



# How to use the site (Ver.3.1)

Global Sustainability Group – [Updated: 2025/1/09]

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## Notice（ご注意）

当該算定結果は、一定の条件下でのシミュレーション数値です。さらに詳しい輸送条件を設定しての算定が必要な場合、弊社営業担当者にお問い合わせください。

また、Origin, Transit point, destinationの各地での発生するCO2排出量は当該算定結果には含まれていません。輸送時のCO2排出量のみを対象とした算定結果が示されますので、ご注意ください。

“The calculation results are simulation figures under certain conditions. If you need calculations with more detailed transportation conditions, please contact our sales representative.”

Any CO2 emissions generated at “Origin”, “Transit point”, and “Destination” are not included in the calculation results. Only CO2 emissions during transportation are included in the calculation results.

# How to operate for GHG emissions calculation

## Basic overall workflow

### UIC code list

Railway station	UIC country_code	UIC_Code
1 DILLINGEN(SAARYDB)	fr	87-97012
2 ROOSENDAAL (NL)	nl	87-96575
3 ESSEN (BELGIQUE)	nl	87-96573
4 VLISSINGEN SLOEHAVEN EUROAS(NL)	nl	87-96572
5 MUIZEN (BELGIQUE)	be	87-96571
6 ANTWERPEN W A GAS TERMINAL(BE)	be	87-96570
7 VLISSINGEN SLOEHAVEN (NL)	nl	87-96567
8 VLAARDINGEN CENTRUM	nl	87-96566
9 ROTTERDAM WAALHAVEN ZUID (NL)	nl	87-96565
10 TERNEUZEN (NL)	nl	87-96551
11 BEVERWIJK (NL)	nl	87-96550
12 RONET (BE)	be	87-96548
13 ROTTERDAM MAASVLAKTE (NL)	nl	87-96538
14 ROTTERDAM NOORD G	nl	87-96542
15 BERGEN OP ZOOM (NL)	nl	87-96545
16 GENK ZUID LINK FORD	be	87-96529
17 ZEEBRUGGE (BELGIQUE)	be	87-96523
18 NINOVE (BELGIQUE)	be	87-96521

Download

### Cargo gross weight or number of ocean containers

ATA Code(3-letter code): i.e. NYC, AMS, SIN, SHA, TYO

UNLOCODE(5-letter code): i.e. USNYC, NLAMS, SGSIN, CNSHA, JPTYO

Postal Code (format varies by country): i.e. US→10001, NL→1012WX, SG→049483, CN→200120, JP→100-0001

UIC Code: Please click [here](#) to search for UIC code using the railroad station name.

### Origin

Air  Ocean  Road  Rail

### Final Destination

Reset  Calculate

Click on the "transit point button" to expand the screen, if necessary.

Optional (recommended)

