

Renewable Energy and energy security



Philip Wolfe

Renewable Energy Association

Renewable Energy Association



More than 600 members

- > Multinationals to high-tech start-ups
- > Energy suppliers to energy users



Renewable heat, power, fuel & CHP



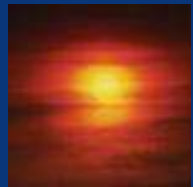
All technologies:

- > Biomass
- > Bioenergy
- > Solar
- > Wind
- > Marine
- > Hydro
- > Heat pumps



RENEWABLE ENERGY ASSOCIATION

Trade Association Forum; 5th February 2009



Energy security =

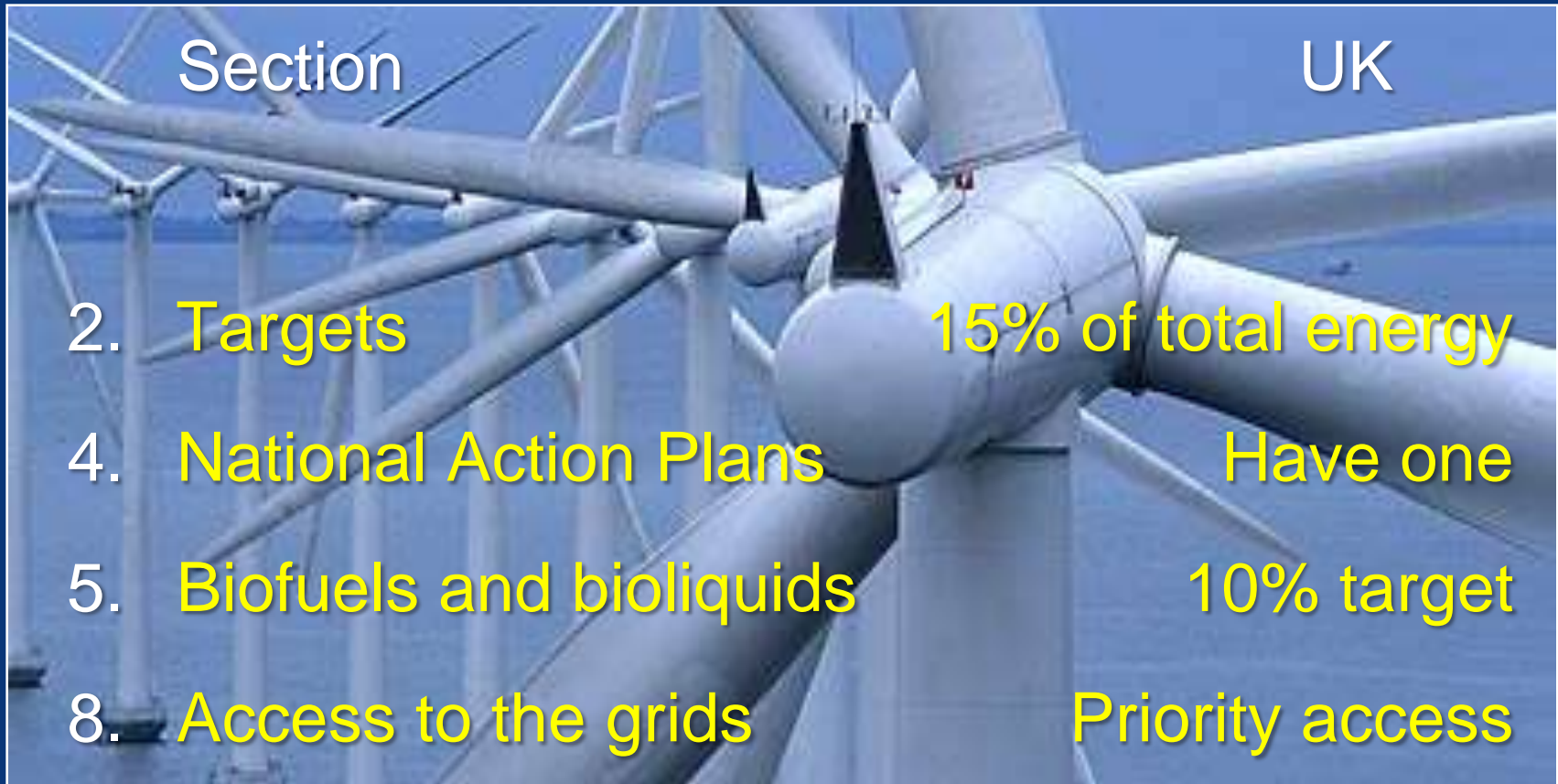


Not being dependent on:

