# About Husqvarna



Husqvarna is the world's leading producer of outdoor power products for forest, park and garden care, watering products and power tools for construction.

- Founded in 1689

- 25,000 independent dealers worldwide

- 13,800 employees

# Our history: innovation landmarks

**1689**
Husqvarna is founded

**1903**
Combustion & electric engines

**1959**
The first chainsaw

**1995**
The first Automower®

**2012**
Battery innovations

**2016**
Husqvarna Fleet Services™

**2019**
Autonomous technology

**2022**
CEORA™

# Sustainable innovations for our customers

# Innovating toward fossil independence

## Our aim:

Make it easy for professional customers to shift to low-carbon solutions that decrease their carbon footprint.

**How we do it:**
- Zero direct emissions* in use from our professional robotic mowers
- Large assortment of battery powered products
- Husqvarna Fleet Services™ Carbon Calculator
- Life Cycle Assessment to measure products climate impact

* Although no $CO_2$ emissions are emitted during use, there are $CO_2$ emissions emitted at other stages of the products' life cycle, for example during production, charging and at the end-of-life stage.

# Designed to last

**Our aim:**

With a circular mindset we can prolong the life of products. When we rethink and redesign for a smarter, more efficient use of resources it can reduce both costs and climate impact.

How we do it:
- Design for reparability
- Thousands of spare parts for current and discontinued models
- Husqvarna Fleet Services™ for fleet optimization and preventive maintenance
- Service centers for product repair

# Innovating globally for biodiversity locally

## Our aim:

Assist professional customers with data and information to help safeguard biodiversity in local areas.

How we do it:

- Close collaboration with scientists and experts

- Measuring and analyzing green spaces with HUGSI – Husqvarna's Urban Green Space Index

- Easy set-up of stay-out zones for robotics, enabling flexibility during the pollinating period

# UNDERSTANDING GREEN SPACE FROM SPACE

Quantifying greenness of global cities.

www.hugsi.green

# THE CHALLENGE

Husqvarna

THE SOLUTION

"IF YOU CAN'T MEASURE IT, YOU CAN'T MANAGE IT."

Peter Drucker

# Husqvarna Urban Green Space Index - HUGSI.green

is a service from Husqvarna providing objective and recurring monitoring for hundreds of cities in more than 60 countries.

Cities are monitored on their individual vegetative prime day.

We are using global open datasets and apply the same methodology when analyzing all cities to promote benchmarking and collaboration.

Data is shared and visualized on www.hugsi.green and is available for you and all other cities part of the index

Sentinel 2 A/B, 13 band multispectral data, spatial resolution 10x10m , return rate approx. every 5 days

**OBJECTIVE MONITORING**

**RECURRING ANNUAL ANALYSIS**

**GLOBAL OPEN DATASETS**

**TRUSTED AND SCIENTIFIC METHODOLOGY**

Husqvarna

Technology partner

overstory

Data sources

esa

European Commission

HUGSI – Husqvarna Urban Green Space Index

# Supporting the greening ambition of global cities

Green spaces are the lungs of cities.
Improving air quality and helping to manage flooding and rainwater.
Contributing to the physical and mental health of citizens.
As urbanization continues, it's therefore vital to monitor the proportion between grey, green and blue areas in and around cities.

www.hugsi.green
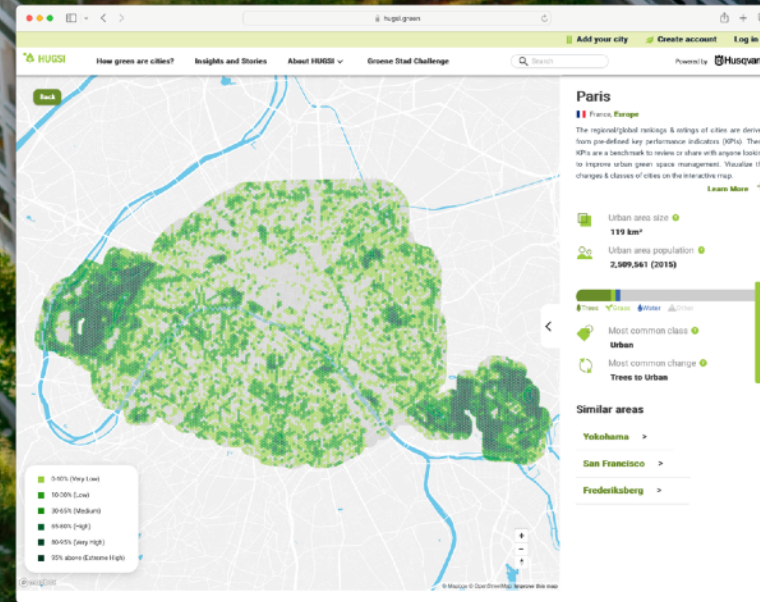
Features of HUGSI.green:

