Going green: time to talk about eco-discs

The packaged media industry goes at great lengths to cut the CO² footprint in many supply chain operations – manufacturing, packaging, logistics – but so far show little interest in the disc itself, where the environmental impact would be greatest. It's time to wake up, says BARRY HURLEY, Director of EcoDisc Technology, who has a solution.

How is the company structured? How big is the R&D department?
EcoDisc Technology AG, a Swiss company, is solely an R&D and licensing company that licenses its technology, know-how and trademarks to replicators on a non-exclusive basis. We have 5 or 6 in-house engineers who make up our R&D team along with all of the resources from our various R&D partners e.g. Axxicon.

Replicator licensing is handled through EDT and our general marketing activities are conducted through our sister company EDM. EcoDisc Marketing is based in Germany and oversees our distributor network, one example being Software Logistics in the UK.

Eco-friendly efforts are good, but are said to cost more. With the economic downturn aren't you entering the market at the wrong time?
On the contrary, the EcoDisc genuinely costs less and is now entering the market at the perfect time. In the last year we have all seen the steepest rise in polycarbonate costs since I can remember, over 60% on average for many replicators. The EcoDisc uses 50% less polycarbonate, 50% less energy and requires no bonder, which means there is a huge saving in raw material and energy costs for the manufacturer. Replicators are having to increase prices everywhere which impacts the end customer significantly, the EcoDisc can help to offset these increases when compared to a standard DVD.

Also, the fact that EcoDisc can be made on CD lines provides a very low entry barrier for replicators as they can increase their output of 4.7GB discs without having to buy extra DVD lines. Our experience also tells us that Replicators that make EcoDisc also find that they secure extra incremental business, as the EcoDisc is a key differentiator over their competitors.

Really, for the replicator and the end customer it is a great proposition. The EcoDisc isn't only eco-friendly, it also makes huge commercial sense and it has been proven to be as reliable as a standard DVD.

Are you able to take advantage of 'green' commitments adopted by companies' procurement policies? It is more prevalent with government agencies?
Yes, absolutely, we have seen the start of this in the US with companies like Wal-Mart vetting the carbon reductions of every customer product they stock. In the UK particularly since the start of the CRC Carbon reduction commitment introduced in April this year we're also seeing more interest from companies who are doing all they can to help reduce their carbon footprint.

It's been slightly more prevalent in government agencies but we're seeing a big interest now from other vertical markets like publishing and large OEM's who are also keen to reduce carbon footprint as part of their CSR commitments.

Sustainability seems to be at the forefront of most leading companies worldwide and this gives another valid reason why manufacturers should get involved in producing this format as they will be perceived as cutting edge and offering their customers a new innovation. This will differentiate them from their competition that is still doing the same old thing as 10 years ago.

The packaged media industry goes at great lengths to cut the CO² footprint in the supply chain operations (manufacturing, packaging, logistics) but does not seem to focus on the DVD disc itself, where the environmental impact would conceivably be greatest. How to do explain this reluctance?
It also has to be said that this industry is very good at greenwashing – and every company has launched a green packaging initiative or product, everybody talks about green packaging, but no one has offered a serious alternative to reduce the CO² footprint of a standard DVD. In most cases launching a green packaging concept is an easy way to appear green, making a disc that is green is a very difficult challenge – when you think it still has to work in all the players on the market.

It has taken us over three years to perfect this product and has cost millions of euros in research and development not to mention the worldwide patents protecting this new format. This is one of the reasons that it has just been assumed up to now that a DVD is a DVD so we must simply accept its CO² footprint.

There is still a lot of work to be done to help people see that because an EcoDisc is thinner (as a byproduct of using only 50% of the material and energy) it still works exactly the same as a standard DVD.

The DVD Forum misses no opportunity to point out some incompatibility problems the EcoDisc experienced with Apple Mac computers. What's the situation today?
Basically, the disc has been extensively tested and modified in the last year so it's now fully compatible with all PC, MAC and DVD drives. Our vision is that the EcoDisc was never designed to be a cheap throw away disc, but one that can be used to replace traditional DVD at retail.

Other thin discs had been thwarted in the past by playability issues caused mainly by clamping problems and the fact that they are literally one substrate, or half a DVD. One of the key differences with EcoDisc is its unique geometry around the clamping area, which keeps the disc rigid when played. Testronics have now concluded after an extensive test

on over 600 drives that the EcoDisc has passed and is now fit and robust for the purposes intended. In fact, they were so enthused by the results that they issued a press release extolling the virtues of the product.

There are several thin disc solutions on the market. What distinguishes EcoDiscs from the others?

