

My name is Constance Fredenberg and I am writing in support of HB 172 Commercialization of Industrial Hemp, (IH).

I have lived in and/or worked for rural Alaskan villages for the past 39 years. I know firsthand about the high cost of inappropriate housing in villages with extreme weather as the norm. There is a dire shortage of housing and an even greater need for more affordable and appropriate construction.

My home base is now in the heart of Alaska's farmland in the Mat-Su Borough. Jack Bennett recently shared some information with me that is very encouraging for both Rural AK and Alaska's farmers. A year ago, I didn't know what IH was. I thought it was rope. I didn't realize it had 25,000 industry applications. It appears that Hemp is a crop that can be grown in Alaska. 2½ acres of IH can be harvested in 100 days and supplies enough building material for a 1000sq.ft. shell for a house.

55% of the world energy consumption is construction waste related. IH as a construction material has a zero footprint. The high insulation value lowers heating costs up to 70%, annually. Europe has been building VOC FREE homes for the last 20 years with hemp insulation. Lime-based hemp insulation replaces drywall, OSB plywood, house wrap, and fiberglass insulation that releases flame-retardants impacting people and planet. The lifecycle of these homes is over a hundred years, and are fire, mildew, moisture, and termite resistant. Worldwide marketing data estimates green building as a 200 billion-dollar industry.

All of the plant's output has value added products from cosmetics to clothes, to biomass, medicine, foods, construction material, and bio composites. IH in the US is a 600 million-dollar industry, and an estimated 1 billion by 2020. Last year was America's first commercial hemp harvest along with the 30 states that passed their own rules and regulations on IH. Last year eliminated importing costs by 30%-40%. The IH food industry is a \$280 million dollar industry in the US. Hemp plastics are stronger than fiberglass on a boat and more flexible and lighter than an Indy 500 racecar. At the end of the car's life cycle the ingredients are 100% biodegradable. Tesla is working on the next super capacitor to double the life of the car's battery using hemp thermal resins known as graphene. The age of graphene is the future of energy storage powered by hemp, replacing microchip boards and silicone.

Give Alaskan farmers the freedom to grow hemp and help turn the fiscal crisis around. I support the passage of HB 172 commercialization of Industrial Hemp for the future of Alaska!

Sincerely,
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