ANALYZING & VISUALIZING URBAN GREEN OVER TIME

URBAN TREE CANOPY & VITALITY MONITORING

CITY WIDE CHANGE AFFECTING VEGETATION

UNDERSTAND URBAN BIODIVERSITY POTENTIAL

What can we tell about urban trees?

**27%**
Urban canopy cover
Global

**36%**
Urban canopy cover
Nordics

**28%**
Urban canopy cover
Europe

**22%**
Urban canopy cover
Rest of world

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# Urban tree monitoring in

**Urban tree canopy cover %**

**VITALITY OF TREE CANOPY**

**TOTAL AREA OF TREE CANOPY**

**TREE CANOPY PER CAPITA**

**ANNUAL UPDATES**



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# Trees in Global cities

**Top 10 global cities with more than 100 000 inhabitants.**

| | City | Country | Tree canopy cover % | Vitality / NDVI (-1 to +1) |
|---|---|---|---|---|
| 1 | Charlotte (NC) | USA | 58% | 0,70 |
| 2 | Espoo | Finland | 56% | 0,69 |
| 3 | Oulu | Finland | 50% | 0,76 |
| 4 | Vilnius | Lithuania | 48% | 0,69 |
| 5 | Helsinki | Finland | 47% | 0,73 |
| 6 | Durban | South Africa | 46% | 0,74 |
| 7 | Berlin | Germany | 45% | 0,65 |
| 8 | Tampere | Finland | 45% | 0,80 |
| 9 | Oslo | Norway | 44% | 0,76 |
| 10 | Vantaa | Finland | 44% | 0,78 |

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# Changes to tree canopy cover in Global cities

