



Sustainability

Satellite-Based Vegetation Management

Full Rollout on E.Dis' Medium Voltage Grid

Daniel Seidel

Co-Founder and Co-CEO
LiveEO, Berlin/NYC

explore21



Sven Mögling

Innovation Manager
E.DIS, Fürstenwalde

Global
Connection



Utility Vegetation Management: Measures to avoid Tree and Powerline Conflicts



LiveEO

\$18bn - \$33bn / Year

Estimated loss to the US economy due to weather related power outages (Wildfires not included)

Sources: [Executive Office of the President, Economic Benefits of Increasing Electric Grid Resilience to Weather Outages, 2013](#); [Campbell, Congressional Research Service, 2012](#)

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Billions Spent on Inspections and Cutbacks



Modern Vegetation Management

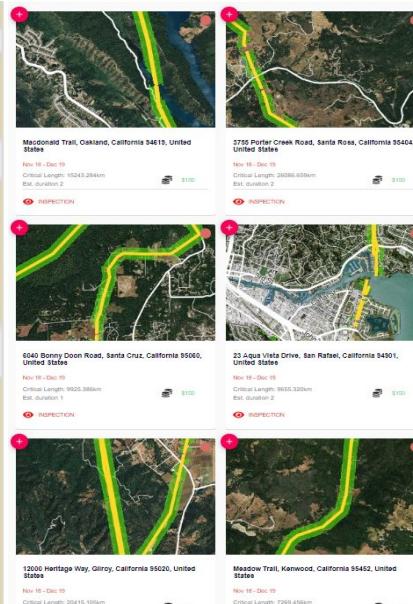
Satellite-Based & Data-Driven



Instant Overviews



Identification of Risks



Work Orders and Prioritization



Easy Access via Web & Mobile App

This is LiveEO



- Large-Scale Infrastructure Monitoring
- Founded in 2018
- 50+ Employees
- Based in Germany & US

Awards



DISTRIBUTECH[®]
INTERNATIONAL

Initiate!



Partners

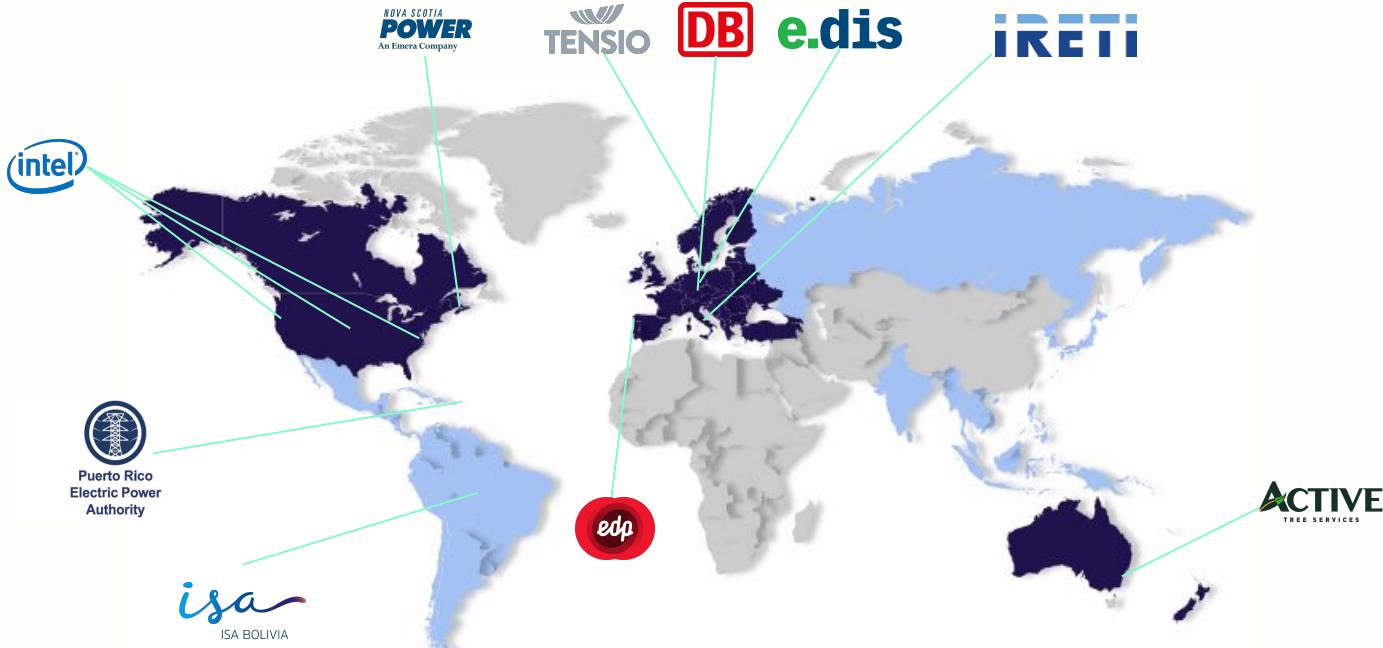


Member of



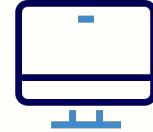
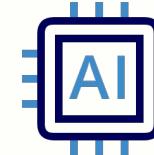
Selection of LiveEO's customers

