



FOREWORD

As people of action, Rotary members bring about positive change to people in communities around the world. Rotary's work has always included projects to care for both the built and the natural environment with a strong focus on traditional and cultural resilience. As Rotary members, we now embrace the natural environment that sustains life on Earth, and by serving and caring for the natural environment, we serve all of humanity.

With Rotary's addition of the environment as an area of focus, Rotary members have an increased opportunity to protect the environment. We do this through projects and by running meetings and events that have minimal impact on the planet. By so doing, we support all 17 of the United Nations Sustainable Development Goals.

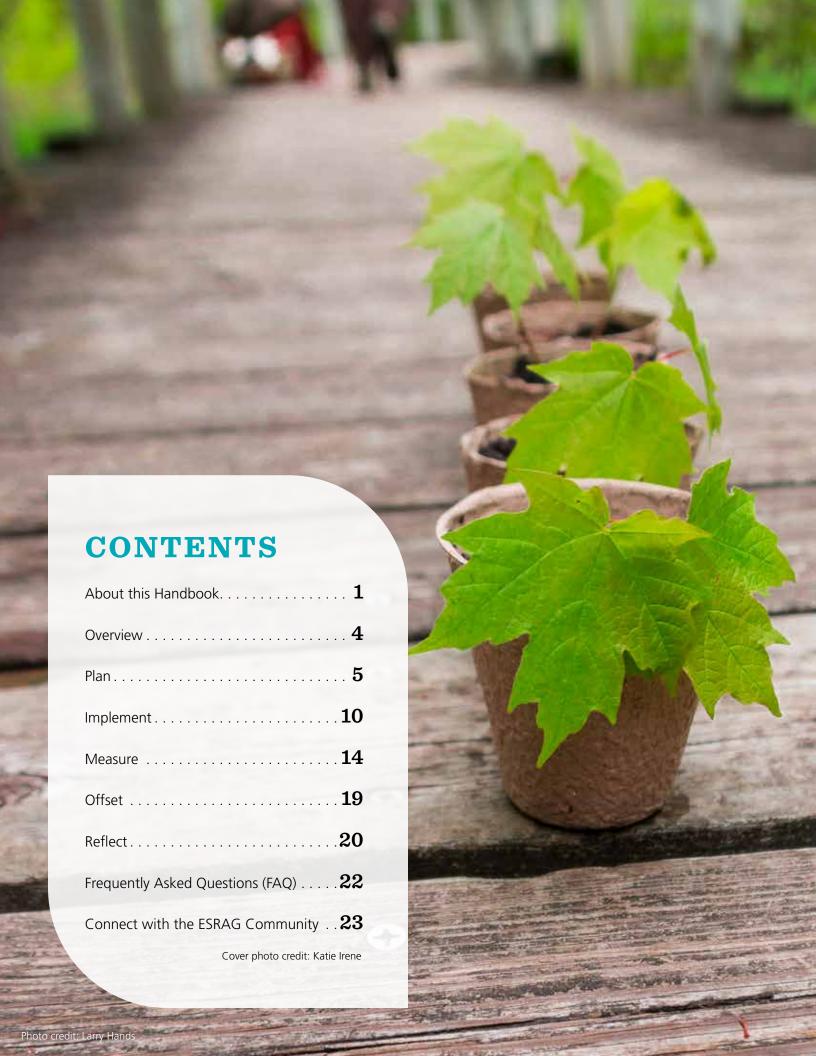
This Handbook helps you organize green events that will reduce material and energy use, and minimize pollution in the air, water, and land. It provides a five-step process: Plan, Implement, Measure, Offset, and Reflect, to take global environmental issues into consideration as you share best practices established by Rotary members and environmental groups worldwide.

We are pleased to share with you this Green Events Handbook, developed by the Environmental Sustainability Rotary Action Group (ESRAG), and encourage you to use it to create your own environmentally friendly meetings and events.

We hope that you will choose from and use the many suggestions in this Handbook in your clubs and districts. Through our collective efforts, Rotary will demonstrate that it is not only a leader in creating lasting humanitarian change in communities across the world, but also a leader in caring for the natural and built environment.

lan Riseley, Chair, The Rotary Foundation, 2022-23





ABOUT THIS HANDBOOK

The Environmental Sustainability Rotary Action Group (ESRAG) created this handbook to assist Rotary clubs, districts, and conference and training organizers to run greener events.

ESRAG assists Rotary clubs, districts, and multi-districts to plan, implement, and evaluate service projects; to build awareness of environmental sustainability, and to inspire action.

The Handbook follows a 5-step approach:

- 1. PLAN
- 2. IMPLEMENT
- 3. MEASURE
- 4. OFFSET
- 5. REFLECT

What are green events?

"Green events" use sustainable practices from the earliest planning, during the event itself, clean-up, and post-event evaluation. Green events reflect a desire to respect and engage with the local community and visitors, as well as sponsors, venues, government agencies and other stakeholders. Hosting a green event requires many operational considerations including developing policies and implementing best practices around venue selection, waste disposal, recycling, transport, food kilometers/miles, energy, and carbon offsetting and compensation schemes. Green events protect the environment and help to reduce carbon emissions that contribute to climate change.

Who is the Handbook for?

This Handbook is for anyone responsible for planning or implementing a Rotary event, from the smallest club gathering to district, regional, and international conferences and conventions. You can apply these principles to implement green events, whether live, virtual, or hybrid.

Why is this Handbook important?

