



# DESTINATION STARTUP®

## Longpath Technologies

**One-Sentence Summary of What You Do:** Based on Nobel Prize-winning dual comb laser technology from NIST and CU Boulder, LongPath is attacking the climate change problem of undetected methane emissions from active oil wells by providing the lowest cost highest precision continuous methane monitoring for oil field installations in the world.

**Affiliated Institution:** University of Colorado Boulder

**Have you formed a company yet?** Yes

**Funding/Financing:** Grant Funding

**Please describe your company and the problem you are trying to solve:** Methane emissions from oil and gas production in the US continues to exceed 38 million metric tons despite LDAR, plane, and drone detection services. The problem is that the current detection solutions are spot detections, and only cover a small timeline of oil and gas production. A majority of these detection services happen annually, at most quarterly, for an hour at a time. Leaks occurring between these service visits go undetected for long periods of time. LongPath provides continuous detection of methane emissions. Each laser deployment covers 10 square miles and up to 30 well pads. Using a cloud based data collection and reporting system, reports are available for the O&G customer near real time (30 minutes after detection). LongPath's engineers have created a system that doesn't need re-calibration, and operates without human intervention. LongPath's methane detection has been validated as METEC, with published papers supporting the effectiveness of the detection. LongPath has piloted the technology with four (4) companies in Colorado, California, and Canada. LongPath is currently deployed commercially in New Mexico, Texas, and Oklahoma, covering 180 wells over a 30 square mile area. The technology is protected by 5 granted and 2 pending patents. LongPath has licensed the technology from NIST and CU Boulder.

**What is/was your go-to-market strategy?** The current market is 1,000,000 US wells, growing 10% annually. Methane reduction is a priority for investors, and net-zero programs are reviewed at shareholder meetings as well as being mandated for VC and PE investments. LongPath currently has numerous requests for pilots simply from our web site traffic. Following an equity investment, LongPath will hire business development resources to expand our sales reach. LongPath methane detection differs from other services in that it provides continuous coverage, and uses highly detailed laser data and sophisticated wind direction algorithms to assure precision in methane quantification. This eliminates false positives as well as lost detection from wind shifts. The customer can specify laser levels below which alerts are not activated, so they can focus on the largest leaks immediately. Studies show the largest 10% of the leaks create over 90% of methane emissions. Because



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LongPath covers a large (10 square mile, growing to 30 square mile) area with one system, the cost of detection can be spread over many well pads. Unlike fixed sensors whose cost increases in a linear fashion based on well pads covered, LongPath provides the most cost effected methane detection in the industry.

**How will/do you generate revenue?** Each year, approximately 515,000 individuals in the United States require surgical intervention to repair a damaged peripheral nerve, generating a market of 1.5-2.8 \$ billion. Recovery is sub-optimal with current options and there are many patients who will not recover at all because their nerve injuries are too large and therefore untreatable. This results in permanent disability. Animal experiments show that Localis technology of localized immunosuppression paired with a live nerve graft significantly increases regeneration after severe nerve injury. Our strategy for market entry is for our device to initially be used to treat larger nerve injuries that are currently untreatable, and therefore lack competition. As surgeons become accustomed to our M14 for the larger injuries, we anticipate increasing market share for smaller nerve injuries that are the largest part of the market. Our partner AlloSource is experienced in product development and has agreed to work with us on GMP production and future clinical trials, leveraging their GMP facilities and network of surgeons.

**How will this showcase benefit your company or technology?** LongPath is seeking \$2.5 million in equity funding. Strategic partners are also welcome in providing introductions to O&G operators. Upon closing the equity round, LongPath will be looking to add business development resources as well as adding to the engineering and customer service teams.

**Who are the members of your team and why is this the right team to get the job done?**

- Greg Rieker, CEO: Leads business and technical team activities. Co-founder of LongPath Technologies. Business experience includes leadership of previous startup.
- Caroline Alden, Atmospheric Inversion Team Lead: Leads algorithm development for detection, attribution and quantification of emissions with comb measurements made in the field. Co-founder of LongPath.
- Sean Coburn, Deployment Team Lead: Leads frequency comb field deployments. Primary research and development coordinator of past field campaigns and ruggedization/automation of system hardware for commercialization. Co-founder of LongPath.
- Robert Wright, Frequency Comb Hardware Team Lead: Leads comb builds and research and development for ruggedization and commercialization of combs. Co-founder of LongPath. Business experience includes launch of LongPath and university study, including 2014 Simon School of Business Early Leaders Award.
- Mark Gorham, VP Business Development: Leads customer discovery, business planning, and investor relationship. 15 years CEO startup experience, including O&G vapor recovery service.





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- Robert Gill, Chairman of the Board: Seasoned VC, CEO, and serial entrepreneur providing guidance and connections for the company.
- Merc Mercure: Board member: VC, Founder, Advisor to many startups and universities, providing guidance and connections for the company.
- LongPath plans to augment its deep technical expertise with O&G service experience in Sales, Marketing, and Operations.

