European Commission

DGXVII Synergy Programme

Registered and General Address:
92 Lovibonds Avenue, Farnborough
Kent BR6 8EW ENGLAND
Telephone: +44 1689 861178
E-mail: rfi@project-finance.com

Guide to Project Finance Business Plans

Contents

Guide to Project Finance Business Plans

1 How to Use this Guide

1.1 Purpose of Guide

It should be remembered that the decision makers in banks have only a limited time to examine a proposed project before making their decision whether to proceed with the loan approval process. A badly presented or incomprehensible proposal stands the risk of being turned down without being fully examined. In order to overcome this problem, this Guide is designed to help potential project sponsors understand how to write a business plan and how to present it.

1.2 A Guide for Beginners

This Guide is not meant to be read straight through but rather to be used like a reference which you consult according to your purpose. We recommend that you examine the Table of Contents and scan through the Guide to get a feeling for its structure and organisation.

If you are new to the project preparation, then it is suggested that you begin from the beginning, reading the first chapters prior before attempting to write a business plan. The first chapter is designed to help the reader understand the context, key issues and requirements of bankable proposals. Therefore a comprehensive understanding of the content of the preliminary chapter will help smooth out the process of writing the actual business plan.

1.3 Business Plan Form

After reading the first chapter the reader may try completing a business plan form. This is the core of the book and it is the form which a sponsor may use for project proposals requesting finance from an International Financial Institution. The Business Plan is a tool whose value depends on how well you use it. Therefore special care and attention needs to be given to every item of the Form. Missing essential elements may cause unnecessary delays in the approval process.

It is recommended that the Business Plan Form be photocopied and the copy be used as preliminary worksheets to help you draft your own business plan. You should attempt to fill out as many of the blanks as possible and to take note of those areas which require further research. The Form will help you document what types of information you need to gather.

1.4 Questions of Business Plan Form

Should you be unsure of the meaning of any section of the Form, then you can turn to the Commentary to the Business Plan Form which describes each of the requirements in detail and provides "planning notes" and "questions" aimed at clarifying the purpose, scope and relevance of each section.

1.5 Final Note Before You Start

If you had all the information at your fingertips, you could write the business plan within few days! But there is a lot of information required. Learning how to write a business plan is a fundamental step which all business people must learn if they are to gain maximum returns on their investments.

The form has been designed for the eventual reader. In most cases, this is a busy manager or analyst in the corporate investment department or the external financial institution which is to be asked to fund the work. As a result, the form and supporting material begins with a summary and progressively provides additional

details. With a few exceptions, this is the opposite of the way in which the form would be constructed if it was designed solely for the person or team compiling the information.

Therefore, when planning the completion of the form, the following should be taken into account:

1. In circumstances where the approach and much of the detailed planning for a project is already well known, it is normally more beneficial to complete the detailed aspects of the form before the summary.

2. However, if a project is at a very early stage and it is not yet completely clear how the project is to be structured, it can be both slow and potentially error-prone to begin by developing the plans for the project at the detailed level. In these circumstances, it can be a very useful technique to clarify the overall strategy for the project before developing the detailed plans. This approach is achieved by completing the summary form before beginning on the most detailed areas of definition.

2 Some Key Issues and Related Project Risks

2.1 Introduction to Project Risks[1]

In writing a business plan, the sponsor must address the specific risks of the project with the aim of presenting a clear plan of how to overcome these risks, either by mitigation or by laying them off to other parties. In order to understand what these types of risks are, we will discuss the key areas of concern for energy and industrial projects.

Each project has a different risk profile, that is, each project will have different kinds of risks and the magnitude of risks will differ from project to project. In general, however, there are key areas of risk which every proposer should be aware of and should keep in mind when planning to write a business plan. These key areas of risk are:

1 Sponsor risk
2 Pre-completion risk
3 Completion risk
4 Technology risk
5 Input or Supply risk
6 Operating Risk
7 Approvals, Regulatory and Environmental risk
8 Offtake and Sales risk

The Bank will expect from the sponsor a clear analysis of each of these risks and how the sponsor thinks he can mitigate them. We will now discuss each of the above risks in turn.

2.2 Sponsor Risk

Sponsor risk is extremely important and recent discussions with project lending banks suggest that it is becoming more rather than less important in the current market. Sponsor risk is closely associated with completion risks. The bank's view on completion risk will be strongly influenced by their view of sponsor risk.

Sponsor risk may be broken down into two elements:

1 Equity commitment and
2 Corporate strength and experience (so called, "corporate substance").

Regarding equity, lenders will normally require a contribution of anything from 15 to 50% of the project cost to ensure the sponsor's continued commitment.

Regarding corporate substance, regardless of whether the lender is seeking pre-completion guarantees from the sponsor, the banks predictably like to work with corporate sponsors with substantial technical expertise and financial "depth".

The backstop value to a bank of a sponsor who can commit resources, either financial or technical to turning around a problematic project is very great. Therefore entrepreneur sponsors of energy or industrial projects-

[1] The source for the ideas on project risks are quoted with kind permission from Gregg Haddock (May 1995) "Financing Renewable Energy Projects" in **Innovative Financing Schemes for Energy and Environmental Technology and Services**, Workshop Tuesday, April 11, 1995 Proceedings, Luxembourg-Kirchberg, Chambre des Metiers, European Commission, Directorate-General XVII - Energy. Mr. Haddock works in project finance for Sumitomo Bank, Limited, London.

-who will often not have the same corporate "substance" as major companies--should anticipate and prepare for a discussion with potential lenders on this issue.

The attitude of potential lenders towards sponsor risk is a key factor in steering many sponsors towards inviting a more substantial sponsor to enter into a joint venture arrangement. This will usually have the effect of reducing sponsor risk in the eyes of a potential lender. Smaller sponsors should not assume however that it will be a waste of time to approach bankers before the support of a more substantial partner has been negotiated. This is especially true for smaller sized projects which are not dependent on large infrastructure development. On the contrary--if the original sponsor is aware in detail of the type and extent of support the banks will require from the equity investor(s) in a project, he will be in a much stronger position when negotiating the terms of any joint venture with a new partner. Indeed, banks may be very helpful in finding potential joint venture partners, as will a good financial adviser.

2.3 Pre-completion Risk

Banks are willing in certain circumstances to assume pre-completion risk for projects, i.e. they may be prepared for their lending to be limited in recourse to the project itself before completion occurs. Acceptance of pre-completion risk is by no means the norm however. Often banks will require some kind of external recourse until completion, such as a guarantee from third parties such as the owners of a project-owning joint venture company. Entrepreneur sponsors in particular should therefore be prepared for lender concern on the issue of pre-completion risk as they will usually not be able to offer blanket guarantees of such risks which would be acceptable to the lender. The sponsor, possibly with the help of a financial adviser, should analyze the pre-completion risk issues likely to be raised by potential debt providers and should be in a position to demonstrate that:

- The pre-completion risks involved are modest;
- Everything possible has been done to mitigate these risks or to lay them off elsewhere.

Lenders will require adequate insurance to be in place against physical damage, consequential loss and third party and public liability. Such insurance is important during the pre-completion, completion and operation phases. A good insurance adviser will be able to assist in this area.

2.4 Completion Risk

Lenders will focus upon the cost-overrun and time-delay risks of project completion in great detail. This is the period of highest risk for lenders. They may face a total write-off in respect of a project which never produces cash flow. Lenders will seek to minimise this risk by requiring fixed-price "turnkey" contracts to be negotiated with the contractors. They will also analyze whether the various contractors are financially sound and whether their obligations are covered by performance bonds or third party sureties. It may be possible, subject to the robustness of the project economics, to pre-agree a debt-funded cost overrun contingency facility, or indeed to raise additional equity up-front to cover this risk.

2.5 Technology Risk

Banks pay a great deal of attention to technology risk . Because of their risk-reward relationship with a project, bankers are keen to limit risk and, in particular, they will always seek to avoid accepting risks which should properly be taken by the equity owners of the project. Any technology which is at the "leading edge" of current practice will certainly be placed in this category. As a technology becomes more established banks may become comfortable with the predictability of the processes involved and may in the rare occasion begin to accept the technology risk. Even for such technologies , however, project sponsors should be prepared for a detailed examination of the technology risk issue by potential debt-providers and should seek in their initial paper to demonstrate:

- That the technology has a satisfactory track-record
- That the contractor building the project has experience of the technology
- The adequacy of the guarantees and warranties which have been negotiated

- The ease with which maintenance and, if necessary, component replacement can be carried out
- That the availability and efficiency levels predicted can be easily achieved.

Potential lenders may also require the opinion of an independent technical consultant on the project.

2.6 Input and Supply Risk

The input and supply risk is the risk relating to the provision of the relevant source of energy and raw materials to the project in question. Where there is a distinct (and finite) supply of fuel for a project, bankers will look for an independent corroboration of the sponsor's reserve figures by a reputable consultant. Given the risk-reward relationship the banker has with the project, he will typically wish to concentrate on any "core" reserves which have the highest degree of certainty and to have his debt repaid well within the predicted economic life of these reserves. Even when there is no reserve factor to be considered project sponsors should, when approaching potential financiers, be prepared to demonstrate the security of supply arrangements, including the basis of pricing of the fuel. The sponsors' presentation should show that the assumptions made relating to the quantities and pricing of fuel are conservative and that even on this basis the proposed debt can be retired with a significant margin of safety. It is likely that a lender will wish to take security over any fuel supply contracts and this factor should be borne in mind by sponsors when contracts are being drawn up.

2.7 Operation Risk

Operation risk is the risk to the forecasted cashflow arising from the failure of operations of the project. Just as banks will wish to ensure that the contractor employed to construct a project is competent and financially sound they will also wish to satisfy themselves that the operating team engaged to run the project is skilled in the employment of the relevant technology and able to deal with all foreseeable situations, whether they are routine or require additional inputs of skills and resources. Banks often derive significant comfort from the employment by a project sponsor of a third-party operations and maintenance ("O&M") contractor, because of the deeper reserves of skills and personnel which this can make available to a project and because O&M costs can thereby be contractually fixed. Sponsors are well-advised to consider this option, even though it may involve greater expense, because of the additional "comfort factor" which it provides to lenders. Sponsors should also take great care to review the efficiency levels, downtimes and outages which are predicted in the cashflows they provide to banks. It is better to predict easily achievable levels of efficiency and availability and refer to the higher levels which may be achieved than to present a base case with levels set at the high end of what can be achieved, even if the sponsor thinks that these targets can be met.

