



# DAN GRIERSON

9 years working for LPAs in Durham and Northumberland.

2 Years as the only planner within a major wind energy developer

4 years as a renewable energy consultant for TNEI Services

Now working for Novera/Infinis Energy as a project director, based in the NE of England

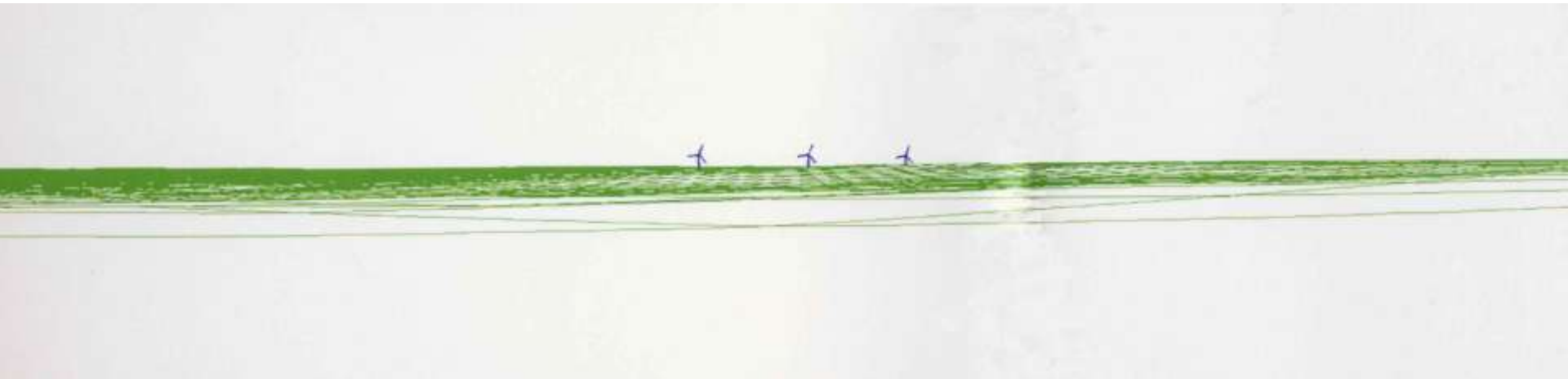
# WIND FARMS

Key Issues in meeting targets



# Is there space for wind?

- Physically and technically yes: County Durham has reached wind component of 2010 target
- Most significant issues in the NE are landscape, grid and aviation
- In practice there are not many viable areas for wind development



# 2010 renewable energy targets:

	target	operating	consented
Tees Valley	138	8.25	10.5 (+ 90)
County Durham	82	83.5	35.75
Tyne and Wear	22	14.75	-
Northumberland	212	4.5	176.8



# County Durham

- Operating wind farms 83.5 MW
  - Sufficient on average for: 50,000 households
  - Equates to: 120,000 people
- Consented wind farms 35.75 MW
  - Sufficient on average for: 21,500 households
  - Equates to: 51,500 people
- **Combined total 119.25 MW**

### WIND FARM LOCATOR

Search for wind farms by

Windfarm name, developer  **SEARCH**

**ADD A PROJECT**

Only show me

 PROPOSED SITES

 PROJECTS IN DEVELOPMENT

 REJECTED SITES

 COMPLETED DEVELOPMENTS

 ACTIVE WIND FARMS

[VIEW ALL](#)

Operational capacity is estimated and rounded up or down to nearest MW. Horsepower equivalent is calculated using an average Capacity Factor of 30% and average hours usage of a 7000hrs as given by the DE. Actual operational output may vary.



