



Inspiring Sustainability in Research and Academics



CONESTOGA
Connect Life and Learning

SCHOOL OF BUSINESS



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RESEARCH
INNOVATION
ENTREPRENEURSHIP

Agenda

- Institutional Efforts
- Principles for Responsible Management Education
 - Reporting & Implementation
 - International Networks
- Applied Research
 - Bloom & Klimato
 - Special Projects
- Question Time

SUSTAINABLE DEVELOPMENT GOALS



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Institutional Sustainability Strategy



Phase 1: Discovery	Phase 2: Plan Development	Phase 3: Implementation
<p>Fall, 2023 – Winter, 2024</p> <p>Research</p> <ul style="list-style-type: none">• Community consultation• Literature review• Document review• Benchmarking	<p>Winter, 2024 – Summer, 2024</p> <p>Strategy Sprint</p> <ul style="list-style-type: none">• Two-day workshop with senior-level leadership• Structured review	<p>Fall, 2024 →</p> <p>Foundational actions underway, including those related to:</p> <ul style="list-style-type: none">• Governance• Communications planning• Baselineing

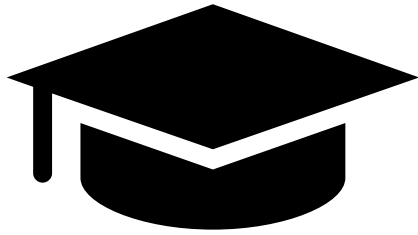
Examples of Institutional Efforts



- Solar grazing sheep
- Solar panels
- Geothermal heating systems
- GHG Reduction Action Plan

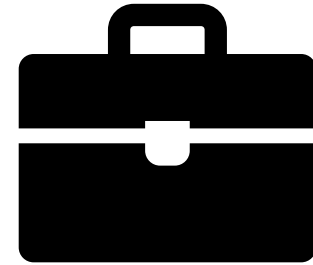


Introduction to Anna



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BUSINESS



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What is PRME?



Purpose



Values



Teach



Research



Partner



Practice



Share

PRME Principles for Responsible
Management Education

an initiative of the United Nations Global Compact

**SUSTAINABLE
DEVELOPMENT GOALS**

Why it matters

CEOs agree, SUSTAINABILITY MATTERS

93% Important to **the future success** of their business

80% A route to **competitive advantage** in their industry

78% An opportunity for **growth and innovation**

Source: UN Global Compact-Accenture CEO Study

The 12th United Nations Global Compact - Accenture CEO Study on sustainability is the largest to date

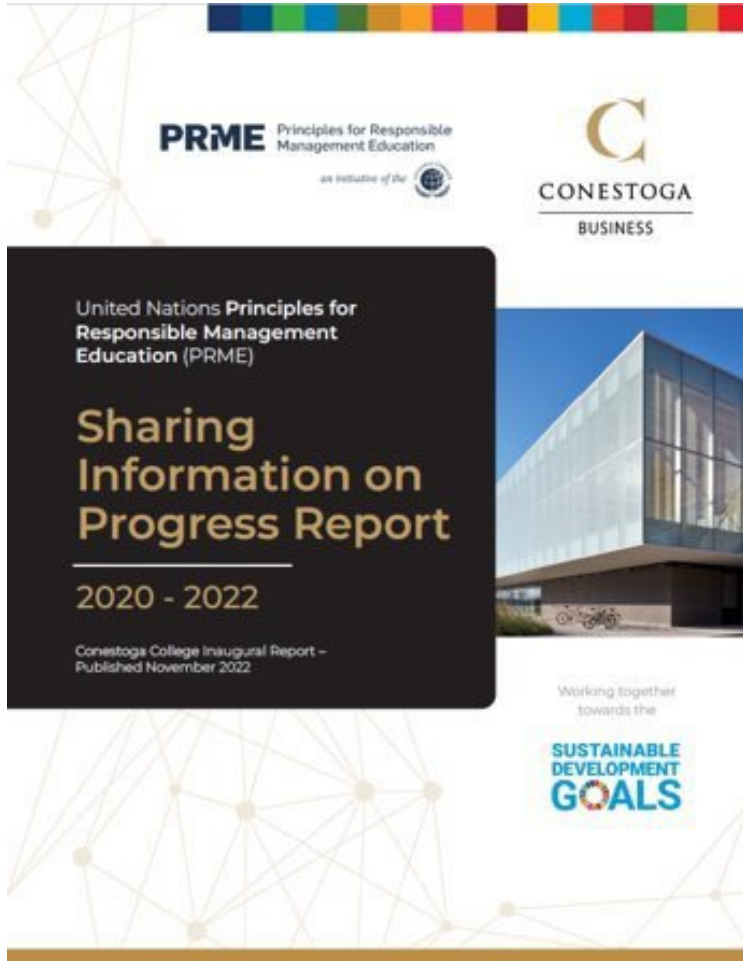
2,600+ CEOs **128** COUNTRIES **18** INDUSTRIES



