every county in the state, and many projects have been completed in smaller districts with limited operating budgets. It is estimated that the savings realized in the Schools program might save participating schools more than $4.7 million over the life of the implemented projects.

A statewide effort to collect energy use data on all public and private schools will take place in 2002. This data will be used to develop a baseline for energy use per square foot, adjusted for weather fluctuation. This will allow local school district officials, as well as Focus on Energy staff, to focus their efforts on the high energy using facilities that will realize the greatest savings from energy improvement investments.

2002 Rebuild America Energy Champion Award Winner

The Focus on Energy Schools Program won the 2002 Rebuild America Energy Champion Award. This U.S. Department of Energy award is given to the nation's top K-12 schools program for energy efficiency.

Small Business Program

The Small Business program delivers energy efficiency services to a sector that consists of about 170,000 small businesses. Previous energy efficiency initiatives have had limited success due to the sector's large numbers and dispersed nature, the owners'/operators' limited time and resources, and the sector's relatively low energy consumption compared to larger businesses.

The goals and initial tasks of this program recognize that flexibility is a key component to the program's ultimate success. Market changes, such as rising natural gas prices, have a profound effect on the ability to recruit program participants in the sector and achieve energy savings goals.

Laundromats

Wisconsin's approximately 1,200 laundromats purchase 5,000 commercial clothes washers each year. In an effort to help small businesses save energy and money, Focus on Energy recently announced a new grant program that provides a cash discount for each high-efficiency ENERGY STAR® commercial washing machine installed by a laundromat. Each energy efficient machine can yield up to $238 in energy savings per year. Currently, energy efficient machines account for about 10 percent of private market sales. This program provides an expanded market for Wisconsin manufacturers of these machines.

The program is targeting the following sub-sectors: beauty salon/spas, restaurants, Laundromats, dry cleaners, retail/chain stores, and grocery/convenience stores.

The Small Retail and Service program also involves architects, designers/builders, contractors, owners, tenants and others who play a role in energy efficiency implementation. Energy providers, trade associations and government agencies also impact energy efficiency initiatives.

Program Goal

The Small Business program's goal is a more profitable, sustainable, and energy efficient small retail and services sector in Wisconsin. Objectives and tasks are set forth in a short-term and long-term format and all will be completed within the first year. The short-term

objectives are quantifiable and deliverable. In contrast, long-term objectives and tasks are more qualitative and have greater long-term implications such as impacts on program infrastructure.

The First Year
Accomplishments in the first year include the following:

- Developed an instant incentive program exclusively marketed by program allies
- Targeted four energy intensive Small Retail and Service business segments
- Targeted program allies that already have a network of clients that may be ready for energy projects
- Focused on the ENERGY STAR retailer network in Wisconsin. These retailers have already had success with an energy efficiency program that is handled by the State of Wisconsin
- Extended technical and financial assistance to customers in Siren, Wisconsin, who were forced to rebuild their businesses after a tornado last summer
- Identified 1,452 energy saving projects
- Signed up 152 trade allies to work with customers
- Gave incentives for 280 energy efficient clothes washers to be installed in commercial laundromats
- Signed up 788 program partners
- Documented 2,371,000 kWh and 1,308 kW in energy savings

Energy Efficiency Goods and Services Program

The typical commercialization of a technology starts with the "discovery" of an idea and evolves through a maturation process of applied research, laboratory development of a working model, scaled up prototype, commercial demonstration, and then, ultimately, complete market commercialization. Market commercialization is also a multi-step process whereby a technology transforms from an innovative but cost prohibitive product to an affordable industry best practice.

The Energy Efficiency Goods and Services Program identifies market barriers and needs for candidate energy efficiency technologies of Wisconsin manufacturers and retailers. Then it encourages individuals and businesses to invest in energy efficient goods and services by affecting changes in the marketplace that will ensure that these goods and services are available and continue to be developed.

The program has identified the following technologies for this commercialization process: electric motors, variable speed drives, ENERGY STAR windows, front- loading clothes washers, fans, blowers, ceiling fans, and HVAC.

Program Goal
The program goal is to get industry involved in the development of the identified technologies, get the products qualified as ENERGY STAR, identify existing barriers to greater market share, and work to eliminate those barriers.

The First Year
While the program is just getting under way, several identified technologies are already well along in the commercialization process and Focus on Energy staff have worked to facilitate this industry-driven development. Two such examples include energy efficient front-loading washers and the ENERGY STAR windows programs.

Production Agriculture Program

Agricultural industries, particularly farm operations, use large amounts of energy. For a variety of reasons that include diversity of individual operations, geographic distribution, and types of agriculture (animal vs. crop, etc.), they operate differently from other businesses and usually pay higher electric rates than other commercial users. Further, many of these agricultural or rural areas face difficult economic circumstances and are often under-served by public and private services.

The Production Agriculture program is designed to strengthen Wisconsin's agricultural communities by improving the overall energy efficiency and sustainability of production agriculture across all eligible rural customers in Wisconsin. The idea is to utilize existing infrastructures such as the USDA Cooperative Extension Service, the USDA Farm Service Agency, WHEDA's Farm program, and the Department of Commerce's Dairy 2020 program to deliver the full range of Focus on Energy programs and services. Some of these services include: energy surveys, detailed reports of findings with specific recommendations, advice on new technologies, help in locating contractors and financing, and access to training seminars.

More specifically, this program can assist farmers by improving system operations and turning energy savings into dollars.

In recognition that not everyone who lives in an agricultural area is a farmer but is impacted by farming, the program is divided into two parts – ***Farm Operations*** and ***Community-Based*** programs. The principal services delivered by the Community-Based program include assistance in establishing a community-based plan, residential and low-income services, and home energy performance evaluations and improvements.

HVLS Fans Save Farmers Money and Energy

"Big" and "slow" may not sound efficient, but thanks to their unique design HVLS (high ventilation low speed) fans offer excellent energy efficient ventilation in freestyle barns.

HVLS fans are big. Ceiling mounted units range from 8 to 24 feet in diameter and have 10" to 12" wide blades. These long blades can move four times as much air as one standard 48" fan. One 20-foot diameter HVLS fan can circulate air over 15,000 to 20,000 square feet.

These programs are available to all farm operations and rural communities served by the investor-owned and municipal utilities that participate in the Focus on Energy program. About 47,000 farms are eligible for services under the program.

Program Goal

It is the Focus on Energy goal to fundamentally change the market to make energy savings an integral and sustainable part of living and doing business in these rural, agricultural areas.

The first year goal of the Farm Operation Program was to design and deliver a sustainable energy efficiency and renewable energy program to farm operations and rural residences by partnering with existing programs and agricultural infrastructures.

The first year goal of the Community-Based Program was to design and begin delivery of a sustainable, successful, community-based program that increases the number of people who seek out and value energy efficiency information and reduces the energy intensity of rural communities.

Agriculture Walk-Through

During a typical dairy farm walk-though, the farmer and Focus on Energy service provider investigate the performance of key parts of the milk production system. This includes the milk cooling compressor, water heater and vacuum system, lighting and ventilation in the milking parlor and animal holding areas, and outdoor lighting.

Once the data has been collected, the energy service provider analyzes the data and develops a list of recommended energy savings measures. Based on what the farmer chooses to do, Focus on Energy helps identify installation contractors, equipment and financing alternatives. The following are examples of expansion/remodeling changes that can result from a walk-through analysis:

- Daylighting upgrades – research has found that cows drink, eat and produce more milk when exposed to high quality lighting for 18 hours per day
- Energy efficient lighting
- Barn ventilation improvements
- Convert from an electric to a natural gas or propane water heating system
- Upgrade all electric wiring to meet current electrical and safety codes
- Install a compressor heat recovery unit that captures heat from the milk cooling compressor to heat water

The First Year

Farm Operation Program

The first year of this program was dominated by start-up activities such as drafting proposals, signing up program partners, designing individual programs, etc. However, the program accomplished nearly all of its Year 1 goals. The program identified 167 projects and realized energy savings of 434,000 kWh (147 percent of the annual kWh goals). The program also established 110 partnerships. These partnerships with key allies such as agricultural lending institutions and large dairies have proven invaluable in getting information out to agricultural and rural communities. In addition, more partnerships are being developed and Focus staff are working with the Department of Agriculture, Trade

and Consumer Protection (DATCP) and the Department of Natural Resources (DNR) to more aggressively identify specific proposed farm operation expansions since being involved early is an important key to success.

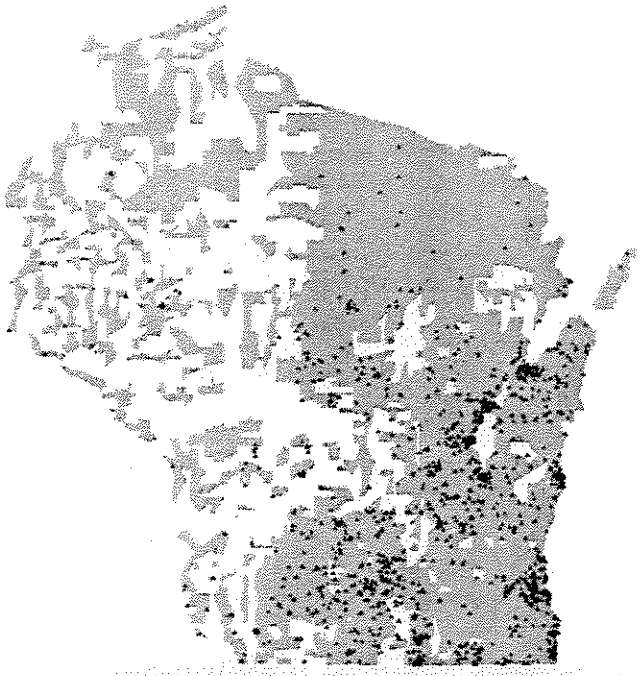
Community-Based Programs

Four communities are developing programs. They include: Ashland, Oneida Nation, Evansville, and Cornell. In addition, Pardeeville, Osceola, the Menominee Nation, Mayville, Benton, and Hillsboro are developing plans to strengthen their energy efficiency services and providers in preparation for full development of their delivery plans.

