

# ESG PROGRESS REPORT

2024

Many positive changes have been made within Rayleigh since the beginning of the implementation of this strategy in February 2022. Many of the action items have been implemented as written, while others required more creative solutions to better suit our team or to maximize benefit. A detailed accountability update for each action item can be found in the tables in the “Our Strategy” section of this document.

The most impactful outcomes of this strategy have included:

- **Employee Handbook** – One of the first items completed as part of this strategy was the creation of an employee handbook. This comprehensive document outlines all the information that employees need to know and is updated quarterly as policies and procedures change.
- **The creation of Flex Days** – Each employee is entitled to two Flex Days per year in addition to their vacation time. Employees use these days for culturally or personally important holidays that are not statutory. This could include family events, extending existing holiday weekends to spend more time with family, and other days that are personally significant.
- **Blind screening during hiring** – To help eliminate bias in the hiring process, a blind screening process has been implemented for jobs postings that are posted publicly, including co-op student positions. Once applications are received, someone from the team who is not directly involved in the hiring process goes through and redacts all personal/identifying information in the applications are then passed onto the hiring managers for review. The unredacted applications are only made available to the hiring managers once they have shortlisted their preferred candidates.
- **The Clean Transportation Incentive (CTI)** – When research began into active transport subsidies available locally, the team found that none of them worked for our unique needs. Instead of settling on a “good enough” solution, Rayleigh’s management budgeted for a new Clean Transportation Incentive which allots \$250 per employee per year that can be used toward transit passes, bicycle/e-bike/electric vehicle purchase and maintenance, accessories to help extend the cycling season, bike safety equipment, etc.

## Background

At Rayleigh, we know that climate change is a serious threat. That's why we're dedicated to developing and commercializing perovskite solar technology that will support a clean transition to renewable energy. Our tech can be produced at far lower temperatures than traditional silicon solar technologies, and it can be applied in places where solar has never been practical before.

Since our founding in 2016, Rayleigh has grown from a single scientist in a lab, to a diverse and talented team working in a pilot manufacturing setting. As we continue to grow, we want to ensure that our company is operated in a way that aligns with our principles. That's why we have created this strategy. We look forward to working with our partners and stakeholders to do our parts to achieve sustainable development.

## About this Strategy

To create this Environmental, Social, Governance (ESG) strategy, we wanted to ensure we aligned with leading standards in sustainability. To accomplish this, we identified internationally recognized standards that we would like to align with. We concluded that Global Reporting Initiative (GRI) and BLab, the organization responsible for the BCorp certification, were our best matches. We then identified the items from these organizations that were most relevant to our context and could be accomplished within two years.

It was also important that we have input and support from the entire team when creating this strategy. Once we had made a set list of issues based on GRI and BCorp standards, we surveyed the entire Rayleigh staff. The results of this survey let us know which issues were most important to our team. The result was a materiality matrix that ranked these issues based on our team's personal interest in those issues, and how important they felt those issues were for the company. A copy of that matrix can be found in Appendix A. We used this information to guide which issues we prioritized over the next two years, which resulted in four overarching ESG priority areas for Rayleigh:

- Prioritizing Ethics and Transparency
- Managing our Environmental Impact
- Maintaining our Team's Health and Wellbeing
- Promoting Justice, Equity, Diversity, Decolonization and Inclusion

We have arranged our strategy to show the long-term outcomes we plan to achieve under each priority area, including the action items we plan to tackle in the next two years to help us on our journey to achieving those outcomes.

## Next Steps

There are still several action items in this strategy that are either incomplete or still in progress. Some of the outstanding items are smaller tasks that have slipped through the cracks such as conducting a waste sorting awareness campaign and setting out a food donation box. These items are both now being planned as of March 2024. Other items are tasks that the team has begun working on but have turned out to be more complicated than originally expected.

