

Schools Renewables



Schools Renewables

- **What is it?**

- An initiative to engage pupils in a range of curricular and personal/ group development activities
- To enthuse learning within a relevant and well resourced context
- Flexible projects covering energy topics including generation, storage, and applications
- Specialist staff are available to work with you in your school to assist delivery
- Students engage with designing, building, testing and marketing low carbon energy systems
- Applications are within relevant and popular contexts including transport technologies
- Internal and external marketing opportunities to raise your school profile with the possibility of funding generation



Schools Renewables

What will be delivered?

- General awareness of energy issues through to specific curricular coverage
- Entry point and levels are flexible to each participating school across Key Stages 1 and 2
- Centred on Science, Technology, Maths, Marketing ICT and Literacy
- The emphasis of delivery will be decided by consultation with teaching staff
- INSET opportunity prior to delivery
- Pupil activity can range from themed investigation and presentation of 'energy' topics to detailed curriculum delivery
- Designing and building wind turbines, eco-powered cars and boats building and testing is at the core of the programme as an exciting activity for pupils and staff
- Relevant off-site delivery opportunities available



Schools Renewables Curriculum



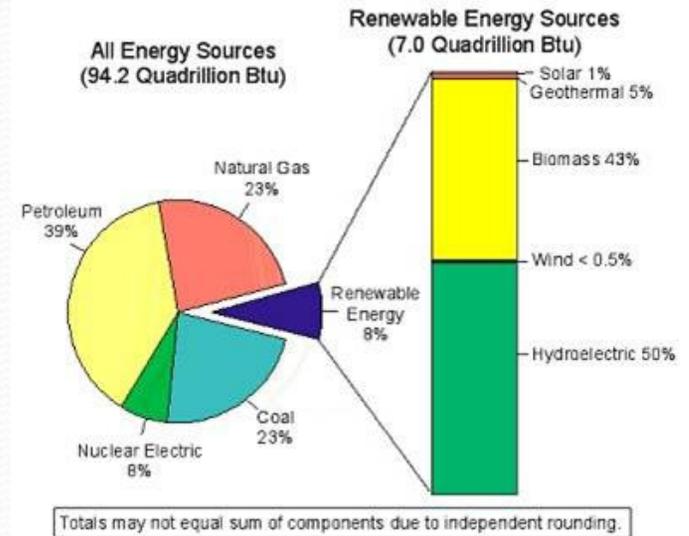
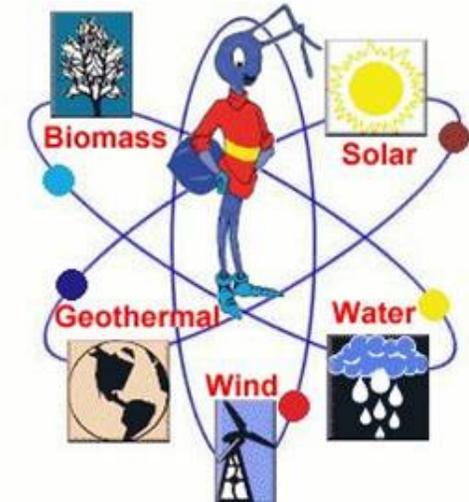
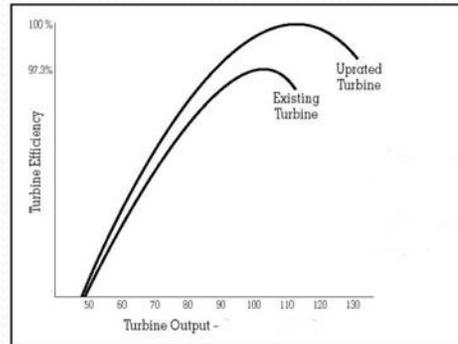
Science

Renewable Energy

- Comparing forms of renewable energy
- Energy conversion – from one form to another
- Storage of electrical energy
- Safety with electricity

Testing and Data capture

- Conducting fair tests
- Predictions
- Recording data
- Analysing data
- Drawing conclusions and making recommendations



