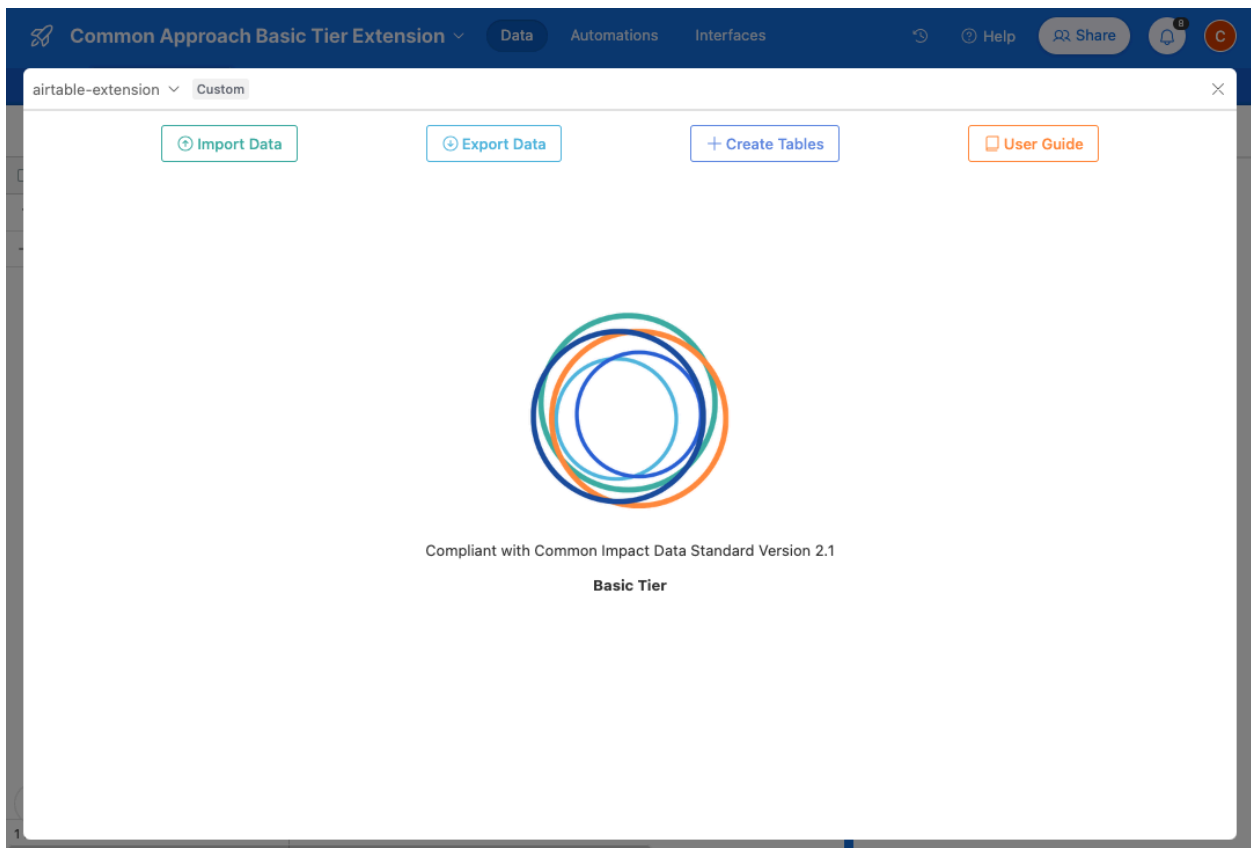# Quick Start Guide

Common Impact Data Standard - Basic Tier Extension for Airtable

1. **Click "Create Tables"**. This creates empty tables in your base for the Basic Tier schema of the Common Impact Data Standard.
2. **Download a sample data file**.
3. **Click "Import Data"** and select the sample data file to see how the fields in the base can be filled, and how tables are linked together with lookup fields.
4. **Click "Export Data"** and provide a name for the exported data file. A JSON-LD file will download to your device.

You can view the exported JSON file contents with a plain-text editor e.g. NotePad, TextEdit.

