Phases of Industrial Investment
And Details of Economic Feasibility Studies
In the name of Allah,  
Most Gracious,     
Most Merciful
Sha‘ban - 1436 H.
Industrial Investment Phases and Economic Feasibility Study Details

Introduction:

An industrial project passes through various, and sometimes interlaced phases; it begins as an idea of investment, involving selection of optimal business and opportunity among other available options, collection of the essential data and information pertaining to the economy in general and the project in particular; communications with the competent official investment bodies; retaining an economic consultancy firm service for preparation of the project’s feasibility study; taking initial steps for obtaining the required licenses and permits and, finally embark on project implementation, bringing it into virtual existence and is operational.

It is essential to be fully aware and knowledgeable of the industrial investment phases and procedures, as they are really money, time and effort consuming. This enables the investor to avoid occurrence of any events that may hamper proceeding with these phases and adversely affect cost and period of the project implementation.

**Industrial project passes through four main phases, they are:**

1. Industrial investment idea.
2. Feasibility study.
4. Management and monitoring of implementation contracts.
These four phases are summarized as follows:

First: Project idea and planning

The industrial investment differs from the commercial and service investments in the sense that it requires longer time of planning and studying and involves higher levels of risks. However, in return it generates good revenues and opens greater opportunities for further growth in other investment activities. Moreover, the industrial investment’s contribution to the development process is greater and far-reaching as it adds value to the national economy. Therefore, it is to emphasize that investors’ intention to enter the industrial business should be driven by a real determination to contribute to further industrial sector’s modernization, innovation, development and growth while realizing the investors’ targeted objectives.

Industrial investment also requires strong financial position of the project sponsor to enable him to support his project, particularly in the first years of the project operation, provide the required working capital and meet the pre-operational expenses before the project starts up commercial production and generates cash inflows.

In the course of this phase, the investor should implement the following two essential steps:

a) Preliminary study of potential opportunities:

Successful selection of the right opportunity is bound, Allah the Almighty willing, to produce viable and rewarding investment. Reaching to an appropriate industrial investment idea consistent with the investor’s ambition
and capabilities, necessitates exerting effort for compiling and scanning various industrial ideas. Lists of preliminary ideas are provided by Commercial & Industrial Chambers’ information centers, economic and industrial consultancy firms and governmental and private industrial research centers. In addition, local and international commercial exhibitions help investors crystallize their industrial investment ideas to translate them into manufacturing of products generating good returns.

b) Preliminary study of each opportunity to select the optimal:

After selection of one opportunity or more, a brief preliminary study should be conducted of each opportunity to extract indicators for comparison and identify the most viable, successful and investment oriented opportunity, with due consideration to demand for a certain product, local supply of the product and imports, given that industrial opportunity depends on four basic factors:

1. Investment size and sponsor’s financial capabilities.
2. Sufficient demand and minimum capacity to make profits.
3. Access to production technology and the need for foreign partner or technology transfer.
4. Investor self-readiness and having previous business experience to facilitate product marketing.

Second: Feasibility study

When preparing the feasibility study, the following
guidelines must be followed. These requirements are essential for evaluating the project. Delay in processing an application can be expected if there is a lack of adequate information. It is stressed that the Fund requires only the information which a prudent investor must have before coming to a reasoned investment decision. If you are in doubt as to whether certain information is required in your particular circumstances, contact the Fund for guidance.

A) Required marketing information:

Note that all required information in this part should be applied to each targeted market separately, whether it is local, GCC or international (export), and supported by statistical data.

1. Project sponsor’s business experience and activities:

State the sales history of sponsor and/or the foreign partner (if there is one). Sales in the Kingdom and other markets are to be covered if exports are envisaged.

2. Product:

Full, clear description of product or products including size (or sizes), packaging as sold to customer and packing for wholesale distribution (if applicable), brand/trade name and uses, plus a brief description of the raw materials. If more than one product is to be sold, give details of the product mix planned including any changes in mix foreseen during the project life. State the proposed production program, year by year (for the first 5 years).
Samples, catalogues and/or photographs of the product(s), if available, should be provided. Detail the standards and specifications applicable in the target market(s) and state to which standards the product(s) will be made.

