



THE MINISTRY OF ENERGY AND BUSINESS

**YOUTH ENERGY
ENTREPRENEURSHIP
CHALLENGE 2024**

**APPLICATION
GUIDELINES**



ENERGY MONTH 2024



THE MINISTRY OF ENERGY AND BUSINESS

YOUTH ENERGY ENTREPRENEURSHIP CHALLENGE

RULES & GUIDELINES

The Ministry of Energy and Business is inviting all public and private tertiary and secondary school students to submit a business plan for the creative use of the Solar House in Queen’s Park. We are delighted that you are interested in sharing ideas and solutions for the promotion of sustainable energy in Barbados and by extension the world.

In 2019, the Government of Barbados, through the Barbados National Energy Policy (BNEP), committed to transform the country from a fossil fuel economy to a carbon neutral state by the year 2030. It is envisioned that the use of renewable energy, low carbon and energy efficient technologies will enhance the security and stability of Barbados’ energy supply and reduce the negative impacts of fossil fuel use on the global environment.

To raise awareness among secondary and tertiary level students about the importance and utilization of sustainable energy technologies in our daily lives, the Ministry of Energy and Business is funding the Youth Energy Entrepreneurship Challenge.

The objective of this challenge is to encourage collaboration and creativity among the country's youth by encouraging them to prepare a business plan for the Solar House – a demonstration project highlighting energy efficiency and sustainable energy technologies located in Queen's Park.

1. The contest is divided into THREE categories:
 - **Fifth** Forms
 - **Sixth** Forms
 - **Tertiary Institutions with the exception of Universities** (Age: 16 – 19)
2. Each participating group is required to submit ONE proposal only.

The Group name should appear on each numbered page (where applicable) in the event that pages become separated. The cover page should bear the name of the group, the name of each student as well as the supervising teacher.

 - 2.1. The participants must:
 - (a) Be full-time students between the ages of 15 and 19.
 - (b) Be enrolled in a secondary school or a tertiary institution with the exception of universities.
3. Students must present their work as a group of no more than 3 persons. No individual submissions will be accepted. Each group should be guided by a member of the teaching staff of the school, who will serve as the focal point.
4. Each individual or group is permitted to submit only one entry. Additionally, students are not allowed to participate in more than one group.
5. All work must be original and free from any instances of plagiarism.
6. Prizes will only be awarded to submission meeting a minimum standard.
7. All proposals must be written in 1.5 line spacing and font size 12 pt.
 - (a) Category 1 - Maximum 10 pages exclusive of drawings and sketches.
 - (b) Category 2 - Maximum 15 pages exclusive of drawings and sketches

(c) Category 3 - Maximum 15 pages exclusive of drawings and sketches

8. **DEADLINE FOR SUBMISSION:** Each school, via the Focal Point/Teacher, must submit the original proposal on or before **Wednesday, January 31, 2025, by 11.59 p.m.**

9. Each proposal must be submitted via one of the following methods:

(a) uploaded via the Registration Link:

(b) emailed to energyinfo@barbados.gov.bb with the subject Youth Energy Entrepreneurship Challenge

(c) delivered to Permanent Secretary, Ministry and Energy and Business, Trinity Business Centre, Country Road, St. Michael. Refer to template in appendix

10. The proposal will be judged on the following rubric:

	Maximum
Creativity (Use of sketches and drawings to show creative utilization of interior space and technology)	30
Depth of Knowledge (Awareness of sustainable energy, business practices and the country's 2030 goals)	20
Content (adequacy of financial plan, marketing plan, does it match the theme and purpose, is the timeline realistic)	30
Organisation / Structure (Does it flow, can you follow, arrangement and sequence of ideas)	10
<u>Expression of Language</u> (Use of Language / Word choice, Grammar/Mechanics)	10

