

Heating System," were produced. They were distributed to the public through state energy offices and other state and local agencies, DOE regional offices, trade organizations (e.g., Hydronics Institute), and real estate offices.

Northern and northeastern states were the primary target. Information was then picked up by the media, with articles in newspapers and popular trade and science magazines.

The DOE program succeeded by generating end-user demand and by training service personnel who are key decision-makers regarding the adoption of this technology. No attempt was made to reach furnace or burner manufacturers.

4.4.4 Market Penetration and Energy Savings

The FRHOB technology is now accepted as the standard burner technology for residential oil-burning heating systems. As of 1986, the three major manufacturers of oil burners manufacture and sell only FRHOBs. The three major manufacturers' primary market is to "original equipment manufacturers" (OEMs), although they also have a large retrofit market.

The number of high efficiency FRHOB's in use increased from 100,000 in 1979, to well over 2,000,000 in 1985 (Fig. 4.3). Approximately 422,000 of the units were produced in 1986 (Table 4.1). Of the 12 million households in the U.S. that heat with fuel oil, almost one-fourth have this new technology. Since every replacement burner has it, full market penetration depends only upon the replacement rate for oil burners. Assuming a 12% level of fuel savings over the pre-existing technology, an annual energy savings of almost 0.14 quads is projected by the year 2,000.