

# FEBRUARY 2018

SOCAR Polymer Newsletter / Issue 2 / 2018

## IN THIS ISSUE:



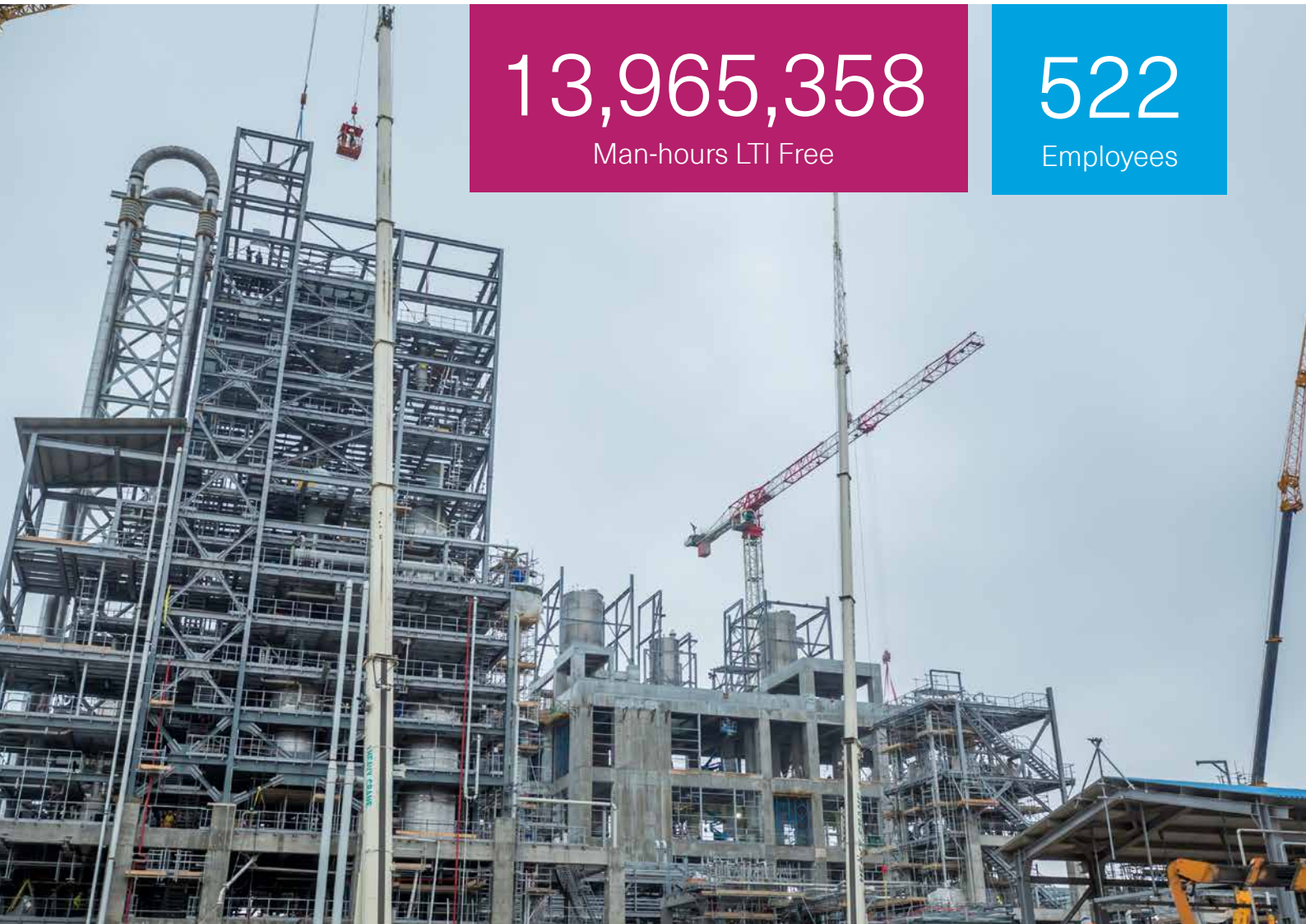
First test production of polypropylene  
p.16



