



IOWA WASTE REDUCTION CENTER  
University of Northern Iowa

Technical Assistance Providers'

# GUIDE TO EXTENDING YOUR REACH THROUGH LOCAL ECONOMIC DEVELOPMENT



# Technical Assistance Providers' GUIDE TO EXTENDING YOUR REACH THROUGH LOCAL ECONOMIC DEVELOPERS

## Introduction

The *Guide to Extending Your Reach through Local Economic Developers* was prepared as a step-by-step work plan for technical assistance providers to extend their targeted promotional efforts through local economic developers. Building on existing relationships that the economic developers have with area businesses, the *Guide* provides advice, support material, and insight into the process of partnering with a local, trusted entity to build a strong foundation in the community with regard to utilizing the provider's technical assistance program to fill the environmental niche in the business community.

The project was grant-funded through the Pollution Prevention Incentives for States (PPIS) program from US EPA Region 7. The University of Northern Iowa's technical assistance program, the Iowa Waste Reduction Center (IWRC), and the university's economic development outreach program, the Institute for Decision Making (IDM) partnered in the project. This *Guide* is based on implementing the process in two different settings.

## Recap of the ICE Grant Project

The Iowa Communities for the Environment (ICE) project was developed to bring together promotional ideas and trial-and-error efforts of the past to solidify a formula for better promoting the technical assistance program. The grant opened in October 2002 and set about identifying potential communities with which to work. From a broad field of interested parties, one economic development organization was selected that represented four small Iowa communities.

Based on the grant's requirements, a mercury reduction project was selected as one of the focus initiatives. In this focus initiative, a mercury thermometer swap was conducted to reduce mercury in one community. The other focus initiative was to target a specific community group. Middle school children were selected as the second focal group because the IWRC had recently developed a children's pollution prevention game for that age group.

Partnering opportunities were developed with the Iowa Department of Natural Resources (IDNR) and the Iowa Department of Economic Development Small Business Liaison (Ombudsman). The IDNR subsequently placed two summer interns at businesses in the communities. No community partners other than the economic developer were engaged in the first effort.

For the first effort, an agreement with the local economic development organization was made, a contract was drawn, and a stipend was provided to cover the expense of their time and materials utilized to market our technical assistance program. To help build the measurement protocol, committed to in the grant, the business community was narrowed to manufacturers only.

Support material was developed and provided to the economic developer along with an opportunity to experience an on-site environmental assessment. The developer then promoted the program through letters, meetings, and telephone calls to area businesses and leaders. Following that activity, the on-site reviews were conducted at businesses throughout the selected community.

Meanwhile, the focus initiatives and the promotional campaign activities were successfully conducted. At that point, the project could have ended as it had met all of the grant requirements. Interestingly, the project had not cost as much as originally budgeted. With the foundation-building experience behind us, the project team selected another community setting in which to test what had become the ICE Approach.

The second economic development organization also had a multi-community base. This one being countywide in a sparsely populated Iowa county that had two main communities and several relatively industrial-based small towns. No focus initiatives were planned. The ICE Approach was used in a relatively short timeframe, without problems, and yielded an encouraging number of clients. In this second community setting, the local recycling center was cultivated as a partner and provided invaluable insight.

## **Purpose of The Guide**

The *Guide* is a straightforward attempt to aid technical assistance providers as they increase awareness about their services by drawing on the trusted relationships of local economic developers. The *Guide* is formatted for ala Carte selection. Technical assistance providers can choose to use all or part of the process. Some of the advice is backed up by experience, gained through our grant activity; other recommendations and suggestions are “lessons learned” from our experiences. All of the supporting material, such as sample letters, news releases, environmental awareness articles, and measurement tools are provided to be used as is or modified. The purpose of including the support material is to streamline the process and reduce expense. In effect, the *Guide* is a formula to create greater awareness of your technical assistance program in one geographic region, hopefully with a lasting effect.

In the era of reduced budgets and doing more with less, the *Guide* is meant to reduce the time and money it takes to execute an outreach project. The core activity of promoting the technical assistance program through economic developers can be executed as a stand-alone project or institutionalized to become an ongoing promotional effort.

As a stand-alone project, the *Guide* can be used to select a focus initiative, such as our mercury reduction effort or a specific targeted group such as our school effort. A special focus may be necessary in order to secure grant funding for the project.

If the choice is to adopt the ICE Approach for regular use, the likelihood of successfully integrating it into ongoing promotional efforts and service delivery, will be increased by achieving the following objectives through the use of this *Guide*:

- Understand the ICE Approach,
- Understand the challenges and potential pitfalls of the approach,
- Understand ways of meeting the challenges and avoiding the pitfalls,
- Understand an economic developer’s position within a community,
- Evaluate the benefits and costs of implementing the approach,
- Make an informed decision regarding implementation of the ICE Approach, and
- Adapt the tools and documents of the ICE project to your organization.

## **How The Guide is organized**

- The *Guide* is a workbook, start at the beginning, and work through the end using the parts that apply to your program and/or project.
- Shaded boxes are used to provide anecdotal accounts of experience gained during the grant project.
- Highlighted links to support material such as sample documents are used to keep the support material “at your finger tips.”
- The *Guide* provides detailed guidance for each step of the process.

## **Why use the ICE Approach?**

There are several practical reasons for using the ICE Approach. These include:

- Building a foundation of awareness of the technical assistance program at the local level.
- Opportunity to help bridge the misconceptions about economic development and the environment being incompatible concerns.
- Providing the technical assistance services in one geographic location to maximize resources.
- Facilitating local resource sharing such as waste exchanging or aggregated recycling.
- Increasing community environmental awareness.
- Executing focus initiatives in the community (optional).
- Preventing pollution in the community.

## Overview of the ICE Approach

The ten major steps to the ICE Approach are listed below as a preview of the detailed implementation information provided in this *Guide*.

- Step 1 ....**Identify the Community** and thus select an Economic Developer with which to partner and the target businesses.
- Step 2 ....**Investigate Target Area** regarding environmental issues, resources, and potential partners.
- Step 3 ....Implement a **Focus Initiative** such as consumer education, school program, or waste specific project (optional).
- Step 4 ....**Collect Baseline Data**, if applicable.
- Step 5 ....**Conduct Promotional Efforts** to raise environmental awareness.
- Step 6 ....**Promote the Technical Assistance Program** to businesses.
- Step 7 ....**Provide Program Services** to community businesses in a relatively short time.
- Step 8 ....**Meet the Client Needs** by identifying common training or by-product markets of the community and by making any appropriate referrals to other environmental resources.
- Step 9 ....**Provide Ongoing Support** by maintaining the relationship with the community through the economic development office by providing periodic articles, workshops, and other need-based support.
- Step 10 ....**Evaluate the Project** using objective measures and/or continuous improvement-based assessments from project members, economic developers, and clients.

