

TANTALLON TECH & SUSTAINABILITY FUND

The Tantallon Tech & Sustainability Fund is a Cayman Island vehicle that invests in listed equities globally. The fund targets a concentrated portfolio of around 20 names seeking returns from long-term growth companies as well as cyclical opportunities.

Tantallon Capital Advisors, the advisor since inception in 2017, is a Singapore-based entity holding a Capital Markets Service License in Fund Management from the Monetary Authority of Singapore.

While global markets rose 2.5% in February and Tech added 5.8%, we continued not to chase the strong start to 2019. We appreciate that high cash levels at the tech companies are driving buy-backs and M&A and that there is optimism around the outcome of the trade war. However, we are continuing to see the tech momentum slow and instead have spent the past 6 weeks confirming our conviction in the battery supply chain and figuring how to further increase our exposure.

Our thesis here is relatively simple: We see huge market size potential. The revenue growth rates for the industry ought to exceed 20% CAGR for the next decade and we have identified multiple drivers stemming from two major trends: Increase in the use of renewable energy from intermittent sources and conversion of mobility based on fossil fuel to electricity. Both need electrical storage to grow into a majority share of their respective markets. In fact, only the combination of the two allows the world economy to achieve major goals of curbing CO2 emissions as well as improving the urban living environments.

The reason this investment thesis continues to have a fair share of doubters is that both trends are still in their relative infancy and very much challenge the status quo of mainstay pools of profit as well as political influence. Furthermore, the US has not assumed its traditional leadership position as it has done in most big industrial changes over the past century and that in itself raises doubts about the validity of these trends. Meanwhile, the few leading US companies in this trend such as Tesla and First Solar have remained outliers in their home market. The only mainstream development has been the increasing demand for 100% renewable energy by the traditional internet service leaders for their data centers.

On the macro economic front the US is a laggard both in terms electricity and e-mobility. Its 2017 electricity mix (62% fossil, 20% nuclear, 18% renewable of which 8% Wind & Solar) continues to rely more heavily on fossil fuels than Europe (43%/22%/35%/14%). On the EV front, the US has recently pulled even with Europe at around 400,000 EVs finding a home in 2018 but both are far behind the 1m plus EVs shipped in China last year. While both realities are understandable given the US's strong corporate assets in the fossil fuel industry and European/American

Performance

Tantallon Tech & Sustainability Fund Size USD 11mn (Cayman is Feeder)
(Inception Jan 17)

	Fund	MXWD*	O/U Perf**	MXWD0IT***	DJ Sust****
Feb 2019	- 0.2%	+ 2.5%	- 2.7%	+ 5.8%	+ 2.2%
2019 YTD	+2.9%	+10.5%	- 7.6%	+14.1%	+ 9.5%
2018	-14.1%	-11.2%	- 2.9%	- 6.8%	-12.1%
2017	+24.4%	+21.6%	+ 2.8%	+40.3%	+20.6%
Inception	+10.0%	+19.4%	- 9.4%	+49.2%	+16.1%

* MSCI ACWI Index

** Comparison with MSCI ACWI Index

*** MSCI ACWI Information Technology Index

**** Dow Jones Sustainability World Diversified Index

FUND DETAILS

Investment Manager:

Tantallon Capital
(Cayman Islands)

Fees:

1.5%pa Management fees

Administrator:

DBS Bank Ltd

Minimum Investment:

USD 1,000,000

Domicile:

Cayman Islands

Custodian:

DBS Bank Ltd

Feeder funds

Offshore (Cayman Is)

Auditor:

KPMG

Lawyers

Harney Westwood & Riegels Singapore
Morgan Lewis Stamford LLC

Dealing:

Monthly

Contact:

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strength in internal combustion engines, they do bias investors there towards the fossil fuel status quo. Other investment heavyweights such as Japan and Australia suffer from similar biases.

