

SANERGY GROUP

SANERGY GROUP

We Comprehend Excellence





Sanergy Group

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A Message from the Chairman



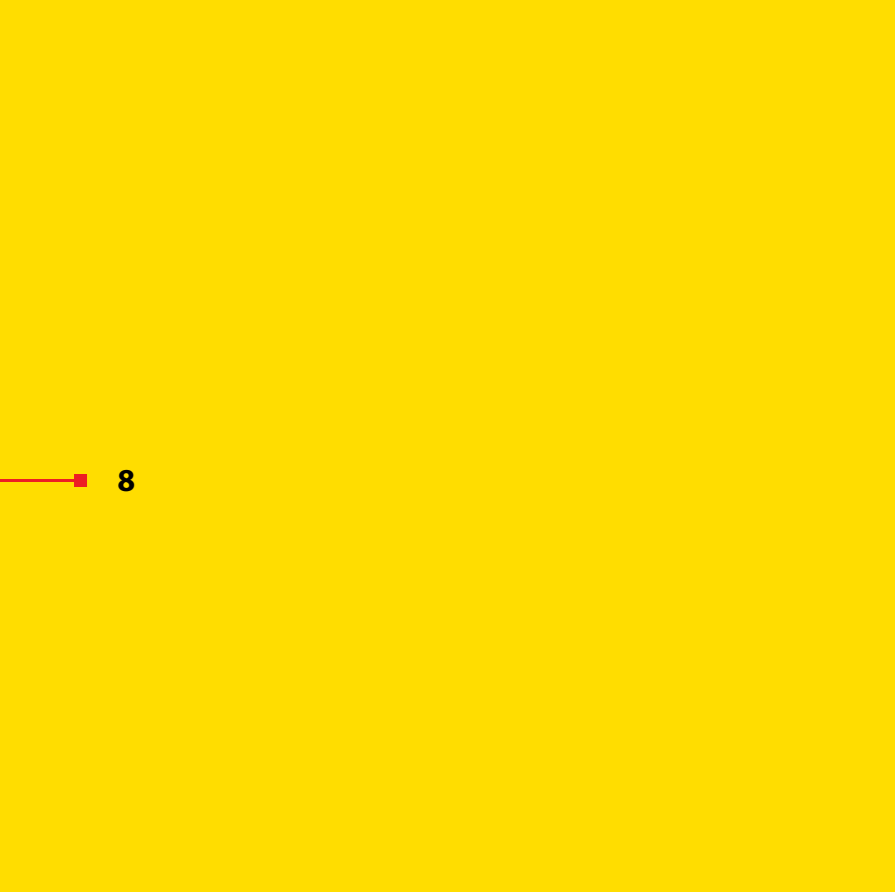
The rapid pace of activities in implementation of industrial projects and the efficiency of industrial contractors make it a tough job to remain in the market for those who cannot put up with these key requirements of the market to be qualified.

Acting as a GC & an EPC Contractor in international projects is an asset, which Sanergy enjoys due to the valuable experience of its group members. Sanergy is determined to maintain this quality and continue to associate its name with confidence and reliability. As a group of specialized companies in consulting, manufacturing, engineering, and project execution, Sanergy is among the well reputed Iranian EPC Contractor in the field of water, power electricity, oil and gas projects.

Sanergy group, having access to financial resources of the I.R.IRAN Government and also Iranian financing banks, has also the capability to arrange finance facilities for power & Electricity, water, Oil and Gas projects.

I would like to take this opportunity to once more extend my appreciations to our customers for continued support and to assure them that Sanergy will continue to be at their disposal, not only as an EPC contractor, but also as a reliable technical advisor who can preserve their interest by studying the feasibility of the future plans.

A.Kadkhodaei
Chairman



What is SANERGY Group?

Sanergy is a general contractor for executing Turnkey/ EPC Projects in the international markets with the capacity to provide Finance Facilities and investment, designing, Engineering, procurement, Construction, Installation and Commissioning in Power, Oil and Gas, Water and Waste Water Industries as following:

- 1. Power: Power transmission Lines and Substation (HV, MV &LV), Wind Farms and Small Hydro Power Plants.
- 2. Oil and Gas: Gas pressure reduction stations (TBS & CGS), Metering Station, transmission Pipe Lines (onshore & offshore) and Offshore Platforms and Steel Structures.
- 3. Water and Waste Water: Treatment Plants, Pump Station, Transmission Lines, Distribution and Irrigation Network.

Sanergy utilized the capabilities of the well-known experienced Iranian Companies active in the various fields of Engineering, production and project execution integrated together under the brand name of "Sanergy Group".

Sanergy Group in addition to capability of project auction has also plenty of manufacturing and production factories as below:

- 1. Power: Steel Towers, conductors, OPGW, Insulators, Fittings, Electrical Panels and wind Turbines.
- 2. Oil and Gas: Gas metering, Gas Pressure Reduction Equipment.



Mission

“To be one of the world’s leading companies in the fields of Power, Electricity, Oil, Gas and water, dedication to satisfaction of our customers and employees, enhancing shareholders rights and contributing to community welfare through providing competitive quality solutions”

Our Principles

The followings are the principles, Sanergy endeavor to Maintain at any case:

- Honesty
- Loyalty to its business partners
- Flexibility in strategies
- Performing as a team



Managing Directors of Sanergy Group



H.Zamani
MD of Sanergy co.



