AHOLA DIGITAL

DIGILOG

Transport ecosystems enable seamless data sharing, fostering environmentally sustainable logistics practices

22 November 2023

AHOLA DIGITAL

Ahola Concern
AT GLANCE

REVENUE
2022 ↗
€130M

LONG HISTORY
FOUNDED IN
1955

SUPPORTED
EMPLOYEES
700

THIRD GENERATION
FAMILY BUSINESS

CUSTOMERS
3000+

OUR VALUES
- **OPENNESS**
- **TOTAL RESPONSIBILITY**
- **RESPECT FOR THE INDIVIDUAL**

ACTIVE
VEHICLES
550+

LONG-TERM RELATIONS
We want to invest in long term personal relations with customers, partners and personnel

5
OFFICE
COUNTRIES

Finland
Sweden
Estonia
Poland
Macedonia

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Ahola Digital
INTRODUCTION

40+
EMPLOYEES

20 YEARS OF LOGISTICS EXPERIENCE

CODE FROM FINLAND

ISO
9001 AND 27001
CERTIFIED

50
APPLICATIONS AND TOOLS
DEVELOPED

SUSTAINABLE
LOGISTICS
SOLUTIONS

TRUSTED
R&D
PARTNER
PARTNER OF CHOICE

OWN
NATIVE
CLOUD
PLATFORM

KOKKOLA,
FINLAND
LOCATED

Ahola Digital
SEGMENTS

Ahola Digital
ROAD TRANSPORT SERVICES

DRIVERS

- Driving Report
- Checklist
- Damage Report
- Waybill
- Deviation
- AMC
- E-Learning
- Guides
- Certificates
- Ticket System
- Newsfeed
- Platoon

BACK OFFICE

- Digital Online (TMS)
- Live Monitor
- Tower
- Track & Trace
- Shift Planner
- Emissions Calculator
- Customer Portal
- Partner Portal
- Logistics PM Tool
- Auth
- Manage
- Storage
- Connect
- Fleet Manager

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Logistics
EVOLUTION 5.0

Logistics 4.0 did introduce IoT, Big Data, BI & Cloud Computing. Logistics 5.0 will continue to emphasize reconciling the human and machine, which will ultimately enable industries to improve the means and efficiency of logistics production.

Logistics 5.0 will be complemented by three pillars of Industry 5.0

- ★ Human Centricity
- ★ Resilience
- ★ Sustainability

The highly **automated**, **connected**, and **intelligent digital ecosystem** will thrive along with a human touch in Logistics 5.0. A Following presentation will show how Ahola Digital is driving to the future of Logistics

Logistics
EVOLUTION 5.0

Source: https://tinyurl.com/46aamvb8

Human-centric		Sustainable	Resilient	
Customer-centric supply chains (CCSCs)	Human-centric manufacturing automation	Environmental perspective		
Human rights and well-being of workers	Human-centered human-robot collaboration (HC-HRC)	Social perspective	Applications for supply chain optimization	BT, DTs, AMT, 5G, Cobots, AR & VR, SCaaS
Human-machine interaction (HMI)	Supply-chain skill development	Economic perspective	Data management and analysis	BDA, ML/AI, CC/EC
Human-centered technological innovation	Human-in-the-loop technology (HITL)	**Supply Chain 5.0**	Data collection and processing	IoT sensors and devices, IIot and G-IIoT, CPS

