

Green Technology

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| Modules: | Protecting the environment |
| Topic: | <i>Green Technology</i> |
| Title: | <i>How can technology be utilized for green purposes?</i> |
| Target group: | <i>Middle and high school students</i> |
| Starting Point: | <i>Nowadays, it is evident that green technology has the ability to play a critical role in the reduction of the total carbon footprint. More specifically, green technology can be applied in order to improve the efficiency of energy utilization, and contribute to the substitution of fossil fuels with renewable energy sources. In addition, green technology might provide effective methods that facilitate carbon storage and reuse, thus reducing carbon dioxide emissions (Du & Li 2019).</i> |
| Aim: | <i>This exercise will provide students the opportunity to learn how digital devices, and technology in general, can be leveraged for the protection of the environment.</i> |
| Implementation: | <i>This activity is designed to be implemented inside one classroom.</i> |
| Estimated Duration: | <i>In class: 1 lesson; homework: 2 days Presentations in class: 1 lesson</i> |

More detailed content and instructions:

- At the beginning of this project, the teacher will make a vivid presentation enriched with photos and videos about how digitalization and all aspects of technology have had tremendous impacts on the environment and ecosystems, thus contributing to climate change on a great scale.
- At the subsequent stage, the students will implement research about how technology could be leveraged and applied on different sectors in order to minimize carbon dioxide emissions, as well as all kinds of pollution (air, solid, and marine). This stage will last approximately 2 days, so that the collected information is of high quality and well-structured.
- After that, the teenagers will make a presentation about their findings, display their results at school and share their thoughts about the subject area.

Sources

- Du, K., & Li, J. (2019). Towards a green world: How do green technology innovations affect total-factor carbon productivity. *Energy Policy*, 131, 240-250.