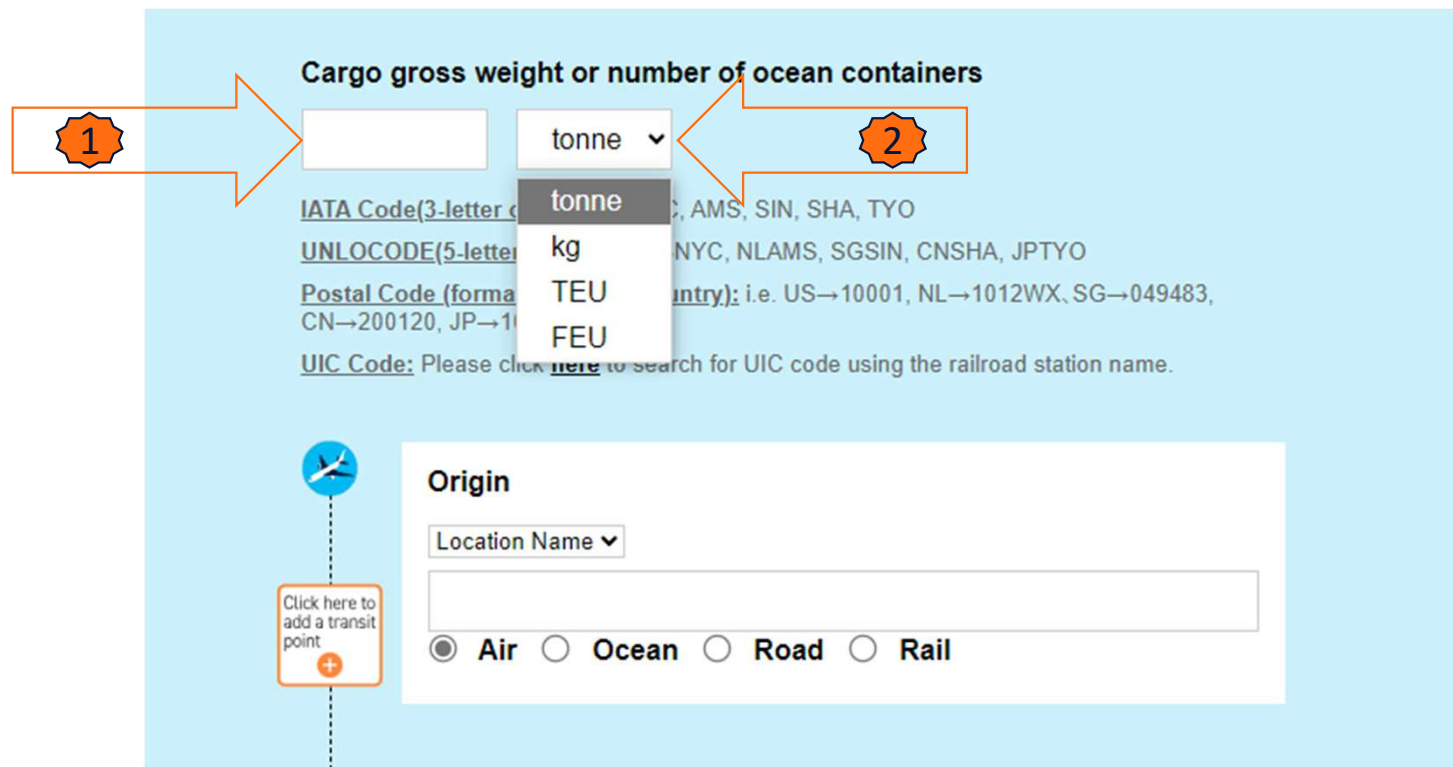
### Basic workflow

- 1 - Input figures of weight.
- 2 - Select weight unit.
- 3 - Select location type.
- 4 - Input location information & select appropriate location
- 5 - Select transport mode.
- 6 - Push button for calculation
- 7 - Push button to reset input data for another calculation.

# How to operate for GHG emissions calculation

## Cargo weight & weight unit

- CO2eq emissions as well as Co2 emissions can be calculated by the following steps.
  - a. Input actual gross weight, or number of containers for TEU/FEU **1**
  - b. Select weight unit **2**

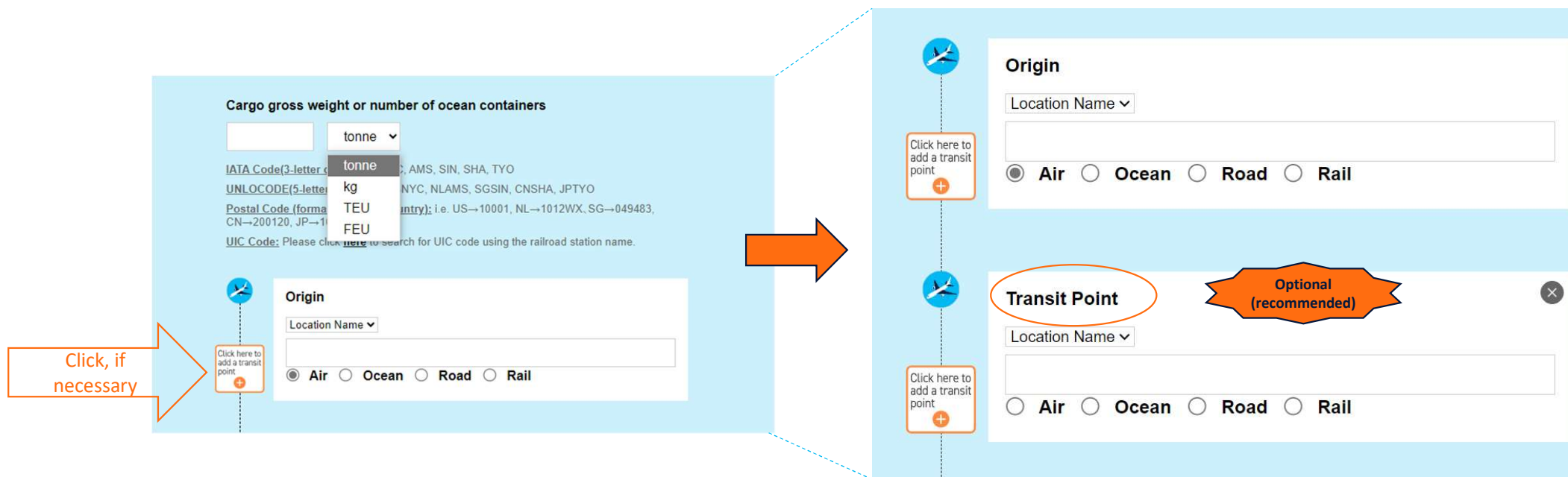


# How to operate for GHG emissions calculation

## Transit point – Optional step

- If there is a transit point within the transportation section, it is **recommended** to press the plus button to calculate each transportation section separately.

The screen for entering transit point information is displayed.



Click, if necessary

Click here to add a transit point

Origin

Location Name ▾

Air  Ocean  Road  Rail

Click here to add a transit point

Transit Point

Optional (recommended)

Location Name ▾

Air  Ocean  Road  Rail

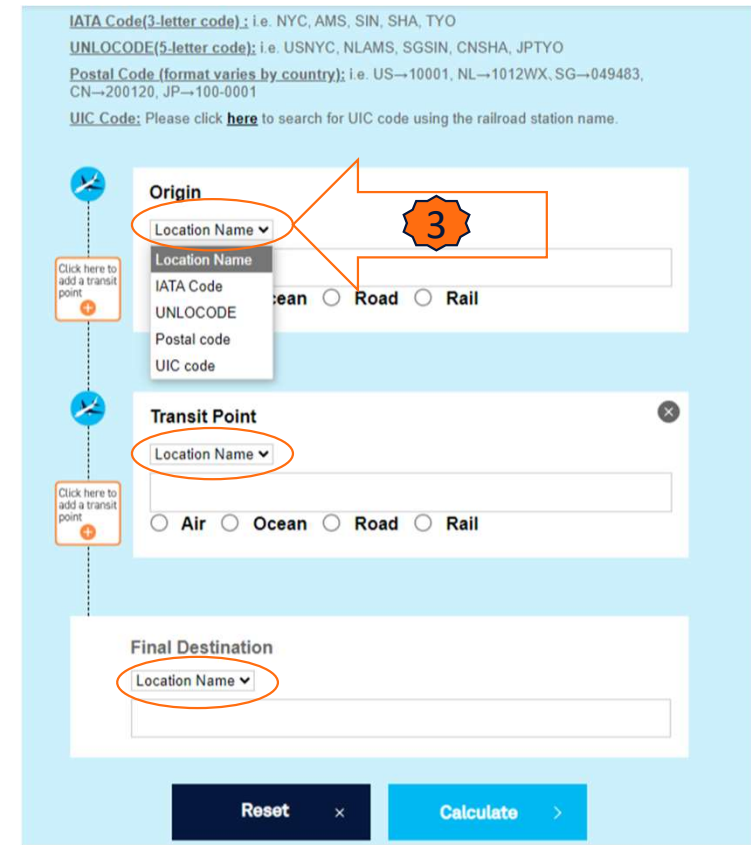
If there are additional transit point, please repeat the same process. It is possible to add up to three transit points.