MGIMO delegation visited the SOCAR  
Polymer plant  
p.26



Polypropylene in construction industries  
p.34



13,965,358  
Man-hours LTI Free

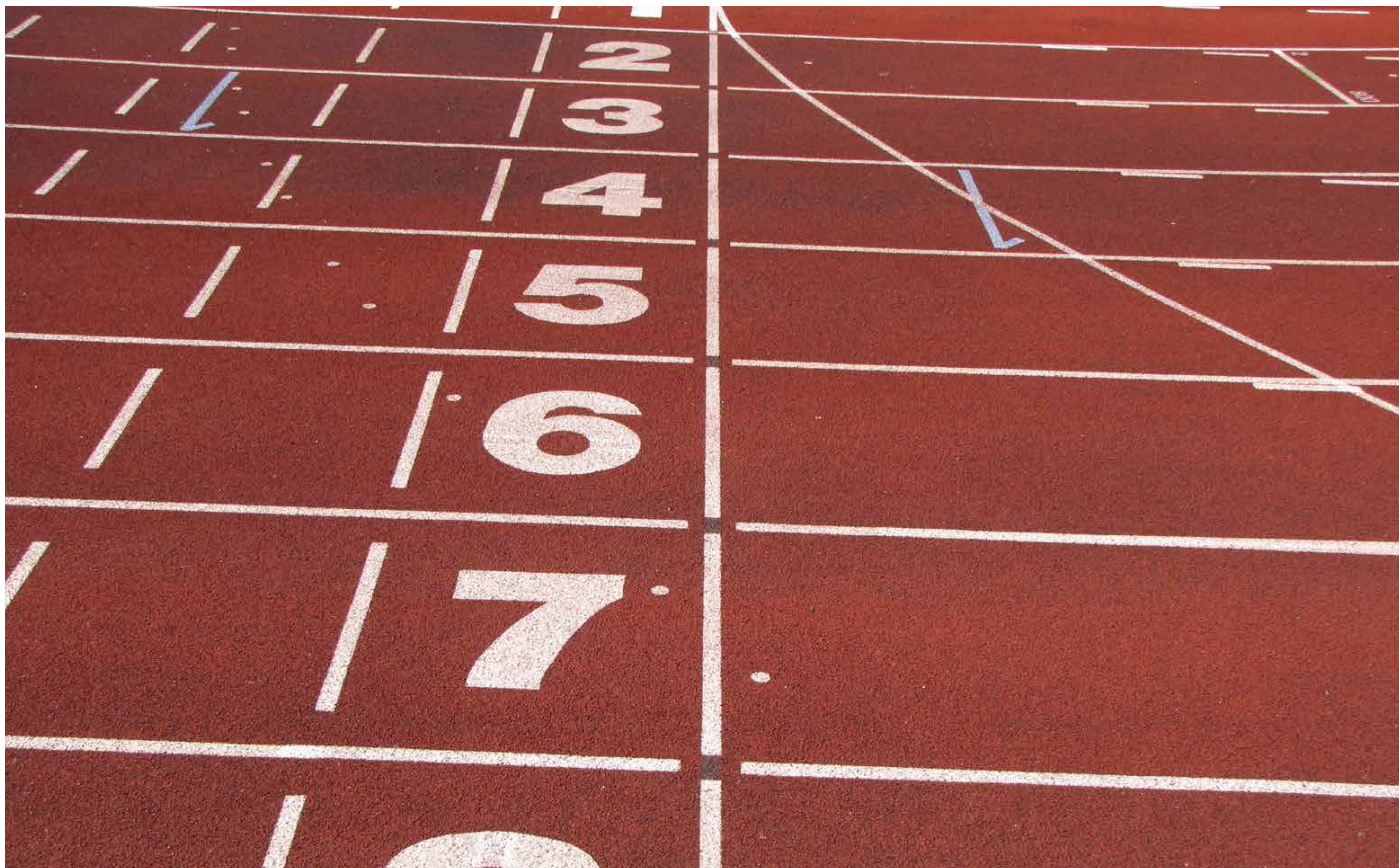
522  
Employees

98.6%  
PP Total progress in  
February

91.1%  
HDPE Total progress in  
February



# A big step toward achieving the target



Dear colleagues,

The closer the start-up day the more exciting the important steps taken towards it.

The PP plant's construction is nearing completion, having advanced to the point of 98.6% as of 23 February 2018. Together, we have reached the phase when commissioning activities take up the lead, as we are looking forward to starting up the plant in the 2nd quarter of 2018.

On February 27, SOCAR's President Rovnag Abdullayev with a group of senior officials of the company visited the SOCAR Polymer site at SCIP to check on the status of works and observe the first-time extrusion of PP pellets produced during a test-operation of the plant's dry-section equipment. The test-production process went smoothly and, thus, a new page in the history of SOCAR Polymer was turned.

To mark this milestone achievement, I would like to extend thanks and appreciation to each and every one of you who have made a contribution to the success we have achieved to date, namely, to SOCAR Polymer, Fluor, Kinetics Technology, and subcontractor teams.

Let us consolidate all our forces and make the finishing touches to this project's success!

A handwritten signature in blue ink, appearing to read 'Farid Jafarov', with a stylized flourish at the end.

**Farid Jafarov**



February 2018

# Site Photos



# PROGRESS ON SITE DURING FEBRUARY

## HDPE plant

January 2018

Progress over  
February 2018

February 2018



HDPE: Blending  
Silos.

Instrument  
cabling and  
Air manifolds  
installation  
to continue.  
Supports and  
Pneumatic  
pipe erection  
in progress



HDPE:  
Organoleptic  
Structure  
and Effluent  
Treatment.

SS erection  
and cable tray  
installation  
ongoing. Cooling  
water lines  
erection started





**HDPE: Extrusion Structure.**  
RCC works completed. SS and piping erection in progress. Junction box and sandwich panel installation in progress



**HDPE: Polymerization.**  
Equipment erected. Piping & Support erection ongoing. SS, junction box, lighting etc. installation in progress



**HDPE: Electrical Substation.**  
Rack room HVAC panels' cable connection, and instrumentation panels' cabling ongoing



January 2018

Progress over  
February 2018

February 2018



HDPE:  
Polymerization  
Pipe Rack.  
Pipe support  
installation  
ongoing. Cable  
tray installation  
ongoing. Cable  
pulling in  
progress



HDPE: Reactor  
Dump tank.  
Electrical works  
in progress



HDPE: Catalyst  
Activation.  
SS erection in  
progress





HDPE: Bagging  
& Packing.  
SS and cladding  
erection in  
progress.  
Equipment  
installed



HDPE: Low  
Pressure Solvent  
Recovery.  
Instrument  
installation and  
cabling complete



# PP plant and U&O area

January 2018

Progress over  
February 2018

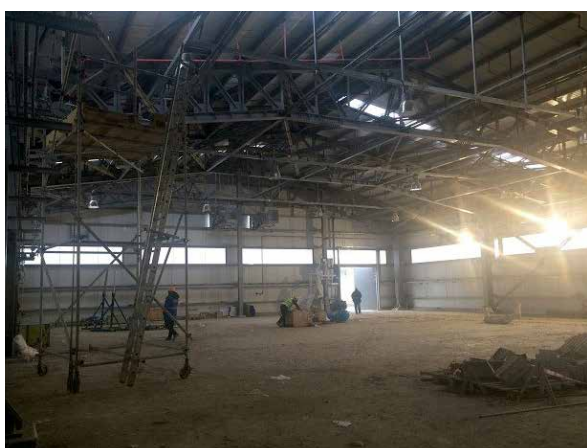
February 2018



PP/U&O:  
Electrical  
substation.  
Complete  
energization  
activity in  
progress