## GETTING STARTED

There are several items that should be addressed before starting the project. Although many of these items seem intuitive, thoughtful consideration and purposeful decision-making will head off any problems that can occur when decisions are made “on the fly.”

### Determining the Audience

Based on the charter of the technical assistance program, determine which audience(s) will be included in the project. The three basic types of audiences in a community are residential, municipal, and commercial/industrial. Determination of the target audience will dictate which services will be provided.

In addition to determining the audience the project will address, the technical assistance provider should state the type of businesses that will be included. Selecting all businesses in a community is a valid option as is narrowing the target audience to just manufacturers or another specific industrial group such as the service sector. This decision is best made early in the planning process.

### Establish a Project Team

Like all successful endeavors, using the ICE Approach will be more rewarding if effort is placed on recruiting a project leader within the technical assistance program. The project leader will be the liaison between the economic development partner and the technical assistance program.

Decide which of two models to use, depending on what is appropriate in your organization with available staff: 1) a project team made up of functional specialists with several people working with clients in a community or 2) a “case management” approach in which one specialist performs multiple functions with clients in a community.

### Develop a Vision

Develop a shared vision of success. Begin by identifying the important outcomes that define success of the project. Discuss among the project team why those success outcomes are important. Build consensus among the project team about which outcomes are the most important to your organization and to your clients. From the consensus-building activity draft a short vision statement(s).

If the intent is to use the ICE Approach in ongoing promotion efforts, think through the relationships between this new approach and existing promotional efforts. How will expectations of staff be different? How will the expanded promotional activities interact with your technical assistance activities?

## Plan to Evaluate the Project

If qualitative and quantitative measurements are to be useful in evaluating the impact of the project then baseline and follow-up measurements are crucial to the project.

To successfully evaluate the project, the planning process must first set project goals. After identifying the goals of the project, the goals must be stated in a way that includes a metric.

Metrics can either count the activity or measure the outcome of the activity.

For example, a goal may be to teach children about pollution prevention. In which case a stated goal may be *to teach middle school children about pollution prevention through presentations and classroom activities*. The measurement of the activity is to count how many students were trained. To actually gauge the learning of the students, a pre-test and a post-test would have to be administered.

Broad-stroke goals such as increasing community environmental awareness are nearly impossible to measure without a high degree of subjectivity. For that type of goal resolving to activity counting will be necessary to gauge the success of the effort. For example, if the project goal includes increasing environmental awareness in the community, the stated goal may be *to increase environmental awareness through a six-month media campaign that informs citizen of environmental issues and solutions*. The measurement of the goal is simply to count the number of articles placed in the media or the number of people that receive the newspaper. However, it does not actually measure the increase to environmental awareness in the community.

Setting quantifiable goals for the project is the best but most expensive approach. For example, a project goal may be to reduce solid waste disposed at the landfill. In which case the stated goal may be *to reduce office paper disposed at the landfill by increasing recycling from the businesses participating in the project by 25%*. To accurately measure the success of the project in reaching its stated goals some baseline data must be collected. Step 4 of the ICE Approach includes a tool to collect baseline measurements at individual companies. The same tool can be used to take follow-up measurements. The tool has a component of productivity so that data can be normalized for comparison from year to year.

Setting project goals is the easy part of evaluating the project. Setting measurable project goals is worth spending a considerable amount of time and effort to develop. Planning to successfully measure the outcome or impact of the project will take more time than activity counting or not measuring at all. Goals should be clearly identified and measurement actions should be addressed.

## Develop a Work Plan

The ICE Approach is written as a menu selection of activities that can be included in the project. The list below is meant to serve as a checklist of the actions that will be included in the project. Choose all that apply:

- ✓ Identify the Community
  - Use an application process
  - Make the selection internally
  - Develop the list of candidate businesses
- ✓ Investigate the Target Area
  - Build a resource list
  - Write the scope of work or work plan
- ✓ Focus Initiative
  - Target a community group
  - Execute a waste-specific activity
- ✓ Collect Baseline Data
  - State project goals
  - Customize the data collection worksheet
- ✓ Conduct Promotional Efforts
  - Place general awareness articles in newspaper
  - Place articles in economic developer's newsletter
  - Send letters to community leaders

- Send letters to focus initiative contacts
- Make civic presentations
- Place press releases about the project
- Make appearance on local TV or radio as invited
- ✓ Promote the technical assistance program
  - Refine the list of candidate businesses if necessary
  - Conduct the letter writing campaign
  - Conduct telephone calls
- ✓ Provide the Service
  - Use the team approach of many specialists in one community
  - Use the case management approach of one specialist in one community
  - Collect the baseline data
- ✓ Meet the Client Needs
  - Make follow-up contact with the businesses
  - Identify common needs of the business community
  - Make appropriate referrals
- ✓ Provide Ongoing Support
  - Swap newsletters with the economic developer
  - Place follow-up news releases and articles
- ✓ Evaluate the Project
  - Conduct follow-up data collection
  - Implement continuous improvements to the process

Identify which of the menu items will be implemented in the project's promotional efforts and service delivery, and then prepare a work plan. The work plan should make clear the roles and responsibilities of each partner and team member, as well as provide a timeline for implementation of each task. A [sample work plan](#) is provided.

### **Secure Commitment of Funding**

There are several potential sources of funding to pilot the ICE Approach to environmental technical assistance delivery.

- You may wish to pilot the approach with one community utilizing your existing base funds to obtain successful data that will enable you to apply for grant funding for subsequent activity.
- The EPA has several funding mechanisms that a project using the ICE Approach could look to for funding resources. Programs such as the Pollution Prevention Assistance (PPA) program formally known as Pollution Prevention Incentives for States, EPA's Community-Based Environmental Protection (CBEP) program and Environmental Justice Pollution Prevention (EJP2) program could be considered as well as other EPA resources at <http://www.epa.gov> or all federal grant opportunities at <http://fedgrants.gov>.
- Numerous environmental grant-making foundations exist, many with geographic focus priorities. Funding availability and deadlines for these programs vary from year to year, so you will want to search out their availability. The Environmental Grantmaking Foundations directory at <http://www.environmentalgrants.com/> is a comprehensive list of foundations that support environmental activities and programs.