The more complicated tasks still in progress include:

- **Solar panel end of life research** – Research into this topic was started in Winter 2024 and is going well. An internal document has been prepared which gives a detailed outline of the potential ways Rayleigh’s panels can be recycled when they reach the end of their lifetime. A second, higher-level document has been developed for external use. Further work is required to determine the associated cost of recycling.
- **Training budget** – Rayleigh plans to implement a training budget for each employee much like the newly created CTI incentive. Due to current budget restraints, this item will be re-visited in the future. In the meantime, the Rayleigh team is making use of free training courses available from the province of Nova Scotia.
- **Sustainable procurement policy/environmental policy** – When the team started doing the research to create sustainable procurement and environmental policies to implement, it quickly became clear that determining the details of these processes was more complicated than previously expected. Time is being dedicated to further exploring the development of policies that are best suited for Rayleigh. So far, Rayleigh has ceased purchasing from suppliers that do not match their values, but further work is required in this area.
- **Developing a formal salary structure** – Part of this task was simple to complete, and part of it has proven to be extremely complicated. It is fairly simple to determine the market rate for Rayleigh’s administrative staff using resources like GlassDoor and the Government of Canada. Engineers Nova Scotia has a helpful amount of salary data available that can be used to create a salary structure for Rayleigh’s engineers. Unfortunately, similar comprehensive data is not available for scientists due to the niche nature of the work they are doing, and the fact that companies similar to Rayleigh are not transparent about their salary structures.

Once these items have been completed, the team will begin to explore the items listed in the “Other Sustainability Issue Areas” section at the end of this document. Rayleigh’s CEO, COO, and Communications/HR Lead meet monthly to discuss and manage the implementation of this plan. They will continue to meet monthly even after the completion of the action items to discuss further action that can be taken to help make Rayleigh an inclusive and enjoyable place to work.

## Our Strategy

### ETHICS & TRANSPARENCY

#### Where we were in February 2022:

Managing every aspect of our business with ethics and transparency in mind is one of our highest priorities.

- We had been working diligently to create that culture in our office, and we’re looking forward to formalizing that culture even further.
- We had an experienced Board of Directors leading our organization and are committed to financial sustainability and responsible management.
- In an effort to be transparent with our team, we gave regular updates on financial changes to the organization, like announcements of new funding approvals.

Long-Term Outcomes	Action Items	Planned Completion Date	Accountability Update, 2024
1. Rayleigh maintains a high standard of ethics in everything we do.	a. Create a code of ethics that will set the expectations for behaviour across the organization. This will include engaging the whole Rayleigh team to establish a set of core values and ethics principles for everyone to follow.	Month 3	a. This item is complete. A code of ethics was written with input from the team and added to the employee manual. A semi-annual employee feedback survey collects input from the team on how well this code of ethics is being upheld.
	b. Institute required ethics training for every new and veteran employee at Rayleigh. We will also look at ways to include our board members as well.	Month 12	b. This item merged with item 11c and is complete.
2. Rayleigh has a culture of transparency.	a. Include specific mention of our “open-door” policy in the employee handbook to ensure all employees and managers are accountable to upholding our culture of transparency.	Month 3	a. This item is complete. The open-door policy was added to the employee manual. Employees are encouraged to speak to management whenever they have an idea or issue that they feel should be addressed.
	b. Be transparent about our ESG performance by sharing our impact on our website.	Month 14	b. This report will be included on the website once completed.

<p>3. Rayleigh’s customers are satisfied with a safe, high-quality product.</p>	<p>a. Obtain third-party validation from independent labs and research facilities, or industry partners, to verify the quality and specifications of our products.</p>	<p>Month 22</p>	<p>a. This item is complete but also ongoing. On three occasions, samples have been sent away for third-party validation. More samples will be sent in the future as new milestones are achieved.</p>
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**ENVIRONMENT**

**Where we were in February 2022:**

At Rayleigh, we’re moving beyond looking at how our product can reduce environmental impact to also working towards improving the environmental impact of our operations.

- We had a strict hazardous waste management program for appropriately handling and disposing of waste that results from our research process.
- We conducted training on hazardous waste management, so our lead disposal policy is strictly followed.
- We had composting and recycling facilities in our building, including battery recycling.
- Our location was (and still is) accessible through clean transportation. We are located near city bus lines, have bike racks available on site, and we have a company e-bike charger for team members to use.

