

## The Economics of Industrial Hemp

Hemp is a half billion dollar industry in the U.S. Currently all hemp products sold in the U.S. are imported or manufactured from imported hemp. Imported materials originate primarily from the following countries: Canada for seed, China for textile and the European Union for building materials and automotive parts.

### U.S. Retail Market for Hemp Products

According to data collected by the Hemp Industries Association, a non-profit trade association, the size of the 2012 U.S. retail market for hemp products continues to set records with an estimated total retail value of hemp products sold in the U.S. in 2012 to be at least \$500 million: [http://www.votehemp.com/PR/2013-02-25-hia\\_\\$500\\_million\\_annual\\_sales.html](http://www.votehemp.com/PR/2013-02-25-hia_$500_million_annual_sales.html)

- The U.S. hemp food and body care market in 2012 accounted for at least \$156 million in retail sales
  - According to the data collected by market research firm SPINS, combined U.S. hemp food and body care sales grew over the previous year ending December 23, 2011 in the sampled stores by 16.5%
  - According to SPINS figures, sales in conventional retailers grew by 14.1% in 2012, while sales in natural retailers grew by 18.0%
    - NOTE: The sales data on hemp foods and body care, collected by SPINS, was obtained from natural and conventional food retailers, however does not include Whole Foods Market, The Body Shop and certain other key establishments such as restaurants, who do not provide sales data. Furthermore, there are many unreported leading mass-market brands of suntan lotion and sunscreen which include hemp oil. Thus it is thought that the sales data on hemp foods and body care underestimates actual sales by a factor of at least three.
- The remaining \$344 million in 2012 sales of hemp-based products is split between
  - Sales of popular hemp items such non-dairy milk, shelled seed, soaps and lotions
  - Sales of clothing, auto parts, building materials and various other products

### U.S. Industrial Hemp Imports

The single largest source of U.S. imports of hemp seed and oilcake is Canada. The total value of Canada's exports of hemp seed to the United States has grown significantly in recent years. The following export statistics are for orders, over \$2,000 from Canada:

- Hemp seeds, whether or not broken:
  - 2013: \$28.5 M total with \$27.5 to U.S.
  - Jan- June 2014: \$ 16.3M total with \$15.4 to U.S.
- Hemp oil and its fractions, whether or not refined but not chemically modified:
  - 2013: \$ 2.7M total with \$2.1 to U.S.
  - Jan- June 2014: \$1.9 M total with \$1.4 to U.S.

- Oil-cake & other solid residues, of hemp seed, whether or not ground or pelleted:
  - 2013: \$ 7.3 M total with \$6.5 to U.S.
  - Jan- June 2014: \$ 5.2M total with \$4.1 to U.S.
  
- True hemp fiber (Cannabis sativa L.), raw or retted:
  - 2013: \$ 1.8K total with \$1.4K to U.S.
  - Jan- June 2014: \$ 427 total with all to U.S.
  
- True hemp fiber otherwise processed but not spun; tow and waste of true hemp:
  - 2013: \$12.9K total with \$12.9K to U.S.
  - Jan- June 2014: \$ 38K total with \$6K to U.S.

Information provided by The Hemp Industries Association (HIA) which represents the interests of the hemp industry and encourages the research and development of new products made from industrial hemp, oilseed and fiber varieties of \*Cannabis\*.

European countries such as the United Kingdom and Switzerland also have supplied hemp seed and oilcake to the United States.

### **Economic Opportunity for New Mexico**

New Mexico is being shut out of the lucrative U.S. retail hemp market and the worldwide Industrial hemp market in general. The first step in New Mexico's participation in the emerging Industrial Hemp industry is state authorization to grow Industrial Hemp. This would allow cultivation of Industrial Hemp under the research and pilot program provision, Section 7606, of the US Farm Bill. The creation of an Industrial Hemp industry in New Mexico opens up economic opportunity for

- Growers
- Processors
- Manufacturers of value added products
- Distributors of hemp-based products
- Retailers of hemp-based products

The market is poised and ready for New Mexico's Industrial Hemp entrepreneurs to take advantage of a diverse range of economic opportunities Industrial Hemp brings. However we need enabling legislation to make this happen.

### **Uses for Industrial Hemp**

Industrial hemp (Cannabis sativa) is a versatile plant that can be grown for its fiber, seed, or oil. The hemp plant itself can be used for remediation in areas contaminated with hydrocarbons

- Hemp fibers have been used to manufacture hundreds of products that include twine, paper, construction materials, carpeting, clothing, and animal bedding
- Seeds have been used in making industrial oils, cosmetics and other personal care products, and medicines

- Hemp seed or oil can be found in cooking oil, salad dressings, pasta, and snack products. This crop also has potential as a biofuel

### **Economic Development Opportunities**

The many uses for Industrial Hemp offer many Economic Development opportunities:

**Food:** Hemp seed provides nearly complete nutrition with all 10 essential amino acids, all 4 essential fatty acids (EFAs) in the ratio recommended by health experts, and over 30% protein in its most easily digestible forms, making hemp the ideal protein, and ideal food for human consumption and opening up the door for various opportunities in the food Industry.

**Animal Feed:** Hemp meal provides all the essential protein that livestock require, yet doesn't require any antibiotics to digest. When cows eat corn they cannot digest it, needing antibiotics to keep from being sick, which makes the antibiotics less effective on the humans that consume the beef. Hemp is also an excellent animal bedding for horses and other livestock.