To cancel the entry, please press the button in the tope right corner.

# How to operate for GHG emissions calculation

## Location type selection

- ❑ Select the type of location at the screen of “Origin”, “Transit point” and “Final destination” .
  - It is recommended that the location type be selected according to the mode of transport.
  - Of course, separate location types can be selected for each location selection and still be calculated.
  
- ❑ Location type options:
  1. **Location Name** : City name
  2. **IATA Code** : IATA airport code, suitable for air transport
  3. **UNLOCDE** : Five characters code, suitable for ocean transport (The code consists of five characters: the first two represent the country code, and the remaining three indicate a specific location within that country.)
  4. **Postal Code** : Zip-code, suitable for truck transport
  5. **UIC Code** : Railway station code (defined by International Union Railways), suitable for railways transport.



IATA Code(3-letter code): i.e. NYC, AMS, SIN, SHA, TYO  
UNLOCODE(5-letter code): i.e. USNYC, NLAMS, SGSIN, CNSHA, JPTYO  
Postal Code (format varies by country): i.e. US→10001, NL→1012WX, SG→049483, CN→200120, JP→100-0001  
UIC Code: Please click [here](#) to search for UIC code using the railroad station name.

**Origin**

Location Name ▾

Location Name  
IATA Code  
UNLOCODE  
Postal code  
UIC code

Ocean  Road  Rail

**Transit Point**

Location Name ▾

Air  Ocean  Road  Rail

**Final Destination**

Location Name ▾

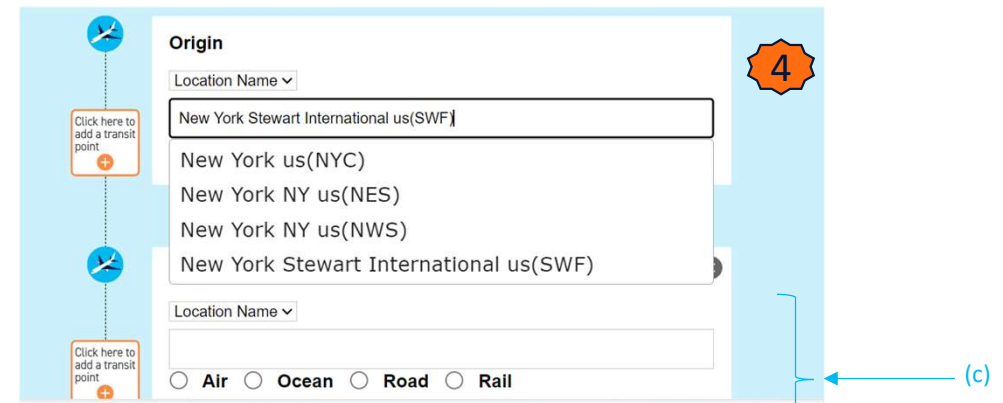
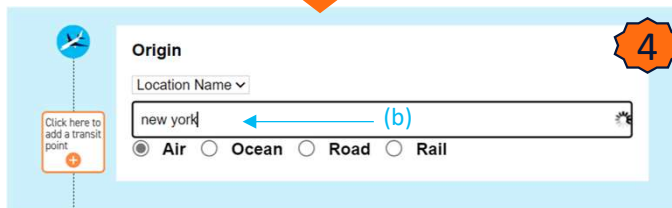
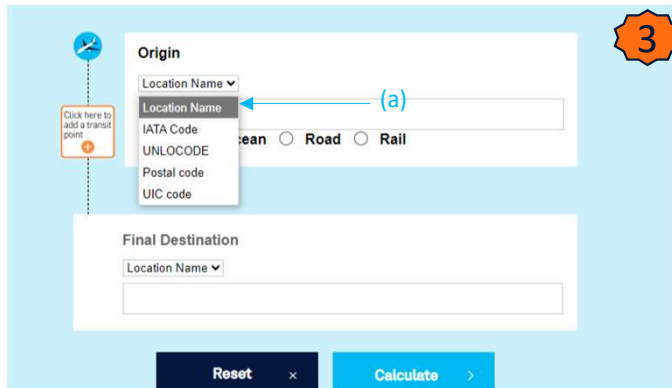
Reset × Calculate >

# How to operate for GHG emissions calculation

If "location name" is selected for the location type

- Option: Location Name

- a. Select "Location Name" for origin and final destination. If necessary, do the same for transit point. 3
- b. Enter city name in the box to select most suitable location from displayed locations. 4
- c. Select the appropriate location name.