Long-Term Outcomes	Action Items	Planned Completion Date	Accountability Update, 2024
<p>4. Rayleigh manages all waste responsibly, whether that’s safely disposing of hazardous waste or reducing the amount of waste going to landfill.</p>	<p>a. Enhance our hazardous waste disposal documentation and make it easily accessible to everyone on the team.                      b. Organize regular electronics recycling days where team members can bring in their old electronics to be taken to a proper recycling location.                      c. Add additional recycling bins so that every office space at Rayleigh has one close by.                      d. Conduct a waste disposal awareness campaign to educate the team on proper waste separation and to suggest ways for reducing waste.</p>	<p>Month 2                      Month 4                      Month 7                      Month 20</p>	<p>a. This item has been completed and Rayleigh’s new lab manager has been tasked with constantly looking for ways to further improve the company’s hazardous waste disposal process in collaboration with the science team.                      b. This item is complete. An electronics recycling box is available in the office and is taken to a local office supply store (Staples) which offers proper electronics recycling when it fills up.                      c. This item is complete. There are trash, plastic, and paper bins available in each of Rayleigh’s office spaces. Organics disposal is</p>

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			<p>available in the shared kitchen.</p> <p>d. Signage has been added to all of Rayleigh’s waste disposal bins indicating which sort of items should be put in them, and reminders are given in weekly team meetings. Employees are also encouraged to hold each other accountable if they see something going in the wrong bin.</p>
<p>5. Rayleigh effectively manages the entire life cycle of our solar film, from raw materials to final disposal</p>	<p>a. Launch research into improving the end-of-life impact of our solar film.</p> <p>b. Develop a sustainable procurement policy to guide our purchasing decision making and ensure we select vendors who are working to manage their social and environmental impact.</p>	<p>Month 15</p> <p>Month 16</p>	<p>a. Research regarding end-of-life recycling is ongoing. A detailed internal overview document and a higher-level version for investors and other external stakeholders have been created to present the results of this research. The next step on this project is to investigate the future cost of recycling Rayleigh’s solar panels.</p> <p>b. Research to create a robust sustainable procurement policy is ongoing and being conducted by Rayleigh’s lab manager. The nature of Rayleigh’s operations – ever changing materials and parameters in the R&amp;D process – has made the process of creating this process more complicated than expected.</p>
<p>6. We are actively mitigating climate change by continuing to decrease our GHG emissions</p>	<p>a. Conduct research into transit and active transport subsidies to encourage employees to commute using more environmentally friendly modes of transportation.</p> <p>b. Draft an environmental policy to set expectations on energy conservation and waste management. This will include turning off all lights and electronics when left unattended.</p>	<p>Month 5</p> <p>Month 6</p>	<p>a. This item is complete. Extensive research was done into locally available transportation incentives, but none worked for Rayleigh. Instead, Rayleigh created a Clean Transportation Incentive that allots \$250 per employee per year to be used to support active and electrified transport. This benefit applies to all forms of clean transportation, making it accessible and helpful for more of the Rayleigh team.</p> <p>b. A formal policy has not yet been written. Despite seeming like a simple item, it has been challenging to define the details to be included in this policy beyond simple items like shutting off lights.</p>



## TEAM HEALTH & WELLBEING

### Where we were in February 2022:

Since Day One, Rayleigh has been invested in creating a positive space for employees and giving them the resources they need to exceed both in their careers, and in balancing in their home life.

- Staff were enrolled with a benefits plan, which also covers mental health.
- Everyone at the company make (and still makes) at least the minimum living wage for our region, and there are regular opportunities for fun and engagement at the office.
- We continuously improve our health and safety program to prevent and address work-related illness and injury to the highest extent possible, including a safety manual, monthly safety meetings, and having safety as a standing agenda item at weekly team meetings.
- *Update, Winter 2024:* Our Health and Safety Committee ran a survey to gauge wellness within the team and look for ways to reduce stress in the workplace. This survey generated action items focusing on communication, annual reviews, and streamlining internal processes to reduce stress.