- > Scarce resources
- > Supply lines we
 - > don't control and/or
 - > can't protect
- > Imports
- > Unsustainable sources



Renewable energy directive

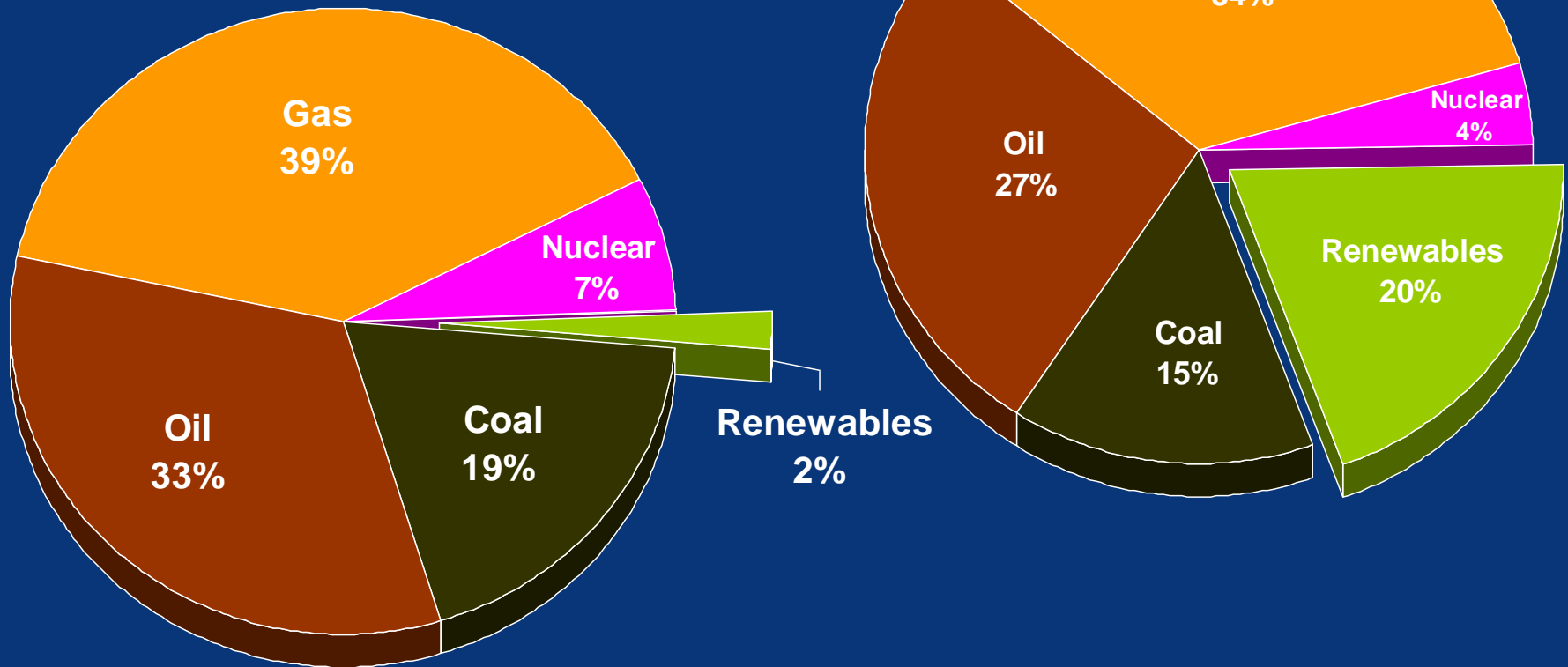


| Section | UK |
|----------------------------|---------------------|
| 2. Targets | 15% of total energy |
| 4. National Action Plans | Have one |
| 5. Biofuels and bioliquids | 10% target |
| 8. Access to the grids | Priority access |

