



# HyLight

Sustainable aerial inspections

This presentation is confidential.



**Automated airships  
for infrastructure monitoring**

# Inspections are inefficient

Carbon footprint → 1 tonne CO<sub>2</sub>eq/h

Not data driven → visual inspection

Expensive



**5 M km**  
Pipelines



**75 M km**  
Power lines







# Tailored for inspections

**Sustainable** → 0 CO<sub>2</sub>eq/h in flight

**Data driven** → multispectral sensors

**Cost effective**

**Long-Range  
Automated  
Hydrogen Airship**



# The only solution without compromise



	Helicopter	Quadcopter	Plane drone	HyLighter
Flight time	2h - 5h	20min-1h	45min – 7h	+10h
Speed range for data collection	0 - 14 m/s	0 - 10 m/s	minimum 17 m/s	0 - 10 m/s
Stationary flight	✓	✓	✗	✓
Range	200km - 300km	1km - 5km	5km – 300km	350km
Payload	600 kg - 1000 kg	0,1 kg – 3 kg	0,1 kg – 5 kg	10 kg
Aerial risk	High	High	High	Low
Ground risk	High	High	High	Low
Carbon footprint in flight	1T CO2e/h	0	0	0

# Better knowledge, less outages



Provide details of  
weaknesses on the grid



Spot vegetation near  
lines



Spot heat points on the  
electrical lines





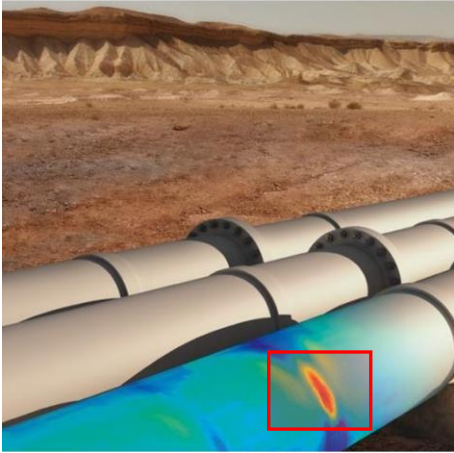




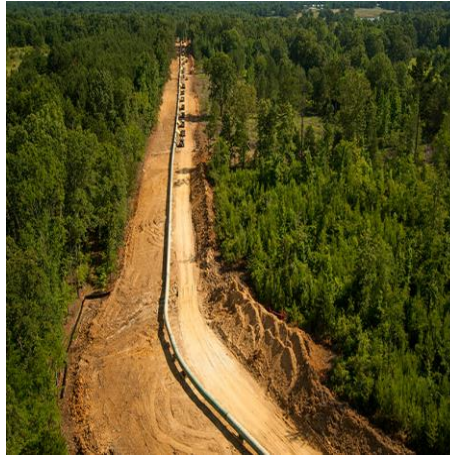
# Better knowledge, less outages



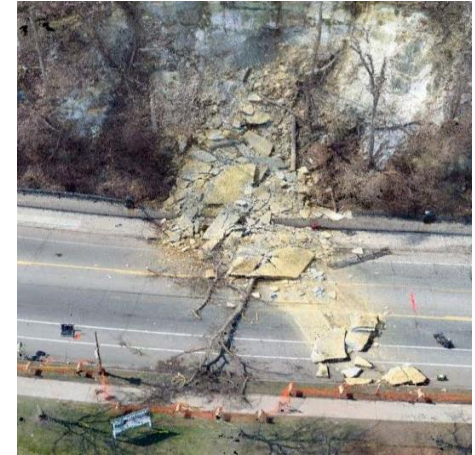
Spot methane leaks



Spot third-party interferences



Spot landslides







# Technical specs: HyLighter 35



<b>Range</b>	350 km
<b>Payload capacity</b>	10 kg
<b>Cruise speed</b>	25-35 km/h
<b>Size</b>	10 m long 2 m diameter



*Our flight at the Milano Innovation District (authorized by ENAC)*



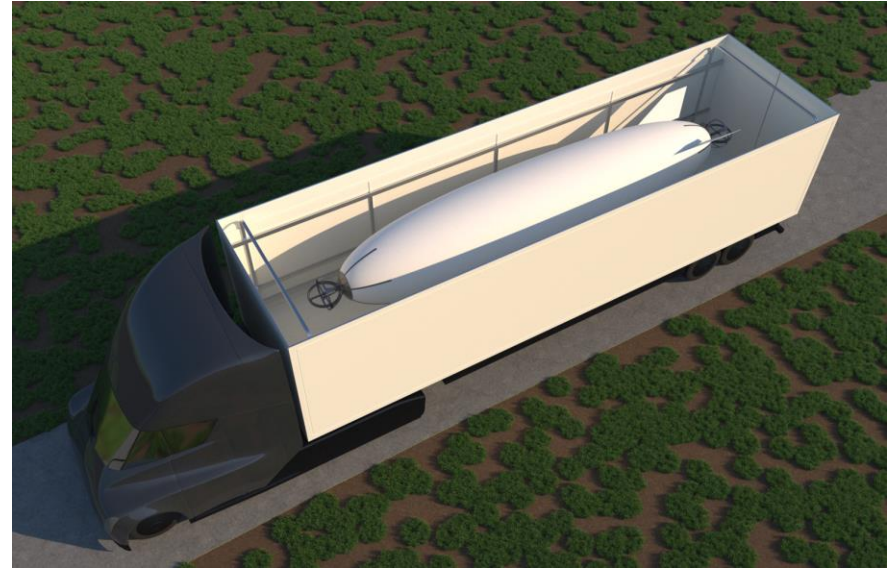
# Designed for optimal operations



We transport the fully operational HyLighter to take off point.

10 minutes to start the operation.

