

# UK RENEWABLE ENERGY ROADMAP

<p><b>TARGETS</b></p> <ul style="list-style-type: none"> <li>15% renewables by 2020 (the EU target for the UK)</li> <li>30-45% renewables by 2030</li> <li>Fewer Carbon emissions (80% cut by 2050)</li> <li>More Carbon capture</li> <li>More Nuclear energy (no CO2)</li> <li>Increased energy efficiency</li> </ul> <div style="border: 1px solid black; padding: 5px; margin-top: 10px; text-align: center;"> <p><b>The UK needs a future mix of Low Carbon electricity generation</b></p> </div>	<p><b>UPDATE 2013</b></p> <ul style="list-style-type: none"> <li>Coal still at 35%</li> <li>Gas still at 20%</li> <li>Nuclear 18%</li> <li>Renewables only 4%</li> </ul> <p><b>BUT % CHANGE OVER 1 YEAR</b></p> <ul style="list-style-type: none"> <li>Onshore wind up 78%</li> <li>Offshore wind up 58%</li> <li>All renewables up 55%</li> </ul>
---	--

**1. OFFSHORE WIND** The UK is a global leader, due to its long coastline and high winds

Aims :-

- To ease planning regulations
- Reduce costs
- Support technical research

**But it is still costly both to construct and by energy unit**

Round 2 set up three strategic areas	HUMBER THAMES ESTUARY LIVERPOOL BAY
New policies	LARGER TURBINES DEEPER WATER FURTHER OFFSHORE
Development of Offshore renewable Hubs	GRIMSBY BELFAST

**2. ONSHORE WIND**

Aims :-

- Ease planning regulations
- Increase research on radar interference
- Not expected to grow as quickly as Offshore

**3. SOLAR (PV –PHOTOVOLTAIC CELLS)**

Still expensive but Government support and feed-in tariffs is expected to fuel a rise in microgeneration

**4. BIOMASS** Several kinds: wood, crops, Municipal Solid Waste, animal waste, sewage for biogas

<p>Aims / Policies :-</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>Brings a reduction in landfill and methane emissions (a greenhouse gas). Targets 80% less SO2, 2.6M tonnes less CO2</p> </div>	<p>Landfill restrictions</p> <p>Encourage use of sustainably sourced wood</p> <p>Convert coal-fired power stations to Biomass (Drax Power Station by 1016)</p> <p>Use biomass pellets in power stations (Tilbury Power Station)</p> <p>Needs secure waste supplies</p>
--	--

**5. MARINE (tidal / waves)** Still in the early experimental stages and its development will depend on feasibility studies. Plans have been put forward for a Severn Tidal Barrage, which will probably not go ahead, but other plans for tidal lagoons and tidal stream generators are more likely to come about