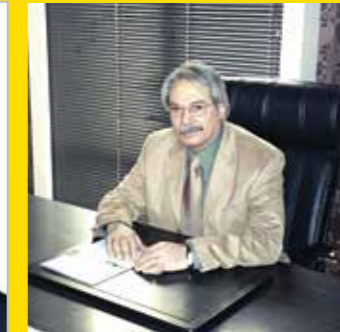
M. Farsi
MD of Yasan co.



B. Ghasemi
MD of POA co.



M.arabani
MD of NSTE co.



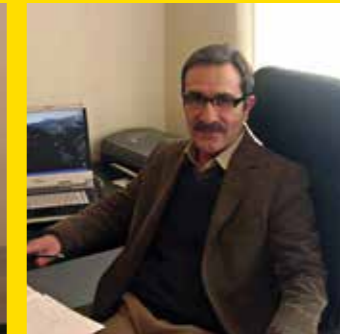
D.I.Dastjerdi
MD of Absar co.



M.Rahbari
MD of YAP co.



O.Noori
MD of JarfTadbir co.



M.zidesarae
MD of Tecnozist co.



M.S.Gandehari
MD of PM co.

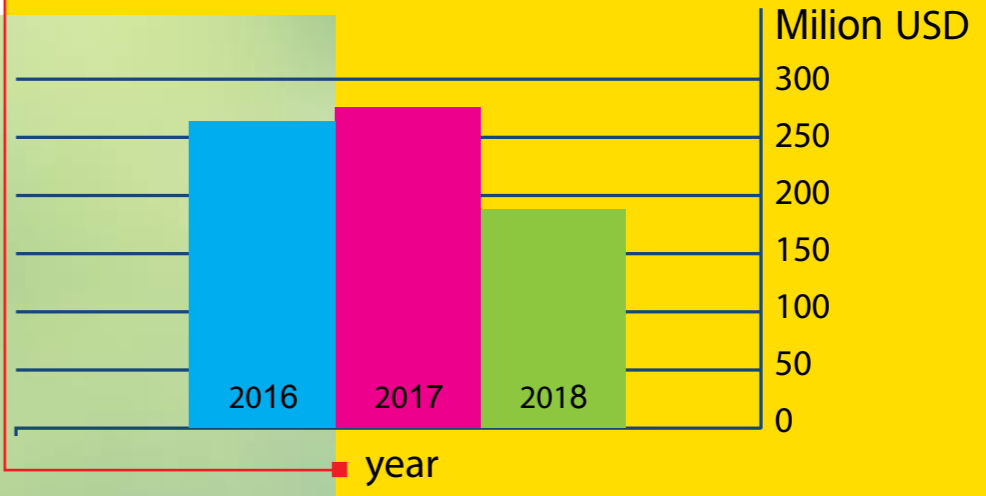
Annual Turnover

| Sanergy Group | | | |
|-----------------------------------|-----------------------|--|-------------|
| Annual Turnover from 2009 to 2011 | | | |
| Year | Amount Currency (IRR) | PPP Conversion Factor * (Rial to USD) | USD |
| 2016 | 2,196,674,397,450 | 8203 | 267,789,150 |
| 2017 | 2,480,736,193,128 | 9036 | 274,539,198 |
| 2018 | 1,701,405,789,120 | 9036 | 188,291,920 |

Annual Turnover:

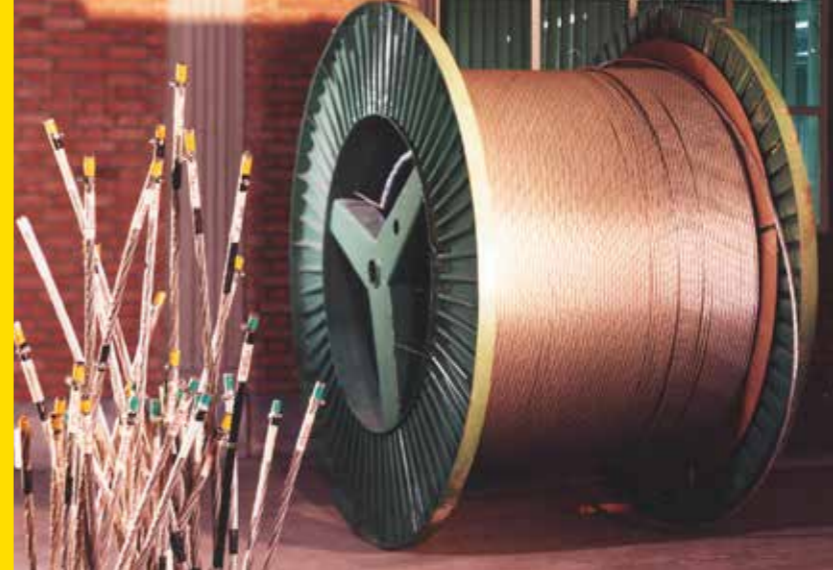
Note: Financial Information Table is including the Financial report of the members of Sanergy Group accumulatively.

* Refer to World Bank report



Fields of Activity





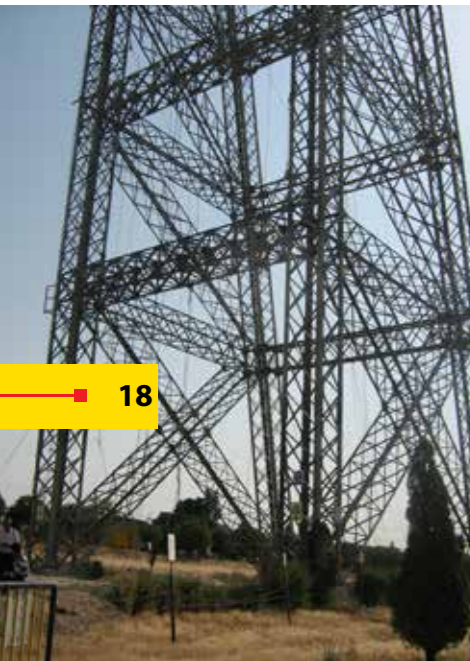
Fields of Activity chart

Fields of Activity

Sanergy Group Members have a strong background of Manufacturing, Engineering and Construction in different projects which covers a wide range of areas including Power, Electricity, Water, Oil and Gas projects. The group members have contributed to almost all huge national projects and also have executed several overseas projects, thus being placed among the outstanding international EC/EPC contractors in their fields of activity.