PP/U&O:  
Common Control  
Room.  
Pre-  
commissioning  
activities in  
progress



PP/U&O:  
Chemical  
& Additives  
Storage Building.  
Most roof  
sheeting works  
completed



PP/U&O:  
Laboratory.  
Most finishing  
works are  
completed







PP/U&O:  
Administration  
building.  
Most finishing  
works completed



PP/U&O:  
Workshop.  
Most finishing  
works completed



PP/U&O:  
Bagging &  
Packing Building.  
Wall and roof  
sheeting  
installation in  
progress



PP/U&O: Fire  
water Retention  
Basins and  
Pump House.  
Pre-  
commissioning  
in progress





PP/U&O: Air/  
HP Nitrogen  
Condensate  
Compressor  
Station's Storage  
& Pumping  
facilities.  
Pre-  
commissioning  
in progress



PP/U&O:  
Cooling Tower.  
Pre-  
commissioning  
activities in  
progress



PP/U&O: Flare  
Stack.  
Pre-  
commissioning  
activities in  
progress



PP/U&O: Valve  
house.  
Finishing works  
completed





PP/U&O: Gate/  
Guard House.  
Repair works in  
progress



PP/U&O: PP-  
Wet section /  
Polymerization.  
Equipment  
testing in  
progress.  
Installation  
of electrical  
instrumentation  
ongoing. Piping  
test in progress.  
Branch cable  
tray installation  
in progress



PP/U&O: PP  
Dry Section  
/ Extrusion  
building.  
Most piping  
tests completed.  
Lighting System  
installed and  
powered up.  
Lift erection in  
progress





PP/U&O: PP Dry section / Powder Silos.  
Pre-commissioning activities in progress



PP/U&O: Homogenization / Blender Silos.  
Pre-commissioning activities in progress



PP/U&O: Raw  
Water Storage  
Tank.  
Pre-  
commissioning  
activities in  
progress



PP/U&O:  
Interconnecting  
Pipe Racks.  
Pipe testing in  
progress



Nitrogen  
package.  
Commissioning  
activities in  
progress





Warehouse.  
Joint sealing  
works in  
progress



Roads.  
Internal roads'  
construction  
ongoing. Laying  
of the first  
asphalt layer  
ongoing. Area  
lighting works in  
progress



# Project progress status

## PP Plant Progress

### Disciplines

### Cumulative Progress

Detailed Engineering



**100%**

Procurement Orders



**100%**

Subcontracting



**100%**

Material Supply – Manufacturing and Delivery



**99.9%**

Construction



**96.7%**

Overall



**98.6%**

## HDPE Plant Progress

### Disciplines

### Cumulative Progress

Detailed Engineering



**99.8%**

Procurement Orders



**99.9%**

Subcontracting



**100%**

Material Supply – Manufacturing and Delivery



**99.0%**

Construction



**80.1%**

Overall



**91.1%**

# First test production of polypropylene







On February 27, SOCAR's president Rovnag Abdullayev along with the vice-presidents visited the SOCAR Polymer production site at SCIP to view the SOCAR Polymer plant and directly witness the status of works. On the same day, they also visited the Azerikimya PU and Carbamide Plant to discuss preparations for start-up operations.

During the bus tour round the PP plant area, the visitors were informed about the different sections of the plant and their functions. Then, the extrusion section was presented to their view, with brief description of the equipment installed therein. The PP plant's Dry Section performs the function of turning dry PP powder into pellets of a certain PP grade by mixing the powder with respective additives/ingredients and extruding pellets. The visitors were invited to witness a test production of PP pellets through extrusion of the polypropylene mass into spaghetti form and wet cutting of pellets with subsequent drying and cooling. The objective of the test-run was to commission and test the operability of the Dry Section of the PP plant.

The test production was successful, and the SOCAR management gave positive feedback regarding the status of presented works.

In celebration of this important milestone achievement, gratitude was expressed to all the teams who had made their contribution, including SOCAR Polymer, Fluor, Kinetics Technology, and subcontractor teams.

After the site visit, the representatives of respective SOCAR Polymer departments made presentations of the accomplished tasks performed to support and enable the successful construction and operation of the plants.

The presentations made a good impression on the SOCAR management representatives, and the agenda for the day was successfully completed.



# Mechanical completion of the warehouse achieved



**The final product warehouse (FPW) at SOCAR Polymer's PP plant is part of the overall storage area where the PP and HDPE pellets, bagged and stacked onto pallets, shall be stored until shipment.**

With 176 m in length and 84 m in width, the warehouse is represented by 15,000 sq.m. large roofed and walled space, that provides optimal conditions for storing the pellets for required periods of time. Construction works are fully

completed, and the warehouse has been handed over to SOCAR Polymer. It was erected from steel structures and clad with sandwich panels. The warehouse has been furnished with a fire-fighting pre-action system, natural/mechanical ventilation system, dock leveling/unloading system, and electrical (illumination and earthing) system. Natural ventilation is achieved through wall louvers and 90 roof deflectors which mechanically pull out the exhaust air, supporting air dynamics.



