Preparing A Business Plan

For A

SMALL-SCALE

RECYCLING-RELATED VENTURE

Michael Lewis

Institute for Local Self-Reliance

Environmentally Sound Economic Development

PREPARING A BUSINESS PLAN FOR A SMALL-SCALE RECYCLING-RELATED VENTURE

Prepared for:

National Capital Area Project Tri-City Working Groups from Baltimore, Maryland, Richmond, Virginia Washington, DC

Prepared by:

Michael Lewis Institute for Local Self-Reliance Washington, DC

INSTITUTE FOR LOCAL SELF-RELIANCE

The Institute for Local Self-Reliance (ILSR) is a nonprofit research and educational organization that provides technical assistance and information to government, citizen organizations, and industry. Since 1974, ILSR has researched the technical feasibility and commercial viability of environmentally sound, state-of-the-art technologies with a view to strengthening local economies. ILSR works to involve citizens, government, and private enterprise in the development of a comprehensive materials policy oriented towards efficiency, recycling, and maximum utilization of renewable energy sources.

This document is one in a series of manuals prepared for the National Capital Area Project. The five manuals listed below are available from the Institute for Local Self-Reliance's (ILSR's) National Office:

Recycling Economic Development through Scrap-Based Manufacturing

Minimizing Waste, Maximizing Recycling

Creating Local Recycling Markets

Expanding Scrap-Based Manufacturing through the Community Joint-Venture Process

Preparing a Business Plan for a Small-Scale Recycling-Related Venture

Although the information in this document has been funded in part by the United States Environmental Protection Agency (U.S.EPA) under assistance agreement X822180-01-0 to ILSR, it may not necessarily reflect the views of the Agency and no official endorsement should be inferred.

© 1994 by the Institute for Local Self-Reliance.
All rights reserved.
Printed on recycled paper in the United States.

Except for the U.S.EPA, no part of this document may be reproduced in any form or by any electronic or mechanical means, including information storage and retrieval systems, without written permission from the Institute for Local Self-Reliance.

NATIONAL OFFICE

1313 Fifth Street, SE, Suite 306 Minneapolis, MN 55414-1546 612-379-3815, 612-379-3920 fax 2425 18th Street, NW Washington, DC 20009-2096 202-232-4108, 202-332-0463 fax 101 North Broad Street, 2nd Floor
 Philadelphia, PA 19107-6502
 215-686-9242, 215-686-9245 fax

ACKNOWLEDGMENTS

The author acknowledges the assistance of the staff of ILSR, especially Neil Seldman, Brenda Platt, Tom Martin, Jane Buckley, Vickie Smith, Ingrid Komar, and Jeff Vandall. Special thanks go to Daphne Wysham for her editing work.

Also acknowledged for their diligent participation in the review process of this and all of the documents listed above are the participants of the Tri-City Working Groups of the National Capital Area Project, including but not limited to:

Baltimore, Maryland	Richmond, Virginia	Washington, DC
Susan Balser & Ken Strong Baltimore Bureau of Solid Waste	Kevin Byrnes Central Virginia Solid Waste Management Authority	Anthony Bigelow & Mike Nelson ECON, Inc.
Linda Birtel, John Lininger & Al Riddick Browning Ferris Industries	Steve Coe Cycle Systems, Inc.	Linda Bollinger Small Business Incubator Project
Council President Mary Pat	Paddy Katzen & Nancy Williams	Bill Easley & Ermon Green District of Columbia Office of
Clarke, Council Member Wilbur Cunningham & Council Member	Virginia Department of Environmental Quality	Recycling
Sheila Dixon Baltimore City Council	Aimee McCarthy Metro Economic Development	Paul Furby & Dick Tynes Eagle Recycling
Brent Coleman Baltimore Development Corp.	Council	Roger Chan, Cornbread Givens, Will Mebane & John Moore
Cyndi Hitt Baltimore Recycling Coalition	Dennis Morris Appomattox Basin Industrial Development Corporation	District of Columbia Office of Economic Development
Bill Hyman	Larry Pemberton	Joe Libertelli MetNet
Auto Green, Inc. Dennis Livingston	Richmond Dept. of Public Works	Lisa Mosczynski DICEE
Baltimore Jobs in Energy Project		Paul Ruffins
		International Bricklayers Union Les Ulanow
		ABC Recycling Services
		Diedre Williams Coalition of Economic Development Organizations

These individuals and their organizations do not necessarily endorse the ideas or findings expressed in this report.

