissed due to job cuts within SOCAR in 2015, however, 1065 persons received compensation to the extent of average 5-month salary amount. Out of 659 persons dismissed due to retiring age, 483 persons received compensation to the extent of average 5-month salary amount in the reporting year.

Up to 01 January 2016 the number of SOCAR employees with higher education totaled to 16734 persons and made up 32.11% of total number of the employees.

The analysis shows that up to 01 January 2016 the average age limit of SOCAR employees was 44.43.

The seniority of SOCAR employees working in the oil industry is as follows:

- up to 20 years - 36119 persons;
- over 20 years - 15985 persons

Up to 01 January 2016 the number of SOCAR employees holding an academic degree is 265 persons. Out of them, 31 persons are doctors of science and 232 persons are doctors of philosophy (candidates of science). The number of SOCAR employees holding an academic degree is shown in the following table:

Table XV.2, Up to 01.01.2016

Structural units	Doctor of sciences		Doctor of philosophy	
	men	women	men	women
Head Office of SOCAR	3	-	28	8
“Azneft” PU	-	-	18	2
“Azerigaz” PU	3	-	3	1
“Azerikimya” PU	-	-	5	-
Geophysics and Geology Department	2	-	6	2
Oil Pipelines Department	-	-	3	1
Marketing and Economic Operations Department	-	-	4	1
Investments Department	-	-	2	1
“Azerneftiyag” Oil Refinery	-	-	-	-
H.Aliyev Oil Refinery	2	-	15	-
H.Aliyev Baku Deepwater Jackets Plant	-	-	-	-
Gas Processing Plant	-	-	1	1
Social Development Department	-	-	3	1
Security Department	-	-	-	-
Ecology Department	1	-	12	1
Gas Export Department	-	-	1	1
Information Technologies and Communication Department	-	-	3	2
“Oil and Gas Construction” Trust	-	-	1	1

“Complex Drilling Works” Trust	1	-	1	-
“Oil and Gas Research and Design” Institute	10	1	58	25
“Development of Work Condition Norms” Department	-	-	-	-
Editorial office of “Azerbaijan Oil Industry” journal	1	-	1	-
Training, Education and Certification Department	2	-	2	-
Carbamide Plant	-	-	-	1
Baku Higher Oil School	4	1	4	8
Oil & Gas and Petrochemistry Complex			1	
Diving and Salvage-Rescue Department	-	-	-	-
Well Control Rescue Unit	-	-	-	-
Transport Department	-	-	3	-
Companies of SOCAR for international projects	-	-	5	-
<b>Total:</b>	<b>29</b>	<b>2</b>	<b>175</b>	<b>57</b>

Up to 01 January 2016, 8941 women were employed by SOCAR that it made up 17.16 percent of the total number of the employees. 524 persons out of the employed women are key employees, 3486 persons are specialists, 4633 persons are labourers and 298 persons are technical staff. 647 persons are under the age of 29, 3115 persons or 34.83% of women are highly educated. 879 women are pensioners, including 42 persons retired on a pension due to age, 733 persons on preferential terms and 104 persons due to disability. Majority of women works at the Oil & Gas Research and Design Institute (62.1%), “Development of Work Condition Norms” Department (53.5%), “Azerikimya” PU (39.3%), Information Technologies and Communication Department (36.2%), Oil refineries (35%). 59 persons out of SOCAR employees holding an academic degree are women. Out of them, 2 persons hold doctor of science degree, while 57 persons hold doctor of philosophy (candidate of science) degree. 343 persons out of the employed women are refugees and internally displaced persons and 6 women are production invalids.

Up to 01 January 2016, out of total number of SOCAR employees 94 persons are the members of martyr’s families, 2465 persons are the veterans of Garabagh war, 1899 persons are internally displaced people and refugees. It should be noted that 706 invalids are employed by SOCAR enterprises. Out of them, 144 persons are the invalids of Garabagh war, 3 persons are the invalids of Afghanistan war, 41 persons are the invalids of Chernobyl accident, 72 persons are invalids from work and 446 persons are disabled.

According to Decree №990, dated 14.01.2015 of President of the Republic of Azerbaijan, Kh.B.Yusifzade First vice-president of SOCAR was awarded Honorary Diploma of the President of the Republic of Azerbaijan.

On the eve of “Oil Workers Day” professional holiday, 2 persons were awarded the order of Honor and 39 persons the medal of “Progress” for their contribution to the development of countrywide oil industry under Decree №1415 dated 19 September 2015 of the President of the Republic of Azerbaijan on awarding of Azerbaijani oil industry workers. 5 persons were awarded the title of “Honoured engineer” and 1 person was awarded the title of “Honoured lawyer” under Decree №1414 dated 19 September 2015 of the President of the Republic of Azerbaijan. 3 old oil workers were granted the individual pension of the President of Republic of Azerbaijan for their immense merits in the oil industry under Decree №1416 dated 19 September 2015 of the President of Republic of Azerbaijan. On occasion of 70-year anniversary of creation of chemical industry in Azerbaijan, 2 persons were awarded the order of Honor and 7 persons the medal of “Progress” for their rational activity under Decree №1471 dated 26 October 2015 of the President of the Republic of Azerbaijan and 1 old oil chemist was granted the individual pension of the President of Republic of Azerbaijan under Decree №1472 dated 26 October 2015 of the President of the

Republic of Azerbaijan. Also, vice-rector of Baku Higher Oil School was awarded the title of “Honoured scientist” for his merits in development of Azerbaijan science and training of highly qualified specialists. On occasion of “Builders Day” professional holiday, 1 person was awarded the title of “Honoured engineer” under Decree №1166 dated 09 April 2015 of the President of the Republic of Azerbaijan and 3 persons the medal of “Progress” under Decree №1167 dated 09 April 2015 of the President of the Republic of Azerbaijan.

Significant documentation works were carried out by Human Resources Department in respect to the awarding and, orders, medals, badges and proper certificates were presented to the awardees with solemnity by President of SOCAR and proper minutes, personal records and registration cards of the awardees were presented to the Presidential Administration of the Republic of Azerbaijan.

According to 42 orders of SOCAR 195 employees were awarded the Certificate of Honour of State Oil Company of Azerbaijan Republic for their special merits in the development of oil industry in 2015.

Out of them:

- On occasion of “Oil Workers Day” professional holiday - 117 persons
- On occasion of 70-year anniversary of creation of Chemical industry - 19 persons
- Several persons (for special merits) - 59 persons

Performance of proper works was continued towards increase of exigence in SOCAR Head Office and in all structural units in order to strictly follow labor and execution discipline in 2015. Data on discipline status for outcomes of 2015 year as compared to 2014 are reflected in the following table in view of SOCAR enterprises:

Table XVI.3

	Data	2014	2015
1	Number of labor discipline violations (case)	3028	3185
2	Violators of labor discipline, person	5167	4869
3	Unjustified absence	214	154
4	Violators of labor discipline	1078	854
5	Leave of work place without permission	226	185
6	Number of defaulters	1992	2267
7	Latecomers	151	131
8	Presence in drink	38	20
9	Violators of safety regulations	796	544
10	Number of reprimanded employees	5115	4818
11	Dismissal due to absence from work and other labor violations	81	67

Awarding of the title of “Labor veteran” is followed up in accordance with Decision № 216 dated 22 September 1995 and Decision № 150 dated 24 September 1999 of the Cabinet of Ministers of Republic of Azerbaijan. All documents concerning the award of the title of “Labor veteran” submitted by the enterprises to the division are checked once more and executed under proper orders of SOCAR. 234 persons were awarded the title of “Labor veteran” under 67 orders issued by SOCAR and certificates of four persons were replaced with new ones in 2015. In total, 238 certificates “Labor veteran” were filled up and submitted to the applicants over the past year within SOCAR.

In accordance with Resolution № 97 dated 23 May 2001 of the Cabinet of Ministers of Republic of Azerbaijan “On approval of Regulations for attestation in the Republic of Azerbaijan”, there held an attestation of personnel in “Azneft” PU, “Azerikimya” PU, Geophysics and Geology Department, H.Aliyev Baku Deepwater Jackets Plant, Training, Education and Certification Department and other organizations in 2015.