3. Supply:

Details of the current sources of supply of the proposed products to the Saudi market (and other markets, if exports intended) for the past three years with forecasts for five years ahead, i.e. companies both manufacturing in Saudi Arabia and exporting countries. Capacity of supplying companies, their product range and estimated market share. Names, addresses, telephone, fax numbers and E-mails of local manufactures and agents/distributors. Relevant information from the MCI or SAGIA licensed projects list should be included. The objective is to paint the fullest possible picture of the current supply of products. Sources of information should be stated.

4. Demand:

Demand in any one year is generally assumed to be the summation of sales from local supply plus imports less exports (or re-exports). Where possible for historical demand, supporting evidence from recognized sources, e.g. Foreign Trade Statistics issued by Central Department of Statistics & Information, Ministry of Economy & Planning and OECD Export Statistics, should be included. If other methodologies are used to establish demand, these should be fully explained. In case demand is driven by major corporate consumers, their annual needs, and future requirements for three years by volume, value, product type, and buying
policy should be attached.

The history of demand over the previous 5 years, where possible broken down by the major regions of the Kingdom, should be provided. Should sales be planned only in part of the Kingdom, then these particular areas should be covered together with the national picture. If there are different market and/or customer segments for the product (e.g. retail, catering, institutions), the percentage market breakdown is to be included. Where relevant, similar data on export markets is required.

The future market size over the period covered by the feasibility study should be estimated, including market segmentation. The methodology and assumptions underlying these estimates are to be explained. (Often more than one methodology can be justified in establishing future demand). The Fund usually evaluates projects based on total GCC demand.

5. Marketing Strategy:

A brief statement of the sponsors rationale for the project including definition of target markets, perceived strengths and principal competitive advantages. What is the sponsors experience in this business or any related activities? (You can benefit from a separate booklet issued by SIDF on preparation of marketing plan).

6. Pricing:

Prevailing market prices per unit applied in the Kingdom (and other markets where appropriate) and by main regions/cities if relevant. Ex-plant prices for local manufacture and CIF prices for imports. Where applicable, retail and
wholesale prices should also be provided.

State the sponsors proposed prices and pricing strategy showing distributor, wholesaler and retailer prices as well as margin structure plus sponsors historical prices if already selling in the targeted market. A comparison of the proposed price and the market price for the same product by type and volume should be attached.

7. Projected sales and market share:

In the light of the estimated market size, a detailed statement of projected annual sales volumes by product until the project reaches its full installed achievable capacity or licensed capacity should be submitted. Also show the project’s estimated market share year by year (segmented, if appropriate, by product and/or product group, units and value, customer/market segment, region). Where have sales already been made? What market share has been achieved? And what were the sales volume and value for the past 3 years (for each product)?

8. Competition:

What is the internal/external competition to the project e.g. competitive brands, their prices and market shares? How will competition affect the ability of the project to achieve the estimated market shares? What are the strengths and weaknesses of individual competitors?

9. Distribution:

How will the product(s) from the factory reach the ultimate consumer? What distribution channels are proposed (specify the
number of such channels and its break down by region/country)? How do these compare with those used by competitors? What transportation methods, storage facilities and warehousing will be used? What is the cost and who pays it?

10. Marketing management structure:

Structure of marketing and sales management including staff numbers, qualifications, nationalities, experience and job description. (Include CVs of management if already recruited).

11. Sales promotion and marketing support:

Detailed plan for advertising and other sales promotion activities both to the trade channels and consumers/end-users. Planned budgets for the past three years, and the next five years, and percentage of these to estimated sales, broken down by type of media to be used. Rationale for the proposed plans and projected expenditures. Information to be provided on plans and budgets for the company/product launch.

12. Marketing agreements:

Copies should be provided of any marketing agreements (including agency, representation, trade mark, distributor agreements) which may exist or in draft whether these agreement are concluded with local or foreign companies. Indicate the marketing input from such partners.

B) Required technical information:

1. The Product:

a. What is the product and what is it used for?
b. Technical description for each product accompanied with sketches, photographs, of each type, sizes or samples if possible.

c. If not manufactured entirely, what parts are to be bought ready-made?

d. Are the products completely finished and ready to use when leaving the factory, or is further work needed outside the factory (e.g. erection, assembly into a complete unit)?

e. Are there any Saudi or international standards that the products must comply to? What are their details? These specifications should cover the raw materials used, the final products and should specify testing and quality control methods.

f. Specify number of units in a package and specify wrapping, cartons, boxes, pallets, ..etc.

g. Are the products entirely new or similar to existing products in the market? Are they capable of being modified if required?