User Guide

Common Impact Data Standard - Basic Tier Extension for Airtable

What is this extension?

This Airtable Extension is a utility for transforming information about an organization's impact into a JSON-LD file that can be shared and aggregated with similar files from other organizations.

The Extension can:

- Export a JSON-LD file containing the impact data that has been entered into the base.
- Import impact data files created by other Extension users, and other software aligned at the Basic Tier of the Common Impact Data Standard.

This example base is populated with sample data from a fictitious organization, Zero Waste Meal Kits. It demonstrates the tabs (data types) and columns (characteristics) of impact data that the extension can manage. The example base shows how the different data types can be linked together like a database. Users can add the Zero Waste Meal Kits data to their own base by importing this sample data file through the extension.

Who should use this extension?

There are two intended users for this extension:

1. Social Purpose Organizations (SPOs), who will use the extension with Airtable to collect and then export their impact report data in the Common Impact Data Standard JSON-LD file format.
2. Data Aggregators (e.g. funders, investors, networks), who will use the extension to collect and view the contents of multiple JSON-LD files and who may also use the extension to export their own summary JSON-LD files.

For both of these types of users, this extension is presented as a low-cost, low-barrier tool for organizations that need to send or receive impact data in the Common Impact Data Standard JSON-LD format at the Basic Tier of alignment and for whom the other aligned software options for managing JSON-LD imports or exports are not preferred.

This extension is not intended to be an all-in-one impact measurement tool. It should be used in conjunction with other software for managing impact data, e.g. Google Sheets, a CRM product, another Airtable base, another non-aligned database, or other software products to collect and analyze data.

This extension assumes that the user has an existing and fairly well-defined understanding of how their organization's activities result in impact and that the organization's measurement practices meet the minimum standard described by the Common Foundations standard.

This extension provides an import/export utility for working with the JSON-LD file format of the Common Impact Data Standard. The extension is intended to complement the use of other software and is not presented as a standalone alternative for software that:

- Collects, summarizes, or analyzes 'raw' impact data, e.g. a set of survey responses
- Manages data related to other Classes or Properties in the Common Impact Data Standard beyond what is in the Basic Tier, e.g. Stakeholders, Impact Risk, Impact Model, and so on.
- Allows for more complicated causal connections, e.g. between Outcomes and related or dependent Outcomes.
- Produces visualizations, live dashboards, or other sophisticated analyses.
- Manages large-scale, complex, or automated data imports or integrations; the extension offers the JSON-LD import function and otherwise offers only the tools and methods that are built into Airtable by default.
- Offers consulting support to accompany the use of the product. The Airtable extension is offered on an "as-is" basis.

Where any of the above-noted features, functionality, or support are required for an organization and/or its intended use of the Common Impact Data Standard, using another aligned software option is recommended.

How does the extension work

Airtable license required

A Team tier license (or higher) is required to use Airtable extensions. If you use Common Approach's referral link to go to the Airtable site to create a Team account, Common Approach will receive a $10 credit from Airtable. These credits help to support the ongoing development of Common Approach's impact measurement standards.

As of May 2024, the Team account costs $24/seat/month USD, or $20/month billed annually. Nonprofit and educational organizations may apply to Airtable for a nonprofit discount to receive a license price of $12/month USD.

