



WECO

Powerful tools to fight Climate Impacts

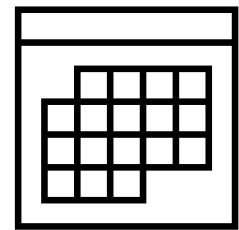
Trees and urban green are one of the best tools to reduce city temperatures and flood risk, whilst also making our neighbourhoods places we want to live.

WEO utilise deep learning and satellite imagery to provide regular actionable insights for cities to help grow their urban forest to tackle climate change.

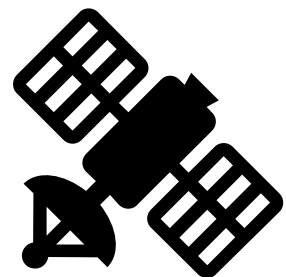
Using AI we create high-resolution insights from satellite data



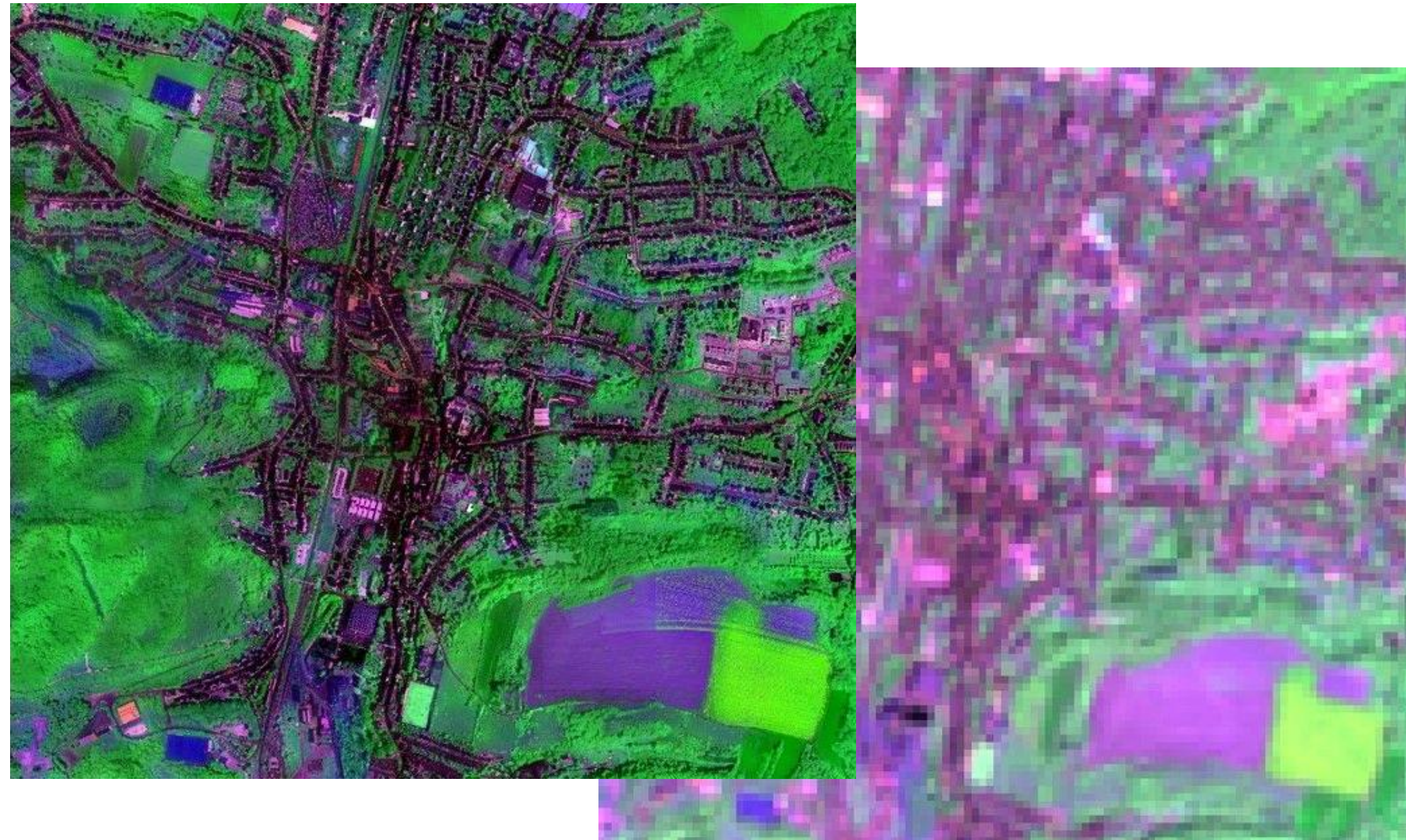
Deep Learning to zoom in to higher resolutions