Last year 743 senior staff, 889 specialists and 11 technical operators who were planned for the departments and enterprises of SOCAR, were attested. Therefore, 1432 persons, who passed the attestation, complied with their positions, while 5 persons failed. As a result of the attestation, 27 persons were promoted in grade, 4 persons were degraded and 1 person was dismissed.

There issued 96 proper orders of SOCAR and 1427 decisions of Personnel Management Committee in 2015 in view of usage of vacations of employees included in Head Office and nomenclature and signed by the top management.

The employees of SOCAR Head Office and nomenclature were on leave 1308 times in 2015. 24 persons were on study leave and 15 persons (6 persons since week 22 of pregnancy) were on social leave. 157 employees were paid compensation to the extent of 4488 calendar days for unused leave. 16 persons were on unpaid leave for several reasons within the reporting period.

Up to 01 January 2016, the number of unused vacation days within SOCAR enterprises and organizations totaled to 41789 and within SOCAR Head Office to 9175 calendar days.

21040 persons did not attend work within 350196 days due to temporary loss of capacity to labour on SOCAR enterprises in 2015. The figures were 21313 and 357276 respectively in comparison with 2014. Thus, 259 persons within SOCAR Head Office presented medical certificates and did not attend work for this reason within 1901 days. It should be noted that these figures totaled to 313 persons and 3090 men/days respectively in 2014.

959 vacancies were announced under 340 positions and professions at “recruitment” subsection (<http://careers.socar.az>) of “career” section of [www.socar.az](http://www.socar.az) webpage within 2015 and there identified a compliance with requirements of the aforesaid vacancies of data submitted by 17722 persons, who applied online for such vacancies and 8085 persons were entitled to take part in the next stage.

6101 persons took part in test examinations and out of the successful candidates in the test examinations 226 candidates took part in vocational test examinations (aptitude testing on labour professions), 1722 persons participated in the interview stage that totally 865 persons (67 persons passed from vocational test examinations, 798 persons from interviews) successfully passed the competition process. Out of the successful candidates 604 persons were assigned to enterprises and organizations of SOCAR to be employed, but 253 persons were included in the Personnel reserve base (PRB) of SOCAR. However, 6 persons from the Personnel reserve base were assigned to enterprises and organizations of SOCAR to be employed within the reporting period.

69 persons were employed by nomination of SOCAR management, 26 persons were employed under Internal Study (7 persons) and Study Abroad program (19 persons).

Out of the alumni graduated from training centres of Training, Education and Certification Department in 2014, 328 persons were employed, 57 persons were assigned to departments and enterprises of SOCAR to be employed and were put into Personnel reserve base of such departments and enterprises.

In the presence of representatives of Human Resources Department in 71 meetings of the Tariff-Qualification Commissions held in SOCAR enterprises and organizations, the issues of transfer of 1487 employees without payment of compensation were considered and the claims of 1114 persons (75%) were satisfied.

At the same time, compliance of 15338 transfers to other positions carried out in structural units under direct subordination of SOCAR with the requirements of legislation and internal normative documents of SOCAR was checked up.

There conducted an opinion survey in 3 directions in regard to improvement of processes on Tariff-Qualification Commissions working in enterprises and organizations of SOCAR, identification of factors impacting upon outflow of human resources and taking relevant actions towards elimination of them as well as measurement of employee satisfaction.

Furthermore, alongside with a survey conducted among the employees working in enterprises and organizations, another survey was held among the persons who worked in such enterprises and organizations, were dismissed at their own initiatives. The survey was carried out by phone call with 181 persons. In reference to responses of participants in the survey, relevant statistic information was prepared through program Statistic Package for Social Sciences (SPSS) and responses were analyzed comparably.

SOCAR creates opportunities for Azerbaijani youth to study at most reknown universities of France within the framework of cooperation with TOTAL company since 2007. The project "Study in France" organized under joint cooperation between SOCAR and TOTAL was started this year, too. As differed from the past years, only engineering qualifications were deemed expedient this year. 3 persons were selected from the candidates nominated by SOCAR to study at higher education institutions of France within 2015-2016 study year as a result of tests and interviews arranged by TOTAL company.

As being every year, a number of steps were taken in development of young specialists within 2015-2016 study year. As a follow-up of such steps, there announced admission of documents for Foreign Scholarship Program in May 2015, documents of 45 persons, who applied for the program, were reviewed. Upon acceptance of candidacy of 30 students whose parameters complied with the requirements, test exams were arranged for students by specialists of Human Resources Department and qualified experts on specific disciplines. Opinions on the participants were concluded and submitted to Commission for Development of Specialists Abroad. Admission of candidates who applied for the Program was reviewed by the Commission for Development of Specialists Abroad (hereinafter referred to as Commission).

In the course of first meeting of the Commission, one student was selected and, six students were selected in second and third meetings, more 19 students were selected in last two meetings - total 26 students were selected as a SOCAR scholarship fellow. However, 2 persons who were accepted by the Commission, refused from participation in the Scholarship Program. At the same time, proper decisions were made for employment of 18 alumni according to their qualifications. Number of students applied for the Scholarship Program in 2015 is stated in the following table:

Table XVI.4

<b>Foreign Scholarship Program</b>	
Applicants	45
Accepted candidates	30
Accepted persons	24

Number of students enrolled in Scholarship Program of SOCAR for 2006-2015 years is as follows:

Table XVI.5

<b>Country</b>	<b>Student</b>	<b>Successfully graduated</b>	<b>Total</b>
US	4	17	<b>21</b>
Germany	1	26	<b>27</b>
Austria	0	1	<b>1</b>
Great Britain	26	131	<b>157</b>
France	7	29	<b>36</b>
Netherlands	0	3	<b>3</b>
Sweden	0	1	<b>1</b>
Canada	2	2	<b>4</b>
Malta	0	1	<b>1</b>
Norway	0	3	<b>3</b>
Russia	0	1	<b>1</b>
Ukraine	2	0	<b>2</b>
Switzerland	1	0	<b>1</b>
Italy	1	0	<b>1</b>
Turkey	1	8	<b>9</b>
<b>Total</b>	<b>45</b>	<b>223</b>	<b>268</b>

Including, for 2015

Table XVI.6

<b>Country</b>	<b>Student</b>	<b>Successfully graduated</b>	<b>Total</b>
Great Britain	17	10	<b>27</b>
France	3	3	<b>6</b>
Germany	0	3	<b>3</b>
US	1	1	<b>2</b>
Canada	1	0	<b>1</b>
Switzerland	1	0	<b>1</b>
Italy	1	0	<b>1</b>
Turkey	0	2	<b>2</b>
<b>Total</b>	<b>24</b>	<b>19</b>	<b>43</b>

Moreover, the students who are studying in foreign countries both within Scholarship Program of SOCAR and state-supported program organize different events at higher education institutions dedicated to Azerbaijan and thus, contribute to delivery of realities about our country to world community and are as active agitators of our land. The scholarship fellows held several promotion and propaganda events within 2015.

Events devoted to Khojaly tragedy were arranged at Aberdeen University, Edinburg University and Southampton University on February 26 and attracted the attention of local community thereof.

There held representations in higher education institutions in order to raise awareness of students on programs and new projects proposed to youth by SOCAR. There held meetings with students of Azerbaijan Technical University, Caucasus University, Azerbaijan State Oil Academy, Azerbaijan State Economic University. The presentations on SOCAR Scholarship Programs were held and detailed information on the program was given to the students.

SOCAR assigned monthly scholarship to 40 students from each course within bachelor degrees who had high study marks since 2004-2005 study year for the



selected faculties of Azerbaijan State Oil Academy (Geological exploration, Gas-oil-mine, Chemistry-technology, Oil mechanics, Energetics, Automation of production processes, Economy, International economic relations and management) in order to develop talented young oil specialists and motivate the students to gain modern scientific and practical knowledges in oil & gas industry. SOCAR keeps its focus on such students and renders its assistance to them to have field practice in advanced enterprises of SOCAR, to determine themes of courseworks and projects as well as to compile such research works based on actual data of SOCAR.

Should winners of Internal Scholarship Program follow the terms, they are employed by SOCAR. 7 scholarship fellows were provided with employment at SOCAR within the framework of Internal Scholarship Program hereof.

