sector and trusting the reliable capabilities and capacities in this sector, the National Iranian Gas Company has offered a vast range of investment options for the energy field investors in several sectors of this strategic industry including processing , transmission, underground storage and distribution ones. What follows introduces some of the most important investment opportunities in the form of the National Iranian Gas Company plans and projects which are ready to attract the financial resources.

The NIGC prioritized plans for investment to be fed financially				
Item	Project Title	Date Start	Date Finish	Required Credit (Billion rials)
1	Gas underground storage in Shoorijeh	2010	2013	2200
2	Gas pressure booster station construction	2009	2013	8600
3	2nd phase of Ilam gas processing plant (1)	2011	2014	1624
4	Continuation of the 6th trans-Iranian Pipeline (Ahvaz I DehgolanIMiandoab) (1)	2011	2014	49302
5	Continuation of the 7th trans-Iranian Pipeline (1) (Iranshahr to Zahedan and Pakistan border)	2011	2015	29804
6	The 9th trans-Iranian Pipeline from Dehgolan to Bazargan	2012	2015	40638
7	The 11th trans-Iranian Pipeline	2012	2016	63042
8	Gas transmission line Damghan, Kiasar, Sari, Neka	2011	2015	3035
9	Gas transmission line Bafgh-Yaz	2011	2014	566
10	Gas transmission line Ahvaz-Khoramshahr	2011	2014	1400
11	Reinforcing gas transmission line Mahshahr	2011	2014	800
12	Gas transmission line Delijan-Khomein	2011	2014	450
13	Gas transmission line Bidboland-Gachsaran	2011	2014	522
Total				202043

Project Introduction	
Underground natural gas storage in Shoorijeh tank 1st Phase	
Execution Location	Khorasan-e Razavi province
Tank Type	Hydrocarbon
Project Scheduled Time	2010-2013
Maximum daily injection for storage	10 million cubic meters in the 1st phase
Maximum periodical extraction possible per day	20 million cubic meters in the 1st phase
Investment Level (Billion rials)	2200

Project Introduction	
Construction of gas pressure booster installations in the 8th trans-Iranian Gas Pipeline	
Execution Location	Fars and Esfahan Provinces
Explanation	Kheyrgoo, Khanj, Jahrom, Arsanjan, Safashahr, Dehshir, Nadushan, Ardestan and Kashan stations
Capacity	About 110 million cubic meters per day for each station
Project Scheduled Time	2009-2013
Investment Level (Billion rials)	8600

Project Introduction	
Ilam Gas processing plant Construction (2nd Phase)	
Execution Location	Ilam province
Explanation	Building gas processing plant capacity of 3.4 MCM /day
Products capacity by product kind	Ilam processing plant capacity was 6.8 MCM/day in the 1st phase that will increase 3.4 MCM/day and reach 10.2 MCM/day. By-products of this increase include production of 876 million cubic meters of methane, 58 million cubic meters of ethane, 189800 CM of C_3^+, 175200 CM of C_5^+ and 51100 tons of sulfur.
Project Scheduled Time	2011-2014
Investment Level (Billion rials)	1624

Project Introduction	
Continuation of the 6th trans-Iranian Gas Pipeline from Ahvaz to Dehgolan and Koohdasht-Naftshahr Transmission Line (Gas Export to Iraq)	
Execution Location	Khuzestan, Ilam, Lorestan, Kermanshah and Kordestan provinces
Explanation	Continuation of the 6th trans-Iranian Gas Pipeline from Ahvaz to Dehgolan/Miandoab with a 600 kilometer length and 56 inch diameter and gas transmission pipeline from koohdasht to Naftshahr (Gas export to Iraq) with a 215 kilometer length and 48 inch diameter together with Abdanan, Kuhdasht and Sanandaj branches with 6 gas pressure boosting stations
Project Scheduled Time	2011-2014
Investment Level (Billion rials)	49362