**186 global cities with more than 100 000 inhabitants. Comparing 2022 to 2021.**
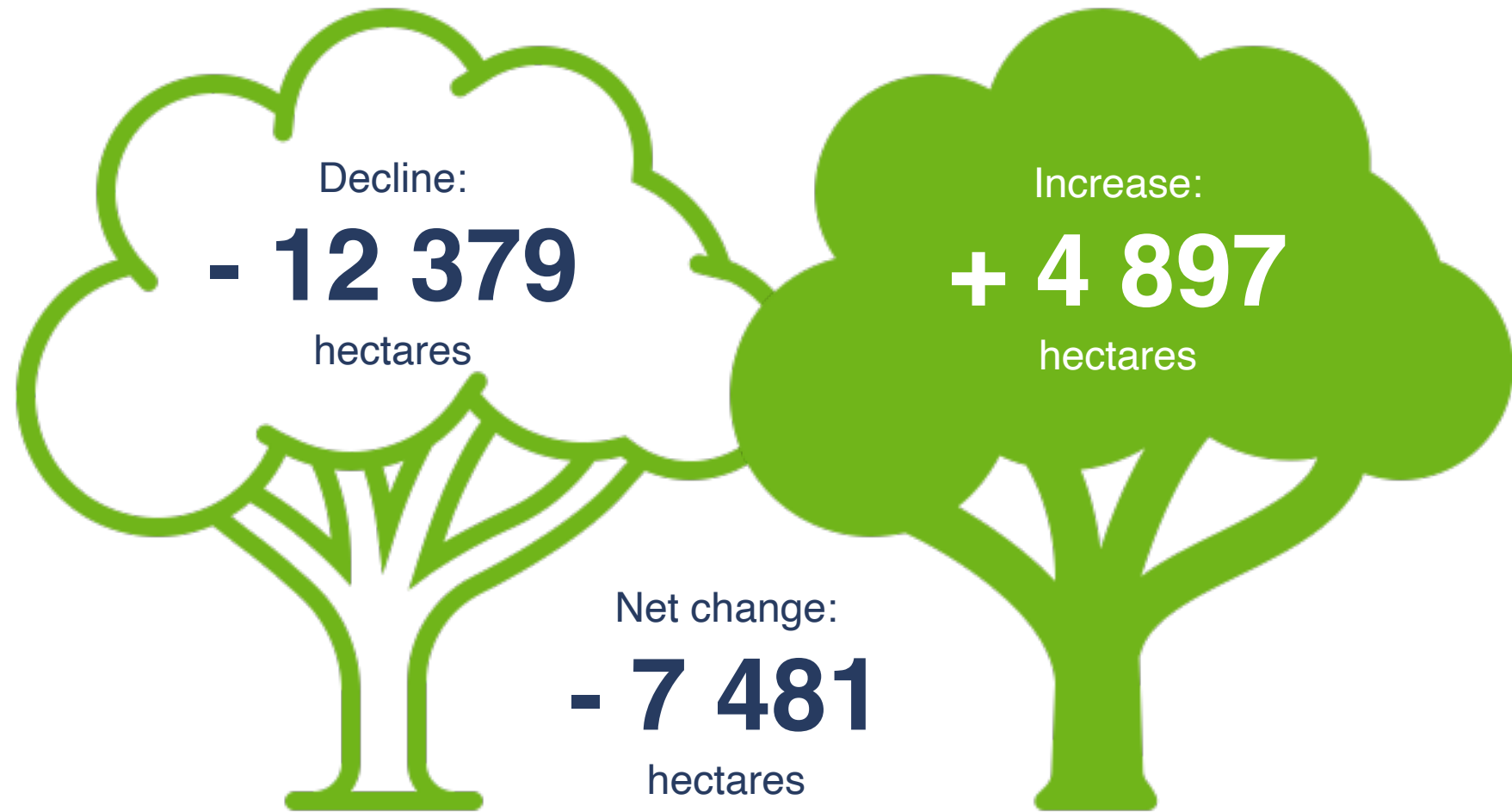
Decline:

- 12 379

hectares

Increase:

+ 4 897

hectares

Net change:

- 7 481

hectares

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**Are you on top of your urban green space data?**

We offer all participants representing a municipality
a 3 months free trial of HUGSI.green with a
custom analysis for your city.
www.hugsi.green

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MAKE LIFE IN
THE TREE
TOPS BETTER