The Rotary International Board has committed to "consider conducting Rotary events in a manner that takes global environmental issues into consideration." Council on Resolutions 22R-14.

Promoting green events supports that commitment, helps Rotary members to be good stewards of the planet, and to stay true to the Four-Way Test and our vision of "Doing Good in the World." As Rotary members, we must catalyze change and practice sustainability today in order to protect the world for tomorrow. Rotary can lead this change and show others the way. With the Green Events Handbook our collective efforts will inspire others to act more sustainably.

Green events can:

- Reduce Rotary's carbon footprint, provide more resources in the circular economy, and keep waste out of landfills.
- Provide opportunities to showcase Rotarians leading as environmental stewards.
- Attract a younger generation who are concerned about the future of our planet.



Types of green events

Personal connections achieved through in-person events will continue to be important to the work of Rotary, even though new virtual meeting and event technologies have created opportunities to interact without the need to travel. Increased options for virtual and hybrid interaction have also made event planning more complex.

While there are still carbon costs associated with live streaming, with its need for high speed and reliable connectivity, online events allow more people to participate. The 'green' benefits from virtual and hybrid events include reduced carbon emissions from travel, less food and solid waste, and more.

Are my actions part of the solution?

Many Rotary clubs' projects engage the environment as part of their work. All these projects and individual Rotarians' actions to live more sustainably contribute to protecting the environment. With the Green Events Handbook as a guide, Rotary clubs and districts can do even more. Our collective efforts will lead and inspire others to become part of the solution.

We often choose the easy, convenient way. For example, we may buy single-use plastic bottles of water, but don't think about what will happen to the empty containers. Will they be recycled or landfilled, or end up as litter in our streets and waterways? Using refillable bottles will overcome that problem at the source. What we do does make a difference.

What is environmental sustainability?

Environmental Sustainability is having enough resources to provide a good quality of life for all people and other species on the planet into the future, without harming the natural environment. It involves using resources in a way that ensures their long-term availability, minimizing waste and pollution, and protecting biodiversity and natural habitats.



Enough, for all, forever...

WE HAVE TO
ACT NOW.
ROTARY CAN
CATALYZE CHANGE
AND LEAD
THE WAY.

ROTARY'S SEVEN AREAS OF FOCUS













Every one
of the seven
areas of focus
benefits from
efforts that are
environmentally
sustainable.

Promoting Peace

Promoting ecological and food security and sustainably managing activities for equitable access to natural resources address the root-causes of conflict, war, and forced migration on our crowded planet. These actions foster the fundamental goal of Rotary to bring peace to the world.

Fighting Disease

A healthy environment, stable local economies, and access to clean energy contribute both to disease prevention and RI partnerships for treatment.

Providing Clean Water & Sanitation

Changing precipitation patterns have increased both the frequency and severity of extreme weather events such as droughts and flooding. Locally directed resource management can reverse desertification, detoxify waters, and mitigate against both flooding and drought.

Saving Mothers and Children

We all thrive when the food we eat, the air we breathe, and the water we drink are clean. The health of children and the mothers who nurture them, benefit even more than the general population from a safe environment.

Supporting Education

Young minds in well-nourished and healthy bodies living in a healthy environment are better able to benefit from education and literacy. Communities at peace offer the social stability essential for education to flourish.

Growing Local Economies

Environmental sustainability supports practices, processes, and technologies to foster local economies and community development, promoting long-term job creation and health.

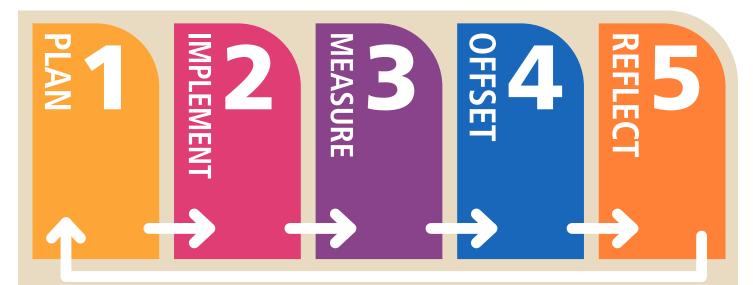
Protecting the Environment

All Rotary projects can promote environmental sustainability by fostering harmony between people and the natural environment, empowering communities to embrace local solutions, and spurring innovation to mitigate climate change and reduce environmental degradation.

OVERVIEW

Organize a green event

Preparations for a single-day event, a district conference, or a green convention will differ in scale. There are, however, five basic steps to always keep in mind to make your event more sustainable:



Plan your event in a sustainable manner and communicate your vision to your team.

Implement your vision during your event and share your impact.

Measure and observe your impact before, during, and after the event. Offset or compensate for carbon emissions that you could not avoid.

Reflect on your success and start planning to have a greater impact at your next event.



PLAN

Expand your vision

When planning your green event, your primary goal may be to provide learning and networking opportunities for your members. Why not expand your vision to include respecting the culture, ethics and values of the communities where you live and work? <u>According to National Geographic</u>, human beings are only one of an estimated 8.7 million species on the planet. Why not expand your vision for your event to support the health of all species and the planetary ecosystems upon which life depends?

PLANET

The ecosystems of the planet Earth upon which all life depends

LIVING THINGS

Humankind, one of 8.7 million species



A social outcome: important, but not the goal

How to plan a green event

- Determine your goals and objectives: what do you want to achieve?
- Set targets: where do you want to go?
- Establish a baseline: what is your current impact?
- Brainstorm actions: what do you need to get there?
- Make a plan: who, what, where, and when?
- Put your plan into action.
- Check your progress and adjust actions if needed to achieve your targets.
- Review the event and celebrate success!

