

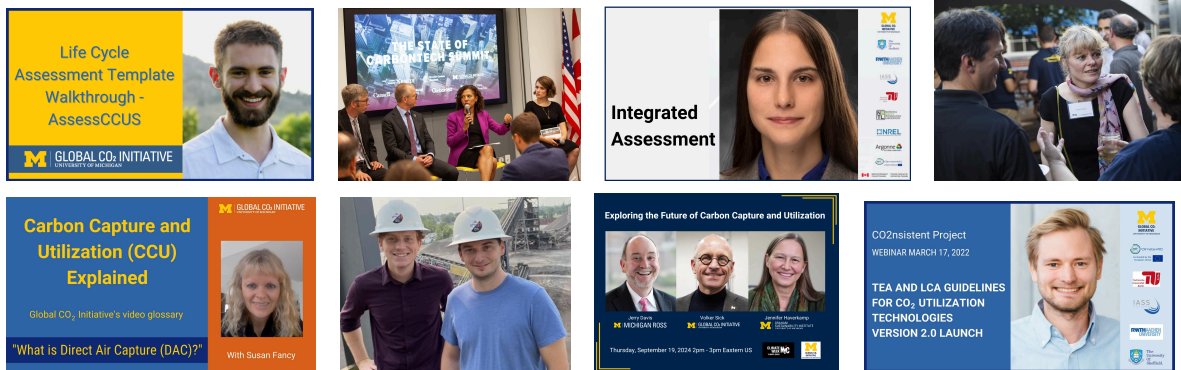
Global CO₂ Initiative: Our role in the sustainability universe

The existential problem of climate change facing us today can be addressed, in part, by treating the excess environmental carbon as a resource rather than as pollution.

Treating excess environmental carbon as a resource has several advantages.

- It provides a means to durably store excess carbon for up to 100 years, thus reducing the excess CO₂ levels and easing the climate burden.
- It provides a non-fossil source of carbon for the multitude of carbon products consumed daily, thus decreasing our dependence on fossil carbon sources and fostering a circular carbon economy.
- It provides a means to generate revenue to help pay the costs of capturing CO₂.

In the past, society has had the luxury of evolving new fields gradually. That is no longer the case with carbon management. It needs to grow very quickly, but it is also a complicated field. To manage large quantities of emissions, carbon management requires collaboration across multiple industries, governments, and communities. It requires a very different mindset from many diverse stakeholders as well as a new set of skills and tools to be successful.



The Global CO₂ Initiative works at the unique intersection of education, companies (both incumbents and startups), and governments. We are driving a brand new, emerging field of carbon dioxide utilization to make products that help eliminate the need for petroleum, coal, and natural gas usage.

We are global thought leaders and influencers with a broad reach. Our influential [market studies](#) defined the trillion dollar potential of CO₂ utilization and its substantial role for climate change mitigation. We co-authored [two National Academies reports on CO₂ utilization](#). We formed and are leading an international team of experts that is working on [standardization of assessment methods](#) so that decision makers have sound and transparent information about the environmental and economic values and risks of CO₂ utilization.

Through this work we offer unique learning experiences for students from across the University of Michigan. We train students to have a broad understanding of how to use carbon responsibly and how to get it sustainably from non-fossil sources. Those students are ready to move into leadership roles and start making the immediate impact that is needed if we are going to stave off the worst impacts of climate change.



Trillion dollar markets do not build themselves. The emerging field of CO₂ utilization needs a new workforce and we are leading the way to educate and provide that workforce. Our students have gone on to work in the U.S. Department of Energy (DOE), Electric Power Research Institute, National Institute of Standards and Technology, Rocky Mountain Institute, McKinsey & Company, and a multitude of tech companies. Two former students even started their own sustainability companies. Another former student co-founded a non-profit in his home country (Ethiopia) to provide local youth with hands-on experience in building sustainability technology.

Not only are we moving the needle on carbon management in real time, we are also training students to be CO₂ utilization's next leaders and best.