



Transport Decarbonisation Index (TDI) User Guide

December 2024

TDI User Guide

The TDI User Guide is a step-by-step manual on how to use the TDI Spreadsheet Toolkit, the Excel-based diagnostic toolkit for the Transport Decarbonisation Index. The toolkit was developed to enable users to conduct a self-assessment of their countries' transport system, assess progress and barriers, and enable evidence-based, time-sensitive, and targeted decisions on emissions reduction towards surface transport decarbonisation.

The main objective of the TDI User Guide is to support policy makers and practitioners on how to interpret, update and make assessments using the TDI as a diagnostic tool and to support informed decision making.

About the TDI Spreadsheet Toolkit

The TDI Spreadsheet Toolkit is an Excel file that can be downloaded from the [HVT website](#) and used as a local file. Once downloaded, the toolkit will not require an internet connection, and because it is not resource heavy it should run on most computers.

The Excel file format allows users to input transport data to specific sheets and to then receive a score for the different dimensions of the TDI. The TDI Spreadsheet Toolkit was developed with the following objectives:

- to assist low- and middle-income countries (LMICs) to apply the TDI to their surface transport systems;
- to allow a country to understand its preparedness and readiness towards achieving net zero greenhouse gas emissions by 2050 in the transport sector;
- to provide a score that might enable comparison with other countries and tracking of long-term progress through multiple applications of the TDI over the years.

The spreadsheet toolkit has several features that will help a user to navigate and quickly apply the toolkit. The key features are an overview of indicators and their sources, automated scoring, resources for policy recommendations and visualisations of the TDI scores.

User Guide

The spreadsheet toolkit applies the TDI through a six-step process.

Step 1: Get familiar with the TDI

Read the **Overview**, the **Toolkit introduction** (*Sheet 1.a - Toolkit introduction*) and the **User instructions** (*Sheet 1.b - User instructions*) in the toolkit to get familiar with the TDI project and the toolkit's purpose.

The **Overview** provides an overview of the contents of the workbook, a hyperlink and a brief description of the content of each worksheet. It also records the toolkit version number and offers a brief description of the

TDI project, including the project partners. Please double-check that the most recent version of the spreadsheet toolkit is being used. The **Toolkit introduction** provides further background information on the TDI. The **User instructions**, which are a shorter version of this user guide, provide step-by-step instructions on applying the spreadsheet toolkit.

Step 2: Understand the indicators

To understand the data requirements of the TDI, look carefully at the indicators under each dimension of the index in the sheet titled **1.c - Indicator description**. This includes the indicator names and their respective metrics and units, their relevance to the TDI, and, where available, potential public third-party data sources such as the Asian Transport Outlook (ATO), the Emissions Database for Global Atmospheric Research (EDGAR), the World Bank, etc.

Step 3: Prepare your data

Based on the list of indicators and on the respective metrics and units in the sheet **1.c - Indicator description**, prepare the data for your country or area of jurisdiction. Although not every indicator in every dimension needs to be covered, the general principle is that more data guarantees better results. To ensure the correctness of the TDI, please make sure to use the same units as indicated in the sheets **1.c - Indicator description** and **3 - Inputs**. If you are missing any data for the country you want to assess, please explore the third-party data sources for potential data.

Step 4: Input your data

Input the prepared data into column B of the sheet **3 - Input**. Make sure to add only numeric values and no letters or units. Copying and pasting values from other documents might cause errors. Please also ensure that you respect the units and format (number or percentage) indicated in column C of the sheet **3 - Input**. Some indicators work with drop-down lists, so you can simply select the corresponding category relevant for your data. An illustration of the layout is shown below.

A	B	C
DEMOGRAPHICS		
Specific Indicator	Value	Metrics and unit
National Population		people (total number of people living in country)
Urban population percent		Percentage share of urban population in regards to total population
GDP PPP		Billion Current in international USD Purchasing Power Parities
PASSENGER TRANSPORT AND MOBILITY SYSTEM		
Specific Indicator	Value	Metrics and unit
Share of collective transport in total passenger-kilometres		33% Percentage share of passenger transport on national level conducted via collective transport (rail, bus, public transport) and active mobility (cycling, walking). it may only include large urban areas, based on data availability.
Public transport (bus, rail) system extent		1153,7 Total kilometres of public transport system across all collective systems (urban rail, bus, also informal transport)
Percent near frequent public transport		8,53% Percentage of residents who live within 500 metres of public transport
Percentage near protected bikeways		0,27% Percentage of residents who live within 500 metres of a protected bikeway, in major cities
Walkability score		34,95% Percent near services (walkability)
Infrastructure investment		9271,64 Investment in transit (\$ millions)
Rural transportation access		69,20% RAI PST (PS + tertiary roads)

