

PROJECT PROFILE – SUMMARY SHEET

Project Introduction

1. Project title: wire and cable	
2. Sector : Industry	Sub sector: Industry
3. Products/Services: wire and cable	
4. Location: Yazd country Free zone <input type="checkbox"/> Economic special zone <input type="checkbox"/> Industrial Estate <input checked="" type="checkbox"/> Main Land <input type="checkbox"/>	
5. Project description: The cable industry has for many years been used in industrialized countries as a means of transmitting and directing radio waves, and so that power plants and telecommunications equipment as the inevitable parent industry relied heavily on the industry. Yazd is quite eminent with regards to the production of copper wires and cables. These products are used both in telecommunication industries and in the electric infrastructures of Iran. Iran' wire, and cable industry possesses a global statues and is able to participate in international markets	
6. Annual capacity : 12000 tons	

Project Status

7. Local / internal raw material access: - million Euro	
8. Sale : 2.178 million Euro - Anticipated export market :25%	
9. Construction Period : 2 years, start:2019 Year	
10. Project Status :	
- Feasibility study available?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
- Required land provided?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
- Legal permissions (establishment license, foreign currency quota, environment, etc) taken?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
- Partnership agreement concluded with local/foreign investor?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
- Financing agreement concluded?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
- Agreement with local / foreign contractor(s) concluded?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
- Infrastructural utilities (electricity, water supply, telecommunication, fuel, road, etc) procured?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
- List of know-how, machinery, equipment, as well as seller / builder companies defined?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
- Purchase agreement for machinery, equipments and know- how concluded?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>

Financial Structure

11. Financial Table

Description	Local Currency Required			Foreign Currency Required Million Euro	Total Million Euro
	Million Rials	Rate	Equivalent in Million Euro		
Fix Capital	236400	1/120000	1.97	1.5	3.47
Working Capital	309600		2.58	--	2.58
Total Investment	546000		4.55	1.5	6.05

- Value of foreign equipment/machinery.....1.5..... million euro
- Value of local equipment/machinery.....million euro
- Value of foreign technical know- how million euro
- Value of local technical knows- how million euro
- Net Present Value (NPV): ...0.0016...million Euro for ...2018.. Year
- Internal Rate of Return (IRR)... 26.4.....%
- Payback Period (PP).....6.5 Year

General Information

12. Project Type : Establishment Expansion and completion

13. Company Profile:

-Name (legal /natural persons) : Mr. Yazdi

-Company Name : Investment Services Center of Yazd Province

-Address : Yazd, Imam Khomeini Street(RA) - After Jami Mosque street- in front of Shahid Ebrahimi Street - Finance Building

Tel: +983536209432-4

Fax: +983536209432-4

-E-mail: info@investinyazd.ir

Web site: www.investinyazd.ir

-Local entrepreneur : private sector public sector other

Please attach follow documents if available

- Pre feasibility study
- Feasibility study
- Legal permissions (establishment license, foreign currency quota, environment, etc)

Ministry of Economic Affairs and Finance

Organization for Investment Economic and Technical Assistance of Iran (OIETAI)

Foreign Investment Center

Tel: 33967749-33967766-33967762-39902485-39902488-39902486

Fax: 33967774

Website: www.investiniran.ir



Organization of Investment and Economic
and Technical Assistance of Iran
Investment Services Center of
Yazd Province

Introduction of Investment Opportunities in Yazd Province

www.investinyazd.ir

Wires and Cables

SUMMARY OF TECHNICAL-ECONOMICAL FEASIBLE STUDY

SUBSECTOR: INDUSTRY

ISIC CODE: 3130



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Contents

- *Introduction*
- *General Indicators of Yazd Province*
- *Project's location*
- *Market study*
- *Physical progress and project phases*
- *Financial projection*
- *Summary of economic issues*
- *Incentives, features and advantages of project*



Introduction

The cable industry has for many years been used in industrialized countries as a means of transmitting and directing radio waves, and so that power plants and telecommunications equipment as the inevitable parent industry relied heavily on the industry. The cable industry has changed dramatically in the last 50 years, this is due to the emergence of the petrochemical industry, which has transformed the formerly dangerous, heavy and expensive cable into a reliable, lightweight and relatively inexpensive device. In the vital value of electric energy, they say that the blood of the veins of the world is industry. This description itself illustrates the constructive role of electricity generation, transmission and distribution. It seems that the major cost of using this energy is only for production. While facilities and equipment account for about 30 to 35 percent of the cost, and 65 to 70 percent of the total cost of the installation is related to the electricity system.

