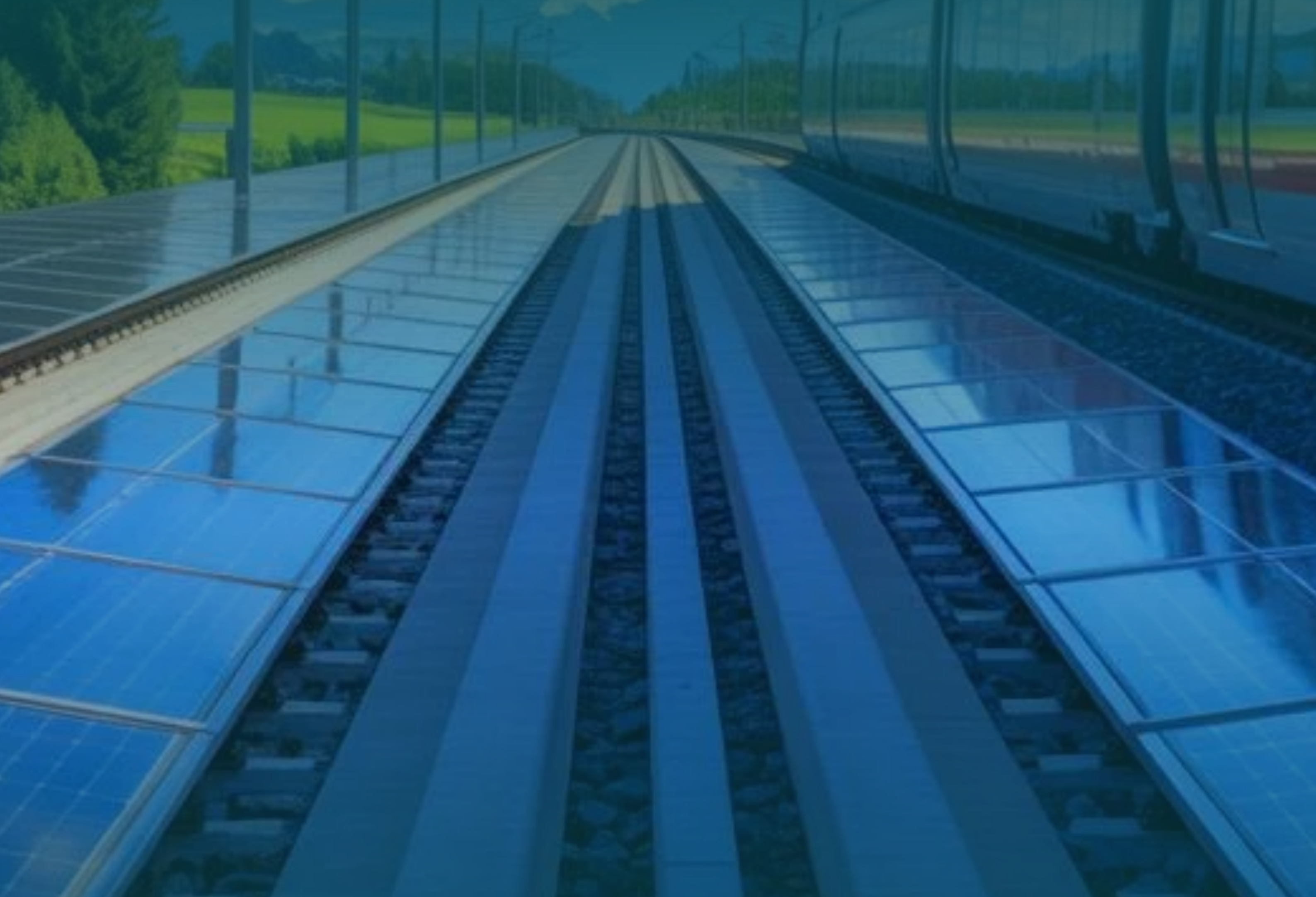
A ZIGGMA WHITEPAPER · 2026

Your Guide to Impact Investing

All investing has impact. Why the most powerful lever to align your capital with the future you want to live in is sitting readily available in your brokerage account.