98% OF CEOs AGREE SUSTAINABILITY IS CORE TO THEIR ROLE



Sharing Information on Progress Reports



Implementation of PRME Principles



Purpose: Strategic Plan goal of PRME-related activities in 50% of programs by 2024.

By the end of 2023, surpassed with integration across 70% of programs



Values: Commitment to Open Educational Resources.

Student savings of \$1.43 million USD since 2022 & launch of the Open Access Case Journal



Teach: PRME Implementation Micro-credential for faculty to incorporate PRME and the SDGs.

58 faculty have completed the micro-credential

Implementation of PRME Principles



Partner: New Micro-credential with the Carbon Literacy Project

Since its launch, 100 participants from the College, community and industry partners (May/24)



Practice: Paid student positions to participate in PRME and run student events

Two full time coop positions and two part time student positions



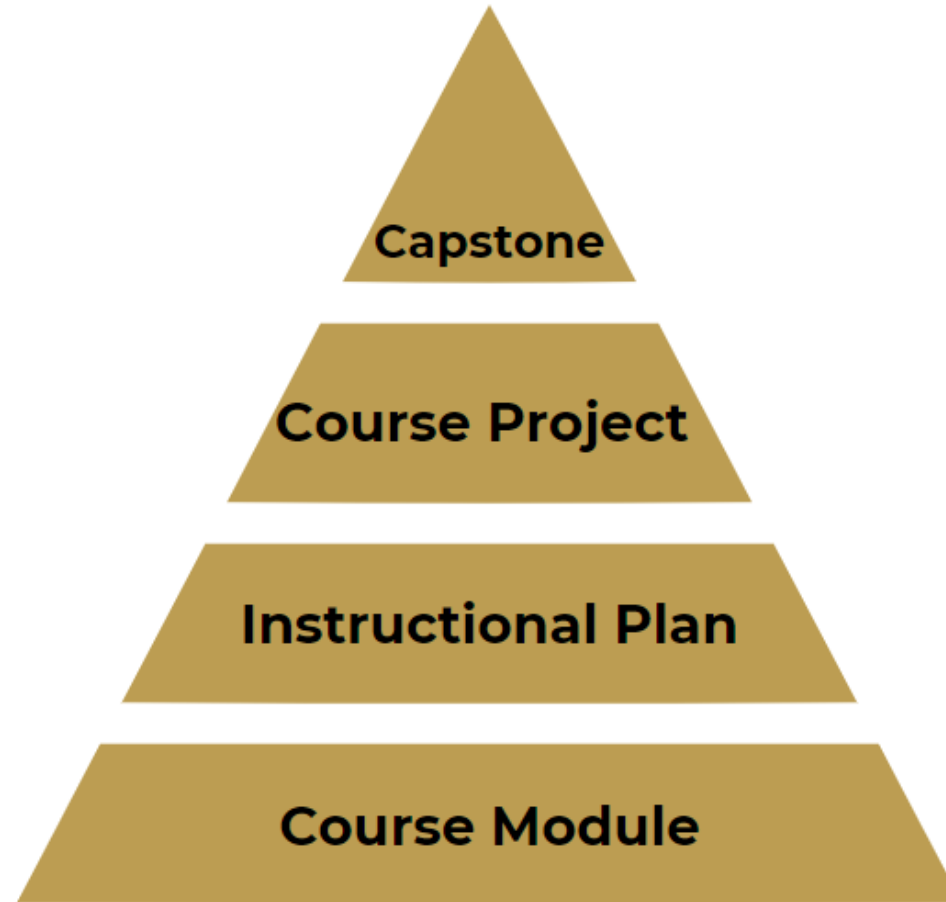
Share: Actively involved within the School of Business

