GreenRoute AI

The navigation app that picks the route with the lowest carbon footprint



Innovation project: fighting global warming and protecting the ozone layer

Agenda

01 The challenge

02 The idea

03 The technology

04 The business

05 The impact

06 The roadmap

Transport and the climate



~25%

of global energy-related CO_2 comes from transport



~75%

of transport emissions come from road vehicles

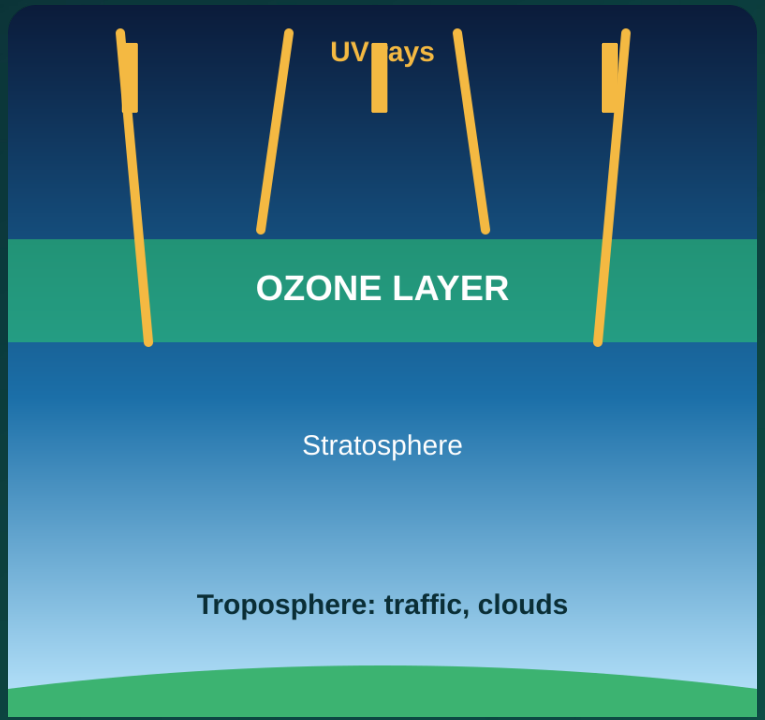


Every trip

burns fuel that could be saved with a smarter route

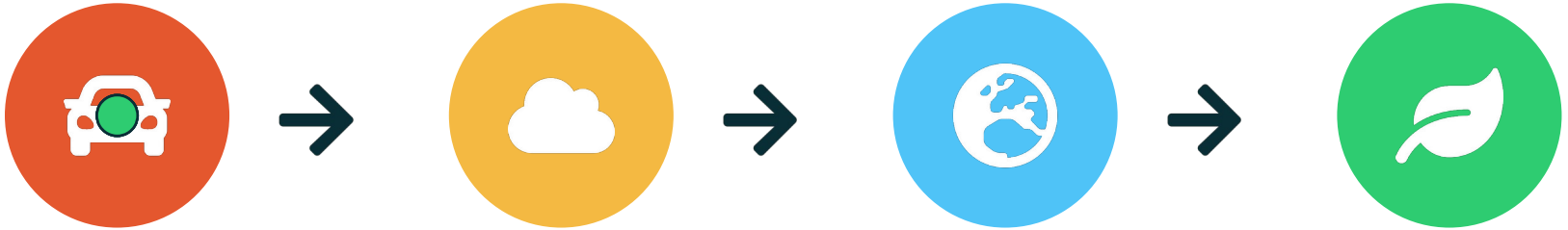
Figures are approximate global estimates (IEA).

The ozone layer: our UV shield



- Absorbs harmful UV radiation from the sun
- Healing slowly thanks to the Montreal Protocol
- N_2O and NO_x from fuel burning still add pressure

From tailpipe to atmosphere



Fuel is burned

CO_2, NO_x, N_2O released

Warming and ozone stress

Less fuel = less harm

Break the chain at the first link: burn less fuel on every trip.