3. Focus on Energy Residential Programs

In the residential sector, the Focus on Energy program has allowed for the expansion of the best of previous public and utility energy efficiency efforts throughout the state and created new programs for sectors not previously reached by utility efforts.

In the past, programs created by utilities were offered only for short periods of time, and only in their service area. Focus on Energy efforts are now offered in all participating utility areas and will persist long enough to help buyers, businesses and contractors in the marketplace make fundamentally better, less costly decisions.



Residential Program Participants (darkest areas)

Program Administration

The Wisconsin Energy Conservation Corporation (WECC) is the Residential sector program administrator. WECC, established in 1980, is a private, nonprofit corporation and a state and national leader in the administration of energy efficiency programs and services. WECC has over 20 years of experience working with utilities, state and municipal governments, regulatory agencies, and consumer groups.

Since the beginning of the residential contract, signed on May 15, 2001, WECC has designed, developed and implemented comprehensive energy efficiency programs for the residents of Wisconsin. The programs are designed to increase the energy efficiency of Wisconsin homes, increase availability of and consumer demand for energy efficient products and services, increase the state's long-term electric energy reliability, and protect the environment.

Beginning with discussions prior to the launch of the residential programs, WECC staff have worked closely with utilities to ensure that utility personnel—especially staff in call centers—are well informed about the Focus programs available to utility customers. Staff send bi-monthly program updates to utility staff and meet with utilities several times annually to share information. The partnering effort has resulted in articles about

Focus programs in utility newsletters, and has helped to increase overall call volume on the Focus on Energy 800 information number.

During the first year of the program, Focus on Energy contractors and program partners and allies have worked with 178,932 program participants who have realized gross energy savings of 26,073,800 kWh, 3,079 kW, and 1,102,597 therms of natural gas. These significant energy savings were achieved through the active participation of over 1,000 retailers, manufacturers, builders and trade contractors who are updating their business models to capture the value of energy efficiency for their customers, the business community, and the general public.

On a regional level, the Focus on Energy program is a founding member and key partner in the Midwest Energy Efficiency Alliance (MEEA), a nonprofit organization representing eight Midwestern states that has forged partnerships with major appliance and lighting manufacturers. By coordinating promotional activities throughout the eight states, MEEA and its member organizations can provide manufacturers with access to a large body of potential customers. This allows the Focus on Energy program to impact the market from the manufacturer level all the way to the residential consumer.

ENERGY STAR Products

The ENERGY STAR Products program targets appliances, electronics, lighting, and windows that are certified by the U.S. Environmental Protection Agency (EPA) and U.S. DOE as meeting strict federal energy reduction thresholds and technical specifications. These products are manufactured by major United States and international corporations and distributed through retail and wholesale outlets nationwide. This program seeks to achieve both energy savings and market transformation goals. The Focus on Energy program works very closely with federal agencies to incorporate ENERGY STAR criteria and leverage substantial federal investment of resources into this program.

The First Year

The ENERGY STAR Products program has served approximately 1.5 million

Retailer Spotlights
From ENERGY STAR EXTRA Newsletter
November 2001

Home Concept—Appleton and Madison, WI
Gary Chrisinger and Steve Brielmaier opened their first Home Concept store in Appleton in 1994. In 1997 Home Concept opened a store in Madison and expanded to the Internet in 1999.

Home Concept is very enthusiastic about promoting ENERGY STAR products. They sell ENERGY STAR bulbs, fixtures and torchieres. Steve feels that "energy efficient lighting should be a large part of any lighting business because ENERGY STAR products will pay more dividends in the long run." Steve also likes the role of ENERGY STAR as a third party checking on quality issues.

Home Concept has seen an increase in demand for ENERGY STAR products and that, according to Steve, "has brought lots of new faces into our store." During a recent Instant Event, featuring Westinghouse bulbs, Home Concept sold 7,572 bulbs. Home Concept credits the event's success to advertising incentives and staff knowledge. Home Concept is looking forward to participating in upcoming events.

households in Wisconsin. The program does this through a network of over 600 participating Wisconsin Retailers that includes small independent stores as well as national "big box" chains. Focus on Energy program staff provide training to the sales staff of these partners that enables them to more effectively explain the benefits of ENERGY STAR appliances and products. As this network continue to expand, consumers will increasingly find knowledgeable sales staff in the stores they patronize on a regular basis.

Instant Day Events

Over 100 True Value stores and almost 50 Ace Hardware stores participated in Instant Days Events as a part of the "Change a Light, Change the World" promotion in October and November. Many of the stores ran their own advertising that worked in conjunction with the marketing done by True Value corporate, Lightwiz for Ace Hardware and Focus. The Ace Hardware and True Value stores sold over 16,000 bulbs during this event. This was one of the largest "Change a Light, Change the World" events in the country.

Compact Fluorescent Light Bulb Sale

On Tuesday, June 11, 2002, Focus on Energy sponsored compact fluorescent light bulb sales in the Madison City-County Building and the Milwaukee Reuss Federal Building. Combined, approximately 12,000 bulbs were sold. Over the 5-year expected life of these bulbs, annual electricity savings of 1,000,000 kWh can be expected. The typical Wisconsin residential customer uses about 8,600 kWh per year. Thus, in one day Focus on Energy saved enough electrical energy to power 120 Wisconsin homes each year for 5 years.

Cooperative Appliance Manufacturer Promotions

The ENERGY STAR program worked with the following manufacturers to offer cooperative incentives to customers on qualifying appliances: Fischer & Paykel, Bosch, GE, Maytag, Whirlpool, Amana, Thermastore, Kitchen Aid, Sears, MARTA, Brand Source, Asko, Frigidaire, Jenn-Air, and Staber.

Retailer Recruitment

ENERGY STAR field representatives represent a total of 727 participating retailers. Recruitment continued in the Northwestern part of the state with over a half dozen Ace Hardware and True Value stores joining the program and participating in the "Change a Light" promotion.

Wisconsin ENERGY STAR Homes

Over 20,000 new single family homes are built in Wisconsin each year. The Wisconsin ENERGY STAR Homes program targets the residential (one- to two-dwelling homes) new construction market. The program uses standards that are specific to Wisconsin's weather and that exceed state energy codes up to 25 percent. The program also emphasizes other issues beyond energy efficiency that impact a home's performance, such as: combustion safety, durability, adequate ventilation and comfort. The program uses trained consultants to work with private builder partners during the construction

process to complete site visits and conduct performance testing. A training series has also been developed to provide additional training to contractors and trade allies on building science principles that are important to the construction of high performance homes.

Focus on Energy is working to make Wisconsin ENERGY STAR Homes the mark of a high quality, energy efficient new home that will save the customer money over the life of the home while providing a home that is safe, healthy, comfortable, and durable. So far, over 330 Wisconsin builders have signed on as builder partners. They are currently working on over 415 homes that will become Wisconsin ENERGY STAR certified.

The Wisconsin ENERGY STAR Homes program works with all participants in the single-family, residential market.

- Builders – Focus recruits builders interested in building high performance homes and provides technical and marketing assistance to interested builder partners. Technical training sessions provide more detailed education on select topics.
- Buyers – The Wisconsin ENERGY STAR Homes program conducts regular consumer seminars that create market recognition and consumer demand for high performance homes throughout Wisconsin.
- Consultants – Focus has worked to establish an infrastructure of 20 high performance home consultants who can develop viable business models supporting the delivery and third-party consumer assurance of efficient new homes; and ensure statewide availability of the Wisconsin ENERGY STAR Homes program.

These efforts are designed to coordinate with the Focus on Energy program efforts related to ENERGY STAR appliances and other household equipment.

The First Year

The Wisconsin ENERGY STAR Homes program assisted builders and trades in constructing 612 new homes to meet high efficiency and high performance standards. Since the beginning of this program, over 1,000 new homes have been certified as comfortable, durable and energy efficient.