Don't try to do everything.

Pick achievable and deliverable actions; save the rest for the next event!



SMART Goals are designed to keep your team focused on meeting the objectives of your green event. This acronym stands for Specific, Measurable, Attainable (or Achievable), Relevant, and Time-Bound. If you are comfortable using SMART goals, you can apply those principles to help you plan and implement your event.

Examples of targets

- Our next club barbeque will produce a maximum of 1 kg of plastic waste.
- At our next seminar, half the participants will share rides to and from the event.
- Our next event will feature plant-based foods.
- Our next District conference will compost 80% of our food waste.



Photo credit: Kris Cameron

Questions to consider

- Why undertake this event or develop these actions?
- What are the desired outcomes?
- Which elements of the event are really needed?
- Where is the best location for this event?
- Whom will this event impact or benefit?
- What are the impacts of the event?

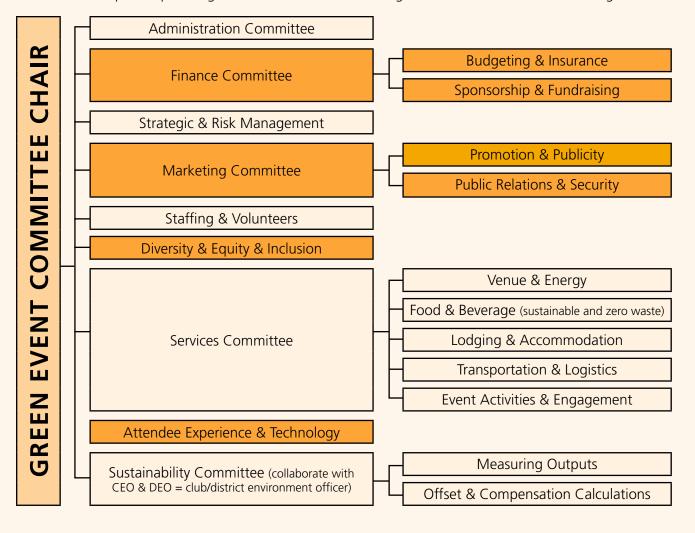
- Can the event be organized using fewer materials or materials with recycled content?
- Is the event resource and energy efficient?
- How will any materials be managed at the end of the event? Can they be wholly or partially reused or recycled?

Setting your event team in motion

This green event guide is designed to be used in conjunction with the traditional planning documents for a conference, symposium, meeting, etc. That traditional planning includes budget and insurance, engagement of speakers and per diem, obtaining sponsorship and fundraising, engaging partnerships, promotion and publicity, public relations, and providing security. Green event planning requires these additional considerations: venue and energy, sustainable menu choices, zero waste food and beverage, active transportation, and calculating offsets.

The Sustainability Committee ensures that the notion of sustainability is integrated across all tasks: Are the finances managed by a green bank? Has the staffing coordinator organized carpools and transit fare for the volunteers? Have the meal planners maximized plant-based food choices? Will the marketing committee offer useful items that aren't plastic trinkets?

Below are examples of planning teams for an event. Encourage each of these teams to "think green".



Start small – pick the low hanging fruit

Be pragmatic and economical and use the '80/20 rule': that you can achieve 80% of your outcomes by focusing on 20% of the actions. Another way to approach it is to reduce the 'easy' 80% of waste and pollution, and do the other 20% when it is feasible, i.e. "picking the low hanging fruit."

Some simple tips for starting small

- Use electronic documents, limit all printed meeting materials.
- Have a policy of no single-use plastic containers, bottles and bags.
- Provide guidance to all suppliers, caterers, participants and guests about your sustainable goals.
- Record event successes and allow for online viewing afterwards.
- Use local products and local food, increase plant-based menu choices.
- Involve local authorities and the event waste management company regarding zero-waste opportunities.
- Consider online webinars and fewer physical meetings and events as these result in a lower global footprint: reduced pollution, travel costs, energy usage, carbon emissions, and waste.

Plan a "green" budget for "green events"

How much extra would it cost to "green" your event? You can expect an additional 10% to 20% cost increase. When you budget for your event, make allowances for any extra costs. For instance, you may have to pay extra for a contractor to collect the food waste and transport it to a local composting facility instead of sending it all to landfill. A facility may charge more to wash dishes than to provide single-use items.

Some solutions, however, save money

- Avoid the need to hire shuttle buses by keeping the venue within walking distance to the hotel.
- Reduce paper and printing by using cell phone apps.
- Avoid buying cases of water and single-use waste by bringing a drinking water cooler with a few paper cups.

Do not forget, however, that there are also costs for not being green, beyond the purchase of materials. One way or another, someone will have to pay the price. For example, food waste sent to landfill will generate methane, a potent greenhouse gas. Energy sourced from coal-fired power stations will contribute to atmospheric carbon.

Often there are trade-offs. Virtual events break down social barriers because more people can attend regardless of income, time commitments, or health. Hybrid events

have some needs that are similar to

in-person ones, but may require additional expenses for

technical platforms. On the other hand, participants in virtual and hybrid events will avoid travel and accommodation costs and enjoy considerable environmental benefits of fewer carbon emissions and less waste.