**Body Care:** Because of hemp oil's high EFA content, especially GLA, hemp helps cells to communicate to rebuild cell membranes, which keeps the skin from getting dry by enabling skin cells to hold onto moisture in their natural lipid layers. This makes hemp oil the perfect ingredient for use in various skin care lines.

**Specialty Oil:** Hemp oil can be made into non-toxic paints, varnishes, lubricants, and sealants. The paints last longer, and the sealants are better absorbed by wood.

**BioFuels:** Hemp biomass can produce electricity from sulfur-free charcoal, as well as ethanol, yet these industries will be the last to develop due to the high value of hemp food. Hemp can easily be made into biodiesel fuel as well.

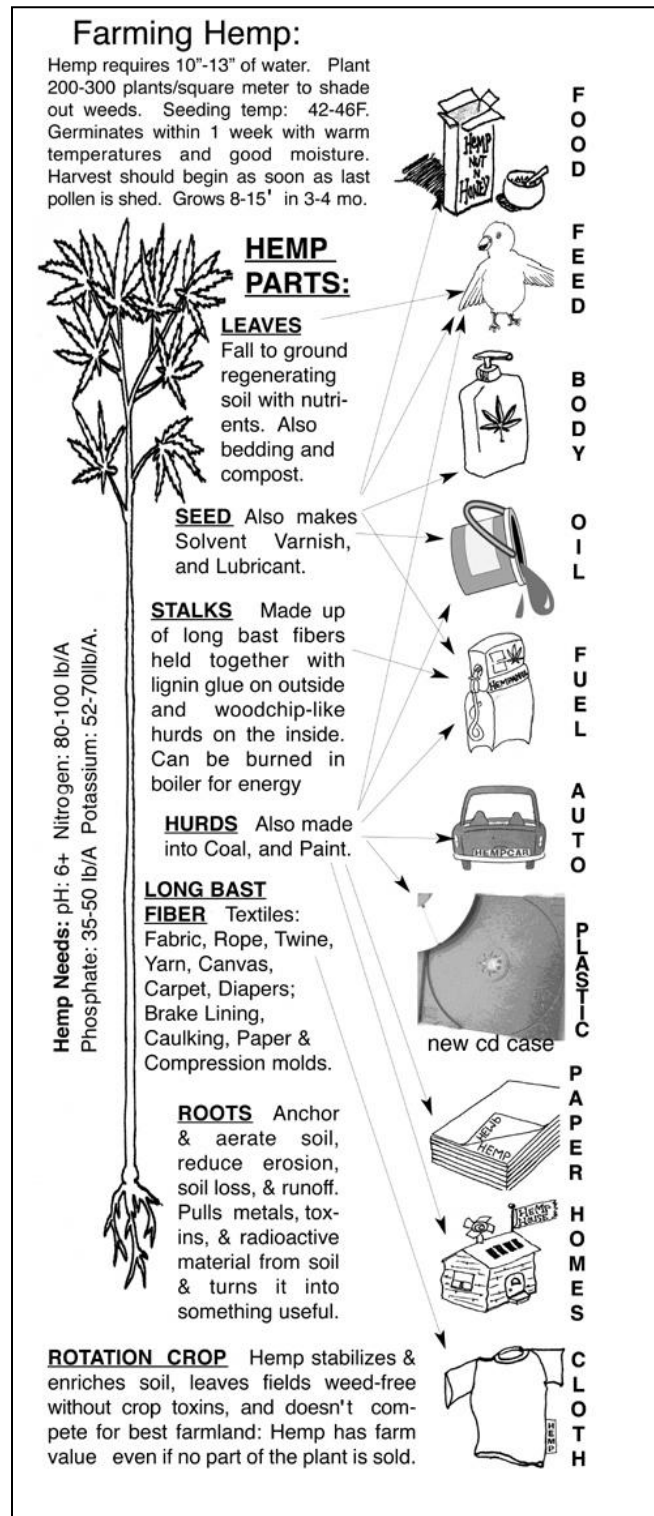
**Automobile parts:** European plants are making auto panels from hemp based composites that are biodegradable, half the weight of, more durable, and safer than fiberglass counterparts.

**Plastics:** Hemp hurds and fiber have over 50% cellulose, the building blocks of plastics. Biodegradable hemp plastics could reduce landfill waste and display unique strength characteristics.

**Paper:** Hemp pulp paper doesn't require toxic bleaching chemicals and lasts hundreds of years longer than paper made from trees. It is stronger, and can be recycled many more times than tree paper. An acre of Industrial Hemp can produce as much pulp as an acre of tree over a 20 year growing cycle.

**Homes:** Hempcrete homes, a mixture of hemp and lime, are fire, water, and rodent proof, with excellent elasticity, strength and breathability, which cuts energy costs. Washington State Univ. found hemp board to be three times stronger than plywood.

**Clothes:** Hemp is among the longest, strongest, most elastic, and most durable fibers in nature. Hemp is stronger, more durable, softer, more UV protective, warmer, and won't mildew or rot like cotton fiber, which requires 25% of the worlds crop chemicals.



The New Mexico Industrial Hemp Coalition believes that creating a New Mexico hemp industry, along with supporting a variety of processing and manufacturing sites, will revitalize rural communities and support a model for improving sustainable agriculture.

We thank you for your support in making an Industrial Hemp industry possible in New Mexico.