

Fuel and Fiber Company

Endnotes & References

- ⁱ Community Power Corporation, 8420 S. Continental Divide Road, Littleton, CO 80127
- ⁱⁱ Corporation For Future Resources, 1909 Chowkeebin Court, Tallahassee, Florida 32301
- ⁱⁱⁱ Ontario Ministry of Agriculture, Food and Rural Affairs FactSheet "Growing Industrial Hemp in Ontario" 08/00
- ^{iv} A Brief Analysis of the Characteristics of Industrial Hemp (*Cannabis sativa* L.) Seed Grown in Northern Ontario in 1998. May 19, 1999 *Herb A. Hinz*, Undergraduate Thesis, Lakehead University, Thunder Bay, Ontario
- ^v IAN S. WATSON, AIA BioDiesel Expert
Lawrence Livermore National Laboratory
- ^{vi} CIFAR Conference XIV, "Cracking the Nut: Bioprocessing Lignocellulose to Renewable Products and Energy", June 4, 2001
- ^{vii} California Energy Commission report "COSTS AND BENEFITS OF A BIOMASS-TO-ETHANOL PRODUCTION INDUSTRY IN CALIFORNIA", March, 2001
- ^{viii} California Energy Commission report "EVALUATION OF BIOMASS-TO-ETHANOL FUEL POTENTIAL IN CALIFORNIA", December, 1999 pg iv 4-5
- ^{ix} Switchgrass is the leading candidate under consideration by DOE. Numerous studies are available upon request.
- ^x Cannabis Sativa, commonly know as "hemp" is included in a list of potential field crops considered as Candidate Energy Crops in the December 1999 California Energy Commission report "EVALUATION OF BIOMASS-TO-ETHANOL FUEL POTENTIAL IN CALIFORNIA" pg. iv-3
- ^{xi} Hemp Pulp and Paper Production Gertjan van Roekel jr.
ATO-DLO Agrotechnology, P.O.box 17, 6700 AA Wageningen, The Netherlands
Van Roekel, G J, 1994. Hemp pulp and paper production. Journal of the International Hemp Association 1: 12-14.
- ^{xii} Fuel and Fiber Company was formed to promote a renewable resource system using fibrous crops such as hemp and kenaf to produce high-value natural fiber, ethanol and other co-products. www.FuelandFiber.com
- ^{xiii} All of the hemp fibre produced and sold by Hempline (www.hempline.com) is made from hemp grown without pesticides and processed without chemicals. The fibre is a uniform natural golden colour typical of field retted stalks. The fibre has a moisture regain of 12% and excellent fibre tenacity. The fibre is pressed into high compression bales to minimize transportation costs.
The fibre is available in 40ft. and 20 ft. containers, truckloads or by the bale and shipped internationally. Samples of the fibre are available for trials upon request. The pricing varies based on the fibre grade, and is comparable or more cost effective than many natural and synthetic fibres.
Hempline primary hemp fibre comes in the following grades:
Ultra clean Grade Fibre
- 99.9% clean of core fibre Value: .55 + lb.
 - Dust extracted
 - Available in staples lengths between 1/2" to 6" and sliver.
 - Well opened with a typical staple denier of between 15 to 65
 - Applications include: nonwovens, composites, textiles, any where that a very clean well opened fibre with uniform staple length is needed.
- Composite Grade Fibre
- 96 - 99% clean of core fibre Value: .35 - .55 lb.
 - Dust extracted
 - Available in staples lengths between 1" to 6".
 - Fairly well opened with a typical staple denier of between 50 to 125
 - Applications include: a range of composites such as automotive, furniture and construction; nonwovens; insulation.
- General Purpose Grade Fibre Value: .20 lb.
- 50 - 75% clean of core fibre
 - Staple lengths vary between 1" to 6". Can be modified according to your requirements
 - Applications include: fibre for hydro mulch; cement and plaster filler; insulation; geo-matting.
- Core fibre
For animal bedding and garden mulch, under the HempChips(tm) brand, is available in 3.2 cu. ft. (90 L) compressed bags through retail outlets and direct-to-stable in truckload quantities.
- ^{xiv} Based on 20% improvement over Canadian production per Ontario Ministry of Agriculture, Food and Rural Affairs Factsheet "Growing Industrial Hemp in Ontario", 08/00
- ^{xv} DOE calculation - See Chariton Valley project reports.
- ^{xvi} California Agricultural Employment Report
- ^{xvii} Estimate only. Actual numbers need to be discovered and confirmed.