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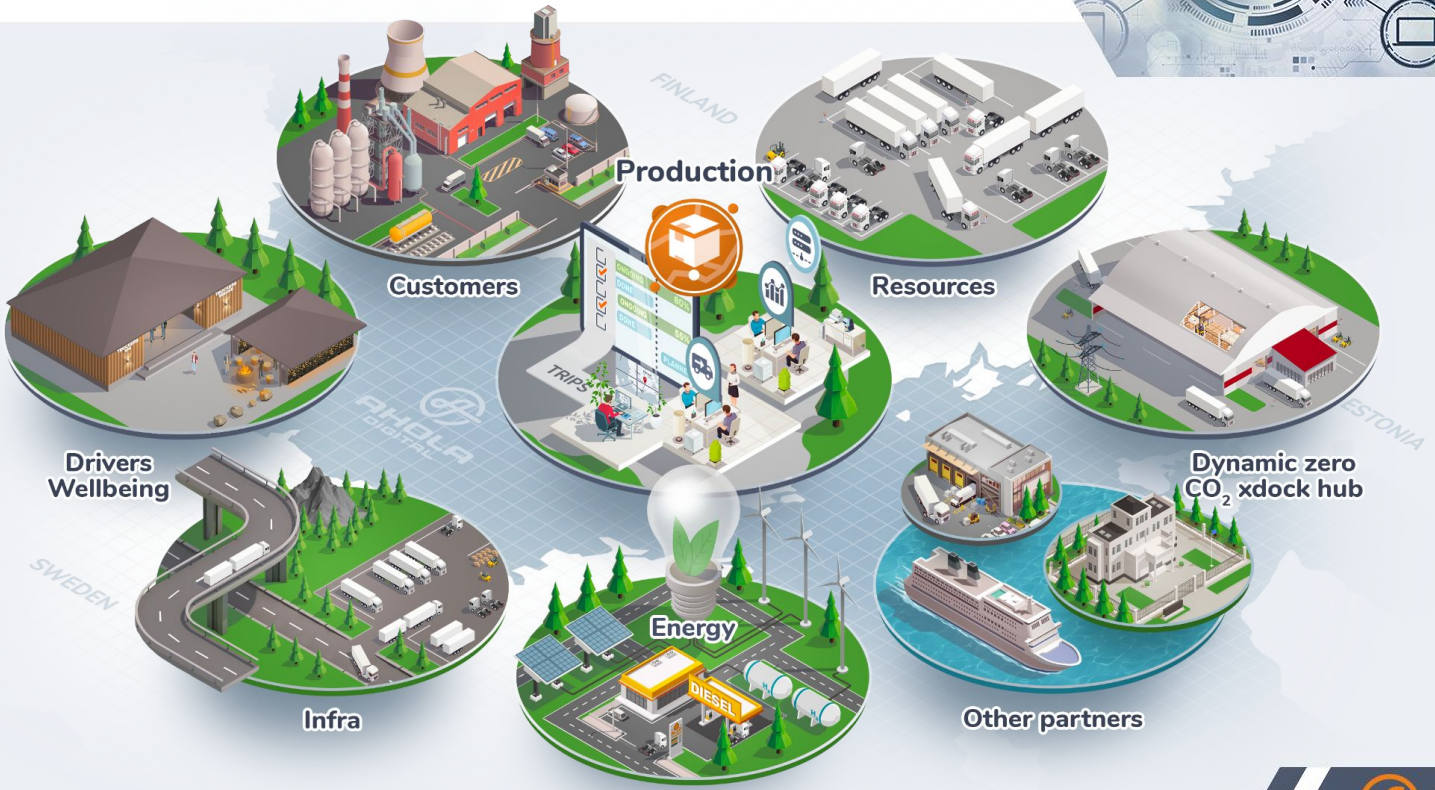
LOGISTICS EVOLUTION 5.0



