

April 12, 2023

Dear Sustainable Equity Strategy Clients and Friends,

UN Secretary General Antonio Guterres released the bracing “Synthesis Report”ⁱ on climate change science and impacts last month and urged that when it comes to climate action, we need “*Everything Everywhere All At Once*.”ⁱⁱ Unlike in the Academy Award-sweeping filmⁱⁱⁱ, however, we cannot “verse-jump” to a parallel universe where different decisions were made. No known physics or movie magic can change the fact that the foundational climate agreement negotiated at the 1992 Earth Summit in Rio de Janeiro famously lacked the binding “targets and timetables” for emissions reductions that would have driven earlier and faster action starting 30 years ago.

But the good news, as elaborated in our last quarterly letter, is that we saw a pivotal upturn in the mobilization of capital, technology innovation, policy support and consumer demand for climate solutions in 2022. This was driven in part by recognition of intensifying climate impacts on the ground, including large population displacements here in the U.S.^{iv} and by Putin’s brutal illustration of the risks of continued fossil fuel dependence when so many cleaner, economically attractive alternatives now exist.

None of these 2022 catalysts ensured that our portfolio blending fundamental economic quality with enhanced resilience to climate change would necessarily snap back quickly from last year’s pullback. Our portfolio is constructed to benefit from secular trends playing out through this decade and beyond, not within any given quarter or year. Nonetheless, we are pleased to report that the Sustainable Equity Strategy did bounce back with a solid 12% gross return in Q1 (11.8% net of fees), well ahead of reference indexes; and, more relevantly for our investing horizon, it has delivered 16% annualized returns (15% net of fees) for 6.25 years since inception, again a meaningful advantage over the indexes noted in the performance table on page four below. (Past performance does not guarantee future results.)

We agree with Mr. Guterres that action is needed across all sectors and all geographies, and with higher urgency. But this does not mean that investments in all such action will be equally rewarding. The inrush of capital to widely touted solutions such as solar power can drive commoditization and compete away the excess profit-generation we seek from holdings, or spur thematic exuberance that propels valuations above our estimates of intrinsic value. In such cases, we simply pass and look elsewhere. While our overarching thesis on the transition to a resource-efficient, low-carbon economy is benefitting from a rising tide, our job on your behalf is to search for seaworthy boats. This selectivity requires methodical research, including application of our DWA E-Map and E-Assess frameworks, and patient opportunism as to entry timing. Loosely paraphrasing Guterres, we might describe our approach with the slightly less catchy: “*Some Things, in Some Places, When the Price is Right*.” (And no, Hollywood has not called seeking film rights, which is just fine with us.)

Electrification – in the Kitchen, in the Driveway, in our Portfolio

In the spirit of solutions emerging everywhere, let’s begin right in your kitchen. In January, Richard Trumka Jr. of the Consumer Product Safety Commission, noted that gas stoves — used in 40% of US kitchens — pose health risks, especially to children, and added that a ban might be warranted. This prompted a firestorm of controversy and countermeasures, including introduction of the *Gas Stove Protection and Freedom Act*.^v

Heroic defense notwithstanding, there is a ready electric alternative to the gas range that cooks better, is healthier for people and the climate, and comparable in price once its higher efficiency is counted: the electric induction stove. Unlike old-school electric stoves with glowing coils that are annoyingly slow to heat up and risk burning wayward fingers during protracted cooling after the pan comes off, induction burners (known as “hobs”) don’t emit direct heat, but create a magnetic field that excites the molecules in the bottom of a pan on the glass cooktop, cooking food more quickly and safely (Cool to the touch! No fire risk! No asthma-causing nitrogen oxides. No cancer-causing benzene.^{vi}). Plus no methane emissions to drive climate change.^{vii} Like electric vehicles (EVs) offering instant torque and “ludicrous” pickup^{viii}, induction stoves boil water in two minutes compared to 5-8 minutes for a gas range. Yet the technology is not new: the first induction patents are a century old and Westinghouse launched a commercial induction range 50 years ago. Induction stoves are popular in Europe and Asia but have penetrated less than 5% of the US market.^{ix}

So why the slow uptake? Perhaps because the open flame gas stoves evoke the primal campfire. Or because natural gas companies have aggressively marketed gas stoves starting in the 1930’s^x, an advantage entrenched by habit, infrastructure lock-in and gas company PR campaigns to this day. Or because US consumers don’t even know about them. Sue Bailey, a former Viking executive who helped sell consumers on high-end gas ranges said induction is “better than gas at high heat, it simmers, the responsiveness is the same. There are so many benefits to it from the cooking side. People have no idea whatsoever.”^{xi} And induction stoves are even more affordable now, given subsidies in last year’s climate provisions of the Inflation Reduction Act.^{xii}