Long-Term Outcomes	Action Items	Planned Completion Date	Accountability Update, 2024
7. Rayleigh has a robust occupational health and safety program.	a. Pull one new policy out of our health and safety manual each month for review as a team and update as needed. b. Conduct semi-annual audits of safety training to ensure every team member is caught up on all safety training. c. Formalize our safety procedure for employee onboarding and add safety requirements to our employee handbook.	Month 4  Month 6  Month 9	a. This item is complete. The team began reviewing one hazard safety assessment per week during the safety section of the weekly team meeting starting in January 2024. Each assessment is updated as needed after the review.  b. This item is complete. Audits are conducted by a member of the safety committee twice a year.  c. This item is complete. All new employees receive a detailed safety walkthrough of the lab space from a member of the JSCH. This is an item on the formal onboarding checklist and is included in the employee handbook and safety manuals.
8. Employees feel engaged, are	a. Develop an official employee handbook containing all relevant information on benefits, company policies, and company	Month 1	a. This item is complete. The employee handbook was launched in spring 2022 and is updated as needed. It is made available to all



<p>satisfied in their role, and have a strong feeling of wellbeing at work.</p>	<p>culture. b. Create a formal employee onboarding program, including introduction to our employee handbook and providing all relevant training. c. Establish a flexible work policy for employees to better balance their work and home lives.</p>	<p>Month 2  Month 8</p>	<p>employees during onboarding and is readily accessible to the team.  b. This item is complete. A formal onboarding program has been created and is updated as needed. It includes a checklist for the supervisor to follow to ensure everything is ready for the employee's first day and week, plus an additional checklist for the employee to follow during their first week of work.  c. This item is complete. A flexible work policy has been created and can be found in the employee handbook. The policy leaves the decision to work from home largely up to the employee and is intended to allow employees to choose a work location where they can best collaborate or focus as needed for various tasks.</p>
<p>9. Employees have the training and skills they need to achieve their career goals.</p>	<p>a. All new employees will be required to complete training when onboarding, including JEDI and climate change awareness education. b. Establish a set annual budget per employee for non-mandatory training and professional development. c. Track employee training completion for both mandatory and non-mandatory training and professional development.</p>	<p>Month 9  Month 18  Month 18</p>	<p>a. This item is complete. EDI training is now a part of the formal onboarding process. The training includes several short videos followed by a questionnaire designed to make employees think about what they have just watched.  b. A training budget was established for the current fiscal year and training options have been made available to all full-time permanent staff. Training has been subsidized by the Nova Scotia government and the Excellence in Manufacturing Consortium as well as WIPSI, a provincial funding program to support workplace training.  c. This item is complete. Mandatory and optional training is being tracked.</p>



**JUSTICE, EQUITY, DIVERSITY, DECOLONIZATION & INCLUSION**

**Where we were in February 2022:**

Rayleigh prides itself on having an inclusive workplace culture.

- We had an open-door policy for people of all backgrounds and actively hire people from underrepresented communities. This includes encouraging these individuals to apply to our job postings, for example.
- We were looking (and continue to look) for opportunities to celebrate different cultural communities and acknowledge where we can play a role in justice, equity, diversity, decolonization and inclusion. For example, the Rayleigh team chose to observe the National Day for Truth and Reconciliation when it was an optional statutory holiday, and we take opportunities to acknowledge the land we are situated on to help encourage dialogue on decolonization in Canada.

Long-Term Outcomes	Action Items	Planned Completion Date	Accountability update, 2024
10. Employees have a sense of inclusion and belonging, and work in a discrimination-free environment.	a. Draft an anti-harassment and anti-discrimination policy and add it to the employee handbook, as well as directly sharing it with the existing Rayleigh team. b. Draft a statement of commitment to improving diversity at the team and board level, which will be made publicly available. c. Provide flex holidays for people celebrating major milestones or non-Christian holidays where there is not currently a statutory holiday.	Month 4  Month 4  Month 2	a. This item is complete. An anti-harassment policy that encourages employees to speak up when experiencing harassment has been created and added to the employee manual.  b. This item is complete with some modifications. A diversity statement has been written and is available on Rayleigh’s website. It is also included on all of Rayleigh’s job postings. The statement does not reference the Board level, though Rayleigh is seeking to establish a more diverse Board of Directors after the next equity raise.  c. This item is complete. Each employee is entitled to two flex holidays per year that can be used for cultural holidays or any other day that is personally important to the employee.
11. Opportunities for hiring and	a. Revisit our current diversity statement on all job postings and revise as needed.	Month 1	a. This item is complete and has been combined with item 10b. b. This item is complete. A blind screening process has been

