

Honorable Mention
Susan Beth Thomas

InnoCentive Challenge 7520002
Evaluation of Submissions

In response to your **Ideation Challenge** on “**Ideas for Increasing Public Transportation Use to Reduce Greenhouse Gases in Chicago**” InnoCentive is forwarding the following submissions to you for your consideration and evaluation.

My Solution: INTRODUCTION and BACKGROUND;

“ The CTA says it must raise fares to make up for higher energy costs...protesters...CTA officials figure it will lose about 17 million rides because of the increase.” Chicago Sun-Times, November 14, 2008

“It has been estimated that 1,000 times more energy reaches the earth’s surface from the sun every single year than could be produced by burning all the fossil fuels mined and extracted during that same year.” ‘Consumer Guide to Solar Energy’ by Scott Sklar & Kenneth Sheinkorf

The innovative solution to the challenge of increasing CTA ridership by 800,000, Reducing green- house gases and generating hundreds of thousands in FREE, POSITIVE global publicity lies in utilizing what can be found in the CTA’s own backyard. The CTA owns thousands of square feet of standing seam metal roofs along the Blue, Green Pink and Orange Line routes. As well as thousands of standing seam metal roof space on its work sheds and repair garages. Installing a grid-connected, Untied Solar Ovonix, Photovoltaic Renewable Energy System on every square foot of available CTA roof space will drastically reduce, or entirely eliminate the CTA’s electric bill. And possibly create a constant income by selling any excess electricity back to the ComEd ‘grid’.

The Blue, Green, Pink and Orange Lines all operate on an east-west line. Creating the Southern Exposure necessary to utilize the sun’s energy most effectively.

Becoming the first major transportation system in America to convert to renewable Energy will put the CTA on the global map. Boosting tourism and strengthening Chicago’s bid to host the Olympic Games. Transportation leaders from around the world Will come to Chicago’s CTA. Tourists from around the world will flock to Chicago to experience the thrill of being a part of the ‘green city transportation system that works.’

The money saved by generating your own electricity would allow the CTA to possibly LOWER the price of a ride and invest in more clean gas buses. United Solar Ovonix, an American Company creating American jobs, has patented a revolutionary, cost-effective, UV Photovoltaic System designed specifically for standing seam metal roofs. UV rays from the sun are constant. Producing 80% energy efficiency rain or shine, during clouds or sun. Bottom line cost will depend on the total available square footage to be covered.

“By integrating solar panels that process sunlight to electricity, any standing seam metal roofing source can become a valuable energy producer.”

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www.uni-solar.com

UNI-SOLAR SYSTEM HIGHLIGHTS;

- 1) Easy “peel & stick” application.
- 2) No additional structural support hardware required.
- 3) Favorable return on investment (ROI) due in part to low installation costs.
- 4) Weather-tight, quick connect system.
- 5) Shadow tolerant and superior performance at both high temperatures and under cloudy, low-light conditions.
- 6) 20 year warranty on PV output and physical integrity, and 5 year system warranty.
- 7) Durable, glass free construction offers a level of safety that exceeds glass-based PV products.
- 8) Complete system design and engineering support.
- 9) Provides more real energy (kilowatt hours) than crystalline panels of the same power rating.

“Uni-Solar products are ideally suited for cost-effective solar roofing solutions because they are lightweight, durable, flexible, can be integrated directly with building materials, and generate more energy in real-world conditions.”

www.uni-solar.com

Installing a United Solar Ovonic, Uni-Solar Photovoltaic Renewable Energy System will enable the CTA to position itself to take full advantage of President-Elect Obama’s “New Energy for America” Program.

- 1) The Implement Cap and Trade Program to reduce Green House Gas Emissions.
- 2) \$ 150 Billion over 10 years to accelerate and promote development of commercial scale renewable energy.
- 3) The commitment to reforming federal transportation funding and leveling employer incentives for public transit.

