

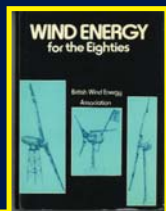
# AGE OF DEVELOPMENT: BWEA AND THE WIND

**1978**

BWEA formed at Reading University on 6th September. Peter Musgrove is first Chairman. Association formally launched at the Rutherford Laboratory on the 17th November. Association's first newsletter 'Windirections' reports: "The inaugural meeting of the British Wind Energy Association was held at the Rutherford Laboratories, Chilton. The presentations covered a review of wind energy research and demonstration projects in Europe and the USA...discussions continued while a visit was made to the 6m diameter variable geometry vertical axis wind turbine, constructed at the Rutherford Laboratories."

**1982**

Royal Aeronautical Society agrees Association can use its address at 4, Hamilton Place. In August BWEA membership reaches 380. BWEA publishes book "Wind Energy for the Eighties". Back cover states: "The British Wind Energy Association is a body comprised primarily of engineers and scientists who are professionally involved in wind energy."



**1993**



At an extraordinary General Meeting in April, Association votes to introduce Corporate Members, with fees related to size. By December, 36 organisations have become Sustaining, Full or Associate Members. Annual conference held York, proceedings carry a paper "Monitoring at Vindeby: Preliminary Results" - Vindeby goes on to become world's first offshore wind farm.

**1987/88**

BWEA subscriptions rise to £20 p.a. (£10 for students and retired members). The Association meets with DTI and it is agreed that UK market is nonexistent compared to those in the United States, Denmark, Holland and Belgium. Membership now exceeds 500.

**1994**

BWEA moves to new office (42 Kingsway, London) with Michael Harper as director. In December "Best Practice Guidelines for Wind Energy Development" published.

1978

1980

1988

1990

**1978**



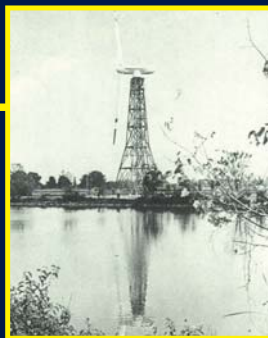
Agricultural machinery manufacturer Vestas tests its first wind turbine, based on the Darrieus design. The upright whisk like turbine is not a success, and after 18 months Vestas switches to a three blade model. UK Department of Energy sets funding for renewables in 1978 at £973 000.

**1979**

"Now 66 different turbines are on sale in USA, with outputs up to 100kW", reports British Wind Energy Association's Newsletter.

**1980**

New legislation in Denmark and the USA creates a large market for wind energy. Annual world-wide installed capacity estimated at 10MW, and the cost of producing a kWh from utility scale turbines is estimated at 30 cents per kilowatt-hour, compared to as low as five cents today.



**1983**

200 KW TURBINE COMMISSIONED BY THE CENTRAL ELECTRICITY GENERATING BOARD, PRECURSOR OF THE NATIONAL GRID. A TOTAL OF FIVE MULTI-MW MACHINES IN OPERATION AROUND THE WORLD.

**1985**

Energy Minister announces that "major programmes on wind power and geothermal hot dry rocks will continue (as well as) studies into the private financing of the Severn tidal power scheme."



**1991/92**

First ever public enquiry for a UK wind farm held in April in Cemmas, mid-Wales. First UK wind farm operational in Delabole, Cornwall. UK has 263 wind turbines, and an installed capacity of 83MW. The first offshore wind farm completed in Vindeby in Denmark. Total world wide installed capacity at the end of 1992 is just over 2.5GW. Vestas reports: "In 1992 the UK market showed the greatest expansion of all Vestas markets. A total of 89 turbines with a total capacity of 30MW are installed in England."



# ENERGY SECTOR 1978 TO 2008

## 1995/96

Colin Moynihan (former energy minister) appointed first British Wind Energy Association president. Membership totals 85 corporate and 800 individual members. BWEA policy document advocates 1000MW of wind by 2000, 5000 MW by 2010 with 10% of electricity supplied from wind by 2025. Office moves to 26 Spring Street (shared with European Wind Energy Association). 1996 conference held in Exeter.

## 1999

BWEA holds 21st Annual Conference in Cambridge titled 'Wind Power Comes of Age'. Windpower Monthly reports: "Wind power in Britain is still hemmed in by barriers on all sides despite years of knocking on government doors with calls for a way out. Such was the mood at the British Wind Energy Association's annual conference." However, the total of wind energy capacity installed rose to 344MW. Nick Goodall is Director.



## 2002

BWEA CONSIDERS EXPANDING ITS MISSION TO COVER TIDAL AND WAVE ENERGY—IN PLACE BY 2004. NEW OFFICES AT AZTEC ROW, STAFF NOW TOTAL SEVEN

## 2005

First issue of "Real Power" for BWEA members, as "Wind Directions" continues as EWEA Journal.

2006/07  
MARIA MCCAFFERY MBE, APPOINTED CHIEF EXECUTIVE IN JUNE 2006, CORPORATE MEMBERS BY END OF 2007: 359.

## 2008



The BWEA now has 439 corporate members and 22 staff. Publishing activities include RealPower and www.bwea.com, the Association's web-site which receives over half a million page views per month. The annual BWEA conference and exhibition has firmly established itself as the leading event of its kind in the UK, with close to 3000 delegates expected for BWEA30.

1998

2000

2008

## 1994

316GWh generated from wind in the UK. In world wide terms, half of all energy from wind was generated in California, with Denmark coming second, Germany third and UK fourth. UK is also third in Europe in terms of capacity installed, with 165MW. In Asia, Indian market is booming, with capacity going up from 238MW at the end of 1994 to 618MW installed one year later.

## 2001/02

13 offshore wind farms with potential capacity around 1500 MW given initial approval by Crown Estate, as part of what is to become known as Round 1; EC Directive on "Electricity from Renewable Energy Sources" finally approved in the UK. Renewables Obligation comes into force, with renewable targets of 5% by 2005 and 10% by 2010. The Renewable Obligation is placed on licensed electricity suppliers.



## 2005

Review of Renewables Obligation starts with consultation tentatively suggesting a 20% renewables obligation by 2020, a target supported by BWEA. Cumulative installed wind capacity is up more than 6GW on 2004 to 40.5GW Europe wide. This will produce some 83 TWh electricity, equal to 2.8% of EU electricity consumption. In percentage terms, cumulative wind power capacity in the EU has increased by an average 32% per year since 1995.



## 2000

FIRST UK OFFSHORE WIND FARM AT BLYTH – TWO 2MW TURBINES

## 2008

The first seven years of the new century saw the European power generation map radically transformed. While by end of 2007 gas and wind capacity increased to 76.6GW and 46.8GW respectively, coal, fuel oil and nuclear capacity decreased by a total of 31.1GW. In the UK by mid 2008 there were 174 wind farms, 167 onshore and seven offshore, with an installed capacity of 2528 MW. UK overtook Denmark in terms of installed offshore wind capacity, to become a global leader in offshore wind. The world's first pair of 6MW turbines started regular operation in Germany, with a 7MW Clipper Windpower machine being scheduled for installation off the coast of Britain. The total worldwide installed capacity passed 100GW, with annual sector growth at 28%. EU Climate and Energy Package proposes that 20% of EU energy comes from renewables by 2020, with UK target of 15%. This corresponds to about 32% of renewable electricity coming from wind in the UK.