



**Written Submission to the Standing Committee on Environment and  
Sustainable Development on Single-Use Plastics**

**The U.S. Grains Council**

**Monday, May 3, 2021**



## **Introduction**

The U.S. Grains Council is pleased to put forward its submission to the Standing Committee on Environment and Sustainable Development on the topic of bioplastics to inform its study on single-use plastics. The U.S. Grains Council is an organization specializing in markets for barley, corn, sorghum, and related products – particularly ethanol. Our organization regularly engages with Canadian governments at the federal and provincial level to share technical information about ethanol, its properties as a low carbon fuel, and its ability to be used as a raw material for the production of bioplastics. Through this submission, we aim to share our expertise with the Canadian government on these ethanol-based bioplastics. This expertise stems from experience in the ethanol markets and the bio-based economy.

U.S. Grains Council is supportive of a circular economy approach that focuses on waste elimination and greenhouse gas (GHG) emissions at the design stage. Bioplastics have an important role to play in this area. However, just like other renewable resources such as fuels and agri-food commodities, not all bioplastics have an equal carbon footprint. This is dependent on a number of factors including farming practices for feedstock, transportation along the supply chain, and manufacturing processes.

The COVID-19 pandemic has demonstrated that plastics have an important role to play in mitigating the spread of germs. As clear barriers at service counters and face visors have become commonplace it has become more and more important to consider what tomorrow's plastics look like and how they will impact our environment. Against this backdrop, the U.S. Grains Council recommends that lifecycle carbon intensity should be taken into account when considering plastics and single-use plastic alternatives.

## **Lifecycle carbon intensity and Ethanol based bioplastics**

Whether it is a single-use plastic, a biodegradable plastic, or a recyclable plastic, it is important to consider where that plastic is coming from and the total environmental impact it has, not just at its end-use. Accounting for lifecycle carbon intensity means that the overall GHG impacts of a plastic product, including each stage of its production and use, are assessed.

Many countries including Canada use lifecycle assessment across multiple industries, such as agriculture, forestry, fuels, and package manufacturing. Incorporating a lifecycle approach to plastic alternatives, including bioplastics, accounts for the carbon intensity produced in stages like feedstock production, transportation, manufacturing, and distribution. It takes advantage of existing mechanisms of calculation and ensures a more complete GHG reduction profile.

As Canada has committed to a renewed Nationally Determined Contribution (NDC) of 40-45% reduction of GHG emissions by 2030 against a 2005 baseline, it is even more important to leverage all areas of renewable resources to achieve this goal. Ethanol-based bioplastics can



make an important contribution to this target by providing low carbon intensity products using existing agricultural supply chains that are already implementing sustainable practices. Ethanol-based bioplastics are made from renewable feedstock which is an important improvement to the current profile of plastics used in Canada.

Currently, there is low market penetration rate for bioplastics. While there may be excitement around bioplastic-based products and an uptake in environmental, social, and corporate governance that lends itself to a bioplastics market, producers will only reconsider if there are the appropriate market signals, including regulatory policy mechanisms.

### **Conclusion**

The U.S. Grains Council is pleased that the Committee has chosen to study single-use plastics and its associated alternatives and reaffirms its recommendation **that lifecycle carbon intensity should be taken into account when considering plastics and single-use plastic alternatives.** We believe that this will best advance mutual goals of waste reduction and GHG reduction as well as spur innovation and new market opportunities to achieve the lowest possible carbon footprint.

Our organization is supportive of global policy that leads to the adoption of increased use of renewable sources, including bioplastics. We hope that this submission will support the Committee's recommendations and are happy to answer any questions that Committee members may have.

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### **About the U.S. Grains Council**

The U.S. Grains Council develops export markets for U.S. barley, corn, sorghum, and related products including distiller's dried grains with solubles (DDGS) and ethanol. With full-time presence in 28 locations, the Council operates programs in more than 50 countries and the European Union.