

WHOLE FLEET



Electric transport

NIINIVIRTA IS ECO-FRIENDLY

The first company, in Italy, to make deliveries in urban areas using 100% e-trucks.

Our biggest challenge in this century is to realize an idea that seems abstract: sustainable development.

Trucks account for less than 2% of the vehicles on the road but 22% of CO₂ emissions from road transport.



MAN 75

📍 Milano



DAF LF 120

📍 Milano



E-IVECO 120

📍 Rimini



DAF LF 140

📍 Vantaa (Finlandia)



DAF LF 140

📍 Brescia



SMITH 100

📍 Torino



DAF LF 75

📍 Milano



SMITH 100

📍 Vantaa (Finlandia)



SMITH 100

📍 Firenze



MASTER ZE

📍 Milano

14 E-TRUCKS



DAF LF 140 SCARRABILE

📍 Milano



MAN 180 SCARRABILE

📍 Helsinki



MAN 180 SCARRABILE

📍 Milano



DAF LF 180 SCARRABILE

📍 Milano

3,5 TONS E-VAN



1x Renault Master Z.E.

Payload: 1200 kg - 5 PLT

Range: 150 km

UP TO 7,5 TONS



1x EMOSS DAF LF 75

Payload: 2100 kg - 10 PLT

Range: 170 km



1x FRAMO MAN 75

Payload: 2100 kg - 12 PLT

Range: 140 km

UP TO 10 TONS



**NEW
PROJECT**

3x SMITH 100

Payload: 3290 kg - 15 PLT

Range: 200 km

UP TO 12 TONS



1x NEWTRON IVECO

Payload: 4000 kg - 15 PLT

Range: 250 km



1x EMOSS DAF LF 120

Payload: 4130 kg - 15 PLT

Range: 250-300 km

UP TO 14 TONS



2x EMOSS DAF LF 140

Payload: 6000 kg - 15 PLT

Range: 200-250 km



1x EMOSS DAF LF 140 SWAP BODY

Payload: 8650 kg - 18 PLT

Range: 150-200 km



UP TO 18 TONS



2x EMOSS MAN 180 SWAP BODY

Payload: 9000 kg - 18 PLT

Range: 250-300 km



1x EMOSS DAF 180 SWAP BODY

Payload: 9000 kg - 18 PLT

Range: 350 km

NIINIVIRTA DISTRIBUTION

MILANO



BRESCIA





FIRENZE



TORINO



RIMINI



HELSINKI



VANTAA



Monitoring system #1

GREEN ROUTER

Single or multiple trip reporting



CO₂ Emissions Report: Energy consumption and GHG in accordance with EN 16258

From: 01/01/2017
To: 31/12/2018

Report summary:
Niinivirta provs
No. of trips: 538

Transport type	Distance	% out of total	Goods weight (ton)	% out of total
Full Truck Load (FTL)	43,198.39 Km	100.00 %	891.07 ton	100.00 %

Temperature	Distance	% out of total	Goods weight (ton)	% out of total
Ambient	43,198.39 Km	100.00 %	891.07 ton	100.00 %

Bulk transport details:

Means of transport	Empty return distance	Average Weight - Full	Average Distance trip
Road	34.25 %	19.00 %	80.22 Km

Means of transport	Distance	% out of total	Goods weight (ton)	% out of total	Tonnellkm * Km	WW Emissions	% out of total
Road	43,198.39 Km	100.00 %	891.07 ton	100.00 %	79,195,71 ton/Km	27.49 ton CO ₂ e	100.00 %
Total	43,198.39 Km	100.00 %	891.07 ton	100.00 %	79,195,71 ton/Km	27.49 ton CO ₂ e	100.00 %

Distance traveled:



