GeoTHERM
expo & congress

Donnerstag, 26. Februar 2026, 16.50 Uhr
Ortenauhalle Kongress 1
Tiefe Geothermie

Thursday, 26 February 2026, 4.50 pm
Ortenauhalle Congress 1
Deep geothermal energy

How Next-Gen Geothermal Financing is Evolving at the Level of Innovation Clusters, Firms, and Technologies

Wie sich die Finanzierung der nächsten Generation im Bereich Geothermie auf der Ebene von Innovationsclustern, Unternehmen und Technologien entwickelt

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Underground Ventures

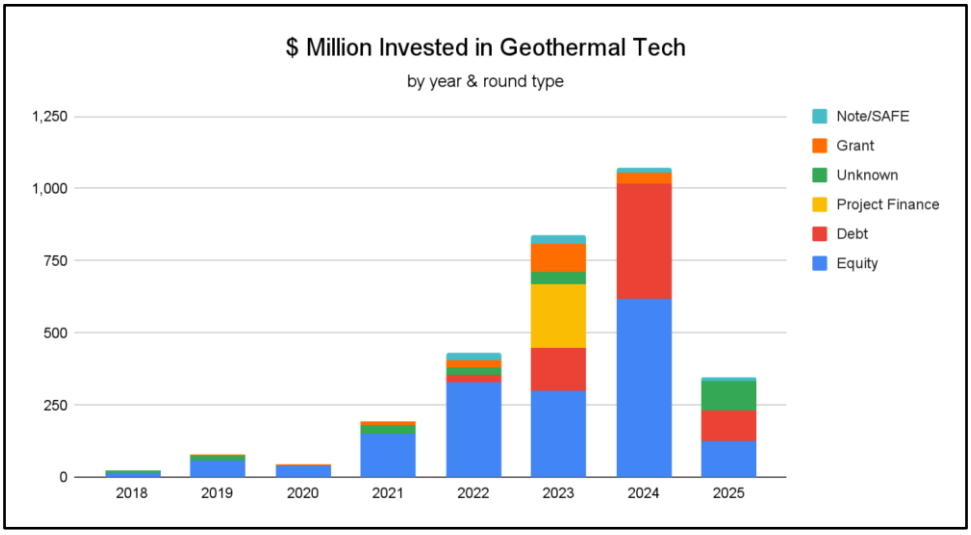
Brief Description

Underground Ventures has collected investment data from 2008 to 2025 H1, which shows how geothermal financing is evolving at the level of innovation clusters, firms, and technologies. The research tracks the growth of next-generation geothermal technologies necessary to grow geothermal energy production. Among other insights, we show how types of financing are changing as risk profiles change, how oil and gas corporates continue to be integral, how North American clusters import capital from Europe, the key role of American capital markets, and the investment - or lack of - into specific technology segments in deep geothermal energy. This paper presents the surfactant-based product SDA-550 which shows a tendency of forming rodlike micelles in acidic solutions. As shown in Figure 1, a chaotic worm-like arrangement of dissolved molecules leads to an increase in viscosity. This behavior creates a temporary blocking effect which causes fluid diversion and facilitates successful acidizing.

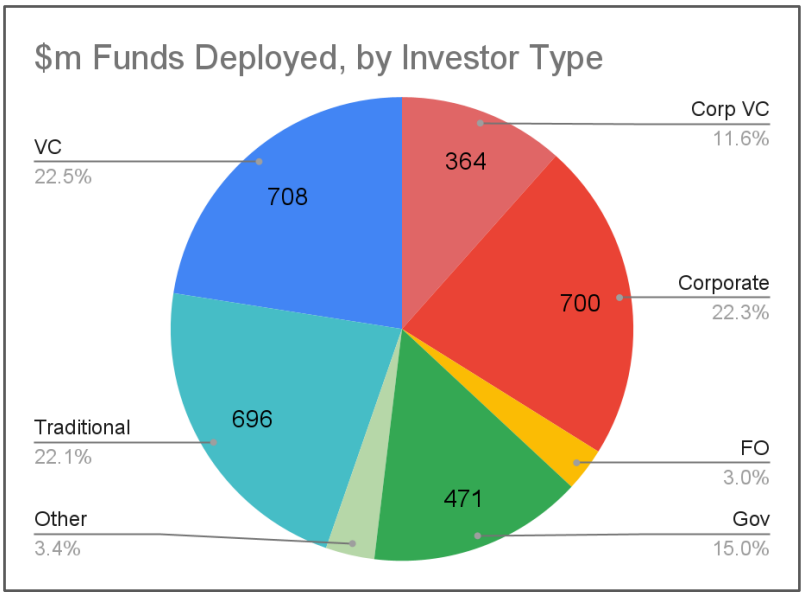
Extended Abstract

In our research, 183 funding rounds have been analyzed, covering 62 geothermal companies and 219 investors. In the largest study of its kind, we demonstrate:

(1) Capital invested in geothermal tech has grown rapidly, and the type of financing has evolved from grants and equity to debt and infrastructure as startups mature and de-risk. This is mostly driven by tech-enabled project developers, who have more predictable future revenues compared to companies selling technology products. In the first half of 2025, less capital was raised compared to the two preceding years, and therefore this year is likely to bring an overall decrease in investments. We do not conclude that this breaks the growth trend, because it is still within a reasonable range of deviation given that the overall fundraising is driven especially by a few firms.