# IMPLEMENTING THE ICE APPROACH

## Step 1: Identify the Community

Community selection may be dictated by a specific organizational goal, by the available funding, or by a current environmental issue that needs attention. If the community is pre-selected and the selection process is not flexible, then work with the existing local economic developer omitting sections 1.2 and 1.3.

### 1.1 Understand the Role of the Economic Developer

Economic development strives to improve the long-term vitality of communities by improving the economic well being of those communities and of the people within them. Economic development includes such efforts as business and job retention; growth/expansion of existing businesses; provision of modern public infrastructure; promotion of policies and actions for planned, balanced growth; development of real estate; strengthening a wide variety of quality-of-life assets; and support of entrepreneurship and international trade.

The essence of economic development is “the ‘process’ of creating an environment (economic, social, political) that is conducive to the retention and creation of wealth in a given area.” [American Economic Development Council] A local economy builds wealth when it has more money coming into it than it has going out. When businesses and consumers buy outside the local economy, money flows out in exchange for raw materials, goods, and services. When businesses sell products or services beyond the boundaries of the local economy, money comes in, businesses provide jobs, and the economy builds wealth. When businesses and consumers buy within their own economy, the money not only stays within the local economy, it stimulates additional economic activity and jobs.

The state’s land grant university, Iowa State University (ISU), was the main source of compiled socioeconomic data. The team downloaded and circulated a “[Data for Decision Makers](#)” for [each county document](#) and prepared a second [summary profile document](#). The combination is useful in seeing the local economy from multiple perspectives. The lead paragraph in each of the sections of the “Data for Decision Makers” document provides a good overview.

Economic developers are committed to strengthening local economies. Economic developers are professionals with specific training and experience in a broad array of disciplines and functions. They fulfill roles as relationship builders, negotiators, financial analysts, researchers, problem-solvers, community leaders, and many others. Economic developers stimulate and coordinate several programs designed to strengthen the local economy, add jobs, promote a positive business climate, and integrate economic concerns with social, political, and environmental goals.

In economic development, it is much harder to attract new business than it is to retain and help strengthen the businesses that are already in the community. Increasingly economic developers and the boards of their organizations are raising the priority of their existing business programs. Many citizens and government officials, however, still see getting a new business as the measure of success.

For an economic developer, each day is quite different and may demand unexpected, urgent, time-consuming responses to an immediate opportunity or a potential crisis. There may be lengthy periods with little time to take care of moderate priority concerns.

Therefore, the ICE project team and the economic developer must have clear definition of their roles. The economic development office will likely have a small staff or no staff at all and must clearly understand the key role they will play if selected for the ICE Approach. If the project is well funded, perhaps paying the economic developer is a way of gaining commitment.

As a benefit, the economic development organization can take a fresh look at a dimension of business and community that they may not be accustomed to looking at (i.e., pollution prevention and environmental compliance.) Be open to their insight and experience. Also, take the opportunity to learn more about economic development and the community from them.

Spend time meeting and talking with the economic developer “on location” in the community. Have lunch and drive around a bit to become familiar with the vicinity and local vernacular. The effort will pay off during development of focus initiatives and during the on-site technical assistance visits.

## **I.2 Recruit Candidate Economic Developers**

If the community selection is part of the project, then choose the candidate communities by first screening the economic developers. In the ICE grant project, the university's statewide economic development program identified candidates based on their trusted relationships. Given what we have learned through the grant process, an application process is recommended.

Through the application process the local economic developers will have an opportunity to 1) fully understand the project and their expected commitment level; 2) show their commitment to the project by demonstrating their willingness and ability to meet the requirements as stated on the application; and 3) be selected in a somewhat impersonal manner. The application process also banks a supply of willing economic developers in the event that the chosen one does not follow through with the commitments or if the project comes in under budget and an additional community is possible.

To identify candidate economic developers through an application process: Conduct the application process a year in advance. (A sample [application](#) is provided.) The economic developer should have an established relationship with business people in the community, and should be enthusiastic about what the project can achieve. Also, consider asking for references.

If the ICE Approach is being institutionalized at your organization, then a statewide dissemination of the application through direct mail, the trade association for economic developers, a statewide economic development service provider similar to the Institute for Decision Making, or the association of counties should be used as the mechanism. For a specific project, dissemination through outlets that economic developers are attentive to, such as state association newsletters, booths at economic development conferences, and electronic newsletters of previous partner economic developers, should gain enough interest to have candidates from which to choose.

## **I.3 Selecting the Community**

Evaluate and prioritize the candidate economic developers based on the responses to the application. The qualities the project requires are somewhat subjective in nature. The candidate should be established in the community and exhibit a willingness to learn about the technical assistance program or have an existing understanding of the program. The best candidate will demonstrate enthusiasm and a commitment to spending the necessary time on the project.

In addition to the characteristics of the economic developer, the location of the community should be considered. The community's proximity to the technical assistance center has a bearing on the project.

A community near the center will be less expensive in travel cost to attend meetings and visit clients. The staff of the assistance center may be more knowledgeable of a community close to the center's location just by being in the same news coverage area or perhaps live in the community.

A community farther from the center will reap the biggest resource conservation benefit from the consolidation of the activity into a short timeframe. Fewer trips to a community mean less travel expense per client visit, when assistance providers are visiting multiply clients per trip. Also, a community farther from the center may have less frequent interaction and be less knowledgeable of the services, so the impact may be greater in "spreading the word."

Finally, the number and industrial classifications of the business base in the community has a bearing on the project. A more industrial community will yield clients that will benefit greatly from assistance. A community with predominantly service and retail trade will have different opportunities for assistance.

## **I.4 Develop the list of candidate businesses**

Take a look at all businesses in the selected community. From the list of all businesses determine which are eligible to receive the technical assistance service. Some technical assistance programs are limited by size of business or industrial sector such as excluding agricultural businesses. The project may want to focus efforts on a particular industrial sector as chosen by the focus initiative or by the expertise of the group providing the service.



## 1.5 Helping the Developer Understand of Environmental Services

Promoting the technical assistance provider's program begins with understanding the program's components. The economic developer is being asked to make the front-line telephone calls. In order to do a good job, he or she needs to have a practical understanding of the services being offered and their benefits. The developer also needs to understand what the program "is not," for example, not regulatory and what that means.

Also, the economic developer is not really making "cold calls" as the economic developer is calling business people with which he or she has put a great deal of effort in maintaining a relationship. The questions asked of the developer will be more candid than those asked if the technical assistance provider were placing the call. So, the economic developer needs to have support material and personal experience to be the most successful.