In use around the Globe



What LiveEO does

Satellite Insights E2E

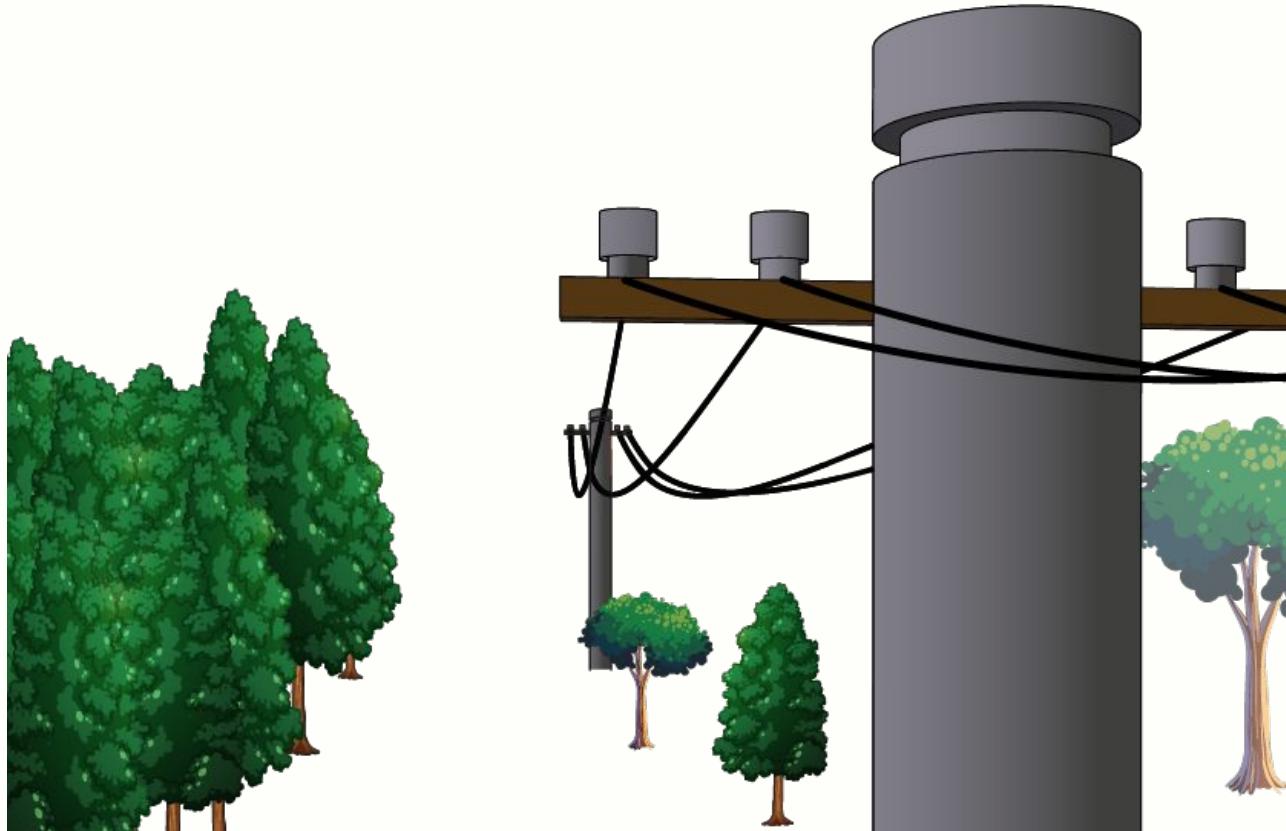


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Typical Situation

