

Carbon Emission Integration with S/4HANA Transportation Management – GTT-444

Planned Release - Nov 2025



Introducing: Carbon emission data integration with S/4HANA Transportation Management (TM) – GTT-444

Innovation For: Solution owner

Enablement Model: Automatically off, enable this via note and configuration

Feature Description:

Track planned versus actual emissions data in SAP Transportation Management for SAP S/4HANA Cloud Private Edition with actual scope 3 emission data from carriers and logistics service providers collected through SAP Business Network Global Track and Trace.

Enable logistics carriers and transportation service providers to send actual scope 3 emissions data through SAP Business Network Global Track and Trace to a shipper. This is to allow for analysis against the planned emissions calculated during the shipper's transportation planning and optimization processes, including:

- View planned versus actual emissions in SAP Business Network Global Track and Trace
- Performing the comparison of tank-to-wheel data in SAP Transportation Management for SAP S/4HANA Cloud Private Edition or make this data available for use in other ERP or analytical solutions

Carbon Emission integration with S/4HANA TM

Solution For: SAP Business Network Global Track and Trace

Solution Area: Fulfillment Tracking

Persona: Transportation Planner

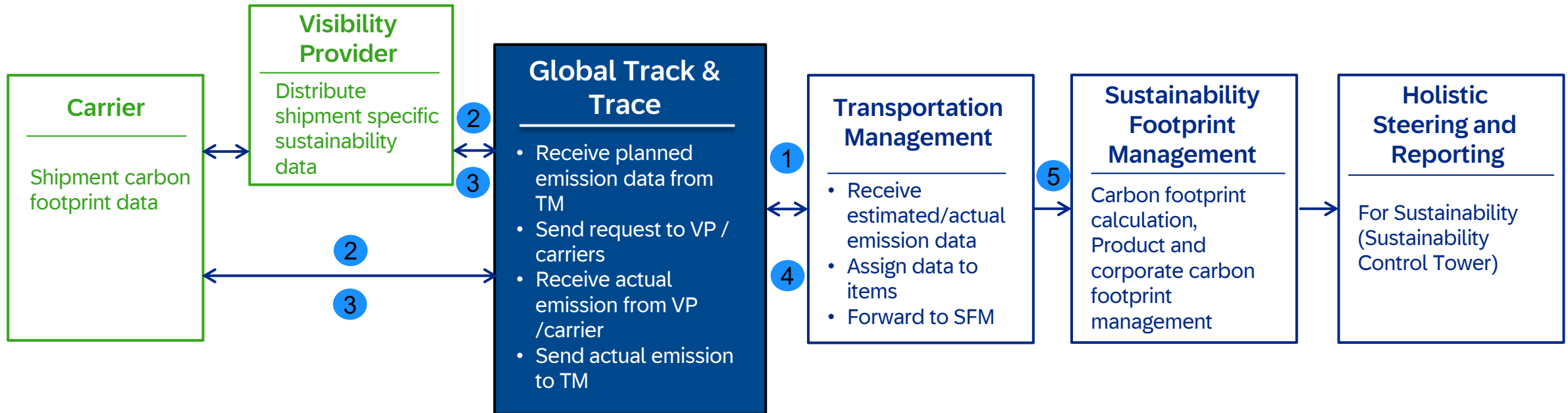


Key Benefits:

- Receive scope 3 emissions data directly from carriers or visibility providers (VP)
- Leverage the scale and standardization of SAP Business Network to avoid costly custom and point-to-point integration
- Make emission data available for use in ERP and other analytical tools
- Drive sustainability objectives by taking the first step toward ingestion of actual scope 3 emissions data into ERP for a more complete calculation of product carbon footprint

Bring Logistics into Sustainability Footprint Management

1. SAP S/4HANA TM sends planned emission to SAP Business Network Global Track & Trace
2. SAP Business Network Global Track & Trace send tracking request to visibility provider or carrier
3. Visibility Provider or carrier sends carbon emission data to SAP Business Network Global Track & Trace after shipment is finished
4. SAP Business Network Global Track & Trace then sends total shipment emission to SAP S/4HANA TM
5. SAP S/4HANA TM makes emission data available for use in other tools



