

Measuring impact

Guiding the transition

Acting against urban heat islands
France Villes et territoires Durables Webinar · May 20, 2026



+33 000

deaths attributable to heat in France
between 2014 and 2022

A challenge that will intensify due to

climate change

Urban planning is the answer



Vegetation

-4°C in perceived temperature



Materials & colours

Albedo, light-coloured surfaces



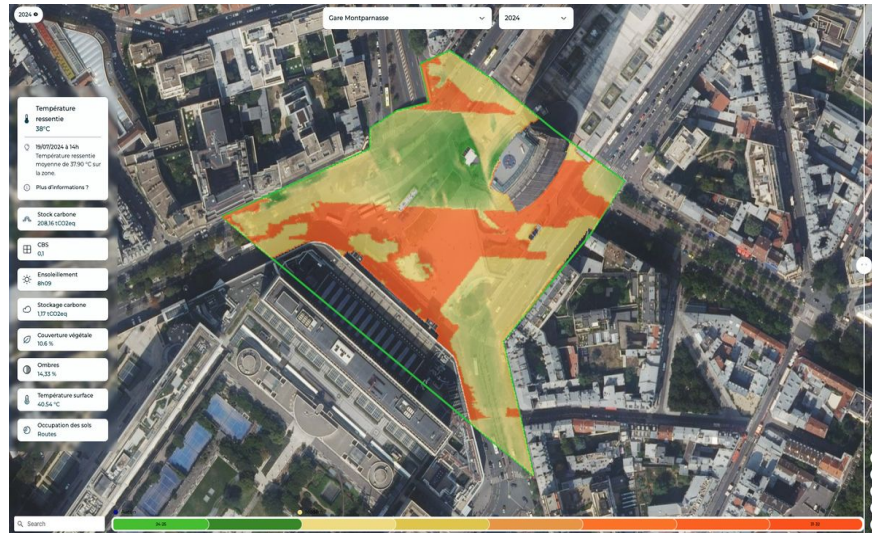
Urban morphology

Ventilation, orientation

Netcarbon measures the impact of your urban projects

01 Diagnostic · District · Park · Square

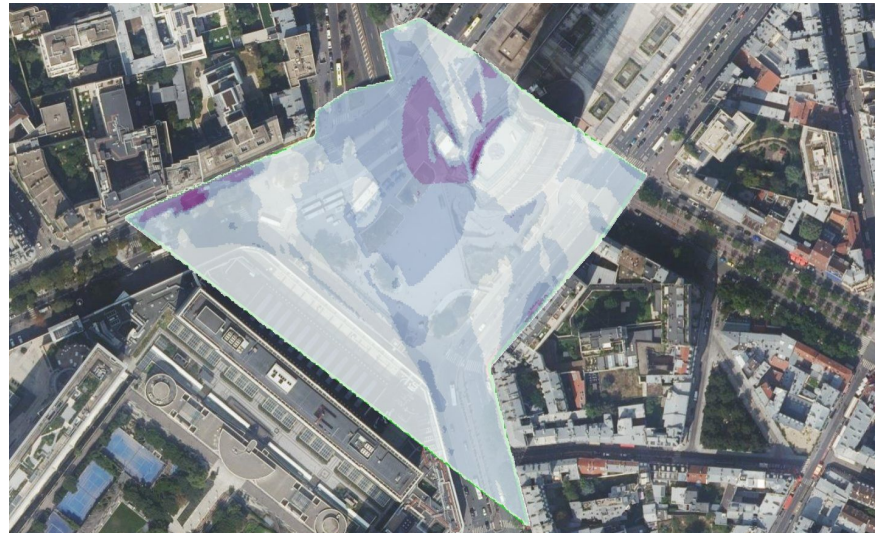
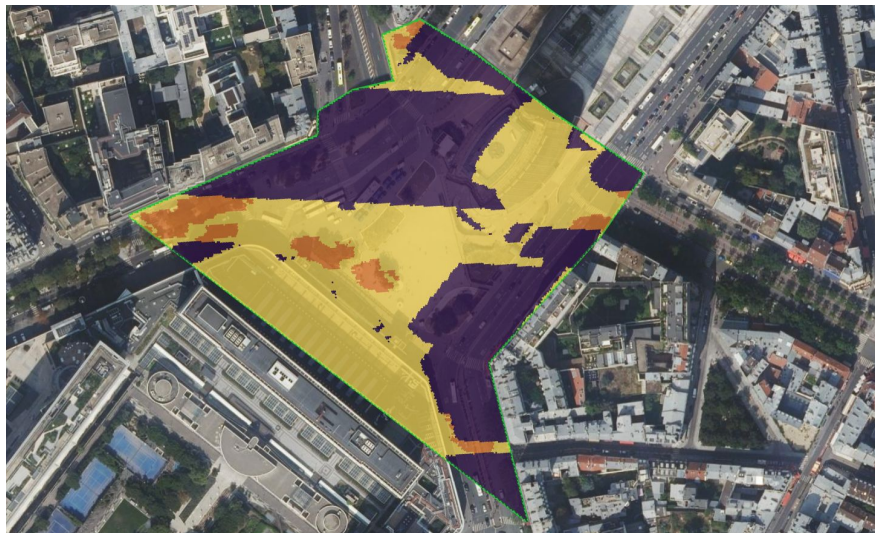
Heat stress zones at a glance