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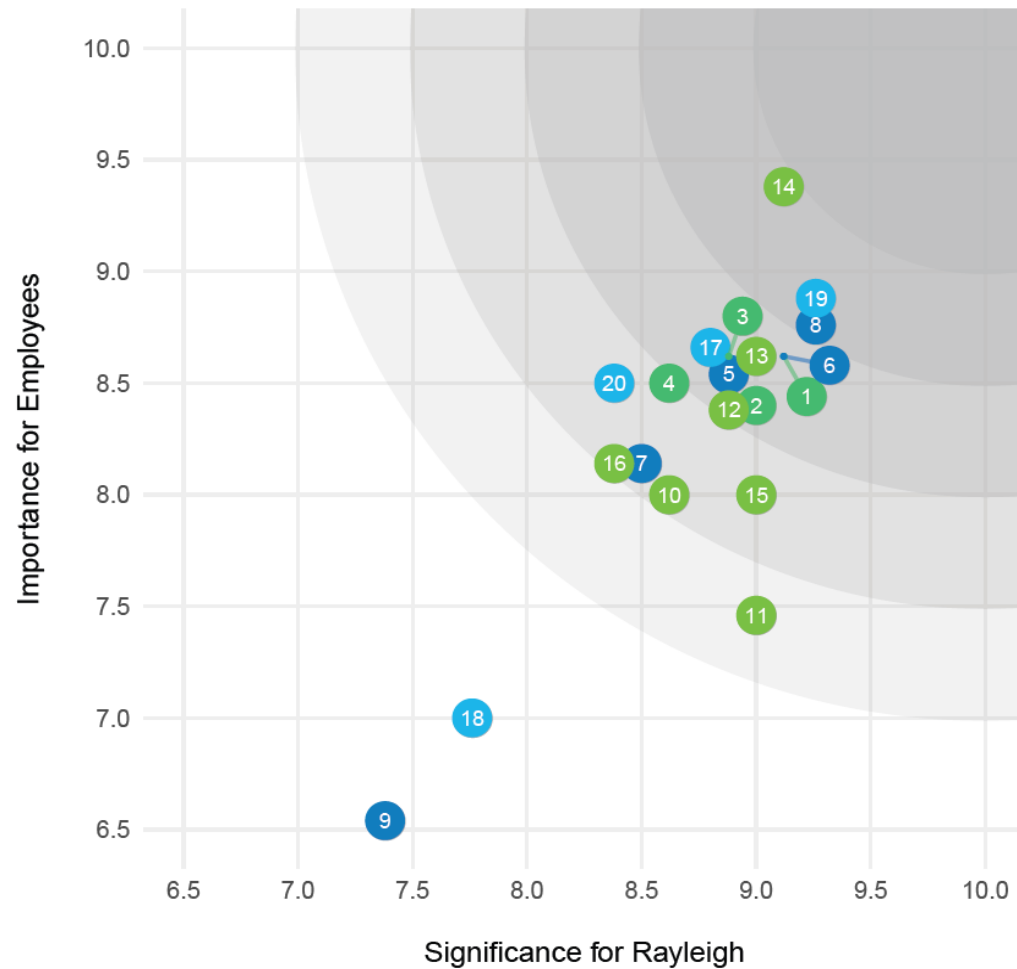