The final product storage facility shall be operated through a Warehouse Management System (WMS) currently under development by the Tecnimont company. WMS is an automated process of labelling and storing pallets to ensure:

- knowledge, in real time, of plant's production status and warehouse hold-up
- registration of products' characteristics and other parameters in a database
- product localization inside the warehouse
- withdrawal of products from the location for delivery to customer

The warehouse facility includes a loading area for trucks and another one for rail wagons – both with several outlet doors. Forklifts from the Bagging/Packing building and from the Product Warehouse all communicate with the WMS. Provided for pallets, the space in the center of the warehouse is subdivided into 'islands' surrounded by lanes for forklifts travelling. Empty wooden pallets will be stored

outside of the product warehouse in a separate storage facility. The warehouse management office will be located in the Bagging and Packing building. The WMS office computer will collect all the customer orders and all WMS related information. The WMS software shall be capable of automatically developing both shift and daily reports in Excel format for storing them in the database or exporting onto an external USB hard drive.

The warehouse has been furnished with a fire-fighting pre-action system, natural/mechanical ventilation system, dock leveling/unloading system, and electrical (illumination and earthing) system.

# Fire emergency alarm system commissioned

SOCAR Polymer HSE Team High Performance



In mid-February 2018, the PP/HDPE plant fire alarm system was connected and commissioned at the district's Fire Brigade Station.

The design of the active fire protection, fire and gas detection system and safety equipment of the Polypropylene (PP) plant, utilities and offsites had been outlined in the Fire Fighting General Specification, developed by EPC Contractor, Maire Technimont, specifically to meet the needs of the SOCAR Polymer project.

The PP/HDPE plant was sectionalized into 13 areas, each of which was supplied with its own hooters/buzzers and flashing lights to alarm the Control Room onsite, so as the location of fire is easily identified by a flashing signal on the monitor. The Control Room monitor would automatically transfer an alarm signal to a firefighting station, located some 700 m away. The Fire Brigade Station is a fast response unit of the Ministry of Emergency Situations of the Republic of Azerbaijan, serving all SCIP residents as well as neighboring Sumgayit residential areas.

The hardwired fire alarm signal cable has an overall length of over 700 meters and contains 13 smaller off-spring cables leading to each of the potentially vulnerable sections of the plants. The installation was performed in 45 days under the supervision of the SOCAR Polymer PMC Team. Delivering



the job on schedule and within the budget was Vertex Ltd., a privately-owned Azerbaijan company with 15-year experience in the field of electrical engineering, industrial construction and fiberoptic cabling, whose services and expertise are solicited internationally.

SOCAR Polymer's inherently sound Health, Safety and Environmental (HSE) standards, applied in the design and construction of the PP and HDPE plants, are based on internationally-recognized Licensors' (LyondellBasell and INEOS) Polymer technologies, as well as mandatory Azerbaijan Republic Codes and Regulations pertaining to chemical production enterprises, such as the Azerbaijan Republic Fire Safety Law, Hazardous Material Code et al.

The HSE specifications take into account a multitude of factors, such as the travel distances between process areas handling flammable materials, and the distances between hazardous equipment and potential ignition sources, which are arranged in order to minimize the probability of explosion, fire and toxic release. Plant areas are provided with roomy roads of specified width and large lay-bays to allow easy and quick access and transit of emergency

vehicles. The HSE stipulates fire water flow at 1400 m<sup>3</sup>/hr, and a two-compartment basin capacity of 5600 m<sup>3</sup> (or 4 hours of storage) to be available onsite.

Further on, the walls specified as fire-resistant are two hours fire rated; steel building columns and structural elements that could be exposed to fire are fire protected with a two hours fire resistant coating. Air intakes ventilation system is located in a safe area, 7.5 m above ground level to avoid the intake of flammable vapors.

The Control Room is designed to withstand the effect of fire and explosion in order to enable operators to shut the plant down in a safe manner and pursue orderly evacuation and rescue operations. There are self-contained facilities onsite, that are fully equipped to ensure normal operations of the system and vital functions of people under emergency conditions.

The above is just a "short" list of potential hazards, mitigated by HSE, whose primary goal is to minimize the risk of incidents and provide maximum safety to personnel, community and environment.

# Two more school visits “inspiring the youngest”

SOCAR Polymer’s visits to schools in the framework of the Inspiring the Youngest project initiated last month continued in February, targeting schoolchildren in grade seven, who have just embarked on studying chemistry.



## Public secondary school 273

On February 8, the project team visited public secondary school 273 in the Garadagh district of Baku to meet the children of classes 7c and 7a for an engaging discussion about chemistry and its role in everyday life.

The children's attention was easily attracted by such intriguing questions as how coffee keeps people awake, how soap cleans off dirt, why cutting onions makes people cry, why milk turns sour, what substance delivers oxygen to all body tissues, how painkillers stop pain, how candles can be lighted via gaseous wax, and the like. Children learned that polymers were hard enough to be used in bulletproof vests, that numerous objects surrounding us were made from polymers – both natural and synthetic, that white phosphorus could self-ignite simply from contact with air, and that nerve-to-brain signals, too, occur owing to chemical

processes. During the Q&A session, Javidan Rahmanov, Murad Bayramov, Ismayil Hasanzadeh, and Emil Israfilov actively answered questions about the chemical content of air, soil, and toys, and the processes behind chemical transformations. The presenters called upon the children to study all school subjects well to grow well-educated and make their contribution into the development of sciences and industries in Azerbaijan.

After the presentation, the children gladly smiled for photographs taken to remember this interesting acquaintance with graduates who had readily shared with them their passion for chemistry.

The project team is thankful to the School Principal Zenfira Abdullayeva, Chemistry Teacher Leyla Mammadova and Laboratory Assistant Khumar Bandaliyeva for their organizational support to the event.



### Azerbaijan British College

On February 28, the project team was hosted by the Azerbaijan British College (ABC) that provides Cambridge standard education in the English language.