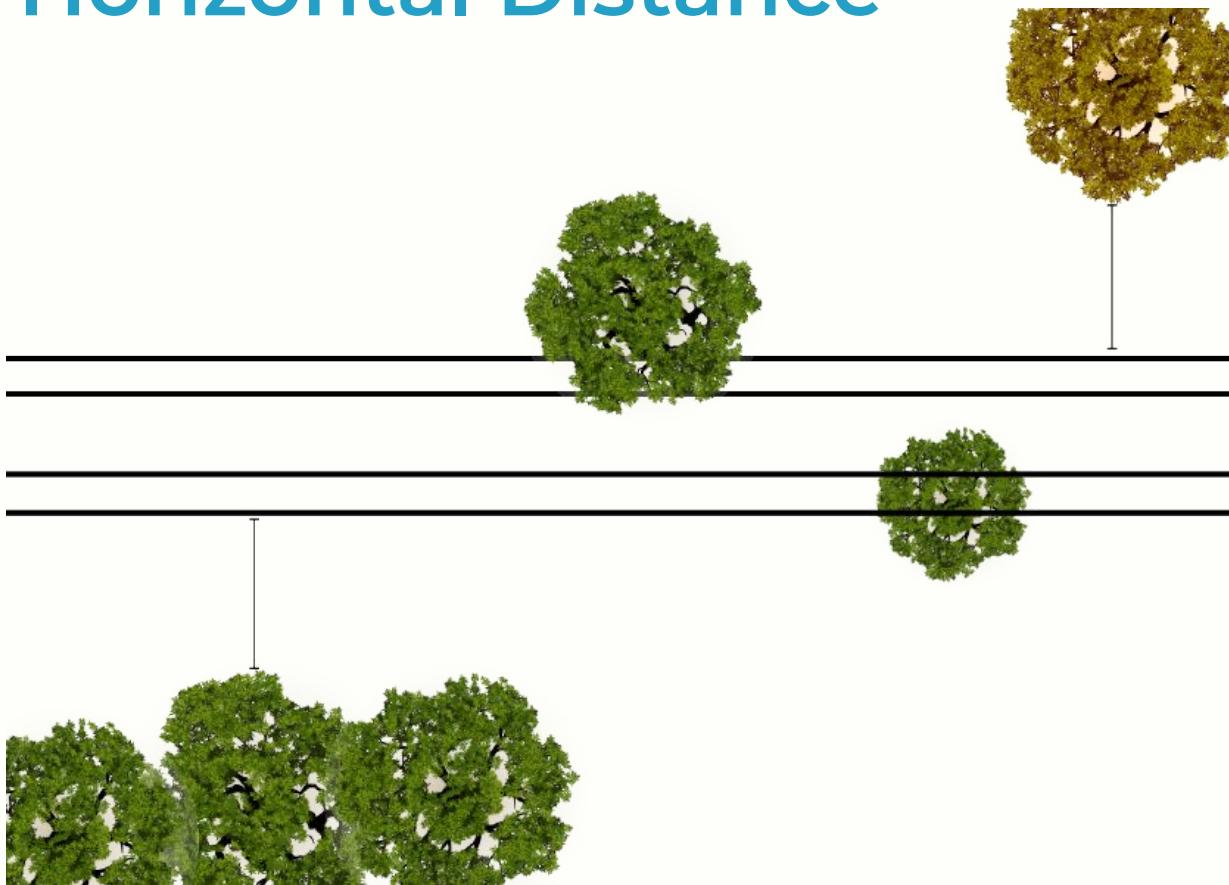
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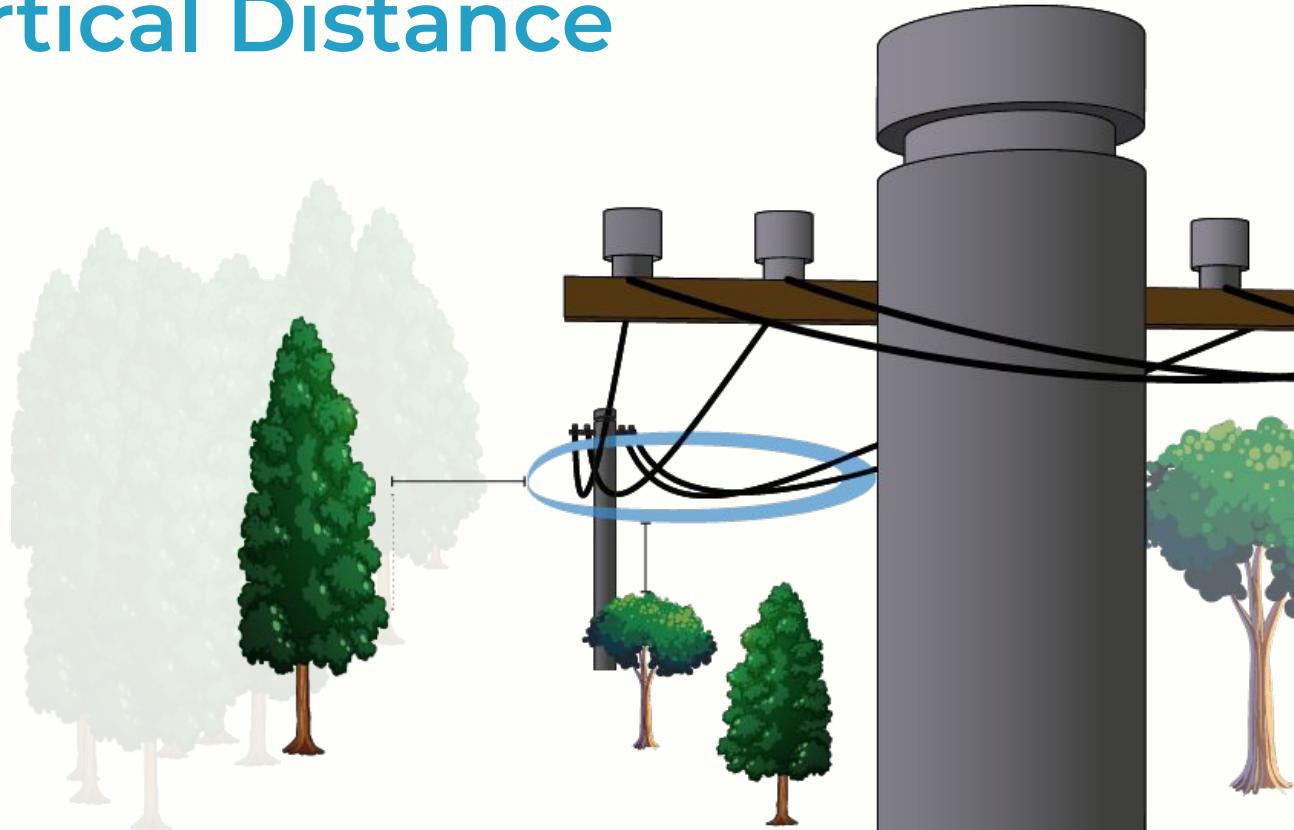
What do we want to detect?

