

Leading the Way in Sustainable Lens Solutions

We're living in exciting times. Around the world, spectacle and contact lens manufacturers are focussed on innovating to find sustainable solutions to business that will appeal to the public and protect the planet without impacting their economic viability.

WRITER **Melanie Kell**

Otis



The word ‘sustainability’ is increasingly the focus in conversations and articles about the environment, but have you ever stopped to think about what that word means?

In the context of the environment, the Oxford Learner’s Dictionary says, “the use of natural products and energy in a way that does not harm the environment”¹

In the context of the economy, it describes sustainability as “the ability to be maintained at a certain rate or level”²

According to the UN World Commission on Environment and Development, “sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs”²

And the University of California, Los Angeles sums all of this up nicely saying: “Sustainability is the balance between the environment, equity, and economy... it is about our children and our grandchildren, and the world we will leave them.”³

Research tells us that sustainability is no longer a desire – it’s a demand. At a global level, more than 44% of consumers in the latest edition of the EY Future Consumer Index⁴ suggest they want to buy more from organisations that benefit society, even if their products or services cost more. Additionally, 30% said they were willing to pay a premium for more sustainable goods and services.⁵

The introduction of sustainable practices that support ecological, human, and economic health and vitality has become a strategic business decision. Or as EY states, “A comprehensive integration of sustainability principles into activities across the organisation is vital for the business to be competitive”⁶

And so, it stands to reason that whether it’s the people they’re employing or the materials, manufacturing processes, water, energy sources, and packaging they’re using, most lens companies are increasingly focussed on finding more sustainable solutions.

ACTION NOT WORDS

Where once we were excited about producers that voiced their ambitions and goals for sustainable practices, consumers now demand evidence of action.

Bausch & Lomb is one company that has recognised the importance of providing evidence of activity in a formal document. In its *2021 Environmental, Social and Governance Report*, parent company Bausch Health reported achievements that included a 40% reduction of its monthly water

consumption; an 80% reduction of monthly solid waste; and a more than 60% increase in waste that is reused or recycled off-site.

Bausch Health also identified specific goals to drive further change through its global operation, with each operation tasked with an annual goal to improve at least one Fuel, Energy, Water and Waste (FEWW) metric by 10%.

Like other companies, Bausch Health is also driving change by putting pressure on suppliers – purchasing preference is given to environmentally sustainable products and services that are comparable to their standard counterparts in quality, price, and performance.

“Sustainability is the balance between the environment, equity, and economy... it is about our children and our grandchildren, and the world we will leave them”

REDUCING CONSUMPTION, INCREASING RECYCLING

CooperVision also actively promotes its achievements, specifically to make one-day contact lenses plastic neutral through a pioneering global partnership with Plastic Bank, a social enterprise that builds ethical recycling ecosystems in coastal communities. For every box of CooperVision one-day contact lenses distributed in Australia and

New Zealand, CooperVision purchases credits that fund the collection and recycling of ocean-bound plastic by coastal collectors “ocean stewards” who are paid for their work. A ticker on a dedicated website counts the amount of plastic collected in real time. At the time of going to print, the environmental impact of CooperVision’s program was equivalent to the collection of 113 million plastic bottles.⁷ Alcon, which has also partnered with Plastic Bank, states its plan to remove one ton of ocean-bound plastic for every ton of plastic the manufacturer company uses in its Precision1 and Total1 contact lenses and blisters.

As well as recycling, companies like Miru have reconsidered their approach to packaging, coming up with a contact lens flat pack that reduces raw material input by 80% while also providing greater convenience for consumers. Johnson & Johnson Vision looked at its methods of distribution and made the decision to ship rather than air freight Acuvue lenses. In the process, it reduced the company’s carbon footprint by 13%. And JuzVision has contributed to the hands-on education of optical dispensers and optometrists by donating unused frames and lenses to the University of New South Wales and the Australasian College of Optical Dispensing for use in class.