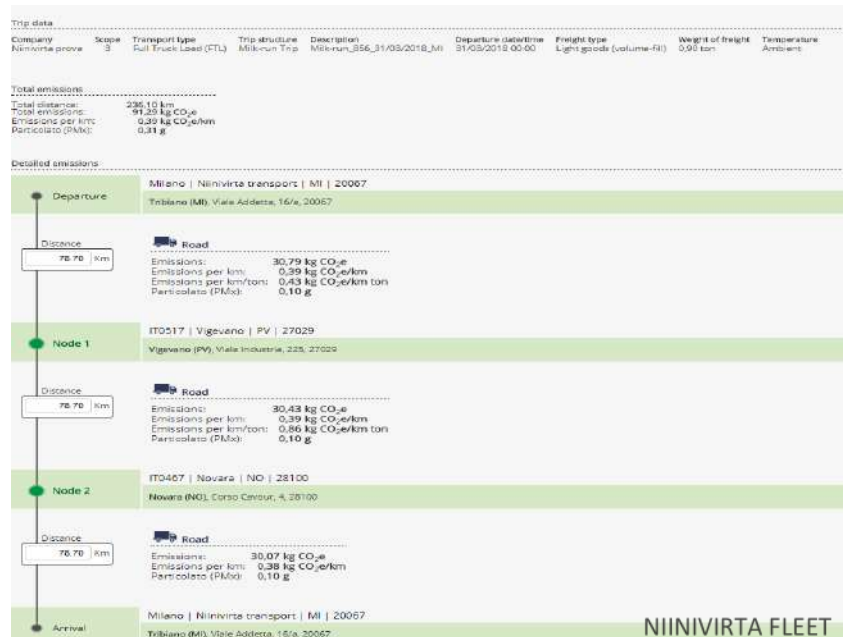
Results:

Energy consumption and emissions	Value	Measurement unit
Well-to-wheel GHG emissions	27.49	ton CO ₂ e
Well-to-wheel GHG emissions	18.08	ton CO ₂ e
Well-to-wheel energy consumption	295.26	GJ
Well-to-wheel energy consumption	295.77	GJ

Since 2017 Niinivirta cooperates with Green Router.

Green Router monitors, analyses and provides UNI EN 16258 certified reports.

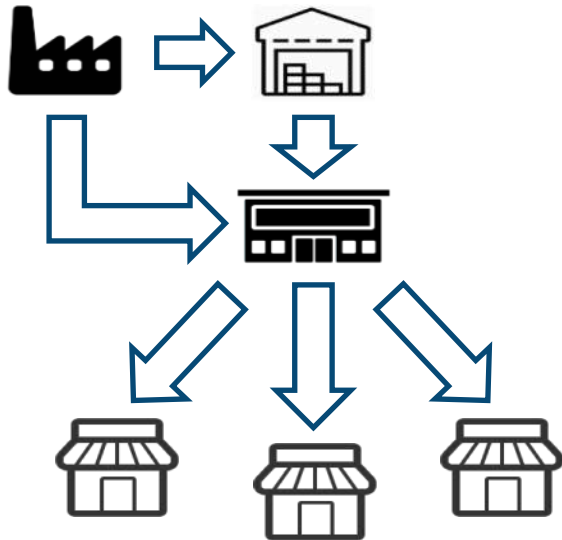
Reporting emission of CO₂



Monitoring & reporting details

GREEN ROUTER

HOW IT WORKS



The monitoring set-up must include various source to evaluate result till the single trip results (see EN 16258).

In this way, the 4 mode of transport are fully considered.



Monitoring & Reporting certification

GREEN ROUTER

CERTIFICATIONS

Trasports

Certified according to EN 16258.



Warehouses (and shopping points)

The certification is made in accordance with the CLECAT* rules.



