Strategizing Sustainability: A Roadmap to Long-Term Growth

S.U.C.C.E.S.S Integrated Women's Entrepreneurship Project (IWEP)
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Agenda

- An Introduction to Me
- Imagine for me
- What is Sustainability
- Defining Sustainability in Business
- How to Set Sustainability Goals
- The Importance of Sustainability Metrics
- How many planets would we need, if everyone lived like you

About Me

- My name is Meredith Hannen-Tugwete
- My background is in Architecture, Structural Engineering and Sustainability
- I’ve worked in Canada, Africa (Zimbabwe, South Africa, Zambia, Uganda and Rwanda), Nicaragua and USA
- My focus with sustainability has been on buildings, education, energy, water and being self sufficient

Imagine for me

How many of you have owner or rental insurance for your home?

What if you couldn't afford it?

What if it didn't exist?

What does this mean?

- Rising deductibles and premiums due to climate change is reshaping Canada’s insurance industry
- Financially being able to afford coverage (flood, fire, etc.)
- In 2024, Canada endured a tough summer, insured losses increasing to more than $7 billion (406% increase) from the 20 year average.[1]
- Across the industry there is a dramatic rise in deductibles. For example if you live in a wildfire zone, insurance could increase your deductible or limit the amount of coverage you have
- In order to provide insurance in these cases the ask has been for installation of additional equipment in the home which many people cannot afford[1]
- Increase in premiums to a point where people can no longer afford insurance[1]
- Fortunately, in Canada there are no areas where people are uninsurable unlike our neighbours across the border.

Canada's Wildfires are a Warning to India

Here is how we must shore up our cities against heatwaves

Chandra Bhushan

Who'd have guessed that a 49.6°C temperature would be recorded somewhere in a normally frigid Canada? Now wildfires, caused by the extreme heat, have reduced its tiny town of Lytton to ash. To put things in perspective, the maximum temperature ever recorded in Delhi is 48°C.

For decades, scientists have warned that the climate crisis will increase the frequency and intensity of heatwaves. However, Canada is not one of the countries predicted to be severely impacted.

Instead, lethal heatwaves are projected to bring death and destruction across the Middle East, South Asia, and portions of Africa and China. The blistering heatwave in Canada, therefore, is a harbinger of things to come, for us.

Heatwaves are increasing in India: For example, researchers from IIT-Gandhinagar published a study in *Environmental Research Letters* in 2017 that convincingly proved a considerable rise in the frequency and severity of heatwaves from 1951 to 2015. It also revealed that the five most severe heatwaves occurred after 1990.

Fatalities are also rising: According to a recent article co-authoured by M Rajeevan, secretary of the ministry of earth sciences, the mortality rate due to heatwaves has increased by 62.2% in the last 50 years.

These findings are in consonance with the predictions of almost all climate models, with latest

Lytton town burnt down to ashes

Heat Action Plans. For example, in 2013, Ahmedabad became the first city to implement a HAP to raise public awareness, identify high-risk groups, issue heatwave alerts, and improve inter-agency collaboration. So far, 30-odd cities have adopted similar HAPs.

State-wide HAPs have also been introduced in Tamil Nadu, Kerala, Maharashtra and Odisha. However, [illegible]

Now, update heatwave's definition: IMD declares a heatwave based on temperature. A heatwave is proclaimed when the highest temperature at a station surpasses 45°C; if it exceeds 47°C, it is referred to as a severe heatwave. Heatwaves in coastal and hilly

75%, the wet-bulb temperature is about 36°C. Few humans can tolerate a wet-bulb temperature exceeding 35°C because their bodies can no longer cool themselves.

Many regions of India now experience wet-bulb temperatures exceeding 32°C during certain parts of the year. However, we are not declaring such days to be heatwaves, endangering the lives of people engaged in manual labour.

Prepare a national heat code: A heat code will outline the criteria for declaring heatwaves and will develop SOPs to be used during heatwaves, such as work-hour limits and relief measures in public places and hospitals. It will also give the district administration the authority to declare an emergency, halt outdoor activities, and allocate resources for heat relief.