In the following pages you’ll find out more details about the actions these and other lens companies are taking to protect the planet for generations to come.

References

1. www.oxfordlearnersdictionaries.com.
2. www.un-documents.net/ocf-02.htm.
3. www.sustain.ucla.edu/what-is-sustainability.
4. www.ey.com/en_gl/future-consumer-index.
5. www.ey.com/en_au/future-consumer-index/sustainability-isn-t-what-it-used-to-be.
6. www.ey.com/en_vn/sustainability/how-to-enhance-long-term-business-value-through-sustainability.
7. plastic-neutral.coopervision.com/plastic-neutrality.

mivision’s Environmental Commitment

While we are pleased to highlight the significant, often global initiatives of lens companies, *mivision* has made its own commitment to the environment through sustainable print practices.

Our printer – Special T – produces *mivision* on paper stocks that are certified by the Forest Stewardship Council (FSC) and European Union Eco-management and Audit Scheme (EMAS), and meet ISO 14001; the international standards for an effective environmental management system. We use soy-based inks and have each issue wrapped in a biodegradable plastic.

Sustainable Lens Initiatives



CR Labs

Since 2019, CR Labs custom-designed waste management system has enabled fine plastics to be separated from water waste produced in the surfacing department, allowing purified water to be pumped back into the lab from 6,000 litre storage tanks. This reduces daily water usage to less than two litres, a saving of more than 500,000 litres of water per year. The lab uses recycled paper for cardboard boxes and lens packets, and recycled plastics for frame and lens bags. For its Australis Premium Optical Lens Range, CR Labs sources 100% recyclable EVA material lens cloths, frame-only bags and multiple use frame pouches.

Everyday general waste is separated from recycling material – even printer cartridges are recycled. The surfacing department reuses blocking alloy, and reusable blocking rings are used to avoid single use plastics. Coating department waste is recycled by sending residual chemicals away to be used in the production of asphalt and concrete.

Contact: CR Labs (AUS) 1800 334 867

EssilorLuxottica

In 2021 EssilorLuxottica launched its first global Corporate Social Responsibility (CSR) program. Two of its five pillars – Eyes on Carbon and Eyes on Circularity – are dedicated to the environment.

With the aim to be carbon neutral across its direct operations by 2025, starting in Europe in 2023, EssilorLuxottica is focussed on self-production or use of renewable energy, energy efficiency across facilities, and the protection and restoration of natural ecosystems. For EssilorLuxottica in ANZ this has meant large-scale investment in solar panels on its New South Wales and Western Australian laboratory facilities,

with plans for the Victorian, Queensland, and South Australian labs to be covered in 2023. Additionally, since 2018 local sites have focussed on achieving a significant reduction in water consumption and electricity use per lens manufactured; and staff are actively involved in recycling and waste reduction. EssilorLuxottica's Eyes on Circularity pillar is a commitment to reduce the company's impact on the planet, with the implementation of the '4Rs program', which refers to 'Research-Recycle-Reduce-Reuse'. In the ANZ region, EssilorLuxottica recycles all incoming packaging, with all cardboard boxes reused many times until they are sent for recycling.

EssilorLuxottica, together with the ESSEC Business School in Paris and other global industry players, has launched the 'Global Circular Economy Chair', the first international Chair devoted to the circular economy. Its aim is to advance research, design, and development of more circular products.

Contact: EssilorLuxottica (AUS) 1800 092 763

Zeiss

As a foundation-owned company, sustainable added value is an integral part of Zeiss' business activity.

All Zeiss strategic business units work to continuously reduce CO₂ consumption and are committed to environment and social responsibility in their specialist areas. Zeiss Vision Care, for example, has been bundling more than 280 initiatives into its "Green, Safe, Responsible" global program since 2017. As part of its sustainability strategy, Zeiss aims to achieve carbon neutrality in its own operations by 2025. To manufacture lenses with ever-decreasing material input, Zeiss has replaced outdated production equipment with energy-efficient devices. Environmentally friendly packaging and water conservation in production are also a focus.

