

Utilization Procurement Grants (UPGrants) Program LCA Support

Research & Innovation Center



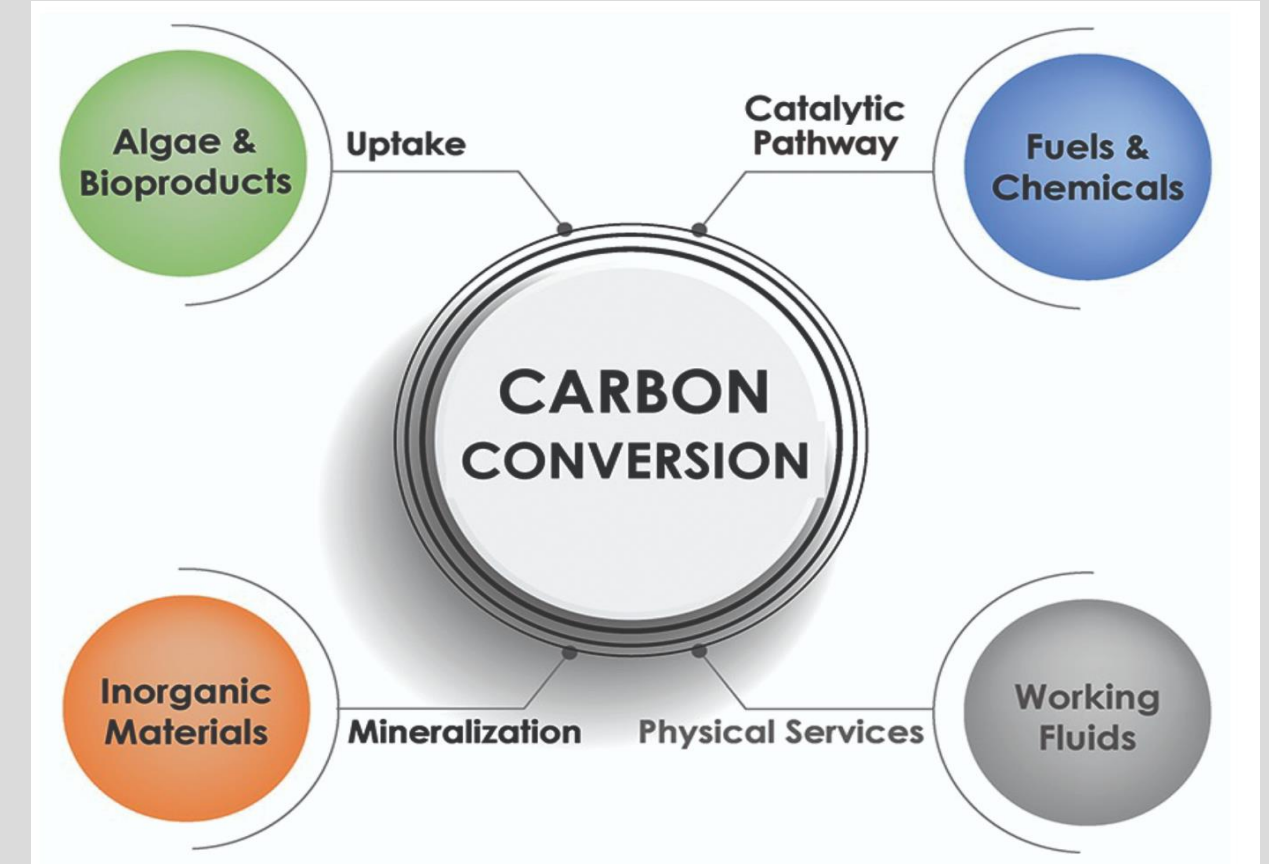
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Background

As the U.S. economy moves toward clean energy and a lower carbon future, the U.S. Department of Energy (DOE) is seeking to partner with states, local governments, and public utilities and agencies to support the procurement and use of commercial or industrial products derived from anthropogenic carbon oxides. These efforts are enabled by provisions included in the Bipartisan Infrastructure Law (BIL) Section 40302.



To implement this legislation, the DOE established the Carbon Utilization Procurement Grants (UPGrants) program and supporting tools through the Office of Fossil Energy and Carbon Management's (FECM) Carbon Conversion Program. Carbon dioxide (CO₂) utilization (CO₂U) aims to convert captured CO₂ into useful products. The commercial or industrial products to be procured and used under these grants will need to demonstrate significant net reductions in life cycle greenhouse gas emissions compared to incumbent technologies, processes, and products. These commercial or industrial products will be provided by carbon conversion product manufacturers that have satisfactorily completed a critical review (performed by DOE) of their product's life cycle analysis (LCA), thereby warranting inclusion on the UPGrants Vendors list.

Eligible Entities

States

Local Governments

Public Utilities/Agencies

UPGrants LCA

- Under the UPGrants program, LCAs must be prepared and documented in conformance with the NETL CO₂U LCA Guidance Document and UPGrants addendum.
- The purpose of the UPGrants addendum is to guide carbon utilization product manufacturers on how to use the NETL CO₂U LCA Guidance Document when preparing LCAs for inclusion as a vendor under the UPGrants program.
- NETL will provide critical review of LCAs submitted by vendors.



NETL CO₂U LCA Guidance Toolkit

UPGrants LCA Toolkit

<p>UPGRANTS ADDENDUM TO THE CO₂U LCA GUIDANCE DOCUMENT</p> <p>Summary of modifications to the CO₂U Guidance Document to be used to apply for LCA approval for use in the UPGrants program.</p>	<p>NETL CO₂U LCA DOCUMENTATION SPREADSHEET</p> <p>Excel file that can be used to document data when not using openLCA.</p>	<p>FREQUENTLY ASKED QUESTIONS</p>	
<p>NETL CO₂U OPENLCA LCI DATABASE VERSION 2</p> <p>openLCA database that includes NETL unit process data and an example LCA.</p>	<p>MORE INFORMATION ON THE UPGRANTS PROGRAM</p>		
<p>OPENLCA CONTRIBUTION TOOL</p> <p>Excel template that translates openLCA results into required charts.</p>	<p>NETL UPGRANTS LCA REPORT TEMPLATE</p> <p>Word report template for summarizing data and results.</p>	<p>ADDITIONAL QUESTIONS?</p> <p>Additional Questions should be directed to LCAUPGrants@hq.doe.gov</p>	
<p>NETL ADDITIONAL DOWNLOADS</p> <ul style="list-style-type: none"> Patches, Archives, and Version History Original CO₂U Toolkit NETL-Provided Technology Baselines 			

NETL LCA Support for UPGrants

- General support, guidance, and LCA expertise for the UPGrants program.
- Development of benchmark LCA models for priority baseline technologies.
 - Environmental technology profiles to set the standard against which applicants must compete.
 - Published as granular, transparent, publicly available data.
- Critical review of LCAs submitted by vendors.
 - NETL to check for accuracy and consistency of the data, methods, and results of submitted LCAs.



Additional Information

- UPGrants website: <https://netl.doe.gov/upgrants>
- UPGrants LCA guidance toolkit: <https://netl.doe.gov/LCA/UPgrants>
- Carbon conversion website: <https://netl.doe.gov/carbon-management/carbon-conversion>
- CO₂U LCA guidance toolkit: <https://netl.doe.gov/LCA/CO2U>
- Notice of Intent FOA for UPGrants: DE-FOA-0002895

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