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# Water & Wastewater Pipe

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US Industry Study with Forecasts for **2014 & 2019**

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Study #2634 | June 2010 | \$4700 | 240 pages

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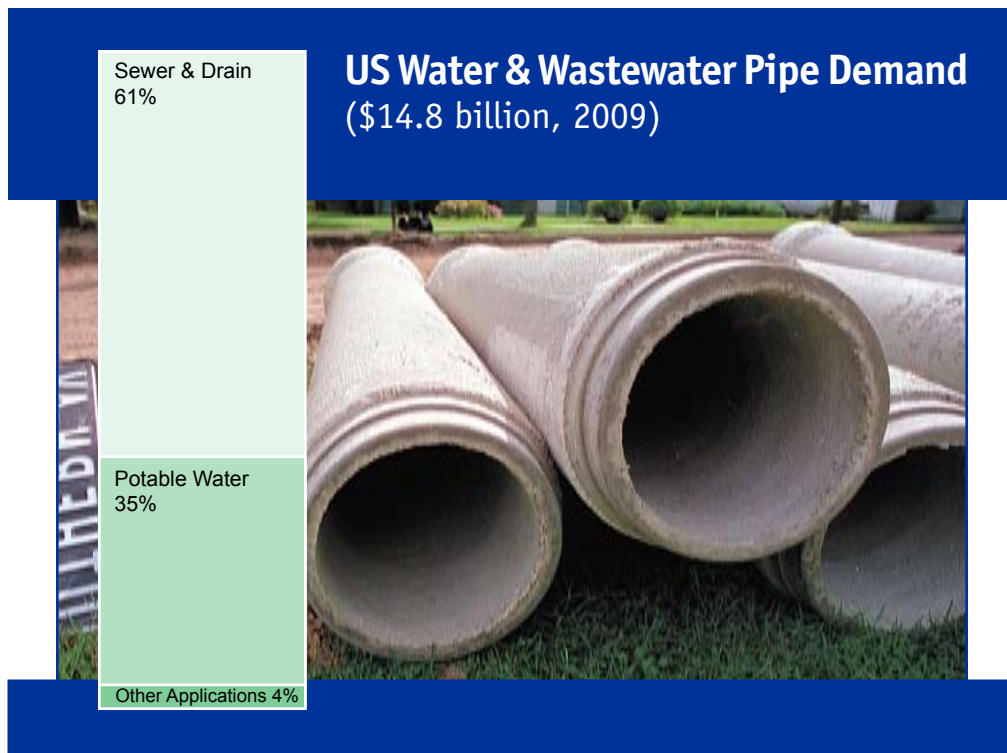
*Advances will reflect renewed activity in the residential building construction sector, the growing obsolescence of sewer and drainage systems, and upgrades of municipal water systems.*

## US demand to rise 5.8% annually through 2014

Demand for water and wastewater pipe in the US is expected to rise 5.8 percent annually to \$19.6 billion in 2014, exceeding 5.3 billion feet. Advances will reflect renewed activity in the residential building construction sector, the growing obsolescence of sewer and drainage systems, and upgrades of municipal water systems. Average pipe prices are projected to decline through 2014 as material prices moderate following the spikes experienced between 2004 and 2009. Copper pipe demand will rise at the fastest pace due to its close ties to the resurgent building construction segment. Good growth is also expected for plastic pipe in areas such as water transmission and drain/sewer applications based on performance upgrades made possible by resin and processing improvements.

## Copper, plastic pipe to be fastest growing products

Demand for plastic water and wastewater pipe will advance 7.0 percent annually through 2014. Polyvinyl chloride (PVC) pipe will remain dominant and grow at an above average pace, fueled by improved joining technologies and resins such as molecular oriented PVC. Best opportunities are anticipated for distribution, service and drain/waste/vent pipe due to



rebounding residential building construction markets. High density polyethylene (HDPE) pipe will grow at a faster pace as a result of opportunities in sewer/drain and potable water pipe, particularly corrugated HDPE drain pipe.