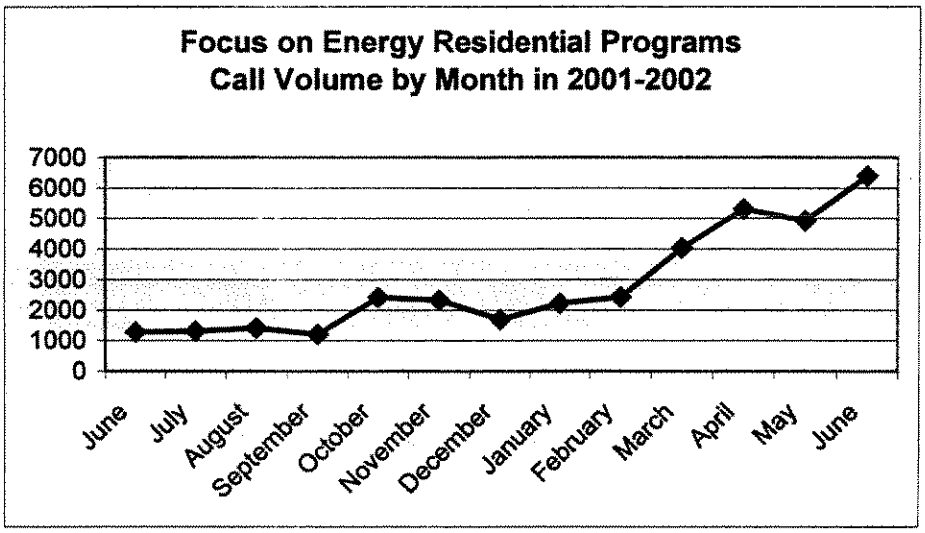
The Wisconsin ENERGY STAR Homes program has also been developing working relationships with the modular home manufacturers in Wisconsin. A part of the program uses third party site visits of homes during the construction process. This effort is working with modular manufacturers to offer Wisconsin ENERGY STAR Homes compliant units that will undergo certification after the setting of the modular units occurs. The goal is to work through present code inspectors, certify them as Wisconsin ENERGY STAR Homes modular consultants, and to do a system verification of the production line.

Residential Education and Information

This program seeks to overcome information barriers for participation in the residential programs and provides an information center that is highly trusted and valued as an independent and objective source of energy education, and efficiency information.

Program Goal
Among other things, the program hopes to establish a residential information center that provides comprehensive information on residential energy efficiency, increase awareness of energy issues, increase participation in various customer and provider education and delivery programs, and increase the level of requests for energy information through the residential information center, public libraries, and county extension agents.

The First Year
Since June 2001, the Residential Information Center has responded to inquiries from over 36,000 Wisconsin residents seeking information about its programs and energy efficiency issues in general.



Home Performance with ENERGY STAR

Home Performance with ENERGY STAR targets the retrofit market for existing 1- to 4- unit residential buildings. The program emphasizes consumer education, value and "one-stop" problem solving. The program develops the pool of skilled contractors and providers who understand energy efficient building science. Strategic use of incentives will increase consumer demand for comprehensive and effective energy efficiency products and services for improving Wisconsin homes.

The program promotes energy efficiency improvements in the following areas:

- Diagnostic, energy efficiency, and safety assessment services
- Heating and air conditioning repair, tune-up or replacement
- Building shell improvements such as air sealing, insulation, windows and doors
- Lighting and appliances

Customers who choose Home Performance with ENERGY STAR get:

- Comprehensive information about how their home currently uses energy
- Help identifying the best ways to reduce energy consumption in their home
- Assistance solving problems related to moisture, comfort, and high utility bills
- Combustion safety checks (measuring carbon monoxide levels, for example) by the consultant
- Free Energy Savers Kit

The program is also working with Wisconsin Technical College System instructors to incorporate energy efficient building practices and building science into the building trades curriculum.

Program Goal
Establish the Home Performance with ENERGY STAR program as a whole house, comprehensive "one-stop" problem solving and efficiency improvement service to increase the energy efficiency, affordability, safety, durability and comfort of Wisconsin homes.

The First Year
An integral element of this program has been working with Wisconsin's HVAC industry distributors, suppliers and contractors to develop and implement "Best Practices" for installation of HVAC equipment. Also, several Wisconsin Technical College schools are working toward integrating building performance principles into trade course curricula. This effort is using strategies for voluntary certification of trade contractors; this will assist consumers in identifying trade contractors that have made the commitment to provide services based on sound building performance principles. The program also provides incentives to consumers on select heating and cooling systems that offer greater electrical energy savings. So far, 524 HVAC contractors have signed on to participate in the program and over 2,500 consumers have received rewards for installing high efficiency air conditioning systems and furnaces.

Through June 2002, 196 homes have received whole-house assessments and another 133 homes have received a Home Performance Rating. Additionally, 3,656 high performance heating and cooling central air conditioning systems have been installed as upgrades to existing homes. A special program component that targets consumers in the 150 percent to 200 percent of poverty range has just begun and local weatherization agencies already have many participants waiting to participate in the program.

Targeted Home Performance with ENERGY STAR Program

This program targets Wisconsin residents who are not eligible for the low income weatherization program, but have limited income and resources. The program helps them increase the energy efficiency of their homes, targeting energy-saving opportunities in existing one- to four-unit owner-occupied homes and one- to two-unit non-owner occupied rental units.

The program is similar to the low income weatherization program; it provides grants on a sliding scale to make services more affordable for qualified participants.

Program Goal
The goal of this program is to establish the Targeted Home Performance with ENERGY STAR program as a whole house, comprehensive weatherization and efficiency improvement service to increase the energy efficiency, affordability, safety, durability and comfort of homes. Further, the program hopes to work with local social service agencies, energy assistance program providers, low income weatherization providers, and utility early identification program staff in the target areas to determine equitable methods to obtain and distribute customer referrals.

The First Year
In its first year the program: identified 19 community action and housing programs interested in providing this program; provided targeted direct marketing activities for program providers; and approved 19 job proposals for customers interested in having their homes weatherized.

Apartment and Condo Efficiency Services

Multifamily housing is a market sector very much in need of comprehensive, statewide energy efficiency work. Apartment and condo buildings are a substantial investment for property owners and addressing energy issues is a good way to manage that investment. Reducing energy costs can increase the owner's return on investment. Increasing tenant comfort can also increase profitability by reducing complaints and vacancies. The Apartment and Condo Efficiency Services program targets new and existing buildings, four units and larger, and helps property owners and managers make good energy decisions. The Apartment and Condo Efficiency Services program reduces the risks associated with energy efficiency upgrades by providing unbiased expert advice.

The Apartment and Condo Efficiency Services program is now providing assistance to property owners in four areas with substantial large-building populations: the Fox River Valley, the Greater Milwaukee area, Madison and the La Crosse/Eau Claire area. Since the population of rental buildings in Wisconsin is large, diverse and scattered, the

statewide scale of the effort is an important element in providing these services in a cost effective manner.

It is notoriously difficult to be successful in operating energy efficiency programs in multi-family units. The market is very diverse in building styles and technologies, in ownership structures, and in the customers served. It is difficult to succeed in property management without being highly leveraged, so owner capital for energy investments is scarce.

Most important, though, is what is referred to as the "split incentives" issue. That is, managers control their rental buildings and their operations. They also control maintenance of properties and investments in them. Tenants pay most energy costs in most rental settings. Thus, neither party has an incentive to invest in energy efficiency technologies, since the benefits will primarily go to the other party in the rental contract.

Success in creating energy efficiency benefits for the one-third of Wisconsin residents that live in buildings of four or more units is a challenge. Practitioners need expertise in a wide variety of technologies and business structures, and unique marketing and education strategies have to be employed.

The Apartment and Condo Efficiency Services program staff promote issues other than energy use with building owners and managers: building integrity and equipment longevity, maintenance costs and practices, or tenant satisfaction and retention. These are issues in which property managers have a stake. Virtually all work that might mitigate odor or cigarette smoke migration in buildings, prevent paint or roof failures, or reduce maintenance problems, has a well-documented energy reduction "side effect."

The Apartment and Condo Efficiency Services plan is crafted, first of all, to test all likely avenues to success. The results will inform continued program growth and evolution, to yield a comprehensive and effective result. Property managers in Wisconsin want to earn a reasonable profit providing marketable, safe housing. Tenants want comfortable, affordable housing. Energy issues relate to all of these goals, and these program elements are designed to test most of the likely paths to meeting the goals of all the actors in rental housing.

New Buildings Efforts

Second-Look Design Assistance

This program allows developers to voluntarily submit new construction plans for multifamily buildings to be reviewed by an engineering/design firm with special expertise in energy efficiency and building integrity issues. The review will highlight details that can reduce energy consumption or durability problems in the planned building. This allows designers and developers to tap specialized expertise, and proceed with confidence when they implement innovative, efficient construction techniques. The project has 11 projects under review, totaling $65 million in construction value.

In addition, information and findings derived from Focus on Energy projects are of value to other housing-related agencies in Wisconsin. The Wisconsin Housing and Economic Development Authority (WHEDA), the Wisconsin Division of Housing, and the U.S. Department of Energy Region #5 office in Chicago, IL all have requested detailed information from the new construction effort for use in their housing programs.

Multi-Family Commissioning

Many common problems identified in the almost 521 multifamily assessments already performed arise due to a systemic flaw in the construction process. Industrial customers have learned the value of commissioning new construction - where commissioning agents test completed systems to assure they interact properly. The result is a building with fewer expensive change orders during construction and fewer occupant complaints after completion. There is also usually a substantial energy savings. This program is creating a training program to help transfer these practices to the multifamily construction market.

Existing Buildings Programs

Multi-family Facility Assessments

The first obstacle to improving energy efficiency in existing rental properties is identifying opportunities and understanding all possible outcomes. In large and complex buildings, there are numerous opportunities to improve one system to save energy, only to completely disrupt the operation of other systems. This initiative provides property managers with expert assessments of their properties, and unbiased information about improvements and replace-on-failure equipment recommendations.

As of May 31, 2002, this program has evaluated 521 buildings. Property owners and managers can choose from three tiers of audit services, based on their individual needs:

- A comprehensive audit that looks at electric, natural gas and water usage is a sound way to assess broader facility issues, especially for those interested in managing their assets effectively.

