

Sustainability Toolkit for Food Companies

Module 1 – Overview of Sustainability

Content

- Define “Sustainability”
- Brief tour through Sustainability Initiatives
- Important Concepts – Scope 1, 2 and 3
- What is MRV?
- Role of Carbon Credits

What is Sustainability?

- Sustainability – UN Definition
 - Meeting the needs of the present without compromising the ability of future generations to meet their own needs

What is ESG?

- Risk and impact measures for a business

Environmental

- Environmental impact and risk for a business, includes emissions, stewardship, resilience

Societal

- Impact and risk for people – stakeholders and communities

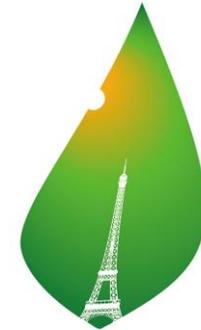
Governance

- Alignment, control and measurement of business – transparency and accountability

Global Sustainability Goals



Convention on Biological Diversity



PARIS2015
UN CLIMATE CHANGE CONFERENCE
COP21·CMP11

United Nations Sustainable Development Goals (SDGs) are the foundation for most sustainability initiatives and have goals established for 2030

Progress is tracked every four years
<https://sdgs.un.org/goals>

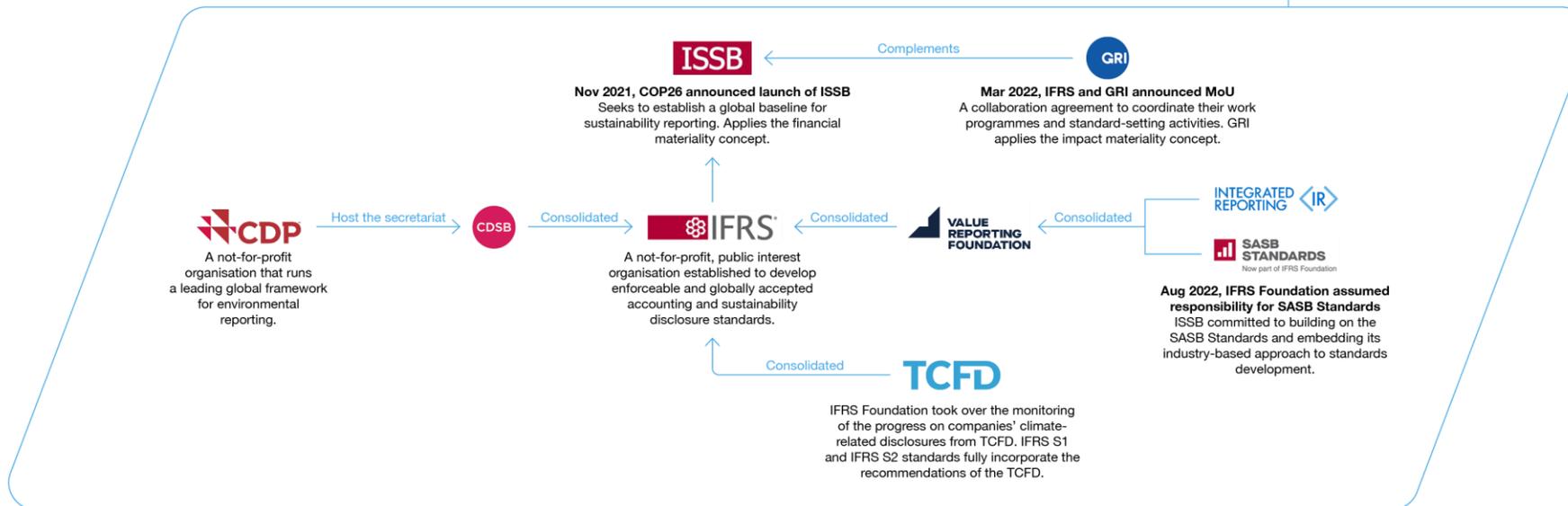
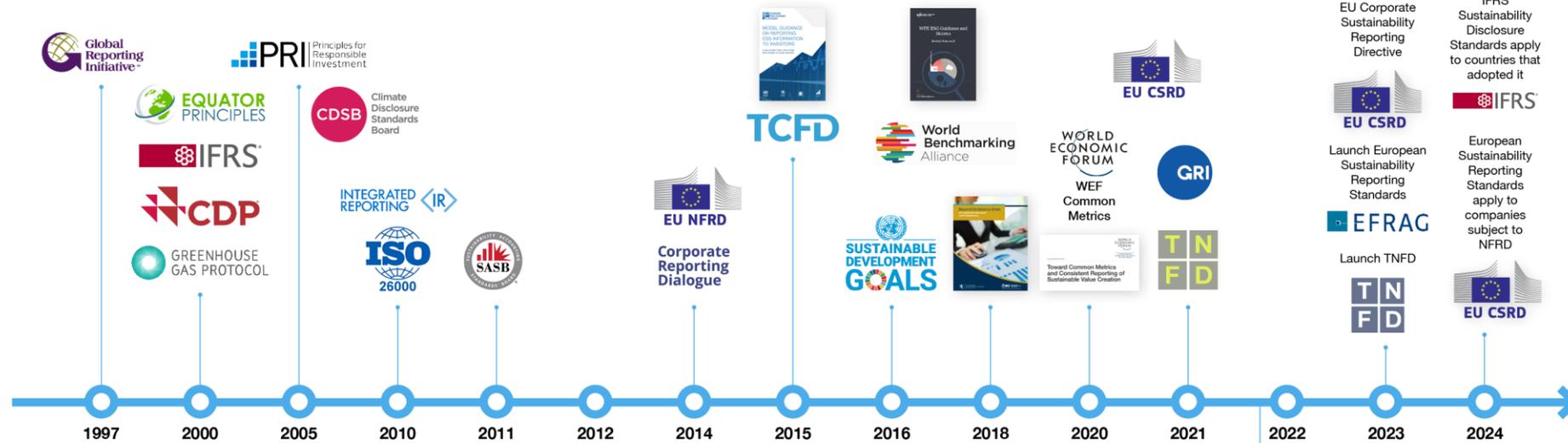
Global targets set to deliver on vision for improved biodiversity and sustainability of a healthy planet

