











































Advisor: Matthew Reis· Biology, Agricultural, and Life Sciences · University of the Cumberland & Virginia Tech



Objective: Encourage students to take charge of their lives with sustainable development in mind







Main Objectives & Goals:

- 1. Use the Campus as a Living Text
- 2. Implement the UN Sustainable Development Goals throughout the school.
- 3. Teach students about photovoltaic energy and how it is useful in their lives.
- 4. Create a campaign to reduce food waste in the cafeteria.
- 5. Organize semestral plant sale to recuperate the native ecosystem & raise funds to travel to Washington DC.
- 6. Plant and harvest food in the Veggie Garden to supply fresh food for the cafeteria.
- 7. Investigated the Waste Water Treatment Plant and create campaigns to reduce water footprint by 30%
- 8. Acknowledge the importance of gender equality and reduce inequalities.
- 9. Statistically analyze school indicators about energy use, waste generation, and water use and proposed campaigns to make improvements







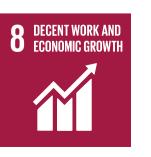
















Rochester School: A living text book



→We Encourage Renewable Energy

At Rochester, we supplement our energy consumption with over 30 photovoltaic panels in each block, including a solar collectors for a heating system for our pools.

We Foster Healthy & Innovative Classrooms

At Rochester, each classroom has a renewable air system and temperature and CO2 sensors to maintain comfortable learning environment.

We Create Healthy spaces for wellbeing.

Students are encouraged to take care of their physical health and practice healthy habits and routines.









Students investigated how the school uses photovoltaic (PV) panels to generate energy. They then build PV houses that incorporated concepts of tilt, orientation, and panels arranged in parallel to maximize power output.

Students taught elementary students about how PV cells work thorugh an Energy Heroes Campaign.



Project



Students Teaching Students









The Club supported different interdisciplinary projects. For example, Math and Environmental sustainability classes created an investigation to find solutions to reduce food waste. They monitored food waste generated by each school and proposed an improvement plan to reduce food waste. Students organized the Zero Waste Challenge in collaboration with International Food day reduced food waste by 80 lbs per day, about the weight of baby elephant!



View the project!







The Veggie Garden serves as the main garden of the school, where students led by the Sustainability Club take care of the plants and cultivate food for various school projects. In addition, the student grows and harvests food that is used in the cafeteria.



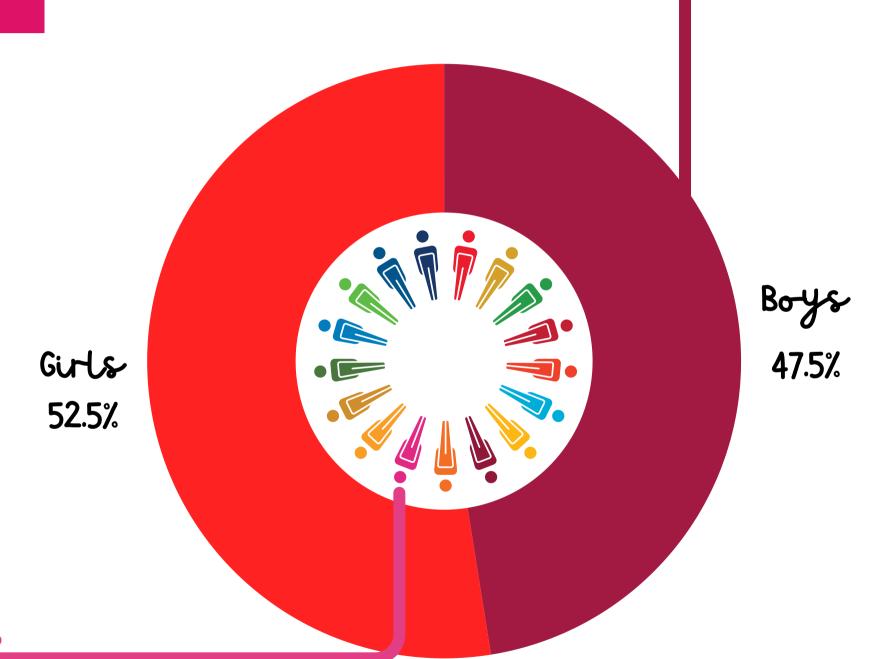
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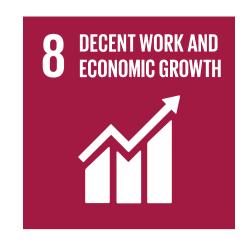


The Rochester Sustainable Development Club is composed equally of boys and girls.



Each activity led by different people to balance the leadership inside the club.

• The club is open for anyone who wants to join, students only need to justify how the club will contribute to their life project and they must be in good academic and nonacademic standing.





Students organized monthly plant sale. The objectives were to sell native plants the encourage restoration of the native ecosystem in Chia and to raise funds to attend the Youth Awards ceremony in Washington D.C.







The WWTP saves up to 30% of the water used at school. Saving so much water decreases the burden on public utilities and the delicate ecosystem in Colombia. Students studied the WWTP and created virtual tours of the facilities to share with the community and encourage sustainable water habits.



View the project!

WWTP

Waste Water Treatment Plant











Waste Water Treatment Plant



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Club Members







































To sum it all up!

- 50 club members
- 263 USD raised by plant sale
- 80 lbs reduction in daily food waste
- 30 lbs of fresh food produced monthly for the cafeteria
- Taught and inspired 910 members of the community about energy and waste management
- Over 200 social service hours

















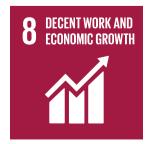




















Special Acknowledgments School Directives











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At Rochester We Care Projects







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