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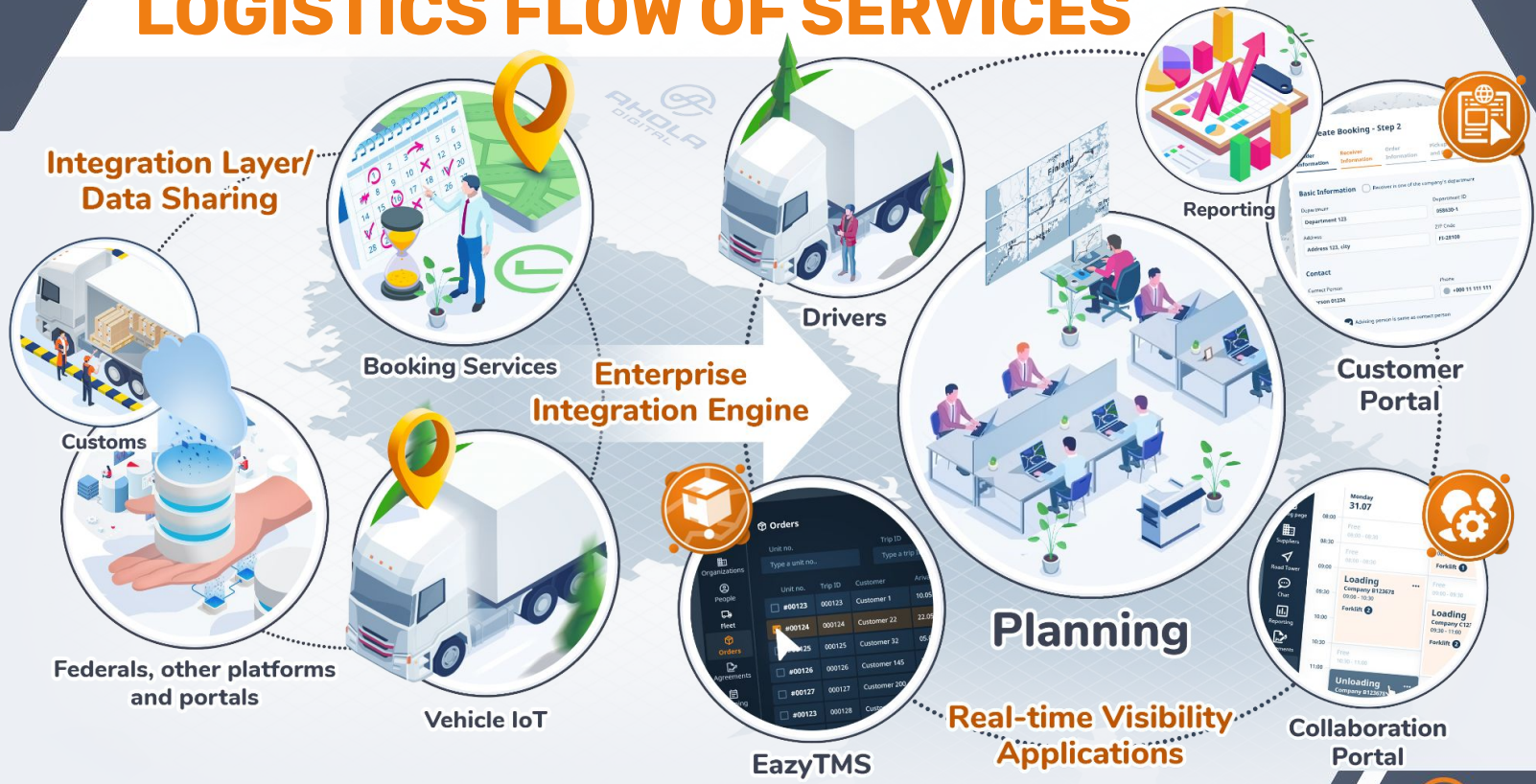
LOGISTICS FLOW OF SERVICES



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Greener Logistics Solution
IN AHOLA CONCERN

Customer Testimony

"Based on the 2019 data comparison, it can also be stated that the emission reduction achieved by Ahola Transport in Nordic countries, meets the 39% emission reduction level given for Finland by 2030 is accomplished already in 2019" - DNV GL Business Assurance Finland Oy Ab 11.6.2020

Lower Fuel Consumption and Higher payload

Optimized Fleet

- Modern truck technology
- High load capacity concepts

Professional Skills

- Quality standards
- Assisting technology
- Training and coaching
- Driver approval and certification program

Production Efficiency

- Empty driving
- Utilization rate

Real-time Operations

- Dynamic transports
- Connectivity
- Digitalization
- Minimized waste

Carbon Neutrality

Energy Choices

- Alternative energy choices
- Green KM services
- Monitoring
- Optional climate compensation