2D → Horizontal Distance



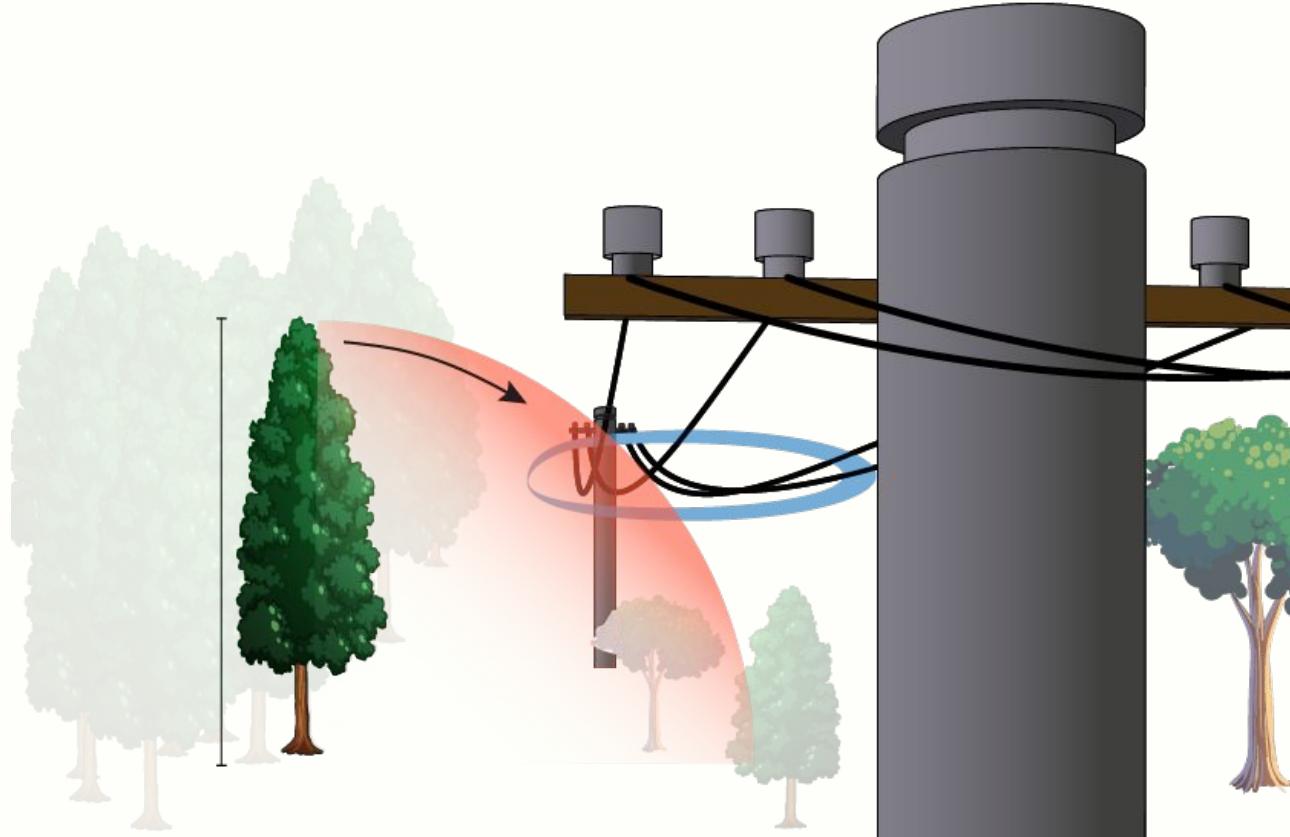
What do we want to detect?

3D → Horizontal & Vertical Distance

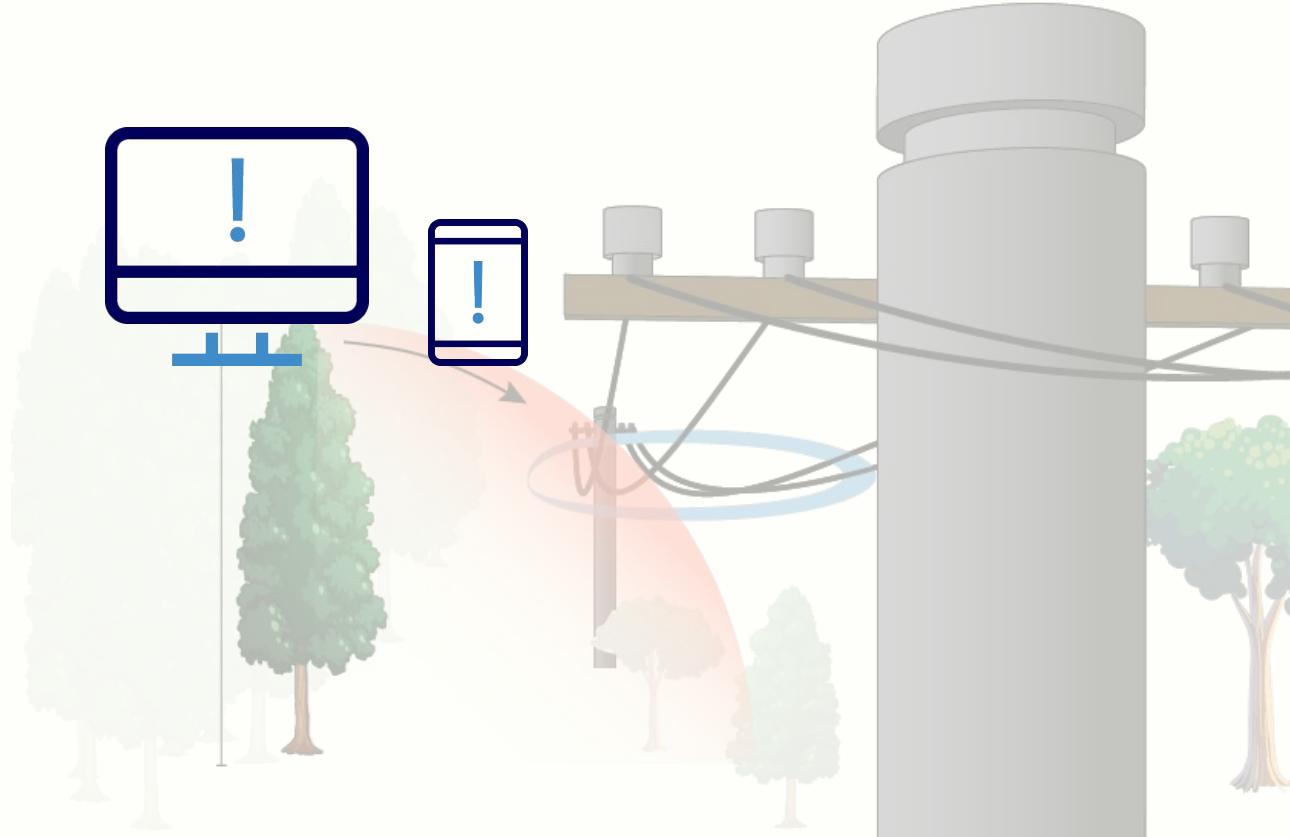


What do we want to detect?

