A ZIGGMA WHITEPAPER · 2026

Your Guide to Impact Investing

All investing has impact. The capital already sitting in your brokerage account is the largest lever you have on the future you want to live in.

BECAUSE ALL INVESTING HAS IMPACT

ZIGGMA — PROFITS WITH PURPOSE

01 The Foundation: All Investing Is Impact Investing

> *The first step to becoming an impact investor is realizing you already are one. Neutrality in finance is a myth. Every dollar in your brokerage account, 401(k), or savings fund is currently voting for a specific future.*

If you aren't actively managing that impact, you are likely subsidizing the very issues that trouble you. The companies in your brokerage accounts, ETFs and managed funds emit, hire, pollute, lobby, and lend with your capital backing them. That isn't a moral framing — it's a mechanical fact of ownership.

Most investors never confront this because the dominant narrative says public-market investing has no real-world impact: “the shares already exist, you're just trading them with someone else.” That narrative is wrong, and the rest of this paper explains why — and what to do about it.

The $100K reality check

8.5 tCO_2e

Annual carbon footprint of a $100,000 S&P 500 holding (Scope 1+2). Roughly equivalent to driving a gasoline car 20,000 miles per year.

Source: Fossil Free Funds / yourSRI

4.1°C

Global Warming Potential of the S&P 500. If the global economy tracked this index, the world would warm 4.1°C above pre-industrial levels. The Paris Agreement target is 1.5°C.

Source: Ziggma Impact Score data, powered by ACA Ethos

~1,400

Half-litre PET bottles' worth of plastic waste attributed to that same $100,000 position each year. Roughly 300 bottles' worth is mismanaged — dumped, burned, or never properly collected.

Source: Ziggma estimate using the a.s.r. Asset Management / Earth Action / Plastic Soup Foundation financed-plastic methodology

Your portfolio has a footprint whether you measure it or not. Whether you self-direct, work with an advisor, or sit in a target-date fund, the question is the same: are you choosing that footprint deliberately, or accepting it as the residual of decisions you never explicitly made?

02 Dismantling the Sacrifice Myth

The return sacrifice never showed up in the data. Across dedicated impact portfolios, screened indices, and the broad fund universe, the measured result is parity or outperformance.

Impact is frequently a proxy for quality. Companies that steward capital, resources, and workforce well tend to compound better over long horizons. That is a mechanical explanation, not a moral one.

Category	Observed Performance	Source
Impact investing	Up to 9% annualized outperformance for high-impact portfolios	Schroders / Oxford Saïd Business School
Clean-revenue screening	Clean200 returned 282.9% vs 221.3% for the MSCI ACWI, July 2016 – January 2026	Corporate Knights / As You Sow, 2026 Clean200
Clean-revenue screening	Clean200 returned 282.9% vs 111.0% for the MSCI ACWI/Energy Index, same period	Corporate Knights / As You Sow, 2026 Clean200
Sustainable funds (broad universe)	$100 invested in a sustainable fund in December 2018 grew to $162, against $152 in a traditional fund	Morgan Stanley Institute for Sustainable Investing, *Sustainable Reality*

Sustainable funds do not win every period. In the second half of 2025 their median return was 5.3%, just below traditional funds at 5.5%. The case rests on the long horizon, not on any single half-year.

> *“ Impact isn't a tax on returns. It's frequently a marker of the operational quality investors already pay for. ”*

ESG RATINGS ARE NOT IMPACT

One distinction holds throughout this paper. ESG ratings from MSCI and Sustainalytics measure financial risk exposure to the investor — how much unmanaged environmental, social, and governance risk sits on a company's books. They do not measure a company's effect on the world.

Impact measurement asks the opposite question. Ziggma's Impact Score, built on ACA Ethos data, scores that outward effect across Climate Action, Sustainable Resource Use, Fair Labor Practices, and Accountability. A company can rate well on ESG risk and score poorly on impact.

