



[CLICK TO VIEW](#)

[Table of Contents 2](#)

[List of Tables & Charts 3](#)

[Study Overview 4](#)

[Sample Text, Table & Chart 5](#)

[Sample Profile, Table & Forecast 6](#)

[Order Form 7](#)

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# HVAC Equipment

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US Industry Study with Forecasts for **2011 & 2016**

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**The Freedonia Group**

767 Beta Drive

Cleveland, OH • 44143-2326 • USA

Toll Free US Tel: 800.927.5900 or +1 440.684.9600

Fax: +1 440.646.0484

E-mail: [info@freedoniagroup.com](mailto:info@freedoniagroup.com)

## Table of Contents

### EXECUTIVE SUMMARY

### MARKET ENVIRONMENT

General .....	4
Macroeconomic Environment.....	4
Demographic Trends .....	8
Population .....	9
Households .....	12
Consumer Trends .....	12
Personal Income & Expenditures.....	13
Consumer Financing .....	15
Building Construction .....	19
Residential.....	21
New Housing .....	24
Housing Stock .....	28
Improvements & Repairs .....	31
Nonresidential .....	32
Office & Commercial Construction .....	35
Institutional Construction .....	36
Industrial Construction .....	37
Improvements & Repairs .....	37
Regulations & Standards .....	39
Refrigerants .....	39
Efficiency.....	41
Pricing Trends .....	43
World Market .....	46
Foreign Trade .....	50
Exports .....	51
Imports.....	55

### HEATING & COOLING

#### FUEL TYPE

General .....	58
Electricity .....	60
Natural Gas .....	63
Heating Oil .....	66
Geothermal Energy .....	69
Others .....	72

#### HEATING EQUIPMENT

General .....	74
Supply & Demand.....	75
Shipments by Type .....	78
Heat Pumps .....	81
Supply & Demand.....	81
Types .....	84
Air Source.....	86
Operation .....	88
New Technologies .....	90
Geothermal .....	91
Operation .....	92
Types .....	93

Warm Air Furnaces.....	94
Supply & Demand.....	95
Types .....	97
Natural Gas .....	99
Electric .....	101
Heating Oil .....	104
Boilers .....	107
Supply & Demand.....	108
Types .....	110
Cast Iron Boilers.....	111
Characteristics.....	113
Manufacturers .....	115
Steel Boilers .....	115
Humidifiers .....	118
Supply & Demand.....	119
Characteristics.....	121
Manufacturers.....	123
Room & Zone Heating Equipment.....	123
Supply & Demand.....	124
Types .....	126
Manufacturers.....	127

#### COOLING EQUIPMENT

General .....	128
Supply & Demand.....	129
Shipments by Type .....	131
Unitary Air Conditioners.....	135
Supply & Demand.....	135
Characteristics.....	137
Types .....	139
Manufacturers.....	141
Room Air Conditioners .....	142
Supply & Demand.....	142
Characteristics.....	145
Types .....	147
Manufacturers.....	148
Chillers.....	149
Supply & Demand.....	149
Characteristics.....	151
Absorptive Liquid Chilling Systems.....	152
Supply & Demand.....	153
Characteristics.....	154
Dehumidifiers .....	155
Supply & Demand.....	155
Characteristics.....	157
Manufacturers.....	159
Packaged Terminal Air Conditioners.....	159

#### MARKETS

General .....	162
Residential.....	165
New Building.....	168
Cooling Equipment.....	170
Heating Equipment .....	172

Replacement & Improvement .....	174
Cooling Equipment .....	177
Heating Equipment .....	178
Nonresidential .....	179
New Building.....	184
Replacement & Improvement .....	187

#### INDUSTRY STRUCTURE

General .....	191
Industry Composition .....	191
Market Share .....	195
United Technologies .....	197
American Standard .....	197
Lennox International.....	198
Goodman Global Holdings.....	199
Other Leaders.....	200
Competitive Strategies.....	202
Research & Development.....	204
Distribution .....	205
Marketing .....	208
Mergers & Acquisitions.....	211
Cooperative Agreements.....	214