Demand for concrete pipe will expand 3.5 percent per year through 2014, fostered by sewer and drainage applications. Concrete pipe will remain the premier material where high flow rates, crush resistance and longevity are key requirements. Cast iron pipe demand will increase 3.1 percent per annum through 2014 due to the material's good performance in water transmission and

sanitary sewer applications. Further growth will be threatened by competition from lower cost plastic pipe. Copper pipe lost market share to plastic pipe between 2004 and 2009 as a result of high metal prices. Demand for copper pipe will rise 10.8 percent yearly through 2014 due to a moderation in copper pricing and the recovery of residential housing markets from weak 2009 levels. Copper's largest use is in distribution (i.e., indoor plumbing) pipe, where it competes primarily with plastic pipe. Steel pipe will remain a leading player in storm sewer and culvert applications, competing with concrete and corrugated HDPE pipe.

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## Sample Text, Table & Chart

### PRODUCTS

**High Density Polyethylene** -- Demand for high density polyethylene water and wastewater pipe is expected to expand in 2014 as a result of the resin's good strength and flexibility. HDPE pipe also competes with concrete, pipe and other materials for potable water, and drain and sewer applications. Building construction and performance advantages over other materials. High density polyethylene pipe will benefit from the introduction of larger diameters, enabling it to better compete with concrete pipe.

High density polyethylene pipe's advances will also be stimulated by the increased use of bimodal polyethylene, which is more leak-resistant than metal, concrete and unimodal polyethylene pipe. Bimodal polyethylene also has greater strength, improved resistance to rapid crack propagation, and higher pressure and flow capacity, thereby reducing material and operating costs. Initial applications for bimodal polyethylene are occurring in water transmission. The material has been used in Europe for pipe production since the early 1990s, but the US has been slower to convert. In Europe, bimodal polyethylene is known as PE100, but in the US it is called PE4710. Greater use of bimodal polyethylene in pipe production has been hindered by varying product standards and the conservative attitudes of water department and other engineering firms. Endot Industries is among a number of firms offering pipe products from bimodal polyethylene. All Endot potable water pipe is made with PE 4710 bimodal polyethylene from Dow Chemical. This resin provides a lifetime of 100 years, 25 percent higher strength ratings, and 4 to 10 times the resistance to environmental stress cracking.

Attributes of HDPE pipe include a competitive cost structure, corrosion resistance, flexibility and good joint integrity. HDPE diameter ranges from 12 to 108 inches.

100

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TABLE IV-10

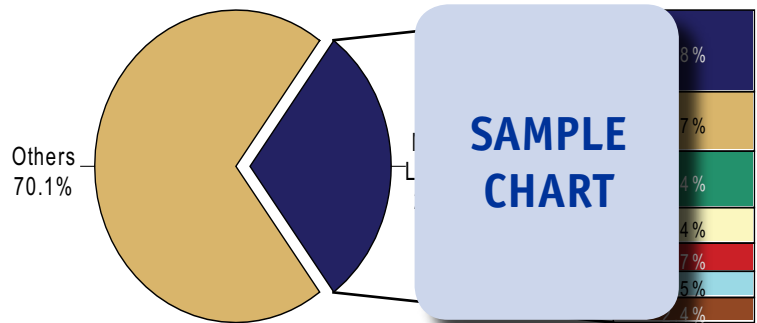
COPPER WATER & WASTEWATER PIPE DEMAND BY MARKET & APPLICATION (million dollars)

Item	1999	2004	2009	2014	2019
Water & Wastewater Pipe Demand % copper	10.5	10.5	10.5	10.5	10.5
Copper Pipe Demand					
Potable Water					
Distribution					
Service					
Drain, Waste & Vent					
\$/foot					
Copper Pipe Demand (mil feet)					

SAMPLE TABLE

CHART V-1

WATER & WASTEWATER PIPE MARKET SHARE (\$14.8 billion, 2009)

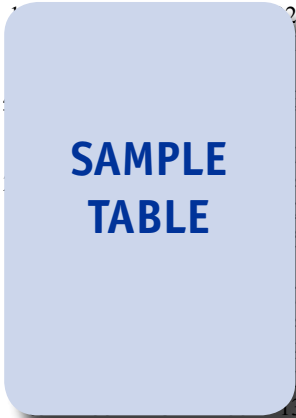


SAMPLE CHART

## Sample Profile, Table & Forecast

**TABLE III-12**  
**POTABLE WATER PIPE DEMAND BY APPLICATION & TYPE**  
 (million dollars)

Item	1999	2004	2009	2014	2019
Water Supply Spending (bil \$)					2.7
\$ pipe/000\$ water spending					16
Potable Water Pipe Demand					35
By Application:					
Transmission Pipe					06
Distribution Pipe					41
Service Pipe					29
Rural Pipe					59
By Type:					
Copper					70
Plastic					40
Cast Iron					95
Concrete					00
Steel					30



**COMPANY PROFILES**

**Genova Products Incorporated**  
 7034 East Court Street  
 Davison, MI 48423  
 810-744-4500  
 http://www.ge

**SAMPLE PROFILE**

Annual Sales:  
 Employment:

Key Products: polyethylene a chloride, crosslinked

Genova Products is a privately held manufacturer of plumbing and building products. The Company's offerings include plastic pipe and fittings, plastic valves, polyvinyl chloride (PVC) gutters and downspouts, PVC fencing and wire channel moldings.