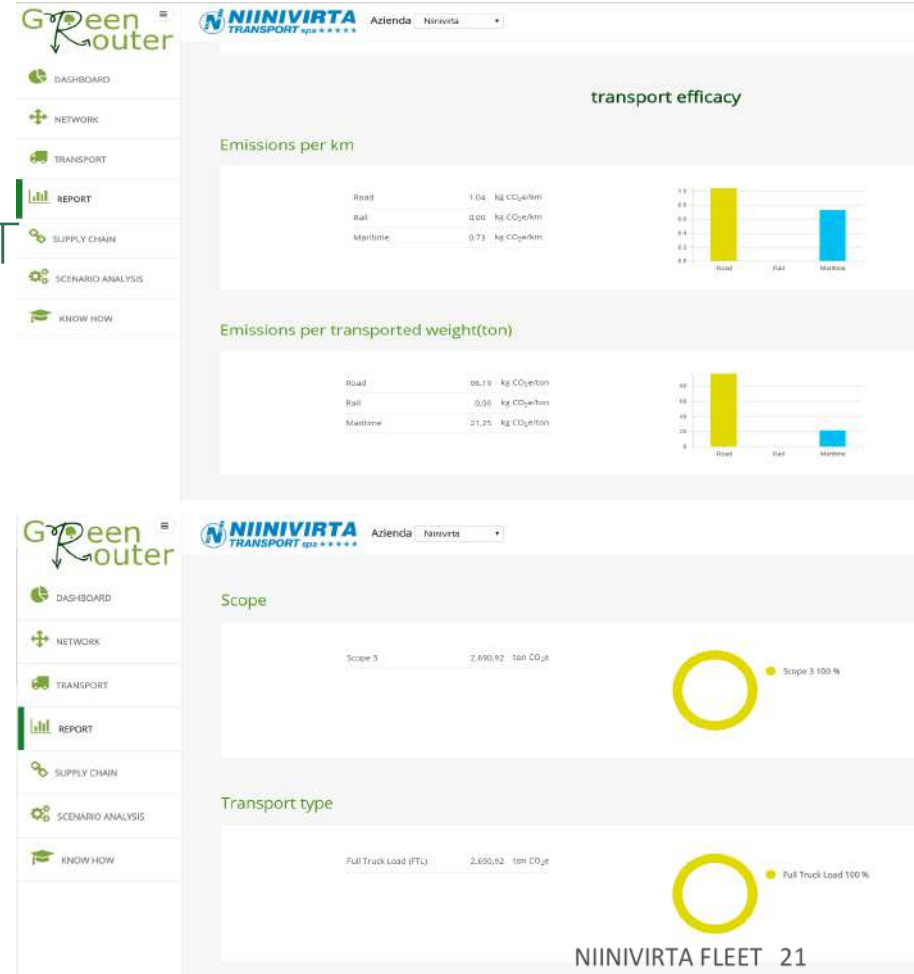
* Approach to the GHG protocol for the 1-2-3 scope included

