

Investor Organization Assessment: CVD Graphene

Organization Report | Technology assessed: CVD graphene

A briefing on the VC and PE organizations positioned to invest in CVD graphene: sector focus, stage, firm structure, philosophy, and similar-investment status.



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Company: First Place Business Solutions

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Prepared for internal evaluation. Every firm, fund, program and figure named in this report is cited to its source.

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Summary of institutional investors relevant to CVD graphene

This document maps the venture capital, corporate venture, growth-equity, and mission-backed investment organizations most likely to fund a company developing CVD graphene, using an evidence-first lens centered on published sector thesis, stage fit, firm structure, investing philosophy, and live evidence of analogous investing. The core conclusion is that CVD graphene is fundable only when framed through a specific technical and commercial wedge, not as a generic “graphene platform.” The strongest investor matches are firms that explicitly back advanced materials, hard tech, industrial transformation, semiconductors, manufacturing systems, climate-industrial technologies, or defense-relevant hardware. Across the source material, the most credible narratives for fundraising are graphene as an enabler of batteries, membranes, coatings, thermal management, power electronics, sensing, microelectronics, or lower-carbon industrial processes.

The document consistently finds that the best fit lies with venture investors willing to underwrite science and scale-up risk, rather than with classic private equity buyers or broad consumer and fintech funds. The highest-conviction firms are Material Impact, Clean Energy Ventures, Extantia, DCVC, Breakthrough Energy Ventures, Piva Capital, Engine Ventures, HAX / SOSV, Lockheed Martin Ventures, and IQT. These organizations appear repeatedly because they combine explicit thesis fit with either early-stage company-building capacity, hard-tech technical diligence, strategic industrial networks, or mission-driven relevance. Several others remain credible but more conditional, including AM Ventures, Prime Impact Fund, Lowercarbon Capital, IP Group, The Engine, imec.istart, Anzu Partners, Innovation Industries, Nysnø Climate Investments, Lux Capital, Shield Capital, Energy Impact Partners, and Momenta.

A key through-line is that investor appetite depends on whether the company can retire a small set of recurring decision blockers. The source document is explicit that firms will ask why graphene is uniquely necessary, whether CVD manufacturing can scale economically, whether there is a single beachhead market, and whether qualification timelines are venture-compatible. Weak techno-economics, vague market entry, broad platform messaging, and overstated climate or defense claims are the main reasons a graphene company will fail to convert interest into financing. In practice, the fundraising burden is to show measurable performance advantage over incumbent materials, a credible path on yield and throughput, a staged commercialization plan, and investor-specific framing tied to published mandate.

The overall investor landscape breaks into a few clear groups. First are dedicated advanced-materials and tough-tech backers such as Material Impact, Engine Ventures, HAX / SOSV, and AM Ventures, which are best suited to pre-seed and seed raises around process proof, pilot development, and initial productization. Second are climate-industrial and deep-tech venture firms such as Clean Energy Ventures, Extantia, Piva Capital, DCVC, Breakthrough Energy Ventures, Lowercarbon Capital, and Prime Impact Fund, which become strongest once the company can connect graphene to quantified decarbonization or industrial performance outcomes. Third are strategic and mission-oriented investors such as Lockheed Martin Ventures, IQT, Shield Capital, and Energy Impact Partners, which

can be highly valuable when graphene maps to defense systems, microelectronics, energy infrastructure, or strategic manufacturing.

The document also shows that many broadly branded generalist investors are possible but not primary targets. Lux Capital and Khosla Ventures stand out as better generalist fits because they publicly signal comfort with frontier science and large technical markets. General Catalyst, Sequoia, and Andreessen Horowitz are better viewed as later or selective stretch targets once the company is clearly more than a materials R&D story and can present as a category-defining platform business. Consumer and fintech investors appear mostly as edge cases: they become relevant only if graphene is already wrapped into a productized application such as consumer electronics, enabling coatings, authentication hardware, or financial-infrastructure devices.

Another important conclusion is that the document avoids overclaiming where public information is missing. Many firms do not publish check sizes, direct graphene precedents, or the exact partner who owns the theme. Where a public contact path exists, it is noted; where a specific individual is not publicly associated with graphene or advanced materials in the reviewed sources, the document says so directly. That matters because partner targeting and process expectations differ sharply by firm structure. Traditional venture firms tend to require deep technical diligence and milestone-based underwriting. Corporate venture firms require strategic relevance and internal stakeholder alignment. Mission-backed investors require concrete government-use logic and technology-transfer potential. These differences are as important as thesis fit.

Taken together, the source document argues for a focused fundraising strategy rather than a broad investor blast. The first outreach tier should emphasize firms with explicit published alignment to materials, manufacturing, climate-hard-tech, semiconductors, or defense hardware, and the pitch should be tailored to one high-conviction application with financeable milestones. The strongest near-term fundraising case for CVD graphene is therefore not “we make graphene,” but “we have a defensible CVD process that unlocks a superior outcome in a large, technically demanding market, and we can prove the path from lab result to pilot, qualification, and scaled margin.” Without that specificity, even highly relevant investors are likely to treat the opportunity as too broad, too early, or too difficult to diligence into a venture return.

Firm summary table

Firm	Sector focus	Investment stage	Firm structure	Similar-investment status	Published partner or contact
Material Impact	Advanced materials / material science	Pre-seed/seed	Traditional institution VC	Active	info@materialimpact.com
Clean Energy Ventures	Climate hard tech / industrial decarbonization materials	Series A/B	Traditional institution VC	Active	not published
Extantia	Clean industrial revolution / industrial processes	Early-stage / Series A/B	Traditional institution VC	Active	Public "Pitch Us!" form
DCVC	Deep tech / industrial transformation / advanced manufacturing	Multi-stage	Traditional institution VC	Active	not published
Breakthrough Energy Ventures	Climate-scale materials / industrial platform	Multi-stage	Traditional institution VC	Active	Rodi Guidero; Eric Toone; Carmichael Roberts
Piva Capital	Future of materials and production	Series A/B	Traditional institution VC	Active	not published
Engine Ventures	Advanced materials / tough tech	Pre-seed/seed	Traditional institution VC	Active	Katie Rae

Firm	Sector focus	Investment stage	Firm structure	Similar-investment status	Published partner or contact
HAX / SOSV	Hard tech commercialization / plasma / manufacturing	Pre-seed/seed	Traditional institution VC + accelerator	Active	Duncan Turner; Avra van der Zee
Lockheed Martin Ventures	Defense materials / electronics / manufacturing	Multi-stage	Corporate VC	Active	Chris Moran; Jeff Cunningham
IQT (In-Q-Tel)	Mission-tech / microelectronics / hardware / energy	Early commercialization / multi-stage	Government-backed strategic investor	Active	Public "Submit a Business Plan" path
Lowercarbon Capital	Industrial materials / climate	Multi-stage	Traditional institution VC	Active	not published
Energy Impact Partners	Energy infrastructure / strategic climate network	Multi-stage	Traditional institution VC / strategic network platform	Active	not published
Just Climate	Hard-to-abate industry transformation	Growth/late stage	Growth-equity climate platform	Active	not published
Prime Impact Fund	Earliest-stage climate tech	Pre-seed/seed	Traditional institution VC / impact fund	Active	not published
IP Group	Research commercialization / spinouts	Early-stage / Series A/B	Listed commercialization investor	Active	not published
AM Ventures	Additive	Early-stage	Traditional institution	Active	info@amventures.com

Firm	Sector focus	Investment stage	Firm structure	Similar-investment status	Published partner or contact
	manufacturing / materials processing		VC		
Vsquared Ventures	European deep tech / engineering	Early-stage / multi-stage	Traditional institution VC	Active	not published
The Engine	Tough-tech commercialization platform	Pre-seed/seed	University/ecosystem-backed platform	Active	not published
imec.istart	Semiconductor / electronics startup platform	Pre-seed/seed	Research-institute-backed accelerator/fund	Active	Public apply path
Anzu Partners	Breakthrough industrial technologies	Multi-stage	Traditional institution VC / crossover platform	Active	not published
Innovation Industries	European deep tech	Early-stage / multi-stage	Traditional institution VC	Active	not published
Nysnø Climate Investments	State-backed climate investing	Early-stage	State-backed investor	Active	post@nysnoinvest.no
Momenta	Industrial systems / physical economy	Multi-stage	Traditional institution VC / growth platform	Active	not published
Lux Capital	Frontier science / defense / hard tech	Multi-stage	Traditional institution VC	Active	info@luxcapital.com
Khosla Ventures	Broad frontier tech / large	Multi-stage	Traditional institution VC	Active	not published

Firm	Sector focus	Investment stage	Firm structure	Similar-investment status	Published partner or contact
	technical markets				
General Catalyst	Multi-sector platform / defense-industrial scaling	Multi-stage	Traditional institution VC	Active	not published
Sequoia Capital	Generalist venture	Multi-stage	Traditional institution VC	Active	not published
Andreessen Horowitz	Generalist venture / infrastructure	Multi-stage	Traditional institution VC	Active	not published
Shield Capital	Defense / dual-use early-stage	Early-stage / Series A/B	Traditional institution VC	Active	Raj Shah
8VC	Defense / manufacturing / logistics	Multi-stage	Traditional institution VC	Active	not published
Type One Ventures	Frontier / space / manufacturing	Multi-stage	Micro VC	Active	contact@typeone.vc
Unilever Ventures	Consumer enabling technologies	Multi-stage	Corporate VC	Active	uv.admin@unilever.com
L Catterton	Consumer growth / disruptive consumer tech	Growth/late stage	PE / growth equity	Active	not published
Maveron	Consumer venture	Early-stage / Series A/B	Traditional institution VC	Active	maveron@maveron.com
Prelude Ventures	Climate early-stage	Pre-seed/seed	Traditional institution VC	Active	contact@preludeventures.com
Eclipse	Physical economy	Multi-stage	Traditional institution	Active	admin@eclipse.capital

Firm	Sector focus	Investment stage	Firm structure	Similar-investment status	Published partner or contact
	/ hardware / factories		VC		
Commerce Ventures	Fintech infrastructure	Multi-stage	Traditional institution VC	Active	not published
Nyca Partners	Payments / risk / fintech systems	Multi-stage	Traditional institution VC	Active	info@nyca.com
Portage	Fintech / financial services platform	Multi-stage	Venture / growth platform	Active	not published
Motive Partners	Fintech venture to buyout	Multi-stage	VC / PE-growth platform	Active	not published
Citi Ventures	Future of finance strategic CVC	Not public	Corporate VC	Active	not published
Btomorrow Ventures	Frontier strategic CVC	Venture-oriented	Corporate VC	Active	not published
SineWave Ventures	Enterprise / public-sector tech	Early-stage / Series A/B	Traditional institution VC	Active	Team@sinewave.vc
Energize Capital	Digitization and decarbonization of complex industries	Multi-stage	Traditional institution VC	Active	not published
New Climate Ventures	Early-stage climate	Early-stage / Series A/B	Traditional institution VC	Active	not published

Top 10 investor pairings for CVD graphene

Mandate and framing

This memo summarizes the source briefing through a fundraising lens: which **venture capital, corporate venture, growth-equity, or mission-backed investment organizations** are the best candidates to fund **CVD graphene technology development**. It excludes industrial adopters and buyers. The emphasis is on **published thesis fit, stage fit, firm structure, investment philosophy, and evidence of current analogous investing**.

The source material covered multiple sector lenses. Across those, the strongest repeat pattern is clear: the best investors for CVD graphene are not generic consumer or software funds, but firms that publicly back **advanced materials, hard tech, industrial transformation, semiconductors, manufacturing platforms, climate-industrial technologies, or mission-critical hardware**.

Executive summary

The best current pairings are concentrated in five investable narratives: 1. **Advanced materials / material science company creation** 2. **Climate-industrial decarbonization materials** 3. **Deep-tech manufacturing / industrial transformation** 4. **Semiconductor and electronics-enabling materials** 5. **Defense / mission-tech materials and hardware**

The most fundable versions of a CVD graphene story are therefore not “graphene in general,” but a sharper wedge such as: - conductive or thermal layers for power electronics or advanced compute, - battery or cathode/anode-enabling materials, - membranes / separations with lower energy intensity, - coatings or barrier materials with measurable system-level performance gains, - industrial process IP with credible scale-up economics, - or defense / sensing / microelectronics applications with mission pull.

Top 10 best firm and sector-focus pairings

1) Material Impact — advanced materials / material science company creation

Why this pairing is top-tier: This is the cleanest direct thesis match in the research set. Material Impact publicly says it is “**building deep tech companies powered by material science**” and backs **inception-stage companies**. For a CVD graphene company that is still proving manufacturability, application fit, and product-market wedge, that is unusually well aligned.

- **Thesis fit:** Very high. CVD graphene is a materials-platform story; Material Impact is explicitly organized around material science.
- **Stage fit:** **Pre-seed/seed** to very early institutional formation.

- **Firm structure: Traditional institution VC** with a company-building posture. Implication: expect heavy technical diligence and interest in formation architecture, not just financing.
- **Investment philosophy:** Publicly thesis-driven, science-led, and impact-aware.
- **Similar-investment status: Active.** Public portfolio includes actnano, 6K, DetraPel, NanoGraf, CorePower Magnetics, and Mattiq—strong evidence the firm is still underwriting enabling materials and adjacent platforms.
- **Clarity of ask:** Best approached for a **priced seed** or **SAFE/seed extension** if the company is still pre-pilot; priced Series A if there is early process proof plus application pull.
- **Likely blockers:** unclear first market; no evidence that CVD process economics beat alternatives; weak IP position; too much platform ambition without a single investable wedge.
- **Published contacts:** Public contact email **info@materialimpact.com**. Specific graphene theme owner was **not published** in the reviewed materials.

2) Clean Energy Ventures — climate hard tech / industrial decarbonization materials

Why this pairing is top-tier: Clean Energy Ventures is one of the strongest evidence-based fits if the company can quantify emissions reduction and commercialization logic. The firm explicitly backs **hard technology** with **defensible science** and a **clear path to commercialization**.

- **Thesis fit:** Very high for graphene tied to batteries, membranes, thermal management, grid hardware, or industrial efficiency.
- **Stage fit: Series A/B**, sometimes earlier around climate-hard-tech formation.
- **Firm structure: Traditional institution VC.** Implication: rigorous IC process, technical diligence, and likely preference for milestone-based de-risking.
- **Investment philosophy:** Publicly science- and engineering-led, with commercial discipline and gigaton-scale impact framing.
- **Similar-investment status: Active.** Portfolio examples in the source include Boston Materials, Volexion, Aqua Membranes, MacroCycle, and Queens Carbon.
- **Clarity of ask:** Best framed as a **priced Series A** for pilot scale-up, application qualification, and first commercial deployment.
- **Likely blockers:** climate impact not quantifiable; science may work but unit economics are too vague; qualification timelines too long for venture without a crisp beachhead market.
- **Published contacts:** Public contact path on website. Specific published partner owner for graphene was **not identified** in the source.

3) Extantia — clean industrial revolution / industrial processes

Why this pairing is top-tier: Extantia repeatedly appears as a strong match for hard industrial climate technologies. Its public framing around a **clean industrial revolution** and portfolio exposure to industrial-process and materials-adjacent companies makes it one of the most practical venture targets.

- **Thesis fit:** High if graphene is part of lower-carbon manufacturing, industrial efficiency, membranes, hydrogen systems, or energy hardware.
- **Stage fit:** **Early-stage, typically Series A/B**, with some flexibility.
- **Firm structure:** **Traditional institution VC**. Implication: thesis-led selection with sector specialization rather than broad opportunism.
- **Investment philosophy:** Publicly thesis-driven around zero-carbon industries and industrial transition.
- **Similar-investment status:** **Active**. Source notes UP Catalyst, SiTration, Binding Solutions, Bloom Biorenewables, and Modern Synthesis.
- **Clarity of ask:** Best as a **priced seed-to-Series A** around industrial use-case validation and early scale-up.
- **Likely blockers:** weak decarbonization narrative; “graphene platform” too broad; no line of sight to lower-cost deployment in a real industrial system.
- **Published contacts:** Public “**Pitch Us!**” form is available. No public graphene-specific partner was named in the source.

4) DCVC — deep tech / industrial transformation and advanced manufacturing

Why this pairing is top-tier: DCVC is one of the most credible generalist-deep-tech investors for hard scientific risk. Its public positioning—**deep tech venture capital** with **more published scientists than MBAs**—signals unusually high tolerance for difficult materials and process diligence.

- **Thesis fit:** High for graphene as a defensible science platform in advanced manufacturing, semiconductors, industrial systems, or energy hardware.
- **Stage fit:** **Multi-stage**, often strongest from **Series A onward** once core technical proof exists.
- **Firm structure:** **Traditional institution VC**. Implication: technical scrutiny is likely a feature, not a bug.
- **Investment philosophy:** Publicly science-led, thesis-driven, and focused on high-stakes technical problems.
- **Similar-investment status:** **Active**. Source cites current activity and portfolio exposure to industrial transformation, advanced manufacturing, energy, and materials-adjacent companies such as Brimstone.
- **Clarity of ask:** Usually a **priced Series A/B** or crossover-style venture round with a strong data room.
- **Likely blockers:** insufficient proof that the science scales; not big enough as a platform; market too niche; founding team too academic without manufacturing execution capacity.
- **Published contacts:** Public team pages exist; no open application path was confirmed in the source. Graphene-specific owner **not published**.

5) Breakthrough Energy Ventures — climate-scale materials / industrial platform

Why this pairing is top-tier: BEV is compelling when graphene maps to a climate-critical system rather than a generic advanced material. The source found public portfolio evidence in adjacent materials and industrial technologies.

- **Thesis fit:** High for climate-linked graphene in batteries, industrial efficiency, grid hardware, hydrogen, separations, or lower-carbon materials.
- **Stage fit: Multi-stage.**
- **Firm structure: Traditional institution VC** climate platform. Implication: mission alignment matters, but the bar for platform-scale impact is high.
- **Investment philosophy:** Thesis-driven around breakthrough decarbonization; detailed materials philosophy beyond that was not fully public in the reviewed source.
- **Similar-investment status: Active.** Source references Molten Industries, Stratus Materials, KoBold Metals, Bloom Biorenewables, and Redwood Materials.
- **Clarity of ask:** Best as a **priced Series A/B** or strategic climate growth syndicate participation once the emissions case is undeniable.
- **Likely blockers:** no credible gigaton or major industrial-impact path; application too incremental; timeline to commercialization too speculative.
- **Published contacts:** Public people and portfolio pages; named public leaders include **Rodi Guidero, Eric Toone, and Carmichael Roberts.**

6) Piva Capital — future of materials and production

Why this pairing is top-tier: Piva is one of the few firms in the source with an unusually direct thesis label: **Future of Materials & Production.** That makes the fit sharp and legible to an investment committee.

- **Thesis fit:** Very high for specialty materials, process innovation, resource efficiency, and production platforms.
- **Stage fit: Series A/B**, sometimes earlier if technical proof is strong.
- **Firm structure: Traditional institution VC.** Implication: domain-expert pattern recognition but still venture return expectations.
- **Investment philosophy:** Publicly thesis-driven and industry-transformation oriented.
- **Similar-investment status: Active.** The source cites a live materials-and-production orientation, though graphene-specific precedent was not public.
- **Clarity of ask:** A **priced Series A** is likely the clearest ask.
- **Likely blockers:** weak evidence that graphene wins on cost/performance versus incumbent materials; insufficiently large end market; unclear production path.
- **Published contacts:** Public contact and team pages; specific published partner ownership for graphene was **not identified.**

7) Engine Ventures — advanced materials / tough tech commercialization

Why this pairing is top-tier: Engine is especially relevant when the company is still at the difficult translation layer between lab science and venture-backed company formation. The source notes Engine explicitly asks whether inbound companies fit **Advanced Materials**, **Advanced Manufacturing**, or **Semiconductors**.

- **Thesis fit:** Very high for CVD graphene with strong IP and technical differentiation.
- **Stage fit:** Pre-seed/seed.
- **Firm structure:** Traditional institution VC with tough-tech specialization. Implication: likely comfortable with longer technical de-risking timelines than mainstream VCs.
- **Investment philosophy:** Publicly disciplined investing plus deep technical insight and long-term commitment.
- **Similar-investment status:** Active. Source points to hard-tech portfolio names including Foundation Alloy.
- **Clarity of ask:** Best as a **SAFE** or **priced seed** around proof-of-process, pilot tooling, and first customer design-ins.
- **Likely blockers:** no clear commercialization path; founder team lacks translational leadership; capex and technical milestones not broken into financeable steps.
- **Published contacts:** Public founder intake form; published leader **Katie Rae**.

8) HAX / SOSV — plasma/process-heavy hard tech and manufacturing commercialization

Why this pairing is top-tier: HAX is unusually strong when the company needs not just money but productization, manufacturing iteration, and tooling strategy. The source also highlights **HAX Plasma Forge**, which is materially relevant to CVD and deposition-adjacent businesses.

- **Thesis fit:** High for process-heavy graphene, semiconductor interfaces, hardware-enabling films, advanced manufacturing tools, or plasma-adjacent production.
- **Stage fit:** Pre-seed/seed.
- **Firm structure:** Traditional institution VC with accelerator platform; Plasma Forge also has government-backed program support. Implication: hands-on build support, but also structured milestones.
- **Investment philosophy:** Publicly builder-oriented and commercialization-heavy.
- **Similar-investment status:** Active. Source cites 800+ portfolio companies, \$7.5B raised by portfolio 2021–2025, and Plasma Forge backed by \$51M dedicated funding; HAX offers **\$550K initial investment**.
- **Clarity of ask:** Clear fit for **accelerator entry + SAFE/seed financing**.
- **Likely blockers:** company is too late-stage for accelerator format; no productization path; science is interesting but not manufacturable in a startup timeframe.
- **Published contacts:** Public **Apply** path. Published leaders include **Duncan Turner** and **Avra van der Zee**.

9) Lockheed Martin Ventures — defense materials / electronics / manufacturing strategic CVC

Why this pairing is top-tier: Among strategic investors, this is one of the most explicit thesis matches. The source says Lockheed Martin Ventures publicly names **Materials, Manufacturing, Electronics & Compute, Power & Propulsion, Sensors & PNT**.

- **Thesis fit:** Very high for defense-relevant graphene in sensing, electronics, thermal management, coatings, or lightweight high-performance structures.
- **Stage fit: Multi-stage strategic venture.**
- **Firm structure: Corporate VC.** Implication: process will include strategic relevance, internal stakeholder mapping, and possible business-unit overlay, not just financial return.
- **Investment philosophy:** Publicly strategic-alignment plus technical-rigor driven.
- **Similar-investment status: Active / evergreen.** Source cites growth from \$100M to **\$1B evergreen fund** and 120+ company partnerships.
- **Clarity of ask:** Best framed as a **CVC minority round**, often in a syndicate, with explicit strategic roadmap.
- **Likely blockers:** no defense-use specificity; export-control or security complexity without mission sponsor; product not mature enough for internal strategic relevance.
- **Published contacts:** Publicly named **Chris Moran** and **Jeff Cunningham** in the source.

10) IQT (In-Q-Tel) — microelectronics / hardware / energy / mission-tech materials

Why this pairing is top-tier: IQT belongs in the top ten because it is one of the few mission-backed investors with explicit interest in **Microelectronics, Energy, Hardware, and Space**, all of which can intersect with graphene.

- **Thesis fit:** High where the company has a concrete government mission case in secure electronics, sensors, low-SWaP hardware, or energy security.
- **Stage fit: Early commercialization to multi-stage strategic venture.**
- **Firm structure:** Best classified here as **government-backed / mission-backed investment platform**. Implication: mission fit is paramount; procurement relevance can matter more than consumer-market TAM.
- **Investment philosophy:** Publicly mission-driven and technology-transition oriented.
- **Similar-investment status: Active.** Source cites 800+ investments and current mission partners.
- **Clarity of ask:** Best as a **strategic minority venture investment** aligned to a national-security use case.
- **Likely blockers:** no direct mission customer; technology not adaptable to government use timelines; founder unwillingness to engage in defense/intelligence pathways.

- **Published contacts:** Public **Submit a Business Plan** path. Individual graphene theme owner was **not published** in the source.

Why these 10 outrank the rest

These ten organizations combine the strongest mix of: - explicit public thesis alignment, - a believable stage fit for a still-developing graphene company, - current evidence of analogous investing, - and a process a founder can realistically navigate.

Several other firms from the source are real possibilities but rank lower for now: - **Lowercarbon Capital** is strong, but works best when the climate case is overwhelming and broad. - **Energy Impact Partners** is highly relevant later, especially when strategic utilities or industrial channels matter. - **Just Climate** is likely too late-stage for most CVD graphene developers. - **Unilever Ventures, Maveron, L Catterton, Commerce Ventures, Nyca, Portage, Motive, Citi Ventures** are generally too indirect unless the company is already wrapped in a downstream consumer or fintech product. - **Sequoia, a16z, General Catalyst, Khosla, Lux** can be important stretch names, but the source gave less direct published evidence of specific advanced-materials process appetite than the selected top ten, except in certain cases like Lux and Khosla where they remain strong secondary targets.

Decision blockers that recur across nearly every firm

A fundraising lead should expect the following recurring objections: 1. **“Why graphene, specifically?”** Investors will want proof that CVD graphene materially outperforms incumbent materials and alternatives. 2. **Scale-up skepticism.** Lab success is not enough; process yield, transfer, substrate compatibility, capex intensity, and reproducibility matter. 3. **No single entry market.** A broad platform story without a first product often blocks conviction. 4. **Qualification timeline risk.** Semiconductor, industrial, energy, and defense adoption cycles can all be long. 5. **Weak unit-economics visibility.** Investors need a path from technical promise to gross-margin reality. 6. **Founder-market mismatch.** Deep technical teams still need manufacturing, productization, and go-to-market leadership. 7. **Climate or mission overclaiming.** If emissions or defense relevance is asserted but not evidenced, credibility drops quickly.

Recommended asks by investor type

- **Pre-seed / seed deep-tech specialists:** SAFE or priced seed around process proof, pilot tooling, and first design-in milestones. Best targets: Material Impact, Engine, HAX/SOSV.
- **Series A/B climate and deep-tech funds:** priced institutional round to scale pilot manufacturing and qualify first products. Best targets: Clean Energy Ventures, Extantia, Piva, DCVC, BEV.
- **Strategic or mission-backed investors:** minority syndicate participation with explicit strategic workstreams. Best targets: Lockheed Martin Ventures, IQT.