TABLE OF CONTENTS

Why Write a Business Plan?	1
Business Plan Outline	2
The Business Plan	2
Cover Sheet	2
Statement of Purpose of the Plan	2
Table of Contents	2
Section I The Business	2
Section II Financial Data	4
Section III Supporting Documents	6
Bibliography	6
Glossary	

WHY WRITE A BUSINESS PLAN?

An effective business plan is an operating, planning, and financing tool prepared by an existing business or an entrepreneur attempting to start a new venture. Without expending the effort to produce a comprehensive business plan, a new venture runs the risk of joining the high percentage of business start-ups that fail within their first two years.

A business plan will be read and studied by people interested in evaluating the business, especially those considering investing in the venture such as bankers, financiers, government grant and loan officers, and foundations. The plan is also used by the operator of the business to gain a firm grasp on all of the vital parameters of the operation, and should be prepared even if no financing is sought.

To convince investors that the business is sound, the plan must address several key questions. These questions focus on issues which include the type of product or service, the marketing strategy, competition, personnel, and financial needs. An effective business plan addresses these concerns systematically and thoroughly.

When used to solicit financing, the business plan is accompanied by a conceptual financing strategy, which details sources, uses, and amounts of financing, schedules, terms, and other relevant information. Possible sources of funding to be mentioned in the financing strategy include private debt and equity financing (e.g., banks, venture capital firms), state financing (e.g., recycling market development grant and loan programs), federal Small **Business Administration (SBA)** financing, and funding sources available to non-profit joint ventures (e.g., corporate and foundation Program Related Investments).

This manual will serve as a starting point for preparing a useful business plan. Additional materials on business plan preparation are listed in the bibliography, and many other sources are available through local libraries. Assistance in preparing a business plan is provided by local Small Business Development Centers, the U.S. Small Business Administration (SBA), university, vocational, technical and adult education programs, and business consultants.

BUSINESS PLAN OUTLINE

A useful business plan should include all of the elements outlined below, which are detailed in the following pages. The order can vary, but the plan should follow a logical organization.

- COVER SHEET
- STATEMENT OF PURPOSE
- TABLE OF CONTENTS
- SECTION I: THE BUSINESS
 - A. Description of Industry/Market and Business
 - B. Product and/or Service
 - C. Location of Business
 - D. Competition
 - E. Marketing Plan
 - F. Management
 - G. Personnel
 - H. Application and Expected Effect of Loan
 - I. Community Benefits
 - I. Schedule

SECTION II: FINANCIAL DATA.

- A. Sources and Uses of Funding
- B. Capital Equipment List
- C. Balance Sheet
- D. Break-Even Analysis
- E. Income Statements (or Profit and Loss Statements)
- F. Cash Flow Projection
- G. Monthly Budget-Deviation Analysis
- H. Historical Financial Reports for Existing Business
- SECTION III: SUPPORTING DOCUMENTS

THE BUSINESS PLAN

COVER SHEET

The cover sheet must include the name of the business, the names of the principals, contact information, and the date.

STATEMENT OF PURPOSE OF THE PLAN

The statement of purpose is a summary of the business plan, and should be no more than three paragraphs. Basic elements of the business, such as product or service type, marketing strategy, competition, and personnel needs, should be addressed, as well as the environmental/social benefits of the enterprise. Key figures, such as the amount of financing required, must be included.

TABLE OF CONTENTS

A table of contents with major section headings and page numbers is required to improve the access and organization of the plan for the readers.

SECTION I: THE BUSINESS

This is the heart of the business plan. It must clearly explain all facets of the business, as listed below.

A. Description of Industry/Market and Business

A brief description of the industry in which the business will operate should include national factors such as annual sales (quantity and dollars), types of feedstocks, technologies and products, number of factories and companies

involved, recycling-related factors, and other important issues.

Similar information for the individual business follows the industry discussion. Issues addressed in this section include: type of business (e.g., product- or service-based), customers, and suppliers; status and form of business (i.e., sole proprietorship, partnership, corporation); start-up date and operation schedule; and, crucial for potential investors, why the business will succeed. Key government recycling regulations that benefit the business should be mentioned.