Yazd is quite eminent with regards to the production of copper wires and cables. These products are used both in telecommunication industries and in the electric infrastructures of Iran.

Many large manufactures are active in this industry, and they have had a major role in the economic and welfare development of the country and in giving counsel and producing such products for private and public institutions.

With production facilities, natural resources, and also providing high-quality products, Iran's wire, and cable industry possesses a global status and is able to participate in international markets.

Competitive advantages of the wire and cable industry include low tax rates. Educated workforce, low cost of the labor force, affordable and safe energy resources, rich copper mines, and unlimited access to the polymer. Furthermore, as Yazd has a central position in Iran, it is possible to transfer the products to neighboring countries with lower transportation costs, leading to economic growth and proportionate and sustainable employment between countries.

General Indicators of Yazd Province

Economic Indicators

1. GDP : 4.680 million Euro
2. GDP per capita : 4440 Euro

Social indicators

1. The population : 1,138,533 people
2. Population growth rate : 2.5%
3. Population density : 2.5 people per square kilometer
4. The percentage of young population 24.29%
5. Urbanization rate : 85.3%

The contribution of various economic sectors

1. Agriculture 8/3%
2. Industry and Mine 46.3%
3. Services 45/4%

Geographical Indicators

1. Area: 74,781 square kilometers (The eighth city of the country)
2. Neighboring Provinces: Fars, Isfahan, South Khorasan, Kerman
3. Number of Counties: 10 and number of cities: 21

The statistics of social and geographical indicators related to 2014 and the statistics of economic indicators related to 2016.

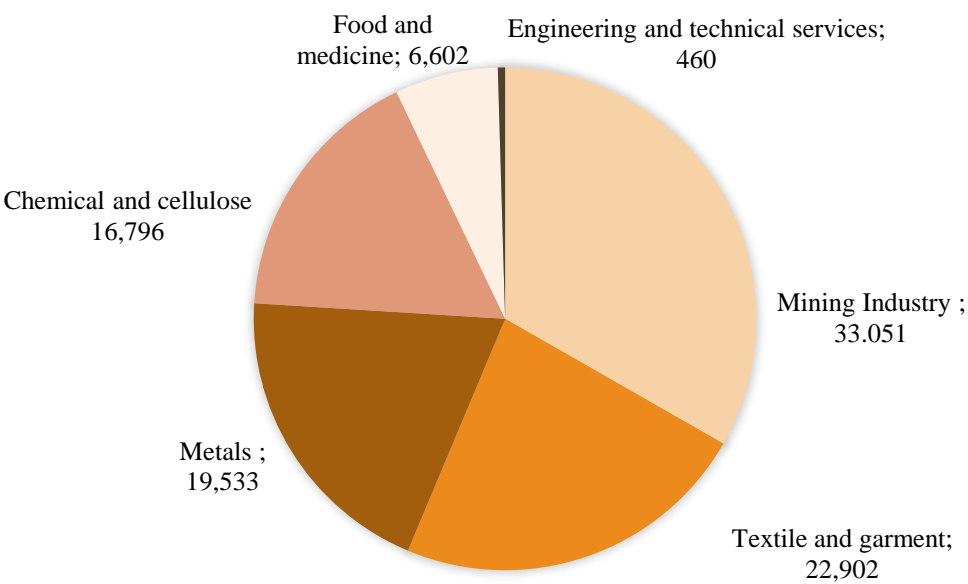
A look at the industrial sector of Yazd province

There are more than 3,600 industrial units with the production licence producing more than 800 types of commodities.

