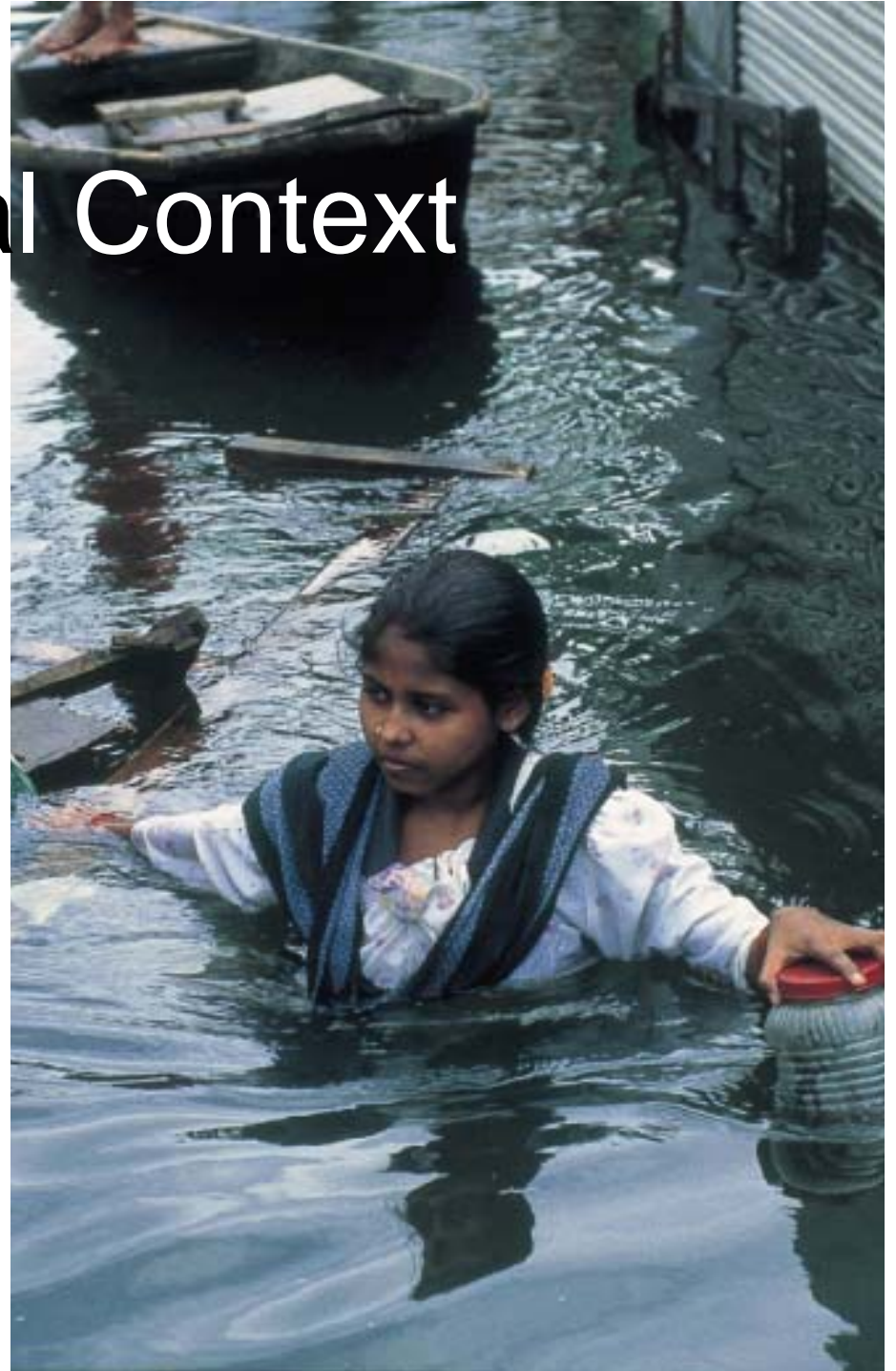


# **Getting the balance right – renewable energy and the environment**

# The Global Context

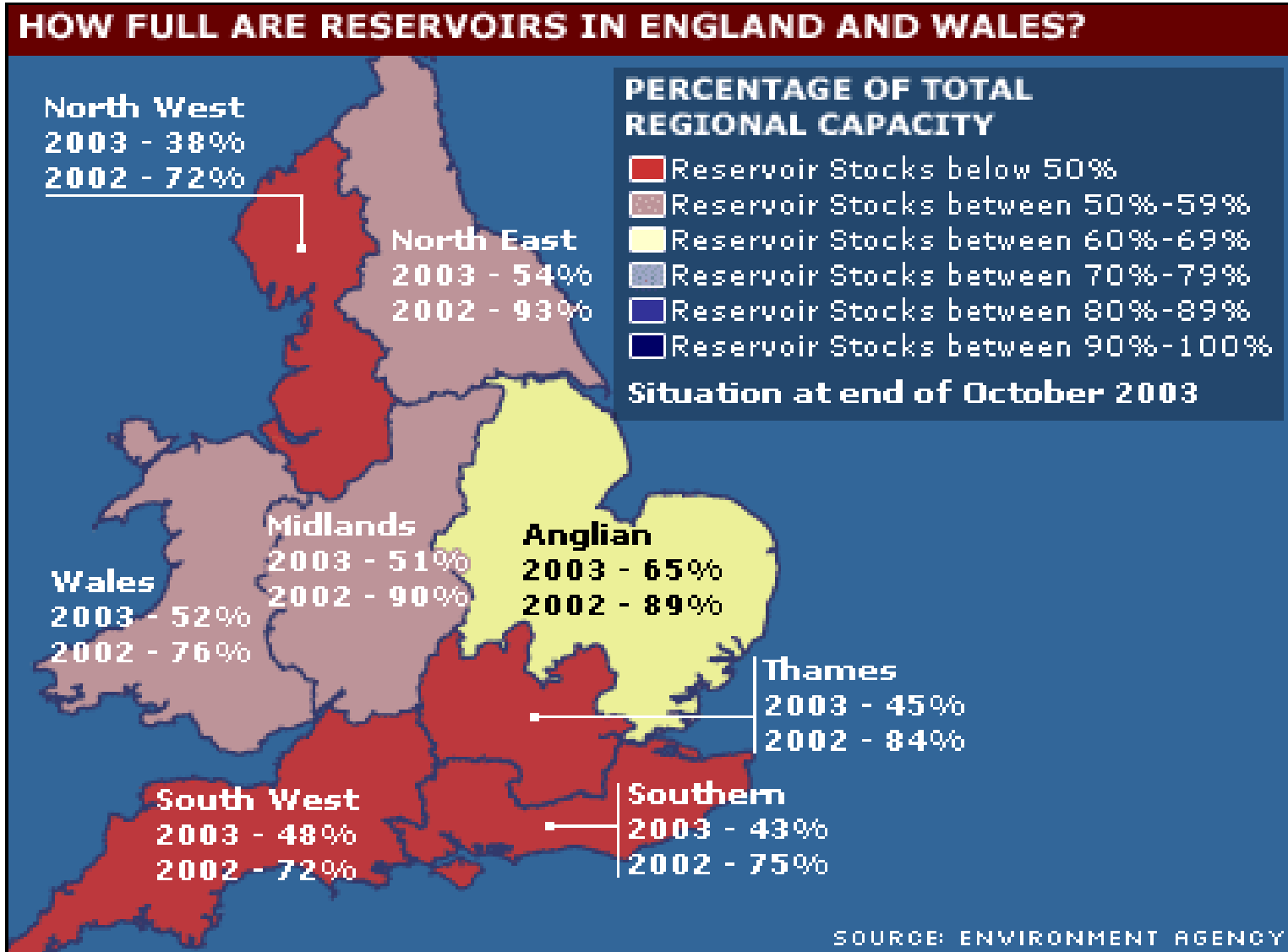
- Global emissions reduction target: 80% by 2050
- Total global emissions rising by 2% p.a or 17 tCO<sub>2</sub> per second
- Need to peak and start to decline in next 20 years
- Developed countries must take the lead



