

PROJECT PROFILE – SUMMARY SHEET

Project Introduction

1. Project title: **Production of paraffin**

2. Sector :Construction of coke, products of oil refining and nuclear fuels (23)
construction of refined oil products(2320)

3. Products/Services: **Production of paraffin**

4. Location: Free zone Economic special zone Industrial Estate Main Land

5. Project description:

Paraffin is a mixture of saturated hydrocarbons with high atom numbers of carbon which is found as liquid, colloidal or solid and crystallized. Paraffin which is existed in petroleum is in liquid form and because of distillation in high temperature, it turns in to solid form. Paraffin has many industrial applications because of its neutral property and it is applied as one of the most high consumption raw materials in pharmaceutical, cosmetics industries and rubber and matchmaking industries and providing fabrics and waterproof paper.

The aim of carrying out this plan is establishment of production factory to supply some needs of industries and prevent the currency exit and create employment in Lorestan province.

6. Annual capacity: 6,000 tons.

Project Status

7. Local / internal raw material access inside of country or province: 100% of materials are supplied in the country .

8. Sale:

Anticipated internal market: 100%

Anticipated export market: ...%

9. Construction Period (from beginning of activity to commercial activity): 24 months

Schedule

Beginning of activity:

In-site beginning of activity:

End of project:

Commercial activity beginning:

10. Project Status:

- Feasibility study available? Yes No
- Required land provided? Yes No
- Legal permissions (establishment license, environment, etc) taken? Yes No
- Partnership agreement concluded with local/foreign investor? Yes No
- Financing agreement concluded? Yes No
- Agreement with local / foreign contractor(s) concluded? Yes No
- Infrastructural utilities (electricity, water supply, telecommunication, fuel, road, etc) procured? Yes No
- List of know-how, machinery, equipment, as well as seller / builder companies defined? Yes No
- Purchase agreement for machinery, equipment and technology concluded? Yes No

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Financial Structure

11. Finance

Description	Required Local Currency			Required Foreign Currency (Thousand Dollar)	Total in Thousand Dollar
	Million Rials	Rate	Equivalent in Thousand Dollar		
Fix Capital	163,501	87000 Rials for each Dollar	1,879	6,139	8,108
Working Capital	41,209		473	0	473
Total Investment	204,710		2,352	6,139	8,491

- Value of local equipment/machinery: **894** thousand dollars
- Value of foreign equipment/machinery: **5,847** thousand dollars
- Value of foreign technology: thousand dollars
- Value of local technology: Million dollars
- Net Present Value (NPV): **892,092** Million Rials for 10 Years, discount rate: 20%
- Internal Rate of Return (IRR): **44,01%**
- Payback Period (PP): **50%**

General Information

12. Project Type: Establishment Expansion and completion

13. Company Profile:

- Name (legal /natural persons):
- Current activity of company:
- Address:

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-Tel: Fax:
-E-mail: Web site:
-Legal structure of company: 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)

Plan name: Production of paraffin

Product introduction

The aim of carrying out this plan is establishment of production factory for paraffin in Lorestan province, to supply some needs of industries and prevent the currency exit and create employment. Production of this unit is solid paraffin with nominal capacity of 6000tons.

Product ISIC Code is 2320512372 (and 8-digit code 27129010) form construction group of coke, products of oil refining and nuclear fuels (23) and construction subgroups of refined oil products(2320), oil wax and derivatives (2320312366), a variety of paraffin (2320412367).

Solid paraffin under the subchapter of tariff 2712, Iran's customs with title of vaseline; paraffin wax, oil wax with crystallized particles, slack wax, ozokerit, laminate wax, peaty wax, other mineral wax and similar products which are obtained by synthesis or other ways, and even colored, is imported and exported by sub tariff 27129010.

Its entry requirements are having permission of Ministry of commerce and Ministry of Industry, Mine and Trade, paying 5percent of entrance fees (tariff) in 2018 (customs 4% and business profit 1%).

Introduction of product applications

Paraffin application generally are as follows:

- 1) Candle making
- 2) Coat for wax paper and covers
- 3) Paraffin wax with food grade
- 4) Covers of materials for molding package
- 5) Anti-mold factor, moisture and mist repellent
- 6) Factor to prepare a sample for histology