This is one of the challenges we have, how to distance EcoDisc from the other thin disc products on the market. The proposition the EcoDisc offers is that it is a true green innovation without the playability issues associated with other thin discs.

How is EcoDisc different? It's all to do with its playability being the same as a standard disc through the position of the data layer and the clamping mechanics of the disc. All other thin discs simply don't achieve the required standard in order to go mass market. Just look at the results we achieved in the Testronics tests.

What is the kind of resistance you have to overcome in selling the EcoDisc solution to a publisher or a replicator?

To a publisher, absolutely none. The proof in this is that every major UK publisher has or is now switching from traditional DVD to the EcoDisc.

As for the replicators, I think most of them are simply not aware that they can upgrade their CD lines at a relatively low cost and secondly that we're not looking at exclusive deals, this format is open to all. Of course most manufacturers won't want to just invest and have idle lines.

So, often, we will need to demonstrate market potential but with huge interest from pretty much every single vertical market in this industry, that's not difficult now.

The huge increases in polycarbonate prices has helped also, both replicators and end customers see the EcoDisc as a way to offset this whereas with standard DVD they have to suffer price increases.

Who is currently manufacturing the EcoDisc? How many replicators are already equipped to do?

Currently we have three manufacturing sites worldwide, these are TAKT in Poland, XGL in China and UTECH in the USA.

We have recently had a surge of interest from replicators and have started to talk to more manufacturers in Europe, US, Asia and South America about the ecological benefits of EcoDisc for their clients but also the financial benefits to them.

The biggest thing to ascertain is the configuration of the equipment the factory has. Factories running Singulus E-Mould with a SkyLine Downstream will always have the easiest and most cost-effective path to EcoDisc installation.

What is your financial model, how do you generate revenue?

The model is quite simple, EDT charges the manufacturer a small royalty for each disc manufactured. We have a variety of mechanisms to do this depending on the market profile, the idea being that this still leaves a significant saving for the replicator when compared with standard DVD.

We also supply moulds and also sometimes modify existing compatible moulds. As part of the service we supply installation and ongoing maintenance services.

What are the market segments you have entered so far?

Pretty much all markets now, in the UK we have the leading magazine publishers like Future Publishing who have now converted all their DVD-5 to EcoDisc for their covermounts. We have produced discs for large European and UK corporates like Volvo Cars, Unilever and Kimberly Clark and we're now seeing large OEM's using EcoDisc as a replacement to their software at retail such as AVG. If you think of all the printers, mobile phones, cameras and personal computers still being bundled with a disc then this shows further market potential. We even have some smaller DVD distributors now taking up this format, but so far none of the studios. No special reason why not other than they use DVD-9 in the main, but we would like to see EcoDisc replace their bonus discs used in many new releases.

The home entertainment market must surely be the most difficult one to crack for the EcoDisc. How to you approach it?

The key to this is having an adequate supply chain, therefore it's not so much the disc itself but the suitable availability of the major manufacturers who would need to offer this format. We're talking to a couple of major manufacturers already because of their interest in serving new markets in addition to the Hollywood majors.

None of the studios of course would be interested until the disc worked in all drives as per a standard DVD. I think now they can see the EcoDisc works as well as a standard DVD, there's no reason why they couldn't trial it, particularly if they have content within 4,7GB.

What is your forward strategy, your market forecast for EcoDisc in 2-5 years?

Whilst there is no doubt that disc consumption will decrease, we think EcoDisc can take a very large percentage of the remaining volume. Currently we are creating interest within customer groups to drive volume growth as well as in the manufacturing community.

Our plan is to increase the number of manufacturers worldwide significantly in the coming year. We see no reason that there can't be approaching 100 lines active internationally in the next three years with the opinion leaders in every industry using EcoDisc products.

Do you see EcoDisc eventually replacing 'standard' DVD discs?

Absolutely, we have some smaller publishers using it already, but the approach to the studios needs to be supported by the major manufacturers. I think we're closer to seeing this now, particularly that the disc has been recently verified by Testronics. I'm sure there would be many packaging advantages for including EcoDisc within box sets.

Is a 2-layer 9Gb EcoDisc being considered, even a Blu-ray disc using the EcoDisc patents?

We are looking at all available options and it is conceivable that we will introduce other formats on the basis of the EcoDisc technology.

What is your marketing strategy in terms of prioritizing the industry sectors and the geographic involvement?

Our initial primary market has been Europe with the UK being the main market, this is closely followed by the US, China and Australia. We are now expanding into other countries in Europe, but we also see a dramatic rise in interest from Asia and South America.

In volume terms, we see markets such as the US, China, India and Brazil being key markets that can sustain huge growth. The sectors approached vary in each market, but generally revolve around the publishing, OEM, home entertainment, public sector and other promotional disc markets.