To be clear, we are unlikely to invest in companies selling home appliances, given the scarcity of defensible moats and profits in this segment of consumer durables. The key point is that gas stoves, along with gas furnaces, gas water heaters and gas dryers represent the last, fading rationales for establishing, or sustaining, a gas line to the home at all. Induction stoves are poised to disrupt gas stoves. Reversible electric heat pumps that both heat and cool – including those sold primarily into complex commercial buildings by our holding **Trane**^{xiii} – are taking on gas heaters. Gas dryers are outnumbered by electric ones.^{xiv} Meanwhile regulators in 50 California cities and counties, including LA and SF, are banning gas hookups in new residential and commercial buildings, and dominoes may start falling as New York and Canada and others contemplate acting.^{xv}

Let’s step up a level. Clean energy headlines routinely focus on switching electricity generation from fossil fuel to solar, wind and other renewables (an exponential trend to which our Strategy is favorably exposed through **NextEra**’s market-leading renewable development arm and **SolarEdge**’s innovative solar inverters). A distinct and complementary piece of the decarbonization equation is switching the distributed end-uses that are fossil-powered to electricity, whether EVs (to which our Strategy is exposed through **Aptiv**’s electrification solutions sold to nearly all major automakers) or the induction stoves discussed above. This electrification of end-uses is projected to double^{xvi} electricity demand in the U.S. by 2050. Digital intelligence is expected to offset some of this increase, by embedding efficiency and peak-smoothing intelligence into grids and devices, a related thesis underlying our holdings in AI-advantaged^{xvii} clouds such as **Microsoft**’s Azure and advanced semiconductor players such as **ASML**. This is not your grandfather’s vintage 1936 rural electrification^{xviii}, important as that was, but a much more profound economy-wide transformation gaining steam.

One thing that occasionally slows the transition to a net zero carbon economy down is good old-fashioned consumer confusion. People often ask if they buy an EV but the local grid is still mostly fossil fuel powered, will that EV purchase really do any good? The simple answer is yes. First, EVs, and induction stoves, are inherently more efficient than their fossil fuel counterparts^{xix}, largely because they don’t generate waste heat. Second, our transition

will not happen “all at once,” but will be staggered unevenly across the value chain: the generation, distribution, and end-use of electricity will each be cleaned up at different rates. Your early EV purchase means that the subsequent impact of decarbonizing your grid will be that much greater when it happens. And vice versa: once your grid is substantially decarbonized, each additional EV buyer that charges up on that grid will have proportionally more impact on reducing emissions. We’ll need all of it, in no particular order, to achieve net zero emissions, an ambitious commitment now adopted by 130 countries and over one-third of the largest public companies^{xx}, with typical target dates ranging from 2040 to 2060.

Our portfolio is well exposed to the electrification mega-trend, through positions referenced above as well as full positions in **Schneider Electric** and **Siemens**, both globe-spanning industrial leaders in electrical products and services, and full-stack hardware and software for electrifying, digitalizing and automating end uses in buildings and factories. Both were among the top-10 portfolio contributors to the Strategy’s performance in each of the last two quarters. Siemens generated 8% revenue growth and impressive 17% order growth in its Fiscal Year 2022, with nearly 16% industrial profit margins despite winding down its Russian operations and contending with an industrial customer base facing headwinds from spiking gas prices due to the Ukraine invasion.^{xxi} Siemens more recently reported that its Fiscal 2023 was off to a “flying start”^{xxii} and boosted guidance for the year ahead. Within its Smart Infrastructure segment, revenue for electrical products grew 20% year-over-year, meeting growing demand to make electricity distribution grids more resilient and efficient through simulation and control software, substation automation, and high-quality switchgear without the potent greenhouse gas SF6.^{xxiii}

There is one end-use for natural gas that we had expected to defy the electrification trend: natural gas generators. Our thesis for investing in **Generac** was that climate change is intensifying the severity of storms, wildfires and power outages. Generac has a ~75% market share for home standby generators, indicating a dominant, well moated business that we believed would make it a “climate adaptation” stalwart as needs for its solution grew (our secondary thesis also foresaw growth of Generac’s smaller clean energy line-up from ecobee smart thermostats and PWRCell batteries to its Concerto platform for optimizing grid assets). After we invested in the company in late 2020, the shares rose 55% in 2021 and then became one of our largest detractors in 2022, losing 71% as the company suffered last year from the bankruptcy of a key distributor and inventory destocking weighing on sales.

