

**Steady growth and rising optimism among UK's manufacturers - CBI**

**Optimism among UK manufacturers rose at the fastest rate since April 2010 as orders and output continued to grow steadily in the three months to October. That’s according to the latest CBI quarterly Industrial Trends Survey.**

**The survey of more than 350 manufacturers reveals total new orders grew for the second consecutive quarter and output rose for the third consecutive quarter. Total new orders grew at the fastest pace since April 2012, with growth in the volume of domestic orders at its highest rate since April 2011.**

**24th October 2013**

**Teacher Resources**

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**Theme: UK Manufacturers**

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Manufacturing Area:

**Scotland**

**Magnum Photographer: Stuart Franklin**

**Cultural Partner - Street Level Photoworks**

**Short biography:**

Franklin won acclaim for his coverage of the Sahel famine in the 1980s and has since completed over twenty assignments for National Geographic. Since 2004, he has focused on long-term projects concerned primarily with man and the environment.

**Photographer’s Commission:**

Holding an Oxford doctorate in Geography, Stuart Franklin is perfectly placed to tell the story of renewable energy in the Scottish Isles. Splitting the commission between Glasgow, Edinburgh and Orkney, Franklin has covered wind farms, wave power and renewable energy testing sites. Franklin’s contribution to the commission is all about scale and, in addition to covering renewable energy, he has also photographed the Aircraft Carrier Alliance site based at Rosyth, an innovative alliance between Thales, Babcock, BAE Systems and the Ministry of Defence that manufactures large-scale aircraft carriers.

**Photographer’s Approach:**

*“My engagement with Open for Business has always been enthusiastic. I was excited to be working in Scotland on shipbuilding and renewable energy - both lively industries employing quite a number of people in remote areas. I like my photographs to communicate, to draw people in, so they must have drama and real interest both in the light and the subject. I worked in black and white, mostly in the outdoors (which suits me fine), and sometimes at sea (again, very happy in that environment). I have tried to make sense of the dynamism of the renewable energy sector by instilling that dynamism into the photographs. I am trying to inform and stimulate the imagination at the same time with the photographs I’m taking. I am using Leica Monochrom.”*

**Manufacturers visited:**

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|  | Whitelee Wind Farm |
|  | Gaia-Wind (small wind turbines) |
|  | Allied Vehicles (cars) |
|  | Pelamis Wave Power (wave machines on shore and offshore) |
|  | EMEC (European Marine Energy Centre) (wave test site) |
|  | Open Hydro's Open-Centre Turbine (demonstrates tidal power) |
|  | Scot renewables turbine (wave device) |
|  | Aircraft Carrier Alliance, Rosyth (partnering relationship between BAE Systems, Thales, Babcock and the Ministry of Defence) |
|  | Seatricity (buoys and pumps) |

**Quotes from Manufacturers:**

Aircraft Carrier Alliance - “*This programme is important for the manufacturing industry because while it provides work for 10,000 people across the country it is also stimulating local economies and demonstrating the UK’s capability on a world stage*. *Through hundreds of apprenticeships these ships are creating a legacy of crucial skills with a new generation of British workers*.”

-John Fyall, Communications Manager

Pelamis Wave Power -“*Pelamis Wave Power is a world leader in an exciting new industry with so much potential, and we’re based in Leith, Edinburgh. Increasing British awareness of this home-grown industry and about the world-firsts we’ve achieved over the last few years is a great opportunity for Pelamis. We hope that photographs of Pelamis machines operating in Orkney will highlight that wave power is no longer just an idea, it’s a real industry with real potential, which is driving constant developments and improvements as we get ever nearer to commercial mass production of wave power converters*.”

“*We hope that this project will help us to communicate that the burgeoning wave and tidal technologies being developed in the UK represent not just an opportunity to secure the UK’s energy supply and reduce carbon emissions, but importantly to strengthen the British manufacturing industry. Britain ought to be proud of our world-class manufacturing industry and this is a wonderful project to shed light on the wide range of technologies already being produced in this country*.”

-Deborah Smith, Marketing Co-ordinator

Level of Engagement:

**Ways In**

Activity Name:

**Back to Back**

Aim of Activity:

This exercise helps to explore in great detail the elements that make up an image – it challenges pupils to be highly descriptive, to analyse detail and to communicate their views with a partner. It develops visual literacy skills in pupils.

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| **Activity –** Select a range of Stuart Frankiln images from *Open for Business*, and his assistant’s images of the process (on the tumblr site) – you will need one image for each pupil taking part. Have a range of drawing materials available – paper, felt pens, pencils, pastels etc. You will also need a clear floor space for this activity. |
| **Step 1** - Put the pupils into pairs and they have to sit on the floor with their backs to each other. |
| **Step** **2** - Give one of the pair an image – but tell them NOT to let their partner see it. |
| **Step 3** - The pupil with the image is then asked to describe in great detail the image that they have – and their partner has to use the drawing materials to represent the image as described. The drawer can ask questions. Give each pair around 10 minutes to complete this task but at the end tell the pairs not to share their image or their drawing at this point. |
| **Step 4** - You should gather up all the images from the pupils and arrange them on the floor. The drawer then has to find the image they were drawing and place it next to the original image. Ask pupils to look at what details have been captured and what details have been missed. |
| **Step 5 -** Swap the roles over so that the describer becomes the drawer of the image and continue with the steps as described above. |
| **Step 6 -** Putthe pupils into small groups to reflect on the exercise and the images. Some possible reflection questions might include: What information was key to drawing the image successfully? How were adjectives useful? How carefully were you listening to each other – did you have to ask follow-up questions or clarify things? What questions did you have as a drawer and what types of questions were they – open, closed? What did you think about the image, its composition? What do you think the photographer was trying to communicate to us? How many forms of renewable energy can your group name? |

Options for Delivery / timescale:

This activity is fast and fun and can be delivered in a lesson and used as a ‘way in’ to *Open for Business*. You may wish to use the *Open for Business* PowerPoint slides to explain the project and the exhibition to pupils so that they have context for the images they have been working with.

Curriculum Links:

This could be used in Art and Design, to support directed drawing or in English to encourage clarity in Speaking and Listening. It could also be used as a means of working together, such as in Citizenship, or as a starting point for a Science project on renewable energy, given the subject matter of the images or cross over into History looking at the use of renewable energy in the recent past.

Extension Activities:

* Encourage pupils to re-draw their images once they have seen the original. Has it helped having the image described to them?
* Use the images as a discussion point on black and white photography – what do the pupils like about them, what atmosphere does the style give them?
* Explore renewable energy through the ages and why was it important in the last century
* Get students to create their own wind powered machine – here is a link from Practical Action which has teacher resources for this activity <http://practicalaction.org/wind-power-challenge>
* In Science explore the difference between renewable and non-renewable energy sources and why finding forms of renewables are important. Explore the work of one of the renewable energy suppliers involved in *Open for Business*
* Research renewable energy sources locally and find out how much energy they generate.
* Research types of camera – eg: What is a Leica Monochrom? (as used by Stuart Franklin)
* Name a ship manufactured in Rosyth shipyard and what it is used for.