Plan to cool our cities: Our existing building codes and urban planning are worsening heatwaves by magnifying the heat island effect. To reduce heatwaves, we will need to modify our urban planning standards and building bylaws to enhance green areas and water bodies and promote cool roofs and green buildings, among other things.

Recognise the emergency: Only in 2015 did the Indian government declare the heatwave a natural disaster under the National Disaster Management Act of 2005. As a result, while the heatwave is qualified for support from the National and State Disaster Response and Mitigation Funds, there are insufficient resources and

The why behind sustainability

What is sustainability

To meet the needs of the present without compromising the ability of future generations to meet their own

–Brutland Report (1987)

It's the integration of environmental health, social equity and economic vitality to create a thriving, healthy, diverse and resilient community for all generations both now and in the future

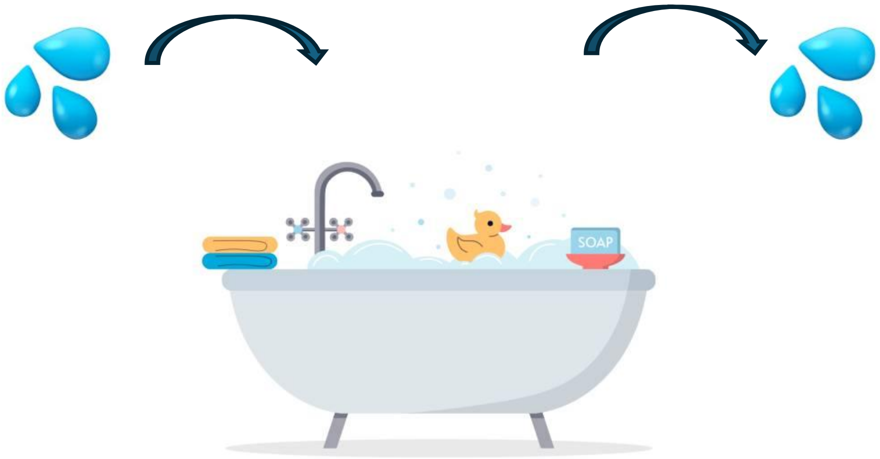
-UCLA 2025[2]

"The purpose of the corporation must be redefined as creating shared value, not just profit."

Michael Porter
Economist & modern business strategy founder

What is sustainability

Replacement Rate



Systems thinking

What I do in my country affects you (water and air don't stop at the border)

