

EPD Case Study



Tell us a bit about your company:

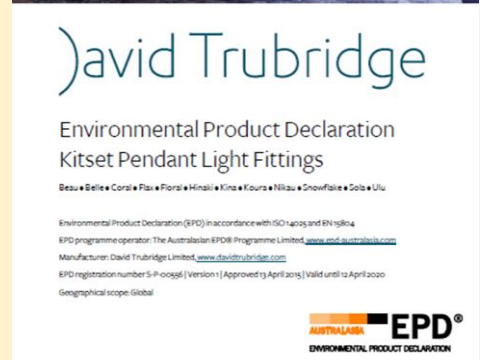
David Trubridge Ltd is a design company based in New Zealand. We manufacture products in a facility that includes a showroom, factory and design studio. The company is driven by a strong environmental responsibility which informs all aspects of design and production and tries to create a caring and enjoyable workplace for our employees. The company also has a dedicated design facility, DT Studio, which works internationally on commission work, public art and licensed designs for other companies. These projects have taken place all over the world and for varied clients, both large corporations and small businesses.



What motivated your organisation to develop EPDs?

In June 2008, our senior R&D designer Peter Tang attended a Life Cycle Thinking workshop in Wellington. The content of the workshop, and the people met there started us on a journey to gain a truly holistic and objective understanding about the environmental impacts of our products. It was a pivotal moment for David Trubridge Ltd to engage with the talented experts who continue to drive life cycle thinking in New Zealand.

David Trubridge Ltd was selected as one of six manufacturing companies to take part in the Life Cycle Management Project. This 5-year pilot project sought to "build capability among New Zealand manufacturing companies for product-oriented environmental management". It ran from 2008 to 2013 and was a collaborative enterprise involving Landcare Research, the then-Ministry of Economic Development, the Ministry for the Environment, Business NZ, New Zealand Trade and Enterprise and the six manufacturing companies.



The project helped us achieve a deep understanding of our product footprint and identify key hotspots where we could focus our efforts. The transporting of our products was one of the areas that really stood out as somewhere we could make improvements. Initially, we had sold all of our lights as preassembled products which shipped in large boxes that contained mostly air by volume. The majority of our existing product range has since been redesigned into kitset form to drastically reduce the volume of the packaging, thus improving the overall environmental footprint. Efficiency-of-packaging is now an integral part of our design development.

Life cycle analysis also revealed that the usage phase of our lights eclipsed all other areas - we saw that we could address this impact if we specified integrated energy efficient light sources (e.g. LED) for our products instead of leaving it up to the client to possibly install a power-hungry high-wattage bulb. This is now an innate part of new product development.

EPDs were a natural next step. Our company is dedicated to environmentally responsible manufacturing and our EPD didn't signal a change of direction; it was just the natural evolution of our thinking and processes.

These tools objectively quantify the environmental performance of our products. Often, our responses to environmental concerns are emotionally driven but life cycle thinking is a way of seeing a more objective picture of possible impacts.

What is the value in EPDs for you?

International customer perception

Our participation in life cycle analysis and EPDs shows that David Trubridge Ltd is committed to continually evaluating the environmental performance of the company's actions and using this knowledge to respond through properly informed design improvements.

Our EPD is a way to tangibly and publically present these years of accumulated life cycle thinking in an internationally recognised format. It is standardised and third party-verified to a consistent set of rules. This demonstrates our desire to be proactive and transparent about the environmental impacts of our products. Our EPD shows customers that we are going the extra mile to do the right thing by the environment.

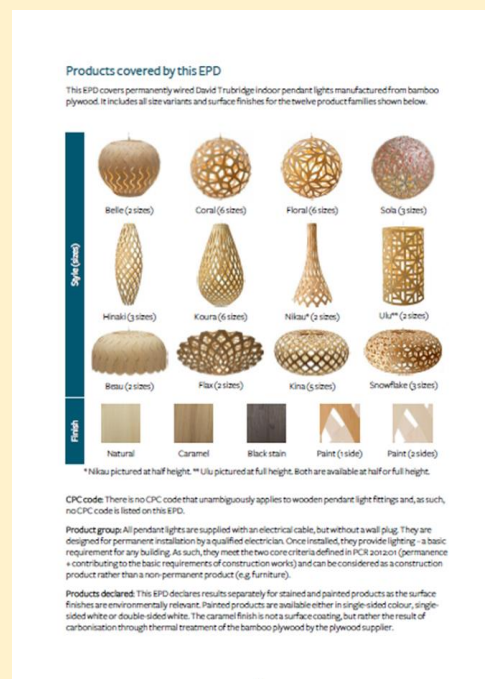
Green building standards

We have a growing list of commercial clients (both locally and abroad). Companies worldwide are shifting their environmental focus toward green building methods so it makes sense for us to have EPDs in place for our products. From time to time they are requested by companies directly before specifying our products.

How do you intend to use your EPD?

In terms of presenting our EPD to the world, our current avenue is through links to it on the relevant product pages of our website.

We are keen to make better use of our EPD but are struggling with ways to present the findings in a more palatable and engaging format. The current format – for example, 2.76E+00 GWPIB [kgCO₂-eq.] – is meaningless to the average consumer.



As part of our ongoing desire to improve, the collaborators at thinkstep have utilised the gathered EPD datasets as a starting point to develop an eco-design tool (early beta version). This tool can assist us in comparing the environmental impacts of various materials as we go through the product design process. The outputs of this tool are by no means definitive but, with judicious use can give an early indication to suggest possible design directions.

Do you have any other environmental certifications?

No

How have you found the process of developing your EPD? What advice would you give to other companies thinking of developing an EPD?

Our EPD has 42 products/variants and gathering all the data was a massive undertaking and thinkstep was instrumental in guiding us through this daunting task.

Those planning to develop EDPs should know it will take more time than you think. You will want to make sure management is fully invested in the project as it will require considerable company resources to get it done. Diverting the efforts of company personnel to the EPD project was tricky for a small, tightly run company like ours.

We wanted the EPDs' release to coincide with our attendance at the 2015 Light + Building trade show in Frankfurt. In a way, the tight deadline was a blessing in disguise as it presented an immovable endpoint to the task.

We were fortunate to have a talented and willing design intern working for us at the time and it would have been even more challenging to meet our goal without his efforts. We estimate the workload to get the EPD across the line was the equivalent of 1.5 staff, working fulltime for three months.

Setting out to publish an EPD is a considerable undertaking but we would gladly do it all over again. Life cycle analysis puts your product under a lens that can reveal opportunities for meaningful and worthwhile responses. As we've discovered, the resulting solutions can have both environmental and economic benefits. Our EPD sends a clear message to the world about the importance that David Trubridge Ltd places on sustainable thinking.