



**Ecology Action Centre Presentation on Bill 207
Electricity Act (amendment) Respecting the Hydrogen Innovation Program
October 20th 2022
Dr. Brenna Walsh**

We acknowledge that we are gathered here today on the unceded and unsundered territory of the Mi'kmaq people, past, present and future caretakers of this land.

I am Dr. Brenna Walsh, Energy Coordinator at the Ecology Action Centre. I have a PhD in Physical Chemistry, and have spent my career working to shape energy and climate policy across municipal, provincial and federal levels of government.

Today I will be speaking to some of our concerns regarding the Act to Amend Chapter 25 of the Acts of 2004, the Electricity Act Respecting the Hydrogen Innovation Program, which I will refer to as the Electricity Act amendment.

The first issue I wanted to raise is relating to the parameters in which hydrogen is discussed in this bill. I would like to reference two places where this bill has been discussed by the government of Nova Scotia, and link these references to the context in which hydrogen is discussed within the bill. The Electricity Act amendment refers to hydrogen twenty-five times. However, the word 'green' is listed in this amendment a single time, within the word 'greenhouse gases' in the amendment to Chapter 25, Section 4FA(4)e. However, in both the press release published accompanying Bill 207 and Bill 206 upon first reading on Oct 17th 2022, 'green hydrogen' is mentioned seven times, and in the introduction of the bill by Minister Ruston during its second reading on Oct 18th 2022 four times, in both cases, in more than half the instances hydrogen is mentioned.

Though it is encouraging to see the intentions of this government to consider green hydrogen production, we are concerned that this amendment, as written would open a pathway for other 'flavours' of hydrogen production. Opening up potential for development of grey hydrogen – that which is produced by burning natural gas- or blue hydrogen-produced the same way but with the promise of CO₂ emissions being abated with expensive and unproven carbon capture and storage technologies- is counter to meeting the province's emission reduction goals, stated within the Environmental Goals and Climate Change Reduction Act of reducing greenhouse gas emissions by 53 % below 2005 levels by 2030 and reaching net zero emissions by 2050.

We would urge the government to reconsider the framing of hydrogen within this amendment, and restrict the definition of a hydrogen facility, currently defined within the amendment as "a facility that produces or processes hydrogen" which could be included within the list of wholesale consumers to only those producing green hydrogen from renewable resources. We propose the definition of a hydrogen facility to be modified to mean "a facility that produces green hydrogen, or processes hydrogen which was produced using renewable technology".

Our second point of concern is around the creation and development of associated regulations governing the Hydrogen Innovation Program. The amendment states that the Governor in Council, which from our understanding indicates the Premier and his Cabinet "may make regulations respecting any aspect of the hydrogen innovation program..." and includes a long list, A-L of twelve areas where the premier and his council will make decisions on the structure, eligibility requirements of a hydrogen facility connecting to the grid, performance standards, evaluation of

carbon intensity of hydrogen facility, whether the hydrogen produced or processed be used within the Province and other parameters in the application process, which we expect would include provisions around siting of a hydrogen facility.

Though we commend the government in developing a long list of considerations in which the Government in Council will be considering in the development of this program, we are deeply troubled by the amount of power this will give a small amount of decision makers in terms of developing how hydrogen will be produced and used in our province. No where in this amendment is there inclusion or consideration of important actors, such as Indigenous Land and Rights Holders, local communities in which hydrogen production and processing facilities will be built, or experts who could provide advice on appropriate land use and impacts of a hydrogen facility on sensitive ecosystems or species. As presented, the Government in Council will have sweeping authority to establish regulations which will shape this emerging industry in the province of Nova Scotia, with no input from the public or other stakeholders which will be essential to develop a just, and effective strategy for production and use of hydrogen within the province.

Additionally, in relating back to my first point, there are no accountability mechanisms within this amendment that ensure that hydrogen facilities approved under the regulations would be producing green hydrogen, and providing hydrogen to Nova Scotia for sectors where it would effectively support decarbonization- particularly in hard to abate sectors, as well as for storage to provide stability to our decarbonizing grid.

In summary, our concerns with the Electricity Act amendment are centered around two critical aspects. One, the fact that this amendment leaves open the possibility for development of carbon intensive grey hydrogen, as well as blue hydrogen- whose claims of low carbon intensity at scale are unproven- instead of limiting inclusion as wholesale customers to facilities that produce and process green hydrogen. Second a seemingly closed-door process to develop regulations around the hydrogen industry in Nova Scotia.

Thank you.

