

Planning & Small Wind Systems

28 April 2010

International Small Wind Conference

Gemma Grimes, Head of Onshore Renewables

RenewableUK

- Established in 1978
- 600 corporate members
- Wind, wave, and tidal energy



- Voice of the UK small scale wind sector

Small wind system designs + setup

Micro - 0.1 – 1.5 kW

Small - 1.5 – 15 kW

Small-medium - 15 – 100 kW

Horizontal axis / Vertical axis

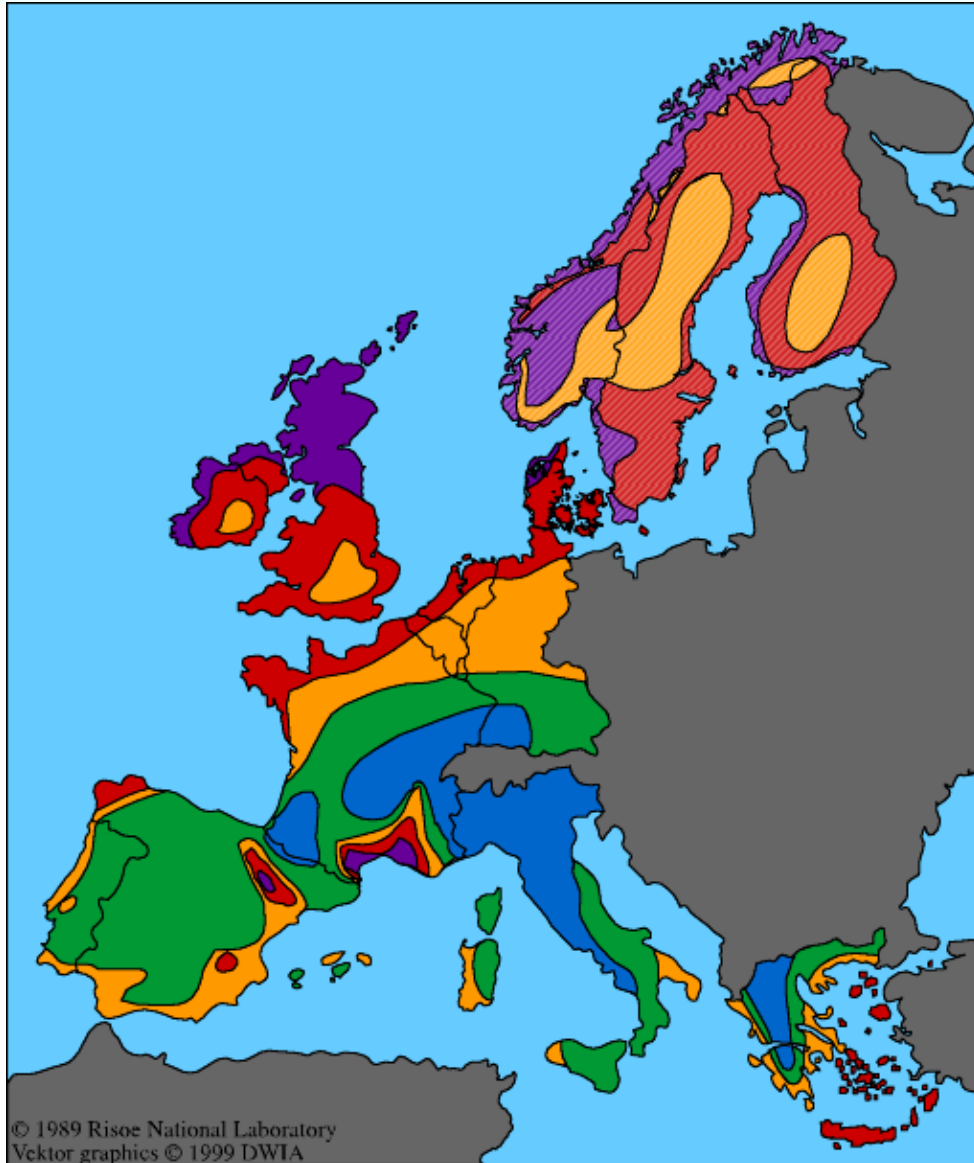
Freestanding / Building mounted

Off grid / On grid

Heat applications



Why is the UK a leading market?



- Best resource in EU
- Aware consumers
- High electricity price
- Affluent consumers
- UK manufacturers

UK micro- and small-wind industry



- Long history - 30+ years
- Over 20 micro- and small-wind manufacturers
- Export ~60% of output to over 100 countries
- Employ 1,755 UK jobs

MCS & Industry standards

APPROVED PRODUCT



BWEA small wind turbine
standard 2008

Certified by

Reference
Annual
Energy **6,780** kWh

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

UK is first in the world to introduce robust industrial standards for small wind systems: www.microgenerationcertification.com

Clean Energy Cashbacks (Feed in tariffs)

The benefits:

