

California Center for Sustainable Communities at UCLA

A UC-wide Collaboration

Founding Partners: UC Los Angeles, UC Berkeley and UC Davis

April 2012

Fact Sheet

The Issue

There is little research that accounts for the total energy used in community systems at a geographically specific scale. A need exists to expand upon available research data on this subject and to comprehensively investigate the relationships among location, type of development, and energy use. Despite the *AB 32 Scoping Plan's* more integrated framework, many state programs and policies intended to reduce energy use and greenhouse gas (GHG) emissions are implemented as single programs in isolation. This isolation leads to missed opportunities to leverage resources and unintended consequences. Interdisciplinary research is needed to monitor the effectiveness of many state programs and policies to reduce GHG emissions and increase community benefits across sectors. Also, a more coordinated and integrated understanding of the total energy use and GHG emissions associated with transportation is needed, including the embedded energy in the vehicles and infrastructure. This, in turn, will help policymakers design programs that more effectively meet community goals and implement state policy.

Project Description

The California Center for Sustainable Communities at UCLA (Center) will become a statewide interface for the synthesis, coordination, and communication of sustainable energy systems research. Using the *2011 Sustainable Communities Research Roadmap* as a framework, the Center will initiate and disseminate

research and development to benefit California. It will assist in producing data, models, methods, tools, and case studies to support the creation of more sustainable, energy-efficient communities. The Center will be a multi-campus effort led by UCLA's Institute of the Environment & Sustainability, with partners at UC Berkeley's Center for Resource Efficient Communities, UC Davis' Institute of Transportation Studies and UC Davis Extension's Land Use & Natural Resources Program. PIER expects the Center to become a national model and leader in sustainable communities' research.



Smart Corner in downtown San Diego

Anticipated Benefits for California

When land use and transportation are better integrated into the design of communities, ratepayers benefit from greater electrified transit such as light rail, streetcars, and buses, as well as the incorporation of electric vehicles in communities. Co-benefits include reduced GHG emissions, fuel cost savings, and reduced air

pollution. The California Air Resources Board estimates that better land use and transportation planning could lead to a five million megaton reduction of GHG emissions by 2020.

Some of the products of the Center will include:

- A geographic information system (GIS) based tool for electric vehicle infrastructure that will enable the Energy Commission to make more effective use of Alternative and Renewable Fuel and Vehicle Technology Program funds, and help Metropolitan Planning Organizations (MPOs), cities and counties plan for public charging infrastructure
- A Pedestrian Rating Tool for Level of Service for use by Caltrans, MPOs and local governments to better plan for and invest in a pedestrian-supportive transportation infrastructure
- Tools and methods for local governments based on Center research findings to be disseminated to end-user stakeholders through trainings, presentation materials, classes, seminars, and demonstration workshops.
- Web-based information encompassing the collective statewide Sustainable Communities Research, making it easier to access for researchers, policymakers, and residents of California.

Disclaimer

The Commission, its employees, and the State of California make no warranty, expressed or implied, and assume no legal liability for this information or the research results.

Project Specifics

Contractor: UCLA's Institute of the Environment & Sustainability

City/County: Los Angeles/Los Angeles County

Application: Statewide

Contract Number: 500-11-012

Amount: \$1,900,000.00

Term: April 2012 to June 2015

For more information, please contact:

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