

Putting the Science into Sustainability

What happened when one of the world's leading device manufacturers decided to put independent analysis of its "green" credentials at the heart of its strategy?



Background

In 2021 Acer announced that it had joined RE 100, a global initiative bringing together the world's most influential businesses committed to 100% renewable electricity. Acer pledged to achieve this goal by 2035 and the wider Acer Group, including its global operations and subsidiaries, has already achieved its 2020 target of reducing carbon emissions by 60% worldwide.

The sustainability commitment extends beyond energy use into manufacturing and packaging. In 2020 all Acer notebooks switched to recycled paper for packaging, saving 8,750 kg of paper pulp and 20 million plastic bags. In addition Acer has recycled and remanufactured over 50 metric tonnes of batteries.

Acer has also included sustainability in its product design. The Acer Aspire Vero uses post-consumer recycled (PCR) plastic throughout the device's chassis and keyboard caps. All graphics on shipping boxes are printed with soy ink, with no paint on the notebook chassis itself, reducing the environmental impact. Important for extending the useful life of the device and supporting "right to repair" initiatives, the notebook is constructed with easily-accessible, standardised screws for a simpler disassembly process.

Customer feedback was to be central in prompting the company to go further. One of Acer's largest UK public sector customers had worked with independent sustainability experts Px³ to undertake a study on their devices, datacentres and ways of working, using the results to quantify existing initiatives and build the case for further change. They highlighted the results to Acer UK, who promptly began discussions with Px³ about the best way to analyse, measure, report on and improve their own sustainability.

The Sustainability Initiative: “Project Oxygen”

In initial workshops Acer and Px³ identified that sustainability analysis would need to cover a range of different areas, from the products themselves (power-consumption, manufacture, distribution and disposal) through to Acer’s organisational carbon footprint. It would also need to involve Acer’s customers, channel and business partners. As a result the first stage was for Px³ to create an overall plan and strategy document to frame the project and ensure it delivered the required results.

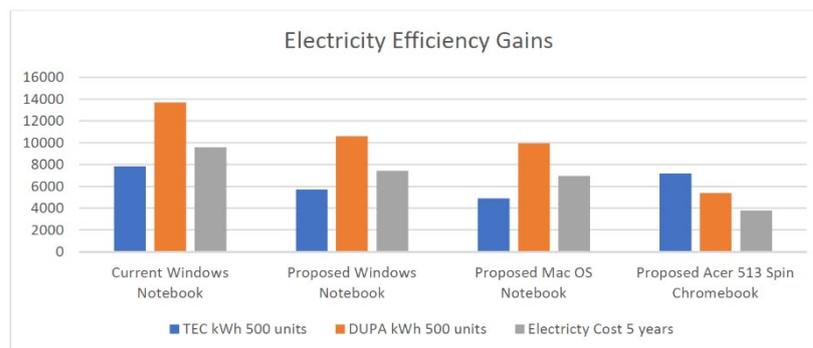
Commenting on the strategic element of the project, Nick Walter, Head of Commercial at Acer UK said *“Acer’s goal is to be the leading sustainable device manufacturer in the industry and to support our customers to deliver meaningful change aligned to CO₂ reduction. This is a significant challenge that the group is addressing through its Project Humanity and Earthion corporate initiatives. Achieving our sustainability goals requires partnerships industry wide and also importantly with independent experts like Px³.”*

As a commercial organisation Acer also needed to be sure that their focus on sustainability was something which would match the top priorities of IT decision-makers in key markets. To evaluate this market research was designed by Px³ and carried by out an independent agency to gather the opinions of 250 IT decision makers across the UK private and public sectors.

The research returned very interesting results; 90% of respondents rated sustainability as a major issue, 86% of respondents said they would pick a device they knew had a low carbon-footprint and 87% would pick one which was carbon neutral. Despite this less than 30% were actually prioritising low energy consumption or carbon footprint as factors when making procurement decisions.

While this was concerning from both a commercial and ecological perspective, it also presented an opportunity for Acer to differentiate in a highly-competitive market, as long as the products credentials and performance stood up to the test.

As a result, Px³ recommended that Acer submit a number of its flagship products to the extensive “Device Use Phase Analysis” testing designed by co-founder and research director, Justin Sutton-Parker. This lab-based exercise provides a science-based measurement of the energy used by end user computing (EUC) devices when used over typical working days and patterns of working including intensive tasks such as video conferencing. The results are then benchmarked using Px³’s “silent sole” classification of energy consumption and compared with figures from tests on typical alternatives available in the marketplace.



Reviewing the findings, Px³’s CEO and Research Director Justin Sutton-Parker commented *“Organisations seeking to reduce their Scope 2 emissions ought to be compelled by the Acer 513 Chromebook. Exhibiting category leading energy performance in the field, the device consumes as little as 0.046 kWh per working day - equivalent to the energy required to take just 791 human steps.”*

The standardised, analytical process used by Px³ allows Acer to make independently-measured product performance data available to customers and partners in detailed technical reports and white-papers, providing accurate information for CSR / ESG reporting as well as playing an important role in carbon reduction plans and “Net Zero” initiatives.

The Wider Picture

Not content with just evaluating their products, Acer UK also engaged Px³ to examine the Scope 1 and 2 emissions from their UK operations. Compiling data about company vehicles, office and IT energy-consumption into a formal SECR format, Px³ also identified a number of areas where emissions could potentially be reduced as part of the 2022 carbon-reduction plan. Acer UK plans to offset its emissions once the evaluation is complete.

To help put the strategy into action Acer UK understood the need to inform resellers about the initiatives and arm them with tools to help them discuss the products and their benefits with customers. To support this Acer UK engaged Consenna to create “Acer Green Rewards” an on-line portal to give resellers information about trading in legacy equipment. Px³ worked with Consenna to develop a sustainability calculator for the portal which would also compare the typical “use phase” carbon footprint of existing devices with that of the latest Acer models.

The initial responses from the UK market were very positive, so Acer EMEA engaged Px³ to enhance the calculator to include additional models and to adjust the results to reflect the carbon intensities for electricity in different countries across Europe. As a result the Green Rewards will be widely available to Acer resellers in mainland Europe to help them engage with their customers.

Recognising that pictures always tell a stronger story, Px³ completed this engagement by summarising the key results of the device analysis and market research into an infographical eDocument which will be available to customers and partners via the Acer UK website.

Results

When an organisation plans to focus on sustainability they need to adopt a very clear approach and to ensure that any claims they make are backed by science-based figures.

Acer UK can be confident in their approach, armed with the findings from the thorough device testing that show the flagship Chromebook Spin 513 LTE consumes 55% less power than a comparable Windows laptop during a standard working day.

Armed with this information the company can engage with customers who are considering their next device purchase and present them with figures which show how this latest generation of devices can help achieve reductions in energy use.

Acer UK has invested in a structured programme of work through Px³ that has looked not just at their products and operations, but crucially how to put the information in the hands of their channel partners where it can do the most good.

More information:

Px³: www.px3.org.uk

Acer UK: <https://store.acer.com/en-gb/>

Green Rewards: [Acer Green Rewards](#)