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 (SPY ETF, 85 tCO_2e per $1M)

~7,000

Single-use plastic bottles' worth of waste generation linked to that same $100K position each year, through underlying portfolio companies.

Source: Ziggma analysis of S&P 500 constituent disclosures

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

For decades, a preconception persisted that "doing good" meant taking a haircut on returns. The data has now invalidated that notion. Impact is, in many studies, a proxy for quality — companies with sound stewardship simply perform better over the long term. Evidence across dedicated portfolios, indices, and funds points toward outperformance, not sacrifice.

Metric	Observed Performance	Source
Annualized alpha	Up to 9% outperformance for high-impact portfolios	Schroders / Oxford Saïd Business School
Index comparison	Clean200 beat MSCI World by ~29% over 8.5 years	Corporate Knights Research
Fund performance	Sustainable funds led traditional by ~9% (2019–2025)	Morgan Stanley Institute for Sustainable Investing

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

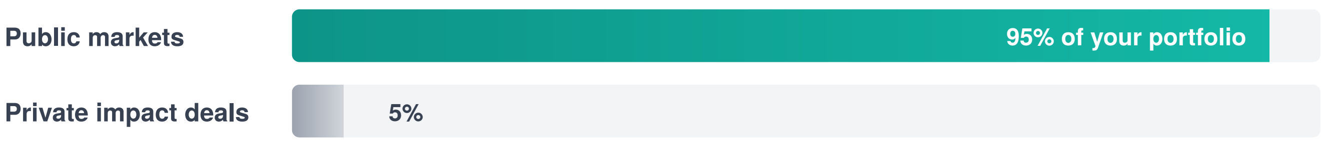
03 The Reality of Portfolio Allocation

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 only 2–5% to high-risk private impact deals. **The remaining 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 public-market wealth: 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

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

Most of the world's largest companies are public. Their cost of capital — the price they pay to borrow, the multiple their equity trades at, the willingness of investors to fund their growth — is set by where capital flows. When you choose to overweight a sector or company, you are participating in that pricing decision. When millions of investors do the same, sectors get rerated.

The practical question is what tools you use to do this well. Ziggma's screener lets you filter holdings by climate alignment, fair-labor practices, resource efficiency, and exclusions for sectors you don't want to fund (fossil fuels, tobacco, controversial weapons, and others). The Ziggma Optimizer then helps you weigh the impact and return trade-offs when you make changes — so a portfolio shift isn't just a moral choice, it's a quantified one.

THE ANALOGY

Look at U.S. utilities over the last decade. NextEra Energy — built around the largest wind-and-solar generation fleet in North America — has traded at a forward P/E in the high 20s and even crossed 40x at one point, while coal-heavy peers like Duke Energy, Southern, and Dominion have generally sat in the mid-teens. Over ten years, NextEra delivered total returns of roughly 700%, against ~190% for the broader utilities sector. Coal-focused producers like Peabody Energy spent the same period in valuation freefall. **None of that was driven by regulators alone. Investors collectively decided which transition risk they would underwrite and which they wouldn't.** Renewables-led utilities got the lower cost of capital; coal-heavy ones got the higher one.

This is the unglamorous core of impact investing. Sectors get repriced because capital chooses sides. The point of doing it deliberately is that 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. With U.S. households owning roughly 58% of U.S. publicly traded stock — ~40% directly and the rest indirectly through funds, 401(k)s, IRAs, and pensions — they 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 most powerful levers 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 ESG advocacy across mutual fund and SMA strategies. 2026 filings include NextEra Energy (Paris-aligned GHG targets), 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:

- **Hannon Armstrong Sustainable Infrastructure (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 over $4.7B in green bonds 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

For investors who go beyond the ETFs, compliance allowances can be purchased directly on registry platforms and **retired**. When you retire a permit, you legally prevent an industrial polluter from using it — you are, quite literally, taking the permission to pollute off the market. Caps are fixed; each retired allowance forces total system emissions down by law.

06 The Capitalism We Choose

For a century, capital flowed where it could extract the most — from workers, communities, and ecosystems. The costs were paid by people and places that never appeared on the balance sheet. Today, the bill is coming due. Climate change is threatening the livelihood of billions. Plastic waste is showing up in organisms across the planet. Several planetary boundaries have already been crossed, and inequality is widening. These are not problems policy alone can solve — they are problems 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.

