

Hemp Biz Journal

STRATEGIC INFORMATION AND DATA FOR THE HEMP INDUSTRY ■ ISSUE 1 ■ 2016

The Rebirth of an American Industry

A strategic business overview of the U.S. hemp industry

As we ink the inaugural issue of *Hemp Biz Journal*, a green wave of opportunity is sweeping America—and it shows no sign of stopping.

Hemp Biz Journal estimates that the U.S. hemp industry reached \$593 million in sales in 2015 and project it to reach \$1.8 billion by 2020. Hemp industry insiders say they've seen this coming for the better part of a decade. With hemp growing legally in 26 countries, the U.S. has lagged the global hemp market, embroiled in a prohibition dating back to the 1930s. Spurred by legislative changes and a more tolerant political climate for cannabis, states like Colorado, Tennessee and Kentucky are starting to see their memories of hemp prohibition fade away. Now the young U.S. hemp market is experiencing a new set of problems: growing pains.

With these growing pains comes the opportunity for entrepreneurship, investment and innovation. And this is happening across many states. Driven by a competitive American culture, a good old-fashioned work ethic, and a strong agricultural back-

bone, the U.S. hemp industry is poised to deliver on a century of promises to become a billion-dollar industry. This means more jobs and opportunities across the entire hemp value chain. With full federal legal commercial cultivation and processing all but imminent for the U.S. hemp industry, the dialogue among hemp CEOs and thought leaders has shifted from how we legalize hemp to how we nurture this young industry in a responsible way to help it reach its potential. To help achieve this, the *Hemp Biz Journal* gathered a group of industry insiders and leaders to research, analyze and gather market data and business information to empower you to make decisions in the fledgling, opportunity-filled hemp industry. With that as our mission, we set out.

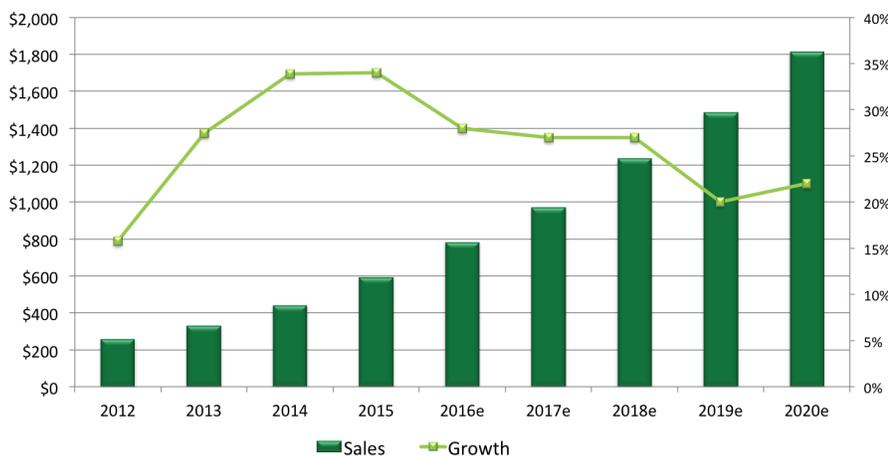
To better characterize the size of the U.S. hemp market, the *Hemp Biz Journal* studied sales and trends in seven major product categories and many more sub-categories. We talked to industry thought leaders, manufacturers, government regulators, scientists, farmers and many others, conducting more than 125 interviews

for this inaugural issue. We pulled import and export statistics, looked at industry data from associations such as the European Industrial Hemp Association, Hemp Industries Association, International Hemp Building Association and point-of-sale data from SPINS. *HBJ* studied market size and penetration rates for comparable industries such as natural and organic foods, supplements, organic textiles, natural and organic personal care products and the medical and adult-use cannabis industry. We attended the **United Nations Business Forum** and met with chief sustainability executives of multinational corporations, heads of banks and government leaders. Our mission: We want this inaugural issue to provide you with the best “overview” of the U.S. hemp industry by analyzing hemp across global market trends, climate adaptation, value chains and the numerous consumer categories across the hemp industry.

Hemp Biz Journal research showed consumer sales of hemp products rose to \$400 million in 2014, up 33 percent over a year

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U.S. Hemp-Based Products Sales, 2012-2020e



Source: *Hemp Biz Journal* estimates (\$ mil., consumer sales)

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ABOUT HEMP BIZ JOURNAL

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The *Hemp Biz Journal* is the premier business publication for industrial hemp. We provide data, market intelligence and strategic information to an exclusive group of businesses and investors. The insights shared in *HBJ* publications are based on expectations, estimates and projections as of the date such information is available. The market conclusions drawn are based upon a number of estimates and assumptions that, while considered reasonable by *Hemp Biz Journal* as of the date of such statements, are inherently subject to market fluctuations and business, economic and competitive uncertainties and contingencies. *HBJ* industry estimates and analysis are meant to be fluid and will be updated if and when new insights and information becomes available. We encourage you to further distribute, publish and/or reproduce our findings to help build the hemp industry but to please cite and give proper attribution to the *Hemp Biz Journal*.