2.8 Approvals, Regulatory and Environmental Risk

The risk of not obtaining necessary regulatory approvals to begin a project should be considered conditions precedent to any proposal. There is also the risk that other regulatory risks, such as environmental risk, may live to haunt the lenders if the transaction should fail and decontamination costs should have to be borne by the lender who takes possession of the security in order to satisfy the outstanding loan. The environmental and regulatory considerations should be explicitly set out in the business plan and are to be found in the relevant sections of the Business Plan Form. In this section, we shall discuss the concerns which bankers have in regards to this risk.

Lenders are increasingly concerned to protect themselves against the consequences of a project breaching official consents and guidelines, especially in the environmental field. It is already the case in the USA and the UK that lenders who take possession of their security when a project fails to perform may themselves be liable for the legal consequences of pollution caused by that project. The position is not so hard and fast in other countries, but bankers are concerned that the increasing trend towards environmental regulation at all levels of government -- local, national and supranational -- might increase the danger of them being forced to meet vast claims arising out of pollution caused by borrowers.

It is essential therefore when approaching a potential lender to prepare and present full details of all consents and approvals--planning, environmental, generating license, etc.--which are expected to be required and the status of the efforts being made to obtain such consents. Evidence should also be provided of the ability of the proposed project to meet all present and likely future constraints and limits. Foreseeing what environmental and planning agencies might impose by way of constraints in the future is clearly not an easy task, but a banker being asked to rely on a project's cashflow for repayment over say a 7-year period will wish to assess and limit the risk of the project being closed down by environmental regulators when the debt raised to build it is only partly repaid.

Banks will not necessarily require all consents and approvals to be in place before they will negotiate a financing structure, but sponsors should expect the granting of all necessary consents to be a "condition precedent" to be fulfilled before any loan funds can be drawn.

Sponsors should expect potential lenders to take detailed legal advice on this issue.

2.9 Offtake and Sales Risk

The offtake and sales risk is the risk that the project may fail to generate adequate income. A lender can only be repaid when a project is generating cash and therefore banks have an acute interest in all aspects of the "offtake" or sales risk. Only in rare cases will project lenders accept the "volume" risk, that is, the danger that the output from a given project will not find a purchaser at all. Whether or not they will accept the risk of an acceptable price being achieved for the project's output will depend on a number of factors including the maturity of the market for such products and the volatility of prices in such markets. Both of these factors should be stated in the business plan.

The availability of long-term, guaranteed-price power purchase contracts is a key element in substantially eliminating the volume and price risks from energy projects. Some contracts may offer banks an outstanding "offtake" agreement whereby the purchaser of the energy is of undoubted financial standing and the generator has the ability to set output pricing over the life of the contract.

Sponsors should expect lenders as a general rule to require the repayment of their loans during the life of any such preferential offtake contract or, if they are prepared to consider having a portion of the debt repaid after the volume and price risk have re-emerged, to take a very conservative view of likely price trends.

Sponsors should also take into account that lenders will almost certainly wish to take a security interest in sale contracts.

2.10 Introduction to Securities and Guarantees[2]

In a project financing, lenders require the sponsors or other creditworthy parties involved with the project to provide assurances, generally through contractual obligations, that:

- the project will be completed, even if the costs exceed those originally projected (or, if the project is not completed, its debt will be repaid in full);
- the project, when completed, will generate cash sufficient to meet all of its debt service obligations; and
- if for any reason, including force majeure, the project's obligations are interrupted suspended or terminated, the project will continue to service (and fully repay on schedule) its debt obligations.

There are several types of security arrangements, or combinations of them, which the lender may require for a specific project, depending on its nature and associated risks.

2.11 Security interest in project facilities or other tangible assets

It is common the banks to take security over the project assets, if this is possible under the laws of the country where the assets are situated.

In cases where this is inappropriate or impossible the lenders will have to rely on negative pledges - binding commitments on the part of the borrower not to create encumbrances over its assets in favor of any third party.

In some cases the bank can use the value of specific tangible assets, which can be separated from the project, to supplement its security. The value of such assets is evaluated on the basis of their open market price. Such tangible assets usually include:

- the tangible assets used in the facilities - equipment, machinery, plants and other physically movable assets;
- the land, buildings and other properties of the project company;
- technology and process licenses;
- the operating permits and licenses;
- rights under contractor's performance bonds or completion guarantees (see below);
- the gods produced by the project, the sales and the project's bank accounts; and
- other rights - energy or goods supply contracts, operating agreements, joint venture agreements, transportation contracts etc.

2.12 Security arrangements covering completion

Such securities typically involve an obligation to bring the project to completion, or else repay all project debt. The banks usually require that the sponsors or other creditworthy parties provide an unconditional undertaking to furnish any funds needed to complete the project in accordance with the design specifications and place it into service by a specified date.

On other hand, the project sponsors have to secure the performance of contractors, sub-contractors and suppliers by requiring bonding from banks or surety companies. The bonds usually are unconditional on-demand payment obligations in favor of the project company in a form of a bond, guarantee or standby letter of credit. The most frequently used types of bonds include tender bonds - commitment to take on the contract; performance bonds - performance guarantee by the contractor; advance payment guarantees - a

[2] The source for the ideas on project securities and guarantees were borrowed from John Finnerty "**Project Financing** " publisher John Wiley (1996) and Clifford Chance "**Project Finance**" publisher ISR,(1991 reprinted 1994).

guarantee to refund an advance payment in the event of failure to perform; retention money guarantees - retention of money to cover rectification of defects; and maintenance bonds - to cover defects discovered after completion of construction.

2.13 Security arrangements covering debt service

After the project commences operation, contracts for the purchase and sale of the project's outputs normally constitute the principal security arrangements for the project debt. Lenders always require that these contractual obligations are in place, valid and binding (with the required governmental and regulatory approval) before any portion of their loans can be drawn down.

The banks normally need assurances that the debt can be fully serviced out of project revenues received from binding purchase and sales contracts. The main types of such contracts are: Take-if-Offered contract, Take-or-Pay contract, Supply-or-Pay contract, Hell-or-High-Water contract, Throughput Agreement, Cost-of-Service contract and Tolling Agreement.

The contracts for power supply and purchase signed with RAO "United Electricity System" of Russia, represent a type of purchasing agreement, which can be used as a security for covering debt service.

2.14 Supplemental credit support

The bank may want to have additional security arrangements in event the purchase and sales contracts fail to provide enough cash to enable the project company to service its debt obligations. Examples of such agreements are: financial support agreement (usually letter of credit); cash deficiency agreement; capital subscription agreement; clawback agreement (control over the project's dividends and/or tax benefits) and escrow fund (special deposit account). These agreements provide commitment from creditworthy party(ies) to supplement any cash deficiency in servicing the project's debt obligations.

2.15 Insurance

The bank will require an adequate insurance policy, providing that the project will be restored as a viable operating or commercial entity, as a result of accident, force majeure or contractual failure. In some cases the bank may require an insurance against business interruption.

2.16 Governmental support and guarantees

For projects critical to the national security, infrastructure or where the project company is majority state owned, the bank will require governmental guarantee. The governmental guarantee may provide a supplemental credit support against the political risk, or the government may act as a principal borrower.

3. In many cases the lender will seek assurances from the national and/or local government that they will not take actions or impose policies that may adversely affect the project. Such policies include tariff setting, tax, duty and excise etc. Depending on the project and the type of security required by the lender, the governmental support may be provided in a form of letter of support, support agreement or loan agreement. Such governmental commitments usually require some form of approval or ratification from the local or country parliament. For example, in the Russian Federation, loans with Governmental Guarantee on amount above 100 million US Dollars require ratification from the State Duma.

Project Summary

1 Legal name of sponsor

This is the full legal name of the entity which is applying for finance from a bank.

2 Contact person and location of sponsor

The contact person is the person who understands the contents of the business plan and who has authority to act on behalf of the sponsor to explain the business plan to the bank. The location of the sponsor is usually the official headquarters of the sponsor. The contact person should be reachable at or through the sponsor's address, telephone and fax. The e-mail code, if available, enhances communication.

3 Legal Status of Sponsor

The official name of the enterprise which is included in the business licence, entrepreneur's certificate, or company record or, if it has not yet been recorded, in the Syndicate Agreement, Articles of Association, or Memorandum of Foundation. If the company is in the process of being registered, then the registration documents should be provided together with the receipt of the Court of Registration of the submission of these documents.

The various types of legal status include:

- **Sole Trader:** this is a business owned by a single person such as an individual entrepreneur or a industrial entrepreneur, salesman.
- **Partnership:** this is a business owned by multiple persons. This may have many different forms, such as, unlimited partnership, business associations or limited partnership.
- **Limited Liability Company**
- **Joint Stock Company**
- **State-owned Enterprise or Institution, Local Government's Institution**
- **Co-operative**

If the sponsor's legal status is complex (for example, a joint venture with public and private elements) then this should be explained fully on a separate sheet and attached as an Appendix to the Business Plan Form. The sponsor should also consider setting out the current and future ownership of the business.

4 Identity and location of partners

These are the names, addresses, telephones and faxes of consultants, suppliers, local banks and others who have contracts with the sponsor and who may share in the financial benefit of the project.

5 Sector

This is the economic sector in which the project can be most appropriately categorised. To "specify" means to describe with some detail the type of project within the economic sector. For example, if the project is about production of fire detection equipment , then you should tick (mark with an ☑ Safety and specify with " fire detection equipment ".

One of the reasons for this section is to help the bank determine what type of technical expertise is required to evaluate the business plan. Obviously, a proposal for retrofit of a power station will require different expertise from a project that aims to finance a production of fire extinguishing systems.

6 Brief Project Description

This description should avoid technical details! The first sentence should state in lay language the purpose of the project and the remainder should focus on the financial and environmental benefits of the project to the sponsor, the local community, the nation and the bank. You should be able to say all this in less than 100 words.

You will discuss details of the project in the relevant sections of the Business Plan Form. It is very likely that after you finish writing these sections, you will have a clearer view of the project than when you first began. It is therefore recommended that initially you merely note a few salient points in the "brief project description" until you have finished writing the rest of the proposal and then return to this section to fill in the details.

7 Type and Amount of Finance Required

7.1 Type of Finance Requested

You will normally select either debt or equity.

The basic distinction between debt and equity is that debt requires the borrower to repay the amount of the loan (principal balance) plus interest over a certain period of time while in an equity deal, the sponsor has no obligation to pay back the loan or any interest. In the equity deal, the sponsor pays only dividends and the investor hopes that the sponsor will be successful in the enterprise and the market will recognise this success by bidding up the value of the shares. To cover the bank's equity exposure, there will normally be shareholder agreements which place certain conditions on the way the sponsor runs the business. But the bank in turn gets to own a part of the business.

7.2 Total Project Cost

Details of how you determine this figure are found in Section 6 on "Transaction Costs".