Score Range	Definition
Excellent (>=90%)	<ul style="list-style-type: none"> ▪ Demonstrates an in-depth knowledge and understanding of sustainable energy and Barbados' 2030 energy goals. ▪ Demonstrates excellent use of illustrations, sketches and drawing to convey ideas for the interior layout and use of technology. ▪ Content excellently matches the theme and purpose ▪ Demonstrates excellent organization of business plan in the way that it flows, is followable, arranged and sequenced. ▪ Excellent expression of language, word choice and grammar.
Very Good (80-89%)	<ul style="list-style-type: none"> ▪ Demonstrates very good understanding of sustainable energy and Barbados' 2030 energy goals. ▪ Demonstrates very good use of illustrations, sketches and drawing to convey ideas for the interior layout and use of technology. ▪ Very good match of the theme and purpose to the content ▪ Demonstrates very good organization of business plan in the way that it flows, is followable, arranged and sequenced. ▪ Very good expression of language, word choice and grammar.
Good (70-79%)	<ul style="list-style-type: none"> ▪ Demonstrates good understanding of sustainable energy and Barbados' 2030 energy goals. ▪ Demonstrates very use of illustrations, sketches and drawing to convey ideas for the interior layout and use of technology. ▪ Good match of the theme and purpose to the content

	<ul style="list-style-type: none"> ▪ Demonstrates good organization of business plan in the way that it flows, is followable, arranged and sequenced. ▪ Good expression of language, word choice and grammar.
Fair (50-69%)	<ul style="list-style-type: none"> ▪ Demonstrates an acceptable understanding of sustainable energy and Barbados' 2030 energy goals. ▪ Demonstrates an acceptable use of illustrations, sketches and drawing to convey ideas for the interior layout and use of technology. ▪ Acceptable match of the theme and purpose to the content ▪ Demonstrates acceptable organization of business plan in the way that it flows, is followable, arranged and sequenced. ▪ Acceptable expression of language, word choice and grammar.
Inadequate (<50%)	<ul style="list-style-type: none"> ▪ Inadequate understanding of sustainable energy and Barbados' 2030 energy goals. ▪ Inadequate use of illustrations, sketches and drawing to convey ideas for the interior layout and use of technology. ▪ Inadequate match of the theme and purpose to the content ▪ Inadequate organization of business plan in the way that it flows, is followable, arranged and sequenced. ▪ Inadequate expression of language, word choice and grammar.

11. SITE VISITS

11.1. There will be an open house on December 11, 2024 between the hours of 9:00AM to 3:00PM where students will be given a tour and briefing about the facility. An online meeting will also be held December 12, 2024 between the Ministry and teachers to explain and answer queries about the competition. Zoom link to the meeting **will be posted on our website.**

12. ABOUT THE SOLAR HOUSE

12.1 HISTORY

The Solar House which officially opened in June 2007 is a government initiative designed to highlight the integrative building design approach to energy efficiency and renewable energy.

Over the years, the Solar House has been used as a live demonstration to show local and international students as well as the general public the basics of solar photovoltaic technology as well as energy efficiency technologies.

The Solar House is an 800 ft² wooden structure with an open layout suitable for an office area or meeting rooms, a bathroom and a kitchen located in a high foot traffic area of Queen's Park, St. Michael. The colours of the building reflect the sunlight and help to keep the house cool while the thermal insulation in the walls and the roof reduces the heat absorbed and transmitted in the building.

In 2024, the Solar House was extensively renovated, and a new hybrid solar photovoltaic system installed.

Details of the layout including pictures of the interior and exterior are included in the appendix.

12.2 THE SOLAR PHOTOVOLTAIC (PV) SYSTEM

The solar PV system at the Solar House comprises 6.8kWp of photovoltaic modules, a 5kW_{AC} inverter and 13.6kWh of battery capacity. This system can generate about 11,000 kWh annually or the equivalent of 6 ½ barrels of oil and offsets 2,277 kg CO₂e.

A [solar](#) photovoltaic system is an electric power system designed to supply electrical energy by means of materials which convert the sun's energy into electricity. The system generally consists of an arrangement of multiple components arranged and configured as a grid-connected or stand alone system.

13. BUSINESS PLAN OUTLINE AND FORMAT

In general, a business plan serves the purpose of outlining the mission and vision of an organisation, sets clear goals and objectives, and details the strategies for achieving them.