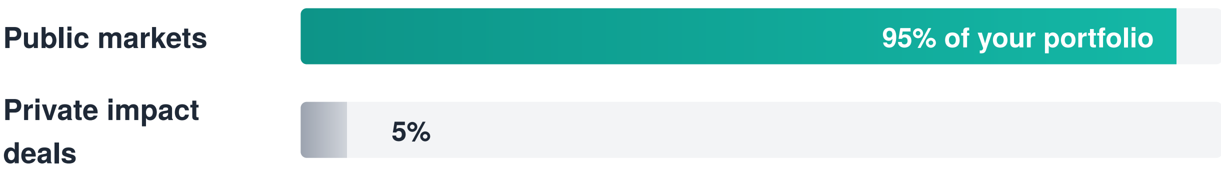
03 The Reality of Portfolio Allocation

Many investors treat private direct impact investments — climate-tech startups, regenerative-agriculture funds, community solar deals — as the only “real” form of impact. They're certainly the most direct. But they come with structural hurdles for most investors:

- **High risk.** Early-stage companies fail at high rates; concentration risk is meaningful.
- **Illiquidity.** Capital is typically locked for 7–10 years.
- **Accessibility.** Often restricted to accredited investors with five- or six-figure minimums.

The “aha” moment: the 95/5 split

A prudent, diversified portfolio can typically allocate no more than 5% to high-risk private impact deals. **The other 95% — retirement accounts, brokerage holdings, college savings — sits in public equities and bonds.** If you only focus on the 5%, you are systematically ignoring the part of your portfolio where you actually have leverage.



The question isn't whether to do private impact deals. It's whether you'll address the other 95% at all.

04 The $87 Trillion Lever

While private market deals capture most of the impact-investing spotlight, the primary engine for systemic change is the immense liquidity of public markets — and the share of that liquidity owned, directly and indirectly, by U.S. households.

$49.1T

U.S. household retirement assets across IRAs, 401(k)s, DB plans, and annuities.

Source: ICI, Q4 2025

$38T+

Additional U.S. household financial wealth held in taxable brokerage and related financial holdings.

Source: Federal Reserve Flow of Funds, Q4 2025

> “ *The entire pool of private impact investments individuals can actually access — equity crowdfunding, Reg A+ offerings, community notes, crowdfunded impact REITs — totals roughly $2–4 billion globally. U.S. households alone hold over $87T in financial wealth with public-market exposure: a lever more than 20,000 times larger than the arena most "impact investors" focus on.* ”

WHAT'S ACTUALLY IN THE $2–4B

- **Equity crowdfunding (Reg CF) — ~$1.5B annually.** Direct equity in early-stage impact startups via SEC-registered portals, with minimums as low as $100.
- **Private credit (Reg A+ / CDFIs) — ~$1.15B.** Community investment notes, small-business loans, and climate-project lending.
- **Crowdfunded impact REITs — ~$750M.** Affordable housing, green buildings, and community real estate.

Source: Private-market impact-opportunity analysis, 2026 forecast. Figures reflect retail-accessible (non-accredited) channels only.

This is the arena where systemic challenges are addressed at true scale. Treating public-market portfolios as impact-irrelevant — because "the shares already exist" — is the single most expensive analytical mistake retail investors make.

Note: The widely cited $1.6T figure for global impact-investing AUM (GIIN, 2024) is dominated by pension funds, family offices, sovereign wealth, and accredited-investor vehicles. What's actually accessible to non-accredited retail investors is the small slice broken out above.

And households aren't a minority shareholder — they're the largest one

The dominant narrative says retail investors are bystanders in a market run by institutions. The data says the opposite. U.S. households ultimately own roughly **58% of publicly traded U.S. stock**: about 40% directly, and the rest indirectly through mutual funds, ETFs, 401(k)s, IRAs, and pensions whose underlying beneficiaries are households. Retail isn't the audience at the proxy vote. Retail is the largest constituency in the room.

Sources: Tax Policy Center (Rosenthal, 2024); Goldman Sachs, 2025.

See your own portfolio's carbon footprint and impact score.

Try Ziggma free

05 Six Strategies to Activate Your $87T

Retail investors collectively hold the power to reshape capitalism toward something less extractive, more just, and more responsible. Not because any single shareholder dictates a board's decisions, but because the sum of millions of allocation choices, votes, and engagements bends the gravity of capital. Cost of capital rises for companies the market doesn't want to fund; it falls for the ones it does. That's the channel.

What follows are six concrete ways to exercise that power in practice. Each works through a different mechanism. None requires a financial-services license or a seven-figure account. You can do one of them or all six; the more you combine, the more your portfolio becomes a deliberate set of choices rather than an inherited one.