Online admission of documents was carried out through webpage [www.socar.az/tehsil](http://www.socar.az/tehsil) for Internal Scholarship Program within 2014-2015 study year from 2 February till 27 February, 2015. 2628 students from 27 universities of Azerbaijan applied to the program, then 2181 students were allowed to take examination carried out by SCSA as they met the requirements and terms of the program and out of them 1726 students participated in the examination. 256 students who got the appropriate pass score determined by the Commission members were invited to the next stage, i.e. interview. According to outcomes of the interviews held on 4-18 May 2015, 134 students were awarded scholarship of SOCAR.

Since 2010 "Paid Summer Practice" Program has been implemented by SOCAR. Every year SOCAR realizes "Paid Summer Practice" Program for Azerbaijani students, who are studying on the qualifications, such as oil & gas, oil & gas facilities, drilling, geophysics, automation of processes, computer, construction, pipelines, ecology, petrochemistry and chemistry engineering, energetics, economy and programmer to have field practice within summer vacation. The Program is implemented in view of enhancement of practical knowledges of the students in various disciplines of oil & gas industry, getting more familiar with real work condition of them, examination of theoretical knowledges in practice and to collect more profound information about work parameters for SOCAR. The students who graduated 2<sup>nd</sup>, 3<sup>rd</sup>, 4<sup>th</sup> courses of bachelor's degree and 1<sup>st</sup>, 2<sup>nd</sup> courses of master's degree on the aforesaid qualifications, are entitled to participate in the Program regardless of higher education institution. It should be noted that Summer practice lasts in the duration of 1 or 2 months depending on desire of any student. According to terms of the Program, temporary employment contract shall be concluded with the students in such duration and they are recruited in the capacity of specialist. The internees get salaries as per time and occupation accordingly. At the same time, all privileges currently applicable for SOCAR employees shall be applied to the internees, too.



1023 persons, who study at 80 higher education institutions in Azerbaijan and abroad, applied for competition announced at webpage of SOCAR under “Paid Summer Practice” Program in 2015. 199 students were admitted to the summer practice. It should be noted that out of students admitted to practice 84 persons were holders of SOCAR scholarship.

In respect to coverage of SOCAR “Summer Practice” program on July 15, 2015 Media Plan was compiled. Specialists of Human Resources Department together with Media representatives visited the enterprises where the students attended at field practice within the framework of time interval specified as per the Media Plan and provided coverage of “Summer Practice” Program at Media upon close familiarization with work schedules of the students.

In view of countrywide high demand for young personnel in energy sector, State Oil Company of Azerbaijan Republic organizes the project “Summer School” for students of higher education institutions since 2010 in order to raise interest to energy sector of students who study at local universities and abroad, as well as young specialists.

Summer holidays of the participants were efficiently organized within the framework of projects “SOCAR Summer School” and alumni of SOCAR Foreign Scholarship Program and other specialists delivered detailed lectures to the students on the subjects such as Negotiations and legal aspects on oil & gas; Geological exploration and prospecting; Development; Oil & gas production and transportation; Development of social projects; Capital investment and economic operations; Oil & gas processing and petrochemistry; Strategic development and ecology; human resources management etc. Alongside with the lectures, excursions were organized to SOCAR enterprises and organizations for the participants.

Selection for project “SOCAR Summer School” is carried out on the basis of competition. The competition is realized in 2 stages. The candidates who comply with terms of the competition are invited to 1<sup>st</sup> stage. The first stage is conducted through test examinations. The applicants who collect the needed scores in this stage, pass to 2<sup>nd</sup> stage. Individual interviews are held with the applicants in this stage.

191 candidates who collected the relevant pass scores on qualification groups for 1<sup>st</sup> stage of Summer School project 2015, were invited to 2<sup>nd</sup> stage - interviews. The candidates were assessed on the basis of knowledges, world outlook, qualification, behaviour and other criteria in the interviews. 50 candidates who were justified and

answered correctly questions of the specialists in the course of the interviews, were entitled to be selected. There arranged visits to foreign countries (Switzerland, Romania, Turkey and Georgia) for participants who were selected as a winner resulted from competitions held within the project. It should be noted that alongside with the students, SOCAR employees haven taken part in the project since 2012.

There conducted winter school for young journalists for the first time within the framework of joint cooperation of SOCAR and Press Council in 2015 in order to upgrade of coverage of energy issues at Azerbaijan media, to promote enhancement of knowledges of young journalists on different branches and peculiarities of oil & gas sector, to get them familiarized more closely with global and regional achievements gained over the past years within our oil industry which has meritorious traditions as well as activity lines of SOCAR. The project "SOCAR Winter School for Young Journalists" was implemented on 15-27 February 2015.

In general, the project consisted of two parts. I part was implemented in Baku within 9 days on 15-24 February 2015 and II part was implemented in Balaken within 3 days on 24-27 February.

There held presentations on different subjects by specialists of SOCAR for participants of "SOCAR Winter school of young journalists" in I part of the project. History and development phases of oil industry and energy sector of Azerbaijan; organization and improvement of geological and geophysical works of SOCAR; oil & gas recovery; oil & gas processing; international oil transactions; marketing and sale of oil and petroleum derivatives; gas export strategy and prospects of Azerbaijan; assets of SOCAR in foreign countries; press and public relations of SOCAR; actions carried out for safety and occupational health of SOCAR employees; nationalization programmes in oil industry; human resources management by SOCAR; projects realized by SOCAR in respect to youth and other subjects were presented in details to young journalists in I part of the project.

36 young journalists took part in the project. Mass Media comprised by such journalists include representatives of TV, newspaper and news portals. 8 persons represented TV, 20 persons news press and 7 persons news portals.

The project "Engineers of the future" covering senior classes of secondary schools was started by State Oil Company of Azerbaijan Republic since November 2012. Implementation of the project "Engineers of the future" aimed to encourage the youth towards engineering professions being crucial and important for economic growth of our state, to enlighten school children about training & education projects and programs of SOCAR, to direct them to engineering disciplines and to take actions for development of professional specialists in the future through awareness-raising activities.

Multiple presentations on the project "Engineers of the future" were held for more than 300 senior pupils in several schools of Baku up to date.

The conducted presentations reflected information in respect to foreign scholarship, internal scholarship, summer school, summer practice realized by SOCAR and great importance was attached upon development of professional labours. It was mentioned that studying any profession at SOCAR training centres would be very important and efficient, however the Company would undertake overall education charges and employment. Significance of priority qualifications within SOCAR, such as oil & gas

engineering, geology-geophysics engineering, chemistry engineering, mechanics engineering, computer engineering and ecology engineering was touched upon.

SOCAR employees were continuously sent for trainings conducted inside of the country as well as most progressive scientific and industrial centres along the globe in the duration of 2015-2016 in order to raise professionalism level and modern theoretical and practical knowledges.

3 persons were sent on requalification courses by Public Administration Academy under the President of Azerbaijan Republic in 2015.

There held meetings with representatives of consulting companies in the running period over the past year. Opinions of internationally experienced specialists on personnel development were surveyed during these meetings and application of such experiences within SOCAR was discussed.

One of key objectives set before SOCAR is to organize training process as per requirements of international standards in development, redevelopment and skill-raising on current professions of highly qualified specialists and labours for oil industry. Therefore, trainings organized at training centres of SOCAR and participants of such trainings were in focus within 2015.

In 2015, Training, Education and Certification Department of SOCAR conducted 385 trainings in Personnel Development Centre, 293 trainings in Offshore Survival Training Centre, 82 trainings in Gala Training Centre and 56 trainings in Sumgayit Training Centre. In total, 9561 participants attended in such trainings that out of them 5495 persons fall on Personnel Development Centre, 2861 persons on Offshore Survival Training Centre, 1043 persons on Gala Training Centre and 484 persons on Sumgayit Training Centre.

As every year, admission processes were carried out in training centres of SOCAR in order to develop qualified labours in 2015.

Admission processes were carried out for 176 students on 12 professions - "Battery assembler", "Fitter technician", "Manual electrical welding", "Operator of logging station", "Plastic welding", "Assembler for fabrication of steel and reinforced concrete structures", "Operator of gas distributing station", "Gas welder", "Operator of drilling unit", "Logger", "Maintenance technician" and Operator of processing units" to be trained by Personnel Development Centre and Gobustan Regional Training Centre.