Full firm consideration table

Firm	Sector focus	Sharper recommendation matrix	Stage	Firm structure	Public philosophy	Similar-investment status
Material Impact	Advanced materials / material science	Top 10 ; strongest for inception-stage graphene platform	Pre-seed/seed	Traditional institution VC	Science/materials thesis-driven	Active; materials-heavy portfolio
Clean Energy Ventures	Climate hard tech / industrial decarb materials	Top 10 ; best for quantified climate wedge	Series A/B	Traditional institution VC	Rigorous science + commercialization	Active; Boston Materials, Volexion, etc.
Extantia	Clean industrial revolution / industrial processes	Top 10 ; strong for industrial-climate framing	Early-stage / Series A/B	Traditional institution VC	Zero-carbon industries thesis	Active; materials/process-adjacent portfolio
DCVC	Deep tech / industrial transformation / advanced manufacturing	Top 10 ; best for defensible science platform	Multi-stage	Traditional institution VC	More scientists than MBAs; deep-tech thesis	Active; ongoing industrial/deep-tech investing
Breakthrough Energy Ventures	Climate-scale materials / industrial platform	Top 10 ; strong when climate impact is central	Multi-stage	Traditional institution VC	Breakthrough decarbonization thesis	Active; materials-adjacent climate portfolio
Piva Capital	Future of materials and production	Top 10 ; highly legible materials-production fit	Series A/B	Traditional institution VC	Domain-expert, thesis-driven	Active

Firm	Sector focus	Sharper recommendation matrix	Stage	Firm structure	Public philosophy	Similar-investment status
Engine Ventures	Tough tech / advanced materials	Top 10 ; excellent pre-seed/seed entry	Pre-seed/seed	Traditional institution VC	Technical diligence + long-term commitment	Active
HAX / SOSV	Hard tech commercialization / plasma / manufacturing	Top 10 ; strongest for process-heavy pre-seed	Pre-seed/seed	Traditional institution VC + accelerator	Builder-oriented commercialization	Active; HAX and Plasma Forge live
Lockheed Martin Ventures	Defense materials / electronics / manufacturing	Top 10 ; best strategic CVC for defense use cases	Multi-stage	Corporate VC	Strategic + technical rigor	Active; \$1B evergreen fund cited
IQT (In-Q-Tel)	Mission-tech / microelectronics / hardware / energy	Top 10 ; best mission-backed path	Early commercialization / multi-stage	Government-backed strategic investor	Mission-driven technology transition	Active; 800+ investments
Lowercarbon Capital	Industrial materials / climate	Strong secondary target; best with broad emissions case	Multi-stage	Traditional institution VC	Climate thesis, founder-supportive	Active
Energy Impact Partners	Energy infrastructure / strategic climate network	Strong later-stage/strategic syndicate target	Multi-stage	Strategic networked VC platform	Corporate-network commercialization	Active
Just Climate	Hard-to-abate industry transformation	Relevant later only; usually too mature-stage for raw graphene risk	Growth/late	Growth-equity climate platform	Systems-level hard-to-abate thesis	Active

Firm	Sector focus	Sharper recommendation matrix	Stage	Firm structure	Public philosophy	Similar-investment status
Prime Impact Fund	Earliest-stage catalytic climate tech	Strong earliest-stage climate option if impact case is robust	Pre-seed/seed	Traditional institution VC / impact fund	Gigaton impact + techno-economic rigor	Active
IP Group	Research commercialization / spinouts	Good if university-originated and IP-heavy	Early-stage	Listed commercialization investor	Science commercialization	Active
AM Ventures	Additive manufacturing / materials processing	Strong if graphene ties to additive/composites/manufacturing	Early-stage	Traditional institution VC	Additive-manufacturing thesis	Active
Vsquared Ventures	European deep tech / engineering	Good European deep-tech option; less direct than top tier	Early-stage / multi-stage	Traditional institution VC	Engineering-led deep-tech orientation	Active
The Engine	Tough-tech ecosystem / MIT-rooted commercialization	Strong support platform for very early tough tech	Pre-seed/seed	Ecosystem-backed tough-tech platform	Infrastructure-first commercialization	Active
imec.istar t	Semiconductor / electronics startup ecosystem	Best for semis/electronics angle in Europe	Pre-seed/seed	Research-institute-backed accelerator/fund	Programmatic fit-driven	Active
Anzu Partners	Breakthrough industrial technologies	Good if company is moving beyond pure lab stage	Multi-stage	VC / crossover-like platform	Scientist/operator commercialization support	Active

Firm	Sector focus	Sharper recommendation matrix	Stage	Firm structure	Public philosophy	Similar-investment status
Innovation Industries	European deep tech	Good regional option with complexity tolerance	Early-stage / multi-stage	Traditional institution VC	Deep-tech thesis, embraces complexity	Active
Nysnø Climate Investments	State-backed climate investing	Good for emissions-reduction story, especially Nordic context	Early-stage	State-backed investor	Impact with risk/return discipline	Active
Momenta	Industrial systems / physical economy	Better for hardware/system layer than raw graphene platform	Multi-stage	VC / growth platform	Operator-led industrial scaling	Active
Lux Capital	Frontier science / defense / hard tech	Strong stretch target, especially defense/science framing	Multi-stage	Traditional institution VC	Sci-fi to sci-fact; thesis-driven	Active
Khosla Ventures	Broad frontier tech / large technical markets	Strong stretch target with very large platform ambition	Multi-stage	Traditional institution VC	Thesis-led by company/market logic	Active
General Catalyst	Multi-sector platform / defense-industrial scaling	Better once graphene company is a platform business, not pure materials R&D	Multi-stage	Traditional institution VC	Not clearly published for this theme	Active
Sequoia Capital	Generalist venture	Stretch target only after category-defining market proof	Multi-stage	Traditional institution VC	Founder/company-building oriented	Active
Andreessen	Generalist venture / infrastructure	Stretch target once wedge is infrastructure-scale	Multi-stage	Traditional institution	Broad platform-thesis	Active

Firm	Sector focus	Sharper recommendation matrix	Stage	Firm structure	Public philosophy	Similar-investment status
Horowitz				VC	investing	
Shield Capital	Defense / dual-use early-stage	Good if mission use case is explicit	Early-stage	Traditional institution VC	National-security thesis	Active
8VC	Defense / manufacturing / logistics	Better for strategic industrial-base framing	Multi-stage	Traditional institution VC	Builder-plus-investor	Active
Type One Ventures	Frontier/space/manufacturing	Opportunistic early frontier-tech route	Multi-stage	Micro VC	Visionary frontier-tech	Active
Unilever Ventures	Consumer enabling technologies	Only if graphene is embedded in consumer product platform	Multi-stage	Corporate VC	Consumer and enabling-tech oriented	Active
L Catterton	Consumer growth / disruptive consumer tech	Too late for core materials risk; useful only downstream	Growth/late	PE / growth equity	Consumer category thesis	Active
Maveron	Consumer venture	Weak for raw materials; only for consumer-facing application company	Early-stage	Traditional institution VC	Consumer behavior thesis	Active
Prelude Ventures	Climate early-stage	Good climate-materials backup target	Pre-seed/seed	Traditional institution VC	Climate-first thesis	Active
Eclipse	Physical economy / hardware / factories	Better for industrialization than pure materials thesis	Multi-stage	Traditional institution VC	Operationally intensive physical-economy focus	Active
Commerc	Fintech infrastructure	Only relevant if graphene	Multi-stage	Traditional	Deeply	Active

Firm	Sector focus	Sharper recommendation matrix	Stage	Firm structure	Public philosophy	Similar-investment status
e Ventures		is fintech-enabling hardware		institution VC	thematic	
Nyca Partners	Payments / risk / fintech systems	Only relevant with clear fintech hardware/sensor wedge	Multi-stage	Traditional institution VC	Thesis-driven fintech	Active
Portage	Fintech / financial services platform	Conditional and indirect	Multi-stage	Venture / growth platform	Fintech specialization	Active
Motive Partners	Fintech venture to buyout	Conditional and later-stage	Multi-stage	VC / PE-growth platform	Invest-operate-innovate	Active
Citi Ventures	Future of finance strategic CVC	Conditional strategic only	Not public	Corporate VC	Strategic future-of-finance	Active
Btomorrow Ventures	Frontier strategic CVC	Too indirect for most graphene stories	Venture-oriented	Corporate VC	Hands-on support	Active
SineWave Ventures	Enterprise/public-sector tech	Conditional for defense/public-sector hardware systems	Early-stage	Traditional institution VC	Enterprise/public-sector convergence	Active
Energize Capital	Digitization and decarbonization of complex industries	Conditional; stronger for applied infra than pure materials	Multi-stage	Traditional institution VC	Complex-industry decarb	Active

Final editor-ready takeaway

If the goal is to prioritize outreach for a real financing process, the first calls should generally be: 1. **Material Impact** 2. **Clean Energy Ventures** 3. **Extantia** 4. **DCVC** 5. **Breakthrough Energy Ventures** 6. **Piva Capital** 7. **Engine Ventures** 8. **HAX / SOSV** 9. **Lockheed Martin Ventures** 10. **IQT**

Those ten cover the most credible combinations of **thesis fit, technical-risk tolerance, stage relevance, and current evidence of analogous investing**. The biggest determinant of success will be whether the company can replace a generic graphene story with a **single high-conviction application, financeable milestones, and evidence that scale-up risk is being retired in a venture timeframe**.

Venture and private-capital fundraising summary for CVD graphene

Three-paragraph summary of the research accomplished

The source research mapped a wide set of institutional investors that could plausibly fund a CVD graphene company and segmented them by sector lens rather than by end-market adoption. Across climate, consumer, generalist, defense, fintech, and other specialist buckets, the strongest pattern was consistent: investors only become credible targets when CVD graphene is framed as an enabling platform for a large technical outcome such as industrial decarbonization, advanced manufacturing, semiconductors, sensing, batteries, membranes, thermal management, or defense-grade electronics. Pure “graphene” storytelling was repeatedly shown to be too broad. The sharper recommendation set favored firms with published hard-tech, advanced-materials, industrial-transformation, semiconductor, or tough-tech mandates.

The research also established that the best near-term investors are mostly venture firms, not classic buyout PE. Traditional growth or PE platforms appeared only as later-stage possibilities once a graphene company had already translated process science into a scaled application business. The evidence was strongest for firms such as Clean Energy Ventures, Extantia, DCVC, Material Impact, Piva Capital, Breakthrough Energy Ventures, Engine Ventures, SOSV/HAX, AM Ventures, and selected strategic or government-linked platforms such as Lockheed Martin Ventures, IQT, imec.start, and The Engine. In contrast, broad consumer or fintech investors were generally conditional fits at best, and only when the company could present itself as a productized infrastructure or application business rather than a materials-development company.

Most importantly for fundraising, the document surfaced explicit decision blockers. Recurrent blockers include: weak climate or mission math; no clear application wedge; insufficient evidence that CVD manufacturing can scale on yield, cost, substrate compatibility, and qualification timelines; lack of a line of sight to commercialization; and poor match between company stage and investor mandate. It also found that many firms do not publish check sizes, partner ownership by graphene theme, or open submission paths. Where public names were available, only published partners, managing partners, or public contact emails/forms should be used. Where they were not public, that should be stated directly rather than inferred.

Sharper recommendation matrix by sector focus

Sector focus	Sharper recommendation	Why this group matters for CVD graphene	Principal blocker
Advanced materials / hard tech	Highest priority	Best fit for process IP, materials science diligence, and platform-technology underwriting	Must prove manufacturability and application-specific advantage
Climate /	Highest priority	Strong fit for	Weak or unquantified

Sector focus	Sharper recommendation	Why this group matters for CVD graphene	Principal blocker
industrial decarbonization	if emissions case is quantified	membranes, batteries, thermal management, power electronics, industrial efficiency, lower-carbon materials	climate impact removes fit quickly
Tough-tech incubators / accelerator-investors	Highest priority at pre-seed/seed	Best for lab-to-pilot, prototyping, plasma/CVD process development, early syndication	Can be too early or too small for later industrial scale-up needs
Semiconductor / electronics ecosystem	High priority when device angle is clear	Relevant for thin films, sensors, photonics, microelectronics, conductive layers	Requires a specific semiconductor/electronics wedge, not generic materials pitch
Defense / dual-use	High priority when mission use is concrete	Strong for sensing, RF, thermal, electronics, secure supply-chain and strategic manufacturing narratives	Must show mission pull, not just dual-use possibility
Strategic / corporate venture	Selective priority	Helpful where pilots, channel access, or application validation matter	Strategic fit and timing can dominate financial logic
Generalist multi-sector VC	Medium priority / stretch	Possible for unusually large platform stories	Generalists rarely fund raw materials risk without a legible market wedge
Consumer-focused VC/PE	Low priority unless productized	Relevant only if graphene is wrapped into a consumer hardware, coating, packaging, or brand-enabling business	Weak fit for foundational materials/process development

Sector focus	Sharper recommendation	Why this group matters for CVD graphene	Principal blocker
Fintech investors	Very low priority unless infrastructure productized	Only relevant if graphene enables financial security, identity, or sensing hardware	Materials story alone will not clear thematic screens
Growth / late-stage PE	Deferred	Potential later, after application proof and revenue scale	Not suited to early technical-risk underwriting

Fundraising interpretation

The practical conclusion is that a CVD graphene company should run investor outreach through a wedge-specific narrative: climate-industrial materials, advanced manufacturing, semiconductor-enabling materials, or defense-grade electronics. The best early believers from the research are those with published evidence of backing science-heavy materials or hard-tech commercialization, especially where they also advertise technical diligence, incubation support, or strategic industrial networks.

The strongest firms are not interchangeable. Material Impact, Engine Ventures, SOSV/HAX, AM Ventures, and Prime Impact Fund are best suited to pre-seed or seed technical de-risking. Clean Energy Ventures, Extantia, Piva Capital, DCVC, IP Group, and Breakthrough Energy Ventures look stronger for institutional Series A/B-style raises once the startup can defend techno-economics and qualification plans. EIP, Just Climate, Lockheed Martin Ventures, and some larger multi-stage platforms become more relevant later, when the company can show application pull, pilot pathways, or strategic value to infrastructure and industrial networks.

A fundraising lead should treat the following as explicit blockers to address before outreach: no quantified cost-down or performance-up against incumbents; no evidence on deposition yield, transfer, substrate compatibility, or throughput; no clear first market; and no investor-specific framing. Firms in this research repeatedly publish that they want defensible science plus a path to commercialization, not frontier science without an adoption path. Where partner ownership was not publicly named, the summary below says so.

Priority firms from the research

Top tier: best fit for current venture fundraising

- **Material Impact** — strongest direct published material-science mandate; active in consumer-electronics-adjacent and advanced-materials companies. Public contact: **info@materialimpact.com**. Specific graphene partner owner: **not publicly identified in the source document**.

- **Clean Energy Ventures** — strongest published climate hard-tech diligence profile; active in materials-adjacent climate companies. Public named contacts by graphene theme: **not public in the source document**.
- **Extantia** — strong clean-industrial thesis and active industrial-process portfolio. Public inbound path: **Pitch Us!**. Specific graphene theme owner: **not public in the source document**.
- **DCVC** — strong deep-tech and advanced-manufacturing fit; public science-first philosophy. Specific graphene owner: **not public in the source document**.
- **Piva Capital** — one of the clearest explicit “Future of Materials & Production” theses. Specific public theme owner: **not public in the source document**.
- **Engine Ventures** — strong advanced-materials and tough-tech fit with a public founder intake form. Publicly named leader in the source document: **Katie Rae**.
- **SOSV / HAX** — strongest open-access route for pre-seed hard-tech and plasma/CVD-adjacent development. Publicly named leaders in the source document: **Duncan Turner** and **Avra van der Zee**.
- **AM Ventures** — highly relevant for graphene tied to manufacturing materials, membranes, composites, or production processes. Public contact: **info@amventures.com**.

Next tier: strong but more conditional

- **Breakthrough Energy Ventures** — strong where climate impact is central and quantified. Publicly named managing partners in the source document: **Rodi Guidero, Eric Toone, Carmichael Roberts**.
- **Lowercarbon Capital** — broad industrial-materials climate fit; active, but less explicitly materials-specialist than top-tier names.
- **IP Group** — attractive if the company is university-originated or IP-heavy.
- **Prime Impact Fund** — strong earliest-stage climate option if climate math is compelling.
- **The Engine** — strong platform for tough-tech infrastructure and residency support.
- **imec.istart** — attractive for semiconductor, sensing, electronics, or photonics-flavored graphene in Europe.
- **Innovation Industries** — credible European deep-tech fit, but less directly materials-explicit than Piva or Material Impact.
- **Anzu Partners** — broad breakthrough-industrial fit with flexible capital structures.

Strategic and mission-driven options

- **Lockheed Martin Ventures** — among the strongest direct thesis fits for defense-relevant graphene because it publicly names materials, manufacturing, electronics, sensors, and power. Publicly named leader in the source document: **Chris Moran**; also **Jeff Cunningham** listed publicly there.
- **IQT (In-Q-Tel)** — strong if the pitch is mission-specific in microelectronics, sensing, hardware, or energy security. Public inbound route: **Submit a Business Plan**.
- **Energy Impact Partners** — more relevant once strategic pilots, utility, or infrastructure channels matter.

- **Just Climate** — only later, once the company is demonstrably a hard-to-abate industrial platform rather than an R&D-stage material company.

Investor recommendation table: every firm considered

Firm	Sector focus	Investment stage	Firm structure	Published investment philosophy	Similar - investment status	Recommendation
Exantia	Climate / industrial processes	Early-stage Series A/B	Traditional institution VC	Thesis-driven clean industrial revolution	Active	Prioritize for climate-industrial wedge
Clean Energy Ventures	Climate hard tech / advanced materials	Early-stage Series A/B	Traditional institution VC	Rigorous technical diligence; hard technology plus commercial reality	Active	Prioritize for quantified climate/materials case
Prime Impact Fund	Earliest-stage climate tech	Pre-seed/seed-focused	Traditional institution VC	Gigaton-impact, catalytic, fact-based techno-economics	Active	Prioritize if earliest stage and climate math is strong
Lowercarbon Capital	Climate / industrial materials	Multi-stage	Traditional institution VC	Thesis-driven climate investing; founder-supportive	Active	Strong secondary target
DCVC	Deep tech / advanced manufacturing	Multi-stage	Traditional institution VC	Science-heavy, deep-tech thesis-driven	Active	Prioritize
IP Group	University spinout / deep tech / cleantech	Early-stage Series A/B	Traditional institution VC	Science commercialization / IP-led	Active	Strong if university-originated or IP-heavy
Energy	Energy /	Multi-	Traditional	Strategic-	Active	Pursue later or

Firm	Sector focus	Investment stage	Firm structure	Published investment philosophy	Similar	Recommendation
					investment status	
Impact Partners	infrastructure / strategic climate	stage	institution VC	network driven commercialization		with pilot/channel need
Just Climate	Hard-to-abate industry / climate growth	Growth /late stage	Traditional institution VC	Systems-level climate impact in hard-to-abate sectors	Active	Later-stage only
Breakthrough Energy Ventures	Climate deep tech / industrial materials	Multi-stage	Traditional institution VC	Breakthrough decarbonization thesis	Active	Strong if climate wedge is central
Energize Capital	Climate / industrial digitization	Multi-stage	Traditional institution VC	Decarbonization of complex industries	Active	Conditional; weaker for pure materials
Unilever Ventures	Consumer enabling tech	Multi-stage	Corporate VC	Brands and technologies that enable them to succeed	Active	Only if productized consumer-enabling story
L Catterton	Consumer growth / disruptive consumer tech	Growth /late stage	Traditional institution VC	Consumer-category thesis with operational value creation	Active	Too late for core materials risk
Maveron	Consumer VC	Early-stage Series A/B	Traditional institution VC	Consumer-behavior thesis-driven	Active	Only if consumer product wrapper exists
Material Impact	Advanced materials / deep	Pre-seed/seed-	Traditional institution VC	Building deep-tech companies powered by	Active	Highest-priority target

Firm	Sector focus	Investment stage	Firm structure	Published investment philosophy	Similar - investment status	Recommendation
	tech	focused		material science		
Prelude Ventures	Climate / materials-aware early stage	Pre-seed/seed-focused	Traditional institution VC	Climate-first, thesis-driven early-stage investing	Active	Strong if climate-first framing works
SOSV / HAX	Tough tech / manufacturing / plasma / hardware	Pre-seed/seed-focused	Traditional institution VC	Hands-on hard-tech commercialization support	Active	Highest-priority early-stage target
Khosla Ventures	Generalist frontier tech	Multi-stage	Traditional institution VC	Thesis-driven around large technical markets	Active	Selective but credible stretch target
Eclipse	Physical economy / industrial systems	Multi-stage	Traditional institution VC	Operationally intensive physical-economy investing	Active	Good for industrialization, not pure materials science
Vsquare Ventures	European deep tech / semis / hardware	Early-stage Series A/B	Traditional institution VC	Engineering-led deep-tech specialization	Active	Strong Europe-focused target
AM Ventures	Additive / advanced manufacturing materials	Pre-seed/seed-focused	Traditional institution VC	Thesis-driven industrial 3D printing and materials	Active	Highest-priority if manufacturing wedge is strong
Piva Capital	Future of materials & production	Early-stage Series	Traditional institution VC	Science breakthrough to mass-market	Active	Highest-priority target

Firm	Sector focus	Investment stage	Firm structure	Published investment philosophy	Similar - investment status	Recommendation
The Engine	Tough tech platform	Pre-seed/seed-focused	University/government-backed fund	Transformational science and engineering commercialization	Active	Strong if infrastructure/residency support is needed
imec.start	Semiconductor / electronics startup platform	Pre-seed/seed-focused	University/government-backed fund	Programmatic founder-fit approach	Active	Strong for electronics / photonics angle
Shield Capital	Defense / dual-use early stage	Early-stage Series A/B	Traditional institution VC	Mission-driven national-security thesis	Active	Conditional on concrete defense mission fit
Lockheed Martin Ventures	Defense materials / manufacturing / sensors / electronics	Multi-stage	Corporate VC	Strategic-alignment and technical-rigor driven	Active	Top strategic target for defense-relevant graphene
IQT (In-Q-Tel)	National security / microelectronics / hardware / energy	Multi-stage	University/government-backed fund	Mission-driven technology transition	Active	Prioritize if government mission use is real
Lux Capital	Frontier science / defense / hard tech	Multi-stage	Traditional institution VC	Sci-fi to sci-fact; believed frontier science	Active / fundraising	Strong stretch target
General Catalyst	Generalist / defense / industrial	Multi-stage	Traditional institution VC	Not clearly published in source	Active	Better once platform scale is clearer

Firm	Sector focus	Investment stage	Firm structure	Published investment philosophy	Similar - investment status	Recommendation
8VC	platform Defense / manufacturing / logistics	Multi-stage	Traditional institution VC	Builder-plus-investor posture	Active	Conditional, stronger post-de-risking
Type One Ventures	Frontier tech / space / manufacturing	Multi-stage	Micro VC / solo GP	Future-oriented civilization-advancing thesis	Active	Opportunistic early conversation
Commerce Ventures	Fintech infrastructure	Multi-stage	Traditional institution VC	Deeply thematic financial-services investing	Active	Only if graphene is embedded in fintech infrastructure
Nyca Partners	Payments / risk / fintech	Multi-stage	Traditional institution VC	Thesis-driven fintech investing	Active / fundraising	Only if financial-system hardware wedge is real
Portage	Fintech / financial services	Multi-stage	Traditional institution VC	Financial-services specialization	Active	Low priority unless productized fintech use case
Motive Partners	Fintech venture-to-buyout	Multi-stage	Traditional institution VC	Invest-operate-innovate; disciplined underwriting	Active	Later-stage, productized fintech only
Citi Ventures	Future of finance	Multi-stage	Corporate VC	Strategic future-of-finance orientation	Active	Strategic only, very conditional
Btomorrow Ventures	Frontier CVC, not fintech-specialist	Early-stage Series A/B	Corporate VC	Hands-on support	Active	Low priority

Firm	Sector focus	Investment stage	Firm structure	Published investment philosophy	Similar - investment status	Recommendation
Sequoia Capital	Generalist VC	Multi-stage	Traditional institution VC	Founder/company-building oriented	Active	Stretch target after de-risking
Andreessen Horowitz	Generalist multi-sector VC	Multi-stage	Traditional institution VC	Major technology-platform orientation	Active	Stretch target after market wedge is legible
SineWave Ventures	Public sector / enterprise tech	Early-stage Series A/B	Traditional institution VC	Enterprise and public-sector convergence	Active	Relevant only with defense/public-sector wedge
Engine Ventures	Advanced materials / tough tech	Pre-seed/seed-focused	Traditional institution VC	Disciplined investing, deep technical insight, long-term commitment	Active	Highest-priority target
Anzu Partners	Industrial breakthrough technologies	Multi-stage	Traditional institution VC	Scientist/operator-assisted commercialization	Active	Strong secondary target
Innovation Industries	European deep tech	Early-stage Series A/B	Traditional institution VC	Complexity-embracing deep-tech investing	Active	Good Europe-focused target
Nysnø Climate Investments	State-backed climate	Early-stage Series A/B	University/government-backed fund	Emissions-reduction impact with risk/return discipline	Active	Strong only with clear climate relevance
Momenta	Industrial systems / physical	Multi-stage	Traditional institution VC	Operator-led industrial	Active	Better after product and industrial-

Firm	Sector focus	Investment stage	Firm structure	Published investment philosophy	Similar investment status	Recommendation
	AI			scaling		system fit are clearer
New Climate Ventures	Early-stage climate	Early-stage Series A/B	Traditional institution VC	Diversified climate-tech approach	Active	Secondary climate option

Decision blockers to state explicitly in fundraising materials

- **No first-market wedge:** “graphene platform” alone is too broad for most funds.
- **Scale-up risk:** investors will press on deposition throughput, transfer, yield, substrate compatibility, and capex intensity.
- **Weak techno-economics:** performance gains must translate into customer-relevant economics.
- **Unclear climate or mission math:** climate and defense funds both require specific impact or mission relevance.
- **Stage mismatch:** growth investors and PE-like funds are poor fits for pre-commercial science risk.
- **No visible champion:** many firms do not publish a graphene-specific partner; outreach without thesis matching will underperform.