Project Introduction	
Continuation of the 7th trans-Iranian Gas Pipeline (Iranshahr-Zahedan-Pakistan border)	
Execution Location	Sistan and Baluchestan province
Explanation	Continuation of the 7th trans-Iranian Gas Pipeline from Iranshahr to Pakistan border with a 315 kilometer length and 56 inch in diameter, Chabahar transmission 60 km, 30 inch line, Iranshahr/Zahedan transmission 260 km, 36 inch line with and its continuation to Zabol with 80 km, 36 inch line and the secondary lines up to 480 kilometer in length
	and 8-30 inch in diameter.
Capacity	With the implementation of the mentioned project, in addition to supplying natural gas to Sistan and Baluchestan province, gas transmission to Pakistan will be provided.
Project Scheduled Time	2011-2015
Investment Level (Billion rials)	29804

Project Introduction	
The 9th trans-Iranian Gas Pipeline from Dehgolan to Bazargan border	
Execution Location	Kurdestan, East Azarbaijan and West Azarbaijan provinces
Explanation	The 9th trans-Iranian Gas Pipeline from Dehgolan to Bazargan border with 608 km length and 56 inch diameter together with 5 pressure booster stations
Capacity	With the implementation of the mentioned plan, the necessary infrastructures for transmission of extra transmitted gas to Turkey and the European Union countries will be provided.
Project Scheduled Time	2012-2015
Investment Level (Billion rials)	40638

Project Introduction	
The 11th trans-Iranian Gas Pipeline	
Execution Location	Bushehr, Fars, Yazd, Isfahan and Semnan provinces
Explanation	The 11th trans-Iranian Gas Pipeline in three extensions of Assaluyeh-Khavaran gas pressure booster station with 327 kilometer length and 56 inch diameter, Khavaran gas pressure booster station-Abarkuh with 273 kilometer length and 56 inch diameter and Abarkuh-Damghan with 600 kilometer length and 56 inch diameter together with 7 gas pressure booster statations
Products capacity by product kind	By utilization of the mentioned plan, gas transmission with a 110 million cubic meters per day capacity produced by 13, 20 and 21 phases will be provided.
Project Scheduled Time	2012-2016
Investment Level (Billion rials)	63042

Project Introduction	
Gas transmission line Damghan/Kiasar/Sari	
Execution Location	Semnan and Mazandaran provinces
Explanation	Damghan/Kiasar/Sari transmission pipeline with 162 km length and 42 inch diameter in Ghushe of Damghan branched from the 48-inch north and northeast line passes through Damghan, Kiasar, Sari and Neka cities.
Products capacity by product kind	By utilization of the mentioned pipeline, it will be possible to transmit 40 MCM/day gas through the north and northeast 48-inch line to Neka
Project Scheduled Time	2011-2015
Investment Level (Billion rials)	3035

Project Introduction	
Gas transmission line Bafgh-Yazd	
Execution Location	Yazd province
Explanation	Bafgh-Yazd 100 km, 24 inch transmission line
Products capacity by product kind	By utilization of the mentioned pipeline, it will be possible to deliver natural gas to Bafgh city and the industrial units in the region from the existing Taft-Mehriz pipeline located in the southwest of Yazd city.
Project Scheduled Time	2011-2014
Investment Level (Billion rials)	566

Project Introduction	
Gas transmission line Ahvaz-Khoramshahr	
Execution Location	Khuzestan province
Explanation	Ahvaz-Khoramshahr 138 km, 36 inch transmission pipeline
Products capacity by product kind	The construction of this line aims at supplying for the future industrial units in the region including steel units and oil refinery
Project Scheduled Time	2011-2014
Investment Level (Billion rials)	1400

Project Introduction	
Mahshahr gas transmission reinforcing line and Shadgan branch	
Execution Location	Khuzestan province
Explanation	Mahshahr gas transmission reinforcing line with a 68 km length and 36 inch line and Shadgan 34 km, 12 inch branch.
Products capacity by product kind	The execution of this plan aims at supplying for Mahshahr power plant, Bandar-e Imam petrochemical development plan and city and Shadgan steel
Project Scheduled Time	2011-2014
Investment Level (Billion rials)	800

Project Introduction	
Gas transmission line Delijan-Khomein	
Execution Location	Markazi province
Explanation	Delijan-Khomein 70 km, 24 inch transmission pipeline
Products capacity by product kind	Supplying gas to cement unit, industrial consumption and the villages on the Khomein route is the goal of this plan
Project Scheduled Time	2011-2014
Investment Level (Billion rials)	450