- 7) Bullet lubricant, along with other materials such as olive oil and wax
- 8) Construction of eyebrow pencil and colored pencil
- 9) Solid fuels for multiple burner rocket engines
- 10) Compounds of paraffin wax which is used to remove surface roughness
- 11) Compounds of glue wax which is used for ski boards
- 12) Reducer of friction which is used for handrails and cement spaces and also is used in printing.
- 13) Ink is used as a base for Solid colors and different colored blocks in wax used in thermal printer
- 14) Micro wax: food additives and wall factor with number of E,E905
- 15) It is used in forensic medicine: to test nitrate using wax, paraffin helps to diagnose nitrates and nitrites available in suspected of shooting hands.
- 16) Antioxidant factor: the mixture of paraffin and micro wax are used in rubber compound that this factor prevent rubber cracking. Antioxidant wax can be produced from artificial wax, ET wax and Fisher Tropsch wax.
- 17) Mechanical thermostat and actuator as a machine for activation.
- 18) Putting guitar pick ups which decreases the microphonics caused by subtle movements.
- 19) Wax bath for beauty and therapeutic purposes
- 20) Thickening agent of many paintballs which is used with criola
- 21) Effective moisturizer in cosmetics such as vaseline
- 22) Preventing oxidation of polished steel and iron surfaces

Proposed places for plan

According to required infrastructure facilities and benefits of establishment in economical and industrial estates and specific areas, the place of conducting the project is one of the economical estates and specific areas of Lorestan province.

Raw ,auxiliary,Consuming materials

Product raw materials and buying cost of them are as follows. Isorecycle, the main raw material of this plan, is supplied in the country.

Raw ,auxiliary,Consuming materials

No	Raw , auxiliary and packing materials	Unit	Consumption rate per year	Spoilage	Sum of raw and consuming materials	Unit price (Rial)	Annual cost (m/r)
1	isorecycle	ton	6,600	0	6,600	55,000,000	363,000
2	solvents	liter	600,000	0	600,000	250,000	150,000
3	Total	-	606,600	0	606,600	-	513,000

Sales plan

Sales plan in the first 5 years as follows is considers in financial calculations.

Sales plan in the first 5 years

Description	First year	Second year	Third year	Forth year	Fifth year
Production percent	70%	80%	90%	90%	90%
solid paraffin (capacity, ton)	4200	4800	5400	5400	5400
solid paraffin (sales, mr)	772800	883200	993600	993600	993600

Annual nominal and practical capacities

Annual production capacity of this unit is planned 6000tons based on 300 working days. In terms of number of working shifts, it is necessary to explain that in regard to production process of paraffin, 2 working shifts are required for machinery.

Practical capacity of this plan, regarding the unpredicted factors of stop working and also repair and maintenance, is considered 5400 tons with 90% efficiency of nominal capacity.

Production method and desired technology

Working steps in this method are:

1. Mixing solvent and food
2. Cooling
3. Initial filtering
4. Solvent extraction
5. Final filtering
6. Molding
7. Packing the paraffin

8. Distributing the product

The plan investment costs

The fixed plan investment costs is estimated to be 697,655million Rials and the working capital is estimated to be 41,209 million Rials.

The plan investment costs

Description	Required				Total (million rials)
	currency (euro)	rial equivalent	rial (m.r)	required total	
Land	0	0	7,000	7,000	7,000
Landscaping	0	0	3,229	3,229	3,229
Building	0	0	43,420	43,420	43,420
Machinery and equipment	5,191,000	508,718	77,769	586,487	586,487
Installations	0	0	4,407	4,407	4,407
Laboratory equipment and supplies	0	0	5,998	5,998	5,998
Vehicles	0	0	4,100	4,100	4,100
Workshop equipment	0	0	91	91	91
Service and administrative equipment	0	0	831	831	831
Unexpected and miscellaneous	0	25,436	7,342	32,778	32,778
Total fixed assets	5,191,000	534,154	154,186	688,340	688,340
Pre-exploitation costs	0	0	9,315	9,315	9,315
Total fixed investment costs	5,191,000	534,154	163,501	697,655	697,655
Working capital	0	0	41,209	41,209	41,209
Other assets	0	0	0	0	0
Total plan investment costs	5,191,000	534,154	204,710	738,864	738,864

The plan production costs

The annual production costs are estimated to be 640051,47 million Rials.

Production costs

No	Description	Cost (million rials)	cost in practical capacity (million rials)
1	Raw, auxiliary and packing materials	513000	461700
2	Production salary and wage	12300	11931

No	Description	Cost (million rials)	cost in practical capacity (million rials)
3	Water, electricity, fuel and communication	3270,64	3008,99
4	Insurance	1349,55	1349,55
5	Repair and maintenance	26345,10	24237,49
6	Marketing and ads	11040	10156,80
7	Production unpredicted and miscellaneous	11125,31	10235,28
8	Depreciation	61620,87	61620,87
Total		640051,47	584239,98

Economic indices

Economic indices

Description	Value-measurement scale
NPV (net present value)	892,092million rials
IRR(internal rate of return)	44,01%
PBP (period of return of capital)	2years

Ministry of Economic Affairs and Finance
Organization for Investment Economic and Technical Assistance of Iran
(OIETAI)
Foreign Investment Center of Lorestan Province
Tel (Tehran): (021) 33967749-33967766-33967762-39902485-39902488-39902486
Tel (Khoramabad): (066) 33229577
Fax: 33967774
Website: www.investiniran.ir
eco_isc@yahoo.com