Published contacts and named public leaders referenced in the source document

- **Material Impact** — info@materialimpact.com
- **AM Ventures** — info@amventures.com
- **Unilever Ventures** — uv.admin@unilever.com; published names cited: **Olivier Garel, Stephen Willson, Pawan Chaturvedi, Rachel Harris, Anna Ohlsson-Baskerville**
- **Maveron** — maveron@maveron.com; published names cited: **Dan Levitan, Jason Stoffer, Natalie Dillon, Jerry Lu**
- **Prelude Ventures** — contact@preludeventures.com
- **Eclipse** — admin@eclipse.capital
- **Nyca Partners** — info@nyca.com; published names cited: **Hans Morris, Stephanie Khoo, Jasleen Kaur**
- **Type One Ventures** — contact@typeone.vc
- **Lux Capital** — info@luxcapital.com, comms@luxcapital.com, ir@luxcapital.com
- **Nysnø Climate Investments** — post@nysnoinvest.no
- **Shield Capital** — published leader cited: **Raj Shah**

- **Lockheed Martin Ventures** — published leaders cited: **Chris Moran, Jeff Cunningham**
 - **Breakthrough Energy Ventures** — published leaders cited: **Rodi Guidero, Eric Toone, Carmichael Roberts**
 - **Engine Ventures** — published leader cited: **Katie Rae**
 - **SOSV / HAX** — published leaders cited: **Duncan Turner, Avra van der Zee**
 - **Where no public owner was named in the source document:** stated as **not public** or **not publicly identified**.
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Organization landscape briefing: climate-focused institutional capital relevant to CVD graphene

Scope and screening

This briefing stays with institutional capital rather than customers or operating companies. It focuses on climate-specialist or climate-relevant investors that could plausibly fund **development of CVD graphene** because their published thesis includes hard-tech decarbonization, advanced materials, industrial transformation, energy transition infrastructure, or deep-science climate solutions. Where a firm's public materials did **not** show a clear advanced-materials or hard-tech fit, I excluded it.

Because CVD graphene can be positioned as an enabling material for lighter and more efficient electronics, batteries, thermal management, membranes, hydrogen systems, power electronics, and industrial decarbonization, the best-fit investors are those that explicitly back **hard technology, industrial processes, deep tech, science-based climate companies, or hard-to-abate industry** solutions rather than climate software only.[1][2][3][4][5][6][7][8]

Best-fit organizations

1) Extantia

- **Why this firm would invest in CVD graphene:** Extantia says it backs founders building the “new zero-carbon industries” and describes its mission as supporting a “clean industrial revolution.” Its portfolio taxonomy includes **Industrial Processes** and **Energy**, which is a strong fit for graphene if the company's wedge is enabling lower-carbon manufacturing, battery materials, thermal management, hydrogen systems, membranes, or industrial efficiency.[1][2]
- **Current status of similar technology-development investing: Active.** Extantia's current portfolio includes several industrial-process and materials-adjacent companies such as **UP Catalyst** (carbon materials / industrial decarbonization), **SiTraction** (industrial separation), **Binding Solutions**, **Bloom Biorenewables**, and **Modern Synthesis**. [2] The site also highlights recent new investments such as Motion1 and other ongoing activity, indicating current deployment rather than a paused posture.[1][2]
- **Investment stage: Early-stage (Series A/B)** with some flexibility; exact check sizes are **not public on the pages reviewed**. Public portfolio pattern shows early company-building exposure rather than late-stage buyout.[1][2]
- **Firm structure: Traditional institution VC.**[1]
- **Investment philosophy: Thesis-driven, science/industrial transition oriented.** Extantia's published language emphasizes re-engineering industries for a “faster, cheaper and more sustainable future,” suggesting a thematic and technical lens rather than broad opportunism.[1]
- **How to engage:** Extantia publicly offers a “Pitch Us!” form on its site.[2] Warm introductions likely help, but the application path is public.

2) Clean Energy Ventures (CEV)

- **Why this firm would invest in CVD graphene:** CEV says it backs “the builders solving climate’s hardest problems,” invests where “climate necessity” meets “commercial reality,” and explicitly favors **hard technology** with “defensible science and technology innovations.” That is a direct thesis match for a graphene company whose case rests on performance advantages and manufacturability in decarbonization markets.[6]
- **Current status of similar technology-development investing: Active.** CEV reports **\$415M AUM, 30+ portfolio companies**, and a **20+ year investing track record**. [6] The site states its team includes trained engineers and operators and that it helps scale companies from pilot engineering to commercialization, which is highly relevant for materials process scale-up. [6]
- **Investment stage: Early-stage (Series A/B).** Exact check sizes were **not public on the page reviewed**. [6]
- **Firm structure: Traditional institution VC.** [6]
- **Investment philosophy: Science/technical diligence + commercial discipline.** CEV says it applies “rigorous diligence,” backs companies with “proven” science, a “clear” commercialization path, and “impact measured in gigatons.” [6]
- **How to engage:** Public site offers **Contact Us** and **Working With Us** pages. [6] Named theme owner for graphene specifically was **not found** in the reviewed materials.

3) Prime Impact Fund

- **Why this firm would invest in CVD graphene:** Prime Impact Fund says it invests in “transformative technology companies with the potential for gigaton-scale climate impact” and is “purpose-built to support high-risk, high-reward ventures at the earliest stages.” It also says it evaluates **techno-economics and climate impact with equal, fact-based rigor**. [7] That is well aligned with a pre-commercial CVD graphene platform if the startup can quantify material-enabled emissions reductions in batteries, grid hardware, lightweighting, or industrial efficiency.
- **Current status of similar technology-development investing: Active / evergreen-adjacent platform support.** The site presents the fund as an active initiative of Prime Coalition and describes an ongoing mandate to support earliest-stage climate ventures; however, current fund size and dry powder were **not public on the page reviewed**. [7]
- **Investment stage: Pre-seed/seed-focused.** The fund explicitly says it is built to support high-risk ventures “at the earliest stages.” [7]
- **Firm structure: Traditional institution VC / impact fund** (sponsored by nonprofit Prime Coalition, but the fund itself is an institutional investment vehicle). [7]
- **Investment philosophy: Impact- and thesis-driven with technical diligence.** Its public language emphasizes gigaton-scale impact, catalytic capital, long-term lens, and fact-based evaluation of techno-economics. [7]

- **How to engage:** Public site includes **Our Story** and general site navigation but no named application form was visible in the reviewed text; engagement path is **not clearly published** on the page reviewed.[7]

4) Lowercarbon Capital

- **Why this firm would invest in CVD graphene:** Lowercarbon says it funds technologies that reduce emissions “from energy and transportation, to **industrial materials** and agriculture.”[4] That direct reference to industrial materials makes it relevant for graphene, especially where the company claims lower-carbon alternatives or major efficiency gains in climate-critical systems.
- **Current status of similar technology-development investing: Active.** Lowercarbon’s public site highlights hard-science companies across energy, chemicals, and industrial decarbonization, and says it supports portfolio companies “from the inception of an idea to the national launch of a product.”[4] Similar-investment line is clearly ongoing, though fund size/check sizes were **not public on the reviewed page**. [4]
- **Investment stage: Multi-stage.** The site states support from “the inception of an idea” through scale, and portfolio examples range from very early hard-tech to more mature companies.[4]
- **Firm structure: Traditional institution VC** (climate-specialist venture platform).[4]
- **Investment philosophy: Thesis-driven, founder-supportive, hard-science oriented.** Lowercarbon explicitly frames climate as a market opportunity and emphasizes hard science, founder support, and broad climate problem coverage.[4]
- **How to engage:** The site includes **Meet the Team** and general contact/navigation pages, but a dedicated application form was **not found** on the reviewed page.[4]

5) DCVC

- **Why this firm would invest in CVD graphene:** DCVC is not climate-only, but it explicitly brands itself as **deep tech venture capital** and says it backs entrepreneurs addressing the “hardest, highest-stakes problems in the world.” It highlights **Energy & Climate** and **Industrial Transformation & Advanced Manufacturing** as investment content areas and states, “We have more published scientists than MBAs.”[8] That profile is highly compatible with a technically difficult graphene process company.
- **Current status of similar technology-development investing: Active.** DCVC highlights current activity, publishes a 2026 deep-tech opportunities report, and showcases ongoing investments in energy and advanced-manufacturing businesses such as Fervo and Fourth Power.[8]
- **Investment stage: Multi-stage.** Public page does not list check sizes on the reviewed material, but portfolio pattern spans early through growth venture.[8]
- **Firm structure: Traditional institution VC.**[8]
- **Investment philosophy: Science/technical diligence, deep-tech thesis-driven.** The “more published scientists than MBAs” positioning is unusually explicit and suggests a strong diligence advantage for materials science.[8]

- **How to engage:** Public site offers **Companies**, **Team**, and **Search** functions; no open application form was evident on the reviewed page.[8]

6) IP Group

- **Why this firm would invest in CVD graphene:** IP Group's model is to back companies emerging from research and breakthrough science. Its portfolio is organized around **DeepTech** and **CleanTech**, and its public materials show ownership in numerous early science-based ventures.[9] This is relevant to CVD graphene if the company is university-spinout-like, IP-heavy, or still in technology maturation.
- **Current status of similar technology-development investing: Active.** IP Group's portfolio page shows **56** companies, with explicit DeepTech and CleanTech categories and disclosed holdings.[9] While the page reviewed does not state fresh-fund status, the active portfolio and portfolio management disclosures indicate ongoing investing activity.[9]
- **Investment stage: Early-stage (Series A/B)**, often very early around spinout formation; exact current check sizes were **not public on the page reviewed**.[9]
- **Firm structure: University/government-backed funds** is not quite exact for the entity itself; best classification here is **traditional institution VC / listed commercialization investor**, but with a strong university-spinout orientation.[9]
- **Investment philosophy: Science commercialization / IP-led investing.** Public pattern is strongly thesis-driven around research commercialization; a more detailed formal philosophy statement for materials was **not published on the reviewed page**.[9]
- **How to engage:** Public site offers portfolio and investor materials; no general startup application form was visible on the reviewed page.[9]

7) Energy Impact Partners (EIP)

- **Why this firm would invest in CVD graphene:** EIP says it invests in "innovative companies powering a better energy future" and brings together entrepreneurs with "some of the world's most influential corporates." [5] CVD graphene is relevant if the startup's first markets are grid hardware, batteries, power electronics, thermal systems, or utility/industrial infrastructure where strategic partners can accelerate pilots.
- **Current status of similar technology-development investing: Active.** EIP's website reports **\$0b+ AUM** in the rendered page text (the dynamic number did not resolve in the extracted text), **0+ investments**, **0+ strategic partners**, and multiple 2026 headlines indicating fresh deployment and exits.[5] The qualitative evidence clearly shows active investing, but the precise counts were not recoverable from the reviewed page extract.[5]
- **Investment stage: Multi-stage.** EIP portfolio pattern spans venture through larger scale-up financings; exact check sizes were **not public on the reviewed page**.[5]
- **Firm structure: Traditional institution VC** with a strategic LP/corporate-partner network.[5]

- **Investment philosophy: Strategic-network driven, commercialization-oriented.** Publicly, the differentiator is pairing startups with major corporates to transform the economy.[5]
- **How to engage:** Public site has **contact us** and **team/approach/portfolio** navigation; the corporate-network model implies warm introductions and strategic fit matter significantly.[5]

8) Just Climate

- **Why this firm would invest in CVD graphene:** Just Climate says it invests in climate solutions that can “radically reduce or remove emissions” and focuses on business models that can transform **hard-to-abate industries**.[3] A graphene business aimed at industrial decarbonization, lower-energy separations, next-generation batteries, or low-carbon manufacturing could fit if it has line of sight to platform-scale deployment.
- **Current status of similar technology-development investing: Active.** Just Climate’s site states it is investing and highlights ongoing strategy development across **energy, industry, circularity and food systems in Latin America**, plus a team spanning growth equity, project finance, engineering, nature, and impact management.[3]
- **Investment stage: Growth/late stage.** The firm presents as a large-scale climate investment platform designed for transformational solutions and hard-to-abate sectors, not a seed fund.[3]
- **Firm structure: Traditional institution VC / growth-equity climate platform.**[3]
- **Investment philosophy: Impact-driven, systems-level, hard-to-abate thesis-driven.**[3]
- **How to engage:** Public site includes team, newsletter, and standard contact/navigation paths; no startup application form was visible on the reviewed materials.[3]

9) Breakthrough Energy Ventures (BEV)

- **Why this firm would invest in CVD graphene:** Although the accessible page content was limited during review, BEV is the flagship venture arm within Breakthrough Energy and publicly brands around breakthrough clean-energy and decarbonization technologies.[10] BEV is a plausible fit for graphene if the material is core to a step-change climate application in batteries, hydrogen, industrial heat, semiconductors, membranes, or carbon-related systems.
- **Current status of similar technology-development investing: Active.** Breakthrough Energy’s site is live and promoting current newsletters, portfolio, people, and programs, but the specific BEV portfolio page was not fully accessible in browser during review, so a precise same-line investment status for graphene-adjacent materials was **not found on-page**.[10]
- **Investment stage: Multi-stage.** Public reputation and platform structure indicate venture investing across company maturation stages, but specific check sizes were **not public in the reviewed material**.[10]

- **Firm structure: Traditional institution VC** (climate-specialist venture fund platform).[10]
- **Investment philosophy: Thesis-driven around breakthrough decarbonization.** A more detailed philosophy statement for materials was **not recovered from the reviewed page**. [10]
- **How to engage:** Public site lists **People, Portfolio**, and **Programs** navigation and newsletter signup; a direct application path was **not found in the reviewed material**. [10]

10) Energize Capital

- **Why this firm would invest in CVD graphene:** Energize focuses on “digitization and decarbonization of complex industries” and says it partners with entrepreneurs serving climate, energy, and industrial sectors.[11] This is only a **conditional fit** for CVD graphene: it works best if the graphene company’s go-to-market is tied to industrial or energy infrastructure and includes software/data or asset-performance layers. Pure materials-platform science is less obviously aligned than with CEV or Extantia.
- **Current status of similar technology-development investing: Active.** Energize reports **\$1.0B AUM** on its homepage and positions itself as a multi-stage climate, energy, and industrials investor.[11]
- **Investment stage: Multi-stage.** The homepage explicitly says “multi-stage investor”; exact check sizes were **not visible on the reviewed page**. [11]
- **Firm structure: Traditional institution VC.** [11]
- **Investment philosophy: Sector-specialist, commercialization-oriented, complex-industry decarbonization.** The public language points more toward applied climate/industrial systems than raw materials science.[11]
- **How to engage:** Publicly available routes include **Team** and **About** pages; no open application form was visible on the reviewed page.[11]

Lower-priority but still possible

11) University/government-backed commercialization vehicles like Prime Coalition ecosystem / spinout-linked investors

- **Why they might invest:** If the CVD graphene company is emerging from university IP, these vehicles are often better positioned to underwrite long timelines and technical uncertainty than mainstream climate software funds.[7][9]
- **Status: Active** where fund platforms are live, but exact current dry powder frequently **not public**. [7][9]
- **Stage:** Usually **pre-seed/seed-focused** to **early-stage**. [7][9]
- **Structure: University/government-backed funds** or adjacent commercialization structures, depending on the vehicle. [7][9]
- **Philosophy:** Science commercialization, catalytic capital, and impact orientation. [7][9]

- **How to engage:** Usually through spinout channels, venture partners, tech-transfer offices, or inbound submission where available.[7][9]

Organizations reviewed but not prioritized

- **EIP (Elevate Innovation Partners)** was excluded because the reviewed site is a financial-services-focused early-stage fund, not a climate or hard-materials investor.[12]
- Several domains commonly associated with climate investing were inaccessible, parked, or resolved to unrelated sites during review, so I did **not** rely on them.

Practical implications for a CVD graphene company

Most likely early believers

1. **Prime Impact Fund** — if the company is still proving lab-to-pilot climate relevance and needs catalytic early capital.[7]
2. **Extantia** — if the company can frame itself as part of the clean industrial revolution and show decarbonization relevance in industrial processes or energy.[1][2]
3. **Clean Energy Ventures** — if the company has a rigorous techno-economic case and climate use-case in a hard sector.[6]
4. **DCVC** — if the company is unapologetically deep tech and the differentiation is rooted in process IP and materials performance.[8]
5. **IP Group** — especially strong if university-originated or IP-heavy.[9]

Most likely scale-up / strategic syndicate partners later

1. **Energy Impact Partners** — when pilot customers and strategic grid/industrial channels matter.[5]
2. **Lowercarbon Capital** — if the emissions case is broad and the company can fit industrial materials or energy systems at venture scale.[4]
3. **Just Climate** — only when the business has become a platform for hard-to-abate industrial transformation rather than a lab-scale materials story.[3]
4. **Breakthrough Energy Ventures** — potentially across stages, but stronger once the company can link graphene to a truly breakthrough decarbonization wedge.[10]

Recommended engagement strategy

- **Lead with application-specific climate math, not graphene generality.** The best climate investors in this set publish around gigaton impact, hard-tech diligence, industrial transformation, and commercialization clarity.[3][6][7][8]
- **Translate CVD graphene into an investable wedge:** e.g., lower-cost next-gen battery components, lower-energy separations, thermal management for grid hardware, hydrogen system efficiency, or lightweight conductive materials that displace more carbon-intensive incumbents.[1][4][6]
- **Match the story to stage:**
 - pre-seed/seed: Prime Impact Fund, IP commercialization-style vehicles, possibly Extantia if the industrial pathway is crisp.[2][7][9]

- Series A/B: Clean Energy Ventures, Extantia, DCVC, Lowercarbon.[2][4][6][8]
- growth/industrialization: EIP, Just Climate, possibly BEV.[3][5][10]
- **Prepare for technical diligence:** especially with CEV, DCVC, IP Group, and likely Extantia.[1][6][8][9]
- **Use public inbound where available:** Extantia's **Pitch Us!** is the clearest open route in the reviewed set.[2]

Sources

1. Extantia, homepage and mission language, <https://www.extantia.com/>
2. Extantia, portfolio/pioneers page, <https://www.extantia.com/pioneers>
3. Just Climate, homepage and focus language, <https://www.justclimate.com/>
4. Lowercarbon Capital, homepage thesis text, <https://lowercarbon.com/>
5. Energy Impact Partners, homepage text and recent headlines, <https://www.energyimpactpartners.com/>
6. Clean Energy Ventures, homepage and investment approach, <https://cleanenergyventures.com/>
7. Prime Impact Fund, homepage / thesis text, <https://www.primeimpactfund.com/>
8. DCVC, homepage and sector positioning, <https://www.dvc.com/>
9. IP Group, portfolio page, <https://www.ipgroupplc.com/our-portfolio>
10. Breakthrough Energy, BEV section / platform navigation, <https://www.breakthroughenergy.org/our-work/breakthrough-energy-ventures/>
11. Energize Capital, homepage, <https://energizecap.com/>
12. Elevate Innovation Partners, homepage, <https://www.eipfund.com/>

Consumer-focused institutional capital landscape for CVD graphene

Scope and framing

This briefing screens for **institutional investors that plausibly fit a consumer commercialization path for CVD graphene** — not graphene adopters, and not a broad graphene industry map. The question is which capital providers could underwrite CVD graphene as a **consumer hardware technology, performance-material ingredient, protective/enabling layer, or brand-enabling platform**.

Because pure-play consumer investors often avoid frontier materials risk, the most relevant set is a mix of: 1. **consumer-specialist VC/PE/CVCs** that explicitly back enabling technologies for consumer brands or hardware, and 2. **deep-tech/materials investors** whose portfolio pattern includes consumer end markets.

Where public evidence of direct graphene investing was not found, I say so explicitly.

1) Unilever Ventures

- **Why this firm would invest in CVD graphene:** Unilever Ventures says it backs “the brands of tomorrow and the technologies that enable them to succeed in large markets,” and specifically lists “Commerce & Enabling Technologies” plus “B2B/Enterprise Technologies.” That creates a thesis fit for CVD graphene if positioned as an enabling material for consumer goods performance, packaging, or electronics-adjacent consumer products rather than as a raw materials project alone.[1]
- **Similar-investment status:** The firm publicly says it supports founders building strong brands or “technology solutions” and is stage agnostic from Seed through Series C/D.[1] Its site evidences active consumer-tech and brand investing, but I did **not find a published direct graphene or advanced-materials consumer ingredient investment** on the firm site during this review. Status for analogous enabling-tech investing: **active**.[1]
- **Investment stage: Multi-stage.** Unilever Ventures says it is “stage agnostic covering Seed through to Series C/D” and invests from **\$500,000 to \$15 million**.[1]
- **Firm structure: Corporate VC** (venture and growth capital arm of Unilever).[2]
- **Investment philosophy:** Consumer- and strategic-enablement oriented. The firm says it brings “consumer and retail experience” and “expertise and networks in the consumer goods industry,” suggesting a thesis around helping brands and enabling technologies scale through category knowledge and corporate adjacency.[1]
- **How to engage:** Public contact path is the firm’s contact page / general email **uv.admin@unilever.com**; team page names **Olivier Garel, Stephen Willson, Pawan Chaturvedi, Rachel Harris, and Anna Ohlsson-Baskerville** among published investment leaders.[3][4]
- **Bottom line for CVD graphene:** Most credible if the company presents graphene as a **performance-enabling ingredient or coating for beauty/wellness packaging, consumer goods durability, or consumer-device enhancement** rather than as a capex-heavy materials platform.

2) L Catterton

- **Why this firm would invest in CVD graphene:** L Catterton positions itself as “the world’s leading consumer growth investor” and says it invests across “all segments of the consumer industry,” including “Disruptive Consumer Technology.” Its operating/value-creation writeup also highlights product development, manufacturing, supply chains, and new product initiatives — relevant if graphene becomes a differentiated consumer materials platform inside scaled brands or consumer hardware businesses.[5][6]
- **Similar-investment status:** L Catterton states it has made **more than 300 investments** and manages approximately **\$40 billion AUM**.[5][6] Public site evidence supports active investing in consumer technology and brands, but I did **not find a publicly disclosed direct CVD-graphene or frontier-materials investment thesis**. Similar line of investing in disruptive consumer technology/consumer product platforms: **active**.[5]

- **Investment stage:** Best classified here as **growth/late stage** overall, though the firm also references “emerging high-growth enterprises.” Public site materials emphasize middle-market growth and buyout scale more than seed investing.[6]
- **Firm structure:** **Traditional institution PE / growth equity platform.**[5][6]
- **Investment philosophy:** Thesis-driven inside consumer categories. The site repeatedly describes investing behind long-duration consumer behavior shifts and using operational resources to improve purchasing, supply chains, manufacturing efficiencies, pricing, and product development.[5][6]
- **How to engage:** Public “Contact Us” channel is published on the site; no public application form for startups was identified in this review.[5] Named partner/theme owner for graphene specifically: **not published.**
- **Bottom line for CVD graphene:** Better fit for a company that has already translated graphene into a **scaled consumer brand, platform, or later-stage hardware/application company**, not for raw early materials R&D.

3) Maveron

- **Why this firm would invest in CVD graphene:** Maveron is explicitly “consumer-centric venture capital” and says it invests in consumer businesses where “consumer behavior is changing,” including cases where “technology and consumer centricity are disrupting archaic industries.” That could support a CVD graphene company **only if it is wrapped into a consumer brand or product experience**, especially consumer hardware or category-defining consumer products.[7]
- **Similar-investment status:** Maveron says its focus remains early partnerships with entrepreneurs building consumer brands and notes a **\$225M Fund 8** raised in 2021.[7] The firm has backed consumer hardware/physical product brands such as Allbirds as a product-led business, but I did **not find direct evidence on its site of investment in graphene/material-science companies**. Similar investing in consumer-product innovation: **active.**[7]
- **Investment stage:** **Early-stage (Series A/B).** Maveron’s site emphasizes early-stage investing and cites examples of solely funding seed and Series A in Zulily and backing Allbirds at Series A.[7]
- **Firm structure:** **Traditional institution VC.**[7]
- **Investment philosophy:** Strongly **thesis-driven around consumer behavior**, with a stated specialization in consumer and emphasis on how people “live, work, learn, play, eat, and stay well.” Maveron also highlights its B Corp orientation.[7]
- **How to engage:** Public contact email is **maveron@maveron.com.**[8] Published investing partners include **Dan Levitan, Jason Stoffer, Natalie Dillon, and Jerry Lu** on the team page.[9]
- **Bottom line for CVD graphene:** Viable only for a **consumer-facing graphene application company**; weak fit for foundational materials-process development absent a clear consumer brand/hardware wedge.

4) Material Impact

- **Why this firm would invest in CVD graphene:** Material Impact is one of the clearest fits because it says it is “building deep tech companies powered by material science” and backs “inception-stage companies” pioneering products for urgent human needs.[10][11] A CVD graphene company with consumer-hardware, coatings, barrier-film, thermal-management, or electronics-protection applications fits directly into that mandate.
- **Similar-investment status:** Public company pages show consumer-adjacent materials/platform investments including **actnano** (nanocoatings for automotive and **consumer electronics**), **6K** (advanced materials enabling commercial and **consumer products**), **DetraPel** (protective coatings for packaging and textiles), and **NanoGraf** (battery materials for **consumer electronics**).[12] Material Impact also says it has **\$700M+ AUM across Funds I, II, and III**. [11] Similar investing status: **active**. [11][12]
- **Investment stage:** **Pre-seed/seed-focused** to very early stage. The firm says it backs and builds **inception-stage companies**. [11]
- **Firm structure:** **Traditional institution VC** focused on deep tech/material science. [10][11]
- **Investment philosophy:** Clearly **science/materials-thesis-driven** and impact-oriented. It states that “the future of earth and humankind depends on material science and deep tech innovations” and highlights mission/impact language plus B Corp scoring. [11]
- **How to engage:** Public contact email is **info@materialimpact.com**. [10][11] The public site names a team page, but no graphene-theme owner was confirmed in this pass; partner ownership of graphene specifically is **not published**. [10]
- **Bottom line for CVD graphene:** One of the strongest candidates for **core technical diligence and first institutional money** if the company can frame consumer end markets and manufacturability.

5) Prelude Ventures

- **Why this firm would invest in CVD graphene:** Prelude says it invests in climate and supports early-stage startups with potential to mitigate climate change. [13] On its vision page, it explicitly includes “Infrastructure and materials that adapt our cities, homes, and offices for the low-carbon future” under Built Environment. [14] A CVD graphene company could fit if the pitch centers on lower-energy materials, lightweighting, energy efficiency, durability, or decarbonizing consumer-device components.
- **Similar-investment status:** The public site clearly shows active climate investing and a materials-aware thesis, but I did **not find a published direct graphene investment** or a consumer-branded materials line on the site during this review. Similar investing in climate/materials platforms: **active**. [13][14]
- **Investment stage:** **Pre-seed/seed-focused** or very early stage based on the homepage statement that Prelude supports **early-stage startups**. [13]
- **Firm structure:** **Traditional institution VC**. [13]

- **Investment philosophy:** Strongly **thesis-driven and climate-first**. Prelude says it backs visionaries accelerating climate innovation and seeks category-defining businesses with commitment to climate.[14]
- **How to engage:** Public contact email is **contact@preludeventures.com** and phone **(415) 729-1270**. [13][14] No named graphene-theme owner was identified from the reviewed pages; **not published**.
- **Bottom line for CVD graphene:** Strong if the story is **climate/materials with consumer spillover**; less ideal for a purely consumer brand positioning.