Worldwide, the structural change in the composition of OECD energy generation has a longer track record and at least a 10yr head start over e-mobility. The wind and solar pioneers started at the end of last century and by 2009 managed to push the renewable electricity component (ex-hydro) beyond the 2% threshold. Ten years later this contribution stands at just over 13%.

E-mobility from plug-ins just reached the 2m unit/2% mark in terms of worldwide passenger vehicle shipments in 2018 (+77% yoy) with China much stronger at 4% for the year followed by both the US and Europe at around 2%. However, in terms of the global car fleet – the equivalent

	2019	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Fund Monthly Gross Return		3.3%	0.1%										
Fund Cumulative Gross Returns		3.3%	3.5%										
Fund Monthly Net Returns		3.1%	-0.2%										
Fund Cumulative Net Returns		3.1%	2.9%										
Equity Monthly Returns		7.5%	0.1%										
Equity Cumulative Returns		7.5%	7.6%										

of the percentage of RE in the global electricity generation mix - the roughly 5m plug-in EVs still represent less than 0.5% of the total car pool which is where wind and solar were about 10 years ago.

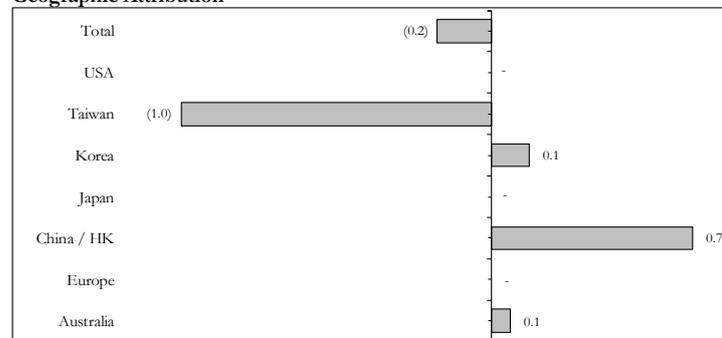
Who are the change leaders?

Now here is the million dollar question: will EVs move faster than RE over the next 10 years, at a similar rate or slower? The big diff in EVs is that consumers are making the choice based on automaker's offerings (which look to anticipate and nudge consumer demand) while energy infrastructure decisions were largely made by utilities. The large utilities actually were much slower with RE and a lot of the RE capacity over the past decade has been built by new entrants who were quicker to seize on the new incentive schemes. Only as of late are traditional utilities looking to build large RE capacities as the absolute low cost of energy (vs. fossil fuels) is making it more attractive. Conclusion from RE is that the new entrants became the opinion leaders and after a decade of improving economics are getting the 'traditional buyers' to act on advantageous costs alone.

On the EV front, the first buyers a decade plus back bought a Prius which was only a mild hybrid (no plug-in at all). Then came a mixed bunch of individuals who either wanted the latest and greatest - Tesla - or the greenest and cheapest - heavily subsidized Chinese mini cars that could get registered in the big cities and very little in between. EV costs over the past 5 years have been driven down to mainstream levels against all expectations by pretty much Tesla alone. Sufficient range at an affordable price (the A-D segments, think VW Up/Polo/Golf/BMW3) became affordable in 2018 (Tesla 3. Announcements by most of the top-12 global auto makers culminating in the latest Geneva Auto show make for an outlook for gradual increase in new EV models during 2019, important launches in 2020 and aggressive targets for 2022-2025. Consumer interest in the promised price/performance offerings appears high and the post-diesel fear of buying yesterday's technology is increasing. The wild card demand for e-mobility demand comes from shared ride companies, taxis and corporate fleets who are attracted by the lower cost of high mileage ownership and the positive impact on their carbon footprint where coupled with RE.

I expect a tipping point to be reached over the next 3-5 years where many consumers will not want their next car to have a combustion engine. They will choose to wait for the right EV at the right price and this will motivate the OEMs to deliver on their aggressive plans. These plans look for 15m plus EVs to be shipped in 2025 and EVs making up about over 10% of the global car park in 2028.