7.3 Amount of Finance Requested

This is the amount which the sponsor seeks from the bank and is a portion of total project costs. Since banks may set upper and lower limits on the amount of money they can loan to clients, the sponsor should check with his banks about what these limits are. The sponsor should be very careful to state the amount of finance requested which is within the bank's limits.

7.4 Other Sources of Finance

- **Sponsor's own resources.** Since banks are generally risk averse, they like to see sponsors risk their own money or capital. The more money or capital the sponsor puts into the project, the greater comfort for the bank.See Introduction for explanation of Project Risks.
- **Local commercial bank.** Some International Financial Institution or a bank like EBRD may have established credit lines with local banks and the local bank therefore may have a strong interest in lending for certain types of local projects, such as energy.
- **Grants.** Outright grants (with no requirement for repayment) increase the net cashflow of the project and thus lower the risk of the project and enhance its attractiveness to the potential lender. For example, grants on safety or energy efficiency may be available through programmes of the European Commission.
- **Other International Financial Institutions.** In a similar vein, other financial institutions may offer loans or preferential finance for energy and safety projects.

8 Expected Savings Per Year

These figures should be consistent with the figures stated in any technical data appendix that you may wish to provide.

9 Energy Prices (ECU)

Whilst energy may be bought and sold in local currency, these prices should be translated into ECU at current foreign exchange rates, which should be stated.

10 Lifetime of the Project

This is the time period in which the continued operations of the project and its benefits will accrue to the sponsor. For example, even though the project may be completed within two years, the lifetime of the equipment and machinery may be expected to last for at least ten years.

11 Expected Implementation Time

This is the time period from the beginning of the project to its completion of construction and beginning of operations.

12 Proposed Start of Implementation

The proposed start date for implementation should be the time when money starts being spent on the project. Depending on the size and complexity of the project, loan review and approval process may take at least three to six months to complete. Therefore the proposed start date would normally not be any sooner than say six months after date of submission of the business plan.

13 Summary Cash Flow Analysis

The figures in this form should be consistent with the figures provided under Section 11 Cashflow Projections of the Business Plan Form. A brief explanation of the terms used in the summary cashflow analysis are:

- **Capital investment:** the total cost of the installed equipment (excluding Value Added Taxes)
- **Revenue:** this is any incremental change in revenue due to the project.
- **Savings:** the quantity of energy, materials or equipment to be imported, which would be saved, multiplied by the expected prevailing prices including taxes.
- **Other benefits:** the additional benefits to any savings generated by the investment. These benefits should be explained in more detail in Section 11 of the Business Plan Form or on separate sheets attached as an appendix to the Form.
- **Operation and maintenance costs:** the net additional costs or the net cost reductions to operate and maintain the newly installed equipment.
- **Other costs:** miscellaneous costs incurred to run the project, if any. These should be explained in detail in section 11 of the Business Plan Form or on separate sheets attached as an appendix to the Form. It is important to note that none of these costs are distinct from and not duplicated in the costs of the installed equipment stated above as capital investment.
- **Depreciation of the installed equipment:** not a cash cost but a noncash expense that reduces taxable income.
- **Tax:** corporate tax rate. The impact of tax is twofold. On the one hand, if the investment is successful and the company has a net profit, the company's taxes will increase. On the other hand,

where the project has involved capital expenditure, the company may be able to claim capital allowances from the government which will help reduce the tax burden. To calculate the tax cashflows accurately, you need will need to forecast the profits from the investment. In any case, once the incremental cashflow has been forecast, then the payment of taxes should be automatically included in your cashflow forecasts.

- **Profit After Tax:** This is the amount remaining after deducting tax from the Pre-Tax Profit.
- **Net Cash Flow:** This is the amount that you have in hand (That is, estimated actual amount of cash) available that will be used to pay creditors and investors.

14 Data Table

- **Quantity of Output Produced:** This estimated figure gives the lender an idea of the total output of the project.
- **Quantity of Savings:** This estimated figure gives the lender an idea of how "efficient" the project may be.
- **Price:** This price gives the lender an idea of the prices used in the forecasts.

Business Description

Business Description

1 Nature of the Business

What is the core business activity that the sponsor is engaged in? For example, it may be a electricity generation or it may be equipment manufacturer. The business is defined by the products it makes and sells for its customers and clients. In market economies, businesses exist on the strength of market demand. Ultimately, market demand defines the genuine nature of the business.

There are a number of areas to draw from when making a statement which defines the nature of the business. You may wish to consider the answers to the following questions to make a brief statement about the nature of your business, its strengths, risks, current and future plans:

What do you intend to sell?
- Products
- Services

What is your position in the market?
- Will it be based on high quality and high price? or
- High volume and low price?

Who will be your customers?
- Individual members of public: what are their social class,
- geographical area and particular interests?
- Manufacturing: what is the size, area and nature?

How will you find new customers?
- Passers-by who walk into business location.
- Press advertisements?
- Direct mail?
- Referrals?
- Salesmen?

How will you increase the sales from your existing customers?
- Market survey and analysis

How will you obtain the products?
- Manufacture from raw materials
- Assemble from intermediaries
- Purchase from manufacturers

Who will provide your company's services to customers?
- Just your business
- Your business and partners
- Sub-contractors or franchisees

How will you sell?
- Direct to the public
- Direct to manufacturers
- Through large chain stores
- Through individual shops
- By mail order

- Through a distributor

How will you support your sales?

- What delivery will you provide?
- In what geographical area?
- What is the after-sale service?
- What are the trade terms? For example, what is the financial assistance for leasing or loans?

2 Strengths of the Business

The strengths of the business can be divided into internal strengths or capabilities of personnel and plant and external opportunities in the marketplace. Amongst the major questions you should consider are:

- Are your personnel and senior management equipped with proper technical, marketing, selling and negotiating skills?
- Does the business have a unique selling point? In other words, does your company offer a special benefit in its products or services which are not offered by competitors?
- Does your company have strong customer loyalty?
- Does your company enjoy a special licence or subsidy from the government?
- Is your business in close proximity to the markets?

3 Risks

The risks are both internal and external - that is, factors which the management can control and factors which are beyond the control of management. Efforts by management should focus on controllable and critical risks. The critical risks to the business are those events, activities or persons without which the business is not likely to survive. For example, if a company enjoys a monopoly in its local market then the major risk to the business is political and perhaps regulatory.

4 Current Situation

The current situation is a description of recent events in light of current cash flows. Is the company improving or is it facing difficulties? Does it have good prospects in the near term or no new prospects?

5 Future Plans

The future plans should describe ways in which the sponsor may use the strengths of the business or decrease the business risks.

Nature of the Project

1 Background to the Project

This describes how the project was conceived. Who conceived the project? Was it from someone in-house or was it initiated by an independent consultant? Who within the company is involved in the project?

2 Scope of the Project

This describes the breadth of the project in terms of time, space and number of personnel directly and indirectly involved.

3 Rationale for the Project

How is the project related to the core activities of the business? The project has a good rationale and is justified if it is part of the company's core business.

4 Arrangements for Implementation

This is a summary of the planning and contractual arrangements necessary for the completion of the project. For large infrastructure projects, tendering for contracts will ensure that fair and competitive prices are obtained. The bank will be looking to protect its investment capital from any possible conflict of interest or fraud. Details of any off-take agreements (contracts that begin with the approval of finance) should be noted.

5 Infrastructure Background

Locations owned or rented fixed capital assets including:

1. Plants
2. Warehouses
3. Offices
4. Stores (Retail)
5. Other

6 Description of supplies

1. Energy/Electricity
2. Gas
3. Raw Materials
4. Premanufactured Parts
5. Other(s)

Benefits

In this section, it is important to have an imagination. You will need to think of how the project will benefit the local and national economy and environment as well as your own commercial prospects. The greater number and deeper the benefits, the more likely that the project will have both short and long term local support and thus, an increased likelihood of success.

1 Savings and environmental improvements

The types of benefits that come from the project are many and varied. It is important to recognise those which can be directly quantified in money terms, such as savings in raw materials, fuel savings, reduced labour, etc. and those which may be only indirectly quantifiable, including improved product quality or marketability, and which might produce a benefit in terms of increased sales. There may also be other benefits which are not quantifiable at all in money terms, but may have a bearing on the project. These include aspects such as safety, improved working conditions and environmental benefits.

The benefits likely to arise from a viable project include:

- New or increased energy generation
- Improved efficiency of generation
- Lower energy consumption
- Lower fuel costs
- Lower water costs
- Lower labour requirements
- Reduced overtime
- Reduced maintenance
- Fewer rejects
- Reduced product finishing
- Improved throughput rate
- Savings in floor space
- Improved scheduling
- Improved quality
- Improved product specification
- Improved product range
- Improved safety
- Reduced greenhouse emissions
- Reduced harmful emissions
- Improved health and safety
- Reduced environmental fees
- Provide qualitative better services.

Other types of economic benefits which may result from the project should be made explicit. For example:

2 Export promotion

Will the project result in an increase in exports or support exports and therefore result in net gains to the local community and nation?

3 Import substitution

Will the project provide for the substitution of current imports with goods or services produced locally?

4 Job creation

How many jobs will be created directly and indirectly by the project?

5 Productivity improvements

Will the project result in enhanced performance and increased productivity of plant and workers?

6 Technology transfer

Will the project involve the transfer of technology to and from the local community?

7 Management development

Will the project involve the enhancement of skills, knowledge and competence of the workforce?

These are some of the considerations that may be taken into account in describing the benefits of the project.

The Sponsors

The Sponsors

1 Background

The section describing the personal details, background and experience of the main parties and the top management of the project should be written with the purpose of convincing the bank that the management to the project can be trusted to complete the job. For example:

- What kind of technical credibility does the management have?
- Have they completed other similar projects?
- How does their background enable them to accomplish the objectives of the project?

2 Financial data

This gives the bank a view on the financial strength of the sponsor. More financial information will be included in Section 11 and 12 of the Business Plan Form.

3 Proposed Financial Contributions and Exposures

This is a brief summary of the financial contributions of each of the partners to the project.

There are many complexities to financial risk but the question here is whether the partner will be personally liable for payment on default. If the partner is personally liable then the bank has full recourse against the partner and therefore the bank has greater comfort. Technically, recourse means that in case of default on the loan, the lender has the right to sue an endorser or guarantor for payment. Non-recourse means that the lender has no right to sue for any of the underlying assets beyond that which was pledged by the defaulting party.

4 Rationale for Involvement of Other Partners, If Any

There are many different rationales for a local enterprise to involve other partners. For example, the local enterprise may need a foreign partner in order to meet certain contractual requirements for hard currency. Or, the enterprise may be relatively unknown and thus, in order to bolster its credibility it may enter a joint venture with a well-known international company. Another rationale may be that the company wishes to enhance its political security by teaming up with politically powerful entities.