Defining Sustainability in Business – The Why

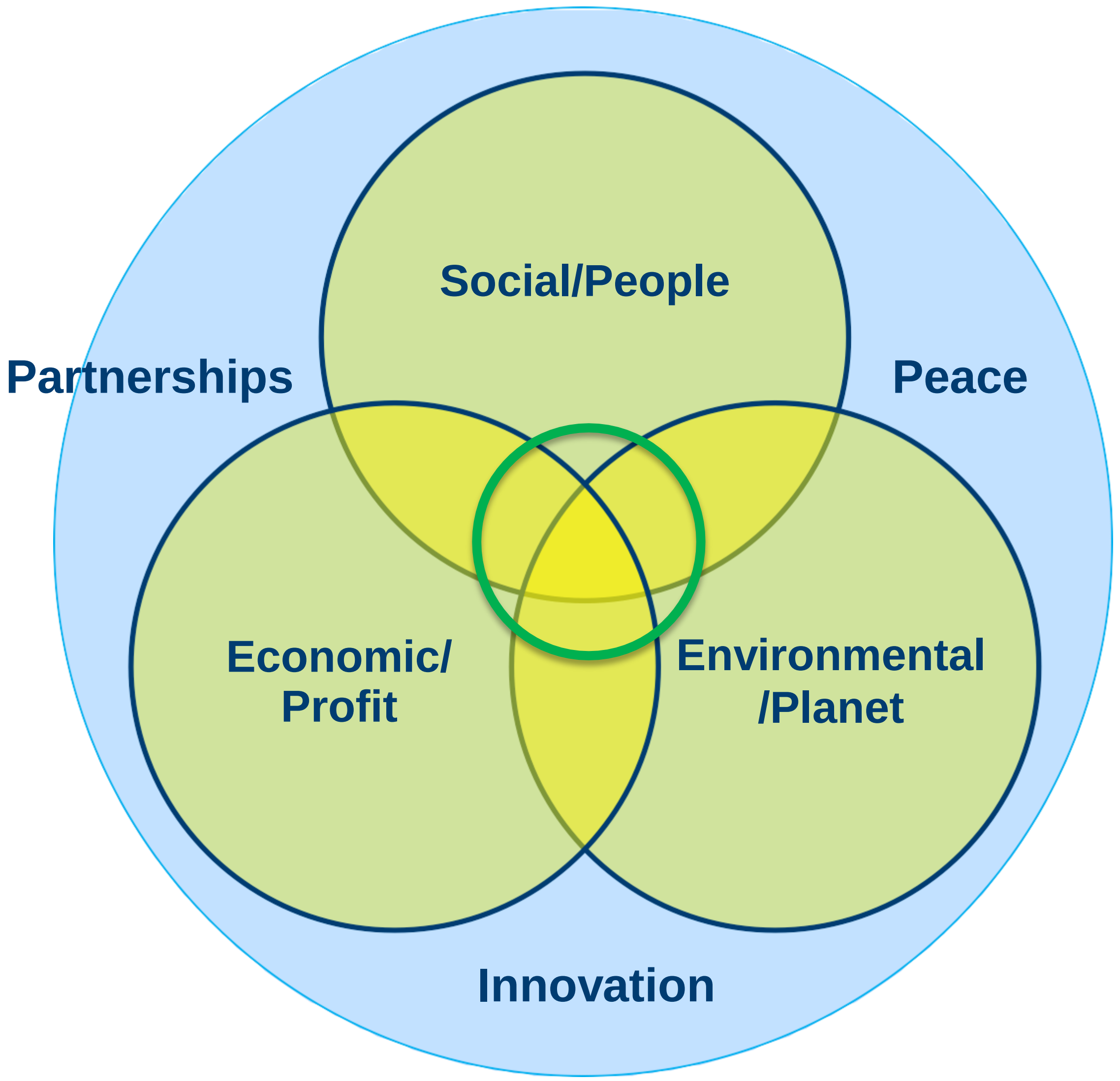
What is the business case for Sustainability

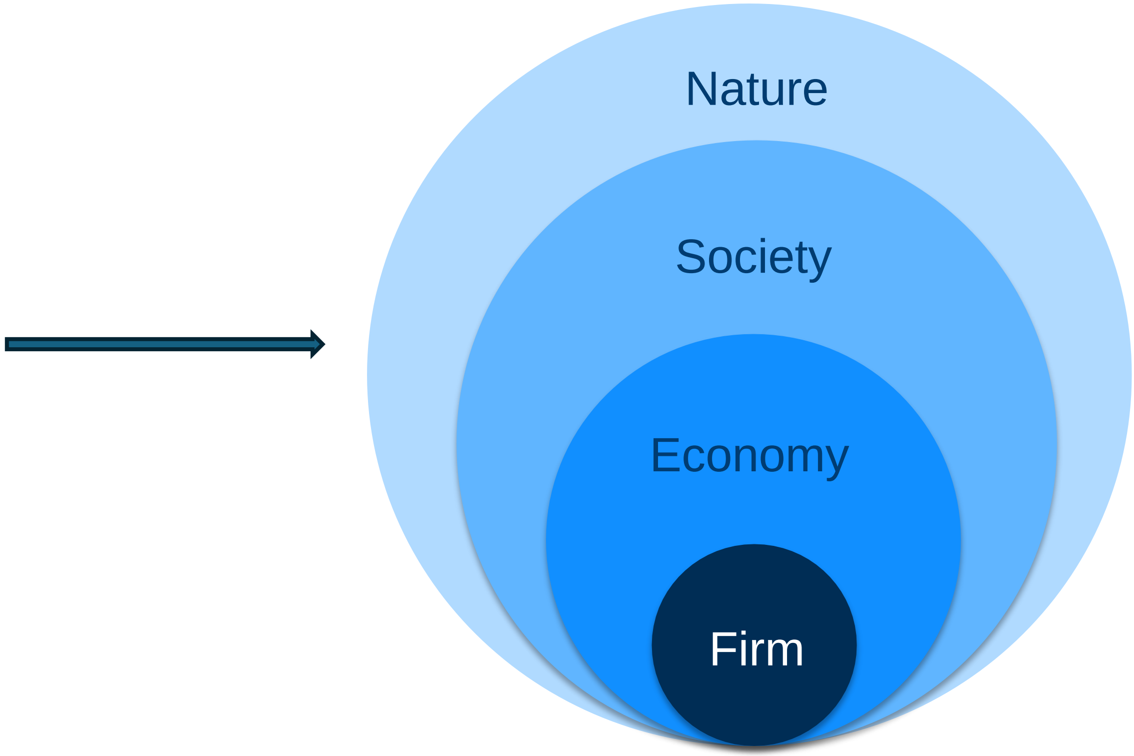
- Founder of one of the world's largest carpet manufacturers had an epiphany, felt wrong about the pollution his company generated.