PRME Steering Committee & PRME Working Group with 40 faculty



Research:
Up Next!

Examples of Curriculum Integration



Join Us! PRME International Networks

17 PARTNERSHIPS
FOR THE GOALS



PRME Principles for Responsible
Management Education
CHAPTER **NORTH AMERICA**

PRME GLOBAL
STUDENTS

PRME
CHAMPIONS
2024 – 2025



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Get to Know PRME

17 PARTNERSHIPS
FOR THE GOALS



11TH RESPONSIBLE MANAGEMENT
EDUCATION RESEARCH CONFERENCE

Doing the Next Step: Responsible Management Education between Transforming and Radicalising

Opening a Dialogue Framework and a Roadmap
for the Sustainable Future of Business Schools

Berlin, Germany
24 - 26 September 2024

Registration

Further instructions on participant registration, proposals
for accommodation and how to reach BSBI will follow soon.

Nine International
PRME Working Groups

i5 PRME



Conestoga Food Research & Innovation Lab

- Industry partner lead
- Goal is commercialization or implementation
- Focus: food, culinary, hospitality, tourism, packaging
- Student-faculty-industry



Vision and Mission – Conestoga Food Research and Innovation Lab

9 INDUSTRY, INNOVATION
AND INFRASTRUCTURE



Our vision

A recognized leader and trusted partner in **food research and innovation** supporting **local food producers** from farm to table with **expertise, inspiration, access to equipment and collaboration**, fostering sustainable growth while providing student learning experiences.

Our mission

To promote the prosperity and well-being of the communities we serve through the active participation in industry-focused research and development that meets local, regional, & international demands



Bloom – Living Lab

- ICan Funded
- Food waste
- Packaging waste
- GHG impact of food choice



Bloom Dinner Spring 2024

1st

Bacon & Brussels 
Crispy smoked pork belly, cider-glazed Brussel sprouts, goat cheddar, toasted pine nuts, gala apple

Patacones 
Twice-fried plantain, black bean puree, fresh tomatillo salsa, lime crema, pickled chilis, feta cheese

Calamari Puttanesca 
Pan-fried squid rings & tentacles, spicy garlic tomato sauce, capers, Kalamata olives, preserved lemon, garlic chips.

2nd

Coq au Vin 
Red wine-soaked Cornish hen, parsnip puree, fingerlings, roasted pearl onion, bacon lardons, honey mushrooms, arugula & parmesan salad, red wine jus

Grilled Pork Tenderloin 
Orange & anise-brined pork tenderloin, beer-braised cabbage, fried spaetzle, ginger-poached pears, grilled scallions

Salmon Fillet 
Warm quinoa & roasted root vegetables, arugula, sumac yogurt, pickled squash & fennel, fried parsnip

Vegan Moussaka 
Panko-breaded & fried eggplant, tempeh "Bolognese", cashew cream, pickled turnip, herb salad

3rd

Flourless Chocolate Torte 
Dark chocolate cake, toasted almonds, strawberry basil ice cream, white chocolate curls

Stone fruit Cheesecake 
Cardamom cheesecake, granola, plum & pear compote, bourbon caramel, pear chip

Mildred's Temple Kitchen Pancakes 
Fluffy pancakes, blueberry compote, lemon-whipped cream, maple syrup

2 COURSE \$33
3 COURSE \$37

Carbon labelled by  Klimato



Low
0.1-0.5 kg CO₂e
Recommended emission level to meet UN's climate goals.



Medium
0.6-1.5 kg CO₂e
Lower climate impact compared to an average lunch or dinner.