Engage diverse groups and empower youth

It takes many minds to create innovative practices. Green events provide enormous opportunities to involve people from diverse social and ethnic backgrounds. Young members in our Rotary network play a major role in environment-related initiatives and can make a significant impact on green events when encouraged to lead.

Work with youth networks to integrate new technologies and add diverse perspectives. Rotaractors and Interactors can help collect data (e.g. delegates' travel data) using tablets and phones. They can mentor Rotarians as we all start a technological shift with efficiency and sustainability in mind. Partnering with youth is an enjoyable experience for all involved.

TESTIMONIAL

I can personally testify to this fact – I was the President of my Interact club while in high school, and we started an environmental education movement that gained attention from the Texas Environmental Excellence Awards and beyond, and this project influenced the formation of my company.

— Dakota Stormer, CEO Footprint



IMPLEMENT

Organize your team

Once you have your plans in place, you will need to start organizing your team. Here are some tips to get you started.

- Don't forget to ask the big question:
 Do we need a real event or could we manage with a virtual one?
 Virtual events are almost zero carbon and zero waste.
- Identify the specific tasks that will reduce the environmental impact of your event. Highlight these in your event plans.
- Use the green events checklist [p16]
 to help identify some of these tasks.
- **Visit the venue** for your event and each of the accommodations. Prepare questions in advance.
- Allow enough time to conduct this research. Go with a team; Others may see things that you may miss.
- Keep your green goals and targets in mind, but remain flexible. Some actions may be either too hard or too expensive.
 Focus on what you can achieve now.

The venue

Investigate how sustainable these practices are at a venue.

- Infrastructure Select venues that already implement green practices. Is the building energy efficient? Does it have energy efficiency or environmental management certification? Note that each country may have its own certification system.
- Access for pedestrians and public transport Can people access your event without car travel?
- Energy use and energy sources What is the source of energy for the venue? To what extent does the venue use renewable energy? How is energy use minimized at the venue?
- **Suppliers and vendors** How sustainable are the practices at the venue? Will you be able to bring in your own sustainable suppliers and vendors?





Photo credit: Maria Ritterfeld, EndPlasticSoup

Food and drink

Food and drink will probably be the most visible and memorable part of your event. Focus on these four key areas to green your event.

Vendors

- Develop an agreement with your venue that vendors and suppliers meet sustainable practices.
- These practices could include food and drink that are fair trade and locally sourced with <u>vegetarian</u> and plant-based options.

Reducing waste from vendors

- Use reusable dishes and cutlery, instead of disposable items; if disposable, use biodegradable.
- Use smaller serving spoons and smaller plates at buffets.
- Try to use packaging that is either reusable or recyclable.
- Have a clearly labeled and well-managed food waste collection system, with the food waste being taken away for composting.
- Arrange for any leftover food to be sent to charity, consistent with local health codes.



 Have a clearly labeled bin system for at least trash, recyclables and food waste.

Drinking water

- Ensure water refilling stations are placed strategically around the venue.
- Encourage delegates to bring reusable drink bottles.

Reducing plastics

- Avoid single-use plastic items, such as containers, straws, cups, and cutlery.
- If possible, provide alternatives to plastic, such as bamboo or wood.
- Invite delegates to bring their own reusable cups.

Travel and transport

Travel and transport are other areas where you can reduce the carbon footprint of your event.

Public transport

- Gather information about what options exist for public transport. How close are the stations or stops to the venue? How often do trains, buses, or trams run? Will their timetables match that of the event? Will the capacity of the services match the number of people expected to use them? Will the public transporting information be easy for visitors to understand?
- Develop a partnership with the public transport services. For example, try to arrange for free public transport for delegates from the city center to the venue.
- Provide incentives for your delegates to use public transport, such as a virtual raffle, with each public transport trip worth one virtual raffle ticket or include the cost of a transit pass in the event fee.

Bicycle services

- Offer a bicycle valet and secure storage for bicycles.
- Provide a bicycle repair service.
- Provide linking for bicycle maps.
- Arrange for a vendor to rent bicycles.

Carpooling

- Well before the event, promote ride sharing extensively so it could be organized online.
- Provide incentives for parking close to the venue for carpool drivers, such as an honesty-based virtual raffle for those who carpool.
- And of course, **encourage people to walk** where possible.

Walking

- Provide links to safe walking paths and route information.
- Arrange pedestrian guides, either humans or signage, along the walking routes.

Lodging and accommodation

Most large events offer suggestions for accommodation, whether this be hotels, motels, B&Bs, or university college dormitories.

- Select accommodations close to the venue so that delegates can walk. For longer distances, offer shuttle buses.
- Encourage room sharing.
- Recommend that the accommodation provides paperless registration.
- Encourage delegates to adopt sustainable practices within the accommodation. For example, turn off the lights, television, and heater or air-conditioner when leaving the room; decline daily housekeeping and linen changes.
- Select accommodations that meet high energy efficiency standards.

Tips for event administrators

- Use e-tickets or digital passes on people's mobile phones.
- Use reusable name badges.
- Offer handouts only upon request.
- Use QR codes to access digital flyers and business cards.
- Use a laptop or tablet at your booth for information and demonstrations.
- Discourage use of welcome kits. If you provide them, use recyclable materials.

