

# The AI Advantage in Nova Scotia

How artificial intelligence is reshaping  
our oceans, hospitals, and your future.



# More Than Just Chatbots

While Canada waits on a federal AI law (AIDA), Nova Scotia is not pausing. We are actively building a localized, careful, and fast-moving AI ecosystem.



# Playing It Safe: How the Government Uses AI

## Internal Operations (For Government Staff)

**Tool:** Microsoft Copilot (Deployed by a specialized 5-person AI team).

**Function:** Drafting documents and optimizing tasks.

**Architecture:** A secure, closed sandbox environment to prevent sensitive data leaks.



## Public Interfaces (For Citizens)

**Tool:** "Scottie" Chatbot (\$250K investment).

**Rule:** Strictly Non-Generative.

**Architecture:** It cannot hallucinate answers. It only pulls pre-verified facts from public directories (like where to get a driver's license).



Verified Facts  
Only

# Curing Doctor Burnout (Safely)

Nova Scotia doctors are using AI scribes (like Mika AI) to listen to appointments and automatically write medical charts. 95% of clinicians using these tools report a significant reduction in administrative stress. But what happens to your voice?

Tool Type	Patient Consent Needed	What Happens to the Audio?
<b>Streaming Scribes</b> (Real-time audio stream)	<b>Implied Consent</b> (Signs posted in the waiting room)	<b>Deleted</b> within 7 days.
<b>Recording Scribes</b> (Local audio recording)	<b>Express Consent</b> (Documented verbal or written)	<b>Deleted immediately</b> (Zero retention permitted).

# The Ocean Tech Sandbox

Dartmouth's COVE facility provides deep-water dock space, turning Halifax Harbour into a live testing ground for marine AI—an industry generating \$4.5 billion annually for the province.

## smartWhales

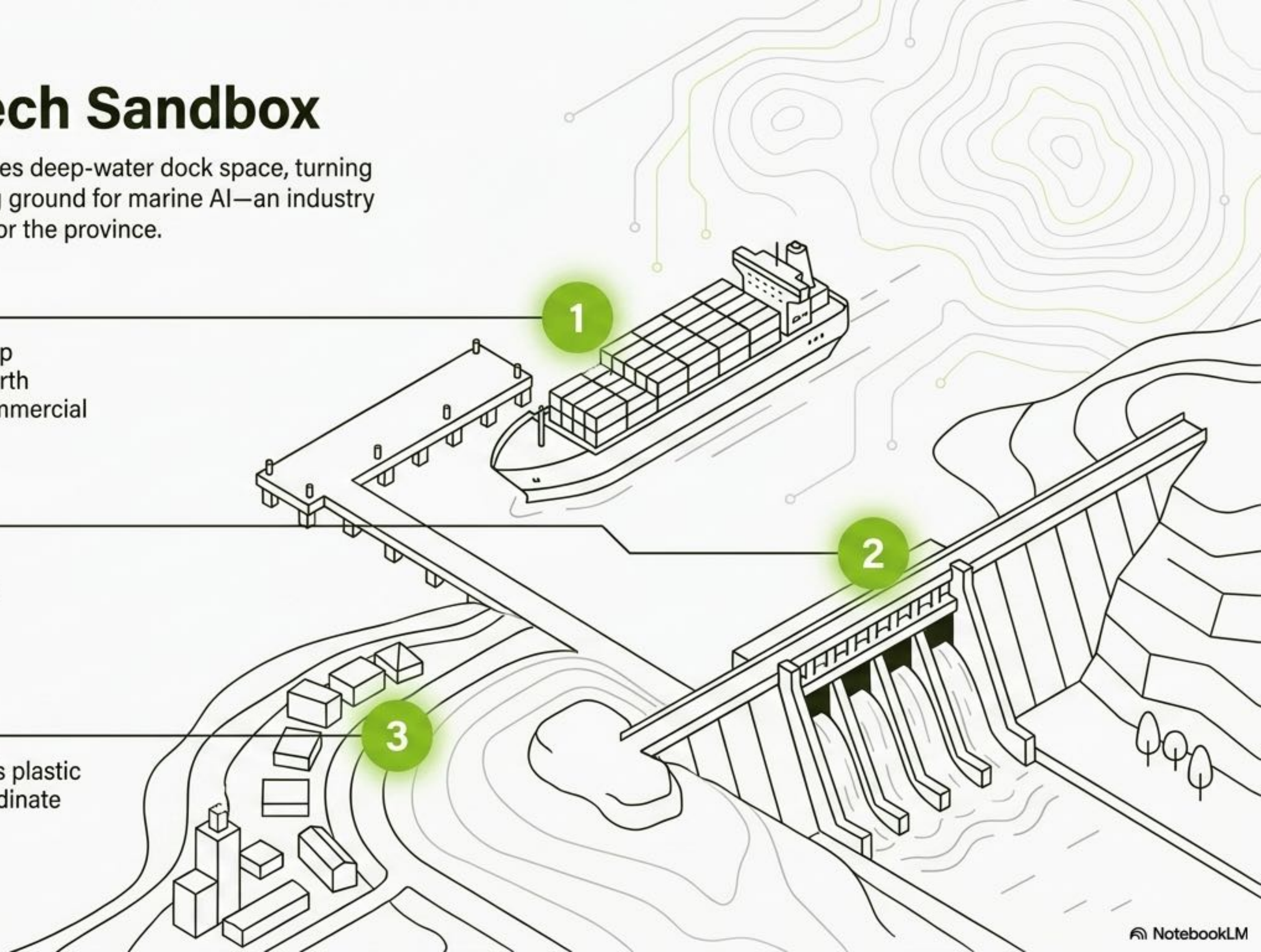
AI fuses satellite imagery and deep learning to detect endangered North Atlantic right whales, warning commercial cargo ships to slow down.

