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annual report

i C A S T

International Center for Appropriate  
and Sustainable Technology





Dear Friends,

Thank you for your continuing support to iCAST. I am honored to have such a dedicated staff, board and supportive community that helps iCAST achieve its mission to utilize local resources for the benefit of local communities.

In 2010, iCAST created a positive impact for Colorado communities with an economic value exceeding Five Million Dollars. In doing so, iCAST helped individuals in various communities save over Three Million kWh's and reduce CO2 emissions by over Five Million lbs. iCAST placed 336 individuals in new or better jobs, and engaged 225 students in its services learning program for undergraduate and graduate students. Over 250 families benefited from weatherization services, increasing their comfort, and lowering their energy bills. Social benefits were administered to over 750 families.

While 2010 was an exciting year for iCAST, 2011 promises to be even more. iCAST will continue to create sustainable opportunities for communities through technical assistance, education and training, and execution of triple bottom-line projects, such as weatherization of low-income housing.

As we move into a new decade, iCAST is looking beyond the borders of the USA to locations in Asia, Africa, and Central America to create a truly international organization. Already, iCAST is lining up projects in Pakistan and Tanzania, in partnership with local NGO's who are currently doing exceptional work. iCAST hopes to bring its entrepreneurial mindset with its Service Learning model to these locations. iCAST hopes to focus its efforts on helping establish micro-enterprises that create local jobs and provide sustainable development opportunities to the local population.

As we venture into 2011, we are counting on your continued help and support, to spread our model of promoting sustainability through appropriate technology deployment to all corners of the globe.

Regards,

*Ravi Malhotra*  
Founder & Chairman



# Community Sustainability Consulting

While working to tackle a variety of specific problems, iCAST simultaneously recognizes the need for economic, environmental, and social integration. In our view, sustainable technical development is synonymous with self-reliance, as it is a long term process requiring full communal participation. To achieve sustainability, communities must learn to develop themselves from the inside out, understanding how and when to bring in external technical and financial assistance under local leadership. iCAST's ultimate goal is to offer this brand of self-reliance to the communities in which we work. iCAST manages projects, ranging from innovative technology development, to community project feasibility studies, to project implementation. iCAST focuses on end to end project management, providing sustainable solutions, leaving communities self reliant with flourishing economies.



Demonstration of iCAST's Biodiesel Installation

## Service Learning

Hands on iCAST projects provide opportunities for students to learn how academic concepts, such as sustainable development, can be practically applied to the problems underserved communities face. Students sharpen their skills, while learning about teamwork, communications, and ethics. In 2010, more than 200 students contributed \$275,000 worth of services to the communities that iCAST served.

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Under the mentorship of iCAST's engineering staff, a student team from the University of Colorado's Engineering Department completed the technology selection phase of the project. Then a student from the University of Virginia worked on the follow up phase of the project. Collectively, these students analyzed the feasibility of the technology, designed and built a prototype energy storage system, conducted marketing research, and reached out to producers throughout the state of Colorado regarding their interest in adoption of energy storage technology. As energy becomes increasingly expensive, the public interest in renewable energy continues to expand. Agricultural producers can directly benefit from the installation of these renewable technologies, but a serious problem exists in the storage of this energy. iCAST is now on the way to being part of a solution. Currently a team of engineering students from CSU are testing a demonstration scale version of this system at the PERC Greenhouse on the CSU campus.

# Workforce Development and Training Program

In 2010, iCAST administered 10 week long courses to over 957 individuals in the classroom and 3,368 individuals through online training. Training covers relevant information for jobs in the area of manufacturing, assessment, business, installations, and management to provide students with a comprehensive understanding of the renewable energy and energy efficiency industries.

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“I was directed to iCAST and the Green Careers for Coloradans Program through the Colorado Department of Labor. Times have been tough and jobs scarce, but now I am starting a new career in Energy Auditing....The field experience training of iCAST was very helpful...I am looking forward to a good and well paying career in Energy Auditing. I am very thankful to all the help Natalie Libansky gave me, in getting me into this great iCAST training course.” - Martin Duffield



Secretary of Labor, Hilda L. Solis, visiting an iCAST Energy Efficiency Class

## Energy Efficiency Program

In 2010, iCAST expanded on its highly successful Energy Efficiency program to 250 low-income and senior housing units. iCAST also provided energy efficiency education to children, families, and underserved communities throughout Colorado. By using less energy, farmers, communities, non-profits, and businesses can increase profitability, effectively strengthening local economies.

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iCAST staff came across a home with insufficient heating, and insulation that forced one woman to live in a home with frost on the inside of her windows. The temperature was so unbearable, she had to walk around her home wearing a winter coat, just to stay comfortable. Not only was her standard of living unacceptable, but her bills were simply unmanageable. After analyzing the energy bill iCAST recommended the most efficient solutions and provided the installation of ECMS at no cost to the home owner. Because of iCAST, this individual will reside in a comfortable home, benefiting her well being and health.