#### COMPANY PROFILES

AAON Incorporated .....	218
AdobeAir Incorporated.....	220
American Standard .....	222
Berjaya Corporation Berhad .....	226
Bradford White .....	228
Burnham Holdings .....	230
Daikin Industries .....	234
Danfoss A/S .....	237
Dectron Internationale.....	240
DESA LLC .....	242
ECR International.....	243
Electrolux AB .....	246
Emerson Electric .....	247
Fedders Corporation.....	251
Friedrich Air Conditioning.....	253
Goodman Global Holdings.....	255
Haier Group.....	257
Johnson Controls .....	258
Lennox International.....	262
LG Electronics.....	266
Matsushita Electric Industrial.....	267
Mestek Incorporated.....	269
Modine Manufacturing .....	272
Nortek Incorporated .....	274
Paloma Industries .....	277
Samsung Electronics .....	281
SANYO Electric.....	282
Sharp Corporation .....	283
Tecumseh Products .....	284
United Technologies .....	287
Whirlpool Corporation.....	292
Other Companies Mentioned in Study .....	295

## List of Tables

### EXECUTIVE SUMMARY

1 Summary Table .....3

### MARKET ENVIRONMENT

1 Macroeconomic Indicators .....8  
2 Population & Households .....9  
3 Personal Income & Expenditures..... 15  
4 Consumer Financing Environment ..... 19  
5 Building Construction Expenditures... 21  
6 Residential Building Construction Expenditures ..... 24  
7 New Housing Units.....28  
8 Housing Stock ..... 30  
9 Residential Improvement & Repair Expenditures ..... 32  
10 Nonresidential Building Construction Expenditures ..... 35  
11 Nonresidential Improvement & Repair Expenditures ..... 38  
12 HVAC Equipment Prices .....46  
13 US Foreign Trade in HVAC Equipment. 51

### HEATING & COOLING FUEL TYPE

1 HVAC Equipment Demand by Fuel..... 59  
2 Electric HVAC Equipment Demand ..... 63  
3 Natural Gas-Burning HVAC Equipment Demand ..... 66  
4 Heating Oil-Burning HVAC Equipment Demand ..... 69  
5 Geothermal HVAC Equipment Demand 71  
6 Demand for HVAC Equipment Powered by Other Energy ..... 73

### HEATING EQUIPMENT

1 Heating Equipment Supply & Demand 78  
2 Heating Equipment Shipments by Type ..... 79  
3 Heat Pump Supply & Demand..... 84  
4 Heat Pump Shipments by Type ..... 86  
5 Air Source Heat Pump Shipments..... 88  
6 Geothermal Heat Pump Shipments .... 92  
7 Warm Air Furnace Supply & Demand.. 97  
8 Warm Air Furnace Shipments by Type 98  
9 Natural Gas-Burning Warm Air Furnace Shipments ..... 101  
10 Electric-Powered Warm Air Furnace Shipments ..... 104

11 Heating Oil-Burning Warm Air Furnace Shipments ..... 107  
12 Boiler Supply & Demand..... 110  
13 Boiler Shipments by Type ..... 111  
14 Cast Iron Boiler Shipments by Fuel . 113  
15 Steel Boiler Shipments by Fuel..... 118  
16 Humidifier Supply & Demand..... 121  
17 Room & Zone Heating Supply & Demand..... 126

### COOLING EQUIPMENT

1 Cooling Equipment Supply & Demand..... 131  
2 Cooling Equipment Shipments by Type ..... 133  
3 Unitary Air Conditioner Supply & Demand..... 137  
4 Room Air Conditioner Supply & Demand..... 145  
5 Chiller Supply & Demand ..... 151  
6 Absorptive Liquid Chilling System Supply & Demand..... 154  
7 Dehumidifier Supply & Demand ..... 157  
8 Packaged Terminal Air Conditioner Supply & Demand..... 161

### MARKETS

1 HVAC Equipment Demand by Segment & Market..... 164  
2 Residential HVAC Equipment Demand ..... 167  
3 New Building Residential HVAC Equipment Demand ..... 170  
4 Replacement & Improvement Residential HVAC Equipment Demand ..... 177  
5 Nonresidential HVAC Equipment Demand ..... 183  
6 New Building Nonresidential HVAC Equipment Demand ..... 186  
7 Replacement & Improvement Nonresidential HVAC Equipment Demand ..... 190

