

BWEA



Delivering the UK's wind, wave and tidal energy



embrace the revolution

Small Wind Systems

Alex Murley

11 September 2008

East Midlands Planning Seminar

BWEA

Delivering the UK's wind, wave and tidal energy



embrace the revolution

BWEA: -

- represents the UK wind and marine industries to government, industry, the media, and the public
- was formed in 1978 and now has over 400 corporate members



- Leading voice for the UK micro- and small-wind industry

BWEA



Delivering the UK's wind, wave and tidal energy

SWT System Designs

Micro- 100 W – 1.5 kW

Small- 1.5 kW – 50 kW

Off grid – 12/24/48 Volts

On grid – 240 Volts

Building mounted or
Free standing

Horizontal axis or
Vertical axis



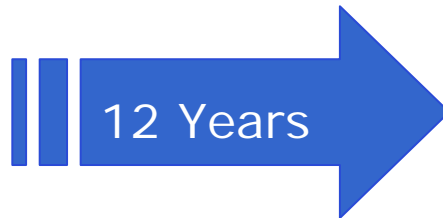
Microgeneration – Context

- Energy security
- Climate change
- Policy
 - UK 2050: 60%+ reduction
 - EU 2020: 15% renewable energy
~35% renewable electricity!

NUMBERS!

Now

6500+

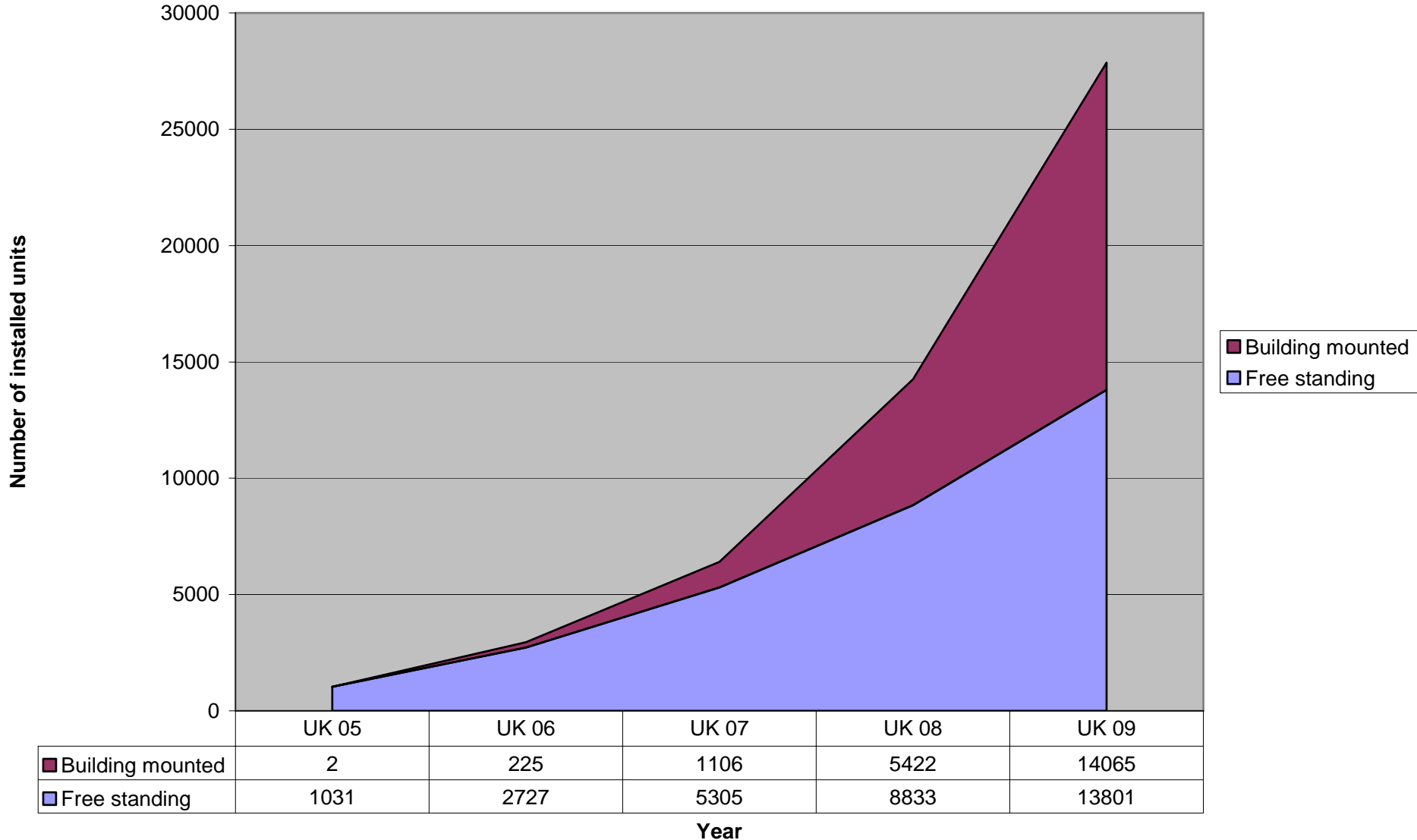


2020

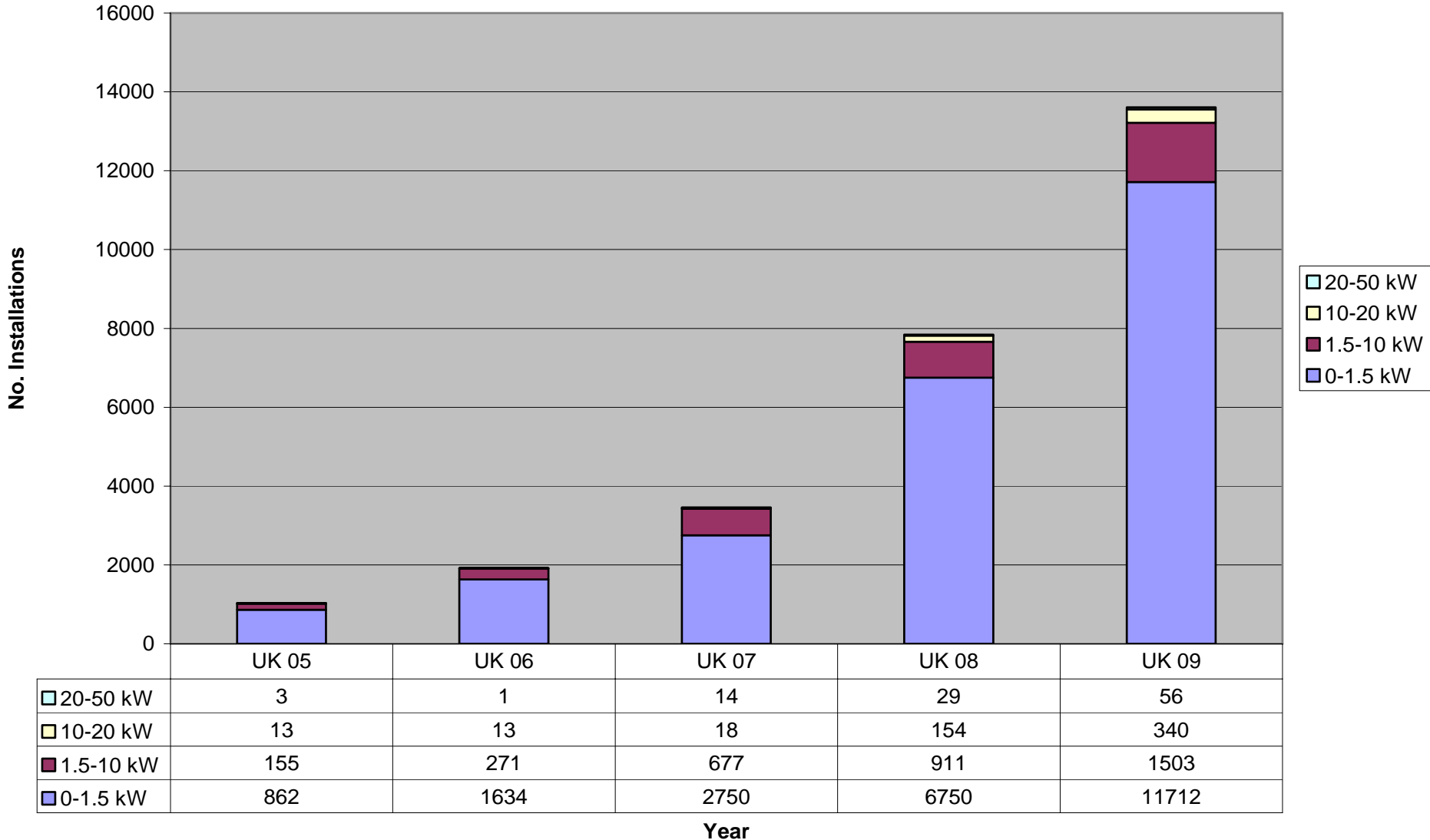
1 600 000
(EST)