Enablement Steps & Notes

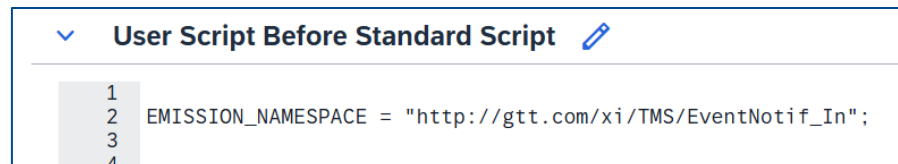
- **SAP S/4HANA TM:**

- When on S/4HANA 2023 FPS03* or above implement [SAP Note 3592173](#)
- Enable carbon emission chart in TM: SAP S/4HANA 2023 FPS0 or above
- Send planned/calculated emission from SAP S/4HANA TM to SAP Business Network Global Track and Trace (via IDOC): SAP S/4HANA 2025 FPS0 or upwards, see details in [SAP Note 3556097](#)
- Forward actual emission from GTT to TM: see [SAP Blog](#) (Reporting of GHG emissions - Receiving of actual emissions sent by your carrier)

- **SAP Business Network Global Track and Trace:**

- Enable forwarding of carbon emissions to TM by providing corresponding TM namespace in Event-To-Action Script. To know what the namespace of carbon emission is, please check 'forward actual emission from GTT to TM' in TM side configuration mentioned above.

In the example mentioned in the [SAP Blog](#), it should be "http://gtt.com/xi/TMS/EventNotif_In"

A screenshot of a SAP configuration interface. It shows a section titled 'User Script Before Standard Script' with a dropdown arrow and an edit icon. Below this, there is a code editor with line numbers 1 through 4. The code on line 2 is 'EMISSION_NAMESPACE = "http://gtt.com/xi/TMS/EventNotif_In";'.

```
1  
2 EMISSION_NAMESPACE = "http://gtt.com/xi/TMS/EventNotif_In";  
3  
4
```

- If you haven't previously enabled the forwarding of events to TM, please refer to help document: <https://help.sap.com/docs/business-network-global-track-and-trace/send-documents-from-gtt-to-other-systems/synchronize-actual-events-back-to-tm-system>

Prerequisites, Restrictions, Cautions

Prerequisites

- Connect with data contributor (carrier or visibility provider) via [Discover Business Partner](#).
- Configure connection via [Configure Partner Connection](#).

Restrictions

- Only road freight orders are supported in SAP S/4HANA TM
- Only total emission data is transferred from Visibility Provider
- Only total emission data can be forwarded to SAP S/4HANA TM*
- The following units of measure are supported: kg, g, t**

Cautions

- You might need to discuss with data contributor that you need carbon emission data transferred to GTT separately.

*To have emission data synchronized back to TM, you need to implement SAP Note 3654588.

**If the UoM sent by data contributor is g or t, it will be converted into kg then display in 'Track Shipments' app and synchronized back to SAP S/4HANA TM

User Story – Carbon Emission Integration



Receiving emission data for logistics processes and understanding scope 3 emissions can be highly complex, involving multiple stakeholders and many manual tasks.