486 persons submitted electronic applications to take part in the competition. Out of 486 applicants 66 persons were highly educated, 47 persons were specialized secondary educated, 28 persons were initially skill trained, 345 persons were secondary educated. Alongside with 448 men, 38 women applied to take part in the competition organized in 2015. After completion of admission of electronic applications - in first stage of the competition, 14 persons were not selected due to incompliance with the terms and conditions mentioned in "Rules for student admission to SOCAR training centres", 472 persons were entitled to participate in the second stage of the competition as they followed the terms hereof.

In respect to ensuring verification of originality of the documents mentioned in electronic application form of the candidates and issuing pass sheet into test examination within the second stage of the competition, 22 persons were not selected due to incompliance with the terms and conditions mentioned in "Rules for student admission to SOCAR training centres", 260 persons were entitled to participate in test examination.

258 persons took part in the test examination. According to overall outcomes of the test examination, 163 persons were selected to have skill trained.

Also, candidacy of 14 persons were presented by DAN Public Union in 2015, out of them 10 persons were registered and in II stage only 1 person was taken from registration as he did not follow the terms and conditions and 9 persons took part in the test examination. According to overall outcomes of the test examination, 3 persons sent by orphan asylums were entitled to get trained in training centres of SOCAR pursuant to their scores and as they got minimum pass scores (20 score) provisionally were selected as winners.

The student admission was announced for 55 students on 3 professions - "Electrical fitter on repair and maintenance of electrical equipment", "Maintenance technician" and "Operator of processing units" at Gobustan Regional Training Centre of Training, Education and Certification Department within "Sustainable Development Initiatives" financed by BP and its coventurers.

482 persons applied to participate in the competition and out of them, 248 persons passed to the next stage (examination). 55 applicants were selected to have skill trained according to overall outcomes of the test examination.

Electronic admission of the documents for Sumgayit Training Centre was held on 5 professions - "Equipment operator", "Automatic control operator", "Electrical gas welder", "Gas cutter" and "Packing operator". 437 persons applied to participate in the competition and out of them, 366 persons passed to the next stage (examination). 71 applicants did not follow the terms and conditions of the competition.

In respect to ensuring verification of originality of the documents mentioned in electronic application form of the candidates and issuing pass sheet into test examination within the second stage of the competition, 16 persons were not selected due to incompliance with the terms and conditions mentioned in "Rules for student admission to SOCAR training centres", 250 persons were entitled to participate in the test examination.

245 persons took part in the test examination. 68 persons who got high scores on the chosen professions, were selected as winners of the competition according to overall outcomes of the test examination and they were entitled to have skill trained.

264 persons who were given pass sheet to participate in the test examination, took part hereof. According to overall outcomes of the test examination, 96 persons who gained high scores on the selected professions, were entitled to participate in the 4<sup>th</sup> stage of the competition.

SOCAR has organized unpaid internship program for alumni of higher education institutions according to personnel demand since 2014 in order to contribute to employment and career development of youth.

Internship program for 2015 was announced for the following qualifications and disciplines. 145 persons applied for and 96 persons were invited to the interview. Out of the interview participants, 13 persons were accepted for internship and they did unpaid internship in Oil & Gas Research and Design Institute of SOCAR. At the end of internship period 6 persons passed the test examination, then interview and accepted for employment according to recruitment rules of SOCAR.

Table XVI.7

<b>LIST of Qualifications and disciplines within unpaid internship program</b>	
Open-cut mining	Urban planning
Development of oil & gas fields	Fabrication of offshore structures and maritime works
Operation of oil & gas wells	Heating gas supply
Technology of oil & gas transportation and storage	Drainage and treatment of sewages
Electricity supply (on lines)	Construction of bridges and transport facilities
Electrical equipment	Hydraulic engineering
Electrical power engineering	Industrial and civil engineering
Electrical network and systems	Highway engineering and airfield construction
Automation of technological processes production	Electrical power engineering
Information control system	Welding metallurgy technology and equipment
Technology of petroleum & chemistry synthesis	Compressor machines and units
Chemistry of oil & gas	Dedicated radiocommunication systems
Oil refinery technology	Communication hubs and commutation systems
Hydrocarbon gas processing technology	Network communications and information/data sharing
Architecture of buildings and facilities	Applied software
Landscape architecture	

Alongside with the above works, 1625 applications as well as 2581 e-applications were reviewed by Human Resources Department within 2015. Moreover, 1507 citizens/employees were received, their requests were addressed, proper investigations were carried out and the inquiries were replied.

## ***XVII. OCCUPATIONAL SAFETY***

There performed considerable works in organizational structures of SOCAR in respect to creation of healthy and safe working conditions, upgrading production areas, facilities and work places in compliance with the requirements of up-to-date standards and preventing industrial injuries, accidents and occupational diseases in the reporting year. Introduction of instrumentations and automation as well as testing and expertise of equipment, mechanisms and applications ensuring safe operation of facilities, equipment and mechanisms in performance of technological processes, were realized. An amount of 15956211 Manat was spent for taking actions on improvement and upgrading of healthy working conditions at SOCAR enterprises in 2015.

Provision of the employees of the Company enterprises and engineers/technicians of the Head Office of SOCAR working in production process with coveralls, boots, other personal protective equipment, life jackets, buoys and rafts for offshore facilities, and usage of such coveralls and aids in all enterprises by the employees was regularly controlled. An amount of 3964089 Manat was spent for the provision of employees with coveralls, boots and personal protective equipment in 2015.

Certain works were carried out for provision of employees with individual and collective recovery aids, and setting up of lifeboats and rafts were performed in all newly constructed deepwater jackets and only after these procedures the jackets were accepted for commissioning. The assigned crew members were trained in proper courses, instructed on maneuvering of new lifeboats and they were awarded relevant certificates for handling lifeboats in deepwater jackets in order to ensure evacuation of staff in case of accidents and fire and to fulfill emergency response operations effectively and efficiently by usage of the launched lifeboats adequately. About 1200 employees working for the Company enterprises were trained and instructed in special courses which organized by Offshore Survival Safety Centre of Training, Education and Certification Department in 2015.

Adequate actions were taken in respect to release of employees from heavy-duty hard work, prevention from impacts of occupational hazards and improvement of working conditions in view of their safety. So, a number of trestles and pier platforms at "Neft Dashlary" OGPD and N.Narimanov OGPD were repaired and brought into strict compliance with safety requirements, and automatic measurement systems and control systems were applied at "28 May" OGPD and A.Amirov OGPD in view of employees safety. Also, there fixed automatic control and alarm-signalization system for warning of existence of dangerous and occupational hazards in some oil pump stations of Oil Pipelines Department in order to prevent accidents, which might occur in fire-dangerous facilities.

Supervision over fire safety in production areas was intensified. Fire extinguishing systems were improved in a number of deepwater jackets, fire water pumps were replaced with stronger pumps, in addition water pumps in standalone mode working with diesel engines were installed, majority of production facilities and dwelling blocks were outfit with fire alarm system. Continuing duty of rescue ships in near by fire-hazardous offshore jackets was provided and presently, instruction-trainings are organized in the presence of such ships in several facilities in order to ensure fire safety of the jackets.

Periodic medical check-up of the employees was strictly controlled by Health and Safety Department in current year as it was followed over the past years. According to the plan schedule approved as from beginning of the year, 21554 persons on the



Company enterprises of were subject to medical check-ups. As a result of the medical check-ups, different types of diseases of 2060 persons were found on various diagnoses in 2015. A few of the them were transfered to easy work, some others were prescribed in-patient and out-patient treatment and another persons were given a medical advice.

Measurement works were carried out at 4836 work places by industry-sanitary laboratories and 1734 work places were found to be excessive more than norm in 2015. There assumed actions for compliance of such factors with the adequate norm and alignment of majority of the same factors with the norm limit were identified through re-measurement works.

An attestation was carried out at work places in 9 structural organizations of the Company enterprises in 2015. 600 work places out of 2792 attested places were deemed hazardous according to outcomes of the measurement works. Alongside with proper actions for mitigation of hazardous production factors to health of the employees at such work places, including employees handling chemical substances, they were given free milk as a preventive arrangement to mitigate harmful effect of these substances.

For the purpose of identification, liquidation or minimization of the risks which might cause hazards, fires, accidents and occupational diseases in production sites, regular inspections were carried out in several production sites, in particular offshore facilities by Health and Safety Department of the Company and the permanent commission on occupational safety in 2015. Current state of working conditions was inspected at more than 275 production sites in 15 subdivisions of 9 structural units of the Company. As a result of the inspections, 683 safety violation cases and other faults were detected and, subsequently there assumed measures for elimination of them and the majority of the detected faults were liquidated.