Locally, Zeiss has implemented initiatives across all sites. Its Vision Care head office within a technology park in Tonsley, South Australia, is the shining star, using 100% renewable energy and having achieved zero landfill from waste generated on site.

Contact: Zeiss Vision (AUS) 1800 882 041



BETTER VISION. X-TRA CLEAN.

X-tra Clean Finish by Rodenstock – so smooth, nothing sticks.



Available with
Biometric
Intelligent
Glasses.

For more information, speak to your local
Rodenstock Account Manager.

Go to:
rodenstock.com/bigvisionforall

R
RODENSTOCK
Because every eye is different



Ferragamo

Ferragamo's Responsible Eyewear sunglass collection comprises frames made from Eastman Acetate Renew and BioRay lenses. Acetate Renew is a blend of bio-plastics derived from responsibly sourced wood pulp and recycled content recovered from industrial processes. BioRay lenses are made from a castor oil derived bio-based plastic, made using renewable crop materials, which reduces the use of non-biodegradable and finite oil.

Responsible material choices have also been made in packaging: the eyewear case is made from an innovative combination of Lino 39 – a blend of natural, renewable and biodegradable linen and cotton – for the outer, and certified recycled post-consumer polyester (rPET) for the lining.

Contact: Marchon Eyewear (AUS) 1800 251 025

Otis

Western Australian-based eyewear brand Otis uses mineral glass lenses, sourced from natural elements like sand and soda ash, in all its sunglasses because it's more scratch resistant, optically correct, and better for the environment than the plastic alternatives. According to the company's website, it's also non-toxic, and "endlessly recyclable".

Contact: ProOptics (AUS) 02 8007 6041



Otis



Maui Jim

Maui Jim

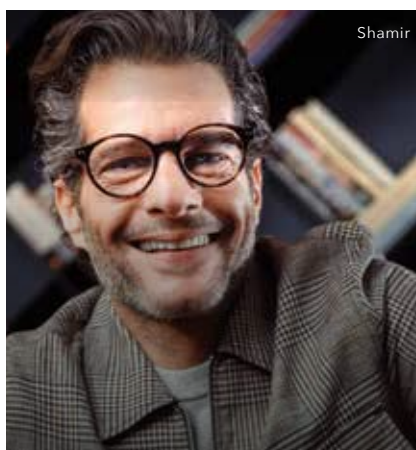
Maui Jim installed the first system in the industry that remotely processes waste off the production floor. It shares this information with other labs to encourage adoption of similar practices.

Each year these efforts save approximately 15,000 litres of fluid and over 90,000 kilograms of waste from the recycling of damaged frames, lenses, and lens-cutting waste. Consumers can feel good about purchasing a Maui Jim prescription knowing that it is responsibly processed.

Contact: Maui Jim (AUS) 1800 010 244

Shamir

Shamir's Freeform technology is offered to external labs, advancing lens performance with new innovations such as Metaform technology, and high-quality customer service with InoTime fast manufacturing techniques. Shamir says its innovative Metaform Freeform lens technology is 80% more energy efficient than existing lens manufacturing methods. This sustainable breakthrough complements Shamir's broader sustainability efforts, which aim to ensure practices are as green as possible by eliminating the use of disposables and favouring environment-friendly materials.



Shamir

Celebrating 50 years of activity, Shamir's CEO, Yagen Moshe, promised to 'devote' energies to maintaining green, sustainable practices.

Contact: Shamir (AUS) 1300 553 465



JuzVision

JuzVision

Over the past five years JuzVision has made a conscious effort to protect the environment, investing in sourcing environmentally-friendly frames and lenses, including its Green Vision frame and lens packages. Solar panels have been installed on the plant and the sales team drives electric vehicles. Recycling is key with frame boxes, lens boxes and protective cloths all repurposed, repackaged, and sent back out to customers as often as possible. Unused frames and lenses are donated to University of New South Wales and the Australasian College of Optical Dispensing for use in education programs. In 2023, JuzVision has a stated aim to reduce single use plastics and is working with suppliers to have lens packaging made from recycled products.