Monitoring & Reporting layout

GREEN ROUTER

THE CO₂ MAPPING PROJECT

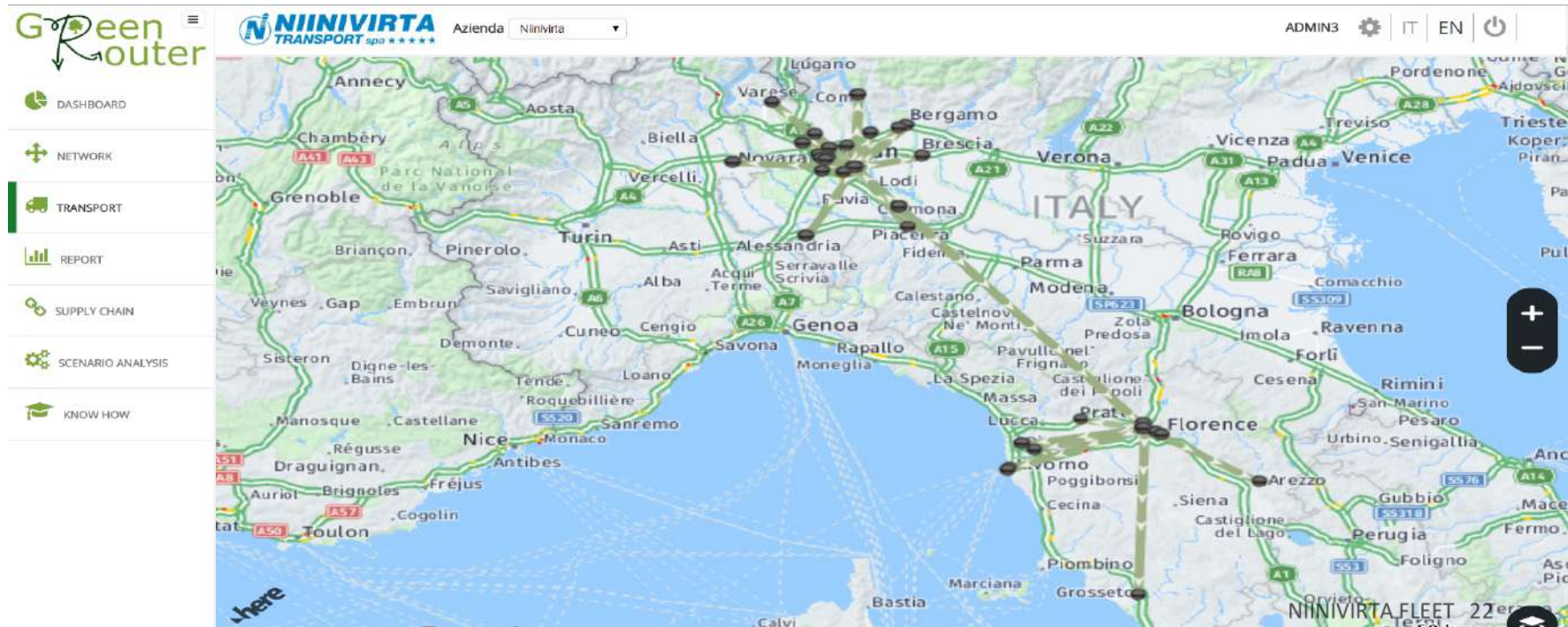
- The CO₂ monitoring project analyzes national and international transport.
- Data are uploaded quarterly.
- Data are directly sourced from Niinivirta transport management software.
- Results are shared with the management to support actions.



Monitoring & Reporting

GREEN ROUTER

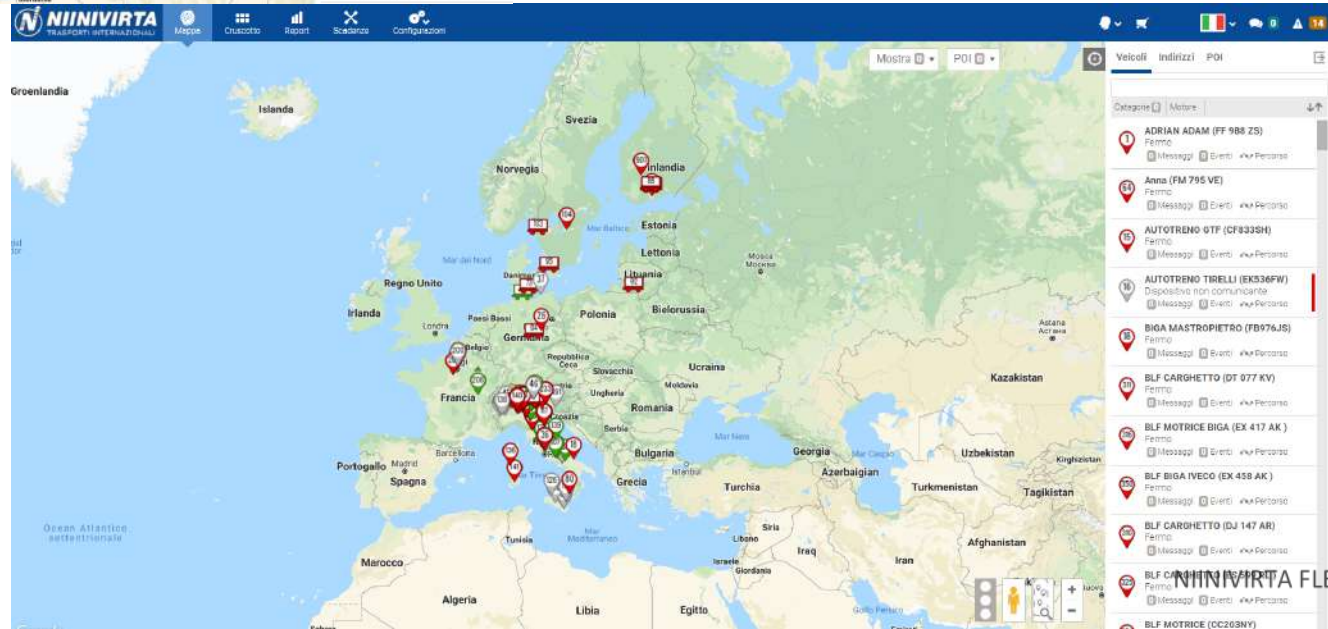
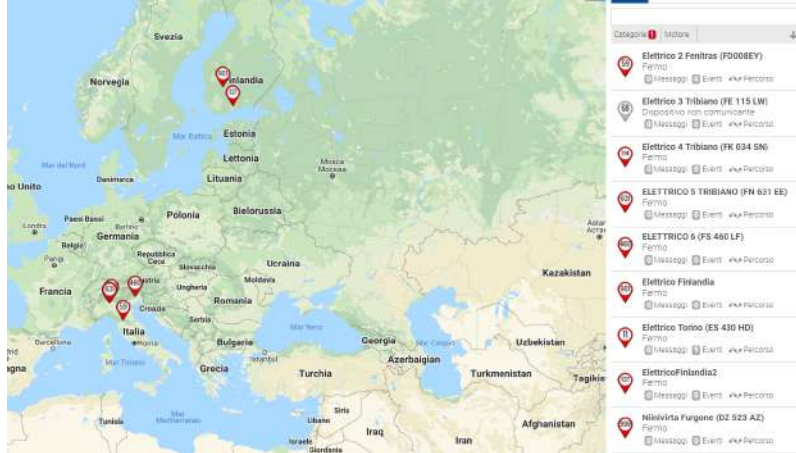
MONITORING THE CO₂ EMISSION