<p>promotions are decided equitably.</p>	<ul style="list-style-type: none"> <li>b. During the hiring process, conduct “blind” resume reviews, blocking out an applicant’s name to prevent unconscious bias in our decision making.</li> <li>c. JEDI training will be mandatory for all staff.</li> <li>d. Develop a formal structure for salary and job position reviews to standardize and prevent bias in how employees are promoted or compensated.</li> </ul>	<p>Month 2</p> <p>Month 2</p> <p>Month 3</p>	<p>developed and is used when positions are advertised publicly. The process is also described in the job advertisements.</p> <p>c. This item is complete and has been combined with 9a. All existing Rayleigh employees have now completed the training. New employees will complete the training as part of the onboarding process.</p> <p>d. A formal salary structure is under development. This is a complicated process because while it is easy to find data to support a salary scale for some positions within the company, little to no data exists for other positions. Where data is available, it is being referenced during salary discussions with employees.</p>
<p>12. Rayleigh has a demonstrated track record of respect and support for under-represented communities.</p>	<ul style="list-style-type: none"> <li>a. Participate in training and learning opportunities as a team to better our understanding of underrepresented communities. This includes inclusive language training, and decolonization or Black history workshops.</li> <li>b. Each holiday season, we will organize a company fundraiser for a local charity.</li> <li>c. Have a food donation box available at the office for regular food drives.</li> </ul>	<p>Month 6</p> <p>Month 10</p> <p>Month 15</p>	<p>a. This item is complete. An EDI committee has been established to conduct quarterly training events. The first event took place in Summer 2023. Events have included a session exploring unconscious bias, a screening of Elliot Page’s “There’s Something in the water”, and a guest speaker who ran a session on conflict resolution.</p> <p>b. This item is complete. Rayleigh has donated to Feed NS’s Hearts for Christmas campaign for the past two years (2022 and 2023). The donation was strategically timed to be made on Giving Tuesday both years, which allowed the donation to be matched by major Canadian grocery retailer, Sobeys. A clothing drive was conducted in 2023 to raise money for Big Brothers, Big Sisters.</p> <p>c. This item is complete. A food donation box has been added to the lobby of the building where Rayleigh is located. It was placed here rather than in Rayleigh’s office so the other companies in the building can easily make donations as well.</p>

OTHER SUSTAINABILITY ISSUE AREAS	
Risk management, including financial, environmental, or social risks	<ul style="list-style-type: none"> <li>a. Developing an emergency response plan</li> <li>b. Ensuring anyone engaging with the public has media training</li> </ul>
Rayleigh management taking an active leadership role in sustainability	<ul style="list-style-type: none"> <li>a. All sustainability messaging coming directly from senior management</li> <li>b. Establishing a sustainability committee, including at least one member from management</li> <li>c. Management being the first to follow and execute on all new initiatives</li> </ul>
Intellectual property and IT protection and security	<ul style="list-style-type: none"> <li>a. Drafting an IT and security policy to be shared with all staff</li> <li>b. Researching the best third-party servers for maintaining IP protection and IT security</li> </ul>
Involvement in the local community	<ul style="list-style-type: none"> <li>a. Giving employees paid time off each year to volunteer</li> <li>b. Giving employees paid time off to participate on advisory panels or in other industry activities</li> <li>c. Once commercialized, donating solar film to organizations or people in need</li> </ul>
Engagement with internal and external stakeholders	<ul style="list-style-type: none"> <li>a. Completing an annual stakeholder survey to solicit feedback on sustainability performance and Rayleigh's overall direction</li> </ul>

# Appendix A: Materiality Matrix

Rayleigh Materiality



1	Occupational Health & Safety	11	Intellectual property and IT protection and security
2	Employee financial security and job stability	12	Rayleigh's financial sustainability and responsible management
3	Employee engagement, satisfaction and wellbeing	13	Creating a culture of transparency
4	Career development, training and skills building	14	Maintaining a high standard of ethics in everything we do
5	Equitable opportunity for hiring and promotions	15	Engagement with internal and external stakeholders
6	Employee inclusion, belonging, and freedom from discrimination	16	Rayleigh management taking an active leadership role in sustainability
7	Respect and support for members of under-represented communities	17	Solar film life cycle management, from raw materials to final disposal
8	Rayleigh's customers are satisfied with a high-quality product	18	Reducing energy use wherever possible
9	Involvement in the local community	19	Responsible waste management
10	Risk management, including financial, environmental or social risks	20	Mitigating climate change by lowering GHG emissions

- Community
- Environment
- Responsible Management
- Worker Wellbeing

**Legend**