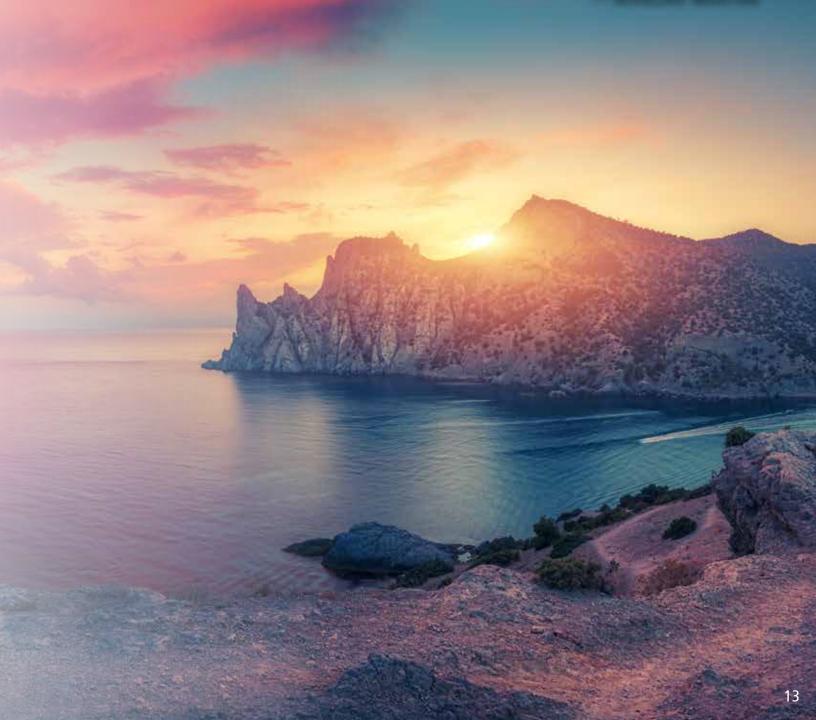






The environment and the economy are really two sides of the same coin. If we cannot sustain the environment, we cannot sustain ourselves.'

— WANGARI MAATHAI



MEASURE

At your first green event, it can be a real challenge to document the baseline from previous events, because no one measured their impact. For your current event, measure your impacts from beginning to end, and use that information as your baseline for your next event.

EXAMPLE:

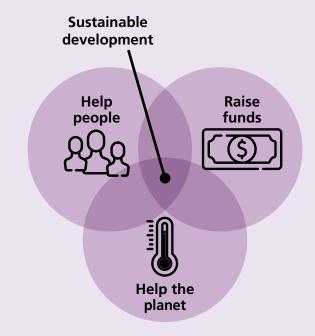
Rotary District 9810 in Melbourne estimated 4 tonnes of CO2 were emitted as a result of conference activities, mostly from food and travel. To compensate for those emissions, the District donated \$AU 200 to compensate by planting trees in support of a project in India featured at the conference.

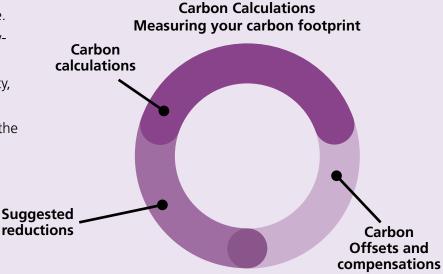
What is a carbon footprint?

We cannot manage what we do not measure. Events can have a significant footprint on the environment from carbon emissions, food choices, waste generation, water and resource use.

We at ESRAG take this to heart when looking at the impact of our events and club meetings – so we have researched how to best identify, calculate, and reduce an event's impact. One measure of impact is the **carbon footprint** or the total carbon dioxide equivalent generated as a result of the event.

We need to reduce carbon emissions because they contribute to climate change. Green events support the transition to low-carbon economies, opening opportunities to create new jobs, increase energy security, and improve public health while reducing greenhouse gas emissions and mitigating the worst impacts of climate change.





Which data should you collect to calculate your footprint?

Club and event footprint calculators

ESRAG has developed web-based calculators, that will allow any Rotary Club to calculate its annual carbon footprint, identify opportunities to reduce its emissions, and to offset or compensate for its residual emissions by contributing to a carbon offset or compensation fund. Explore two examples, Every Club Climate Friendly and ESRAG On-line Rotary Club Calculator.

Use these calculators to estimate the carbon emissions from your club activities and other events, such as conferences, then take steps to reduce the emissions.

ESRAG Flight Carbon Estimator

Air travel emits significant amounts of greenhouse gases (GHG) which, at higher altitudes, warm the atmosphere even more.

ESRAG has developed a <u>Flight Carbon Estimator</u>, so that those traveling can compensate for the carbon emissions from their flights. You can compensate for the carbon impact of your air travel by estimating your carbon emissions and <u>making a voluntary donation to the Environment Fund of The Rotary Foundation</u>. Your donations will support Global Grant projects that mitigate the causes of climate change by reducing emissions and sequestering carbon.

Event Checklist

All events have an impact on the environment. As Rotary moves toward more sustainable and greener practices, it is our responsibility to reduce the negative impacts and improve the positive impacts of our events. Explore this interactive checklist for a more detailed estimate of your event's impact. Your Club and District will become more sustainable as you are empowered by understanding the impacts of your choices.