5 Objectives

5.1 What are the objectives of the business itself?

These objectives may include business, economic, social and environmental goals. It would be helpful to the bank if these objectives were stated in specific enough language so that they can be ascertained, measured, monitored and controlled. To be considered are:

- Short term (within one year).
- Medium term (from end of first year to end of fifth year).
- How are these objectives going to be achieved?

5.2 What are the long term objectives of the business (if any)?

How are these objectives to be achieved?

Project Costs and Timescale

This section sets out in detail the total costs of the project and their justification.

1 Project costs

In this section, you will provide an estimate of the costs of all raw materials, technology, equipment, assets, goods and fees that will be necessary in order to implement and complete the project - basically, all contract costs and operating costs. This should be a fairly detailed breakdown of costs and the major items should be listed first, with smaller or minor costs listed last.

The types of typical costs incurred are outlined in the table below which can be used as a worksheet to estimate project costs. This worksheet is merely indicative and you should take care to make your own list as complete and comprehensive as possible.

Project Costs Worksheet			
Items	**Value in Local Currency**	**Value in ECU**	**Contributions in-kind ECU**
Land			
Building and facilities			
Equipment & Machinery (includes customs duty & fitting costs)			
Transport of equipment or goods, insurance and handling			
Installation			
Start-up expenses			
Training			
Professional fees			
Working capital			
Costs of registering security			
Cost of insurance policies			
Rental right			
Refurbishment			
Design and consultation			
Others:			
TOTAL			

Contributions in-kind refer to elements within the project that do not need to be purchased but represent contributions (usually in exchange for equity) such as land, buildings, equipment, know-how, licenses. This type of contribution often occurs in joint-venture projects.

1.1 Background Information

All banks require an accurate breakdown of the project costs and the use of funds, especially the use of the lender's funds. This information should be available early in the project preparation.

Typically, the allocation of costs should be amongst land, building, facilities, equipment and machinery, installation, start-up expenses, training, professional fees, working capital, registering security, cost of insurance policies and others. These costs should be split according to local currency, foreign currency (ECU) and contributions in-kind (ECU).

It is important to take into account **all costs** related to the project and the key is to identify incremental costs - those costs which are directly related to the proposed project. Some of the areas which may be of direct relevance include:

1.1.1 Raw Materials

The raw materials are inputs to the production process. The sponsor needs to show that the assumptions made relating to the quantities and pricing of the raw materials is conservative, and that even on this basis the proposed debt can be paid off with a significant margin of comfort. Where there are large raw material contracts, the lender may wish to take security over any of the supply contracts and this factor should be kept in mind when the contracts are being negotiated.

In considering the costs of the raw materials, it is important to note whether the supply of the raw materials is guaranteed in terms of price and quantity. The operator needs a certain amount of raw material input in order to produce sufficient cashflow. Or, it may be the case that the operator does not need a guaranteed source of raw materials because there is a variety of sources for the raw materials and therefore can depend on the market price.

The question of raw materials relates to the issue of mitigating or avoiding supplier risk, that is, failure of the supplier to supply the raw materials to the operator. Another consideration you may need to keep in mind is how the raw materials (their use, conversion, waste and disposal) relate to the physical environment, which may need to be reported.

1.1.2 Incremental Costs to the Production Process, Premises or Personnel

Normally fixed overhead are not included in the costs of the project. However, if the project requires additional production processes, premises or personnel, then these should be included as incremental costs.

1.1.3 Waste Disposal Costs and Pollution Cleanup

If the project reduces fuel consumption per unit of production, it may spur the increase of production of goods and polluting by-products. By increasing production, there may be costs associated with the greater amount of waste disposal and pollution cleanup.

1.2 Energy and raw materials consumption

The premise of this Guide is that an efficient technology may pay for itself in terms of savings.

An awareness of the fuel, materials and electricity usage and the expected cost savings are important factors for the overall efficiency of the plant. For example, new efficient technology or equipment may lead to a reduction in operating costs, including less maintenance and repair, or they may result in helping increase the flexibility of the production process, thus reducing overall production costs.

Efficiency also reflects on the quality of management - pro-active modern management techniques will strive to continuously improve the efficiency of equipment, machinery and plant. Whilst it may be difficult to quantify, you need to be aware how much time it will take to train staff to act in a different way and to consider whether the morale of the workforce improve or deteriorate in response to the technology.

It is important to note that cost-reduction investment decisions are often a matter of deciding amongst different courses of action. If the costs are the same but the potential benefits are different, it would be easy. But more normally you have to decide amongst two or more investments with differing costs and life expectancies so your method of investment appraisal must be able to compare these investments across similar time-frames.

Whilst in many instances the cost of technology and equipment required for the savings may be incurred immediately at the start of the project, the resulting savings will be spread out over a period of time. More details of how to account for the timing of the cashflows will be found in Section 11: Cashflows Projections. Any technical, financial and marketing assessments or engineering reports regarding the amount of savings should be included as an Appendix to the Business Plan Form.

1.3 Basis for the cost estimate

The bank will require the "basis" of the cost estimate which means that the bank will require justifications for the figures stated in the cost estimate. How have the costs been estimated? In order to meet this requirement, the client might consider his answers to the questions in the table below.

Basis for the Cost Estimate

1. Have they come from supplier costs?
2. Have they come from engineering quotes?
3. Have they been featured quotes?
4. Have they come from some other means?
5. Who gave you the information on costs? (Name(s) of person(s) and their qualifications)
   - Did the estimate come from someone within the company?
   - Did the estimate come from an independent contractor?
6. How reliable are these cost estimates?
   - Would they be useful as firm market price quotations?
   - Would they be used as the basis for further negotiations with large buyers?
7. How are accurate are the cost estimates? (within 1 to 2%, 3 to 5%, 5 to 10%, 10 to 20%, only half accurate)

Evaluating Costs: Levels of Estimate

Financial appraisal is usually introduced when the project costs are only estimated. Depending on how far the project has progressed, the estimate will have different measures of accuracy. We might distinguish amongst five levels of estimate:

- **Order of Magnitude**: This is a very crude estimate derived by an inspired guess. The inspiration often comes from a similar project which someone else has undertaken and which has known costs, perhaps published.
- **Study Estimate**: This will approximately quantify the costs of the major components, perhaps by telephone calls to possible suppliers, "rule of thumb" calculations, and using blanket figures for installation and civil engineering works.
- **Authorisation Estimate:** At this stage most of the items of cost are known to a sufficient level of accuracy for the project to be submitted for approval by the financial management. The technical feasibility of the project will have been established, the components identified and costed, and the scale of assembly and installation work established.
- **Definitive Estimate**: All outgoings on the project and the timing of those costs will have been established to an extent that the progress of the project could be measured from the costs incurred at any time. The price at which suppliers will deliver components or carry out work will have been agreed, and any major designs or other alterations since the preliminary estimate will have been incorporated. The only margins allowed are those for cost that cannot be established until an appropriate point in the physical installation of the project is reached.
- **Detailed Estimate**: This sets an exact amount for the authorisation of payment of invoices on the project. It is in most cases the final cost. So far as possible, all the causes of cost outside those defined in the estimate have been reduced to zero.

1.4 Sources and dependability (condition and age) of technology and equipment

This is a description of the technology and equipment. The sources and dependability of the technology and equipment are important parts to the project. If the technology is old and in poor condition, then it is unlikely to have very much value. New technology and equipment in new or good condition is likely to carry the best value. Obviously, out of date technology may need more frequent repairs and carry an increased risk of breakdown which leads to plant ineffectiveness and inefficiency. The bank will look to the company to decrease this risk of old and undependable technology and equipment.

1.5 Assistance to be provided by the technology supplier

The technology supplier may provide advice and training on how to operate and maintain the equipment and machinery. The terms of the training as part of the technology transfer should be examined closely since the value of the asset will be detrimentally affected if this training is inadequate or sub-standard. What specific assistance will the technology supplier provide? How long will this training be provided? How will your company measure the adequacy and competency of the training assistance?

1.6 Timetable of Implementation and Disbursements

The Timetable for Implementation and Disbursements describes in chronological order the major payments that must be made in order to complete the project. These payments should correspond to specific phases in the project. The major disbursements are payments to specific entities, mainly contractors, sub-contractors and suppliers. Whilst these disbursements may be made in local currency, you are asked to specify the amount in ECU.

The timing issue of when costs will be incurred may be critical to the financial viability of the project. In brief, the company should be looking to maximise its resources and the longer these outflows can be delayed, the less costly they are in present value terms. The timing of the costs thus will have an impact on the valuation of total project. What is important here is that the timing of the costs (cash outflows) will need to be co-ordinated with the cash inflows.

In this paragraph, you will need to identify each of the major items to be purchased with a "short technical description". For example, "automatic control systems" or "flue gas analysers" would be sufficient if it is clear that these are major items to be purchased. Technical descriptions of the items to be purchased should be included in a Technical Purchase Appendix.

2 Arrangements for Implementation

2.1 Description of contractors in charge of implementing major components of project and rationale for their selection

The bank will rely on the sponsor to implement directly, or to appoint contractors to implement, the project in a timely manner and in a cost-effective way. In order for the bank to assess the risks connected with the implementation of the project, you will be required to describe the arrangements for implementation which includes a description of the major components of the project, the names of the contractor in charge of each component and the reasons for selecting the particular contractor and its relevant track record. The major components of the project include amongst other things the sourcing of raw materials, construction of buildings and plant, delivery of fuel stock, marketing and after-sales support. In general, a major component can be thought of as any process which adds value to the product and which is within the control of the company and it represents a major cost in the project.

The reasons for selecting any particular contractor should include business confidence and trust in the contractor's performance. Perhaps the contractor has done business before with the company. In any case, the track record of the contractor is important because it qualifies the contractor in terms of its experience in work of a similar kind. Dates and types of contracts in which the contractor was previously engaged would be relevant.

2.2 Nature of the contracts with the contractors in charge of implementation

In this paragraph, you are asked to summarise some of the major features (terms and conditions) of the contracts with the contractors in charge of implementation. Some of the major points which you should cover include:

2.2.1 What are the terms and conditions of the completion covenants?

Are there any penalties for late completion or bonuses for early completion?

2.2.2 What are the terms of the progress payment schedules?

These payments should be conditioned upon the completion of specific tasks or events. What are those specific events?

2.2.3 Performance bonds associated with implementation

What types of performance bonds are required for implementation?

2.2.4 Is the agreement with implementing contractor a turnkey contract?

In other words, is the contractor in charge of constructing and implementing the whole business process?