One of the Sanergy's unique advantages is strong access to the banking system which enables Financing of the International projects, giving it even more potential in accepting and implementing overseas projects.

| Power of Electricity | Oil & Gas | Water & Wastewater | Production & Manufacturing |
|-----------------------------------|---|----------------------------------|------------------------------|
| Small & Medium Hydro power plants | Oil & Gas Pipelines projects | Water & Wastewater Treatment | Steel Towers |
| Transmission Lines | Gas Station (Metering, Regulating, ...) | Pump Stations | Conductors, OPGW, Earth Wire |
| Substation | Storage & Vessel Tanks | Irrigation Networks | Glass Insulators |
| | | Water Reservoir and Transmission | Fitting and Accessories |
| | | | Gas and Oil Equipment |



EPC Projects

1. Power and Electricity

Electricity is the most versatile and easily controlled form of energy. At the point of use it is practically loss-free and essentially non-polluting. Electricity is weightless, easier to transport and distribute, and it represents the most efficient way of consuming energy. Sanergy has experiences in the role of transportation of Electricity Energy in below fields of activities:

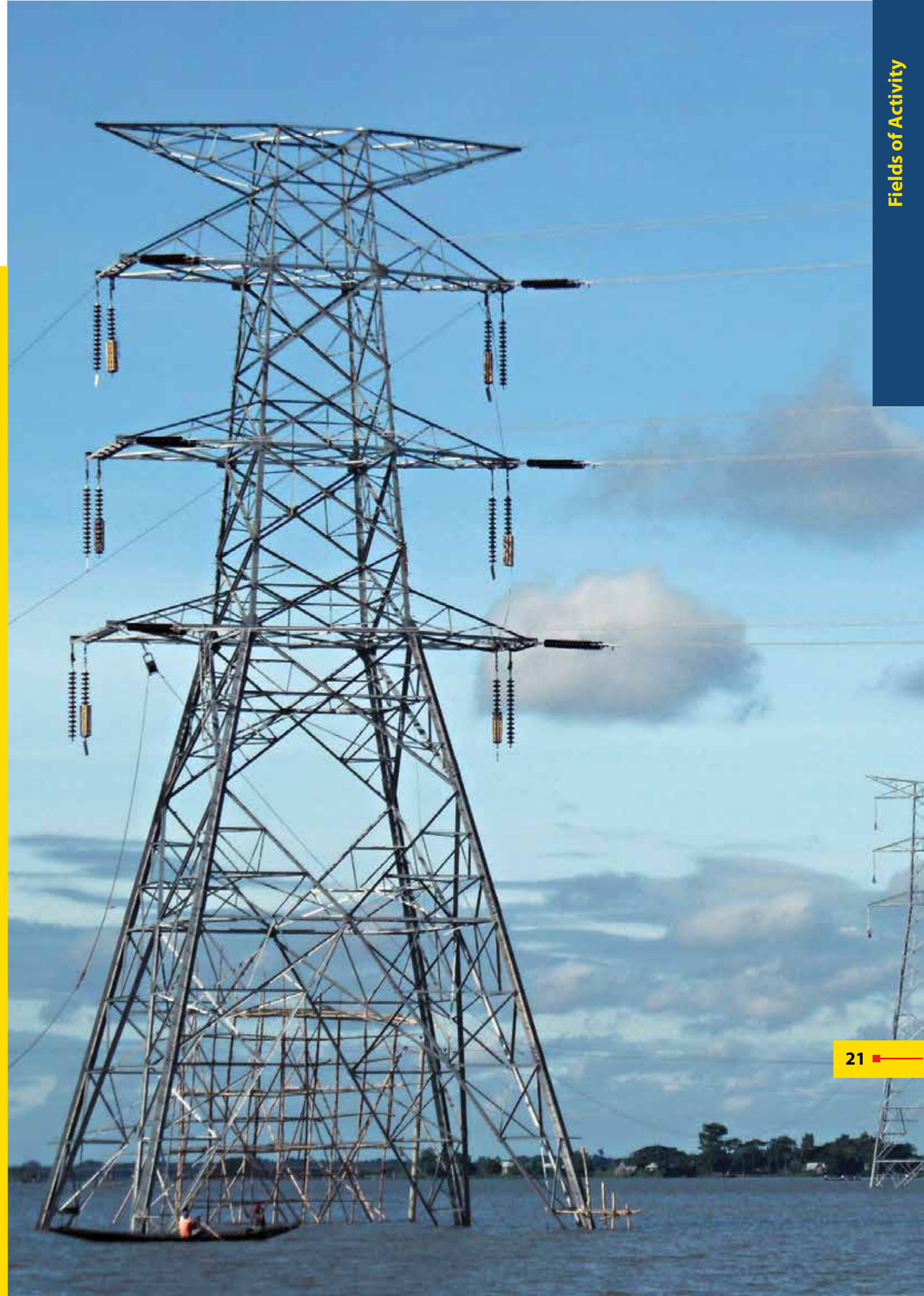
Transmission and Substations

Based on our long experiences in the field of Transmission and Substations we can provide Engineering Services for Transmission Line and Substations as an EPC contractor.