High
1.6+ kg CO₂e
Same or higher climate impact compared to an average lunch or dinner.

Klimato

Bloom > Vegan Moussaka

Bloom Conestoga College
ND

Restaurant library

Settings

Meal type: Main course

Number of servings:

Recipe languages: English [Manage](#)

Allergens: [+ Add](#)
No allergens selected

Note: [+ Add](#)
No note

0.48
kg CO₂e

0% Organic

325 g Weight

484 g CO₂e

149 g CO₂e/100g

Recipe info

Title:

Subtitle (Optional):

Add ingredient

Origin & production method:

Weight: Unit:

+ Add ingredient

Ingredients 5

- Breaded Eggplant 180 g
- Temphe Bolognese 60 g
- Cashew Cream 30 g
- Herb Salad 30 g
- Pickled Turnip 25 g

Discard

HOW MUCH CO₂e DO YOU PUT ON YOUR PLATE?

A meal is defined as 400g (EAT-Lancet Commission). We rate meals based on this reference value to enable fair comparison between recipes that have a different portion size.



Very low

< 0.40 kg CO₂e/meal



Low

0.40-0.90 kg CO₂e/meal



Medium

0.90-1.80 kg CO₂e/meal



High

1.80-2.60 kg CO₂e/meal



Very high

≥ 2.60 kg CO₂e/meal



In line with the Paris Agreement goal to limit temperature increase to well below 2°C above pre-industrial levels.

In line with the targets set for 2030. This puts us on a good path for 2050. **Aligned with Coolfood, a WRI initiative.**

Associated with a **temperature increase of 2.5°C** above pre-industrial levels.

Associated with a **temperature increase of 3°C**, above pre-industrial levels.

Associated with a **temperature increase higher than 3°C** above pre-industrial levels.

Quiz Time!



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What % of global GHG emissions is associated with food production?