Project Introduction	
Gas transmission line Bidboland-Gachsaran	
Execution Location	Khuzestan province
Explanation	Bidboland-Gachsaran 94 km, 20 inch transmission line.
Products capacity by product kind	By utilization of the mentioned pipeline, it will be possible to transmit at least 2.4 MCM and at most 9 MCM of sweet gas from Shahid Kaveh gas pressure boosting station located close to Bidboland Gas processing plant to Gachsaran Refinary
Project Scheduled Time	2011-2014
Investment Level (Billion rials)	522

The important developmental research plans of the NIGC

Developmental research enhancement results in the access to advanced technologies in gas field which in turn acts as an important infrastructure along the gas role as the industrial development pillar of the country. The research and technology directorate of the National Iranian Gas Company has been founded since 2004 having the goal of performing the demand-oriented and effective research plans to codify and develop the technical knowledge in the areas related to gas processing , transmission, underground storage and distribution, and producing commodities having higher added value and reaching to the development summits along with the Outlook Document goals. On these lines, the research and technology directorate has foreseen and created the necessary infrastructures having high potentials to attract the domestic and foreign capitals by creating added value and prosperity through science and technology. The general information about some of these plans are shown below.

The National Iranian Gas Company welcomes the interest and participation of the esteemed domestic and foreign investors in these fields and is ready to offer the complementary information of the plans to the qualified applicants who ask for them.

Research Plan: Development of Technical knowledge, Design and Construction of Intelligent pigs for oil and gas lines	
Achievements	• Native-making the new generation of Intelligent and pigging gas and oil pipelines 3000 km annually by the domestic companies and preventing currency exit up to $3.5 million per annum • Building a pipeline evaluator system to establish suitable infrastructure for development and native-making of intelligent pig knowledge • Building a test structure of the intelligent pig to test the performance of the intelligent pigs • Compiling the pipeline fault bank and processing the received information
Required Investment Amount	Estimated required credit: $ 22 million
Time	Plan completion time: 10 years, 5 phases
Internal Rate of Return (IRR)	Capital Return Rate: 19 percent
Demand Estimation	Native-making of at least five kinds of pigs (TFI, MFL, EMAT and UT and active cleaning) and pigging at least 6000 km per annum by the domestic companies

Research Plan: Building Sulfur Recovery Unit (SRU) catalyst and Technical Knowledge Development of Sulfur Producing Units	
Achievements	• Design and construction of a Sulfur Producing Unit for the Bidboland 1 Gas processing plant • Technical knowledge development of building the Al_20_3, $Ti0_2$, Co/Mo and modified alumina for the sulfur producing units technical knowledge development • SRU Process technical knowledge compilation and development of new sulfur producing technologies • Accessing the technical knowledge of design and construction of main equipment in sulfur producing units including furnaces and reactors
Required Investment Amount	Estimated required credit: $ 855,000
Time	Plan completion time: 3 years
Internal Rate of Return (IRR)	Capital Return Rate: 20 percent
Demand Estimation	• Building 10 SRU units at least and prevention of buying licenses • Producing about 1000 tons of different kinds of catalysts inside the country

Research Plan: Design and Construction of Odorant Substance Production Unit with a Capacity of 800 tons per annum	
Achievements	Building and launching the odorant substance production unit in the 1st phase of the South Pars Gas Complex with a capacity of 800 tons per annum
Required Investment Amount	Estimated required credit: $ 5 million + € 8.5 million
Time	Plan completion time: 24 months
Internal Rate of Return (IRR)	Capital Return Rate: 20 percent
Demand Estimation	• Making the production of this strategic substance native • Excess substance export possibility and stopping currency exit up to $1 million per annum

Research Plan: Gas processing plant Design (with national mark)	
Achievements	• Accessing technical knowledge of all the units required by the gas processing plants • Prevention of buying several licenses
Required Investment Amount	Estimated required credit: EPCF through entrusting the Khatam-Al-Anbia Base
Time	Plan completion time: 5 years
Internal Rate of Return (IRR)	Capital Return Rate: At least 20 percent
Demand Estimation	• Building a natural gas processing plant with a capacity of 20 MCM per day relying on the native knowledge