6) SOSV / HAX

- **Why this firm would invest in CVD graphene:** SOSV describes itself as focused on deep tech for human and planetary health, and HAX is presented as supporting founders in real-world product development, manufacturing, and fundraising.[15] For a CVD graphene venture whose first product is consumer hardware, sensors, wearables, thermal films, or electronics components, HAX is relevant because it specializes in hard-tech commercialization rather than software-only venture.
- **Similar-investment status:** SOSV states founders can apply through HAX and highlights HAX infrastructure for builders.[15] The site also references HAX Plasma Forge and broad deep-tech sectors including energy and critical minerals, supporting an active hardware/deep-tech line.[15] I did **not verify a direct CVD graphene portfolio company from the reviewed pages**. Similar hard-tech commercialization investing: **active / evergreen platform active**. [15]
- **Investment stage:** **Pre-seed/seed-focused** through accelerator-style entry; exact public check size was not confirmed from the reviewed pages, so **not public in sources reviewed**.
- **Firm structure:** **Traditional institution VC** with accelerator programs.[15]
- **Investment philosophy:** Deep-tech commercialization, builder-oriented, with explicit support for engineering, prototyping, manufacturing, and fundraising.[15]
- **How to engage:** Publicly, companies can **apply** through SOSV/HAX via the website's application links.[15]
- **Bottom line for CVD graphene:** Good candidate for a **product-first, hardware-led graphene company**, especially where prototyping and manufacturing help matter more than consumer-brand marketing.

7) Khosla Ventures

- **Why this firm would invest in CVD graphene:** Khosla Ventures' portfolio framing includes both frontier technology and a consumer-and-retail category with explicit "investment thesis" language on portfolio pages.[16] Khosla has a long history with hard tech and is known for backing technical risk when it can create large category outcomes; that makes it a plausible fit if graphene is central to a breakthrough consumer hardware or energy-storage product.
- **Similar-investment status:** Public pages reviewed show active consumer-and-retail investing and the firm's broad thesis-driven style, but I did **not find a direct**

published graphene investment from the sources reviewed here. Similar investing line: **active**.^[16]

- **Investment stage: Multi-stage** in practice, though the reviewed page did not publish a stage grid or check-size policy. Public check size/series specifics for this theme were **not found** in the reviewed sources.
- **Firm structure: Traditional institution VC**.^[16]
- **Investment philosophy:** Evidently **thesis-driven**, since portfolio entries themselves are organized around explicit investment theses.^[16]
- **How to engage:** Public general inbound/process for graphene-specific founders was **not found** on the reviewed pages. Named graphene owner: **not published**.
- **Bottom line for CVD graphene:** Strongest where the company combines deep tech with a massive consumer, mobility, or energy-enabled outcome; weaker as a pure materials manufacturing story without a category-defining product.

8) Eclipse

- **Why this firm would invest in CVD graphene:** Eclipse says it invests in entrepreneurs building companies in the “physical economy” and highlights experience in factories, hardware, supply chains, and policy/regulatory complexity.^[17] That operating posture is useful for graphene companies trying to industrialize CVD processes into real products. While Eclipse is not consumer-specialist, it could be relevant for a CVD graphene company with a hard-tech manufacturing and hardware go-to-market that later reaches consumer end markets.
 - **Similar-investment status:** The reviewed pages show an active physical-economy thesis and a public invitation to “Submit a Business Plan” via admin@eclipse.capital.^{[17][18]} I did **not find direct graphene or consumer-materials thesis language** on the reviewed pages. Similar hard-tech investing: **active**.^{[17][18]}
 - **Investment stage:** Best described as **multi-stage**, but public check sizes were **not found** on reviewed pages. Portfolio cards on the site include “Early Stage, Early Growth” descriptors for companies such as Oxide.^[18]
 - **Firm structure: Traditional institution VC**.^[17]
 - **Investment philosophy:** Operationally intensive, **technical/industrial diligence** posture. Eclipse emphasizes factory-building, hardware, supply chains, and showing up when operational issues break.^[17]
 - **How to engage:** Public engagement channel includes admin@eclipse.capital / “Submit a Business Plan” on the site.^[18]
 - **Bottom line for CVD graphene:** Better for the **manufacturing stack and industrialization** than for pure consumer-brand commercialization.
-

Prioritization for a consumer-path CVD graphene company

Highest-probability fits

1. **Material Impact** — strongest direct fit for material-science company building consumer-relevant enabling products.[10][11][12]
2. **Unilever Ventures** — strongest strategic consumer CVC if graphene is packaged as enabling tech for consumer products/packaging/device performance.[1][2]
3. **SOSV / HAX** — strong for hard-tech productization and hardware-led commercialization.[15]

Good but conditional fits

4. **Prelude Ventures** — good if the company's story is climate/materials first, consumer second.[13][14]
5. **Khosla Ventures** — good if the company has a category-defining hard-tech wedge and massive market ambition.[16]
6. **Eclipse** — good for scaling manufacturing and physical product execution.[17][18]

Later-stage or narrower-fit consumer investors

7. **Maveron** — only if there is already a clear consumer brand/product wrapper.[7][8][9]
8. **L Catterton** — strongest only once the business is de-risked into growth-stage consumer application or platform scale.[5][6]

What this means in practice for fundraising

For an early CVD graphene company targeting consumer markets, the best path is usually **not** to pitch “graphene” alone. The firms above show that consumer investors engage more readily when the company is framed as one of the following: - a **consumer-hardware performance unlock**, - a **protective coating / barrier / thermal layer** with brand benefits, - a **battery/materials advantage** for consumer electronics, - or an **ingredient platform** that enables superior product performance in large consumer categories.

That framing materially improves fit with Unilever Ventures, Maveron, and eventually L Catterton, while preserving deep-tech credibility with Material Impact, SOSV/HAX, Prelude, Khosla, and Eclipse.

Sources

- [1] Unilever Ventures, About page: <https://www.unileverventures.com/about/>
- [2] Unilever Ventures, homepage: <https://www.unileverventures.com/>
- [3] Unilever Ventures, Team page: <https://www.unileverventures.com/team/>
- [4] Unilever Ventures, Contact / footer email published across site: <https://www.unileverventures.com/>
- [5] L Catterton, homepage / industry focus and contact references:

<https://www.lcatterton.com/>

[6] L Catterton, About Us page: <https://www.lcatterton.com/Aboutus.html>

[7] Maveron, homepage: <https://www.maveron.com/>

[8] Maveron, contact email in footer: <https://www.maveron.com/>

[9] Maveron, Team page: <https://www.maveron.com/team>

[10] Material Impact, homepage: <https://www.materialimpact.com/>

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[15] SOSV homepage and application links: <https://sosv.com/>

[16] Khosla Ventures, Portfolio page: <https://www.khoslaventures.com/portfolio>

[17] Eclipse, About page: <https://eclipse.capital/about>

[18] Eclipse site navigation / companies and published submit-business-plan email: <https://eclipse.capital/> and <https://eclipse.capital/about>

Organization landscape briefing: institutional capital relevant to CVD graphene

Scope and framing

This briefing screens **institutional capital organizations** that plausibly fit a **CVD graphene developer** under an explicit **deep-tech / hard-tech / advanced materials / manufacturing** thesis. It excludes operating companies and end-users. The emphasis is on firms that publish an investing focus in physical science, hardware, materials, semiconductors, manufacturing, climate hardware, or related science-heavy platforms, and that show public evidence of investing in analogous companies rather than software-only businesses.

Because CVD graphene can sit across electronics, thermal management, membranes, composites, coatings, energy materials, and industrial manufacturing, the best-fit investors are usually those with one or more of these patterns: **advanced materials, industrial transformation / advanced manufacturing, hard-tech incubation, semiconductor-enabling materials, or climate/industrial decarbonization materials**.

1) DCVC

- **Why this firm would invest in CVD graphene:** DCVC explicitly brands itself as “**deep tech venture capital**” and says its annual opportunities report covers deep tech themes including **manufacturing**; its content taxonomy also includes “**Industrial Transformation & Advanced Manufacturing**.” That makes it a plausible fit for a graphene company if the business is built around hard science,

defensible IP, and a large industrial platform outcome rather than a narrow component feature.[1]

- **Current status of similar investing: Active.** DCVC continues to present itself as a deep-tech investor and publishes current deep-tech opportunity work; the site also highlights ongoing company news and deep-tech category activity.[1] Public material reviewed here did **not** show a dedicated graphene or thin-film materials practice page, so the similar-investment line is best described as active at the **deep-tech manufacturing/platform** level rather than proven specifically in graphene from the sources reviewed.[1]
- **Investment stage: Multi-stage.** Public sources reviewed on-site confirm broad deep-tech investing, but this pass did **not** locate a public check-size page or precise stage grid on the firm site. Check sizes: **not public in sources reviewed**. [1]
- **Firm structure: Traditional institution VC.** [1]
- **Investment philosophy:** Thesis-driven deep tech; the firm publicly centers category conviction in major science-heavy sectors and publishes opportunity reports rather than only founder-first generalist messaging.[1]
- **How to engage:** The most relevant route is a **warm intro to the industrial / advanced manufacturing theme owners**. Specific partner ownership for graphene from reviewed sources: **not published**. No public application form was found on the pages reviewed.[1]

2) Vsquared Ventures

- **Why this firm would invest in CVD graphene:** Vsquared's homepage says it is "ENGINEERING THE IMPOSSIBLE" and showcases portfolio exposure to **Black Semiconductor, Isar Aerospace, IQM, and Neura Robotics**, a pattern strongly associated with hardware-heavy European deep tech. That makes it relevant to graphene when the company is positioned as an enabling materials or semiconductor platform rather than a single custom project.[2]
- **Current status of similar investing: Active.** The firm is operating with at least two fund vehicles referenced on-site — **Vsquared Ventures I** and **Vsquared Ventures II** — and publicly notes support from **InnovFin Equity** with EU backing, indicating institutional fund activity rather than a dormant platform.[2]
- **Investment stage: Early-stage (Series A/B) to multi-stage, leaning early.** The pages reviewed did not publish check sizes. Public stage language/check size: **not found** in reviewed sources.[2]
- **Firm structure: Traditional institution VC** (with EU-backed institutional support noted on-site, but not a government fund itself).[2]
- **Investment philosophy:** Engineering- and science-led deep-tech specialization is strongly implied by the branding and portfolio composition; a fully articulated public philosophy statement beyond that was **not published** on the pages reviewed.[2]
- **How to engage:** Likely via **warm intro to the team**; the site has a **Contact Us** section and a public team page link, but no obvious open application form for startups was found in the reviewed snapshot.[2]

3) AM Ventures

- **Why this firm would invest in CVD graphene:** AM Ventures is unusually relevant when a CVD graphene company's go-to-market depends on **advanced manufacturing or materials processing**. The firm says, "**We invest in industrial 3D printing innovations that transform the world,**" and specifically lists **Materials** as a focus, including "**Materials production, refining, or R&D for metals, polymers, ceramics and composites.**"[3]
- **Current status of similar investing: Active.** Its portfolio page shows a current, curated portfolio across additive manufacturing systems and materials companies, including **Elementum 3D** (advanced manufacturing powders), **Fortius Metals** (next-generation wire alloys), **Headmade Materials**, **Lean Plastics Technologies**, **Lithoz** (ceramics), **Evove** (precision-engineered membranes), and **Scrona**. [3] That is one of the clearest publicly visible signals that the firm still backs science-heavy materials/manufacturing ventures.
- **Investment stage: Pre-seed/seed-focused to early-stage.** The site language and application flow are startup-oriented, but public check sizes were **not found** in reviewed sources.[3]
- **Firm structure: Traditional institution VC** with strong strategic/domain specialization in additive manufacturing.[3]
- **Investment philosophy:** Highly thesis-driven and domain-specialist; the portfolio and founder quotes repeatedly emphasize technical understanding, industry network, and additive-manufacturing operating expertise rather than broad opportunism.[3]
- **How to engage:** AM Ventures has an explicit founder funnel: "**Launching a venture? ... Apply now**" via a public Typeform. That makes it one of the easiest funds in this set for direct inbound outreach.[3]

4) SOSV / HAX

- **Why this firm would invest in CVD graphene:** SOSV's HAX platform is directly relevant to a graphene startup that still needs hardware/product development, prototyping, manufacturing iteration, and fundraising support. SOSV says HAX is "**Helping hard tech founders tap into the world's ecosystems for real-world product development, manufacturing and fundraising**" and provides a direct application link.[4]
- **Current status of similar investing: Active / evergreen-like accelerator-investor activity.** SOSV states it has **800+ portfolio companies**, **\$7.5B raised by portfolio 2021–2025**, and a broad deep-tech founder pipeline; its HAX platform remains visible and open for applications.[4]
- **Investment stage: Pre-seed/seed-focused.** HAX is an accelerator-oriented entry point for very early hard-tech companies. Public check size for HAX/SOSV was **not located** in reviewed sources.[4]
- **Firm structure: Traditional institution VC** with accelerator programs.[4]

- **Investment philosophy:** Builder- and infrastructure-oriented; SOSV emphasizes giving founders access to prototyping/manufacturing ecosystems, technical infrastructure, and co-investor networks.[4]
- **How to engage:** **Direct application** via the public **Apply** flow and specifically **HAX** application link. Warm intros still help, but this is a genuine public funnel.[4]

5) Clean Energy Ventures

- **Why this firm would invest in CVD graphene:** CVD graphene is relevant where the product attacks industrial decarbonization, energy efficiency, filtration, electrification, or advanced climate materials. Clean Energy Ventures says it backs “**Hard technology. Real economics.**” and invests in founders pairing **defensible science and technology innovations** with commercial fundamentals.[5]
- **Current status of similar investing: Active.** Its portfolio visibly includes materials-heavy companies such as **Boston Materials** (lightweight conductive composites), **Voilexion** (atomically thin cathode coatings), **Aqua Membranes** (3D-printed RO spacers), **MacroCycle** (polyester recycling), and **Queens Carbon** (low-carbon cement process).[5] This is strong evidence that advanced materials remains an active lane for the firm.
- **Investment stage: Early-stage (Series A/B).** The reviewed pages did not publish check sizes. Check sizes: **not public in sources reviewed**. [5]
- **Firm structure: Traditional institution VC.**[5]
- **Investment philosophy:** Publicly stated as rigorous, technical, and commercialization-aware: “**Our team of trained engineers and operators applies rigorous diligence...**” and looks for science proven enough that the **path to commercialization is clear**. [5]
- **How to engage:** Best route is a **warm intro to the investment team**; the site also has a public **Contact Us** path. Named theme-owning partner for graphene from reviewed sources: **not published**. [5]

6) Breakthrough Energy Ventures

- **Why this firm would invest in CVD graphene:** BEV is relevant if the graphene company is a climate-scale materials or industrial platform — e.g., enabling lower-energy separations, better battery materials, better grid/thermal performance, or lower-emissions industrial processes. Its portfolio includes multiple science-heavy materials and industrial technology companies.[6]
- **Current status of similar investing: Active.** On its public portfolio pages, BEV shows companies such as **Molten Industries** (graphite anode material and hydrogen via methane pyrolysis), **Stratus Materials** (cathode active materials), **KoBold Metals**, **Bloom Biorenewables**, and **Redwood Materials**. [6] That is clear evidence the firm remains active in materials-adjacent climate deep tech.
- **Investment stage: Multi-stage.** Public pages reviewed did not provide a clean check-size chart in this pass. Check sizes: **not public in sources reviewed**. [6]
- **Firm structure: Traditional institution VC** (climate-focused venture platform). [6]

- **Investment philosophy:** Mission-driven climate investing around technologies that materially cut emissions; a precise philosophy statement for diligence style was **not found on reviewed pages**, though portfolio pattern indicates science-heavy thesis investing.[6]
- **How to engage:** Typically via **warm intro** or through the broader Breakthrough Energy ecosystem. No public startup application form was identified in the reviewed materials.[6]

7) Piva Capital

- **Why this firm would invest in CVD graphene:** Piva explicitly names “**Future of Materials & Production**” as a technology vertical and lists “**Specialty chemicals and new materials**,” “**Resource efficiency**,” and “**Waste to value and circular economy**.” That is an unusually direct thesis match for a graphene materials platform.[7]
- **Current status of similar investing: Active.** The portfolio is organized around **Materials & Production** and other industrial categories, and the homepage says Piva invests at “**the inflection of scientific breakthrough and mass market impact**.”[7]
- **Investment stage: Early-stage (Series A/B).** Public check sizes were **not found** in reviewed sources.[7]
- **Firm structure: Traditional institution VC.**[7]
- **Investment philosophy:** Thesis-driven, industry-transformation oriented, and domain-expert led; the firm says it is a team of **domain experts** backing companies redefining **trillion-dollar markets**. [7]
- **How to engage: Warm intro** plus public **Contact** channel. Team page is public; a graphene founder would want the partner most aligned to **Materials & Production**, but the specific partner owner for that theme was **not identified in reviewed pages**. [7]

8) The Engine

- **Why this firm would invest in CVD graphene:** The Engine is highly relevant for a CVD graphene startup that is still de-risking science, process scale-up, or application pilots. It defines **Tough Tech** as “**transformational science and engineering**” and provides specialized lab/engineering infrastructure, programs, and ecosystem support for companies commercializing difficult technologies.[8]
- **Current status of similar investing: Active.** The Engine says it supports **150+ resident companies**, spans **19 Tough Tech industries**, and has **260+ investors and VCs in The Engine network**. [8] It is best understood as an active tough-tech platform and ecosystem with capital adjacency; the reviewed pages did not provide a clear public check-size or standard venture fund grid.
- **Investment stage: Pre-seed/seed-focused to early-stage** ecosystem fit. Exact check sizes: **not public in sources reviewed**. [8]
- **Firm structure:** Best classified here as **university/government-backed funds** is not quite right; however, among the permitted buckets it is closest to a **university-**

backed / ecosystem-backed tough-tech platform given MIT roots and non-profit incubator/accelerator structure. The reviewed page explicitly describes it as “**a non-profit incubator and accelerator.**”[8]

- **Investment philosophy:** Science-and-engineering commercialization support; infrastructure-first and ecosystem-first rather than purely financial opportunism.[8]
- **How to engage:** Public routes include **Residency Options, Programs, and Join Our Ecosystem**; for a founder, direct inbound through those programmatic channels is realistic.[8]

9) imec.istart

- **Why this firm would invest in CVD graphene:** imec.istart is relevant especially for CVD graphene with a **semiconductor, sensing, photonics, or electronics-toolchain** angle because it sits in the imec ecosystem, which is strongly associated with semiconductor and hardware commercialization. The public site is explicitly startup-application oriented.[9]
 - **Current status of similar investing: Active.** The site prominently invites founders to apply and routes them into program selection and fit assessment.[9]
 - **Investment stage: Pre-seed/seed-focused.** Exact check size was **not found** in reviewed sources.[9]
 - **Firm structure: University/government-backed funds** is the closest permitted category for this accelerator/fund ecosystem, given imec’s research-institute base.[9]
 - **Investment philosophy:** Application-screened and programmatic; the public site emphasizes founder/program fit. A fuller investment philosophy statement for materials specifically was **not published** on reviewed pages.[9]
 - **How to engage: Direct application** via the public /**apply** flow.[9]
-

Shortlist assessment for a CVD graphene developer

Highest-probability thesis fits

1. **Piva Capital** — strongest explicit **materials & production** language for a new-material platform.[7]
2. **Clean Energy Ventures** — best fit if graphene improves energy efficiency, electrification, filtration, or industrial decarbonization economics; strong public pattern in climate materials.[5]
3. **AM Ventures** — best fit if the company is tightly linked to **advanced manufacturing**, printed electronics, membranes, production equipment, or specialty materials process innovation.[3]
4. **Breakthrough Energy Ventures** — strongest for a climate-scale materials/industrial story with very large emissions leverage.[6]
5. **DCVC** — strong umbrella deep-tech fit where the company can tell a broad platform + defensible science story.[1]

Best very-early institutional entry points

1. **SOSV / HAX** — especially if the company still needs productization, pilot builds, manufacturing iteration, or investor syndication at pre-seed/seed.[4]
2. **The Engine** — especially for hard science teams needing space, equipment, and ecosystem before conventional VC readiness.[8]
3. **imec.istart** — especially for electronics / semiconductor / photonics flavored graphene startups in Europe.[9]

Strong European deep-tech generalist fit

- **Vsquared Ventures** — best for a company that can frame graphene as a European deep-tech platform adjacent to semis, advanced hardware, or frontier manufacturing.[2]

Notes on engagement strategy

For a graphene company, the best outreach usually depends on **which wedge is most mature**: - **Semiconductor / electronics materials**: prioritize **Vsquared, imec.istart, DCVC, The Engine**. - **Climate / industrial efficiency / membranes / thermal management**: prioritize **Clean Energy Ventures, Breakthrough Energy Ventures, Piva, DCVC**. - **Manufacturing platform / process scale-up / printed structures**: prioritize **AM Ventures, SOSV/HAX, Piva, The Engine**.

Where public partner ownership was not published on reviewed sources, assume **warm introductions through technical advisors, university PIs, pilot customers, or existing investors** will outperform cold email.

Sources

[1] DCVC, home page and Deep Tech Opportunities Report page: <https://www.dcvc.com> ; <https://www.dcvc.com/reports/deep-tech-opportunities-report-2026/>

[2] Vsquared Ventures, home page and portfolio page: <https://vsquared.vc/> ; <https://vsquared.vc/portfolio/>

[3] AM Ventures, portfolio page and application CTA: <https://amventures.com/portfolio/>

[4] SOSV, home page with HAX and application links: <https://sosv.com/> ; HAX application link surfaced on page: <https://sosv.com/apply/hax> ; HAX site link surfaced on page: <https://hax.co>

[5] Clean Energy Ventures, home page and portfolio page: <https://cleanenergyventures.com/> ; <https://cleanenergyventures.com/portfolio>

[6] Breakthrough Energy Ventures / Breakthrough Energy portfolio pages: <https://www.breakthroughenergy.org/our-work/breakthrough-energy-ventures/> ; <https://www.breakthroughenergy.org/portfolio/index.html>

[7] Piva Capital, home page and portfolio page: <https://piva.vc/> ; <https://piva.vc/portfolio/>

[8] The Engine, home page and related residency/program/team links surfaced there: <https://engine.xyz/>

[9] imec.istart, home page and apply page link surfaced there: <https://www.imecistart.com/en> ; <https://www.imecistart.com/en/apply>

Organization landscape briefing: defense-tech investors relevant to CVD graphene

Scope and screening logic

This briefing stays with **institutional capital** relevant to a developing **CVD graphene** company whose defense angle would likely be advanced materials, microelectronics, sensors, power, communications, RF, thermal management, coatings, or manufacturing capabilities useful to defense and dual-use systems. It excludes operating companies as customers and excludes government program offices acting as non-investor sponsors.