3D → Fall-in Curves



High Risk Alerts & Tasks



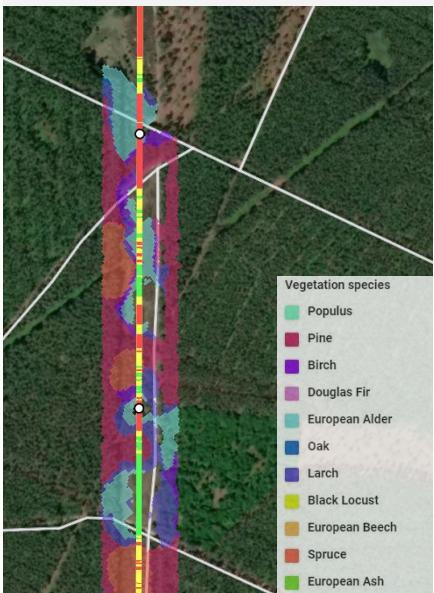
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Satellites see more

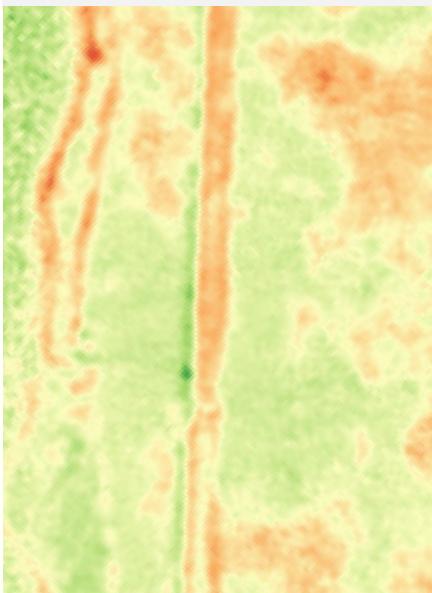
Additional Insights



Tree Species



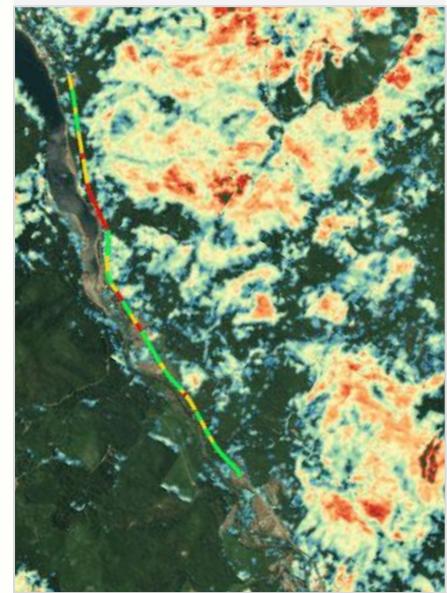
Vitality Trees



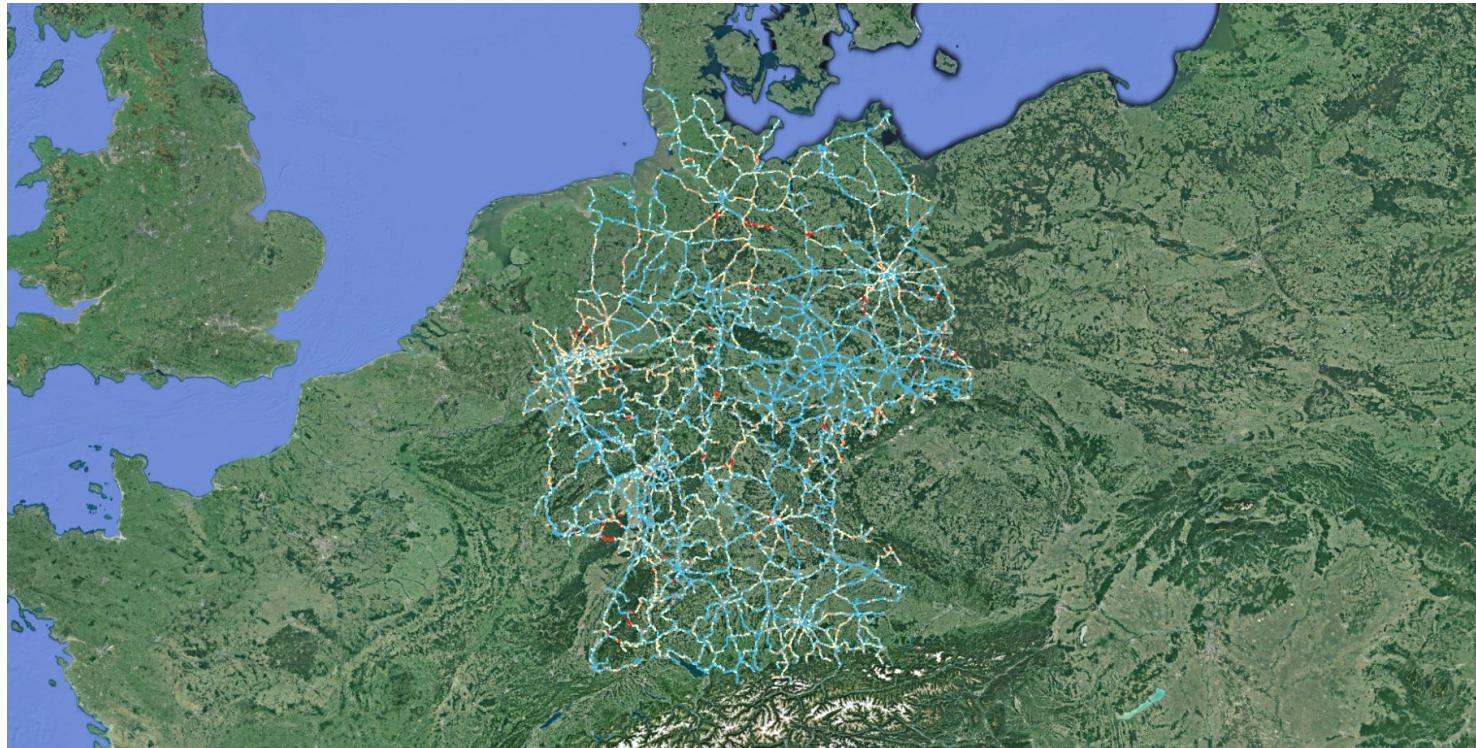
Cut Back Control



Post Disaster Assessment

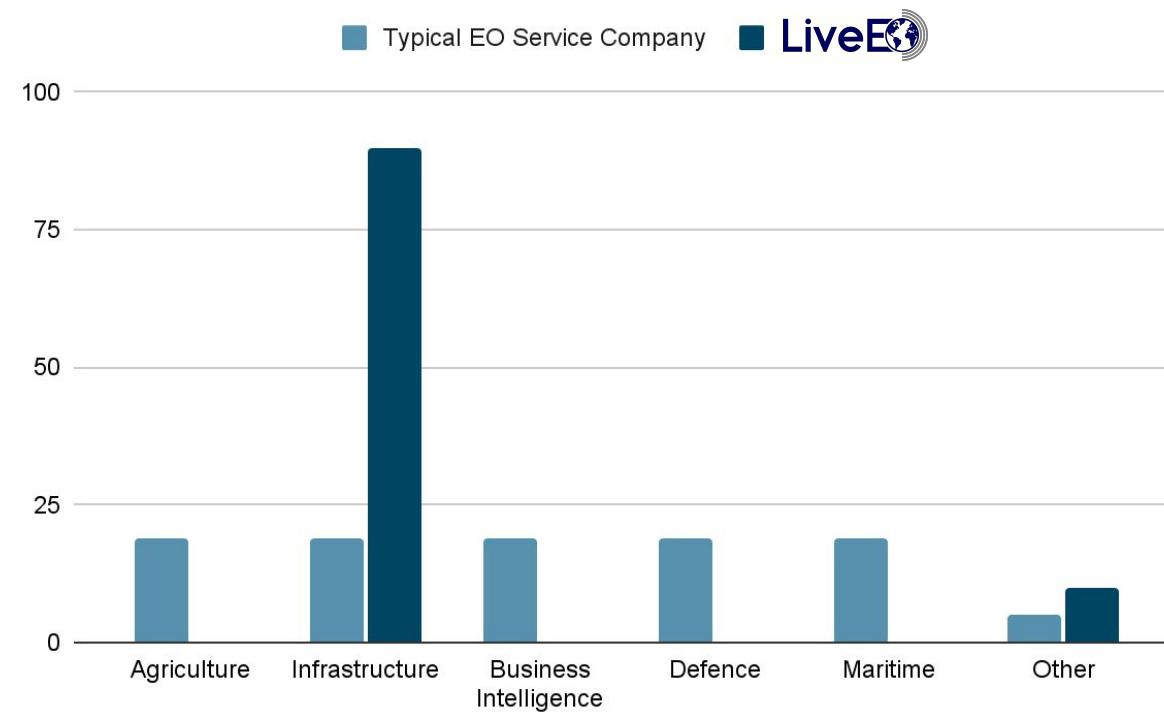


Analytics on Country-Scale



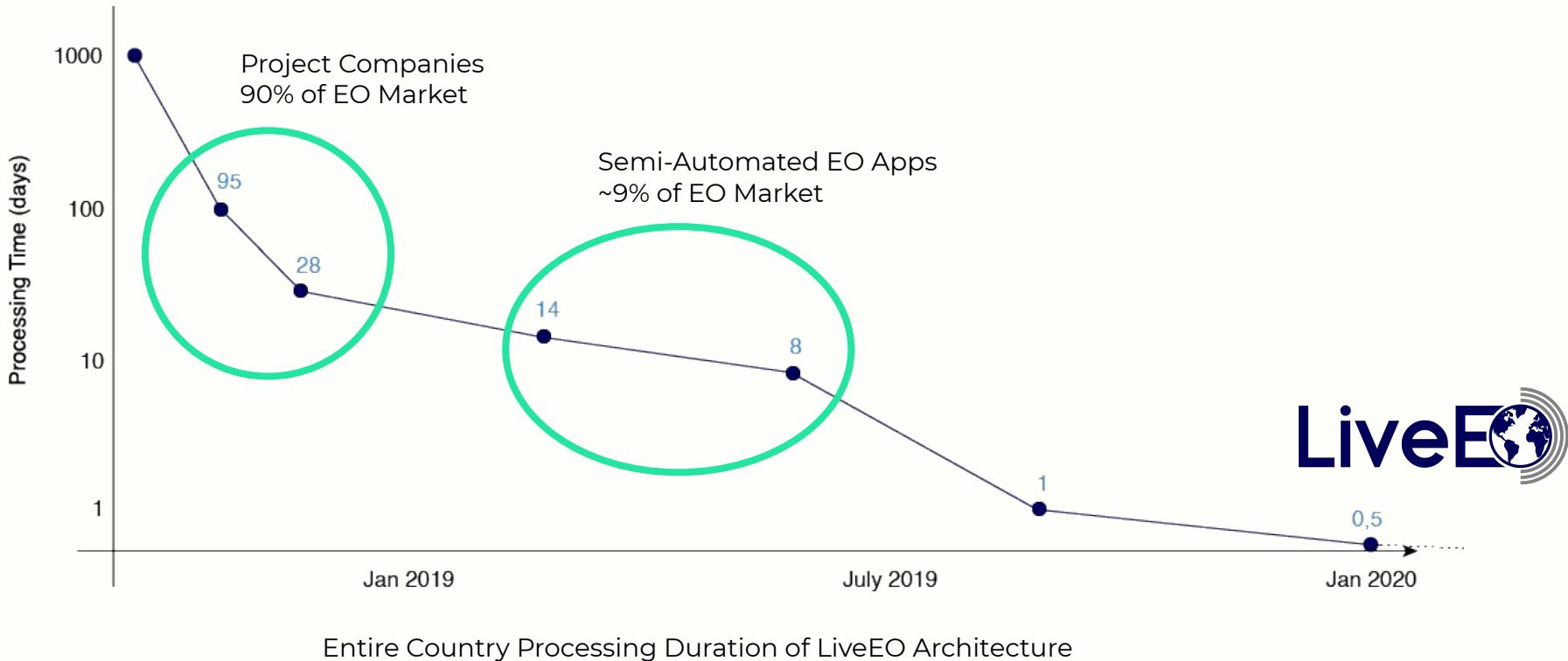
