

Tapping into Carbon Finance

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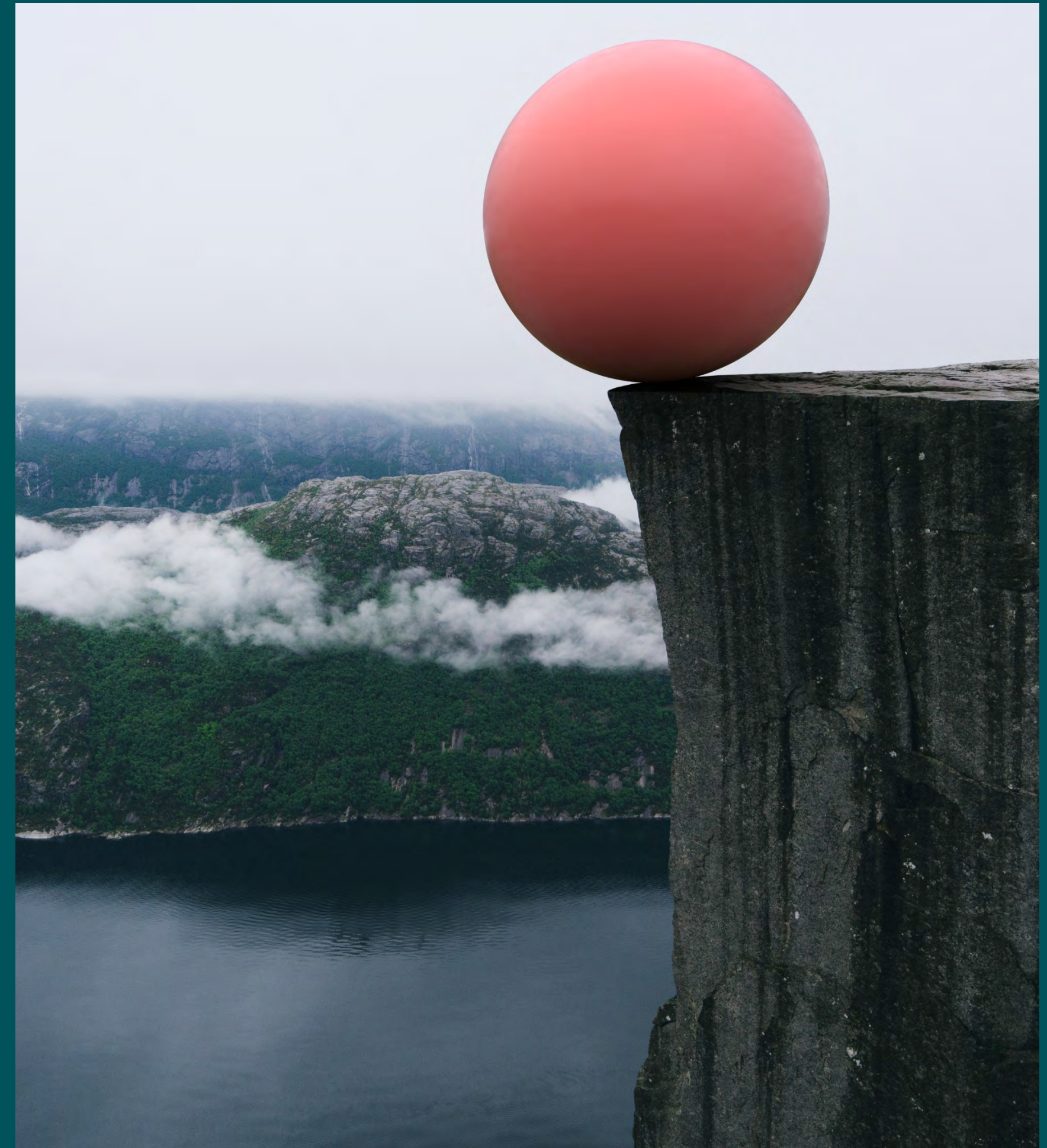
Director of Business Development

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RADICLE



About Radicle





Reality Transformers

We transform the reality of businesses and organizations with our environment-care technologies.

We create revenue for our clients by monetizing emissions data, providing resources to help pay for sustainable technologies, and/or compliance needs.