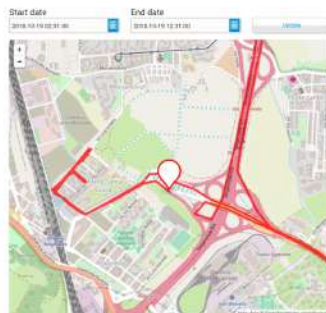
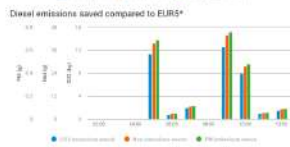
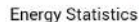


Monitoring System #2

VISIRUN

All e-trucks are equipped with GPS system.





^a comparison to a EUR515 diesel truck with 50% load. Source: VTT / Liquate

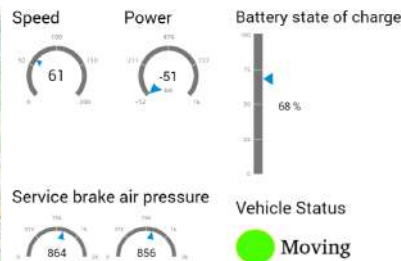
Leverage from
the EU
2014-2020



Trip statistics	
Distance travelled (km):	68.32
Energy Consumed (kWh):	39.67
Energy Regenerated (kWh):	16.54
Energy cost (£):	8.67
CO2 emissions saved (kg):	37.23
Nox Emissions saved (g):	129.81
PM emissions saved (g):	2.25