- A low-cost express audit that focuses on major natural gas space and water heating is an option when the owner has limited time or concerns limited to natural gas usage.

- A free, self-audit, which owners mail in to the program for analysis, is used for owners who want to focus on a specific concern.

Operator Training

Informed operation of rental buildings greatly increases energy efficiency and reduces maintenance needs. This effort is creating a statewide program to provide owners and managers with comprehensive, unbiased information about routine practices and procedures that can reduce costs and improve energy efficiency, without greatly changing investment needs.

Contractor Alliances and Training

Existing research demonstrates that some property managers would welcome opportunities to replace failing equipment with efficient models. Equipment failure rarely happens, however, on a planned basis and with ample warning. The contractor implementing the replacement often does not have high-efficiency components on hand and often has limited experience with their installation or their reliability. The same contractor training implemented in the Wisconsin ENERGY STAR Homes single family program is being echoed in the Apartment and Condo Efficiency Services program. Through this effort, small business owners and contractors will have access to advanced training, specialized engineering support, and detailed information about high efficiency technology alternatives.

Direct Install Lighting

One of the simplest and easiest ways to generate immediate electrical savings and reliability improvements is to help property owners install energy efficient lighting. This program will provide turnkey support of such savings initiatives. It is also intended to develop long term relationships with property managers and develop better knowledge of this challenging market, with the goal of eventually expanding this program into other energy-intensive areas of rental buildings.

In-Unit Direct Install Effort

While the direct install lighting program helps property managers reduce operating costs, this program is oriented toward assisting tenants. Several Wisconsin providers have stepped forward with material and hardware to be installed in apartments and condos to improve comfort and enhance energy efficiency. The installations are paired with tenant education about the installed hardware, and about lifestyle issues that drive energy costs.

Other Initiatives

Technical Research and Development

A wide variety of energy efficient devices and practices are offered to multi-family building owners, largely by salespeople. This program will provide multi-family building owners with objective and unbiased information about a variety of products and services offered to help them make knowledgeable decisions about energy efficiency initiatives that involve substantial capital investment.

Rental Characterization Study

A primary barrier to effective program design and delivery is that the rented housing stock in Wisconsin is very diverse. There is virtually no central source of information regarding typical building types and building systems to guide program designers, or to inform landlords about their competition. This study will fill that basic information gap, and help guide programs to be most cost effective and productive.

The First Year

In addition to the establishment of many initiatives in this challenging sector, 36 comprehensive assessments were completed, representing 72 percent of the first year

goal. In addition, 78 program allies, or 195 percent of first year goal, were recruited for participation through June 30, 2002.

The direct install common area lighting projects have been strongly subscribed, with 102 projects analyzed and 62 properties receiving assistance in installing measures, saving a reported 3,210,695 kWh and 400,752 therms of natural gas. Also, 318 apartments and condominiums have been served by the in-unit direct install program, yielding reported savings of 90,592 kWh and 33,700 therms of natural gas.

4. Focus on Energy Renewable Energy Programs

Background

The Wisconsin Renewable Energy Network (WREN), a consortium of Wisconsin based renewable energy organizations and businesses, teamed with the Wisconsin Energy Conservation Corporation (WECC) to administer the Focus on Energy Renewable Energy program. By legislative mandate, WREN is allocated 4.5 percent of the available statewide energy efficiency public benefit funds each year, primarily focusing on electric generation technologies. In addition, the total amount of funds allocated for renewable energy includes four percent of the budgets from the business and residential programs, primarily focusing on thermal technologies. When fully funded, the renewable energy electric program will total $2.8 million per year, with another $1 million allocated to thermal renewable energy from each of the residential and business program administrators.

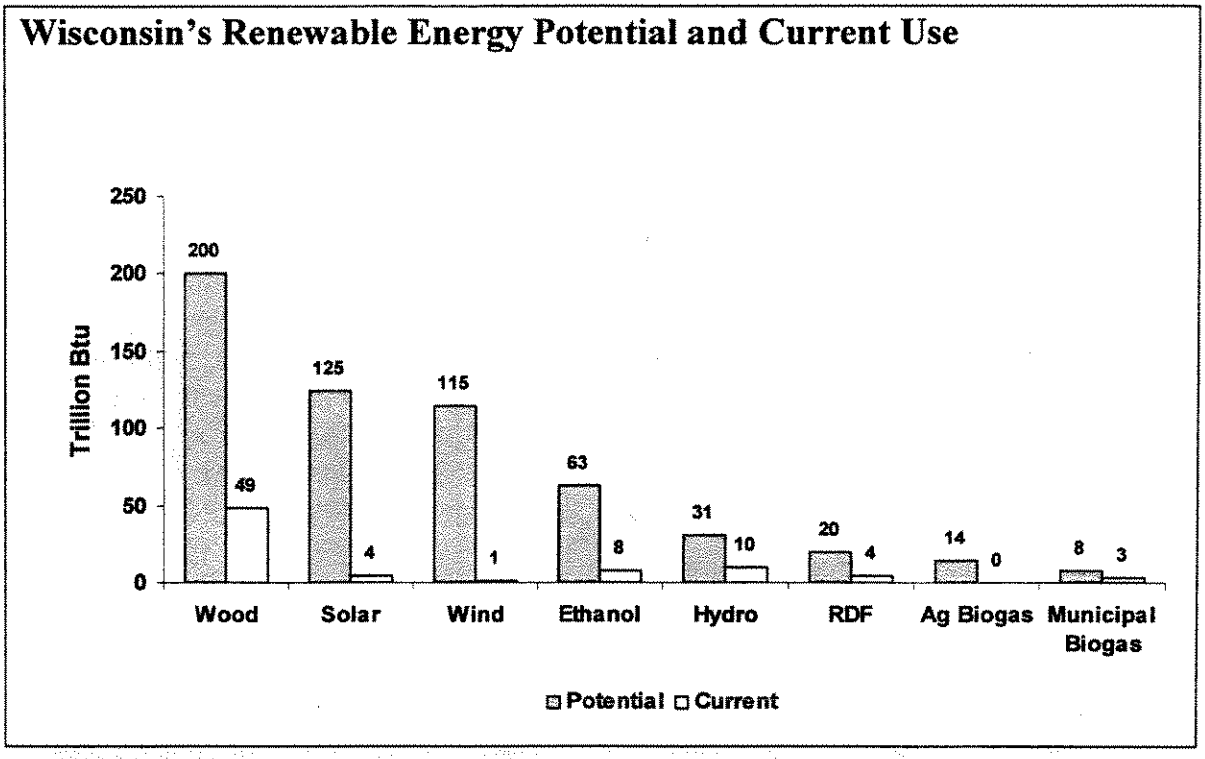
The **Wisconsin Renewable Energy Network** includes the Wisconsin Energy Conservation Corporation (WECC), the Midwest Renewable Energy Association, RENEW Wisconsin, the Energy Center of Wisconsin, L&S Technical Associates and MSB Energy Associates. Subcontractors include: the Wisconsin Center for Environmental Education, the Wisconsin Technical College System, the University of Wisconsin-Extension and Franklin Energy Associates.

Is there a market for significant home energy efficiency and use of renewable energy?

Through wise planning, efficiency measures, and quality construction, homes can be built today that use half the energy used by homes that meet the current energy code. This amount can be halved again by an array of renewable energy options including passive solar and daylighting techniques, solar water heating, and a modest array of photovoltaic cells. Add an efficient wood stove and the purchase of renewable energy electricity from the local utility and the household's energy needs could be satisfied nearly 100 percent by renewable energy.

Program Vision

Wisconsin has large amounts of wind, sun, plant matter, and flowing water. The task at hand is to maximize the benefits of using renewable energy through an integrated approach that considers Wisconsin's resources, market readiness and an established technology supply and maintenance chain. Estimates have shown that Wisconsin has the technical potential to increase its renewable energy application by a factor of seven over current use (see table below). The marketplace for renewable energy applications is still immature. Wisconsin's businesses, farms and homes can produce and use more renewable energy, but the road to increasing this use is filled with barriers that the Focus Renewable Energy Program seeks to overcome by implementing an orderly, sustained plan.



Program Goal

The renewable energy program aims to create both demand for and supply of services in amounts that will lead to a renewable energy market functioning on its own. This market will deliver the energy security and environmental and economic benefits of increased renewable energy use in Wisconsin. As an area with no fossil resources and at the end of supply lines, Wisconsin needs to make its energy supply as diverse as possible and maximize intelligent use of local resources.

The Focus on Energy Renewable Energy program is designed to provide unbiased information, educational opportunities, training, facilitation, financing and marketing to create both a push and a pull for more customer-based renewable energy applications in Wisconsin. This will be complemented with research and development and a special effort to reduce infrastructure barriers. This array of public services marks the largest amount of public funds allocated for this purpose in Wisconsin history. However, it is still expected to take many years of sustained effort before a mature renewable energy market develops and can function efficiently on its own.

One of the program's challenges is to catalyze consumer applications of renewable energy. These are the most efficient from an energy perspective because the energy is used where it is available, reducing the need for increased energy supply lines. However, it also means that renewable energy systems must be as simple to live with and similar in cost to the systems they are replacing. For the most part, this market climate does not exist at present and until it does, another approach is needed is make progress in the renewable energy marketplace.