Despite this, we maintained our position as we felt these were temporary challenges to an otherwise sound business. When a stock displays this sort of volatility, however, we devote extra effort to re-examining our original thesis. During this exercise we became concerned about the emerging threat that EV batteries could pose to the standby generator business. For example, a Chevy Bolt’s battery plus a \$150 inverter can meet a home’s electricity demands for three days during an outage^{xxiv}. Bi-directional charging, which avoids the need for a separate inverter, is already available in some EV models and will be available in many more in 2024. We grew concerned that this specter of technological obsolescence on the horizon could begin to weigh on consumer decisions about whether to buy a standby generator, potentially slowing down Generac sales in the future. We exited our Generac position in Q1, taking advantage of a 17% lift in its shares early in the year to offset some of the still significant losses in the position.

We often share insights about our winners, so we felt it important to also expand on this detractor and some of our actionable learnings:

- First, as students of accelerating market solutions to climate change, even we underestimated the reach of electrification into a domain where we believed the reliability of fossil fuels possessed a



defiant and enduring advantage, that of natural gas standby generators. The silver lining is that if the revised thesis that drove our Generac exit is correct, it speaks to the corresponding strength of many of the holdings still in our portfolio, discussed above, that will be major beneficiaries of burgeoning electrification; indeed our learnings on Generac led us to boost, in Q1, our position weightings in Siemens and Schneider Electric.

- Second, powerful interdependencies are at play across our investable universe: once you decarbonize your mobility by buying an EV, it can also help decarbonize your home by offering dual-use as backup power that precludes the need for a generator. This speaks to the value of a portfolio mindset and cross-learning, rather than a narrower, siloed thesis on each holding.
- Third, even sizable companies — Generac entered the S&P 500 just before we bought it — are at risk of rapid loss in value or even extinction in the low-carbon transition. We anticipate more such climate-driven asset re-pricings ahead, from coastal real estate to other legacy companies disrupted by cleaner alternatives. We own **S&P Global** and **Aon** in part because we expect them to benefit from growing demand for risk assessment and risk management services as investors and companies navigate these uncertainties and re-pricings. Along these lines, individuals and institutions may benefit from having investment managers who are attuned to hidden risks in their portfolio from physical climate risk, regulatory progression, changing consumer awareness and technology disruption. We strive to be such a manager. We won't be right all the time, but paying studious attention to these often misunderstood trends and drivers should, we believe, improve our probability of success on your behalf.^{xxv}

Performance

As usual, we encourage you to join us in maintaining a long-term horizon when investing in or evaluating our Strategy. This affords us advantages as investors, because we can take advantage of short-term dislocations in pricing to act on investment theses — like clean electrification — playing out over many years. More market volatility may well lie ahead: the Russia/Ukraine war is tragically still on, the Fed is still tightening, more regional banks may fail, industrial indicators are signaling economic contraction and a potential debt ceiling crisis is looming. But sustainability challenges are steadily intensifying, offering potentially outsized rewards to those applying human ingenuity and capital to craft solutions and build resilience. We maintain conviction that our approach is prudent, indeed advantaged, for long-term investors. Our performance to date is below. (Please note that past performance does not guarantee future results.)

Reference Indexes

	DWA Sustainable Equity (gross)	DWA Sustainable Equity (net)	MSCI SRI TR Index	S&P 500 Total Return Index	MSCI World TR USD Index
Annualized Returns					
1Yr	-7.89%	-8.67%	-7.55%	-7.73%	-7.02%
3Yr	19.33%	18.30%	16.50%	18.60%	16.40%
5Yr	14.15%	13.13%	9.73%	11.19%	8.02%
Inception	16.05%	14.97%	11.31%	12.22%	9.63%
Cumulative Returns					
1Yr	-7.89%	-8.67%	-7.55%	-7.73%	-7.02%
3Yr	69.94%	65.55%	58.12%	66.84%	57.71%
5Yr	93.80%	85.34%	59.11%	69.94%	47.09%
Inception	153.36%	139.18%	95.27%	105.46%	77.62%

We were pleased to attract a highly regarded Western nature conservancy as a client in the first quarter, and continue to have many excellent discussions with other institutions, including university and foundation endowments, either directly or through their Outsourced Chief Investment Officers, as well as with individuals and family offices. We are, as always, grateful for any referrals you may care to make to others who you think might value our approach. To clients, thank you, as always, for your confidence in us to steward your capital. Please reach out to Mary Kush (mary@douglasswinthrop.com) or Dan Abbasi (dan@douglasswinthrop.com) if you would like to set up a call for any reason.