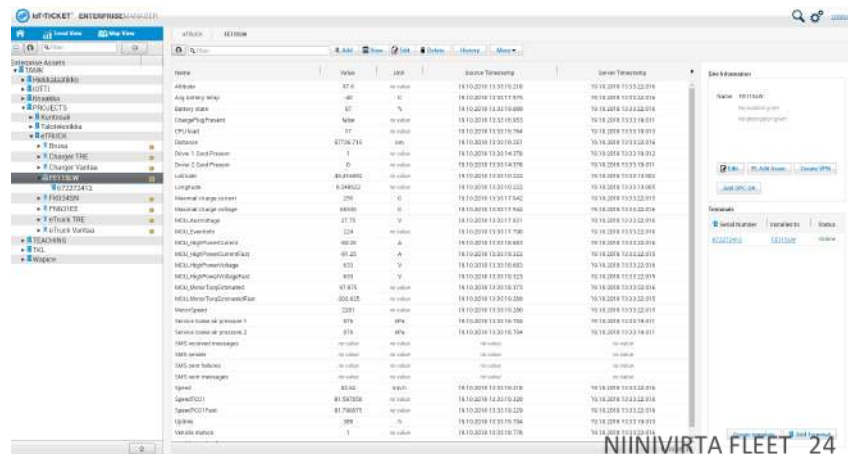
Distance: 57724 km

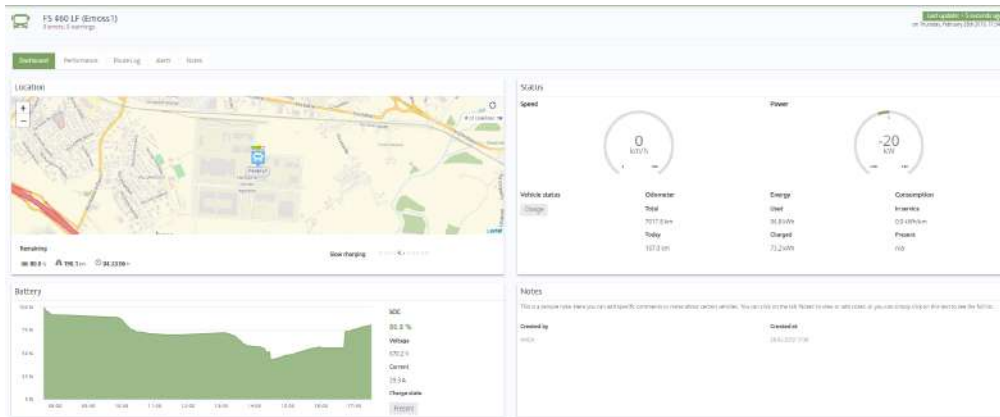
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Monitoring System #3

TAMK UNIVERSITY

Since 2017, Niinivirta collaborates with TAMK Tampere University to develop new software to create IoT-based data reports.

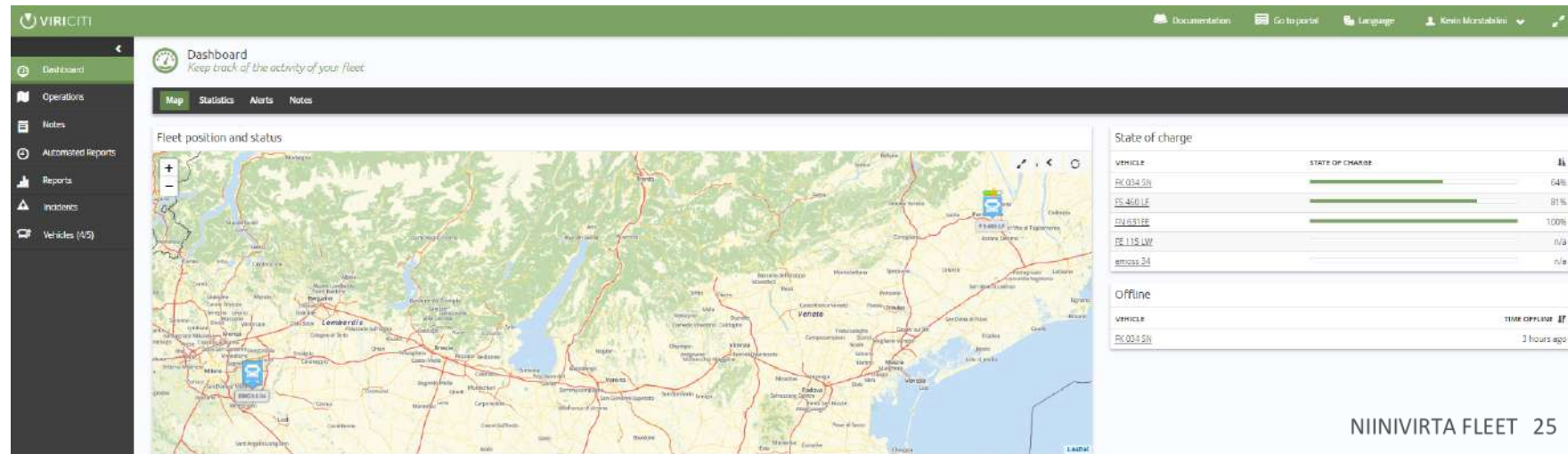




Monitoring System #4

VIRICITY

In addition to Visirun, all E-trucks are equipped with a software to monitor all internal data in real-time, like battery status, consumption, range left.



