



World Ceramic Tiles Forum – National Context

USA





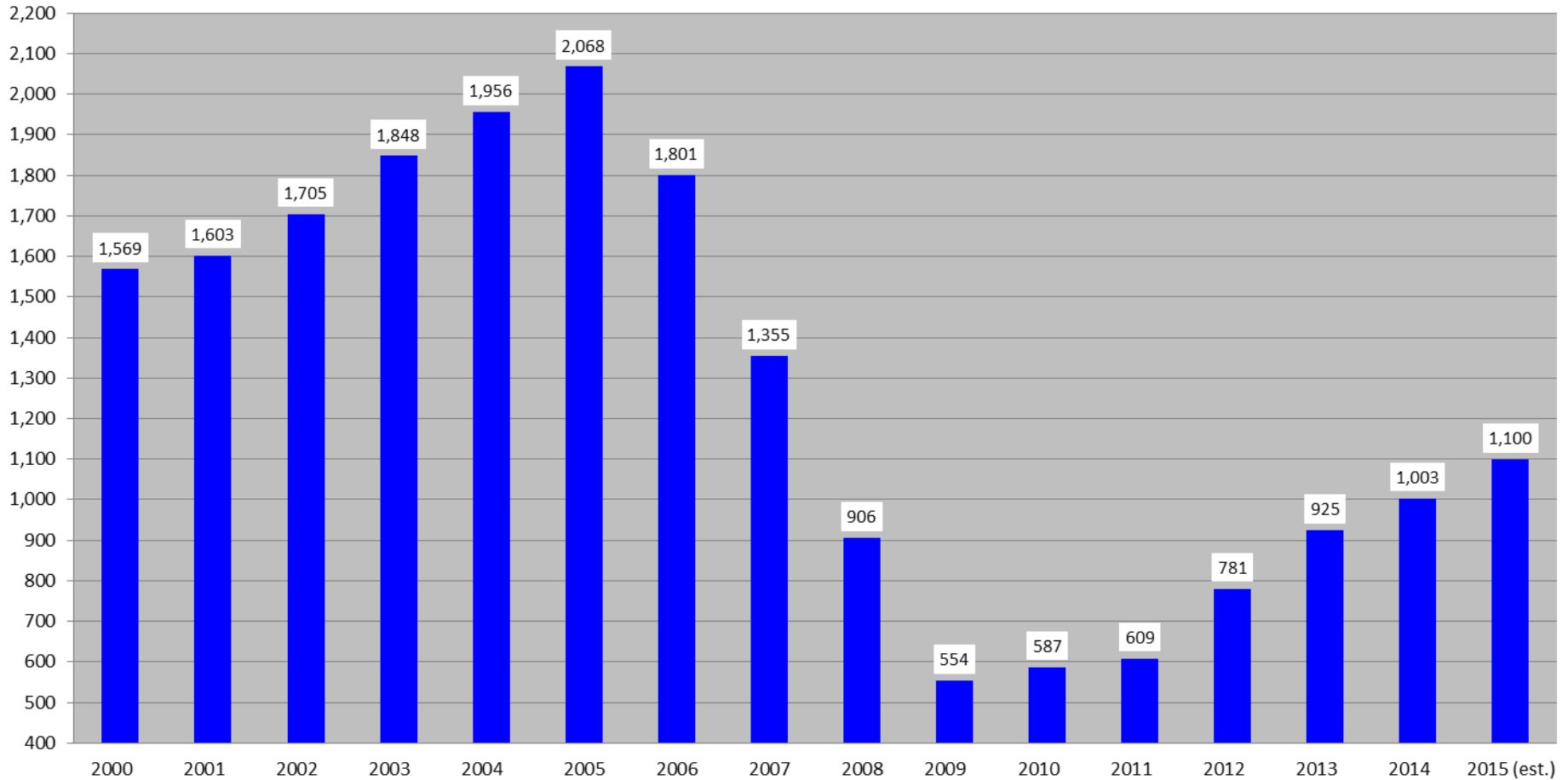
New Housing Starts

- The U.S. residential market continues to expand, and new housing starts are headed towards a sixth consecutive year of growth.
- Despite this trend housing stats are roughly half of what they were in the peak year of 2005.
- Based on year-to-date data, new home starts for 2015 would be at an estimated 1.1 million units, up 9.6% vs. 2014.