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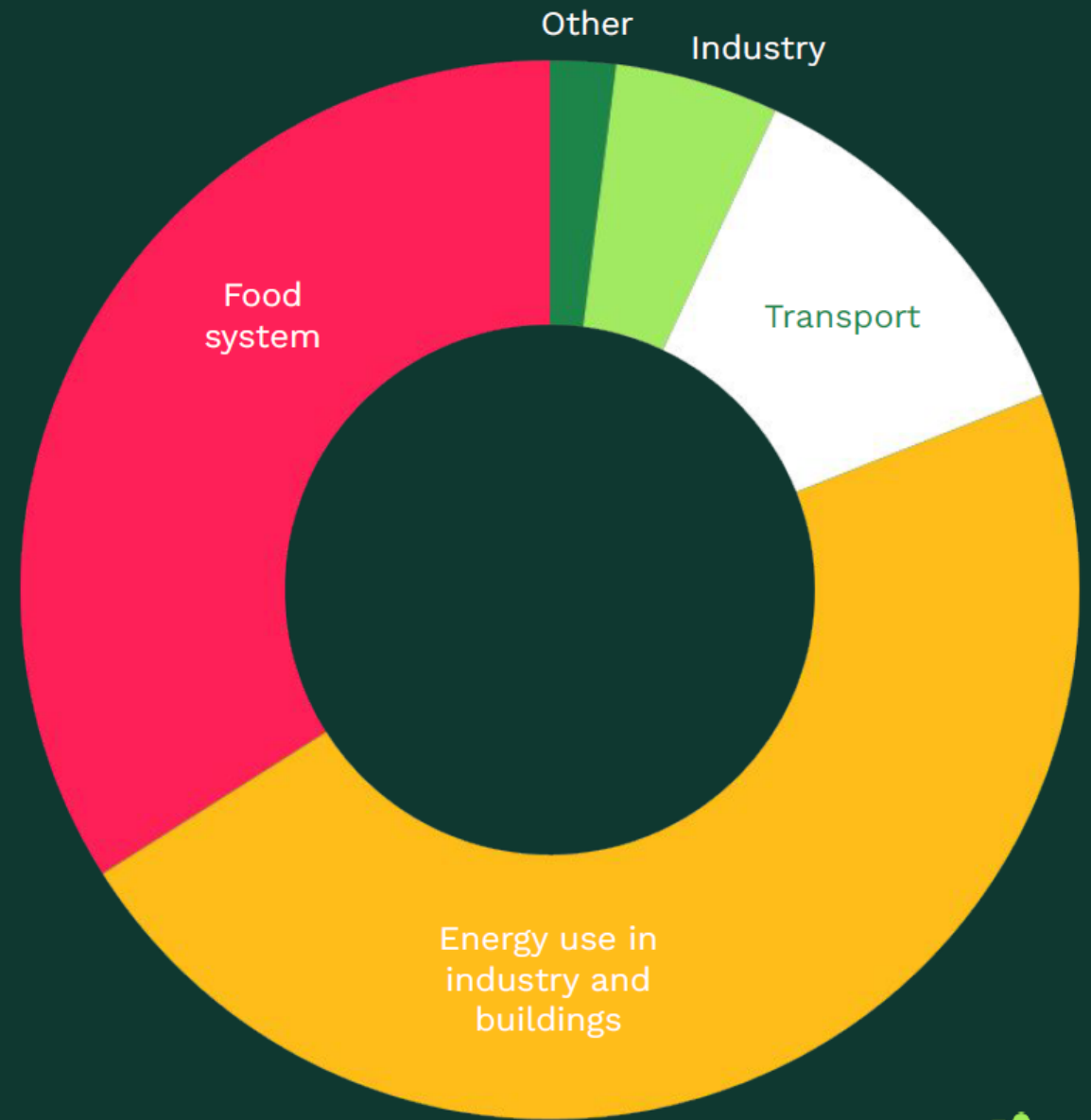
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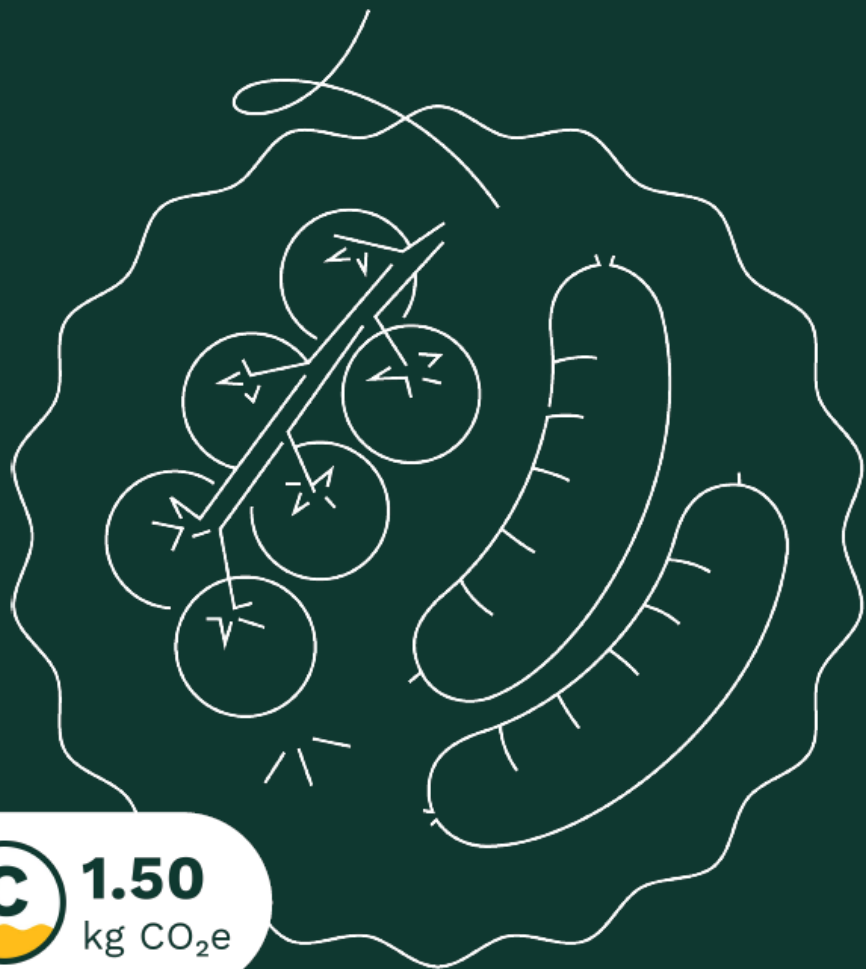
FOOD ACCOUNTS FOR 34% OF GLOBAL EMISSIONS



