

# ***The Irish Solar Energy Association Limited***

Registered in Ireland, number 359956

## **Consultation paper on the funding of the Grid Upgrade Development Programme for renewables.**

In response to the invitation issued regarding comments on the proposal re funding of the Grid Upgrade the Irish Solar Energy Association Ltd wish to make the following comments by way of a submission to the overall plans for Grid Upgrade.

### **Introduction.**

Electricity has up to now been generated effectively by a small number of producers and distributed to consumers by the grid. With modern technology it is now possible to produce electricity in small generators over a widely distributed network and have the excess amount fed into the Grid. Emerging technologies will make it more attractive for domestic users to maximize power production in the summer using Solar PV, and store it in fuel cells for the winter, leading to the emergence of a growing number of 'off-grid' households. Improving PV technology will make it increasingly attractive to use public buildings (schools etc) as net suppliers of energy to the grid at times when the buildings are not in full use (summer holidays, weekends).

The Irish Solar Energy Association wish to submit proposals that the concept of "netmetering" be adopted in the Irish context in line with most of the other countries in Europe. The UK promoted the installations of Solar Photovoltaic Panels in domestic situations by introducing a 50% capital grant. These installations are automatically connected to the Grid of the companies supplying the electricity to those homes who now receive the benefits when excess electricity is available.

### **What is Netmetering?**

In short it means that as electricity is used by the consumer the meter records the amount being used and as the Solar panel generates electricity surplus to the householders requirements at any one time the meter "goes backwards" to record the amount being sent out on the grid. The "net" value of the meter reading is then settled in the normal way.

### **Well proven technology.**

In Europe the concept of feeding into and drawing from the Grid is well established. (see appendix 1). Grants are available to organizations and private homes for the initial capital cost of installation. In May 2002, the British Department of Trade and Industry (DTI) launched a campaign supported by a 50% grant scheme to promote solar energy. The legal, technical, and procedural have all now being work through and systems are being installed.

It all boils down to developing a national energy policy that will reduce our dependence on imported fuels; help us reduce our CO2 emissions; have a sustainable energy systems and encourage people to think about our energy costs and reduce waste.

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The best way to deal with it is to promote the use of solar power. The ISEA believes strongly that incentives such as exist in other European countries should be available in Ireland.

The issue mentioned in your paper "*key constraint to the development of renewable energy was the ability of the electricity system to accommodate it*" is not a barrier to the development of distributed generation by Photovoltaics. The amount generated in individual household sites will be in the order of 2 or 3 Kw or smaller. The Grid is capable of carrying this amount where it may not be able to accommodate one large generator. This has been proven to be the case in Europe, and we should not allow institutional obstacles to stand in the way of technically feasible steps on the path to a renewable energy economy.

There will be no or at least very additional little costs involved in this proposal.

Further information on the organization and development of such a system is very comprehensively described in the papers:

1. *Low voltage grid connection of photovoltaic power systems ETSU Report No. S/P2/00215/REP*

*And*

2. *The Value of Electricity Generated from Photovoltaic Power Systems in Buildings ETSU S/P2/00279/REP*

E. Brennan  
Secretary

Appendix 1

Overview of Incentives in other Countries for Solar installations (Separate Excel doc)