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OVERVIEW

Whether it's taking action to address climate change, ensuring the responsible use of resources, or fostering safe and sustainable communities, Siemens plc uses the UN's Sustainable Development Goals to guide their drive towards a sustainable future.

In this challenge, you will be asked to use the UN's Sustainable Development Goals to inspire the ways in which you can make your Greenpower Project more sustainable.

To find more information about Siemens commitment to sustainability please visit: https://new.siemens.com/uk/en/company/sustainability.html

There is an incredibly exciting prize to be won: kindly donated by SEA LIFE, 15 students and up to four supervising adults can visit a UK centre of their choice to learn more about sustainability in oceans!



© CRITERIA: CREATING A MORE SUSTAINABLE GREENPOWER PROJECT

Practicing sustainability - in the interest of future generations

Siemen's sustainability initiatives are an essential aspect of successfully implementing their strategy to achieve profitable and long-term growth. Siemens has prioritised their commitment to climate action through stepping up efforts to reduce their greenhouse gas emissions, strengthen resilience and adapt to climate-induced impacts. In order to drive these goals Siemens have incorporated the UN's Sustainable Development Goals (SDG) within their organisation. This challenge is to choose **ONE** SDG to inspire more sustainable practices within your Greenpower project.

You can choose any element of your Greenpower project or use the project as a whole.

For example, your Greenpower project could be broken down into the following elements:



The car: Build materials, bodywork, technology, and car design



Power supply: Battery charging, battery saving and energy creation



Event day: Team transport and travel, food and drink, shelter and weather protection



Marketing, promotion, and sponsorship



Project longevity within the organisation

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SELECTED SUSTAINABLE DEVELOP GOALS (SDGS)

To find more out about the UN's Sustainable Development Goals please visit https://www.un.org/sustainabledevelopment/student-resources/

7 AFFORDABLE AND CLEAN ENERGY

GOAL 7: AFFORDABLE AND CLEAN ENERGY



'Ensure access to affordable, reliable, sustainable and modern energy for all'

This goal is focused around clean energy- how can your Greenpower project encapsulate this goal?



GOAL 9: INNOVATION, INDUSTRY AND INFRASTRUCTURE



'Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation'

Fostering innovation to drive sustainability is a key aspect of this goal that can be aligned with your Greenpower project. How has your team encouraged new ideas and how do you continue to ensure that your team are improving every season?



GOAL 11: SUSTAINABLE CITIES AND COMMUNITIES



'Make cities and human settlements inclusive, safe, resilient and sustainable'

How can your Greenpower Team impact the world around them and how can you create an environment for change?

For example:

- Is there sustainable transport to and from school?
- Are their electric charging points in the local area?
- Can your team help to improve air quality in the local area or around the school?
- Is access to green spaces available to the whole community?





GOAL 12: RESPONSIBLE PRODUCTION AND CONSUMPTION

'Ensure sustainable consumption and production patterns'

Urgent action is needed to decrease our reliance on raw materials and increase recycling and "circular economy" approaches to reduce environmental pressure and impact. How can your Greenpower team embed these sustainable approaches?

13 CLIMATE ACTION

GOAL 13: CLIMATE ACTION



'Take urgent action to combat climate change and its impacts'

The year 2019 was the second warmest on record and the end of the warmest decade (2010–2019) and global temperatures are on track to rise as much as 3.2°C by the end of the century. What can your team do to reduce its CO2 emissions?

For more information on what is included within each SDG and the associated targets, as well as the other UN SGDs, can be found on the UN SDG webpage: https://sdgs.un.org/goals

For more Siemens education resources to support you and explore sustainability in other technologies, please go to https://new.siemens.com/uk/en/company/education.html



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All entries must include the following sections:

	Example
Concept: Showing good understanding of the chosen SDG and how to make it relevant within their Greenpower setting	SDG 7: AFFORDABLE AND CLEAN ENERGY SDG 7 promotes the use of clean and renewable energy sources, for this reason we have chosen to use solar panels to charge our car's battery. The school Science block has a small number of solar panels which are used to power the Chemistry Lab. We plan to invest in additional solar panels to also charge our Greenpower batteries.
Planning: Route to actualisation outline	Approach sponsor with "good" Green credentials to help raise the funds. Create digital marketing campaign to highlight the benefits of solar energy usage to inform other students. The school Science block has a small number of solar panels which are used to power the Chemistry Lab. We plan to invest in additional solar panels to also charge our Greenpower batteries.
Problem Solving: Showing how the concept evolves and highlighting the challenges faced and how they were overcome	It would take an estimated 12 months to go from raising funds to installation, which is too long for our project. Instead, we used that 12 months to research green electricity providers and moved our Greenpower after school club to the Chemistry Lab to utilise the power generated sustainably rather than using the grid mains power.
Evidence: Showing through photos, videos or data tables, the concept working within the Greenpower Team scenario	Copies of digital marketing campaign, statistics from energy provider credentials. Smart meter reading from Chemistry Lab.

Submissions:

We require the Siemens Sustainability award in a PowerPoint presentation submitted via electronic transfer to **olivia@greenpower.co.uk**. Entries close on 27th of September.

Key objectives	Max No. of slides	Judges criteria for maximum points
Demonstrate a good comprehension of the SDG in relation to your Greenpower project setting. 2 points available	Please use no more than 1 slide to demonstrate this sectiont	1) Have they understood the SDG? 2) Have they shown a correct example of the SDG in relation to Greenpower
Plan must be realistic, well-resourced and include timeframes where appropriate Outline key milestones that need to be achieved to reach the sustainability aim of the project. 5 points available	Please use no more than 1 slide to demonstrate this section	 Plan is realistic within their setting. Evidence given to support this. The plan is correctly resourced, evidence given to support this. The time frame is suitable to meet the aims, evidence given to support this. Key milestones have been identified. Importance of key milestones has been explained in relation to the success of the project.
Highlight the issue analyse where it went wrong and create solutions to overcome the problem. The solutions may change your original project aim but as long as you can document these changes and link them back to your chosen SDG you will have met the aims of the challenge. 5 points available	Please use no more than 2 slides to demonstrate this section	 Problem/s have identified. The cause of the problem/s has been identified. An understanding of how the problem could have been avoided (or not) through additional planning. Solutions have been identified. The best solution has been identified with reasoning
Use this section to capture how your team have worked towards your chosen SDG, using clear and simple images with a short description. 3 points available	Please use no more than 3 slides to demonstrate this section	1) They have demonstrated 3 different examples of evidence showing the SDG being actioned within the Greenpower setting along with any explanatory comments.

Winning entries:

1st place and then highly commended entries will be announced at the International Finals and via press release on the 10th of October.

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