Because very few defense-focused investors publicly say “CVD graphene” specifically, the fit test used here is stricter than generic materials enthusiasm: each organization below has a published defense/dual-use mandate and/or explicit interest in **materials, manufacturing, microelectronics, hardware, energy, or mission-relevant deep tech** that maps to likely defense uses of CVD graphene.¹²³⁴⁵⁶⁷⁸⁹

¹ Shield Capital, homepage, “Investing in entrepreneurs building technologies that matter,” early-stage focus, \$500M+ AUM, 50+ portfolio companies, and recent 2026 deals, <https://shieldcap.com/>

² Lockheed Martin Ventures page, focus areas, evergreen fund size, team, and 2026 fund-capacity announcement, <https://www.lockheedmartin.com/en-us/who-we-are/lockheed-martin-ventures.html>

³ IQT home page, describing its model of identifying startups in strategic technology areas, evaluating government mission fit, and naming mission partners, <https://www.iqt.org/>

⁴ DCVC, home page, states “We are deep tech venture capital,” “We have more published scientists than MBAs,” and lists Industrial Transformation & Advanced Manufacturing among areas, <https://www.dcvc.com/>

⁵ DCVC, companies page, includes Brimstone “Transforming industry by co-producing widely used and critical materials,” <https://www.dcvc.com/companies/>

Shortlist summary

Organization	Why it fits CVD graphene in defense tech	Similar-investment status	Stage	Structure	Philosophy	How to engage
Shield Capital	Explicit national-security VC investing in early-stage AI, autonomy, cyber, and space; hardware/software with mission relevance fits dual-use advanced-materials platforms enabling sensors, air/space systems, or resilient manufacturing. 10	Active: public 2026 investments and 50+ portfolio companies; \$500M+ AUM. ¹¹	Early-stage / effectively multi-stage within early venture ; public site says early-stage, not specific checks. 12	Traditional institution VC	Mission-driven, national-security thesis. ¹³	Warm intro preferred; public team pages identify Raj Shah and broader team; contact page/public phone published. ¹⁴ 15

⁶ Lux Capital homepage, “We turn sci-fi into sci-fact” and contact details, <https://www.luxcapital.com/>

⁷ General Catalyst defense portfolio page listing defense-tagged companies, <https://www.generalcatalyst.com/portfolio?sector=defense>

⁸ 8VC homepage, defense/manufacturing categories and builder-investor positioning, <https://8vc.com/>

⁹ Type One Ventures portfolio page, stage range, frontier sectors, public contact email, and “Pitch us” path, <https://type1ventures.com/portfolio>

¹⁰ Shield Capital, homepage, “Investing in entrepreneurs building technologies that matter,” early-stage focus, \$500M+ AUM, 50+ portfolio companies, and recent 2026 deals, <https://shieldcap.com/>

¹¹ Shield Capital, homepage, “Investing in entrepreneurs building technologies that matter,” early-stage focus, \$500M+ AUM, 50+ portfolio companies, and recent 2026 deals, <https://shieldcap.com/>

Organization	Why it fits CVD graphene in defense tech	Similar-investment status	Stage	Structure	Philosophy	How to engage
Lockheed Martin Ventures	Strategic arm explicitly lists Materials, Manufacturing, Electronics & Compute, Power & Propulsion, Sensors & PNT among focus areas; this is one of the clearest direct thesis fits for CVD graphene. ¹⁶	Active / evergreen: Lockheed says its fund grew from \$100M to a \$1B evergreen fund and backs 120+ companies; capacity increase announced	Multi-stage strategic venture; check sizes not public on cited page.	Corporate VC	Strategic-alignment and technical-rigor driven; focuses on technologies that complement or redefine core mission areas. ¹⁸	Strategic process via “Contact Us” / portfolio intake; named team led by Chris Moran with investment directors listed publicly. ¹⁹

¹² Shield Capital, homepage, “Investing in entrepreneurs building technologies that matter,” early-stage focus, \$500M+ AUM, 50+ portfolio companies, and recent 2026 deals, <https://shieldcap.com/>

¹³ Shield Capital, homepage, “Investing in entrepreneurs building technologies that matter,” early-stage focus, \$500M+ AUM, 50+ portfolio companies, and recent 2026 deals, <https://shieldcap.com/>

¹⁴ Shield Capital, homepage, “Investing in entrepreneurs building technologies that matter,” early-stage focus, \$500M+ AUM, 50+ portfolio companies, and recent 2026 deals, <https://shieldcap.com/>

¹⁵ Shield Capital, Raj Shah team page, listing him as Founder and Managing Partner and noting DIU and Air Force background, <https://shieldcap.com/team/raj-shah>

¹⁶ Lockheed Martin Ventures page, focus areas, evergreen fund size, team, and 2026 fund-capacity announcement, <https://www.lockheedmartin.com/en-us/who-we-are/lockheed-martin-ventures.html>

Organization	Why it fits CVD graphene in defense tech	Similar-investment status	Stage	Structure	Philosophy	How to engage
IQT (In-Q-Tel)	Not-for-profit national-security investor with explicit sector pages in Microelectronics, Energy, Hardware, Space, AI ; CVD graphene fits where it improves mission systems, microelectronics, sensing, or resilient energy/material performance. ²⁰	Active: 800+ total investments; portfolio page current; invites business-plan submission. ²²	Multi-stage venture-like, but check sizes not public on cited pages.	University/government-backed funds (not-for-profit, government-mission-backed platform)	Mission-driven technology-transition model for U.S. and allied government partners. ²³	Public “Submit a Business Plan / get in touch” path; suitable for direct inbound if national-security use case is clear. ²⁴

¹⁸ Lockheed Martin Ventures page, focus areas, evergreen fund size, team, and 2026 fund-capacity announcement, <https://www.lockheedmartin.com/en-us/who-we-are/lockheed-martin-ventures.html>

¹⁹ Lockheed Martin Ventures page, focus areas, evergreen fund size, team, and 2026 fund-capacity announcement, <https://www.lockheedmartin.com/en-us/who-we-are/lockheed-martin-ventures.html>

¹⁷ Lockheed Martin Ventures page, focus areas, evergreen fund size, team, and 2026 fund-capacity announcement, <https://www.lockheedmartin.com/en-us/who-we-are/lockheed-martin-ventures.html>

²⁰ IQT home page, describing its model of identifying startups in strategic technology areas, evaluating government mission fit, and naming mission partners, <https://www.iqt.org/>

²¹ IQT portfolio page, 800+ investments, categories, and public “Submit a Business Plan” path, <https://www.iqt.org/portfolio>

²² IQT portfolio page, 800+ investments, categories, and public “Submit a Business Plan” path, <https://www.iqt.org/portfolio>

Organization	Why it fits CVD graphene in defense tech	Similar-investment status	Stage	Structure	Philosophy	How to engage
DCVC	Deep-tech VC explicitly covering defense, security, industrial transformation, advanced manufacturing, energy, quantum, and hard tech; suitable if CVD graphene is positioned as enabling hardware or manufacturing platform. ²⁵²⁶	Active: current 2026 deep-tech report, recent portfolio updates, active companies list including defense/security names such as Fortem Technologies; sector taxonomy includes Cybersecurity, Security, & Defense.	Multi-stage; public site does not give checks on cited pages.	Traditional institution VC	Strong science/technical diligence ethos: “more published scientists than MBAs.” ²⁹	Warm intro likely best; public team page exists, but no application form on cited pages. ³⁰

²³ IQT home page, describing its model of identifying startups in strategic technology areas, evaluating government mission fit, and naming mission partners, <https://www.iqt.org/>

²⁴ IQT portfolio page, 800+ investments, categories, and public “Submit a Business Plan” path, <https://www.iqt.org/portfolio>

²⁵ DCVC, home page, states “We are deep tech venture capital,” “We have more published scientists than MBAs,” and lists Industrial Transformation & Advanced Manufacturing among areas, <https://www.dvc.com/>

²⁶ DCVC, companies page, includes Brimstone “Transforming industry by co-producing widely used and critical materials,” <https://www.dvc.com/companies/>

Organi- zation	Why it fits CVD graphene in defense tech	Similar- investme nt status	Stage	Structure	Philosophy	How to engage
2728						
Lux Capital	Publicly backs science/defense frontier companies; portfolio includes Anduril and site says Lux raised a \$1.5B fund focused on new science, defense. ³¹ CVD graphene fits if framed as frontier materials/computing/defense infrastructure.	Active / fundraising recently completed: Jan. 2026 site item notes Lux Ventures IX / Bloomberg coverage of \$1.5B for new science and defense. 32	Multi-stage; checks not public on cited pages.	Traditional institution VC	Thesis-driven frontier-science style; slogan “We turn sci-fi into sci-fact” and “We believe before others understood.” ³³³⁴	Warm intro preferred; general contact emails published, but partner/the me owner should be identified before outreach. ³⁵

²⁹ DCVC, home page, states “We are deep tech venture capital,” “We have more published scientists than MBAs,” and lists Industrial Transformation & Advanced Manufacturing among areas, <https://www.dvc.com/>

³⁰ DCVC, home page, states “We are deep tech venture capital,” “We have more published scientists than MBAs,” and lists Industrial Transformation & Advanced Manufacturing among areas, <https://www.dvc.com/>

²⁷ DCVC, home page, states “We are deep tech venture capital,” “We have more published scientists than MBAs,” and lists Industrial Transformation & Advanced Manufacturing among areas, <https://www.dvc.com/>

²⁸ DCVC, companies page, includes Brimstone “Transforming industry by co-producing widely used and critical materials,” <https://www.dvc.com/companies/>

³¹ Lux Capital companies page, Anduril portfolio entry and Jan. 2026 fundraise/news items, <https://www.luxcapital.com/companies>

³² Lux Capital companies page, Anduril portfolio entry and Jan. 2026 fundraise/news items, <https://www.luxcapital.com/companies>

Organization	Why it fits CVD graphene in defense tech	Similar-investment status	Stage	Structure	Philosophy	How to engage
General Catalyst	Larger multi-stage VC with defense-tagged portfolio including Anduril, Helsing, Applied Intuition, Maven, Re:Build, Serval; fit is stronger for scaling a platform with large defense and industrial applications than for pure materials science risk. ³⁶	Active: current defense portfolio page visible; exact fund status/c heck sizes not public on cited page. ³⁷	Multi-stage.	Traditional institution VC	Not published on cited portfolio page.	Warm intro preferred; no dedicated defense application path found on cited page. ³⁸
8VC	Publicly states focus on Defense and Government & Defense	Active: homepage says 8VC invests/	Multi-stage; stage/c heck size not	Traditional institution VC	Builder-plus-investor posture; “builds	Warm intro preferred; portfolio link exists but no

³³ Lux Capital homepage, “We turn sci-fi into sci-fact” and contact details, <https://www.luxcapital.com/>

³⁴ Lux Capital companies page, Anduril portfolio entry and Jan. 2026 fundraise/news items, <https://www.luxcapital.com/companies>

³⁵ Lux Capital homepage, “We turn sci-fi into sci-fact” and contact details, <https://www.luxcapital.com/>

³⁶ General Catalyst defense portfolio page listing defense-tagged companies, <https://www.generalcatalyst.com/portfolio?sector=defense>

³⁷ General Catalyst defense portfolio page listing defense-tagged companies, <https://www.generalcatalyst.com/portfolio?sector=defense>

³⁸ General Catalyst defense portfolio page listing defense-tagged companies, <https://www.generalcatalyst.com/portfolio?sector=defense>

Organi- zation	Why it fits CVD graphene in defense tech	Similar- investme nt status	Stage	Structure	Philosophy	How to engage
	alongside manufacturing and logistics; plausible fit for graphene if sold as defense- manufacturing or strategic industrial capability rather than pure lab science. ³⁹	builds in defense and manufact uring; recent 2026 investme nt posts visible. ⁴⁰	public on cited page.		and invests” in ambitious companies . ⁴¹	dedicated intake found on cited page. ⁴²
Type One Ventur es	Frontier-tech micro/multi- stage style investor with portfolio themes in space, robotics, energy, manufacturing, and even a company described as “novel cosmic shielding material”; fit is strongest for space/defense graphene	Active: portfolio page shows 37 results across pre-seed to Series E and invites founders to “Pitch us.” ⁴⁴	Multi- stage, but skewed earlier in frontier tech; explicit public stages range pre- seed to growth /late. ⁴⁵	Micro VCs / solo GPs	Visionary/ founder- led future- tech philosophy; backs teams that “challenge and advance civilization.” ⁴⁶	Direct founder outreach via Pitch us and public email contact@ty peone.vc. ⁴⁷

³⁹ 8VC homepage, defense/manufacturing categories and builder-investor positioning, <https://8vc.com/>

⁴⁰ 8VC homepage, defense/manufacturing categories and builder-investor positioning, <https://8vc.com/>

⁴¹ 8VC homepage, defense/manufacturing categories and builder-investor positioning, <https://8vc.com/>

⁴² 8VC homepage, defense/manufacturing categories and builder-investor positioning, <https://8vc.com/>

Organization	Why it fits CVD graphene in defense tech materials narratives. ⁴³	Similar-investment status	Stage	Structure	Philosophy	How to engage
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Detailed organization notes

1) Shield Capital

Why it would invest in CVD graphene

Shield says it invests in **early-stage companies building technologies that matter** across **artificial intelligence, autonomy, cybersecurity, and space**, and frames itself around the convergence of commercial technology and national security.⁴⁸ A CVD graphene company can fit if it is not pitched as a commodity-materials story but as a defense-enabling platform for space electronics, RF/sensing, thermal management, resilient coatings, or mission manufacturing infrastructure.

Current similar-technology-development investing status

Status: **active**. Shield reports **\$500M+ assets under management, 50+ portfolio companies**, and recent 2026 activity including leading SiFly's Series A, co-leading Star Catcher's Series A, and leading Autonomous Cyber's seed round.⁴⁹ Its portfolio examples show interest in mission systems and dual-use operational tech, such as Airspace

⁴⁴ Type One Ventures portfolio page, stage range, frontier sectors, public contact email, and "Pitch us" path, <https://type1ventures.com/portfolio>

⁴⁵ Type One Ventures portfolio page, stage range, frontier sectors, public contact email, and "Pitch us" path, <https://type1ventures.com/portfolio>

⁴⁶ Type One Ventures portfolio page, stage range, frontier sectors, public contact email, and "Pitch us" path, <https://type1ventures.com/portfolio>

⁴⁷ Type One Ventures portfolio page, stage range, frontier sectors, public contact email, and "Pitch us" path, <https://type1ventures.com/portfolio>

⁴³ Type One Ventures portfolio page, stage range, frontier sectors, public contact email, and "Pitch us" path, <https://type1ventures.com/portfolio>

⁴⁸ Shield Capital, homepage, "Investing in entrepreneurs building technologies that matter," early-stage focus, \$500M+ AUM, 50+ portfolio companies, and recent 2026 deals, <https://shieldcap.com/>

⁴⁹ Shield Capital, homepage, "Investing in entrepreneurs building technologies that matter," early-stage focus, \$500M+ AUM, 50+ portfolio companies, and recent 2026 deals, <https://shieldcap.com/>

Intelligence, where Shield highlights command-and-control and DoD airspace applications.⁵⁰

Investment stage

Best classified as **early-stage (Series A/B)** with some seed activity; the firm describes itself as investing in **early-stage** companies.⁵¹ Public check sizes were **not found**.

Firm structure

Traditional institution VC.⁵²

Investment philosophy

Clearly **thesis-driven / mission-driven** around national security and the commercial-technology/defense convergence.⁵³

How to engage

A developing company would likely need a **warm intro** to the team. Publicly named relevant senior figure: **Raj Shah, Founder and Managing Partner**, whose published background includes the Defense Innovation Unit and the U.S. Air Force.⁵⁴ The firm also publishes a phone number and contact navigation.⁵⁵

2) Lockheed Martin Ventures

Why it would invest in CVD graphene

This is one of the strongest direct fits because Lockheed Martin Ventures explicitly names **Materials, Manufacturing, Electronics & Compute, Power & Propulsion, and Sensors &**

⁵⁰ Shield Capital, Airspace Intelligence portfolio page, highlighting resilient command-and-control and DoD airspace-management applications, <https://shieldcap.com/company/airspace>

⁵¹ Shield Capital, homepage, “Investing in entrepreneurs building technologies that matter,” early-stage focus, \$500M+ AUM, 50+ portfolio companies, and recent 2026 deals, <https://shieldcap.com/>

⁵² Shield Capital, homepage, “Investing in entrepreneurs building technologies that matter,” early-stage focus, \$500M+ AUM, 50+ portfolio companies, and recent 2026 deals, <https://shieldcap.com/>

⁵³ Shield Capital, homepage, “Investing in entrepreneurs building technologies that matter,” early-stage focus, \$500M+ AUM, 50+ portfolio companies, and recent 2026 deals, <https://shieldcap.com/>

⁵⁴ Shield Capital, Raj Shah team page, listing him as Founder and Managing Partner and noting DIU and Air Force background, <https://shieldcap.com/team/raj-shah>

⁵⁵ Shield Capital, homepage, “Investing in entrepreneurs building technologies that matter,” early-stage focus, \$500M+ AUM, 50+ portfolio companies, and recent 2026 deals, <https://shieldcap.com/>

PNT as focus areas.⁵⁶ CVD graphene development can be directly relevant across several of those buckets: lightweight/high-performance materials, thermal interfaces, sensing layers, advanced RF/electronics substrates, and manufacturable defense components.

Current similar-technology-development investing status

Status: **active / evergreen**. Lockheed says the venture arm, founded in 2007, has grown from a **\$100 million fund** to a **\$1 billion evergreen fund** and has partnered with **more than 120** companies.⁵⁷ It also announced in April 2026 that Lockheed Martin increased venture-fund capacity from \$400 million to \$1 billion.⁵⁸

Investment stage

Best classified as **multi-stage** strategic venture. Public check sizes were **not found** on the cited page.

Firm structure

Corporate VC.⁵⁹

Investment philosophy

Published philosophy is **strategic-alignment and technical-rigor driven**: investments are guided by long-term perspective and technical rigor, and are selected for tangible mission relevance and potential integration into Lockheed's ecosystem.⁶⁰

How to engage

Engagement is through a **strategic CVC process** rather than ordinary venture outreach. Publicly named team members include **Chris Moran** (Vice President and General

⁵⁶ Lockheed Martin Ventures page, focus areas, evergreen fund size, team, and 2026 fund-capacity announcement, <https://www.lockheedmartin.com/en-us/who-we-are/lockheed-martin-ventures.html>

⁵⁷ Lockheed Martin Ventures page, focus areas, evergreen fund size, team, and 2026 fund-capacity announcement, <https://www.lockheedmartin.com/en-us/who-we-are/lockheed-martin-ventures.html>

⁵⁸ Lockheed Martin Ventures page, focus areas, evergreen fund size, team, and 2026 fund-capacity announcement, <https://www.lockheedmartin.com/en-us/who-we-are/lockheed-martin-ventures.html>

⁵⁹ Lockheed Martin Ventures page, focus areas, evergreen fund size, team, and 2026 fund-capacity announcement, <https://www.lockheedmartin.com/en-us/who-we-are/lockheed-martin-ventures.html>

⁶⁰ Lockheed Martin Ventures page, focus areas, evergreen fund size, team, and 2026 fund-capacity announcement, <https://www.lockheedmartin.com/en-us/who-we-are/lockheed-martin-ventures.html>

Manager), **Jeff Cunningham** (Investment Director), and other listed investment staff.⁶¹ The page includes a public **Contact Us** route.⁶²

3) IQT (In-Q-Tel)

Why it would invest in CVD graphene

IQT's mandate is to invest in innovation that secures the nation, and it publicly highlights **Microelectronics, Energy, Hardware, Space, and AI**.⁶³⁶⁴ A CVD graphene company could fit if it solves a concrete government mission problem such as sensor sensitivity, low-SWaP electronics, thermal management, resilient energy components, or strategic supply-chain capability in microelectronics/materials.

Current similar-technology-development investing status

Status: **active**. IQT says it has made **800+ investments** and the portfolio page is live and current.⁶⁵ It also notes new mission partners including the U.S. Army, DOE/NNSA, and Department of the Navy.⁶⁶

Investment stage

Best classified as **multi-stage** mission investor; public check sizes were **not found** on cited pages.

Firm structure

Best fit under the requested taxonomy: **university/government-backed funds**. More precisely, IQT describes itself as a **not-for-profit global investment platform** working to serve U.S. and allied government partners.⁶⁷

⁶¹ Lockheed Martin Ventures page, focus areas, evergreen fund size, team, and 2026 fund-capacity announcement, <https://www.lockheedmartin.com/en-us/who-we-are/lockheed-martin-ventures.html>

⁶² Lockheed Martin Ventures page, focus areas, evergreen fund size, team, and 2026 fund-capacity announcement, <https://www.lockheedmartin.com/en-us/who-we-are/lockheed-martin-ventures.html>

⁶³ IQT home page, describing its model of identifying startups in strategic technology areas, evaluating government mission fit, and naming mission partners, <https://www.iqt.org/>

⁶⁴ IQT portfolio page, 800+ investments, categories, and public "Submit a Business Plan" path, <https://www.iqt.org/portfolio>

⁶⁵ IQT portfolio page, 800+ investments, categories, and public "Submit a Business Plan" path, <https://www.iqt.org/portfolio>

⁶⁶ IQT home page, describing its model of identifying startups in strategic technology areas, evaluating government mission fit, and naming mission partners, <https://www.iqt.org/>

⁶⁷ IQT home page, describing its model of identifying startups in strategic technology areas, evaluating government mission fit, and naming mission partners, <https://www.iqt.org/>

Investment philosophy

Strongly **mission-driven** and technology-transition oriented: it identifies startups, evaluates mission fit, and helps adapt/transfer technology to government partners.⁶⁸

How to engage

Unlike many VCs, IQT has a direct public path: “**Submit a Business Plan**” / “**get in touch**” if the technology could support national security missions.⁶⁹

4) DCVC

Why it would invest in CVD graphene

DCVC brands itself as **deep tech venture capital** and explicitly spans **defense, security, industrial transformation, advanced manufacturing, energy, and space**.⁷⁰⁷¹ A CVD graphene company fits especially if it is framed as a hard-tech platform enabling defense-grade sensors, compute packaging, energy systems, or novel manufacturing throughput rather than as a narrow materials lab project.

Current similar-technology-development investing status

Status: **active**. DCVC is publishing a **2026 Deep Tech Opportunities report**, current portfolio updates, and maintains an active companies page.⁷²⁷³ The portfolio includes hard-tech and defense/security-adjacent companies such as **Fortem Technologies** (counter-drone systems), **Radiant** (portable nuclear microreactor), **Capella Space**, and **Mythic** (AI hardware).⁷⁴

⁶⁸ IQT home page, describing its model of identifying startups in strategic technology areas, evaluating government mission fit, and naming mission partners, <https://www.iqt.org/>

⁶⁹ IQT portfolio page, 800+ investments, categories, and public “Submit a Business Plan” path, <https://www.iqt.org/portfolio>

⁷⁰ DCVC, home page, states “We are deep tech venture capital,” “We have more published scientists than MBAs,” and lists Industrial Transformation & Advanced Manufacturing among areas, <https://www.dcvc.com/>

⁷¹ DCVC, companies page, includes Brimstone “Transforming industry by co-producing widely used and critical materials,” <https://www.dcvc.com/companies/>

⁷² DCVC, home page, states “We are deep tech venture capital,” “We have more published scientists than MBAs,” and lists Industrial Transformation & Advanced Manufacturing among areas, <https://www.dcvc.com/>

⁷³ DCVC, companies page, includes Brimstone “Transforming industry by co-producing widely used and critical materials,” <https://www.dcvc.com/companies/>

⁷⁴ DCVC, companies page, includes Brimstone “Transforming industry by co-producing widely used and critical materials,” <https://www.dcvc.com/companies/>

Investment stage

Multi-stage. Public check sizes were **not found** on the cited pages.

Firm structure

Traditional institution VC.⁷⁵

Investment philosophy

Public philosophy strongly suggests **science/technical diligence** and thesis-led deep-tech investing: DCVC says it backs founders addressing the hardest, highest-stakes problems and notes that it has **more published scientists than MBAs**.⁷⁶

How to engage

A company would most likely pursue a **warm intro** to a relevant partner or principal via the published team page; a public application form was **not found** on cited pages.⁷⁷

5) Lux Capital

Why it would invest in CVD graphene

Lux is a strong fit when CVD graphene is positioned as a frontier-science capability with defense and industrial implications. Lux publicly highlights **Anduril** in portfolio, says it turns “**sci-fi into sci-fact**,” and its 2026 fundraise was described as focused on **new science, defense**.⁷⁸⁷⁹

Current similar-technology-development investing status

Status: **active / recently raised**. Lux’s companies page cites January 2026 items: “**Announcing Lux Ventures IX**” and Bloomberg coverage, “**Lux Capital Raises \$1.5 billion for Fund Focused on New Science, Defense**.”⁸⁰

⁷⁵ DCVC, home page, states “We are deep tech venture capital,” “We have more published scientists than MBAs,” and lists Industrial Transformation & Advanced Manufacturing among areas, <https://www.dcvc.com/>

⁷⁶ DCVC, home page, states “We are deep tech venture capital,” “We have more published scientists than MBAs,” and lists Industrial Transformation & Advanced Manufacturing among areas, <https://www.dcvc.com/>

⁷⁷ DCVC, home page, states “We are deep tech venture capital,” “We have more published scientists than MBAs,” and lists Industrial Transformation & Advanced Manufacturing among areas, <https://www.dcvc.com/>

⁷⁸ Lux Capital homepage, “We turn sci-fi into sci-fact” and contact details, <https://www.luxcapital.com/>

⁷⁹ Lux Capital companies page, Anduril portfolio entry and Jan. 2026 fundraise/news items, <https://www.luxcapital.com/companies>

⁸⁰ Lux Capital companies page, Anduril portfolio entry and Jan. 2026 fundraise/news items, <https://www.luxcapital.com/companies>

Investment stage

Multi-stage. Public check sizes were **not found** on cited pages.

Firm structure

Traditional institution VC.

Investment philosophy

Publicly **thesis-driven frontier-science**. Lux uses the phrases “**We believe before others understand**” and “**We turn sci-fi into sci-fact.**”⁸¹⁸²

How to engage

Best path is likely **warm intro**. Lux publishes general emails including **info@luxcapital.com**, **comms@luxcapital.com**, and **ir@luxcapital.com**, but partner-specific theme ownership for graphene/materials was **not established from cited pages**.⁸³

6) General Catalyst

Why it would invest in CVD graphene

General Catalyst is not a specialist materials investor, but its defense portfolio is meaningful: the defense filter shows **Anduril, Helsing, Applied Intuition, Maven, Re:Build, Serval** and others.⁸⁴ That makes it relevant if the graphene company has progressed from core materials R&D into a scaled defense or reindustrialization platform.

Current similar-technology-development investing status

Status: **active**. The current portfolio page explicitly filters by **defense** and lists multiple active defense names.⁸⁵ A specific recent defense fund or dry-powder figure was **not found** on the cited page.

Investment stage

Multi-stage.

⁸¹ Lux Capital homepage, “We turn sci-fi into sci-fact” and contact details, <https://www.luxcapital.com/>

⁸² Lux Capital companies page, Anduril portfolio entry and Jan. 2026 fundraise/news items, <https://www.luxcapital.com/companies>

⁸³ Lux Capital homepage, “We turn sci-fi into sci-fact” and contact details, <https://www.luxcapital.com/>

⁸⁴ General Catalyst defense portfolio page listing defense-tagged companies, <https://www.generalcatalyst.com/portfolio?sector=defense>

⁸⁵ General Catalyst defense portfolio page listing defense-tagged companies, <https://www.generalcatalyst.com/portfolio?sector=defense>

Firm structure

Traditional institution VC.

Investment philosophy

Not published on the cited portfolio page.

How to engage

Likely **warm intro** to the defense or industrial team; a direct defense application path was **not found** on the cited page.⁸⁶

7) 8VC

Why it would invest in CVD graphene

8VC says it builds and invests in ambitious companies across **manufacturing** and **defense**, and explicitly labels **Government & Defense** as a core investment category.⁸⁷ For CVD graphene, the fit is strongest if the company presents a scaled manufacturing, strategic-industrial-base, or defense-systems-enabling roadmap.

Current similar-technology-development investing status

Status: **active**. The homepage states that 8VC companies are transforming **Life Sciences, Healthcare, Manufacturing, Enterprise, Logistics, Defense** and shows current 2026 investment news.⁸⁸

Investment stage

Multi-stage. Public check sizes were **not found** on the cited page.

Firm structure

Traditional institution VC.

Investment philosophy

Publicly a **builder-plus-investor** model: 8VC says it **builds and invests** and notes that when desired companies do not exist yet, it builds them.⁸⁹

How to engage

Likely via **warm intro**; the site publishes a **Contact** section but no dedicated application workflow was found on the cited page.⁹⁰

⁸⁶ General Catalyst defense portfolio page listing defense-tagged companies, <https://www.generalcatalyst.com/portfolio?sector=defense>

⁸⁷ 8VC homepage, defense/manufacturing categories and builder-investor positioning, <https://8vc.com/>

⁸⁸ 8VC homepage, defense/manufacturing categories and builder-investor positioning, <https://8vc.com/>

⁸⁹ 8VC homepage, defense/manufacturing categories and builder-investor positioning, <https://8vc.com/>

8) Type One Ventures

Why it would invest in CVD graphene

Type One is not a defense specialist, but its portfolio and positioning make it relevant for space/defense-adjacent advanced materials. Its portfolio spans **space, robotics, energy, manufacturing** and includes a **seed-stage company described as “Novel Cosmic Shielding Material,”** which is a direct pattern match for frontier materials bets.⁹¹

Current similar-technology-development investing status

Status: **active**. The portfolio page lists **37 results** and shows active investments from **pre-seed** through **Series E / growth**.⁹²

Investment stage

Multi-stage, though its visible pattern includes **pre-seed, seed, post-seed, Series A/B, growth**.⁹³

Firm structure

Best categorized as **micro VCs / solo GPs** within the user’s taxonomy.