Perhaps the most valuable learning can occur through a sample on-site review at a business that has agreed to allow the economic developer to participate. In the pilot project this activity was well received.

Providing the economic developer with support materials and experiences such as the following examples will be helpful:

- Providing a [sample environmental assessment report](#) from your program (with confidential or identifying information removed or with the client's permission).
- Providing [sample letters](#) to be sent to the business contacts.
- Providing [talking points](#) to reference while on the telephone.

**Important:** Watch for signs of over-commitment on the part of the economic developer. Do not be afraid to stop the project in its early phases and reschedule activity to meet the developer's schedule or perhaps select another economic developer.

## STEP 2: INVESTIGATE THE AREA

Take the time to identify the environmental resources in the area and partnering opportunities. Scope out the community and identify one entity that will be key to making environmental contacts and building relationships in the area. For example, the economic developer can help bridge relationships between waste management and businesses. Bring in municipal partners; take time to find out what is happening.

### 2.1 Gain an Understanding of the Area from an Environmental Perspective

The economic developer partner will be a valuable resource in this stage. Draw on their local expertise and experience to gain a perspective on the contemporary environmental well being of the community. Their perspective may be indicative of the perspective of the businesses in the community, as their information sources are the same.

Conduct background research for your project. The purpose is to become aware of the past environmental issues that had an impact on the community's environmental awareness. Solicit input from the municipal entities in the community. The local wastewater treatment plant or Publicly Owned Treatment Works (POTW) will know when and why the wastewater plant was upgraded, the landfill operator will know what the tipping fees and special handling requirements are, and the recycling center manager will share which solid wastes are needed to keep the center in business. The POTW operator may provide information on the community's businesses with wastewater issues or high volumes.

In the pilot project, a section specifically addressing the county recycling center services and needs was added to the standard environmental assessment report (see gray box). The local landfill operator or recycling coordinator will be a valued resource for understanding the residential and commercial waste streams. This particular partner will be able to inform you which businesses you may wish to target for solid waste reduction through coordination with a waste exchange representative.

## **Solid Wastes**

**Existing Conditions** – Solid waste generated by THE COMPANY includes general office waste, old corrugated cardboard, pallets, empty containers and scrap metal.

**Regulatory review** – In Iowa, solid waste disposal is governed by the Iowa Department of Natural Resources (DNR.) Landfill restrictions include no free liquids, whole tire, yard waste, car batteries, used oil or hazardous waste. THE COUNTY has gone one-step further and has also banned electronics from the county landfill.

In 1989, Iowa adopted the Waste Reduction and Recycling Act that established a goal for Iowa landfills to reduce the volume of waste landfill disposed by 50% by the year 2000. Therefore, Iowa businesses are encouraged to reduce solid waste generation through pollution prevention and recycling.

**Recommendation(s)** –THE COMPANY is commended for its pollution prevention activity and for recycling much of the solid waste generated at the facility.

Recycling efforts are, for the most part, voluntary programs. The main purposes of recycling wastes is to 1) divert solid waste from the local landfill, 2) to conserve natural resources, and 3) save the company money. Recycling can be achieved by disposing of waste through a recycling service or by exchanging waste with potential users.

Exchanging waste can be a cost-effective tool for both the generator and the recipient of industrial by-products by working cooperatively to cut costs and reduce disposal in the landfill. The Iowa Waste Exchange (IWE) program facilitates the exchange of industrial by-products through regional specialists throughout Iowa. IWE specialists access a central database of byproducts available and recipients' desired products. For assistance in THE COUNTY visit the website at <http://www.iwrc.org/exchange/cfm/index.cfm>.

Businesses in THE COUNTY are fortunate to be served by the County Recycling Center. The center accepts newspaper, office paper, cardboard, empty containers, and other material at drop off locations throughout the county. Additionally, the center will take pallets and plastics at its main facility. When quantities warrant, the center will provide a collection service to local businesses free of charge.

Additionally, the center can provide document destruction services. This service is also free of charge. Material should be brought in to the main facility. Special arrangement for pick up can be made for very large quantities. Call the County Recycling Center for additional information on the services offered.

The County Recycling Center is able to provide free services by marketing material, such as old corrugated cardboard and office paper, brought into the center to cover the expense of recycling other material at a loss.

Pollution prevention or source reduction is the best way to reduce disposal cost at the facility. Through pollution prevention the amount of solid waste generated can be reduced. Some simple suggestions are listed below.

### **Office Paper:**

- Print draft documents or make note pads on back of one-sided used paper,
- Make double-sided copies whenever possible,
- Use recycled paper products whenever possible (letterhead, business cards, etc.),
- Use separate bins for collecting paper and miscellaneous wastes,
- Check with paper recyclers to see if they take other paper-related wastes including magazines, newspapers, cardboard, advertisements, etc. Many contractors will provide this service if asked.

The County Recycling Center accepts paper of all kinds. Most local haulers deliver old corrugated cardboard to the recycling center. The recycling center is willing to take additional paper material in the cardboard dumpster provided the office paper, newspaper, magazines, etc. are bagged and the hauler is willing.

### **Printer Cartridges:**

THE COMPANY is encouraged to purchase and recycle printer cartridges. Refilling print cartridge has recently become both an available and affordable way of reducing waste generation and ink costs. Refill kits are available from the local office supply store or from the ink product vendors directly.

### **Old Corrugated Cardboard:**

Old corrugated cardboard (OCC) is one of the most marketable recycled products. The County Recycling Center accepts OCC and most local haulers deliver old corrugated cardboard to the recycling center. The OCC recyclers list is included in the report. It may be most cost effective to use the same service provider for OCC and office paper.

### **Empty Container Disposal:**

The EPA exempts containers from hazardous waste regulation provided they meet the definition of “empty.” Containers are considered empty when they contain less than 3% by weight of the original product. Aerosol cans must be empty and at atmospheric pressure before disposal. Containers that are not empty prior to disposal must often be managed and disposed of as hazardous waste because of their contents. According to the Iowa Administrative Code, if a landfill refuses a waste, it must provide an alternative disposal option to the waste generator.

THE COMPANY should assure all containers are empty prior to disposal or recycling. THE COMPANY is encouraged to return defective aerosol cans to its supplier. Whenever possible, recycling is a better option than disposal. As a last resort, containers that meet the EPA’s definition of “empty” may be landfill disposed.

### **Pallets and Wood Waste:**

Although the pallet market appears to be saturated at this time, some pallet recyclers will take pallets and wood waste of various sizes. The report contains a list of waste wood/pallet recyclers; THE COMPANY may want to use the list to make a comparison of services between the current provider and other recyclers in the area. Arrangements can also be made with the County Recycling Center.