The focus of the proposed business plan should be the creative use of the Solar House to increase public awareness of renewable energy, energy conservation and energy efficiency. The proposed business / organization can be for profit or not for profit.

TITLE PAGE / COVER PAGE

1. Include : Business idea name and the names of the students
: Name of teacher who will serve as focal point.

SECTION 1 – Executive Summary

1. Provide a brief description of the proposed activities that will be undertaken at the Solar House including basic financial and marketing highlights.
2. Briefly describe the goals. These should be SMART (Specific, Measurable, Achievable, Realistic, and Time-bound) goals.

SECTION 2 – Proposal for Its Use

1. Provide details of the proposal.
2. Give reasons why you have chosen this type of activity.
3. Provide an organizational chart for the proposed business.

SECTION 3 – Timeline for Implementing

1. Include a Gantt chart.

SECTION 4 - Financial Plan

1. Discuss your organisations main sources of income and funding. These could include individual and corporate donations, grants, fundraising events, service fees, Government subventions, etc.
2. Describe the anticipated start-up costs and operating expenses related to the new activities including any advertising expenses.

The plan should answer relevant questions such as:

- i. What are the opening hours, how many employees will be needed (if any) and what should they be paid?
- ii. How much and what equipment will be needed?
- iii. What additional costs and expenses may be anticipated?

SECTION 5 – Marketing and Public Relations

1. Provide a marketing plan which outlines your organisations plans to generate awareness about its purpose and work, as well as how you plan to solicit donations.

SECTION 6 – Sketches, Drawings, Diagrams, Illustrations

1. Provide sketches, drawings, diagrams, maps and / or illustrations showing the proposed changes to the layout and configuration of the solar house or new conception designs for the business, including logos, signage, etc.

The following sections only apply to students of 6th Form and Tertiary Institution

SECTION 7 – 6th Form Students and Tertiary Institutions (ONLY)

1. Community Engagement Plan
 - a) Outline a plan to work with community organisation or social groups as part of the development of the initiative.