Eco Driving Service Efficiency

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Greener Logistics Solution
SUSTAINABLE WAY

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Moving from a **REACTIVE TO PREDICTIVE**

STANDARD VISIBILITY

Information a location of goods is manually entered transmitted regular intervals by EDI. Because this information is only available several hours a day after-the-fact, it is unrealible and does not allow for proactivity

REAL-TIME VISIBILITY

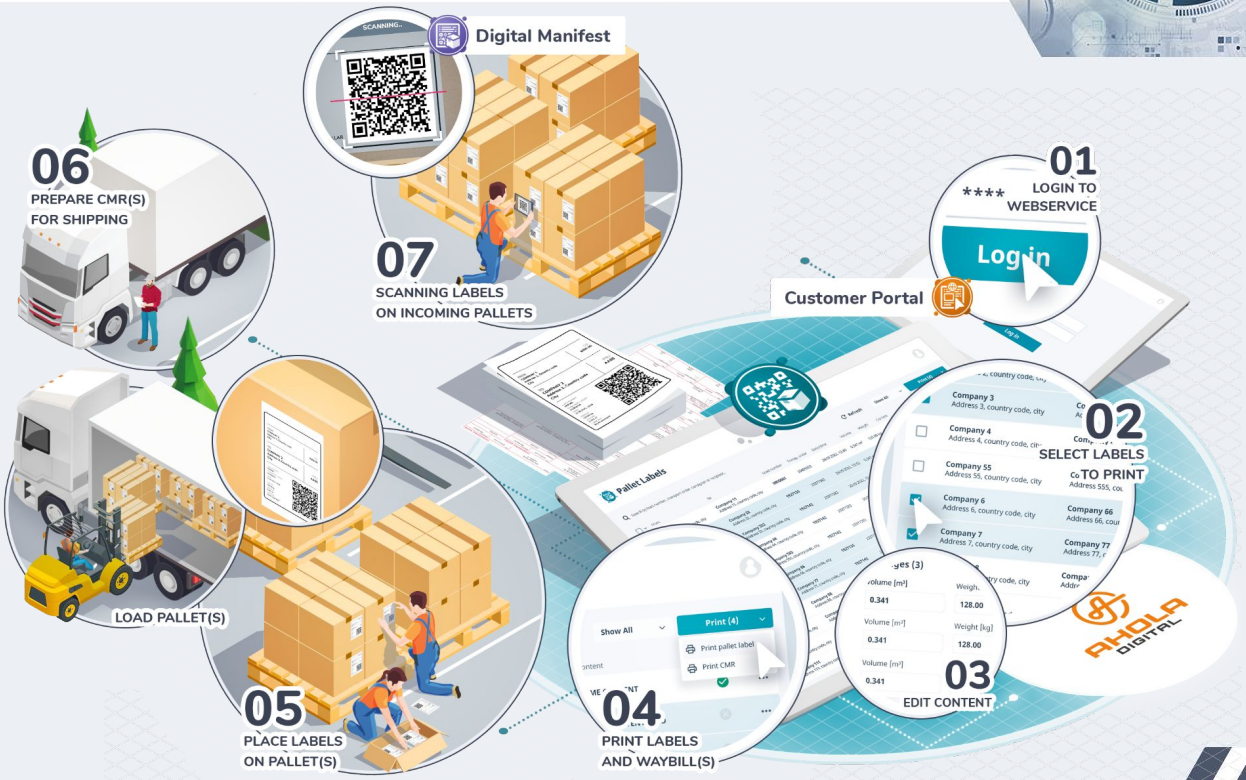
Information is captured on real-time systems (e.g. telematics, smartphones, IOT and API:s) and provides live location information of goods at that present moment. The information is reliable and allows for post-delivery performance analysis

PREDICTIVE VISIBILITY

The Information Collected is real-time is cross-checked with previously collected information, such as road traffic, estimated delivery times and routes to calculate an estimated time of arrival (ETA), making it possible to alert stakeholders several hours/days in advance