Research Plan: research plans and projects relating to the underground natural gas storage (including 3 projects) • Natural gas underground storage • Comprehensive studies about underground gas storage in Ghezeltapeh tank • Feasibility study of underground gas storage in Ahmadi tank	
Achievements	• Creating information and geographical based databases • Codification of the environmental and safety codes of practice in underground storage field • Feasibility study and utilization of new technologies in order to store natural gas underground to adjust the demand and supply, especially gas supply in the gas consumption peak time in the cold seasons
Required Investment Amount	Estimated required credit: 1st project $ 909,000 2nd project $ 250,000 3rd project $ 125,000
Time	Plan completion time: 1st project 30 months 2nd project 60 months 3rd project 6 months
Internal Rate of Return (IRR)	Capital Return Rate: 15 percent
Demand Estimation	Introducing about 40 suitable structures for underground natural gas storage

Research Plan: Using Sulfur in Several Applications and Managing its Usage	
Achievements	• Accessing the know-how of producing sulfur commodities especially agricultural sulfur and sulfuric asphalt • Modifying the granularizing units in the gas processing plants to produce different agricultural sulfurs and other sulfuric fertilizers needed • Solving the industrial and strategic problems about the excess sulfur of the processing plants and conversion of the substance into new high added- value products and stopping currency exit up to $43 million per annum • Commercializing sulfur asphalt
Required Investment Amount	Estimated required credit: $ 675,000
Time	Plan completion time: 7 years (4 years 1st phase, 3 years 2nd phase)
Internal Rate of Return (IRR)	Capital Return Rate: 40 percent
Demand Estimation	• Conversion of about 700 thousand tons of excess sulfur produced by the processing plants into agricultural sulfur per annum (reducing the consumption of chemical fertilizers by one-tenth and doubling the extraction amount and promotion of the agricultural products quality and consequently increasing the revenue of the country due to the soil PH modification • Conversion of about 200 thousand tons of sulfur of the processing plants into sulfuric asphalt per annum and substitution of about 30% of the consumed tar into sulfur with a lower price

Research Plan: Identifying the air polluters, carbon dioxide management and execution of the Clean Development Mechanism (CDM)projects	
Achievements	• Identifying about 5 project potentials to be developed under Kyoto Protocol Clean Mechanism • Registering 2 COM projects in the gas industries of the country • Receiving about 211000 certificates of annual emission reduction if two projects registered • Revenue of about $ 21.1 million by selling emission reduction certificates in a ten-year period (assuming $ 10 for one ton of carbon dioxide)
Required Investment Amount	Estimated required credit: $ 535000 and € 230,000
Time	Plan completion time: 42 months
Internal Rate of Return (IRR)	Capital Return Rate: regarding the nature of the COM projects, IRR of these projects is less than 10 percent and it will be justifiable by receiving and selling of the emission reduction certificates
Oemand Estimation	• Users of the plan are the subsidiary companies of the NIGC and mainly the gas processing companies

Research Plan: technical knowledge development and construction of the Mini Liquefied Natural Gas producing unit (Mini LNG)	
Achievements	• Codification of technical knowledge development and construction of the Mini Liquefied Natural Gas producing unit • Supplying natural gas distribution network in consumption peak time
Required Investment Amount	Estimated required credit: $ 20 million
Time	Plan completion time: 3 years
Internal Rate of Return (IRR)	Capital Return Rate: 20 percent
Demand Estimation	• Construction of a Mini LNG unit inside the country for gas distribution to the faraway locations and economizing $ 1 million • Gas distribution to 1000 residential areas in impassable regions

Research Plan: Integrated Software Development for Design, Optimization and Administration of the Gas Transmission and Distribution Network in Iran	
Achievements	• Substitution of foreign commercial software with the domestic software required by the National Iranian Gas Company Dispatching Directorate having support and maintenance capability and exiting the sanctions imposed against Iran • optimization of the gas transmission and distribution networks and analysis of the network performance to identify the possible faults
Required Investment Amount	Estimated required credit: $ 675,000
Time	Plan completion time: 4 years
Internal Rate of Return (IRR)	Capital Return Rate: 20 percent
Demand Estimation	Substitution of the crucial application software packages in the gas transmission network reliable management field including TGNET, SIMONE with the domestic software package (economizing up to $ 305,000)