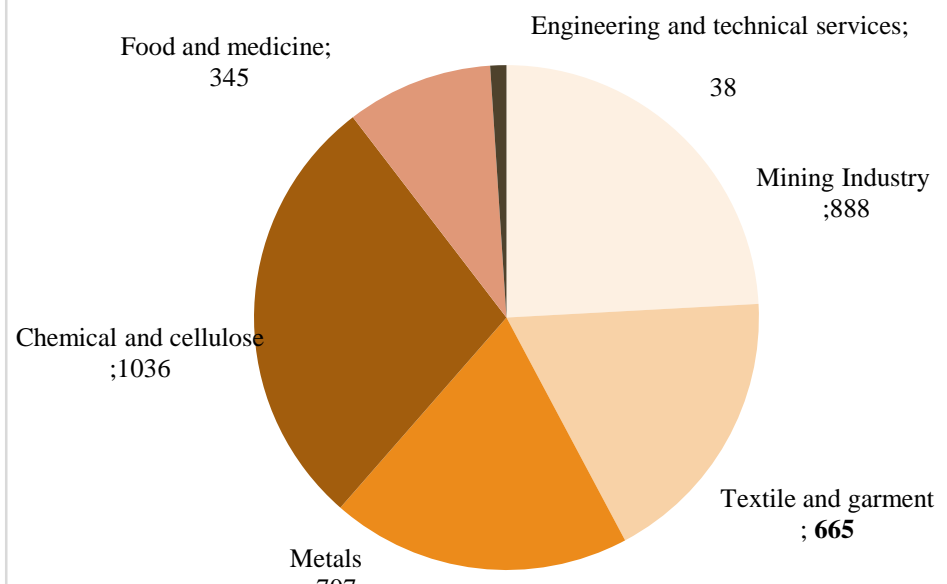
The fourth industrial province of the country

More than 95 % of the industries of Yazd Province constitute small and medium - sized industries (SME)

The country's first ranking in the production of tiles and second ranking in textile production



Distribution of Industrial Units of Yazd Province



Industrial employment distribution of Yazd Province 6

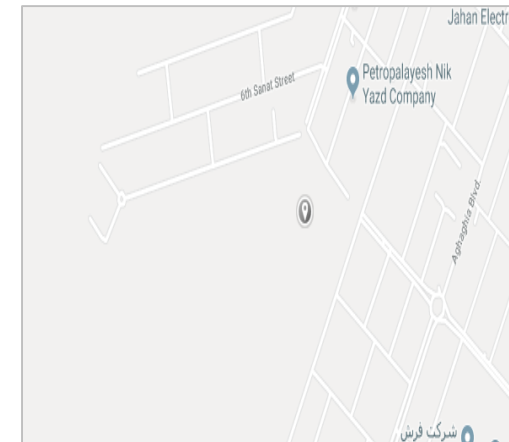
Project's Location

Yazd province with about 74781 square kilometers (4.6 percent of the country) is the eighth largest province of the country. It is located in the central part of Iran's plateau on the margin of the Kavir Lut plain. It is located in the northwest of Semnan, Isfahan, west, Fars from the south and Southwest, southern Khorasan is east of Kerman and neighboring east and south east. In terms of political-administrative divisions, this province has 10 cities, 21 districts, 45 villages and 21 urban centers. This province has 14 industrial estates, 17 industrial zones and 1 special economic zone in the fields of textile, metal, chemical, food, electricity and electronics, non-metallic and cellulose minerals, and has the proper infrastructure for the establishment of industrial units.

The Production Of wire and cable is located in Yazd industrial city.

Longitude of the project: 31.901312

Latitude of the project :31.54.233287



Access to the Infrastructure

- Having numerous power plants with a nominal capacity of 2500 MW
- Having three gas pipelines with a capacity of 50 million cubic meters per day
- Supply of petroleum products required through national pipelines

Energy



- Provincial Geographic Position (Crossing of North-South and East-West Transportation Corridor)
- The first rank of rail transit in the country (more than 876 kilometers of railroad tracks) and the railroad crossroads
- Having an international airport for cargo and passenger transportation with easy access

Transportation



- 14 industrial towns, 17 industrial districts with a total area of 7000 hectares
- It covers about 1,000 active units and 1,400 units under construction.
- The existence of Yazd Special Economic Zone with an area of over 570 hectares

Industrial areas



Product Introduction

Electric wires are responsible for conveying electricity, and this happens through the internal parts comprising wires and cables. In general, wires or cables are composed of a conductor (made of copper, aluminum, or tinned copper), an insulator, a jacket, metal armor, separating covering, middle covering, and final covering.