Transport Flow

Smart
LABELS



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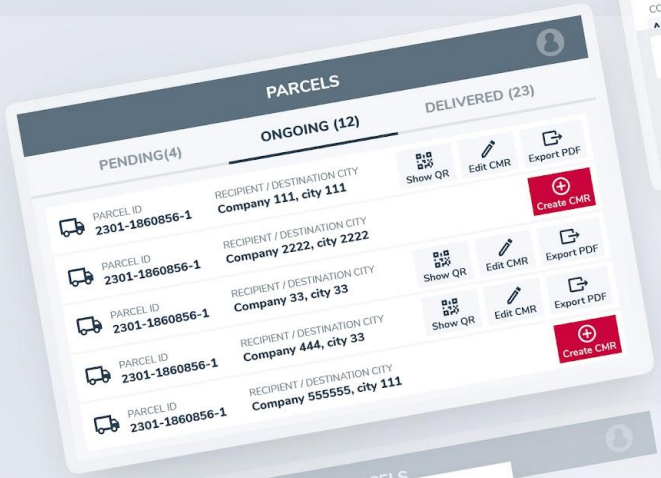
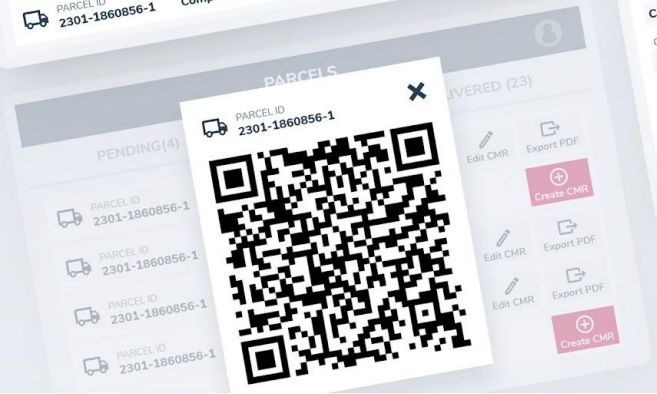
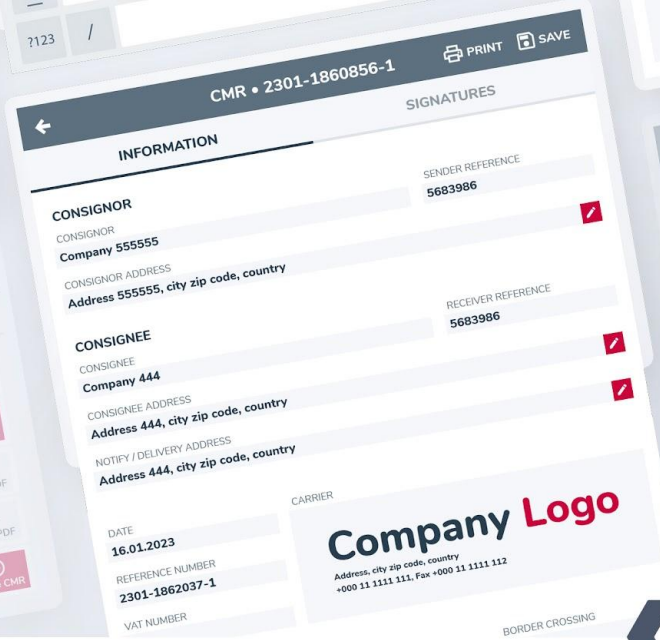
ECRM