## **2.2 Build a Resource List**

List the municipal entities and the appropriate contact person’s name and telephone number. These organizations are valuable resources in the community that may be called upon by the technical assistance provider during the report writing process or by the business directly. The organizations on this list should also be included in Step 5 when making contact with community leaders.

Contact these local organizations and ask questions that will enhance the on-site review process:

- Publicly Owned Treatment Works (POTW) – Does it allow sewer discharge of used antifreeze? What are the pollutant load problems?
- Power Company – Does it have an energy efficiency on-site audit program and/or rebates?
- Landfill – Are there any local landfill bans?
- Recycling center – What services are provided?
- Recycling services – Develop lists of private service providers in the area.
- Waste management – Develop a list of haulers.
- Regulatory agency – List the field office for the community.
- Hazardous waste service providers – Develop a list.
- Fire department – Identify the emergency contact number.
- Local Emergency Planning Commission (LEPC) – Who to call in the event of a spill?

Take time to establish relationships with resources in the local area. The nearest landfill manager, wastewater treatment plant operator, and Council of Government environmental planner are among the best resources for understanding the community's overall commitment to the environment and issues/concerns. The area landfill operator will have the pulse of all three waste generation aspects of the community: municipal, residential, and industrial/commercial. The local wastewater treatment plant operator will know which businesses in the area have troublesome issues and/or large quantities of wastewater. The nearest Council of Government environmental planner will know of other area resources, such as the county's environmental health officer and area community college, which could provide additional assistance.

By investigating the area, the project is also introduced to the organization that will continue to provide local support on an ongoing basis. In effect, you build a network of environmental support for the community. Often a residual effect of building the network is that local service providers begin to work with each other.

Other state resources include: the state's waste exchange program; the state's National Institute of Standards and Technology (NIST) Manufacturing Extension Partnership (MEP); or university-based environmental programs that may be conducting community outreach. The waste exchange program for your state can be found at <http://www.metrokc.gov/hazwaste/imex/exchanges.html>. To reach the NIST MEP program for your area, just contact 1-800-MEP-4-MFG. Both state waste exchange programs and NIST MEP's primarily serve the commercial/industrial audience. University-based environmental programs could serve all three audiences, depending on the type of program.

### 2.3 Build a strong foundation to the project

Once the homework is done. The project work plan can be formally developed.

Establish the expectations with the economic developer by developing a project work plan, timeline and a contract, if applicable. A [scope of work](#) and a [project work plan](#) are provided.

Establish the project leadership from the beginning and maintain it, if at all possible, throughout the project. A leader should be designated from both the technical assistance program and the economic development office.

Communicate realistic time-required expectations and that she/he is committing to a 6-12 month project that will have uneven demands on her/his time during that period ranging from weeks of no time required to a few scheduled full-time days.

In pilot project experience, the grant document provided the framework for our [project work plan](#) for that phase of the project.

Strictly implement the model process for securing commitment shown in Figure 1; the roles of the [local economic developer](#) are critical.

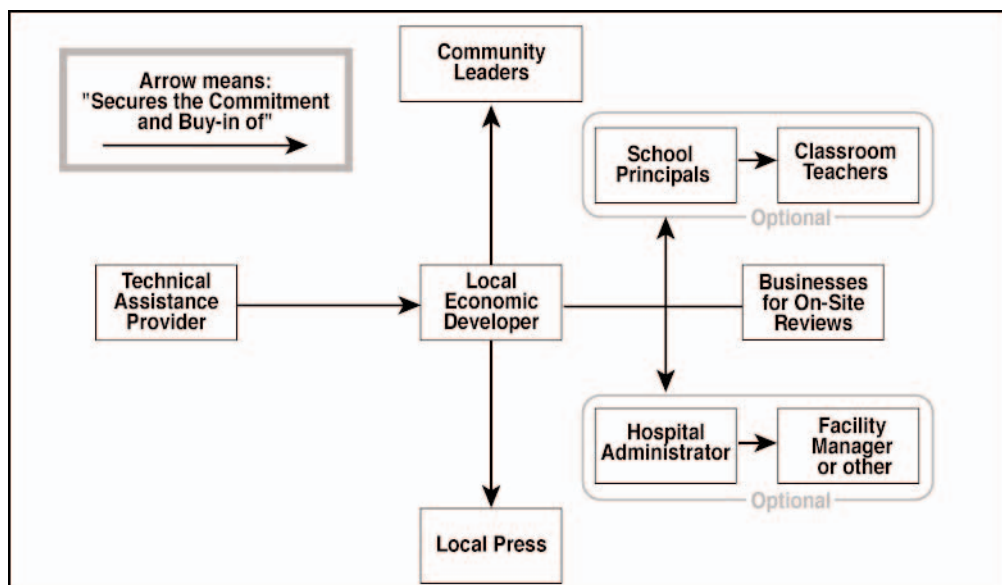


Figure 1. Model Process for Securing Commitment

## STEP 3: IMPLEMENT FOCUS INITIATIVE (OPTIONAL)

The project team may want to include a focus initiative such as a mercury reduction program or other waste-specific issue. A focus initiative is useful for two reasons; 1) it helps grab the attention of the community and 2) it may be a necessary component to secure grant funding for the project. The ICE project included a mercury fever thermometer swap event for both of those reasons.

### Focus Initiative: Mercury Reduction

In conjunction with the Household Hazardous Waste (HHW) Regional Collection Center (RCC) a mercury thermometer swap was held in the target area on a Saturday morning. The RCC proved to be the least expensive disposal service. At the event, participants were able to bring in mercury-containing household fever thermometers. In addition to collecting the mercury-containing thermometers, mercury-free replacement thermometers were provided to attendees.

Fliers were distributed by all of the area middle schools and an article was placed in the local newspaper. [A sample flier is included](#). The cable access community calendar was also used to promote the event. The majority of participants received the event flier from their children.

Local medical offices were contacted by mail to help promote the event. Fliers were posted in their offices. One local doctor collected thermometers from his patients and brought them to the swap. Another participant learned of the event from a dentist.

Through a prior arrangement, one Conditionally Exempt Small Quantity Generator (a business that generates less than 220 pounds per month of hazardous waste is a CESQG) brought in several manometers and mercury-containing gauges from a local dairy business.

Overall, the event was successful. The school and medical offices are good avenues of promotion. The focus initiative served its purpose of gaining community attention as well as removing mercury from the target area.