- Launched "Mission Zero." Between 1994 and 2009, the company reduced material waste, pollutant emissions, and energy consumption:

  - 24% reduction in greenhouse gas emissions,
  - 60% reduction in fossil fuel consumption,
  - 82% reduction in waste being sent to landfills,
  - 80% reduction in the amount of water used,
  - $450 million in avoided costs

Defining Sustainability in Business





How to set clear, measurable sustainability goals that align with your business vision and mission

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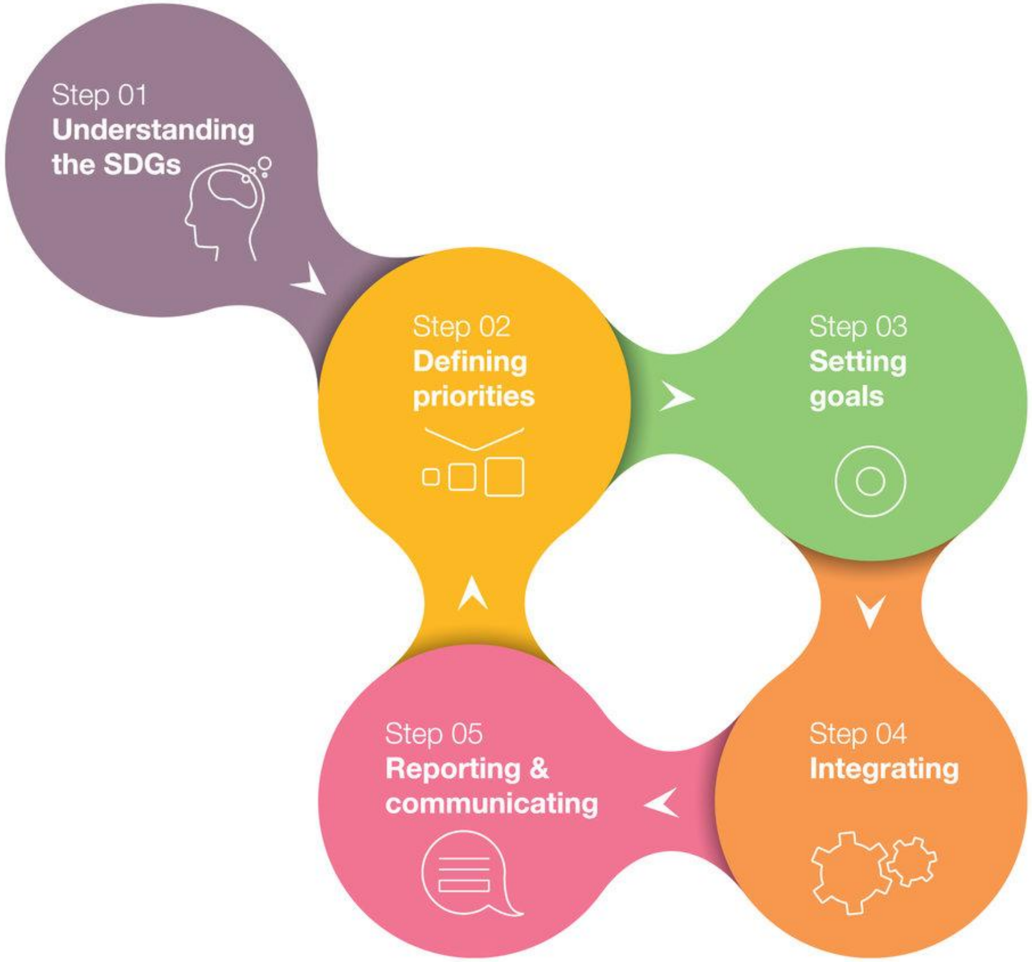
SMART 2.0

