

***TOOLKIT FOR SETTING UP ELECTRONICS RECYCLING
PROGRAMS***

SECTION II

***GUIDANCE FOR POTENTIAL ELECTRONICS RECYCLING
ENTREPRENEURS ~ BEFORE WRITING A BUSINESS PLAN***

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INTRODUCTION

The purpose of this section is to help entrepreneurs make an informed decision whether to pursue plans for starting an electronics recycling business, before writing a business plan.

For purposes of this section, a supplier is a source of electronic material that the company will handle. Buyers are the end-markets: the entities that will buy the product or material from the electronics recycling company. Both suppliers and buyers are currently revenue sources in the electronics recycling industry.

THRESHOLD QUESTIONS FOR ENTREPRENEURS CONSIDERING STARTING AN ELECTRONICS RECYCLING BUSINESS

Do you have expertise in the consumer electronics and recycling industries?

Two of the requirements for a successful electronics recycling operation are a thorough understanding of the consumer electronics and recycling industries.

A working knowledge of consumer electronic equipment, including their manufacture and components, and issues affecting current and future electronics markets are essential. In addition, having a strong familiarity with the recycling industry and the issues affecting recycling markets, particularly the volatility of the commodities marketplace, is fundamental to your future success.

This knowledge also can provide insights about the type of electronics recycling company to start, the competition that it will face, and the scale of operations that will be necessary for the company to sustain itself.

What type of electronics recycling services will be offered?

The electronics recycling industry includes a variety of electronics recycling strategies. Often companies offer a combination of services. For example, recycling strategies may include:

- Collection – setting up a system for taking used electronics from consumers
- Refurbishing/resale – assessing and managing electronics for resale as is or by refurbishing (minor repairs and/or upgrades)
- Demanufacturing – disassembly and separation of parts and materials for resale or processing as scrap
- Shredding – shredding whole units and selling commodity streams for recycling
- Brokering – selling used electronic units or individual components to another vendor
- Asset recovery – managing surplus property from government and large companies.

An additional element to consider is who the customers will be: municipal or regional government, small businesses, large businesses, government agencies, other

recyclers? Each requires unique services and will be sources of different types and volumes of electronic equipment.

🔗 What will be the business' competitive edge?

For a business to succeed it must fill a niche that similar companies in the service area do not. This means providing a unique service that the potential electronics suppliers in your area want. This might include meeting or exceeding environmental and worker safety standards, competitive pricing, providing specific services and processes, meeting end-market concerns, or other distinctive characteristics for the company to stand out.

🔗 What geographic area will be served?

What communities and states will the company work in? This will impact the potential supply of materials, transportation needs, and regulatory requirements.

🔗 Who are the potential suppliers and buyers?

Knowing who the suppliers of electronics for processing will be, how much material can be provided, what type of material it is, and when it can be provided, is essential information for determining if available supplies will meet the needs of the operation.

In order to ensure an adequate supply of the type of electronics the company will require the customer categories, service area, pricing, and types of services offered must all be in balance.

Similarly, it is important to be familiar with the buyers' (end-markets), their needs and ability to absorb your product or service are equally important because it will determine if sales will be able to sustain the operations.

🔗 What volume & type of materials will be necessary?

Determining the volume of electronics, including type, that the business will need to manage or process will set the context for how big the business will need to be in order to break even and earn a profit.

Before answering this question, it is necessary to know the type of services and customers the electronic recycling business will target, the types, capacity and dimensions of necessary processing equipment, the number of employees to operate the company, existing and projected market conditions, and the size or capacity of potential locations for the company.

🔗 What is the labor market able to supply?

Can the labor market in the area provide an adequate number of employees with the skills and background that the company will require? The numbers of skilled workers

that the company will be able to employ will directly affect the capacity and success of the operation.

What are the capital requirements?

Once the type of electronics recycling company and the services that it will provide have been determined, it is necessary to identify the potential capital requirements. The capital expenses may include such large financial commitments such as:

- Administration, processing, and storage building(s)
- Trucks
- Conveyor belts
- Forklifts
- Storage bins
- Work stations
- Other processing equipment or machinery.

