

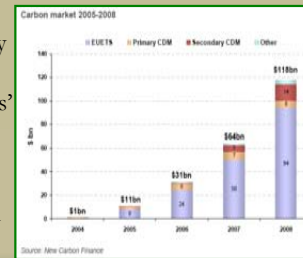
Abstract & Mission Statement

CARES is developing interoperable, open source sustainability assessment and modeling tools that will allow users to quantify their level of sustainability across environmental and manufacturing metrics that include, but are not limited to, carbon dioxide, sulfur dioxide, methane, water consumption, electricity consumption, and solid waste production.

An online community and sustainability database is being constructed at planetcares.org to distribute the assessment tools, environmental data, and sustainability best practices.

Financial Sustainability

- Sizeable carbon emission trading market
- Expected growth to \$150 bn in 2009
- Revenues streams created by providing tools to:
 1. properly quantify products' carbon intensity
 2. identify sustainability and renewable energy technology to reduce carbon intensity



Case Studies

Culturally-Inspired Sustainable Housing for Pinoleville Pomo Nation



- Tribal Sovereignty
- Energy conservation and efficiency
- Energy independence
- Environmental harmony
- Culturally-inspired
- Educate youth

Developing Sustainable Communities in the Kingdom of Saudi Arabia



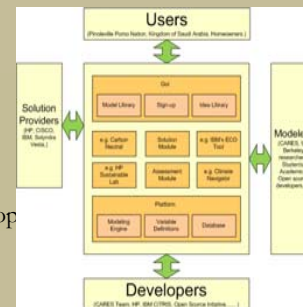
- Dar Al-Hekma (Women's college) partnership
- Increasing opportunities for women
- Improving health
- Environmental stewardship
- Water conservation and management
- Energy conservation and efficiency

Motivation

- Reducing the environmental impacts is key to reducing to effects of catastrophic climate change
- Information concerning the environmental impact of products is decentralized and unclear.
- Adoption rate some of renewable energy technology is glacial: ~11% of US household have energy efficient bulbs
- Our view is that access to the latest data, models and solutions will accelerate adoption of sustainable solutions

Technical Infrastructure

- Information on sustainability best practices and renewable energy technology
- Current sustainability calculators and assessment models
- Data structures to co-develop interoperable open source sustainability tools
- Metrics to evaluate and rate carbon calculators and assessment models



Impacts

Culturally-Inspired Sustainable Housing for Pinoleville Pomo Nation



- Construction begins in Summer 2009
- Members of the PPN are returning back to CA
- The PPN is implementing additional sustainability technology

Developing Sustainable Communities in the Kingdom of Saudi Arabia



- Dar Al Hekma has begun measuring and reducing air pollution on campus
- Empowering women of Dar Al Hekma to pursue technical fields

Goals

To develop open source tools, case studies and infrastructure to enable consumers and companies make informed decisions about sustainability and renewable energy technologies.

CARES will:

1. Assess current level of sustainability
2. Advise on appropriate solutions
3. Connect with vendors to help implement solutions
4. Measure the improvement in the level of sustainability

Current Status

- Searchable database of sustainability cases
- Calculators and software environments



Community Assessment of Renewable Energy and Sustainability

Grade/Audience: All | Keywords: [] | Advanced Search

Welcome to CARES!

Advanced Search | Browse Resources | Submit Resources | Case Studies | Assessment Tools | References | Data | Wiki | My Workspaces

CARES: Open Source Portal for Sustainable Solutions.
Our mission is to enable consumers and stakeholders to make informed decisions about sustainability and renewable energy technologies.

Latest News
California Sets First Low Carbon Fuel Standard in U.S. April 24, 2009
Hundreds in Rhode Island seek 'green' building standards certification April 24, 2009

Future Work

Work with industry, academia, and government to

- Identify metrics
- Evaluate current software
- Develop standardized metadata and vocabulary
- Create interoperability to make the CARES infrastructure
- Conduct UC Berkeley dorm sustainability assessments