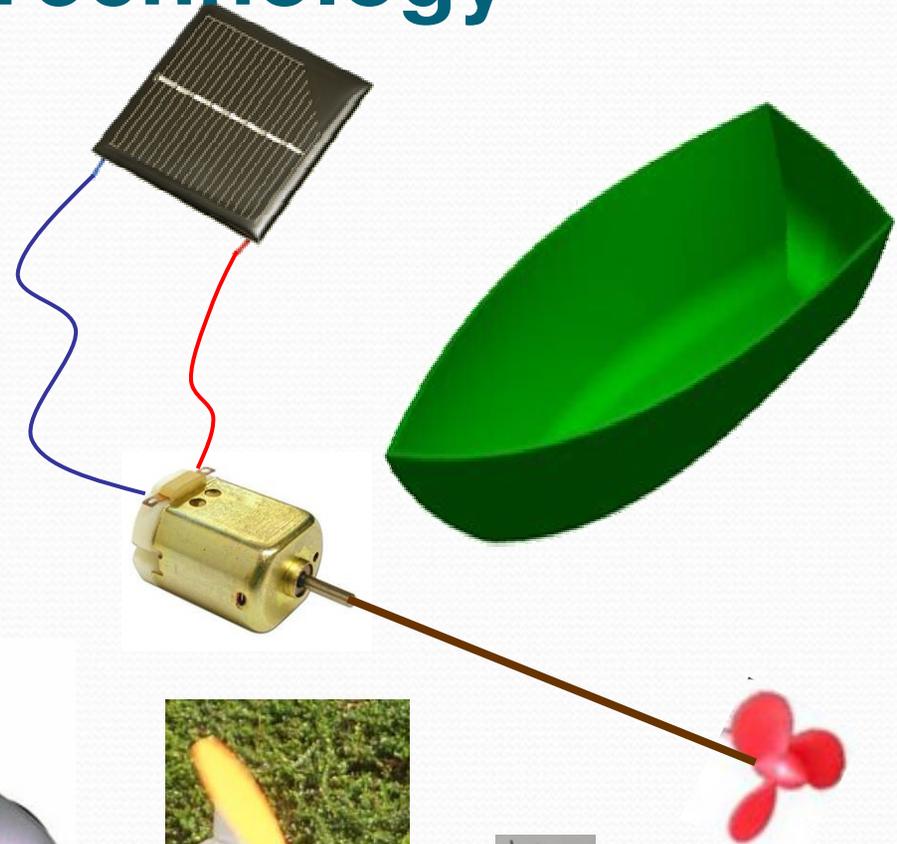
Design & Technology

Product Design

- Research renewable energy and transport

Manufacturing

- Wind and water turbines
- Solar Boats and Cars
- Graphic Design
- Computer aided design



Maths / ICT

Producing and presenting information for different audiences

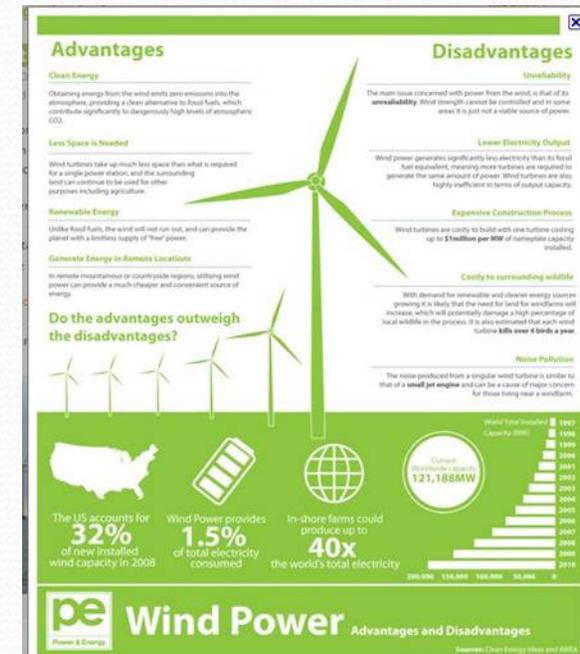
Data Analysis

- Selecting the best way to record, analyse and present data
- Selection and use of appropriate methods
- Presentation techniques
- Producing graphs from data



Publishing Data

- Presenting data to meet your audience needs and expertise
- Digital based production decisions including internet applications and social media



Geography

Energy needs analysis

- Environmental issues
- Local energy provision
- Import of energy considerations - cost – employment - environmental impact

Criteria for selecting test locations

Local conditions affecting choice

- Weather
- Sunlight
- Wind speed and frequency
- Tidal flows
- Population considerations
- Business community
- Residential community
- Seasonal populations



Literacy

Presentation

- Produce a 'visitor centre' experience to describe the project
- Marketing and advertising the exhibition
- Production of exhibition materials - posters, leaflets, displays
- Making the exhibition appeal to different people
- Approaching local authorities to help promote the exhibition
- Planning and resourcing a tour of the exhibition to a local shopping centre
- Interviewing: expert opinions and local views
- Contacting and producing materials for the mass media – TV, newspapers etc
- Put on 'energy' as a school production
- Interfacing with ICT production of material in different media
- Engagement of local partner schools with your project

