

Chapter 4 The Business Plan

This table explains which sections of the Business Plan are completed in each chapter of the toolkit:

Toolkit Chapters:	Business Plan Section Titles:
Chapter 1	Business Description
Chapter 2	Opportunity
Chapter 3	Marketing Competition Operations Technology Finance
Chapter 4	Schedule Impacts Closing and Executive Summary

The business plan is the fundamental road map for any energy enterprise. This chapter will present the remaining topics to be included in your final business plan and provide a structure for presenting the material in a coherent form to potential lenders, investors and partners.

To reiterate, a good business plan does the following:

- Shows that the proposed business is a serious initiative, undertaken by capable entrepreneurs who understand and have control of the essential elements that will assure success.
- Increases the chances that an entrepreneur will be able to attract investors, lenders, partners, strategic allies, suppliers and key staff.
- Forces the entrepreneur to collect, in one place, all of the thinking and research that has gone into the development of a proposed business.

1. LENDER AND INVESTOR POINTS OF VIEWS

It is important to differentiate between lenders and investors.

Lenders (usually bankers) make loans (debt) in the expectation of a very specific set of payments over time. Their requirements are usually well defined as to what conditions must be met in advance and over the course of the loan. *Lenders do not want to bear risks* and they do not generally enjoy any benefits of a business being profitable. Lenders want to be repaid and if the business cannot make that repayment they want to know that others will make the payment or that assets of equivalent value are available to reimburse them.

Investors make equity investments in businesses. They expect a higher return than lenders and are willing to take more risk, but this should not be confused with being risk-takers. They are equally clear about what they are willing to do or not do. Their interests are in seeing a business succeed and in earning a return on their investment. When they are a significant participant in a business, they tend to establish very specific (and stringent) rules and targets to make sure that things are going well. When things are not going well investors often have the ability to make significant changes in a business, including replacement of the management team.

It may sound as though the interests of lenders and investors are aligned: to get paid. Sometimes this is true, especially when things are going well and especially in the early stages of a business. However, very few businesses go exactly as planned and “course corrections” are needed. Depending on the seriousness of these corrections the interests of lenders and investors may become very different.

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Why do Investors invest? Investors provide equity to a business for a variety of reasons. It is important that entrepreneurs understand the goals and objectives of investors before going too far in discussions. Investors provide equity to:

- ❑ Produce income in the form of cash dividends (often in a particular pattern as in the case of an investment fund that has promised returns to its investors over a specific time period).
- ❑ Achieve capital growth (with or without specific time constraints; a traditional equity investor-partner is involved over the life of a business whereas a fund investor, as noted above may have a contractual obligation to liquidate its investment in 6, 8 or 10 years).
- ❑ Enter a market (and thereby avoid the start-up and market research costs and problems of entering a market alone, preferring instead to join forces with a business already developed).
- ❑ Sell a product (especially equipment).
- ❑ Form a partnership and thereby grow quickly (similar in appearance but substantively different than making an investment to enter a market).

In contrast, why do lenders make loans? The list of reasons tends to be shorter, but it is equally important, especially in a new field such as renewable energy, to understand the motives of a lender. Taking it for granted that all lenders make loans because that is an important part of their business and a source of profits there are other reasons to consider. Lenders make loans (provide debt) to:

- ❑ Build relationships with clients who will be a source of future business.
- ❑ Enter new business areas that can expand their loan portfolio profitably and provide a competitive advantage to the bank.
- ❑ Contribute to economic and social growth and thereby stimulate greater lending activity.

It is important to note that many banks simply do not lend for “projects” (bankers separate project finance – which is secured by the project proposal – from corporate finance – where all of the activities and assets of a company guarantee a loan – and many do not lend for groups without substantial experience and assets). Learning the interests of banks in advance can save a great amount of time.