STRATEGY I Private Equity & Pure-Play Crowdfunding

For the “satellite” portion of the portfolio (the 5%), investors can seek direct *additionality* — the principle that your dollar specifically enabled a project that would not otherwise have happened.

- **Honeycomb Credit** (post-merger with Raise Green): local climate infrastructure and community projects.
- **Charm Industrial:** a leader in direct carbon removal and sequestration.
- **Trine / GoParity:** platforms for funding solar in emerging markets with lower minimums.
- **Wefunder:** use the “Climate” or “Social Impact” verticals to find seed-stage startups.

STRATEGY II Shifting Capital — How Industries Get Repriced

Where capital flows sets what companies pay to grow. Most of the world's largest companies are public. Their cost of capital — the rate they borrow at, the multiple their equity trades at, the willingness of investors to fund expansion — is a market price. Every allocation decision is a vote on that price. When millions of investors move the same direction, whole sectors get repriced.

The repricing is measurable. The Clean200 — 200 public companies ranked on clean-economy revenue by Corporate Knights and As You Sow — returned 282.9% from its July 2016 inception through January 2026. The MSCI ACWI returned 221.3% over the same period. The MSCI ACWI/Energy Index of fossil fuel companies returned 111.0%.

The financing side shows the same divergence. The Oxford Sustainable Finance Group analysed two decades of global energy financing. Coal mining carries the highest cost of capital in the energy sector, with its cost of debt reaching 7.9% and its equity component 18.2% in 2021. Renewables-focused electric utilities finance more cheaply than fossil-focused peers globally: 6.0% cost of debt against 6.7%. **Cheaper capital is not a reward. It is a price, set by investors, that determines which projects get built.**

WHERE THE PATTERN HOLDS

The repricing is not uniform. The same Oxford analysis found that low-carbon utilities finance more cheaply than high-carbon ones in Europe, that the reverse holds in China, and that no consistent trend appears in North America. Repricing is a global directional force, not a guarantee in every market.

The practical question is which tools make this deliberate. Ziggma's stock screener filters the investable universe on the four Impact Score sub-scores — Climate Action, Sustainable Resource Use, Fair Labor Practices, and Accountability — alongside exclusions for fossil fuels, tobacco, and controversial weapons. Every holding also carries a Global Warming Potential figure: the temperature pathway implied by its emissions trajectory. The Ziggma Optimizer then quantifies the return and impact trade-off of a proposed change, weighing the Impact Score against the Ziggma Score's four pillars — Growth, Valuation, Profitability, and Financial Health.

Cost of capital rises for companies the market is reluctant to fund. It falls for the ones capital wants to own. That is the channel through which an allocation decision becomes a real-world one. Sectors get repriced because capital chooses sides. Doing it deliberately means you stop letting other investors choose for you.

STRATEGY III Active Ownership — Voting Your Shares

Retail investors collectively hold the power to demand better corporate stewardship. The 58% ownership stake from section 04 is also a voting stake. Households are the largest constituency in every corporate proxy vote. Individual votes are small. Together they shape resolutions that change corporate behavior.

A common pushback: “If I mostly hold passive ETFs and mutual funds, I can't really vote anyway.” That used to be largely true. It is changing fast, and the indirect-ownership section below covers how. For shares you do hold directly, the vote is already yours to use.

Direct ownership: vote your shares today

You can support shareholder resolutions filed by advocacy groups and active asset managers — **As You Sow**, **Mercy Investment Services**, the **Nathan Cummings Foundation**, **Green Century Capital Management**, **Trillium Asset Management**, and others. In 2026, 184 ESG resolutions are filed across U.S. companies. Recent examples:

- **Plastic waste:** As You Sow's resolution at **Philip Morris International** demands producer responsibility for plastic cigarette butts — the most-littered plastic waste on the planet.
- **Agentic AI:** the Nathan Cummings Foundation's resolution at **Equifax** on the risks of autonomous AI systems making credit and identity decisions.
- **Supply-chain human rights:** Mercy Investment Services' resolution at **PepsiCo** demanding a report on human-rights oversight in supply chains, following documented abuses in Indian sugarcane plantations.
- **Big Tech accountability:** multiple investors have filed at Meta on child safety, generative-AI transparency, and the mental-health impacts of platform design.