2. Manufacturing process:

a. A description of each operation in the process from raw material to finished product. This should specify the function of each piece of equipment needed (e.g. press to form curved metal shapes, steam boiler for heating or drying or curing, tanks for storage, pumps and pipe lines).

b. A flow diagram showing the route of each piece of raw material through its various processes.
c. A scaled and dimensioned layout of equipment and machines within the factory showing storage areas for raw materials, work in progress, finished products, maintenance workshop, laboratory, etc ...

d. This plan of the layout should show the number of men at each piece of equipment during a production shift. This staffing distribution should be in line with the numbers of workers of different degrees of skill provided subsequently in the list of workers and salary requirements.

e. Special equipment for waste treatment must be described (inclinators for burning, liquid effluent treatment plants, air filtration).

f. Special internal factory environment control vital to the process must be explained. For example, processing of paper and textiles requires strict atmospheric control. Processing of food requires hygienic safeguards, toxic chemicals require safety procedures for workers and the general public, highly inflammable materials require special concentration on fire protection. The cost of providing these safeguards will ultimately appear in either the building cost or the equipment costs.

g. Explain the measures taken to treat the factory waste whether gas, liquid or solid in order to make it meet the specifications set by the relevant Government Authorities such as the Presidency of Meteorology and Environment, Royal Commission of Jubail and Yanbu and the Industrial Cities Offices.
3. Project installed capacity:

a. Indicate the installed capacity of the machinery as contracted with supplier. Show detailed calculation of this capacity and the basis on which it was built (e.g. on the production of 1000 small units of product “A” and 100 large units of product “B” a year). The capacity of each piece of machinery should be stated.

b. The proposed hours per day and days per year must be provided in relation to these quantities. The buildup to installed capacity in terms of years must be determined from the start of commercial production of the factory.

4. Machinery and equipment:

a. A complete detailed list of machinery and equipment must be provided.

b. Each item must be itemized by manufacture, type, model, technical specifications and whether or not it is being obtained through a third party. Descriptive pamphlets are required.

c. Each item must be priced CIF nearest port, either by direct invoice if already purchased or by pro-forma invoice. Additional sums for local carriage and erection should be shown. Lump sums for turnkey projects will not be accepted.

d. Where a final choice of an item has still to be made, information about the various alternatives should be given.

e. Special equipment for firefighting, air conditioning,
water treatment, safety precautions, standby generators, laboratory equipment, etc... can be itemized under the general heading here unless already covered under the building estimates.

f. Internal factory cranes, pallet trucks, mobile cranes, gantry cranes, monorails and other fixed lifting structures should be itemized under the heading above.

g. Adequate spare parts for at least the first year of operation must be included.

h. Three competitive quotations for the machinery and equipment. Detailed information and technical specifications must be included. Catalogs of the machinery must also be included. Of the 3 quotations, the selected quotation must be identified and reasons for the selection must be explained.

5. Buildings:

a. A location plan of the site in the appropriate city or industrial area.

b. A site plan showing the site boundaries, adjacent roads and the position and size of all buildings on the site. Proposed supporting buildings, internal roads and parking spaces must be shown.

c. A site plan showing the positions of connection points to main utilities (sanitary sewage, water, power).

d. Drawings of buildings giving plan areas, elevation and cross sections. These drawings should clearly indicate the methods and materials of construction of the buildings,
floors and foundations.

e. A brief specification of the main feature of the building is required.

f. A drawing showing all loss and fire prevention equipment and safety measures to guarantee the safety of the project and its workers from the danger of fire or any other dangers that the project may face.

g. Quotations for civil works and buildings must be obtained (at least three offers on a detailed specification or a bill of quantities). Lump sum offers are not acceptable.

h. In case the building and civil works quotation does not include the land preparation costs, then separate quotations must be provided to include, for example the following:

- Site clearing.
- Excavation.
- Infilling.
- Any other special work related to land preparation.