## HydroAI

Computer vision automatically identifies and counts fish species around hydro-power plants for environmental compliance.

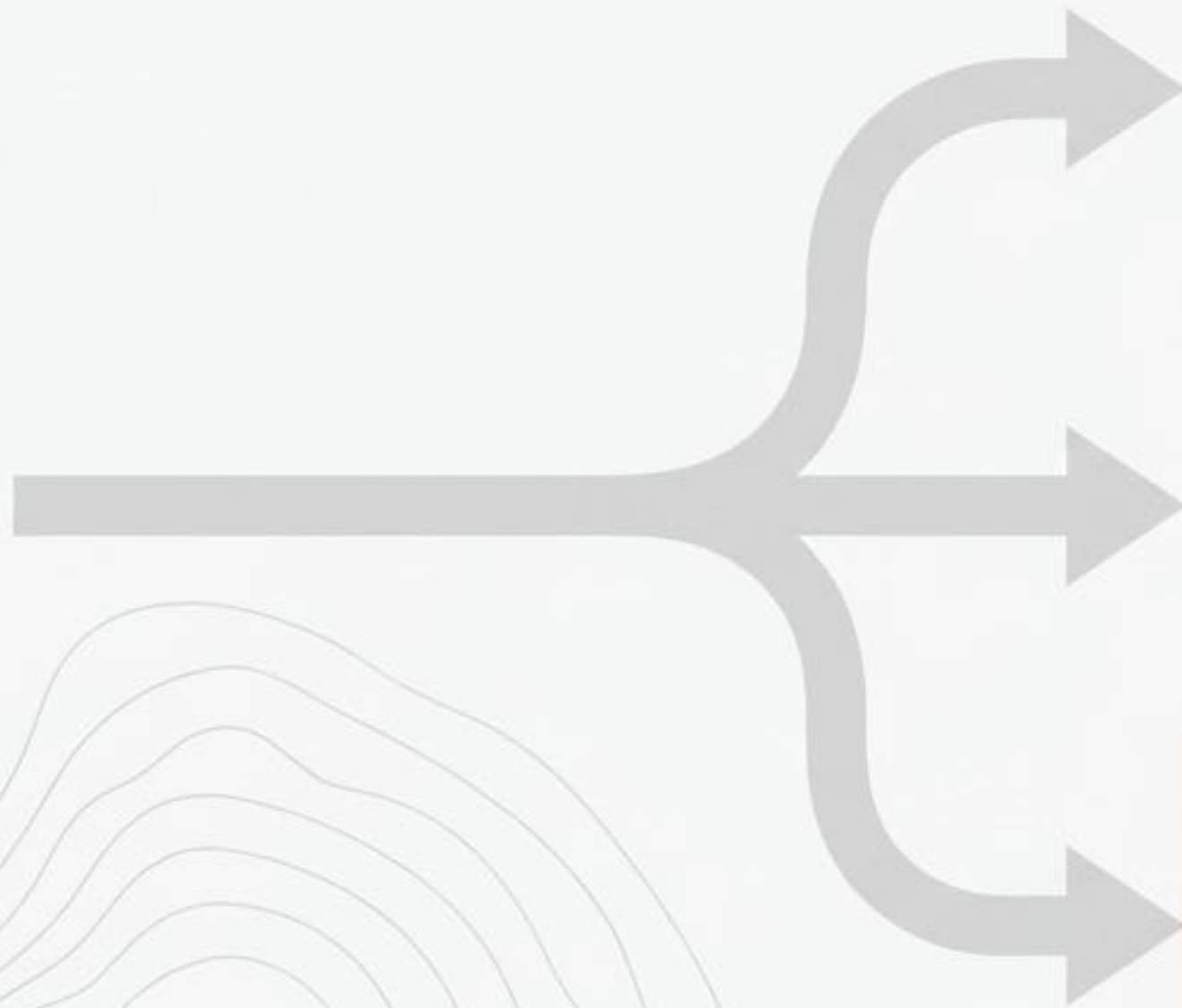
## Shoreline Cleanup

Machine learning maps and labels plastic waste from drone footage to coordinate physical cleanup crews.



# From Sea to Soil: The Tech Transfer

The computer vision and sensor AI developed for harsh, deep-ocean environments is highly adaptable. We are taking ocean tech and using it on land.



## Farming / Agriculture

The Atlantic Institute for Digital Agriculture uses AI for smart spraying and monitoring methane emissions from dairy cows.

## Mining / Geology

Scient Analytics applies machine learning to spectral imaging, allowing geologists to scan physical rock drill cores in hours instead of weeks.

## Weather / Meteorology

Environment Canada's hybrid AI model runs thousands of forecasts in hours, accurately predicting severe events like the 150cm Cape Breton snowstorm.

# Privacy by Design: The Startup Solution

Most global apps send your personal data away to massive, centralized cloud servers. Nova Scotia startups are building a different way.

## The Old Way



### Cloud Computing

Your data is extracted, transmitted, and stored externally.