What do lenders and investors look for? There are different degrees of emphasis placed on the following factors but both lenders and investors look for:

- ❑ Strong sponsor (experience, credibility, skills, commitment of time and money).
- ❑ Solid business fundamentals and assumptions (raw materials, process, outputs).
- ❑ Clear competitive advantage and business strategy.
- ❑ Risk assumption by others (completion of business both from the standpoint of time and money, insurance for accidents, guarantees of performance of equipment).
- ❑ Clear legal and regulatory framework (energy sector, banking and investment sectors, tariffs, taxes, and incentives).
- ❑ Country stability (political, economic and disasters, especially climate driven).
- ❑ Exit mechanisms (for bankers: repayment backed up by security and guarantees; for investors: sale of assets or shares to 3rd parties, buy-back by business, re-financing, dividends).

2. FINANCIAL ANALYSIS

In Chapter 3 you took the first step in preparing the financial statements to be included in your business plan – the income statement and pro-forma income statement. Now it is time to prepare the balance sheet and cash flow statement, the remaining two pieces of your financial analysis.

Balance Sheet

The balance sheet is a financial presentation of what your business owns and what it owes at a specific date. Anything that your business owns is an asset and anything your business owes is a liability. The

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balance sheet basically splits assets and liabilities into two columns with the goal of having more assets than liabilities, or at least having the two columns equal.

Assets include the following categories:

Current Assets: includes any items that can be converted into cash over the next twelve months. Examples include cash, accounts receivable, inventory or short-term investments.

Fixed Assets any items that cannot be easily converted into cash within twelve months. May include land, buildings, equipment, furniture, and vehicles.

Long-term Investments: any commitments the company has made in terms of long-term investments.

Total Assets: The total of your company's Current and Fixed Assets.

The liabilities section of the Balance Sheet includes:

Current Liabilities: all debts and monetary commitments payable within the next 12 months. This includes accounts payable, short-term debt, interest and taxes

Long-term Liabilities: all debts and monetary commitments payable over a period exceeding 12 months including debt and taxes.

Equity: this is the owners' investment in the company. Break into separate lines if there are multiple owners or shareholders.

Total Liabilities/Net Worth: Add together the current liabilities, long-term investments and equity to determine the amount of money due plus the owners' value.

The following is an example of a balance sheet:

Assets		Liabilities	
Current Assets	Value (\$)	Current Liabilities	Value (\$)
Cash		Accounts Payable	
Accounts Receivable		Short-term Debt	
Inventory		Interest Payable	
Short-term Investments			
Other		Other	
Total Current Assets		Total Current Liabilities	
Fixed Assets		Fixed Liabilities	
Building		Long-term debt	
Equipment		Taxes Payable	
Land		Other	
Long-term Investments			
Other			
Total Fixed Assets		Total Fixed Liabilities	
		Equity	
Total Assets		Total Liabilities	

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Cash Flow Statement

You now have all the information needed to prepare a cash flow statement, which is basically a financial analysis on a “checkbook” basis. That is comparing cash flows to and from the business and estimating the overall business’s internal rate of return (IRR). Later this IRR calculation will become more sophisticated, taking into account not just the Business IRR, but estimating what the return to equity investors will be after a financing plan is put in place (Investor IRR or Return on Equity). It is recommended that you prepare two cash flows. The first should be monthly to cover a year of operations. The significance of a monthly cash flow is that it illustrates when you generate revenue and whether or not you can pay your expenses each month. The second cash flow should be annual and cover at least a 5-year period or until the assets are used or the loan/equity is paid. An annual cash flow shows that you can pay your debts and gives the lender and investor an idea of how your business grows and what return they can expect for their money.

The easiest way to compile a cash flow is to take the headings from your income statement through Net Profit (or Loss) and add the following items:

Add back Depreciation: You deduct depreciation to calculate the amount of taxes you owe so it must be added back to calculate your cash flow.

Amortization: All payments due on loans. Deduct the loans from your Net profit.

Net Cash Flow: The total of Net profit plus depreciation after inclusion.