# Impacts in the South East

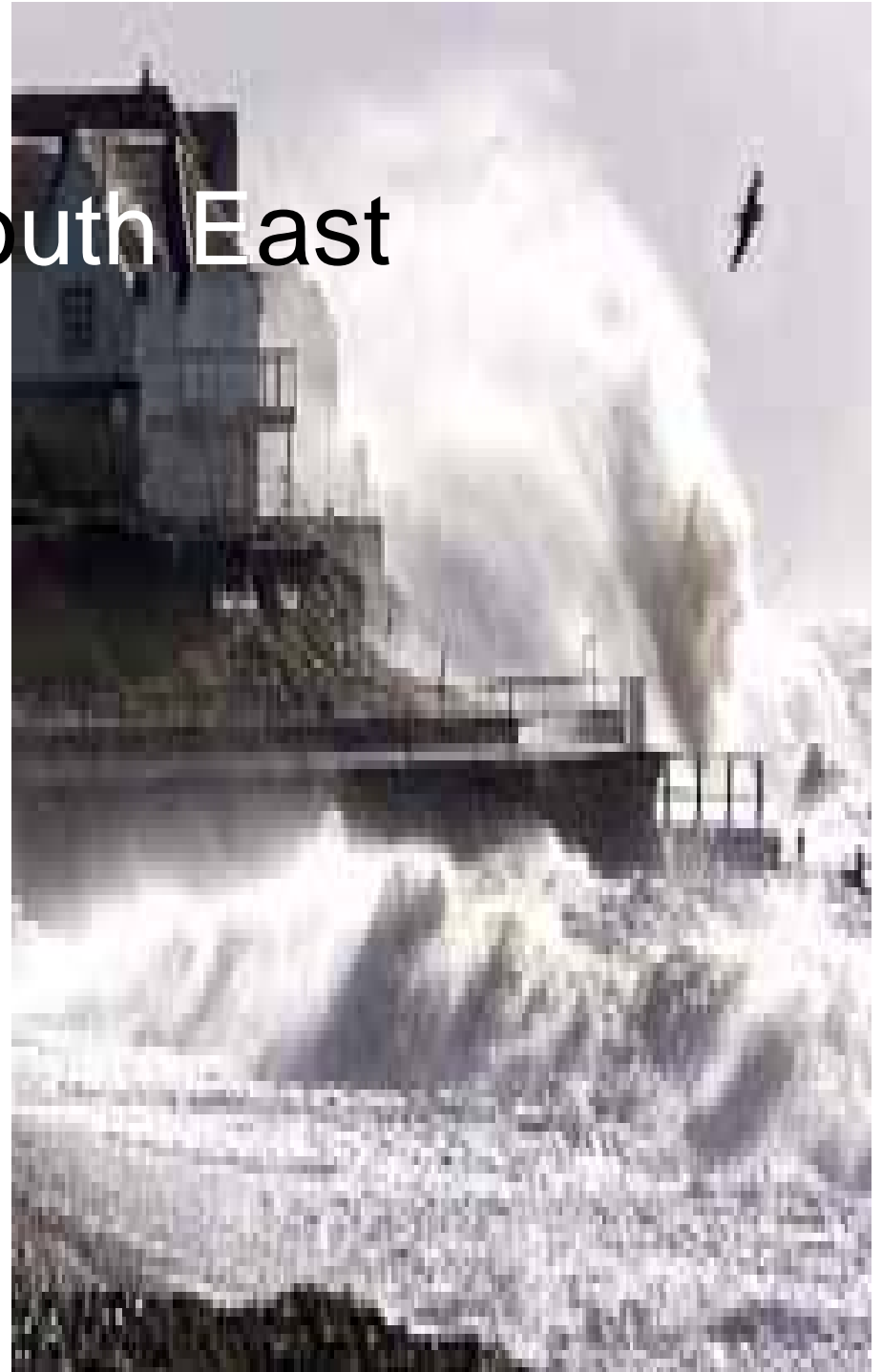
- Flooding
- Water shortages
- Aug and Sept 03 driest since 1873
- Sep-Nov 03 rainfall reduced by 70% - river flow at 20% of normal level
- Storm damage