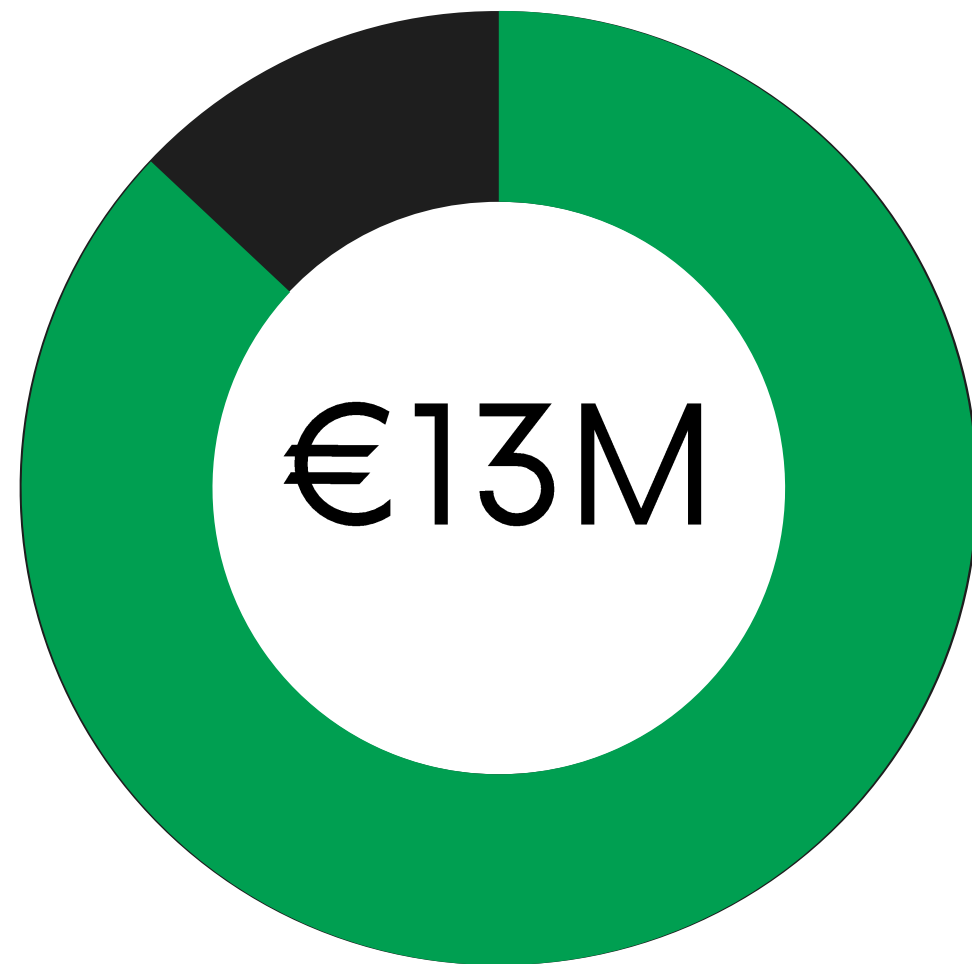
Seasonal Updates – not years between aerial flights



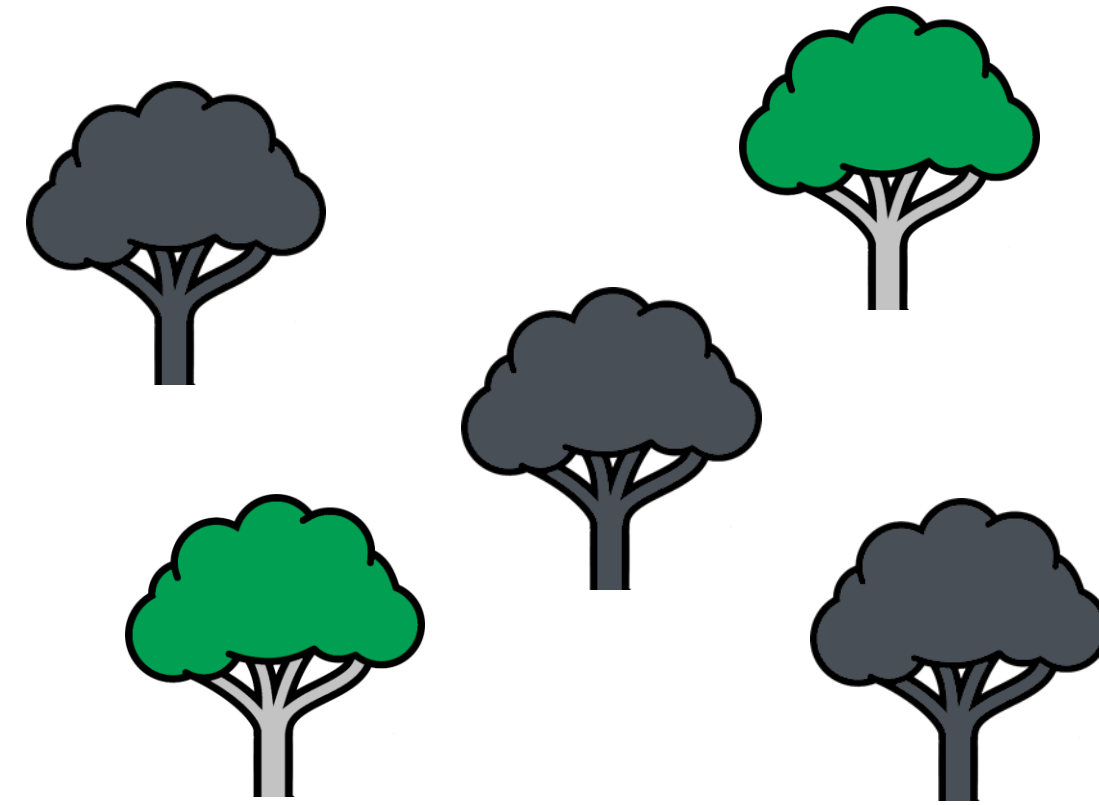
Sentinel Satellite datasets available globally



