

Get Energised with the ScottishPower Foundation Project Brief

Get Energised with the ScottishPower Foundation will present students in upper secondary schools with a problem-solving challenge, based on the exciting and important national collections in our care. Around 3000 participants will take part in the project in total looking at the theme of *Renewable Energies in Scotland* particularly looking at wind turbines, wave and tidal sources. Working specifically with senior pupils studying STEM-related subjects (Science, Technologies, Engineering and Maths) at the stage of making subject and career choices, we will be encouraging more pupils, especially girls, to consider this area. Crucially, the project will also introduce science industry and research experts in the form of a panel to set the challenge, debate the process and discuss results. The outcomes of the project will inform approaches and resources for the National Museum of Scotland's planned new gallery on Energy opening in 2016.

The events will be hosted in the National Museum of Scotland over **National Science and Engineering Week 14- 23 March 2014**. We will also carry out satellite events based at two of our other sites across Scotland – the National Museum of Rural Life in East Kilbride and the National Museum of Flight in East Lothian. *Get Energised* will be broadcast live on GLOW TV (Scotland's schools intranet) allowing all schools across Scotland to participate and creating online film resources available after the project. A key legacy of the project is new resources, including digital resources, linked to our planned Energy gallery. The students' hard work will be recognised at an Awards Ceremony at the end of the project.

Target Audience

- Senior pupils aged 14 – 18 studying Physics, Maths, Technologies and general science.
- Schools across Scotland.
- Secondary teachers.

Pupils learning outcomes

- Applying their knowledge of physics, maths and technologies to solving real engineering challenges and presenting their solutions.
- Developing skills in team-working to successfully complete the engineering challenge.
- Able to discuss the pros and cons of renewable energy versus traditional sources of energy.
- Understanding the different career opportunities available in Scotland in the engineering sector.
- Be inspired by the innovative engineering and creative people in Scotland's renewable energy industry.

<http://www.educationscotland.gov.uk/weatherandclimatechange/energy/renewable/introduction.asp>

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Challenge Events

Pupils will work in groups to solve a 'challenge' relating to energy needs of the future. The challenge will be set by a panel of industry experts and innovators and will involve building and testing ideas. The challenge will be the same at every event and team working time on the challenge will be about 3 hours. Groups will be provided with materials and 'kit' to create a solution but will also be encouraged to consider the commercial aspects of the challenge. The challenge could be something along the lines of creating the most efficient wind turbine. A high profile keynote speaker will set the scene at the beginning of the day and provide inspiration for the challenges. Elements of the challenge events will be 'broadcast' on Glow TV our Scottish schools intranet to increase participation.

Delivery Outline.

3 days of challenge events and speakers programme for pupils and teachers at National Museum of Scotland.

2 days of satellite events at National Museum of Rural Life and National Museum of Flight. Each day will last from 10.00 – 15.00 (3 hours for challenge)

Maximum 150 pupils per day.

1 keynote speaker per day (can be duplicated)

Project Management

Pamela Robertson, Learning Officer, National Museums Scotland will manage the overall delivery of the project. Pamela will be responsible for:

- Recruiting panel of experts and stakeholders.
- Marketing and recruitment of schools including all publicity and web information.
- All liaison and bookings of schools.
- Event operations on the challenge days.
- Liaison and management of Education Scotland partnership through GLOW.
- Ensuring project milestones are met.
- Liaising with design of the teachers packs.
- Providing support and training to enabler staff if required.
- Evaluation of project.

The **Science Engagement Specialist** will be expected to carry out the following tasks:

- Develop, write and deliver an engineering team 'challenge' day event for senior pupils on the themes of renewable energy in Scotland, to be delivered 5 times.
- Develop learning outcomes and Identify curriculum links for the challenge day events and related resources.
- Attend approximately 4 meetings with panel of experts to discuss content and their role in judging the winners.
- Develop and write teachers' pack for use pre, during and post event (approximately 10 -15 pages).
- Procure materials required for 'challenge' days, prepare materials as required for the day into 'kits' and deliver 'kits' to the museum.
- Liaise with NMS staff on the content of the 'challenge' and the use of equipment and materials.
- Create risk assessments for all challenge days.
- Curate a programme of 5 key note speakers to appear on the Challenge days.
- Attend awards ceremony in May 2014 (date to be confirmed).
- Prepare post event report.

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Programme

It is expected that the contract will commence in September and follow the schedule as below:

- Deadline for tender applications 20 August 2013
- Selection process w/b 2 Sept 2013
- Successful applicant appointed 9 September 2013
- Content development October – December 2013
- Event delivery March 2014

Deliverable Milestones

Schools recruited	20 December 2013
Speaker programme confirmed	15 November 2013
Engineering 'challenge' day outline	15 November 2013
'Challenge' day teachers packs final content	10 January 2014
Delivery of 'challenge' day kit sample	1 March 2014
Delivery of challenge 'kits' for schools	7 March 2014

Tender Submission

The tender submission should include a written creative response (up to 4 pages of A4), CV (including 2 referees) and a detailed budget clearing stating daily rate and time estimated for delivery of the project.

Evaluation of the tender submission will be based on the following:

Evaluation Criteria	Weighting	Max Points
Budget	30%	35
Expertise and experience	35%	17
• knowledge of the subject matter.		
• Experience of creating resources for target audience.		18
Creative ideas	35%	35
• Demonstrates creative ideas in submission.		

Response Note

The tender is to be fixed price, the budget allowed for this package of work is **£9,000 net of VAT**. At tender stage it should be indicated how this budget has been broken down. An additional budget of maximum £10,000 is allocated for challenge 'kit' materials. Any alternative quotes whether higher or lower than the proposed budget will be considered.

For any further queries please contact:

Pamela Robertson
Learning Officer
National Museum of Scotland
Chambers Street
Edinburgh EH1 1JF
T: 0131 247 4046 E: p.robertson@nms.ac.uk

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