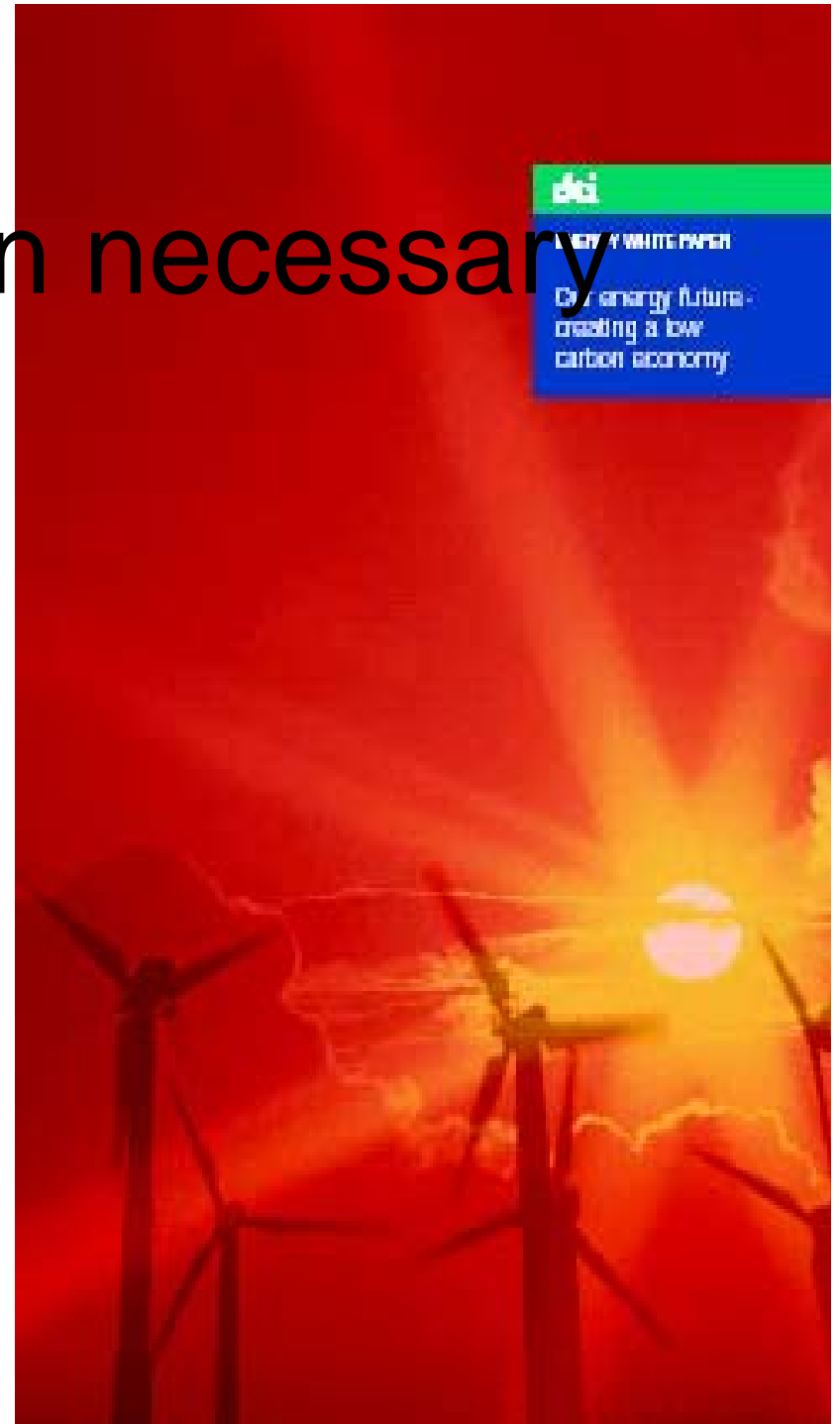
# Impacts in South East

- Highest sea level rises
- Subsidence
- Loss of habitats
- Coastal erosion
- Soil erosion



# Energy revolution necessary

- Approx 90% emissions are from energy
- Government Energy White Paper to put environment at heart of policy
- Renewable electricity currently supported by Renewable Obligation and capital grants