Cables have a general definition which is any conductor capable of conveying electricity, insulated by its surrounding environment. The reason for using insulators inside cables is that when it is installed in the ground, the conducting wire inside the cable is lost and the voltage of the ground surface remains at zero.

Cables are made through different methods and by different indexes according to the voltage to which they would be connected and the places in which they would be installed. Naturally, low-pressure cables which are made for slower flows have a simpler structure than that of faster flows. The materials used for the majority of conductors are copper.

The most important insulation used in cable construction is polyvinyl chloride PVC, which is called plastic beam.

Pvc is non-flammable and this is a good advantage in cables.

It has a lot of flexibility. Things like cheap mass production and simplicity of manufacture have made more than 90% of the low-pressure cables made of this insulation.

Another type of PET insulation, polyethylene, is used for cables that are fireproof and used in dedicated locations. Some cables use rubber insulation, which is of little use.



Major exporting countries

In 2016 and 2017, China, Mexico, and the United States were the major exporters of wire and cable in the world. Iran with 169 million dollars, was allocated 0/1 percent of export's world.

<i>2016</i>				<i>2017</i>			
<i>Rank</i>	<i>Major countries</i>	<i>Value /million dollars</i>	<i>percentage</i>	<i>Rank</i>	<i>Major countries</i>	<i>Value /million dollars</i>	<i>percentage</i>
1	China	21549	18/6	1	China	22972	18/3
2	Mexico	11359	9/8	2	Mexico	11324	9
3	The US	10309	8/9	3	The US	10857	8/7
4	Germany	7275	6/3	4	Germany	8156	6/5
5	Romania	4173	3/6	5	Romania	4333	5
95	Iran	169	0/1	56	Iran	4(not yet rated)	0
		115787	100			12520	100

Major importing countries

The major importers of wire and cable in the world in 2016 and 2017 were the US, Germany and Japan.

Iran's wire and cable imports amounted to \$ 67 million in 2016, accounting for 1.0% of the world's wire and cable imports.

<i>2016</i>				<i>2017</i>			
<i>Rank</i>	<i>Major countries</i>	<i>Value /million dollars</i>	<i>percentage</i>	<i>Rank</i>	<i>Major countries</i>	<i>Value /million dollars</i>	<i>percentage</i>
1	The US	19766	17/3	1	The US	20260	16/6
2	Germany	9762	8/6	2	Germany	10955	8/9
3	Japan	6190	5/4	3	Japan	6833	5/5
4	Mexico	5653	5	4	China	5863	4/8
5	China	5531	4/9	5	Mexico	5496	4/5
95	Iran	67	0/1	69	Iran	181(not yet rated)	0/1
		113915	100			123276	100

Major target countries for export

Iran's wire and cable export market in 2016 and 2017 was allocated to Afghanistan, Iraq, Syria and Turkmenistan. It should be noted that the amount of cables imported from these countries to Iran in 2017 decreased significantly compared to the previous year.

<i>2016-17</i>			<i>2017-18</i>		
<i>Major countries</i>	<i>Value /million dollars</i>	<i>percentage</i>	<i>Major countries</i>	<i>Value /million dollars</i>	<i>percentage</i>
Afghanistan	85/5	51	Afghanistan	122/9	72/9
Iraq	67/3	40	Iraq	39/8	23/6
Syria	12	7	Syria	3/3	1/9
Turkmenistan	2/7	2	Turkmenistan	1	0/6
Total	169/5	100	Total	168/5	100