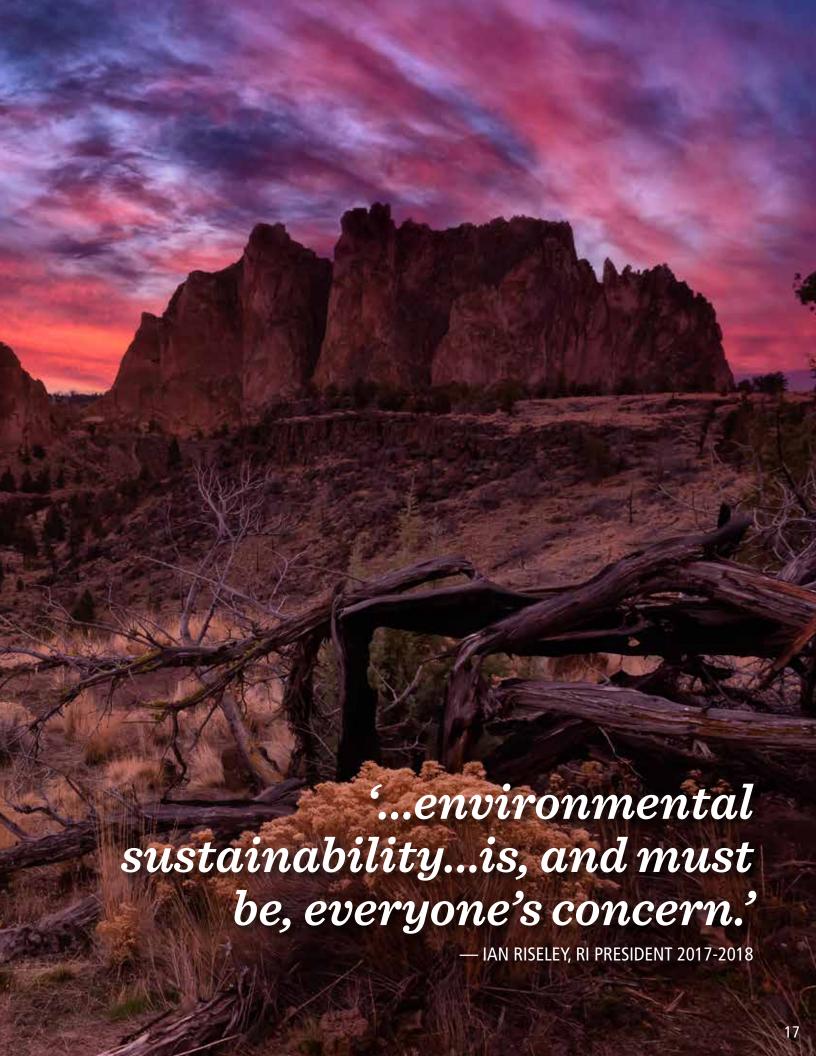


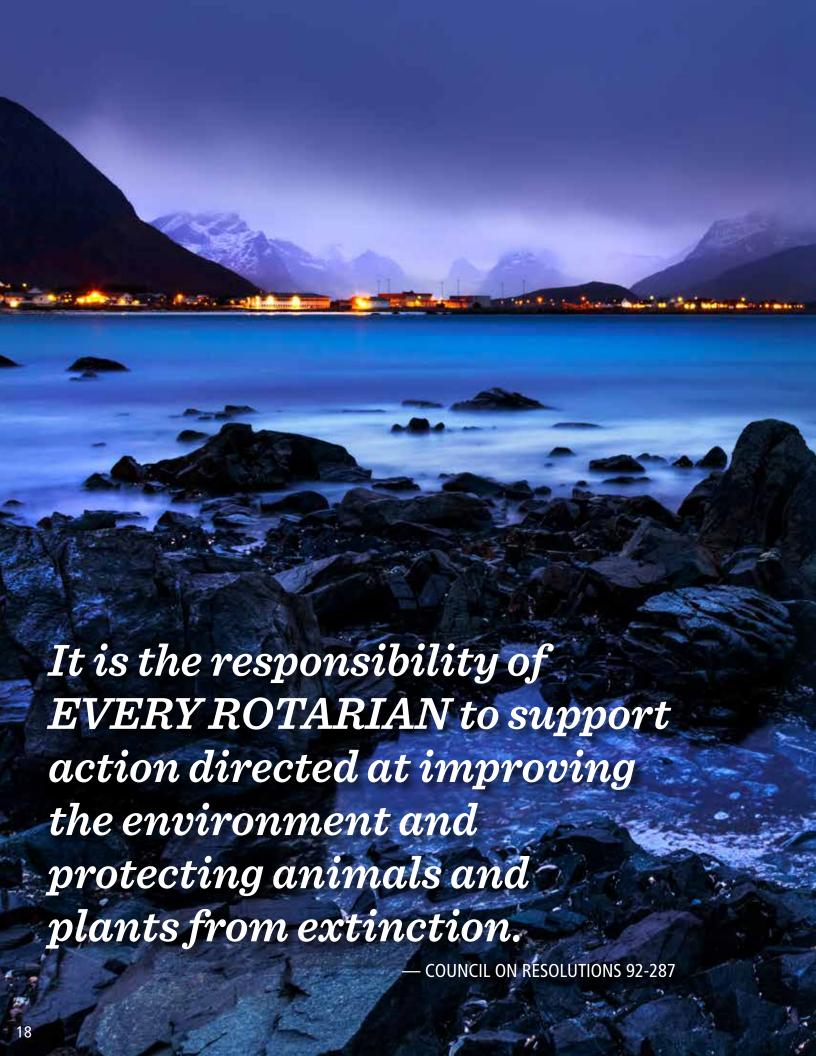


ESRAG has developed a simple checklist to help you evaluate your event impact.