Our Impact



\$53M+ CAD PAID

to our clients via emissions markets for their sustainable practices



5 MILLION TONNES

of carbon dioxide emissions reduced by working together



OVER 3,000 CLIENTS

we do great work with around the world



MORE THAN \$300M CAD

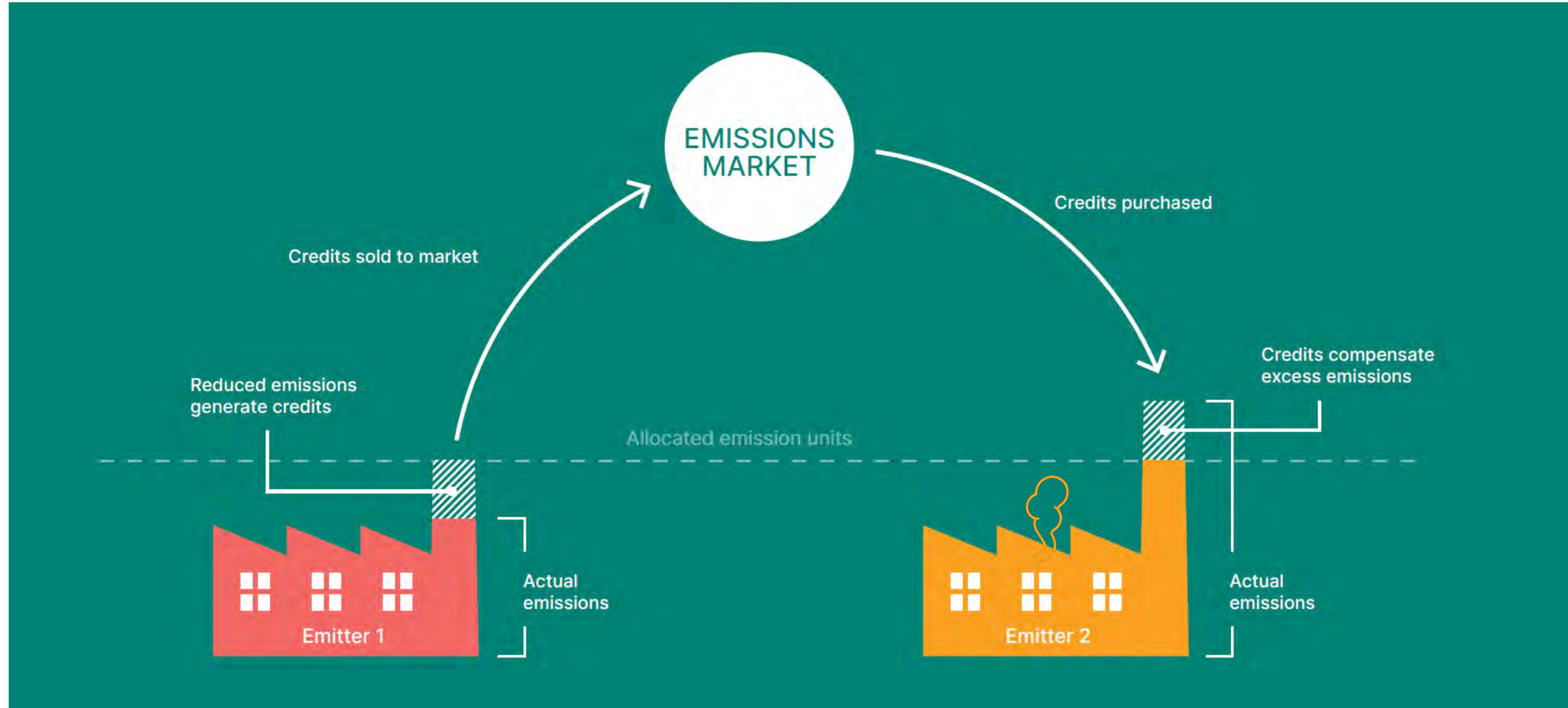
traded in offset credits

General Emissions Market Overview

What it is & how it works



About the Emissions Market



Emissions Markets

Emissions markets are where companies buy and sell environmental commodities, including carbon credits.

There are two types of emissions markets: compliance and voluntary. Compliance markets are for organizations that face penalties if they fail to meet government emissions targets. Voluntary markets are meant for organizations opting to reduce emissions to meet environmental, social, and governance (ESG) commitments or supplement their revenue.



Carbon Offsets vs. Low Carbon Fuels Markets



What is a Carbon Offset?



