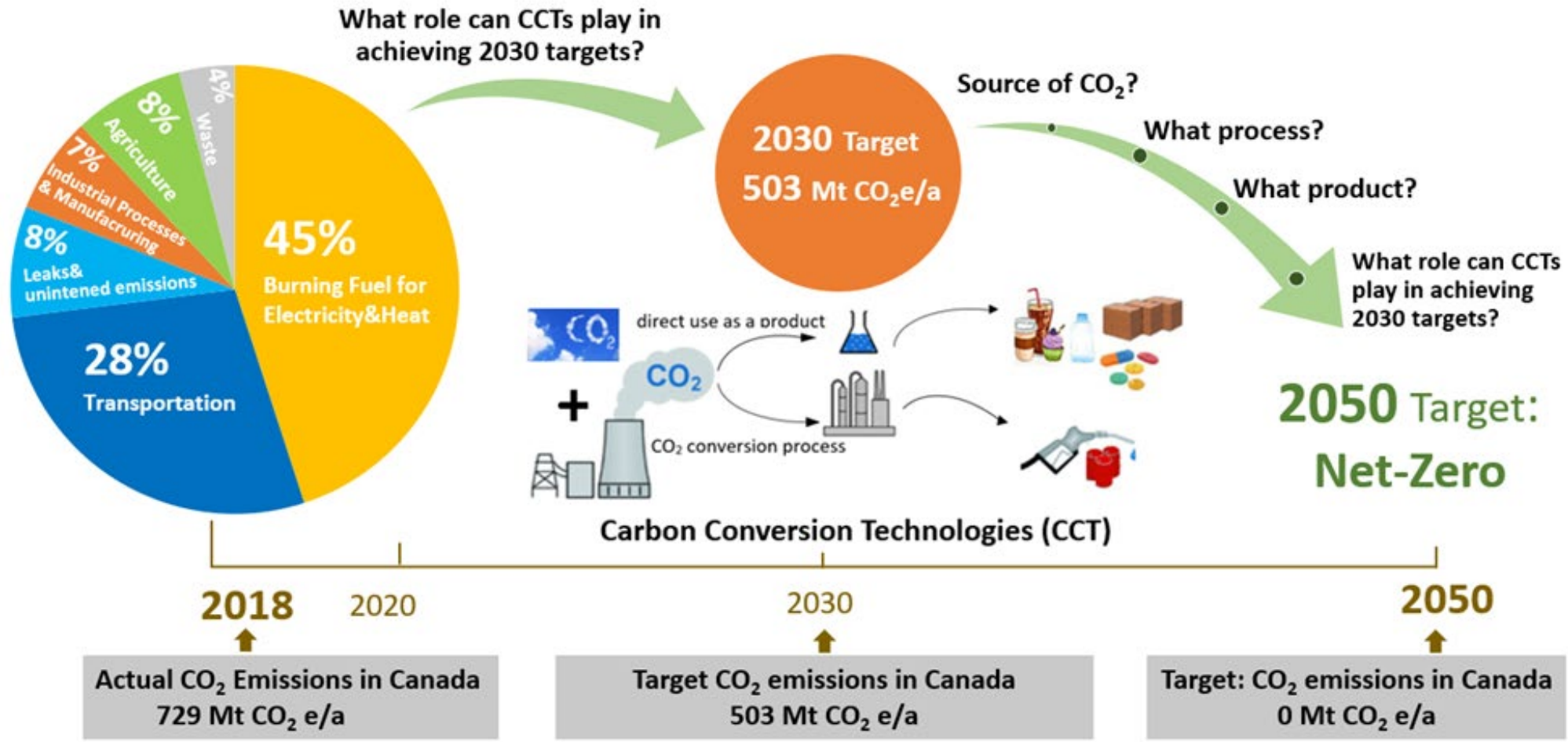


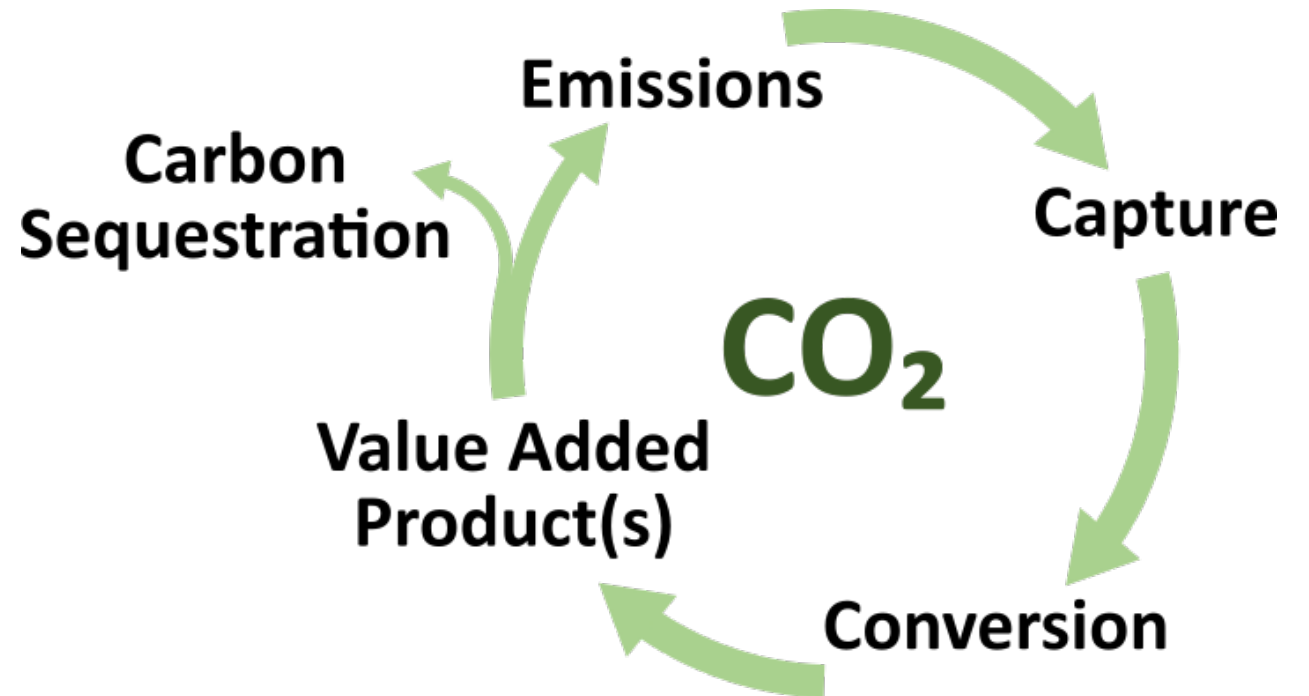
# Carbon dioxide utilization can be a net-zero