

ENERGY POLICY REVIEW  
Performance Innovation Unit Project Scoping Note

Comments from RENU E

(Renewable Energy in the Urban Environment)

## Renue

131 Trinity Road,  
London SW17 7HJ.  
t: 020.8767.4624  
f: 020.8672.7080  
17 September 2001

Allan Brereton,  
Energy Review Team,  
PIU, Cabinet Office,  
Admiralty Arch,  
The Mall,  
London SW1A 2WH.

- 1 RENU E considers the forthcoming Energy Review most apposite, and we are glad of the opportunity of submitting these general points at this stage. Apologies for the late submission (beyond the suggested 10 September deadline), and thank you for the extension. Perhaps recent events in New York and Washington have added weight to the Review, particularly its accurate emphasis on the primacy given in the Scoping Note to considerations of diversity, security and sustainability of supply re energy sources. From our point of view, these tragic events last week bear long term implications re various policy aspects, and serve to heighten the urgency with which the implementation of a comprehensive shift towards renewable energy sources should be speedily effected/enacted, through a highly (and carefully) integrated transitional programme. We would hope the Energy Review reflects this urgency.
2. PENUE is a not-for-profit environmental charity which was established as a result of local community activity centred on small-scale energy projects within the Wandle Valley area in SW London. Our aims are threefold:
  - \* to raise awareness of the ecological and human benefits of the use of renewable energy resources;
  - \* to demonstrate how renewable energy technologies can be practically implemented in local urban communities, and thus contribute to urban regeneration/revitalisation; and
  - \* to assist in the reduction of greenhouse gas emissions.

RENU E works in partnership with Merton Council, Wandsworth Council, other energy and sustainability groups/NGOs, and local community groups, schools, businesses. Practical aspects of implementation are a priority (along with fundraising), with a view to skills provision and community education. This involves organising training courses/seminars for practitioners, local decision-makers, producing educational materials (ENCL.1, a recent leaflet) and small scale renewable energy demonstrations.

3. At the commencement of the Millennium, there was much talk relating to the 'solar century' With the Review focusing on energy policy up to 2050, the scoping note

accurately outlines potential conflict between current policies and longer term environmental objectives. We consider that priorities of the longer term transition to sustainability should given existing competitive market conditions be the guiding indicators re all short and medium term strategic decisions. Energy policy should seek a way that enables cleanly generated energy to be available to all users at viable cost, within as short a timeframe as possible. This would be consistent with the Royal Commission on Environmental Pollution(RCEP) recommendations for 60% reductions (and perhaps 80% is a truer target figure) in greenhouse emissions by 2050. Regarding the potential for the solar century, two articles (ENCL. 2a & 2b) by Simon Jones and Alex Benady give indications of moves already underway towards solar generation. Worth, citing here is the point made in Simon Jones article that DTI studies support a Greenpeace claim that 'if solar panels were fitted to all suitable buildings, they could generate two-thirds of Britain's electricity'.

4. The long term objectives of diversity, security and sustainability of supply might well be compromised by existing competitive market conditions. This particularly applies to cost pricing mechanisms employed by privatised energy utilities. Given the considerable inertia within industrial/post-industrial and financial infrastructure regarding transition to sustainable energy policies, the government should consider the full range of possibilities re pricing incentives so as to best facilitate and maximise the developmental process leading to appropriate economies of scale for renewable technologies. This applies not only to photovoltaics and solar water-heating systems, but wind turbines, biomass, combined heat and power, fuel cells (noting the recent innovative scheme in Woking), in shorts the full range of technologies. RENEUE considers it to be in the national interest that very difficult questions relating to priorities and balance regarding resources supply and demand/pricing policy be faced up to without delay. To effect transition smoothly and to maximum effect might become progressively more difficult if such decisions are unresolved or left subject to prevarication.
5. Concerning security of supply again, and noting our position as a net importer of gas and oil (probably within 10 years), we can do no better than quote from an article by Dan Plesch, a senior research fellow at the Royal United Services Institute for Defence Studies: 'Renewable energy poses no security risk, and in fact it can give us more independence internationally. Shifting towards it is also a strategic necessity since by moving to it we can also free ourselves of dependency on US military power to give us access to that oil. Today a large part of Britain's armed forces are in the Gulf to show the US that we are ready to help it control that oil. The shift will not be quick but it must be pursued urgently. We cannot now just go on in the old way. Such a shift is common-sense but will doubtless be ignored by official thinking in Whitehall.' (the Guardian, Wed 12 September 2001) Hopefully, the work of the Energy Review and its subsequent report to the Government, will prove the latter part of this last sentence inaccurate.
6. We view the overall context re energy policy in the period up to 2050 (and beyond) as being within a possible wider societal transition to truly sustainable living, affecting social/community/economic/environmental/ecological aspects of all policy sectors in interconnected mode. Within this context, policy initiatives will become mutually reinforcing and supportive. The scoping note makes the welcome linkage between energy and transport, and we would suggest that other similar linkages might be included. The built environment, property and construction have significant linkages with energy consumption. Obviously the Energy Review cannot cover detailed aspects of policy, but could well cover indicators/targets covering residential housing, commercial and mixed developments via possible inputs into land use and planning. A requirement for renewable energy inputs in all new-build developments is a possible path towards the Greenpeace claim as mentioned in paragraph 3. Similar provision could be made for building refurbishment developments, again via inputs in the planning system. Another cross-sectoral consideration might be energy in relation to the food industry, linking in with nutrition, food miles, distribution and transport, options re local food markets, making the necessary linkages with energy inputs/outputs —overall re efficiency and balance. Again, detail might be beyond the nature of the Energy Review; though perhaps not, with DEFRA being involved, even though this is more of a demand side consideration.