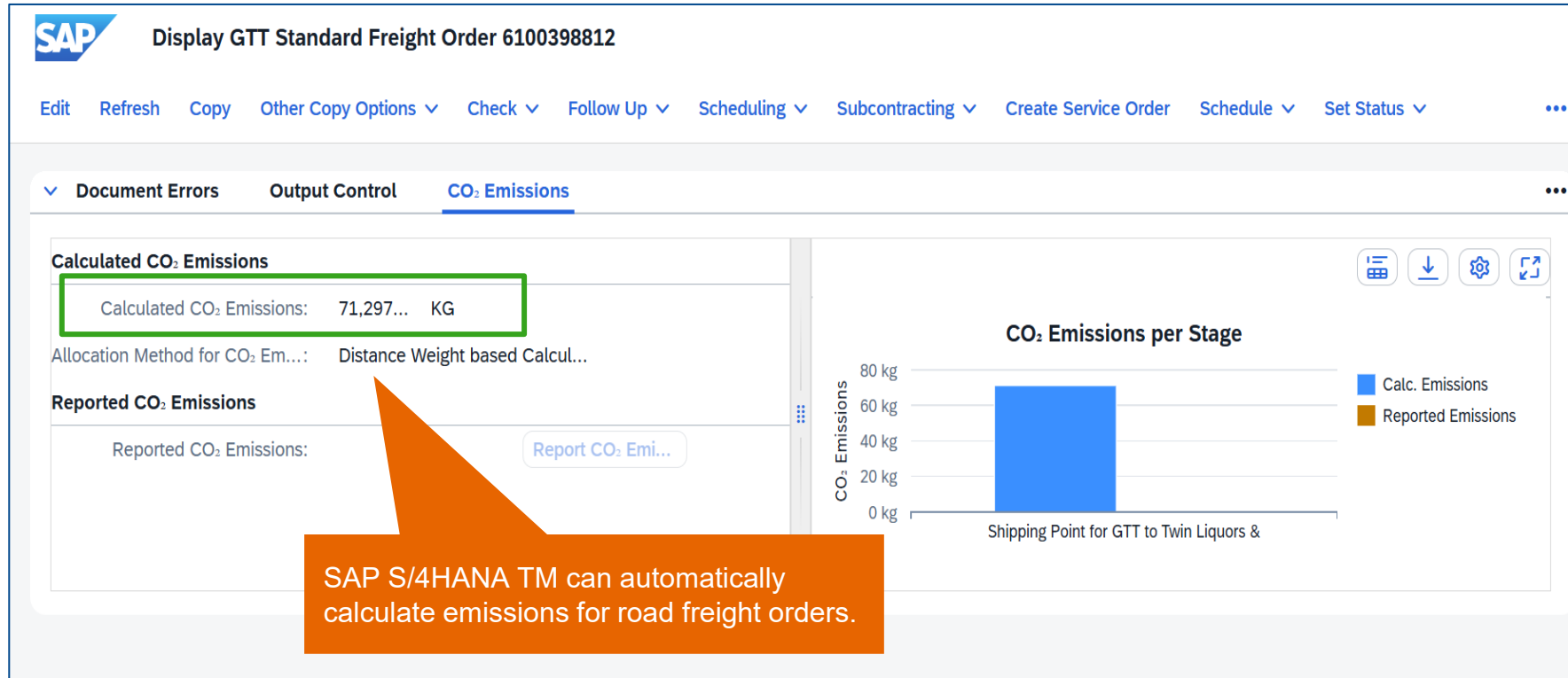
Now, it has become much easier, as SAP Business Network Global Track and Trace can integrate with SAP S4/HANA TM to share carbon emissions.

Transportation planners can:

- Use SAP Business Network to connect to many carriers or visibility providers
- Receive emission data for logistics processes