Special attention should be paid to recycled feedstock specifications, prices paid or tipping fees charged for feedstocks, recycled-content levels, new or innovative uses of recycling technologies, and other recycling-related issues.

B. Product and/or Service

This section should include detailed information on the products and/or services that the business is selling. Especially important are aspects of the products and/or services that differ from the competition and make them more marketable, such as the recycled-content level.

C. Location of Business

A business plan should be sitespecific. Even if an exact site is not listed in the plan, site requirements and specifications should be included. These include information on rent, power, water, access, loading docks, ceiling heights, zoning permits, waste and pollution issues, renovations, and community sentiment. Blueprints and maps may be included here or referenced and placed in the appendix.

D. Competition

Understanding the market and competition is vital for any enterprise, especially a new one. The closest competitors should be analyzed to determine their overall health, and they should be compared and contrasted with the new venture.

E. Marketing Plan

A marketing plan is a vital part of the business plan. It provides an avenue to identify, analyze, and satisfy target markets through several steps.

Review the business' mission statement while identifying who buys the company's products or services and what benefits they seek. Then determine why the customers buy from the business in question instead of the competition. Niche-market positioning, and publicity and promotion strategies then should be developed. With these factors in place, pricing is next calculated as equaling the cost of the product or service plus expenses plus image plus profits. Finally, goals and budgets must be determined.

All of this material is then pulled together to form the marketing strategy.

F. Management

Manager competence is a key factor in the success of any business, especially a new one. Personal resumés of the principals should accompany a thorough job description of the top management position(s), including responsibilities, salary, and required experience.

G. Personnel

Complete job descriptions for each position in the new business should be included here. Include discussions on initial and future needs, sources of prospective employees, and training issues.

If the business is employing people from a disadvantaged background, mention of this should be made in the Community Benefits section.

H. Application and Expected Effect of Loan (as Required)

All new business ventures require capital (usually for equipment) and this section details how much, for what it will be used, all financial details (taxes, fees, prices, suppliers, model names, etc.), and how the money will make the venture more profitable.

I. Community Benefits

New ventures bring benefits to their host communities. Detail the number of jobs, amount of wages to be paid, and annual revenues to be earned, and any multiplier effect anticipated through related economic activity. Other social, environmental, or economic benefits should be included, such as advantages of using recycled feedstock (i.e., reduction in energy and materials consumed, and pollution generated), community equity, job training, etc.

J. Schedule

An overall time schedule of the major events required to get the venture "up and running" should be laid out in a clear and concise matter.

SECTION II: FINANCIAL DATA

A sound managerial accounting system is essential for any business. This system should be designed by a competent accountant and be put in place prior to the start-up of the venture.

A. Sources and Uses of Funding

All funding sources are delineated in one chart, and the uses of that funding in another. Include copies of legal documents as relevant.

B. Capital Equipment List

All capital equipment (durable goods used in the process of the business that are not sold as product) should be listed with model information and cost.

C. Balance Sheet

A balance sheet is a standard accounting tool that shows the distribution of assets, liabilities, and net worth at a given point in time for a business. A sample form follows:

assets current assets (e.g., cash, stocks)	\$
net fixed assets (e.g., land, plant)	\$
(fixed assets less accumulated depr	eciation)
other assets (e.g., patents)	\$
total assets	\$
footnotes	
liabilities	
current liabilities	\$
(e.g., accounts payable, taxes)	
long-term liabilities (e.g., mortgages)	\$
total liabilities	\$
footnotes	
net worth	\$
(total assets less total liabilities)	-

D. Break-Even Analysis

The break-even point for a business is where the level of sales makes the fixed costs (e.g., rent, salaries) plus the variable costs (e.g., cost of goods sold) equal to revenues. A point in time is then associated with the break-even dollar figure, meaning the business is projected to become "profitable" after that date.

A variation on establishing a breakeven point in time is to calculate return on investment (ROI). This is the annual rate of money made on the initial capital outlay through the business. Therefore, an ROI greater than zero percent indicates a profitable investment. However, financiers seek ROIs equal to or greater than the interest rates available from other opportunities.

E. Income Statements (or Profit and Loss Statements)

Used in conjunction with the balance sheet, an income statement provides a dynamic view of the company's financial health over a period of time. If that period of time is a projection of future activities, then the statement is called a "pro-forma." An income statement calculates pre-tax profit/loss as net sales (gross sales less cost of goods sold) less total expenses (operating and other expenses), and subtracts the appropriate taxes to arrive at the net profit/loss.