If renewable technologies can be seen as integral matters of policy in these (and other) related areas, and aided by appropriate systems of incentives, this would hugely assist the necessary

snowball effect re economies of scale so urgently needed in enabling the huge potential of this sector to unfold. While the announcement made earlier this year of £100 million government funding for renewables was welcome, the amount is small in relation to actual need.

7. One of the most difficult tasks of the Energy Review will be policy stipulation to effect the initial interim period of transition, juggling factors of relative supply, diversity, security, costing, environmental/ecological factors for oil/ gas/coal/nuclear sources. Having little relevant experience here, we refrain from comment, other than to say that we would see a seesaw effect occurring, with incentives for renewables adding leverage to environmental/ecological/social superiority, with all fossil fuel use slipping towards decline and phase-out. Despite reassurances about short and medium term security of supply, in a fast-changing world little is certain (except, we hope, the sun), and notwithstanding sociopolitical change, the scarcity factor will increasingly apply (towards 2050) re fossil fuel sources, as well as environmental/ecological considerations gaining greater weight and import.
8. At all stages of possible transition, the prime importance of energy efficiency (conservation measures, reduction of consumption, effective insulation etc) need be afforded absolute priority. Noting that the UK is set to achieve the Kyoto targets for emissions reduction up to 2010 though questions need to be asked re the adequacy of the Kyoto aspirations looking beyond 2010, the Review must ensure that reductions are sustained, preferably increasing their rate on an exponential basis. This, in turn, raises questions regarding economic strategy re growth of sustainability, and bears national/regional/local implications regarding immediate, medium and long term objectives. Holistic sustainable economic practice is perhaps requisite to stabilising climate and weather patterns.
9. The privatised format of the energy utility companies inevitably leads to conflict with a prime sustainability tenet, 'less is more. Our view is that clean energy generation, energy efficiency and consumption reduction are complementary facets of sustainable energy policy. Live lightly on the Earth.  
Utilities, as presently constituted, seek to encourage through their pricing mechanisms increased energy consumption. The Review will need to examine these structures carefully, to determine whether they are adequately compatible with a sustainable approach to energy generation and use. If on a broad range of considerations, such structures are found wanting, means should be examined as to alternative possible structures within which energy supply and demand might be sustainably fulfilled, and an outline programme for requisite changeover be included in the Energy Review's report/recommendations to the government. One such alternative might be a format for regionalised/localised public/co-operative ownership.  
Given current instabilities in global financial markets, which could well become a quasi-permanent feature affecting investment decisions for the foreseeable future, and in consideration of the recent Californian energy supply crisis, plus other global factors, perhaps this point connecting sustainable energy with sustainable money, might acquire added significance.
10. Regarding the options for coal, oil, nuclear and gas sources for energy supply, we wish only to comment on the nuclear option.  
We consider the nuclear option fails to qualify as a component of a sustainable energy policy on various grounds, of which the most self-evident is that of nuclear waste, for which we deem there to be NO sustainable solution. Others include the safety factor re nuclear reactors, escape of radioactive waste into seas, in-efficiencies re cost effectiveness, potential for non-reliability of supply (consider the range of problems with ageing Magnox reactors), and the possible linkings with nuclear proliferation and the defence industry.  
We note that BNFL and British Energy have both responded to the Energy Review with claims for new nuclear plant construction (BNFL 20 power stations, BE 10 power stations) at £1billion construction costs per plant, and citing nuclear power as part of the answer to UK Kyoto emissions targets.  
Given that the £1billion figure is, presumably, an initial estimate, and allowing for probable budget overruns, inflation, consideration of decontamination costs, plus the deep and widespread concerns over radioactive waste, we would ask how such amounts would further the development of renewables technology during the transitional period.  
We note also that British Energy has recently asked for its £3billion debt that has accumulated (following privatisation) to be written off, and used instead to finance new nuclear plant costs. The irony is that the debt has arisen out of the treatment of nuclear waste. Moneyvis a vis safety seems to have a strange language of it's own!