An enhanced approach is needed to achieve our tree goals

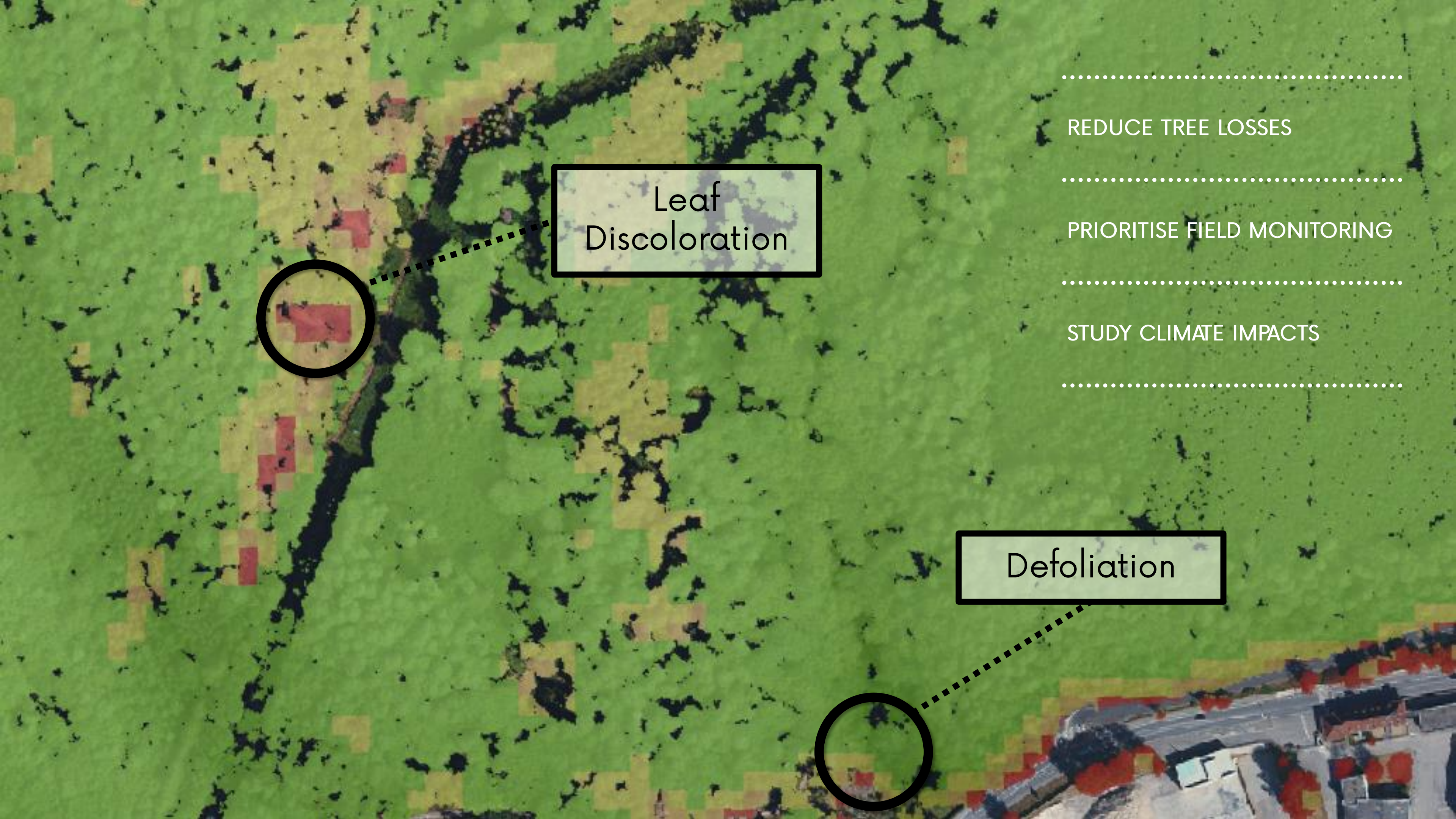


Paris annual tree management budget



49%

The average target canopy cover increase amongst surveyed major cities



Leaf
Discoloration

Defoliation

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REDUCE TREE LOSSES

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PRIORITISE FIELD MONITORING

.....

STUDY CLIMATE IMPACTS

.....