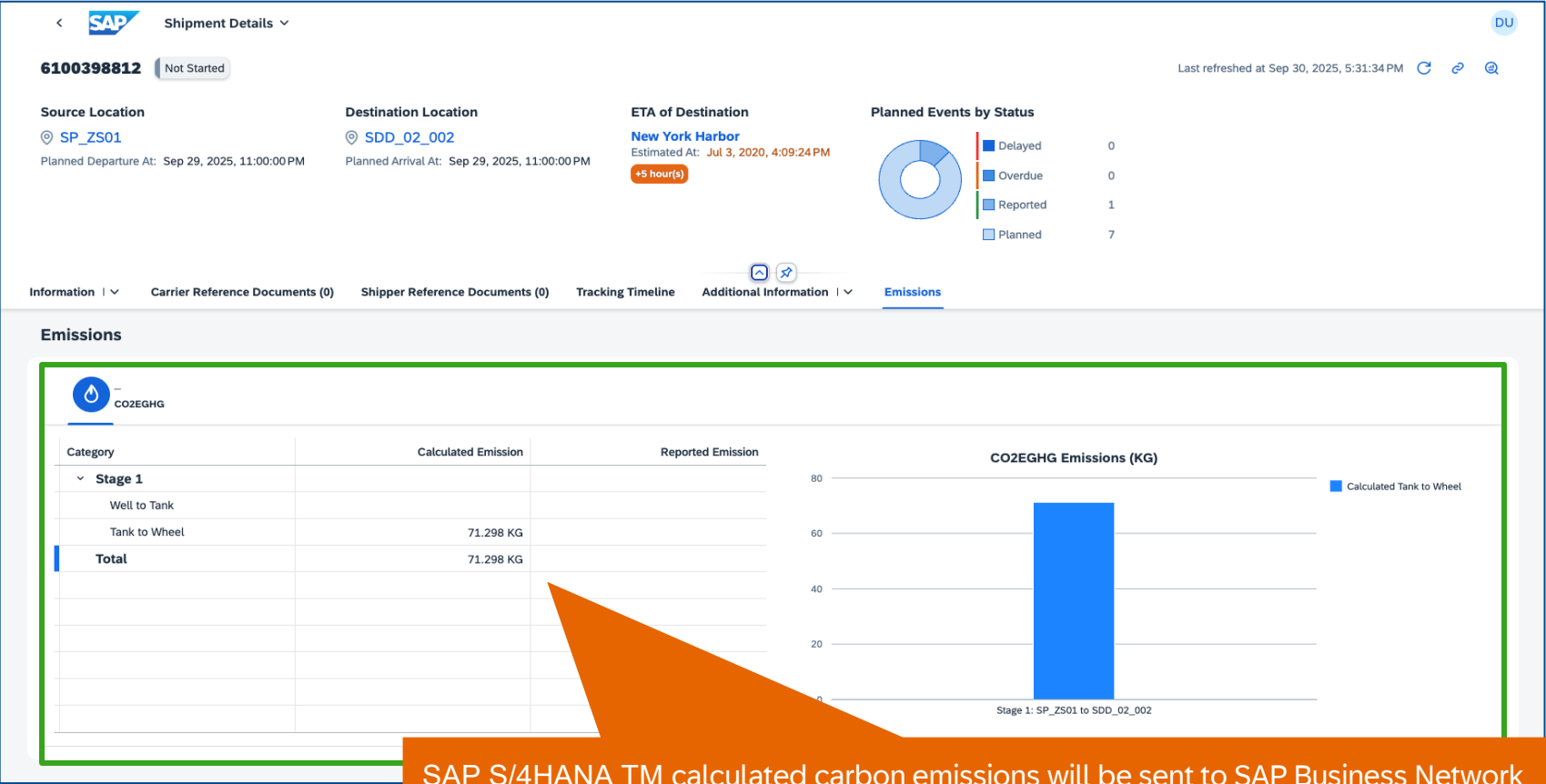
Feature Details

Step 1: Calculated Emissions in SAP S/4HANA TM



Feature Details

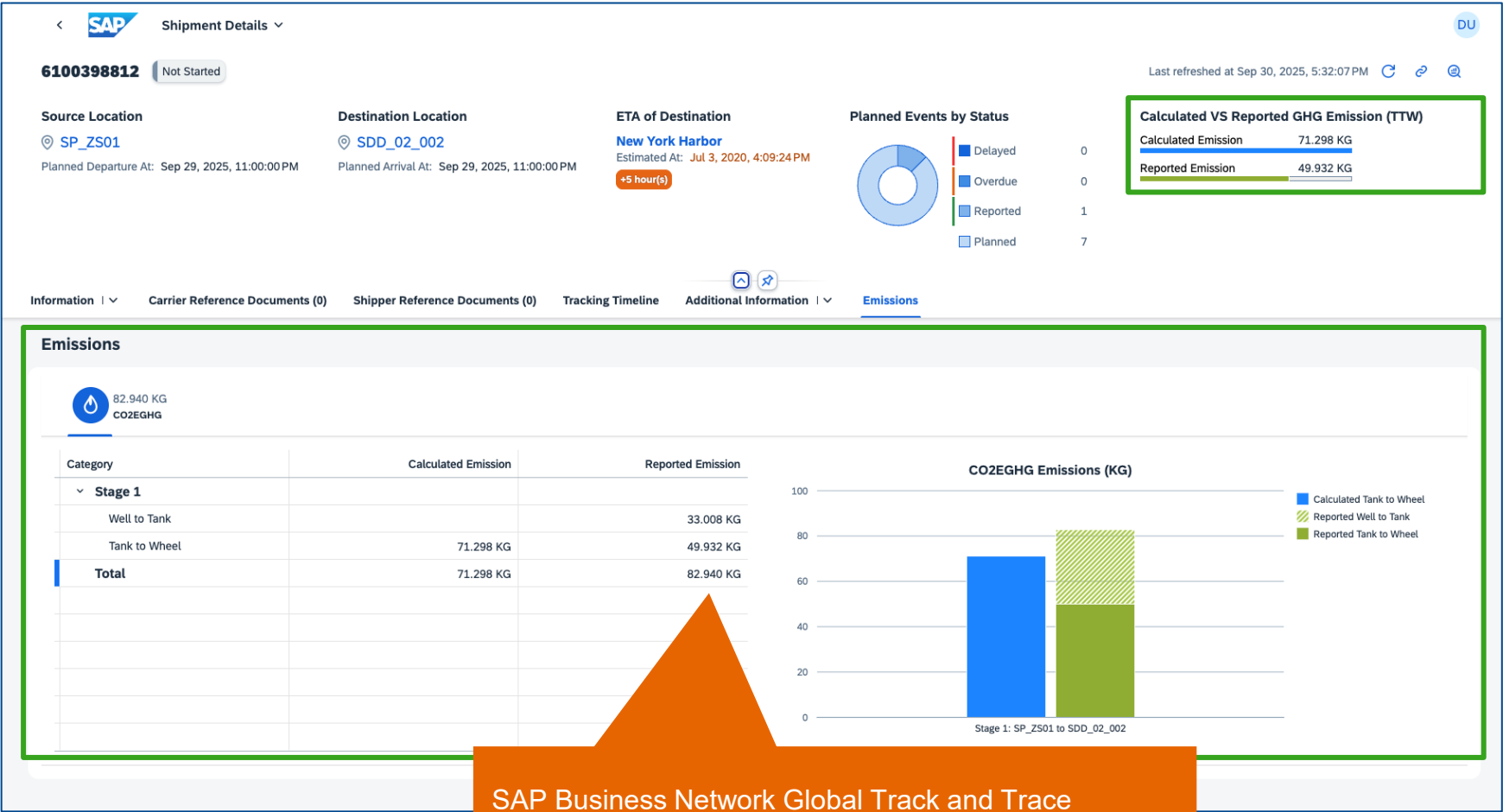
Step 2: SAP Business Network Global Track and Trace receives calculated emissions