2.2.5 Other types of special or unusual conditions

These can be any kind of events which are critical to the performance of the contract.

2.3 Explanation of any cost contingency built into the project costs.

In recognition that there may be events outside the control of the company, contingency costs are usually built into the project costs in order to help ensure that project funding will be available in case these events occur. From the perspective of the lender, the bank would like to know what types of risks are foreseen by the applicant for funds and what contingencies are included.

2.3.1 What are the built-in contingency costs to the project?

This is a listing of the of contingency costs, their amount and the conditions under which they take effect.

2.3.2 What are the justifications for these contingency costs?

There may, for example, be cost contingencies built into equipment purchases and working capital. These assumptions should be explained.

2.3.3 If there are provisions for cost overruns, what are the reasons for assuming that such cost overruns may occur?

Whilst provisions for cost overruns are normal in project finance, it is important that this risk is covered to ensure the successful completion of the project.

2.3.4 How has the company ensured that there is sufficient back-up funding in the event of cost overruns?

It usually the case that the sponsor will need to have extra facilities to sufficiently cover any extra costs.

2.4 What is the proposed method for purchasing goods, services and equipment with the bank's funds?

Whenever possible preferred method is by tender. That is, at least three contractors should bid for the work and the procedure should allow for the best price and quality as possible. However, exceptions to this general rule should also be explained.

2.5 What is the justification for using any other method?

For example, there may be laws or regulations which require certain procedures to be undertaken.

2.6 Is there any reason not to use competitive tendering?

These are rather exceptional circumstances and should be explained fully.

3 Procurement Issues

In addition to the national legal requirements on procurement, some banks, like EBRD, the World Bank, European Investment Bank and other multilateral financial institutions require transparency and arm's length procurement when approving the funding of a project so the sponsor is asked to address this area carefully. At an early stage, the bank will identify procurement issues and in particular, the bank will:

- Determine whether public sector or private sector procurement rules are applicable
- Indicate uses of proceeds and likely procurement procedure
- Highlight exceptions to open tendering if it is a public sector operation
- Ascertain whether or not there is a likelihood of advance procurement action or contracting (i.e. before operation approval)
- Ascertain the need for special implementation and contracting risks and arrangements
- Determine whether the sponsor is likely to be a supplier or contractor
- Ascertain if used equipment is to be procured.

According to the bank's internal rules for procurement, public sector operations are operations:

- To or for the benefit of a government or an entity or undertaking that is controlled or majority financed by the public sector of the country of operation, or the procurement procedures of which are subject to regulation or control by a government or public agency, other than such entities or undertakings that, in the bank's judgement, are operating autonomously in a competitive market environment and are subject to bankruptcy or insolvency law; or
- Guaranteed by the state or a public agency or instrumentality of the country of operations.

Operations that do not fall within the definition of "public sector operations" or "concessions" (as granted by the bank) are deemed by the bank to be "private" for procurement purposes.

Products Services and Markets

1 Description of products or services

You may provide the names of each of your products or services, a brief technical description and the proportion each will contribute to the total turnover. The total percentage contribution of all the products and services should add up to 100 percent and these figures should correspond to information you will supply on the profit and loss statement in the Appendix Proforma Financial Statements to the Business Plan Form. If your company is selling more than four products or services then use separate sheets to provide the relevant information.

2 Pricing and Costs (breakdown of the cost of materials)

For each product or service, you may wish to provide the variable costs associated with the product or service.

2.1 Sources of cost estimates

In nearly all cases, the source of cost estimates will be the costs the company actually pays. Therefore, if you yourself do not pay for the costs, then how are the costs estimated?

2.2 Explanation of price estimates

You may also wish to provide information on how you arrived at the sales forecast estimates. For example, perhaps you have conducted a market survey? If so, then a summary of this report should be included here and the market survey report should be attached as an Appendix to the Business Plan form. Whatever information you supply, this will provide the bank with a basis to check the actual costs.

Whilst there are many different ways to make price estimates, there are three good ways you may use:

1 Cost-plus price: What does it cost you to produce or provide?
2 Competitor's price: What do your competitors charge?
3 Market price: What the market will bear?

3 Market Description, Location and Size

The nature of the market for the enterprise's products or services:

The purpose of this section is to describe the market of the company, its general characteristics, customers, competitors and factors affecting the growth of the market and the position of the company within the market.

3.1 Description of the market that the business is in:

A company is usually described in terms of the industrial or commercial sector in which the company is engaged accompanied by a brief description to whom the company sells. For example, the company may be an electric power company that sells electricity to a region or the company is an electrical components producer that sells goods to a wide variety of appliance manufacturers. For this paragraph, it is sufficient to describe what the company sells and to whom.

The survival and existence of a business in a market economy is wholly dependent on market demand. That is, in simple terms, the company survives because it satisfies the needs of customers. Thus, a deeper

description of the market your business is in entail a description of your customer's needs. These should be detailed in the paragraphs below.

3.2 Geographical area of the company's market

The geographical area of the market can be potentially the population of the whole world. But this is not what is meant here. The geographical area should be limited to the area where you think your primary customers reside. Where will you see most of your income coming from? Where do your customers typically reside?

3.3 Size of the company's market (ECU per year)

The question here is "how big is your market?" This means not just your company's sales but the size of the total market in which you compete in. You should calculate how many units can be sold to potential customers per year and multiply this by the price per unit. This will be a gross figure. If you have various estimates of the size of the total market, you may mark these in terms of a range from pessimistic to optimistic.

3.4 Description of the market environment

Some of the questions to consider are:

- Is the market price sensitive?
- Is it very competitive or not competitive?
- Is it a mature market with established market leaders or relatively new market with no clear market leaders?

4 Type of Customers - Characteristics of Customers of the business

This is fundamental information which your company must clarify and re-clarify if it is to survive and thrive. You should provide a customer profile. Who are your customers? Describe your customers as specifically as you can. This should include the names, type or profile. In order to determine the characteristics of your customers, you may need to gather the following information:

- The geographical areas in which you plan to trade
- The characteristics of people most likely to buy your goods
- The characteristics and requirements of intermediaries you hope to do business with
- The particular type of intermediaries who favour your products or services
- The characteristics of the organisations you want to do business with.

Within these organisations, identify the types of people (by position or job title) you will have to convince of the value of your product/service in order to gain sales.

5 Competitor's analysis

In this section, you are asked to identify your main competitors in terms of product or service and their respective market shares.

6 What is special about your own product or service? (What is its unique selling point, if any?)

Since the survival of a company in a market economy depends on market demand, it follows that the particular niche or special requirements which the company fulfils for the customers is its most important characteristic. Its so-called "unique selling point" gives the company's products and services a unique

psychological label within the minds of customers and enables them to identify the products and services to some particular need which the customers need fulfilled. Without this unique selling point, why should the customer buy your product or service over your competitors?

6.1 Advantages of your product or service over the competition

This is similar to the issue of the "unique selling point" except that here the focus is on the particular advantage which your product or service has over competing products and services. For example, in one case, your advantage may be in price. But in other instances, your advantage may be in terms of quality, delivery, after-sales service, finance and so on. It is important to remember that a price advantage can be quickly eroded and therefore may not likely be an advantage for very long. It is therefore recommended that the company look to have a comparative advantage based on other factors which is really part of the definition of the product and integral to the definition of the customers' needs.

You may wish to refer to the "Benefits" stated in Section 4 of the Business Plan Form.

7 Factors affecting the growth of demand

7.1 Description of factors affecting growth of demand

What are the factors affecting the growth of demand for your company's products and services? There are two types of factors: general market factors and specific market factors. General market factors are those which the company has no control and include interest rates, whether the product is a necessity (such as spare parts) or an additional convenience, the business and consumer confidence, the inflation or deflation rate. Specific market factors are those which the company can control or strongly influence. For example, the image of the company and the product via advertising. The limitation on the growth of demand is likely to be related to communications or the lack thereof to the appropriate target audience. In this paragraph, it is important to show both general market factors and specific factors which limit the growth of demand.

7.2 Is the company's market growing, stable or in decline?

This information will give the lender an idea of the market risk of the company. That is, if the company is in a growing area then it is likely to have more opportunities for growth in profits. On the other hand, if the market is declining then the company may be on a slippery slope and may be in danger of closing after a few years. A stable market implies that there may be intense competition amongst competitors and little opportunity for growth except at the expense of competitors' losing market share.

8 Financial Position of Buyers

The stronger and more secure the financial position of the buyers of the company's products, the better it is for the company. The company in other words will carry less of a risk of buyers' default and a greater likelihood of continuing business if the buyers are financially strong and financially stable. The major questions to consider include:

1 What is the financial position of the buyers of the company's products and services?
2 Are the buyers financially strong or weak?
3 Do they command any credit from the business?

Regulations and Environment Information

1 Key regulations required from the authorities

You will provide a list of key regulations that govern the transaction. The regulations may require permissions from regulatory authorities. The regulations should be specifically cited by date and by their official title.

2 Key permissions required for the transaction

Are there any permits which the government must grant to the sponsor before this transaction will be allowed?

1. From national level
2. From state or regional level or
3. From local or municipal level.

These are self-explanatory items. Obviously it is important that the specific conditions of the permits, their extent and effect, be understood and complied with sponsor. It is also important the sponsor communicate any peculiar interpretations of what these conditions may mean for the bank. For example, any adverse effects on the title and ownership of land and facilities resulting from the sponsor's non-compliance.

3 Permit requirements

What are the specific permit requirements, if any, for this project?

These are permits from regulatory authorities or government agencies such as housing, tax, welfare, energy and so on.

4 Environmental regulations

Are there particular environmental regulations which must be complied with in order for the transaction to be approved in the jurisdiction in question? You are also asked to list all the relevant federal, regional and local environmental and worker health and safety requirements for the project. This list or register of relevant laws should include the official name and date of particular laws and regulations. If there are specific written requirements, summaries of negotiations with an ecological committee, discharge and/or emission permit conditions or other matters with legal or local community then copies of these should be included as an appendix to the Business Plan Form. The following sections explain what types of environmental information usually the bank requires of the sponsor.

5 Environmental Information

5.1 Introduction

Environmental issues are of increasing concern to banks throughout the world since the value of the transaction may be drastically influenced by past or future contamination and failure to comply with regulations. Potential environmental liability is a species of legal risk and as such must be treated with utmost seriousness and thoroughness. The bank's position is to see that the environmental risk is reduced to minimum or avoided.

5.2 Environmental Due Diligence

The bank conducts environmental due diligence along with financial due diligence on all of its potential projects. The requirements for these projects vary, depending on the nature of the project, the potential for environmental impact of the project, the proposed use of bank funds in the project, potential environmental liability or risk associated with past or future operations, conditions for worker health and safety, and other related issues.