There will also be many Federal and State Incentives to help the CTA to pay for a United Solar Ovonic Uni-Solar Photovoltaic Renewable Energy System.

1) SOLAR ENERGY INCENTIVE PROGRAM

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Providing up to 30% of project cost, maximum amount \$ 250,000
Up to \$3.25 per DC watt.

www.commerce.state.il.us

2) CLEAN RENEWABLE ENERGY BONDS (CREBs)

An allocation of \$800 Million for new CREBs made by the Energy Improvement and Extension Act of 2008. Clean Renewable Energy Bonds (CREBs)
Can be used to finance renewable energy projects.

www.irs.gov

3) BUSINESS ENERGY TAX CREDIT

A corporate tax credit, 30% for solar. The credit is equal to 30% of expenditures with no maximum credit limit stated. Eligible solar energy property includes equipment that uses solar energy to generate electricity.

www.irs.gov

The beauty of this idea is its simplicity and cost-effectiveness. The CTA becomes the world leader in Renewable Energy for a major city transportation system. With Uni-Solar project manager oversight and easy peel & stick application, much of the installation could be done in-house. Utilizing the CTA's own engineers and workers. Creating in them, a sense of pride and job security.

Eliminating or greatly reducing the CTA's electric bill creates self-sufficiency and the economic freedom to LOWER fares and upgrade the fleet of buses to hybrids. It also lowers the CTA's carbon footprint and generates hundreds of thousands in POSITIVE global publicity.

United Solar Ovonic is an American Company providing American jobs. A partnership between the CTA and United Solar Ovonic will send the national message that we Americans, and American Ingenuity, can and will embrace renewable energy technology and energy independence.

Installing a Uni-Solar UV Photovoltaic Renewable Energy System will produce immediate financial returns. Using part of those energy savings to lower fares will be a 'deal too good to pass up ' for riders concerned about lost wages, lost jobs, and higher gas prices. Ensuring that CTA ridership can meet, and even exceed the one billion rides per year goal.

“Investing in a solar electric system allows the (CTA) to produce your own electricity with no noise, no air pollution, and no moving parts while using a clean renewable resource. A solar electric system will never run out of fuel, and will help reduce the amount of greenhouse gases emitted by coal fired plants. It is the Ultimate energy source for the 21st century.”

www.solarexpert.com

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Energy Independence. Positive global publicity. Uplifting employee morale and job security. Easy, cost-efficient application. Passing savings on to ridership. Boosting Chicago's bid for the Olympic Games and enhancing Chicago's global image as a GREEN city. Increased tourism. American Ingenuity. American Jobs.

Please consider the UNLIMITED BENEFITS of using a United Solar Ovonic Renewable Energy System to SOLVE the CTA's and the Chicagoland Chamber of Commerce's Ideation Challenge. President-Elect Obama's New Energy for America program is eager to help you. Begin the preliminaries now and hit the ground running on January 21, 2009!

REFERENCES:

- 1) UNI-SOLAR LAMINATES
www.uni-solar.com
- 2) UNI-SOLAR MIDWEST DISTRIBUTOR
www.Inovateussolar.com
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1-574-968-442 x 4502
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T.J. Kanczuzewski- Vice President
TJ@Inovateussolar.com
- 3) FEDERAL, STATE INCENTIVE DATABASE
www.dsireusa.com
- 4) President Elect Barack Obama's Energy Policy
www.my.barackobama.com/page/content/newenergy
- 5) SOLAR RADIATION Resource Maps
www.rredc.nrel.gov/solar
- 6) U.S. Department of Energy
www.energy.gov
- 7) RENEWABLE ENERGY POLICY PROJECT
www.repp.org
- 8) NATIONAL RENEWABLE ENERGY LABORATORY
www.nrel.gov
- 9) ENERGY EFFICIENCY and RENEWABLE ENERGY CLEARINGHOUSE
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www.eren.doe.gov

- 10) ILLINOIS SOLAR ENERGY ASSOCIATION
www.Iseanetwork.org

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