# Major Constraints

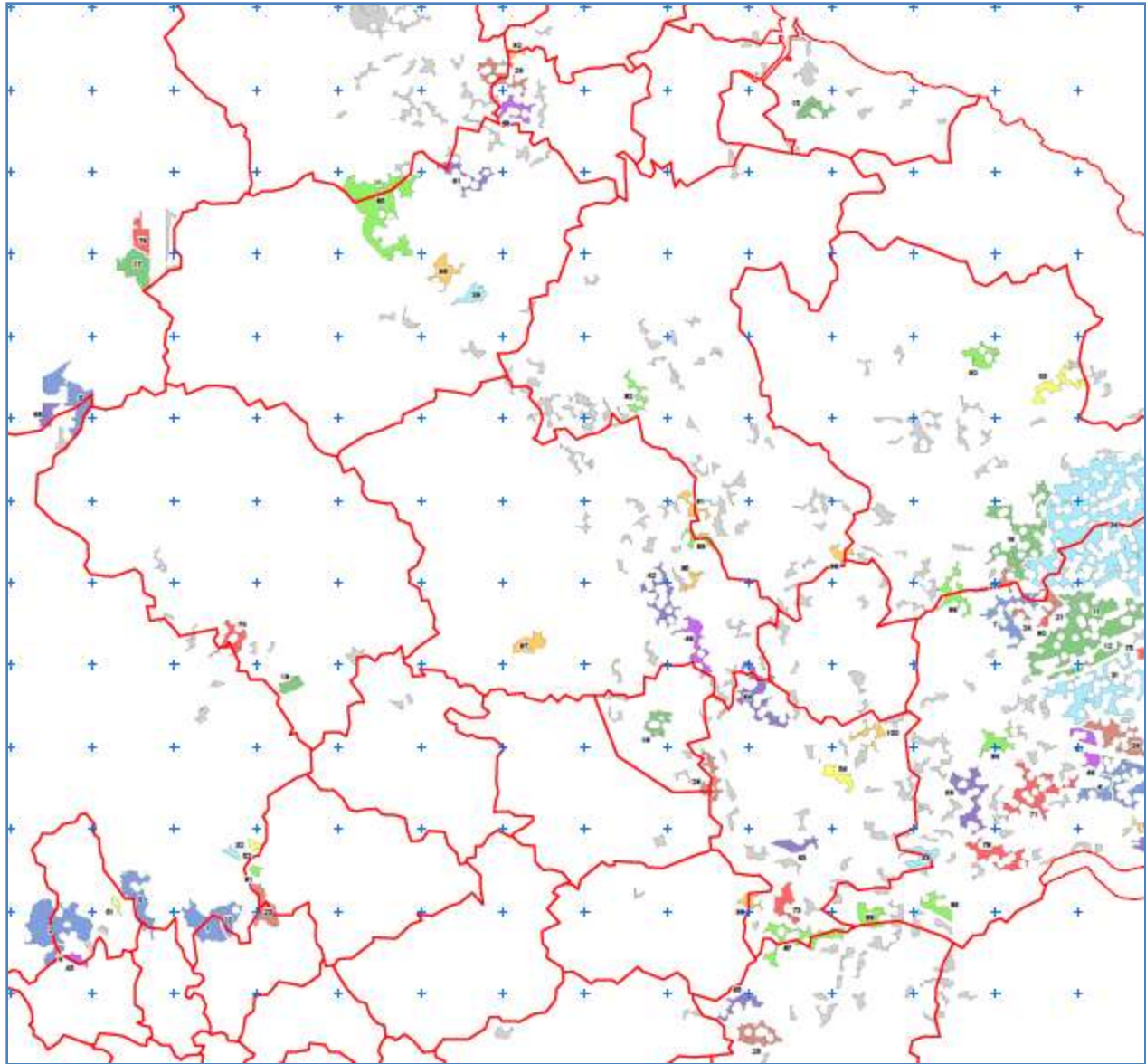
- National landscape designations
- Air Defence Radar
- Military Aerodromes
- Military training radars (Spadeadam)
- Military low flying
- National Air Traffic Services
- Civil Aerodromes

- Meteorological office radars
- Government and civil telecommunications infrastructure
- Grid access
- Highways access



# Other Constraints:

- Wind resource
- Environmental designations
- Protected species
- Landscape and visual impact
- Residential amenity
- Cultural Heritage



**There are not many areas left!**

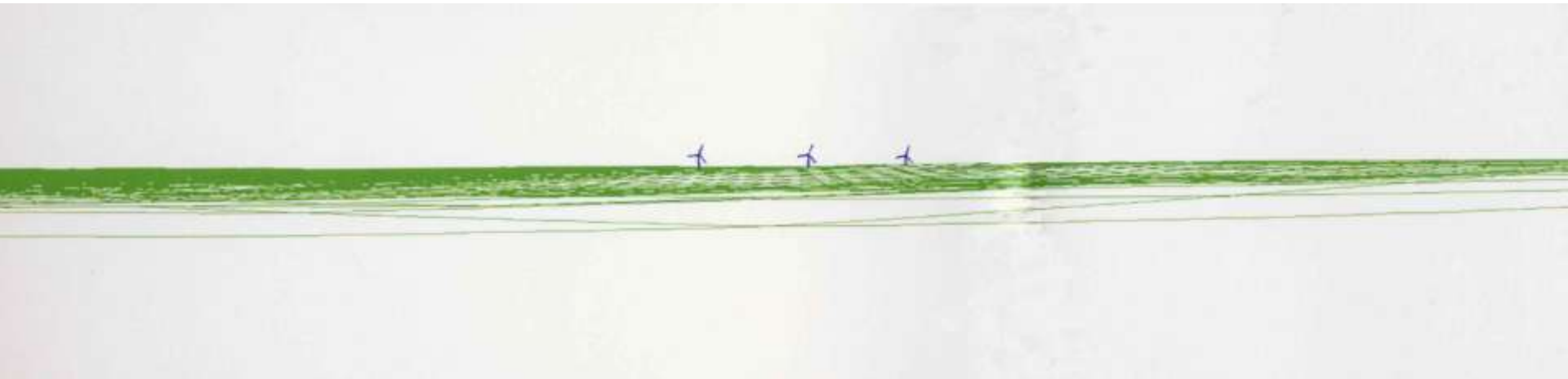


# Communicating this to decision makers:

- Viable sites are a limited resource,
- Opportunities are limited
- Sporadic development across the region cannot occur
- Development will be focussed in certain areas

# Communicating positives:

- Burgeoning NE manufacturing and supply chain
- Centre for UK training
- Significant support sector
- Generally high levels of public support and acceptance



# Key issues

- Suitable sites are a finite resource
- Constraints will lead to 'clustering'
- Some of the most technically suitable sites are adjacent to national landscape designations
- Previous work to identify preferred areas has been problematic
- It is a very dynamic sector!

# Principle Issue

- Effective communication of the site selection process and the scarcity value of deliverable schemes to decision makers.



## Government opinion poll shows support for “silent majority”

**The Central Office for Information polled 1279 adults across the UK in Aug 2003**

- **The poll revealed that nine out of ten adults thought renewable energy was a very good or fairly good idea**
- **29% would strongly approve of a wind farm being developed in their area, 38% said they would slightly approve.**
- **10% would be slightly resistant and 9% strongly resistant**
- **For those living near an onshore wind farm 54% strongly approved and 40% slightly approved, with 2% resistant.**