I. Trend in the construction sector/demand



**New Housing Starts
(in thousands of units)**



Source: U.S. Census Bureau



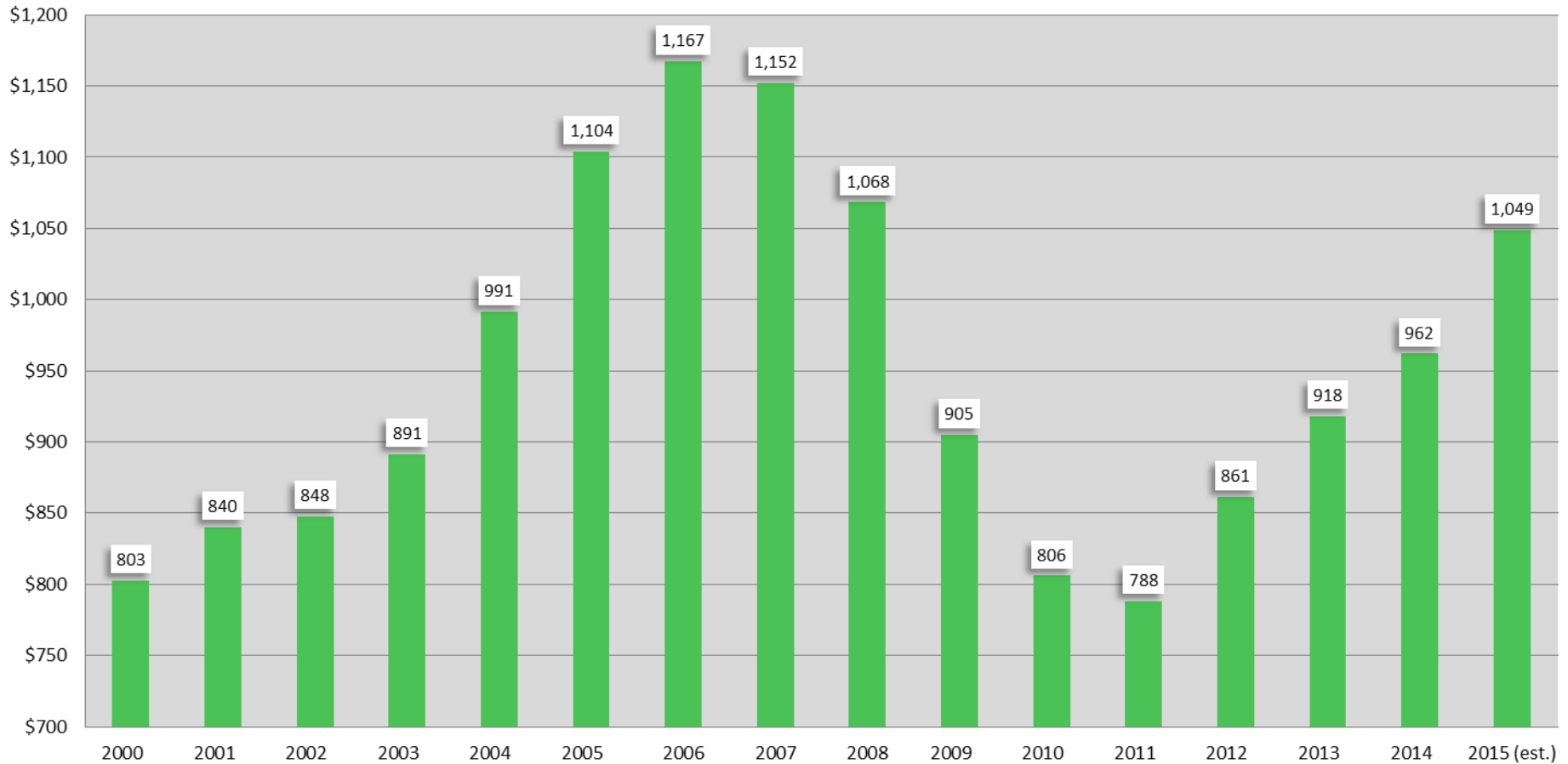
U.S. Construction Spending

- Based on year-to-date data, 2015 total U.S. construction spending (includes both private and public residential and non-residential construction) would be at an estimated \$1.05 trillion, a 9.0% increase from 2014.

