The Department of Energy (DOE), under its Public Outreach Programme is organizing competitions for both Primary and Secondary Schools for 2015. Competitions will be in the form of Posters, Essays, Energy Audits and Renewable Energy Model Competitions. The theme for this year’s competition is “Do Fiji Proud, Be an Energy Saver” and is critical to what the planet is facing today with regards to the global warming phenomena, sea level rise, overexploitation of our natural resources and the inefficient use of energy. In this regard, students are encouraged to participate and to broaden their knowledge on energy issues, particularly those facing Fiji.

**THEME: Do Fiji Proud, Be an Energy Saver!!!!**

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**The categories are as follows:**

<table>
<thead>
<tr>
<th>PRIMARY SCHOOL</th>
<th>SECONDARY SCHOOL (FORM 3—5)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>- POSTER COMPETITION (CLASSES 1-8)</strong></td>
<td><strong>- ESSAY COMPETITION</strong></td>
</tr>
<tr>
<td>i) Students will be required to use their artistic skills and knowledge based on the theme.</td>
<td>Students will be required to write an essay based on the theme.</td>
</tr>
<tr>
<td>ii) Only one entry per student for the Primary Schools Poster Category and a brief 1/2 page description of the poster.</td>
<td>i. Only one entry per student for the Secondary Schools Essay Competition.</td>
</tr>
<tr>
<td>iii) Posters are to be submitted on A3 size paper (297x 420mm)</td>
<td>ii. The essay will be judged on structure, originality, appropriateness, standard of presentation, referencing and the understanding of the theme.</td>
</tr>
<tr>
<td>iv) The posters will be judged on the originality, appropriateness, content, art-work, general impression on the poster, linkages to the local or national level and the understanding of the theme.</td>
<td>iii. All references need to be acknowledged with proper citations.</td>
</tr>
<tr>
<td>v) Posters will be divided and judged in two categories i.e. classes 1-4 and classes 5-8.</td>
<td>iv. Essays should be of (800 —1000 words).</td>
</tr>
<tr>
<td>vi) <strong>Students must fill the registration form</strong> and attached together with their entry. Failure for students to do this may result in the elimination of their entry.</td>
<td>v. Essay to be typed or legibly written and binded properly</td>
</tr>
<tr>
<td></td>
<td>vi. <strong>Students must fill the registration form</strong> and attached together with their entry. Failure for students to do this may result in the elimination of their entry.</td>
</tr>
</tbody>
</table>
SECONDARY SCHOOL

- RENEWABLE ENERGY MODEL COMPETITION

- The competition will involve a group of not more than 4 students.
- They will be required to create a working model based on the theme; “Do Fiji Proud, Be an Energy Saver”.
- The model can either focus on Renewable Energy, Green/Sustainable Buildings, Cleaner Technologies, Supply Chain Issues, Fuel Substitution (Biofuel Production (Ethanol), Electric Cars/Bicycles) and so forth.
- The model should closely portray the real set-up in terms of the technology/resource referred to.
- Hybrid models which use more than one of the technologies/resource listed above is also acceptable.
- Students will be assessed based on the structure, stability, material used, mobility, working model, appropriateness, concept and relevance of ideas and also linkages to the theme at the local or national level.
- Students will also be required to provide a 1 page description/explanation and do a presentation of the model
- Schools can submit more than one entry for Secondary Schools Energy Model Category however the models should not resemble each other in design and concept.
- All written submissions are to be typed or clearly hand-written.

Winners will be judged first at divisional level (Central/Eastern, Western and Northern) and then at National Level. Registration forms for participation in Model Competition are to be submitted before 13th March, 2015, 4pm at the addresses provided below. The details of the competition will be forwarded to the schools that register.

- ENERGY AUDIT

- Group of not more than 4 students. Individual reports from students will be disqualified.
- Must undertake the energy audit of the School. The building should be clearly described in the final report under the Facility Description.
- Plagiarism will not be entertained. Failure for the students to properly reference will result in the deduction of points.
- Final Report must be neatly typed, bound and submitted to the Department at the address provided.