Montparnasse Station forecourt - UTCI mapping on 19/07/2024 at 10am

01 Diagnostic · District · Park · Square

Understanding why: shadows & wind



Montparnasse Station forecourt - Shadow map (left) and wind map (right) on 19/07/2024 at 10am



Temperature
Surface



Biodiversity
CBS



Land use
Land artificialisation



Carbon stocks
CO₂ dans les sols

02 Simulation

PERCEIVED TEMPERATURES · Paris, Gare Montparnasse



Palette

+ 3000 Essences disponibles
+ 60 matériaux

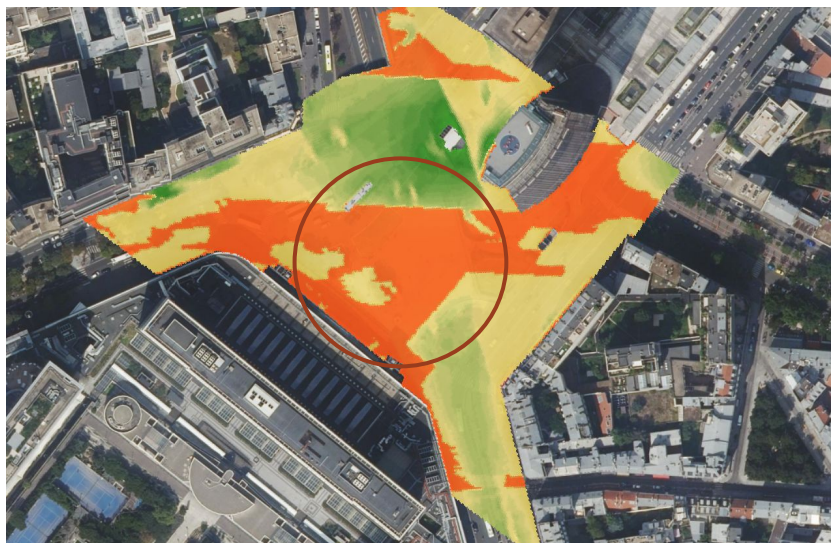
Styphnolobium : supporte les fortes chaleurs et sols pauvres

Quercus (Chêne) : feuillage dense persistant, idéal pour créer de l'ombre

Carpinus betulus (Charme) : très résistants au stress hydrique et tolérants à la mauvaise qualité des sols.