Contact: JuzVision (AUS) 0428 236 251

#1

IN SPECTACLE LENSES
WORLDWIDE*



Crizal® Sapphire™ HR |

TRANSPARENCY THAT STANDS THE TEST OF LIFE⁽¹⁾

CRIZAL® SAPPHERE™ HR – the best anti-reflection coating overall**

The best Crizal® technologies combined to create an invisible shield for your eyes and lenses.



SEE MORE. DO MORE.

©Essilor International - March 2021 - ESSLILOR®, CRIZAL® and CRIZAL® SAPPHERE™ are trademarks of Essilor International. Frames: Ray-Ban 3447-N Round Metal. FR9706. December 2021.
*Essilor, #1 in spectacle lenses worldwide - Euromonitor, Eyewear 2021 edition; Essilor International company; worldwide retail value sales at RSP. **External laboratory tests and internal technical tests in 2020. Compared to the most known lens-brands by consumers (2019 external brand tracking in 11 countries). The word 'overall' refers to consumer expectations about anti-reflective coatings, ranked through a quantitative consumer study run by an external institute in 3 countries.
(1) Consumer sensory test run by external third party in 2019 - 80 glasses wearers.

Zeal Optics

Zeal Optics fits its frames with Ellume polarised lenses, made from its proprietary Z-Resin, a plant-based material derived from the castor plant. Processed castor beans replace petroleum-based plastics and significantly reduce the amount of CO₂ generated during manufacturing. According to Zeal, this plant-based material creates “a high-purity lens for crisper, clearer vision”.

Contact: Zeal (AUS) 1800 010 244



Zeal Optics

Johnson & Johnson Vision

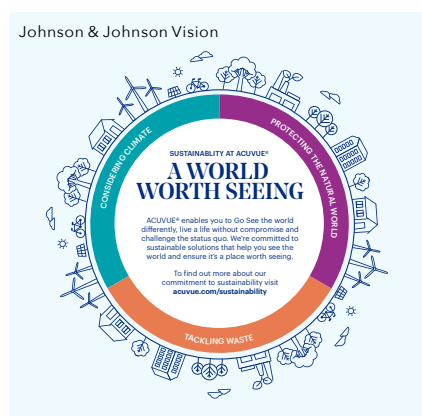
A long-term sustainable approach to the production and distribution of Acuvue contact lenses tackles waste, protects natural resources, and considers the climate.

In consideration of the climate, J&JV reduced its carbon footprint by switching from air to ocean freight for its contact lenses. In the manufacture of Acuvue Oasys 1 Day 90 packs, it reduced energy used by 12% and reduced paper packaging by 60% for the same products manufactured in the United States.

Acuvue Oasys 1 Day contact lens boxes and leaflets are produced on 100% sustainable paper certified by the Program for the Endorsement of Forest Certification (PEFC) and Sustainable Forestry Initiative (SFI); 42,000 tons of CO₂ have been saved annually in manufacturing through renewable and energy efficient programs, and the Acuvue site in the Irish city of Limerick uses 100% renewable electricity from wind power.

To tackle waste, 90% of unused raw materials are recycled on location at Acuvue manufacturing sites; and 4.4 million contact lenses, cups and foils are recycled in the United Kingdom alone. Impressively, back in 2017, Acuvue Oasys 1 Day was named Product of the Year by Environmental Leader for sustainable packaging.

Contact: Johnson & Johnson Vision (AUS) 02 8260 8000



Miru 1Day Flat Pack

At barely 1mm thick, each Miru 1 day Flat Pack is a foil blister pack designed to minimise lens handling. Designed for consumer convenience, it is eight times thinner than a conventional blister pack, requiring 80% less raw material.