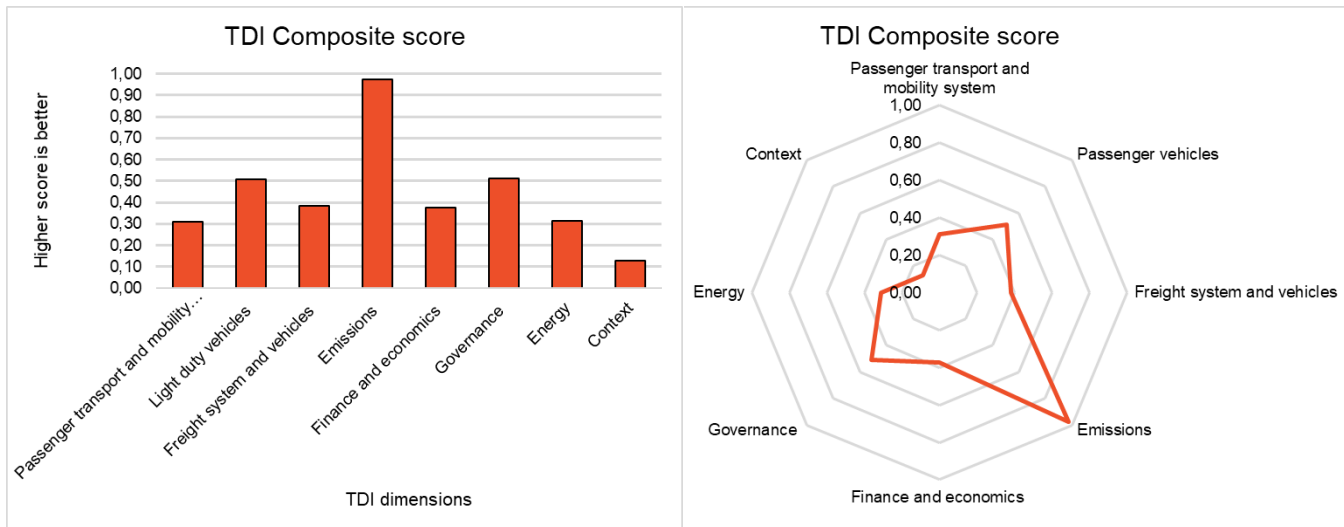
Step 5: Read the results

Check the results in the sheet **2 - TDI Score**. The toolkit provides a TDI score for each dimension, as well as the scores for each of the indicators under a particular dimension, as illustrated below.

Dimension	Dimension score
Passenger transport and mobility system	0,31
Light duty vehicles	0,51
Freight system and vehicles	0,38
Emissions	0,98
Finance and economics	0,38
Governance	0,51
Energy	0,31
Context	0,13

1. Passenger transport and mobility system	
Indicator	Individual score
1.a Share of collective transport in total passenger-kilometres	0,60
1.b Public transport (bus, rail) system extent	0,11
1.c Percent near frequent public transport	0,25
1.d Percentage near protected bikeways	0,00
1.e Walkability score	0,50
1.f Infrastructure investment	0,05
1.g Rural transport access	0,66

The dimension scores are then visualised, both as bar charts and as radial diagrams.



The sheet **2 - TDI Score** also features explanations of how to interpret each score. In general, a higher score reflects a better performance for the indicators under this dimension. The highest potential score is 1, the lowest score is 0. Any data gaps in sheet **3 - Input** result in empty cells for the indicator scores. However, dimension scores will be provided as long as data for any indicator within a dimension are provided. The two lowest-scoring dimensions and their associated policy recommendations are shown.

Step 6: Explore the policy recommendations

After understanding the TDI results, take a look at the provided illustrative, non-prescriptive advice on policy actions. In the sheet **1.d - Policy guidance**, material in support of these actions is listed.