Note that the same location name exists in different countries



# How to calculate Co2eq & CO2 emissions

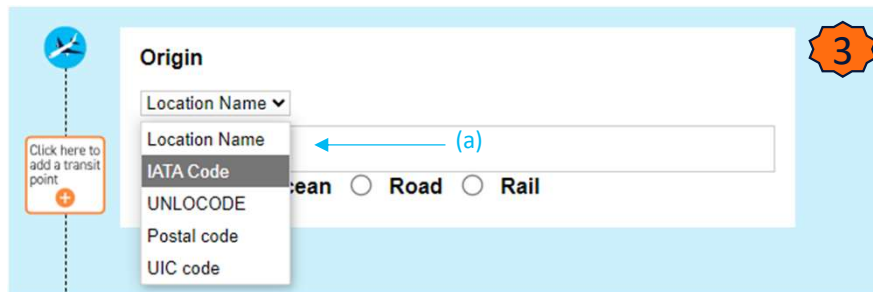
If "IATA code" is selected for the location type

- Option: IATA code: IATA airport code

- a. Select "IATA Code" for origin and final destination. If necessary do the same for transit point.
- b. Enter the 3-letter alphabet as the IATA airport code to select the name of the airport displayed.
  - IATA airport code is available at IATA website.
- c. Select the appropriate location.

3

4



Origin

Location Name

Location Name

IATA Code

UNLOCODE

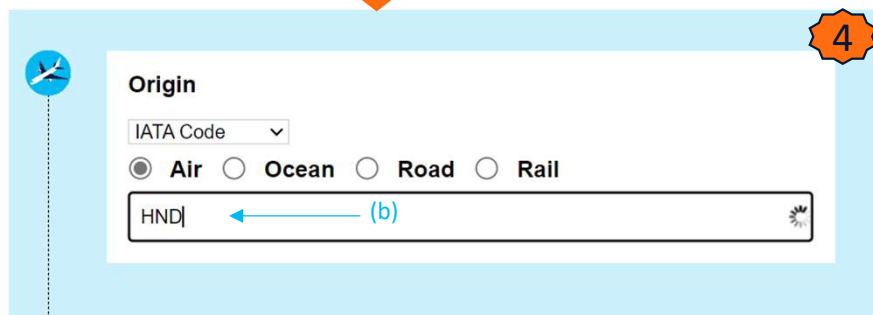
Postal code

UIC code

Air  Ocean  Road  Rail

(a)

The location code is suitable for calculating CO2 emissions from air transportation



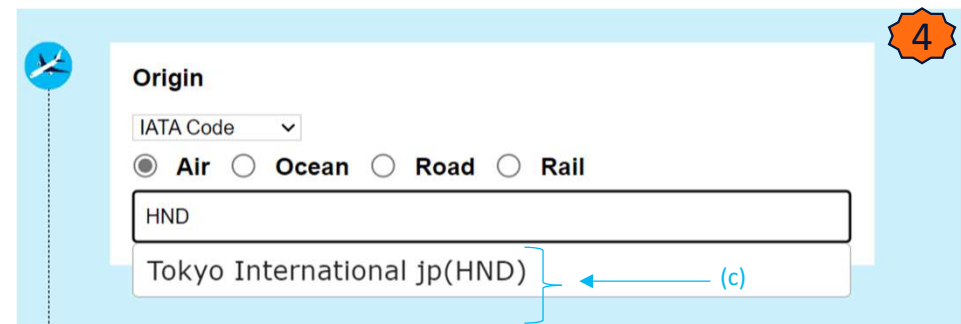
Origin

IATA Code

Air  Ocean  Road  Rail

HND

(b)



Origin

IATA Code

Air  Ocean  Road  Rail

HND

Tokyo International jp(HND)

(c)

# How to calculate Co2eq & CO2 emissions

If "UNLOCODE" is selected for the location type

- Option: UNLOCODE

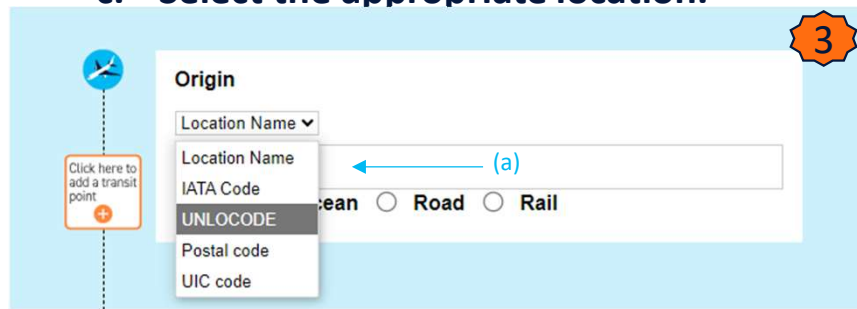
- a. Select "UNLOCODE"

- b. Enter the 5-letter alphabet as UNLOCODE and select the name of the location displayed.

- UNLOCODE of each country can be found in website. Search by LOCODE.

- c. Select the appropriate location.

3  
4



Origin

Location Name ▾

Location Name

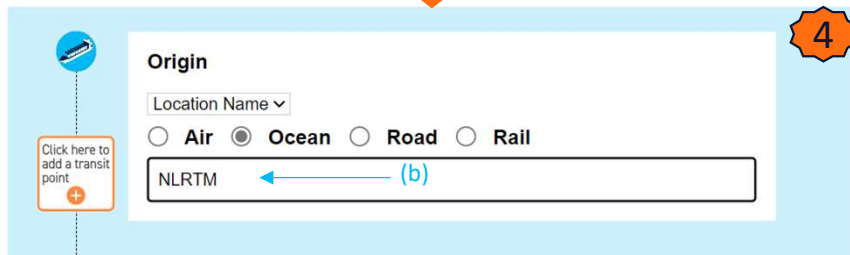
Air  Ocean  Road  Rail

UNLOCODE

Postal code

UIC code

The location code is suitable for calculating CO2 emissions from Ocean transportation.