Environmental due diligence is conducted at the same time as financial due diligence. Initial information on the project and the environment will assist bank staff in screening the project and setting the environmental requirements. It is essential, that the investigations or information requirements on a proposed project are undertaken early in the project's review schedule, so that the environmental requirements are completed prior the bank's Final Review and will not cause delay in the project approval process. Often environmental investigations uncover problems or potential liabilities which must be taken into consideration during negotiations and for which further studies or management plans must be developed. Typically, environmental investigations determine how a project will perform against national and international standards and how management practices compare with best practice elsewhere.

Depending on the type and the size of the project, the following environmental investigations may be required as a result of the project's initial screening:

5.3 Environmental Audit

An environmental audit is a study of the environmental status of a facility, property, or operation to establish the status and to identify past or present problems and potential environmental risks and liabilities associated with the project. The audit will look at the environmental condition of the property, the amount of environmental degradation, observations or records of spills, type of equipment and pollution controls, worker health and safety issues, regulatory compliance record, current and pending environmental regulations that apply to the operation, and the need for additional information. The audit may also help to set the baseline for legal requirements, such as an indemnification agreement, although this should be confirmed by the regulatory authority. The audit must be conducted by a third party, such as an environmental consulting firm, to maintain objectivity.

5.4 Environmental Assessment (EA)

An Environmental Assessment (EA) is a method of analysis which attempts to predict impacts of proposed projects upon the physical and social environment of the surrounding area (including community and worker impacts).

5.5 Guidelines for Environmental Due Diligence

1. Initial information to the bank should describe the geographical and process characteristics of the project, detail the environmental work done to date on the project (included copies, if possible), and give contact information for the environmental persons on the project (name, address, fax, phone).
2. Identify federal, regional and local environmental and worker health and safety requirements for the project. This may be a list of laws, written requirements, summaries of negotiations with an ecological committee, discharge/emission permit conditions, etc.
3. Clarify legal agreements regarding responsibility (legal or financial) for past adverse environmental damages (contamination, occupational diseases, etc.) such as indemnification agreements. This is particularly important if there are storage areas, waste handling plants or utilities which are shared between companies.

6 Environmental Contact Person

This person should be knowledgeable of the potential environmental liabilities of the site(s) and is a member of the management committee to the sponsor's project team, or at the very least, has the authority to communicate to the management committee.

7 The Land

The land is what is owned or intended to be purchased as part of the transaction. It is also the major resource which may contain pollution and therefore be may be a source of liability or clean up costs.

7.1 Location

The description of the land should include its legal address and legal description. If there exist ownership documents then copies of these should be attached to the business plan form.

7.2 Historical uses of land

Certain historical uses of the land may have beneficial or detrimental legacy to the current generation of owners and users. It is important to determine as far as possible what these uses were in order to better understand the real risks of the land.

7.3 Current land uses associated with the project site

The current land uses associated with the project site will be related to the allowable limits of pollution according to regulations and best practice.

8 Physical Construction Activities Involved in the Project

This should be a description of the nature of any physical construction activities involved in the project. Physical construction activities may cause some form of pollution. The construction must abide by the construction permits and not violate any laws or permits regarding pollution.

9 Environmental impact assessments or environmental audits carried out for the project

The information contained in environmental impact assessments or environmental audits may identify environmental pollution problems. If the sponsor has conducted an environmental audit then the sponsor must be careful to explain how any discrepancies, shortcomings or failures found in the audit have been corrected or will be improved.

10 Potential environmental liabilities associated with property

Potential environmental liabilities are those company activities which are in possible violation of environmental regulations or other government permits. Potential environmental liabilities may also arise from legal agreements allocating responsibility (legal or financial) for past environmental damages (contamination, occupational diseases, etc.) to the company. This responsibility may be in the form of indemnification.

11 Proposed measures for environmental mitigation

After identifying potential environmental problems in the previous sections, the sponsor should state specific ways in which these problems can be rectified, eliminated or transferred. This is important from the bank's point of view since the bank is risk averse and is unlikely to approve any financing plan where environmental problems are unresolved.

12 Proposed measures for environmental enhancement

Whilst environmental mitigation reduces the risk of environmental problems, environmental enhancement includes those types of processes or activities which are likely to benefit or increase the value of the surroundings. In many instances environmental mitigation activities are also environmental enhancing.

13 Corporate environmental policy

This is a written document which states the company's environmental purpose, aims, objectives (qualitative) and targets (quantitative).

14 Environmental concerns associated with the project or its associated properties

This question is asking the sponsor to state what he or she believes are the environmental concerns of the project or its associated properties. In other words, the sponsor is asked to form an opinion about he or she considers are the potential environmental problems of the project or its associated properties.

15 Status of public consultation on the project

Public consultation is important for environmental considerations. Has the public been notified of the development and its potential environmental problems? How have they been informed? Have they been given an opportunity to respond?

Role of the bank

Role of the bank

1 Description of the role of the bank

In this section, you will need to (concisely) describe the role which you wish the bank to play in this transaction. The major types of roles which the bank can play set out below are not mutually exclusive. In other words, the bank can play more than one role in the same project. The typical roles are:

1 Lender: The bank loans money to the borrower at a fixed or variable rate of interest for a fixed period of years.

2 Syndicator of Loans to Other Lenders: This is where the bank repackages the loan and acts to spread the risk of the project across a number of lenders.

3 Guarantor: The bank guarantees a certain portion of the project funds. This enables other banks and investors to participate in the funding of the project. Guarantees are an effective mechanism to induce other commercial banks to participate in the project funding.

4 Underwriter: This is where the bank acts to indemnify parties for the loss incurred by non-performance of the project. In effect, the bank acts as a type of insurer.

5 Equity Investor: In this case, the bank invests risk capital for which the company has no obligation of repayment in terms of principal and interest, but it may have certain contractual obligations to pay dividends.

6 Financial and investment advisor: The bank plays a role of advising the client on what types of financing and investment options are open and may be appropriate for the proposed project.

The Financing Plan

The Financing Plan

1 Introduction

The financing plan sets out how the transaction costs identified in Section 6 will be met. Normally, the bank will be only one of several sources of financing. In fact, the bank will require the sponsor both to invest in the equity of the project and to identify other potential sources of financing. In the case where the project involves the expansion of an existing facility, the bank may be prepared to finance the project itself provided the bank's exposure in the company remains within 35 per cent of the long-term capitalisation of the company.

Why does the bank require other investors to co-finance the project?

- Risk Sharing: the bank has an interest to reduce its risks and at the same time to see that entities with direct experience of the business are willing to risk their money in support of the project as a worthwhile venture.
- Additionality: The bank seeks to encourage other financing entities by having them participate in projects either through loans or through equity.

If the sponsor is experiencing difficulty in attracting other financing, especially debt, it is advisable to contact the bank at an early stage. The bank may be able to offer assistance in attracting other lending institutions once the financing structure has been agreed. Commentary on the Financing Plan form is as follows:

2 Current and Required Sources of Finance

The purpose of this paragraph is to present the current and required sources of finance. The total Financing Required is simply the Total Current Sources (A) less the Total Project Costs (B).

The column entitled "Financing Source" includes major types of finance. They are described as follows:

- Sponsor's Own Resources: The bank will require cash of at least 20% of the project costs. The bank is looking to see its own risk minimised and may look to the sponsor for further cash injections. The valuation of the in-kind contributions should be the actual current market value (re-sale value) and not historical costs.
- Supplier: the supplier may extend credit for the purchase of necessary materials.
- Local loans: for example, these loans may come from local banks or consumer credit institutions.
- Foreign loans: these generally include loans from international financial institutions such as the World Bank, the EBRD and international commercial banks .
- Foreign equity: cash from other investors.
- Others: these may be grants, cash contributions or new financial instruments which are combination of debt and equity, such as convertible bonds.

The layout of the financing plan should be described as in the table below:

			Financing Plan (ECU Million)	
Financing Source	**Local**	**Foreign**	**Total**	**% of Total**
Debt				
a				
b				
c				

Equity				
a				
b				
c				
Total Project Financing				

The object of the above table is to identify the major financial contributors to the project and its purpose is to help the bank assess the quality and adequacy of the financing.

3 Type of Financing Required

The sponsor should discuss the possibilities with the bank directly. Note that the total of the type of financing required stated in this paragraph should match the total financing required stated under paragraph 2.

Cash Flow Projections

1 Introduction

This section focuses on the cash-flow projections of the project. We will describe cash-flow projections and explain how cash-flow is related to the financial viability of the project.

In this section, the proposer's principal aim is to describe the financial viability of the project. This section assumes that the proposer is thoroughly acquainted with the principles stated in Chapter 4 on the financial economics of energy, renewable energy and energy efficiency and has an grasp of how to carry out Net Present Value (NPV) calculations. Here the emphasis is on the concept of cash flow, how it is determined and why it is important.

As a preliminary consideration, it is important to note that the project to be implemented by the proposer will be either:

- a stand-alone project; or
- a corporate finance project.

A stand-alone project will require the creation of a special purpose company. In this situation, the bank will analyse the cash-flows of the proposed new company which does not yet exist. In the corporate finance situation, the bank will analyse the financial statements of the existing company with and without the cash-flows brought about by the project.

In either case the bank's major concern is that the cash flow from the project be amply sufficient to cover the total debt service (all payments of interest and balance of the loan). The strength of the cash flow indicates the financial viability of the project.

Investment in the capital project may have company-wide cash flow implications. There is the danger that those involved in forecasting cash-flows may not realise how the project affects other parts of the business. The proposer should therefore carefully consider whether there are any additional cash-flows associated with the investment decision. For example, the decision to invest in refurbished or new energy equipment and/or technology may influence the quantity and quality of the product, potentially increasing sales and working capital requirements.

2 Definition of Operating Cash-flow

Cash-flow generated by an investment project is the difference between the money coming in and going out of the project. Cash-flow should not be confused with accounting profits which include some cash-flow items and exclude some others and are reduced by depreciation which is not cash-flow at all. The cash-flow indicates whether the investment is worthwhile. The timing of payments is very important to the value of the project. Net cash-flows are a measure of the cash that comes into the investment and the cash that goes out. Depreciation is ignored because the capital outlay is already accounted for in the first year(s) of the investment project. And interest charges are ignored because they are taken into account by the discount rate that is used to discount the cash-flows.

There are two other major reasons why cash-flow from an investment does not equal accounting profit. First, the tax is usually payable in arrears but is deducted from the profit in the year that they are incurred. Secondly, the income statement does not take into account working capital outlay.

