

August 2022 Volume 7 Issue 2

## Rotarians Foster Green Housing Focus: North America

Hold onto your hat! This month, Rotarians from Canada to Mexico report how winds of hope and change are sweeping across their continent. They share several ways to make housing greener and cheaper to run, and invite you to take advantage of an array of conferences and free technical assistance to help you design excellent environmental projects.

In this issue:

- Cause for hope: new laws in US and Australia, and your role in Rotary!
- Guidance for green building: ESRAG's Solar Habitat handbook, Near Zero Energy Design, and the Aug. 19 Small Wind webinar
- RIP Jennifer Jones champions pollinator projects in India and North America
- Aug. 20 Workshop: how to develop a Rotary Global Grant project
- "Big West" Rotarians' September 10 summits on soil, water, and green transportation
- September citizen science for platypuses in Australia
- How ESRAG's Climate Task Force can help you plan powerful projects
- Environment's starring role in the August *Rotary Magazine* (including ESRAG celebrities)



*Photo by Jeff Heie: Solar panels going up on a Habitat duplex in Harrisonburg, Virginia, US. Shared with permission of GiveSolar.*

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## News From the Chair

**By Patricia Armstrong**



This Bulletin is a wonderful collection of projects, stories and announcements of exciting upcoming ESRAG events.

Following on from my editorial in last month's Bulletin, where I suggested that we all try to adopt a Positive Solutions Mindset, I was both excited and encouraged to hear of news of the climate legislation being approved in the United States, and the new Labour Government in Australia being assured of support from the Greens Party for Labour's 43% carbon emissions target by 2030 (up from the 26% target set by the previous Coalition Government).

The Inflation Reduction Act (IRA), which was passed by the US Senate on Sunday, 7 August and the House of Representatives today (August 12), requires only the signature of President Joe Biden. This bill allocates \$369 billion to climate action over the next 10 years. Closer to home for me, the Australian government is now confident that their 43% emissions target legislation will be approved by both the House of Representatives and the Senate in the next month.

There is still so much work to be done to address the world's many environmental issues, but huge progress has been made at the global level this week. Two countries at least made transformative commitments. Is the environmental tide turning at last? I don't really know. I hope so. We can only be inspired and energised by these examples of global leadership and the many examples described in this Bulletin to encourage and equip our club, our district and our local community.

As members and friends of ESRAG, why not join our ever-growing band of volunteers ? With other like-minded folk from around the world, channel your energy and expertise to educate and empower other members to take on impactful projects. Read about our [Taskforces](#) and [Initiatives](#) to discover how you can help Rotarians protect our planetary home.

*Photo (from left): Clare Caulfield, Pat Armstrong, and Murray Neilson at a tree-planting day in Beaufort, Central Victoria*

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## Now Presenting: Habitat Solar!

**By Ariel Miller**

Rotarians have added a powerful tool that makes housing more affordable AND slows climate change: Habitat Solar, a new initiative under Rotary's partnership with Habitat for Humanity which assists Habitat to add rooftop solar to eligible new homes.

Participating families will achieve big savings on monthly electric bills and prevent hundreds of thousands of tons



of carbon emissions over the useful life of their panels. By adopting Habitat Solar as a project, your Club will discover a new way to engage young people as passionate volunteers.

ESRAG's Renewable Energy Task Force has teamed up with Habitat International's building science

specialist Molly Berg on a [manual](#) offering field-tested advice, case studies, and links to rebates and tax credits available by state across the US. "This partnership is natural: there's a Habitat affiliate and a Rotary Club in almost every town," says Dr. Liz Henke, a member of East Chapel Hill Rotary (North Carolina, US), who played a crucial role in pilot-testing the idea.

"It's huge for the family and huge for the environment," she explains. "The typical Habitat family's monthly electric bill in our part of the US is \$100. Our first Habitat solar installation in 2020, a 5.1 kW array, is saving the family \$62 a month. [Here's a video](#) with the family's testimonial! The more electric costs rise, the greater the savings will be. More recently our local Habitat affiliate has been installing 5.4 kW arrays each preventing over 300,000 lbs. of carbon emissions over 30 years, the equivalent of planting 3,800 trees or 350,000 miles not driven by a gas-powered car."

