



CEDA Global

Updated Q4 2022



CEDA Overview

CEDA Global Overview

The world's most complete, high quality dataset to assign Scope 3 GHG emissions in your carbon footprint or product LCA projects using a spend-based approach.

- Peer-reviewed data that uses over 100 data sources
- Covers 400 unified product categories
- GHG emissions factor for each product in 148 different countries (~60k GHG emissions factors)
- Updated annually based on inflation and CPI data
- Includes expert support for categorization, CDP reporting questions, and more



CEDA is a listed data source on the [Greenhouse Gas Protocol website](#).



VitalMetrics is a [CDP accredited solutions provider](#).

Leverage the Widest Coverage

- **59,200 Unique Emissions Factors:** CEDA gives the most complete, high quality coverage of your Scope 3 and LCA calculations.
- **148 Countries, Covering 95% of Global GDP:** CEDA Global has extensive country coverage so you can get specific on where purchases were made, and assign different emissions factors.
- **400 Product and Industry Categories:** every major industry and product is covered in CEDA to give you 100% Scope 3 coverage.
- **7 Individual GHG Emissions Factors:** CEDA allows you to report the contributions of specific GHGs, as well as a CO₂ equivalent factor.

Get Professional-Grade Support

- **Unlimited Email/Phone Support:** every CEDA license comes with unlimited email and phone support
- **1-Day Response Time:** get your questions answered by our experienced analysts within one business day
- **Verification and Reporting Support:** as you make calculations, build reports, and get verified, our team is available to answer your questions
- **In-Depth Metadata:** CEDA Global includes metadata like NAICS codes, price indexes, currency exchange rates, and GHG uncertainty

Keep the Database Current

- **Annual Inflation and Price Index Updates:** CEDA Global factors need to reflect current prices, so we push out annual updates to account for inflation and deflation within countries and industries
- **Updated Exchange Rates:** our metadata includes exchange rates to normalize the currencies you use in your calculations
- **Ongoing Feature Roadmap:** CEDA Global is the seventh iteration of CEDA, and we're always adding usability features, improving the methodology, and building major features

Client Testimonial

“Knowing that world class science is behind CEDA gives us and our clients ultimate confidence in the methodology and process we require from the enterprise and supply chain footprints provided.”

–Phil Williams, Vice President of Webcor Builders

CEDA Licensing Terms

Please contact [Liston Witherill](#) for details on our licensing terms. We have three main pricing models based on use cases:

- **Consulting Firms:** use CEDA Global on client projects and pay a per client, per project annual fee with a minimum number of client projects per year; additional projects may be added any time, and billed quarterly
- **Software Integrations:** use CEDA Global as a core data set in an internal or customer-facing software tool and pay an annual minimum or scalable fee, usually based upon the number of users, companies, or revenue generated using CEDA
- **Sustainability Teams:** use CEDA Global as the data source for your company's carbon accounting program and pay a fixed annual price for unlimited internal use, and unlimited users

Want More Information?

[CEDA walkthrough video](#)

[CEDA demo data set](#)

[CEDA country list and product/industry list](#)

[White Paper: CEDA Technical Overview](#)

CEDA Background

Current Input-Output Data Situation

There is no international authority that produces global input-output data.

SNA of the UN provides a general guideline within which countries' detailed-level practices may vary, creating interoperability challenges.

National IO tables are scarce.

There are over 200 sovereignties recognized by the United Nations.

But only about 20 countries produce national input-output tables regularly.

More countries/regions are mandated to submit data to OECD (66).

Data resolution and quality are often limited, and differ from country to country.

Most countries or regions distinguish about 30-50 products or sectors.

Quality of underlying statistics varies widely across countries.

How CEDA Derives Its Data: The Structural Reflection Method

Where does CEDA get its data if the data doesn't exist elsewhere?

CEDA utilizes country-specific input-output or GHG emissions data as much as possible. If the data is available and high quality, we use it.

CEDA also uses detailed and high quality data from other nations with comparable size and structure to fill in gaps wherever primary country data is unavailable.

CEDA relies on over 100 publicly available data sources to derive the final database using advanced statistical methods and models.

Main Data Sources

Input Output Tables

- National input output tables
- OECD input output tables

GHG Inventories

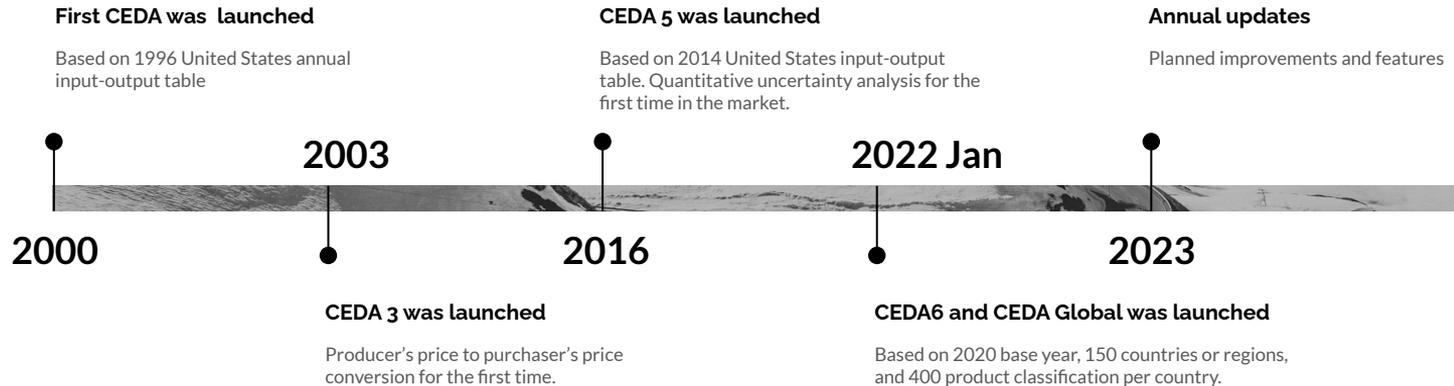
- EDGAR database
- Global Carbon Project database
- OECD database (for 66 countries)
- National greenhouse gas inventories submitted to UNFCCC

UNCOMTRADE International Trade Statistics

CEDA has pioneered GHG emissions factor data for over 20 years with a series of firsts.