solution



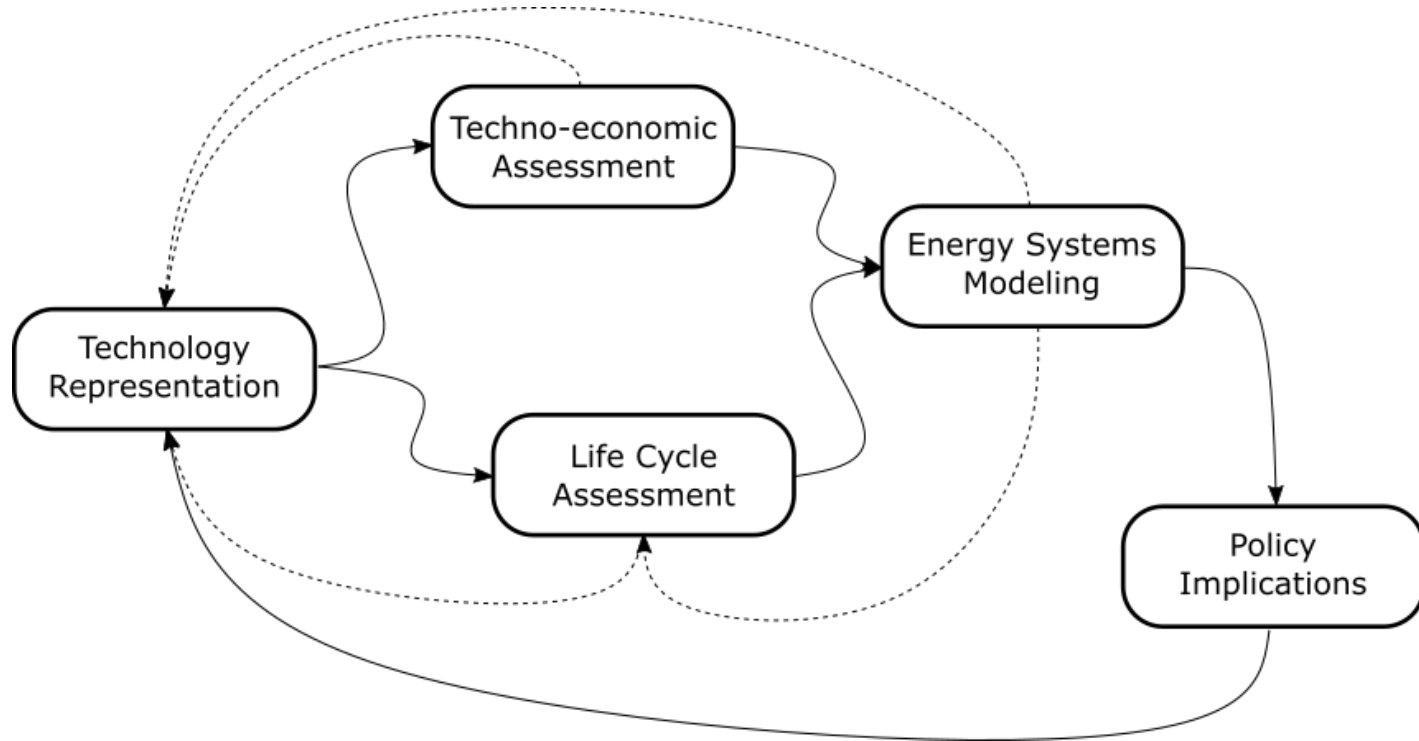
Carbon conversion technologies have the potential to close the CO<sub>2</sub> cycle...