Number of installed units (UK, Cumulative)

embrace the revolution



Annual number of UK installations (Type)



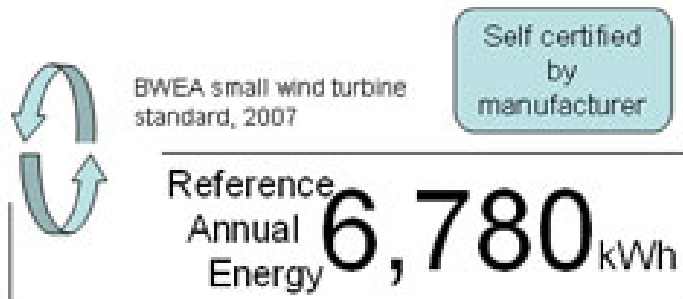
General Permitted Development Orders

- England GPDO - Domestic land use:
 - o Oct/Nov 2008
- England GPDO - Non-Domestic land use:
 - o Entec Report
 - o DCLG Consultation 2008

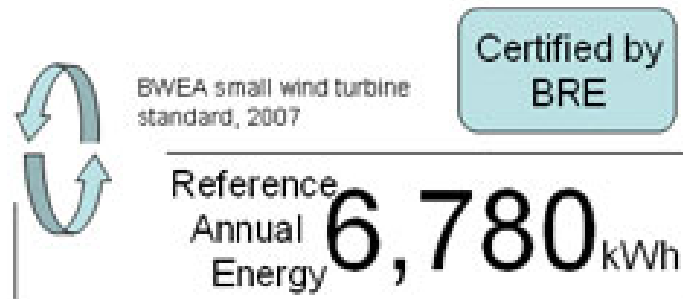
General Permitted Development Orders

- GPDO linked to MCS Standards
- MCS standard: Product & Installer
- MCS Product standard linked to:

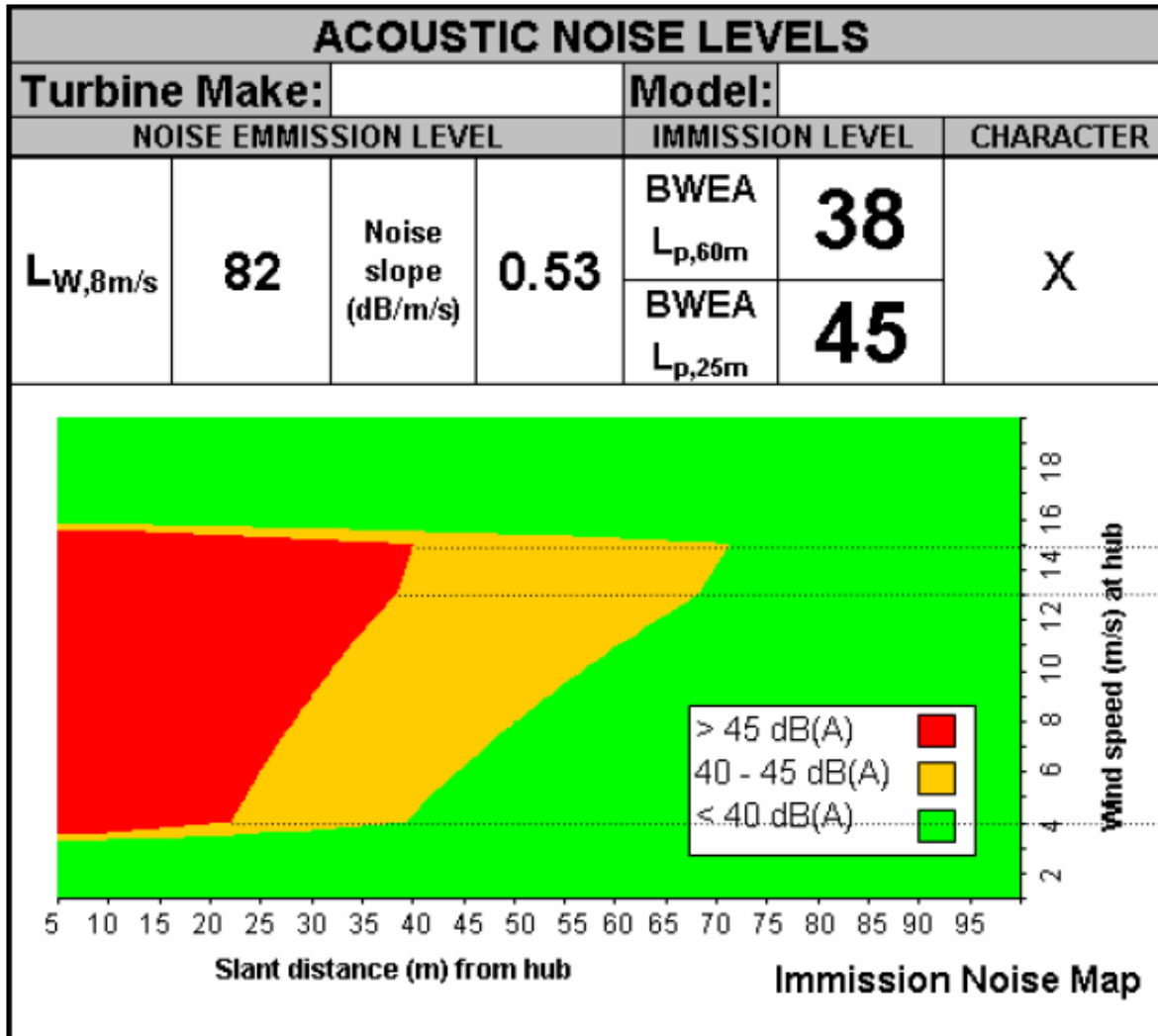
BWEA SWT Performance and Safety Standard



Annual average wind speed of 5 m/s (11 mph). Your performance may vary



Annual average wind speed of 5 m/s (11 mph). Your performance may vary



Cut-out wind speed

Speed Limiter start

Cut-in wind speed

General Permitted Development Orders - Domestic land use

Wind Turbines on buildings

- Less than 3m above ridge (including blades)
- Diameter of blades less than 2m.
- No permitted development in conservation areas or World Heritage Sites.

Stand-alone Turbines

- Less than 11m in height (including blade).
- Diameter of blades less than 2m.
- At least 12m from a boundary.
- They should not face onto and be visible from the highway in conservation areas or World Heritage Sites.
- They should not be installed in the curtilage of a listed building

Bare Minimum!

National & Regional Policy

- PPS22 Renewable Energy
- PPS1 – Climate Change Supplement
- Regional Spatial Strategies / Plans

What information Planners will need

- 5 copies of all documents submitted
- Scale drawings – inc. site boundary
- 'Supporting environmental information'

Supporting environmental information

- Manufacturer's noise data
- Distance from dwellings / highways
- Supporting photographs
- Publicly available wind data

BWEA

Delivering the UK's wind, wave and tidal energy



embrace the revolution

...and what *should not* be needed

- Demonstration of generation capacity
- Detailed wind speed assessment
- Detailed noise assessment
- Compliance with GDPO standards

BWEA

Delivering the UK's wind, wave and tidal energy



embrace the revolution

Summary...

- Planning policy is the enabler
- Education is essential & on-going
- Technology continues to develop
- Standards are there to help
- Need guidance? Tell BWEA / DCLG

BWEA



Delivering the UK's wind, wave and tidal energy



embrace the revolution

Alex Murley

BWEA Small-Systems Manager

0207 2888 372

alex@bwea.com

www.bwea.com