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(图片由受访者提供)

我国每年产生约6万吨电子废弃物，仅有6%得到正确回收。九名拉萨尔艺术学院学生利用回收的电子元件和电缆创作艺术作品，展示废弃物的再生价值，也向公众传递环保信息——除了做好回收，减少丢弃和延长产品使用寿命，才是根本的解决之道。

这是个电子产品快速更迭的时代。国家环境局数据显示，新加坡每年产生约6万吨电子废弃物，相当于220架A380双层客机的重量，或平均每人每年丢弃73部手机。然而，其中仅有6%得到正确回收。

德国欧绿保集团（ALBA Group，以下简称ALBA）自2021年受国家环境局委任为“制造商责任计划”（Producer Responsibility Scheme）业者以来，在全岛设立不同的电器和电子可回收废物收集点，方便公众和商家丢弃包括电脑、手机、平板电脑、打印机和家用电器等电子垃圾，再交予合格的电子垃圾回收商处理。

2025年3月，九名拉萨尔艺术学院美术文凭二年级学生受邀，用ALBA收集的废弃电子元件与电缆创作艺术作品。这些作品已于5月29日在ALBA位于大士10道（Tuas Avenue 10）的访客中心揭幕，并将长期展出，面向学校和企业等来访团体，成为环保教育的创意样本，展示电子废弃物的另一种可能。

按照项目要求，学生们必须完全

电子垃圾成艺术品 巧手生花变废为宝



使用电子废弃物，不得引入全新材料。九人分为两组，一组重现ALBA标志，另一组以电线绘制抽象风格的新加坡地图。项目从构思到完成历时约一个月，其中制作时间为九天。

有些废弃电线买来就丢

负责绘制地图的小组选择电线作为主要媒材。成员黄建（22岁）解释，地图轮廓为不规则图形，电线的柔性最适合描绘细节。为了让观众一眼看出这是电子废弃物，他们保留了插头等细节，并挑选不同颜色的电线，展现全岛不同的城区。

黄建说：“我们翻找了大约三袋电线，大多数是黑色或白色，但也找到少量彩色电线。让我震惊的是，有些电线甚至还在原包装里，说明它们

从未被使用过。”

负责制作ALBA标志的小组，在设计时兼顾品牌识别与创意表达。成员李杰宜（20岁）介绍，他们原本也打算用电线，但为了避免与另一组重复，转而寻找形状自带曲线的物品，例如旧诺基亚手机、老式座机电话的话筒、天花板灯罩等。

李杰宜说：“我们几乎没有对物品做大幅改造，而是利用它们原本的形状来拼成ALBA的字母。有些细节部分用拆解下来的电脑主板和键盘按键填充。”

在ALBA的仓储区挑选材料的过程，对学生们既是新奇的体验，也是体力与安全的考验。他们必须戴手套，穿长裤，佩戴口罩，避开有潜在危险的物品。李杰宜说：“有一次我

们找到一个充电宝，外壳已经鼓胀发热，幸好被工作人员及时发现并移除。”他们也避开使用电池等组件，“因为作品中不能有可能漏液或带来安全隐患的部件。”

减少丢弃延长使用

亲自在废弃物堆中翻找材料，让学生们对电子废弃物的来源与处理有了更深刻的感受。黄建说：“一开始，我以为电子废弃物就是被丢弃的老旧设备。但在现场，我发现很多废弃物其实离当下并不久远。我们总是追求最新型号，忽视了丢弃仍可使用物品对环境造成的影响。”

李杰宜说：“我会把这次学到的东西分享给家人朋友，至少鼓励他们把电子废弃物丢进ALBA的专用回收箱。虽然回收可提取金属等有价值资源，但整个过程依然会消耗能源并产生污染。因此，减少废弃物的源头和延长产品使用寿命，才是更根本的解决之道。”

艺术的介入，为这一议题提供了更具感染力的公众沟通方式——让环保不只是数字与政策，更是可以被看见，被触摸，被重新想象的日常。

李杰宜和黄建希望他们的作品能激励更多人释放创造力：“只要有想象力，废弃物也可以变得有意义和影响力。”

拉萨尔艺术学院学生利用回收的电线，创作出色彩分区的新加坡地图装置艺术。



拉萨尔艺术学院学生用旧手机外壳、电话听筒、电脑主板等电子废弃物，喷漆后制作成ALBA标志。作品彰显废弃物在创意设计中的再生价值。



李杰宜（后排右一）和黄建（后排右二）等九名美术专业生，将环保理念融入创作过程。他们的作品在ALBA访客中心长期展出。

Electronic waste becoming artwork—skilful hands transform waste into treasure

Our nation produces about 60,000 tonnes of electronic waste every year, but only 6% is properly recycled. Nine students from LASALLE College of the Arts used recycled electronic components and cables to create artworks, showing the renewed value of discarded items, and also conveying to the public an environmental message—that other than recycling, reducing disposal and extending the lifespan of products is the fundamental solution.