...but important questions need to be answered if this potential is to be realized.

- What CCT product categories and technologies are most competitive?
- What are the potential environmental consequences?
- How can I improve my process to make it more economically and environmentally competitive?
- What are the business risks associated with particular CCTs?
- Should I invest in CCT?



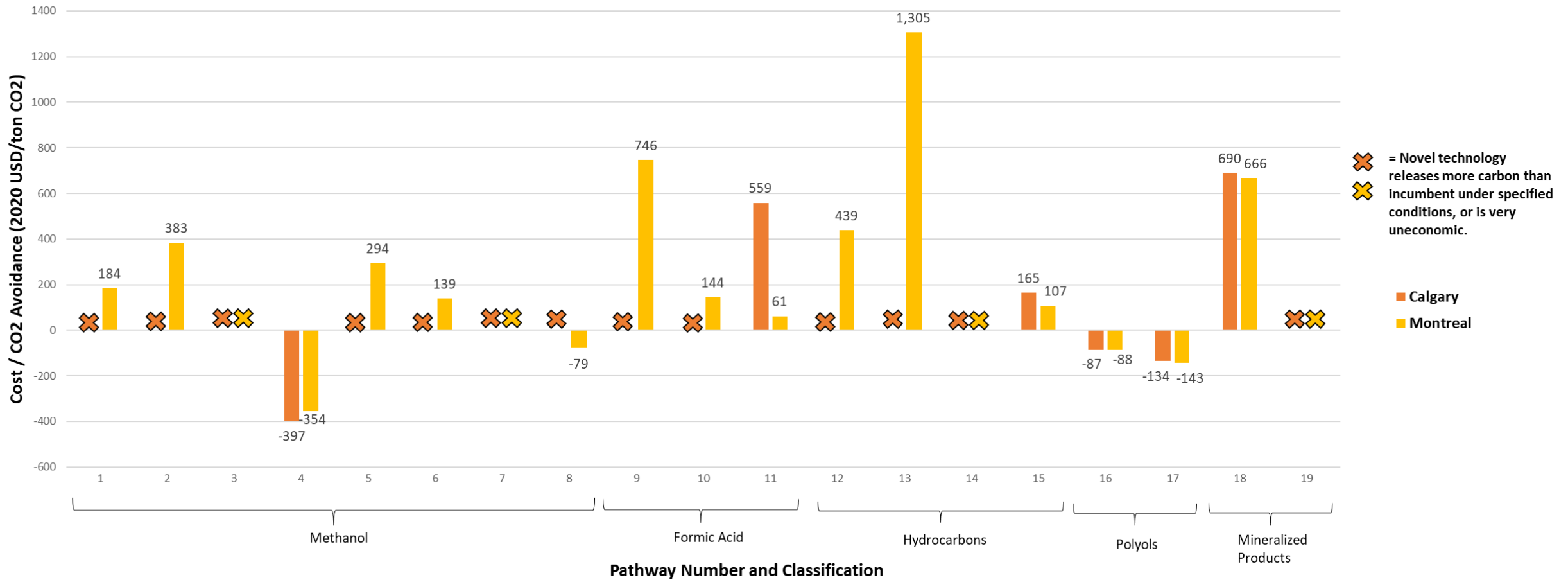
# Carbon conversion needs to be looked at from a systems perspective



Systems tools are underutilized but can drive innovation by:

- Supporting the ideation process
- Prioritizing research and development
- Improving process designs
- Directing effort to support innovation goals
- Informing decisions to avoid potential unintended negative consequences

# Example: Different products show dramatically different outcomes depending on process and location



Source: [Ben Lincoln, 2021](#)

# In process: Development of an NSERC Alliance grant proposal

The overall objective of the Assessment of Carbon Conversion Technologies (CCTs) network is to bring together global experts in the assessment of emerging energy technologies, developers of CCTs, and potential users of such technologies to understand the potential future roles and risks of specific CCTs.

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