Navigation today vs GreenRoute AI

Typical maps

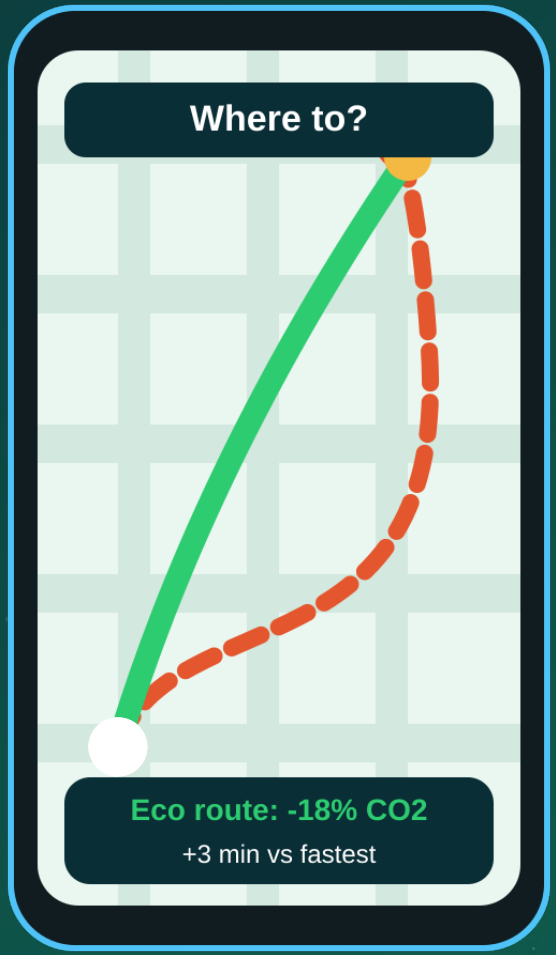
- ✗ Optimised mainly for speed
- ✗ Eco option limited to some regions
- ✗ No reward for green choices

GreenRoute AI

- ✓ **Optimised for lowest CO_2**
- ✓ **Eco route is the default**
- ✓ **Rewards and tracking built in**

Eco-first navigation

- Works like Google Maps: type a destination
- AI ranks every route by estimated CO_2
- Smooth routes use less fuel
- Save money and earn green rewards



Fast is good.
Clean is better.

One tap shows the cleanest way to get there.



