



## **N E W M E X I C O**

*Increasing Energy Efficiency in New Buildings in the Southwest: Energy Codes and Best Practices* examines the potential for and benefits from adopting and enforcing up-to-date residential and commercial energy codes and “best practice” building techniques in the Southwest states of Arizona, Colorado, Nevada, New Mexico, Utah, and Wyoming. The study examines three scenarios – business-as-usual, moderate improvement, and strong improvement – modeling costs and energy savings for all three scenarios in 2010 and 2020. The study also makes a series of policy recommendations to promote energy codes and the construction of highly-efficient buildings.

Following are New Mexico-specific data and results:

### **Status of Energy Codes**

The 1992 MEC (with state amendments) is the mandatory minimum energy efficiency requirement for all new homes built in New Mexico, but implementation is spotty in most areas. An exception is the fast-growing Albuquerque area, where the building permitting and inspection process is rigorous. State-wide, new homes are going in at the rate of about 700 per month, over half of which are in the vicinity of Albuquerque. All new state-owned commercial buildings must comply with ASHRAE Standard 90.1-1989. All other new commercial buildings must only comply with older codes, ASHRAE 90A-1980 and 90B-1975. In 2001, New Mexico’s Governor established a building code commission to develop a version of IECC 2000 code suitable for New Mexico. A final decision to adopt the code was originally scheduled for December 2002 with implementation slated for May of 2003. At the last hour in its December meeting, the commission decided not to adopt the IECC codes, leaving the status of adopting up-to-date energy codes in New Mexico in flux. As this report was prepared, the New Mexico Attorney General’s office has been directed to examine the current state of affairs concerning building codes and their enforcement.

### **Status of “Best Practices” Efforts**

As of July 2003, there were 15 ENERGY STAR® builders in New Mexico, one of which, Artistic Homes in Albuquerque, builds only ENERGY STAR homes. Artistic has constructed 1339 ENERGY STAR-labeled homes, 75 percent of which were built in the 12 month preceding July 2003. In addition, there are 13 builders who are “Building America” partners, nine of them in the fast-growing Albuquerque area.

### **Building Stock and Projected Growth**

	Housing units 2000	Housing units 2020	Growth 2000-2020 (%)	Commercial area in 2000 (ft <sup>2</sup> x 10 <sup>6</sup> )	Commercial area in 2020 (ft <sup>2</sup> x 10 <sup>6</sup> )	Growth 2000-2020 (%)
NM	780,579	1,131,449	45	345	467	35
Region	6,597,710	9,543,226	45	3,969	7,085	79
NM as % of Region	12	12	-	9	7	-

Source: U.S. Census; Tellus Institute



**Energy Savings Potential – Residential Sector**

Scenario	2010			2020		
	Total Savings (TBtu)	Total Elec Savings (GWh)	Total Gas Savings (TBtu)	Total Savings (TBtu)	Total Elec Savings (GWh)	Total Gas Savings (TBtu)
Moderate Improvement	1.2	17.9	1.1	1.6	68.9	2.5
Strong Improvement	2.6	39.0	2.5	5.5	232.0	4.7

**Energy Savings Potential – Commercial Sector**

Scenario	2010			2020		
	Total Savings (TBtu)	Total Elec Savings (GWh)	Total Gas Savings (TBtu)	Total Savings (TBtu)	Total Elec Savings (GWh)	Total Gas Savings (TBtu)
Moderate Improvement	0.2	38.3	0.04	0.6	130.0	0.12
Strong Improvement	0.5	116.0	0.06	2.0	522.0	0.18

**Combined Residential and Commercial Costs and Savings (millions of constant 2003 dollars)**

Scenario	2010			2020		
	Costs	Savings	Net Savings	Costs	Savings	Net Savings
Moderate Improvement	15.8	22.3	6.5	14.5	35.4	21.0
Strong Improvement	35.1	49.8	14.9	44.0	120.5	76.5

**Net Economic Savings during 2001-2020 (billion dollars)**

	SCENARIO	
	Moderate Improvement	Strong Improvement
NM	0.15	0.50
Region	2.85	8.36
NM as % of Region	5	6