The differences between cash-flows and accounting profit are set out below:

Cash-flows versus Accounting Profit

	Cash-flows	Accounting profit
Revenues	When cash comes in	When sale occurs
Operating expenses	When cash goes out	When expenses occurs
Depreciation	Not included	Included in Income statement added back for tax accounts
Capital allowances	Tax shield included as cash inflow	Included in tax accounts
Taxes	When tax is paid (time lag)	Recognised when tax incurred

There are two main ways to derive cash-flows for investment appraisals:
1. From the raw data; and
2. From pro forma financial statements such as the income statement and the balance sheet.

3 Deriving Cash-flows from Raw Data

The ideal situation would be for you to analyse cash-flows without looking at the income statement figures and to examine the cash-flows from the actual operations of the firm.

As you consider your sales forecasts and operating cost forecasts, you may keep in mind to:
- Include a cash outflow when it is likely to leave the business, not when it will be shown as an expense.
- Include a cash inflow from sales when your customers will actually pay, not when the accountants will recognise the sale.
- Include incremental tax, which has occurred due to the incremental cash-flow from the investment. It is important to remember not to include a cash outflow for tax in the year in which the tax expense occurred but rather forecast the tax outflow for the following year when those taxes will actually be paid.

4 Deriving Cash-flows from Projected Financial Statements

Whilst deriving cash-flow from raw data is ideal, it is likely that the data will come to you in the form of an Income Statement and Balance Sheet provided by the company accountant. You can derive a cash-flow statement from accounting data by taking into account the following points:

4.1 Working Capital

By focusing on cash you should automatically include working capital expenses. Working capital is the capital needed by any new project, for example, to pay for inventories or to allow for customers paying on credit, indeed all the expenses required by the investment before cash is received from the customers. The longer the production cycle and the longer your customers will take to pay, the greater your working capital requirements are likely to be.

Working capital requirements can be derived from the balance sheet. The total investment for capital projects can be considerably more than the fixed asset outlay. Normally, a capital project gives rise to increased stocks and debts to support the increase in sales. The increase in working capital (i.e. stocks plus debtors less creditors) brought about by the capital project forms part of the investment outlay, but it is a common error in appraisal to neglect this often crucial component. If the project takes a number of years to reach its full capacity, it is likely that there will be additional working capital requirements in the early years, especially for new products where the seller may have to tempt purchasers by offering more than usually generous credit terms. It is likely that as the investment increases its sales through its lifetime, there will be

additional expenditure on working capital each year. The reason being that the ratio between accounts receivable and accounts payable will remain fairly constant. (If you do not have this information broken down into these components, a reasonable proxy from working capital is current assets minus current liabilities.)

The investment decision implies that the firm ties up fixed and working capital for the life of the project. At the end of the project, whatever is realised is returned to the firm. For fixed assets, this will be scrap or residual value--usually considerably less than the original cost, except in the case of land and some premises. For working capital, the whole figure--less the value of damaged stock and bad debts--is treated as a cash inflow in the final year.

The introduction of new equipment or technology may reduce stock requirements. Here the stock reduction is a positive cash flow in the start year; but you should only include an equivalent negative outflow at the end of the project if it is assumed that the firm will revert to the previous stock levels. A more realistic assumption may be to assume that any replacement would at least maintain existing stock levels, in which case no cash flow for stock in the final year is necessary.

4.2 Interest: Not Included in Cash-flow

Capital projects financed by borrowing requires a series of cash outflows in the form of interest payments. Interest payments, however, should not be included because they relate to the financing rather than the investment decision. Were interest payments to be deducted from the cash flows, it would amount to double counting since the discounting process already considers the cost of capital in the form of the discount rate. To include interest charges as a cash outflow would seriously understate the true NPV.

4.3 Only Fixed Overheads Included in Cash-flow

Only additional fixed overheads incurred as a result of the capital project should be included in the analysis. In the short term, there will often be sufficient factory space to house new equipment without incurring additional overheads, but ultimately some additional fixed costs (for rent, heating and lighting, etc.) will be incurred. Most factories operate an accounting system whereby all costs, including fixed overheads, are charged on some agreed basis to cost centres. Investment in a new process or machine frequently attracts a share of these overheads. While this may be appropriate for accounting purposes, only incremental fixed overheads incurred by the decision should be included in the project analysis.

4.4 Taxation

Taxation for most organisations is a cash-flow. Includes any cash benefits from tax relief on the initial capital expenditure and tax payable on additional cash-flows. Attention should be given to estimating the timing of the tax cash flows. Generally, tax is assumed to be paid one year following the cash-flow upon which it is based, while the tax benefit on capital expenditure occurs one year after the year-end following the end of the accounting period.

4.4.1 Impact of Tax

Tax has two main implications for investment appraisals. On the one hand, if the investment is successful and has a net profit, company taxes will increase. On the other hand, if the investment has involved capital expenditure, the company may be able to claim capital allowances from the government and this will help to reduce its tax burden.

4.4.2 Taxable Profit

In order to calculate the tax, you will need to forecast the profit of the investment. How accurate this estimate needs to be will depend on how large the invest is, and how far the investment proposal has

progressed through the review and approval process. Once the incremental cash-flow has been forecast, the payment of taxes should automatically be included in the cash-flow forecasts.

4.4.3 Timing of tax cash-flows

In some countries, the actual payment of corporation taxes, payable on the profits of one year, does not normally occur until the following year. For example, if it is currently due six months after the end of the financial year then the company only pays tax one year after the tax expense was incurred.

4.4.4 *Example of Deriving Cash-flow from Financial Statements*

The following simple example shows how data from the balance sheet and the income statement can be used to derive cash-flow.

Cash-flow from the Forecasted Income and the Balance Sheet (in ECU)

	Year:	0	1	2	3	
From the balance sheet:						
Investments		(120,000)				
Stocks		0	80,000	100,000	110,000	
Debtors		0	40,000	48,000	46,000	
Creditors		0	60,000	72,000	84,000	
From the Income statement:						
Revenues		0	400,000	480,000	560,000	
Operating profit		0	60,000	96,000	120,000	
Depreciation (straight line)		0	(40,000)	(40,000)	(40,000)	
Interest charges		0	(10,000)	(8,000)	(3,000)	
Tax payable at	33%	0	(3,300)	(15,840)	(25,410)	
Net profit		0	6,700	32,160	51,590	
Dividends		0	0	(2,000)	(3,000)	
Retained profit		0	6,700	38,860	90,450	
Add back:						
Depreciation, interest charges & dividends		0	50,000	50,000	46,000	
Delayed tax charge*		0	3,300	12,540	9,570	(25,410)
Add investment		(120,000)	0	0	0	0
Add changes in working capital**		0	(60,000)	(16,000)	4,000	72,000
Cashflows			**(6,700)**	**46,540**	**59,570**	**46,590**

* This shows the difference between tax payable in one year, and when the tax is actually paid in the next year. So in Year Two tax is paid on Year One's profits ($3,300) and not on Year Two's profits ($) and the difference is added back ($15,840 minus $3,300 is $12,540).

** Add in the initial working capital expenses in Year One (stocks plus debtors minus creditors), and then any changes in working capital. Add back the working capital outlay for the investment to Year Three's cash-flow, as those funds are released at the end of the investment.

5 Other Considerations in Cash-flow Analysis

5.1 Sunk Costs

This is money that has already been spent and should have no bearing on whether, if further money was invested, it would gain a good return for shareholders. For example, if you are considering whether to build a technology equipment manufacturing or refurbishment facility of an energy plant on land that you already own, you do not need to include the cost of the original land purchase as part of the investment cost, as that is a sunk cost.

5.2 Incidental Costs and Benefits

All incidental costs and benefits should be included. An example of incidental cost that is often overlooked is the management time involved in the investment project that leads to a temporary decline in sales elsewhere in the business. That cost (lost sales) should be included as an incidental cost.

5.3 Opportunity Cash Flows

Capital projects often give rise to opportunity cash flows. For example, a company owns land which is not being used for any commercial purpose and intends to build an enterprise on it offering an NPV of ECU 100,000. If the market value of the land is ECU 120,000, this new use imposes an opportunity cost--the cost of denying its sale by building the enterprise. This opportunity cash flow is a fundamental component to the investment decision and should be deducted from the ECU 100,000. The enterprise option is not wealth-creating--other alternatives should be explored, including that of selling the land.

We frequently see opportunity cash flows in replacement decisions. For example, a water treatment facility at a power plant can be replaced by a improved model costing ECU 5 million, which generates cash savings of ECU 1 million per year for five years when it will have a ECU 500,000 scrap value. The equipment manufacturers are prepared to give an allowance on the existing machine of ECU 1.5 million. The net initial cash outlay is therefore ECU 3.5 million. However, by taking this course of action, the company prevents the existing machine from continuing its intended life when in three years time it would yield a ECU 300,000 scrap value. The scrap value denied three years' from now is the opportunity cost of replacing the existing machine. The cash flows associated with the replacement decision are therefore:

Cash-flow Replacement Decision

Year 0	Net Cost	(ECU 3.5 M)
Years 1-5	Annual Cash Savings	(ECU 1 M)
Year 3	Opportunity Cash Flow	(ECU 300,000)
Year 5	Scrap Value on new machine	ECU 500,000

6 Conversion into Cash

Improvements in energy equipment and technology may be related to improvements in product quality or delivery time. These improvements can often be converted into cash values. For example, a proposal may be for new machinery. This machinery may lead to improvement in product quality. If you do not include this benefit in the analysis, you may seriously underestimate the value of the project. For example, the quality improvements may lead to cost savings through the reduction in scrap and wastage, the amount of time on repairing or reworking defective returns and the time it takes to inspect each product. As the quality improves, the company may expect to have less cash outflows from its warranty service since fewer products will need to be repaired within the warranty service period. The increase in quality may also lead to an increase in sales. You will need sufficient information to make informed judgements on how the increased quality will affect cash-flows.

It is very important that you distinguish those improvements from the investments which are quantifiable from those which are difficult to quantify. The bank is interested in seeing those costs and benefits which can be converted into cash. However, you will need to make sure that you can show clearly how you derived these monetary values.

7 Strategic Options

Investments of a strategic nature often offers hidden benefits beyond that found in their underlying cash flows. These hidden benefits may arise during the life of a project, but not be quantifiable, such as the greater production flexibility from the introduction of advanced manufacturing technology. Alternatively, the actual investment could open up the possibility of other wealth-creating opportunities. These opportunities could be called strategic options including:

- Entry into new markets
- Developing follow-up products and
- Improving existing practices.

The introduction of new energy industry manufacturing technology may provide the right opportunity to introduce new management practices such as just-in-time procedures. Investment in new energy technology may also give rise to entry into other markets (conversion).

