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Consumer Water Purification & Air Cleaning Systems

US Industry Study with Forecasts for **2012 & 2017**

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Gains in US demand will be driven by consumer concerns about the quality of the air and water in the home, and greater awareness of the healthful and aesthetic benefits of these systems.

US demand to rise 4.4% annually through 2012

Demand for consumer water purification and air cleaning systems is projected to increase 4.4 percent per year to \$1.5 billion in 2012. Gains will be driven by consumer concerns about the quality of the air and water in the home, and greater awareness of the healthful and aesthetic benefits of these systems. Market penetration will also be spurred by the development of quieter and more user-friendly systems. Additionally, existing owners of purification systems are continuing to upgrade to higher value versions featuring performance indicators, scent or flavor options, and multiple treatment technologies. The aftermarket plays an important role in the industry with sales of replacement filters and membranes forecast to grow 4.8 percent annually, reaching \$2.7 billion in 2012, driven by rising system penetration rates, and marketing efforts and performance indicators intended to improve replacement compliance.

Electrostatic systems to pace air cleaning segment

Among air cleaners, conventional filtration systems accounted for the largest share of value demand with 47 percent in 2007, because they offer thorough air cleaning and minimal to no ozone production. However, electrostatic air cleaners are projected to achieve slightly faster gains through 2012 because they offer improved efficiency, quieter functioning and low operating

US Consumer Water Purification & Air Cleaning System Demand (\$1.2 billion, 2007)

Point-of-Entry Water Purification 13%

Point-of-Use Water Purification 48%

Whole-House Air Cleaning 11%

Portable Air Cleaning 27%



costs. Many consumers have shifted away from ionic air cleaners and ozone generators out of concern regarding the amount of ozone -- a lung irritant -- these systems generate. Additionally, there are more regulations on air cleaners that generate more than 50 parts per billion of ozone, particularly if the manufacturer is claiming health benefits.

Reverse osmosis, distillation to be fastest growing water purification systems

Water purification systems that feature conventional filtration media accounted for the majority of demand for water systems in 2007, with 61 percent of sales value. However, faster growth will

be registered by higher value reverse osmosis and distillation systems, although from significantly smaller bases. These systems can process a broader range of contaminants compared to conventional filters. In general, growth is largely dependent on the quality -- or the perceived quality -- of local tap water supplies. Demand for water purification systems will also benefit from a trend among consumers to switch away from bottled water and toward treated tap water in response to media reports highlighting the financial and environmental costs of bottled water. Consumer concerns about the limited regulation regarding bottled water quality -- since many types are simply treated tap water -- will also drive sales.

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Sample Text, Table & Chart

PURIFICATION TECHNOLOGIES

Conventional Filtration

Sales of conventional water filtration systems, which use either physical or mechanical filtration media as the primary or only mode of treatment, are expected to grow from 11.4 million units in 2007 to 14.0 million units in 2012. This growth is expected to occur because they are generally less expensive than other technologies, and a variety of price points, particularly in the lower end, allows them to appeal to a broad range of consumers. Traditionally, conventional filters, especially those using ion exchange resins and carbon, provide the most cost-effective means of removing the most common occurring contaminants, including chlorine, sediment and metals, from municipal or well water sources. Most types are able to reduce lead levels, but not all are yet certified to the latest NSF International standard for lead reduction. The ability to remove such contaminants for a low price has made these systems popular. Furthermore, because they are able to remove chlorine, sediment and other aesthetic contaminants, conventional filtration systems are also popular among people who have safe water but simply do not like its taste or smell. This factor opens the products up to a larger potential customer base compared to other water treatment systems. While previously having faced stiff competition from the bottled water industry, the conventional filter segment of the consumer water purification industry, a reusable and relatively inexpensive way to get better tasting water in the home, has benefitted from consumer backlash against the cost and environmental impact of bottled water.

Further growth will be restrained as some existing owners of water treatment systems trade up to higher end technologies, such as reverse osmosis and ultraviolet disinfection. Gains will also be slowed by performance limitations, such as the inability to remove certain health-threatening contaminants such as radionuclides, microbial contaminants and radon. Some conventional filters are also limited in their ability to reduce volatile organic compounds (VOCs), disinfection byproducts, Cryptosporidium and Giardia lamblia cysts. Furthermore, other types of

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**SAMPLE
TEXT**

TABLE V-6

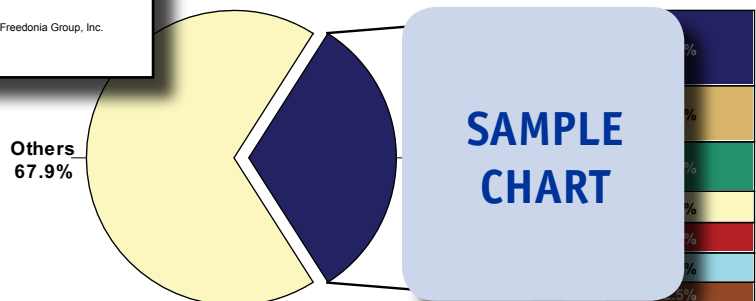
NORTHEAST WATER PURIFICATION & AIR CLEANING SYSTEM DEMAND (million dollars)

Item	1997	2002	2007	2012	2017
Households (millions)					
\$/household					
Northeast Water Purif & Air Cleaning S					
By Subregion:					
New England					
Middle Atlantic					
By Type:					
Water					
Air					
% Northeast					
Water Purification & Air Cleaning Syst					