IMPACTS	CATEGORIES	KEY PERFORMANCE INDICATORS
Economic	Participation	Number of attendees
Social	Stakeholder Engagement	 Suppliers signing sustainability clauses in contract Number of key suppliers evaluated for sustainability
	Community Action	Donations of cash or in-kindNumber of charities and NGOs supported
	Accessibility	Hotels and venues with accessibility program
Environmental	Greenhouse Gas Emissions	 Total carbon footprint Flight and other travel Local Transport Hotel and venue Exhibition Transporting event supplies and waste Emissions per delegate
	Energy	Total electricity consumedTotal gas consumedTotal energy consumed for heating
	Water	Total water used
	Paper and Materials Usage	 Printing Signage and banners % of production made from eco-friendly materials % of production materials reused Badges recollected
	Waste Management	 Total waste from event (incinerated, landfilled, recycled and composted) Total waste per event participant Plastic beverage bottles used and disposed of in event
	Food & Drinks	 Number of meals served % local food sourced for meals % organic food sourced for meals % plant-based options offered Responsibly-sourced seafood







OFFSET

Eliminate all you can, then always offset or compensate for what remains.

What is a carbon offset?

Carbon offsets allow individuals or organizations to compensate for their carbon emissions by investing in projects that reduce or remove greenhouse gas (GHG) emissions, such as reforestation, renewable energy projects, or methane capture from landfills. Offsets are a form of trade. The need to reduce emissions that one can't avoid creates a market for offsets. Buying an offset funds projects that reduce GHGs somewhere else. Look for local projects to offset carbon emissions that you can't avoid. For example, support a local group that is growing plants that absorb carbon.

It is important to note that carbon offsets are not a substitute for reducing emissions at the source. When used responsibly, carbon offsets can be an effective tool to help individuals and organizations take responsibility for their carbon footprint and contribute to a more sustainable future. The practice of carbon offsetting — paying a third party to remove or otherwise offset an amount of carbon equivalent to the volume you emitted — is now falling under close scrutiny because some offsets are not delivering the promised tons of removal to neutralize tons of emissions.

Nevertheless, you can compensate for carbon emissions arising from your events by donating to The Rotary Foundation to fund Global Grant projects that will sequester or reduce greenhouse gases, such as solar energy installations and reforestation.

Most calculators just provide an estimate of the environmental impact of an event or club activities. To obtain an accurate figure would require the services of a qualified environmental auditor, which can be quite expensive. The purpose of this handbook is to provide you and your team with some low cost tools to estimate the environmental impact of each of your events and to learn how to improve the sustainability of future events.

Offsetting is an increasingly regulated industry and Rotary groups may not wish to go down that path. To compensate for one impact of GHG emissions associated with an event, one can donate to the Environment Fund of The Rotary Foundation.





REFLECT

Reflect on your success

Greening your Rotary events, projects, and club operations is a continuous cycle of improvement. After every event, reflect on what worked, what didn't, and fine-tune your approach. You can continue to reduce your environmental footprint in cost effective ways and compensate for what you can't reduce. Knowing that other clubs and districts are also working to be "greener" and sharing best practices, helps to assure our collective success.

Reflect, debrief and audit

After organizing an event, it is common to celebrate and move quickly to the next one. Taking time to reflect, a step often missed, can provide additional benefit to your club or committee. When well documented, reflection will provide valuable insights for the next event planning team.

Ask yourself and your team the following questions

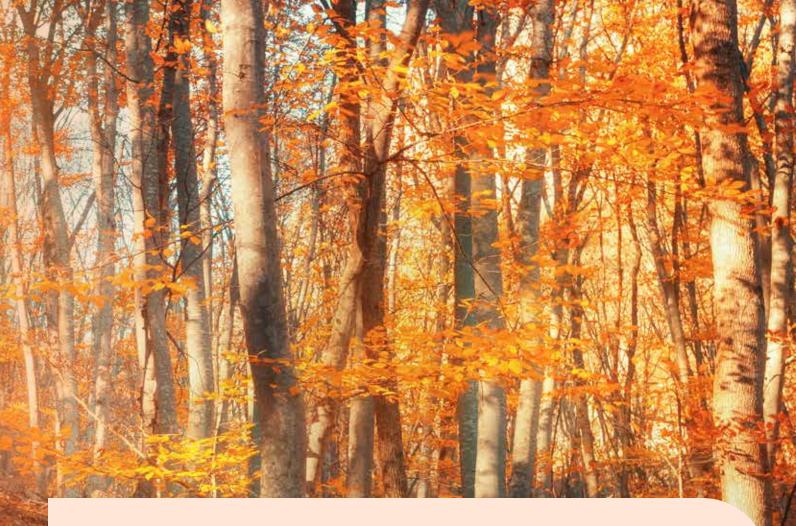
- What worked well?
- What could you do better?
- Have you communicated your sustainability successes to your sponsors and event participants?
- Did your recommended hotels align with your sustainability vision?
- Did you avoid single-use items?
- Did your menu offer locally sourced foods and plant-based choices?
- Did you reduce the amount of plastic giveaway items and handouts during the event?
- Did you dispose of the waste in the most sustainable manner?
- Did you measure and compensate for the carbon emissions of the event?

How to calculate your event score?

ESRAG offers tools to collect data and calculate the success of your green event. Understanding the effectiveness of your event will help your Club or District appreciate this sustainable approach and help you to improve the social and environmental outcomes of your event.