Hemp Biz Journal's market research reports provide business intelligence and thought leadership to all levels of the hemp industry. Each report is exhaustively researched by our staff of industry experts and presents an analysis of markets, trends, competition and strategy in the U.S. and global hemp industry.

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earlier. The market continued at a similar pace for 2015 and is poised for tremendous growth in several consumer categories in the not too distant future. According to the **Hemp Industries Association**, the industrial product sector was led by automotive composites with nearly \$100 million in sales. *Hemp Biz Journal* estimates that by 2020, industrial products including automotive, green building, oil well liners, and non woven or technical fibers will storm the market and contribute 32% of overall hemp consumer sales, up from 20% in 2015.

The U.S. hemp industry will grow from a niche industry filled with activists and startups to a nationally recognized market expected to reach \$1.8 billion in sales in 2020. In all, the U.S. hemp market will be a catalyst for innovation and spur growth across the broader global market. Truly, these are exciting times filled with potential and opportunity. Now that the seeds are planted, it's on all of us to grow the industry we've imagined. Let's get started.

Hemp: What it is – and what it isn't

To understand where the hemp industry is going, it is important to begin with a brief review of the incredible plant we call “cannabis”—a plant we will demonstrate is positioned to launch a new global health and wellness industry and catalyze an eco-industrial revolution. Never before has a common plant held such potential for both modern society and the environment.

The Department of Agriculture interprets industrial hemp as any part of the cannabis plant, whether growing or not, containing a THC concentration of no more than three-tenths of one percent (0.3 percent) on a dry weight basis. In short, cannabis plants that exceed 0.3 percent THC are classified generically as “Marijuana/Marihuana” while cannabis plants that contain less than 0.3 percent THC are classified as industrial hemp. As such, lawmakers have utilized the presence of THC to define two general categories of the cannabis plant: industrial hemp and marijuana. *HBJ* refers to industrial hemp as “hemp” and “marijuana” (or “marihuana” as it is sometimes spelled) as the psychotropic drug (whether used for medicinal or recreational purposes), and “cannabis” as the plant species that has industrial, medicinal and recreational varieties. The language traditionally used in

conversations about cannabis has been one of the biggest problems in accurately representing the agronomic truths about the plant.

Cannabaceae is a family of plants that includes 170 species, grouped into 11 genera, including Cannabis (hemp and marijuana), Humulus (hops) and Celtis (hackberries). Cannabis contains three primary subspecies – Sativa, Indica and Ruderalis – and has a record of usage dating back thousands of years. Historical data shows how past cultures of Asia, India and Europe utilized the cannabis plant for industrial and medical benefits. Ancient documents from Egyptian and Greek physicians have also been found illustrating its medical usage for ailments, artifacts and widespread industrial use.

The industrial revolution powered by coal, petrochemicals and lumber is not only responsible for polluting our planet but may also be responsible for creating hemp prohibition. While domestic production of hemp was encouraged from the 1600s to 1890 – through the use of hemp in making sails, rope and clothing – the cultivation and processing of hemp became restricted under the Marijuana Tax Act of 1937. According to many hemp industry insiders who draw upon the research and writing of Jack Herer, a powerful group of American industrialists – including **John D. Rockefeller, William Randolph Hearst and the Dupont Co.** – conspired to demonize the hemp industry in the 1930s, setting the stage for decades of prohibition.

While it is not fully clear how complicit these industrialists were in creating hemp prohibition, what is clear is the man behind it all was **Harry Anslinger**, the first commissioner of the Treasury Department's Federal Bureau of Narcotics (FBN), and his wife's uncle, **Andrew Mellon**, who appointed Anslinger secretary of the Treasury and gave him a budget of \$100,000. A known racist and staunch supporter of prohibition, Anslinger had everything he needed to demonize “marihuana” and collude with industry magnates to stymie hemp's economic and industrial potential.

Despite Anslinger's best efforts, the war on cannabis is now failing, and research continues to prove the effectiveness of this plant for myriad uses. With decades of research backing cannabis as a positive addition and another therapeutic tool in the western pharmacopeia, patients and