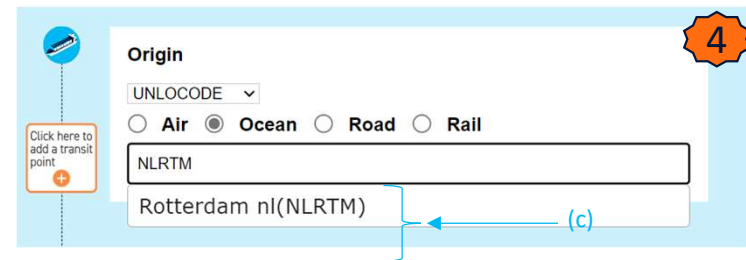


Origin

Location Name ▾

Air  Ocean  Road  Rail

NLRTM



Origin

UNLOCODE ▾

Air  Ocean  Road  Rail

NLRTM

Rotterdam nl(NLRTM)

# How to calculate Co2eq & CO2 emissions

If "Postal code" is selected for the location type

- Option: Postal code
  - Select "Postal code" to switch to the dedicated screen.
  - Select a country by typing or drilling down.
  - Enter the local postal code(zip-code)
  - Select the appropriate location.

3

4

4

4



The location code is suitable for calculating CO2 emissions from land transport by truck

# How to operate for GHG emissions calculation

If "UIC code" is selected for the location type

- Option: UIC code

- Select "UIC code" to switch to the dedicated screen.
- Click "here" to download a UIC code list to search for the UIC code by filtering the station name.
- Enter the UIC code from the list by copy and paste.

Cargo gross weight or number of ocean containers

tonne

IATA Code(3-letter code): i.e. NYC, AMS, SIN, SHA, TYO  
 UNLOCODE(5-letter code): i.e. USNYC, NLAMS, SGSIN, CNSHA, JPTYO  
 Postal Code (format varies by country): i.e. US→10001, NL→1012WX, SG→049483, CN→200120, JP→100-0001  
 UIC Code: Please click [here](#) to search for UIC code using the railroad station name.

Origin

Location Name

IATA Code

UNLOCODE

Postal code

UIC code

Air  Ocean  Road  Rail

(a)

IATA Code(3-letter code): i.e. NYC, AMS, SIN, SHA, TYO  
 UNLOCODE(5-letter code): i.e. USNYC, NLAMS, SGSIN, CNSHA, JPTYO  
 Postal Code (format varies by country): i.e. US→10001, NL→1012WX, SG→049483, CN→200120, JP→100-0001  
 UIC Code: Please click [here](#) to search for UIC code using the railroad station name.

Origin

UIC code

Enter UIC code

Air  Ocean  Road  Rail

(b)

UIC code list (16) - Saved to this PC

Railway station	UIC country_code	UIC code
1 DILLINGEN(SAAR)	fr	87-97012
2 ROSENDAAL (NL)	nl	87-96572
3 ESSEN (BELGIE)	nl	87-96572
4 VLUSSINGEN SLOE	nl	87-96572
5 MUIZEN (BELGIQ)	be	87-96571
6 ANTWERPEN W.A.	be	87-96570
7 VLUSSINGEN SLOE	nl	87-96567
8 VLAARDINGEN DE	nl	87-96566
9 ROTTERDAM WAA	nl	87-96565
10 TERNEUZEN (NL)	nl	87-96551
11 BEVERWIJK (NL)	nl	87-96550
12 RONET (BE)	be	87-96548
13 ROTTERDAM MAA	nl	87-96538
14 ROTTERDAM NOO	nl	87-96542
15 BERGEN OP ZOO	nl	87-96545
16 GENK ZUID LINK F	be	87-96529
17 ZEEBRUGGE (BEL	be	87-96523
18 NINOVE (BELGIQ)	be	87-96521
19 LANGERBRUGGE I	be	87-96520
20 HAVINNES (BELG)	fr	87-96516
21 AALST OOST (BEL	be	87-96980
22 CANDIOLLO (IT)	it	87-90155
23 NOVARA (IT)	it	87-90153
24 BRUZOLO DI SUSA	it	87-90152
25 AVIGLIANA (ITALIE)	it	87-90151
26 SAN AMEROGIO (ITALIE)	it	87-90150
27 GHISLENGHEN (BELGIE)	be	87-90149
28 LESSINES (BELGIE)	be	87-99718
29 VERZUOLO (IT)	it	87-962290
30 GENOVA SAMPIERDENE	it	83-42218
31 ST-MEEN	nl	87-471243
32 TEUJERO	es	71-20316
33 POAGO	es	71-15304
34 PASAJES PUERTO	es	71-11521
35 ABAJO	es	71-16801
36 KEHL-FRONTIERE	fr	67-212910
37 Branna	cz	54-331124
38 VENEZIA MARGHERA SCALO	it	87-25155
39 VENEZIA MARGHERA SCALO	it	83-114277
40 SELENLITERADE (NL)	nl	87-965491
41 Rechraming	at	81-15396
42 ANTWERPEN-OOST	be	88-210229

downloaded list

Page 1

Origin

UIC code

Air  Ocean  Road  Rail

87-97012

DILLINGEN(SAAR)(DB) fr(97012)

