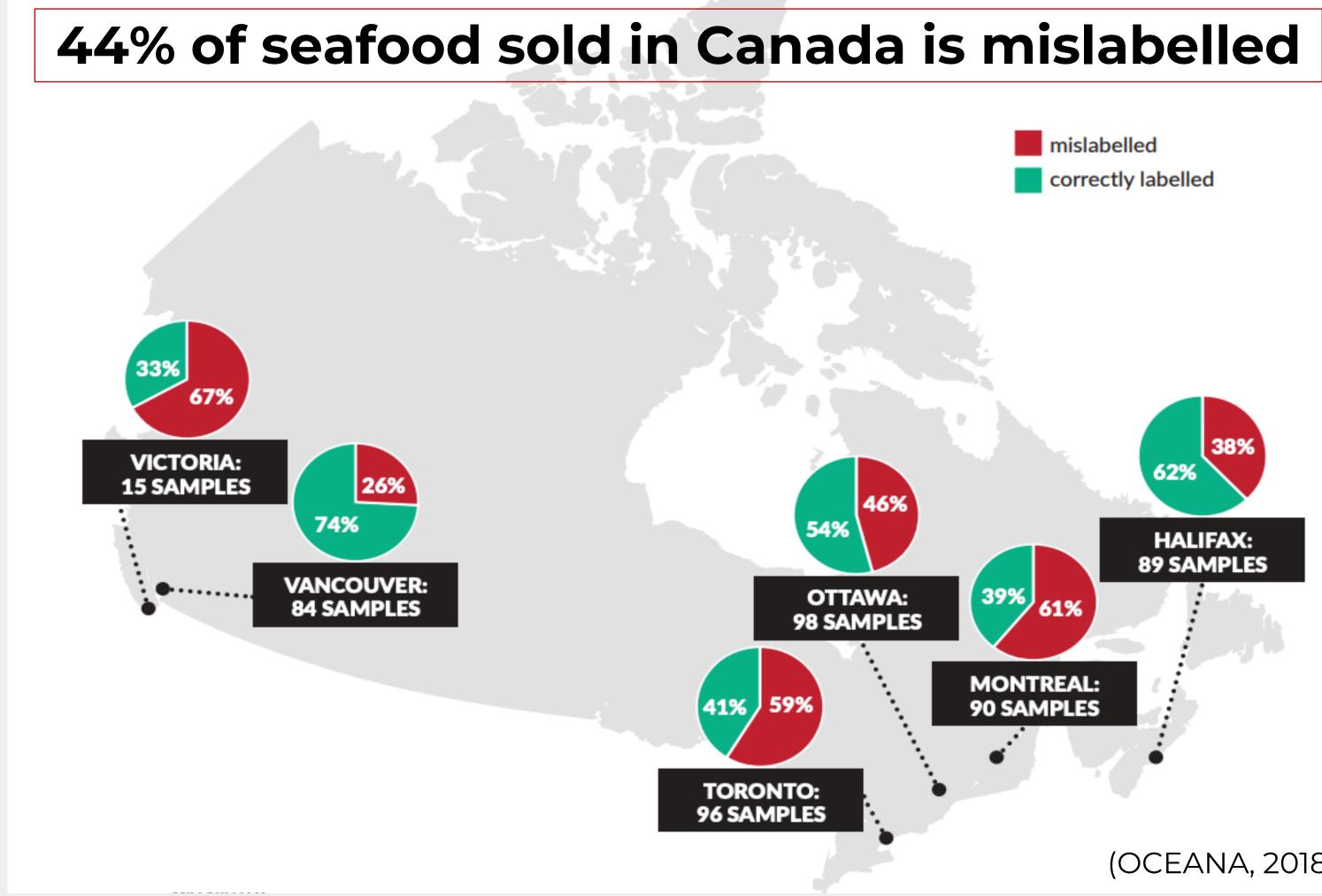




Seafood Fraud in Canada: **Opportunity for Action**

Seafood is a significant source of protein for 3 billion people globally and contributes \$6 billion to the Canadian economy. However, a lack of coordinated policy threatens local seafood supply, specifically when it comes to seafood fraud and intentional mislabelling.^{1, 2}

Approximately 30% of seafood products around the word are mislabelled, and Canada is one of the leading culprits.³



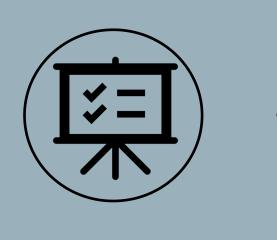
Seafood fraud has dire consequences, including compromising sustainable fisheries and conservation efforts by misrepresenting stock numbers.⁵ Mislabelling also creates health risks for consumers, including tetrodotoxin poisoning from puffer fish and gastrointestinal issues from escolar, an indigestible substance. ^{6,7}

