

August 18, 2017

Dear HESA Committee Members:

Canada is set to launch a new industry, legal cannabis, in 2018. Elsewhere, this industry is being run in ways that are heavily polluting: drawing incredible amounts of energy and water, creating tonnes of plastic packaging waste, and causing soil degradation and nutrient-loading waterways from pesticide runoff.¹

This is certainly the story of the legal cannabis industry in the US, where “...one square foot of indoor marijuana cultivation uses four times more energy than the same space in a hospital, eight times more energy than a commercial building...”²

But it doesn't have to be the story in Canada. One of the great things about legalization is the opportunity to apply environmental regulations – and to include them from the outset.

Without strong environmental standards, this industry could have far-reaching, negative environmental impacts.

- [Not so green: how the weed industry is a glutton for fossil fuels](https://www.theguardian.com/society/2017/jun/20/cannabis-climate-change-fossil-fuels?CMP=share_btn_fb) (The Guardian. June, 2017) https://www.theguardian.com/society/2017/jun/20/cannabis-climate-change-fossil-fuels?CMP=share_btn_fb

However, **strong environmental standards could ameliorate these effects, and create this as Canada's first truly sustainable industry.** There are technologies and practices already being used elsewhere that could be applied to this industry as standards, ensuring all operations minimize energy and water use, advance water recycling and renewable energy, grow without harmful chemical inputs, and minimize the waste, in particular the use of plastics in product packaging.

- [Renewable energy and the cannabis economy](https://news.lift.co/renewable-energy-cannabis-economy/) (Lift News. August, 2016) <https://news.lift.co/renewable-energy-cannabis-economy/>
- [Organic weed? Marijuana growers go green](http://news.nationalgeographic.com/2017/06/marijuana-organic-cannabis-industry-goes-green-energy-water-pesticides/) (National Geographic. June, 2017) <http://news.nationalgeographic.com/2017/06/marijuana-organic-cannabis-industry-goes-green-energy-water-pesticides/>

The text below (pgs. 3 – 5) have been endorsed by the undersigned cannabis organizations and companies that believe environmentally responsible considerations of cannabis production, packaging and distribution should be of utmost importance in the

¹ Energy and water are already heavily impacted here in Canada in the smaller-scale legal grows.

² National Geographic online. *Organic Weed? Marijuana growers go green.* June, 2017

new legislation, as well as by environmental organizations who work on energy, water, climate change, waste, and/or wildlife issues and share these environmental concerns.

We call for the HESA Committee to deeply consider this important issue, call witnesses to speak to it, and to develop strong regulations that will create cannabis as a sustainable industry from the ground up.

Sincerely,

Rielle Capler, MHA, PhD(c)
Nola Poirier, BSc., MES, MFA

August 18, 2017

Standing Committee on Health
Sixth Floor, 131 Queen Street
House of Commons
Ottawa ON K1A 0A6
Canada

Dear HESA Committee members;

The Canadian federal government has announced its goal to have a system for legalizing and regulating the use of recreational cannabis by July 2018.

The Cannabis Act (Bill C-45) represents a momentous shift for Canada, economically, legally, and socially. When this legislation is passed, it will put an end to a longstanding prohibition and introduce a new national industry. In addition, it will make Canada the first G7 country to legalize cannabis use.

Environmental sustainability is essential for all industries in Canada, but is especially vital here, at the onset of new legislation, in light of the national significance of such a change, and with the international community watching how we navigate this terrain. As we embark on this endeavour, Canada has both an opportunity and a duty to develop and apply best environmental practices across this industry.

In particular, we call upon the government to ensure all Canadian cannabis legislation mandates environmental best practices, and includes a strategy for enforcement in the following areas:

- **Energy.** Many cannabis production practices are highly energy-intensive. There are short-term, localized impacts, for example when transformers are blown; as well as long-term considerations such as the nature of energy sources, regional peak demand, and climate change impacts. Industry regulations need to advance far-sighted standards for energy use and efficiency, including sourcing renewable energy.
- **Water Quality and Efficiency.** Many cannabis cultivation practices are water intensive. In addition, both commercial and household-level operations can cause nutrient loading in wastewater. To protect freshwater and oceans, Canadian cannabis growing regulations need to comprise leading edge standards for both efficient water use and for effective wastewater management.
- **Production Inputs.** The use of some fertilizers and pesticides to grow cannabis impacts water quality, soil quality, and human health. Cannabis production legislation needs to regulate use of chemical fertilizers and pesticides with a goal

of protecting soils, water quality, and wildlife; legislate which products are acceptable; require labelling of both the chemicals used and their quantities; and reward organic practices.

- **Production Waste.** All growing operations will generate waste products, including production materials, spent infrastructure, packaging, spent vegetation/soils, and wastewater, among others. Material regeneration standards need to be aligned toward Zero Waste principles at all stages of the industry to ensure minimal waste generation.
- **Packaging Waste.** The retail end of the waste stream includes packaging, both for shipping and retail sales. Industry packaging standards need to be developed through a lifecycle assessment of the materials, with a goal to approve reusable, compostable, and/or actively recyclable materials and minimize or prohibit single-use constituents.
- **Land Use.** Land use extends to both indoor and outdoor operations. Cannabis operations should not reduce the quality of land used for food agriculture or negatively impact pollinating insects and other wildlife populations. Considerations for soil, water, and wildlife protection include operation size, location, and agricultural practices. Some ways to safeguard environmental protection include the use crop rotation, and the inclusion of cannabis as part of multi-product agricultural operations.

With the development of Canada's Cannabis Act, we have an opportunity to design triple-bottom-line accounting across all aspects of the sector. It is our duty as a nation, and as a leader in this field, to establish legalized cannabis as a truly green industry.

Sincerely,*

Anandia Labs <http://www.anandialabs.com/>

Canadian Association of Medical Cannabis Dispensaries <http://www.camcd-acdcm.ca/>

Canadian Consortium for the Investigation of Cannabinoids (CCIC) <http://www.ccic.net>

Canadians for Fair Access to Medical Marijuana (CFAMM) <https://cfamm.ca/>

Canadian Students for Sensible Drug Policy <http://cssdp.org>

Cannabis Trade Alliance of Canada (CTAC) <https://sustainablecannabis.ca>

Canadian Unitarians for Social Justice <https://cusj.org>

Craft Cannabis Association of BC <http://www.craftcannabis.ca>

Ecology Action Centre <https://ecologyaction.ca/>

Educators for Sensible Drug Policy <http://efsdp.org/>

Environmental Defence <http://environmentaldefence.ca/>

Flowers and Freedom <https://flowerandfreedom.com>

Forest Action Network <http://forestaction.wikidot.com>

Greenspiration <http://greenspiration.org/>

Island Harvest <http://www.islandharvest.ca/>

Hollyweed North <http://hollyweednorth.com/>

Leadnow <https://www.leadnow.ca>

Let's Talk Trash Powell River <https://letstalktrashpr.com>

NICHE Canada <https://www.nichecanada.com/>

Manitoba Wildlands <http://manitobawildlands.org/about.html>

Quadron Cannatech <http://www.quadroncannatech.com>

Tantalus Labs <https://tantaluslabs.com>

The Cannabis Conservancy <https://cannabisconservancy.com>

The Sunshine Coast Conservation Association <http://www.thescca.ca/>

Wildsight <https://wildsight.ca>

*Signing this letter confirms only that we call for best environmental practices for this industry. It does not imply consent to any specific aspects of the Cannabis Act