A broader distribution of the invitation to CESQGs is probably warranted, perhaps preceded by a survey of many types of businesses to gain an understanding of the potential mercury sources in a community including schools. In addition to working with more business groups, a broad mercury-awareness campaign (through the media and direct mail) including all mercury sources such as fluorescent bulbs, switches from salvage automobiles and appliances, medical devices, dairy manometers, and elemental mercury found in laboratories could be conducted.

A [summary of Universal Waste Rule](#) that governs fluorescent bulb management standards is included in the support material.

The information below could be used to help focus future mercury reduction efforts. It is from the Wisconsin DNR's mercury website at <http://www.dnr.state.wi.us/org/caer/cea/mercury/program.htm>:

**Medical-** Healthcare facilities contain mercury in a lot of their medical equipment (e.g. pressure gauges, thermometers), laboratory reagents, and common facility items (e.g., fluorescent lights, thermostats, cleaning supplies). Mercury spills in hospitals are not uncommon due to the large amount of mercury used in a wide variety of products all over the facility. Besides the occasional spill, mercury devices and other mercury wastes are often incinerated with medical waste, which emits mercury directly into the environment.

**Dental-** The main source of mercury from dental offices is from the amalgam. However, mercury is also found in common items, like fluorescent lights, thermometers, and thermostats.

**Schools-** Schools have mercury mostly in the science labs, but also in common items around the facility, like fluorescent light, thermostats, and thermometers in the nurse's office.

**Heating, Ventilation, and Air Conditioning-** HVAC wholesalers and contractors sell and install mercury-containing thermostats. Three major thermostat manufacturers established the Thermostat Recycling Corporation, which offers free thermostat recycling to HVAC wholesalers. After a contractor removes a mercury-containing thermostat from a building, it is dropped off in a recycling bin at a wholesaler and once the bin fills up, it is shipped off to a recycling facility.

**Dairy Farms-** Many dairy farms contain mercury manometers, some of which are installed in exposed places where they could be easily broken and also are often kept in the milking house when dairy farms go out of business.

**Automotive-** Mercury is found in the hood and trunk light switches of many vehicles (approximately 1/3 of vehicles have mercury light switches). Mercury is also found in the anti-lock braking system, navigational displays, and headlights of many cars.

**Thermometers-** Many fever, basal, lab, and candy/deep fry thermometers contain mercury.

A focus initiative may also include a specific community group such as the schools.

### **Focus Initiative: Middle School P2 Education**

In the first community setting, during the same timeframe as the OSRs, the school component of the ICE project was implemented. Classes in two middle schools welcomed the ICE team members and enthusiastically talked about the experience afterwards.

The IWRC had previously created *The Clean Scene* pollution prevention board game. The game allows each student to own his or her individual dry cleaning business, and based on economic and environmental decisions, the business may or may not be successful. Not only does the game incorporate the importance of pollution prevention, but it also includes math, economics, and decision-making skills. The games are available for download at <http://www.iwrc.org/programs/boardgames.cfm>.

In addition to the P2 game, project staff used the IWRC's Mobile Outreach for Pollution Prevention (MOPP), 34-foot Winnebago. The MOPP is equipped with waste reduction technology and equipment for small businesses. The students got the chance to tour the MOPP and heard a brief introduction to the equipment and an explanation of why it is important for businesses and consumers to address waste management in their decision-making.

Based on their feedback, use of the *Clean Scene* game was especially valued by the teachers and students. Visiting the MOPP vehicle provided an opportunity for students to see first hand what waste management entails.

To tie together the ICE project focus initiatives, all middle school students in the communities were given a flier promoting the mercury reduction program. The majority of the participants in the fever thermometer swap received their information from the school fliers.

The most benefit to a community can come from taking a whole community approach where different activities reinforce each other; recognize that other assistance exists and can be included in the ICE Approach as resources allow.

## **STEP 4: COLLECT BASELINE DATA, IF APPLICABLE**

Measurements must be deliberate if the outcome or impact of the project is to be meaningful. Data collection can take place at the individual business or from a community-level. Measurements include taking baseline and follow-up data.

Use the statements developed in the "Plan to Evaluate the Project" section of "Getting Started" to direct the data collection activity. For true pollution prevention impact, measurements must be taken at individual facilities and aggregated to produce tangible results.

### **4.1 Acquire Baseline Information on Waste Generation**

The ICE project was, in part, developed to assist businesses identify, evaluate, and implement pollution prevention practices. While it is fair to assume pollution prevention will benefit the environment and the profitability of businesses, a comprehensive approach to the effort may not always be undertaken due to limited resources and a lack of usable data from which to establish current conditions and make evaluations of realistic accomplishments that can be obtained.

The service that the technical assistance program will provide in the project is the best first step in collecting useful data. An environmental assessment (or audit) generally will include a review of business processes, raw material usage, waste generation, and existing compliance status. Each of those items represent opportunities to collect and evaluate data at each facility. The project team will want to collect and aggregate that data for analysis. From that analysis the project can determine if the business community has realized an environmental improvement.

The audit will also afford the participating business the opportunity to utilize a record keeping system designed to establish facility environmental baselines, including associated costs for waste management and resource

usage. Ongoing utilization of the system will allow the facility to measure changes in its waste management practices. The goal of this continual record keeping is to help facilities evaluate and justify (i.e., perform cost/benefit or payback analyses) pollution prevention practices that may be implemented at the facility.

Worksheets (adapted from those originally developed by the National Metal Finishing Resource Center) for collection of initial record keeping system data are provided.

[Environmental Baseline and Pollution Prevention Progress Worksheets](#)

## 4.2 Customize the Data Collection

Using the worksheets, the technical assistance provider should reconcile the data being collected with the stated goals of the project from the planning process. Additional project-specific data points may be added to the worksheet. It is not recommended that items be removed from the data collection worksheet so that the tool remains intact and useful to clients independent of the project.

Ideally, all of the target businesses in the project will complete baseline and follow-up data collection. Likely only those accepting the technical assistance service will participate.

Other sources of aggregated data may also be utilized in the analysis process. Information from local resources such as the recycling center, landfill, or the wastewater treatment facility may also be useful in the evaluation process. Information such as the tons of recyclables received at the center or the pollutant load of the wastewater plant can be collected during the project timeframe. The same data should then be collected in the future as follow-up activity. The problem with such snapshot collection of data (once as baseline and once as follow-up) is that there may not be an actual cause and effect relationship due to the great number of variables that would have to be considered. Therefore the verifiable data from the facilities participating in the project remains the most reliable method of measuring the impact of the project.