Sanergy Group is capable to perform Engineering, Procurement and Construction for Transmission Line and substation projects.

Our scopes of works are in brief as bellow:

1. System study, planning, feasibility study
2. Preparing technical and commercial document and specifications
3. Management of contract (MC)
4. Installations and commissioning of equipment
5. Basic and Detail design
6. We have enough facilities to provide tools and machineries for hot line working training personnel for hot line and carry out the hot line projects
7. Tendering
8. Manufacturing and supply of Equipment and supervisory services for AC and DC systems as well as HVDC projects
9. Training software of design program and operation and maintenance of the project
10. Perform geological and geotechnical laboratory services
11. Surveying and prepare plan & profile for transmission line by LIDAR system
12. Scientific research for upgrading sys. And development of existing sys. And optimization of projects





■ EPC Projects

2. Small and Medium Hydro Power Plants

Small-scale hydro has been increasingly used as an alternative energy source, especially in remote areas where other power sources are not viable or there is a Hydro Power potential in the local Watersd to be converted to Electricity Power.

- **Sanergy Group** is specialized in Design and Implementation of Micro and Small-scale Hydro-Electrical Power Plant (up to 30 MW), harnessing of Energy from Falling Water, such as steep mountain rivers. Using this renewable, indigenous, non-polluting resource, Small-Scale Hydro Power Plants can generate power for homes, hospitals, schools and workshops. The Micro Hydro Station, which converts the energy of flowing water into electricity, provides poor communities in rural areas with an affordable, easy to maintain and long-term solution to their Energy needs.

- We always seek the most appropriate and cost effective solutions for its Clients. Our cooperation could be from the first Ideas to Engineering and Planning, Implementation, Contruction, Procurement, Installation and Execution Supervision, Commissioning and joint Implementation, Transfer of know how from Planning to Operation Maintenance.

3. Water and Wastewater

The rapid population growth and increasing water need for home and industrial usages emerges the importance of supplying of Water and treatment of the Waste-waters.

Sanergy Group is ready to perform a full spectrum of Water and Wastewater Treatment projects on Turn-key basis all over the world.

The Company offers Engineering (basic and Detail), Project Management, procurement, Supervision and Inspection Services from Conceptual stage to completion for various water and wastewater.

As a part of our Strategic approach, we have acquired and developed innovative and cost effective systems in solving the most complex engineering problems, data management and economic solutions and are also ready to acquire the new technologies in Water and wastewater Projects and to implement them with R&D methods or technology transfer.

The Water Treatment Technologies include, R.O. (Reverse Osmosis), Filtration and Pulsator Treatment, Ion Exchange and Demonetization, Membrane Filtration and Electro Deionization.

And the Wastewater Treatment Technologies include Biological Treatment, Activated Sludge, Nitrogen Removal, Carousel, Aerated Lagoons, and Stabilization Ponds.



Our scopes of work are briefly as below:

- Engineering (Feasibility Study, Basic Design and Detail Design)
- Project Management
- Manufacturing and Supply of Equipment together with Procurement Supervisory Services
- Installation and Commissioning of Equipment
- Training and Operation and Maintenance of the Project

Our Main Fields of activity in Water and waste-water:

- Water Supply and Construction of Reservoirs
- Water and Waste-water Treatment Plants and Re-usage technology as below :
 - Water Treatment Plants
 - Wastewater Treatment Plants
 - Industrial Wastewater Treatment Plants
- Water and Wastewater Transmission Line
- Water and Waste-water Pump Stations
- Water and Waste-water Distribution Networks
- Irrigation Networks

EPC Projects



4. Oil and Gas

The importance of Oil & Gas as the main source of Energy has made it a strategic industry all over the world and all countries are dependent to its aspects.

The fast development of implementation of Oil & Gas products is achievable with definition and execution of different types of projects in the oil & gas owing countries.

Sanergy Group is using the experiences obtained by the group members in both domestic & abroad projects to stand as an active and reliable International General Contractor to fulfill the requirements of clients in Oil & Gas Industries.

We do Engineering, Procurement, Construction, Installation & Commissioning in oil & gas industries projects as mentioned below:

- 1. Oil & Gas Pipe Laying
- 2. Pressure Reduction, Metering & Filtration Gas Stations as City Gas Station (CGG) & Town Border Station (TBS).
- 3. Liquid & Dry Bulk Storage & Pressure Vessels
- 4. Material Handling Systems



■ Manufacturing Factories

1. Steel Towers

Steel Structures Company of Sanergy Group (YASAN Steel Structures Company) is capable of manufacturing required equipments for power industry in two main categories, power transmission towers and substation equipments. Designing and engineering by using the most experience, capable and competent engineers and update technology and software, has made us responsible for design of all kinds of power transmission and telecommunication towers and also steel structures according to the latest international standards such as ASCE and IEEE.

We do estimation of raw materials, preparation and issuance of different production schedule to workshop by using professional planning and production control software using Plate NEST-OS 2D&Angle OCUT cutting technology software in order to reduce raw material waste, determining the production priorities, control and supervision of overall production stage.

Up to now, we have proudly designed and tested 31 types of power transmission towers with test certificates from reputable test station all around the world.

The mainly used softwares are ISI, MSTOWER, STAAD PRO., BOCAD V.22.