Over 40 children assembled in the small conference room of the college. Listening to presentation with genuine interest, they were coming up with numerous questions and from the first minutes of the event triggered active Q&A interactions and discussions. The questions mostly regarded the fun and entertaining part of the chemical science. The presented and discussed topics comprised various chemical reactions and processes encountered in daily life, nature, human organisms, household, and industries. Although the one hour event extended for two due to the children's active involvement in the course of the presentation, both school teachers and guests were pleased to observe the kids' live interest in every topic raised.

The project team left the school with hopes to make new visits to this education facility in the framework of future education projects, and expressed gratitude to the General Manager Alekper Alekperov and Head of Secondary Jill Cowie for their cooperation and organizational support.

The idea to initiate the "Inspire the Youngest" project stemmed out of the Action Plan for the implementation of the "State Program on the development of industry in the Republic of Azerbaijan in 2015-2020" signed by President Ilham Aliyev on 26 December 2014. Among the main objectives of the state program was "improvement of human resources and promotion of science" (item 5.4) and "bringing the HR development processes in education facilities into conformity with the demands of the labour market" (item 5.4.5). The implementation of activities under

The idea to initiate the "Inspire the Youngest" project stemmed out of the Action Plan for the implementation of the "State Program on the development of industry in the Republic of Azerbaijan in 2015-2020" signed by President Ilham Aliyev on 26 December 2014.

this state program was assigned to the AR Ministry of Education, with instructions in the Action Plan to involve private industrial companies.

Thus, to make a contribution into the implementation process of the state program, the PR department of SOCAR Polymer visited the Baku Education Office of the Ministry of Education to agree upon the content and select schools for the test run of the project.

To make a stronger impression on the schoolchildren, the team decided that SOCAR Polymer's young interns Nizam Zahidli and Sevinj Gafarli conduct the presentations, as they are closest by age to schoolchildren. These young process engineers who scored high at university entrance exams are a good example for schoolers to follow.

According to the preliminary plan, in the next months the pilot project will be held in 2 more public schools of the Garadagh and Yasamal districts in Baku.

# OPS Trainings



OPS (operations) trainings are offshore/onshore trainings conducted for SOCAR Polymer's operation/maintenance/laboratory staff to expand their theoretical knowledge and practical skills regarding the technical aspects of operating/maintaining various types of equipment/facilities installed at the PP plant. Trainings are arranged by Tecnimont, SOCAR Polymer or Fluor, and are delivered at vendors' facilities abroad or at appropriate institutions in Azerbaijan.



In the month of February, SOCAR Polymer employees attended the following trainings abroad:

OFFSHORE TRAININGS				
Training theme	Company/Location	Duration	Dates	Participants' positions
<b>Electrical LV/MV Switchgear</b>	ABB Bergamo, Italy	8 days	8 – 16 Feb	3 electrical technicians
<b>Fire &amp; Gas Detection &amp; Alarm System</b>	SAFCO Milan, Italy	2 days	12 – 13 Feb	1 instrument supervisor, 2 instrument technicians
<b>DCS</b>	YOKOGAWA Banglore, India	3 weeks	19 Feb – 9 Mar	4 shift supervisors, 1 instrument supervisor, 3 DCS technicians, 3 instrument technicians, and 4 operators
<b>On-the-job training program</b>	UZBEKNEFTGAZ Karshi, Uzbekistan	3 weeks	19 Feb – 9 Mar	3 bagging shift supervisors, 2 analyser technicians, 4 laboratory technicians, 7 operators, and 1 senior lab technician
<b>Refrigeration package</b>	MAYEKAWA ITALIA S.R.L. Bologna and Ravenna, Italy	5 days	26 Feb – 02 Mar	2 mechanical supervisors, 2 mechanical technicians, and 2 process engineers



# On-the-job training sessions at the SOCAR Polymer plant site



The EPC contract with the Technimont company includes trainings which the Kinetics Technology (KT) company has provided on daily basis since 28 August. The extensive Training Program scheduled for the period from August 2017 till mid-February of 2018 covers all aspects of plant operations and envisages both Classroom training (480 hours total) by various specialists and vendors, and On-job training (1050 hours total) to be led by experienced technicians until the end of the project to ensure complete grooming of SOCAR Polymer operators to efficiently

handle the Plant. The trainings are listed under four major disciplines/categories: electrical, instrumentation, mechanical and operation. Thus, the SOCAR Polymer plant personnel gets a better understanding of the principles of equipment operation, and grows better informed of the basic maintenance and troubleshooting processes.

More detailed information on some of the training sessions conducted on site in February is provided below:

Training title	Duration	Dates	Participants' positions
<b>Working with pressurized vessels</b>	1 day	6 Feb	9 operators
		7 Feb	3 supervisors and 7 operators
		14 Feb	1 HSE TL, 1 HSE specialist, 1 HSE advisor, and 7 operators
		15 Feb	4 HSE specialists and 3 operators
<b>Seat Belt Awareness</b>	1 day	27 Feb	27 operators, 6 electrical technicians, 1 senior lab analyst, 1 lab engineer, 17 laboratory analysts, and 1 bagging supervisor
		28 Feb	19 operators, 4 mechanical supervisors, 1 maintenance supervisor, 3 shift supervisors, 6 electrical technicians, and 26 mechanical technicians

# Pre-Startup Safety Review conducted



A Pre-Startup Safety Review (PSSR) is a safety review conducted prior to startup (commissioning) of a new (or modified) processing/manufacturing plant or facility to ensure that installations meet the original design or operating intent, to catch and re-assess any potential hazard due to changes during the detailed engineering and construction phase of a project. In other words, it ensures the "Ready for Start-up" status of the process facility/units. The PSSR includes a Technical Process HSE Site Review to be carried out when the construction is nearing mechanical completion (about 90-95 % completion) and the site is reasonably accessible. The recommendations made by the PSSR team must be implemented prior to the introduction of a highly hazardous chemical to a process. A PSSR must confirm the following:

- construction and equipment are in accordance with design specifications;
- safety, operating, maintenance, and emergency procedures are in place and are adequate;
- a process hazard analysis has been performed for new facilities, and recommendations have been resolved or implemented before startup; and
- training of each employee involved in the operating process has been completed.

