UK solar sector could face costly waste legislation



By David Burton, Chairman, Strateco Ltd

New UK electrical

waste legislation could have a profound effect on the solar industry, yet few know what it is. David Burton explains the unique challenges facing solar

f you think that what happens to old PV panels when they come to the end of their working life isn't important, you need to think again. PV CYCLE, the pan-European collection and recycling scheme supported by 90% of the photovoltaic manufacturers and importers active in Europe, is now preparing for the mandatory inclusion of PV panels in forthcoming UK waste electrical and electronic equipment (WEEE) legislation. While PV CYCLE manages a dedicated European-wide collection and recycling network for PV modules, which has already treated several thousand

tonnes of panels to date, the current issue in the UK is less about what happens to old panels and more about the up-front costs of conforming to new regulations.

"As UK legislation currently stands, PV producers would be unfairly financially penalised – through placing products on the market which will not become waste for 30 years or more but having to pay for a proportion of other 'WEEE' which is being collected from consumers through local authority civic amenity sites," says Jan Clyncke, Managing Director of PV CYCLE.

Clyncke says that the current UK WEEE regulation places a 'market share' obligation on producers, classed as UK manufacturers, importers or those who re-brand products, which is supposed to pay for the collection of old electronic equipment waste from local authorities and others. The costs levied on producers through this market share calculation are related to the weight of new electronic equipment that a producer places on the market.

"The first thing to consider is that, of course, the PV sector has little old product being disposed of as waste today – and even if it were, the industry, through PV CYCLE, already takes care of this waste," Clyncke says. "Secondly, PV panels are by far the heaviest electrical product being

placed into the EEE market. Consequently, if UK Government applies a market share calculation, which is by weight and requires that producers pay up front, the financial impact could be significant. Finally, PV modules are expected to last 25-30 years so there won't be any significant waste to dispose of for another generation."

Clyncke concludes: "In summary, our sector could be paying excessive amounts for compliance with a law that was initially designed to pay for the collection and recycling of electronic and electrical consumer products."

PV CYCLE is now working with its local partner, Strateco, and the Government in identifying the best solution that ensures the economic survival of PV module producers in the UK and guarantees that green solar energy remains an affordable electricity source for UK citizens.

The goal is to ensure that the PV sector, which has already established a comprehensive and integrated infrastructure for PV panel recovery and recycling in the UK, can be permitted to meet its producer obligations under forthcoming legislation without an excessive cost burden – as this would impact upon the effectiveness of the Government feed-in tariff initiative and dissuade development and investment in the



PV sector.

PV CYCLE has established a pick-up service as well as 14 fixed collection points around the UK and some 260 more in Europe, operated by existing PV players, to ensure that PV panels have an established collection and treatment route – a policy decision taken by the industry far ahead of any legislative obligation. Currently, the infrastructure is handling a very small number of PV panels (goods damaged in transit or installation, guarantee returns etc), but the objective is to enable any PV panels that come to the end of their natural life to be collected by the PV sector, and remain the responsibility of the sector.

Strateco believes that rather than just allowing the waste industry to take control when PV panels finally become waste – a situation that under the existing WEEE regulations has led to disproportionate costs being levied on producers – the PV sector should be able to take responsibility for its own waste and has already put in place the necessary infrastructures and processes to do this. This 'producer responsibility' approach is allowed under Article 12.3 of the new WEEE Directive and the Department of Business, Innovation and

Skills should allow this approach under the new UK regulations.

Clyncke adds: "By mid-September 2012 over 370,000 installations were registered on the central feed-in tariff register. The large majority of the installations - over 95% - are installations of less than 4kWp, with a possible average installation weight of almost 400 kilos, making PV panel installations effectively the heaviest domestic electronic products being placed onto the market – with virtually nothing coming off the market as waste for the next 20-30 years. Legal frameworks need to take into consideration the nature of this product in order to be effective and sustainable."

While generally fixed installations such as air conditioning systems and escalators that are installed (and will be de-installed) by professionals are placed outside the scope of the Directive, PV panels as fixed installations being installed and de-installed by professionals are specifically named and included within the policy. Additionally, because many of the panels are fitted on households, a new WEEE ruling would require all PV panels, regardless of the original fitting location, to be viewed as household waste when they reach the end of their life.

However, old PV panels are unlikely to end up in the household waste stream for two key reasons: first they would be de-installed by professionals, not householders, and most local authorities would not accept commercial waste on their sites; and, secondly, the PV CYCLE infrastructure would ensure safe, efficient and sustainable treatment of old PV panels.

There is an added area of risk: should old PV panels be mixed with other WEEE waste streams, the panels could, in some circumstances, be capable of generating electricity and we want to ensure that correct material handling procedures, beyond those associated with waste handling, are brought to bear. PV CYCLE is clearly the solution. There is, undeniably, a strong case for BIS to consider PV panels as a special case.

Want to know more?

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