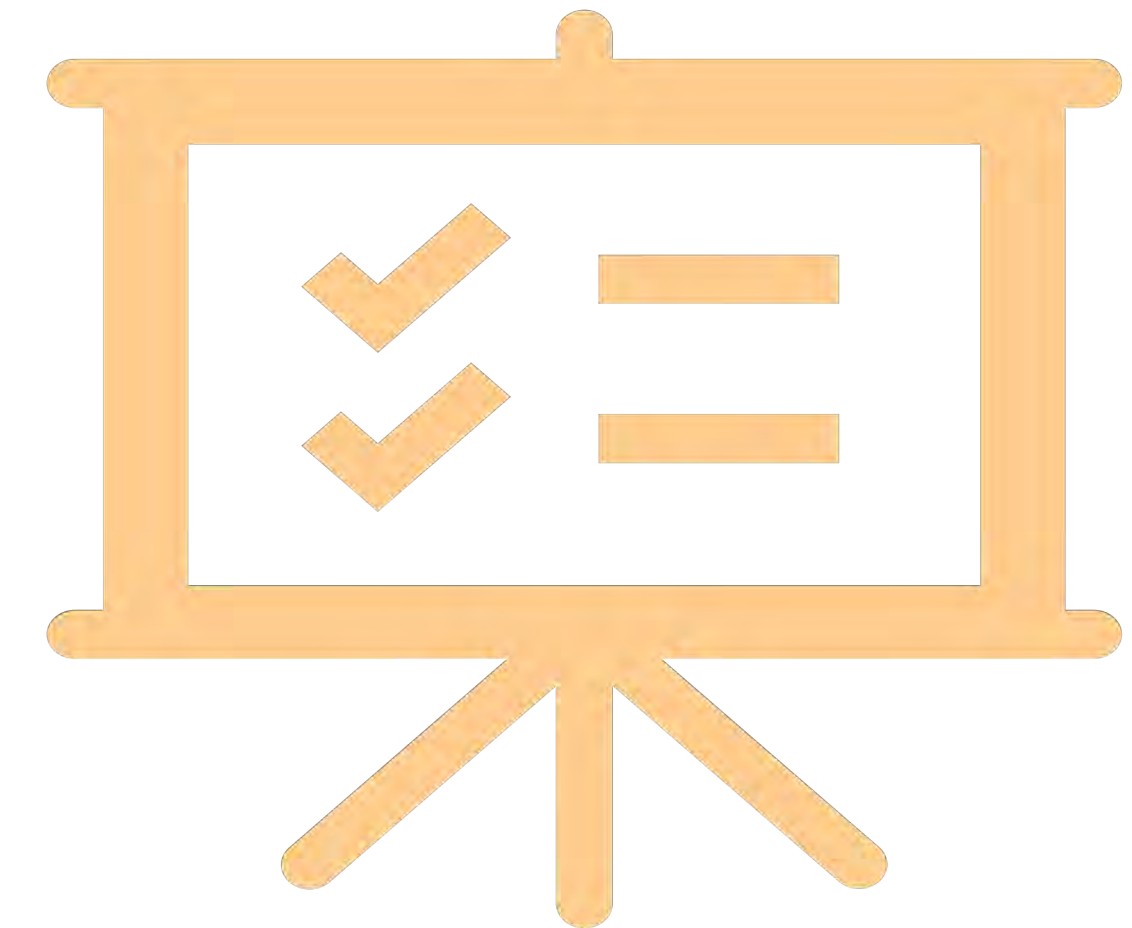
Offset project types span a wide variety of activities and technologies
Monetized in carbon “offset” markets in both voluntary and compliance schemes
The unit of measurement for carbon offsets are **metric tonnes of CO₂e**

Two types of offsets:

- Emission reductions – avoided or reduced GHG projects
- Emission removals – sequestered GHG projects

Offsets must be:

- Additional
- Permanent
- Transparent
- Verifiable
- Conservative



What is a Low-Carbon Fuel?