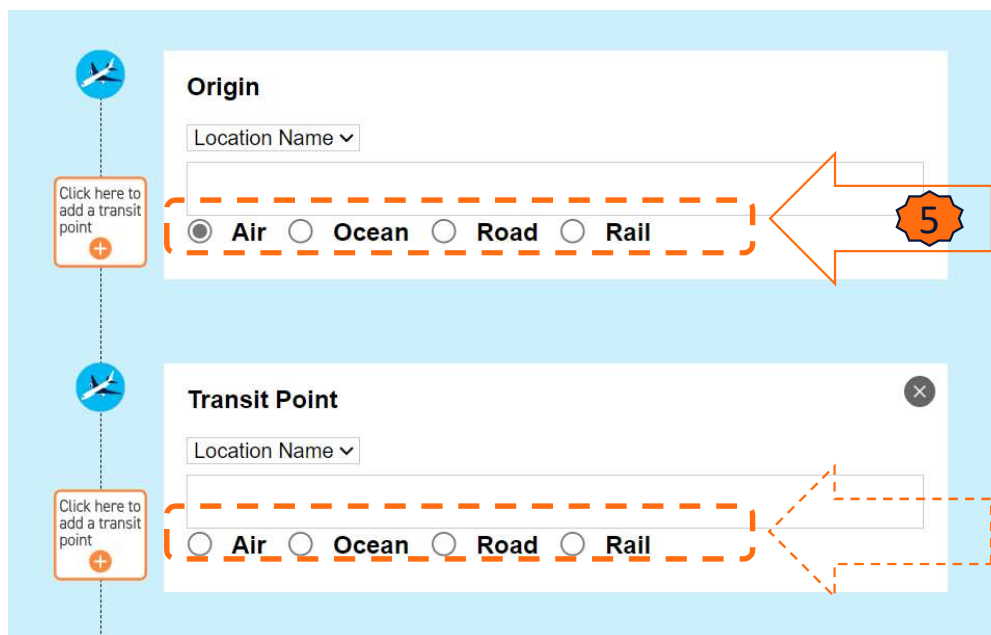
(c)

The location code is suitable for calculating CO2 emissions from land transport by train.

# How to operate for GHG emissions calculation

## Transport mode selection

- Select the mode of transport for each leg of the shipment at the screen of “Origin” as well as of Transit  point



The screenshot displays two sections for selecting transport modes. The top section, titled "Origin", features a "Location Name" dropdown menu, a text input field, and a radio button selection for "Air", "Ocean", "Road", and "Rail". The "Air" option is selected. A dashed orange box highlights the radio buttons, and a large orange arrow points from a star icon with the number "5" to the "Air" option. To the left, a callout box with a plus sign and the text "Click here to add a transit point" is shown. The bottom section, titled "Transit Point", has a similar layout with a "Location Name" dropdown, a text input field, and radio buttons for "Air", "Ocean", "Road", and "Rail". A dashed orange box highlights the radio buttons, and a large orange arrow points from a star icon with the number "5" to the "Air" option. To the left, another callout box with a plus sign and the text "Click here to add a transit point" is shown.

# How to operate for GHG emissions calculation

## Buttons for Calculation & Reset



**Cargo gross weight or number of ocean containers**

tonne

**IATA Code(3-letter code):** i.e. NYC, AMS, SIN, SHA, TYO  
**UNLOCODE(5-letter code):** i.e. USNYC, NLAMS, SGSIN, CNSHA, JPTYO  
**Postal Code (format varies by country):** i.e. US→10001, NL→1012WX, SG→049483, CN→200120, JP→100-0001  
**UIC Code:** Please click [here](#) to search for UIC code using the railroad station name.

