NETL CO2U LCA Guidance Toolkit Introduction

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Solutions for Today | Options for Tomorrow

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Disclaimer

DISCLAIMER

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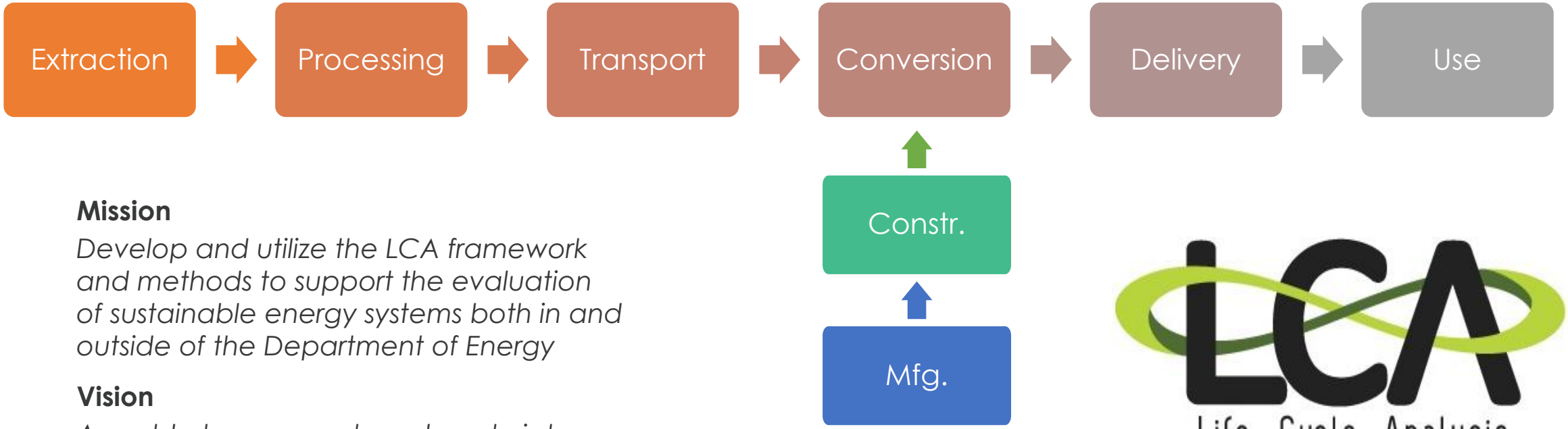
Life cycle analysis (LCA)

A definition

A comprehensive form of analysis that evaluates the environmental, economic, and social attributes of a product or system from the extraction of raw materials from the ground (cradle) to the final use and disposal of the product or system (grave).

Energy life cycle analysis

Cradle-to-grave environmental footprint of energy systems



Mission

Develop and utilize the LCA framework and methods to support the evaluation of sustainable energy systems both in and outside of the Department of Energy

Vision

A world-class research and analysis team that integrates results which inform and recommend sustainable energy strategy and technology development