I. Trend in the construction sector/demand



**Total U.S. Construction Spending
(in billions of \$ U.S.)**



Source: U.S. Census Bureau

II. Trend in production, consumption and trade in ceramic tiles

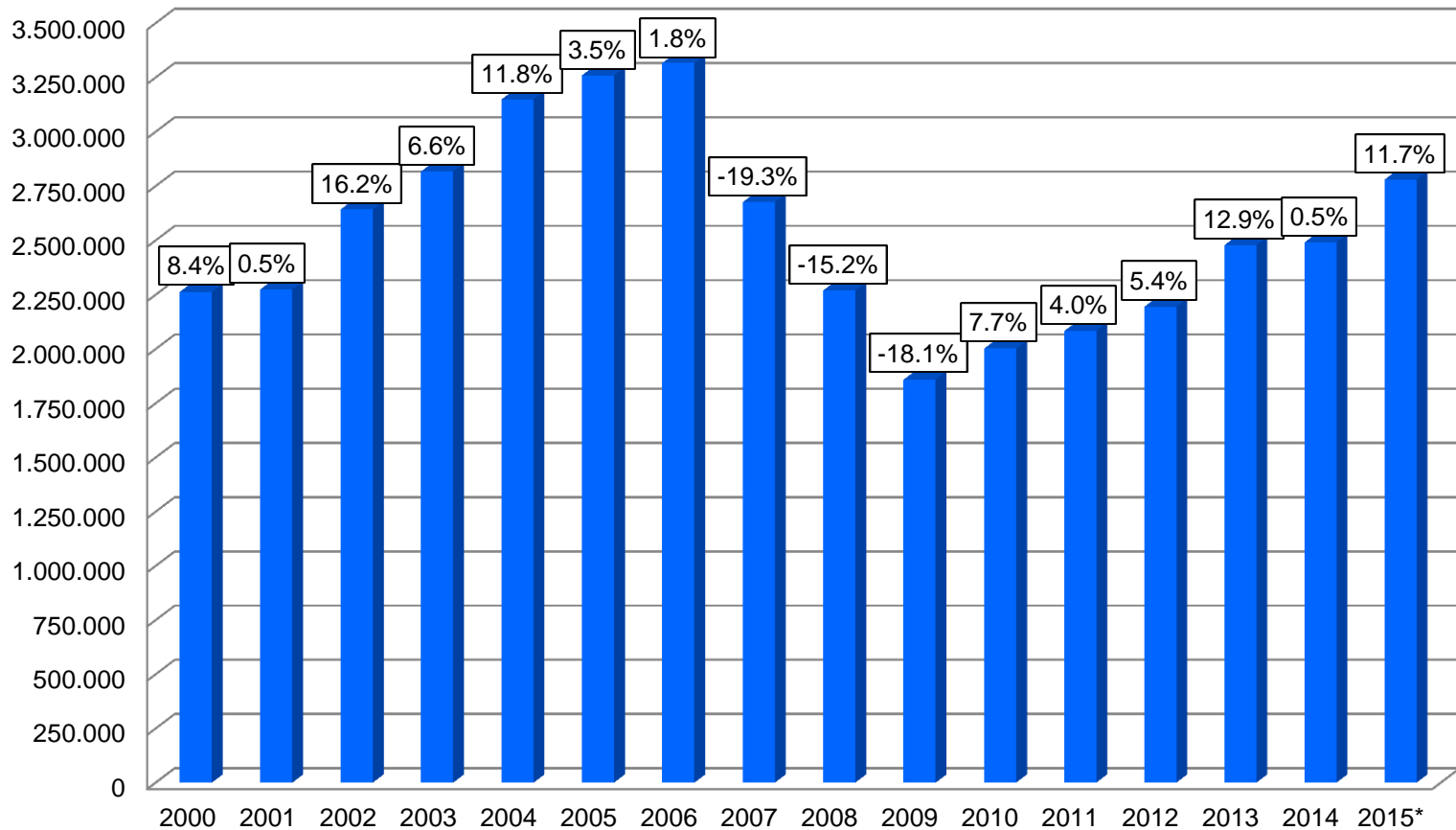


U.S. Ceramic Tile Consumption Overview

- Through July 2015 YTD the U.S. ceramic tile market is headed for its sixth consecutive year of growth!
- Extrapolating from the available year-to-date data, 2015 U.S. ceramic tile consumption will be 258.3 million sq. m (2.78 billion sq. ft.), an 11.7% increase from 2014.
- This is great news, but for perspective is still 16% less than in 2006, when U.S. consumption was at its peak (308.4 million sq. m/3.32 billion sq. ft.).

II. Trend in production, consumption and trade in ceramic tiles

**U.S. Ceramic Tile Consumption (in thousands of sq. ft.)
& Year over Year % Changes**



*Estimated based on available YTD data

Sources: U.S. Census Bureau & TCNA

II. Trend in production, consumption and trade in ceramic tiles



U.S. Imports & Domestic Shipments

- Through July 2015 YTD, 102.6 million sq. m (1.10 billion sq. ft.) of ceramic tile were imported into the U.S., up 12.2% vs. July 2014 YTD.
- Over the same period China was the largest exporter to the U.S. with a 29.5% share of U.S. imports (in sq. ft.), followed by Mexico (27.8%) and Italy (17.8%).
- Imports comprised 68.1% (in sq. ft.) of U.S. ceramic tile consumption through July 2015 YTD.
- July 2015 YTD domestic shipments totaled 517.7 million sq. ft. (48.1 million sq. m), up 13.6% from July 2014 YTD.