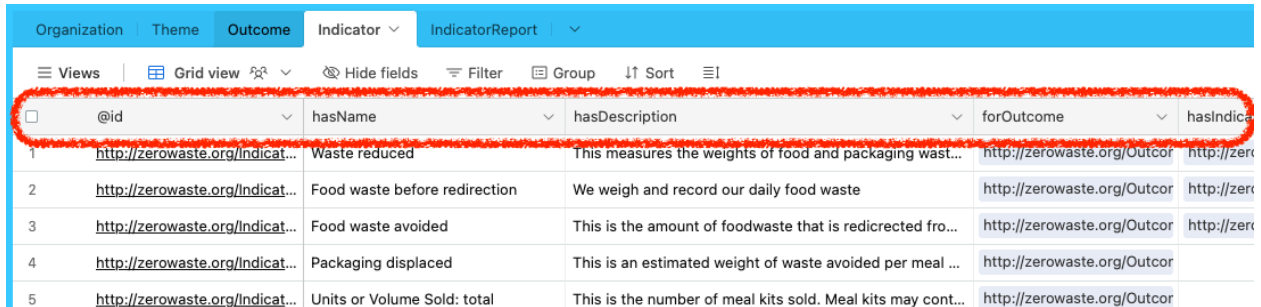# Using the extension functions
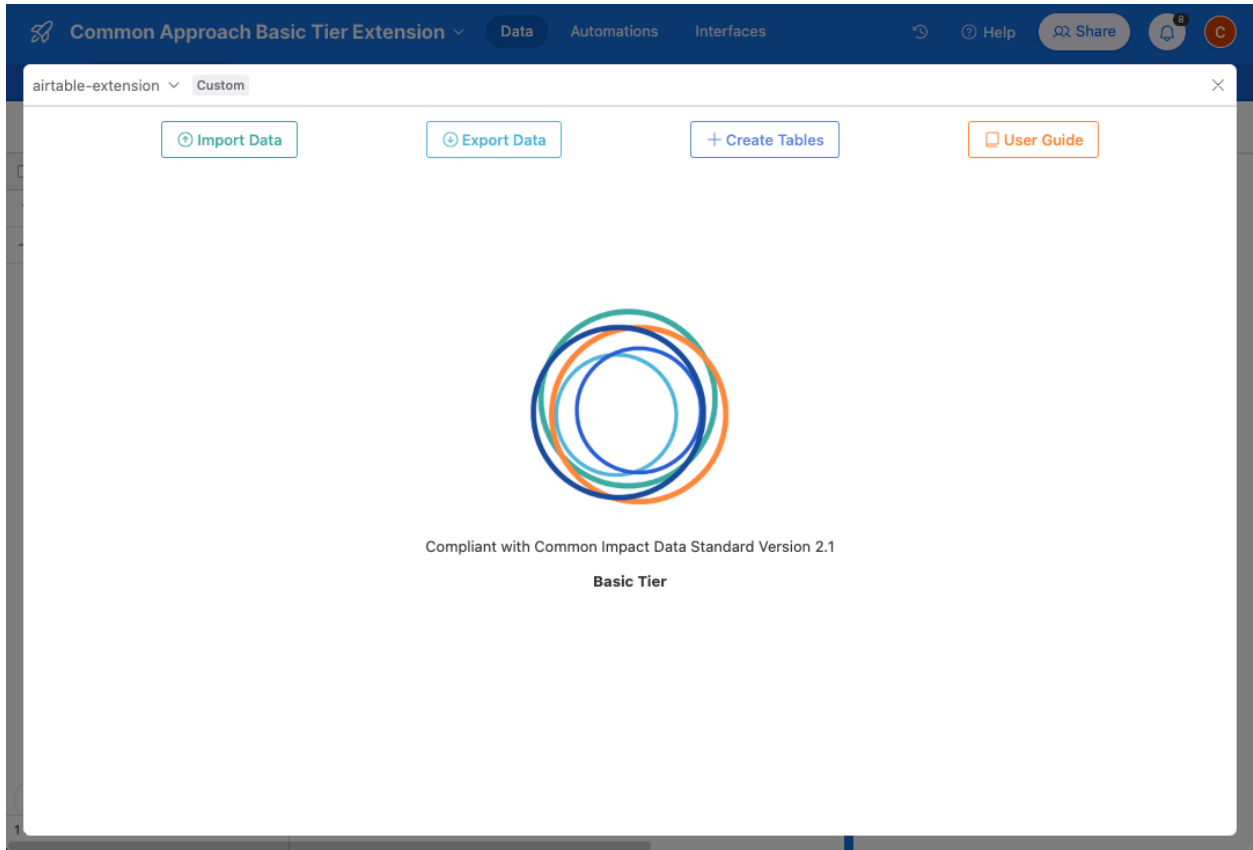
Create Tables

Clicking on the "Create Tables" button creates an empty set of tables in an Airtable base.

The extension creates one table for each Class in the Basic Tier of the Common Impact Data Standard: Organization, Theme, Outcome, Indicator, and IndicatorReport.