The Company competes in the US water and wastewater pipe market via the production and sale of plastic pipe and fittings made from PVC, chlorinated PVC (CPVC), acrylonitrile-butadiene-styrene (ABS), standard polyethylene, crosslinked polyethylene (PEX) and polypropylene. Genova Products reports it is the world's largest manufacturer of vinyl plumbing and the only producer of whole-house plumbing pipe and fittings.

Among Genova Products' PVC pipe offerings are 300 series pressure; 400 series sewer and drain; 600 series Schedule 30 in-wall drain, waste and vent (DWV); and 700 series Schedule 40 DWV pipe. The Company's 300 series PVC pressure pipe is available in 1/2- to 2-inch diameters for use in cold water applications, including irrigation and underground residential sprinkler systems. Typically, 400 series PVC

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"Cast iron accounted for 61 percent of all transmission pipe demand in 2009. Cast iron pipe demand will grow 2.2 percent annually to \$1.7 billion in 2014. More than 500 North American cities are presently being served by cast iron mains that were installed more than 100 years ago. At least 12 cities have cast iron pipe in service that is over 150 years old. These mains are indicative of cast iron's durability. Further advances will be threatened by ..."  
 --Section III, pg. 73



**OTHER STUDIES**

**Plastic & Competitive Pipe**

This study analyzes the US pipe industry. It presents historical demand data for the years 2000, 2005 and 2010, and forecasts for 2015 and 2020 by market (e.g., potable water; conduit; natural gas and oil; drainage and sewer; drain, waste and vent; irrigation; process), material (e.g., concrete, steel, plastic, ductile iron, copper, aluminum) and plastic resin (e.g., PVC, HDPE, reinforced thermoset, ABS). The study also considers market environment factors, evaluates company market share and profiles industry participants.

#2738 ..... February 2011 ..... \$5100

**Brick & Block**

US demand for brick and block products is projected to increase 11.8% annually through 2014. Gains will be driven by a recovery in building construction, especially new housing. Common, glazed and other clay brick will be the fastest growing products, followed by concrete pavers. This study analyzes the 7.1 billion unit US brick and block industry, with forecasts for 2014 and 2019 by product, market, application and US region. It also evaluates company market share and profiles industry players.

#2652 ..... September 2010 ..... \$4800

**Construction Outlook in China**

Construction expenditures in China are expected to grow 9.1% annually through 2014. Nonbuilding construction will be the fastest growing sector, based on state-led efforts to expand and upgrade China's transportation infrastructure. Nonresidential building demand growth slightly outpace the residential sector. This study analyzes the 7.8 trillion yuan construction industry in China, with forecasts for 2014 and 2019 by type, market and region. It also evaluates company market share and profiles industry participants.

#2647 ..... May 2010 ..... \$5300

**World Plumbing**

Global plumbing product demand will rise 3.5% yearly through 2013. The Asia/Pacific region will see the fastest gains, while growth in developed countries will not be as strong. The fixtures segment will grow at a somewhat faster pace than fittings, based on demand for more sophisticated fixtures. This study analyzes the \$55.4 billion world plumbing product industry, with forecasts for 2013 and 2018 by product, material, world region and for 23 countries. It also evaluates company market share and profiles industry participants.

#2599 ..... March 2010 ..... \$5800

**Plumbing Fixtures & Fittings**

US plumbing product demand will reach \$10.8 billion in 2013, supported in part by consumer desire for homes with multiple bathrooms. Shipments will lag demand as imports expand rapidly. Fixtures will outpace fittings, led by high-end products such as whirlpool bathtubs and hot tubs and spas, which are perceived to add luxury and value to homes. This study analyzes the US plumbing products industry, with forecasts for 2013 and 2018 by material, type, market and region. It also evaluates market share and profiles industry players.

#2567 ..... October 2009 ..... \$4900

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