**Origin**

Air  Ocean  Road  Rail

**Final Destination**

**Origin**

Air  Ocean  Road  Rail

**Step1** **Step2**

**Step3**

**Transit Point**

Air  Ocean  Road  Rail

**Transit Point**

Air  Ocean  Road  Rail

**Final Destination**

**RESULT**

[jp] 渋谷区 - [de] MUNICH -7tonne

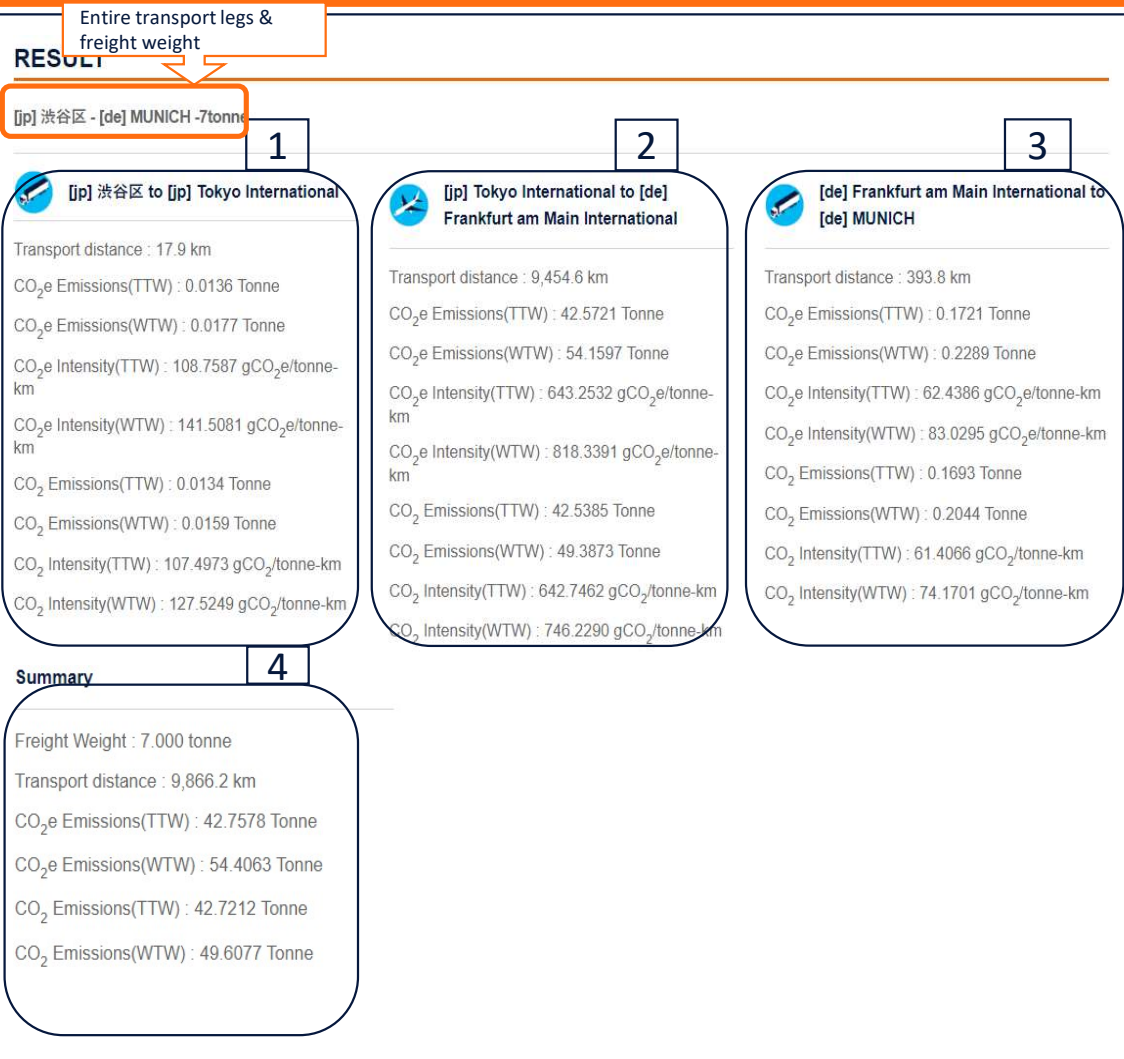
[jp] 渋谷区 to [jp] Tokyo International	[jp] Tokyo International to [de] Frankfurt am Main International	[de] Frankfurt am Main International to [de] MUNICH
Transport distance : 17.9 km	Transport distance : 9,454.6 km	Transport distance : 383.8 km
CO <sub>2</sub> e Emissions(TTW) : 0.0136 Tonne	CO <sub>2</sub> e Emissions(TTW) : 42.5721 Tonne	CO <sub>2</sub> e Emissions(TTW) : 0.1721 Tonne
CO <sub>2</sub> e Emissions(WTW) : 0.0177 Tonne	CO <sub>2</sub> e Emissions(WTW) : 54.1597 Tonne	CO <sub>2</sub> e Emissions(WTW) : 0.2289 Tonne
CO <sub>2</sub> e Intensity(TTW) : 108.7587 gCO <sub>2</sub> e/tonne-km	CO <sub>2</sub> e Intensity(TTW) : 643.2532 gCO <sub>2</sub> e/tonne-km	CO <sub>2</sub> e Intensity(TTW) : 62.4386 gCO <sub>2</sub> e/tonne-km
CO <sub>2</sub> e Intensity(WTW) : 141.5081 gCO <sub>2</sub> e/tonne-km	CO <sub>2</sub> e Intensity(WTW) : 818.3391 gCO <sub>2</sub> e/tonne-km	CO <sub>2</sub> e Intensity(WTW) : 83.0295 gCO <sub>2</sub> e/tonne-km
CO <sub>2</sub> Emissions(TTW) : 0.0134 Tonne	CO <sub>2</sub> Emissions(TTW) : 42.5385 Tonne	CO <sub>2</sub> Emissions(TTW) : 0.1693 Tonne
CO <sub>2</sub> Emissions(WTW) : 0.0159 Tonne	CO <sub>2</sub> Emissions(WTW) : 49.3873 Tonne	CO <sub>2</sub> Emissions(WTW) : 0.2044 Tonne
CO <sub>2</sub> Intensity(TTW) : 107.4973 gCO <sub>2</sub> /tonne-km	CO <sub>2</sub> Intensity(TTW) : 642.7462 gCO <sub>2</sub> /tonne-km	CO <sub>2</sub> Intensity(TTW) : 61.4086 gCO <sub>2</sub> /tonne-km
CO <sub>2</sub> Intensity(WTW) : 127.5249 gCO <sub>2</sub> /tonne-km	CO <sub>2</sub> Intensity(WTW) : 746.2290 gCO <sub>2</sub> /tonne-km	CO <sub>2</sub> Intensity(WTW) : 74.1701 gCO <sub>2</sub> /tonne-km

**Summary**

Freight Weight : 7.000 tonne  
 Transport distance : 9,866.2 km  
 CO<sub>2</sub>e Emissions(TTW) : 42.7578 Tonne  
 CO<sub>2</sub>e Emissions(WTW) : 54.4063 Tonne  
 CO<sub>2</sub> Emissions(TTW) : 42.7212 Tonne  
 CO<sub>2</sub> Emissions(WTW) : 49.6077 Tonne

# How to operate for GHG emissions calculation

## Calculation results



- 1** ⇒ Shibuya-ku to HND airport by truck
- 2** ⇒ HND airport to Frankfurt airport by Air
- 3** ⇒ Frankfurt airport to Munich by truck
- 4** ⇒ Total of those calculation results

Each leg data shows its

- Transport mode
- Freight transport distance (Km)
- CO<sub>2</sub> equivalent Emissions \_ TTW/WTW(Tonne)
- CO<sub>2</sub> Emissions \_ TTW/WTW(Tonne)
- CO<sub>2</sub> equivalent intensity \_ TTW/WTW(gCO<sub>2</sub>e per tonnekm)
- Co<sub>2</sub> intensity \_ TTW/WTW(gCo<sub>2</sub> per tonnekm)

# How to operate for GHG emissions calculation

## Reference information



- CO2
  - Carbon dioxide
- CO2e, CO2equivalent
  - Carbon dioxide equivalent
- CO2e intensity
  - A method of quantify the CO2e intensity of freight transport, calculated by dividing the total CO2e emissions by the total transport activity, measured in tonne-kilometers
- Tonne-kilometer
  - The unit of measure for freight transport, representing the movement of one tonne of goods over a distance of one kilometer.
- TTW: Tank to Wheel(Tank to wake)
  - TTW describes the phase where the energy carrier is converted into propulsion energy.
- WTT: Well to Tank
  - WTT describes the phase of the energy carrier's life cycle from generating input feedstocks to supplying the vehicle at the recharging or refueling station.
- WTW: Well to Wheel (Well to wake)
  - WTW covers the entire energy carrier life cycle, combining both the WTT and TTW phases.
- Formula
  - $\text{CO2e emissions} = \text{Transport distance(km)} * \text{Freight weight(tonne)} * \text{CO2e intensity(tCO2e/tonne-km)}$
  - $\text{CO2 emissions} = \text{Transport distance(km)} * \text{Freight weight(tonne)} * \text{CO2 intensity(tCO2/tonne-km)}$



# How to use “My Page”

Upon user registration, “My Page” function can be utilized.