On February 12-15, a PSSR team made up by the representatives of the licensor – LyondellBasell, EPC contractor – Tecnimont S.p.A., plant owner – SOCAR Polymer and PMC contractor – Fluor conducted a Pre-startup Safety Review at SOCAR Polymer's PP plant.

On February 12-15, a PSSR team made up by the representatives of the licensor – LyondellBasell, EPC contractor – Tecnimont S.p.A., plant owner – SOCAR Polymer and PMC contractor – Fluor conducted a pre-startup safety review at SOCAR Polymer's PP plant. The review resulted in a positive feedback from the PSSR team and some recommendations to be followed before the start-up of the PP plant.

# SOCAR Polymer in talks with potential customer companies

On 6 February 2018, the Institute for Scientific Research on Economic Reforms (ISRER) jointly with “Sumgayit Chemical Industry Park” LLC and “SOCAR Polymer” LLC organized a conference on “Expansion of import-replacing industrial production based on domestic raw material resources”. The event was supported by the Ministry of Economy of the Azerbaijan Republic and attended by entrepreneurs, experts, and representatives of government bodies and research institutions.

Deputy Minister of Economy, Niyazi Safarov underlined the successful implementation of consistent measures targeted at modernization of the industry and diversification of the non-oil sector. He emphasized the importance of making effective use of domestic raw materials to support local production. He added that the Azerbaijan Ministry of Economy was holding talks with potential customers regarding future sale of products to be produced at the SOCAR Polymer plants: “Talks are underway with 15 companies, and this number is likely to increase in the future. As a result, the demand for polymers has reached 50,000 tons”.

The Director of “Sumgayit Chemical Industrial Park” LLC, Nazim Talibov reported on the activities of the Park.

Dr. Gazanfar Bayramov, leading researcher at the Institute for Physical Problems under the Baku State University, gave a presentation on cooperation opportunities between higher education institutions and industry players.

Prof., Dr. Vilayat Veliyev, Director of Institute for Scientific Research on Economic Reforms (ISRER) gave a presentation on establishment of clusters around “SOCAR Polymer” LLC.

The Planning and Performance Manager for “SOCAR Polymer” LLC, Vugar Aslanov gave a presentation about the importance and prospects of raw material use. He informed the audience about the current status of works at the SOCAR Polymer construction site in Sumgayit, the PP and HDPE Production Plans for the period of June-December 2018, and the products that could be produced from different PP and HDPE grades.

In conclusion of the event, the conference participants discussed the questions and issues raised by the entrepreneurs. Thus, in particular, the entrepreneurs inquired about the technology required for manufacturing products based on PP and HDPE as feedstock. In reply, V.Aslanov informed that SOCAR Polymer is ready to provide



“Talks are underway with 15 companies, and this number is likely to increase in the future. As a result, the demand for polymers has reached 50,000 tons”.

them with support and advice from the technological point of view by engaging our engineers to render consultancy on certain issues, including details on what products could be manufactured from different grades of polymers and what optional ways to develop business exist. Some other questions regarded the list of polymer grades to be produced by SOCAR Polymer this year and the start-up date of the plant.

The conference has been productive and effective in establishing closer contact and understanding between SOCAR Polymer and entrepreneurs.

# MGIMO delegation visited the SOCAR Polymer plant



On February 21-26, a delegation from the Moscow State University of Foreign Affairs (MGIMO) and study-tour participants under the MBA "International oil & gas business" curriculum of the Business and International Competences School paid a visit to Baku.

The delegation headed by the Vice-principal A.Malgin included the Azerbaijan Republic's Trade Representative in the Russian Federation and the Head of MGIMO's Complex International Nature and Ecology Issues Department – R.Aliyev, the Director of the Business and International Competencies School – A.Mirzoyeva, and the Scientific Leader of the MBA program on "International Oil and Gas Business" – M.Belova.

Among the 22 MBA students were managers and owners of Russian, Kazakhstani and Azerbaijan companies operating in the oil, gas, finance and investment sectors, as well as representatives of such companies as Gazpromneft, KazMunayGas, VYGON Consulting,



Varyeganneft, Gazprom Automation, PromResurs, WingsOil, and some others.

During the visit, the MBA students got an insight into the oil, logistics, energy transportation, and production infrastructure of Azerbaijan's most modern companies.



They also attended lectures and informal meetings with the heads of Azerbaijan enterprises, professors and principals of leading Baku universities.

The rich content of the visit and study-tour was enabled through the support of the MGIMO Alumni Association in Azerbaijan, the Trade Representation of Azerbaijan in Russia, the State Oil Company of the Azerbaijan Republic – SOCAR, and the Ateshgah insurance company.

The visit to the SOCAR Polymer plant in the Sumgayit Chemical Industrial Park became a memorable part of the three-day program agenda. The General Manager of SOCAR Polymer LLC, F.Jafarov delivered a presentation about the SOCAR Polymer project. The presentation about the company's success story supported with a review of the plastics market and a detailed description of various aspects of the polymer project, including the SOCAR production chain, the principles of project financing, the project's contractual structure, and the implemented work scope, was followed with lively discussions, during which F.Jafarov shared facts from the company's practical experience. In addition, the delegation was taken on a site tour about the plant.