02 Before / after simulation

PERCEIVED TEMPERATURES · Paris, Gare Montparnasse

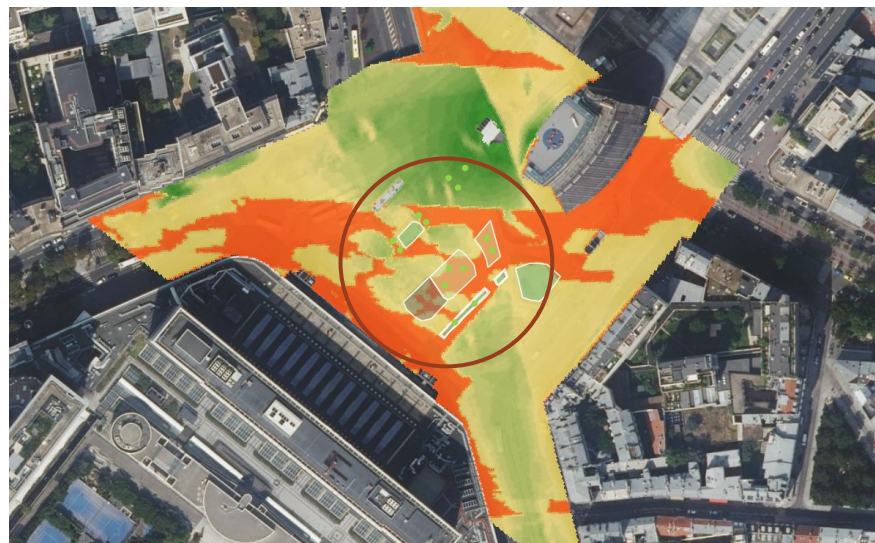


Before project

TEMP
30°C

VEG. AREA
3796 m²

CO₂
208 tCO₂



After project

TEMP
26°C

VEG. AREA
4301 m²

CO₂
225 tCO₂

02 Before / after simulation

PERCEIVED TEMPERATURES · Paris, Gare Montparnasse



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Verifying alignment with France 2050 climate targets

3 indicators · 1 alignment score per project

INDICATORS

Carbon stocks

CO₂ sequestered in soils & vegetation

Perceived temperature

Thermal comfort at 1m resolution (UTCI)

Vegetation cover

Permeable & vegetated surfaces (ZAN)

ALIGNMENT SCORE

×2

Carbon stocks

Double carbon sequestration
(France 2050 carbon sink target)

-4°C

Perceived temperature

Reduce heat stress by 4°C
(urban comfort & health target)

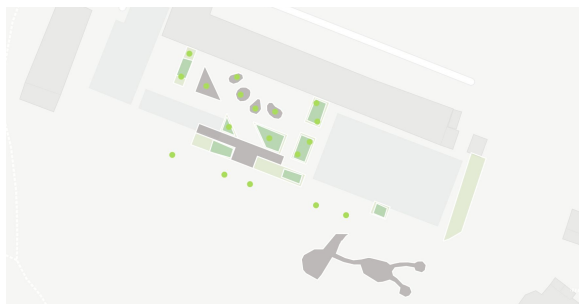
ZAN

Zero net artificialisation

No net loss of natural surfaces
(France 2050 land use target)

Each project receives a 2050 alignment score — objective, comparable, actionable.

Cities of all sizes, across France (and looking for EU cities)



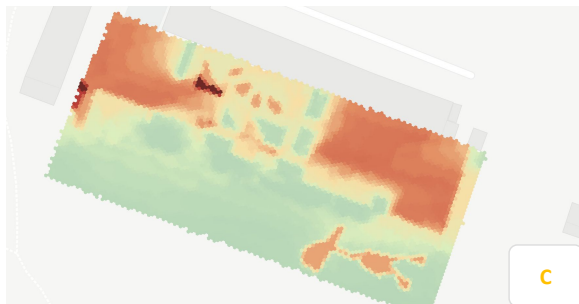
Anglet · École Évariste Galois



Lyon · Place Bachut



Nantes · Quartier de l'aéroport



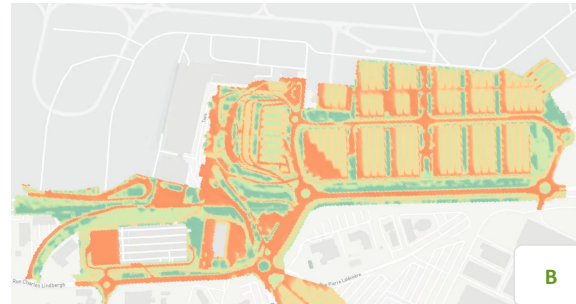
C

École Évariste Galois · Simulation après



A

Place Bachut · Simulation après



B

Quartier de l'aéroport · Simulation après

Where to start?

01

Diagnose

Map your heat stress zones at district scale · Identify the most exposed public spaces · Cross-reference with your ongoing planning programmes

A few days

02

Simulate

Test rewilding scenarios at 1-metre resolution · Quantify impact before deciding · Compare species and materials to guide investment

A few weeks

03

Decide & monitor

Back your decisions with m²-level data · Share maps with your technical teams · Fund projects through environmental labels · Measure real impact after works

Over time

+200 000

hectares
monitored

+150

projets
d'aménagement

13

personnes
dans l'équipe

3 ans

of R&D
ESA · CNES · BPI · ADEME

THEY TRUST US

Local authorities



basile.goussard@netcarbon.fr

netcarbon.fr