## User registration

1. To register as an e-calculator user, click the “User Registration” button in the upper right corner of the screen.
2. Note: Before registering, please be sure to read and agree to our “Privacy Policy”.
3. Upon successful registration, a confirmation message will be sent to provided e-mail address.
4. Upon user registration, “My Page” function can be utilized.

### User Registration

Please fill in either English or Japanese.

Enter Your Information	Confirm	Completion of registration
Name *		
Your Company/Organization *		
E-mail Address*		
E-mail Address(confirm)*		
New Password*		

**[Important Note]** Please read our “Privacy Policy” carefully before submitting your registration.

I agree to the privacy policy.\*

**Reset** × **Confirm**

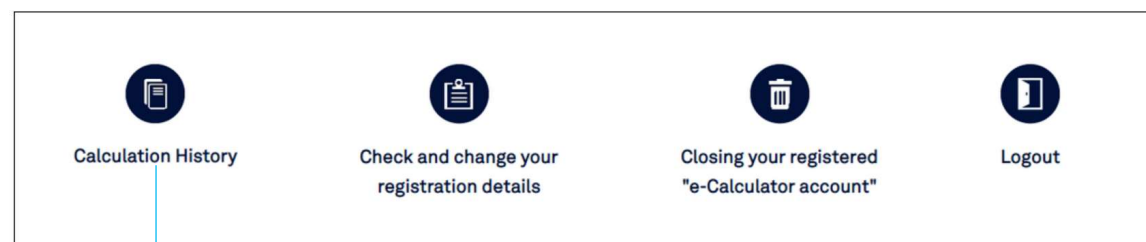
# How to use "My Page"



To use the "My page", please click "Login" button in the upper right corner of the screen.



My Page Menu



See next page

## Calculation History

### Calculation History

**List of calculations**

Select All

<input type="checkbox"/> 03/05/2024	<a href="#">[ca] Lester B Pearson International - [cn] Beijing Capital International</a>	800kg	4.9198 Tonne (TTW)
<input type="checkbox"/> 03/05/2024	<a href="#">[ar] Ministro Pistarini International - [se] Gothenburg-Landvetter</a>	4.3tonne	33.2984 Tonne (TTW)
<input type="checkbox"/> 02/26/2024	<a href="#">[jp] Narita International - [br] Presidente Joao Batista Figueiredo</a>	1tonne	9.7261 Tonne (TTW)
<input type="checkbox"/> 10/04/2022	<a href="#">[jp] Osaka Kansai International - [us] New York John F Kennedy International</a>	1tonne	7.6568 Tonne (TTW)

[Download](#)

Click on a calculation result you want to review.

You can download and print them.

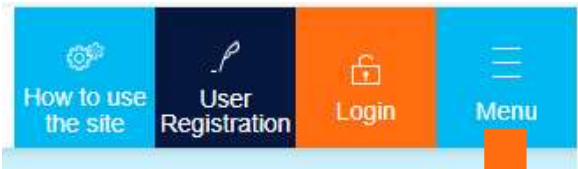
### Note:

- Calculation results are only saved when you are logged in.
- The records can be saved upto 100.
- When the number of stored calculation records exceeds 100, they are deleted one by one, starting with the oldest.

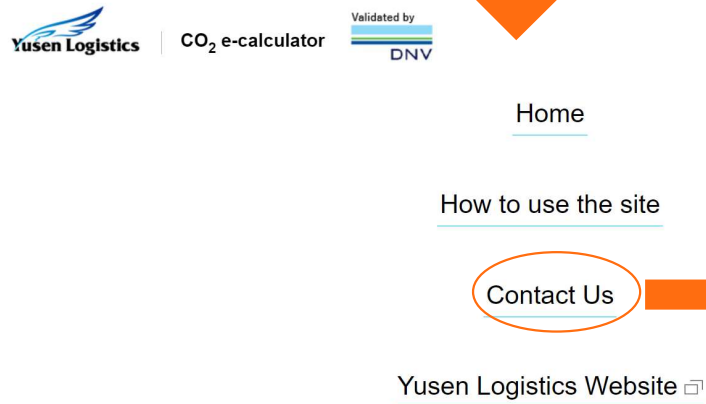
# Contact for questions about this website



If you have any questions regarding the operation of this calculation tool or any other inquiries regarding this tool, please contact us by the following process.



Click on “Contact us” and follow the prompts to enter your questions and press the “confirm” button to send.



### Contact Us

Please fill in either English or Japanese.

Enter Your Inquiry   Confirm   Send Completely

Name \*

Your Company/Organization \*

E-mail Address \*

Details of your inquiry  
(Only inquiries & comments about the e-calculator accepted.) \*

**[Important Note]** Please read our "Privacy Policy" [here](#) carefully before submitting your registration.

I agree to the privacy policy \*

Reset × Confirm

**“Note: This website accepts only inquiries related to the e-calculator. Requests for other services, such as freight quotations, will not be processed.”**