



# Climate literacy for Construction Trades Microcredential

***nsc***



Construction at the new Sydney Waterfront Campus, our most sustainable campus to date

## **Integration of SDGs in**

- Curriculum
- Skills development & careers

## **Focus on**

- Goal 4 - Quality education
- Goal 8 - Decent work and economic growth
- Goal 9 - Industry, innovation and infrastructure
- Goal 11 - Sustainable cities and communities
- Goal 13 - Climate action

## *SDG Accord Case Study*

### **What did we do?**

Nova Scotia Community College (NSCC) has recently begun offering a series of microcredentials. These short, focused courses are designed to quickly equip learners with up-to-date skills to meet the demands of the rapidly changing workforce. They certify a learner's competence in a specific skill, making them the perfect option for individuals looking to advance in their current career or start a new one.

NSCC currently offers microcredentials in areas such as clean technology, construction, equity and inclusion, natural resources and environment, and transportation. The Climate Literacy for Construction Trades microcredential offered by the college introduces the science of climate change, specifically its effects on natural and built environments. Key concepts like carbon emissions, energy efficiency for new and existing structures, and lifecycle carbon are explored. Students examine considerations for all phases of construction – from purchasing to installation – to help reduce climate impacts.

This microcredential is intended to raise baseline awareness of climate science within the trades and provide foundational skills and knowledge concerning:

- Climate science, and climate change projections for NS
- How the construction sector impacts the climate
- How climate change will impact construction

### **What were the benefits and outcomes?**

#### ***1. Equipping learners with up-to-date skills to meet demands of the workforce:***

Microcredentials are a great option for anyone entering the workforce or changing careers

***2. Providing opportunities for upskilling and reskilling:*** Microcredentials provide opportunities for skill development and specialization, which the Government of Canada has identified as top priorities to build a skilled and agile workforce for a sustainable future

***3. Ensuring our students are making a meaningful impact on society and the environment:*** Our college is committed to ensuring that our students are well-prepared for the challenges and opportunities of the future while making a meaningful impact on both society and the environment

### **What barriers or challenges did you encounter in embedding this aspect of the SDGs into your work and how did you overcome them?**

#### ***1. Knowledge gap in pre-employment and apprenticeship curriculum standards:***

The Climate Literacy for Construction Trades microcredential provides a baseline awareness of climate science within the trades that isn't currently incorporated into provincial curriculum and Red Seal standards

***2. Lack of readily available education for journeypersons:*** The Climate Literacy for Construction Trades microcredential ensures that the workforce is better prepared to support and advocate for low carbon/net zero construction projects through education

***3. Shift in company values:*** Feedback from industry partners suggests a need for climate literacy in the construction trades

## *SDG Accord Case Study*

### **What are your conclusions and recommendations for others?**

The Nova Scotia Microcredentials Framework ensures a coordinated and consistent approach across post-secondary institutions, benefiting both learners and employers.

Microcredentials are short yet impactful courses tailored to develop and validate specific skills and competencies that are in high demand by employers. They help bridge pre-existing skills with changing requirements of the job market and can be a valuable tool for people looking to switch careers. Microcredentials have far-reaching benefits beyond our student population, extending into the communities that NSCC campuses are located in, and contribute to a more sustainable future for all.