Cumulative Cash Flow: Add each period’s cash flow together to derive the cumulative.

Internal Rate of Return: This calculation measure the extent to which investors earn money for their initial investment. The simplest way to calculate this is using Microsoft excel or other software. The concept is explained in more detail below.

Example of a cash flow:

Cash Flow	Period
Net Revenues	
Cost of Goods Sold:	
Gross Profit:	
Total Operating Expenses:	
Interest	
Taxes	
Depreciation	
Net Profit (or Loss)	
Add back Depreciation	
Less Payments	
Net Cash Flow	
Cumulative Cash Flow	
Internal Rate of Return	

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Business Rate of Return

Based on cash flow projections it is relatively easy – with the aid of a financial calculator or spreadsheet software – to determine the businesses internal rate of return. Combined with a few pieces of additional information it will be possible to conclude if a business is generally feasible from a financial perspective.

Combined with the businesses internal rate of return the entrepreneur needs to know:

- ❑ What is the current interest rate charged for loans in the local market?
- ❑ What is the current or projected interest rate for loans from outside the current market?
- ❑ What are investors demanding as a rate of return to make their funds available to business as equity?

If a business's IRR is 16% and the cost of borrowing money in the local market is 20% then there is little reason to borrow in the local market unless a large portion of the business capital will come from the entrepreneur or others who are willing to receive a low rate of return. The reason is as follows, if half the business is financed with 20% debt then the other half must be financed by people willing to receive a return of 12% (50% financed at 20% combined with 50% financed at 12% equals 100% financed at an average 16%). Why would investors make risk capital (equity) available at a rate of return lower than a bank loan and take more risk in the process? There are reasons to organize such a business, but clearly these reasons must be clear at the outset. The most significant reason is the expectation by equity providers that the business is going to increase in value beyond the projections shown in the cash flow (which raises the question: why aren't these values being shown?¹). Businesses where the IRR is below the cost of borrowing are generally only feasible as businesses with all or substantially all of the capital coming from equity.

There are cases where lower interest loans are available. The situation where a loan from outside a market is willing to accept a lower interest rate than the rate demanded by the local market usually implies one or more of the following:

- ❑ Concessionary finance program by a government or institution.
- ❑ Equipment or market opening financing by a company with or without the support of the exporting country's government.

Such financing can serve to lower the hurdle rate – the IRR a business needs to meet to be feasible, but usually comes with significant requirements to be met.

When then is a business not feasible from a financial perspective?

- ❑ First, if a business has a negative IRR.
- ❑ Second, if a businesses IRR is too low for even the entrepreneur to invest his or her available cash.
- ❑ Third, (assuming the entrepreneur does not have all the capital required) if the business IRR is too low to attract other equity investors to supply their cash at risk.
- ❑ Fourth, (assuming an all equity transaction isn't feasible) if the business IRR cannot support the borrowing of funds through loans, the business could rarely be feasible.

The Hardest Task

This is the stage of analysis where very often well-intentioned entrepreneurs refuse to see the reality staring at them from the numbers THEY prepared. There is hope in “financial engineering”, defined as

¹ Where businesses may increase in value for reasons other than basic cash flow AND where a business is going to be able to capture this value through, for example, a sale to someone, it is possible to show this value increase by inserting a “terminal” value in the year of the sale. However, there must be a reasonable expectation that this increase in value will be turned into a cash-producing event.

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estimating higher revenues than estimated, lower costs, eliminated contingencies, subsidy programs, lower loan costs, value increases and so on. It is OK (and normal) to refine estimates, but there is a point when only the entrepreneur can determine if he or she is fooling himself or herself. It is easy to change assumptions and improve the IRR. There is an old saying that statistics do not lie; only statisticians do. Notwithstanding the ability to manipulate data – and with the help of spreadsheets it is as easy as point and click - the entrepreneur needs to decide if the business can truly be implemented and if refining the estimates and financial plan makes sense. At this point in the business's analysis **there should be a great deal of room for error**. If the business is just barely financially feasible, if the business absolutely depends on convincing others to make loans and equity investments, if the business estimates have been gone over and over mostly to make the result better, if the entrepreneur has gotten the opinion of others and it is still a very close call then continuing with the business is probably **a bad use of the most valuable commodity an entrepreneur has: his or her time**.