Best regards,

The Douglass Winthrop Team

ⁱ <https://www.ipcc.ch/report/sixth-assessment-report-cycle/>

ⁱⁱ <https://www.un.org/sg/en/content/sg/statement/2023-03-20/secretary-generals-video-message-for-press-conference-launch-the-synthesis-report-of-the-intergovernmental-panel-climate-change>

ⁱⁱⁱ <https://www.nytimes.com/2023/03/13/movies/oscars-everything-everywhere-all-at-once.html>

- iv <https://www.nbcnews.com/science/environment/natural-disasters-boosted-climate-change-displaced-millions-americans-rcna69732>
- v <https://www.aga.org/news/news-releases/aga-applauds-introduction-of-the-save-our-gas-stoves-act-and-the-gas-stove-protection-and-freedom-act/> vi <https://publichealth.berkeley.edu/news-media/research-highlights/leaks-from-gas-stoves-can-create-toxic-levels-of-hazardous-air-pollutants/#:~:text=Low%2Dlevel%20gas%20leaks%20from,published%20in%20Environmental%20Science%20%26%20Technology.>
- vii Apart from health benefits, the climate gains would be material: gas-burning appliances, including ranges, release enough methane annually in the US alone to equal to the climate impact of 500,000 cars. See: <https://www.consumerreports.org/appliances/inflation-reduction-act-and-new-electric-appliance-rebates-a3460144904/>
- viii https://www.tesla.com/ownersmanual/2012_2020_models/en_us/GUID-E692415D-F83C-4F07-B30A-9E50499CFC30.html
- ix <https://www.consumerreports.org/appliances/ranges/guide-to-induction-cooking-a2539860135/> and <https://www.bloomberg.com/news/features/2023-03-09/gas-stove-ban-panic-could-fuel-induction-range-growth>
- x <https://www.motherjones.com/environment/2021/06/how-the-fossil-fuel-industry-convicted-americans-to-love-gas-stoves/>
- xi <https://www.bloomberg.com/news/features/2023-03-09/gas-stove-ban-panic-could-fuel-induction-range-growth>
- xii <https://www.edf.org/article/thanks-inflation-reduction-act-2023-great-year-green-your-home> and <https://www.architecturaldigest.com/story/inflation-reduction-act-home-appliances>
- xiii <https://www.trane.com/residential/en/resources/green-guide/electric-heat/>
- xiv 25% of 89 million residential clothes dryers in the US use natural gas; see: <https://www.nrdc.org/sites/default/files/efficient-clothes-dryers-IB.pdf>
- xv At least 50 California cities and counties, including San Francisco, Sacramento and Los Angeles, have banned gas hookups in most new residential and commercial buildings, even though California is the state with the highest share of households using gas for cooking (70%, versus ~40% for the US as a whole).^{xv} New York and Canada are exploring or passing new electric building ordinances, suggesting that dominoes could start falling. See: <https://borrumenergysolutions.ca/blogs/blog/why-are-natural-gas-heating-bans-growing-across-canada#:~:text=By%202025%2C%20all%20new%20replacement,with%20natural%20gas%2Dpowered%20systems.>
- xvi <https://www.nrel.gov/docs/fy17osti/68214.pdf>
- xvii AI is a shorthand routinely used to denote Artificial Intelligence
- xviii <https://www.usda.gov/media/blog/2016/05/20/celebrating-80th-anniversary-rural-electrification-administration>
- xix <https://time.com/6176129/best-stove-for-health-environment-natural-gas-electric/> and <https://www.motortrend.com/news/evs-more-efficient-than-internal-combustion-engines/>
- xx <https://zerotracker.net/> and <https://zerotracker.net/insights/pr-net-zero-stocktake-2022>
- xxi <https://assets.new.siemens.com/siemens/assets/api/uuid:bb2270f7-8343-4163-abaa-6802f2ad3bea/2022-q4-presentation-en-2.pdf>
- xxii <https://assets.new.siemens.com/siemens/assets/api/uuid:cada153e-39a3-491e-b9ad-64642d0ecd0/2023-q1-presentation-en.pdf>
- xxiii <https://press.siemens-energy.com/global/en/pressrelease/greener-finland-siemens-energy-seals-largest-order-sf6-free-gas-insulated-switchgear>
- xxiv <https://www.washingtonpost.com/climate-environment/2023/02/07/ev-battery-power-your-home/>
- xxv The induction stove, interestingly, is not about new invention; as noted earlier, the technology had been commercialized for half a century, but the imperative of climate action “everywhere”, combined with its inherent product superiority, means it is poised to disrupt the incumbent gas range. This is one among many cases where the key to decarbonization lies not in new innovation, but in accelerating the roll-out of technology we already have.

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