STAGES OF ENERGY AUDIT

The energy audit process is divided into three (3) stages:

- Desktop Review: Overview of the sites energy performance based on basic and electricity of fuel consumption data. The students have to liaise with the School Management for the release of the electricity consumption data for at least the last two (2) years. In case the school uses diesel generators, the fuel consumption data must be obtained from the generator operator.
- Site Inspection: Assessment of the sites energy consumption and usage patterns aimed at identifying peak energy reduction options that would be consistent with the operational requirements of the site.
- Data Analysis and Report Preparation:
  Analytical study of acquired data. Identification of energy reduction opportunities and provision of itemized list of recommendations, including management options and capital works where feasible. All analysis and calculations must be submitted together with the report and attached as Annexes. This will assist the assessors authenticate your analysis and calculations.
OUTLINE OF THE ENERGY AUDIT REPORT

The outline of the Energy Audit Report is shown below;

- **Executive Summary**: A brief summary of the recommendations and cost savings
- **Table of Contents Introduction**
  - Purpose of the energy audit. Need for a continuing energy cost control program
- **Facility Description**
  - School buildings, electrical equipment, electrical appliances
- **Energy Bill Analysis**
  - Students will need to analyze the school bills and tabulate findings
- **Energy Management Opportunities**
  - Listing of potential EMOs, Cost and savings analysis, Economic evaluation
- **Energy Action Plan**
  - Your recommendations need to be documented here and an implementation schedule
- **Conclusion**
  - Additional comments not otherwise covered.

Assessment

Entries will be evaluated according to but not limited to Creativity, Appropriateness, Description and so on.

3. CLOSING DATE:

   All entries must reach DoE by 22nd May 2015, 4pm.

* Pictures used are for illustration purpose only.

**COMPETITION PRIZES**

**POSTER COMPETITION: STUDENT’S PRIZES (CL 1-4 & CL 5-8)**

1st - $100, 2nd - $75, 3rd - $50

**ESSAY COMPETITION: STUDENT’S PRIZES (FORM 3-5)**

1st - $150, 2nd - $100, 3rd - $75

**ENERGY MODELS (DIVISIONAL LEVEL)/ENERGY AUDITS: STUDENT’S PRIZES**

1st - Tablet & $100, 2nd - Tablet & $75, 3rd - Tablet & $50

**ENERGY MODELS (NATIONAL LEVEL): SCHOOL PRIZES**

1st - Plaque & $3000 Cheque, 2nd - Plaque & $2000 Cheque, 3rd - Plaque & $1000 Cheque

**ENERGY AUDIT: SCHOOL PRIZES**

1st - $3000 Cheque, 2nd - $2000 Cheque, 3rd - $1000 Cheque
REGISTRATION FORM
Name: ........................................................................................................................................
Age: ................................................................................................................................. Class/Form: .........................................................................................................................
School: ......................................................................................................................................
Address: ...................................................................................................................................
Postal: .......................................................................................................................................... Option: (please tick)

POSTER

ESSAY

ENERGY MODEL SCHOOL REGISTRATION FORM
School: ......................................................................................................................................
Address: ....................................................................................................................................
Postal: .......................................................................................................................................... Phone: ....................................................................................................................................
Email: ......................................................................................................................................... Registration Due Date: 
13th March 2015
Number of MODELS to be submitted

ENTRY FORM
TEAM MEMBERS (4) (Please clearly state the details)
1. ........................................................................................................................................................
2. ........................................................................................................................................................
3. ........................................................................................................................................................
4. ........................................................................................................................................................

MODEL

ENERGY AUDIT

All entry forms are also available on: http://www.fdoe.gov.fj/

All entries to be addressed to:
The Director, Department of Energy,
P. O. Box 2493, Government Buildings, Suva.
OR delivered to Level 1, Nasilivata House
87 Ratu Mara Road, Samabula.

For further queries please contact Akuila on 3384111 or email akuila.tawake@fdoe.gov.fj/energy@govnet.gov.fj