The ultra-slim, lightweight packaging is easy to store, and comes with a convenient 30 lens storage case made from recycled mould plastic.

Contact: Menicon (AUS) 08 8277 4545



motion lighting, and heat protection film. Additionally, it is relying on renewables.

On average, more than 95% of materials – including cardboard, wood, paper, and oil – used in its production processes are recycled, and distribution centres reuse cardboard containers five to 10 times before they are recycled. More than 99% of the plastic components generated in the manufacturing process are recycled. As mentioned above, CooperVision's one-day contact lenses, distributed in Australia and New Zealand, are plastic neutral thanks to an initiative in partnership with Plastic Bank that builds ethical recycling ecosystems in coastal communities.

Contact: CooperVision (AUS) 1800 655 480 (NZ) 0800 606 060



CooperVision



**NO
JUNK
IN
THIS.**

**Free from parabens, formaldehyde,
phthalates, fragrances, and dyes**

Tokai



Tokai

The Aichi CO₂ Reduction Manifesto 2030 is a system under which businesses in the Aichi, Japan prefecture, declare their initiatives to reduce CO₂ emissions by making use of their autonomy and ingenuity. Having signed onto the Manifesto, Tokai Optical is actively working to reduce CO₂ emissions by 9% by 2030 (compared to 2021) and has been certified as a CO₂ reduction company.

Environmental initiatives include recovering exhaust heat from power generation for use in plant dehumidification; the water generated is used to cool the plant, which reduces demand in summer. Lights are sequentially being switched to LED with individual switches to ensure appropriate illumination; an installed wastewater treatment facility has a capacity of 500 m³/day; and staff receive environmental education and emergency response training.

Within the 'Operation Tokai Ecocap Collection', Tokai Optical has collected and donated approximately 886,000 plastic bottle caps. The proceeds of these have funded the equivalent of polio vaccines for approximately 1,050 people.

Contact: Tokai Optical (AUS) 1800 864 886

Bausch & Lomb

Bausch & Lomb gives purchasing preference to environmentally sustainable products and services that are comparable to its own standard counterparts in quality, price, and performance. In Australia, most marketing materials for contact lenses are printed using Forestry Stewardship Council (FSC)-certified printer and stock. Globally, the company is transitioning from plastic packaging materials to more environmentally friendly paper-based materials. Between 2018 and 2020, manufacturing plants actively reduced gas and electricity consumption as well as monthly non-hazardous waste generation. Further, in 2022 Bausch & Lomb reported that it had reduced monthly water consumption by 40% and the monthly amount of solid waste by nearly 80%, with a more than 60% increase in waste that is reused or recycled off-site.

Contact: Bausch & Lomb (AUS) 1800 251 150 or (NZ) 0800 658 386



SEED

SEED

SEED has focussed its efforts on reducing energy consumption, by installing a photovoltaic power generation system on the rooves of its manufacturing facility that produce clean energy while also shielding the facility from heat. A control system identifies opportunities to reduce waste by monitoring the use of every kind of energy – electricity, gas, water, compressed air, and high-pressure steam.

To combat the large amounts of water used in contact lens manufacturing, SEED built a recycling system for large-scale water conservation. To recover plastics, it recycles those emitted from the manufacturing processes and collects used contact lens blisters from general consumers for recycling.

Contact: Capricornia Contact Lens (AUS) 1300 650 994

Alcon

A joint offsetting project between Alcon and Plastic Bank aims to remove one ton of ocean-bound plastic for every ton of plastic Alcon uses in its Precision1 and Total1 contact lenses and blisters. The partnership covers nearly 70 countries, including in Australia and New Zealand.

Alcon says the partnership with Plastic Bank, a social enterprise dedicated to stopping ocean plastic and improving the lives of collectors in coastal communities, is a fundamental component of the company's commitment to reducing the environmental footprint of its products and operations.

Contact: Alcon Vision (AUS) 1800 224 153 or (NZ) 0800 101 106 [mi](#)



Alcon



Bausch & Lomb