

# Making Clean Energy the Standard

The Renewable Energy Trust Works  
for Massachusetts

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MASSACHUSETTS  
TECHNOLOGY  
COLLABORATIVE

RENEWABLE ENERGY TRUST

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# *Investing in Our Future*

**F**ast forward to December 2010. Massachusetts has the fastest growing renewable energy industry in the nation with hundreds of high-tech businesses creating new jobs and producing cutting-edge technologies to harness power from the wind, sun, biomass and fuel cells. Companies are expanding in the Commonwealth, tapping the unique skills of our workforce as well as the research and development breakthroughs coming out of our world-class universities.

Massachusetts has the most environmentally advanced infrastructure with energy efficient green schools and buildings the norm in communities throughout the state. Families are living in affordable green housing that saves them money on energy bills while leading to a cleaner environment. Once crumbling urban schools now provide healthy settings where kids are thriving and learning.

Massachusetts citizens have a wide array of choices in a competitive power market that is the envy of states across the country. More than 750 megawatts of clean energy powers homes and businesses as the Commonwealth leads a national

charge to reduce the devastating affects of climate change and move toward greater energy independence.

Rewind to the present. The state's \$150 million Renewable Energy Trust is fully operational and making sound investments in our energy future that are transforming vision into reality.

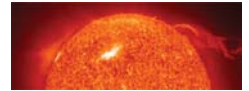
This is not science fiction. The Trust is laying the foundation right now to grow jobs in the emerging renewable industry, help develop new clean energy facilities, deliver green power options to consumers, build state-of-the-art green schools and transform the way people consume electricity.

The Trust represents a tremendous opportunity to make a difference in people's lives by changing the energy paradigm. New jobs, a cleaner environment and better schools for our children are just the beginning.



*Massachusetts  
Leads  
the Way*

Working with state and national leaders, we will fulfill the economic and environmental promise of renewable energy making Massachusetts a truly wonderful place for citizens to live and work.



# New Economic Activity

**A**ny way you add it up, the Renewable Energy Trust works for Massachusetts. By investing in emerging businesses, the Trust is fueling new economic activity. Companies in Massachusetts are making major advancements in solar and fuel cell technologies that could revolutionize the renewable industry. High tech manufacturing is alive and well as companies such as Evergreen Solar and ASE Americas employ hundreds of workers building and exporting solar panels.

Close to 2,000 people are employed in the renewable energy industry, which currently boasts more than \$110 million in sales including a strong export business. The Massachusetts solar industry alone

has annual sales of \$43 million with 78% coming from exports.

The Trust recognizes that job growth comes from the private sector. A new Industry Support Initiative is designed to help local entrepreneurs succeed and help bring renewable businesses into Massachusetts.

The list of private companies, non-profit organizations, communities, architects and developers in the pipeline for one of the Trust's financing tools is growing daily. The Trust is providing targeted infusions of capital and bridging funding gaps to make renewable energy projects happen in Massachusetts.

### *Economic Development Goals:*

- *Position Massachusetts to attract renewable companies to locate here and existing businesses to expand*
- *Provide challenge funds as well as debt and equity investments in early-stage companies to spur new job creation*
- *Create a business and regulatory climate in Massachusetts that encourages entrepreneurs and developers to make long-term investments that generate renewable energy capacity*

Investments with public and private universities through a growing consortium are leading to new technologies that will move out of the lab and into people's homes and businesses.

### **FAST FACT:**

**WITH SUPPORT FROM THE TRUST'S NEW \$10 MILLION SOLAR-TO-MARKET INITIATIVE, MANUFACTURERS AND INSTALLERS OF SOLAR ARRAYS WILL BE EXTREMELY BUSY IN THE MONTHS AHEAD. WORKING WITH ORGANIZATIONS ACROSS THE STATE INCLUDING MIT AND THE MASSACHUSETTS ENERGY CONSUMERS ALLIANCE, THE NUMBER OF SOLAR PANELS INSTALLED ON HOMES AND BUILDINGS IN THIS STATE WILL MORE THAN DOUBLE IN THE NEXT TWO YEARS.**

*Pictured above:*  
The Edgerly Early Childhood Development Center in Somerville received a design and construction grant for \$630,000 from the Trust.



# *Expanding Choices, Benefiting Consumers*

**G**enerating 750-1,000 megawatts of clean energy is a tall order that will tap every ounce of creativity, drive and entrepreneurial spirit we can muster from industry, academia and government. This effort will directly benefit all Massachusetts citizens who value a cleaner environment and increased choices over how their electricity is produced.