Generation tariff

Export tariff

Reduced energy bills

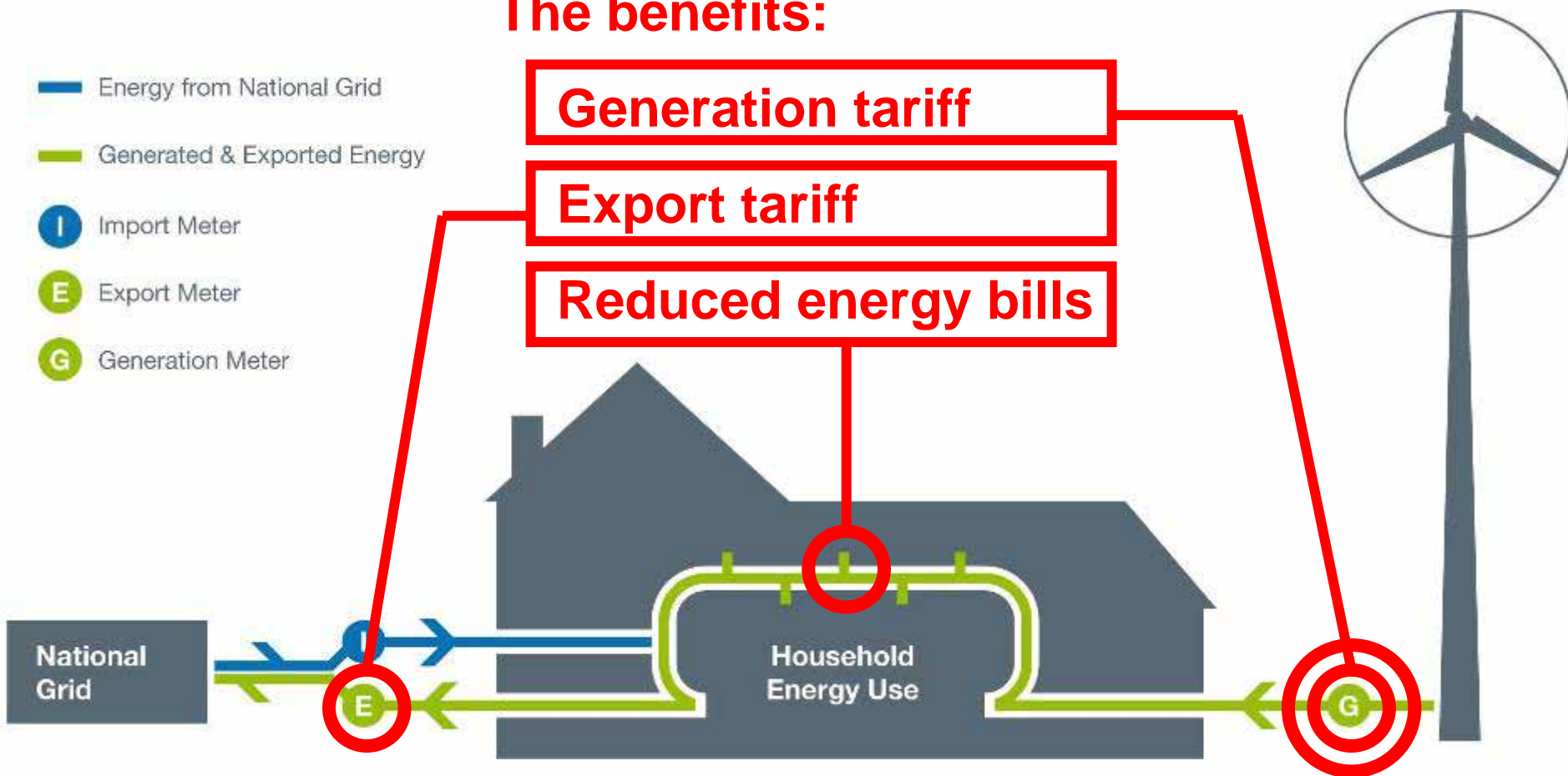
— Energy from National Grid

— Generated & Exported Energy

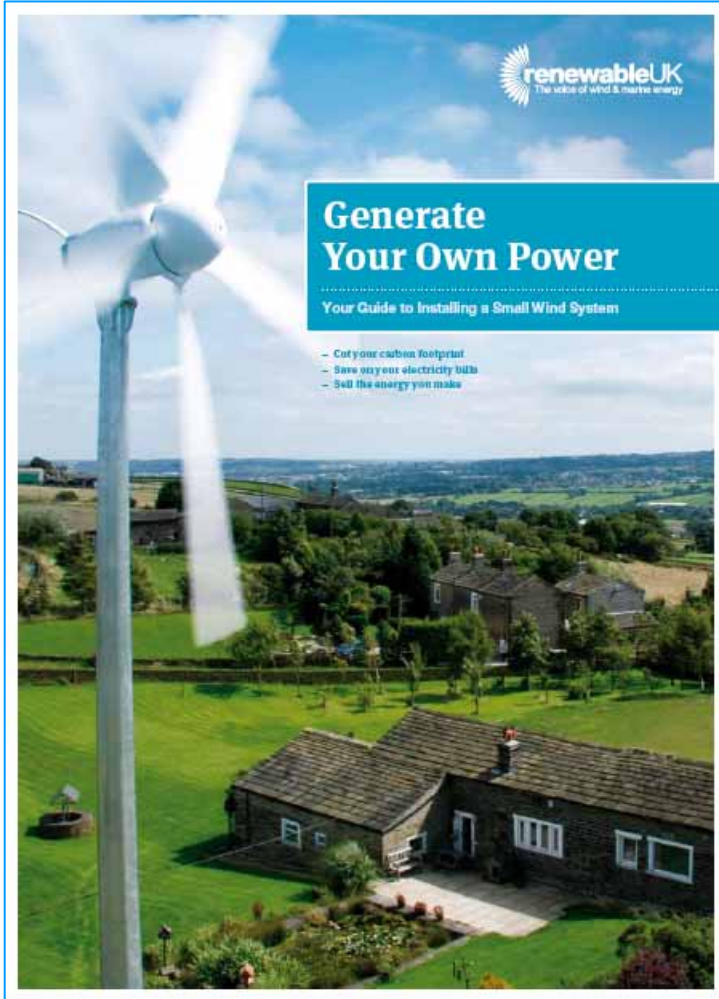
I Import Meter

E Export Meter

G Generation Meter



Latest RenewableUK SW publication



Customer guide to small wind:

Technology introduction

Siting

Planning + Technical requirements

Industry standards

Financial incentives

Case studies