Users should not change the names of the tables and columns created by the extension. Doing so may cause imports or exports to fail or produce unexpected results.
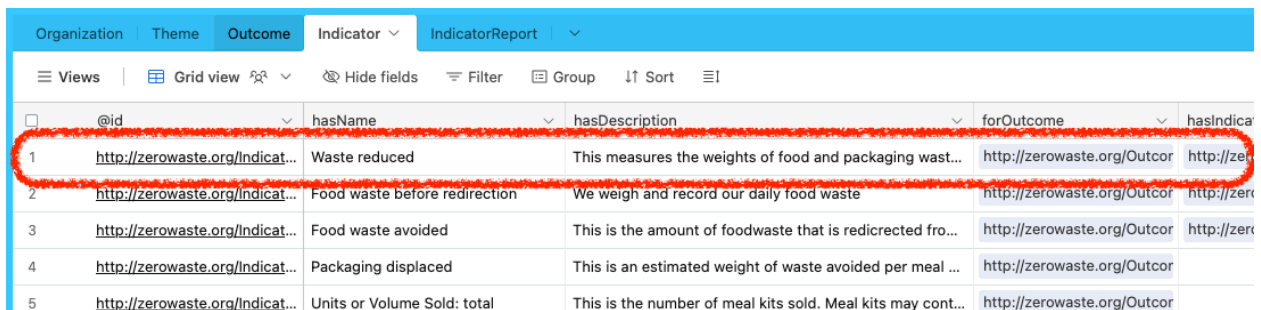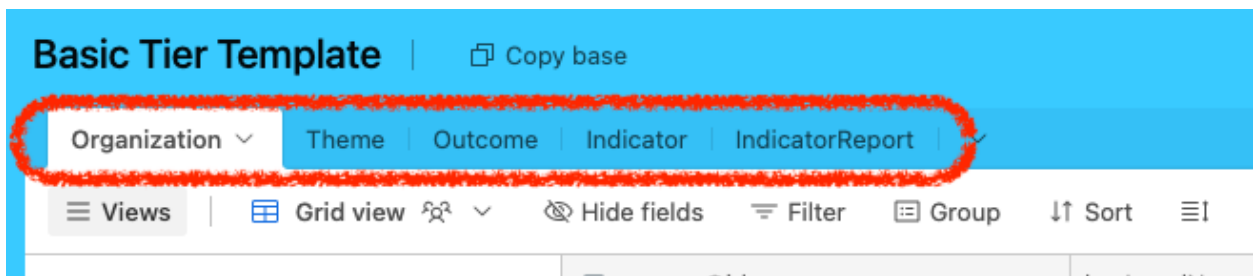
Each column in a tab represents a Property of that Class, e.g. Indicators have a unique identifier (@id), a name (hasName), a description (hasDescription), links to Outcomes (forOutcome), and so on, identified on each column heading. Full descriptions of classes and properties are below.

Each row in a tab represents an instance of that Class; e.g. the Indicators tab will include one Indicator per row. An Airtable base can hold many instances of each Class. Every instance must have its own unique identifier; this is also described in more detail below.

Import Data

Press the "Import data" button to import data from a Common Impact Data Standard JSON-LD source.

Select a file from the file browser. To test this function, users may download a sample data file from https://ontology.commonapproach.org/examples/CIDSBasicZerokitsTestData-SHARED.json. The contents of this file can be viewed with any plain-text editor e.g. NotePad, TextEdit.

Upon successful import, the message appears "Success! Data imported successfully".

The imported data appears in tables created by the extension.

Export Data

Press the "Export Data" button. Enter a name for the file (potentially the name of the Organization or Program represented). The JSON-LD file is downloaded to your local computer.

Bases with additional tables and columns

Users may add unlimited other Classes (tables) and Properties (columns) to their Airtable base, but data from these additional tabs and columns will not be included in JSON-LD files exported by the extension.

Warning Messages

Users should not change the names of the tables and columns that are created by the extension. This may cause imports or exports to fail or produce unexpected results.

Warning messages will not prevent the user from importing or exporting a file. They simply notify the user about the condition of the data.

