Carbon Reduction Challenge Spring 2019

David Capati, Jack Daly, Sanjana Teje



ABOUT SIGVARIS USA

Sigvaris is a Swiss-based company that manufactures, distributes, and sells medical compression garments known for its premium quality products.



The U.S based portion of the company is currently seeking potential methods to reduce costs in order to compete in this evolving market of low price high volume competitors.

Current US Operations

People in national sales team

Miles/day driven in personally owned vehicles

\$0.57 Reimbursement / mile received for employees

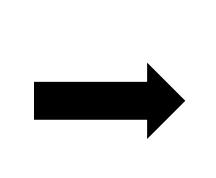
30,838 Annual gallons of gasoline consumed

605,768 Total pounds of annual carbon emissions

PROPOSAL

To aid in transitioning their traveling sales team from personally-owned, gas vehicles to a fleet of company-owned hybrid electric vehicles.







Purchase of Toyota Prius 2018 fleet

Utilize fleet management services including company cards for purchasing gas

Cover insurance, maintenance, and registration costs for company-owned fleet

Target highest drivers within the sales team with a phased approach*

*Sigvaris' Feb 2019 driver mileage shows that to 10 drivers contribute to 46% of mileage

CARBON SAVINGS

10 car fleet

Current Fleet

347,215 24.7 MPG Miles/Year

19.64 lbs.

276,085 lbs. of CO₂ Annually

Hybrid Fleet

347,215 Miles/Year

19.64 lbs. 53 MPG

128,666 lbs. of CO₂ Annually

Total Carbon Reduction = 147,419 lbs. of CO₂ Annually =Taking 7 Ford Fiestas of the road every year



34 car fleet

Current Fleet

761,837 Miles/Year

24.7 MPG

19.64 lbs. of CO₂/gallon

605,768 lbs. of CO₂ Annually

Hybrid Fleet

761,837 Miles/Year **53 MPG**

19.64 lbs.

282,310lbs. of CO₂ Annually

Total Carbon Reduction = 323,458 lbs. of CO₂ Annually =Taking 15 Ford Fiestas off the road every year



Fleet Management

Manager

COST SAVINGS

Discount Rate: 6%

	34	car	10 car		
	Initial Investment	Year 1	Initial Investment	Year 1	
Fixed 1-time Cost of purchasing Fleet	(\$794,750)		(\$233,750)		
Fixed 1-time Fleet Management Cost	(\$5,100)		(\$1,500)		
Annual Operating Cost (gasoline)		(\$31,911)		(\$9,386)	
Annual Maintenance Costs		(\$21,964)		(\$6,460)	
Annual Insurance Costs		(\$72,624)		(\$21,360)	
Annual Registration Costs		(\$2,050)		(\$603)	
Annual Fleet Management Costs		(\$1,530)		(\$450)	
Total Cost (Proposed)	(\$799,850)	(\$130,079)	(\$235,250)	(\$38,259)	
Total Cost (Current)		(\$434,246)		(197,912)	
Net Operating Savings	(\$799,850)	\$304,167	(\$235,250)	\$159,653	
<u>Value</u>	<u>(\$799,850)</u>	<u>\$286,950</u>	<u>(\$235,250)</u>	<u>\$150,616</u>	

	Present Value						
	Initial Investment	Year 1	Year 2	Year 3	Year 4	Year 5	NPV
10 car	-\$235,250	\$150,616	\$142,091	\$134,048	\$126,461	\$119,302	\$437,268
34 car	-\$799,850	\$286,950	\$270,708	\$255,384	\$240,929	\$227,291	\$481,412

10 Car Payback Period:

\$235,250

\$159,653

1.47 years

34 Car Payback Period:

\$799,850

\$304,167

2.63 years

STAKEHOLDER ANALYSIS

Meet Their Need Key Players Vice President, Sales CEO Sales Team Member Show **Least Important** Consideration Account Manager

Conducted market

research and

benchmarking

industry

Q1 2019

Q2 2019

Q3 2019

Q4 2019

Q1 2020

Q2 2020

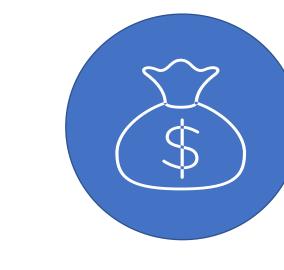
*Rollout 10 car transition with tracking metrics *Alignment with

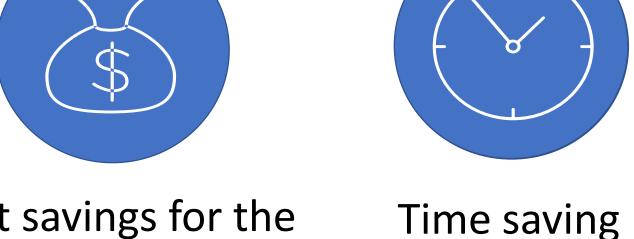
*Full fleet rollout and expansion strategy

Completed

*In progress

BENEFITS



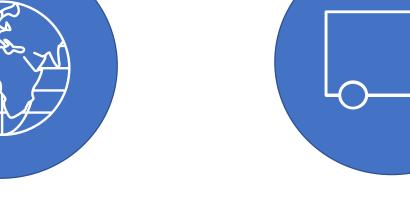




stakeholders











Marketing Greater control of

Cost savings for the organization

for refueling

business model

logistics assets

advantage to consumers health