The Focus on Energy Renewable Energy program's approach targets early technology adopters and consumers who take an active interest and want to be involved in their energy environment. The aim is to develop a renewable energy market through orderly development of this early adopter market, which can support a growing technology, supply and maintenance chain leading to full integration within five to ten years.

More specifically, the statewide Renewable Energy Focus program:

- Creates a clearinghouse that will serve as an entry to all programs and services
- Educates consumers and service providers on renewable energy technology and applications
- Designs and implements renewable energy programs for both the residential and business sectors
- Develops and delivers renewable energy training programs
- Conducts renewable energy market assessments
- Develops financial mechanisms that are compatible with long term market transformation objectives
- Showcases renewable energy through demonstration sites
- Develops and implements a renewable energy research and development program
- Develops a strong infrastructure of renewable energy suppliers
- Builds on the desire for environmental stewardship
- Generates a self-sustaining market for renewable energy

Ethanol Use in Wisconsin

According to a new report by the Wisconsin DOA, ethanol use in Wisconsin motor fuels is on the rise. In fact, in 2001, Wisconsin consumed 85.9 million gallons of ethanol, compared to just 13.3 million gallons in 1994.

Leading by example, the State of Wisconsin has encouraged the growth of ethanol blended fuels. For model year 2002, the state purchased an additional 365 ethanol (E-85) and flexible fuel vehicles, bringing the state's fleet total to 2,108 ethanol and flexible fuel vehicles – one of the largest clean fuel fleets in the nation.

Wisconsin also provides financial incentives to encourage the building of ethanol plants. A 40 million gallon plant is expected to be completed in late 2002 near Monroe, and a 15 million gallon plant began operation near Stanley in June 2002.

Ethanol is a renewable energy source and its use is considered to be beneficial both in terms of the environment and in reducing dependence on petroleum products.

The ***2002 Wisconsin Gasohol and Alternative Fuel Use*** report is available from the Wisconsin Energy Division, P.O. Box 7868, Madison, WI 53707; (608) 266-8234; energy@doa.state.wi.us

- Advances renewable energy in the agriculture sector
- Increases electric system reliability
- Coordinates renewable energy programs with other Focus on Energy contractors and their programs
- Removes barriers to renewable energy adoption without building a bureaucracy

Renewable Energy Portfolio Standard

1999 Wisconsin Act 9 requires that 2.2 percent of all electricity sales come from renewable energy. The law limits hydroelectric sales from facilities put in service before 1998 to account for up to 0.6 percent of the requirement. The renewable energy portfolio timeline:

- **0.5 percent by Dec 31, 2001**
- **0.85 percent by Dec 31, 2003**
- **1.2 percent by Dec 31, 2005**
- **1.55 percent by Dec 31, 2007**
- **1.9 percent by Dec 31, 2009**
- **2.2 percent by Dec 31, 2011**

In 2001, Wisconsin customers used approximately 750,000 megawatt hours of renewable energy. This exceeds the 2001, 2003, and 2005 goals and we are almost halfway toward meeting the 2011 mandate.

Photovoltaics

The word "photovoltaic" comes from the Greek *phos* meaning light and *Volt* - Alessandro Volt -- the man who first devised apparatus for developing electric currents. Photovoltaic or "PV" materials have the ability to generate a current of electricity when exposed to light. Photons, which make up light, knock electrons from the front to the back of the PV material, creating an electrical current. Electrical generation within a solar cell is non-mechanical. There are no moving parts, only moving electrons, and therefore it is silent, clean, and continues indefinitely as long as the light source is present.

Solar panels are made up of photovoltaic (or PV) cells, the basic components required to produce solar electricity. These are made of specially formulated silicon materials. PV cells can be built into frames and installed on roofs or on freestanding racks installed on the ground. Recent solar technology includes building components that incorporate solar cells into walls, windows and roofing systems.

The First Year

On November 6, 2001, WECC and its WREN subcontractors assumed partial responsibility for the design and delivery of renewable energy programs for residential and business customers in Wisconsin. The Residential and Business Programs administrators also have partial responsibility for providing renewable energy services, and DOA will operate, until the end of 2002, a pilot renewable energy program in the 23 northeast Wisconsin counties. Since October 2001, WREN's priorities have been to develop effective administrative infrastructure and processes, finalize the first-year design of services that would be successful in achieving Wisconsin's renewable energy goals, and begin to provide renewable energy services.

Administrative Results

- Began developing with DOA communication protocols between WREN and DOA as well as the Residential and Business Administrators.
- Reached agreement with the University of Wisconsin-Extension, the Wisconsin Technical College System, and the Wisconsin Center for Environmental Education regarding the services these organizations will provide to promote and contribute to the success of the renewable program
- Developed the memorandum of understanding between WREN and the Residential and Business Programs administrators regarding the coordination and integration of their respective responsibilities to renewable energy

New Wisconsin Wind Energy Map Available

The Wisconsin Energy Division has completed a new estimated wind power map for Wisconsin. The map provides probable wind speeds at 200 feet above the ground. The map was produced using wind speed information collected over three years from 13 dispersed towers, as well as from GIS elevation and land cover layers and the Wind Map computer model. This map is considered a first generation product, and more precise estimates will be available in the future.

Program Design Results

WREN finalized with DOA the scope of work and budget for program delivery.

The scope of work includes the following program elements:

- Financing programs
- Renewable energy information clearinghouse
- Facilitation services for residential and business customers
- Education and training programs for consumers, students, educators, and building professionals
- Marketing
- Market assessment
- Technology research and development
- Strategies to eliminate institutional barriers

- Co-funding opportunities
- Renewable credit trading program

Program Implementation Results

To meet the demands of residential and business customers who needed assistance with renewable energy, WREN received a pre-award from DOA allowing them to begin offering a limited set of renewable energy services. During December 2001, WREN was able to offer facilitation services to the following customers: Trent Tube, Midwest Environmental Advocates, Madison Area Technical College, Janesville Energy LLC, Irish Orchards, Hoffman Corporation, and S. C. Johnson.

WREN members also began developing program materials and features, including:

- Commercial and residential site audit procedures and tracking
- List of potential commercial site auditors
- Details for PV installer certification
- Integrating distributed generation concepts into the rules of the Public Service Commission of Wisconsin
- Installation reward program materials
- Business and marketing grant materials
- Incentive levels for small wind machines
- Interconnection requirements for grid-connect renewable energy systems

Since the formal Renewable Energy Program launch in March 2002, the program has:

- Approved its first cash back reward program on March 29 and approved a solar-thermal space heating project for $4,137 and a residential photovoltaic system project at $4,193
- Added a renewable energy option to the Focus on Energy hotline
- Approved two $15,000 grant applications for Business and Marketing, and Technical Feasibility and Demonstration projects
- Developed Business Training Scholarships with the Energy Center of Wisconsin that will target renewable energy professionals
- Approved 13 grant applications
- Received and approved 5 cash back rewards

5. Focus on Energy Environmental Research Program

The purpose of the Environmental Research Program is to explore the impact of electrical energy use on Wisconsin's natural environment. Funding supports research projects that study the environmental effects of electrical generation and transmission.

The program is administered by the Energy Center of Wisconsin (ECW). The ECW is a private, nonprofit organization providing energy efficiency education, information and demonstration.

Program Goal

The primary goal of this program is to contribute practical and useful knowledge to the ongoing process of designing Wisconsin's electrical energy future. Of specific interest are research projects that fill gaps in existing knowledge about the environmental effects of electrical energy generation and transmission in Wisconsin.

The First Year

The Environmental Research Forum was appointed by the Wisconsin Department of Administration's Division of Energy to recommend research projects for funding. The eight members of the Forum contribute a broad spectrum of viewpoints and expertise, and represent the following organizations and institutions: the University of Wisconsin, the Department of Natural Resources, the Public Service Commission of Wisconsin, the Department of Commerce, the Department of Administration's Division of Energy, Wisconsin's Environmental Decade, the Wisconsin Utilities Association, and WE Energies.

The Environmental Research Forum

John Marx, Administrator, Division of Energy, Wisconsin Department of Administration

Julie Keal, Policy Analyst, Wisconsin Department of Commerce

Edward Emmons, Chief, Fish and Habitat Research Section, Wisconsin Department of Natural Resources

Douglas Reinemann, Ph.D., Professor of Biological Systems Engineering, University of Wisconsin – Madison

Marc Looze, Air Pollution Campaign Director, Wisconsin's Environmental Decade

Bill Skewes, Executive Director, Wisconsin Utilities Association

David Michaud, WE Energies

Kenneth Rineer, Senior Environmental Analyst, Electric Division, Public Service Commission of Wisconsin

New information from research results will be made available to legislators and policy makers, the scientific community, and the general public.

Research Priorities

The Environmental Research Forum developed a proposal process to solicit, evaluate, and recommend six research project priorities. These include:

1. Study the effect of mercury and other air pollutants from coal fired power plants on human health in Wisconsin.
2. Measure and inventory mercury in the environment, both sources and fates.
3. Conduct deposition monitoring, modeling and fate of multiple pollutants.
4. Study ecosystem impacts of electrical generation and transmission.
5. Study land use issues resulting from electrical generation and transmission.
6. Identify, study and assess global climate change impacts and strategies for Wisconsin.

Sources of Energy Used to Generate Electricity in Wisconsin

Coal →	73.1 percent
Nuclear →	20.9 percent
Hydroelectric →	3.5 percent
Natural Gas →	1.6 percent
Oil →	0.3 percent
Other →	0.6 percent

In June 2002, Governor McCallum announced grants totaling $672,000 for research projects related to the research project priorities. The grants were awarded by the Focus on Energy Environmental Research Program and are administered by the Energy Center of Wisconsin.