Potential Target Countries for Export in the Region

<i>Import in 2017</i>		
<i>Countries</i>	<i>Value /million dollars</i>	<i>percentage</i>
The UAE	1233(not yet rated)	1
Russia	1019	0/8
Turkey	969	0/8
Saudi Arabia	730	0/6
Kuwait	589	0/5
Iraq	421(not yet rated)	0/3
Qatar	318(not yet rated)	0/3
Kazakhstan	314	0/3
Pakistan	229	0/2
Oman	153	0/1

Main export companies

- ❑ **SETAREH YAZD WIRE & CABLE Co:** Setareh Yazd Wire & Cable Manufacturing Company was established in May 2009 and started with the permission of the Ministry of Industries and Mines in a land of 16000 square meters. The area of production halls, warehouses and office areas is about 8000 square meters, which after the installation and commissioning of machinery in December 2010, officially started production with the license of the Ministry of Industries and Mines. In 2013, the product development plan to achieve the production of aluminum cables was realized by purchasing new machinery from internationally accredited companies and using the latest technology in the world and having specialized and efficient personnel.
- ❑ **Simco Cable Company :** Simco Co. was founded in 1968 by producing various types of wires and cables in Tehran. In 1975, in order to develop and use modern technology, Rasht transferred to Rasht and in the area of 150,000 square meters, constructed production, office and laboratory halls with an approximate area of 40,000 square meters and with an initial nominal capacity of 15,000 tons.
- ❑ **Moghan cable co:** Moghan Wire & Cable Company started its activity in Shahroud city in Semnan province in the year of 1981 by producing various types of low pressure wire and cable especially in industrial and construction sectors. The following year, in 1996, as the demand for telecommunication cables and wires increased, the board of directors of the company established a new telecommunication cables unit in Shahroud Industrial City. In 2006, the second phase of the development project, with a capacity of over 43,000 tons of land covering more than 10 hectares and under construction of 38,000 square meters including production halls, office buildings and warehouses in the Shahroud industrial town, was implemented and consequently an important step in the quantitative and qualitative development. It meets the quality of products needed by this part of the industry.

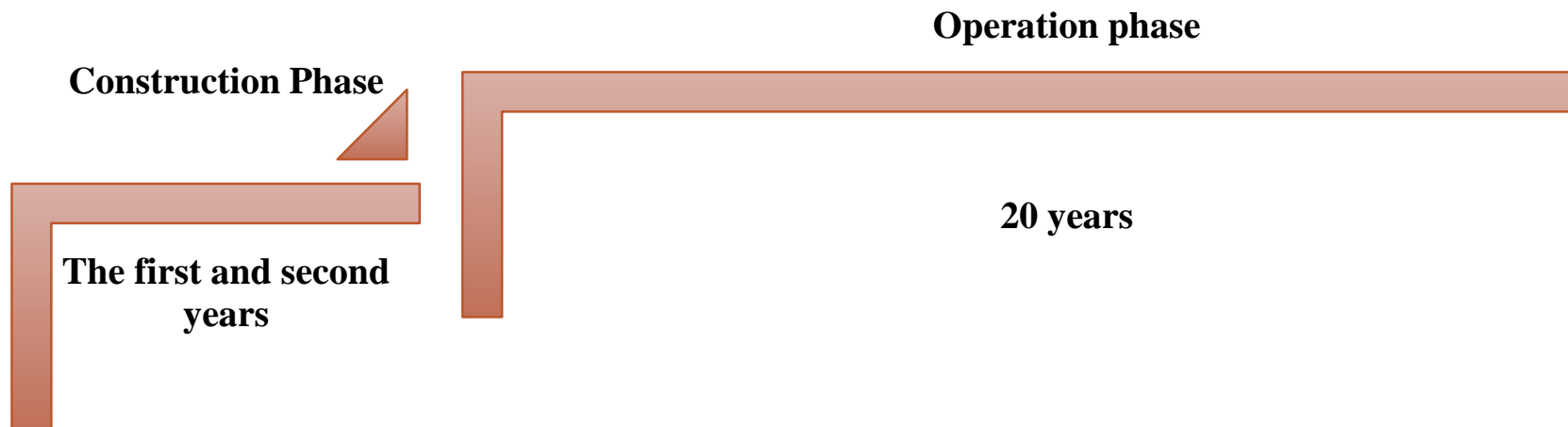


Physical Progress And Project Phases

Project Status:

Studies conducted for the project: Economic Feasibility studies have been carried out. The land needed for the project is provided by the government.