Greater diversity in power production will help insulate consumers from volatile price spikes for gas and oil. Bringing more renewable energy online will also help reduce market prices for electricity in New England.

The Trust is working with regulators, utilities, policy makers, project developers and consumer cooperatives to

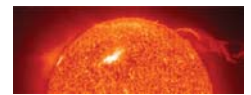
deliver on the promise of renewable energy pulsing through the New England grid. These activities support new generation capacity and help drive down the cost of implementing renewable technologies. Looking ahead, there are plans to develop a Community Wind Program to assist those communities interested in building wind facilities to provide local power options. The core principle guiding the Trust is simple — deliver the maximum benefits to Massachusetts citizens by spurring economic development, greater energy independence and a cleaner environment.



Massachusetts has a tremendous opportunity to lead the charge toward an energy future that is less reliant on imported fossil fuels and more determined to harness domestic renewable energy resources.

## **FAST FACT:**

**THE TRUST AWARDED \$1 MILLION TO NINE CONSUMER COOPERATIVES THROUGHOUT THE STATE TO AGGREGATE DEMAND FOR GREEN POWER. ONE GROUP HAS ALREADY OBTAINED COMMITMENTS FROM 20 EDUCATIONAL AND CULTURAL INSTITUTIONS TO PURCHASE GREEN POWER. A STATEWIDE SURVEY CONDUCTED BY OPINION DYNAMICS IN 2002 REVEALED OVERWHELMING PUBLIC SUPPORT WITH 90% OF CONSUMERS IN FAVOR OF INCREASING THE USE OF RENEWABLE ENERGY. MORE THAN HALF OF THOSE SURVEYED ARE WILLING TO PAY MORE FOR CLEAN ENERGY.**



# Green Infrastructure

## FAST FACT:

**THE TRUST APPROVED MORE THAN \$27 MILLION TO HELP DESIGN, CONSTRUCT AND RENOVATE GREEN BUILDINGS IN DOZENS OF COMMUNITIES ACROSS**

**MASSACHUSETTS. IN ADDITION TO THE \$13.5 MILLION FOR SCHOOLS, THE TRUST MADE AVAILABLE \$14 MILLION FOR GREEN BUILDINGS. GENZYME AND THE WOODS HOLE RESEARCH INSTITUTE ARE TWO EXAMPLES OF THOSE UTILIZING FUNDS TO CONSTRUCT GREEN FACILITIES.**



While Fenway Park's "Green Monster" is probably the only green structure most people could identify in Massachusetts, the Trust is working to change that by making renewable technologies and energy efficiency measures standard practice in construction of green schools, homes and businesses.

Through a dynamic partnership with the Massachusetts Department of Education, the Trust has already financed 37 separate cities and towns that are either building or considering building green schools. This \$13.5 million initiative is receiving rave reviews from school districts, local officials, parents and educators.

Green schools use high performance design, energy efficiency and renewable technologies as part of a three-pronged approach to constructing and renovating school buildings. The result is healthier learning environments for children, better working conditions for teachers and ener-

gy cost savings for cash-strapped communities.

The Trust has plans to expand the green schools initiative by targeting as much as \$5 million to support upgrading facilities in some of the Commonwealth's older urban centers. Developing better learning environments in some of the state's oldest school buildings will help students and educators.

Renewable technologies will soon become part of the math and science curricula helping to educate current and future generations about the benefits of clean energy. The Trust is establishing strategies to educate the public by working with teachers, universities and community-based organizations.

## Affordable Housing

Next on the renewable infrastructure agenda is an initiative to help the state tackle one of its most pressing economic development problems — the shortage of affordable housing. The Trust is developing a new green mortgage program to help homeowners utilize high energy efficiency and renewable technologies in new and renovated homes. The Trust hopes to stimulate new construction of the state's first affordable and market rate green housing. New housing supply is crucial to attracting and retaining a skilled



# Spreading the Green

**T**he Renewable Energy Trust is committed to bringing wind, solar, biomass and fuel cell technologies into the mainstream. Accomplishing the aggressive goals of generating 750-1,000 megawatts, creating significant new jobs and greening Massachusetts' infrastructure requires enormous collaboration at the local, state and federal levels.