Opportunity to generate assets for fuels production

Monetized in low carbon fuel emission markets under regulatory schemes

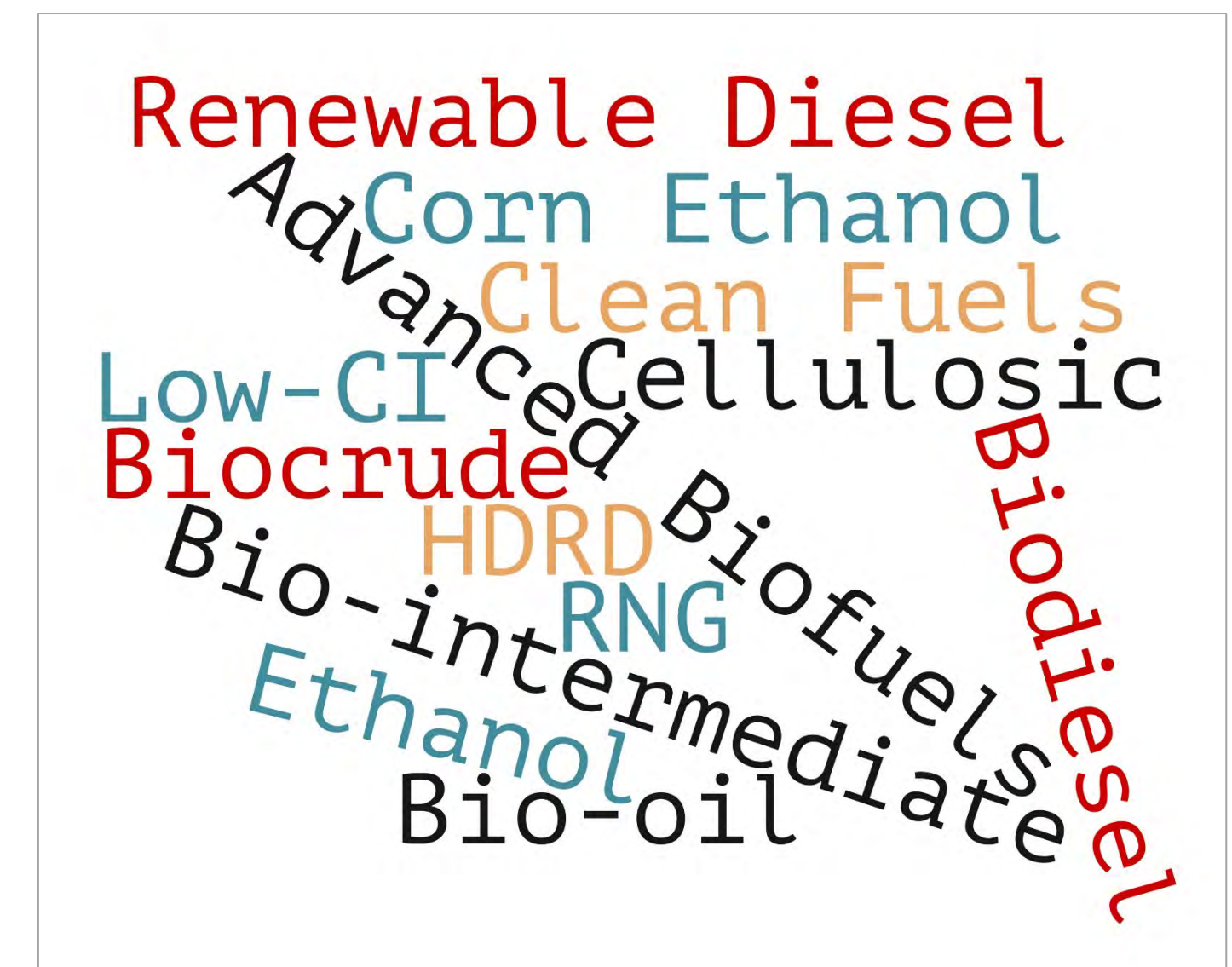
Carbon intensity is measured in $\text{g CO}_2\text{e} / \text{MJ}$ of fuel

Low-carbon fuel:

- Definition related to **carbon intensity of fuel**
- Low means lower than target carbon intensity set by regulation
- Feedstock and technology agnostic

Feedstocks can be:

- Renewable
- Waste-derived
- Cellulosic



Carbon Offsetting Opportunities



Carbon Offsets Across Canada



Federal OBPS:

- Recognizes equivalent provincial programs
- Set to develop offset protocols for landfill methane management, improved forest management, advanced refrigeration systems, and enhanced SOC
- Development starting early 2021 and anticipated approval winter 2021

Provincial Opportunities

- **Alberta:** Aerobic composting, aerobic landfill bioreactor, landfill gas capture and combustion
- **Quebec:** Landfill sites – CH₄ treatment or destruction

In Development

- Landfill biocover systems (AB)
- Aerobic composting (SK)
- Landfill gas destruction (SK)

What is an Offset Worth?



Federal Carbon Pricing Schedule

2030	\$170
2029	\$155
2028	\$140
2027	\$125
2026	\$110
2025	\$95
2024	\$80
2023	\$65
2022	\$50
2021	\$40
2020	\$30
2019	\$20



Hold Your Horses



A few things to think about before deciding to chase carbon offsets

- Additionality can be a barrier if your province has strict regulations on GHG emissions from landfills
- Landfill gas capture and combustion systems usually only make financial sense for larger landfills
- Biocover systems may be a better option for small and medium landfills

What Can You Do?

Help us help you

- Call you MLA and advocate for the use of offsets, if your province doesn't already have an offset program in place
- Also advocate for common sense implementation of landfill methane projects
- Provide your support and recommended edits to the federal Landfill Methane Management protocol during the public stakeholder process (TBD)



Thank you.
We're ready when you are.

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