Experiencing health risks may result in loss of consumer trust: 55% of Canadian seafood consumers already doubt that the seafood they consume is what it says on the package. This lack of consumer trust can negatively affect Canada's seafood economy and drive consumers to avoid one of the most nutritious food sources on the planet.⁶

Avoiding seafood comes with it's own set of consequences. Seafood has been linked to a variety of human health attributes due to it's high Omega-3 and micronutrient content. It's estimated that 5,800 diet-related deaths could be avoided every year if Canadians increased their consumption of fish to 150g per week, representing a potential benefit to Canadian society of between \$42 and \$50 billion per year.¹⁰

(OCEANA, 2018)

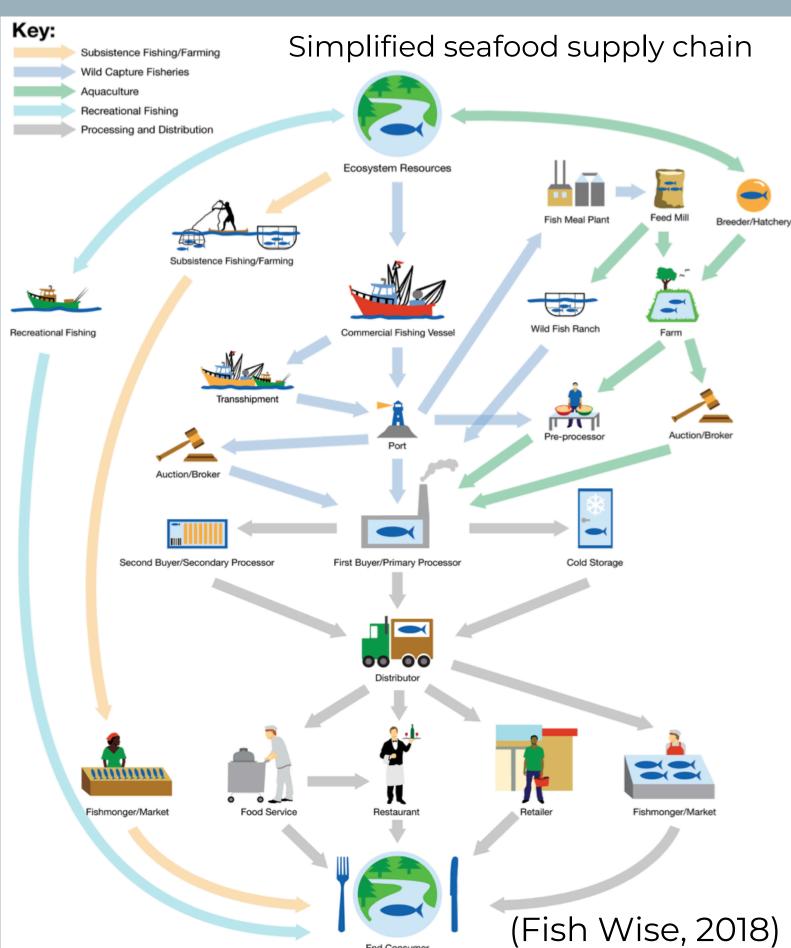
Eliminating Seafood Fraud: A Fishy Approach to Food Policy Emily De Sousa, MA Student, University of Guelph



Policy Recommendations

The proposed actions are a culmination of evidence-based approaches that focus on building a more transparent seafood supply chain and supporting the vision of the Food Policy for Canada.

1. Implement strict traceability regulations



Mandatory full-chain boat-to-plate traceability would require that handlers throughout the supply chain provide details about the seafood at each stage of the supply chain.¹⁵

In order to implement full-chain boat-to-plate traceability in Canada, we must make full-chain traceability a requirement in the Safe Food for Canadians Regulations. All seafood being sold in Canada must include key information that follows fish throughout the supply chain; including who, what, where, when, and how the fish was caught, processed, and distributed.

3. Utilize DNA barcoding as a regulatory tool

DNA barcoding is a powerful tool fit for the purpose of identifying mislabelled seafood products in Canada.

The Food Policy for Canada has committed \$24.4 million dollars to ending food fraud in Canada.¹³ In order to effectively address food fraud, part of this funding should be directed to regular DNA barcoding of seafood products in grocery stores, retailers, and restaurants across Canada. This would allow authentication of species and ensure the integrity of the imposed regulations recommended above.