You can measure the direct impact of your event on

- Waste: The weight of waste produced, e.g.
 5kg of waste was generated during the BBQ.
- Community development: The value of material that you repurposed and gave back to the community, e.g. 5% of the food was left over and was donated to charity.
- **Plastic:** The volume of plastic eliminated and the percentage of reusable service ware being used, e.g. 90% of cutlery utensils were reuseable or made of biodegradable material.
- Carbon emissions: The amount of carbon dioxide equivalent released into the atmosphere, e.g. 5 tonnes of carbon dioxide equivalent were emitted during the District conference.
- Local economic development: Food produced locally, e.g. 50% of the food was produced by local growers.
- Energy consumption: Amount of energy consumed, e.g. energy consumption was reduced by 500kWh compared to a previous conference.



Capture your progress and success

You can use the following diagram to map your event progress and and gauge its successful contribution to sustainability and resilience.

EVENT

PLAN

IMPLEMENT.

MEASURE •

OFFSET

REFLECT .

Use in-person, virtual, or hybrid events for conventions, assemblies, forums, workshops, training classes, and meetings. Plan for administration, strategic planning, staffing, insurance, finances, technology, marketing, services, sustainability. Determine and commit to sustainability actions for the venue, technology, food & beverage, accommodation, travel, staging main event and side events. Use calculators and estimators to determine the environmental impact of the event.

Mitigate for the environmental impact of events and attendees, by either offsetting or compensating for what you could not eliminate.

Debrief by analyzing the event metrics, and communicating results for future events.

FREQUENTLY ASKED QUESTIONS (FAQ)

Why should events avoid single use plastics?

While there are many aspects of our modern lives that greatly benefit from the use of plastic, a green event minimizes the use of single-use plastic, including water bottles, utensils, plates, take-out boxes, decorations, packaging, etc. The environmental impact of plastic starts when producing it as it burns fossil fuels and thus generates air pollution via greenhouse gas emissions (www.ciel.org/plasticandclimate/). Plastic creates further pollution as only 9% of all plastic is effectively recycled and only 30% of plastic water bottles are recycled in the US (www.epa.gov/facts-and-figures-about-materialswaste-and-recycling/plastics-material-specific-data). The rest ends up in landfills, in the environment and oceans, leading to the dramatic pollution we are experiencing now. Reducing the amount of single use plastic that we use is the key, as many countries, including the USA, do not have the adequate recycling infrastructure.

Doesn't recycling solve the plastics problem?

The recycling process degrades the quality of plastic polymers, so some new plastic will always be needed. Plastics that can't be recycled could be burned to recover the embedded fossil fuel energy, but waste incineration technology is expensive and too often is not designed or operated to minimize pollution. Cardboard, paper or bio-compostable packaging are alternatives to plastic. Local regulation and infrastructure are still needed to correctly handle the end of life of bio-compostable and biodegradable plastics. Choosing reusable items is currently the most effective strategy to reduce plastic waste and pollution.

How green is a virtual event?

A virtual event is not 100% carbon-free, but it greatly reduces the impact on the environment by reducing the emission of greenhouse gases. CO₂ emissions per km traveled vary depending on the mode: on average 133g for a domestic flight; 171g for a car; and 41g for rail. By contrast, using a computer for eight hours only results in 100g-480g CO₂ emissions, demonstrating that virtual events significantly lower an event's carbon footprint. Nevertheless, a virtual event may not offer the best conditions for maintaining fellowship. A

hybrid event with opportunities for both in-person and virtual participation can offer the best of both, while reducing the carbon and ecological impact on your community and the environment.

Why should events offer plant-based menu options?

Industrial agriculture, particularly animal agriculture, contributes more GHG emissions than all forms of transportation combined. Project Drawdown has cited adopting plant-rich diets as the second most impactful solution to prevent irreversible climate disruption. Offering plant-based meals as the default and requiring an extra step to select an animal-based meal, increases the number of people who choose the plant-based option by more than 50%. This lowers the carbon and water footprint of your event and helps save on catering expenses as well. Whole food plant-based dishes can be exciting and novel for your guests, as well as providing a more inclusive experience for attendees with a variety of cultural traditions, food allergies, and dietary restrictions.

Read more about the environmental benefits of plantrich diets and planning plant-based events.

How does ESRAG support the new area of focus, the environment?

ESRAG takes a broad look at environmental issues, grouping them under six work themes: Biodiversity, Circular Economy, Climate, Food Systems, Pollution, and Sustainable Living. Read our climate policy.

I want to get involved; how do I contact ESRAG leaders?

You can become a member and get involved in ESRAG's activities as part of your local regional group, district, club, or you can even run your own project. We need a lot of volunteers since Protecting the Environment has become a new area of focus. Anyone can join ESRAG, whatever your background and whether you are a member of Rotary or not. Contact us with your questions.

CONNECT WITH THE ESRAG COMMUNITY

ESRAG inspires, supports and empowers the Rotary family with extensive expertise, resources, networks, education, and best practices to implement sustainable and impactful environmental projects.

At ESRAG, we assist clubs and districts to:

- Plan & implement projects
- Create awareness of environmental issues and solutions
- Build global and local networks
- Inspire action for sustainable solutions
- Support RI in promoting and encouraging impactful projects in the Environment Area of Focus

<u>Learn how to become a member of ESRAG</u>, the <u>Environmental Sustainability Rotary Action Group</u>. ESRAG offers innovative and sustainability solutions for your District and Club. Learning what other clubs are doing is important. Contact the ESRAG Chapter for your region... share best practices and more ...

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