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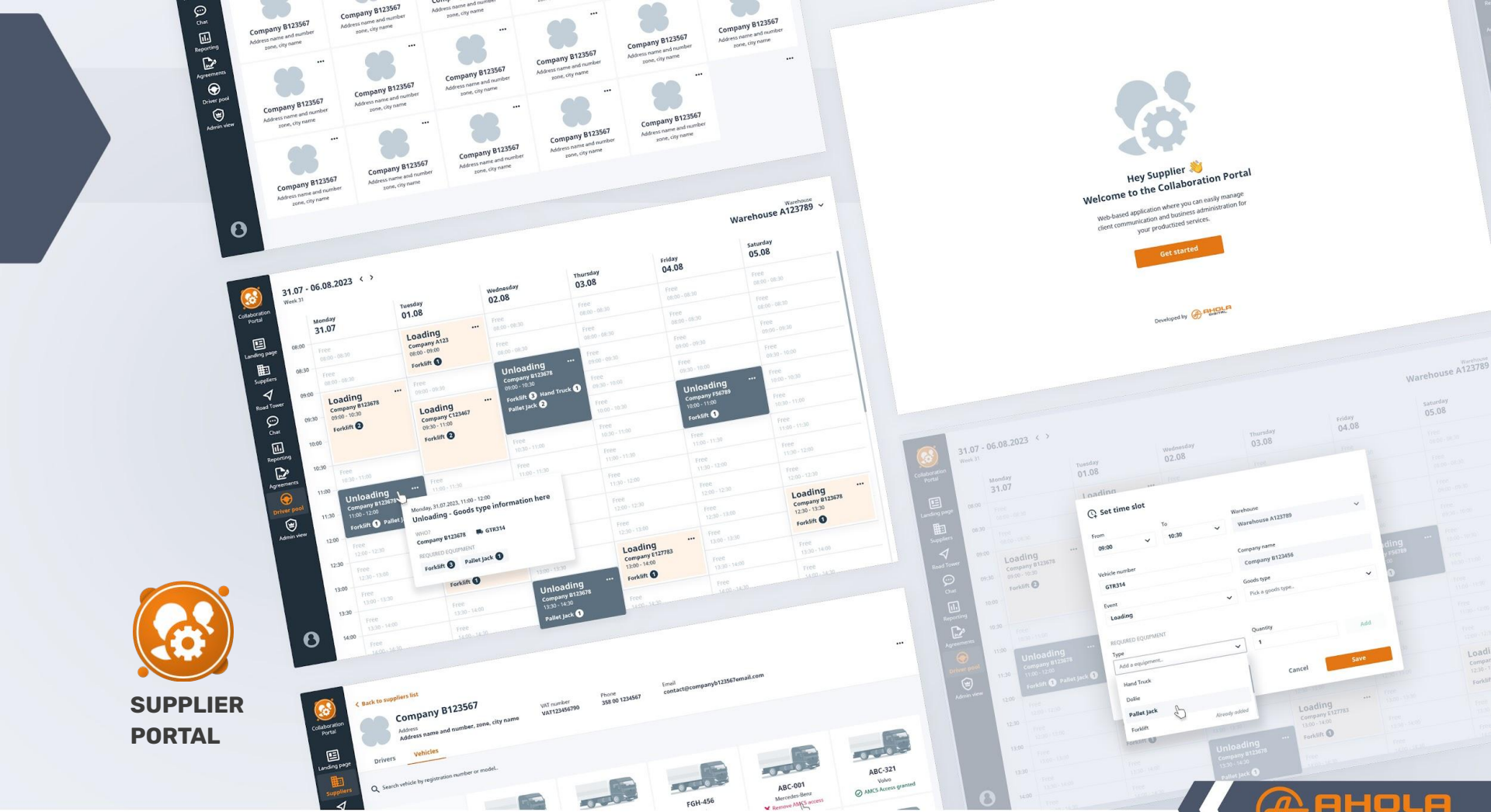
CUSTOMER PORTAL



SUPPLIER PORTAL

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Transparent Emission Calculation
TOP LEVEL FEATURES