Power Transmission Towers

In order to achieve the optimum design of Towers, YASAN is proud of an innovation of unique, special and in house software called "YASTOWER", which specially designed for single line modeling of towers. One of the advantages is to reduce the design duration and more importantly it is a smart software for selecting the best possible members, considering the weight optimization and back to back space.

Now, we design and manufacture the best power towers in the range of 400, 230, 132, 66, 63 KV with the production capacity of 35,000 MT/Year.

Equipment of Substation

we are also to produce all steel equipments necessary for complete operation of high voltage substations with best quality and according to international standards.

Telecommunication Tower

In addition to manufacturing of power towers and substation structures, we are manufacturer of telecommunication towers with high quality in 3 divided main categories:

Lattice Towers, Guyed Towers and Anchor Bolts

Company's hot dip galvanizing plant consist of pretreatment and hot dip galvanization workshops along with other facilities, allow us to handle hot dip galvanization of 3000 MT per month according to ASTM A123 or BS standards to meet clients requirement



Manufacturing Factories

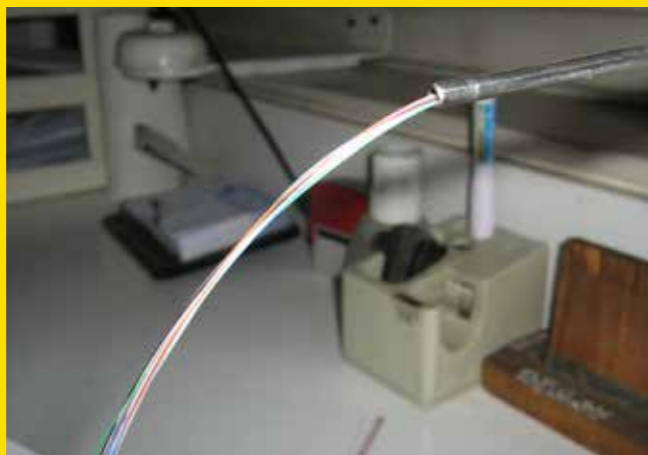
2. Conductor, Earthwire and OPGW

The Conductor, Shield wire and OPGW manufacturer of Sanergy Group using 6 separated production lines in 2 different 2 halls. SNP in Sanergy Group is the leading manufacturer of the OPGW and ACSR cables in Iran. Our main machines are Rigid and planetary stranders, drawing lines, continuous casting & AL ROD milling machine.

Our production with regards to international design standards, virtually cover any types of the OPGW and ACSR wires with the annual production capacity of 6000 Km OPGW and 24,000 MT ACSR.

Quality Control

In the QC department all the raw materials, half-made and final products are tested according to the latest international standards like ITU-T, IEC and IEE. The tests include telecommunication (OTDR), electrical (DC Resistance) and mechanical (tensile, torsion, wrapping and hardness) properties as well as metallographic. These tests and measurements are performed in our own laboratories. Many other complementary qualification tests like short-circuit current and etc. are done in foreign high technology labs. All procedures are designed and performed according to ISO 9000-2000 standards. The tests which can be performed in the factory are as below in two different categories:



ACSR Type Test

ACSR Type Test In accordance with IEC 61089, IEC 61395 and ASTM B 232:

1. Stress-strain test
2. Creep test
3. Verification of conductor lay-length, diameter, and construction
4. Torsional ductility test on individual wires.

OPGW Type Test (IEEE.1138)

1. Water ingress test
2. Seepage of flooding compound
3. Aeolian vibration test
4. Galloping test
5. Sheave test
6. Crush test
7. Short circuit test
8. Cable bend test
9. Twist test
10. Creep test
- 11/12 Street-strain/fiber-strain test
13. Strain margin test/test/tensile performance
14. Temperature cycle test
15. Corrosion test
16. Lightning are test
17. Dc resistance test

Hot Line

SNP equipped with know how and especial machinery to be able to replace OPGW with old earth wire on over head transmission lines in live (Hot) condition. This technology has been transferred from RWE CO. from Germany.

Manufacturing Factories

3. HV Accessories & Fittings

As a member of Sanergy which is a group of pioneers in turn key projects, Yaragh Avaran Pooya Co. is capable of manufacturing all types of fittings and accessories of High Voltage Transmission Lines, OPGW and ADSS Cables, Distribution Lines and Substations along with required Joint Boxes. Our products can be classified as:

- Fittings and accessories for power transmission lines.
- Clamps and connectors for substations.
- Fittings and junction boxes for OPGW and ADSS cables.
- Fittings for distribution network.
- Self-supporting cable fittings in distribution network.
- Aerial and ground Fault indicators.
- Metal fittings of insulators.
- Hot dip galvanized nuts and bolts
- All kind of dampers and spacer dampers

Performed Type Tests up to 2013



To certify that requirements of Quality Control are met, the laboratory of YAP Co. has been equipped with required test equipment for the performance of routine tests and sample tests such as Mechanical Tests, Vibration Tests, Fatigue Tests and Heat Cycle Tests. However, more than 240 Type Tests have also been performed in international accredited laboratory such as KINECTRICS (Canada), CESI (Italy), KEMA (Netherlands), LAPP (Germany), Ontario Hydro (Canada) and VEIKI VNL. (Hungary)

| Type Test | Number of type tests |
|--------------------------------|----------------------|
| Fittings of 500KV | 32 |
| Fittings of 400KV | 64 |
| Fittings of 220KV & 230KV | 25 |
| Fittings of 132KV | 15 |
| Fittings of 63KV | 11 |
| Fittings of OPGW and Joint Box | 11 |
| Spacer Damper | 13 |
| Damper | 6 |
| Substation Clamp | 6 |
| Fault Indicator | 13 |
| Distribution Fitting | 30 |
| Total | 240 |



Manufacturing Factories

4-Insulator

The Insulator manufacturer of Sanergy Group is the sole manufacturer of "toughened glass insulators" in the Middle East and one of a few worldwide. The range of products includes the full spectrum of standard and anti-fog insulators from 70KN to 210KN, which their electrical and mechanical characteristics are well above the specified values in related standards such as IEC, ANSI and BS.

