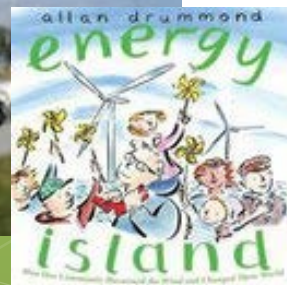
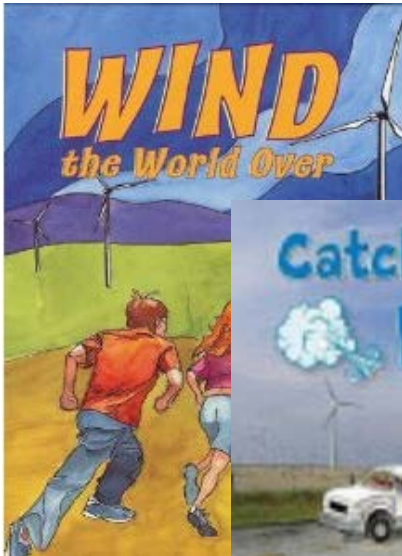
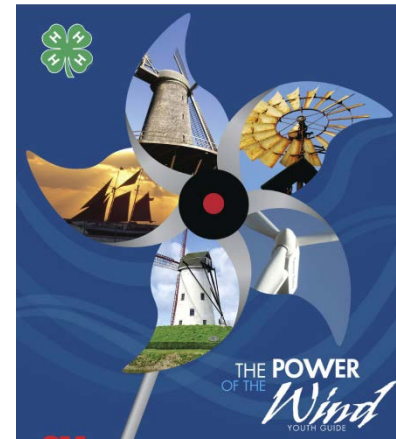


