

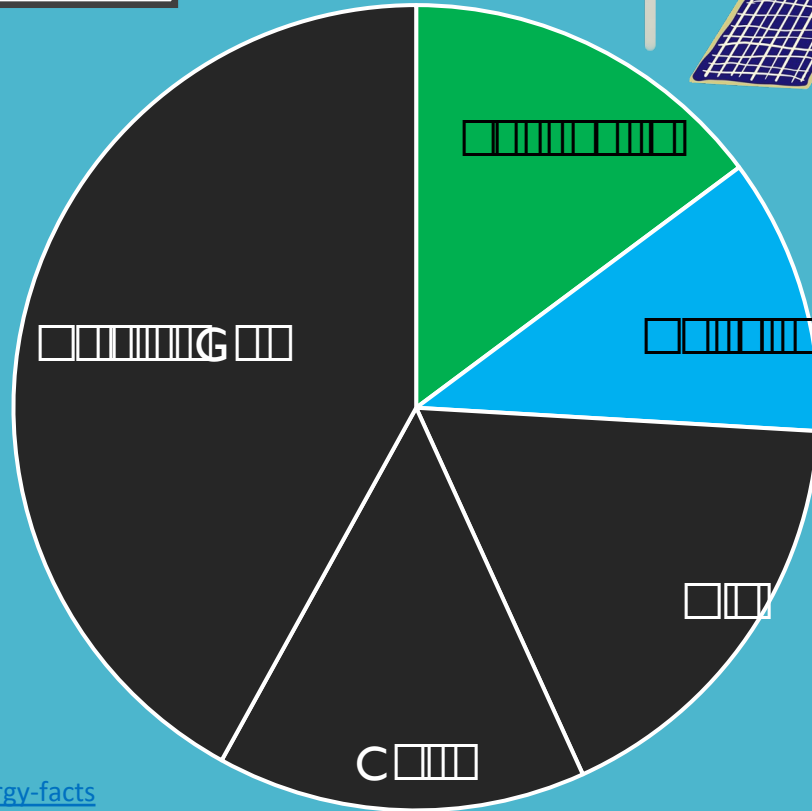
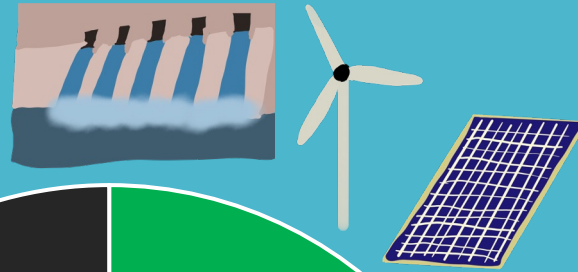


# Climate Solutions for Riverdale

Joel Grayson



# Energy Sources in U.S.



Black=Fossil Fuels

Source: [eia.gov/energyexplained/us-energy-facts](https://www.eia.gov/energyexplained/us-energy-facts)

Data as of 2020

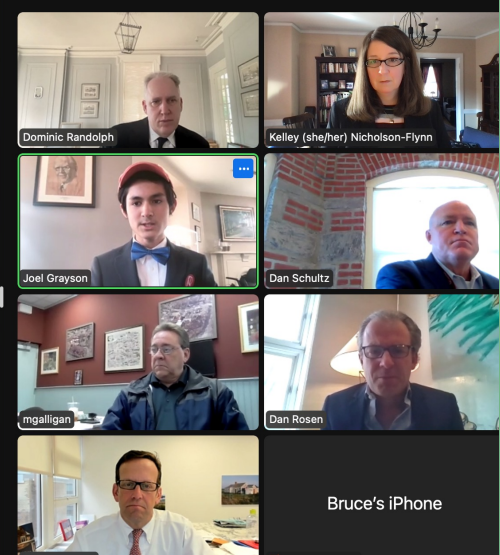


# Solar for Riverdale



## Company Comparison



Company	Sunkeeper Solar		Silver Lining Solar	
	PPA	Direct Purchase	PPA	Direct Purchase
Purchase Type				
kW (system size)	410 kW		86.8 kW	
kWh per year	442000 kWh		107,737 kWh	
Cost per kWh	13¢	\$0	13.8¢	\$0
Upfront cost w/ incentives	\$0	\$997,000	\$0	\$242,000
Annual Cash Flow Savings	\$38-145k	\$91k	\$5k-18k	\$7-20k
ROI Year	0	11	0	13
Image				
Buildings	River & Upper Campus		Andy & Aquatic Center	
Link to Quote	<a href="https://drive.google.com/file/d/18wZR...">https://drive.google.com/file/d/18wZR...</a>		<a href="https://drive.google.com/file/d/1-1.5W...">https://drive.google.com/file/d/1-1.5W...</a>	
Service	Friendly, professional		Friendly, professional	
Date Proposed	1/24/2022		1/21/2021	



# Annual Impact



G  442    
(15% )

  
(6 )

# Electric Leaf Blowers

<b>Gas-Powered</b> Leaf Blowers	<b>Electric</b> Leaf Blowers
Pollute nitrous oxides	Do not pollute on spot
Loud	Quiet
Emit carcinogens and asthma-inducing toxins	Better for health



1 hour of gas powered leaf blower operation

=

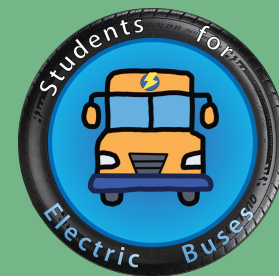


1100 miles of automobile driving



# Electric School Buses

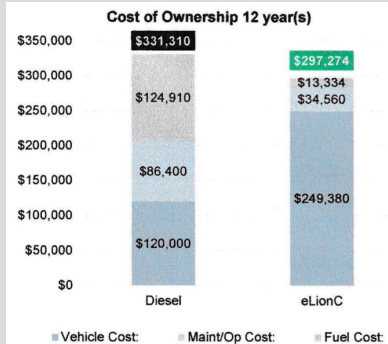
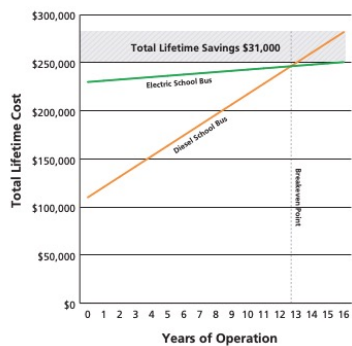
- + Lower emissions by 17 MtCO<sub>2</sub>e, combating climate change
- + Improves student health (diesel causes asthma)
- + Less pollution



E 

Over 12 years, electric is **cheaper** than diesel

- Higher upfront cost
- Lower cost of fuel and maintenance



Thank You