Klimato

Source Crippa, M., Solazzo, E., Guizzardi, D., Monforti-Ferrario, F., Tubiello, F. N., & Leip, A. J. N. F. (2021). Food systems are responsible for a third of global anthropogenic GHG emissions. *Nature Food*, 2(3), 198-209.

How many km can you travel in a diesel car to be equal to the GHG generated to produce your lunch today (on average)?



C 1.50
kg CO₂e

The **average lunch**
or dinner in the EU

=



8 km

Driving **8 km**
in a diesel car

How many plant-based burgers are equal to the same GHG from a beef burger?



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**YOU CAN EAT
10 PLANT-BASED
BURGERS FOR
THE CARBON
IMPACT OF
1 BEEF
BURGER**



=



What produces more GHG
production of rice or pasta?



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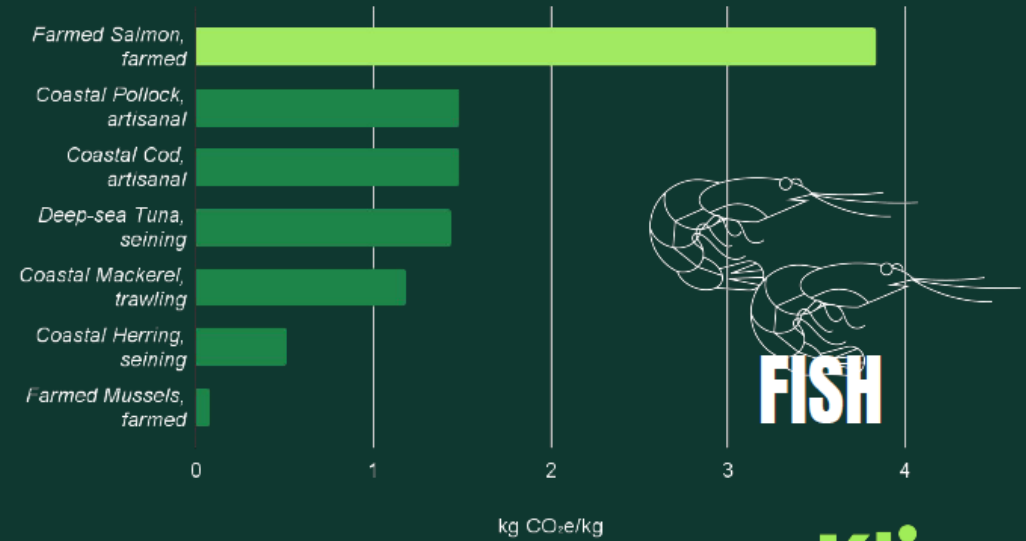
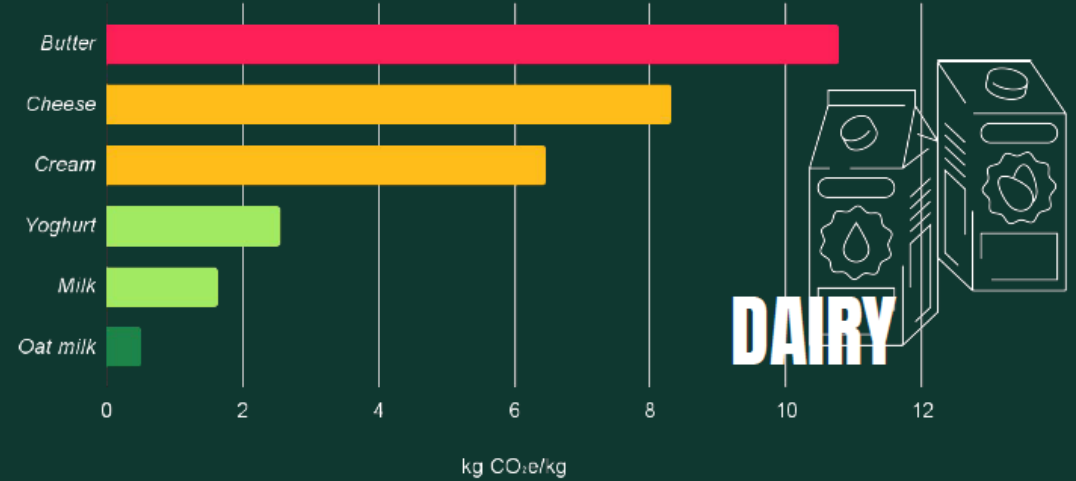
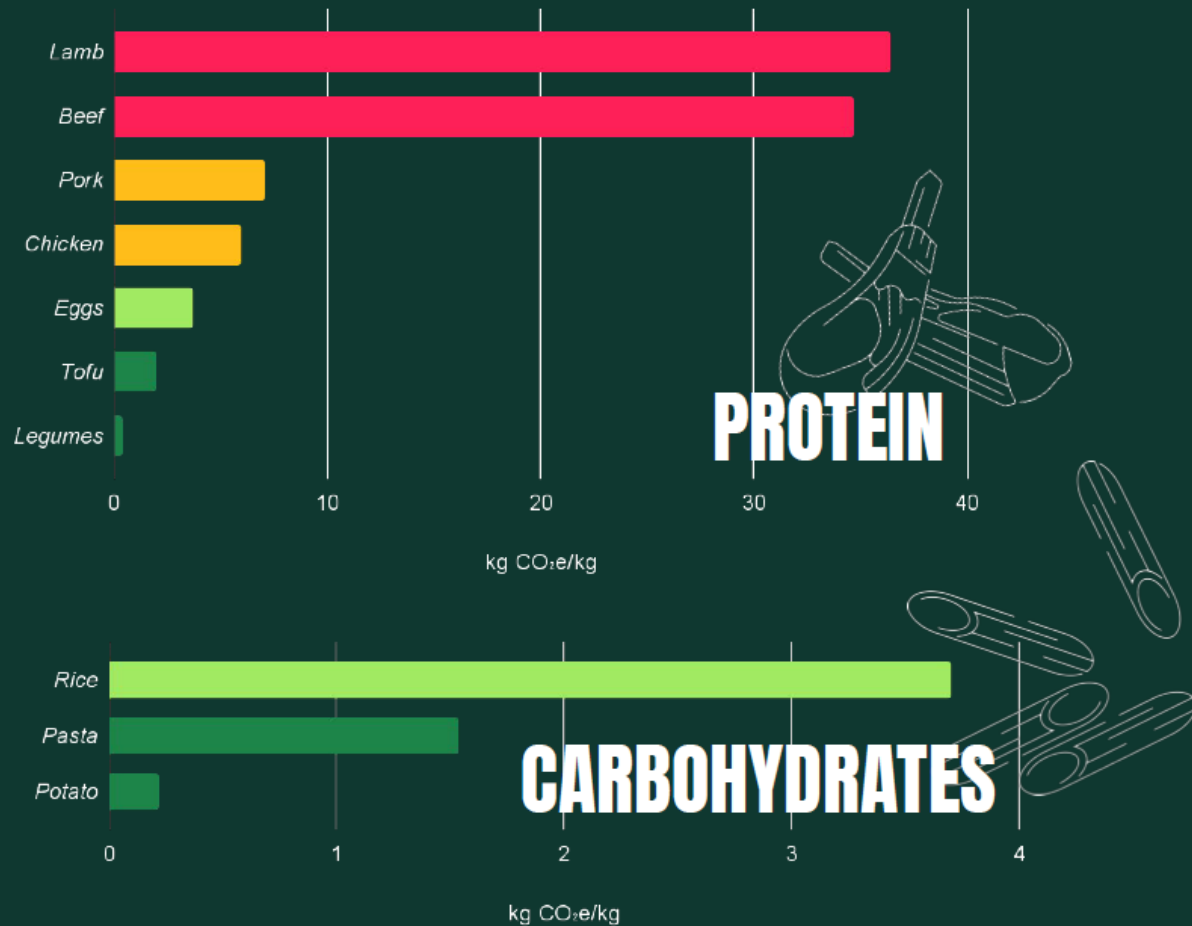
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COMPARING CARBON FOOTPRINT WITHIN FOOD CATEGORIES