- Specific
- Measurable
- **Results-oriented**
- **Absolute + audacious + accountable**
- Time-bound (Polman & Winston, *Net Positive*, p. 105-106)

How does an Organization create a sustainability strategy



Continuous Improvement (PDCA) from the Lean Methodology

Inside-out (CSR): based on past performance; insufficient to address global needs

Outside-in (social purpose): evidence-based and benchmarked against society's needs rather than past experience

Where Do Organizations Fit?

Complying: sustainability concerns are viewed with skepticism, as is the business case for sustainability (doing the bare minimal or required by law)

Benchmarking: sustainability is appreciated as a legitimate concern of external stakeholders, and incorporated into operations for PR benefits

Partnering: Sustainability is a significant concern for the organization and requires solutions that work for all stakeholders

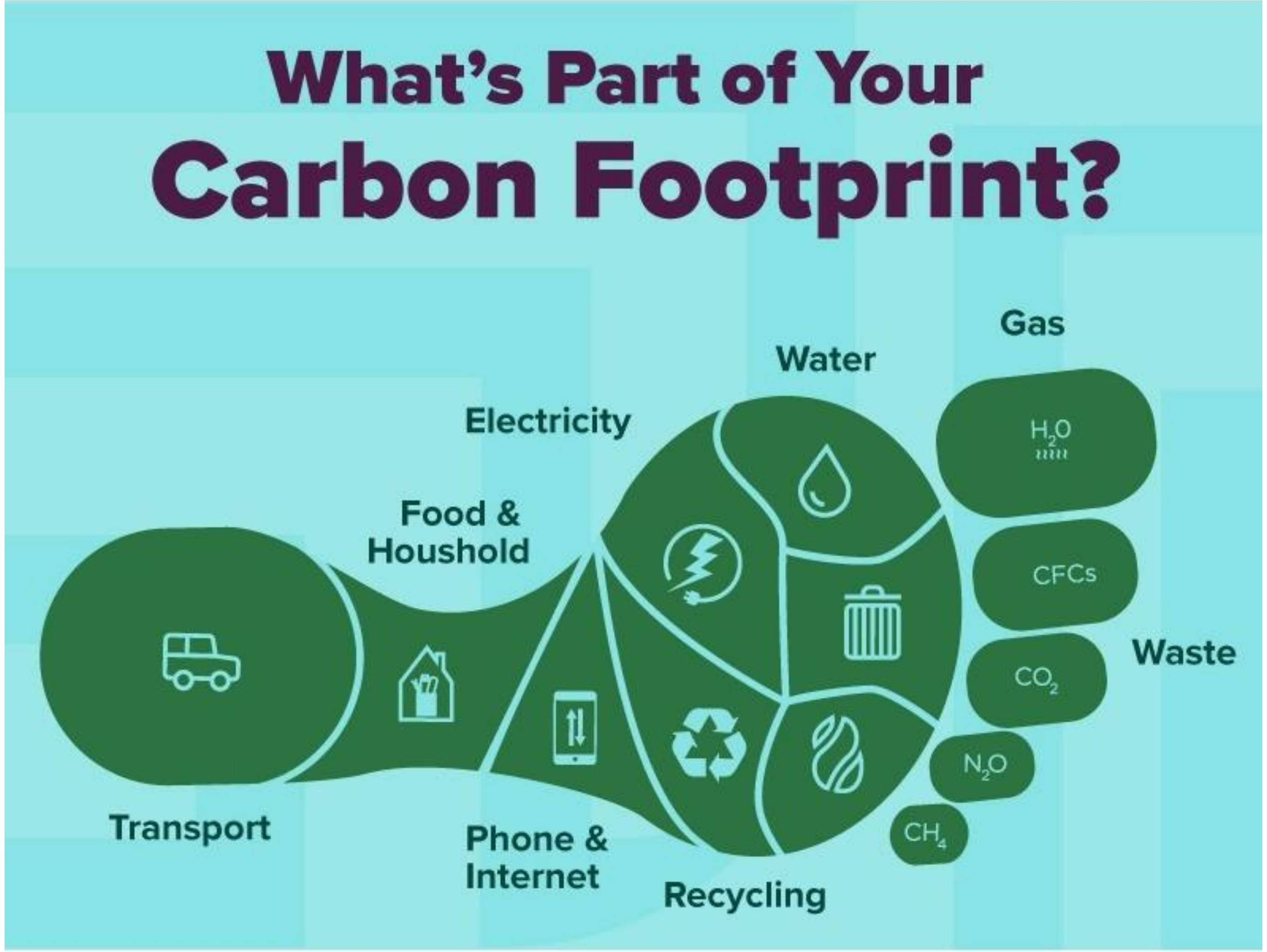
Integrating: sustainability is a paramount concern of the organization and provides a competitive advantage in the organization's sector enabling the creation of value for stakeholders