In the course of fabrication and reconstruction of production facilities, they were supervised by Safety Division to be compliant with safety rules and norms as well as requirements of due standards in the reporting period. Regular inspections were conducted in newly constructed facilities where fabrication and reconstruction works were realized in order to oversee compliance with the standards of facilities, equipment and mechanisms in production sites and assembly/erection of them as per the design and safety requirements. There held discussions for elimination of faults

and shortcomings during such inspections and subsequently, assumption of due actions was under control.

Application of international management standards including “OHSAS 18001 - Occupational Health and Safety Management System” and implementation of works in compliance with requirements of such standards was attached great importance in the enterprises. Therefore, Health and Occupational Safety Department carried out monitorings in such enterprises, the enterprises were rendered due methodical support, awareness-raising works were conducted and the recommendations were given within the reporting year.

A lot of works were carried out in respect to development of manuals, statutory documents, other norms and regulations in order to instruct and to raise awareness of the employees duly on safety in 2015. There elaborated a series of Regulations and manuals reflecting safety rules to be followed while handling operations in production areas and these works are ongoing. “Set of instructions on measurement and assessment of hazardous production factors in attestation of work places” and “Structure of containers running under pressure in oil, gas and petrochemistry industry and safety rules” were developed by Azerbaijan State Scientific Research Institute for Labour Protection and Safety jointly with Health and Safety Department, and upon approval they were distributed among structural enterprises of the Company in 2015. At the present, more directive document - “Standard Rules for safe performance of diving operations and medical provision of divers” is under development.

Also, activities of contractor organizations working at the production sites were intensely supervised. The issues, such as use of special coveralls and due personal protective equipment by employees of such organizations, and avoidance of entry of vehicles belonged to other organizations into fire-explosive dangerous production sites, as well as appointment of responsible persons for overall administration in case of work performance at one production site by several contractor organizations and arrangement of integrated supervision over fulfillment of all works in compliance with requirements of safety rules were in focus.

In spite of the taken actions, 9 production accidents occurred in the enterprises of SOCAR in 2015, out of which 3 accidents, including 2 accidents were fatal collectedly. Two accidents occurred collectedly were resulted from extreme weather conditions where wind speed was 40 m/second, wave height was more than 10 m on 4 December 2015. One of the accidents took place in stormy weather by splashing down into sea of the employees being inside dwelling block at fixed offshore platform 501 of “Neft Dashlary” OGPD belonged to Transport Department, as a result of which one person died, 2 persons were lost. Other accident was because of explosion and fire in hurricane weather conditions due to broken down piles of gaslift lines with 110 atm running pressure in deepwater jacket 10 located at Gunashli field of “28 May” OGPD. As a result of such accident, 13 persons died and 17 persons disappeared nevertheless 33 persons were rescued. Another fatal accident resulted in death of one person in Transport Department on 28 January 2015. Other accidents which resulted in injuries took place in “Oil and Gas Construction Trust (4 accidents), “Azneft” PU (1 accident) and Gas Processing Plant (1 accident).

Causes of the occurred accidents and investigation materials for the accidents were inquired and thus, impacts of human factor and other factors upon the accidents were assessed and analyzed. Relevant enterprises were given proper instructions to take due actions in order to avoid flow of people and vehicles in accidental and obsolete hydrotechnical facilities, to render safe service to wells and technological lines on these facilities, dismantling and removal and/or refurbishment of the accidental jackets

in respect to prevention of such accidents, including ensuring safe operation of hydrotechnical facilities and prevention of probable incidents and fatalities.

The employees who were accused of negligence for the fatal accidents were subject to disciplinary punishment. Thus, 765 persons within SOCAR enterprises were subject to disciplinary punishment for violation of safety rules and negligence of accidents pursuant to orders of the departments and enterprises in 2015. Out of them, 469 persons were reprimanded, 110 persons were reprimanded severely with a final warning and salaries of 186 persons were reduced. However, some actions were performed to motivate the employees in order to improve work condition and to enhance quality of safety works.

Creation of healthy and safe work condition at production, arrangement of safety works at due quality as well as keeping this discipline in focus regularly reflects highest values attached upon health and safety of the employees by SOCAR.



## ***XVIII. ECOLOGY***

### **Monitorings**

In total, 1034 environmental monitorings were conducted at production facilities of SOCAR in the reporting year.

### **Laboratory analyses:**

Total number of samples received by Complex Researches Laboratory made up 2819 and number of overall analyses made up 52218.

### **Maps developed in Geographic Information System**

170 different maps were compiled by Geographic Information System in 2015.

### **Soil treatment against oil refuses and petroleum residues:**

10.44 ha area were treated by SOCAR against oil refuses and petroleum residues.

### **Management of produced waters:**

Number of absorbing wells running through close system within SOCAR reached to 132 in 2015 and out of 5639.8 ths. m<sup>3</sup> produced water 4967.9 ths. m<sup>3</sup> were utilized by the aforesaid system.

A pilot project was implemented by "AWAS" company (Germany) in view of treatment of produced waters generated in contract area of Surakhany oil field up to discharge level in Caspian sea and subsequently, positive results were obtained. Moreover, a document "Feasibility Study" was developed by "SOCAR-Foster Wheeler Engineering Services" within the project of close system treatment of produced waters in production sites of "Surakhany Oil" Operating Company, "Balakhany Oil" Operating Company and "AzGerneft" LLC.

### **Management of wastes:**

Different wastes to the extent of 48273.264 tons including 10260.1 tons drill sludges, which generated at SOCAR enterprises, were delivered accordingly and 21500 tons oil sludges, which generated at "Alfa-laval" units of H.Aliyev Oil Refinery, were decontaminated and 138.12 tons solid wastes were burned in special incinerator.

Furthermore, there fabricated cast-in concrete foundations in Waste Disposal Centre within the framework of Disposal Centre Expansion Project of SOCAR in order to install "VacuDry" processing unit (manufactured by "Econ Industries" GmbH, Germany) in the Centre for processing of drill sludges.

### **Actions taken for management of air emissions:**

There signed a contract between SOCAR and UNDP on the project "National Activities Plan (NAMA) ensuring reduction of carbon emissions in fuel consumption of Azerbaijan" financed by Global Ecology Foundation.

Delivery into flare unit of gas emissions from handling area of hydrocarbon gasification, liquefaction and storage section, railway tanks and air vents at "Ethylene-Polyethylene" plant of "Azerikimya" Production Unit was arranged and flare unit was repaired for the reason of ensuring smoke-free flaring of air emissions.

40 wells in "Absheronneft" OGPD and "Siyazanneft" OGPD were connected to gas vacuum system and casing pack for 13 wells was arranged in order to take back associated gases to the system or to prevent air emissions.

Moreover, joint project submitted by SOCAR and "BP Exploration" company was selected as a winner in the nomination of "Excellence Award for Gas Flare Reduction"

in the World Bank-led Global Gas Flaring Reduction Partnership (GGFR) Global Forum held in Khanty-Mansiysk city of Russian Federation.

A document “Methodology for calculation of gases generating heat effect from stationary sources of SOCAR in flaring process” was developed in order to assess more accurately impact of air emissions upon climate and to improve overall system “Monitoring-Reporting-Verification” of SOCAR.

Potential actions in oil & gas industry leading to reduction of impact upon climate changes which envisaged up to 2050 were determined and assessed from technical and economic standpoints in order to be included in document “Intended Nationally Determined Contributions”.

#### **Landscaping:**

103329 different species of trees and bushes were planted at SOCAR enterprises and organizations, grassplots to the extent of 3070 m<sup>2</sup> were swarded and the existing greeneries were cared.



#### **Environmentally awareness-raising:**

2029 persons within SOCAR attended in Ecology course and the employees working for offshore facilities were instructed on awareness-raising in the subject of first category spills of oil and petroleum derivatives. 6 different environmentally awareness-raising events were conducted among students of schools and universities.

**Development of environmental normative documents and Environmental Impact Assessment (EIA):** In total, 39 normative documents, including 18 "Environmental Passport" documents, 2 "Allowable Emission Threshold" documents, 1 "Admissible Flow Rate" document, 18 "Hazardous Waste Passport" documents and 1 Environmental Impact Assessment (EIA) paper were developed for enterprises and organizations of SOCAR in the reporting year.