The following are the 2002 Environmental Research Grant recipients:

Upper Midwest Environmental Sciences Center
Award: $110,842
Research Topic: *Assessing the Ecological Risk of Mercury Exposure to Common Loons*

Electric Power Research Institute
Award: $121,530
Research Topic: *Mercury Chemistry in Power Plant Plumes*

WDNR Bureau of Air Management and UW Department of Botany
Award: $39,134
Research Topic: *Lichen Bioaccumulation and Bioindicator Study near Alliant Columbia Generating Facility*

WDNR Bureau of Air Management
Award: $57,452
Research Topic: *Wisconsin NADP National Trends Network (NTN)*

WDNR Bureau of Air Management
Award: $106,950
Research Topic: *Wisconsin Mercury Deposition Network*

Electric Power Research Institute
Award: $150,000
Research Topic: *Comparative Toxicity of Secondary Coal Combustion and Mobil Source*

WDNR Fisheries Management and Habitat Protection
Award: $85,984
Research Topic: *Mercury in Selected Fish Species over Time*

Environmental Baseline Study

An environmental baseline study will establish baseline measurements that describe the current state of health of the environment resulting from the impacts of the electric utility industry. A set of environmental indicators has been identified and will be monitored over time to determine if efforts to reduce energy consumption are benefiting the environment. This study will produce a database of information and will be reported in the Environmental Research Forum's annual report.

Gap Analysis of Environmental Impacts of Electricity and Transmission

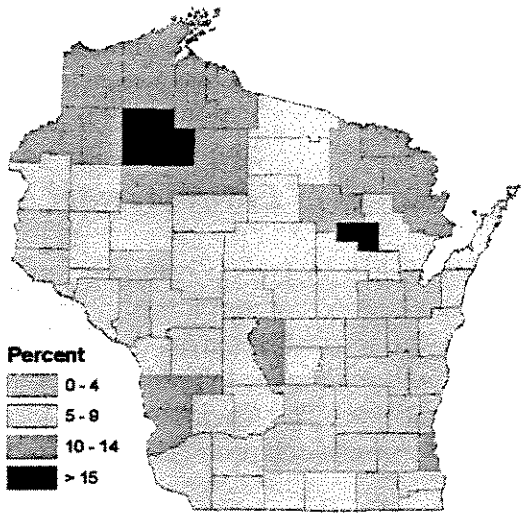
A research gap analysis is being performed to assist the Environmental Research Forum in setting their research priorities. Experts in a wide variety of fields have been interviewed to establish areas that need additional research emphasis. A group of outside experts will review the initial list of research gaps to ensure that all potential gaps have been identified. The Environmental Research Forum will then use this information to re-evaluate the research priorities before a new request for proposal is issued in fall 2002.

6. Home Energy Assistance Program

Background

The Wisconsin Department of Administration manages Home Energy Assistance programs that help families and individuals with limited incomes. Although managed through the Department, the programs are delivered to eligible households through organizations such as county health and social services agencies, Community Action Agencies, and Indian tribal agencies.

These programs receive significant financial contributions from the federal government through the Low Income Home Energy Assistance Program (LIHEAP) block grant and the Low Income Weatherization Assistance Program (LIWAP). As a result of 1999 Wisconsin Act 9, these programs also receive state public benefits money. The public benefits funds have allowed the state to increase the number of limited-income households that receive weatherization, efficiency, emergency, heating cost, and electricity cost services. By integrating these funds with the federal Low Income Home Energy Assistance Program and the federal Low Income Weatherization Assistance Program, Wisconsin has developed a comprehensive, wide ranging assistance program to serve limited-income households—one that deals with "whole home" energy needs.



In addition, for all applicants of LIHEAP, the Department provides on-line benefit reporting to non-participating municipal and cooperative utilities. Access to these reports saves the municipal and cooperative utilities money and allows for equitable benefit levels across the state.

Wisconsin Home Energy Assistance Program (WHEAP)

Household Participation by County
2000/2001 Heating Season
(September 30, 2000 through October 2001)

The Wisconsin Home Energy Assistance Program

Wisconsin's Home Energy Assistance Program (WHEAP) helps state residents pay for home energy costs. The program is operated by county departments of social/human services, Indian tribal agencies, and other nonprofit human service offices, under the direction of the DOA's Division of Energy.

Benefits Provided

Heating Assistance

WHEAP Heating Assistance is a one-time benefit payment for each heating season (October 1 through May 15). It is intended to help pay a portion of heating costs, not to cover the entire annual cost of home heating costs. The amount of the heating assistance benefit depends on household size, income level and household heating costs.

Heating assistance benefits are sent directly to utilities and fuel suppliers to apply to a household's bill. Customers receive a notification from the Wisconsin Division of Energy informing them of their benefit amount; the fuel supplier credits the amount to the customer's account.

Expansion to Electric Services

The Public Benefits funds have enabled the program to expand services to assist with non-heating electric costs. This assistance is intended to help pay a portion of the electric costs of a household, not to cover the entire annual cost of electricity for the household. Households served by non-participating municipal and cooperative utilities (not contributing to the Public Benefits Fund) are not eligible for this benefit, by statutory requirement.

Energy assistance benefits for electric costs are sent directly to electric suppliers in the same manner as for heating assistance. Customers receive a notification from the Division of Energy informing them of their benefit amount, and the supplier credits the amount to the customer's account.

Crisis Assistance

Crisis assistance is available to eligible state residents who are subject to a disconnection of their utility service or if they are nearly out of heating fuel and do not have any way to pay for the fuel or fuel bill. WHEAP Crisis Assistance provides both Emergency Services and Proactive Services. Importantly, all WHEAP agencies provide a 24-hour crisis phone number.

Emergency Services also help during the heating season (October 1 through May 15) by purchasing heating fuel for a household, providing a warm place for a customer to stay

for a few days, providing furnace repair/replacement, or taking other actions that will help in a heating emergency.

Proactive Services may help residents avoid future emergencies throughout the year by establishing co-payment plans between the customer, fuel supplier, and WHEAP agency; providing training and information on how to reduce fuel costs; providing counseling on budgets and money management; or taking other actions to help avoid future emergencies.

Weatherization and Conservation Services

Weatherization Services help reduce home energy costs and conserve energy by reducing home energy consumption. This makes homes more comfortable -- warmer in the winter and cooler in the summer. The reduction in consumption reduces the customer costs and also reduces overall consumption, which benefits all customers.

Common weatherization services may include insulation of attics and side-walls, reduction of air leakage into and out of the home, repair or replacement of the heating system, replacement of water heaters, replacement of inefficient refrigerators, repair or replacement of windows, provision of energy efficient light bulbs, and water saving measures.

Program Eligibility

Generally, people are eligible for weatherization services if they are eligible for WHEAP. When applying for WHEAP, families also are considered for weatherization services.

Households with low to moderate income are eligible. Many households with income from farms, offices, factories and other work places receive WHEAP assistance.

Family Size	Family Income (3 Months)
1	$ 3,221.25
2	4,353.75
3	5,486.25
4	6,618.75
5	7,751.25
6	8,883.75
7	10,016.25
8	11,148.75
For each additional person add	$1,132.50

The table shows income guidelines applicable for the 2001-2002 heating season. Families are eligible for home energy assistance program services if their gross income for the last three months is less than the amount shown in the above table for their family size. In addition to the financial eligibility tests, both weatherization and WHEAP have simple non-financial eligibility tests.

Wisconsin Home Energy Assistance Program
2001/2002 Heating Season
(Based on data available from October 1, 2001 – June 12, 2002)

LIHEAP Heating Assistance

- Provided LIHEAP Heating Assistance to 117,220 households
- Average payment = $307

Public Benefits Electric Assistance

- Provided Public Benefit Electric Assistance to 106,490 households
- Average payment = $128

LIHEAP Crisis Assistance

- Provided LIHEAP Crisis Assistance to 10,903 households
- Average payment = $221

Public Benefits Crisis Assistance

- Provided Public Benefit Crisis Assistance to 7,717 households
- Average payment = $192

Heating Unit Repair and Replacement

- Provided Heating Unit Repair and Replacement to 1,747 households
- Average payment = $1,318

Wisconsin Weatherization Assistance Program
(Preliminary Year End: July 2001 through June 2002)

All Funding Sources

- Provided Weatherization Assistance to 4,360 households
- Average Household Benefit from All Fund Sources = $5,523
- 18percent Unit Increase and 298percent Increase in Direct Household Benefits Compared 1999-2000 Program Year (pre PB)

State Public Benefits Funds Only

- Public Benefit Assistance to 3,954 households
- Average Public Benefit to PB Qualified Households = $2,710
- First Full Year for PB Weatherization Program
  Public Benefits Provided 44% of the Direct Household Benefit

7. Energy Impacts and Savings

A comprehensive independent evaluation of program energy savings is an important component of the Focus on Energy program. On June 28, 2002, PA Consulting Group compiled a special report on the energy savings impact results of the first year of the Focus on Energy programs.

In order to accomplish a balanced evaluation of the Business Programs, PA Consulting applied adjustment factors to the Business Programs administrators' reported savings estimates to derive "evaluated" net impact estimates. This is demonstrated in Table 1.2.