The importance of tracking sustainability metrics: Carbon Footprint

If everyone in the world lived like you do, how many earths would we need?

Check out the website below and find out

https://www.footprintcalculator.org/home/en



The importance of tracking sustainability metrics: Waste Reduction

Why Waste?

The **construction and demolition (C&D) waste sector contributes 50% of the total waste** that goes to the landfill. This accounted for 600,000 tons of C&D waste in 2018.

Supply chain issues can be mitigated when waste is converted into new materials.

Embodied carbon can be reduced by reusing, recycling and upcycling materials instead of sending them to landfills.

Landfills **contaminate the air and water** around them negatively affecting nearby communities.

Carbon Footprint & Sustainability Report

	Actual	Projected
Carbon Footprint Saving	548.53 (metric tons) Tons Recycled: 604.78	0.00 (metric tons) Tons Recycled: 0.00
Homes powered for 1 month	68.40	0.00
Vehicles removed from road for 1 year	108.00	0.00
Barrels of oil saved	1,276.00	0.00
Gallons of gasoline saved	61,495.00	0.00
Tree carbon processing equivalent	14,065.00	0.00

The importance of tracking sustainability metrics: Energy Consumption

Energy consumption contributes more than 75% of GHG (greenhouse gas) emissions.

What falls under energy consumption[4]:

Fossil fuels

Electricity generation

Transportation

Buildings

Energy Consumption Explained

What is….

Fossil fuel: energy-related emissions that come from burning coal, natural gas and petroleum

Electricity: makes up 20% of final consumption it's responsible for 40% of energy emissions.

Transportation: road transportation contributes 12.2% of global emissions (why hybrid and EV's are a big push…also the price of fuel)

Buildings: Overall buildings constitute 40% of global emissions (construction, operations and building materials) all of which require energy. [3]

The importance of tracking sustainability metrics: Social Impact

- Social purpose business requires an ecosystem approach (interconnection)
- Competition:
  - “I need to beat you”
- Collaboration:
  - “We can go farther, faster, together”

Project Social Purpose Continuum

I.0 Ad Hoc	2.0 Targeted	3.0 Holistic	4.0 Social Purpose
Pursues a few social measures during the development process; adds social features at the end	Follows existing accessibility, sustainability, community, wellness and diversity policies	Achieves societal outcomes across phases, value chain, and stakeholder relationships	Leverages assets, influence, reach and scale of project to catalyze societal transformation

Group Discussions

- How do you feel about how many earths we need? And were you surprised?

- What companies do you think are greenwashing and why?

- What companies do you admire and why?