Assessing usage of alternative fuels, conduction of what - if scenarios

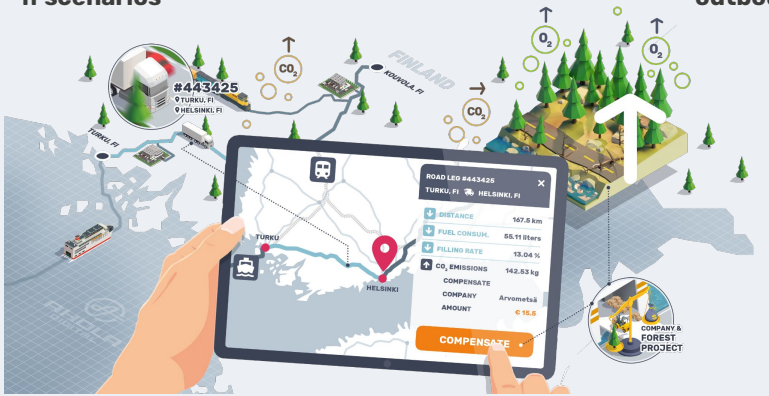
CO_2 and other air pollutants

Ready for CO_2 Auditable reporting

Covering complete inbound and outbound flows

All transport models and intermodal transports

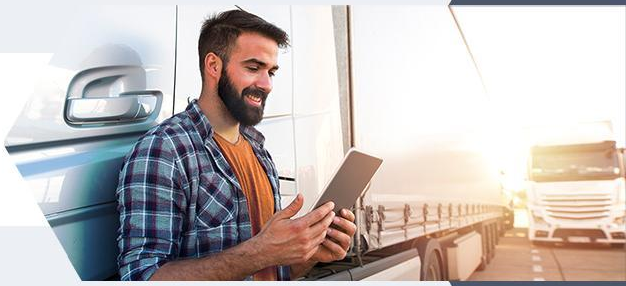
Global scope



OPENAPI Reporting interface

Various data input structures

Transparent
EMISSION CALCULATION

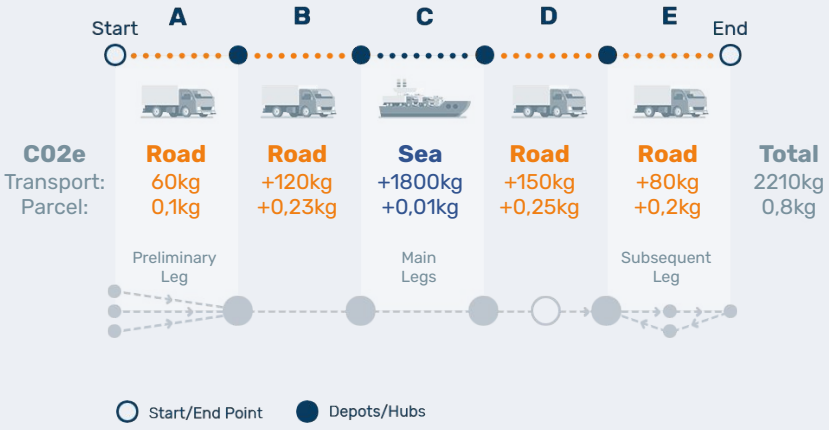


- Emissions from all transport operations, all fuel types plus allocation to products/product lines and customers.
- We calculate TTW (Tank To Wheel) and Well-to-Wheel (WTW) values

Calculation Highlights

- All transport modes available, including intermodal
- Emissions allocation down to SKU/product level
- Inclusion of special factors such as haul type e.g.
- Norm-compliant usage of surcharges, e.g. empty rides or distance adjustments
- Comprehensive and regularly updated master data (vehicles, energy mixes, conversion factors…)

Leg - specific Shipment Calculation (table contains illustrative values)