# ARBORISTS & LOGGERS

# GREEN SPACE MANAGEMENT
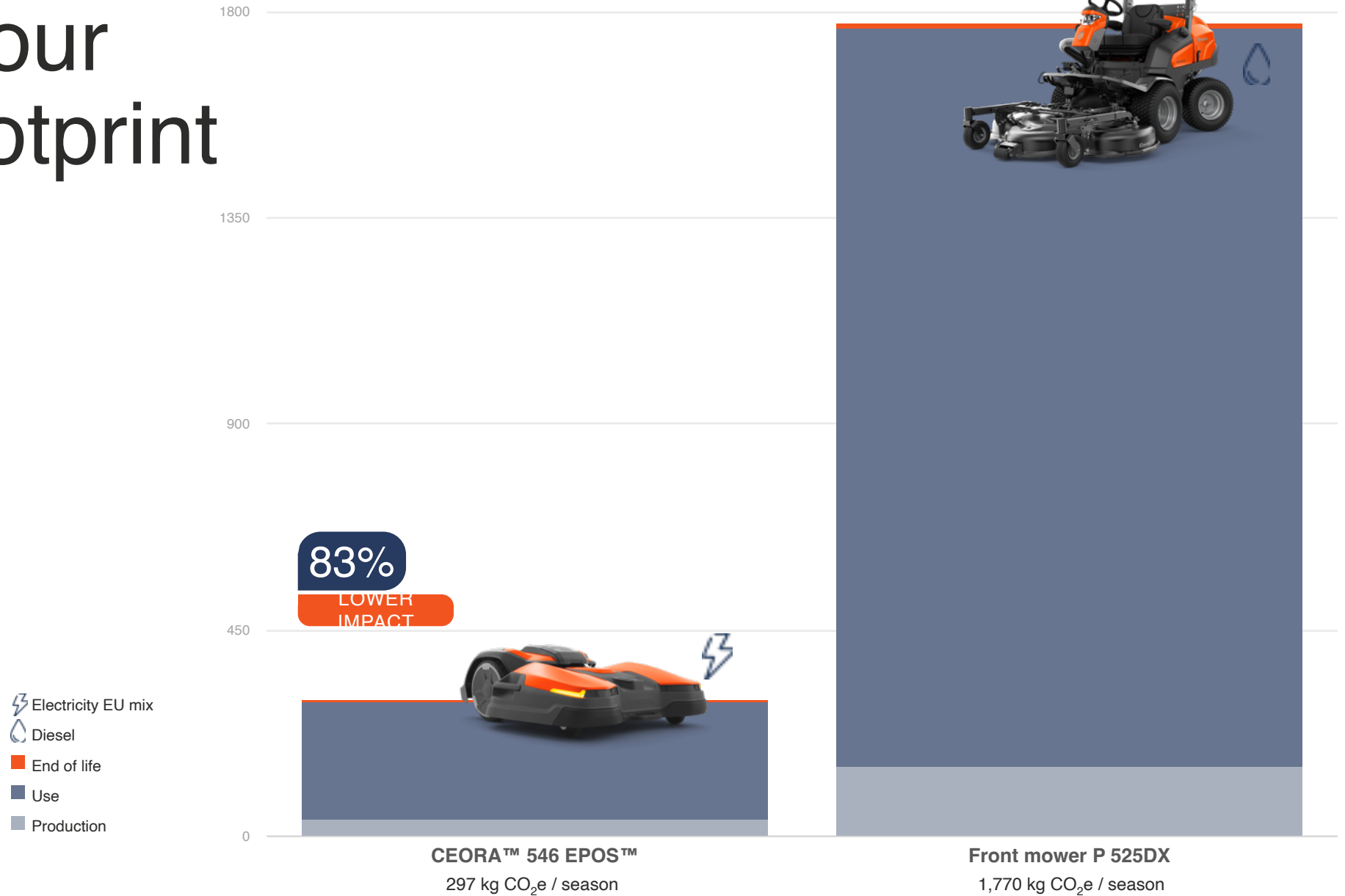
# SPORTS TURF MANAGEMENT

# Minimise the disturbing noises

The soundscape of the fuel-driven mower

The soundscape of the robotic mower

85–90 dB(A) | Diesel truck

75–85 dB(A) | Vacuum cleaner

60–75 dB(A) | Conversational speech

40–50 dB(A) | Quiet neighborhood

# Reduce your carbon footprint

**83%**
LOWER IMPACT

Electricity EU mix
Diesel
End of life
Use
Production

1800

1350

900

450

0

**CEORA™ 546 EPOS™**
297 kg CO$_2$e / season

**Front mower P 525DX**
1,770 kg CO$_2$e / season

# Minimise the disturbing noises

The soundscape of fuel-powered trimmers

The soundscape of battery-powered trimmers

85–90 dB(A) | Diesel truck

75–85 dB(A) | Vacuum cleaner

60–75 dB(A) | Conversational speech

40–50 dB(A) | Quiet neighborhood
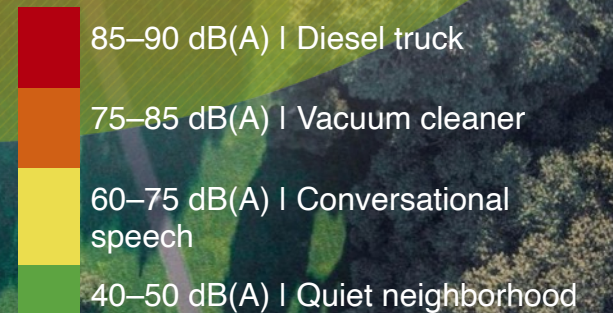
# We have the right products and accessories for the task at hand

**TURF CARE**

**HEDGES**

**CLEANING**

**TREE CARE**

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