## The Local Way



### Edge Computing

Backed by regional funding, local startup Begin AI trains machine learning models directly on your phone. Your personal data never leaves your device, seamlessly meeting strict Canadian privacy laws (PIPEDA).

# The Friction Points



## Labor Shifts

AI causes real disruption. The provincial Creative Industries Fund was recently cut to \$1.1 million, introducing new rules specifically restricting AI-generated creative content to protect traditional artistic labor.



## Data Fairness

AI is only as fair as the data it trains on. Academic labs at Dalhousie are actively working to audit systems for failures and demographic biases.



## Medical Records

If doctor's audio is permanently deleted in 7 days for your privacy, what happens if a transcription typo is discovered a month later? The original proof is gone.

# TL;DR — Your AI Future

1

## Local Rules Rule

With federal legislation stalled, Nova Scotia's hospitals and public sectors are actively writing the blueprints for safe, localized AI governance.

2

## Oceans First

Halifax Harbour is a world-class testing ground. The AI we build for deep-sea whales and dam ecology is now being used to farm our soil and predict our weather.

3

## You Are The Talent

Academic labs at Dalhousie and SMU are pioneering Green AI and sustainable machine learning. The province is heavily funding the next generation to build technology that is ethical and secure.

Dive in. The ecosystem needs your brain.