23 Targets established
<https://www.cbd.int/gbf/targets>

The Paris agreement is a legally binding international agreement to reduce GHG emissions to limit global temperature increase to 1.5 C

<https://unfccc.int/process-and-meetings/the-paris-agreement>

Global Sustainability Frameworks



Sustainability Frameworks in Canada

National Index on Agri-Food Performance

- Cross Industry working group developing shared Sustainability Index
- >140 Agriculture and Food organizations contributing
- <https://www.agrifoodindex.ca/>

Standards Council of Canada

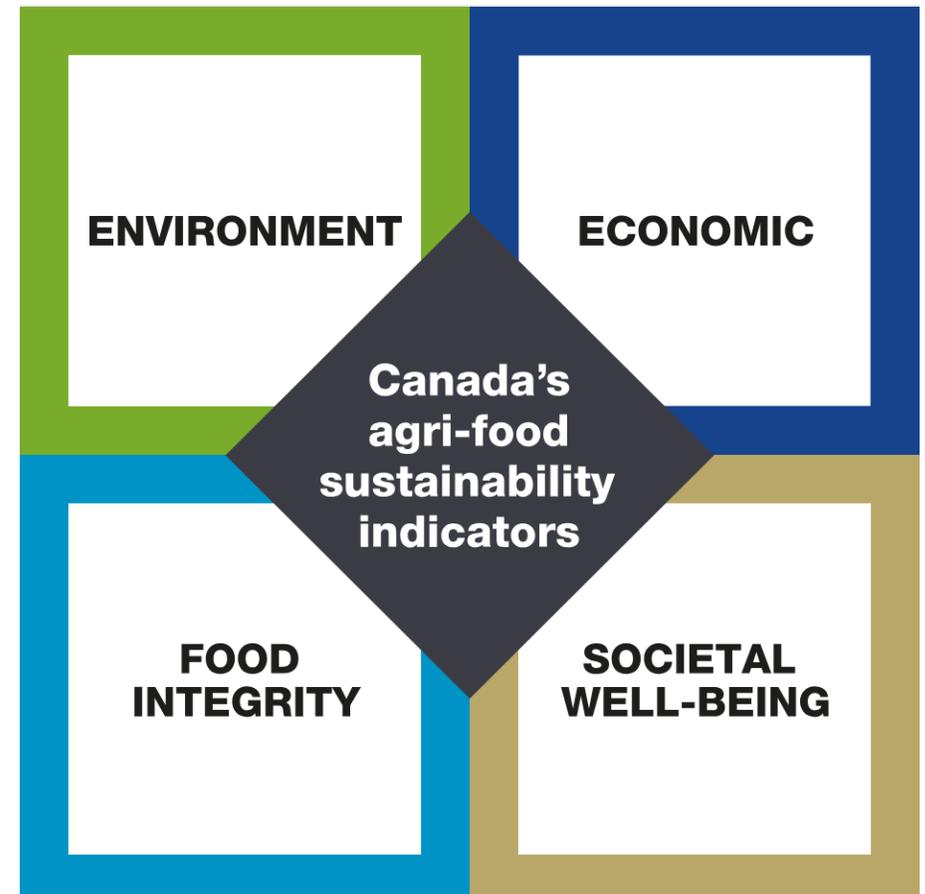
- Responsible for International Standards Organization standards in Canada
- <https://www.scc.ca/en/about-scc/publications/general/beyond-disclosure-driving-performance-trust-esg>