Indirect ownership: pass-through voting is finally arriving

Historically, voting rights on shares held through mutual funds, ETFs, and 401(k)s sat with the fund manager rather than the beneficial owner. That is now changing rapidly. **BlackRock, Vanguard, and State Street** have all launched “pass-through voting” programs that let beneficial owners direct how their indirectly-held shares are voted.

Independent infrastructure is making this scalable. **Tumelo**, a U.K.-based stewardship-technology firm, has built pass-through voting from the ground up — over £200 billion in client assets already vote through its platform. In December 2025, Tumelo's partnership with BetaNXT (which supports Vanguard's Investor Choice Program) extended the rails to millions of retail investors via their brokers and retirement plans. This is the largest expansion of retail voting power since the introduction of the mutual fund itself.

STRATEGY IV Choose Active-Shareholder Funds

For most investors, the highest-leverage move isn't picking individual stocks or filing resolutions themselves. It's choosing fund managers who do *both* jobs — allocating to screened, sustainable companies **and** actively engaging with them as shareholders. A single allocation combines the two levers with the widest reach in this paper: where your capital flows and how it gets voted.

A few firms with active 2026 proxy-season filings (per the Proxy Preview 2026):

- **Green Century Capital Management** — runs the Green Century Equity Fund, MSCI International Index Fund, and Balanced Fund. Fossil-fuel-free; all profits are donated to environmental and public-health nonprofits. 2026 filings include ArcBest, AutoNation, NVIDIA (GHG from sold products), Mattel (plastic additives), Verizon (board oversight on climate), and Harley-Davidson (transition plan).
- **Trillium Asset Management** — 40+ years of shareholder advocacy across mutual fund and SMA strategies. 2026 filings include BJ's Wholesale, Target (pesticide use in supply chains), and Elevance Health (partisan political-spending review).
- **NorthStar Asset Management** — engagement-focused SMA manager. 2026 filings include Linde (renewable energy goals), Eaton (weapons-enabling products), Digital Realty Trust (data-center water risk), and Salesforce (AI human-rights risks).
- **Parnassus Investments** — long-standing screened equity fund family; investing under explicit ESG and stewardship criteria since 1984.
- **Zevin Asset Management** — boutique values-aligned manager. 2026 filings at Alphabet and Home Depot on customer data and surveillance risks.

When you allocate to a fund like this, you outsource the time-consuming work of shareholder advocacy to professionals doing it full-time — while still moving your capital toward companies whose business models you want to fund. **For most investors, this is the easiest way to engage both the capital-shifting mechanism of Strategy II and the voting mechanism of Strategy III in a single decision.**

STRATEGY V Green Bonds & Direct Lending

Fixed income offers a uniquely traceable path to impact, because the “use of proceeds” is legally defined in the bond documentation. In many cases you can know — at the project level — what your capital actually funded.

Green bonds

Debt issued by companies, municipalities, or specialty REITs specifically for environmental projects. Global green-bond and -loan issuance reached **$1.66 trillion in 2024**. A few entry points:

- **HA Sustainable Infrastructure Capital (NYSE: HASI)** — the first U.S. public company dedicated solely to climate-change solutions. HASI is a publicly traded REIT that finances energy-efficiency upgrades, solar, wind, storage, and grid infrastructure. Its proprietary *CarbonCount* methodology gives investors a per-dollar emissions-avoided figure for every position. Investment-grade-rated; pays a meaningful dividend.
- **Corporate green bonds.** Apple has issued $4.7B in green bonds across three issues, funding renewable-energy procurement and low-carbon manufacturing in its supply chain. Similar issuance from companies including Alphabet, Verizon, and many European utilities.
- **Municipal green bonds.** Increasingly used to finance climate-adaptation infrastructure — resilient water systems, flood control, green buildings, and clean transit. Often tax-advantaged for U.S. retail investors.

Direct lending and community investing

Community Development Financial Institutions (CDFIs) and crowdfunding platforms let depositor capital flow directly to underserved small businesses and affordable green housing — often with low minimums and full project-level transparency.

