## Save Botley West

We find the case made for this development weak. As argued by many in this debate, there are a number of aspects of this application which provide strong reasons to doubt their case.

Basically human survival is dependent on our being able to obtain a sufficient supply of land and water; where these are not available locally, such as energy, we must obtain them from elsewhere. A simple balance for Botley West is to argue that we can forego some of our current "income" in food and water in exchange for "income" from power.

1). Income from land. The applicants' case in rests on their claim that the farmland being taken out of production (or at least where productivity would be reduced by power-generating activity) is mostly of low quality, therefore the loss is not great compared with the gain, a view strongly disputed by some. Surprisingly, the applicants argue that this loss can be rectified at the end of the project by simply reverting the land to farmland.

The length of time over which the land could be out of farming - or its productivity greatly reduced - is strongly disputed; certainly there is no evidence to suggest that this a straightforward operation. The value of the land when the operation ceases cannot be easily estimated nor can the cost of reverting this to farmland, not forgetting that a percentage of the land will be deeply buried in concrete and effectively lost to agriculture forever. In short, we find that the applicants arguments are at best optimistic. Perhaps most worryingly the opposing arguments are not evenly balanced; all the risks fall on the holder of the lease at the time that power generation ceases.

2) Implications for water. Although water may be regarded as playing a relatively minor part in the activities of the solar farm, the picture is not as simple as that. Without the farm, the pattern of water flow through the farm is at it is now. After the panels are fitted, the rainfall pattern will be different, tending to be more uneven with flow concentrated on the lower edges of the panels; the effect of this on plant growth will depend on the vegetation planted and the way in which the panels concentrate the light.

There is however, one way in which the panels play an important role in water balance in solar farms. In order to function properly (get maximum light to the panels) the panels need to be washed frequently. To do this they have to use water. The amount used depends on season, temperature, and what is falling: pollen (sticky) needs more. So, this water is largely lost to the land on which it fell. Since a proportion of it evaporates effectively it is lost to the crops which grow there.

To complicate things still further the water which is spayed over the solar panels has to be mixed with solvents in order to reduce their viscosity/improve their glass cleaning capacity.

We should also note that this application, like some others for wind-farms, is effectively competing with other organisations; in this case for water. The other unusual aspect of these is that they are seeking approval for something short-term in a way which makes their rival economies almost impossible to evaluate. The frequent forecasts claiming that our weather pattern is changing demonstrate clearly that we cannot be sure of the weather in the future. If we cannot do that then we cannot predict the amount of water that will be available to us. So, how do we handle conflicting demands? In prolonged periods of drought, when water is particularly scarce, who decides whether it should be used to provide us with electricity or food? Planning needs to be aware that we should be cautious of committing us to yet more demands; we cannot safely approve a new, relatively short term demand which conflicts with longer term essential requirements.

This application is to generate electricity from the land in the Upper Thames watershed. an area of high density population and high demand for its limiting resources, especially in view of the plans for ever more research facilities and housing for the people wanted to work in these facilities. It will — and must — be administered sensitively with emphasis on long-term development and stability. This will not be achieved by this application, which looks to promise wide-scale upheaval leaving us to sort ourselves out when they have finished with the land.