The true NPV is therefore the sum of the project NPV normally calculated and the value of strategic options.

8 Checklist of Practical Tips

First, you need to decide what is the appropriate alternative to the investment project. Are there any opportunity costs which should be included in the analysis?

Second, you may list all the tangible and intangible costs and benefits of the project that are incremental to existing expenditure. Can the intangible costs and benefits be converted in to monetary values in a way that is acceptable to the bank? You may need to focus on the incremental costs and benefits that are most relevant to the bank. Any other quantifiable benefits should be considered extra ammunition but not core to your central argument.

Include only future, incremental cash flows relating to the investment decision and its consequences. This implies that:

1. Only additional fixed overheads incurred are included.
2. Depreciation (a non-cash item) is excluded.
3. Sunk (or past) costs are not relevant.
4. Interest charges are financing (not investment) cash flows and therefore excluded.
5. Opportunity costs (e.g. the opportunity to rent or sell premises if the proposal is not acceptable) are included.

Profit is not so relevant as cash flow in decision analysis.

* Replacement decision analysis examines the change in cash flows resulting from the decision to replace an existing asset with a new asset.

9 Commentary on the Cash-flow Projections

The following is a commentary on the Cash-flow Projections in the Business Plan Form.

9.1 Operating Profit

9.1.1 Total Turnover

This includes any and all sales revenue connected to the project.

9.1.2 Raw material

This has been stated in the section on Transaction Costs.

9.1.3 Other direct operating costs

This has also been stated in the section on transaction costs.

9.1.4 Gross profit

This is the addition of the turnover less the costs of raw material and other direct costs.

9.1.5 Indirect costs

These are incremental costs associated with the project such as:

1 Sales and marketing

2 Utilities and maintenance

3 Overheads

4 Other

5 Total Operating Expenses (excluding depreciation). This is the total of lines 1 through 4.

9.1.6 Operating profit (excluding depreciation)

This is gross profit less total operating expenses.

9.2 Working capital

See the discussion above at Working Capital. Changes in working capital are taken account by the next three lines.

9.2.1 Decrease (increase) in stock

A decrease in stock (inventory) means that there is a net inflow of cash to the firm while an increase in stock is a net outflow of cash.

9.2.2 Decrease (increase) in debtors

A decrease in debtors (less number of outstanding debts owed to the firm) means a net inflow of cash to the firm while an increase in debtors is a net outflow of cash.

9.2.3 Decrease (Increase) in creditors

A decrease in creditors (a lower amount of debt to the firm) is a net inflow of cash while an increase in creditors is a net outflow of cash.

9.2.4 Operating Cash Flow

This is the sum of the operating profits, depreciation, decrease (or increase) in stock, decrease (or increase) in debtors and increase (decrease) in creditors.

9.3 Taxation

See discussion above in Taxation. The main point is that taxes appear in the cash-flow statement when they are actually paid.

9.4 Capital Expenditures

This is the expenditure on fixed assets which have an economic life of more than one year.

9.5 Free cash-flow (pre-finance)

This is the cash not retained and reinvested in the business. The free cash-flow is the operating cash flow less tax paid and less capital expenditures. The capital expenditures should be clear from your analysis conducted in Section 6: Transaction Costs and Timetable.

9.6 Servicing of Finance

9.6.1 Interest paid

This is the interest paid on all long term loans.

9.6.2 Bank fees paid

These are fees paid to the bank for obtaining the loan.

9.6.3 Net cash-flow before financing

The net cash-flow before financing is equal to the free cash-flow less the total cost of servicing of finance.

9.7 Financing

9.7.1 Issue (redemption) of ordinary share capital

Cash inflow from the issue of an equity stake in the firm. Cash outflow from the redemption of equity/share capital in the firm.

9.7.2 Others: long term loan receipt/(repayment)

These are cash outflows from the repayments of long term loans to other banks, or cash inflows from loans negotiated with other banks.

9.7.3 Bank: loan (repayment)

These are cash outflows generated for the repayments of the loan to the bank.

9.7.4 Bank: loan requirement

This is the money to be received from the bank and should be equivalent to the capital expenditure on the project in the period concerned.

9.7.5 Short term loan receipt/(repayment)

These are any repayments to be made in respect of short term loan obligations or cash inflows from short term loans negotiated and received.

9.7.6 Net cash-flow after financing

The net cash-flow after financing is the net cash-flow before financing less the amount paid for financing.

9.8 Ratios

9.8.1 Gross Profit Margin

Total turnover (total revenues) less total direct operating costs divided by total turnover.

9.8.2 Net Profit Margin

Net profit before tax divided by total turnover.

9.8.3 Return on Equity

Net profit before tax divided by shareholder's equity. (See Balance Sheet in Section 12 Appendix Pro-forma Financial Statements.)

9.8.4 9.8.4 Current Ratio

Current assets divided by current liabilities. (See Balance Sheet in the Appendix Pro-forma Financial Statements.)

9.8.5 Acid Test (Quick Ratio)

Current assets less stocks divided by current liabilities. This measures the ability of the firm to meet its short-term liabilities by generating cash-flows from its most liquid assets.

9.8.6 Free Cash-flow to Debt Service Ratio

This is the free cash-flow divided by the interest paid and the total long term loan repayment. This measures the firm's ability to pay for its long term loan out of the cash-flow from the project.

Pro-Forma Financial Statements

Pro-Forma Financial Statements

1 Introduction

The Pro-forma Financial Statements consist of the Income Statement (Profit and Loss Account), the Balance Sheet, Cash-flow and Financial Ratios. Please note that the information provided in these statements may have already been stated in the Section 6: Transaction Costs and Timetable and in Section 11 Cash-flow Projections. In this commentary, a brief explanation of each of the items in the financial statements is given. For the sake of clarity, an example from a real-life project is presented at the end of this commentary so that the reader can see how the calculations of various items interrelate. (Please note that the name of the project and the actual numbers have been altered in order to preserve and protect the confidentiality of the parties concerned.) In general, there are three stages in preparing the pro-forma financial statements:

2 Stage 1 Pre-finance

In this stage, you present the financial condition of the company without any consideration of long term finance.

3 Stage 2 With Finance

In this stage, you show the financial condition of the company with finance.

4 Stage 3 Differential between Stage 1 and Stage 2

Finally, in the last stage, you show the difference between the projections set out in Stage 1 and the projections in Stage 2.

5 Forecasted Income Statement

The following is a commentary of the Pro-forma Financial Statements in the Business Plan Form.

Forecasted Income Statement Including bank Loan (in thousand USD). For items 1 through 13, please refer to the Commentary on Operating Profit.

1 Total turnover
2 Raw material
3 Other Direct Operating Costs
4 Gross Profit
5 Indirect Costs
6 Sales & Marketing
7 Utilities & Maintenance
8 Overheads
9 Other
10 Total Operating Expenses (excl. depreciation)
11 Operating Profit (excl. depreciation)
12 Depreciation

This is an accounting measure of the declining value of an asset over the lifetime of the asset. Please note that depreciation must be "neutralised" in the Cash-flow statement.

13 Operating Profit

Operating profit is equal to the amount of Operating Profit excluding depreciation plus the amount of depreciation. This figure for Operating Profits is equal to line 1 of the Forecasted Cash-flow below.

14 Interest Expense
This is the interest expense on the loan sought.

15 Bank fees
These are fees to be paid to the bank.

16 Net Profit Before Tax
Net Profit before Tax is equal to the Operating Profit less the Interest Expense and bank Fees.

17 Taxation
This is the expected tax to be paid.

18 Net Profit After Tax
This is the Net Profit before Tax less the Taxation.

6 Forecasted Balance Sheet

Forecasted Balance Sheet including bank Loan (in thousand USD).

6.1 Introduction

The balance sheet is designed to illustrate a company's financial position (that is, the assets owned, shareholders' funds and liabilities owed) at a specific point in time. The balance sheet relationship between assets, shareholders' funds and liabilities can be expressed as:

Assets = Shareholder's funds + Liabilities.

Another way of saying the same thing is:

Total Assets = Total capital + Liabilities.

In the format below, the long term debt owed to the bank is clearly set out as part of the overall relationship:

Total Assets = Shareholder's Equity + Long Term Debt + Current Liabilities.

6.2 Assets

1. Tangible Assets
The tangible assets are whatever "you can kick". In other words, they are physical items.
2. Accumulated Depreciation
This the depreciation per year added consecutively for each year.
3. Net Book Value
This the value of the Tangible Assets less the Accumulated Depreciation.
4. Stocks
These are short term items in inventory that are expected to be sold within a year.
5. Debtors
These are debtors to the firm which are expected to pay the firm within a year.
6. Cash
These are liquid assets that can be turned immediately into cash.
7. Current Assets
The Current Assets is equal to the total of the Stocks, Debtors and Cash together.
8. Total Assets
The Total Assets is equal to the total of the Net Book Value and the Current Assets.

6.3 Liabilities

9. Called up share capital

This is the cash which shareholders have paid in to the firm.

10. Profit & Loss account
    This is the amount of profits (or loss) which was not distributed as dividends.
11. Shareholder's equity
    This is difference between the amount of the Called up Share Capital and the Profit and Loss Account.
12. Long Term Debt
    This is amount of payment on long term debt.
13. Trade creditors
    This is the short term debt owed to suppliers and others who are expected to be paid within a year.
14. Short term debt
    These are debts due for payment within a year.
15. Current Liabilities
    This is the total of Trade Creditors and Short term Debt.
16. Total Liabilities
    This is equal to the Shareholder's Equity plus the Long Term Debt and the Current Liabilities.

7 Forecasted Cash Flow

Forecasted Cash Flow including bank Loan (in thousand USD). Please note that the definition of the following terms are found in Commentary to Cash-flow Projections.

1. Operating Profits
2. Add Back Depreciation
3. Decrease (Increase) in stock
4. Decreases (Increase) in debtors
5. Increase (Decrease) in creditors
6. Operating Cash Flow
7. Taxation Paid
8. Capital Expenditures
9. Free Cash Flow
10. Servicing of Finance
11. Interest Paid
12. Bank Fees Paid
13. Dividends Paid
14. Net Cash Flow before Financing
15. Financing
16. Issue of ordinary share capital
17. Others long term loan payment
18. Bank long term repayment
19. Long term loan requirement
20. Short term loan
21. Net cash flow from financing

8 Forecasted Ratios

Forecasted Ratios including bank Loan (in thousand USD). Please refer to the definitions of the following ratios in the Commentary to Cash-flow Projections.

1. Gross Profit margin
2. Net Profit Margin
3. Return on Equity
4. Current Ratio

5. Acid Test (Quick Ratio)
6. Gearing
7. Cash-flow to Debt Service Ratio

