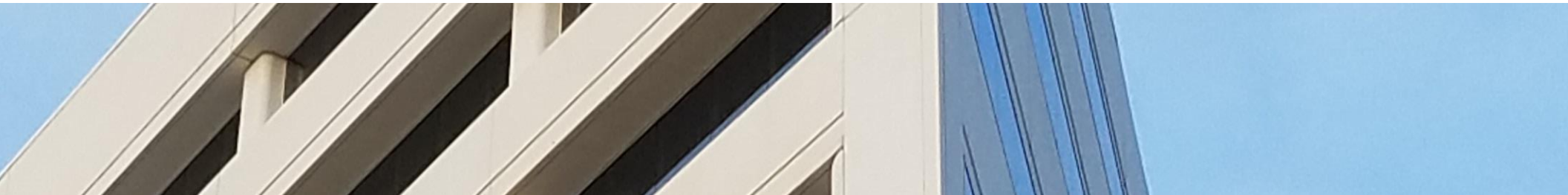




# DIVESTMENT ANALYSIS

Wilshire Consulting



*November 2019*

# ILLUSTRATIVE EXAMPLE OF METHODOLOGY

Stock reallocation example: Divested assets are re-invested across portfolio

Security	Unconstrained Benchmark			Divestment Changes \$ Buy / Sell	Constrained Benchmark		
	\$ Invested	Weight	Return		\$ Invested	Weight	Return
A	\$45	45%	10.25%	\$5	50	50%	10.25%
B	\$27	27%	10.00%	\$3	30	30%	10.00%
C	\$18	18%	9.75%	\$2	20	20%	9.75%
Restricted	\$10	10%	9.50%	-\$10	0	0%	9.50%
<b>Total</b>	<b>\$100</b>	<b>100%</b>	<b>10.02%</b>	<b>\$0</b>	<b>100</b>	<b>100%</b>	<b>10.08%</b>

Portfolio example: Constrained vs. Unconstrained returns drive \$ impact

Time period	Portfolio Returns			Impact			
	Constrained	Unconstrained	Net	\$AUM	PERF Ret	Incremental	Cumulative
All Previous Quarters							(\$100.00)
+ Brought Forward					10.00%	(\$10.00)	(\$110.00)
+ Current Quarter	10.08%	10.02%	0.06%	\$10,000		\$5.75	(\$104.25)

Note: Even if the constrained portfolio yields a positive return, the cumulative impact may still be negative

# SUMMARY ANALYSIS SINCE LAST AFFIRMATION

## Active Divestment Programs (Last Affirmation to FY 2019)

	Present Value Estimate		Program	Estimates Begin in
	\$MM	% PERF	Affirmation	Calendar Qtr.
Tobacco	770	0.2%	Yes	1Q 2017
EM Principles	645	0.2%	Pending	1Q 2008
Sudan	238	0.1%	Pending	3Q 2010
Iran	160	0.0%	Pending	3Q2011
Firearms	11	0.0%	Pending	2Q 2013
Thermal Coal	251	0.1%	N/A*	3Q 2017
<b>Active Total</b>	<b>2,075</b>	<b>0.6%</b>		

\* Thermal Coal divestment program began in 3Q2017

# SUMMARY ANALYSIS SINCE INCEPTION

## All Divestment Programs (Inception to FY 2019)

	Present Value Estimate		Active Dates
	\$MM	% PERF	
<b>Active</b>			
Tobacco	(3,574)	(1.0%)	1Q 2001 to Present
EM Principles	645	0.2%	1Q 2008 to Present
Sudan	238	0.1%	3Q 2010 to Present
Iran	160	0.0%	3Q 2011 to Present
Firearms	11	0.0%	2Q 2013 to Present
Thermal Coal	251	0.1%	3Q 2017 to Present
<b>Active Total</b>	<b>(2,269)</b>	<b>(0.6%)</b>	
<b>Inactive</b>			
EM Countries	(668)	(0.2%)	4Q 2002 to 4Q 2008
South Africa	(5,695)	(1.5%)	1Q 1988 to 4Q 1994
<b>Inactive Total</b>	<b>(6,363)</b>	<b>(1.7%)</b>	
<b>Overall Total</b>	<b>(8,632)</b>	<b>(2.3%)</b>	



# APPENDIX



Wilshire Consulting  
TOBACCO

**Impact of Tobacco Divestment**

Year	Total Return			\$MM Return Impact	Trading Cost (\$MM)	PERF Return	Cumulative PV Impact (\$MM)	
	GE ex-Tob	GE	Net				Inception	Affirmation
2001				-9.3	-1.4	-6.12%	-15	N/A
2002				-144.5		-9.55%	-152	N/A
2003				-124.8		23.23%	-313	N/A
2004				-217.5		13.21%	-577	N/A
2005				-293.9		10.41%	-949	N/A
2006				-109.8		15.41%	-1,203	N/A
2007				-172.5		9.99%	-1,500	N/A
2008				-102.2		-27.12%	-1,189	N/A
2009				116.5		11.89%	-1,208	N/A
2010				-103.1		12.45%	-1,465	N/A
2011				-423.3		1.16%	-1,905	N/A
2012				-283.6		13.28%	-2,469	N/A
2013	24.40%	24.25%	0.15%	182.2		16.22%	-2,682	N/A
2014	4.51%	4.57%	-0.06%	-86.9		6.51%	-2,944	N/A
2015	-2.22%	-2.01%	-0.21%	-321.0		-0.09%	-3,266	N/A
2016	9.03%	9.02%	0.02%	29.3		7.67%	-3,502	N/A
2017	24.35%	24.25%	0.10%	141.7	-1.2	15.73%	-3,916	136
2018	-8.83%	-9.08%	0.26%	485.3		-3.49%	-3,311	600
1H2019	16.34%	16.27%	0.07%	108.6		11.06%	-3,574	770

