

## 8 possible wedges of the stabilisation triangle

Wedge Type	<i>A wedge of emissions savings would be:</i>
<p><b>Increased Efficiency &amp; Conservation in transport</b> Make cars more efficient, reduce the number of miles traveled by the world's cars</p>	<ul style="list-style-type: none"> <li>• achieved if the fuel efficiency of all the cars projected for 2055 were doubled from 30 mpg to 60mpg</li> <li>• achieved if the number of miles travelled by the world's cars were cut in half</li> </ul>
<p><b>Fuel Switching</b> Replace coal electric plants with natural gas-powered facilities</p>	<ul style="list-style-type: none"> <li>• 1400 large (1 billion watt) natural gas plants displacing similar coal-electric plants</li> <li>• bringing one Alaska pipeline on line every year for 50 years</li> <li>• 50 large LNG tankers docking and discharging every day</li> </ul>
<p><b>Carbon capture and storage</b> CO<sub>2</sub> emissions from fossil fuels are captured and stored, rather than vented to the atmosphere</p>	<ul style="list-style-type: none"> <li>• 3500 projects of the size of In Salah pilot development which currently stores 1m tonnes of carbon per year (each need to last through to 2054)</li> <li>• Increase the scale of hydrogen production by a scale of ten</li> <li>• Over 50 years, capture the CO<sub>2</sub> emissions from 180 coal-to synfuels facilities</li> </ul>
<p><b>Biofuels</b> Use more ethanol based fuels derived from crops</p>	<ul style="list-style-type: none"> <li>• planting an area the size of India with biofuels crops</li> </ul>
<p><b>Wind</b> Increase wind electricity capacity to replace coal-based electricity</p>	<ul style="list-style-type: none"> <li>• scaling up current capacity by a factor of 30 – this would require covering an area in wind turbines approximately 4 times that of the UK</li> </ul>
<p><b>Solar</b> Use more solar panels to replace coal-based electricity</p>	<ul style="list-style-type: none"> <li>• an area of solar panels covering area 230 times the area of London (1/12 size of UK)</li> </ul>
<p><b>Nuclear</b> Add to the current global nuclear capacity to replace coal-based electricity</p>	<ul style="list-style-type: none"> <li>• tripling of nuclear power plants from today's 400 to 700 more in the next 50 years</li> </ul>
<p><b>Natural sinks</b> Increase the natural capacity of the eco-system to absorb carbon emissions</p>	<ul style="list-style-type: none"> <li>• halting global deforestation in 50 years would provide one wedge of emissions savings</li> <li>• planting new forests that would cover a total area of the size of the United States or 25 times that of the UK</li> </ul>