

Dear Stern Review Team,

This email is a response to the document "What is the Economics of Climate Change?" and an update of what I submitted previously at http://www.hm-treasury.gov.uk/media/BFA/D4/climatechange_gerry_woff 1.pdf .

I would like to emphasise again that '**concentrating solar power**' (CSP) is a technology that can totally transform our perception of the costs and benefits of changing to a low-carbon economy:

- CSP is a relatively simple, mature and practical technology that, **with the right political and financial impetus**, can be brought into play very soon. It is described in outline in the attached leaflet. More detail, with links to other sources, may be found in the revised and updated web page at www.mng.org.uk/green_house/renewable_energy/csp.htm .
- The benefits of CSP for Europe (EU), the Middle East (ME) and North Africa (NA)- EUMENA- include:
 - Huge and inexhaustible supplies of clean electricity at competitive prices.
 - Security of energy supplies (as explained in the leaflet and the web page).
 - Cutting CO2 emissions: detailed projections prepared for the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU) by 'TRANS-CSP' show how, even allowing for increases in demand for energy, **a combination of CSP with other technologies could allow Europe to cut CO2 emissions from electricity generation by 70% by the year 2050, and phase out nuclear power at the same time.**
 - Jobs and earnings throughout EUMENA.
 - Reduction of international tensions arising from shortages of energy and of fresh water (see desalination of sea water, below).
- Benefits for hot countries include:
 - Shading for buildings, car parks, factories, or stables for animals to help keep them cool.
 - Waste heat used for desalination of sea water or for air condition.<!--[if !supportLists]-->
 - Horticulture out of the harshness of direct tropical sunlight, using desalinated sea water.<!--[if !supportLists]-->
- People in the UK and elsewhere in Europe apparently assume that CSP is not relevant to their needs because they are a long way from the kinds of hot deserts where CSP comes into its own. But average transmission losses over modern high-voltage DC transmission lines (HVDC) are about 3% per 1000 km. In round figures, this means that electricity can be transmitted from North Africa to

London with only a 6% loss of power. Since the 'fuel' for CSP is free, any such loss is quite acceptable.

Sincerely,

Gerry Wolff

Dr J G Wolff BA Hons (Cantab), PhD (Wales), CEng, MBCS (CITP),
Gerry@mng.org.uk, 01248 712962, www.mng.org.uk/green_house. "From Greenhouse
to Green House", 18 Penlon, Menai Bridge, Anglesey, LL59 5LR, UK.