Growth Tracking

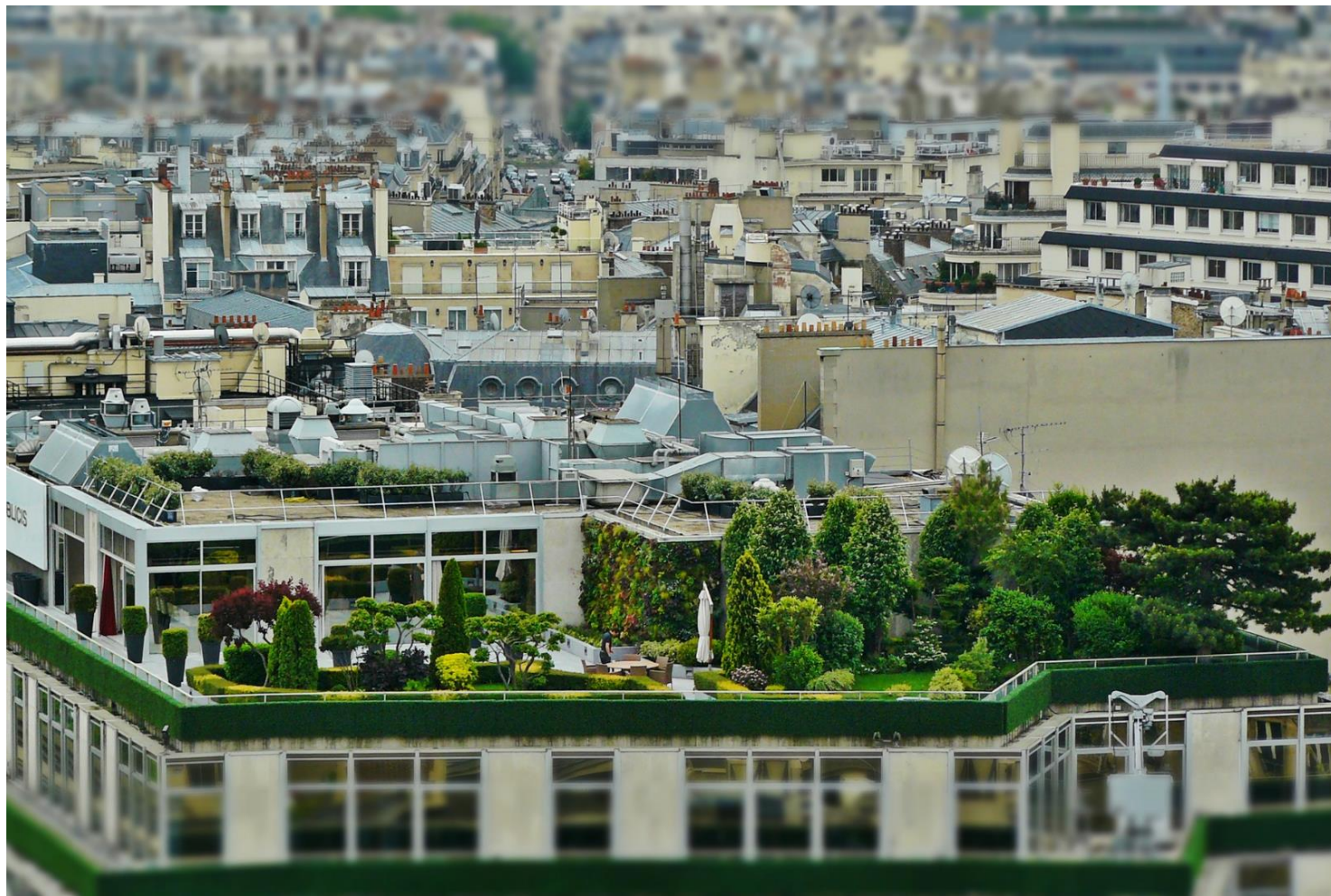
Assess Risk to Railway per Tree

.....
OPTIMISE PRUNING
.....
REDUCE RISK
.....





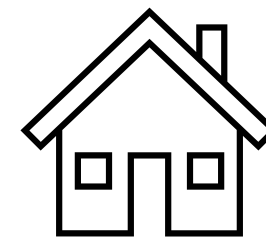
Green Roofs: Combatting Climate Change Beautifully



