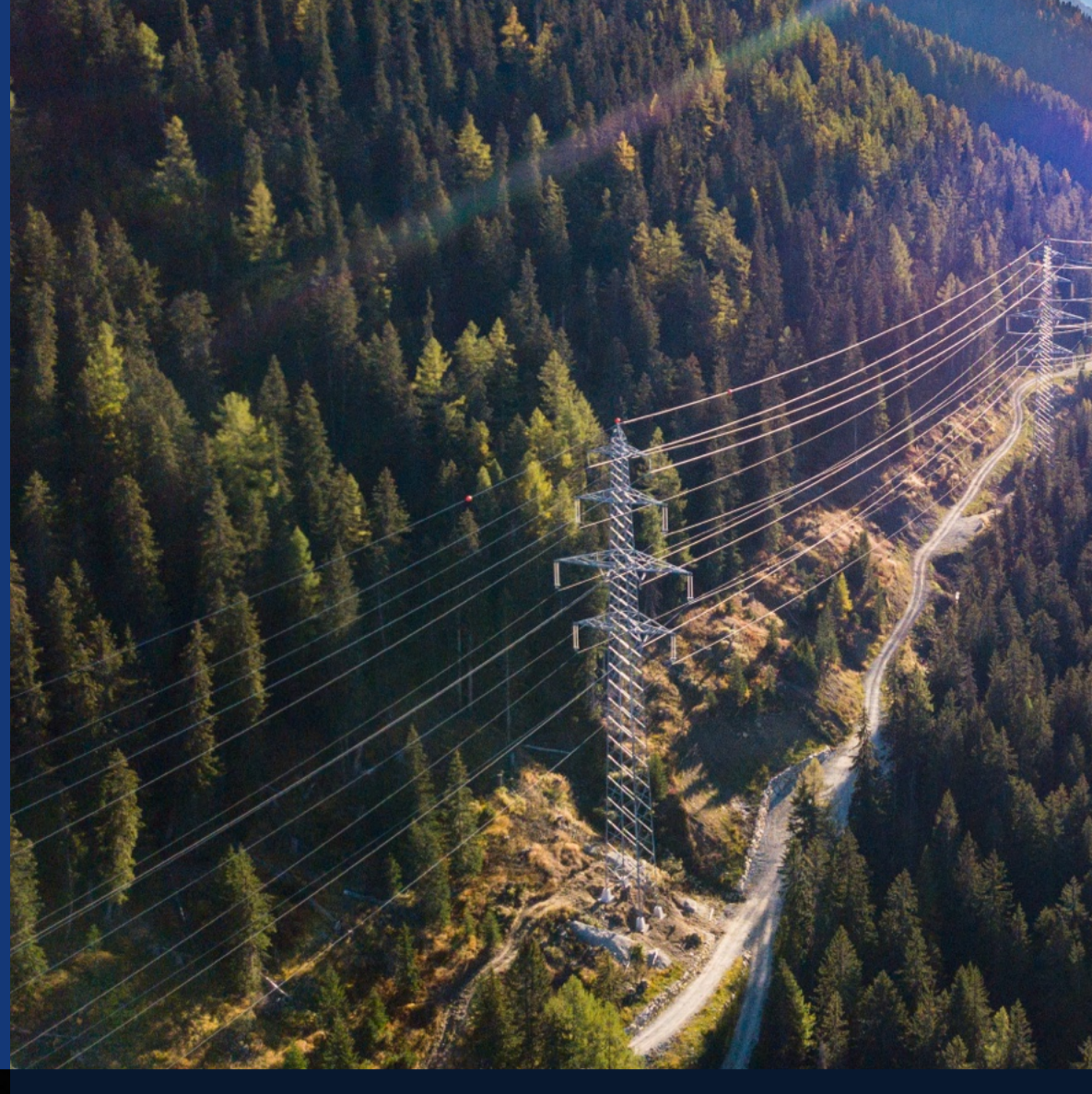


The future of Vegetation Management is here.
Satellites In. Drones & LiDAR Out

View power lines from space

Remote monitoring and survey of power lines from space are fast becoming the new normal for utility companies.



Satellites are opportunity reservoirs

Out of the 2,666 operational satellites circling the globe, **446 are used for observing the Earth** and 97 for navigation/ GPS purposes

By 2028, there will be **15,000 satellites in orbit** - Promising massive opportunity and scalability of satellite technology and its commercial applications.

*Source: World Economic Forum

Face the Facts



Features	Satellite	Drones w/ LiDAR	Helicopter w/ LiDAR
Resolution	12-inch High Resolution	VHR	VHR
Perspective	Overhead	Overhead	Overhead
Bands	MultiSpectral, Mono, TriStereo, SAR, Hyperspectral	Visual, LiDAR, additional bands can be added	Visual, LiDAR, additional bands can be added
Speed of Data Acquisition	Instant	Very Slow	Fast
Geographic Coverage	Entire Planet	Localized	Regional
Regulatory Approval Needed	None	Required	Required
Historic Data	Available	Not Available	Not Available
Clearance Detection	Yes	Yes	Yes
Change Detection	Yes	No	No
Costs	\$	\$\$\$\$	\$\$\$\$

Fall of Drones & LiDAR

Old technologies like Drones and LiDAR are expensive, extremely slow, and require high maintenance. The complexities in managing them add to vegetation management costs per OH line-mile.



Rise of Satellite Analytics: Rethink Operations & Maintenance

- Plan cycle trim/line clearance activities years in advance
- Create a digital twin of power lines and vegetation using multispectral satellite imagery and SAR
- Determine clearance and growth rate of vegetation along power lines using AI & Satellite models
- Identify danger tree/hazard tree & high-risk areas
- Plan effectively with herbicide & tree growth regulator
- Digitalize work planning & contractor management
- Validate task completion



Reduce vegetation management costs by 20%
Improve reliability by 15%

What satellites can, others can't.



2021 is the year for utility companies to **Reimagine** Vegetation Management, **Replace** old technologies, and **Reduce** costs with satellite analytics & AI.