Baku once again demonstrated its hospitality to the MGIMO representatives. As a token of respect to the memory of the founder of modern Azerbaijan and great friend of MGIMO, the university delegation laid flowers to Heydar Aliyev's memorial.



# Caspian European Club CEO luncheon event



The honorary guest of the Caspian European Club event, the Deputy Minister of Economy Sahil Babayev presented Certificates of Gratitude to the Club's dedicated supporters. SOCAR Polymer's Deputy General Manager Fuad Ahmadov accepted the award on behalf of our company.

On February 21, SOCAR Polymer was represented at a CEO Luncheon hosted by Caspian Business Club, which brought together 140 higher-ranking officials and representatives of business, banking and industrial sectors from across the Caspian Region.

In his keynote address, Deputy Minister of Economy Sahil Babayev emphasized the efforts of the Azerbaijani Government in generating favorable investment climate, fostering long-term partnerships between the public and private sectors, and encouraging continuous dialogue between industries and regulating institutions.

Speaking in turn, the Caspian European Club CEO Telman Aliyev thanked the participants for standing by and keeping Club membership. Certificates of Gratitude were awarded to the Club's dedicated supporters, which included SOCAR Polymer. Deputy General Manager Fuad Ahmadov accepted the award on behalf of our company.



Mr. Aliyev further on invited the attendees to visit Tbilisi on April 18 to participate in the 5th International Caspian Energy Forum. The event will enjoy the patronage of the Governments of Georgia and Azerbaijan Republic. Georgian Prime Minister Giorgi Kvirikashvili is expected to make a welcome speech at the opening ceremony.

A networking platform, Caspian Business Club, also known as Caspian European Club, Caspian Energy Club or CEIBC, is a regional organization with the headquarters in Baku, listing over 5,000 member-companies in 70 countries – largely those that have established or intend to develop interests in the Caspian and Black Sea Region, as well as in the Baltic Sea Region.

It was founded in 2002 on the initiative of the Caspian Energy International Media Group, supported by regional oil and gas majors, and chaired by President Ilham Aliyev.

The organization's mission is to serve an agora for national and international business community, a reliable and trustworthy ground for voicing grievances and sharing best practices, as well as to lead Small and Medium-sized entrepreneurs, offering information support and orientation. Its major goal is to promote the Azerbaijani business ecosystem globally and reroute oil industry incomes to support the evolution of the national non-oil sector.



**OFFICIAL SUPPORT**



**CERTIFICATE**

OF GRATITUDE TO

**SOCAR Polymer LLC**

FOR SUPPORT

*First Deputy Chairman & CEO  
of Caspian European Club*

*Telman E. Aliyev*

APRIL 12, 2017 / BAKU

[www.caspianenergyforum.com](http://www.caspianenergyforum.com)

# A delegation from Austria visited SOCAR Polymer's Plant



On 21 February 2018, the SOCAR Polymer plant in the Sumgayit Chemical Industrial Park (SCIP) received a delegation from Austria, headed by the Secretary General of the Austrian Federal Ministry for Transport, Innovation and Technology Andreas Reichardt. The delegation also included his colleagues from the ministry - Verner Müller and Markus Ulman, as well as the chairmen of the Austrian Parliament's committees on tourism and environment, officials in charge of high technologies and transport, and heads of industrial and commercial companies in Austria. The delegation was accompanied by the AR Deputy Minister of Economy Niyazi Safarov and SCIP representatives including the Director of SCIP LLC Nazim Talibov, the Head of Department Elkhan Shiriyyev, a specialist of the Business Promotion Sector Aysha Omarova, and PR specialist Rashad Mehdiyev.

Upon arrival to the site, the guests drove around the plant to make visual acquaintance with the production facility. At the VIP hall, the guests were received by SOCAR Polymer's Deputy General Manager Fuad Ahmadov, Finance Director Rauf Guliyev, and PR Specialist Ilaha Hajiyeva. Mr. Ahmadov gave a broad presentation describing the history, objectives and performance of the SOCAR Polymer company. Andreas Reichardt mentioned that he had been closely







following the ongoing economic development processes in Azerbaijan, and emphasized wide presence of opportunities for bilateral cooperation. The Secretary-General also stressed his country's interest in expanding relations with Azerbaijan in various fields of activity. Having accentuated the importance of industrial zones currently created in our country, Andreas Reichardt underlined that Austria and Azerbaijan could successfully cooperate in this direction, with Austria providing machinery with related training and maintenance, and offering transfer of technology.

the two countries. Mr. Niyazi Safarov, in his turn, underlined local companies' readiness to cooperate not only domestically, but also internationally with view to diversify attained markets and increase the added value of local products.

Pleased with the outcomes of this hour-long visit, the guests departed to visit the other industrial facilities located in SCIP.

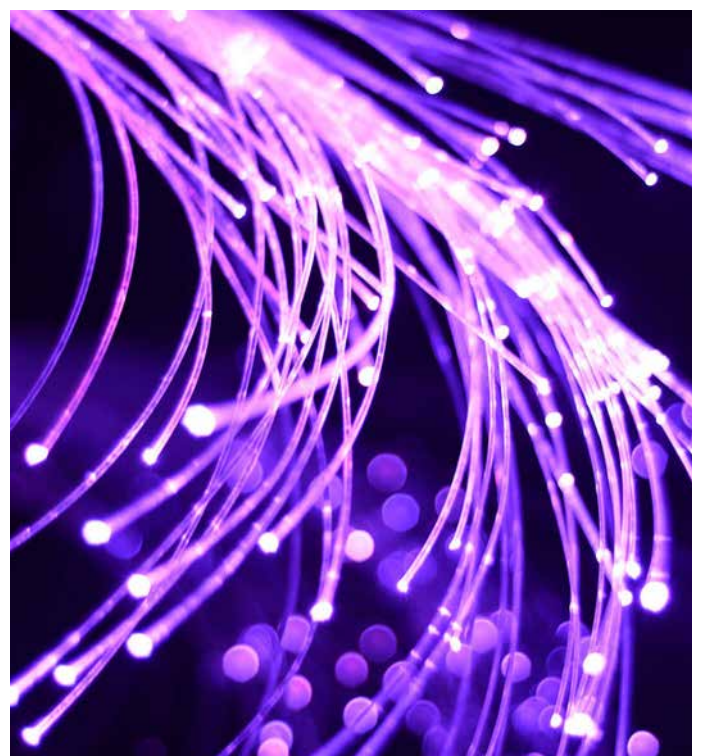
The meeting participants went on to discuss possible cooperation opportunities between the industrial sectors of