Canadian Sustainability Standards Board

- Sustainability disclosure standards for Canada
- <https://www.frascanada.ca/en/cssb>

National Index on Agri-Food Performance

- The Index was developed through a collaborative process involving >140 Canadian and International Organizations
- Operated by the Canadian Agri-Food Policy Institute and funded through
 - Industry
 - Sustainable Canadian Agriculture Partnership
 - Canadian Agriculture Partnership
 - Protein Industry Canada



Metrics within the National Index

- Each pillar of the Index is composed of multiple metrics which have been developed through industry consultation
- Initial measurement and benchmarking has been completed

INDICATORS	METRICS
1. Climate change & GHGs	1. Emissions 2. Sequestration/loss 3. Mitigation
2. Soil health	1. Soil cover 2. Soil erosion 3. Soil organic carbon
3. Water stewardship	1. Water quality 2. Water use
4. Biodiversity & agrobiodiversity	1. State of biodiversity & habitat change (interim for 3 & 4) 2. Conversion of farmland to urbanization 3. Composite view: state of biodiversity & habitat change 4. Disaggregated views: state of biodiversity & habitat change
5. Crop inputs use / management	1. Responsible pest control use (pesticides) 2. Responsible nutrient use (fertilizer)
6. Food loss & waste	1. Reduce 2. Repurpose
7. Packaging & waste	1. Reduce / recycle 2. Reuse

INDICATORS	METRICS
14. National economic contribution	1. GDP 2. Employment 3. Trade balance
15. Financial vibrancy & resiliency	1. Financial performance 2. Investment 3. Labour 4. Infrastructure 5. Supply chain resiliency
16. Innovation	1. R & D 2. Regulatory approvals 3. Innovation adoption
17. Sustainable finance	1. Market-based sustainable capital / investment 2. Government / NGO-sourced climate solutions funding

INDICATORS	METRICS
8. Safe food	1. Overall safe food supply 2. Recalls & safety alerts 3. Compliance with maximum limits for contaminants
9. Health: Nutrition information	1. Provision of nutrition information 2. Mandatory fortification 3. Promoting Indigenous country foods
10. Health: Antimicrobial stewardship	1. Antimicrobial use & resistance
11. Health: Zoonotic disease mitigation	1. Risk surveillance: rate of animal disease outbreaks
12. Traceability implementation	1. Traceability scope
13. Transparency & accuracy	1. Labelling of packaged food products 2. Health claims 3. Food misrepresentation



INDICATORS	METRICS
18. Decent work for people	1. Workplace mental health 2. Workplace safety 3. Inclusive & progressive workplace 4. Attractiveness of sector as a place to work
19. Food security	1. Monitoring food insecurity: food affordability 2. Increasing access to nutritious foods
20. Animal care	1. Farmed animal codes of conduct

Applicable UN Sustainable Development Goals (SDGs)



Environment

- Broken down into specific measures which apply to the agri-food supply chain
- Targeting improvement across supply chain from farm to shelf
- Exploring specific methodologies for measurement and tracking