## EMERGING MARKET PRINCIPLES

<b>Impact of Emerging Market Principles</b>
---

Year	Total Return			\$MM Return Impact	Trading Cost (\$MM)	PERF Return	Cumulative PV Impact (\$MM)	
	GE ex-EM	GE	Net				Inception	Affirmation
2008				8.9		-27.12%	51	51
2009				90.6		11.89%	155	155
2010				-68.8		12.45%	107	107
2011				-132.8		1.16%	-20	-20
2012				15.5		13.28%	-9	-9
2013	24.51%	24.25%	0.26%	282.3		16.22%	299	299
2014	4.64%	4.57%	0.07%	108.8		6.51%	428	428
2015	-1.98%	-2.01%	0.03%	47.0		-0.09%	476	476
2016	9.01%	9.02%	-0.01%	-11.4		7.67%	501	501
2017	24.26%	24.25%	0.00%	1.7		15.73%	582	582
2018	-9.09%	-9.08%	-0.01%	-9.0		-3.49%	548	548
1H2019	16.30%	16.27%	0.02%	15.0		11.06%	645	645



Wilshire Consulting

# SUDAN

## Impact of Sudan Divestment

Year	Total Return			\$MM Return Impact	Trading Cost (\$MM)	PERF Return	Cumulative PV Impact (\$MM)	
	GE ex-Sudan	GE	Net				Inception	Affirmation
2010				24.2		12.45%	25	25
2011	-7.71%	-7.71%	0.00%	0.4		1.16%	26	26
2012	17.00%	17.00%	0.00%	-1.1		13.28%	29	29
2013	24.33%	24.25%	0.08%	84.9		16.22%	125	125
2014	4.57%	4.57%	0.00%	4.3		6.51%	138	138
2015	-1.97%	-2.01%	0.04%	59.2		-0.09%	198	198
2016	8.98%	9.02%	-0.03%	-43.1		7.67%	170	170
2017	24.27%	24.25%	0.02%	21.1		15.73%	220	220
2018	-9.09%	-9.08%	-0.01%	-23.4		-3.49%	190	190
1H2019	16.29%	16.27%	0.02%	17.3		11.06%	238	238



Wilshire Consulting

IRAN



<b>Impact of Iran Divestment</b>
----------------------------------

Year	Total Return			\$MM Return Impact	Trading Cost (\$MM)	PERF Return	Cumulative PV Impact (\$MM)	
	GE ex-Iran	GE	Net				Inception	Affirmation
2011				20.6	-0.4	1.16%	21	21
2012				1.4		13.28%	25	25
2013	24.29%	24.25%	0.04%	47.2		16.22%	80	80
2014	4.59%	4.57%	0.02%	33.6		6.51%	120	120
2015	-2.00%	-2.01%	0.01%	16.9		-0.09%	137	137
2016	9.00%	9.02%	-0.02%	-22.2		7.67%	125	125
2017	24.25%	24.25%	0.00%	0.6		15.73%	146	146
2018	-9.09%	-9.08%	-0.01%	-15.1		-3.49%	127	127
1H2019	16.29%	16.27%	0.01%	5.4		11.06%	160	160



Wilshire Consulting  
FIREARMS

**Impact of Firearms Divestment**

Year	Total Return			\$MM Return Impact	Trading Cost (\$MM)	PERF Return	Cumulative PV Impact (\$MM)	
	GE ex-FA	GE	Net				Inception	Affirmation
2013				-2.0	-8.1	16.22%	-10	-10
2014	4.57%	4.57%	0.00%	4.5		6.51%	-6	-6
2015	-2.01%	-2.01%	0.00%	-2.7		-0.09%	-9	-9
2016	9.02%	9.02%	0.00%	4.8		7.67%	-5	-5
2017	24.25%	24.25%	0.00%	-3.0		15.73%	-8	-8
2018	-9.08%	-9.08%	0.00%	-0.2		-3.49%	-9	-9
H12019	16.29%	16.27%	0.01%	9.8		11.06%	11	11



Wilshire Consulting

# THERMAL COAL

## Impact of Coal Divestment

Year	Total Return			\$MM Return Impact	Trading Cost (\$MM)	PERF Return	Cumulative PV Impact (\$MM)	
	GE ex-Coal	GE	Net				Inception	Affirmation
2017				45.5	0.0	15.73%	47	47
2018	-9.02%	-9.08%	0.06%	116.5		-3.49%	155	155
H12019	16.32%	16.27%	0.05%	64.5		11.06%	251	251