RENUE considers that the environmental/ecological/economic costs of the nuclear industry render it obsolete within the context of a transition to sustainability, emphasising the need to live cleanly on the planet, and avoiding a legacy being passed on to future generations (over tens of thousands of years.!) of highly radioactive wastes. Balancing out the factors of risk particularly in the light of last week's events in America finance would be best spent on the safe, clean and secure option of renewable energy.

### IIDNG TERM TRANSITIONAL STRATEGY CONSIDERATIONS

11. As all fossil fuels will tend towards depletion through to 2050, the development of such a programme and the means of implementation is a vital part of the PIU Projects work. Noting the work already undertaken on resource productivity and renewable energy, we presume this will include an assessment of the most appropriate practicable means of implementation, including modes of co-ordination across the national/regional/local spectrum.
12. A considerable part of RENUE's work has been in developing partnerships with local authorities, community and environmental groups, and the various energy agencies. This approach parallels the understanding that whatever the particular nature of the different modes of generation from renewable sources, the scale of such generation renders it more suitable to localised patterns of sourcing & transmission. The wider transitional strategy and of course, there is a huge educative role that has to be fulfilled re renewable energy in the public mind. This would perhaps be best rendered practical through a system that actively incorporated people in the neighbourhoods, localities, areas of the UK. At all levels, for this to be of maximum effect and impact, would involve a co-ordinated, devolved approach.
13. Within the phased emergence of such a network of regional/local renewable energy generation, there are considerable implications re the existing national grid system, including the possibility of the gradual replacement (eventual phase-out?) of the current pattern of overhead power transmission lines. Quite apart from visual benefits gained thereby (though some might, I suppose, attest to their strange beauty, bestriding the land), recent years have yielded growing concerns at possible health risks arising from electromagnetic fields generated in proximity to power lines. Indeed, in the case of Merton Council, this has led to inclusion of a specific policy relating to this phenomenon (ENCL. 3, Policy PE5), restricting development in direct alignment with overhead power lines. If sufficient houses, commercial buildings, factories, offices, schools/colleges etc were to be fitted with solar panels (buildings are said to account for some 50% of power consumption), many large scale power stations would be rendered redundant. Hence too, overhead power lines, whether in rural or urban areas.
14. Such strategic application on a national basis might be set as previously mentioned within the broader socio-economic transitional context towards sustainable living with its attendant implications for quality of life (viable and accessible for all citizens). This approach would emphasise localised patterns of economy and development, linking regional and local authorities with citizen participation and local community revitalisation, and find expression in regional plans and local authority Unitary Development Plans. Merton Council, as one of RENUE's principal partners, provides a very good example of this with a policy on renewable energy (on a pro-active basis) in its Revised UDP at Second Deposit stage (ENCL.3, Policies PE13 & PE14), covering not only local energy generation, but also energy efficiency in design and use of materials in construction. Hopefully, this will become standard practice in all regions, and we presume the Energy Review will include this in its work and recommendations. Within land use/planning perspectives, this could perhaps be extended to include mention of renewable energy generation requirements within planning briefs for specific sites, though there is the consideration of being over-prescriptive. Some progressive changes within the nature of the planning process might find a way around any such difficulty.
15. For extended organisational purposes, we can point to the idea of sustainable neighbourhoods and urban villages (or rural networks, as appropriate) which, for instance are finding expression in the Greater London Authority's Spatial Development Strategy (though this is at a comparatively early stage of its full consultation process). I recently received information on the approach undertaken by Sandwell Council (in the West Midlands) re its neighbourhood strategy, developed with a variety of partner organisations in the Borough. Local citizens helped in identifying 79 geographic neighbourhoods using a variety of criteria, with the overall aim being to gain a balanced picture of relative deprivation. An extension

of, or parallel with such approach could be employed to enable the emergence of sustainable neighbourhoods (or appropriate equivalents in rural areas. RENU's remit is application in urban settlements). Within such approach, renewable energy generation and the development of installation skills for solar systems/wind turbines etc would form one component of sustainable approaches to material/community/ecological wellbeing. Another strand of such localised enactment could be Local Agenda 21 programmes, again focusing on a devolved participatory approach.

This concludes our comments on the Scoping Note for the Energy Review. Despite their lateness, we hope they are of interest/use re your ongoing work. We look forward to receiving subsequent information regarding the progress of this significant, timely review of national energy policy.

With best wishes, in peace

Bruce Mackenzie  
for RENU