Methods for identifying the capital requirements specific to the type of electronics recycling business being created could include:

- Speaking with state recycling agencies and associations
- Networking at electronics recycling events
- Touring electronics recycling facilities
- Hiring a consultant with experience in the electronics recycling industry
- Subscribing to industry publications (i.e., *E-Scrap News*), and contacting area universities
- Participating in the International Association of Electronics Recyclers (the electronics recycling trade association www.iaer.org)

How will the company be financed?

Finding capital for any start-up company is a difficult task and is even harder for a recycling company because of financiers' general misperceptions about the industry. In addition, financiers cannot be expected to understand the specific recycling operation given the diversity within the electronics recycling industry, and because it is a relatively new industry sector. As a result, plan to seek funding from both traditional (banks and investors) and non-traditional sources (state recycling loan and grant programs, revolving loan funds, and other nonprofit financing programs) to meet funding needs.

Factors affecting a financier's decision to fund a venture is how much of your own money you are willing to put in the deal and the status of your personal line-of-credit and credit rating. A financier needs to be convinced that you are serious about the company and generally expects that approximately 20% of the needed capital will come from your pocket. It is also common for financiers to use personal credit information as one criterion in making their investment decision. As a result, it is extremely important that you have a sound credit history before seeking financing for the new company.

What will be the legal status of the business?

When considering the form of ownership for the company, some of the issues to consider include:

- Capital requirements
- Business succession
- Legal liability
- Taxes
- Decision-making authority, and
- Control.

There are three principle forms of ownership – Sole Proprietorship, Partnerships, and Corporations.

A *sole proprietorship* is a business that is owned and operated by one person. With this type of ownership, there is no legal distinction between you as an individual and your business.

A *partnership* consists of two or more individuals that are co-owners of a business. As with a sole proprietorship, there is no legal distinction between the individual owners and the business.

A *limited partnership* is a specific type of partnership that provides some protection from legal and financial responsibility. Designed to attract investors, a *limited partnership* is a state-chartered form of ownership with at least one general partner and any number of limited partners. The limited partners are passive investors that have no say in the management or running of the business. As a result, they are generally sheltered from legal and financial responsibility for the company. The general partner(s), however, are not so sheltered.

A *corporation* is a state-chartered organization that has shareholders. Shareholders are generally protected from liability or financial responsibility for the actions of the corporation, but share in the profits. Shareholders elect a board of directors, which is responsible for the management of the business.

Before determining the form of ownership for the company, be sure to consult with an attorney and an accountant for advice. Select an attorney who has experience with new business ventures. Other small-business owners, accountants, the Chamber of Commerce, and bankers may be able to provide a referral. The state's Bar Association may also be contacted for information about a state-supported Law Referral Service.

What are the permitting and/or regulatory requirements?

All businesses have permitting and regulatory requirements specific to their state, and in many cases, locality. As an electronics recycler, there may also be environmental, health and safety permitting and regulatory requirements. Further, if the company will

be operating in multiple states, especially transporting electronics across state lines, there will be federal transportation and hazardous waste management requirements.

Contact the state's Small Business Development Center and Small Business Compliance Office to find out about general business requirements. Contact the state's environmental/recycling agency to find out requirements specific to electronics recycling operations. Be sure to consult the municipal government as well to determine zoning, health, environmental and other requirements. You can also contact your local or county government representatives for more information. Refer to Section III of this Toolkit for specific contacts within your state.

The state transportation agency should be able to provide guidance on transportation requirements and further contact information.

What local, state and federal resources are available to assist with financing or advice?

There are numerous resources available for start-up businesses. These include assistance with:

- Recycling and general business development
- Financing
- Technical assistance
- Site selection
- Regulations and compliance issues.

In addition, there are electronics recycling newsletters and electronic business directories. A complete listing of these resources can be found in Section III.

NEXT STEP – Once these questions have been answered and you feel confident to move ahead, it's time to start writing your business plan. Business plan resources may be found at:

- **Your state's economic development office and small business development center. Refer to Section III of this Toolkit for contact information.**
- ***A Financing Guide for Recycling Businesses: Investment Forums, Meetings & Networks*, September 1996, US EPA, Document #EPA530-R-96-012. To order, call: RCRA Hotline 800-424-9346.**
- **Contact the Nebraska Recycling Association for more information on writing business plans.**