How the AI works



1. Collect

Traffic, slopes, speed limits, weather, vehicle type



2. Predict

ML model estimates fuel use per road segment



3. Optimise

Finds the route with the lowest total CO_2



4. Adapt

Re-routes live and learns from every trip

Data that feeds the model



Live traffic



Road slope



Weather



Vehicle type

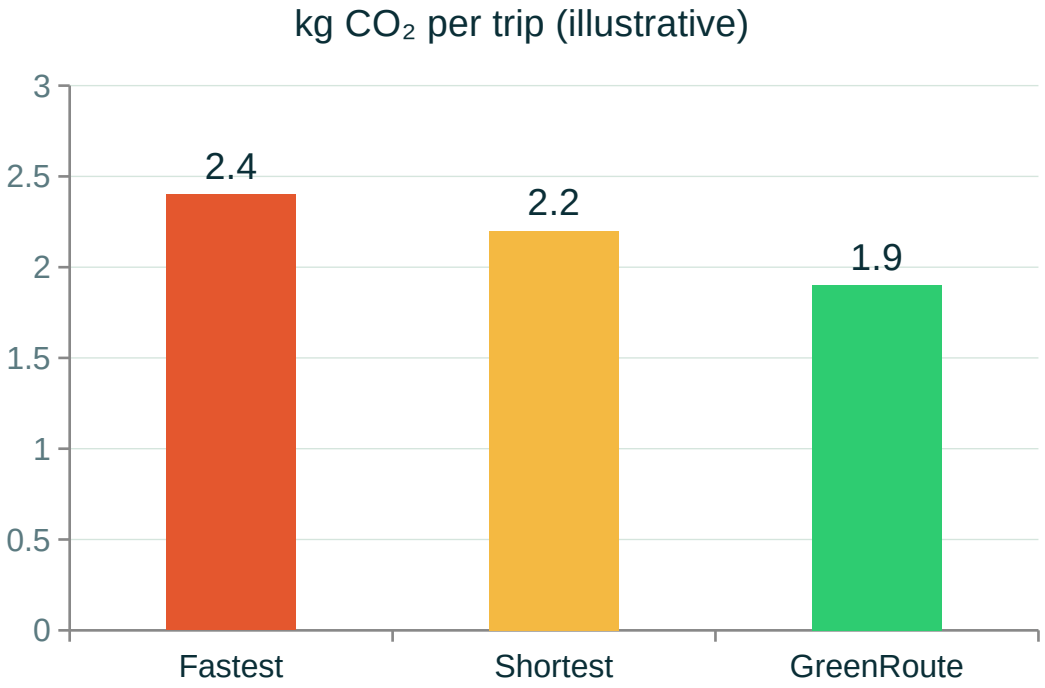


Speed limits



Map data

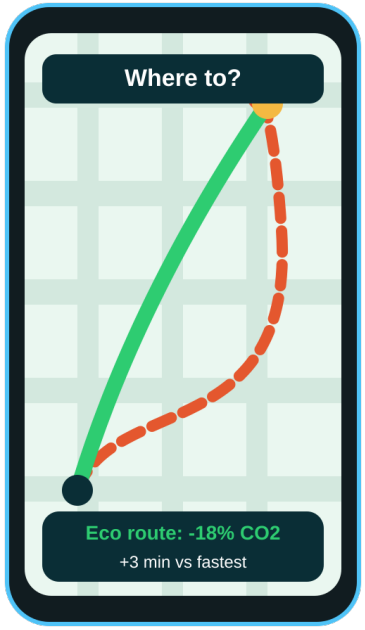
Same trip, different footprint



-21%

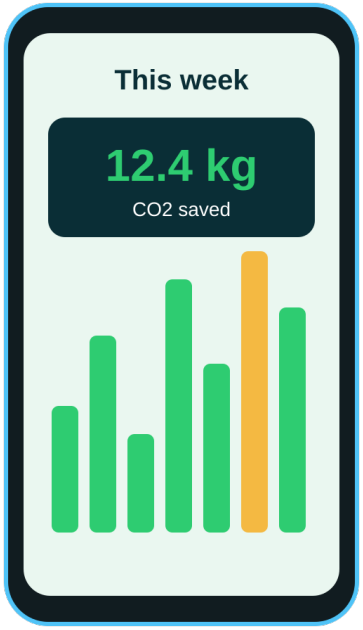
CO_2 vs the fastest route, for only a few minutes more. Example for one commute.