INDICATORS	METRICS
1. Climate change & GHGs	1. Emissions 2. Sequestration/loss 3. Mitigation
2. Soil health	1. Soil cover 2. Soil erosion 3. Soil organic carbon
3. Water stewardship	1. Water quality 2. Water use
4. Biodiversity & agrobiodiversity	1. State of biodiversity & habitat change (interim for 3 & 4) 2. Conversion of farmland to urbanization 3. Composite view: state of biodiversity & habitat change 4. Disaggregated views: state of biodiversity & habitat change
5. Crop inputs use / management	1. Responsible pest control use (pesticides) 2. Responsible nutrient use (fertilizer)
6. Food loss & waste	1. Reduce 2. Repurpose
7. Packaging & waste	1. Reduce / recycle 2. Reuse

Food Integrity

- Tracking indicators which relate to food safety and food quality/health claims
- Targeting improvement on traceability and transparency
- Exploring specific methodologies for measurement and tracking

INDICATORS	METRICS
8. Safe food	<ol style="list-style-type: none"> 1. Overall safe food supply 2. Recalls & safety alerts 3. Compliance with maximum limits for contaminants
9. Health: Nutrition information	<ol style="list-style-type: none"> 1. Provision of nutrition information 2. Mandatory fortification 3. Promoting Indigenous country foods
10. Health: Antimicrobial stewardship	<ol style="list-style-type: none"> 1. Antimicrobial use & resistance
11. Health: Zoonotic disease mitigation	<ol style="list-style-type: none"> 1. Risk surveillance: rate of animal disease outbreaks
12. Traceability implementation	<ol style="list-style-type: none"> 1. Traceability scope
13. Transparency & accuracy	<ol style="list-style-type: none"> 1. Labelling of packaged food products 2. Health claims 3. Food misrepresentation

Economic

- Broad measures for economic impact of food and food systems
- Targeting improvements in innovation, finance and overall economic benefit
- Exploring specific methodologies for measurement and tracking

INDICATORS	METRICS
14. National economic contribution	<ol style="list-style-type: none"> 1. GDP 2. Employment 3. Trade balance
15. Financial vibrancy & resiliency	<ol style="list-style-type: none"> 1. Financial performance 2. Investment 3. Labour 4. Infrastructure 5. Supply chain resiliency
16. Innovation	<ol style="list-style-type: none"> 1. R & D 2. Regulatory approvals 3. Innovation adoption
17. Sustainable finance	<ol style="list-style-type: none"> 1. Market-based sustainable capital / investment 2. Government / NGO-sourced climate solutions funding