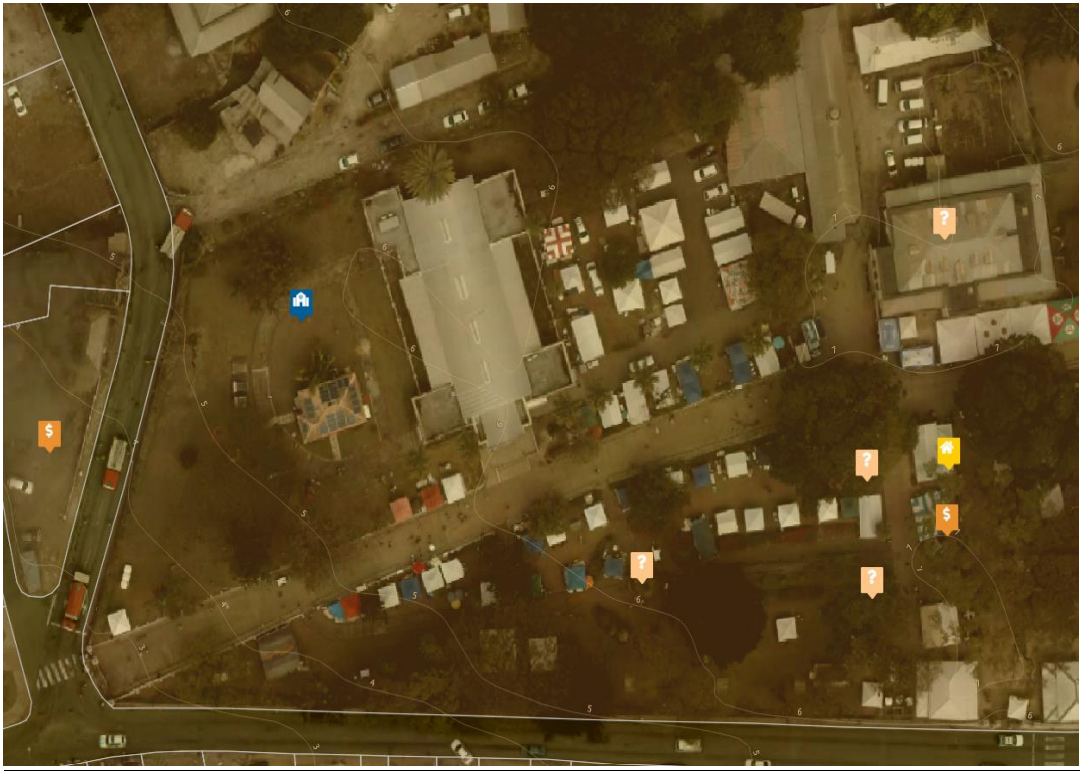
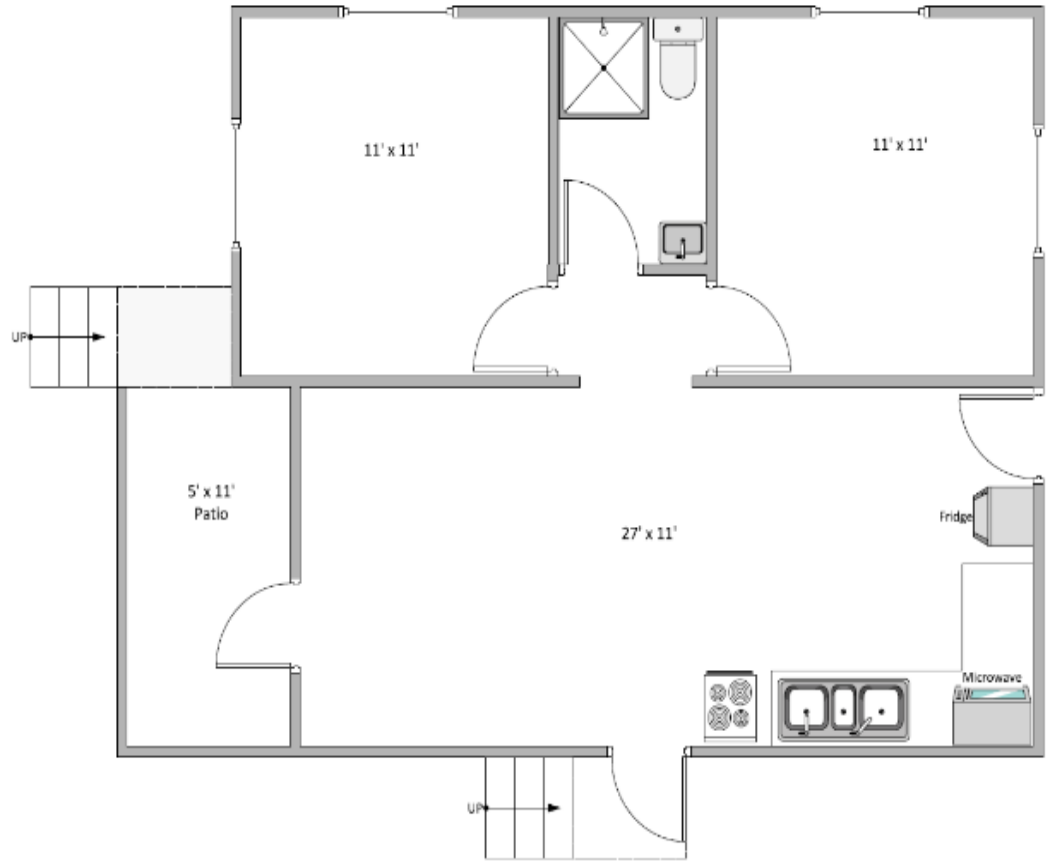
- b)* How could it impact the lives of community members and how can they be included?

BIBLIOGRAPHY

1. List all sources of information, including websites.
2. Attach any relevant supporting information that is not included in your plan.

Ministry of Energy and Business
Government of Barbados
2024-11-11

Appendix – Pictures and Layouts of the Solar House



Pictures