Investment philosophy

Public philosophy is highly **visionary / frontier-tech founder-first**: it invests in teams that can “**challenge and advance civilization**” and explicitly invites partners to **rewrite the future**.⁹⁴

How to engage

Type One is one of the easiest to approach directly: public email **contact@typeone.vc** and a **Pitch us** link are published.⁹⁵

⁹⁰ 8VC homepage, defense/manufacturing categories and builder-investor positioning, <https://8vc.com/>

⁹¹ Type One Ventures portfolio page, stage range, frontier sectors, public contact email, and “Pitch us” path, <https://type1ventures.com/portfolio>

⁹² Type One Ventures portfolio page, stage range, frontier sectors, public contact email, and “Pitch us” path, <https://type1ventures.com/portfolio>

⁹³ Type One Ventures portfolio page, stage range, frontier sectors, public contact email, and “Pitch us” path, <https://type1ventures.com/portfolio>

⁹⁴ Type One Ventures portfolio page, stage range, frontier sectors, public contact email, and “Pitch us” path, <https://type1ventures.com/portfolio>

⁹⁵ Type One Ventures portfolio page, stage range, frontier sectors, public contact email, and “Pitch us” path, <https://type1ventures.com/portfolio>

Triage: best fits for an actual CVD graphene defense raise

Best fit now

1. **Lockheed Martin Ventures** — strongest direct thesis overlap because it explicitly names materials, manufacturing, electronics & compute, sensors, and power.⁹⁶
2. **IQT** — excellent if the company can tie graphene to mission pull from microelectronics, sensing, energy, or hardware users in government.⁹⁷⁹⁸
3. **DCVC** — strong if the company is a true deep-tech platform with hard technical defensibility and manufacturability.⁹⁹¹⁰⁰
4. **Lux Capital** — strong if the company is frontier-science heavy and can tell a national-security plus industrial-scale story.¹⁰¹¹⁰²

Good fit with the right framing

5. **Shield Capital** — compelling if the product is framed around an operational defense mission, not generic materials science.¹⁰³
6. **8VC** — stronger once the company can argue strategic manufacturing scale and defense-industrial-base importance.¹⁰⁴

⁹⁶ Lockheed Martin Ventures page, focus areas, evergreen fund size, team, and 2026 fund-capacity announcement, <https://www.lockheedmartin.com/en-us/who-we-are/lockheed-martin-ventures.html>

⁹⁷ IQT home page, describing its model of identifying startups in strategic technology areas, evaluating government mission fit, and naming mission partners, <https://www.iqt.org/>

⁹⁸ IQT portfolio page, 800+ investments, categories, and public “Submit a Business Plan” path, <https://www.iqt.org/portfolio>

⁹⁹ DCVC, home page, states “We are deep tech venture capital,” “We have more published scientists than MBAs,” and lists Industrial Transformation & Advanced Manufacturing among areas, <https://www.dvc.com/>

¹⁰⁰ DCVC, companies page, includes Brimstone “Transforming industry by co-producing widely used and critical materials,” <https://www.dvc.com/companies/>

¹⁰¹ Lux Capital homepage, “We turn sci-fi into sci-fact” and contact details, <https://www.luxcapital.com/>

¹⁰² Lux Capital companies page, Anduril portfolio entry and Jan. 2026 fundraise/news items, <https://www.luxcapital.com/companies>

¹⁰³ Shield Capital, homepage, “Investing in entrepreneurs building technologies that matter,” early-stage focus, \$500M+ AUM, 50+ portfolio companies, and recent 2026 deals, <https://shieldcap.com/>

¹⁰⁴ 8VC homepage, defense/manufacturing categories and builder-investor positioning, <https://8vc.com/>

7. **General Catalyst** — likely more relevant once commercial and defense scaling are visible.¹⁰⁵

Opportunistic / narrower fit

8. **Type One Ventures** — attractive for frontier space-materials storytelling and direct access, but likely smaller and less defense-specialist than the top group.¹⁰⁶

Important caveats

- Publicly disclosed **check sizes** were often **not public** on the cited source pages; none are invented here.
- Very few firms disclose direct investments in **graphene** or specifically **CVD graphene** on current public pages; recommendations are therefore based on **published thesis fit plus similar category investing**, not fabricated direct precedent.
- Some potentially relevant organizations were **excluded** because the public evidence in this research window did not clearly support a defense-tech CVD graphene fit better than the shortlisted names.

Sources

Organization-landscape briefing: fintech-focused institutional capital for CVD graphene

Scope and screening note

This briefing screens **institutional capital organizations in fintech** that could plausibly fund a **developing CVD graphene company only when the graphene enables a financial workflow, risk model, sensing stack, identity layer, or infrastructure layer** used in payments, banking infrastructure, capital markets, insurtech, or adjacent financial hardware/software. It excludes operating companies that would merely adopt graphene into products. It also avoids inventing evidence: where a firm has no public graphene investment, the rationale is based on **published fintech thesis and adjacent hardware / infrastructure patterns**, not on assumed materials-science appetite.

¹⁰⁵ General Catalyst defense portfolio page listing defense-tagged companies, <https://www.generalcatalyst.com/portfolio?sector=defense>

¹⁰⁶ Type One Ventures portfolio page, stage range, frontier sectors, public contact email, and “Pitch us” path, <https://type1ventures.com/portfolio>

Best-fit organizations

1) Commerce Ventures

- **Why this firm could invest in CVD graphene:** Commerce Ventures says its mission is to back entrepreneurs building the platforms required for the future of **retail and financial services** and that it takes a **deeply thematic approach** to investing.[1] Its fintech portfolio includes infrastructure and risk companies such as **Moov** and **Socure**. [1] A CVD graphene company would fit only if it is packaged as a fintech-enabling infrastructure layer — for example, ultra-sensitive authentication sensors, anti-fraud hardware, or high-performance components for payments/security workflows — rather than as a generic materials company.
- **Status of similar technology-development investing: Active.** Commerce publicly presents a current sector focus on financial services and recent areas of thematic focus.[1] The site does not publish dry powder or a current fund size on the captured page, so that is **not public on the firm page reviewed**.
- **Investment stage: Multi-stage.** Public page does not list standard check sizes; **not public** on the page reviewed.[1]
- **Firm structure: Traditional institution VC.**[1]
- **Investment philosophy: Thesis-driven / deeply thematic.**[1]
- **How a developing company would engage:** Commerce provides a **team page** and a general “**Get in touch**” prompt on its site.[1] A warm intro is likely preferable, but an explicit application form was **not found** on the page reviewed.

2) Nyca Partners

- **Why this firm could invest in CVD graphene:** Nyca describes itself as a **thesis-driven** fintech investor and says it invests across systems that **move money, manage risk, and serve customers**. [2] It explicitly highlights **payments and financial transactions, capital formation and risk**, B2B payments, treasury operations, and fraud/risk tools that enable real-time payments.[2] That makes Nyca relevant if graphene is embedded in a financial-system product such as secure device-level payments hardware, fraud sensors, cryptographic/identity modules, or risk-detection instrumentation for insurers or payment rails.
- **Status of similar technology-development investing: Active.** Nyca states it is investing **from its fifth fund** and has **over 90 active investments**. [3] Its public site says it invests **from seed to scale**. [2]
- **Investment stage: Multi-stage**, with public positioning of “**seed to scale**.” Public check sizes were **not found** on the pages reviewed.[2]
- **Firm structure: Traditional institution VC.**[2]
- **Investment philosophy: Thesis-driven** and disciplined; the footer states “Thesis-driven investing,” and the homepage describes thematic investing around payments, risk, and customer-serving systems.[2]
- **How a developing company would engage:** Nyca publishes a **Contact** page/email (**info@nyca.com**) and team page with named partners including **Hans Morris**,

Stephanie Khoo, and Jasleen Kaur.[2][3] Warm introductions appear appropriate; a formal application workflow was **not found**.

3) Portage

- **Why this firm could invest in CVD graphene:** Portage calls itself a **global fintech and financial services investment platform** and says it backs companies across all stages that are reshaping financial services.[4] It operates both **Portage Ventures** for venture investing and **Portage Capital Solutions** for later-stage fintech businesses.[4] A graphene company could fit if it is framed as enabling next-generation financial infrastructure — for example, sensors or compute/network components that change underwriting, authentication, claims handling, or capital-markets data acquisition.
- **Status of similar technology-development investing: Active.** Portage publicly states it invests across stages and maintains dedicated venture and later-stage strategies.[4] The reviewed page does not publish current dry powder or standard check sizes; **not public** on the reviewed page.
- **Investment stage: Multi-stage.** Publicly split between venture and later-stage capital solutions.[4]
- **Firm structure: Traditional institution VC / growth platform** (venture plus later-stage fintech investing).[4]
- **Investment philosophy:** Public site emphasizes deep industry knowledge, global network effects, and stage-flexible fintech specialization; a more explicit philosophy label beyond that was **not published** on the page reviewed.[4]
- **How a developing company would engage:** Portage publishes firm and strategy pages plus portfolio access points.[4] Warm introductions are likely best. A direct startup application form was **not found** on the reviewed page.

4) Motive Partners

- **Why this firm could invest in CVD graphene:** Motive says it finds and invests in **financial technology opportunities** using sector insight and disciplined underwriting, and describes coverage **from venture to growth & buyout** across North America and Europe.[5] That makes Motive relevant for a CVD graphene company only if the company has already converted the materials story into a clear financial-technology product with enterprise adoption potential — for example, infrastructure serving asset managers, insurers, exchanges, or financial operations.
- **Status of similar technology-development investing: Active.** Motive publicly states it invests from **venture to growth & buyout**. [5] Specific dry powder and check sizes were **not found** on the reviewed pages.
- **Investment stage: Multi-stage**, spanning venture, growth, and buyout.[5]
- **Firm structure: Traditional institution VC / PE-growth platform.**[5]
- **Investment philosophy:** Public materials emphasize a repeatable “**Investing, Operating and Innovating**” model and disciplined underwriting.[5]
- **How a developing company would engage:** The firm has a public website and team/contact routes; specific open application mechanics were **not found** on the reviewed page. Warm intro likely preferred.

5) Citi Ventures

- **Why this firm could invest in CVD graphene:** Citi Ventures brands itself as investing in the **future of finance**.^[6] As a bank-affiliated strategic investor, it is relevant when graphene enables a bank-grade infrastructure shift: security/authentication devices, transaction-risk sensing, capital-markets data infrastructure, or operational resilience tooling usable in regulated financial environments.
- **Status of similar technology-development investing: Active.** Citi Ventures publicly presents itself as an investment arm focused on the future of finance.^[6] On the reviewed page, fund size, dry powder, and specific check sizes were **not public**.
- **Investment stage: Multi-stage** is plausible from portfolio pattern, but the reviewed page did not specify series focus; therefore stage precision is **not public on the page reviewed**.^[6]
- **Firm structure: Corporate VC.**^[6]
- **Investment philosophy:** Strategic, future-of-finance orientation; more detailed philosophy was **not published** on the page reviewed.^[6]
- **How a developing company would engage:** Engagement typically occurs through strategic network/warm intro to relevant investing personnel; a public startup application form was **not found** on the reviewed page.^[6]

Secondary / more conditional fits

6) Btomorrow Ventures

- **Why this firm could invest in CVD graphene:** Btomorrow Ventures is the **corporate venture capital arm of BAT** and says it provides hands-on support to entrepreneurs.^[7] It is **not a fintech specialist**, so it is only a conditional fit if the graphene company has a hardware-heavy financial identity, security, or risk use case and the company's thesis overlaps with BAT's broader frontier-technology interests.
- **Status of similar technology-development investing: Active,** with the site stating that since launching in 2020 it has made **over 25 global investments**.^[7] However, a fintech-specific or financial-infrastructure investing line was **not found** on the reviewed page.
- **Investment stage:** Appears venture-oriented; exact stage/check sizes **not public** on the reviewed page.^[7]
- **Firm structure: Corporate VC.**^[7]
- **Investment philosophy:** Founder-supportive / hands-on support messaging is public; fuller investment philosophy is **not published** on the reviewed page.^[7]
- **How a developing company would engage:** Through the public website and team pages; strategic CVC process likely applies. No application form was found on the reviewed page.^[7]

Lower-priority or insufficient-evidence names

7) F-Prime Capital

- **Why it appeared in screening:** F-Prime is a known venture platform with financial-services exposure, but the currently accessible public web page reviewed in this research session did **not** expose investable thesis details because the domain resolved to a minimal SmugMug-hosted page rather than a usable investment site snapshot.[8]
- **Status of similar technology-development investing:** **Not found** from the reviewed accessible page.[8]
- **Investment stage / structure / philosophy / engagement:** **Not established from accessible primary source in this session.** Excluded from the recommendation set pending better source access.

Practical interpretation for a CVD graphene startup

A CVD graphene startup will usually **not** win meetings with fintech specialists by leading with the material. The credible path is to present as a **financial infrastructure company enabled by graphene**, with the material unlocking a measurable fintech outcome such as: - lower fraud loss through better authentication sensing, - faster or cheaper KYC / identity verification hardware, - improved insurtech risk detection and monitoring, - more resilient capital-markets or banking infrastructure components, - or a compliance / security / data-capture advantage in regulated workflows.

On that framing, the strongest current targets from public evidence are: 1. **Nyca** — clearest public thesis around payments, risk, and infrastructure.[2][3] 2. **Commerce Ventures** — clear thematic fintech focus with infrastructure/risk portfolio examples.[1] 3. **Portage** — broad multi-stage fintech platform suited to venture or later-stage financing.[4] 4. **Motive Partners** — strongest if the company already has enterprise traction and a productized financial-technology application.[5] 5. **Citi Ventures** — strongest if strategic bank relevance is explicit and the startup can map to regulated financial infrastructure needs.[6]

Recommendation matrix

Firm	Why it fits CVD graphene in fintech	Similar-investment status	Stage	Structure	Philosophy	Readiness to engage
Commerce Ventures	Thematic focus on future platforms for retail/financial services; infra/risk pattern	Active	Multi-stage	Traditional institution on VC	Deeply thematic / thesis-driven	Warm intro preferred; public contact prompt[1]
Nyca	Explicit focus on	Active;	Multi-	Traditional	Thesis-driven	Public

Firm	Why it fits CVD graphene in fintech	Similar-investment status	Stage	Structure	Philosophy	Readiness to engage
Partners	payments, risk, treasury ops, fraud tools, financial-system modernization	investing from fifth fund	stage ("seed to scale")	traditional institution VC		contact email + named partners; warm intro best[2][3]
Portage	Dedicated global fintech and financial-services platform across venture and later stage	Active	Multi-stage	Traditional institution VC / growth platform	Not published beyond fintech specialization	Warm intro preferred[4]
Motive Partners	Financial technology specialist across venture to growth & buyout	Active	Multi-stage	Traditional institution VC / PE-growth platform	Invest/Operate/Innovate; disciplined underwriting	Warm intro preferred[5]
Citi Ventures	Strategic fit if graphene shifts bank/security/market infrastructure	Active	Not public on reviewed page	Corporate VC	Strategic future-of-finance	Strategic intro route; no open app found[6]
Btomorrow Ventures	Conditional fit only for frontier hardware/security use case touching finance	Active, but fintech line not found	Venture re-oriented, exact stage not public	Corporate VC	Hands-on support; otherwise not published	Strategic/warm intro[7]

Sources

[1] Commerce Ventures, homepage and sector/themes/portfolio pages, <https://commerce.vc/> [2] Nyca Partners, homepage, <https://www.nyca.com/> [3] Nyca Partners, team page, including Hans Morris bio stating Nyca is investing from its fifth fund,

<https://www.nyca.com/team> [4] Portage, homepage and strategy descriptions, <https://portageinvest.com/> [5] Motive Partners, homepage, <https://motivepartners.com/> [6] Citi Ventures, homepage, <https://www.citi.com/ventures/> [7] Btomorrow Ventures, homepage, <https://www.btomorrowv.com/> [8] F-Prime accessible page reviewed in session, <https://www.fprime.com/>

Generalist investors potentially relevant to CVD graphene

Scope and screening logic

This briefing focuses on **institutional capital providers with generalist or broad multi-sector investing models** that could plausibly fund a **technology-development company building CVD graphene**, rather than end-users or narrowly vertical industrial strategics. I prioritized firms that publicly show one or more of the following: (1) a broad, generalist platform; (2) willingness to underwrite deep-tech, hard-tech, materials, semiconductors, industrial, energy, or science-led companies; and/or (3) an engagement model that a pre-commercial or commercialization-stage graphene company could actually access. Claims below are cited to firm websites first, then reputable reporting when needed.

Bottom line

For a CVD graphene company, the strongest generalist-fit investors are not the broadest consumer/software generalists, but the **generalist or multi-sector firms with explicit science, hard-tech, industrial, semiconductor, climate, or national-security tolerance**. In this set, **Lux Capital, Khosla Ventures, General Catalyst, Sequoia Capital, Andreessen Horowitz, Lowercarbon Capital, Energy Impact Partners, and In-Q-Tel** are the most defensible names to approach on public evidence, though they vary sharply in stage fit and in whether they back platform science versus commercialization infrastructure. Sequoia and a16z are best viewed as **selective, team-and-market-driven stretch targets** rather than first calls for raw materials-process risk. Lux, Khosla, Lowercarbon, EIP, and IQT show stronger public evidence for underwriting non-software technical risk.[1][2][3][4][5][6][7][8]

1) Lux Capital

- **Why Lux would invest in CVD graphene:** Lux is a broad science-and-technology venture firm whose public positioning is to turn “sci-fi into sci-fact” and to back frontier technical companies across multiple domains.[2] That makes CVD graphene plausible when the company is framed as a **platform materials/manufacturing breakthrough** with implications for semiconductors, sensing, defense, energy, or advanced industry, rather than as a commodity-materials bet. Lux’s public mission framing and partner bench, including technically trained investors such as Shahin

Farshchi, PhD, support a thesis of willingness to underwrite hard scientific diligence.[2][9]

- **Current status of similar technology-development investing: Active.** Lux's companies page and recent news flow show ongoing hard-tech and frontier-science activity, and Lux announced **Lux Ventures IX** in January 2026. Bloomberg also reported Lux had raised **\$1.5 billion** for a fund focused on new science and defense.[2][9] Public portfolio examples show exposure to advanced hardware and science-led businesses rather than only software.[2]
- **Investment stage: Multi-stage.** Lux does not publish a universal check-size table on the pages reviewed, so exact check sizes are **not public on the cited pages**. Its public materials and portfolio pattern indicate investing from early venture onward.[2][9]
- **Firm structure: Traditional institution VC.**[2][9]
- **Investment philosophy: Publicly thesis-driven / science-forward / technical-diligence oriented.** Lux explicitly says, "We believe before others understand," and frames the firm around science and technology investing, not a single vertical silo.[2]
- **How to engage:** Standard venture warm-intro dynamics likely apply; Lux also publishes general contact routes including **info@luxcapital.com** and lists its investing partners publicly.[2][10] A developing graphene company should target a warm introduction to a relevant investing partner, especially one with hardware/science pattern recognition. Named partners are public, but a specific "graphene owner" is **not published**. [10]

2) Khosla Ventures

- **Why Khosla would invest in CVD graphene:** Khosla is a broad venture platform that publicly presents investment theses company by company and has a long history across enterprise, sustainability, frontier science, and industrial technologies.[3] For CVD graphene, the fit is strongest if the company is pitched as a **large-market enabling technology**—for example next-gen electronics, energy systems, industrial decarbonization, or advanced manufacturing—with a credible platform moat.
- **Current status of similar technology-development investing: Active.** Khosla's portfolio page shows the firm investing across sectors and explicitly publishing "investment thesis" rationales for portfolio companies.[3] While the specific pages reviewed do not publish a current fund size or dry-powder number, the firm's portfolio includes frontier technologies such as **fault-tolerant quantum computers (Oratomic)**, suggesting ongoing appetite for technically difficult development bets.[3] Current investing appears active; a pause was **not found**.
- **Investment stage: Multi-stage.** The public portfolio spans early and later venture-backed companies; exact check sizes on the reviewed pages are **not public**. [3]
- **Firm structure: Traditional institution VC.**[3]
- **Investment philosophy:** Publicly a mix of **thesis-driven and opportunistic around large technical markets**. The firm's published "investment thesis" blurbs

indicate explicit market-plus-technology reasoning rather than pure category momentum.[3]

- **How to engage:** Khosla publishes a **contact** route on site; in practice, warm intros are the standard route for venture consideration. A specific partner owning CVD graphene is **not published** on the pages reviewed.[3]

3) General Catalyst

- **Why General Catalyst would invest in CVD graphene:** General Catalyst is a large multi-sector platform rather than a narrow industrials fund. Its fit for CVD graphene is strongest when the company is framed around a **platform company with outsized category-creation potential** in semiconductors, AI hardware enablement, energy systems, defense, or resilient manufacturing. The presence of companies such as **Re:Build** and **Alsym Energy** in its public portfolio shows tolerance for physical-world and industrial technology, not only software.[4]
- **Current status of similar technology-development investing: Active.** General Catalyst publicly states it has **900+ portfolio companies** as of 6/30/25 and shows ongoing investment activity across sectors on its portfolio page.[4] Public evidence does not indicate a pause in comparable physical-tech investing. A precise current fund amount on the cited page is **not public**.
- **Investment stage: Multi-stage.** Public portfolio mix spans early and growth outcomes; exact check sizes on the reviewed page are **not public**. [4]
- **Firm structure: Traditional institution VC.**[4]
- **Investment philosophy: Not published** in a single hard-tech-specific thesis on the cited page, though the firm publicly emphasizes building and backing companies that “shape what’s next.”[4]
- **How to engage:** Warm intro is the most realistic route. GC’s website publishes contact and firm pages, but a specific application form for hard-tech founders on the cited page was **not found**. [4]

4) Sequoia Capital

- **Why Sequoia would invest in CVD graphene:** Sequoia is a classic generalist platform investing across sectors and stages. Publicly, its companies list includes **AMP Robotics, Arq, Carbon, Biomodal, BridgeBio**, and other non-pure-software businesses, which shows some tolerance for science-enabled and industrial businesses.[1] For CVD graphene, Sequoia fit depends less on “materials” per se and more on whether the startup can present itself as a **category-defining company with a very large market and exceptional founding team**.
- **Current status of similar technology-development investing: Active, but selective.** Sequoia’s current portfolio remains broad and live.[1] On the cited page, firmwide dry powder and exact fund size are **not public**. I did not find a public CVD-graphene-like thesis statement from Sequoia; this is therefore a stretch but real possibility rather than a core pattern.
- **Investment stage: Multi-stage.** Sequoia operates from seed through growth, but exact check sizes on the cited pages are **not public**. [1]

- **Firm structure: Traditional institution VC.**[1]
- **Investment philosophy:** Public ethos is founder/company-building oriented; a materials-specific philosophy is **not published** on the cited pages.[1]
- **How to engage:** Warm intro strongly preferred. Sequoia does not publish an open application flow for this type of financing on the cited pages. Relevant theme-owning partner for graphene is **not public**. [1]

5) Andreessen Horowitz (a16z)

- **Why a16z would invest in CVD graphene:** a16z is a large multi-sector venture platform. The public fit for CVD graphene is not because a16z is a materials specialist, but because it can back **enabling infrastructure** for large compute, semiconductor, industrial, or defense markets if the company's wedge is massive enough.[11] This is most plausible if the startup has a clear commercialization path into AI hardware, communications, sensing, or advanced manufacturing.
- **Current status of similar technology-development investing: Active.** a16z's public portfolio page states the firm maintains a broad investment list and updates it monthly; it also publishes an official investment list and accelerator company lists.[11] The cited page does not provide current hard-tech dry powder or a materials-specific fund sleeve. A pause in relevant investing was **not found**.
- **Investment stage: Multi-stage.** The public portfolio page includes "Stage at Investment" as a sorting dimension, confirming investment across stages; exact check sizes on the cited page are **not public**. [11]
- **Firm structure: Traditional institution VC.**[11]
- **Investment philosophy:** Broadly thesis-led around major technology platforms; a CVD-graphene-specific philosophy is **not published** on the cited page.[11]
- **How to engage:** Warm intro is standard. The cited page does not publish a specific hard-tech application route.[11]

6) Lowercarbon Capital

- **Why Lowercarbon would invest in CVD graphene:** Lowercarbon is not a classic all-sector generalist, but it behaves as a broad technology investor within climate and industrial decarbonization. It is relevant where CVD graphene is positioned as an **enabling industrial/climate material**—for batteries, membranes, power electronics efficiency, lightweighting, heat management, or manufacturing emissions reduction. Lowercarbon explicitly says it backs companies that "make real money slashing CO2 emissions" and funds technologies across industrial materials, energy, and agriculture.[5]
- **Current status of similar technology-development investing: Active / evergreen-style ongoing deployment not clearly published.** The website actively highlights hard-science climate investments including **Commonwealth Fusion Systems, Solugen, Antora, Crusoe, Crux**, and others.[5] The cited page does not publish a recent fund close or check-size schedule, but it clearly indicates continuing deployment and support "from the inception of an idea to the national launch of a product." [5]

- **Investment stage: Multi-stage**, with clear early-stage willingness implied by investing “from the inception of an idea”; exact check sizes are **not public** on the cited page.[5]
- **Firm structure: Traditional institution VC**.[5]
- **Investment philosophy:** Publicly **impact-plus-commercial-return**, strongly thesis-driven around decarbonization, but broad as to sector/mechanism.[5]
- **How to engage:** Warm intro preferred; a general web presence and team pages are public. A named graphene-theme partner and formal application intake were **not found** on the cited page.[5]

7) Energy Impact Partners (EIP)

- **Why EIP would invest in CVD graphene:** EIP is not an all-sector generalist, but it is broad across energy, infrastructure, industrial, and climate technologies and brings a large strategic network. For CVD graphene, EIP fits if the startup is commercializing graphene into **grid equipment, batteries, thermal management, power electronics, industrial decarbonization, or energy infrastructure materials**. Its corporate network can matter if qualification cycles are strategic.[6]
- **Current status of similar technology-development investing: Active.** EIP’s homepage states it has **\$0b+ AUM** on the rendered page text, along with a large strategic-partner base and portfolio including **Form Energy** and other industrial/climate companies.[6] The page also lists current 2026 news flow, indicating active investing and portfolio development.[6]
- **Investment stage: Multi-stage**, given the breadth of portfolio and AUM; exact check sizes are **not public** on the cited homepage.[6]
- **Firm structure:** Best categorized here as **corporate VC / strategic networked investment platform** because its model explicitly convenes corporates and entrepreneurs, though it also operates as an institutional fund manager.[6]
- **Investment philosophy:** Publicly **strategic-commercial / ecosystem-driven**—EIP says it brings together entrepreneurs and influential corporates to transform the economy.[6]
- **How to engage:** EIP publicly offers **contact us** routes; engagement often likely includes strategic-fit evaluation with its partner network.[6] A publicly named graphene-owning partner on the cited page was **not found**.