# Polypropylene in construction industries



Just a while ago polypropylene used to fall short of more popular tonnage polymers such as polyethylene and polyvinyl chloride. However now, the low production costs, environmental friendliness, easy recycling, compatibility with a wide range of fabrication methods and novel industrial applications, particular in construction industries and infrastructure development projects, have won polypropylene the fastest growth rate among thermoplastics. Some market researchers estimate the current global demand in polypropylene at about 45 million metric tons, with forecasts to rise to approximately 62 million metric tons by 2020. Packaging industries are by far the largest consumers with a 30% market share, while construction materials take up between 5% and 6%. Let's zoom in on the latter.

Arguably the most versatile polymer available, polypropylene could be used both as plastic and fiber. Plastic fixtures and fittings, as well as pipes made of stiff and rigid polypropylene are used indoors for a range of utility systems, such as water distribution and underfloor heating. Exhibiting superior fatigue resistance and hinge properties polypropylene pipes are taking over as service lines in housing and construction industries. Proper insulation by pipe-in-pipe technologies

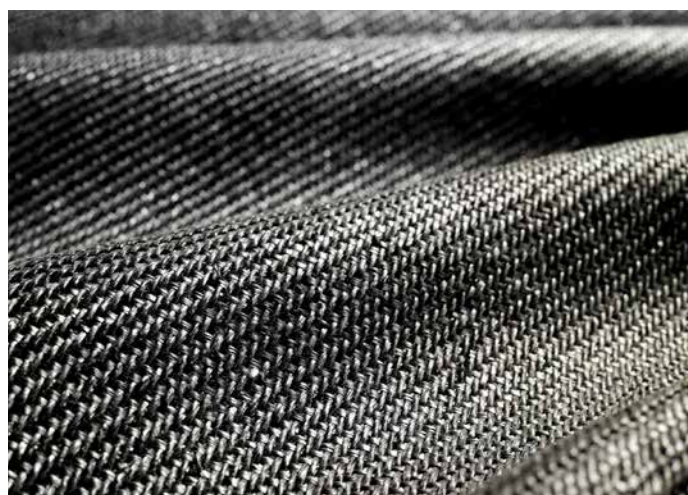
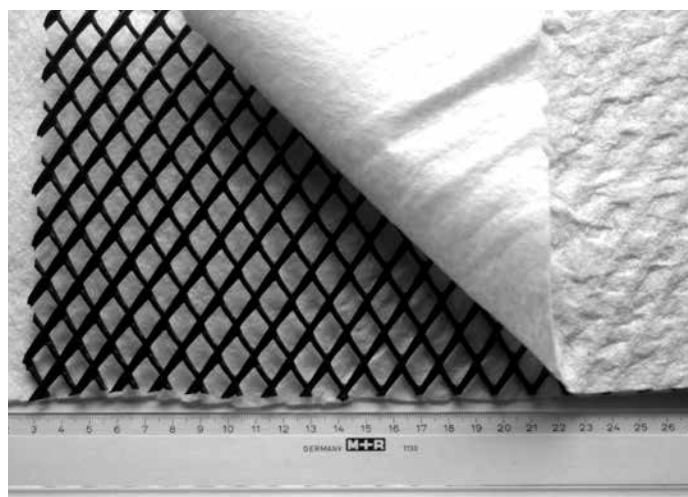




or thermal coating ensure extended pipe life cycle of over 70 years. The polypropylene service lines and moldings have become crucial in sustainable design and edifice repurposing. With low production costs, fast and effort free installation, they ensure cost efficiency of pre-fabricated houses which offer swift delivery of affordable dwellings. Similarly, PP utility networks have become essential in hi-end segment of the construction industry that focuses on innovative energy-saving buildings with integrated water and waste recycling systems.

In turn, fiber polypropylene is span into non-woven membrane fabrics, geotextiles, widely adapted by environmental engineering design. Geosynthetics largely perform earth retaining functions, such as separation, drainage, reinforcement, sealing, protection et al. They hold up to exposure, including in extreme temperatures, and come out in various purpose-specific configurations, such as geogrids, meshes, geonets et al. Geotextiles are used to upgrade soil characteristics and level grounds in infrastructure development projects, e.g. highways, airfields or railroads, harbors and pipelines, making it possible to build in those locations, where it would have been impossible to build otherwise. As the base of natural or artificial grass lawns they serve as economically viable solutions for outfitting recreational and sport facilities and playgrounds. The non-woven membranes play a key part in preserving the integrity of layers in fashionable inverted roofs, that have their waterproof blankets beneath the insulation.

Polypropylene is adept to custom fit many an innovation application, with a full potential to be untapped yet.





[www.socarpolymer.az](http://www.socarpolymer.az)

OPENING NEW FRONTIERS  
IN THE PETROCHEMICAL  
INDUSTRY OF AZERBAIJAN

 **SOCAR**  
**POLYMER**