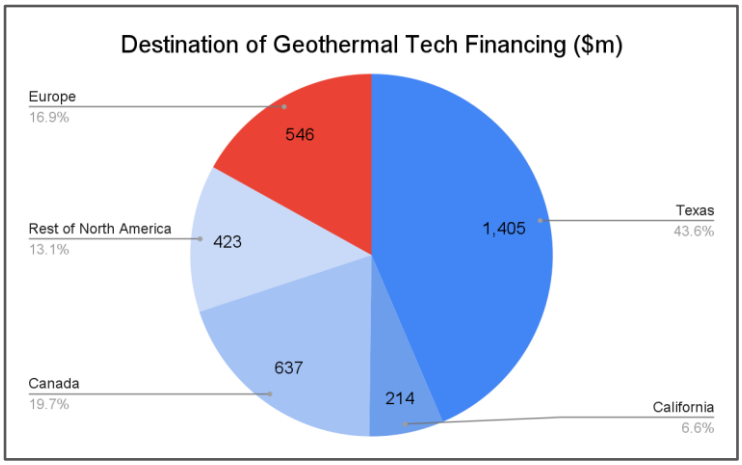


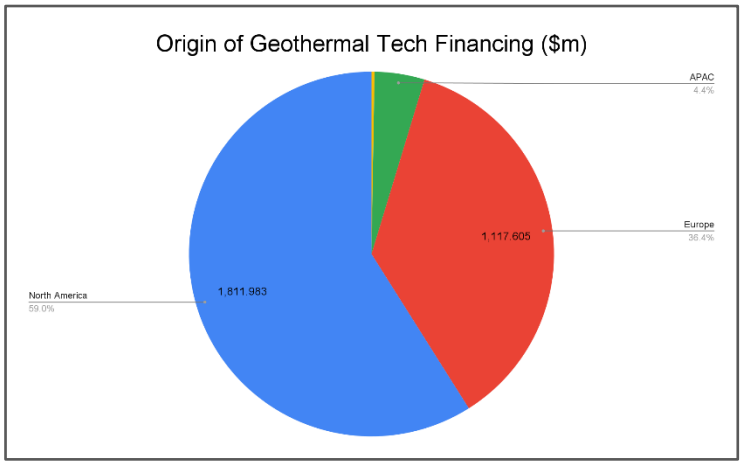
(2) The O&G industry is closely connected to geothermal innovation clusters, both in terms of financing and spinning out alumni-entrepreneurs that go on to found tech companies. Corporate-backed funding makes up 34% of all funding to start-ups in the sector since 2008, which is high when compared to other industries. The share used to be above 40% but this has dropped in recent years as especially traditional funding (e.g., private equity funds) and government have invested more in later-stage companies.



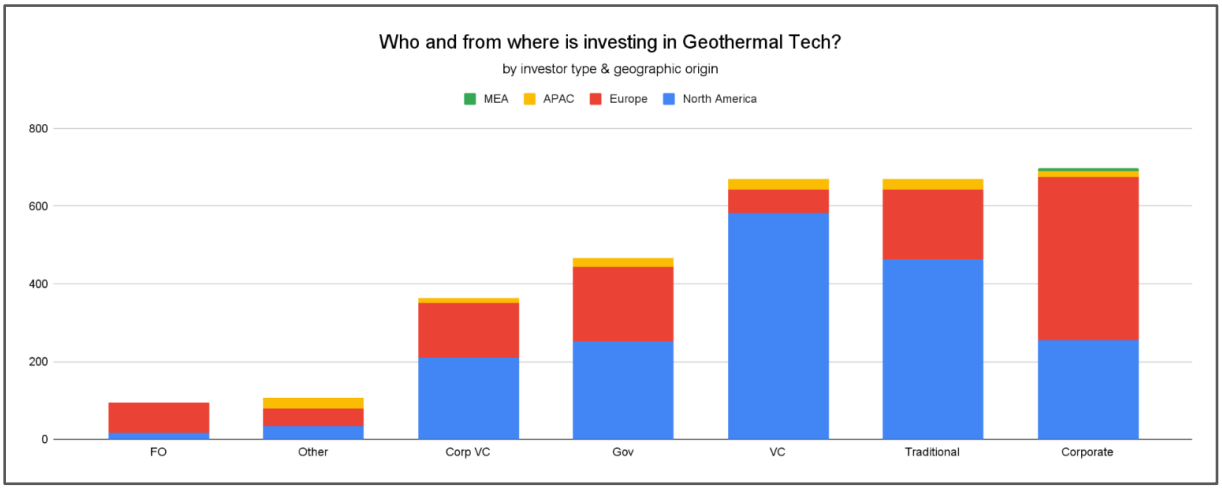
(3) North America is the leader in next-gen geothermal, but, surprisingly, North America is also a net importer of capital from the world, particularly from Europe. Almost half (43.6%) of capital is invested in the Texas cluster, followed by Alberta, Canada and

California. Meanwhile, more than half of European capital goes to finance technologies developed by companies headquartered in North America.





(4) European corporations invest more in geothermal technologies than North American corporations, but North American traditional and venture investment funds vastly exceed their European counterparts. Overall, North American investors account for 60% of capital invested in geothermal tech while North American geothermal tech companies receive 80% of capital invested, making them a net importer of capital (driven mostly by European corporates).



(5) Although investments in drilling and reservoir stimulation have grown significantly, certain technologies such as well casing/completion and downhole tools are severely underinvested, compared to their importance for next-gen geothermal success in hotter temperatures. Our database, which categorises product companies and tech-enabled

developers separately, also shows that commercial funding for superhot rock projects is now noticeable. Note that while relatively little investment goes to product companies focused on subsurface technologies, it is clear that some tech-enabled EGS project developers do develop some proprietary subsurface technologies inhouse. Additionally, we expect the below categorisation for developers to evolve over time, e.g., for SHR to merge with EGS and AGS when deeper drilling becomes more common.