**從LED全球產量第一，到重新尋求生路**

**台灣學到的是：回歸原點、站在消費者立場設想**

**From the first in global LED production to re-seek a way out**

**Taiwan's lesson: return to the origin, think from consumer’s standpoint**

「電器化商品壽命不到五年，丟臉！」

“An electronic good with less than five years of life span? What a shame!”

身為台科大電氣工程教授、台灣LED產業聯盟秘書長、消基會監察人、與一般

消費者，蕭弘清博士鏗鏘有力的在每場演講中，自許、與勉勵產業界人士，任何生產製造的電器、電子產品，至少要有五年壽命，不然就是浪費資源的敗類！

他想說的其實是：凡事一定要站在消費者立場設想。

As professor of Electrical Engineering in National Taiwan University of Science and Technology, executive secretary of Taiwan LED Industry Alliance, supervisor of Consumers Foundation, and an ordinary -consumer, in every speech, Dr. Horng-Ching Hsiao sonorously vows and encourages industry professionals that any manufacturing electrical appliances, electronic products, should at least have a life span of five years, or else it is considered a scum, a waste of resources! His point being: everything must come from consumer’s standpoint.

一向讓消費者驚豔的蘋果公司，在2013年七月We Are Social所做的一項調查中，竟成為最廣受消費者抱怨的智慧手機第一名，其中讓消費者最氣的是iPhone的電源線與轉換器，每出一款新品、規格跟舊款就不相容！沒站在消費者立場設想，不管過去多光鮮的品牌，照樣被修理。

Apple always has the ability to surprise the consumers. Yet in July 2013 a survey done by We Are Social, showed Apple’s iPhone 5 was the most criticized handset on social networks with the majority of people complaining about the introduction of a new power socket. Not thinking from the consumer’s standpoint, regardless of how glamorous the brand is, still receives complaints.

蕭弘清說：市面上許多電器化商品，都有規格不相容、導致浪費的狀況。

以他最熟悉的LED領域，他直言：台灣關鍵技術的優勢，已經被韓國趕上，中國大陸也差距不遠，我們唯一的生路，還是-- **站在消費者立場設想**！

Horng-Ching Hsiao said: many electronic goods on the shelf have incompatible issues resulting in wasteful situation.

In his most familiar LED field, he bluntly states: Taiwan's key technology advantages has been caught up by South Korea, and China is also not far behind. The only way out still is, fundamentally, to think from consumer’s standpoint!

至於怎麼辦？他提供了一個可行的答案：做到規格相容標準化。

換成消費者的語言：當我買A的LED燈泡，可以裝在B的燈座；當我買A第一代的燈座，未來A第三代的燈泡，也可以裝上去。

As for how? He provides a viable answer: make it compatible!

In consumer language: When I buy Brand A’s LED bulb, it can be installed in Brand B’s lamp; when I buy Brand I’s third generation bulb, it should fit in Brand I’s first generation lamp.

全世界LED大廠產製的照明產品，一直缺乏共同規格標準，各家設計產品時規定訂定天馬行空。若最基本的電壓電流有相容性，即使不同公司電氣化產品的零組件也能替換無誤；同樣的，同公司前後期零組件也能替換。

LED Lighting products have been produced without a unified standard. The lack of standard led to various factories producing LED devices as per their individual specifications. As a result, the market was stocked with unreliable products. A unified industry technical specification including the production of the electrical system makes electrical parts interchangeable between brands. It will for sure save many extra costs for manufacturers and benefit the consumers.

LED燈仍無法普及，台灣LED照明產業聯盟歸結了幾個主要原因：

LED lighting has been hitting the market for quite a long time but still unpopular. Taiwan LED Lighting Industry Alliance offers three main conclusions:

1. 價格太高
2. 品質參差不齊

許多技術水準尚未成熟的產品搶著上市，宣稱的壽命與光衰都無法獲得保證，造成消費者喪失對產品信心，市場淪入惡性削價戰。

1. 方向盤壞了得換新車的荒謬現象

為遷就傳統省電燈泡結構與螢光燈具，許多LED產品成光源模組與驅動電源一體化設計，光源模組通常有3-5萬小時的壽命，但驅動電源較容易故障，可是一體化的設計，只要發生故障，就得整燈汰換，非常浪費資源！

即使設計成光源模組與驅動電源獨立分離，現況是不同廠商規格不相容，造成維修更換不方便。

1. The price is too high.
2. The quality is uneven.

Many immature products rush too quickly into the market, with the life span and light fades claimed that cannot be guaranteed. It results in a loss of consumer confidence in the product, and the market falls into a vicious price war before anyone making a profit.