The extension will provide warnings when:

- There are missing links between objects e.g.:
    - Indicator not linked to Organization, or vice versa
    - Indicator not linked to Outcome, or vice versa
    - Outcome not linked to Organization, or vice versa
    - Outcome not linked to Theme, or vice versa
    - Indicator not linked to IndicatorReport, or vice versa
- There are empty data fields in objects e.g. with no Descriptions or other empty text fields
- There are duplicate Name fields within one Object type (e.g. two indicators with the same hasName value)
- The base contains data other than the tables and columns created by the extension.

Failure Messages

Users should not change the names of the tables and columns that are created by the extension. This may cause imports or exports to fail or produce unexpected results.

The extension will fail to import or export data, and an error message will be provided under the following conditions:

- Duplicate URI (@id) fields on any two rows in any Object (tab) in the file or base
- Column names have been changed from starting values (may result in failure, or in new/duplicate columns being created)

Entering your own impact data to Airtable

This section describes how to use each Class (table) and Property (column) created by the extension and whether there are any particular formatting or syntax rules to follow.

<div style="border:2px solid black; background-color:yellow; padding:10px;">

Lookup fields update automatically

The 🔗 emoji in the lists below identifies data fields (columns) that link between tables. These fields contain Lookup values that update automatically in Airtable. For example: when an Indicator is linked to an Outcome by editing the "hasIndicator" field on the Outcome tab, a link automatically appears in the "forOutcome" field of the related record on the Indicator tab.

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Methods for entering data

This guide assumes that users will decide for themselves how best to enter data into their base and maintain it, whether that is by direct entry, copy/paste, CSV upload, or other integration options that are provided by Airtable. Common Approach does not offer any specific support or guidance for how to enter data other than the guidelines below about the required formats for certain data fields.

Common Impact Data Standard: Tiers of alignment

This extension creates all the classes and properties associated with the Basic Tier of alignment to the Common Impact Data Standard, as well as some additional properties for some classes (e.g. forOrganization in the Indicator and Outcome classes) that make bases a little easier to use. See the alignment checklist for more information about the classes and properties included at higher tiers of alignment.

Basic Tier classes and properties

@id: the unique identifier

Every row in every tab created by the extension starts with a column labelled "@id". Each entry in the @id column holds a Unique Resource Identifier (URI) for the set of values in that row. In the language of the Common Data Standard, it is a unique identifier for an instance of a Class.

Every @id value must be globally unique, with no exceptions allowed. This means it should be unique not just within one report or document but across every use of the @id value for every report, for every organization, everywhere.

This can be achieved by basing the @id value on an organization's registered domain name, an existing global system of unique identifiers.

Writing your own unique @id tags

The basic naming convention for @id tags is four elements that look a bit like a URL:

"abc://" / "Organization domain name" / "object name" / "instance name"

Example 1: "Reduce GHG" is an Outcome of Zero Waste Meal Kits programs. This outcome is defined in one row of the Outcomes tab. Its unique identifier is http://zerokits.org/Outcome/ReduceGhG.

Optionally, organizations with multiple programs or locations may include a program identifier after the organization URL to keep reporting entities with separate sets of @id values:

"http://Organization domain name" / "optional program name" / "object name" / "instance name"

Example 2: "Increased confidence" is an Outcome of a teacher training program that reports separately from other programs at Example Foundation. Its unique identifier is: http://examplefoundation.org/TeacherTraining/Outcome/IncreasedConfidence

Syntax requirements for @id values:

- Must start with lowercase letters followed by "://" characters. "http://" "https://" "esg://" and "data://" are all valid examples for the first section of the id value
- The domain name part of the value (e.g. the 'zerokits.org' part of http://zerokits.org/) may only use lowercase letters [a-z], uppercase letters [A-Z], numbers [0-9], and the dash character [-].
- The rest of the URI path (e.g. after ".org/" may only use lowercase letters [a-z], uppercase letters [A-Z], numbers [0-9], the dash character [-], the underscore [_], and may use the slash [/] to separate the elements in the path.