#### **Works carried out for performance of sanitary-hygienic actions**

Out of employees working for departments and enterprises of SOCAR, 21474 persons passed periodical medical checkups, and back osmosis facilities running in production sites of "Neft Dashlary" OGPD, "28 May" OGPD and "Absheronneft" OGPD, water carriers and canteens within SOCAR organizations were inspected and laboratory checkups were arranged. There made analyses for 476 potable water samples, 193



food samples and 1068 sanitary water samples at bacteriological laboratory as well as 485 potable water samples at chemical laboratory in the duration of the year.

In addition to the above, overall works such as deratization to the extent of 5065.355 ths. m<sup>2</sup> area, desinsection to the extent of 4642.523 ths. m<sup>2</sup> area, disinfection to the extent of 249.574 ths. m<sup>2</sup> area were carried out within the departments and enterprises and reserve water tanks to the extent of 2610.5 m<sup>3</sup> were disinfected and actions were taken against reptiles to the extent of 71000 running meter area.

**General environmental works:**

Back osmosis units were handed over at fixed drilling offshore platforms 6 and 122 of N.Narimanov OGPD in view of improvement of water supply of the employees and as a result, sea waters to the extent of 287.653 ths. m<sup>3</sup> were purified.

Small-scale treatment unit “Topaz 20” was installed at pier platform 112 of “28 May” OGPD and current repair works were carried out at treatment units at deepwater offshore jackets 3, 6 and 10 and fixed deepwater offshore platforms 6 and 122 of N.Narimanov OGPD in regard to purification of domestic sewages and flow into sea.

Metal structures on seabed wells were dismantled through “Usukhchay” ship at OGPS 3 of “Neft Dashlary” OGPD in respect to abandonment of submarine wellheads, which decommissioned in aquatorium of “Neft Dashlary” field.

13 water meters were installed within H.Aliyev Oil Refinery in order to control over quantity of water consumed. There started construction of water cooling units in the site in order to improve cooling system of processing units in the plant. As from 17 March 2015 discharge into sea of sewage waters of “Azorneftlyag” Oil Refinery was prevented and delivered to current mechanical and biological treatment units of H.Aliyev Oil Refinery.

**Vehicles and special machineries:**

According to the approved schedule, environmental investigation for 5628 vehicles and special machineries being at balance of SOCAR, was performed. 188 vehicles, which do not meet standards because of its time elapse and obsolescence, were written-off and instead, 127 modern different vehicles and special machineries complying with Euro-4 standards were purchased.



## **XIX. TRANSPORT SUPERVISION**

4814 automobiles and special machineries existed at the balance of SOCAR departments and enterprises up to 01 January 2016. Out of them 1924 vehicles function with auto-petrol, 2702 vehicles function with diesel, 15 vehicles function with electric power and 173 vehicles are trailers.

List of motor-vehicle transport and special machineries at the balance of Transport Department of SOCAR is shown in Table 1.

Table XIX.1

Name of enterprise	Car	Bus	M / bus	Truck	Special machineries	Tractors	Trailers	Fixed	Total
<b>TTS #1</b>	574	58	36	33	23	23	4	0	751
<b>TTS #2</b>	348	57	15	221	77	74	14	2	808
<b>TTS #3</b>	192	130	17	335	140	184	70	0	1068
<b>TTS #4</b>	310	105	28	310	151	154	66	3	1127
<b>TTS #5</b>	73	35	4	187	238	205	16	97	855
<b>TTS #6</b>	173	96	3	297	197	211	37	5	1021
<b>Total on Transport Department</b>	1670	481	103	1383	826	851	207	107	5628

\* Technological transport subdivision

So, thanks to expedient works performed, spare parts were timely delivered in order to ensure technical availability of vehicles and special machineries and as a result, maintenance and repair works for them were fulfilled with high quality. There observed a decline in ordering by the customer organizations resulted from efficient use of vehicles and special machineries concerning actions for reduction of transport costs in regard to application of new tariff rates and therefore, usage coefficient of park for vehicles and specific machineries totaled to 0.60 during 12 months of 2015.

962 automobiles and special machineries standard operation of which expired, became wear and tear and are not economically favorable to be operated and repaired, were inspected on place by relevant divisions, then proper opinions were prepared and submitted to the management to write off them in 2015. Subsequently, the aforesaid 959 automobiles and special machineries were written off from the balance of enterprises, 47 automobiles were sold under proper orders of SOCAR.

157 new machineries were purchased and put into service instead of the written-off machineries.

List of vehicles and special machineries for departments and enterprises of SOCAR which written-off, newly purchased, sold and handed over to balance of joint ventures (extracted from balance of SOCAR) in 2015, is shown in Table 2.

Table XIX.2

No	Name of enterprises and departments	Purchased in 2015	Written off in 2015	Sold	Extracted from balance
1	Transport Department	157	959	47	0

According to instruction of SOCAR management the renewal of old vehicles and special machineries is implemented gradually step by step taking into consideration



the presence of old vehicles and special machineries at balance of SOCAR enterprises.

There carried out certain works on usage of fuel-lubricants within the reporting year. The reports for 2015 on fuel consumption submitted by SOCAR enterprises and departments were studied. As a result of the taken actions, 1034.376 tons of auto petrol and 364.483 tons of diesel fuel were reduced during 12 months of 2015 as compared to 2014.

While inspecting usage of equipment, vehicles and fuels-lubricants at SOCAR enterprises in the reporting year, proper instructions were made by management and specialists of Transports Supervision Department and brought into notice of heads of those enterprises for elimination of shortages and deficiencies found. In principle, this arrangement was followed up at all transport enterprises.

Demands of the enterprises for procurement of spare parts were reviewed and proposals were submitted for procurement of them.

Moreover, as distinct from last years, requests from enterprises about purchasing of transport means and special machineries were duly addressed and upon review, the management proposed to procure them. This arrangement is ongoing now.

In view of increase of efficiency of transport means, the following works were carried out in 2015.

Operation as per statutory documents, proper use, running, route plan, efficient usage of fuels-lubricants for vehicles and special machineries being at possession of the enterprises and departments, were under control. Functionality and updating of Arvento GPS navigation system was fulfilled by specialists of the aforesaid Department, however, its application was entrusted to Transport Department. Thus, it is possible to obtain detailed information on location of transport means in any point of the republic, on its driving speed in safety standpoint and in one word, to get information on any vehicle everyday through this system.

Tracing devices and trackers which fixed upon vehicles and mechanisms were reinspected as per the table and, maps and schemes were updated and fixed upon new vehicles.

Table XIX.3

<b>Types of vehicles</b>	<b>Fixed in 2015</b>	<b>Totally fixed</b>
Cars	411	1054
Buses	243	301
Special automobiles	220	349
Trucks	58	82
Tractors	17	19
<b>Total</b>	<b>949</b>	<b>1805</b>

There established Technological transport subdivisions by zones in order to control over use of special machineries and vehicles at Transport Department of SOCAR. Monthly repair works for vehicles and machineries were carried out through computer program at transport units. Transport means, which completed its daily work, were arranged to serve to several customers in need for prevention of standby. Control over prevention of surplus drives was instensified and for this reason, there compiled a route map for transport means of newly opened facilities and specialists of Transport

Supervision Department intensely supervised it. Parking of vehicles in garages on Saturdays, Sundays and holidays was provided and this regulation is ongoing now.

Receipt of all reports, proposals and opinions delivered to Transport Supervision Department was carried out via email.

Fuel consumption norms approved by SOCAR were redeveloped and applied over the past years in regard to recently commissioning of new various vehicles and machineries produced abroad.

Relevant action plan was elaborated and it was applied at the related points in order to prevent road traffic accidents.

Transport Supervision Department is in charge of supervision over not only road transport, but also orders for sea and air transport, work hours under the orders, amounts due for the service and efficiency of them. In this respect, as compared to 2014 air transport services were reduced as 1052.25 flight hours and 4631186 Manat, sea transport services were increased as 16182 ship work hours and respectively within 2015 owing to the actions taken by the Department. Increase in use of sea transport services in 2015 was resulted from elimination of consequences of fatal accident occurred at deepwater jacket 10 in Gunashli field of "28 May" OGPD of "Azneft" PU on 04 December 2015 and searching of the lost oilmen.