Please read **Annex E-Basic Concepts of Financial Analysis** for a review of the terminology and methods presented.

3. SCHEDULE

This is the place in the business plan where you put together a schedule, or timeline, of when you will implement the business strategies. The key milestones, such as hiring employees, receiving approvals for permits, acquiring stock, expanding operational capacity, operations schedule, reaching profitability, and others should be included here. Again, be thorough, but keep it clear and simple.

A schedule helps the audience of your business plan understand how the business is planning to accomplish the goals and deliverables presented throughout the document. It shows that you have thought through the implementation, that you are organized and you understand how to launch operations.

A simple format to use is dividing the schedule into the following categories: Planning, Pre-operations/Construction and Operations.

Start a draft timeline using the following table. Include a description of each activity under each category. Estimate a date when the activity will be pursued.

Category	Activity	Timeline
Planning		
Pre-Operations/ Construction		
Operations		

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is selling a lantern or solar home system to shop owners so that they can stay open in the evening, thus increasing their sales. Finally, environmental impacts are those that preserve the environment. All clean energy businesses have environmental benefits because the technology used is environmentally superior versus technology reliant on traditional energy sources or fossil fuels. Another example is offsetting or reducing dependence on wood or charcoal, which preserves forests and combats desertification. A calculation of reduced greenhouse gases can also be prepared. There are investors who are interested in buying the avoided greenhouse gases (typically carbon) from your business. It is not necessary for every business to have social, economic and environmental impacts.

6. THE EXECUTIVE SUMMARY (add definition and 3 or 4 examples)

7. SUMMARY OF WHAT HAS BEEN LEARNED

At this point all sections of the business plan and their content have been covered. Now it is time to compile all your written material into the business plan. The goal of this toolkit was to break the business plan into building blocks to make the task of writing a business plan less daunting.

In Chapter 1 you started by writing the first draft of your Business Description, Section 1 of the business plan. The Business Description is the portion of the plan where you provide a narrative of your business. The remainder of the business justifies and details the information presented. By the end of this section the reader must have a clear picture of what it is you are proposing.

The following two chapters, Chapter 2 - Fact-Finding, and Chapter 3 - Feasibility Analysis were presented as a step 1 and 2 process. This can be best explained by example. Every business must defend why customers will buy the proposed product or service. This is done by proving that an opportunity exists and that customers can afford the product or service and are willing to purchase it. In order to do this information about the customers and the environment in which you will operate must be gathered before you can decide if it is good business opportunity. Chapter 2, Fact-Finding, explains how to collect this type of information and where it should be included in your final business plan. Then, Chapter 3, Feasibility Analysis, demonstrated how to take the data, along with other business assumptions, and calculate the feasibility of the business opportunity. By the end of Chapter 3 sufficient analysis has been completed to write the business proposal or feasibility study.

Lastly, Chapter 4 – The Business Plan, introduces the final elements; such as a schedule and executive summary; that must be included in your business plan. The final step is to review the outline of the business plan format below and compile your information into a descriptive, organized document that can be presented to possible lenders, investors or partners. **Annexes G, H, I and J** provide helpful examples and information to assist you in this final stage.