The executive operations of the collection are formed in the first and second years. In the first year, ownership costs, pre-production costs, 60% of landscaping operations, 60% of construction operations and 40% of installation operations. The following year, 40% of the rest of the landscaping, 40% of the rest of the construction and 60% of the rest of the Installations will be done. From the fourth year, the complex will be exploited and the exploitation period is considered for 20 years.



Project Financial Plan

Estimated fixed investment (capital costs)

Description At the price of 2018 (with the rate of EUR 120,000 Rials)	done (million Rials)	needed (million Rials)	total sum (million Rials)
Land	0	23,640	23,640
landscaping	0	23,640	23,640
Building	0	59,100	59,100
The facility	0	59,100	59,100
Equipment, machinery	0	180,000	180,000
Costs before operation	0	47,280	47,280
Miscellaneous and unpredictable	0	23,640	23,640
Total fixed investment costs	0	416,400	416,400
capital in circulation	0	309,600	309,600
Total investment costs	0	726,000	726,000

The total area of the project is 10000 square meters and the infrastructure is 5800 square meters.

Fixed And Variable Costs

line	Description	Fixed cost percentage	Fixed cost (million Rials)	Variable cost percentage	Variable cost (million Rials)	Total cost (million Rials)
1	Raw material	0%	0	100%	96,180	96,180
2	salary	70%	8,782	30%	3,764	12,545
3	Energy and fuel	20%	2,927	80%	11,709	14,636
4	Repair and Maintenance	20%	3,345	80%	13,382	16,727
5	Depreciation	100%	20,909	0%	0	20,909
6	Marketing and Advertisement	0%	0	100%	23,000	23,000
7	Other unforeseen expenses	0%	0	100%	25,091	25,091
total		-	41,818	-	167,270	209,088

Revenue Estimation

In order to forecast revenue, we have done as following:

Description of income items	Annual production	unit	Price per ton (million Rials)	Annual Revenue (million Rials)
Wire and cable Production	1200	ton	217,800	261,360
total	-	-	-	261,360

Project Cash Flow *(Inflation Rate 15%- Billion Rials)*

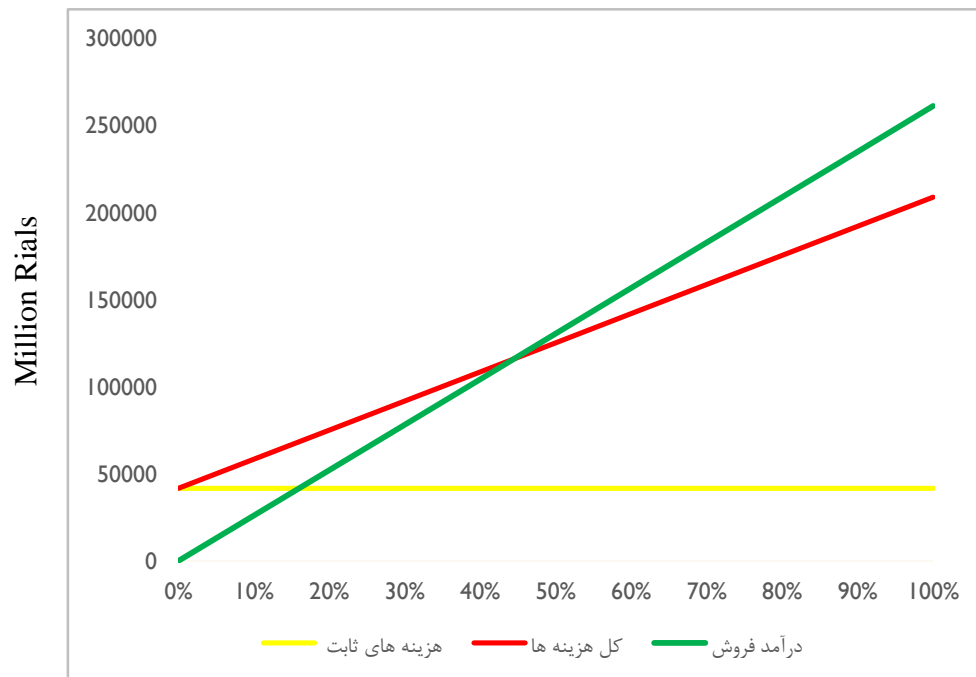
year	Construction Phase		Operation phase																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
capacity	0%	0%	70%	80%	90%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
incomes	0	0	242	318	411	526	605	695	800	919	1057	1216	1398	1608	1849	2127	2446	2813	3234	3720	4278	4919
costs	-167	-250	-210	-267	-336	-421	-484	-556	-640	-736	-846	-973	-1119	-1286	-1479	-1701	-1957	-2250	-2588	-2976	-3422	-3935
profit (loss)	-167	-250	32	51	75	105	121	139	160	184	211	243	280	322	370	425	489	563	647	744	856	984
cumulative cash flow	-167	-416	-385	-334	-259	-154	-33	106	266	450	662	905	1184	1506	1876	2301	2790	3353	4000	4744	5599	6583