Recommended practice for @id values:

- Does not strictly have to use an organization's actual registered domain name, but this is encouraged so that values are globally unique.
- Does not have to resolve to a real, live web page if entered into a web browser. Whether it does or not has no bearing on how the @id tag is interpreted by software that uses the Common Impact Data Standard.

For more information: Wikipedia provides a high-level overview of URIs, and W3C provides a more detailed technical description.

Unique identifiers for Themes from existing standards

In some cases, Themes may already be defined by an existing published standard.

For example, the UNSDGs are published with their own unique identifiers; on the https://metadata.un.org site, we can see that for UNSDG Goal 3 (Good health and well-being), the @id value is http://metadata.un.org/sdg/3. Because this is a unique identifier (URI) and not a "real URL", it does not need to resolve to a live website page (and it does not).

Other published libraries of impact themes include:

- IRIS+ from Global Impact Investing Network (GIIN)
- Global Reporting Initiative (GRI)

Other standards may also include their own URIs for Outcomes and Indicators, but the use of these URIs is only supported in the Essential Tier of the Common Impact Data Standard—the required Classes and Properties are not part of the Basic Tier.

Organization

Reminder: The 🔗 emoji denotes a lookup field that automatically updates to show links between records.

@id: see @id: the unique identifier at the start of this section

hasLegalName: The name of the entity that is the subject of the impact report. Does not have to be the legal name of the parent organization for a report for a single program, nor the name of only one member of a report for a multi-organization collaboration.

🔗 hasIndicator: This field automatically populates the @id values for Indicators associated with the Organization, as specified in the @id column on the Indicators tab.

🔗 hasOutcome: This field automatically populates the @id values for Outcomes associated with the Organization, as specified in the @id column on the Outcomes tab.

Theme

@id: see @id: the unique identifier at the start of this section

hasName: Enter a name for the theme e.g. "SDG 11" or "Green Economy"

🔗 hasOutcome: This field automatically populates the @id values for Outcomes associated with the Theme, as specified in the @id column on the Outcomes tab.

Outcome

@id: see @id: the unique identifier at the start of this section

hasName: Enter a name for the Outcome.

hasDescription: Enter a description of the Outcome.

🔗 forTheme: This field presents a "pick list" that allows the user to choose one or more Themes that have been entered on the Themes tab.

🔗 hasIndicator: This field presents a "pick list" that allows the user to choose one or more Indicators that have been entered on the Indicators tab. It also automatically populates with indicators when this outcome has been selected in the forOutcome field of a record on the Indicators tab.

🔗 forOrganization: This field presents a "pick list" that allows the user to choose one or more Organizations that have been entered on the Organizations tab.

Indicator

@id: see @id: the unique identifier at the start of this section

hasName: Enter a name for the Indicator.

hasDescription: Enter a description of the Indicator. Consider including the units of measure for the related indicator report values.

🔗 forOutcome: This field presents a "pick list" that allows the user to choose one or more Outcomes that have been entered on the Outcomes tab. It also automatically populates with Outcomes when this Indicator has been selected in the hasIndicator field of a record on the Outcomes tab.

🔗 hasIndicatorReport: This field automatically populates with IndicatorReports when this Indicator has been selected in the forIndicator field of a record on the IndicatorReports tab.

🔗 forOrganization: This field presents a "pick list" that allows the user to choose one or more Organizations that have been entered on the Organizations tab.

IndicatorReport

@id: see @id: the unique identifier at the start of this section

hasName: Enter a name for the IndicatorReport. Consider including the timeframe of the report in the name.

i72:value: Enter a numerical value or text value.

I72:unit_of_measure: enter a text value, e.g. "people per day", "kilograms", "weeks from program start", "Canadian dollars", "rating from 1-5", "score out of 60".

hasComment: Enter a comment related to the IndicatorReport. Consider including relevant information like collection location, measurement method, intended analysis, baselines, more detail for units of measure, or other useful context.

🔗 forIndicator: This field presents a "pick list" that allows the user to choose one or more Indicators that have been entered on the Indicators tab. It also automatically populates with Indicators if this IndicatorReport has been selected in the hasIndicatorReport field of a record on the Indicators tab.