

# EESW IET 150 MY SUSTAINABLE COMMUNITY COMPETITION – Parent/guardian/ group leader competition handbook



# **EESW IET 150 - MY SUSTAINABLE COMMUNITY Competition Handbook**

This handbook is given as a guide to support young people taking part in the competition. The handbook explains how to take part, a competition brief, simplifying each stage and guidance on completion. Supporting resources include a PowerPoint, an introduction video and a young person's handbook.

The closing date for all entries is Friday 28th January 2022, please submit all work to IET150@eesw.org.uk

#### 1. Introduction

## What is the EESW IET 150 - MY SUSTAINABLE COMMUNITY Competition?

The **IET 150** - **MY SUSTAINABLE COMMUNITY** Competition will help encourage young people to consider their community response to the sustainability and climate change agenda and to consider a career in STEM by giving students a positive experience using their STEM knowledge, skills, and experience to meet the challenge brief.

#### How it works

The EESW & The IET will provide groups/individuals with a **MY SUSTAINABLE COMMUNITY** introduction video, handbook(s) and PowerPoint to get started.

As part of the resources, young people will be given a brief and ideas they may wish to consider, then it's over to them to research and design a solution to meet the **MY SUSTAINABLE COMMUNITY** Competition requirements. Their work should be submitted to: IET150@eesw.org.uk no later than *Friday 28<sup>th</sup> January 2022*.

Projects submitted by the closing date will be entered and assessed for the opportunity to win a prize.

There are three categories of entry – **Individuals**, **Small Groups** (*up to 10 per group*) or **Large Groups** (*over 10 per group*), plus two classes for each category – **Class 1** (*ages 7-10*) and **Class 2** (*ages 11-14*).



# 2. Competition Brief

## EESW IET 150 - MY SUSTAINABLE COMMUNITY Competition Brief

Our communities have evolved over thousands of years, but never before has sustainability been so important.

You are required to design and build a sustainable community, similar to where you live, but from the beginning. Imagine an open piece of land with nothing on it, a blank canvas, this is where you begin.

You should include 150 homes for the people within the community to live in, the rest is up to you. You need your community to be sustainable, that means considering the environment and everything that lives in it.

From providing shelter and water, to heating, food sources and your economy, the challenge is yours. Where will the community buy goods? Where will they work? Where will they go for education or if they feel unwell? And finally, how will they get there?

These choices and so many more will be yours to make as you design and create your own sustainable community!

# 3. Competition Stages

#### Stage 1 -Welcome

- Each group/individual should have access to the Introduction Video and Young Person's Competition Handbook.
- ➤ Both the Introduction Video and Handbook will provide the brief for the IET 150 MY SUSTAINABLE COMMUNITY Competition.
- Each group/individual should discuss their Competition ideas with their parent/guardian/group leader.

# Stage 2 Commencing the Competition

As guidance, a group/individual could start with:

- > Research the current local community, considering other communities around the globe.
- > Preparing a planning system. e.g., Gantt chart to ensure your time is spent effectively.
- Devising ideas and possible solutions.
- Assessing the feasibility of possible solutions.
- Preparing initial designs.
- > Develop their designs to a finished concept.
- Producing any display or digital models to represent the community/specific part of the community.

# Stage 3 Completion

Each group/individual should:

- Produce a portfolio/booklet/poster of work with parent/guardian/group leader support.
- > Produce display model(s)/digital model(s) of their solutions and take pictures/video for submission with the booklet/portfolio.
- Submit all completed entries electronically to: IET150@eesw.org.uk no later than Friday 28th January 2022.

#### 4. Guidance

# **Competition Classes**

There are 3 categories of entry – Individuals, Small Groups (up to 10 per group) and Large Groups (over 10 per group). For each category there are 2 Classes – Class 1 (age 7-10), Class 2 (age 11-14).

Competition Class	Individual:	Small Group (2-10):	Large Group (+10):
1 Age 7-10	A project booklet/poster, plus a small community model or individual model of part of the community.	A project booklet, plus a completed community model or several individual models of different areas of the community.	A class project booklet, plus a completed community model or several individual models of different areas of the community.
2 Age 11-14	A portfolio/booklet/poster, plus a small community model or individual model of part of the community.	A portfolio (suggested length of 14 pages), plus a completed community model or several individual models of different areas of the community.	A class portfolio (suggested length of 15+ pages), plus a completed community model or several individual models of different areas of the community.

**Please note**, all information provided here is just a suggested amount, there is no maximum or minimum number of pages required for the portfolio, or for the number of models submitted. Models can be physical or digital, or a combination of both.

### Portfolio/Booklet/Poster Guidance

Each group/individual should submit either a portfolio, booklet or poster. For the portfolio, it is suggested they can include some of the following: *title page, contents, overview, introduction, research and analysis, procedure, design, and conclusion.* 

It may also include photographs, illustrations, designs drawings, references, tables etc.

## Display Model Guidance

To adhere to the ethos of the project, any physical models should be made from **renewable/sustainable or recyclable materials**. As per the requirements of the class/age group, models can be of an entire community, a section of a community or a specific area such as energy generation, transport, a particular service etc. Digital and Concept models can also be submitted.

Models can be any size however we recommend they fit on a tabletop for ease of manufacture.

# 5. Contact Information

For further information on the competition, to take part or for general enquiries please contact EESW.

Email: IET150@eesw.org.uk

Website: www.stemcymru.org.uk

Phone number: 01656 669381

# 6.Competition Assessment Criteria

The aim of the assessment procedure is to indicate achievement under each of the following criteria (there are a total of 90 marks available, split as shown).

#### 1. Analysis of Brief - 5 marks

- Understood the brief.
- Explained the issues involved.
- Suggested appropriate plans for future development.

#### 2. Project Management - 5 marks

Evidence of good time and project management

#### 3. Produced a Solution - 10 marks

- Demonstrated solutions.
- Evaluated solutions using different methods.
- Discussed how successful your solution will be for the future of the community.

#### 4. STEM Knowledge and Skills - 10 marks

Displayed skills in Science, Technology, Engineering and Maths

#### 5. Sustainability - Commercial, Social and Environmental factors - 10 marks

- Shown awareness of sustainability (commercial, social, and environmental implications)
- Identified any potential estimated cost benefits?

#### 6. Written Portfolio/Booklet/Poster - 20 marks

Portfolio/Booklet/Poster is clear, concise, well-presented, and accurately sets out the process undertaken.

#### 7. Model Design & Manufacture/Digital Design - 20 marks

Model(s) or digital design is well designed, creative, and thought provoking

#### 8. Judge's Discretion – 10 marks

Extra marks, reserved by the judges and awarded for any areas where judges feel extra marks are deserved, for example:

considered, work done, enthusiasm and ideas over and above the guidance given, independent research and reference to information provided in additional resources.