### INDUSTRY STRUCTURE

1 US HVAC Equipment Sales by Company, 2006..... 194  
2 Selected Acquisitions & Divestitures 213  
3 Selected Cooperative Agreements ... 216

## List of Charts

### MARKET ENVIRONMENT

1 Year of Construction of Housing Stock, 2006 ..... 31  
2 Value of US-Exported HVAC Systems by Destination, 2006..... 54  
3 US HVAC System Exports by Destination, 1996-2006 ..... 54  
4 Value of US-Imported HVAC Systems by Source, 2006..... 56  
5 US HVAC System Imports by Source, 1996-2006..... 57

### HEATING & COOLING FUEL TYPE

1 HVAC Equipment Demand by Fuel, 2006 ..... 60

### HEATING EQUIPMENT

1 Heating Equipment Shipments by Type in Value & Unit Terms, 2006 ..... 80

### COOLING EQUIPMENT

1 Cooling Equipment Shipments by Type in Value & Unit Terms, 2006 ..... 134

### MARKETS

1 HVAC Equipment Demand by Market ..... 165  
2 Residential HVAC Equipment Demand by Market ..... 168  
3 Share of New Housing Units with a Central Cooling System, 1996-2006 ..... 172  
4 Heating Equipment Installed in New Single Unit Housing by Type, 2006 ..... 174  
5 Nonresidential HVAC Equipment Demand by Market ..... 184

### INDUSTRY STRUCTURE

1 US HVAC Equipment Market Share, 2006 ..... 196

*Growth in the dominant replacement sector will benefit from demand for newer, more efficient HVAC units in response to rising energy prices and government subsidies and mandates.*

## US demand to grow 3.2% annually through 2011

Demand in the US for heating, ventilation and air conditioning (HVAC) equipment is forecast to increase 3.2 percent per year to \$16.8 billion in 2011. Advances will be primarily driven by strong gains in new nonresidential construction, along with ongoing growth in the residential replacement market. Although gains will be restrained by declines in new single unit housing completions between 2006 and 2011, nearly three-quarters of HVAC demand is attributable to replacements. Growth in the replacement sector will benefit from interest in more energy efficient building systems driven by rising energy prices, spurring the replacement of older HVAC equipment with newer models. Rebates and tax incentives will also encourage owners to replace older, less efficient units. Changing federal regulations regarding minimum efficiency requirements for many of these systems will also affect sales of HVAC equipment.

## Unitary air conditioners to remain largest cooling equipment segment

Unitary air conditioners will remain the largest segment in the cooling equipment industry, accounting for more than 70 percent of total demand in 2011. Absorptive liquid chilling systems are expected to post the strongest gains through 2011 as industrial and commercial construction rebounds over the

## US HVAC Equipment Demand (\$14.3 billion, 2006)



Cooling  
64%

Heating  
36%

forecast period. Packaged terminal air conditioner sales will achieve above average gains because of a rebound in lodging construction expenditures. Room air conditioners will also post above average sales as quieter and more efficient units become available. The cooling equipment industry is affected by a variety of regulations, including those involving refrigerants. In the US, the production of systems using chlorofluorocarbons has been banned, and hydrochlorofluorocarbons are due to be completely phased out by 2030. As a result, the chlorine-free refrigerant HFC-410A is being phased in across a variety of price points by most manufacturers.

## Heat pumps to lead gains among heating equipment

In 2006, heat pumps surpassed warm air furnaces as the largest heating equipment segment and will account for 47 percent in 2011. Heat pumps are also expected to post the strongest gains through 2011 based on the ability of these units to provide efficient heating and cooling in moderate climates and to serve as a low cost supplementary heat source in colder climates. While warm air furnaces will remain the second largest segment through 2011, they are expected to lose market share over the period. Warm air furnace sales will be supported by their relatively low initial cost.

