

Council for an Energy-Efficient Economy and Energy Conservation Coalition, 1986).

A major market breakthrough occurred in 1983 when Airco installed a large sputtering plant for low-E coatings for Cardinal Glass Company, the firm that supplies the sealed insulating glass units for the largest window manufacturer in the U.S. - Andersen Corporation (American Council for an Energy-Efficient Economy and Energy Conservation Coalition, 1986). After Andersen began offering a low-E window, the product gained new acceptability and credibility for consumers, builders, and specifiers. The availability of the Andersen low-E window placed competitive pressure on other window manufacturers. By the mid-1980's industry investment in facilities that could produce the new generation of low-E coatings exceeded \$150 million and virtually every major glass and window company offered a low-E product (Selkowitz, 1986).

#### **4.1.3 Importance of the LBL/DOE Role**

When the LBL/DOE effort to support research and development for low-E windows began, industry was too concerned with rising fuel costs and with responding to building codes limiting window areas to put much effort into a speculative new technology. Some manufacturers were aware of the potential of low-E coatings, but they doubted that durable products could be produced at low cost and high volume. The window industry essentially ignored low-E coatings (American Council for an Energy-Efficient Economy and Energy Conservation Coalition, 1986). It was only after the LBL/DOE program developed and demonstrated the technology, that the window industry began to acquire and market low-E products.