What sets us apart

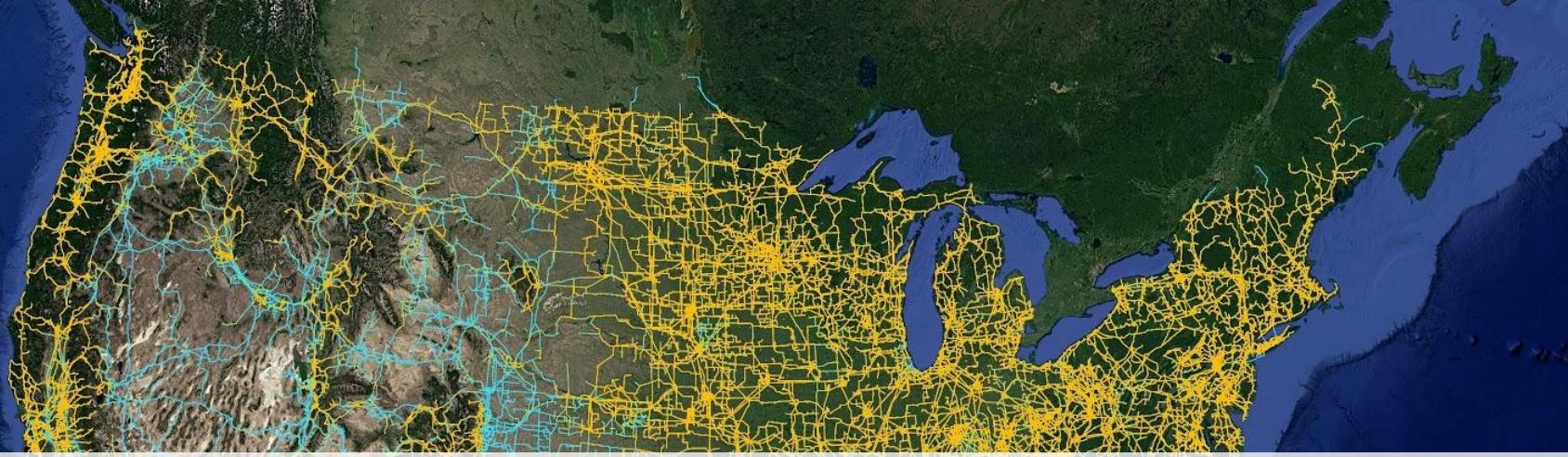
Focus and Vertical Excellence



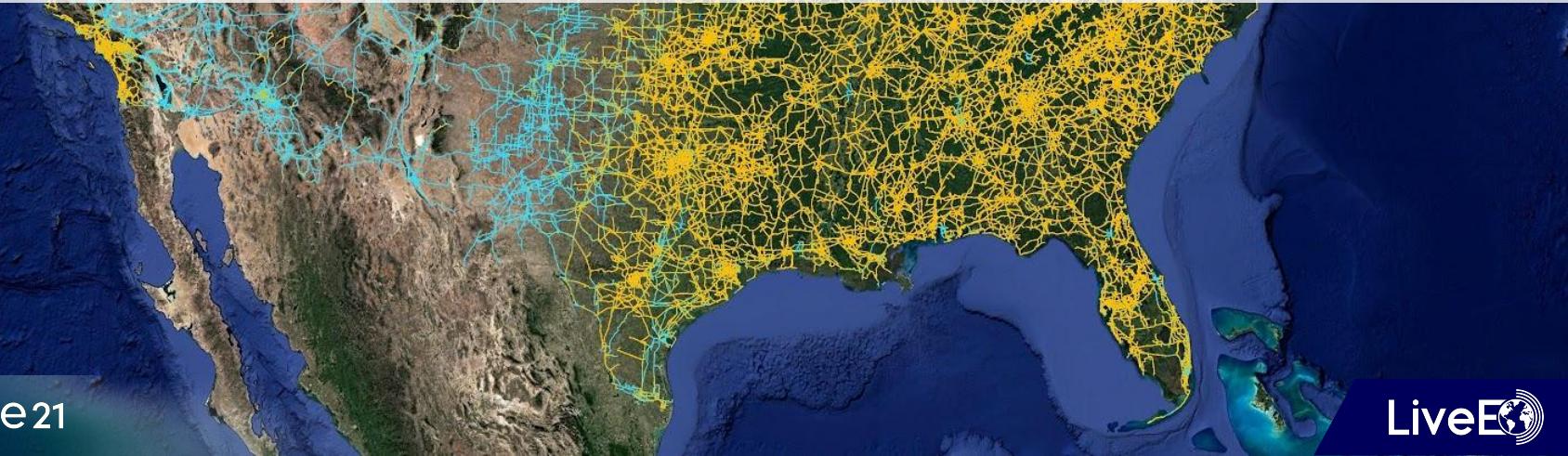
What sets us apart

Full Automation is key



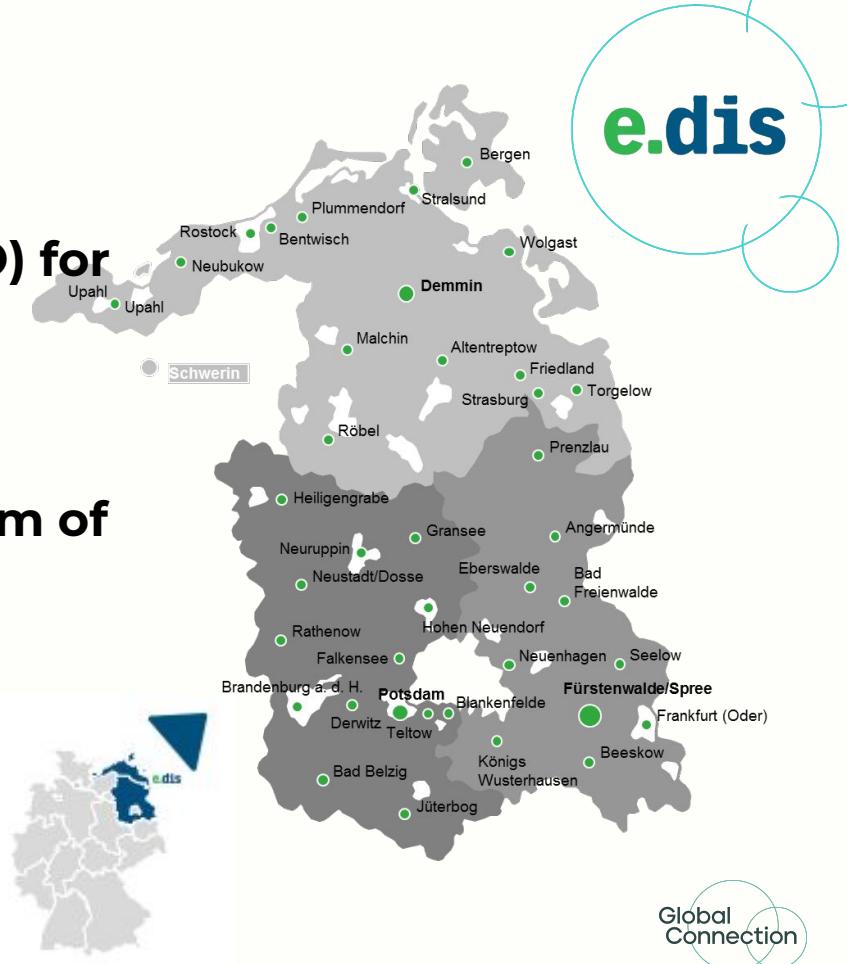


>500,000 Miles Analyzed in the US



This is E.DIS

- **Distribution System Operator (DSO) for electricity and gas in northeast Germany**
- **80,000 km of power lines / 5,000 km of gas lines**
- **1800 + Employees**
- **Part of the E.ON Group**



Challenge