Reduce **Flood** Risk without building concrete barriers



Combat Urban **Heat** Island Effects



Insulate homes during the winter



Green Roof
Detection



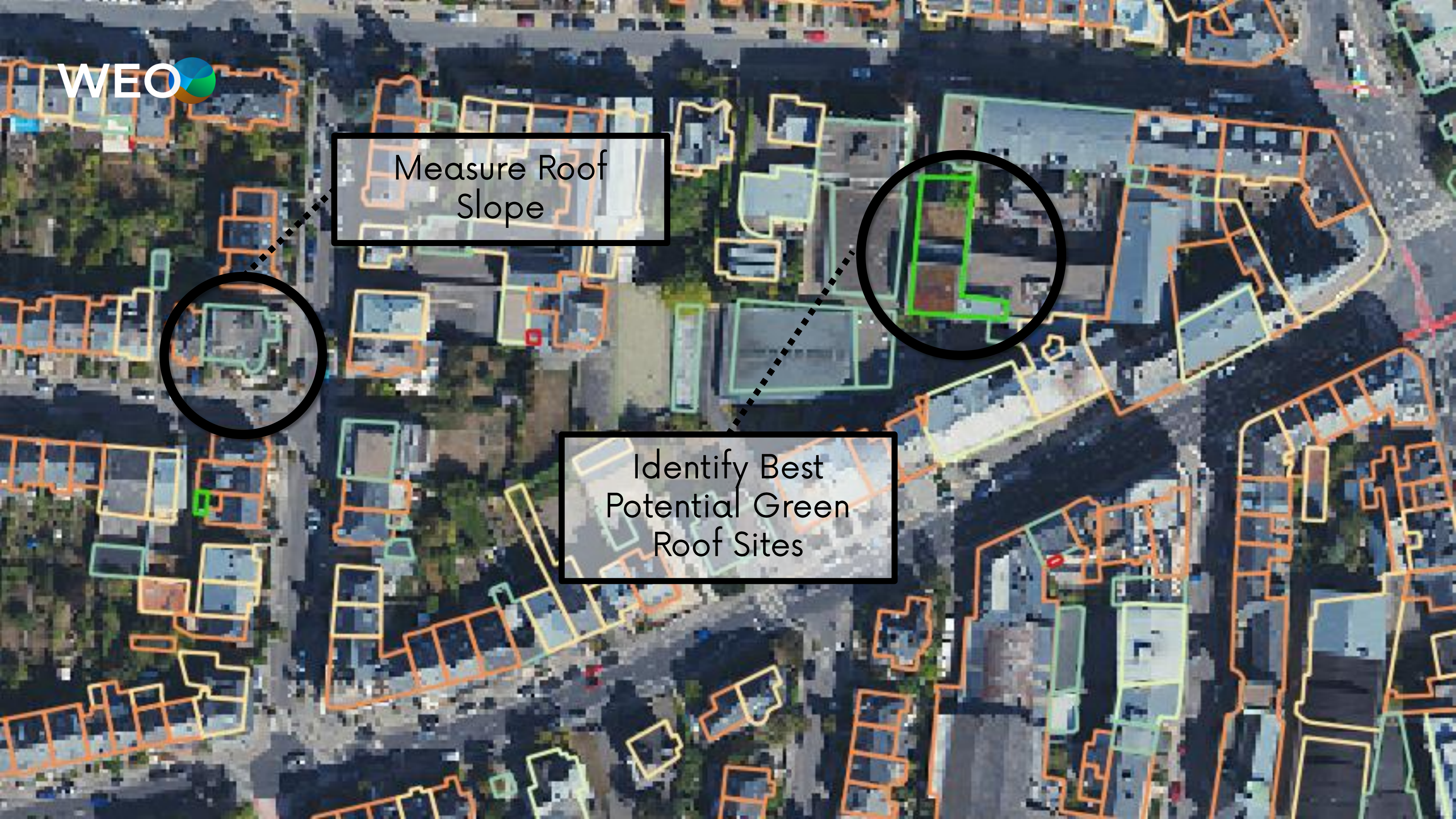
TRACK GREENING PROGRESS

PRIORITISE INCENTIVES

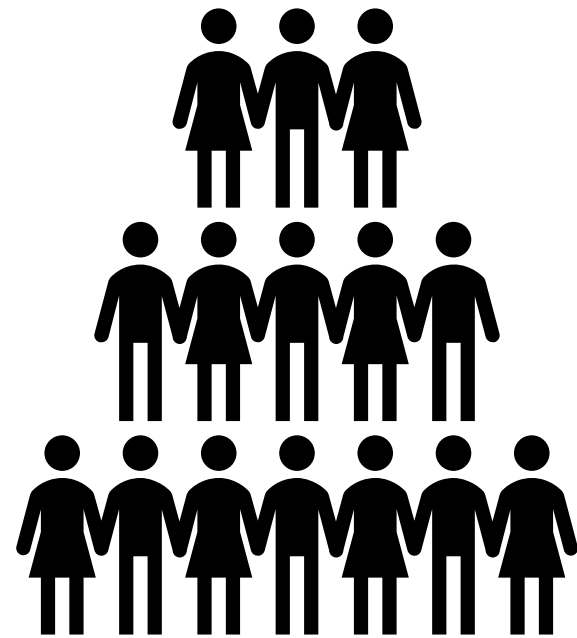
ESTIMATE RUNOFF POTENTIAL

Measure Roof Slope

Identify Best Potential Green Roof Sites



Preparing for **Climate Change**

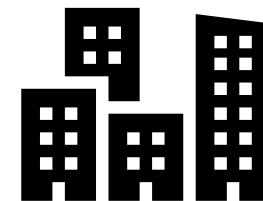


70,000

The number of **excess deaths** in the 2003 European Heatwaves



Natural surfaces heat up in daytime and then **cool** at night



Roads and pavement heat up and **stay warm** through the night



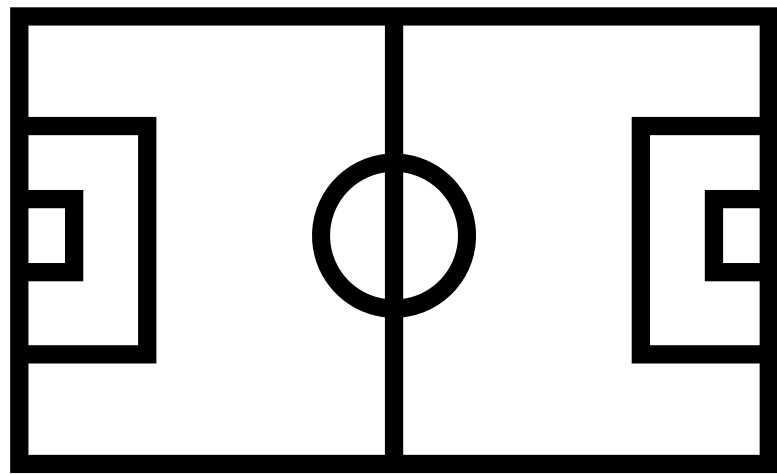
Rural areas can be 10 degrees **cooler** than adjacent city blocks during a heatwave.

Land Surface
Temperature at
10m Resolution



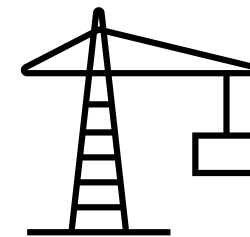
Identify at-risk
neighborhoods