A business plan should include three projected income statements with appropriate notes: 1) a three-year summary; 2) the first year detailed by month; and 3) the second and third year detailed by quarter. Past statements should be included for reference.

F. Cash Flow Projection

A cash flow analysis for a young business is vital, as it will forecast amounts of cash needed. Laid out month-by-month for the first year and by quarter for the second and third years, the cash flow statement subtracts cash disbursements from total cash receipts to determine net cash flow. Adding these periodic totals results in a cumulative cash flow for the year. Sources of income are also listed in the cash flow projection.

Included in the cash flow projection is amount of working capital, or wealth required to cover initial operating costs, needed for each time period. Later operating expenses may be paid from sales revenues.

G. Monthly Budget-Deviation Analysis

A monthly budget-deviation analysis identifies the differences between past cash flow projections and reality, and examines the reasons for the inevitable discrepancies. This analysis is used in planning and projection activities, and becomes a gauge by which potential investors can measure management's planning ability. The business must have some operating experience with which to compare the budget, therefore, this tool is not appropriate for a start-up venture.

H. Historical Financial Reports for Existing Business

A historical record of past activities of the business should be included in the business plan when possible. Balance sheets, income statements, and tax returns for the past three years will suffice.

SECTION III: SUPPORTING DOCUMENTS

Any document that may lend support to the business plan should be included in this section. These include personal resumés, credit reports, letters of reference and balance sheets of the principals involved in the venture, cost-of-living budgets, job descriptions, letters of intent, leases, contracts, legal documents, patents, news articles, and pertinent recycling regulations.

BIBLIOGRAPHY

- 1. David H. Bangs, Jr., The Business Planning Guide: Creating a Plan for Success in Your Own Business, The Wharton Small Business Development Center, University of Pennsylvania, 1992.
- 2. ARCH Development Corporation, "Business Plan Requirements," inhouse document, Washington, DC, 1992.
- 3. Margaret Gainer, Community Model for Creating Small Manufacturing Enterprises as Local Markets for Recycling, Gainer & Associates, Arcata, California, 1992.
- 4. The Recycling Market Development Team, Wisconsin Recycling Business Development Assistance: Where to Look for Help with Business Plans, Recycling Markets, and Financial Assistance, Wisconsin Department of Natural Resources, Madison, Wisconsin, July 1992.
- Tonia Papke, Writing Your Business Plan – Step by Step, Management Development International, New York, New York, 1991.

GLOSSARY

break-even analysis

An assessment to determine a level of unit sales or a point in time when a firm's amount of sales revenue equals its total costs.

budget-deviation analysis

An assessment to identify the differences between past cash flow projections and reality, and to examine the reasons for the inevitable discrepancies.

business plan

A document describing a proposed business venture which may be used as an operating, planning, and fundraising tool.

cash flow analysis

An assessment to forecast the amounts, schedules, and sources of cash needed by subtracting the cash disbursements from the total cash receipts to determine the net movement of funds for a given period.

community development organization

An organization which is primarily concerned with economic development at the local community level.

conceptual financing strategy

A plan that describes sources, uses, and amounts of financing, as well as schedules, terms, and other relevant information (often accompanying the business plan).

equity

A risk interest or ownership right in a property.

feedstock

Raw material input into a process.

income statement

A statement which lists revenues, expenses, gains, and losses for a period of time ending with the net income for the period.

joint venture

A collaborative business arrangement involving a number of parties working together on a particular project; the parties can include any combination of businesses, governments, community groups, and financiers.

pro-forma

Projected financial statements.

program related investments

Foundation or corporate funds available to non-profit ventures at low cost.

recycling

Commonly, the use of secondary materials in the production of new items. Recycling by definition often includes materials reuse.

recycling market development

Increasing the financial viability of recycling collection programs and the remanufacture of products using recycled materials through promotion, business conversion, and economic development strategies.

recycling-related venture

Any business that collects, processes, or remanufactures recycled materials.

ROI

Return on investment. The ratio of income to net value for a project.

SBA

Small Business Administration.

scrap-based manufacturing

Production of new products using recycled feedstock.

tipping fee

The charge assessed for unloading solid waste at a disposal or transfer site.

U.S. EPA

United States Environmental Protection Agency.