New Menu Options at Bloom



Recognition



Terra Bioindustries



- Protina & Recyclose
- Applications testing
- PDCAAS
- Support with markets

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Bio Origins



- Made with renewable biomass materials
- Applications testing
- Corn, mushrooms, cucumbers, blueberries

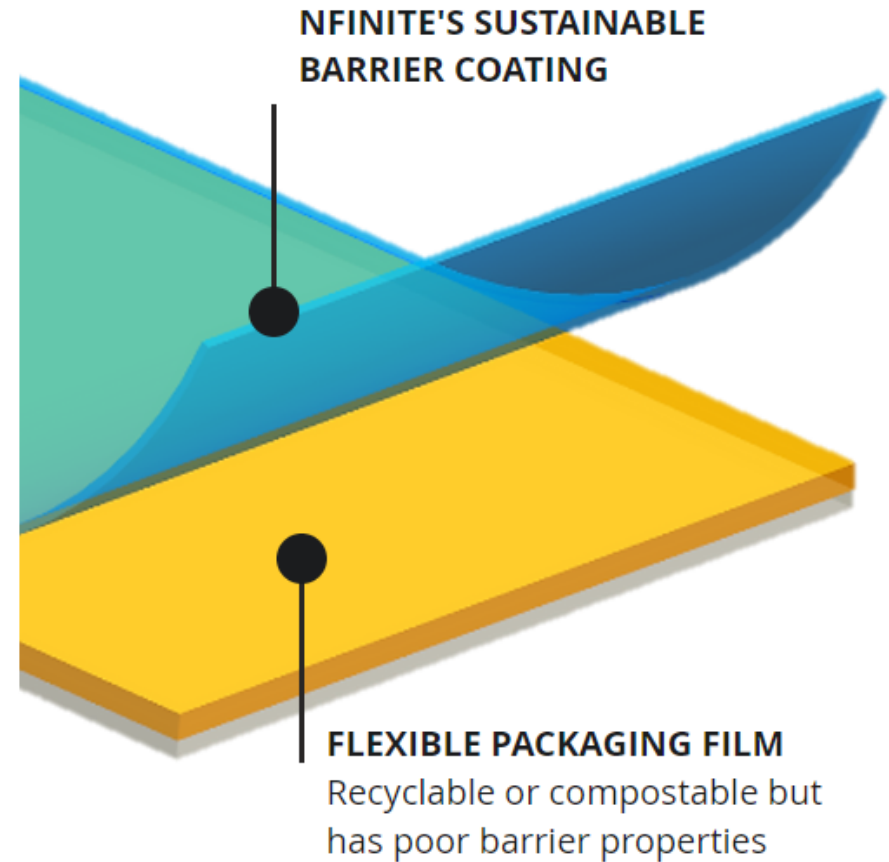
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Nfinite Nanotechnology



- Reduce single use packaging
- Applications testing of novel barrier coating
- Analytical information



Shelf-Life Extension



- Goal is to ensure as much food is consumed as possible
- Determine mode of shelf-life failure
- Data collection



Cambridge Food Bank

- Quantifying food waste recovery
- Technical support with food diversion



Supports for Food Security

Emergency Food Support

Sustainability in the Lab

- Organic bins in the lab
- Reusable lab supplies
- Sensory evaluation using QR code



Summary

- Institutional Efforts
- Principles for Responsible Management Education
 - Reporting & Implementation
 - International Networks
- Applied Research
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 - Special Projects
- Question Time

Questions?

10 to 15 minutes



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13 CLIMATE ACTION



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