Use of air and sea transport by relevant structural organizations is stated respectively in the following (Table 4 and Table 5) tables.

Table XIX.4

№	Name of departments	2014		2015		(+: -)	
		Flight hour	Amount manat	Flight hour	Amount manat	Flight hour	Amount manat
1	Complex Drilling Works Trust	1489,14	6930863	1086,21	4984139	-402,93	-1946724
2	Oil and Gas Construction Trust	972,45	4462317	571,87	2647015	-400,58	-1815302
3	"Azneft" Production Unit	4269,76	19753220	4021,02	18884060	-248,74	-869160
	<b>TOTAL:</b>	<b>6731,35</b>	<b>31146400</b>	<b>5679,1</b>	<b>26515214</b>	<b>-1052,25</b>	<b>-4631186</b>

Table XIX.5

N	Name of subdivisions	Ship work hours and differences (hour)			Ship work costs and differences (Manat)		
		2015	2014	Difference (+-)	2015	2014	Difference (+-)
1	28 May OGPD	68856	64697	+4159	34767536	25434819	+9332717
2	Neft Dashlary OGPD	45017	50271	-5254	18849706	16769257	+2080449
3	N.Narimanov OGPD	85255	69133	+16122	19183023	14239936	+4943087
4	Absheronneft OGPD	62851	60712	+2139	9423430	6430116	+2993314
5	Transport Department	11922	12 774	-852	759155	715 119	+44036
6	Oil and Gas Construction Trust	115705	118338	-2633	53684275	42 300 987	+11383288
7	Complex Drilling Works Trust	50156	53 887	-3731	26628258	24 448 356	+2179902
8	Geology and Geophysics Department	14096	14022	+74	5204821	4 753 695	+451126
9	Diving and Salvage-Rescue Department	25796	19803	+5993	4760661	1903355	+2857306
10	Ecology Department	1116	951	+165	360186	242538	+117648
	<b>Total</b>	<b>480770</b>	<b>464588</b>	<b>+16182</b>	<b>173621052</b>	<b>137238177</b>	<b>+36382873</b>

Current works and proper tasks of SOCAR management were followed up by Transport Supervision Department alongside with the aforesaid.

Besides, implementation of the following actions is deemed to be necessary in order to improve transport management, to reduce transportation and maintenance/repair

costs, to optimize cargo and passenger transportation, to keep in high level technical readiness coefficient of automobiles and special machineries, to save fuel and lubricants within SOCAR in 2016 and the subsequent years:

- To continue fixing GPS navigation system upon automobiles and special machineries being at balance of SOCAR and then, to intensify supervision over mileage and fuel consumption of automobiles and special machineries;
- to follow-up writing off from balance Russian produced and economically inefficient automobiles and special machineries, and instead, to purchase new automobiles which consume fuel less, including preferring procurement of diesel engine automobiles;
- To identify and offer for sale of automobiles which were technically serviceable, but economically inefficient and excessive.



## **XX. SOCIAL ISSUES**

As every year, SOCAR undertook several infrastructure projects and continued successfully construction of education, social and other facilities not only in Baku, but also in all countrywide regions in 2015 in respect to implementation of actions envisaged in State Programs ratified by Mr. Ilham Aliyev President of the Republic of Azerbaijan in order to promote social-economic development of the country and welfare of the population. As a company understanding its social responsibility, SOCAR takes an active part in countrywide social life and makes its contribution to all key social-economic projects implemented in our republic.

Capital construction, repair-construction, asphalt-concrete and accomplishment works were carried out in several regions and Baku city of our republic within the framework of State Programs.

New 3-floor residential building with 21 apartments was put into commissioning due to demolition of obsolete 2-storeyed residential building #8 located at alley 5, City highway in Sabunchu district and water and sewerage systems were completed.

Construction of Baku Talents Education Complex in Baku city was continued, but construction of French lyceum in Nobel avenue of Khatai district was completed and it was put into commissioning. Construction of 220-pupil special boarding-school #2 in Shuvelan settlement of Khazar district was completed.

Underground maintenance and construction of SRS of "Bibiheybatneft" OGPD in the area of mining 3 of A.Amirov OGPD at Lokbatan settlement of Garadagh district and it was put into commissioning. Construction works were completed at the site of reconstruction of existing administrative building of SOCAR Gas Export Department located at 21 F.Bayramov street, Khatai district, Baku city.

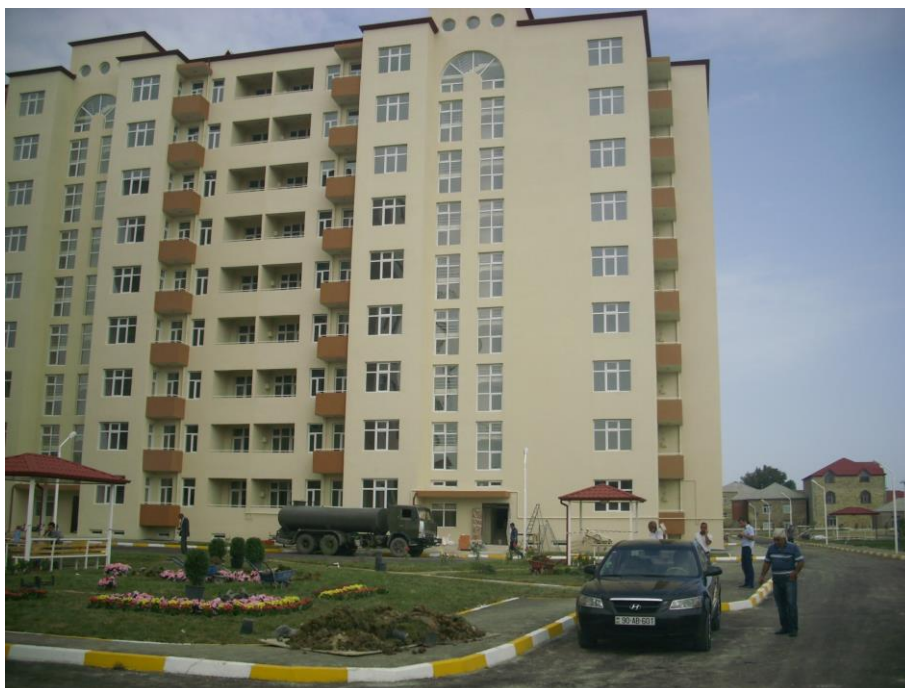
Construction of new administrative building of SOCAR which meets international standards, was completed.

Construction of Baku Olympic Stadium, which was built near Koroglu metrostation in Sabunchu district that distinguished with its contemporary architecture in the capital and charming design for 68 thousand spectators, was completed in February 2015 as one of the large-scale social projects.

Restoration and accomplishment of parks, facades and house roofs of residential buildings in Baku were carried out over the past year and such works are ongoing in some areas.

At the present, 3898 persons were registered on housing of SOCAR that out of them 442 persons live in several regions of the country (Siyazan, Imishli, Kurdamir, Salyan, Neftchala and Shirvan city) and 3456 persons live in Baku city.

224 oil-worker families were provided with housing by SOCAR in the reporting period. So, 220 persons were provided with new apartments through "Neftchi" housing-construction cooperative and 2 persons were provided with new flats within 3-floor residential building which was constructed in place of dismantled obsolete 2-floor houses #8 located at alley 5, City highway in Sabunchu district, and 2 persons were provided with flats, which were modified after due alteration and repair of non-residential premises being at balance of SOCAR.



Out of employees provided with new apartments through “Neftchi” housing-construction cooperative, 35 persons were young specialists who graduated within the framework of SOCAR Scholarship Program and employed by SOCAR.

204-apartment residential building located at E.Guliyev avenue, Sahil settlement, Garadagh district was constructed and put into use by “Neftchi” housing-construction cooperative. Construction of 9-storey 144-apartment new residential building with roof at block 2944, M.Hadi street, Khatai district was ongoing.

At the present, allotment of 452-apartment residential complex at 28 May street, Lokbatan settlement, Garadagh district and allotment of plot (12.51 ha land) are carried out in western part of Hovsan settlement of Surakhany district in respect to construction of private houses.