- First use of characterization models (2000)
- First peer-reviewed article on the method of data compilation and data sources (2004, 2005)
- First international extension (China, UK, and EU25) (2004)
- First use of multiple allocation methods (2005)
- First use of uncertainty characterization (2010)
- Numerous peer-reviewed papers applying CEDA
- First global emissions factors covering 148 countries (2022)

CEDA's Development Timeline



CEDA's Methodology Is Peer Reviewed

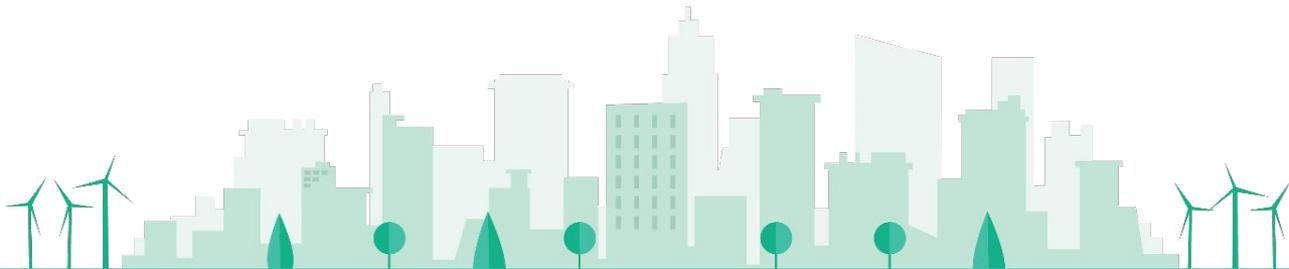
- Suh, S., Lenzen, M., Treloar, G.J., Hondo, H., Horvath, A., Huppes, G., Jolliet, O., Klann, U., Krewitt, W., Moriguchi, Y. and Munksgaard, J., 2004. System boundary selection in life-cycle inventories using hybrid approaches. *Environmental science & technology*, 38(3), pp.657-664.
- Suh, S., 2004. Functions, commodities and environmental impacts in an ecological-economic model. *Ecological Economics*, 48(4), pp.451-467.
- Suh, S., 2005. Developing a sectoral environmental database for input-output analysis: the comprehensive environmental data archive of the US. *Economic Systems Research*, 17(4), pp.449-469.
- Huppes, G., De Koning, A., Suh, S., Heijungs, R., Van Oers, L., Nielsen, P. and Guinée, J.B., 2006. Environmental impacts of consumption in the European Union: High-resolution input-output tables with detailed environmental extensions. *Journal of Industrial Ecology*, 10(3), pp.129-146.
- Suh, S., Weidema, B., Schmidt, J.H. and Heijungs, R., 2010. Generalized make and use framework for allocation in life cycle assessment. *Journal of Industrial Ecology*, 14(2), pp.335-353.
- Suh, S. and Huppes, G., 2005. Methods for life cycle inventory of a product. *Journal of cleaner production*, 13(7), pp.687-697.
- Perkins, J. and Suh, S., 2019. Uncertainty implications of hybrid approach in LCA: precision versus accuracy. *Environmental science & technology*, 53(7), pp.3681-3688.
- Suh, S. and Qin, Y., 2017. Pre-calculated LCIs with uncertainties revisited. *The International Journal of Life Cycle Assessment*, 22(5), pp.827-831

About VitalMetrics

Our Vision and Mission

Vision For every company to reach net zero.

Mission For every company, product, and service to have scientifically-defensible sustainability metrics.



Our Products and Services

GHG Emissions Data

A proprietary database that helps companies calculate and report Scope 3 emissions using spend-based emissions facts, covering 400 product categories in each of 148 countries.

Includes:

CEDA Global (XLSX format)
Implementation Support
Expert Support

GHG Accounting

GHG accounting services to help companies report Scope 1, 2, and 3 emissions.

Services include:

Data Categorization
Climate Action Plan
Climate Risk Assessment
Science Based Targets
Monitoring and Updates

LCA

Life cycle assessment research and consulting projects to make product development and emissions reduction decisions.

Services include:

Comparative LCA
LCA Product Research
Public Research Studies

Dr. Sangwon Suh

Founder & Chief Scientist

VitalMetrics was founded by [Dr. Sangwon Suh](#), a leading industrial ecologist and LCA expert. Dr. Suh has contributed to ISO GHG standards, the GHG Protocol, and International Panel on Climate Change reports. He leads VitalMetrics' content and product development with his pioneering approach to GHG emissions data, calculations, and stepwise approach to sustainability maturity. Dr. Suh has worked with leading organizations like Disney, Kellogg's, Cox Communications, Rivian, and more, and is also a professor at UCSB's Bren School and Leiden University.



A Few of VitalMetrics' Customers



Contact Us

To begin a conversation about working together,
[contact us by filling out the form on our website.](#)

You may also contact:

Liston Witherill
Vice President, Business Development
(818) 968-1934
liston@vitalmetrics.com