### National Index on Agri-Food Performance

September 16, 2020



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#### **CAAIN OVERVIEW**

The Canadian Agri-Food Automation and Intelligence Network (CAAIN) **brings together technology and agri-food companies** focused on creating and integrating automated and digitized solutions in Canada's agri-food sector.





#### **CAAIN CORE PROJECT AREAS:**

- 1. Smart farming: precision ag technology, data analytics
- 2. Automation and robotics: enhancing productivity
- 3. Data integration and analytics: AI and predictive models
- 4. Sustainability, traceability and producer premiums





connect. create. cultivate.

## SUSTAINABLE AGRIFOOD TRACEABILITY PLATFORM (SAFT)

FARMLEAD Lakeland

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resco Solutions

End-to-end sustainability

#### CURRENT SITUATION: CORPORATE SUSTAINABILITY INITIATIVES



 Aggressive Value Chain Targets affecting Farms and Ranches being set by (with more coming on);



• Opportunity to scale investment and Farm actions with the right Platform

- MARKET ACCESS ADVANTAGE...
  - To whoever can demonstrate compliance

#### **Framework Technical Architecture**



#### THE SAFT PROJECT WILL.....

Utilize Canadian Sustainability Protocols and Metrics Modify Sustainability Calculators for the Canadian Market Integrate Farm Management Systems and Sensor Data into the SAFT Platform Engage Agri-food Producers and Processors to Adopt Sustainability Best Practices

Capture Producer and Processor Data and Track that Data Along the Supply Chain Generate Dashboards and Reports to Include Permissioned Peer-to-Peer Benchmarking Improve Operations for Stakeholders Across the Supply Chain Monetize Sustainability Interventions Across the Supply Chain

#### **SAFT PARTNERS**



#### **FUNCTIONING EXAMPLE**

## CANADIAN BEEF SUSTAINABILITY ACCELERATION PILOT

An initiative led by Cara







#### Example of a Functioning Program– Incentives for Sustainable Production



	A	+		Sector Secto
	Ranches	Feedlots	Packers	Verified Sustainable Beef
Audits Operations pay for their own audits	VBP+	VBP+		↓
<b>Tracking</b> Cargill/CBSA customers fund traceability	<b>B!</b> X	<b>B:</b> X	Cargill	
<b>Credits</b> CBSA customers make quarterly credit payments for pounds delivered, which Cargill distributes to producers based on the number of their cattle that qualified.	\$	\$	\$	\$ ■ B



Certified Sustainable- Mass Balance



#### Farm to Fork Data Hub Collaboration

WHY? Impact and		Public Trust										
Outcomes	Customer	Pull	Investor Returns				Policy Compliance					
								-				
WHY? Value Proposition	Profitabilty	Productivity	Markets Market	share and t Access	Risk Management		Decision Making	g Data Asset Management				
WHO?		Crops, Livestock	k, Value a	added Foo	d Manufactu	ring, Dis	tribution, Retail					
Value Network	Primary Production	Processor		Value-added Manufacturer		Distributor		Retailor				
Knowledge Integration	Research	Publication	S	Learning/Training		5	Standards	Verification and Testing				
		Sustainability Data (carbon, water, 4R, waste to value)										
Information and Data	Primary Production Data	Processor Production Data		Manufacturing Data		Dist	ribution Data	Retail Data				
	Supply Chain Data (Finance, chain of custody, traceabilility, trade)											
Application Layer	Enterprise Application	Enterprise Application		Enterprise Application		E	Interprise pplication	Enterprise Application				
	Cro	Crop/Livestock BIXS			Retail Attributes Notification System (RANS)							
	BIXS											
Integration Layer		BIXS Blockchain										
		BIXS Web Services										
Infrastructure		Cloud Services										

#### **Opportunities for Collaboration**



# Questions?

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