8. DETAILED OUTLINE OF AN ENERGY BUSINESS PLAN

A good business plan is built on solid information. The following is a proposed format that does just that:

- BUSINESS DESCRIPTION
- OPPORTUNITY
- MARKETING
- COMPETITION
- OPERATIONS
- TECHNOLOGY
- FINANCE
- SCHEDULE
- RISKS
- IMPACTS

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In addition to these elements, a business plan contains:

- ❑ CLOSING, which describes the business’s proposed capitalization plan and what is being requested from lenders and investors;
- ❑ COVER, which provides simple but crucial information to help readers understand the document and locate the entrepreneur;
- ❑ An executive SUMMARY, which tries to tell the business’s “ story” in one or two pages;
- ❑ A set of ATTACHMENTS, which provide details concerning some of the points made in the business plan.

While certain businesses may require additional content most, if not all, business information can fit within this structure.

Annex G includes sample business plans for a:

- ❑ Grid-connected hydroelectric business;
- ❑ Solar enterprise selling both product and services to rural communities; and,
- ❑ Company providing income generating equipment dependent on energy supplies and efficiency.

Cover and Table of Contents

- ❑ Business Title, Location, Technology, Size
- ❑ Contact Information
- ❑ Contents by Section and Page Number
- ❑ Disclaimer and Confidentiality Statement

Executive Summary

Section 1 – Business Description

In this section of the business plan the product or service to be sold is described as well as the location. The goals for starting the business are presented. Finally, the business structure – retail, wholesale, manufacturing, project development – should be explained as well the ownership structure - how are profits distributed? Any permits or licenses that have or need to be acquired should also be presented. The section need not be long or detailed, but rather clear and concise. The Business Description completed in the Feasibility Analysis can be used in the Business Plan.

- ❑ Business location and Setting
- ❑ Product or service to be offered
- ❑ Goals and Objectives
- ❑ Business legal and ownership structure
- ❑ Permits and licenses

Section 2 – Opportunity

Describe and defend in the customers that will buy your product or service. The goal of this section is to prove that there are sufficient customers that are willing and able to buy your product.

Section 3 - Marketing

In this section, the strategy for selling the product or service is presented in detail. This section should have been completed in Chapter 3 and presented in the Feasibility Analysis. Include the following:

- ❑ Pricing Strategy
- ❑ Distribution Plan
- ❑ Marketing (Advertising and Promotion)

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Section 4 – Competition

This section is the opportunity to defend why there is and will continue to be demand for your product or service in light of the competitors. It is also extremely important for you to understand your competition and it helps you learn about the market. Use the section created for the Feasibility Analysis including the following:

- Names and description of competitors
- Strengths and weaknesses
- Competitive advantage

Section 5 – Operations

This section describes how the business will operate. Namely it describes your organizational structure and then how each department will operate. Again use the completed section from the Feasibility Analysis.

- Organization Structure
- Operations

Section 6 –Technology

This section describes in detail the technology and energy resource to be used. Explain the process, appropriateness and track record. Use section completed in Feasibility Analysis.

Section 7 – Finance

In this section all of the financial features of the business are presented. The most important financial assumptions of the business are shown, the proposed financial plan is described and an analysis is made of the impact of various changes to the basic financial assumptions.

- Worksheet of funds required
- Income Statement
- Balance Sheet
- Cash Flow

Section 8 – Schedule

Write a schedule and timeline of major milestones to be reached. Use schedule from Feasibility Analysis section.

Section 9 – Risk Factors

This section describes the risks that the business faces and how the business plans to deal with these risks. Include the risks with possible mitigation measures.

Section 10 – Impacts

Social, economic and environmental benefits of the business's implementation, and any other special features of the business, are described in this section.

- Local employment
- Economic activity stimulated
- Improvements to physical assets
- Social benefits
- Protection of environmental quality
- Pollution avoidance or elimination
- Greenhouse gas (carbon) benefits

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Closing

The Closing section of this business plan summarizes the businesses' proposed capitalization plan and what is being requested from lenders and investors.

Attachments

- Complete financial statements
- Summary of technical and market studies
- Copies of authorization letters and permit approvals
- Detailed background and financial information about the sponsor

GOOD LUCK!!!

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