This is an age of rapid turnover in electronic products. Data from the National Environment Agency (NEA) shows that Singapore produces about 60,000 tonnes of electronic waste annually, equivalent to the weight of 220 Airbus A380 double-deck aircrafts, or each person discarding 73 mobile phones per year on average. However, only 6% of this is properly recycled.

Since being appointed by NEA in 2021 as an operator under the Producer Responsibility Scheme, ALBA Group from Germany (hereafter referred to as ALBA) has set up various collection points island-wide for electrical appliance and electronic waste. This allows the public and businesses to conveniently discard items such as computers, mobile phones, tablets, printers, and household appliances, which are then passed to qualified electronic waste recyclers for processing.

In March 2025, nine second-year Diploma in Fine Arts students from LASALLE were invited to use discarded electronic components and cables collected by ALBA to create artworks. These works were unveiled on 29 May at ALBA's Visitor Centre at Tuas Avenue 10 and will be on long-term display. They are open to visits from schools and companies, serving as creative samples of environmental education, and thus showcasing another possibility for electronic waste.

According to project requirements, students had to only use electronic waste, without introducing new materials. The nine students were divided into two groups: one recreated the ALBA logo, while the other created an abstract-style map of Singapore using electrical wires. From conception to completion, the project took about one month, with nine days spent on production.

Some discarded wires were thrown away right after being bought

The group responsible for creating the map chose wires as their main medium. Member Casimia Wee Jyen (22) explained that the map's outline was irregular, and the flexibility of wires was most suitable for depicting details. To let viewers immediately recognise it as electronic waste, they retained details such as plugs and selected wires in different colours to represent the different districts of the island.

Casimia said: "We searched through about three bags of wires, most of them were black or white, but we also found a small number of coloured wires. What shocked me was that some wires were still in their original packaging, which meant they had never been used."

The group responsible for making the ALBA logo balanced brand recognition with creative expression in their design. Member Lee Jie Yee (20) explained that they had originally intended to use wires as well, but to avoid duplicating the other group, they instead searched for items with curves in their shapes, such as old Nokia mobile phones, vintage landline phone receivers and ceiling light covers.

Jie Yee said: “We hardly made major modifications to the items. Rather, we used their original shapes to piece together ALBA’s letters. Some details were filled in with dismantled computer motherboards and keyboard keys.”

The process of selecting materials in ALBA’s storage area was both a novel experience and a test of physical effort and safety for the students. They had to wear gloves, long trousers and masks, and avoid potentially dangerous items. Jie Yee said: “Once, we found a power bank with a casing that had swollen and was heating up. Luckily it was discovered and removed in time by staff.” They also avoided using batteries and similar components, because the artworks could not contain parts that might leak or pose safety risks.

Reduce waste and extend usage

Personally rummaging for materials in piles of discarded items gave the students a deeper understanding of the sources and handling of electronic waste. Casimia said: “At first, I thought electronic waste meant simply old, outdated devices. But on site, I discovered that much of the waste was not that outdated. We are always chasing the latest models, ignoring the environmental impact of discarding things that are still usable.”

Jie Yee said: “I will share what I have learnt from this experience with family and friends and at the very least encourage them to throw electronic waste into ALBA’s dedicated recycling bins. Although recycling can extract metals and other valuable resources, the whole process still consumes energy and produces pollution. Therefore, reducing waste at the source and extending the lifespan of products is the more fundamental solution.”

The intervention of art offers a more powerful way of public communication on this issue—making environmental protection not just about figures and policies, but something visible, tangible and re-imaginable in daily life.

Jie Yee and Casimia hope their works can inspire more people to unleash their creativity: “With imagination, discarded items can also become meaningful and influential.”