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## Sample Text, Table & Chart

**TABLE V-3**

**UNITARY AIR CONDITIONER SUPPLY & DEMAND**  
 (million dollars)

Item	1996	2001	2006	2011	2016
Building Construction Expend (bil \$)					
\$ unitary AC/000\$ construction					
Unitary Air Conditioner Demand					
+ net exports					
Unitary Air Conditioner Shipments					
\$/unit					
Unitary AC Shipments (000 units)					
% unitary air conditioners					
Cooling Equipment Shpts (000 units)	15,765	16,265	15,100	15,100	15,100

**SAMPLE TABLE**

**HEATING EQUIPMENT**

**Supply & Demand**

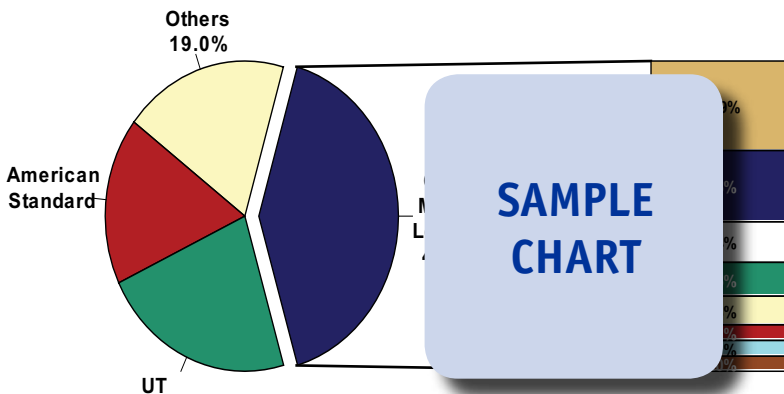
Sales of room and zone heating equipment are projected to increase to \$1.2 billion in 2011. Advances will be aided by increased construction spending. In the nonresidential market, room and zone heaters are used to handle large, open areas, such as warehouse entrances, that would put too much of a load on central systems if the areas depended on the central system. The projected recovery of the new nonresidential construction in the forecast period, particularly in the industrial segment, will boost demand for these types of heating equipment. Additionally, as a growing number of homeowners are using their garages as home gyms and hobby areas, room and zone heaters are being purchased and installed to warm these previously unheated spaces.

**SAMPLE TEXT**

Further gains will be restrained by competition with central heating systems and portable space heaters. Historically, room and zone heating equipment has been used for new additions and zone heating, but there is still a general preference for incorporating better designed central heating equipment. Some building owners prefer to use a separate thermostat on the central system for areas with different heating requirements, or in some cases, use small portable space heaters for rooms that are difficult to warm or are used less often. Additionally, the traditional use of room and zone heating in new residential additions will be hampered by a sharp projected deceleration in spending on improvements to housing structures over the forecast period.

**CHART VII-1**

**US HVAC EQUIPMENT MARKET SHARE, 2006**  
 (\$14.3 billion)

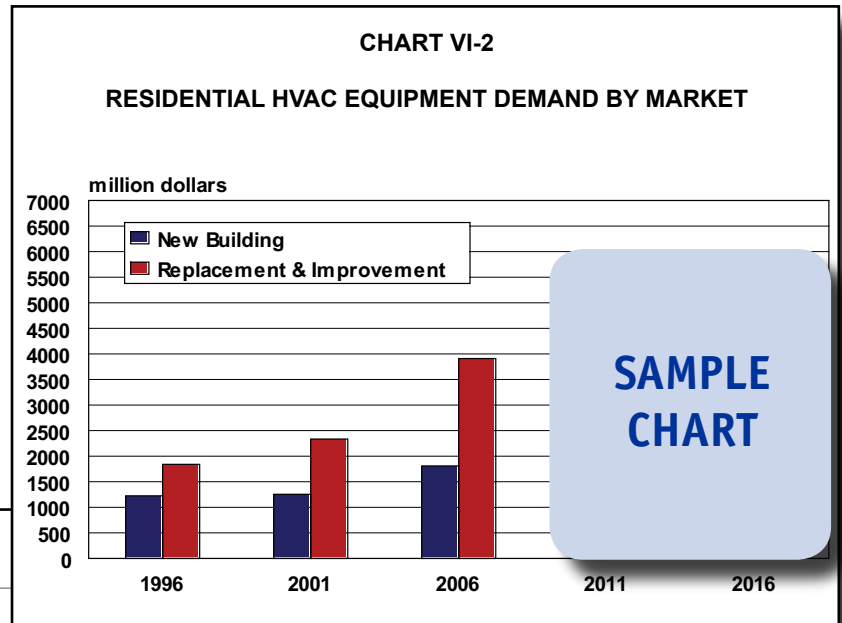


**SAMPLE CHART**

of room and zone heating equipment are projected to increase to \$1.2 billion in 2011. Declines are due in part to competition from low-cost suppliers that produce the equipment outside the US. The projected growth of a domestic industry in some of the key export markets. Further declines will be slowed by a couple of factors. For room and zone heating equipment has greater export potential