Project cash flow (20 years of operation)



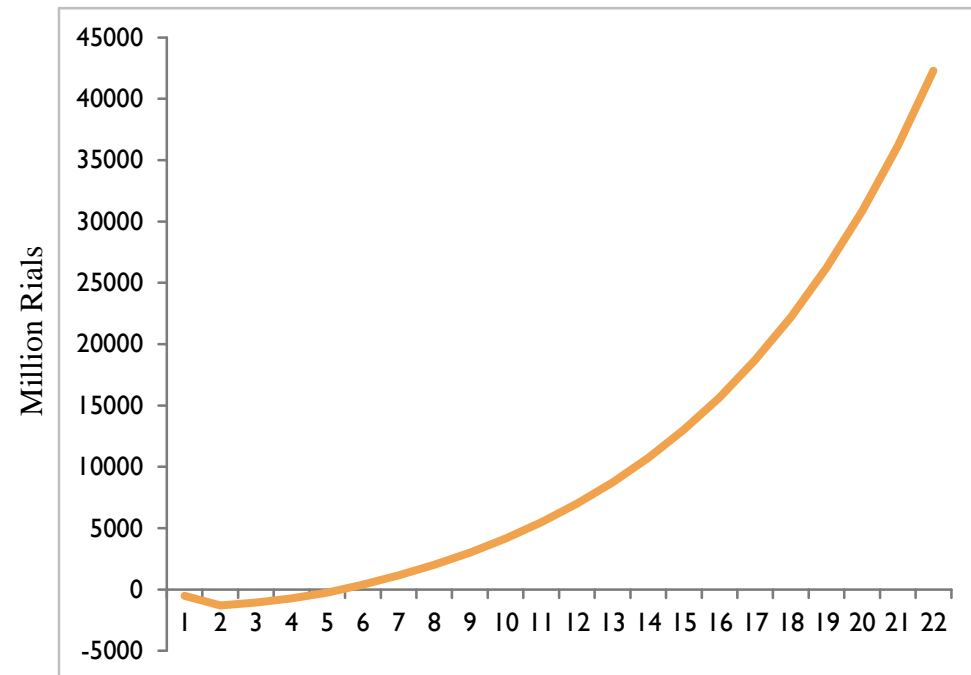
Economic Indicators

Break-Even analysis



At the full capacity of the project, a break-even point will be realized at 35% of production or revenue.

Normal Payback Period



After 6.5 years, the total capital is reversible.