Inside the app



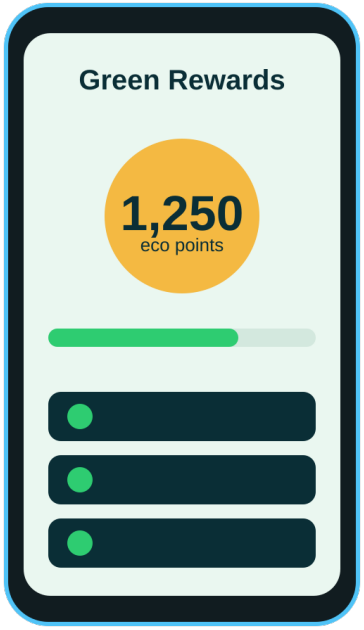
Eco route

Compare fast vs green



Dashboard

See CO_2 saved



Rewards

Earn points for green trips

Key features

Eco-Route

Lowest-carbon path, time trade-off shown

Vehicle profile

Petrol, diesel, hybrid or EV

CO_2 dashboard

Track kg of CO_2 saved weekly

Green rewards

Points redeemable with partners

Terrain aware

Avoids steep climbs and jams

Community goals

Cities and friends compete

Who will use it



Daily commuters

Save fuel every day



Delivery fleets

Cut fuel bills and reports



EV drivers

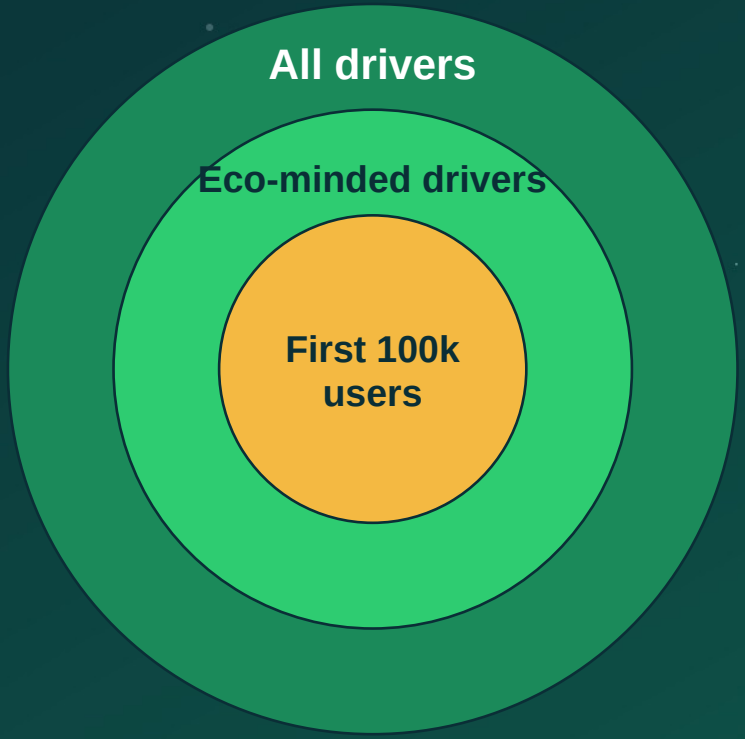
Stretch every charge



Eco travellers

Travel with a clear conscience

Market opportunity



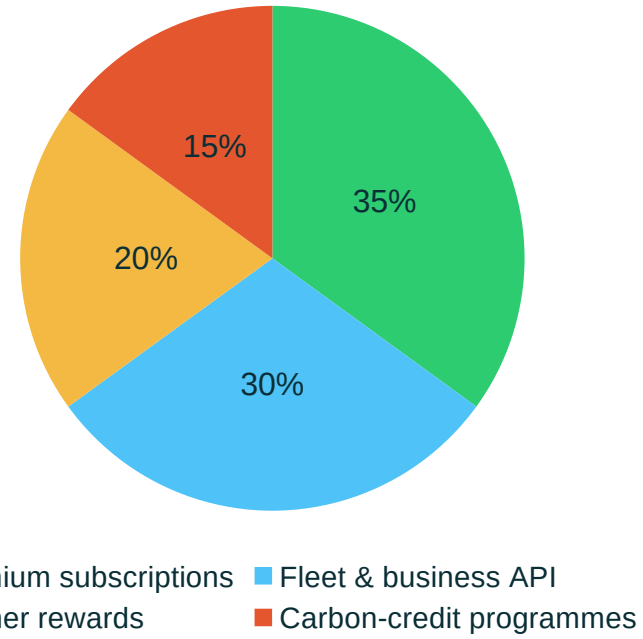
Everyone who drives is a potential user

Start with eco-minded drivers and fleets

Launch in one city, then scale

How we make money

Illustrative revenue mix



Premium app
Ad-free, advanced stats

Fleets & logistics
Cut fuel bills for companies

Green partners
Eco brands fund rewards

Carbon credits
Verified CO_2 savings sold

Pricing plans (example)