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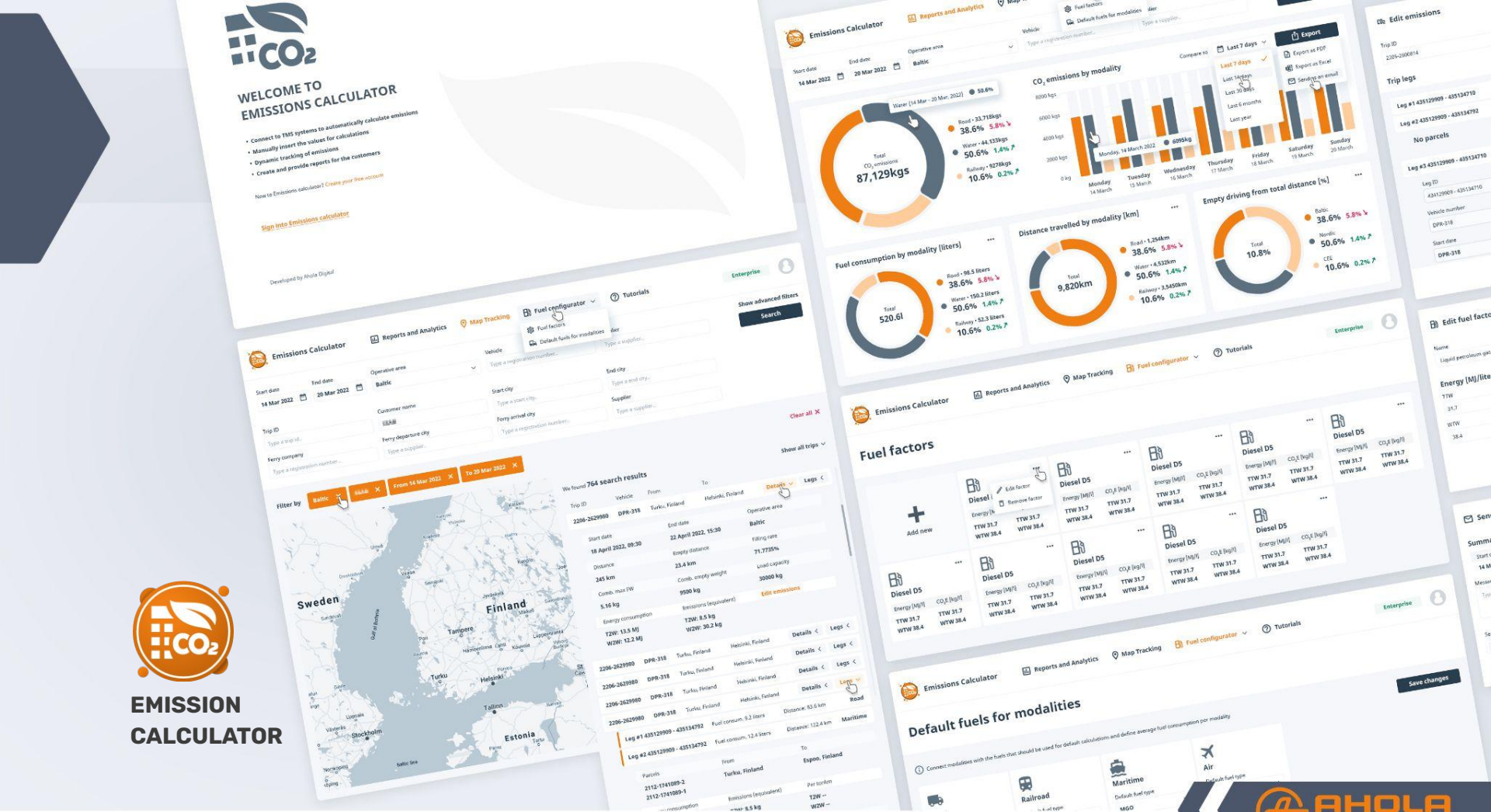

EMISSION CALCULATOR

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Logistics 5.0
GENERATIVE AI

To enable true endless trip where cargo space is moving on:

- Continuous selling of capacity
- Continuous analysis of route conditions
- Continuous calculation of energy consumption and charging
- Continuous route optimisation based on sold capacity
- Road analytics (surface affects Energy consumption)
- Weather forecasting on multiple route options
- Keeping in mind of Customer parameters like a opening hours
- External dependencies like a ferry deadlines e.g.

"When there is an increase in the number of parameters that are constantly changing, humans become the final decision makers. However, machines powered by AI can continuously learn and adapt to new information in real time, making them an integral part of decision making that goes beyond just historical data."

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THANK YOU
FOR YOUR INTEREST!

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