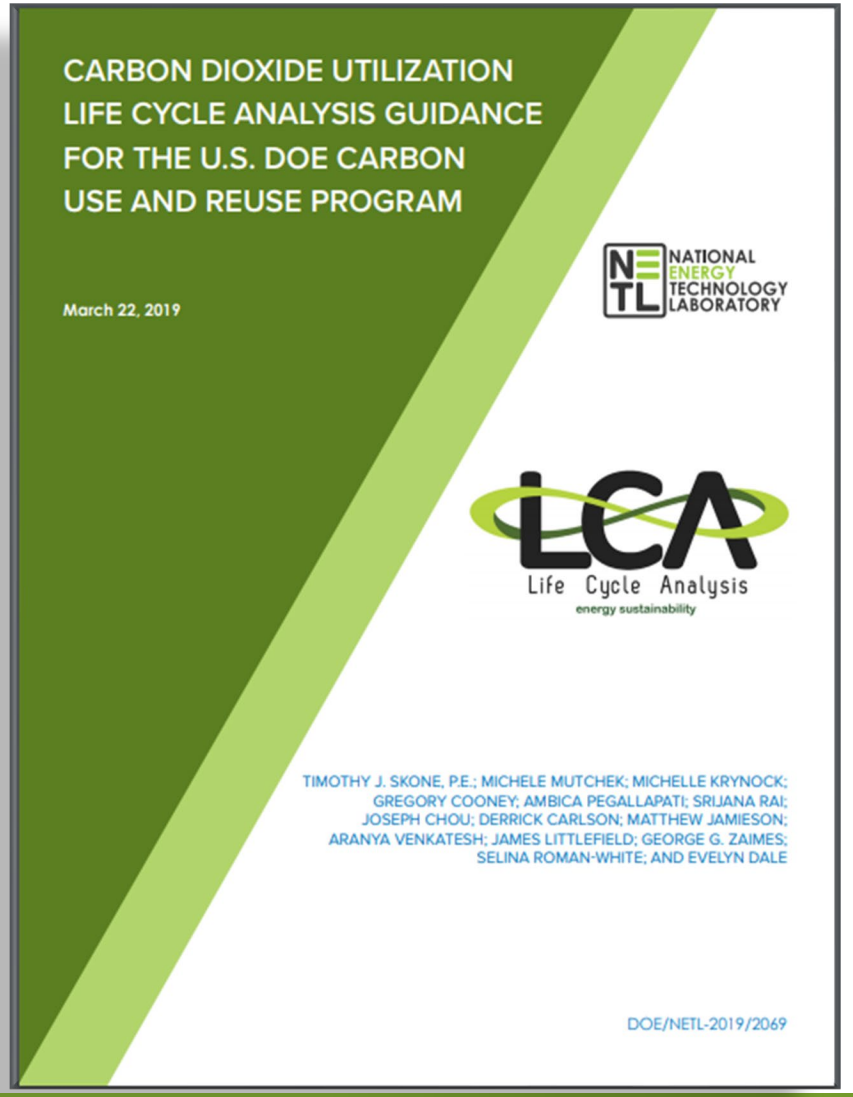
LCA
Life Cycle Analysis
• energy sustainability •

Funding Opportunity Announcements

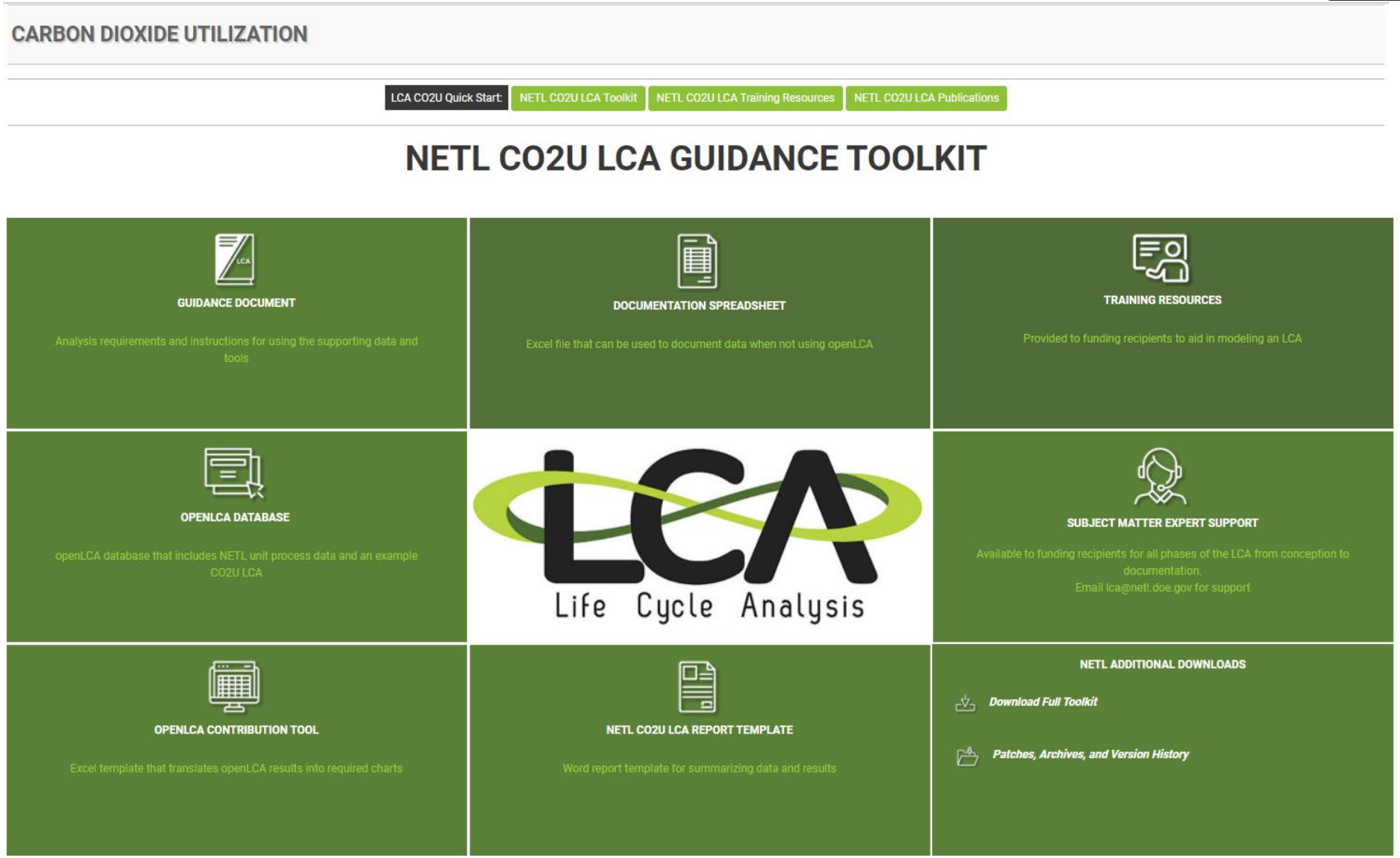
The Funding Opportunity Announcement (FOA), *Novel Concepts of the Utilization of Carbon Dioxide from Utility and Industrial Sources (DE-FOA-0002186)*, states:

> "The Life Cycle Analysis (LCA) required as part of the final deliverables for DE-FOA0002186 **shall follow the analysis documented in the NETL report 'Carbon Dioxide Utilization Life Cycle Analysis Guidance for the U.S. DOE Office of Fossil Energy**,' known as the CO2U LCA Guidance Document, or simply, the guidance document. The guidance document is part of the NETL LCA CO2U Guidance Toolkit, which provides additional support for the creation of the required LCA. The guidance document outlines the analysis requirements and how to use the supporting data and tools."

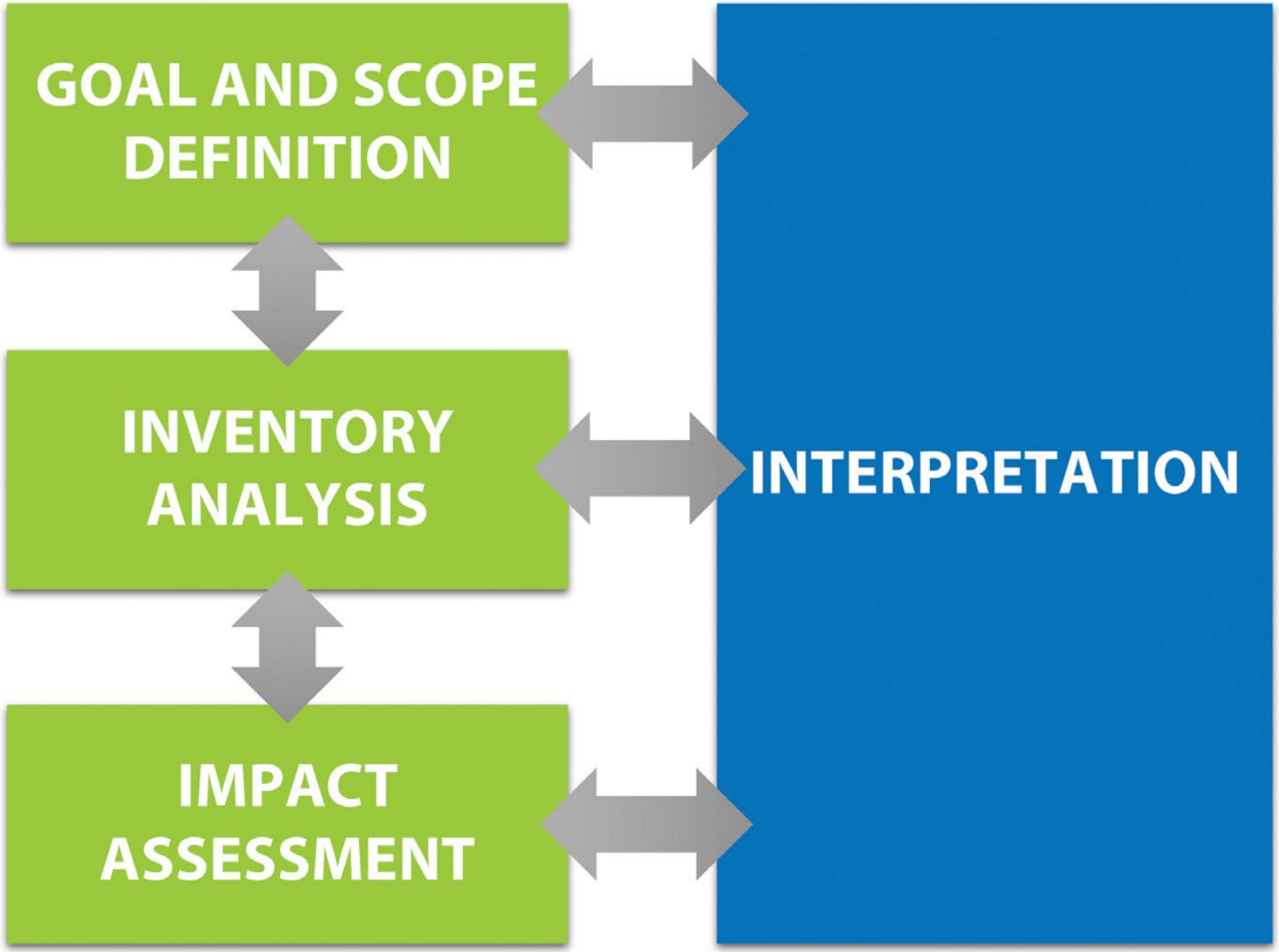
CO2U LCA Guidance Document



netl.doe.gov/LCA/CO2U



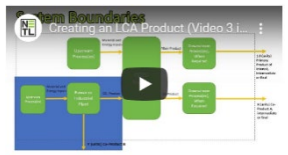
The LCA Development Process



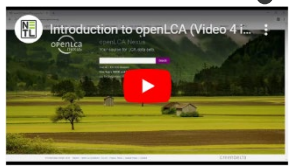
Additional Training Resources

1: Overview

- 2: The Basics of Life Cycle Analysis

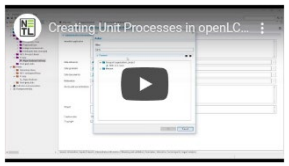


- 3: Creating an LCA Product

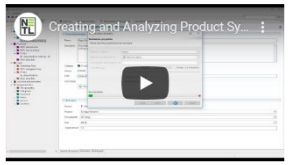


- 4: Introduction to openLCA

- 5: Introduction to NETL CO2U openLCA LCI Database

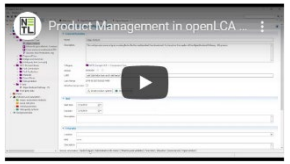


6: Creating Unit Processes

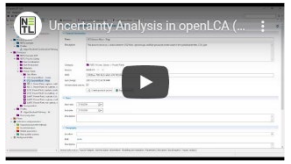


7: Creating and Analyzing Product Systems

8: Comparing Product Systems in a Project



9: Uncertainty Analysis



10: Product Management

11: Exporting and Importing Data

Reach Out With Questions

Email lca@netl.doe.gov with questions any time

Include FOA number, Title of the Project, and name of your federal point of contact

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