Geographic Attribution



Divergence in various OECD and EM markets will be the order of the day. Europeans will demand more EV choices than their US and Japanese counterparts. Chinese infrastructure and product launches will dwarf the developments in India, Lat Am and Africa but the laggards will be starting to figure it out for the following decade as we have seen in RE.

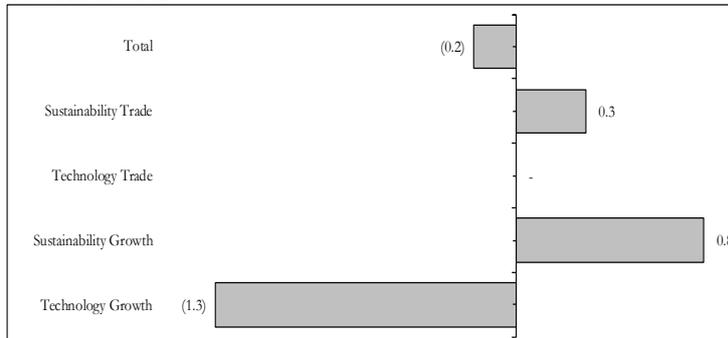
This mobility evolution is a mixed blessing for many industry participants. At the moment the one clear winner is the battery industry and its supply chain which is looking at volume growth in excess of 30% CAGR from e-mobility which will be supplemented by complementary grid demands. China, North Asia and ROW are 3 distinct industrial players. Over the next 5 years the China leaders will supply the local market for domestic and global OEMs and try building an international presence to extend their relationship with the global OEMs. The Japanese & Korean leaders will supply the global OEMs from an increasingly global presence. The US, Europe and India will try to grow some start-ups into 'domestic champions' while relying for volume on the local plants of the Asian leaders. The current leaders have the only basis from which to make the necessary heavy investments and are therefore going to dominate for at least the next five years.

While it easy to fear the roadblocks of charging infrastructure and the inevitable end to subsidies the lessons of RE show that rapid progress happens as competitive dynamics set in, the economics move from a position of disadvantage to advantage and the output/product match the Zeitgeist of sustainability.

We conclude that we will increase our exposure to batteries and expect our thesis of strong and profitable growth for the sector to go mainstream after a volatile ending to 2018 on the back of weaker Lithium prices.

% OF ASSETS ALLOCATION	EXPOSURE
Taiwan	36.3%
Hong Kong / China	7.1%
Korea (South)	2.8%
Australia	0.6%
United States	0.0%
Japan	0.0%
Cash	53.2%
Total	100.0%

Sector Attribution



Equity Positions

Total	7	Largest 5	44.9% of NAV	Liquidity	0.2 days	Mkt Capitalization	>7.5Bn	40.2%
						Gross Exposure (USD)	>1Bn-7.5Bn	6.8%
							<1Bn	53.0%

Top Holdings		Main Contributors - Feb		Main Detractors - Feb	
Ememory Technology Inc (TT)	24.9%	BYD Co Ltd-H (HK)		Ememory Technology Inc (TT)	
Delta Electronics Inc (TT)	8.9%	Longi Green Energy Technol-A (CN)			
BYD Co Ltd-H (HK)	5.7%	Chroma ATE Inc (TT)			
Samsung SDI Co Ltd (KP)	2.8%	Samsung SDI Co Ltd (KP)			
Chroma ATE Inc (TT)	2.6%	Delta Electronics Inc (TT)			

The Fund has appointed Hugo Fund Services SA, 6 Cours de Rive, 1204 Geneva, Switzerland, as its Swiss Representative. Banque Heritage SA, 61 Route de Chêne, CH-1208 Geneva, Switzerland is the Swiss Paying Agent. In Switzerland shares shall be distributed exclusively to qualified investors. The fund offering documents, articles of association and audited financial statements can be obtained free of charge from the Representative.

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