during heatwaves

Land take and the **concreting** of our countryside



2 Million

The number of football fields of arable **land taken** for urban growth since 2000 in Europe



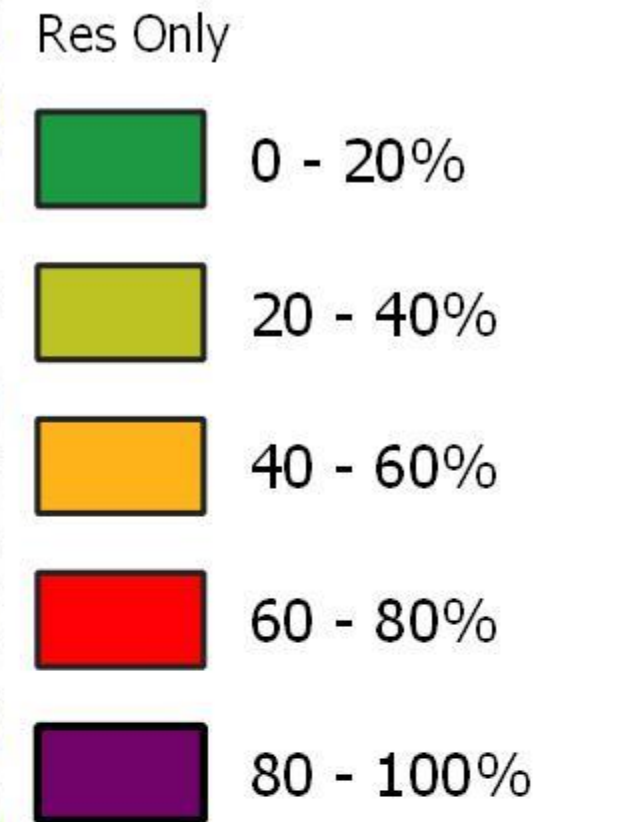
Identify new **development** early



Incorporate data into flood **risk models**



% Impermeable



Identify highly impermeable outdoor areas



.....
ENFORCE DEVELOPMENT
REGULATIONS
.....

.....
UNDERSTAND FLOOD RISK
.....



Track new
impermeable areas

Identify possible
breaches in
development
regulations

Vegetation putting assets at risk

This image highlights vegetation covering the roof of a critical pump station supplying 30,000 homes in a high fire risk area of South Australia.

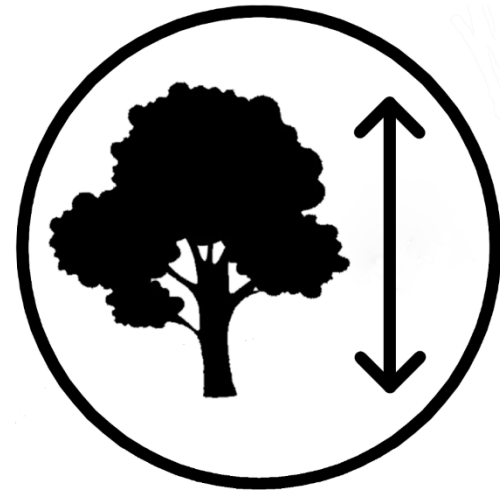
With thousands of assets like these, the only way to accurately and regularly update risk assessments for its critical assets is with satellite data.