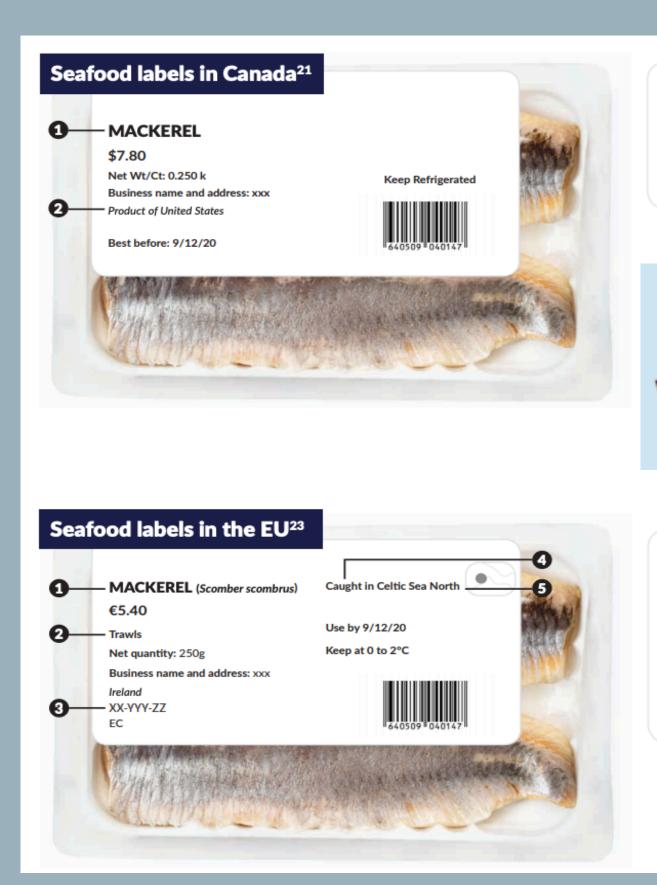
As the most highly traded commodity in the world, seafood has a complicated supply chain. Ensuring traceability throughout is the first step to ending seafood fraud.

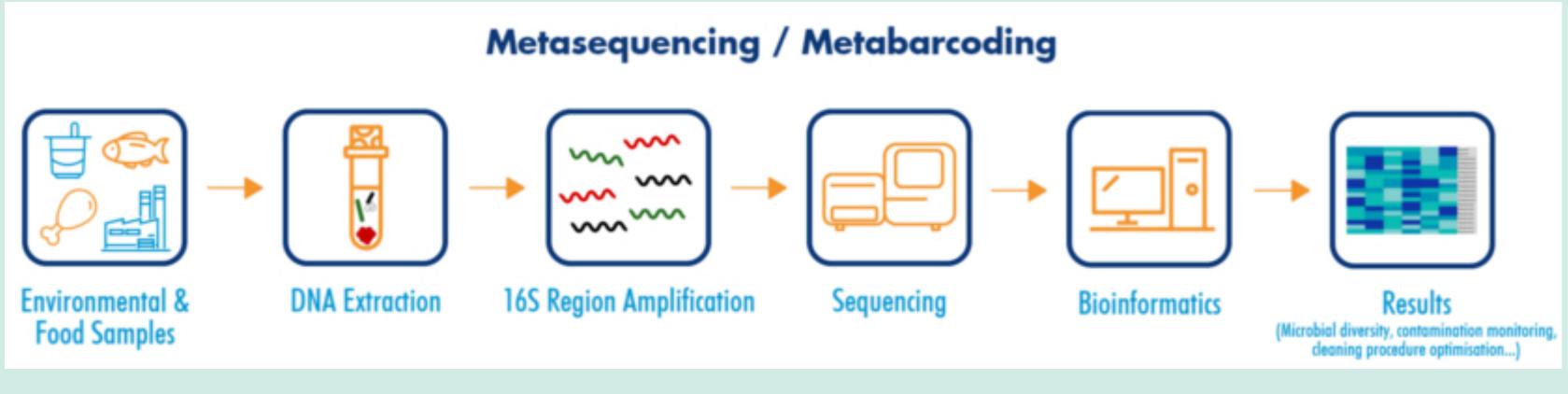
Canada's Safe Food for Canadians Regulations currently fall short of international traceability standards.¹⁶

2. Improve seafood labelling standards

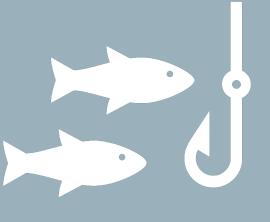
In Canada, the only information required on seafood labels is a generic marketplace name and the country where the product was last processed.¹⁷ This labelling method allows many species to be listed under the same common name, leading to confusion and undesired consequences.

**** Seafood sold in Canada must be labelled with:





The technology compares a DNA sample from a seafood product against a global database.



In Canada, more than 200 species can be labelled as "snapper"

Scientific species name

• Farmed or wild-caught

Country of geographic origin

• Type of fishing gear used to harvest

1 Common name **2** Country of where the last bstantial transformation

In the EU, rates of mislabelling and fraud dropped from 23 per cent to seven per cent when traceability and labelling systems were put in place.¹⁷

TRACEABILITY REOUIREMENT • Commercial designation (or common name) and scientific name 2 Fishing gear category Identification mark Production method **5** Catch area