8) In-Q-Tel (IQT)

- **Why IQT would invest in CVD graphene:** IQT is highly relevant when CVD graphene has **national-security applications** in microelectronics, sensors, communications, energy security, or specialized hardware. IQT explicitly says its mission is to identify, evaluate, and leverage emerging commercial technologies for the U.S. national security community and allies, and specifically names **energy security** and **next-generation microelectronics** as focus areas.[7] That creates a strong thesis fit for graphene as an enabling defense/microelectronics platform.
- **Current status of similar technology-development investing: Active.** IQT’s portfolio page shows **800+ total investments** and current active investments

across Hardware, Energy, and Microelectronics & Quantum.[8] Its mission page confirms a continuing mandate to fund and scale breakthrough technologies.[7]

- **Investment stage:** Best characterized as **early-stage / multi-stage selective**, though exact stage bands and check sizes are **not public** on the cited pages.[7][8]
- **Firm structure:** **University/government-backed funds** is the closest category provided in the prompt, though more precisely IQT is an independent nonprofit strategic investor serving U.S. government partners.[7]
- **Investment philosophy:** Publicly **mission-driven, strategic, and technical-diligence oriented**; IQT emphasizes identifying breakthrough technologies that close capability gaps for government partners.[7]
- **How to engage:** Unlike many VCs, IQT publishes a direct route: “**Submit a Business Plan**” / “**get in touch**” on its portfolio page for companies that support the national-security mission.[8]

9) SineWave Ventures

- **Why SineWave would invest in CVD graphene:** SineWave is a smaller investor with a public thesis at the intersection of enterprise technology and public sector applications. It is not a pure materials investor, but could be relevant if a CVD graphene company’s first products are **defense, public-sector, or enterprise infrastructure hardware/systems** rather than bulk materials. Its website says it makes **early-stage investments in commercial tech with applications for enterprises and the public sector**. [12]
 - **Current status of similar technology-development investing:** **Active.** The firm publicly markets itself as actively investing and showcases a live portfolio presence. [12] A specific recent fund announcement or dry powder figure was **not found** on the cited page.
 - **Investment stage:** **Early-stage (Series A/B) or seed-to-early** orientation is implied by the phrase “early-stage investments”; exact check sizes are **not public** on the cited page. [12]
 - **Firm structure:** **Traditional institution VC.** [12]
 - **Investment philosophy:** Publicly **thesis-driven around enterprise/public-sector convergence.** [12]
 - **How to engage:** The site publishes contact emails including **Team@sinewave.vc** and **InvestorRelations@sinewave.vc**. [12] Warm intros are still likely best.
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Comparative assessment

Highest-conviction generalist-fit targets

1. **Lux Capital** — strongest public evidence of science-led, broad hard-tech appetite; good fit for platform materials with deep technical risk. [2][9][10]
2. **Khosla Ventures** — broad cross-sector firm with a demonstrated willingness to articulate investment theses around frontier technologies. [3]

3. **Lowercarbon Capital** — especially strong if the graphene story is tied to industrial decarbonization, power electronics efficiency, storage, or climate-enabling infrastructure.[5]
4. **In-Q-Tel** — highly relevant if the product roadmap has defense, microelectronics, sensing, or energy-security use cases; unusually clear inbound process.[7][8]
5. **Energy Impact Partners** — attractive if the company is moving from lab to grid/industrial commercialization and needs strategic counterparties.[6]

Real but more selective/stretch targets

6. **General Catalyst** — credible if the startup is a platform company with a large industrial outcome, but less explicit public evidence on materials-process risk appetite than Lux/Khosla.[4]
7. **Sequoia Capital** — possible for exceptional teams and massive markets, but public evidence suggests high bar and less explicit technical-thesis signaling for raw materials commercialization.[1]
8. **Andreessen Horowitz** — similar to Sequoia: viable mainly once the story is an infrastructure platform with clear category creation, not just a novel material.[11]
9. **SineWave Ventures** — best only for defense/public-sector-adjacent commercialization wedges.[12]

Fundraising implications for a CVD graphene startup

- **Lead with the market wedge, not the material.** Generalists rarely underwrite “graphene because graphene.” They respond better to a wedge such as semiconductor performance, thermal management, membrane economics, defense sensing, or power-system efficiency.[1][2][3][4][5][6][7][11]
- **Show manufacturability and qualification path.** Because CVD graphene often carries scale-up skepticism, firms with generalist mandates will want evidence that process risk is collapsing: pilot yield, substrate compatibility, transfer method, capex assumptions, unit economics, and customer qualification milestones.
- **Match investor type to commercialization stage.** IQT and SineWave are stronger where public-sector adoption is central; EIP where regulated energy/industrial ecosystems matter; Lux/Khosla for venture-scale platform science; Sequoia/a16z/GC after the market narrative is more legible.[2][3][4][6][7][8][11][12]

Sources

[1] Sequoia Capital, “Our Companies,” <https://sequoiacap.com/our-companies?spotlight=no>

[2] Lux Capital, homepage and companies pages, <https://www.luxcapital.com/> and <https://www.luxcapital.com/companies>

[3] Khosla Ventures, “Portfolio,” <https://www.khoslaventures.com/portfolio>

[4] General Catalyst, “Portfolio,” <https://www.generalcatalyst.com/portfolio>

- [5] Lowercarbon Capital, homepage, <https://lowercarbon.com/>
- [6] Energy Impact Partners, homepage, <https://www.energyimpactpartners.com/>
- [7] In-Q-Tel, “Mission,” <https://www.iqt.org/mission>
- [8] In-Q-Tel, “Portfolio,” <https://www.iqt.org/portfolio>
- [9] Lux Capital, “Announcing Lux Ventures IX,” and related companies/news page references surfaced on Lux site; companies page text also references Bloomberg report “Lux Capital Raises \$1.5 billion for Fund Focused on New Science, Defense,” <https://www.luxcapital.com/companies>
- [10] Lux Capital, “People,” <https://www.luxcapital.com/people>
- [11] Andreessen Horowitz, “Portfolio,” <https://a16z.com/portfolio/>
- [12] SineWave Ventures, homepage, <https://sinewave.vc/>
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Organization landscape briefing: institutional capital for CVD graphene (others sector-focus)

Scope and framing

This briefing focuses on institutional capital providers whose **stated thesis is outside the usual named buckets** yet still plausibly fits a company developing **CVD graphene**. The emphasis is on organizations with specialist theses in **advanced materials, industrial transformation, additive / advanced manufacturing, physical AI / industrial systems, climate-industrial decarbonization, and government-backed tough-tech commercialization**. It excludes operating companies and end-users. All claims are cited inline.

Bottom line

For a CVD graphene company, the best institutional fits in this “others” bucket are investors with explicit exposure to **advanced materials, industrial manufacturing platforms, plasma / deposition processes, energy-transition materials, or government/mission-tech commercialization**. The strongest near-term fit set is:

1. **Material Impact** — direct stated focus on material science company creation and inception-stage backing.¹⁰⁷¹⁰⁸

¹⁰⁷ Material Impact, home page, states it is “Building deep tech companies powered by material science,” <https://www.materialimpact.com/>

2. **Engine Ventures** — explicitly funds Tough Tech including **Advanced Materials** and provides a founder application path.¹⁰⁹¹¹⁰
3. **HAX / SOSV** — pre-seed hard-tech investor with a new **Plasma Forge** platform oriented toward plasma, semiconductors, materials, and manufacturing.¹¹¹¹¹²¹¹³
4. **AM Ventures** — focused on industrial additive manufacturing and explicitly includes **materials production, refining, or R&D for metals, polymers, ceramics and composites**.¹¹⁴¹¹⁵
5. **Anzu Partners** — invests in breakthrough **clean tech, industrial, and life science technologies** with venture, private credit, and public structures.¹¹⁶
6. **DCVC** — deep-tech VC with an explicit sector in **industrial transformation & advanced manufacturing** and a technical-diligence culture.¹¹⁷¹¹⁸

¹⁰⁸ Material Impact, about page, states \$700M+ AUM across Funds I-III and that it backs and builds inception-stage companies, <https://www.materialimpact.com/about/>

¹⁰⁹ Engine Ventures, home page, describing breakthrough technology, Tough Tech mission, featured companies including Foundation Alloy, and Katie Rae quote on technical support, <https://engineventures.com/>

¹¹⁰ Engine Ventures, founder connect page with explicit Advanced Materials category and founder submission form, <https://engineventures.com/connect>

¹¹¹ HAX, home page, says it is built for pre-seed startups solving hard problems with hard tech; cites \$550K initial investment and leadership by Duncan Turner and Avra van der Zee, <https://hax.co/>

¹¹² HAX Plasma Forge page, describing commercialization of plasma into industrial products, focus on semiconductors/materials/advanced manufacturing, up to \$550K seed capital, and \$51M dedicated backing from SOSV/NJEDA/PPPL, <https://hax.co/hax-plasma-forge/>

¹¹³ SOSV home page, stating SOSV is the world's most active deep-tech venture capital firm investing at pre-seed, <https://sosv.com/>

¹¹⁴ AM Ventures, home page, states it invests in industrial 3D printing innovations and lists "Materials production, refining, or R&D for metals, polymers, ceramics and composites," <https://amventures.com/>

¹¹⁵ AM Ventures, apply/join page and public application link, <https://amventures.com/apply/>

¹¹⁶ Anzu Partners, home page, states \$1B AUM and investing in clean tech, industrial, and life science technologies via venture, private credit, and public structures, <https://www.anzupartners.com/>

7. **Breakthrough Energy Ventures** — if the graphene platform is tightly tied to climate-critical industrial decarbonization, batteries, grid, or process efficiency.¹¹⁹¹²⁰
8. **Innovation Industries** — European deep-tech VC that says it focuses on complex, ground-breaking technologies with impact orientation.¹²¹
9. **Nysnø Climate Investments** — state-backed climate investor for early-stage emissions-reducing companies, directly or through funds.¹²²
10. **In-Q-Tel (IQT)** — government-backed strategic investor if the graphene use case maps to sensing, semiconductors, secure electronics, or national-security materials platforms.¹²³

Below is the firm-by-firm assessment.

1) Material Impact

- **Why it would invest in CVD graphene:** Material Impact says it is “building deep tech companies powered by material science” and that “the future of earth and humankind depends on material science and deep tech innovations.” That is one of

¹¹⁷ DCVC, home page, states “We are deep tech venture capital,” “We have more published scientists than MBAs,” and lists Industrial Transformation & Advanced Manufacturing among areas, <https://www.dvcv.com/>

¹¹⁸ DCVC, companies page, includes Brimstone “Transforming industry by co-producing widely used and critical materials,” <https://www.dvcv.com/companies/>

¹¹⁹ Breakthrough Energy, people page, biographies for Rodi Guidero, Eric Toone, Carmichael Roberts and broader BEV team, <https://www.breakthroughenergy.org/people>

¹²⁰ Breakthrough Energy, portfolio page, including Stratus Materials, KoBold Metals, Redwood Materials and other climate-tech companies, <https://www.breakthroughenergy.org/portfolio>

¹²¹ Innovation Industries, home page, describing itself as a European deep tech VC, emphasizing complexity, technology expertise, and impact, <https://www.innovationindustries.com/>

¹²² Nysnø Climate Investments, English home page, states mission, 49 investments, 429 companies reached via risk capital, and 5.5bn NOK AUM, <https://nysnoinvest.no/en/>

¹²³ IQT home page, describing its model of identifying startups in strategic technology areas, evaluating government mission fit, and naming mission partners, <https://www.iqt.org/>

the clearest thesis fits for a CVD graphene developer in this list.¹²⁴ Its stated model is to “back and build inception-stage companies,” which suits a technology-development company before broad commercial scale.¹²⁵

- **Current status of similar technology-development investing: Active.** The firm says it has **\$700M+ AUM across Funds I, II, and III**.¹²⁶ Its portfolio includes materials-heavy companies such as **6K** (advanced materials production via plasma), **CorePower Magnetics** (advanced magnetic materials/components), and **Mattiq** (nanomaterials discovery/development), showing ongoing appetite for enabling-materials businesses.¹²⁷
- **Investment stage: Pre-seed/seed-focused** overall orientation, though its wording is “inception-stage companies.” Public check sizes are **not published** on the cited pages.¹²⁸
- **Firm structure: Traditional institution VC.**¹²⁹
- **Investment philosophy: Thesis-driven, science/materials-driven, impact-aware.** It publicly frames itself around material science, deep tech, and impact, including a public B-Corp-related impact statement.¹³⁰¹³¹
- **How to engage:** Public contact via **info@materialimpact.com**; no public application form was found on the cited pages. Named partner relevance is

¹²⁴ Material Impact, home page, states it is “Building deep tech companies powered by material science,” <https://www.materialimpact.com/>

¹²⁵ Material Impact, about page, states \$700M+ AUM across Funds I-III and that it backs and builds inception-stage companies, <https://www.materialimpact.com/about/>

¹²⁶ Material Impact, about page, states \$700M+ AUM across Funds I-III and that it backs and builds inception-stage companies, <https://www.materialimpact.com/about/>

¹²⁷ Material Impact, companies page, portfolio descriptions for 6K, CorePower Magnetics, Mattiq, and others, <https://www.materialimpact.com/companies/>

¹²⁸ Material Impact, about page, states \$700M+ AUM across Funds I-III and that it backs and builds inception-stage companies, <https://www.materialimpact.com/about/>

¹²⁹ Material Impact, home page, states it is “Building deep tech companies powered by material science,” <https://www.materialimpact.com/>

¹³⁰ Material Impact, home page, states it is “Building deep tech companies powered by material science,” <https://www.materialimpact.com/>

¹³¹ Material Impact, about page, states \$700M+ AUM across Funds I-III and that it backs and builds inception-stage companies, <https://www.materialimpact.com/about/>

strengthened by Breakthrough Energy's page noting **Carmichael Roberts** is a co-founder and managing partner of Material Impact.¹³²¹³³

2) Engine Ventures

- **Why it would invest in CVD graphene:** Engine says it invests in founders solving tough challenges with “breakthrough technology” and explicitly asks inbound founders whether their concept fits **Advanced Materials, Advanced Manufacturing, Semiconductors, Energy**, or related categories.¹³⁴¹³⁵ CVD graphene squarely fits that framing.
- **Current status of similar technology-development investing: Active.** Engine's site highlights portfolio companies including **Foundation Alloy** (“next generation of super metal alloys”) and semiconductor / energy hard-tech businesses, indicating recent, still-active investment in foundational technology platforms.¹³⁶ Public dry powder is **not published** on the cited page.
- **Investment stage: Pre-seed/seed-focused.** Its connect page is clearly oriented toward founders at concept stage, including affiliation with universities and national labs.¹³⁷
- **Firm structure: Traditional institution VC.**¹³⁸
- **Investment philosophy: Thesis-driven, technical-diligence-heavy, commercialization-oriented.** Engine says it brings “disciplined investing, deep technical insight, and long-term commitment.”¹³⁹

¹³² Material Impact, home page, states it is “Building deep tech companies powered by material science,” <https://www.materialimpact.com/>

¹³³ Breakthrough Energy, people page, biographies for Rodi Guidero, Eric Toone, Carmichael Roberts and broader BEV team, <https://www.breakthroughenergy.org/people>

¹³⁴ Engine Ventures, home page, describing breakthrough technology, Tough Tech mission, featured companies including Foundation Alloy, and Katie Rae quote on technical support, <https://engineventures.com/>

¹³⁵ Engine Ventures, founder connect page with explicit Advanced Materials category and founder submission form, <https://engineventures.com/connect>

¹³⁶ Engine Ventures, home page, describing breakthrough technology, Tough Tech mission, featured companies including Foundation Alloy, and Katie Rae quote on technical support, <https://engineventures.com/>

¹³⁷ Engine Ventures, founder connect page with explicit Advanced Materials category and founder submission form, <https://engineventures.com/connect>

¹³⁸ Engine Ventures, home page, describing breakthrough technology, Tough Tech mission, featured companies including Foundation Alloy, and Katie Rae quote on technical support, <https://engineventures.com/>

- **How to engage:** There is a direct founder intake form on the **Connect** page asking for the innovation, problem, category, affiliation, and current raise.¹⁴⁰ Named published leaders include **Katie Rae**, CEO & Managing Partner.¹⁴¹

3) HAX / SOSV

- **Why it would invest in CVD graphene:** HAX states it backs pre-seed startups solving industrial-scale problems with hard tech across **energy, advanced compute, transportation, health tech, and manufacturing**, using technologies “from plasma and physical AI to advanced chemistry.”¹⁴² Its new **HAX Plasma Forge** is especially relevant because it is built to commercialize plasma-enabled technologies for **semiconductors, materials, and advanced manufacturing**.¹⁴³
- **Current status of similar technology-development investing: Active and expanded.** HAX says it provides **\$550K initial investment** and that Plasma Forge has **\$51 million in dedicated funding**, including **\$24.5 million from SOSV** and **\$24.5 million over five years from NJEDA**, plus PPPL support.¹⁴⁴¹⁴⁵ That is unusually strong evidence that adjacent process/materials investing is active now.

¹³⁹ Engine Ventures, home page, describing breakthrough technology, Tough Tech mission, featured companies including Foundation Alloy, and Katie Rae quote on technical support, <https://engineventures.com/>

¹⁴⁰ Engine Ventures, founder connect page with explicit Advanced Materials category and founder submission form, <https://engineventures.com/connect>

¹⁴¹ Engine Ventures, home page, describing breakthrough technology, Tough Tech mission, featured companies including Foundation Alloy, and Katie Rae quote on technical support, <https://engineventures.com/>

¹⁴² HAX, home page, says it is built for pre-seed startups solving hard problems with hard tech; cites \$550K initial investment and leadership by Duncan Turner and Avra van der Zee, <https://hax.co/>

¹⁴³ HAX Plasma Forge page, describing commercialization of plasma into industrial products, focus on semiconductors/materials/advanced manufacturing, up to \$550K seed capital, and \$51M dedicated backing from SOSV/NJEDA/PPPL, <https://hax.co/hax-plasma-forge/>

¹⁴⁴ HAX, home page, says it is built for pre-seed startups solving hard problems with hard tech; cites \$550K initial investment and leadership by Duncan Turner and Avra van der Zee, <https://hax.co/>

¹⁴⁵ HAX Plasma Forge page, describing commercialization of plasma into industrial products, focus on semiconductors/materials/advanced manufacturing, up to \$550K seed capital, and \$51M dedicated backing from SOSV/NJEDA/PPPL, <https://hax.co/hax-plasma-forge/>

- **Investment stage: Pre-seed/seed-focused.** HAX explicitly says it is built for **pre-seed startups** and offers **up to \$550K in seed capital from SOSV**.¹⁴⁶¹⁴⁷
- **Firm structure: Traditional institution VC** for SOSV/HAX, with **government-backed program support** at Plasma Forge through NJEDA and PPPL partnership.¹⁴⁸¹⁴⁹
- **Investment philosophy: Hands-on technical commercialization.** HAX says it embeds engineering, design, and supply-chain support and helps turn “bench science” into investable, scalable companies.¹⁵⁰¹⁵¹
- **How to engage:** Apply through the public **APPLY** path on HAX’s site.¹⁵² Published investment leaders include **Duncan Turner** and **Avra van der Zee**.¹⁵³

¹⁴⁶ HAX, home page, says it is built for pre-seed startups solving hard problems with hard tech; cites \$550K initial investment and leadership by Duncan Turner and Avra van der Zee, <https://hax.co/>

¹⁴⁷ HAX Plasma Forge page, describing commercialization of plasma into industrial products, focus on semiconductors/materials/advanced manufacturing, up to \$550K seed capital, and \$51M dedicated backing from SOSV/NJEDA/PPPL, <https://hax.co/hax-plasma-forge/>

¹⁴⁸ SOSV home page, stating SOSV is the world’s most active deep-tech venture capital firm investing at pre-seed, <https://sosv.com/>

¹⁴⁹ HAX Plasma Forge page, describing commercialization of plasma into industrial products, focus on semiconductors/materials/advanced manufacturing, up to \$550K seed capital, and \$51M dedicated backing from SOSV/NJEDA/PPPL, <https://hax.co/hax-plasma-forge/>

¹⁵⁰ HAX, home page, says it is built for pre-seed startups solving hard problems with hard tech; cites \$550K initial investment and leadership by Duncan Turner and Avra van der Zee, <https://hax.co/>

¹⁵¹ HAX Plasma Forge page, describing commercialization of plasma into industrial products, focus on semiconductors/materials/advanced manufacturing, up to \$550K seed capital, and \$51M dedicated backing from SOSV/NJEDA/PPPL, <https://hax.co/hax-plasma-forge/>

¹⁵² HAX, home page, says it is built for pre-seed startups solving hard problems with hard tech; cites \$550K initial investment and leadership by Duncan Turner and Avra van der Zee, <https://hax.co/>

¹⁵³ HAX, home page, says it is built for pre-seed startups solving hard problems with hard tech; cites \$550K initial investment and leadership by Duncan Turner and Avra van der Zee, <https://hax.co/>

4) AM Ventures

- **Why it would invest in CVD graphene:** AM Ventures is focused on industrial 3D printing, but it explicitly includes **materials production, refining, or R&D for metals, polymers, ceramics and composites** among its core use cases.¹⁵⁴ A CVD graphene company that sells feedstock, coatings, composite-enabling materials, or process modules into additive/advanced manufacturing can fit this thesis.
- **Current status of similar technology-development investing: Active.** The firm says it invests in industrial 3D printing innovations and openly solicits startups via its “Apply now” flow.¹⁵⁵¹⁵⁶ Public recent fund size or dry powder was **not found** on the cited pages.
- **Investment stage: Early-stage / seed-to-Series A style orientation** is implied by startup application language, but precise public stage language and check sizes were **not published** on the cited pages.¹⁵⁷
- **Firm structure: Traditional institution VC.**¹⁵⁸
- **Investment philosophy: Thesis-driven around industrial additive manufacturing.**¹⁵⁹
- **How to engage:** Direct **Typeform application** is public, plus general contact at **info@amventures.com**.¹⁶⁰¹⁶¹ Team page says the firm is open to connecting and links to “Get in touch.”¹⁶²

¹⁵⁴ AM Ventures, home page, states it invests in industrial 3D printing innovations and lists “Materials production, refining, or R&D for metals, polymers, ceramics and composites,” <https://amventures.com/>

¹⁵⁵ AM Ventures, home page, states it invests in industrial 3D printing innovations and lists “Materials production, refining, or R&D for metals, polymers, ceramics and composites,” <https://amventures.com/>

¹⁵⁶ AM Ventures, [apply/join page](https://amventures.com/apply/) and public application link, <https://amventures.com/apply/>

¹⁵⁷ AM Ventures, [apply/join page](https://amventures.com/apply/) and public application link, <https://amventures.com/apply/>

¹⁵⁸ AM Ventures, home page, states it invests in industrial 3D printing innovations and lists “Materials production, refining, or R&D for metals, polymers, ceramics and composites,” <https://amventures.com/>

¹⁵⁹ AM Ventures, home page, states it invests in industrial 3D printing innovations and lists “Materials production, refining, or R&D for metals, polymers, ceramics and composites,” <https://amventures.com/>

¹⁶⁰ AM Ventures, team page, says firm is open to connecting and links to get in touch / apply, <https://amventures.com/team/>

5) Anzu Partners

- **Why it would invest in CVD graphene:** Anzu says it invests in **breakthrough industrial and life sciences technologies** and specifically in **clean tech, industrial, and life science technologies**.¹⁶³ CVD graphene fits when positioned as an industrial platform technology, process technology, or enabling material for energy / electronics / manufacturing.
- **Current status of similar technology-development investing: Active.** Anzu says it has **\$1 billion in assets under management** and operates across **venture, private credit, and public structures**.¹⁶⁴ That indicates current capacity and flexibility for technology-development companies, though a graphene-specific portfolio example was **not found** on the cited page.
- **Investment stage: Multi-stage.** Its combination of venture, credit, and public structures suggests investing beyond a single stage, but public check sizes were **not published** on the cited home page.¹⁶⁵
- **Firm structure: Traditional institution VC / growth-oriented crossover platform.**¹⁶⁶
- **Investment philosophy: Expert-heavy, commercialization-supportive.** Anzu says its team includes investors, operators, consultants, scientists, and engineers, and that it works alongside founders to bring world-changing technologies to market.¹⁶⁷

¹⁶¹ AM Ventures, apply/join page and public application link, <https://amventures.com/apply/>

¹⁶² AM Ventures, team page, says firm is open to connecting and links to get in touch / apply, <https://amventures.com/team/>

¹⁶³ Anzu Partners, home page, states \$1B AUM and investing in clean tech, industrial, and life science technologies via venture, private credit, and public structures, <https://www.anzupartners.com/>

¹⁶⁴ Anzu Partners, home page, states \$1B AUM and investing in clean tech, industrial, and life science technologies via venture, private credit, and public structures, <https://www.anzupartners.com/>

¹⁶⁵ Anzu Partners, home page, states \$1B AUM and investing in clean tech, industrial, and life science technologies via venture, private credit, and public structures, <https://www.anzupartners.com/>

¹⁶⁶ Anzu Partners, home page, states \$1B AUM and investing in clean tech, industrial, and life science technologies via venture, private credit, and public structures, <https://www.anzupartners.com/>

¹⁶⁷ Anzu Partners, home page, states \$1B AUM and investing in clean tech, industrial, and life science technologies via venture, private credit, and public structures, <https://www.anzupartners.com/>

- **How to engage:** Public **Contact Us** link is available on the site; named partners were **not extracted from the cited page**, so partner ownership is **not published** here.¹⁶⁸

6) DCVC

- **Why it would invest in CVD graphene:** DCVC explicitly identifies **Industrial Transformation & Advanced Manufacturing** as one of its content / sector areas and says it backs deep-tech entrepreneurs addressing high-stakes problems.¹⁶⁹ A graphene company with defensible science, manufacturing moat, and industrial end-market pull fits that mandate.
- **Current status of similar technology-development investing: Active.** DCVC's public company list includes **Brimstone**, described as "transforming industry by co-producing widely used and critical materials," which is direct evidence of appetite for foundational industrial materials innovation.¹⁷⁰ The site also emphasizes ongoing deep-tech activity across sectors.¹⁷¹
- **Investment stage: Multi-stage.** The site does not confine DCVC to seed or growth only, and the portfolio spans company maturities; precise public check sizes were **not published** on the cited pages.¹⁷²
- **Firm structure: Traditional institution VC.**¹⁷³
- **Investment philosophy: Science/technical diligence heavy.** DCVC says, "We have more published scientists than MBAs."¹⁷⁴

¹⁶⁸ Anzu Partners, home page, states \$1B AUM and investing in clean tech, industrial, and life science technologies via venture, private credit, and public structures, <https://www.anzupartners.com/>

¹⁶⁹ DCVC, home page, states "We are deep tech venture capital," "We have more published scientists than MBAs," and lists Industrial Transformation & Advanced Manufacturing among areas, <https://www.dcvc.com/>

¹⁷⁰ DCVC, companies page, includes Brimstone "Transforming industry by co-producing widely used and critical materials," <https://www.dcvc.com/companies/>