Massachusetts has a proud tradition of leading the nation and creating the models for other states to follow. The Trust has the potential to emerge as a national leader among the 18 other state renewable energy

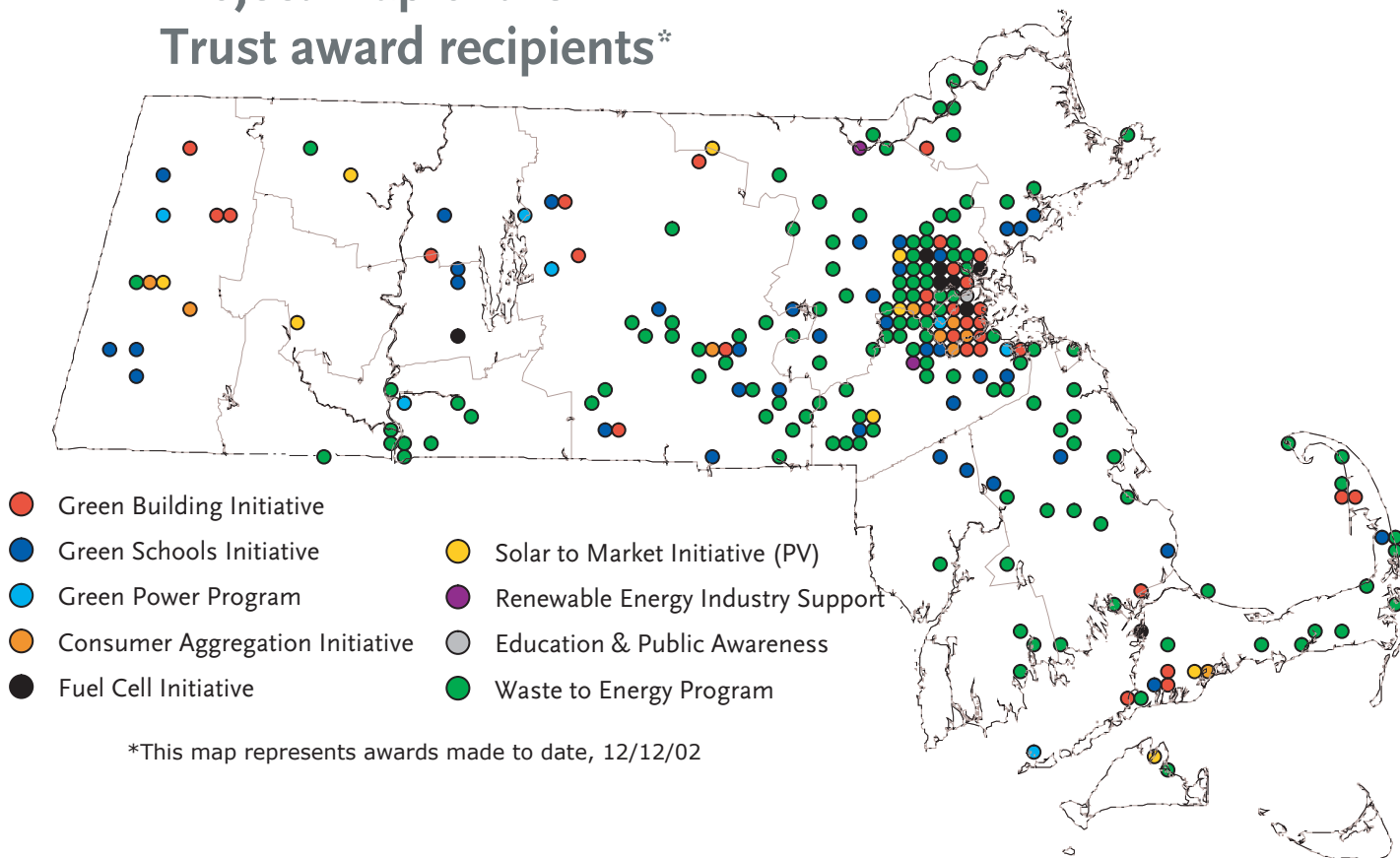
funds working toward a shift in the way America generates electricity. By tapping the brightest minds and best ideas from industry, academia and government, the Trust is well positioned for success.

Climate change, increased energy security and a cleaner environment are everyone's responsibility. We all

share the fundamental obligation to future generations to leave the planet in better shape than the way we found it. Making renewable energy the standard will take time, commitment and resources to bring about the type of innovation that will transform the way we produce and consume energy.

Project-by-project, community-by-community, the Renewable Energy Trust is working for Massachusetts.

## Project map of the Trust award recipients\*



\*This map represents awards made to date, 12/12/02