- Damage from vegetation is the main reason for power disruptions in the E.DIS network area
- Wood clearance is time consuming, costly and not well targeted
- Due to the long power lines and the difficult terrain, it is impossible to keep an up-to-date overview of all vegetation risks



e.dis

Use case

- Use of the LivEO solution for the entire E.DIS medium-voltage overhead line grid (6,800 km)
- 2 analyzes per year
- 200+ employees use the application
- 5 sub-contractors involved
- Reduce vegetation management costs by 30%
- improving system reliability by 15%.

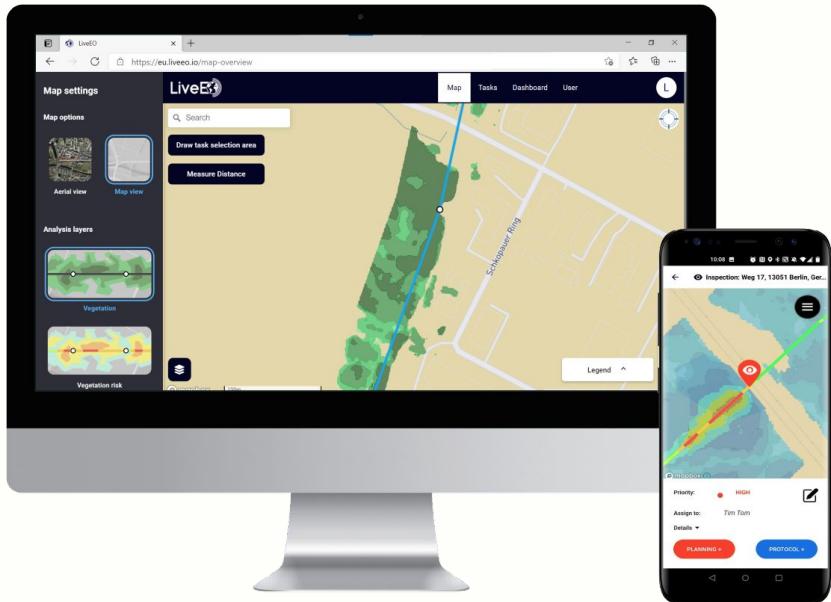


Outlook

- Use of LiveEO in low and high voltage
- Use for monitoring of gas pipelines
- Integration into the processes for ecological route management
- Expansion of use to other E.ON companies



Solution Demo



LiveEO

Native integrations:





Thank you!

Please reach out for more information and a free demo analysis.

Daniel Seidel
daniel@live-eo.com
live-eo.com

Sven Mögling
sven.moegling@e-dis.de
e-dis-netz.de