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## Sample Profile, Chart & Forecast



### COMPANY PROFILES

#### Bradford White Corporation

725 Talamore Drive  
 Ambler, PA 19002  
 215-641-9400  
<http://www.bradfordwhite.com>

Annual Sales:  
 Employment:

Key Products:  
 space heating s

Bradford White Corporation is a leading manufacturer of heating equipment, primarily hydronic and water heating products for the residential market. The company operates an 800,000-square-foot manufacturing facility in Middleville, Michigan.

The Company's is active in the US HVAC equipment industry through the manufacture and sale of water heaters, combination domestic hot water and space heating systems, air handlers and hydronic boilers. Bradford White also makes HVAC equipment via the LAARS Heating Systems Company subsidiary (Rochester, New Hampshire).

Bradford White's range of heating equipment includes BRADFORD WHITE hydronic and space heating residential water heaters, which are specifically engineered to heat both air and water. These units, which are available in side-connect and coil designs, all feature side connections for space heating. Among the Company's residential water heaters that can be used for hydronic space heating applications are DEFENDER SAFETY SYSTEM gas-powered line, COMBICOR oil-powered line, gas-powered Direct Vent Energy Saver, and POWER



**New Building**  
 "Sales of HVAC equipment to the residential new building market are forecast to advance less than one-half of one percent per year to \$1.8 billion in 2011. This trend is the result of a projected decline in the number of single-unit housing completions between 2006 and 2011 from the elevated base of 2006. This will be countered to some extent by a recovery in the number of multiple unit homes completed and the number of manufactured housing units shipped."  
 --Section VI, pg. 168



**OTHER STUDIES**

**World Major Household Appliances**

This study forecasts the world market for household appliances. It presents historical demand data (1996, 2001, 2006) and forecasts for the years 2011 and 2016 by type (refrigerators and freezers, clothes washers and dryers, cooking appliances, dishwashers); world region (e.g., North America, Asia/Pacific, Western Europe); and for over twenty countries.

The study also considers economic trends and other factors impacting demand, details industry structure, evaluates market share and profiles major producers.  
 #2279 ..... 01/2008..... \$5800

**World Water Treatment Products**

World demand for water treatment products will be influenced by stricter water quality laws, greater emphasis on water treatment in developing nations, improvements on water treatment methods and continued expansion in industrial activity and population. This study examines the global market for chemical and nonchemical water treatment products, with forecasts for 2011 and 2016 by product, market, world region and major country. The study also evaluates market share and profiles industry competitors.

#2276 ..... 12/2007..... \$5800

**Filters in China**

This study analyzes the Chinese market for filters. It presents historical demand data (1996, 2001, 2006) and forecasts for the years 2011 and 2016 by product type (e.g., internal combustion engine and related filters, fluid filters, air filters); and by market (e.g., transportation equipments, industrial and manufacturing, utilities, consumer). The study also considers market environment factors, reviews filtration technology, details industry structure, evaluates company market share and profiles leading competitors.

#2278 ..... 11/2007..... \$4900

**Outdoor Furniture & Grills**

US demand for outdoor furniture and grills will grow 4% yearly through 2011. Demand will benefit from the increasing popularity of patios, porches and decks, and from lifestyle trends such as "cocooning" and "outdoor rooms". Patio heating products will lead gains, followed by the much larger grill segment. This study analyzes the \$6.2 billion US outdoor furniture and grill industry, with forecasts for 2011 and 2016 by product, market and region. It also evaluates market share and profiles major players.

#2221 ..... 09/2007..... \$4400

**Filters**

US filters demand will grow 4.2% yearly through 2011. Gains will be driven by ongoing sales in the dominant aftermarket, pending laws for cleaner air and reduced emissions, as well as increasing penetration of motor vehicle cabin air filters and home air and water filters. Fluid filters will remain the largest segment while air filters will grow the fastest. This study analyzes the \$9.8 billion US filter industry to 2011 and 2016 by product and market. It also evaluates market share and profiles leading competitors.

#2164 ..... 04/2007..... \$4500

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