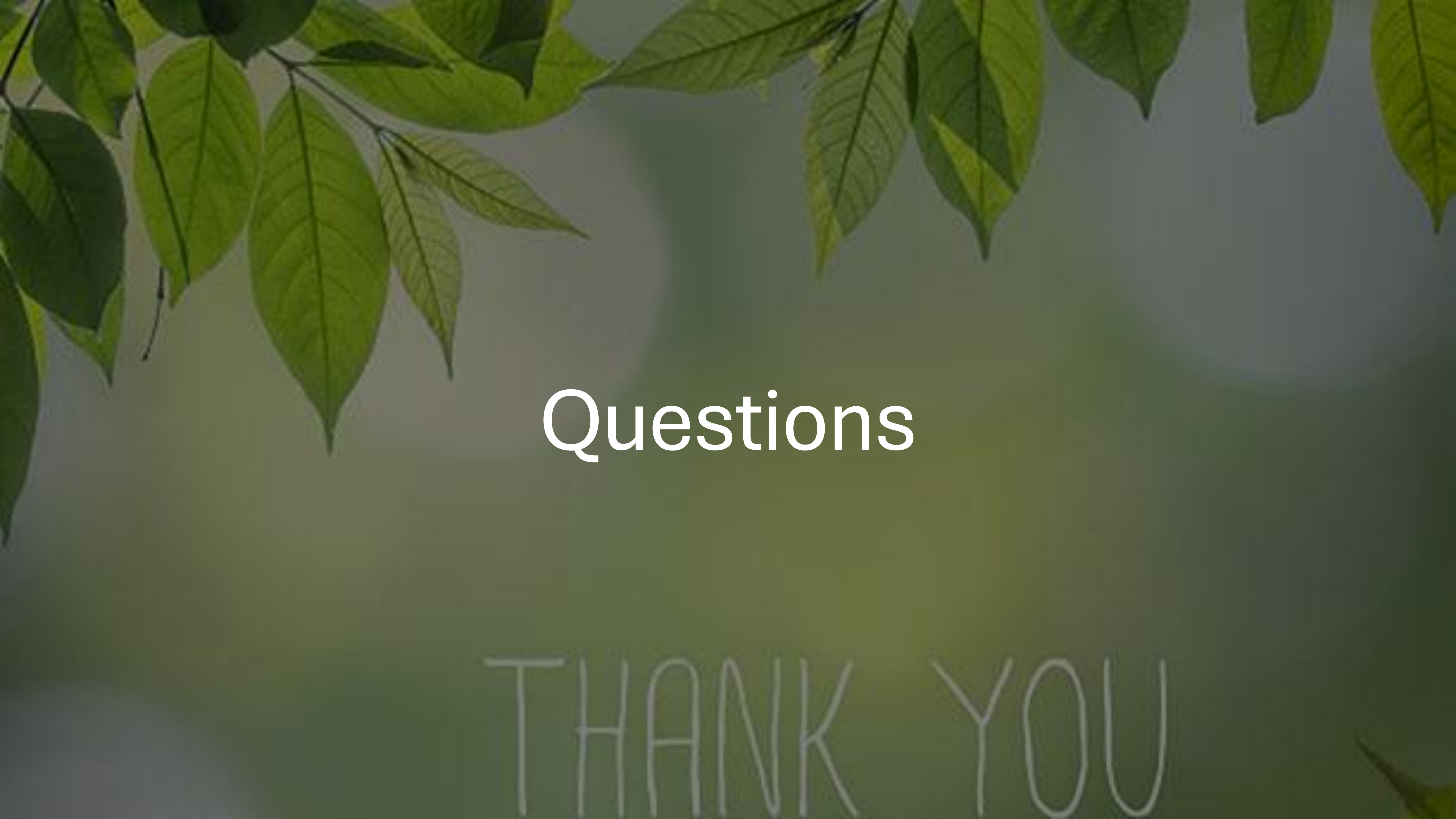
- What is the business case for sustainability

In Conclusion

But…money is the fuel (Sinek)

- Money is the fuel.
- Business is the car.
- You don’t buy a car to put gas in it.
- You buy a car to go somewhere.
- You don’t do business to make money.
- You do business to advance a just cause.
- Money is an outcome of a net positive business ***not the goal.***

Questions



References

1. Insurance Bureau of Canada. 2025. *Summer 2024 shatters records for severe weather damage: Over $7 billion in insured losses from floods, fires and hailstorms. https://www.ibc.ca/news-insights/news/summer-2024-shatters-records-for-severe-weather-damage-over-7-billion-in-insured-losses-from-floods-fires-and-hailstorms*. *Sep 24, 2024. National.*

2. UCLA Sustainability. 2025. *What is Sustainability.* https://www.sustain.ucla.edu

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