

Austin, USA

The Austin Energy Green Building Program for eco-efficient construction and consumer empowerment

In 1991 Austin Energy, America's 8th largest public utility, modified national building codes to better suit their ambitious local climate action purposes. Austin Energy became the first utility to launch its green building program, known as the Austin Energy Green Building (AEGB). To complement the AEGB, the City offers regular workshops training and connecting builders in eco-friendly construction.

Urban NEXUS Case Story 2014 - 01

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The project in brief

Through the establishment of a rating system for energy-efficient homes and a local energy code, the City provides incentives to local developers to exceed national building standards. The Austin Energy Green Building Program allows single family, multifamily and commercial buildings to be rated by both home owners and building professionals. Additional offers include educational workshops for building developers on sustainable design and construction. The Rating System also provides building professionals an online tool to communicate with AEGB staff and other stakeholders in the project team. The tool project teams may create project schedules in line with rating milestones, receive a rating for a building project, publish case studies and record completed projects. Whereas prospective building owners are provided with AEGB staff support, rating guides and score cards to empower and inform each stage of the process. The project was implemented through inter-departmental collaboration within the City of Austin together with external partnerships between universities, research institutions, building market associations, and the International Code Council.

What makes it "Urban NEXUS"?

The primary success factor of the project lies in the inter-departmental institutional Urban NEXUS which allowed the City to customize national building codes, like local energy standards, in a way that addresses local metropolitan conditions and targets market development. The AEGB works closely with the Planning and Development Review and Watershed Protection, Public Works, Austin Resource Recovery and Austin Water departments, for planning, resource and construction standards, along with the Neighborhood Housing and Community Development departments responsible for affordable and green housing matters. The utility also offers an educational program, which is a joint effort between the City, the International Code Council and universities such as Texas A&M. The AEGB not only reduces urban heat island, and GHG emissions, indoor and outdoor pollutants, construction waste and utility bills, it also improves energy efficiency, stormwater management, water conservation and pest management. In result, the transparent rating system ensures that home buyers are better informed, while energy auditing and the construction of eco-friendly homes are encouraged through the use of incentives and training for building professionals.



Date	1990-ongoing
NEXUS Sectors	Green Buildings-Water-Energy-Economy
NEXUS Innovations	Institutions; Design and Technology, Communications+ User Behavior
Scale	City-wide
Budget	US\$ 150,000 / year

Urban NEXUS Definition

The Urban NEXUS is an approach to the design of sustainable urban development solutions. The approach guides stakeholders to identify and pursue possible synergies between sectors, jurisdictions, and technical domains, so as to increase institutional performance, optimize resource management, and service quality.

It counters traditional sectoral thinking, trade-offs, and divided responsibilities that often result in poorly coordinated investments, increased costs, and underutilized infrastructures and facilities. The ultimate goal of the Urban NEXUS approach is to accelerate access to services, and to increase service quality and the quality of life within our planetary boundaries.

ICLEI / GIZ 2014

Further Reading

Official project website: www.austinenergy.com

Official Project Report (2011): <http://www.austinenergy.com/wps/wcm/connect/06b6bfe9-bfdb-406e-b599-e046bb9888a5/aegbAnnualReport2011.pdf?MOD=AJPERES> (20 Aug 2014)

GIZ and ICLEI (2014), Operationalizing the Urban NEXUS: towards resource efficient and integrated cities and metropolitan regions, GIZ Study: www.iclei.org/urbanexus

Scope for improvement

As eco-efficient homes at times imply novelties in home equipment, a user guide to assist home-owner user behavior could be developed to ensure maximum efficiencies and the sustainable use of appliances. Such measure could enhance the involvement of civil society, in addition to the public education efforts already under way.

Replication

The developed rating system and energy code, as amendment to the national Building Code, is transferrable to other municipalities. Capacity needs to be available within the City's administration in order to allocate staff to the development and ongoing maintenance of the program, as well as for the execution of educational events.

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On behalf of:



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