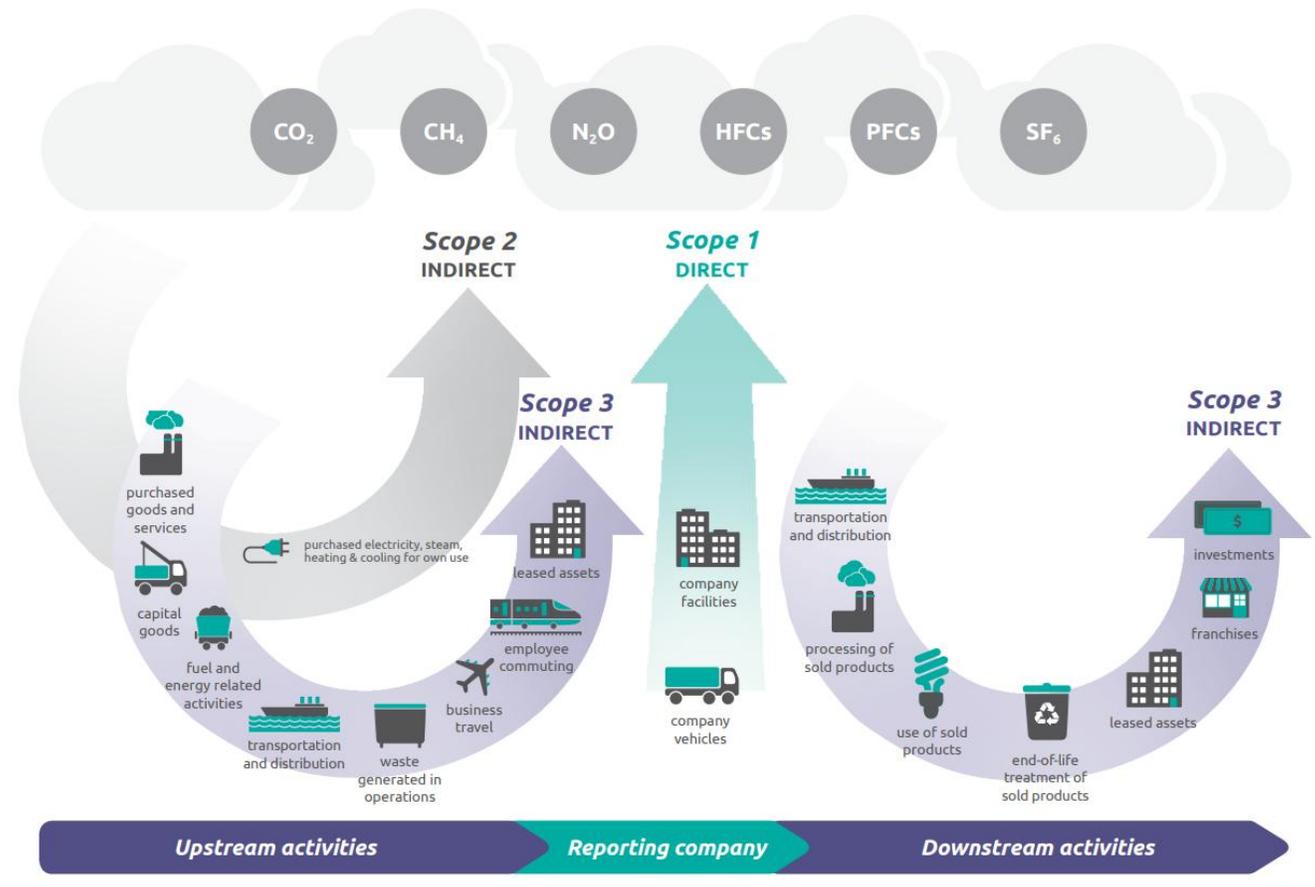
Societal Well-Being

- Tracking measures of societal impact
- Evolving indicators
- Exploring specific methodologies for measurement and tracking

INDICATORS	METRICS
18. Decent work for people	<ol style="list-style-type: none"> 1. Workplace mental health 2. Workplace safety 3. Inclusive & progressive workplace 4. Attractiveness of sector as a place to work
19. Food security	<ol style="list-style-type: none"> 1. Monitoring food insecurity: food affordability 2. Increasing access to nutritious foods
20. Animal care	<ol style="list-style-type: none"> 1. Farmed animal codes of conduct

Scope 1, 2 and 3 Emissions

- GHG Protocol defines emission scopes:
 - Scope 1: Direct emissions from owned or controlled sources
 - Scope 2: Indirect emissions from the generation of purchased energy
 - Scope 3: All other emissions in a company value chain



Scope 1

- Direct emissions from owned or controlled sources

Stationary Combustion

- Furnace, boiler, incinerator
- Natural Gas, Propane

Fugitive Emissions

- Refrigeration, air conditioning, cold storage
- CFC, ammonia

Mobile Combustion

- Direct owned or leased trucks, forklifts
- Gasoline, diesel, bio-diesel

Scope 2

- Indirect emissions from the generation of purchased energy

Emissions from Purchased Energy

- Energy from electricity or other sources
- Market specific, i.e. hydro

Scope 3

- All other emissions in a company value chain – *Not exhaustive*

Travel

- Business Travel
- Employee Commuting
- Emissions from fuel consumption

Purchased goods and services

- Growing, production, extraction of inputs
- All scoped emissions from suppliers

Upstream & downstream waste

- Waste in supply chain
- Food waste, waste disposal

Upstream & downstream emissions

- Transportation and distribution from suppliers

Water

- Not tracked as part of Scope 1, 2, 3 emission

Water Consumption	Water Waste	Water Recycling
<ul style="list-style-type: none">• Water used in production• Measure water coming into facilities	<ul style="list-style-type: none">• Water/liquid waste• Measure water into sewer or other disposal	<ul style="list-style-type: none">• Water captured and reused in processing• Measure water reuse

What is MRV?

- MRV
 - Measurement – Measuring environmental impact
 - Increasingly digital
 - Ideally with primary (specific) data
 - Reporting – Reporting impact to a third party
 - Creating standardized reports
 - Verification – Verifying impacts
 - Third party verifies the approach and impact according to a protocol

Carbon Credits? Offsets? Insets?

Credits

- Project based
- Avoids or Reduces Emissions
- Validated
- Trade on Registry

Offsets

- Credits to reduce reported emissions
- No direct impact on emissions

Insets

- Reduction in supply chain
- Directly impacts emissions

End