U70 (IEC class: U70BS & U70BL)

U120 (IEC class: U120B & U120BP)

U160(IEC class: U160BS, U160BL, 160BLP)

U210 (IEC class (1) U210B & U210BP)

Specification Reference Standards are: IEC383 -1, IEC 305, IEC 120



5-Gas and oil equipment manufacturing

- Design and manufacturing of metering, pressure regulating and filtration gas station (TBS & CGS) in cabinet and flat type.
- Design and manufacturing a variety of different size of dry gas filters and filter separators
- Design and manufacturing of bulk material handling systems equipment
- Design and manufacturing of storage tanks (fixed and floating roof) and pressure vessels
- Manufacturing, assembly, test and calibration completely in sizes 2 -6 and class rates: 150#, 300#, 600# under license of VEMM TEC (Germany)



Sanergy Group Members (Companies) ■



Sanergy Group Members (Companies)



1. Yasan Company

Yasan Steel Structure Company was founded in the year 1994 in a 60.000 m² area. The main purpose of establishing this company was to design and manufacture Power Transmission and Telecommunication Towers.

After around two decades of establishing the company, Yasan has obtained significant success by collecting and utilizing professional expert and modern hardware equipments and is able to produce more than 35.000 metric ton steel structure per year.

It was obvious that providing high quality product, satisfying the customers and having the possibility for exporting the products to other countries and achieving mass production needs great attempt and ambition.



2. Emkan Electric Company

EEC is one of the leading Companies that undertake Civil works, installation and commissioning activities for Transmission line. As a construction Contractor, its scope of work broadly includes Survey, Route Optimization, Foundations/Civil Works, Erection, Stringing, Testing and Commissioning of Transmission Lines. EEC has executed more than 2000 Km project up to 400KV transmission lines.



3. Sim Noor Pooya Co. (S.N.P)

SNP SNP was established as an independent company in 1997.

SNP started its activities with design and manufacturing Optical Ground Wire (OPGW) under the license of NKF KABEL B.V in the Netherlands and extended it with producing different type of conductors (ACSR, ACSR/AW.AAAC, AAC) for transmission lines .

Over years SNP has manufactured, delivered and installed the various types of conductors and OPGW on transmission.



4. Yaragh Avaran Pooya

The history of YaraghAvaranPooya (Y.A.P Co.) Engineering Company goes back to the time it was an affiliated company to IREEE Co. which was the first designer and manufacturer of connectors and fittings in Iran. The company followed its activities by R&D process in the industry since 1993.

Afterward IREEE Co. has developed its new image in other areas like transmission line towers, OPGW, Conductors, Insulators, and ect. Relying on such successful experiences, its professional experts, exclusive know-how, through utilizing the advanced software and hardware for fittings led to establishment of a new company with a modern organization called YaraghAvaranPooya Engineering operating in engineering and manufacturing services in 1999.

At the present Y.A.P Co. has an effective role in the Middle East at the biggest manufacturer of fittings, connectors and supplying the national demands up to 400 KV. Its presence in the market will soon make the company to be the main presenter in this field at the Electrical Industry in the region.



5. Pars Maghareh Co.

Pars Maghareh Co. (P.J.S.C) is established on 2002 by Iran Electrical Equipment Engineering Co., which herself as a main local manufacturer of electrical equipment for overhead power transmission lines, was founded in 1991.

The complete production line's equipment, machineries and the know-how have been supplied by the most reliable and reputable European companies in the glass insulator production field. Finally in 2006, installation & commissioning operations carried out with the supervision of the supplier in the site located in Ghazvin-Takestan.

Today, Pars Maghareh co. is the leading and the sole manufacturer of «Toughened glass insulator» in territory and region with annual capacity of 10.000 tons of glass insulators. It is obvious that, this success is due to the valuable experiences and efforts of the company's board in power industries. The range of products include the full spectrum of standard and anti-fog insulators from 40KN to 300KN which their electrical and mechanical characteristics are well beyond the specified values in related standards such as IEC, ANSI and BS.

Pars Maghareh insulators have successfully passed the standard type tests in the most authorized national and international laboratories and the related quality certificates have been collected in this respect.

6. Namdaran Transmission System Eng. Co.

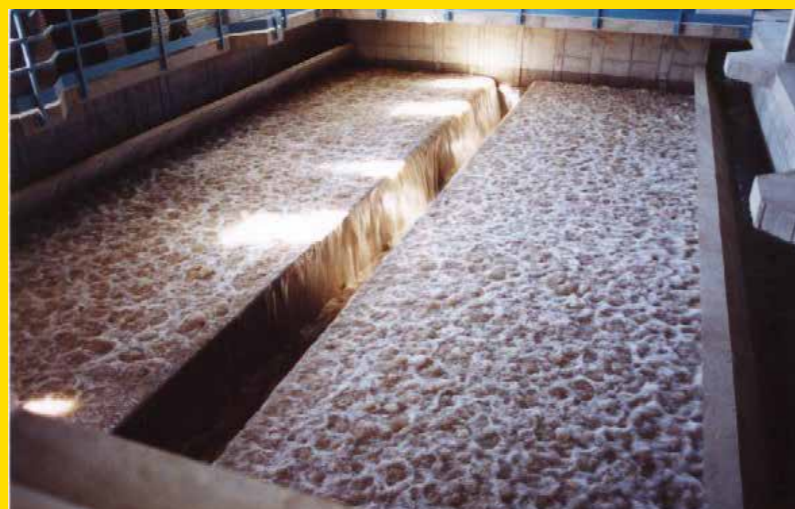
Namdaran Co was established on 1999 for providing Engineering Services for high voltage, Medium Voltage and Low Voltage Transmission and Distribution Electrical Systems. Its activities include Feasibility Studies, Design, and Design Review, Supervision of Electrical Projects as well as training of experts.