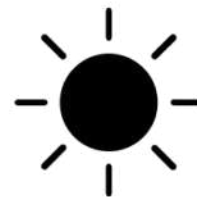
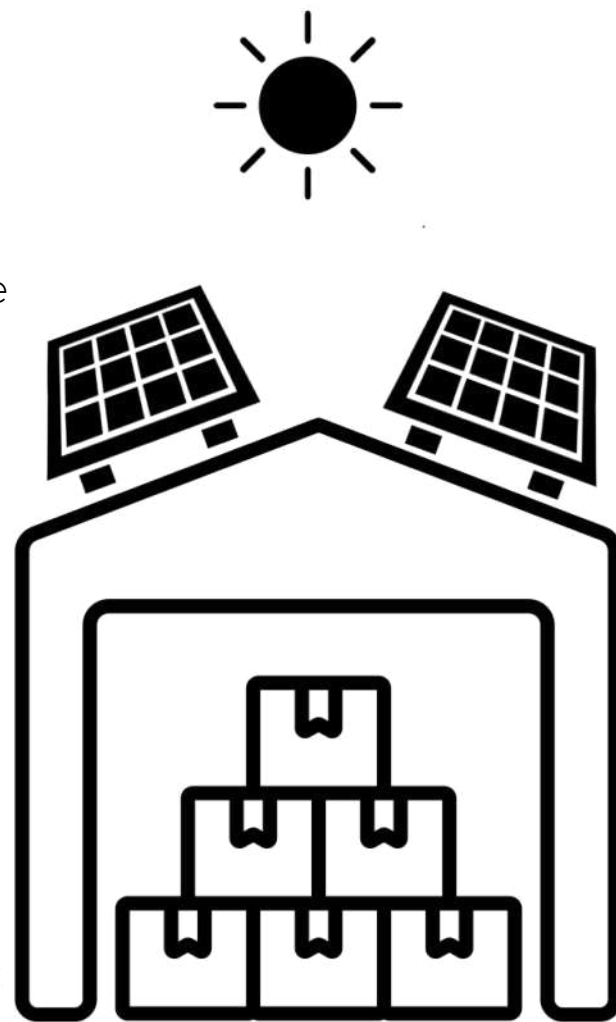
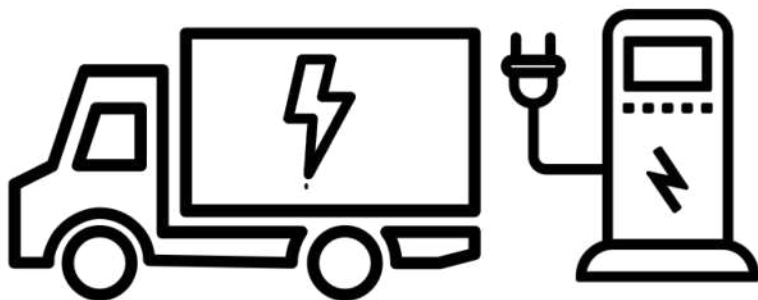
NIINIVIRTA GREEN LOGISTICS SUPPLY CHAIN

In 2014, with the purchase of the 1st 100% electric truck, we have started a project.

At present we have created our own network, based on daily organization of charging time and truck range.

By the end of 2021 we will install on the roof of our warehouse a 100 Kw photovoltaic system.

In this way we will be able to guarantee our customers a completely green supply chain both tank-to-wheel and well-to-wheel.





IN DECEMBER 2020 WE'VE REACHED A GREAT RESULT

**763.361 km = 20 LAPS AROUND
THE WORLD**



THANK YOU!

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