# STEP 5: CONDUCT PROMOTIONAL EFFORTS

Conduct some initial environmental awareness building once you have identified the community. The goal of awareness building is to generate interest in gaining further knowledge of environmental issues. Following efforts to promote general awareness specific outreach about the project will take place.

## 5.1 Addressing Environmental Awareness

Early in the promotional stage, general interest articles can be placed in the local newspaper and in the economic developer's newsletter. Some easily understood technical articles provide practical information for citizens and business people. The purpose of the articles is to begin raising the community environmental awareness by making information available in the weeks or months before the project activity is in full swing.

Sample articles are provided:

- [Used Oil and What To Do with It](#)
- [Household Hazardous Material Sales](#)
- [Solvent Distillation](#)
- [Tires Batteries A Potential Hazard](#)
- [Contaminated Antifreeze A Potential Hazard](#)
- [Short program article \(111w\)](#)
- [Medium program article \(158 w\)](#)
- [Program Article \(358 w\)](#)

## 5.2 Communicating with Community Leaders

Just before the direct contact to the businesses begins community leaders should be made aware of the upcoming project. Letters can be sent to the city council, county board of supervisors, the mayor and any other city officials. [A sample letter to community leaders](#) is included.

The economic development partner may extend an offer to make a presentation at city meetings. Meetings may be held weekly or monthly so advanced planning and coordination is important. Add the scheduled presentation to the project timeline in the work plan.

### 5.3 Promoting the Project

Press releases should also be provided to the area newspaper for publishing at the same time that the economic developer's letter is mailed to area businesses. These press releases should continue weekly during the period when the developer is securing business participation. The economic developer is the best partner to place the news releases, especially if he/she has an existing relationship with the local newspaper. The same articles can be used in the economic developer's newsletter.

Samples are provided:

- [Project article for newsletter](#)
- [Project article for general publication](#)
- [Project article for general use](#)
- [Press release long version](#)
- [Press release short version](#)

Newspaper, radio, and television personnel should be invited to conduct an interview. The information can also be provided to the local cable access channel.

Follow-up press releases should be released regarding the success of the project, providing highlights from on-site visits and the focus initiatives.

## STEP 6: PROMOTE THE TECHNICAL ASSISTANCE PROGRAM

Work with the economic developer to promote the technical assistance program directly to businesses, industrial groups, city officials and local interest groups by conducting an aggressive letter writing and telephone calling campaign from the economic developer's office to secure client commitment to using the technical assistance program's services.

The economic developer will contact all leaders of the community and the appropriate community businesses, conduct follow-up calls to further encourage businesses, and send thank-you notes to participating businesses.

### 6.1 Refine the List of Candidate Businesses

Review the preliminary list of candidate businesses developed previously. From the list of all businesses determine which will receive the technical assistance service.

### 6.2 Conduct the Letter Writing Campaign

Once the list is finalized, the economic developer will conduct a letter writing campaign to inform the businesses about the technical assistance program and the project. A sample [letter to prospective business clients](#) is provided.

The letter is the first direct contact with the businesses and should be from the economic developer to businesses explaining the benefit of receiving the technical assistance service. The letter should also let the prospective client know that a follow-up telephone call will be made.

### 6.3 Conduct Telephone Calls

A week after the letters have gone out, the economic developer should begin making follow-up telephone calls to the businesses. Therefore, the technical assistance provider should have already taken the economic developer on a facility visit prior to the telephone calling campaign. The economic developer is not really making cold calls to the business. The businesses are familiar with the economic developer and they are seen as a trusted business liaison. That is the reason the project works. The conversation between the economic developer and the business will likely be more candid than if the business was speaking to the technical assistance provider. The more familiar the economic developer is with the on-site review process the more likely the client is to accept the proposal of a visit.

The technical assistance provider should provide [talking points](#) to the economic developer.



## **6.4 Securing the Commitment of Business Clients**

Make sure the economic developer understands that she/he is to “cinch the deal” with respect to a client’s solid interest in having the environmental technical assistance. The project has invested a great deal of time in being prepared to serve the client and in promoting the project; the economic developer should not let the client off the telephone without a confirmed YES or NO of interest in receiving the technical assistance service.

The prospective client must understand that the project’s success and the success of the economic developer is dependent on securing clients for the technical assistance provider. Even after having received commitment, some confirmed clients will decline when the technical assistance provider makes the appointment. Stress to the economic developer not to allow extra opportunities to delay the decision.

## **STEP 7: PROVIDE THE SERVICE**

After the economic developer has made contact with local businesses and developed a list of clients that are definitely interested in or already committed to an on-site assessment, the technical assistance provider needs to do its job. Immediately following the promotional campaign, contact the clients and set the on-site visit appointments in the designated timeframe. Place a priority on these clients so there is no lag time. Provide the program services to the community in a relatively short timeframe.

Based on the charter of the technical assistance program, the audiences will have been determined. Recall that the three basic types of audiences in a community are residential, municipal, and commercial/industrial. From that determination, the services to be included in the project should have been identified in the work plan. If additional services seem to be needed at the time of the on-site visit, address those opportunities as referrals or follow-up activity. Stay the course and follow the work plan; that is the purpose of planning ahead.

The basic assumption of the ICE Approach is that the primary service being provided is an on-site environmental assessment. Use one of two models, depending on what is appropriate with available staff: 1) a project team made up of functional specialties with several people working with clients in a single community or 2) a “case management” approach in which one specialist performs multiple functions with clients in one community.

### **7.1 Conduct On-site Environmental Assessments**

The best approach to providing the service is to conduct multi media on-site environmental assessments to the limit of the technical assistance program’s ability. Each on-site review staff could be comprised of staff trained in hazardous waste issues, air emissions, wastewater, storm water and solid waste reduction. It is important to emphasize the strengths of the program, as the project’s goal is to make a positive lasting impression. Other resources such as Environmental Management Systems (EMS) and special training opportunities will be promoted as follow-up assistance.

### **7.2 Collect Baseline Data, if applicable**

Collect baseline data for the facility at the time of the site visit. Using the predetermined tools and survey questions, collect most information from the client at the time of the visit or at least get started and then least the worksheets with the client and follow-up within a short period of time. Productivity data and consumption data like energy use or raw product purchases can be collected after the visit. Waste generation data and storage practices are best addressed at the site visit.

## STEP 8: MEET THE CLIENT NEEDS

Establish the relationship with the client in addition to providing service by making follow-up contact. Meet the client's needs by identifying common training or by-product markets of the business community and by making appropriate referrals to other environmental resources.