During the last ten years, Namdaran Co. has succeeded to work in some projects in Iran as well as abroad and has received high rank certificates from the clients.



7. Pars Omran Asia Co.

Pars Omran Asia Consulting Engineering was established in 2005 with aim of Design, Engineering and Technical Supervision in fields of Water and wastewater projects. Shareholders of the firm are highly experienced career engineers in fields of Civil, Mechanical, Petrochemical and Power.



8. JarfTadbirToos Engineering Construction Co.

JarfTadbirToos (J.T.TOOS) Company can provide a wide range of services to implement a project from inception to completion in Gas Industrial. These services may be applied to Gas Pressure Regulating and Metering Station (CGS, TBS) and related equipments, Storage Tank and Pressure Vessel and Bulk Material Handling. The principal of the company have been established based on proven ability, engineering integrity, improved productivity & on time delivery.



9. Absar Company

Based on 30 years of work intelligently with endurance and three decades of active involvement in the civil engineering field and development and implementation of specific projects and gain a lot of encouragement and appreciation letters, besides three counts of patents (official documents) in the field of water and wastewater industry with their restricted rights for the Absarcompany and according to the potential and actual abilities to implement projects, the company declares its readiness to implementation of water and wastewater projects specially in low height and swampy areas below water level and low height and catchment and Islands around the world.



10. Technozist co.

Technozist Inc. established in 1980, utilizing a broad experience, profound knowledge and specialized staff in the field of water and waste water systems involves extensively in every part of the process such as engineering, procurement, construction, commissioning and project management services and covers a wide range of expertise includes municipal and industrial water and wastewater treatment plant, pump stations, water and wastewater transmission line (pipe jacking, micro tunneling and ...). Technozist has a tradition of deep cooperation with and commitment to different kinds of partners and its goal is to provide the most effective solution for the customers in a professional and supportive manner.

Projects and Production References



Selected Overseas Projects



1. 132 KV Nakhjavan Transmission Line (Azerbaijan)

Scope of Work: Design and Supply and Installation of Equipment and Supervision on Construction and Commissioning of 132 KV Overhead Transmission Line in Azerbaijan Republic (Republic of Nakhjavan)
Employer: AZENCO LTD – Azerbaijan Republic
Start & Completion: The Contract is started on July 2006 and finished on June 2007.
 The Employer's Certificated of Completion is Received on 09/07/2007.

2. Trasmission line In Bangladesh

Scope of Work: Supply, Erection, Testing and Commissioning of Bibiyana-Comilla 230kV Transmission Line on Turnkey Basis (Lot-3) in People's Republic of Bangladesh
Employer: Power Grid Company of Bangladesh (PGCB)
Start & Completion: The contract is started on 20th February 2011 and is going to be finished on 30th September 2012.
Project Specification: about 55 kM 230 kV, Double Circuit, Twin Bundle Overhead Transmission Line



3. Gas Transmission Line in Armenia

Scope of Work: Execution of civil and mechanical works of Gas Transmission Pipe Line (28 inches) in Kajaran- Sisian region of R. o. Armenia.
Employer: ArmrusGasprom CJSC (ARG) - Armenia
Start & Completion: There were 3 contracts for the above subject which started on 2007 and finished on 2008. The Employer's certificate of completion is received on 22, June, 2009.

4. Small Hydro Power Plant in Azerbaijan Republic

Scope of Work: Engineering, Procurement, Construction, Installation and Commissioning Supply, Installation and Commissioning
Employer: Azerenerji JSC – Azerbaijan Republic
 Project Estimated Completion: The Feb. 2013.
 Project Specification and Technical data:

| Item | Specification |
|---|---------------------------------------|
| Type of Turbines | Francis |
| Turbine Nominal Working Characteristics | Head= 14.5m, Q=1.2 m ³ /s |
| Electricity Production Capacitance | Mini (< 1,000 kWh) |
| Network Main Electrical Data | 20/0.4 kV, Connected to local Network |
| Approximately Diameter and Length of Penstock P/L | D: 900 mm, L=1860 m |



Selected Local Projects

1. YASAN Co. (A member of Sanergy Group)

Contract Identification: Akhtar Site Transmission Line 400 kV
Award date: 2008/01
Completion Date: 2010/08
Role in Contract: Contractor
Total contract amount: 8,592,401 US\$
Employer's Name: Pars Special Economy Zone



4. Absar Co. (A member of Sanergy Group)

Contract Identification: Wastewater collection system of North east area of Kish Island
Award date: 2009
Completion Date: In Final Delivery Phase
Role in Contract: Contractor
Total contract amount: 58,509,358 US\$
Employer's Name: Kish Island water co.

2. Emkan Electric Co. (A member of Sanergy Group)

Contract Identification: Gotvand – Shazand 400kV
Award date: 2009
Completion Date: 2010
Role in Contract: Contractor
Total contract amount: 14,880,000 USD
Employer's Name: Iran Power Development Company (IPDC)

5. Technozist Co. (A member of Sanergy Group)

Contract Identification: Sarvestan and Darab Waste Water Treatment Plant
Award date: 2009
Completion Date: 2012
Role in Contract: Contractor
Total contract amount: 4,800,000 US\$
Employer's Name: Fars Industrial Towns Co.