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## Impact Assessment & Major Accomplishments

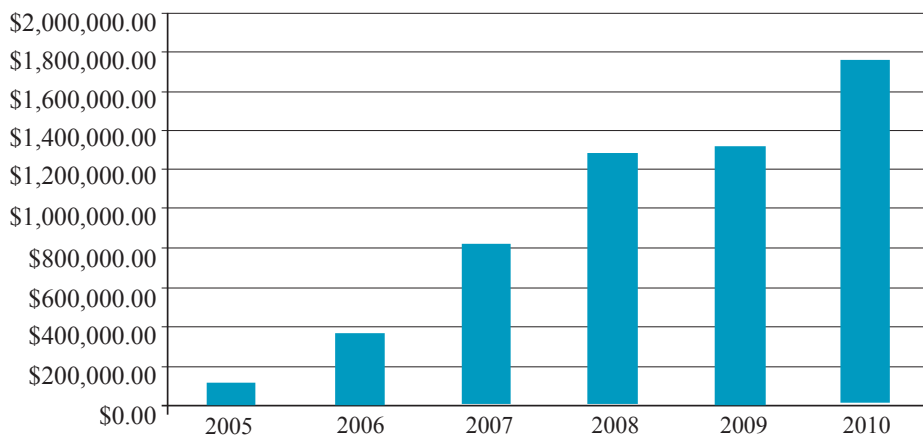
- ✓ Performed more than 300 Energy Efficiency audits and installs for the residents of Colorado
- ✓ Administered 10 week long training courses to over 950 people in the classroom and more than 3,000 people through our online training
- ✓ Engaged 200 students to provide \$275,000 worth of work on various projects within the organization
- ✓ Placed 336 individuals in new or better jobs with the help of our training partners
- ✓ Researched practical applications for an energy storage device that reduces peak demand load for agricultural producers
- ✓ Managed the design and installation of a farm scale biodiesel facility in southeast Colorado
- ✓ Developed community sustainability plans for counties, cities and a tribe in Southern California
- ✓ Saved over 3 Million kWh of Energy, reducing CO2 emissions by 5 Million lbs.
- ✓ Created direct economic impact worth over \$5 Million
- ✓ Promoted the launch of three new social ventures



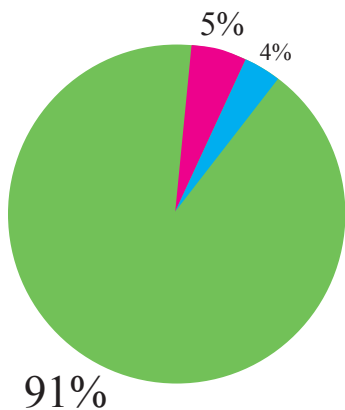
Colorado School of Mines students showcasing their iCAST Service Learning Project




# 2010 Financials

## Revenue Trends



## 2010 Revenue



	Fundraising \$88,131.55
	Administration/Outreach \$70,505.24
	Program Services \$1,603,994.21

“The four individuals who comprised the training team for the ‘Fundamentals of Energy Efficiency Course’ were **courteous, knowledgeable, respectful, humorous, inspiring, and generous** with their time and resources. Also, each one of them **freely offered extra support** outside the official class time...The final day included a career panel that presented **another level of exceptional support** to the class. I would highly **recommend** this training to people I know who would fulfill its requirements.”

Mark Klosterman

(FoEE Training Recipient)

# A b o u t i C A S T

## M i s s i o n

iCAST's mission is "to provide economic, environmental, and social benefits to economically disadvantaged individuals and communities; and to provide education and training that builds local capacity." iCAST partners with organizations to help local citizens in the community utilize their existing resources for their own benefit. Our focus is building healthier communities. Our impact is a healthier planet.

## P r o g r a m A r e a s

**Community Sustainability Consulting:** researching and developing sustainable solutions for communities across the world by providing technical assistance to conduct resource assessments, feasibility studies, business planning and project implementation for projects that promote a triple bottom-line approach to community development.

**Workforce Development and Training Programs:** providing job training, work experience, and resource development for students through a Service Learning program, unemployed and under-employed individuals and for workforce agencies.

**Energy Efficiency Program:** administering energy efficiency retrofit programs for low income housing, non-profits, senior housing, and entire communities. Manage the entire process from qualifying clients to energy audits to ECM installation to final reporting and invoicing.

## S t a f f

President: Ravi Malhotra

Vice President: Chris Stoneman

Director of Administration & Finance: Marcia Cohen

Director of Energy Efficiency Programs: John Elliott

Project Manager: Chris Jedd

Technical Project Manager: Sam Anderson

Training Project Manager: Natalie Libansky

Trainer: Milo Smith

Training Coordinator: Laura McGaughey

Energy Auditor / Advisor: Rob Foley

Energy Efficiency Program Coordinator: Cindy Wagner

Business Development Associate: Mathew Crosby

## B o a r d

Chairman:

Ravi Malhotra

Directors:

Vic Ahmed, Entrepreneur

Matt Heimerich, Farmer

Robert Knecht, Colorado School of Mines

Tim Scotland-Stewart, Engineer, McKinstry Group



# 2011

## Goals and Objectives

As we move into a new decade, iCAST is looking beyond the borders of the USA to locations in Asia, Africa, and Central America to start 2011 with an international focus. Already, we are lining up projects in Pakistan and Tanzania, in partnership with local NGO's who are currently doing exceptional work. iCAST hopes to bring its entrepreneurial mindset with its Service Learning model to these far-away places and focus its efforts in helping establish micro-enterprises that create local jobs and provide sustainable development opportunities to the local population. We are making great progress and with your help and support, iCAST will spread its model of promoting sustainability through appropriate technology deployment to all corners of the globe.

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