- **Honeycomb Credit** (post-merger with Raise Green) — investors fund local climate infrastructure and small businesses through community-loan offerings, typically with minimums as low as $100. Each loan discloses its purpose and projected impact.
- **CDFI-certified banks and credit unions** such as Self-Help Federal Credit Union, Beneficial State Bank, and Sunrise Banks — your deposits get redeployed into community-development lending, with FDIC or NCUA insurance on the deposit itself.

STRATEGY VI The Power of Carbon Allowances

Most investors confuse **carbon credits** (voluntary offsets) with **carbon allowances** (compliance permits under cap-and-trade systems). The distinction matters.

- **Carbon credits** support projects like reforestation to “offset” emissions. Mechanism: voluntary; quality varies; often disputed.

- **Carbon allowances** are government-issued “permits to pollute” under legally binding cap-and-trade systems. The major markets: California's CCAs, the EU's ETS, the UK ETS, and RGGI (the U.S. Northeast). Mechanism: hard, legally enforced annual caps.

Investors can access allowance markets through publicly traded ETFs:

- **KraneShares Global Carbon Strategy ETF (KRBN)** — diversified exposure across the major cap-and-trade markets.
- **KraneShares California Carbon Allowance ETF (KCCA)** — California CCAs specifically.
- **KraneShares European Carbon Allowance ETF (KEUA)** — the EU ETS.

THE POWER MOVE: RETIREMENT

Compliance allowances can be purchased and **retired** directly on registry platforms, though registry accounts are generally restricted to compliance entities and registered traders rather than individual investors. When a permit is retired, an industrial polluter is legally prevented from using it. The permission to pollute is taken off the market. Caps are fixed; each retired allowance forces total system emissions down by law.

06 The Capitalism We Choose

The costs of a century of extractive capital never appeared on anyone's balance sheet. They are appearing now. Climate change threatens the livelihood of billions. Plastic waste is turning up in organisms across the planet. Several planetary boundaries have been crossed and inequality is widening.

These are not problems policy alone can solve. They are shaped, every day, by where capital chooses to flow.

The time to act is now — not by waiting for regulators, politicians, or boards, but by individual investors exercising the ownership rights they already have: shifting capital, voting shares, choosing managers who engage, lending to the projects that build the world they want to live in.

The desire to act on this is massive. Morgan Stanley finds that **99% of Gen Z and 97% of Millennial investors** are interested in sustainable investing: the strongest preference signal ever recorded in retail finance. The wind is at their back. **$124 trillion is set to change hands between now and 2048** — the largest intergenerational wealth transfer in history (Cerulli Associates, 2024). The capitalism of 2048 will be the cumulative product of where that capital flows.

The choice isn't whether your portfolio has impact. It already does. The choice is whether that impact is deliberate.

> “ *Retail investors collectively hold the power to change capitalism for the better — less extractive, more just, more responsible. The next generation isn't asking whether to align capital with values. They're asking who will help them do it.* ”

Take Action with Ziggma

Measure your portfolio's footprint. Shift toward the future you want to live in. Do it in minutes, not months.

01

Measure

See your portfolio's carbon footprint and Impact Score instantly.

02

Shift

Identify laggards and swap them for high-quality, high-impact leaders.

03

Lead

Align 100% of your portfolio with the future you actually want.

Get started with Ziggma

ZIGGMA — PROFITS WITH PURPOSE

Sources & Notes

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All figures verified as of August 2026. The carbon footprint of a $100,000 S&P 500 position (8.5 tCO_2e) reflects Scope 1+2 emissions; including Scope 3 emissions would materially increase the figure. Car comparison uses EPA averages of 4.6 metric tonnes of CO_2 per passenger vehicle per year and 11,500 miles driven per vehicle per year. The plastic figure is an attributed portfolio footprint, not a claim that the purchase caused additional pollution: each company's reported plastic waste is allocated to the investor in proportion to the position's share of that company's enterprise value including cash (EVIC), the same denominator the PCAF standard uses for financed emissions. It is a central working estimate of roughly 20 kg within a 15–30 kg sensitivity range, converted at 14 grams per bottle. The mismanaged share applies the OECD Global Plastics Outlook global rate of 22%. Company plastic reporting is incomplete and weighted toward packaging. The $87T figure combines total U.S. retirement assets with additional household financial wealth. It is not all public equity: the retirement component includes defined-benefit plans and annuities, where the individual holds a beneficial interest rather than a directed one.