We do not require any infrastructure for take off and landing.



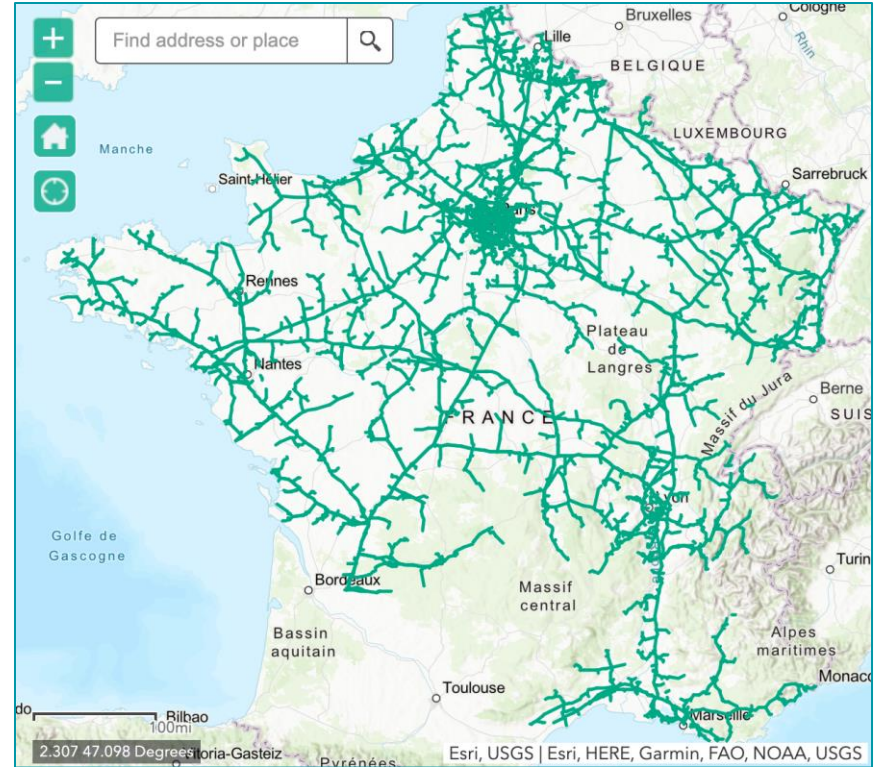
# Flight efficiency: case study



1 HyLighter can fly over  
**350 km in 1 day.**

The pipeline transmission system  
of GRTgaz stretches over  
**32,500 km of length.**

We need **93 days** to cover the entire  
network of GRTgaz with  
**1 HyLighter.**



# Our solution is reliable



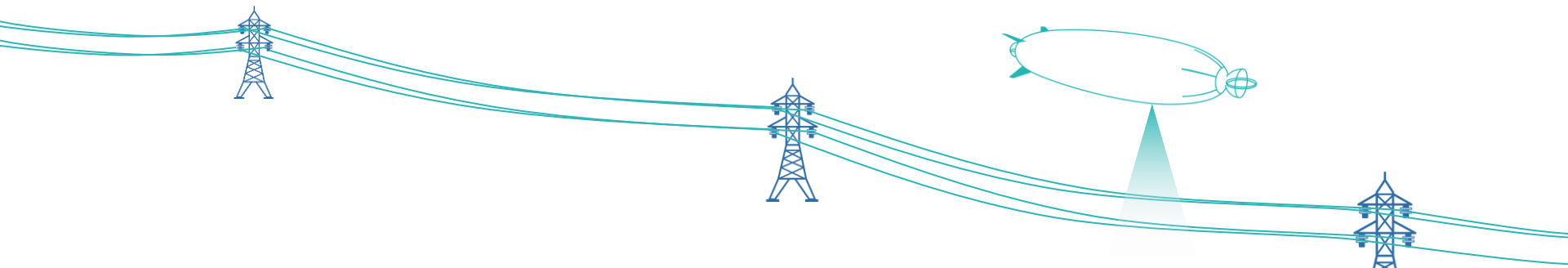
## Accelerators



## R&D support



## Supports





# Join us for the flight!



Thomas Laporte CBO  
[thomas@hilight.aero](mailto:thomas@hilight.aero)  
+33 6 48 73 25 92

# Appendix



Thomas Laporte CBO  
[thomas@hilight.aero](mailto:thomas@hilight.aero)  
+33 6 48 73 25 92

# Testing HyLight tech on your assets



## Inspection as a service: experimentation of HyLight tech through a POC.

### 1. Organization of ops

#### **We settle on 3 things**

**Goal**: type(s) of data to collect.

**Size and place**: length of infrastructure (usually between 25km to 60km) and location.

**Budget**: the usual cost is between 30k€ and 80k€ depending on size, location and data type. It is adaptable.

### 2. Data collection

HyLight deals with obtaining flight approval from the National aviation authority.

HyLight operates the flight and gather the data.

Optional: we can organise a communication campaign during flight day. The aim could be to communicate about your company's efforts in transforming O&M to reach carbon reduction targets (and re-state those targets).

### 3. Data delivery

HyLight transmits a report on the data collected.

Your company will be able to compare the data quality & precision of HyLight with your current method.

You will be able to make a decision to organize larger operations. And will be among the first to benefit from our industrial scale solution.



# HyLight solution cost at industrial scale



We are aware of the importance of cost. That is why, directly at the launch of our industrial scale operations (not pilot projects or PoCs), we will be at the same price or lower compared to the cost of helicopters.

Then, the deployment of our solution, as well as the optimisation of our technology will allow us to reduce the cost of more than half the cost of helicopters. Our target is **below 15€/km**.

*We will also be able to collect more insightful and valuable data. Thus, allowing your company to decrease failures, leaks and maintenance costs.*