¹⁷¹ DCVC, home page, states "We are deep tech venture capital," "We have more published scientists than MBAs," and lists Industrial Transformation & Advanced Manufacturing among areas, <https://www.dcvc.com/>

¹⁷² DCVC, home page, states "We are deep tech venture capital," "We have more published scientists than MBAs," and lists Industrial Transformation & Advanced Manufacturing among areas, <https://www.dcvc.com/>

¹⁷³ DCVC, home page, states "We are deep tech venture capital," "We have more published scientists than MBAs," and lists Industrial Transformation & Advanced Manufacturing among areas, <https://www.dcvc.com/>

- **How to engage:** Public site offers portfolio/about/team navigation, but no founder application form was identified on the cited pages; warm intro is likely best. Theme ownership by named published partners was **not determined from the cited pages**.¹⁷⁵

7) Breakthrough Energy Ventures

- **Why it would invest in CVD graphene:** BEV is only a fit when the CVD graphene company is tightly tied to **climate impact**: e.g., industrial efficiency, batteries, grid hardware, hydrogen/electrolyzer components, thermal systems, power electronics, or lower-carbon materials. Its portfolio includes multiple advanced-materials or industrial decarbonization companies such as **Stratus Materials, KoBold Metals, and Redwood Materials**.¹⁷⁶
- **Current status of similar technology-development investing: Active.** Breakthrough Energy maintains a live portfolio and public investment team. Its people page lists multiple BEV investing professionals, including **Rodi Guidero, Eric Toone, and Carmichael Roberts** as managing partners.¹⁷⁷ On the cited portfolio page, it publicly showcases materials-related companies.¹⁷⁸
- **Investment stage: Multi-stage.** Public pages show a broad portfolio, but check sizes were **not published** on the cited pages.¹⁷⁹
- **Firm structure: Traditional institution VC.**¹⁸⁰

¹⁷⁴ DCVC, home page, states “We are deep tech venture capital,” “We have more published scientists than MBAs,” and lists Industrial Transformation & Advanced Manufacturing among areas, <https://www.dcvc.com/>

¹⁷⁵ DCVC, home page, states “We are deep tech venture capital,” “We have more published scientists than MBAs,” and lists Industrial Transformation & Advanced Manufacturing among areas, <https://www.dcvc.com/>

¹⁷⁶ Breakthrough Energy, portfolio page, including Stratus Materials, KoBold Metals, Redwood Materials and other climate-tech companies, <https://www.breakthroughenergy.org/portfolio>

¹⁷⁷ Breakthrough Energy, people page, biographies for Rodi Guidero, Eric Toone, Carmichael Roberts and broader BEV team, <https://www.breakthroughenergy.org/people>

¹⁷⁸ Breakthrough Energy, portfolio page, including Stratus Materials, KoBold Metals, Redwood Materials and other climate-tech companies, <https://www.breakthroughenergy.org/portfolio>

¹⁷⁹ Breakthrough Energy, portfolio page, including Stratus Materials, KoBold Metals, Redwood Materials and other climate-tech companies, <https://www.breakthroughenergy.org/portfolio>

¹⁸⁰ Breakthrough Energy, people page, biographies for Rodi Guidero, Eric Toone, Carmichael Roberts and broader BEV team, <https://www.breakthroughenergy.org/people>

- **Investment philosophy: Thesis-driven climate investing with deep technical evaluation.** Eric Toone's biography states he oversees Breakthrough Energy's technological roadmap and evaluation and references his scientific background.¹⁸¹
- **How to engage:** Warm intro is likely best. Public pages identify the managing partners and broader venture team, which helps target outreach toward climate-industrial materials themes.¹⁸²

8) Innovation Industries

- **Why it would invest in CVD graphene:** Innovation Industries says it is a **European deep tech venture capital fund** investing in deep-tech companies with "ground-breaking technologies" addressing fundamental challenges and creating sustainable competitive advantage.¹⁸³ That is a plausible fit for CVD graphene where the moat is process IP, yield, or device-enabling performance.
- **Current status of similar technology-development investing: Active.** The firm presents active portfolio and news flow, including large deep-tech rounds in semiconductors and robotics.¹⁸⁴ A graphene-specific or materials-specific portfolio example was **not found** on the cited page.
- **Investment stage: Early-stage (Series A/B) to multi-stage deep tech,** but exact public stage wording and check sizes were **not published** on the cited page.¹⁸⁵
- **Firm structure: Traditional institution VC.**¹⁸⁶
- **Investment philosophy: Thesis-driven and complexity-embracing.** It says, "We embrace complexity," and emphasizes technology and industry expertise.¹⁸⁷

¹⁸¹ Breakthrough Energy, people page, biographies for Rodi Guidero, Eric Toone, Carmichael Roberts and broader BEV team, <https://www.breakthroughenergy.org/people>

¹⁸² Breakthrough Energy, people page, biographies for Rodi Guidero, Eric Toone, Carmichael Roberts and broader BEV team, <https://www.breakthroughenergy.org/people>

¹⁸³ Innovation Industries, home page, describing itself as a European deep tech VC, emphasizing complexity, technology expertise, and impact, <https://www.innovationindustries.com/>

¹⁸⁴ Innovation Industries, home page, describing itself as a European deep tech VC, emphasizing complexity, technology expertise, and impact, <https://www.innovationindustries.com/>

¹⁸⁵ Innovation Industries, home page, describing itself as a European deep tech VC, emphasizing complexity, technology expertise, and impact, <https://www.innovationindustries.com/>

¹⁸⁶ Innovation Industries, home page, describing itself as a European deep tech VC, emphasizing complexity, technology expertise, and impact, <https://www.innovationindustries.com/>

- **How to engage:** Public **Connect / Email / LinkedIn** paths are listed on the site. Named partner ownership for graphene themes was **not published** on the cited page.¹⁸⁸

9) Nysnø Climate Investments

- **Why it would invest in CVD graphene:** Nysnø is a state-owned climate investor whose mission is to make long-term investments that reduce greenhouse gas emissions.¹⁸⁹ A CVD graphene company can fit if it is enabling lower-emission industrial processes, improved power electronics, batteries, membranes, composites that reduce energy use, or climate-relevant sensing.
- **Current status of similar technology-development investing: Active / evergreen-like continuing mandate.** Nysnø says it has **49 investments**, has provided risk capital to **429 companies** through direct and fund investments, and reports **5.5 billion NOK AUM**.¹⁹⁰ That is strong evidence of current capacity.
- **Investment stage: Early-stage;** Nysnø says it invests in **early-stage companies** and via funds.¹⁹¹
- **Firm structure: University/government-backed funds** — specifically a **state-owned** investment company.¹⁹²
- **Investment philosophy: Impact / emissions-reduction driven**, balanced with risk and return.¹⁹³

¹⁸⁷ Innovation Industries, home page, describing itself as a European deep tech VC, emphasizing complexity, technology expertise, and impact, <https://www.innovationindustries.com/>

¹⁸⁸ Innovation Industries, home page, describing itself as a European deep tech VC, emphasizing complexity, technology expertise, and impact, <https://www.innovationindustries.com/>

¹⁸⁹ Nysnø Climate Investments, English home page, states mission, 49 investments, 429 companies reached via risk capital, and 5.5bn NOK AUM, <https://nysnoinvest.no/en/>

¹⁹⁰ Nysnø Climate Investments, English home page, states mission, 49 investments, 429 companies reached via risk capital, and 5.5bn NOK AUM, <https://nysnoinvest.no/en/>

¹⁹¹ Nysnø Climate Investments, English home page, states mission, 49 investments, 429 companies reached via risk capital, and 5.5bn NOK AUM, <https://nysnoinvest.no/en/>

¹⁹² Nysnø Climate Investments, English home page, states mission, 49 investments, 429 companies reached via risk capital, and 5.5bn NOK AUM, <https://nysnoinvest.no/en/>

¹⁹³ Nysnø Climate Investments, English home page, states mission, 49 investments, 429 companies reached via risk capital, and 5.5bn NOK AUM, <https://nysnoinvest.no/en/>

- **How to engage:** Public contact details are published, including **post@nysnoinvest.no** and phone number, and the site offers team pages.¹⁹⁴ Named thematic partner ownership was **not published** on the cited page.

10) In-Q-Tel (IQT)

- **Why it would invest in CVD graphene:** IQT invests to serve U.S. and allied government mission needs and says it identifies startups developing game-changing innovations in strategic technology areas, then evaluates how they can serve government partners.¹⁹⁵ CVD graphene is relevant where it improves sensors, RF devices, advanced electronics, thermal management, coatings, or specialized materials for defense/intelligence use.
- **Current status of similar technology-development investing: Active.** IQT's site states it works with a broad set of mission partners including the **CIA, DIA, NSA, NRO, NSA, DHS, U.S. Cyber Command, Space Force**, plus newer partners including the **U.S. Army, DOE NNSA, and Department of the Navy**.¹⁹⁶ Specific graphene-adjacent portfolio evidence was **not found** on the cited pages.
- **Investment stage: Multi-stage / strategic early commercialization**, but check sizes are **not public** on the cited page.¹⁹⁷
- **Firm structure: University/government-backed funds** category equivalent here: a **government-backed strategic investment organization**.¹⁹⁸
- **Investment philosophy: Mission-driven, strategic commercialization with deep technical adaptation.** IQT says it identifies startups, evaluates fit for

¹⁹⁴ Nysnø Climate Investments, English home page, states mission, 49 investments, 429 companies reached via risk capital, and 5.5bn NOK AUM, <https://nysnoinvest.no/en/>

¹⁹⁵ IQT home page, describing its model of identifying startups in strategic technology areas, evaluating government mission fit, and naming mission partners, <https://www.iqt.org/>

¹⁹⁶ IQT home page, describing its model of identifying startups in strategic technology areas, evaluating government mission fit, and naming mission partners, <https://www.iqt.org/>

¹⁹⁷ IQT home page, describing its model of identifying startups in strategic technology areas, evaluating government mission fit, and naming mission partners, <https://www.iqt.org/>

¹⁹⁸ IQT home page, describing its model of identifying startups in strategic technology areas, evaluating government mission fit, and naming mission partners, <https://www.iqt.org/>

government needs, and leverages in-house expertise to adapt and transfer technologies.¹⁹⁹

- **How to engage:** Public website and portfolio pages are available; strategic engagement is typically through mission fit rather than open founder application. Named partner-equivalent ownership is **not published** in the cited material.²⁰⁰

11) Breakthrough-style climate industrialists: Lowercarbon Capital

- **Why it would invest in CVD graphene:** Lowercarbon says it backs companies “slashing CO₂” across **energy, transportation, industrial materials, and agriculture**.²⁰¹ CVD graphene can fit if directly tied to emissions reduction through industrial materials substitution, better batteries, power electronics, membranes, or process efficiency.
- **Current status of similar technology-development investing: Active.** The firm publicly describes continued support from company inception onward and highlights hard-science companies such as Commonwealth Fusion Systems and Solugen.²⁰² Graphene-specific examples were **not found** on the cited page.
- **Investment stage: Multi-stage.** Lowercarbon says it supports companies “from the inception of an idea to the national launch of a product.”²⁰³
- **Firm structure: Traditional institution VC.**²⁰⁴
- **Investment philosophy: Thesis-driven climate investing, founder-supportive, commercially minded.** It explicitly argues that “fixing the planet is just good business.”²⁰⁵

¹⁹⁹ IQT home page, describing its model of identifying startups in strategic technology areas, evaluating government mission fit, and naming mission partners, <https://www.iqt.org/>

²⁰⁰ IQT home page, describing its model of identifying startups in strategic technology areas, evaluating government mission fit, and naming mission partners, <https://www.iqt.org/>

²⁰¹ Lowercarbon Capital, home page, describing focus on slashing CO₂ including industrial materials and support from inception onward, <https://lowercarbon.com/>

²⁰² Lowercarbon Capital, home page, describing focus on slashing CO₂ including industrial materials and support from inception onward, <https://lowercarbon.com/>

²⁰³ Lowercarbon Capital, home page, describing focus on slashing CO₂ including industrial materials and support from inception onward, <https://lowercarbon.com/>

²⁰⁴ Lowercarbon Capital, home page, describing focus on slashing CO₂ including industrial materials and support from inception onward, <https://lowercarbon.com/>

²⁰⁵ Lowercarbon Capital, home page, describing focus on slashing CO₂ including industrial materials and support from inception onward, <https://lowercarbon.com/>

- **How to engage:** Public website does not show an application flow in the cited text; warm intro likely best. Named partner ownership for graphene was **not published** on the cited page.²⁰⁶

12) Momenta

- **Why it would invest in CVD graphene:** Momenta focuses on the physical economy where “digital intelligence meets physical execution,” across **energy, manufacturing, supply chain, and smart space**, and invests in the hardware that powers industrial systems.²⁰⁷ It is a fit if the graphene company’s first products are industrial hardware, sensing, or manufacturing-system components rather than raw materials alone.
- **Current status of similar technology-development investing: Active.** Momenta says it has made **200+ investments**, has **5 funds**, and reports **22 exits**.²⁰⁸ Its publicly stated sectors are industrial and physical-AI-heavy, but a graphene-adjacent materials portfolio example was **not found** on the cited page.
- **Investment stage: Multi-stage.** The firm has both **Investment** and **Growth** engines.²⁰⁹
- **Firm structure: Traditional institution VC / growth platform.**²¹⁰
- **Investment philosophy: Industrial-systems thesis-driven, operator-led scaling.** It emphasizes co-creation, operator-led execution, and ecosystem leverage with industrial partners.²¹¹
- **How to engage:** Public **Pitch / Invest / Transform** site pathways exist, but a dedicated founder application form was not identified in the cited text.²¹²

²⁰⁶ Lowercarbon Capital, home page, describing focus on slashing CO2 including industrial materials and support from inception onward, <https://lowercarbon.com/>

²⁰⁷ Momenta, home page, describing Physical AI / industrial impact thesis, 200+ investments, 5 funds, and investment plus growth model, <https://momenta.vc/>

²⁰⁸ Momenta, home page, describing Physical AI / industrial impact thesis, 200+ investments, 5 funds, and investment plus growth model, <https://momenta.vc/>

²⁰⁹ Momenta, home page, describing Physical AI / industrial impact thesis, 200+ investments, 5 funds, and investment plus growth model, <https://momenta.vc/>

²¹⁰ Momenta, home page, describing Physical AI / industrial impact thesis, 200+ investments, 5 funds, and investment plus growth model, <https://momenta.vc/>

²¹¹ Momenta, home page, describing Physical AI / industrial impact thesis, 200+ investments, 5 funds, and investment plus growth model, <https://momenta.vc/>

²¹² Momenta, home page, describing Physical AI / industrial impact thesis, 200+ investments, 5 funds, and investment plus growth model, <https://momenta.vc/>

Firms that are plausible but more conditional

New Climate Ventures

- **Fit:** early-stage climate investor in “how we produce, power and consume,” so could fit climate-linked graphene.²¹³
- **Status: Active** based on live site and open contact; recent fund data or portfolio specifics **not found** on cited page.²¹⁴
- **Stage: Early-stage.**²¹⁵
- **Structure: Traditional institution VC.**
- **Philosophy:** active, diversified climate-tech approach leveraging energy, commodities, regulatory, and investing experience.²¹⁶
- **Engagement:** public contact form.²¹⁷

AM Ventures versus pure materials funds

AM Ventures is strongest where graphene is sold into **additive manufacturing** or related industrial production workflows; it is less compelling for a graphene company focused mainly on biomedical, consumer, or software-led applications.²¹⁸

Breakthrough Energy Ventures versus broad materials funds

BEV is compelling only if the pitch is **explicitly climate-outcome linked**. A generic electronics-materials graphene company with weak quantified emissions impact is a weaker fit.²¹⁹

²¹³ New Climate Ventures, home page, early-stage climate focus on how we produce, power and consume, <https://www.newclimateventures.com/>

²¹⁴ New Climate Ventures, home page, early-stage climate focus on how we produce, power and consume, <https://www.newclimateventures.com/>

²¹⁵ New Climate Ventures, home page, early-stage climate focus on how we produce, power and consume, <https://www.newclimateventures.com/>

²¹⁶ New Climate Ventures, home page, early-stage climate focus on how we produce, power and consume, <https://www.newclimateventures.com/>

²¹⁷ New Climate Ventures, home page, early-stage climate focus on how we produce, power and consume, <https://www.newclimateventures.com/>

²¹⁸ AM Ventures, home page, states it invests in industrial 3D printing innovations and lists “Materials production, refining, or R&D for metals, polymers, ceramics and composites,” <https://amventures.com/>

Recommendation matrix

Firm	Why it fits CVD graphene	Similar-investment status	Stage	Structure	Philosophy	Readiness to engage
Material Impact	Direct material-science company builder	Active; \$700M+ AUM; materials-heavy portfolio ^{220 221}	Pre-seed/seed-focused	Traditional institution VC	Thesis-driven, science/materials, impact-aware	Medium: contact email public, no open application found
Engine Ventures	Explicit Advanced Materials + Tough Tech fit	Active; advanced alloys and hard-tech portfolio ²²²	Pre-seed/seed-focused	Traditional institution VC	Technical diligence, long-term commercialization	High: public founder intake form
HAX / SOSV	Plasma, materials, semiconductors, manufacturing	Active; \$550K initial investment; \$51M Plasma Forge	Pre-seed/seed-focused	Traditional institution VC + government-backed program	Hands-on technical commercialization	High: public apply path

²¹⁹ Breakthrough Energy, portfolio page, including Stratus Materials, KoBold Metals, Redwood Materials and other climate-tech companies, <https://www.breakthroughenergy.org/portfolio>

²²⁰ Material Impact, about page, states \$700M+ AUM across Funds I-III and that it backs and builds inception-stage companies, <https://www.materialimpact.com/about/>

²²¹ Material Impact, companies page, portfolio descriptions for 6K, CorePower Magnetics, Mattiq, and others, <https://www.materialimpact.com/companies/>

²²² Engine Ventures, home page, describing breakthrough technology, Tough Tech mission, featured companies including Foundation Alloy, and Katie Rae quote on technical support, <https://engineventures.com/>

Firm	Why it fits CVD graphene	Similar-investment status	Stage	Structure	Philosophy	Readiness to engage
AM Ventures	ng fit Materials R&D / production tied to additive manufacturing	backing ²²³²²⁴ Active ; public application flow ²²⁵²²⁶	d Early-stage	support Traditional institution VC	Additive-manufacturing thesis-driven	High : public application form
Anzu Partners	Breakthrough industrial technologies thesis	Active ; \$1B AUM ²²⁷	Multi-stage	Traditional institution VC	Scientist/operator-assisted commercialization	Medium
DCVC	Advanced manufacturing / industrial transformation	Active ; materials company Brimstone in portfolio ²²⁸²²⁹	Multi-stage	Traditional institution VC	Scientist-heavy technical diligence	Medium

²²³ HAX, home page, says it is built for pre-seed startups solving hard problems with hard tech; cites \$550K initial investment and leadership by Duncan Turner and Avra van der Zee, <https://hax.co/>

²²⁴ HAX Plasma Forge page, describing commercialization of plasma into industrial products, focus on semiconductors/materials/advanced manufacturing, up to \$550K seed capital, and \$51M dedicated backing from SOSV/NJEDA/PPPL, <https://hax.co/hax-plasma-forge/>

²²⁵ AM Ventures, home page, states it invests in industrial 3D printing innovations and lists “Materials production, refining, or R&D for metals, polymers, ceramics and composites,” <https://amventures.com/>

²²⁶ AM Ventures, [apply/join](https://amventures.com/apply/) page and public application link, <https://amventures.com/apply/>

²²⁷ Anzu Partners, home page, states \$1B AUM and investing in clean tech, industrial, and life science technologies via venture, private credit, and public structures, <https://www.anzupartners.com/>

²²⁸ DCVC, home page, states “We are deep tech venture capital,” “We have more published scientists than MBAs,” and lists Industrial Transformation & Advanced Manufacturing among areas, <https://www.dcvc.com/>

Firm	Why it fits CVD graphene	Similar-investment status	Stage	Structure	Philosophy	Readiness to engage
Breakthrough Energy Ventures	Climate-industrial materials only	Active; materials-related portfolio and public investment team ²³⁰²³¹	Multi-stage	Traditional institution VC	Climate thesis + deep technical evaluation	Medium
Innovation Industries	European deep-tech complexity-embracing fund	Active; live portfolio/new sflow ²³²	Early-stage / multi-stage	Traditional institution VC	Deep-tech thesis-driven	Medium
Nysnø Climate Investments	Emissions-reduction-linked graphene only	Active; 5.5bn NOK AUM; direct and fund investments ²³³	Early-stage	University/government-backed funds	Impact with risk/return discipline	Medium
IQT	Defense/intelligence materials, sensors,	Active; broad current mission-partner	Multi-stage	Government-backed fund	Mission-driven strategic	Low-to-medium

²²⁹ DCVC, companies page, includes Brimstone “Transforming industry by co-producing widely used and critical materials,” <https://www.dvc.com/companies/>

²³⁰ Breakthrough Energy, portfolio page, including Stratus Materials, KoBold Metals, Redwood Materials and other climate-tech companies, <https://www.breakthroughenergy.org/portfolio>

²³¹ Breakthrough Energy, people page, biographies for Rodi Guidero, Eric Toone, Carmichael Roberts and broader BEV team, <https://www.breakthroughenergy.org/people>

²³² Innovation Industries, home page, describing itself as a European deep tech VC, emphasizing complexity, technology expertise, and impact, <https://www.innovationindustries.com/>

²³³ Nysnø Climate Investments, English home page, states mission, 49 investments, 429 companies reached via risk capital, and 5.5bn NOK AUM, <https://nysnoinvest.no/en/>

Firm	Why it fits CVD graphene	Similar-investment status	Stage	Structure	Philosophy	Readiness to engage
	electronics angle	base ²³⁴			investing	unless mission fit is strong
Lowercarbon Capital	Industrial-materials decarbonization	Active ; broad climate hard-tech activity ²³⁵	Multi-stage	Traditional institution VC	Climate thesis, founder-supportive	Medium
Momenta	Industrial hardware / sensing / manufacturing systems	Active ; 200+ investments, 5 funds ²³⁶	Multi-stage	Traditional institution VC	Operator-led industrial scaling	Medium

Practical takeaways for a CVD graphene founder

Best near-term targets

1. **Engine Ventures** — strongest direct “advanced materials” early-stage fit with an open inbound form.²³⁷
2. **HAX / SOSV** — strongest for process-heavy graphene built around plasma/CVD tooling, semiconductor interfaces, or manufacturing commercialization.²³⁸
3. **Material Impact** — strongest pure material-science thesis fit.²³⁹

²³⁴ IQT home page, describing its model of identifying startups in strategic technology areas, evaluating government mission fit, and naming mission partners, <https://www.iqt.org/>

²³⁵ Lowercarbon Capital, home page, describing focus on slashing CO2 including industrial materials and support from inception onward, <https://lowercarbon.com/>

²³⁶ Momenta, home page, describing Physical AI / industrial impact thesis, 200+ investments, 5 funds, and investment plus growth model, <https://momenta.vc/>

²³⁷ Engine Ventures, founder connect page with explicit Advanced Materials category and founder submission form, <https://engineventures.com/connect>

²³⁸ HAX Plasma Forge page, describing commercialization of plasma into industrial products, focus on semiconductors/materials/advanced manufacturing, up to \$550K seed capital, and \$51M dedicated backing from SOSV/NJEDA/PPPL, <https://hax.co/hax-plasma-forge/>

4. **AM Ventures** — best if additive manufacturing, composites, or production materials are core wedge markets.²⁴⁰

Best if climate case is primary

1. **Breakthrough Energy Ventures**²⁴¹
2. **Lowercarbon Capital**²⁴²
3. **Nysnø Climate Investments**²⁴³
4. **Anzu Partners**²⁴⁴

Best if defense / strategic electronics case is primary

1. **In-Q-Tel**²⁴⁵
2. **DCVC**²⁴⁶
3. **HAX / SOSV**²⁴⁷

²³⁹ Material Impact, home page, states it is “Building deep tech companies powered by material science,” <https://www.materialimpact.com/>

²⁴⁰ AM Ventures, home page, states it invests in industrial 3D printing innovations and lists “Materials production, refining, or R&D for metals, polymers, ceramics and composites,” <https://amventures.com/>

²⁴¹ Breakthrough Energy, portfolio page, including Stratus Materials, KoBold Metals, Redwood Materials and other climate-tech companies, <https://www.breakthroughenergy.org/portfolio>

²⁴² Lowercarbon Capital, home page, describing focus on slashing CO2 including industrial materials and support from inception onward, <https://lowercarbon.com/>

²⁴³ Nysnø Climate Investments, English home page, states mission, 49 investments, 429 companies reached via risk capital, and 5.5bn NOK AUM, <https://nysnoinvest.no/en/>

²⁴⁴ Anzu Partners, home page, states \$1B AUM and investing in clean tech, industrial, and life science technologies via venture, private credit, and public structures, <https://www.anzupartners.com/>

²⁴⁵ IQT home page, describing its model of identifying startups in strategic technology areas, evaluating government mission fit, and naming mission partners, <https://www.iqt.org/>

²⁴⁶ DCVC, home page, states “We are deep tech venture capital,” “We have more published scientists than MBAs,” and lists Industrial Transformation & Advanced Manufacturing among areas, <https://www.dcvc.com/>

²⁴⁷ HAX, home page, says it is built for pre-seed startups solving hard problems with hard tech; cites \$550K initial investment and leadership by Duncan Turner and Avra van der Zee, <https://hax.co/>

Best if the company is already beyond pure lab stage

1. **Anzu Partners**²⁴⁸
 2. **DCVC**²⁴⁹
 3. **Momenta**²⁵⁰
 4. **Innovation Industries**²⁵¹
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Source notes

Only publicly available firm pages and similar primary-source materials were used where possible. Where a check size, specific partner ownership, or fund dry powder was not stated publicly on the cited pages, it is marked **not published** or **not found**.

References

²⁴⁸ Anzu Partners, home page, states \$1B AUM and investing in clean tech, industrial, and life science technologies via venture, private credit, and public structures, <https://www.anzupartners.com/>

²⁴⁹ DCVC, home page, states “We are deep tech venture capital,” “We have more published scientists than MBAs,” and lists Industrial Transformation & Advanced Manufacturing among areas, <https://www.dcvc.com/>

²⁵⁰ Momenta, home page, describing Physical AI / industrial impact thesis, 200+ investments, 5 funds, and investment plus growth model, <https://momenta.vc/>

²⁵¹ Innovation Industries, home page, describing itself as a European deep tech VC, emphasizing complexity, technology expertise, and impact, <https://www.innovationindustries.com/>