3. Sim Nour Pooya Co. (A member of Sanergy Group)

Contract Identification: Isfahan ring optical fiber project(EPC)
445 km – 230 kv line
Award date: 12/2007
Completion Date: 11/2009
Role in Contract: Contractor
Total contract amount: 2,177,300 USD
Employer's Name: Isfahan regional electric company (EREC)



6. Technozist Co. (A member of Sanergy Group)

Contract Identification: Tehran wastewater collection pipeline (using pipe jacking system)
Award date: 2012
Completion Date: In progress
Role in Contract: Contractor
Total contract amount: 3,530,000 US\$
Employer's Name: TEHRAN Waste Water Company.



Accomulated Production References

According to Sanergy Different Fields of Activity, the cumulative experiences of manufacturing and production can be classified as below:

1. Conductor:

For ACSR, ACSR/AW, AAC and AAAC conductors up to 45000 MTs.

| Nominal Voltage | MT |
|-------------------|---------------|
| 66 kV and less | 4,491 |
| 132 kV | 5,133 |
| 230 kV | 6,416 |
| 400 kV and higher | 1,639 |
| Total | 32,079 |

2. OPGW:

OPGW with the different designs up to 25,000 Kms.

| Nominal Voltage | Line Length (km) |
|-------------------|------------------|
| 66 kV and less | 2,600 |
| 132 kV | 3,400 |
| 230 kV | 5,050 |
| 400 kV and higher | 6,950 |
| Total | 18,000 |

3. Glass Insulator:

We have produced the below amounts of Insulators since 2007 (1386) till today.

| Type | Quantity |
|-----------------------------|----------|
| 70 KN Insulator | 241,941 |
| 120 KN Insulator (Standard) | 519,543 |
| 120 KN Insulator (Anti Fog) | 94,279 |
| 160 KN Insulator (Standard) | 573,545 |
| 160 KN Insulator (Anti Fog) | 81,721 |
| 210 KN Insulator (Standard) | 325,723 |
| 210 KN Insulator (Anti Fog) | 97,427 |



4. HV accessories & Fitting:

A brief record of supply of fittings and accessories in KM up to 2012 has been categorized up to 500KV as below:

| | |
|-----------------------------------|------------------|
| Fittings and Accessories of 500KV | 60 KM |
| Fittings and Accessories of 400KV | 5,831KM |
| Fittings and Accessories of 230KV | 3,309 KM |
| Fittings and Accessories of 132KV | 2,953 KM |
| Fittings and Accessories of 63KV | 6,781 KM |
| Fittings and Accessories of OPGW | 14,114KM |
| Total | 33,048 KM |

5. Towers:

From the year 2004 to 2012, we have manufactured more than 90,000 MT different types of tower, for both abroad and domestic markets.

| Type | Quantity/Ton |
|-----------------------|--------------|
| 63 KV Single Circuit | 1,000 |
| 63 KV Double Circuit | 12,644 |
| 132 KV Double Circuit | 7,848 |
| 230 KV Single Circuit | 2,450 |
| 230 KV Double Circuit | 21,069 |
| 400 KV Single Circuit | 39,088 |
| 400 KV Double Circuit | 7,515 |



Accomulated Projects Refrences

Sanergy accumulated local and overseas Projects references in different fields of activity can be classified as below:

1. Power Transmission Lines:

| Nominal Voltage | Line Length (km) |
|-------------------|------------------|
| 66 kV and less | 144 |
| 132 kV | 74 |
| 230 kV | 285 |
| 400 kV and higher | 1965 |
| Total | 2468 |

2. Oil & Gas:

| Project Type | Length/ Number |
|-----------------------|----------------|
| Gas Transmission Line | 27 Km |
| Gas Stations | 82 Unit |

3. Water & wastewater pipe laying projects:

| Description | Number of projects | Total amount of pipe laying (m) | Diameter of pipe (Inches) |
|--|--------------------|---------------------------------|---------------------------|
| Water distribution & transmission line projects | 10 | 128130 | 4 inch-40 inch |
| Wastewater collection network & transmission line projects | 13 | 154383 | 8 inch-78 inch |



4. Water &wastewater treatment projects:

| Description | Quantity |
|--|----------|
| Water treatment projects | 8 |
| Municipal wastewater treatment projects | 30 |
| Industrial wastewater treatment projects | 13 |
| Hospital wastewater treatment projects | 35 |
| Pump station projects | 9 |

5. Target Countries:

The countries wich have recived services and production of Sanergy group from 2003 up to 2012 as blow:

| No. | Country |
|-----|--------------|
| 1 | Armenia |
| 2 | Azerbaijan |
| 3 | Bangladesh |
| 4 | Ethiopia |
| 5 | Hungary |
| 6 | Iraq |
| 7 | Lebanon |
| 8 | Pakistan |
| 9 | Saudi Arabia |
| 10 | Sri lanka |
| 11 | Syria |



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Head Office Address: No.31, Shahid Satri Boulevard , Vali-e-Asr.Tehran-I.R.Iran
Executive Office Address: Unit 2, No.82, opposite of Melat Park, Shahid
Ansari Street, Vali-e-Asr. Tehran-I.R.Iran
Tel: (+9821) 22043408 (+9821) 26202862-5 Fax: (+9821) 22043409
info@sanergy-co.com