Only ENERGY STAR Products® energy impacts for Residential programs have been adjusted. The rest of the Residential programs administrator's reported energy impacts (reported through June 2002) have not been adjusted. This is due to current evaluation research in progress for estimate adjustment factors. These estimate adjustment factors will be completed soon. See Table 1.1 for the detailed Residential program energy impacts savings estimates.

Additionally, PA Consulting did not evaluate the savings for the Renewable Energy or Environmental Research sectors because these programs were only recently developed. The energy savings and other benefits to limited income households are being evaluated over a three-year period.

Finally, the Focus on Energy program is documenting other savings and benefits in its program evaluation process. For instance, reduced generation emissions is a significant component of the programs' individual successes (Tables 1.3 and 1.4).

The following tables summarize the savings of the Focus on Energy programs as identified by PA Consulting:

1.1 Residential Programs

Adjusted Gross Energy Savings Program Achievement: June 30, 2001 – June 30,2002

Program Area	# of Participants Having Energy Savings Estimates*	Gross Installed kWh Savings	Gross Installed kW Savings	Gross Installed Therm Savings
ENERGY STAR Products	167,481	18,543,910	1,382	142,180
ENERGY STAR Homes	612	212,976	0	75,276
Information & Education	N/A	N/A	N/A	0
Home Performance w/ ENERGY STAR	8,237	3,184,272	1,673	471,856
Targeted Home Performance	5	9,651	2	5,830
Apartments and Condos Efficiency Services	2,597	4,122,991	22	407,455
Total	**178,932**	**26,073,800**	**3,079**	**1,102,597**

Note:

Gross annual savings estimates are based on an analysis made by the program administrator, before any adjustments are made for qualifiers such as free ridership, accuracy of engineering estimates and verification of installation by program evaluators. Adjusted gross savings have been included for accuracy of engineering estimates and verification of installation, but have not been adjusted for free-ridership.

Installed savings estimates are based on the program administrator's reported results from tracking participant's actual implementation of savings recommendations.

*For appliance and technology rebate/financing programs, where building assessments are not practical, the number of participants is identified through other program tracking methods such as sales tracking or periodic surveys of vendors, etc.

1.2 Business Programs

The following table shows the adjusted Business Programs Reported Gross and Verified Gross energy savings developed by applying adjustment factors (based on free ridership and the review of savings estimates) to the program-reported totals as of the end of June 30, 2002.

Program	Sector	kWh		kW		Therms	
		Program Reported Gross	Evaluation Verified Gross	Program Reported Gross	Evaluation Verified Gross	Program Reported Gross	Evaluation Verified Gross
Production Agriculture	Agriculture	964,183	433,882	291	477	1,319	0
Existing Buildings	Commercial	5,278,284	6,439,506	796	1,354	135,114	113,496
Government Buildings	Commercial	461,295	562,780	55	94	3,997	3,357
New Buildings	Commercial	1,691,230	1,691,230	713	713	43,505	0
Schools	Commercial	4,516,205	5,509,770	1,970	3,349	579,547	486,819
Small Business	Commercial	1,943,508	2,371,080	769	1,308	266,588	223,934
General Industrial	Industrial	14,355,123	8,756,625	2,210	3,138	770,319	231,096
Industries of the Future	Industrial	264,654	161,439	43	60	0	0
Water and Waste- water	Industrial	1,237,714	754,396	538	764	160	48
Renewable	BP Renewable	0	0	0	0	984,201	334,628
Unknown	Unknown Program	981	736	0	0	0	0
Total	Commercial	13,890,522	16,574,366	4,304	6,818	1,028,751	827,606
Total	Industrial	15,856,491	9,672,460	2,790	3,962	770,479	231,144
Total	All	30,712,177	26,681,444	7,385	11,257	2,784,750	1,393,378

1.3 Estimation of Environmental Benefits – Reduced Generation Emissions

A separate Focus on Energy evaluation effort estimated emission factors or rates for the electric generating plants serving Wisconsin.* The emission rates can be used to estimate emissions reductions or savings created by the Focus on Energy programs. The evaluation team is currently working to update the emissions rates and to develop an emissions factor for mercury. The mercury emissions rate shown in the following table is taken from the EPA's E-Grid 2000 database.

Emissions Rates

	(Lbs/MWh)	(Lbs/GWh)
	By Marginal Cost	By Capacity Factor
NOx	6.4	5.9
SO2	10.8	10.0
CO2	2400	2035
Mercury	0.0373	

Using the marginal cost emission rates and evaluation-verified net installed electricity savings estimates, the Focus on Energy programs together would save 304,280 pounds of NO_x, 513,472 pounds of SO_2, over 114 million pounds of CO_2 and 1.772 pounds of mercury.

*Development of Emissions Factors for Quantification of Environmental Benefits," PA Consulting Group, June 25, 2001.

1.4 Emissions Savings

		Emissions Reductions (Pounds) †			
Program	**Sector**	**NOx**	**SO2**	**CO2**	**Mercury**
Agriculture	Agriculture	833	1,406	312,396	0.005
Existing Buildings	Commercial	41,213	69,547	15,454,814	0.240
Government	Commercial	3,602	6,078	1,350,672	0.021
New Buildings	Commercial	1,082	1,827	405,895	0.006
Schools	Commercial	35,263	59,506	13,223,448	0.205
Small Retail & Services	Commercial	15,175	25,608	5,690,592	0.088
General Industrial	Industrial	36,428	61,472	13,660,334	0.212
Industry of the Future	Industrial	672	1,133	251,844	0.004
Water - Waste Water	Industrial	3,138	5,296	1,176,857	0.018
Unknown	Unknown Program	2	4	847	0.000
Total	Commercial	96,334	162,564	36,125,422	0.561
Total	Industrial	40,237	67,901	15,089,035	0.234
Total	All Major Markets	137,407	231,875	51,527,700	0.800
Energy Star Products	Residential	118,681	200,274	44,505,384	0.691
Apartments and Condos Efficiency Services	Residential	26,387	44,528	9,895,178	0.154
Home Performance w/ Energy Star	Residential	20,379	34,390	7,642,253	0.119
Energy Star Homes	Residential	1,363	2,300	511,142	0.008
Targeted Home Performance	Residential	62	104	23,162	0.000
Total	Residential	166,872	281,597	62,577,120	0.972
Grand Total		304,280	513,472	114,104,820	1.772

† Emission reductions are calculated using the marginal cost emission rates.

STATE OF WISCONSIN

SENATE CHAIR
BRIAN BURKE

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ASSEMBLY CHAIR
JOHN GARD

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Phone: 266-2343

JOINT COMMITTEE ON FINANCE

November 8, 2002

Mr. George F. Lightbourn, Secretary
Department of Administration
101 E. Wilson Street, 10th Floor
Madison, WI 53703

Dear Secretary Lightbourn:

On October 14, 2002, the Department of Administration (DOA), pursuant to s. 79.10(11)(b) of the statutes, provided the Committee with an estimate of total funds available for distribution under the lottery and gaming credit for property taxes levied in 2002 (paid in 2003). On October 24, 2002, DOA provided the Committee with a second letter, which includes a revised lottery and gaming credit estimate that reflects certain corrections. With these modifications, the amount available for the lottery and gaming credit would total $106,334,700. The Committee is authorized to revise the DOA estimate and may do so at a meeting that takes place before November 1, 2002. If the Committee chooses to accept the DOA estimate, no Committee action is required.

This letter is to notify you that the Committee did not meet to reestimate the amount available for the lottery and gaming credit; DOA may, therefore, notify the Department of Revenue that the amount available for distribution under the lottery and gaming credit is $106,334,700.

The Legislative Fiscal Bureau analysis of lottery sales and expenses and other gaming-related revenues is in agreement with the DOA estimate. The Fiscal Bureau concludes that the certified amount of $106,334,700 would support an estimated average lottery and gaming credit of $78. For your information, the Fiscal Bureau memorandum dated October 29, 2002, relating to this analysis, is attached.

Sincerely,

BRIAN BURKE
Senate Chair

JOHN GARD
Assembly Chair

BB:JG:dh

Attachment

cc: Members, Joint Committee on Finance

Legislative Fiscal Bureau
One East Main, Suite 301 • Madison, WI 53703 • (608) 266-3847 • Fax: (608) 267-6873

October 29, 2002

TO: Members
Joint Committee on Finance

FROM: Bob Lang, Director

SUBJECT: Estimate of Available Funds for the 2002(03) Lottery and Gaming Credit

On October 14, 2002, the Department of Administration (DOA), pursuant to s. 79.10(11)(b) of the statutes, provided the Committee with an estimate of total funds available for distribution under the lottery and gaming credit for property taxes levied in 2002 (paid in 2003). The Department of Revenue (DOR) must be notified of the total amount available for distribution under the lottery and gaming credit by November 1, 2002. This estimate provides DOR with the basis for calculating the fair market value, termed the credit base, necessary to distribute the lottery and gaming credit. The credits are calculated by multiplying the credit base by school tax rates.

The Committee is authorized to revise the DOA estimate and may do so at a meeting that takes place before November 1, 2002. If the Committee chooses to accept the DOA estimate, no Committee action is required.

In its letter, dated October 14, 2002, DOA estimated that a total of $110,222,600 would be available for the 2002(03) lottery and gaming credit. This amount was based on estimated 2002-03 lottery sales of $412.7 million. On October 24, 2002, DOA provided the Committee with a revised lottery fund condition statement that reflects a correction of the estimated farmland tax relief credit payment in 2002-03 and several other adjustments. With these modifications, the amount available for the lottery and gaming credit would total $106,334,700. Our analysis agrees with this revised amount. Certification of this amount would result in an estimated average lottery and gaming credit of $78.