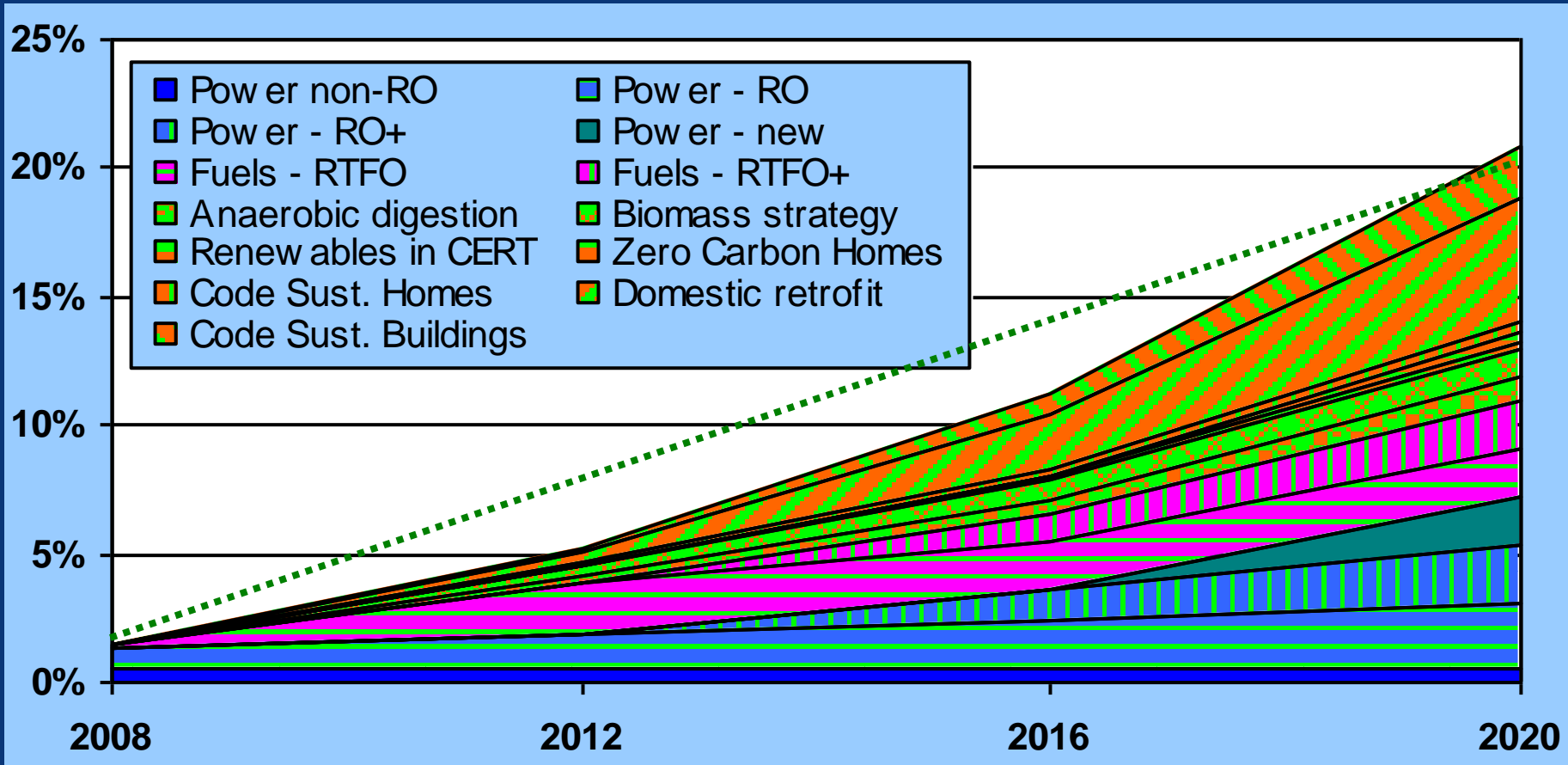
Renewables in total UK energy

Today

2020



How can we get there?