III. Latest developments at national level in energy supply regulation and taxation



U.S. Natural Gas Industrial Price

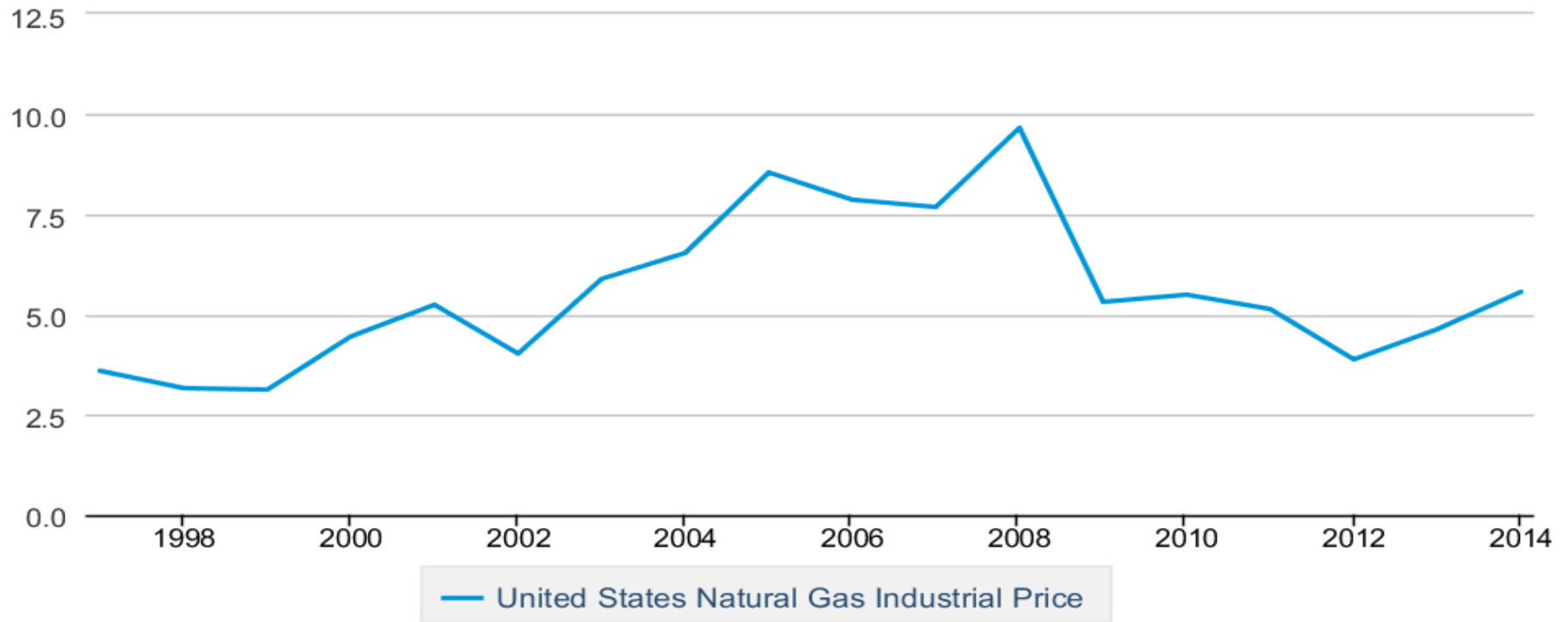
- In 2014 the U.S. natural gas industrial price (per thousand cubic feet) was \$5.55, up from \$4.64 in 2013, a 19.6% year-over-year price increase.

III. Latest developments at national level in energy supply regulation and taxation



United States Natural Gas Industrial Price

Dollars per Thousand Cubic Feet



Source: U.S. Energy Information Administration

IV. Any development in standardisation or regulation at national level affecting ceramic tiles

- Already developed Environmental Product Declaration (EPD) for North American ceramic tile based on North American flooring PCR
 - This allows a comparison of the environmental footprint of ceramic tile compared to other flooring
- Now working on an EPD for North American grout and mortar

V. Other national developments

- US EPA just released mandatory air emission regulations for major sources of hazardous air emissions in the ceramic tile, sanitary ware, and brick industries.
- Regulating the following
 - HF gas but based on health limits which are higher than existing limits
 - HCl gas but based on health limits which are higher than existing limits
 - 17 congeners of Dioxins and furans
 - Mercury
 - Particulates
- EPA suggesting use of activated carbon injection (ACI)
- Industry challenges dioxin determination and use of ACI

V. Other national developments

- All of the above will be challenged in court by Sierra Club, brick industry, tile industry, and others
- Some brick plants will be forced out of business
- As currently structured, all ceramic tile factories are not affected because as controlled sources they are below the major source limits
- Paying attention to these developments though