The State Oil Company carries out large-scale actions in solution of social problems of oil workers by focusing on this direction regularly. It is worth to emphasize the works carried out in alignment of activity of social facilities to modern requirements for promotion of social welfare of the oil workers over the past period. According to “Social Development Program 2011-2015 for improvement of social welfare of employees working in structural units of State Oil Company of Azerbaijan Republic” approved by joint statutory order of SOCAR and Azerbaijan Oil & Gas Industry Workers Trade Union Republican Committee, arrangements on 202 clauses were fulfilled completely and on 151 clauses were fulfilled partially from the overall actions comprised by 494 clauses to be executed and preparatory procedures were ongoing for commencement of other necessary works.

Construction of new administrative buildings and repair of current buildings were in focus in order to create working condition at the level of up-to-date standards for the employees of “Azerigaz” Production Unit. Administrative building of Terter Gas Maintenance Section was constructed and handed over, and final accomplishment works were carried out for administrative buildings of Yevlakh and Salyan Gas Maintenance Sections.

Production area and quality control laboratory of “Ethylene-polyethylene” plant of “Azerikimya” Production Unit were overhauled and the rooms were provided with heating system and

necessary equipment. Cafeteria room and two cloakrooms were fabricated in the building, the cloakrooms were provided with 66 wardrobes and the surrounding area was accomplished.

Administrative building and ancillary building of Gas Export Department was overhauled, main gas areas were equipped duly. 60-seat canteen kitchen of Gas Export Department was routinely repaired. There fabricated canteens and equipped duly at construction site of module type Gas Distribution Station of Ganja Gas Distribution Area, at measuring points such as Azadkend in 174 km part of Astara-Gazimammad Main Gas Line, Garamusali belonged to Agdash Main Gas Compressor Station and 43 km part of Siyazan Main Gas Compressor Station.

Sanitary units in Fixed Offshore Platform 8 of Gunashli Production Section of Complex Drilling Works Trust were repaired and medical point was fabricated and equipped duly in order to provide medical service to the employees in Fixed Offshore Platform 112. Rest area was created in the platform and the rooms were provided with all types of equipment, devices and appliances.

Current repair works were carried out in waggons of Fixed Offshore Platform 122 of Umid Production Section, at Bulla Production Section, at 8 March Production Section of Complex Drilling Works Trust, and a canteen was fabricated, duly equipped and put into use of the employees working for Pirallahy area of Absheron Production Section.

Within "Azneft" Production Unit:

Repair works were carried out in facades and corridors of 9-floor buildings designed for woman employees and "A", "V" buildings of the dormitory located at "Neft Dashlary" OGPD. Current repair works were conducted in floors 1, 7, 8, 9 of 9-floor building for women.

New air vent units were fixed in I floor of 9-floor building for women and canteens located at pier platform 252, and current repair and painting works were carried out in waiting room of helicopter deck and toilets were supplied with new sanitary units.

Household appliances (refrigerator, conditioner, washing machine, dryer, electrical heater etc.), mattress, blanket, cover, pillow and linen were supplied duly in order to improve the living and household conditions of the employees, who work at GGPA's 1, 2, 3, 4, 5 and Fixed Offshore Platforms, other workshops and production sites.

Overhaul works were completed in the dwelling blocks at deepwater jackets 14 of "28 May" OGPD were completed. Wall coats in corridors of dwelling block were upgraded, new tiles were put on the floor and lighting posts were replaced with new ones.

Dining waggon was delivered to Fixed Offshore Platform 112 and it was supplied with necessary tables and chairs. At the present, capital repair works are ongoing in dwelling block of Gas Preprocessing and Delivery and Compressor Transformer Station.

Construction of new 150-seat conference hall and 200-seat canteen in Chilov island was completed and it was supplied with furnitures and household appliances. Air conditioners, refrigerators, TV sets and washing machines in dormitories 2, 4, 4a, 14 and 57 located at Chilov island, OGPD sites and deepwater jackets, which needed to be repaired, were refurbished and repaired and put into use.

Living quarters and rest house were fabricated and helicopter deck was erected in deepwater jacket 7 under construction. Household appliances, furnitures and kitchen utensils were provided for the deepwater jacket 7.

11 air conditioners were fixed and set in rest houses and premise located at pier platform 429, 81 and 485 of N.Narimanov OGPD. Repair-maintenance works were conducted in rest houses of Fixed Offshore Platforms 757, 60, 588, 704 located at the territory of OGPA 3 and deepwater jackets 53, 55 in Bulla site of OGPA 4.

19 waggon houses, 2 canteens and 6-cabin showers were fabricated in living quarters of newly constructed Fixed Offshore Platform 20 in Western Absheron field of "Absheronneft" OGPD. Construction of OGPAs 3, 4 and of production premises at NKH and NS sites are under completion.

Canteen of the dormitory located at pier platform 110 in the area of OGPS 2 of N.Narimanov OGPD was enlarged and a room supplied with necessary equipment was additionally arranged in order to spend leisure time of the employees.

17 dormitory cabins, 2 household laundries and 1 stockhouse were purchased and erected at the areas in respect to improvement of living condition of the employees working in oil-mine facilities of the OGPD. It was planned to install 1 Osmosis type biological treatment unit at Fixed Drilling Offshore Platform 122 of OGPS 4.

Proper actions were taken in respect to improvement of social-household condition of the employees working at A.C.Amirov OGPD, H.Z.Tagiyev OGPD, "Siyazanneft" OGPD, "Bibiheybatneft" OGPD and other subdivisions in the subordination of "Azneft" Production Unit.

2145 employees, who work at shifts (rotation) at deepwater jackets located at "Gunashli" field, at Fixed Drilling Offshore Platform 1 of "Umid" field as well as in compressor stations of Gas Preprocessing, Delivery and Compressor Supply Area located at "Neft Dashlary" field of "28 May" OGPD were supplied with high quality hot meal free of charge in a day.

2-3 day and several-day recreations of approximate 3142 oilmen and their family members were organised at countrywide recreation zones as well as rest of 1390 persons was arranged in "Gubek Hotel" Recreation Centre over the past period. 2172 oil-engineers, who needed medical treatment, were sent to sanatorium-resort treatment centres and in addition, treatment of approximate 3395 persons was provided in sanatorium located at Naftalan town.

The provision of material aid to the employees were continued, martyrs' families and disabled war veterans were in focus according to the Regulation on providing the employees of the State Oil Company of Azerbaijan Republic with the material aid by the Company over the past period.

The provision of material aid was continued for 27522 refugees settled in "Dordyol 1, 2", "Tazakand" villages and Dordyol-Mamyrlly area in Agdam region, in Tartar region and at Ahmadalylyar, Mirzanaghyly and Gazakhlyar villages of Fuzuli region and to 1700 refugees and martyrs' families settled in Sumgayit city, who were into custody of SOCAR with the appropriate Decree of the President of Republic of Azerbaijan.

State Oil Company of Azerbaijan Republic signed a contract on Voluntary Medical Insurance with "Pasha Insurance" JSC in respect to promotion of health of employees working for the Company departments and enterprises since January 2012. 54714 employees of the Company were rendered general profile medical services by 13 medical institutions and dentist services by 8 medical institutions within the framework of contract signed for 2015. At the same time, different privileges were granted for family members of oil workers in such medical institutions as per insurance contract. As from October 2013, top management of SOCAR included approximate 15000

pensioner oilmen into the insurance program and up to date, they have made use of medical services according to insurance program through Central Oil-engineers Hospital.

The employees of SOCAR are provided with the whole day ambulance/emergency aid 24/7 (first aid in physician and medical points), out-patient and in-patient service, periodic checkups etc. by insurance company according to Volunteer Medical Insurance program. Also, annual medical check-ups of the employees working in hazardous production areas are carried out in order to prevent sickness cases among such employees. So, pursuant to instructional order 24/2 on "Procedure for conducting of mandatory medical check-ups" dated 15 May 2014 of Ministry of Health of the Republic of Azerbaijan, out of 21904 employees working in hazardous, harmful and unsuitable production areas of SOCAR departments and enterprises, 21554 persons passed periodical medical check-ups under the schedule. As a result of the medical check-ups 2060 persons were found to have different diseases and out of them 26 persons were tuberculosis patients. All of the tuberculosis patients were sent to hospitals to be treated and the persons who kept in touch with such patients were brought to prophylactic check-ups by officers of Hygiene and Epidemiology Centre and proper disinfection actions were taken.



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