Collectively, private investors hold the power to change capitalism for the better — **less extractive, more just, more responsible.** The desire to do so 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, 2025). 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

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.

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Sources & Notes

1. Investment Company Institute, "The U.S. Retirement Market, Fourth Quarter 2025" (March 2026). Total U.S. retirement assets: $49.1T.
2. Federal Reserve, Flow of Funds Accounts, Q4 2025. Household financial assets, taxable brokerage and related holdings.
3. Global Impact Investing Network (GIIN), "Sizing the Impact Investing Market 2024" (October 2024) and "State of the Market 2025" (October 2025). Global impact-investing AUM: $1.571T; 21% CAGR since 2019. Note: this figure is dominated by institutional, family-office, and accredited-investor capital.
4. Private market impact-opportunity analysis, 2026 forecast. Estimated $2–4B in private-market impact investments accessible to non-accredited retail investors, comprised of approximately $1.5B equity crowdfunding (Reg CF), $1.15B private credit (Reg A+ / CDFIs), and $750M crowdfunded impact REITs. Driven primarily by 2021 SEC amendments raising Reg CF and Reg A+ offering limits.
5. Cerulli Associates, "The Cerulli Report: U.S. High-Net-Worth and Ultra-High-Net-Worth Markets 2024." Wealth transfer estimate: $124T through 2048.
6. Goldman Sachs Investment Research, weekly Kickstart and equity-strategy notes (David Kostin, Daniel Chavez), 2025. U.S. households directly own ~38–40% of the U.S. equity market.
7. Rosenthal, Steven, and Theo Burke, "Who Owns U.S. Stock? Foreigners and Rich Americans, Yet Again" (Tax Notes Federal, April 1, 2024). U.S. households own approximately 58% of publicly traded U.S. stock when retirement accounts are included.
8. Morgan Stanley Institute for Sustainable Investing, "Sustainable Signals: Individual Investors 2025." Gen Z 99% / Millennials 97% interest in sustainable investing.
9. Fossil Free Funds / yourSRI, SPDR S&P 500 ETF (SPY) carbon footprint: 85 tCO_2e per $1M invested (Scope 1+2).
10. Schroders / Oxford Saïd Business School research on impact investing alpha; Corporate Knights Clean200 vs. MSCI World performance data.
11. NextEra Energy valuation premium vs. coal-heavy utility peers (Duke, Dominion, Southern) — multiple analyses including The Motley Fool, Trefis, and Simply Wall St (2021–2026). NextEra ten-year total return ~700% vs. ~190% for the S&P Utilities Index.
12. Hannon Armstrong Sustainable Infrastructure (NYSE: HASI), company filings and CarbonCount methodology. First U.S. public company solely dedicated to climate-change solutions; investment-grade-rated specialty REIT.
13. Climate Bonds Initiative, "Global Green Bond Market Report 2024." Total green-bond and sustainable-loan issuance: $1.66T in 2024.
14. KraneShares Carbon ETF family (KRBN, KCCA, KEUA). Cap-and-trade exposure to California CCAs, EU ETS, and global allowance markets.
15. Proxy Preview 2026 (As You Sow / Proxy Impact), shareholder resolution filings by impact-focused fund managers and investors including: Green Century Capital Management, Trillium Asset Management, NorthStar Asset Management, Zevin Asset Management, Mercy Investment Services, Nathan Cummings Foundation, and As You Sow. Specific 2026 filings cited: Philip Morris International (plastic cigarette butts), Equifax (Agentic AI), PepsiCo (human rights oversight in supply chains), Meta (child safety, generative-AI transparency, content moderation), NVIDIA, Linde, Eaton, Digital Realty Trust, Salesforce, Elevance Health, NextEra Energy, and others.
16. Tumelo / BetaNXT, "Pass-through voting partnership" (December 2025). Over £200B in client assets voting via Tumelo's platform; integration with Vanguard's Investor Choice Program.

All figures verified as of May 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. Comparison to driving a gasoline car uses EPA average of 4.6 metric tonnes per car per year.