6. **Means of transport:**

A list must be prepared for all the required transport vehicles to include distribution and delivery trucks, employee cars, labour buses, fork lifts, etc... An explanation for the need of such vehicles must be provided bearing in mind that the required vehicles must be in line with the quantities of products expected to be distributed in the initial years of operation and the areas the products will be distributed in. The Fund has some limitations on the
eligibility of certain types of vehicles for financing.

7. **Furniture and office equipment:**

A list must be prepared for all the required office furniture and equipment to include office furniture, computers, (Software, Hardware, Network) telephone system, canteen equipment and furniture, typewriters, copying machines, etc.

8. **Labor:**

a. In addition to the layout plan showing the work places of the factory labour (Section 2 — The Process - d), a complete list of all persons employed by the company is required. This must give the job title, the basic monthly salary and all additional expenses such as social security, home travel, accommodation, bonuses, etc.

b. The source of factory labour should be stated (expatriate, local).

c. Procedures for training people must be described and a plan for recruiting Saudis must be provided, for 3-5 years as of commencement of commercial operation.

9. **Raw Materials:**

a. A list of each different type of raw and packing material must be provided. This list should show the source or alternative sources of purchase with both current unit cost prices and those expected for the first year of start-up. Three raw and packaging material quotations must be provided.
b. The list must include both raw materials for manufacture, and items bought in as finished goods (pumps, brackets, hinges, locks, carton, etc.).

c. A detailed calculation of raw and packaging materials for each single unit of the product must be provided. The calculation must show the quantities required for every raw material and its cost.

d. The annual consumption of these materials related to licensed output must be provided.

e. A reasonable allowance for wastage in processing should be made.

f. A description of the pattern of buying should deal with bulk purchases of imported items to overcome delivery delays or to foresee price fluctuations with corresponding estimate of stock holding.

10. Utilities:

a. Requirements for water must be provided, its source, type of water, quantity needed and its cost.

b. Electrical energy requirements for equipment, machinery, lighting, air conditioning, etc... must be provided in terms of power (KVA) and running hours. The source must be provided (town supply, own generator, mixture of two),

c. Fuel quantity required for manufacturing and operation (for example operating steam boiler, electric generator, vehicles, etc.).
11. License and concession agreements:

a. A copy of any technical or licensing agreement between the sponsor and another company is required.

b. The agreement should clearly state front fees agreed and annual fees based upon sales, output, profits or other relevant measures.

c. The agreement should clearly define the extent of participation by the licensor in technical management, technical services for installation, commissioning and maintenance, drawings, and know-how, with proposed changes to these.

12. Pre-operational expenses:

a. Payments to architects, consulting engineers, designers, legal expenses and other professional services to plan the enterprises are to be stated. Fees for feasibility studies must also be provided.

b. Estimates of all other plant’s pre-operational costs should be included such as salaries, visits abroad for equipment purchases, raw materials used for trial runs etc...

C) Required financial information

1. Summary of the total project cost.
2. sources of funding of the project cost.
3. detailed financial projections to include balance sheet, profit and loss and cash flow statements (the projections should cover the tenure of SIDF loan and should not be less than five years).
4. financial indicators such as financial ratios, breakeven analysis, internal rate of return, value added etc..

5. In preparing the financial projections you should bear in mind that the Fund:

- Will not allow dividends (or withdrawals) to be paid before the first year of the Fund’s loan repayment and then the lesser of 25% of paid up capital or SIDF’s loan maturities for the year.

- Will require owner’s capital to represent no less than 25% of the project’s cost and frequently more.

- To reduce financial burdens on the project, SIDF will usually permit commercial bank finance to be drawn down after the borrower has invested all his equity, and after Fund finance, and to start repaying the loan earlier than the Fund’s loan.

- Requires projections to be prepared on a current cost basis. Do not include any element of inflation in costs or prices in future years.

- Requires the assumptions on profit and loss account and balance sheet items to be clearly spelled out.

- The project should be viable on its own merit, (i.e. no reliance on government subsidy or tariff protection).

- Accounting methods and percentages for calculating the depreciation, maintenance and amortization must be clearly stated.