### 8.1 Make Follow-Up Contact

Follow-up assistance is a key to this project, as it will likely produce greater pollution prevention implementation. Follow-up assistance may include:

- Phone call to determine level of implementation and provide an opportunity for the company to ask more questions,
- Providing companies with trial equipment on loan,
- Assisting in actual implementation such as equipment set-up or measurements,
- Prepare grants for applicable businesses to receive equipment or fund process changes (a [sample grant application](#) is included),
- Troubleshoot any problems or concerns that arise.

### 8.2 Identify Common Needs

Meet the environmental needs of the community by identifying common training or by-product markets of the businesses. During the investigation step and while providing the on-site assessments, specific problems or lack of resources in the community may become apparent. Aggregated client needs will likely be related to needing an outlet for a recyclable material or to understanding local, state, and federal regulations.

Often the solution is simply making the information available to the businesses in the community. Training classes or short presentations hosted by the economic developer should meet this need. Also invite other environmental programs or service providers to make presentations at meetings hosted by the economic developer or submit articles to the economic developer's newsletter or the community newspaper. The technical assistance program can meet the regulatory need by making presentations or writing articles as well. The subjects addressed should be broad enough to interest the whole client group but with local information specific enough to be useful.

Unique problems of clients should be handled individually through hands-on special assistance or by referral.

### 8.3 Make Referrals

With permission from the client, make referrals to other environmental services. Use the resources list developed in Step 2 to encourage the client to leverage all the resources available to their business. Just as the economic development organization is able to add the technical assistance program to its list of services provided to the community, the technical assistance provider can be a group that conveys additional resources to the client.

## STEP 9: PROVIDE ONGOING SUPPORT

If you institutionalize the ICE Approach, providing ongoing support will come naturally. The expectation is that by working through the economic developer the program will have developed a strong foundation in the community. By maintaining that presence, promotional efforts in the future should be well received and less intensive in nature and therefore less expensive. Some or all of these techniques can be used to maintain a presence in the community:

- Continue to cultivate the relationship with the economic developer.
- Get on the mailing list of their newsletter.
- Continue to be an environmental resource to the economic developer.
- Continue to place articles about the technical assistance program in the economic developer's newsletter at least annually to inform new businesses and remind existing businesses of the program.
- Place notices of workshops, new manuals or fact sheets, or regulatory changes in the economic developer's newsletter.
- If the economic developer or the chamber of commerce holds lunch meetings with guest speakers, volunteer to speak at a meeting next year.
- Invite local resources such as recycling services and landfill operators to workshops hosted by the technical assistance provider.
- Attend, when invited, relevant events in the community.
- Write articles about local services and the corresponding regulation for publication in the local newspaper or a direct mail flier.

Small businesses also rely on other businesses, including competitors, for assistance and advice in making changes. Building a trusting relationship with the businesses within a community will provide additional opportunities for businesses to learn from each other, have access to waste exchange opportunities, share recyclers, and maintain a long-term working relationship with the technical assistance program.

Once the relationship has been developed with the local economic developer through the initial outreach efforts, it is imperative not to let the relationship subside. The local economic developer can be the community's most valuable resource for improving its environment, but the partners involved need to maintain the connection. For instance, the developer may become aware of new business development, and provide that business with brochures for the technical assistance program, so that new business can benefit from assistance at the onset. Also, a developer may become aware of a manufacturer in the community struggling to make ends meet and urge that business to seek assistance from the environmental technical assistance provider to find inefficiencies that, if corrected, could reduce operating costs.

If your program has a newsletter, be sure to ask area businesses, economic developers, community leaders, and contacts from the focus initiatives if they would like to be placed on the mailing list. This will keep them informed of changes, and remind them of the existence of your assistance.

Position [follow-up press releases](#) to celebrate the success of the project, providing highlights from on-site visits and the focus initiatives.

## STEP 10: EVALUATE THE PROJECT

Project evaluation will be either an objective analysis of the measurements data or a subjective summary of the activity counting, depending on whether or not the project planned to measure the impact or the activity.

After having set quantifiable goals for the project and having collected baseline data, the success of the project will be measured by comparing the baseline data to follow-up data. Collecting follow-up data will likely be an expensive and time-consuming task. If the ICE Approach is institutionalized at the organization, then collecting follow-up data at specified intervals should also become common practice for the technical assistance provider. If the project is a standalone effort then the follow-up data collection will need to be voluntary activity submitted by the clients after a simple mailed or telephoned request from the center.

Using a metric tool such as the one available in Step 4 that collects data at the individual facility will be more time-consuming but will yield more useful and objective results. However, avoid the pitfalls of wrap up evaluation in a project that has ended by resisting the temptation of turning good baseline data collection into bean counting.

To return to a previous example, a project goal may have been to reduce solid waste disposed at the landfill. In which case the stated goal was *to reduce office paper disposed at the landfill by increasing recycling from the businesses participating in the project by 25%*. This example may seem straightforward but can actually be interpreted in two ways: 1) If 25% of businesses begin recycling office paper, then the goal was met or 2) If the total volume of office paper generated and landfilled was measured, and later 25% of the volume was recycled, then the goal was also met. In the first interpretation the measurable goal was reduced to activity counting even though the community is recycling more office paper. In the second outcome the quantitative baseline data was compared to a subsequent data collection to produce a meaningful measurement of the amount of waste diverted from the landfill, as opposed to the number of businesses that recycle office paper.

Additionally, the project evaluation would not be complete without a thorough cost analysis. This is perhaps the best place for activity counting. By using the ICE Approach, the project can expect to have delivered the technical assistance services in an economical manner by seeing more clients for less money through reduced travel expense and relatively low- or no-cost promotional activity.

If the ICE Approach is being institutionalized at the technical assistance organization, the evaluation of the project should include feedback from the economic developer. A set of [questions for the economic developer](#) is included.

## CONCLUSION

The ICE Approach can be institutionalized to become an ongoing part of promoting the technical assistance program or be executed as a standalone project. A standalone project can have goals beyond simply promoting the program.

Using the ICE Approach or any deliberate method of promoting regulatory compliance can achieve measurable improvement if the measurement activity is integral in the planning of the project.

The ICE Approach can identify common needs of a community such as training workshops or recycling market shortfalls. Directly addressing the needs of the clients is sure to enhance the technical assistance program's image as well as meeting the clients' needs in an economical manner.

Most importantly, the ICE Approach can build a foundation in the community that will reduce the amount of resources expended for promoting the technical assistance provider's services in the future.❖