

## Energy matters . . .

### Investigating Renewable Energy at KS2



## CEES at Vine House Farm

If requested a “mix & match” programme of learning activities from different day courses may be selected.

**At KS1 & 2, CEES Day Course themes at Stibbington Centre, Burwell House, Wisbech Castle and Vine House Farm include:**

#### Science

Exploring the environment  
Rocks & soils  
Energy & renewables  
Habitats & food chains  
Plants & minibeasts  
Crime Scene Investigation

#### Geography

Maps, trails & treasure  
Weather & climate  
Exploring a locality  
Rivers & water

#### History

Romans                  Vikings  
Victorians              WWI  
WWII Evacuation

#### Art & design

Eco Art & the environment

#### English & maths

. . . outdoors

#### Contact details for further information

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## Day Course Information:

**Curriculum focus - Science:** Working scientifically

#### Aims

- ✓ To understand how electricity is generated by renewable means in a real world context.
- ✓ To recognise dangers associated with electricity and industrial installations.
- ✓ To evaluate experimental materials and processes.
- ✓ To assess man’s impact on the environment.
- ✓ To use scientific evidence to answer questions, to make careful observations and to take measurements using a range of scientific equipment.

#### Programme

*The actual programme may vary depending on number and needs of pupils, length of visit and weather conditions on the day.*

#### Welcome

On arrival a CEES teacher will welcome your group to CEES’ education base at Vine House Farm and describe the day’s programme. An illustrated talk will then be used to introduce electricity generation and renewable energy. A wind turbines quiz will use electronic response systems to assess children’s prior knowledge.

#### Morning

This session will begin with a safety briefing prior to visiting one of the farm’s wind turbines where pupils will be able to carry out investigations, including estimating turbine tower height, measuring wind speed, assessing environmental impact and completing a field sketch.

#### Afternoon

During this session an Energy Trail around the farm will give pupils an opportunity to see other renewable energy installations, and the session will end with a chance to experiment with mini solar, photovoltaic and wind turbine kits.

**Review** Prior to departure there will be an opportunity to review and reflect on the day

#### Risk management

See separate “**Guidance notes for safe and effective Day Courses**”

**Supervision:** For this Day Course our recommended adult:pupil ratio for safety is 1:8 in pre-arranged working groups

**Weather conditions:** CEES teachers are aware of daily weather forecasts and may adjust programmes depending on weather conditions on the day. See separate guidance on outdoor clothing and footwear.

**Site conditions:** Vine House Farm is a busy, working farm. CEES teachers have assessed the site and will draw attention to any relevant risks. Movement around the site is carefully planned and pupils will remain close to their supervisory adult at all times.

**Equipment:** Instructions are given on the safe use of all equipment.