SAP S/4HANA TM calculated carbon emissions will be sent to SAP Business Network Global Track and Trace. Meanwhile a tracking request will be sent to the data contributor for actual emission data.

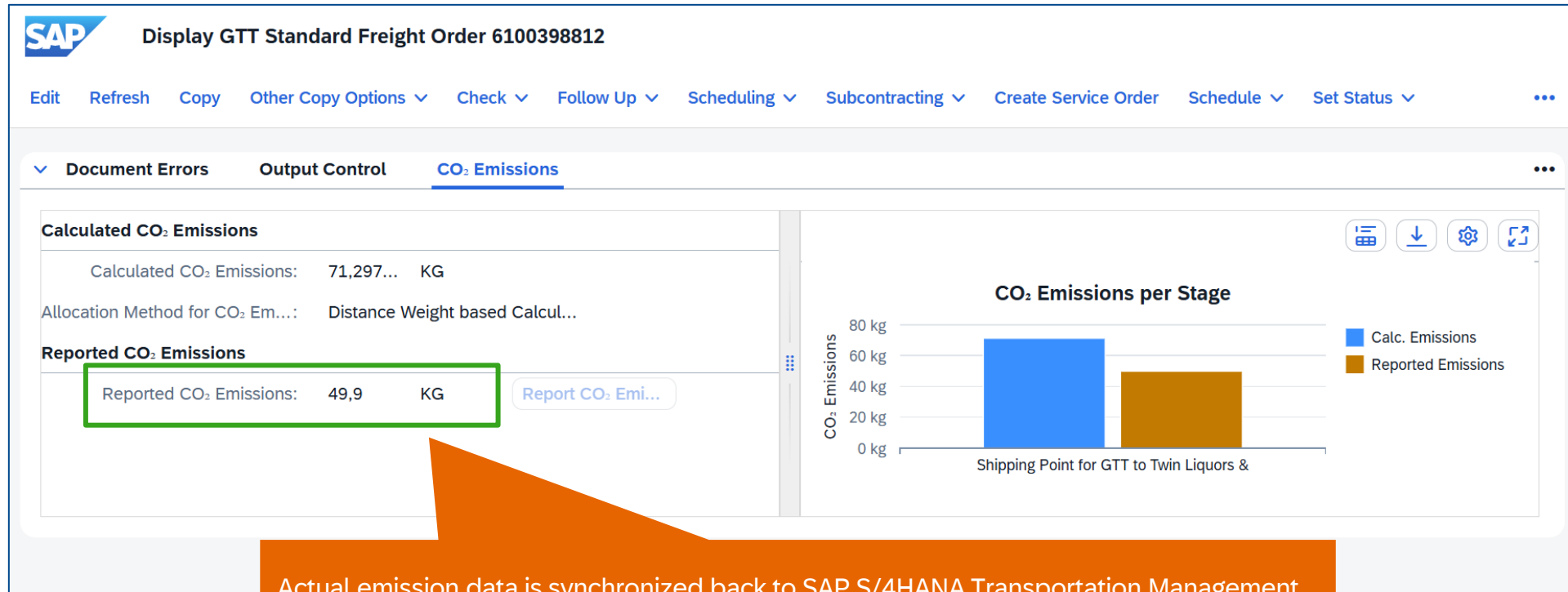
Feature Details

Step 3: SAP Business Network Global Track and Trace receives actual emission data



Feature Details

Step 4: Actual emission data is synchronized back to SAP S/4HANA TM



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Contact information:

Name
Email



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