# Technologies emerging

## Medium scale

- Landfill gas
- Co-firing of biomass
- On-shore wind
- Off-shore wind

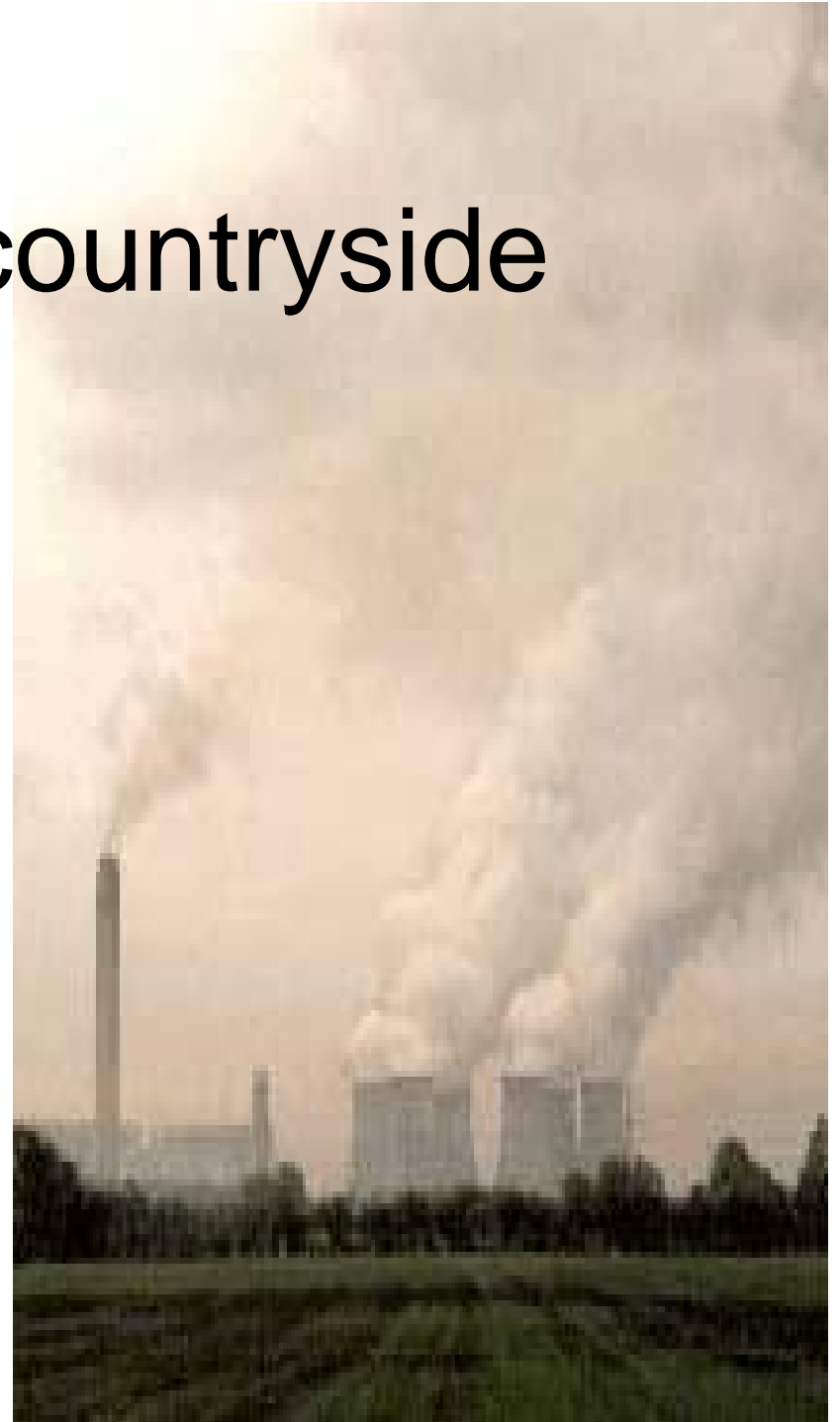
## Small scale

- PV/solar thermal
- Wind
- Ground source heat pumps
- Wood burning stoves



# Protecting the countryside

- All energy sources have an impact
- Currently concentrated in small number of areas but effects are wide reaching
- Renewables less impactful but more distributed



# The wind power debate

- Sense of wilderness must be maintained
- Protected areas likely to be inappropriate for large scale turbines
- New Planning Guidance designed to get balance right



“Wind turbines are the  
most efficient users of  
land of all renewables”  
(approx 0.06ha/GWh/year)

Source: DTI Energy Prospects



# Future policies

Government should also:

- Introduce targets for renewable heat and transport fuels
- Improve delivery of energy demand reduction
- Support less close to market technologies





**Friends of  
the Earth**