Free

€0

Eco routes
Basic CO_2 stats

Premium

€2.99 / mo

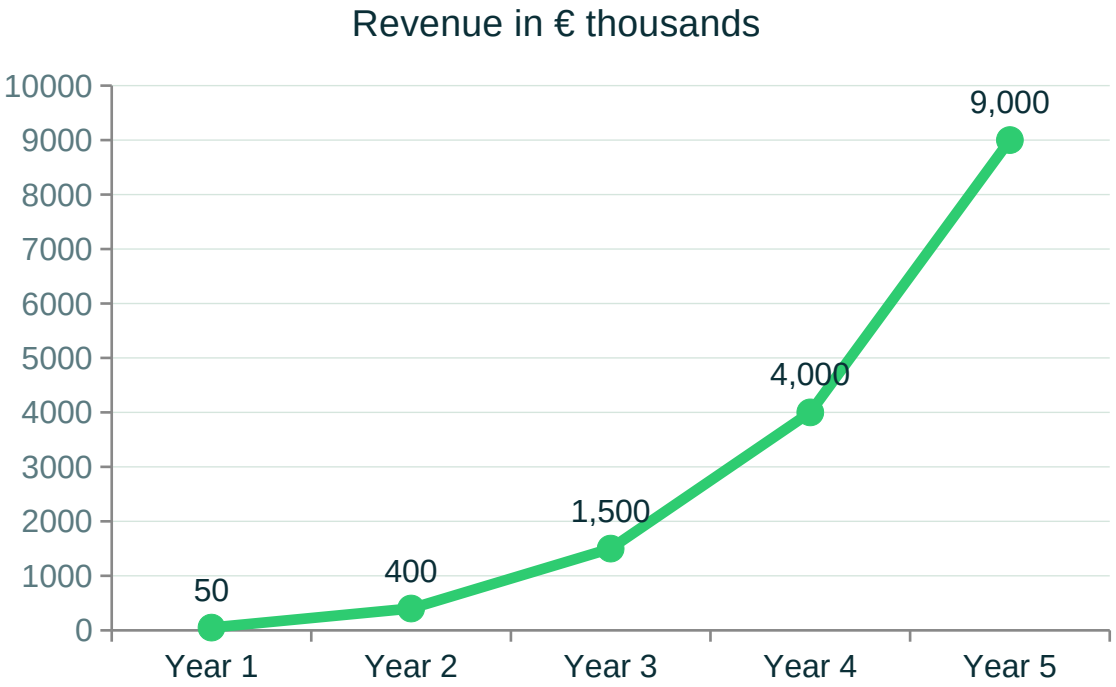
Advanced stats
Bonus rewards
No ads

Business

Custom

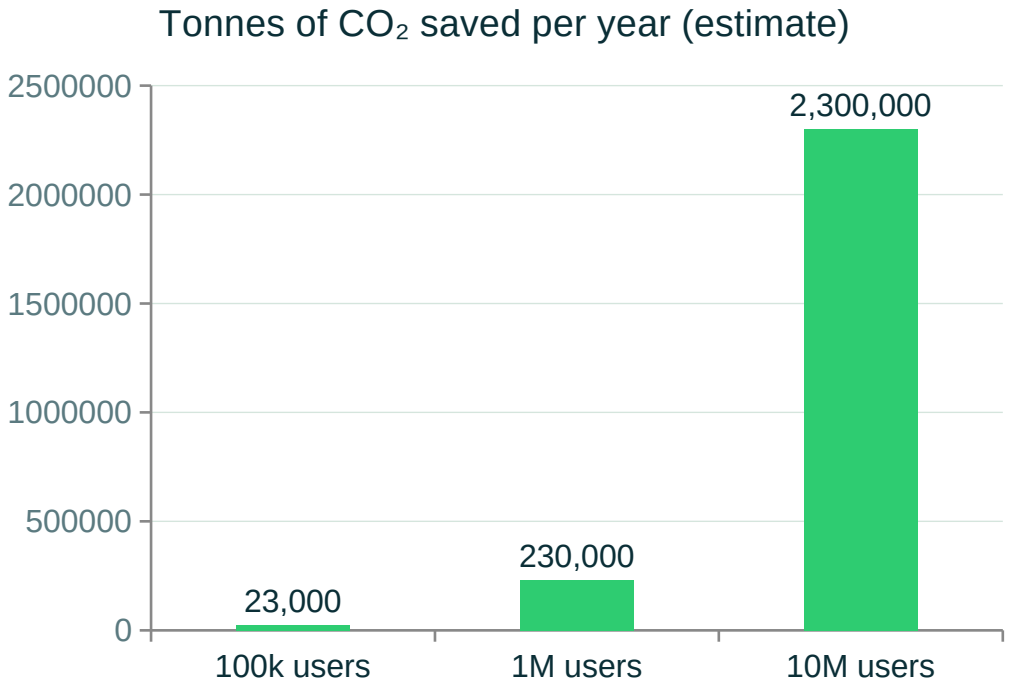
Fleet API
Carbon reports
Support

Growth outlook (illustrative)



Growth comes from fleets and partners once the user base is large.

Potential climate impact



~5 %

less fuel per driver. Assumes about 4.6 t CO_2 per car per year.

Two benefits, one app

Climate

- Less fuel burned
- Lower CO_2 per trip
- Slows warming

Ozone layer

- Less NO_x and N_2O
- Less pressure on the shield
- Supports Montreal Protocol gains

Ozone recovery mainly depends on global agreements; we add a small, real contribution.

Why we can win

Feature	Typical maps	GreenRoute AI
Fastest route	Yes	Yes
Eco route	Limited, some regions	**Core feature**
Personal CO_2 dashboard	Not a focus	**Yes**
Rewards and community	No	**Yes**
Fleet carbon reports	No	**Yes**

Roadmap



Month 0-6

Build AI model & MVP

Month 6-12

Pilot in one city

Year 2

Launch fleet API

Year 3+

Go global

Risks and answers

Users want speed	Show the time trade-off, only a few minutes
Estimates must be accurate	Calibrate with real fuel data in the pilot
Big competitors	Focus on rewards, fleets and partners

Smarter roads, cleaner planet

GreenRoute AI: profitable for us, good for drivers, great for the climate and the ozone layer.

Thank you! Questions?