Improving your energy security



Use less



Produce more



Source locally



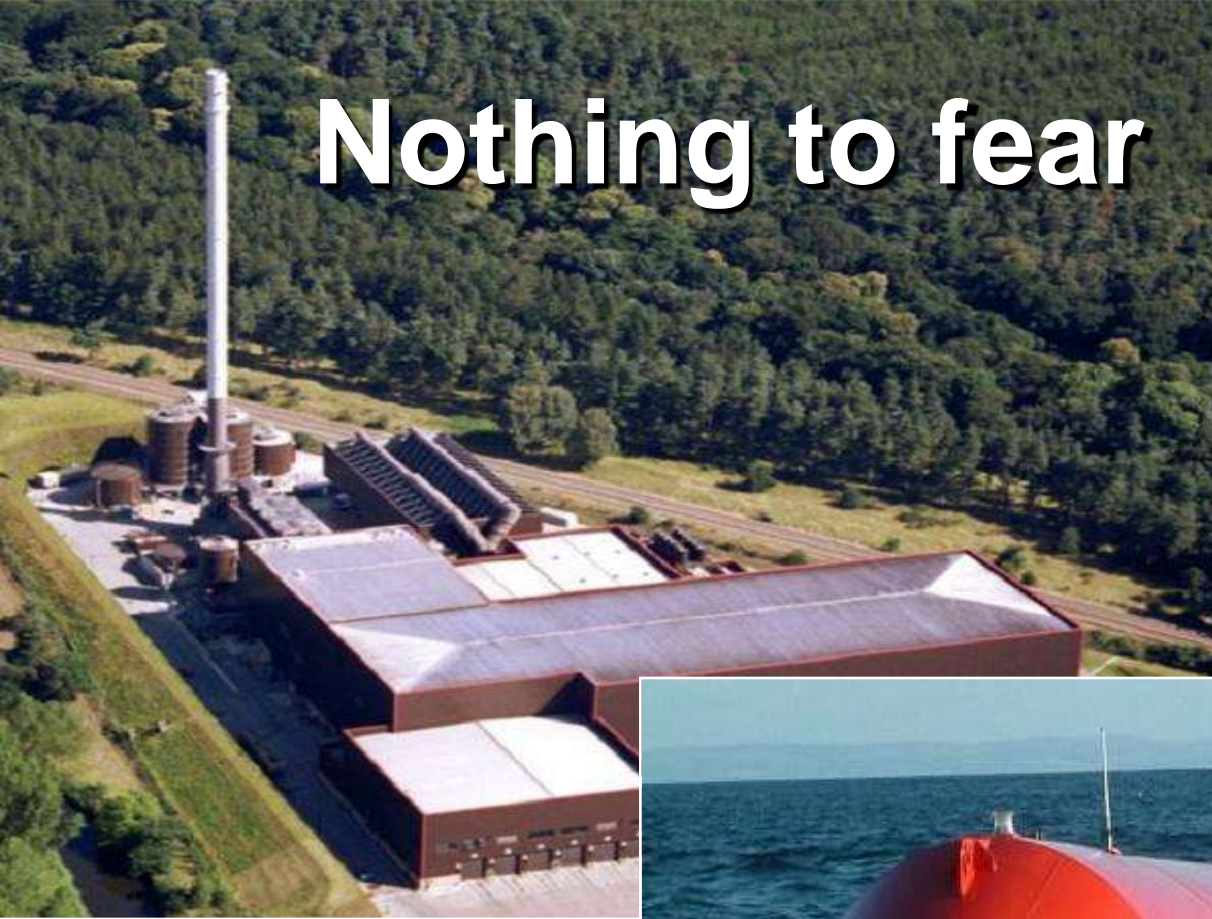
Renewable energy tariffs

- ▲ Electricity (under 5MW); Heat + biogas
- ▲ Start in April 2010 and April 2011
- ▲ Production tariffs (reward total output)
- ▲ Fixed p/kWh depending on technology
- ▲ Paid through the energy companies
 - > but passed on to consumers

Nothing to fear

**“You mean drill into the ground to try and find oil?
You're crazy.”** 1859

**“The wireless music box
has no imaginable
commercial value.”** 1925



The microchip
“But what is it good for?”
IBM 1968

**“640K ought to be
enough for anybody.”**

Green New Deal

- ▲ Recession – recovery must be sustainable
- ▲ Stimulus packages – 20% should be ‘green’¹
 - > USA 12%; China 37%; Germany 13%²
 - > UK figure should be ~£10bn
- ▲ Energy efficiency & renewables a major part
- ▲ What are the quick wins in renewables?

¹ *Professor Lord Stern*

² *HSBC*

Green New Energy Deal