# WIND ENERGY EDUCATION RESOURCES



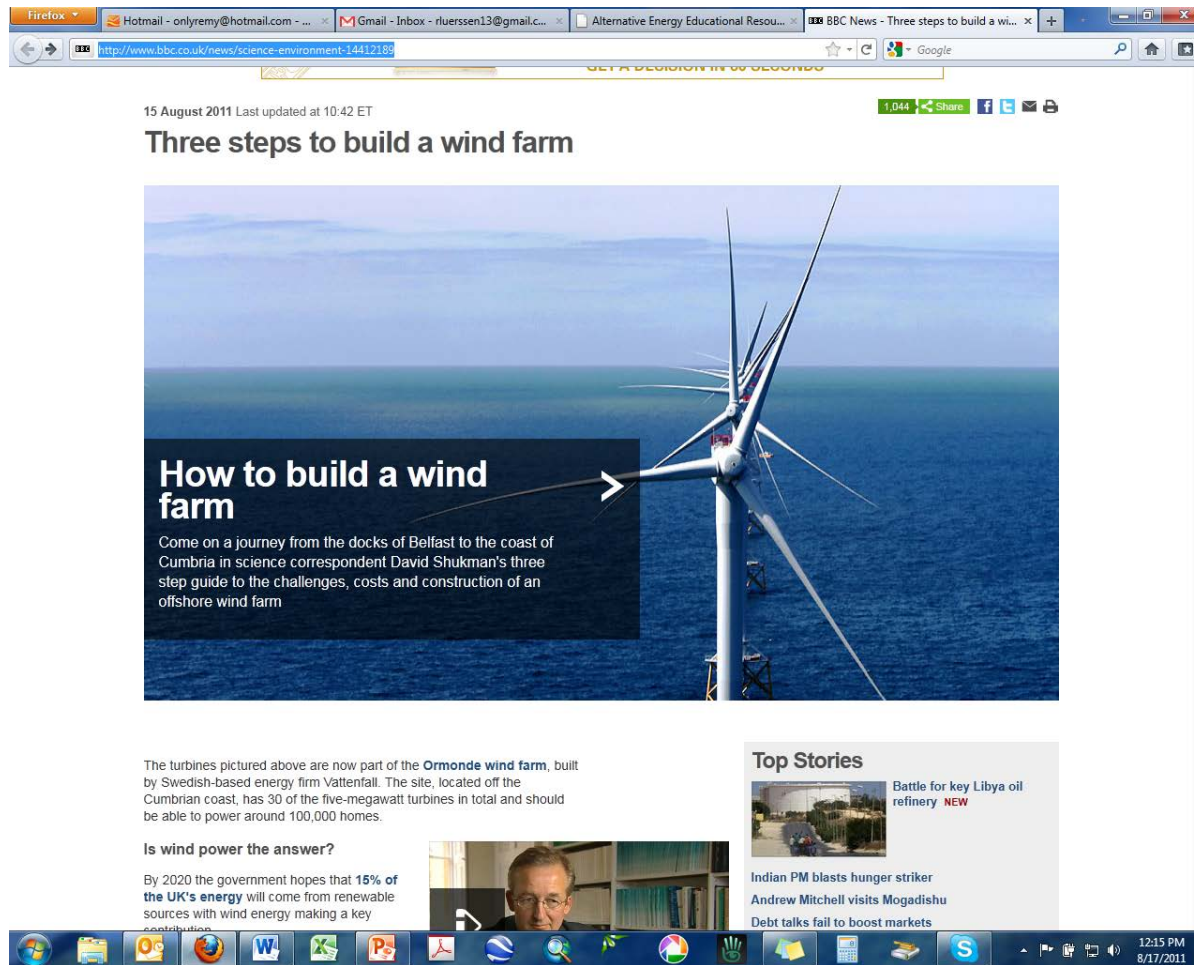
# Project Development Activity Guide

- Overview of development process
- Integrates wind energy concept activities and application
- Works best with afterschool club (ie recycling club) or small class with open curriculum (ie gifted classes)
- Gets students excited about project and allows them to find ways to excite the rest of the school and community

# Lending Library

- Many kits available at JMU
  - NEED
  - Kid Wind
  - Kilowatt Ours
  - LEGO
  - misc.
- NEED kits available at museums around the state

# Steps to Build an Offshore Wind Farm



The screenshot shows a web browser window displaying a BBC News article. The browser's address bar shows the URL <http://www.bbc.co.uk/news/science-environment-14412189>. The article is dated 15 August 2011 and was last updated at 10:42 ET. The main headline is "Three steps to build a wind farm". Below the headline is a large image of an offshore wind turbine. A dark overlay on the left side of the image contains the text "How to build a wind farm" and a sub-headline: "Come on a journey from the docks of Belfast to the coast of Cumbria in science correspondent David Shukman's three step guide to the challenges, costs and construction of an offshore wind farm". To the right of the main image is a "Top Stories" section with three items: "Battle for key Libya oil refinery NEW", "Indian PM blasts hunger striker", and "Debt talks fail to boost markets". At the bottom of the browser window, a Windows taskbar is visible with various application icons and a system tray showing the time as 12:15 PM on 8/17/2011.

15 August 2011 Last updated at 10:42 ET

## Three steps to build a wind farm

### How to build a wind farm

Come on a journey from the docks of Belfast to the coast of Cumbria in science correspondent David Shukman's three step guide to the challenges, costs and construction of an offshore wind farm

The turbines pictured above are now part of the **Ormonde wind farm**, built by Swedish-based energy firm Vattenfall. The site, located off the Cumbrian coast, has 30 of the five-megawatt turbines in total and should be able to power around 100,000 homes.

#### Is wind power the answer?

By 2020 the government hopes that **15% of the UK's energy** will come from renewable sources with wind energy making a key contribution.

#### Top Stories

- Battle for key Libya oil refinery **NEW**
- Indian PM blasts hunger striker
- Andrew Mitchell visits Mogadishu
- Debt talks fail to boost markets

<http://www.bbc.co.uk/news/science-environment-14412189>

# WIND WISE EDUCATION: OVERVIEW

- Developed by Kid Wind and Pandion
- Grades 6-12
- Advanced, interdisciplinary, hands-on lessons
- Uses real data, maps and real life scenarios
- More emphasis on environmental impacts
- Asks questions about best locations, impacts on birds, how to build a better turbine, the role of wind energy in their community and country, etc
- Each lesson includes an inquiry based introduction, case studies and profiles of professionals
- Standards based for middle and high school physics, biology, technology, earth science, environmental science, math, geography, language arts, economics and social studies
- Answer worksheets for teachers
- Assessment tools for each activity