**SAMPLE
TABLE**

CHART VI-1

CONSUMER WATER PURIFICATION & AIR CLEANING SYSTEM REPLACEMENT PART MARKET SHARE, 2007 (\$3.4 billion)

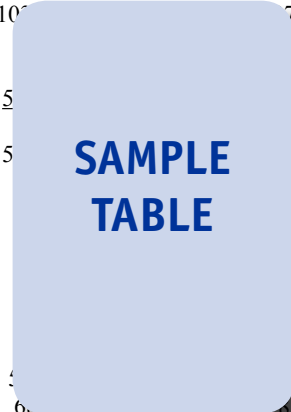


**SAMPLE
CHART**

Sample Profile, Table & Forecast

TABLE IV-2
CONSUMER WATER PURIFICATION SYSTEM DEMAND BY TYPE
 (million dollars)

Item	1997	2002	2007	2012	2017
Households (million) units/000 households	107	107	107	107	107
Water Purification Systems (000)	5	5	5	5	5
Point-of-Entry					
Point-of-Use					
\$/unit					
Water Purification Systems					
Point-of-Entry					
Point-of-Use					
% water					
Water Purif & Air Cleaning Systems	60	60	60	60	60



COMPANY PROFILES

Essick Air Products Incorporated
 5800 Murray Street
 Little Rock, AR 72209
 501-562-1094
 http://www.es

Annual Sales:
 Employment:
 Key Products:

SAMPLE PROFILE

Essick Air Products Incorporated is a commercial evaporative cooling equipment, humidifiers and air purifiers. The privately held company maintains a manufacturing complex at its headquarters location in Little Rock, Arkansas.

The Company participates in the US consumer water purification and air cleaning systems industry through the production of air purifiers. Essick markets odor and allergen removal units under the MEGA brand name, and combination air purifier and humidifier units under the BEMIS BY ESSICK AIR brand name. MEGA odor and allergen removal systems employ the Company's maximum efficacy gas absorption technology and activated carbon filters to eliminate pollen, dust, dust mites, pet hair and dander, smoke and other airborne contaminants. BEMIS BY ESSICK AIR combination units use high-efficiency particulate air filters to remove up to 99.97 percent of airborne particles, including bacteria, viruses, dust mites, dust, pollen, smoke and pet dander. The units also humidify rooms and utilize wicks to filter out mineral deposits. Specific products include DP3 200 and DP3 610 units, which reportedly clean air in a 12-foot-by-14-foot room every 15 minutes and humidify a space up to 750 square feet. In addition, Essick manufactures replacement filters for its air purifiers.

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"Volume gains for sales of whole-house air cleaning systems, which are sometimes known as central filtration or in-duct systems, will advance 2.2 percent per year to 530,000 units in 2012. Gains will be limited by the penetration of forced air central heating systems since whole-house air cleaners must be installed on existing duct-based systems. Sales will also be restrained by ..."

--Section IV, pg. 136

OTHER STUDIES

World Water Disinfection

Global water disinfection product demand will grow 7.4% yearly through 2012. Markets in China, India and other developing countries with large industrial sectors will grow the fastest. In mature markets like North America, growth will be driven by upgrades to better performing specialty chemicals. This study analyzes the \$5.2 billion world water disinfection industry, with forecasts for 2012 and 2017 by product, market, world region and for 17 major countries. It also evaluates company market share and profiles industry players

#2412 10/2008..... \$5700

Filters in China

Demand for filters in China will jump 14.4% annually through 2011. Air filters will post the fastest gains, spurred by rising output of products that include filters or are made in clean-air factories. The motor vehicle market will remain dominant while the water and waste treatment segment of the utilities and consumer markets grows the fastest. This study analyzes the ¥20.9 billion Chinese filter industry, with forecasts for 2011 and 2016 by product and market. It also evaluates company market share and profiles major players

#2310 05/2008..... \$5100

Membrane Separation Technologies

US membrane material demand will rise 8.2% annually through 2012, driven by ongoing interest in higher purity process fluids and increasingly strict water/wastewater quality rules. The best opportunities will emerge in pharmaceutical and medical markets, and water and wastewater treatment will remain the largest markets. This study analyzes the \$2.9 billion US membrane industry, with forecasts for 2012 and 2017 by type, application and market. It also details market share and profiles major players.

#2307 03/2008..... \$4600

World Filters

Global filter demand will climb 5.6% annually through 2011. Developing areas will lead gains based on faster-growing economies and the enactment of stricter environmental laws. China, India and Russia will post some of the strongest sales growth. Air and fluid filters will be the fastest growing types. This study analyzes the \$37 billion world filter industry, with forecasts for 2011 and 2016 by product, market, world region and for 26 countries. It also evaluates company market share and profiles major players.

#2295 03/2008..... \$5800

World Major Household Appliances

Global white goods demand will grow 3.1% yearly through 2011. India will lead gains based on low penetration rates and rising living standards. Replacement demand will spur growth in developed areas as users replace broken appliances and trade up for newer models like more efficient "green" types. This study analyzes the 413 million unit world white goods industry, with forecasts for 2011 and 2016 by product, world region and for 25 countries. It also evaluates market share and profiles major players.

#2279 01/2008..... \$5800

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