- Any other costs required to run the operation must be clearly stated.
D. Other required information

1. In the beginning of the feasibility study give a general description of the project, its main elements and targets. For expansion projects, provide a clear description of the relationship between the existing project and the expansion especially in terms of the buildings, machinery, products and production capacity. In brief, this general description is a summary of the details and findings of the feasibility study’s marketing, technical and financial aspects.

2. The owner(s) experience in the field of this project or any other related fields. This should cover the time the business started, types of business, its distribution network, its location and size.

3. A clear description of the organization structure (attach a diagram showing this structure).

4. A clear job description for the staff responsible for implementation of the project as well as those in charge of running the project after start-up of commercial production, must be provided. In case any position is filled, the CVs must be provided.

5. A plan for recruiting Saudis to the project for technical, marketing, financial or administrative positions must be provided. This plan should cover the time required to fill these positions with Saudis and the training required to improve the level of the local manpower. If there are positions that cannot be occupied by Saudis in the near future then it must be indicated and the reason for not occupying it with Saudis must be clearly stated.
6. A detailed time schedule of implementing the project from the start of the implementation to the commercial production must be provided.

**Third: Statutory procedures and agreements**

After full satisfaction of the project viability and preparation of feasibility study, investor should complete some statutory procedures with government and private sectors to obtain licenses and technical and marketing agreements required, and negotiate with suppliers and contractors on a basis of a work plan and priorities timetable, as shown below:

a. Complete project file procedures including industrial license, legal form, products and capacity, proprietorship commercial register and company articles of association for companies.

b. Allocate the project land in industrial cities and zones and ensure availability of utilities and public facilities.

c. Coordinate with power companies to avoid delay when requiring heavy electrical loads.

d. Obtain quarry concessions (whenever required).

e. Obtain project designs, drawings, layouts and bills of quantities from certified engineering offices in coordination with machinery suppliers.

f. Select and negotiate with machinery suppliers.

g. Arrange for machinery delivery, installation, testing and commissioning; and determine supplier role in such stages.
h. Negotiate technology transfer and sign memorandum of understanding with more than one party (whenever required) in order to reach ideal contracting forms preceding final agreement.

i. Select suitable local contractors for project implementation, invite them for bidding, select offers and choose one to be the main contractor.

j. Arrange for financing from government and private institutions before project implementation as numerous funds are required.

k. Obtain membership from the chamber of commerce and industry and join specialized industrial committees.

l. Coordinate with the Saudi Customs to get exemptions and permits for production inputs.

m. Complete the Labor Office procedures to provide the project with skilled labor required.

n. Coordinate with competent authorities to ensure that the project conforms with safety and environmental requirements.

o. Coordinate with Saudi Standards, Metrology and Quality Organization to ensure that products and production technology conforms with its specifications, whenever available.

p. Complete Zakat procedures with the Department of Zakat and Income Tax.

q. Complete labor registration with the General Organization for Social Insurance.
Forth: Management of the Project implementation and monitoring:

After completion of statutory procedures, project implementation becomes the next stage as shown below:

a. Form a project implementation team to be the first administrative core. The team mainly consists of a technical manager, project manager and secretaries and it aims at supervising implementation progress for buildings and machinery.

b. Sign building and civil work final contracts with the selected contractor and ensure all common items are duly fulfilled.

c. Complete orders and credits regarding supply and installation of production lines as per capacities approved in the feasibility study; and sign technology transfer and know how agreements, whenever required, in conformity with the feasibility study (see Technology Transfer & Acquisition – SIDF Publication).

d. The project team should ensure parallelism between the above steps to make buildings and infrastructure ready for installation of machinery in accordance with the project layout.

e. Train Saudi employees to operate machinery by suppliers which, as part of agreement, send technicians to the project to install machinery, perform commissioning and train labor
f. Provide the project during commissioning with raw and packaging materials required whether from the local or export markets.

g. Marketing plan should coincide with other implementation phases to be fully aware of targeted markets before actual production.

h. Commissioning is the first post-implementation stage to ensure quality, faultless product, well trained labor and sufficient officers.

i. Finally, ensure project viability, compare actual results with expected ones after gradual operation as planned and count costs and returns.

j. Continuously develop products in accordance with latest technologies, react to market and client development and lay out strategies to control production inputs and outputs, promotion, pricing and distribution.