The DOA letter of October 24, 2002, and the lottery fund condition for 2002-03, are provided as attachments to this memorandum. Please note that the attached Fiscal Bureau fund condition statement is formatted differently from the DOA fund condition statement. As a result, certain amounts appear to be at variance. However, these variances are not material and the amount estimated on the lottery and gaming credit is identical under both approaches.

Under 2001 Wisconsin Act 16, the 2001-03 biennial budget act, lottery sales were estimated at $403.6 million in 2001-02 and $402.9 million in 2002-03. Actual 2001-02 lottery sales totaled $427.6 million. This strong performance was primarily the result of particularly high Powerball sales associated with a large jackpot in August, 2001. The revised sales estimate of $412.7 million in 2002-03 was projected on the basis of sales models utilized by DOR to estimate both on-line and instant ticket games. The 2002-03 sales estimate of $412.7 million appears to be a reasonable projection. The following table shows actual 2001-02 sales by game type and 2002-03 sales estimates made under Act 16 and under the revised projection.

		Estimated Sales	
	Actual	Act 16	Revised Projection
Game Type	2001-02	2002-03	2002-03
Scratch	$233,573,800	$233,919,300	$238,361,300
Pull-Tab	4,640,200	3,927,100	4,640,200
On-Line	189,336,300	165,024,600	169,711,400
Total	$427,550,300	$402,871,000	$412,712,900

The certification of the lottery and gaming credit proceeds available for distribution in 2002(03) will require that this amount be paid to property owners. If the projected sales that support the distribution amount are not realized, the lottery fund includes a reserve (approximately $8.3 million) that can be utilized for credit payments. This reserve amount is adequate to support credit payments from the lottery fund even if actual sales are up to $22.0 million less than the projected $412.7 million. To the extent the reserve would need to be utilized, the effect would be to reduce the credit amount in the subsequent tax year. Similarly, if 2002-03 lottery sales exceed the $412.7 million projection, the additional funds would be available for distribution for 2003(04) property tax credits.

In summary, 2002-03 lottery sales of $412.7 million would result in $106,334,700 in lottery and gaming credits. This amount would result in an estimated average credit of $78. Unless the Committee meets to certify another number before November 1, 2002, the $106,334,700 projection will be used by DOR to set the credit base for determining 2002(03) lottery and gaming credits.

AZ/bh
Attachments

2002-03 Lottery Fund Condition Statement
October, 2002

Fiscal Year Opening Balance	$17,698,700
Operating Revenues	
Ticket Sales	$412,712,900
Retailer Fees and Miscellaneous	100,600
Gross Revenues	$412,813,500
Expenditures	
Prizes	$235,235,000
Retailer Compensation	29,059,500
Vendor Payments	12,694,400
General Program Operations	21,510,500
Appropriation to DOJ	289,100
Appropriation to DOR	222,000
Program Reserves	412,200
Total Expenditures	$299,422,700
Net Proceeds	$113,390,800
Interest Earnings	$1,135,000
Gaming-Related Revenue	$1,003,900
Total Available for Tax Relief*	$133,228,400
Appropriations for Tax Relief	
Lottery and Gaming Credit	$106,334,700
Farmland Tax Relief Credit	18,487,400
Late Lottery and Gaming Credit Applications	150,000
Total Appropriations for Tax Relief	$124,972,100
Gross Closing Balance	$8,256,300
Reserve (2% of Gross Revenues)	$8,256,300
Net Closing Balance	$0

*Opening balance, net proceeds, interest earnings and gaming-related revenue.

STATE OF WISCONSIN
DEPARTMENT OF ADMINISTRATION
101 East Wilson Street, Madison, Wisconsin

TOMMY G. THOMPSON
GOVERNOR

GEORGE LIGHTBOURN
SECRETARY

Office of the Secretary
Post Office Box 7864
Madison, WI 53707-7864
Voice (608) 266-1741
Fax (608) 267-3842
TTY (608) 267-9629

October 24, 2002

The Honorable Brian Burke, Co-Chair
Joint Committee on Finance
316 South, State Capitol
Madison, WI 53702

The Honorable John Gard, Co-Chair
Joint Committee on Finance
315 North, State Capitol
Madison, WI 53702

Dear Senator Burke and Representative Gard:

After conferring with the Lottery and the Legislative Fiscal Bureau, the Department is revising its estimate under s. 79.10 (11) of the total funds available for distribution under the lottery credit. This revision reflects the consensus estimate.

The revised estimate projects $106,334,700 will be available for lottery credit distribution in December 2002. Total funds available for distribution equal existing and projected lottery proceeds and interest for FY02 less the amounts estimated to be expended for Department of Justice gaming enforcement and the Farmland Tax Relief and less the required 2% reserve under s. 20.003 (5). The calculation of the estimate is attached.

With the committee's approval, DOA will inform the Department of Revenue that this is the total amount available for distribution under the lottery credit. In turn, DOR will calculate the estimated fair market value necessary to distribute the total amount of revenue available.

Sincerely,

George Lightbourn
Secretary

cc: Members, Joint Committee on Finance
Richard G. Chandler, Secretary of Revenue

Revised Estimated Funds Availabe for Lottery Credit, December 2002

	Estimated FY2002-03
Gross Revenue	
Ticket Sales	412,712,900
Miscellaneous Revenue	100,600
Total Gross Revenue	412,813,500
Expenses	
Prizes	235,235,000
Administration	
Retailer Commission	29,059,500
On-Line Vendor Fee	12,694,400
Operating Expenses	21,510,500
Program Reserves	412,200
Total Administration	63,676,600
DOJ Gaming Enforcement	289,100
DOR Credit Administration	222,000
Total Expenses	299,422,700
Net Proceeds	113,390,800
Amount Available for Property Tax Relief	
Opening Balance	17,698,700
Net Proceeds	113,390,800
Gaming Revenue	1,003,900
Interest Earnings	1,135,000
Total Available for Property Tax Relief	133,228,400
Property Tax Relief	
Farmland Tax Relief Credit	18,487,400
Lottery Property Tax Credit	106,334,700
Late Lottery Credit	150,000
Total Appropriations for Property Tax Relief	124,972,100
Gross Closing Balance (Reserve of 2% of Gross Revenue)	8,256,300
Average Lottery Tax Credit	
Number of Qualifying Parcels	1,371,100
Average Credit	78

STATE OF WISCONSIN

SENATE CHAIR
BRIAN BURKE

317-E Capitol
P.O. Box 7882
Madison, WI 53707-7882
Phone: 266-8535

ASSEMBLY CHAIR
JOHN GARD

308-E Capitol
P.O. Box 8952
Madison, WI 53708-8952
Phone: 266-2343

JOINT COMMITTEE ON FINANCE

November 12, 2002

Mr. George F. Lightbourn, Secretary
Department of Administration
101 E. Wilson Street, 10th Floor
Madison, WI 53703

Dear Secretary Lightbourn:

This is to notify you that the Joint Committee on Finance met yesterday, pursuant to s. 13.09(5) of the statutes, to consider a transition budget for the Governor-Elect. The transition budget request (copy attached) was submitted to the Committee by Ms. Susan Goodwin, Transition Director.

A transition budget in the amount of $87,500, as requested, was approved by the Committee.

Sincerely,

Brian Burke

BRIAN BURKE
Senate Chair

John G. Gard

JOHN GARD
Assembly Chair

BB:JG:dh

Attachment
cc: Susan Goodwin

DOYLE
GOVERNOR

November 8, 2002

Representative John Gard, Assembly Chair
Senator Brian Burke, Senate Chair
Joint Committee on Finance
State Capitol
Madison, WI

Dear Representative Gard and Senator Burke:

Pursuant to Sec. 13.09 (5), Stats., I am forwarding the request of Governor-Elect James E. Doyle for funding needed to establish the administration of the incoming Governor, including hiring staff, making appointments, reviewing the state budget submission, and other necessary tasks. In light of the state's current fiscal situation, Governor-Elect Doyle has attempted to limit the expenditures for the transition and I believe you will find this request to be relatively modest.

If you have any questions concerning the transition budget, which is attached, please contact me at 284-2002.

Sincerely,

Susan Goodwin
Transition Director

P.O. Box 2687 • Madison, Wisconsin 53701 • 608-284-2002 • www.doyle2002.com

TRANSITION STAFF AND BUDGET

TITLE	Monthly salary	Total (7 weeks)
Transition Director	$7,000	$12,000
Assistant to the Director	$2,500	$4,400
Governor-elect assistant	$3,000	$5,250
Scheduler	$3,500	$6,100
Receptionist	$2,000	$3,500
Operations Manager	$4,000	$7,000
Press Secretary	$6,000	$10,500
Assistant Press Secretary	$3,500	$6,100
Personnel Director	$5,000	$8,750
Assistant Personnel	$2,500	$4,300
Policy/Budget Director	$0	$0
Assistant Policy/Budget	$4,000	$4,000
Staff salaries		$72,000
Social security @ 7.15%		$ 4,500
STAFF SUBTOTAL		$76,500
Travel		$3,600
Equipment (computers, copiers, fax)		$1,000
Phones/voice/data lines		$3,000
Office supplies/stationary/postage		$3,400
Total		$87,500