Summary Of Economics Issues

Activity type	The exact title of activity by mentioning the code (ISIC)	Production product name	Nominal capacity and unit
Industrial	wire and cable 3130	Wire and cable Production	12000 tons
Runtime period	Total fixed investment (million Rials)	Investment in annual circulation (million Rials)	The manpower needed
2 years	416,400	309,600	80 people
internal rate of return (IRR)	Net current value of NPV (million Rials) at a discount rate of 20%	Following the applicant (million Rials)	Percentage of benefits to cost B/C*
26.4%	196	145,200	1.14

• 6/5 years



Payback

- 0.0016 million Euro
(per Euro 120000 rials)
- discount rate : 20%



NPV

• 26.4%



IRR

The Benefits of Industrial Zones

The cost of exploitation the plant in industrial towns with the opinion of the board of directors of the company is 30% cash and 70% of the installments.

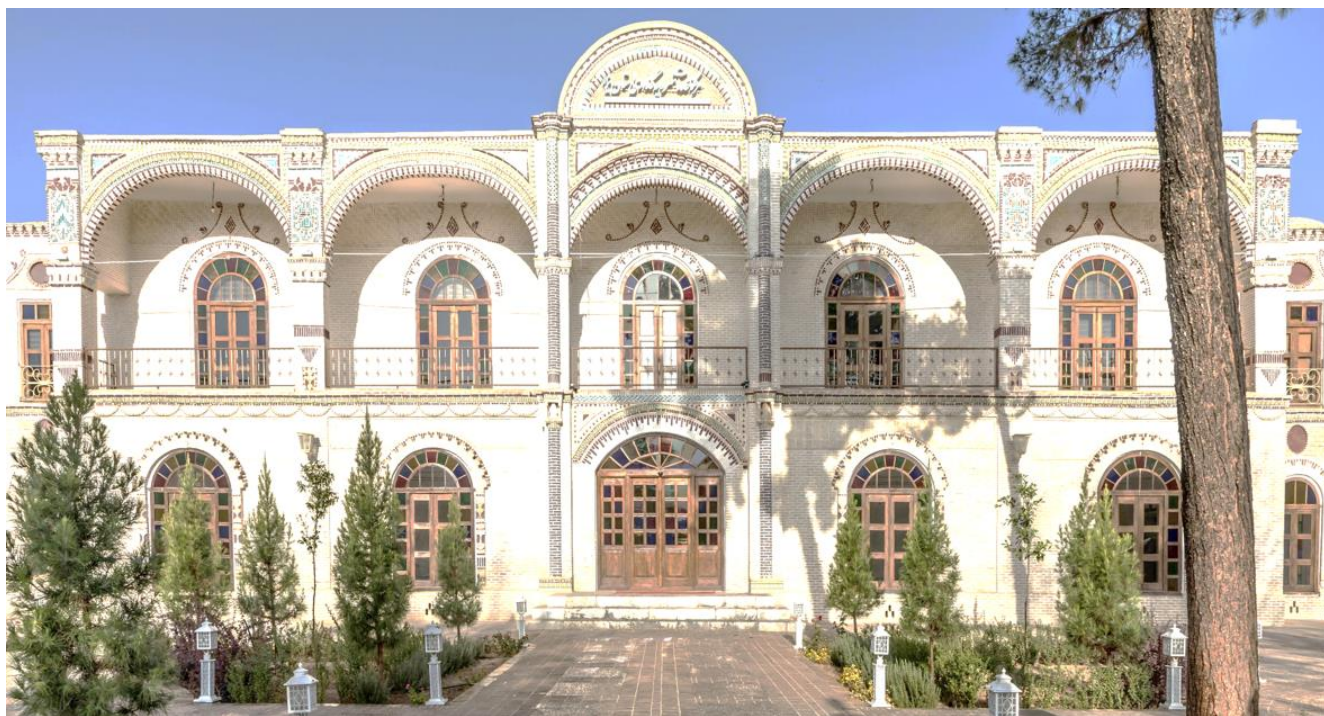
Impunity of a portion of the cost of exploitation of the facility for units that pay the right to operate in cash and in the same time..

Impunity of part of the costs of facilities for units that will be completed within 12 months.

Impunity of part of the cost of exploitation of the facility for units that will be operational within 12 to 18 months.

Having banking facilities for equipping, developing and completing units from the memorandum signed by the Small Industries Organization with operating banks

Take Advantage Turn to Yazd



**Yazd Investment Services Center is ready to facilitate
and expedite your investment process.**

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