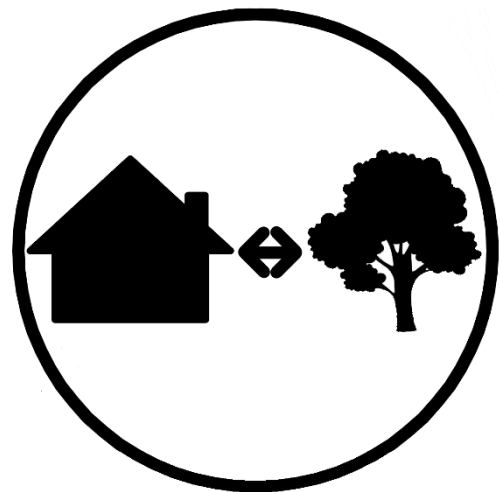
Proximity

Vegetation
Distance from
Buildings



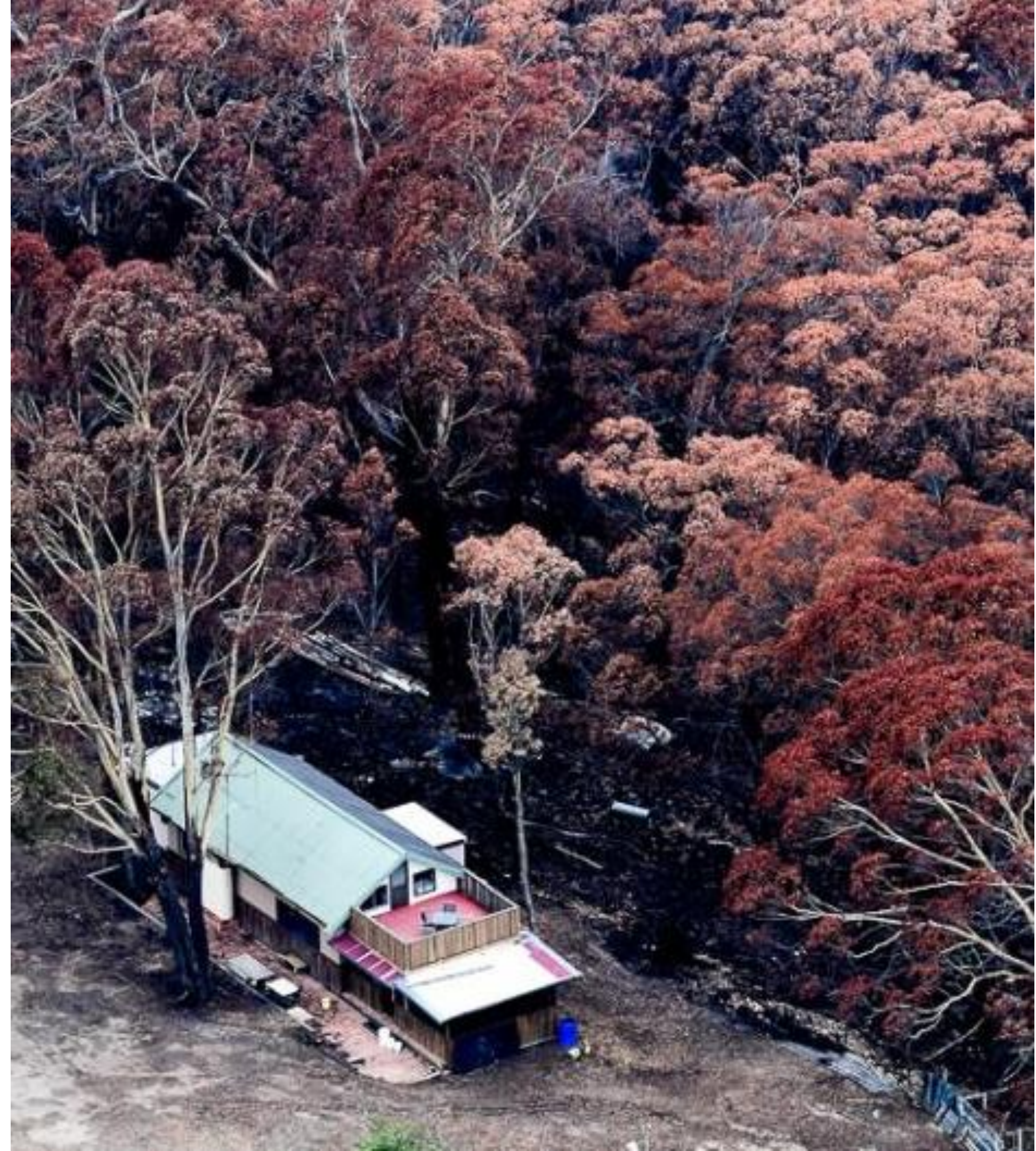
Structure

Vegetation Height
and Structure



Flammability

Vegetation
Flammability and
Dryness

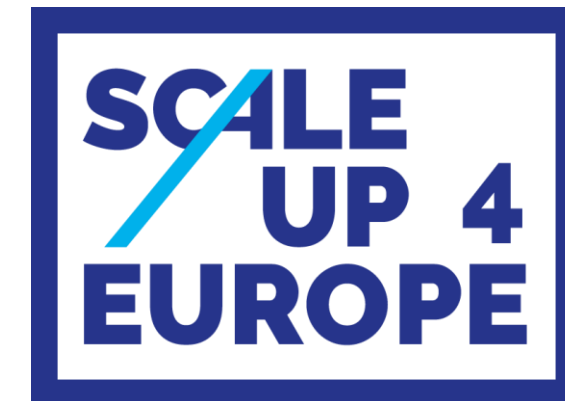
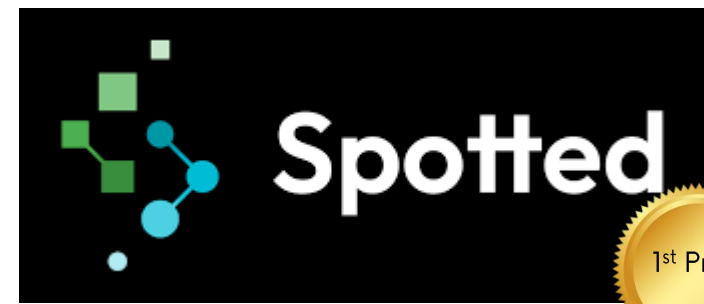
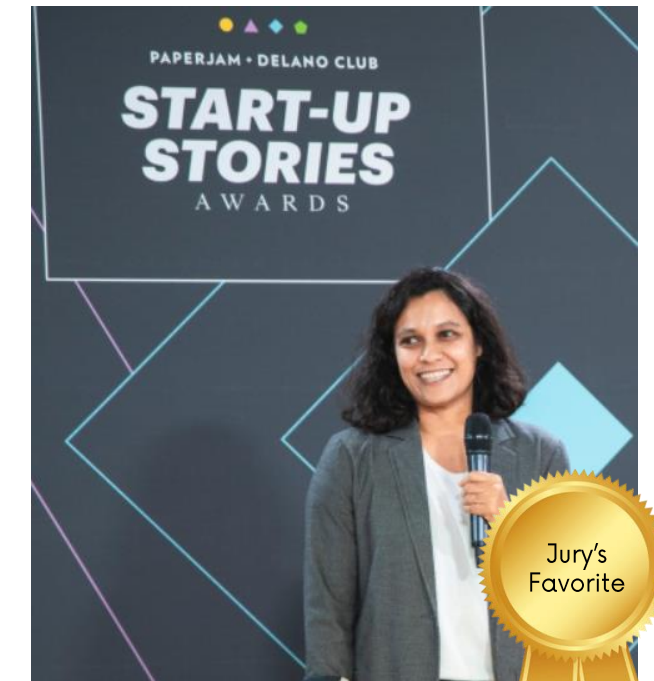


WEO Existing Clients

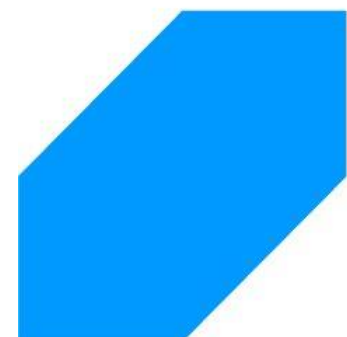




Our Successes



Best use of AI & Data



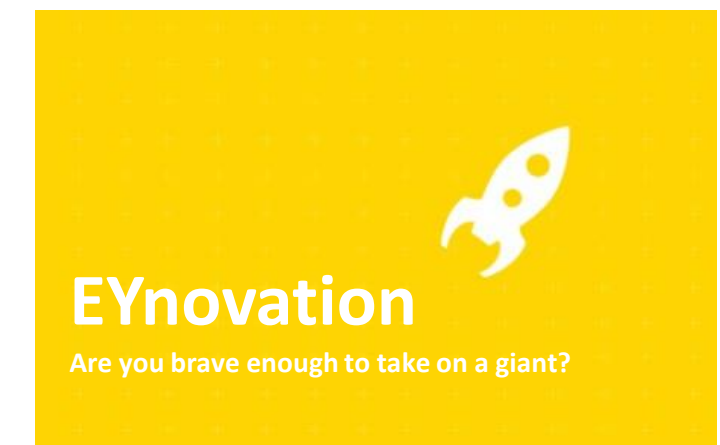
FIT4 START Graduate



UP⁴² Challenge



4 x Project Funded



The Team



Imeshi Weerasinghe
CEO and Cofounder



Dr. Charlotte Wirion
CTO and Cofounder



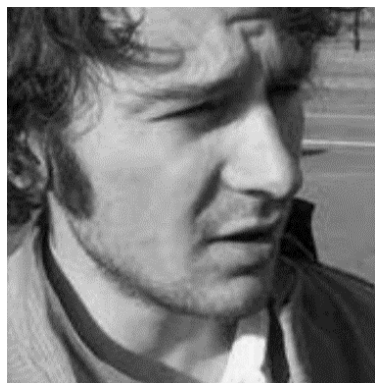
Olivier de la Guéronnière
Director



Rowan Steele
Business Dev. Manager



Dr. Frankwin van Winsen
Head of Development



Thierry Nicolas
Senior Software Developer



Dr. Adelene Lai
Software Developer



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Intern

+10 years experience in our respective fields

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