1. A ridiculous combination leads to a waste of resources

Unlike traditional lamps that are produced with separate bulbs and sockets, LED lighting devices are made under the premise that the lighting source and power supply units are inseparable.

The lighting source usually has 3-5 million hours of life span, yet the power supply doesn’t last as long. But with an integrated design, once a malfunction happens, the entire lamp needs to be replaced. It is an extreme waste of resources and money!

Even when the lighting source and the power supply units are designed separately, the different manufacturers’ specifications are currently incompatible, resulting in maintenance and replacement inconvenience.

三個LED無法普及的核心問題，其實都回歸到缺乏了規格相容標準化，一個單純沒有**站在消費者立場設想**的簡單原因。

The three conclusions in fact all returns to the lack of a unified standard-- a simple reason of not thinking from consumer’s standpoint.

如果台灣生產的LED能做到照明產品規格相容標準化，從產業鏈來看，未來可以建立模組化的專業大廠，專門生產單一零組件、減少企業開發的投資、降低上市成本、也提升產品可靠度。就消費者端來看，選擇台灣照明產品，等於選擇相容性最高、同時最方便更換的產品，不會再發生方向盤壞了得換新車的荒謬怪象，自然能提高消費者採購與採用意願。

If the LEDs made in Taiwan can all be compatible with a unified standard, from the industrial chain outlook, professional modular suppliers will be able to mass produce specialized individual components. It will reduce investments on developing different specifications, reduce listing costs, and improve product reliability. On the consumer side, the choice of Taiwan lighting products will be equivalent to choosing the highest compatibility, and the most convenient replacement product. No more ridiculous combinations leading to a waste of resources! Naturally the consumer’s willingness to purchase and use LED lights will increase.

至於規格相容標準化，台灣LED產業漸漸認知其迫切性，進展也頗為積極。最令人注目的是搭著區域經濟合作的商業發展趨勢，於2013年7月踏出兩岸LED共通標準制定的一大步：台灣LED照明產業聯盟，已獲中國大陸國家半導體照明工程研發及產業聯盟、與廣東省支持，簽署互信意向書。中國大陸方看中的是台灣的技術優勢，而台灣則深知中國一宣布推出自有標準，全球絕對不敢漠視的利多價值。

As for creating a unified standard, Taiwan LED industry has gradually acknowledged the urgency and the progress has been quite positive. The most impressive is excelling with the regional economic cooperation business trends. In July 2013 a big step was taken forward for Taiwan and China to formulate common standards in LED: Taiwan LED Lighting Industry Alliance has been supported by and signed a letter of intent with China Solid State Lighting R&D and Guangdong Province’s LED industrial union. Both sides could benefit from the development: China is able to take advantage of Taiwan's technical superiority, while Taiwan knows clearly once China announces the launch of any new standards, the whole world will definitely magnify all possibilities.

雖然台灣知道想要吃下中國大陸訂單並不容易，但規格標準制定不只是放眼中國、更撒網全球。同時，雙方共同制定標準，兩岸或許因作業流程的差距拉近，而降低許多有形無形的成本與摩擦。更重要的是，兩岸共同標準拉升了其他國家進場的貿易障礙門檻，或許還有機會創造出特有的民族品牌，引領趨勢。

Taiwan knows getting China’s orders is never easy, but the new standard is not just for China, but also with the potential for entering the global market. Meanwhile, the progressing of the cross-strait unified standard automatically initiates a lot of communications that will narrow many gaps, and reduce the number of tangible and intangible costs and frictions. More importantly, the co-development will raise trade barriers for other countries aiming at entering China. It is also hoped the cooperation will create a unique bilateral Chinese brand with a possibility to rock the world.

至於國際大廠如何看待這波兩岸LED發展中的新定位？說穿了，誰能站在消費者立場設想，端出最方便、最具價格優勢的好產品，絕對是眾所期待的觀察重點。

As to how international companies view this new position of LED development between the cross-strait? To put it bluntly, whoever can think from the consumer’s standpoint, bring out the most convenient and best price valued products, will absolutely be the focus of observation.