"Habitat is a world leader in low and moderate income (LMI) housing development," Liz Henke points out. "When Habitat shows that adding rooftop solar is feasible, we hope other LMI developers will follow its example."

*Photo courtesy Southern Energy Management: installing solar panels for Orange County Habitat in North Carolina.*

[Read More](#)

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## Efficient Building Design for 2030

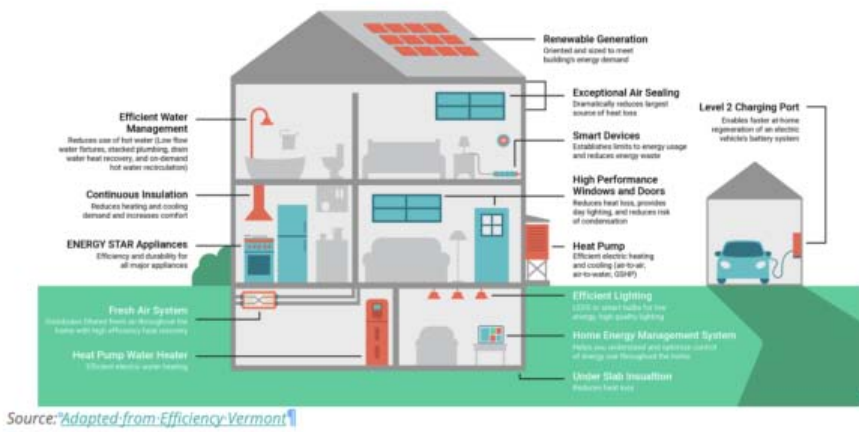
**By Joey O'Brien**

Buildings consume about 40% of total domestic energy and have a resulting greenhouse gas (GHG) footprint. To affect climate change we need a "whole of society" shift, and decreasing the energy footprint of buildings must be part of it. The IPCC identifies 1.5 C above pre-industrial norms as a tipping point in climate change acceleration.

I regret to report that average June 2022 temperature rise in the Northern Hemisphere is already 1.42 C above



## Features of a net-zero home



1880 levels (see NASA data, later in the article). Therefore, action is needed

now, not some distant time in the future. This article explains the benefits of energy-smart building, and ways Rotarians can promote it.

Building codes (which I call the MINIMUM standard one should consider building towards) are shifting throughout the developed world to near net-zero for 2030-ish. We call this Near Zero Energy (NZE) building. A **NZE** building is a building that can produce as much clean energy as it consumes.

A NZE ready (**NZEr**) building is one that is designed, modeled and constructed the same as one that is NZE, but does not yet have on- or off-site renewable energy components in place. A core aspect of net-zero energy "readiness" is the use of improved air sealing, increased insulation levels, and high-performance windows and doors, to reduce thermal demand and facilitate appropriately-sized space and water heating equipment.

The common retort to this is "the client can't/won't afford it." In jurisdictions where the trades are familiar with the steps, the increases in costs are less than 5%. In areas where traditional platform construction is most common, the costs could be 15% more. Often the costs are offset with energy cost reductions in as little as two years. NZE buildings are expected to be 80% more energy efficient than a new building constructed to today's building code minimum. They use on-site (or near-site) renewable energy systems to produce the remaining energy they need.

[Some Canadian provinces are rewarding efforts](#) to reach for these standards now. Natural Resources Canada (a federal government department) is encouraging action with a [\\$5,000 grant and \\$40,000 interest-free loans](#) for home energy efficiency. This is real leadership on this file.

In Canada, less than 1% of buildings can be considered NZE-r. We need to quickly scale up the number of NZEr buildings constructed each year through the adoption of ambitious NZEr building codes. Not only will this help reach our global climate commitments, it will have the benefit of generating investments in our buildings sector while offering good local jobs in the clean economy.

*Canadian Rotarian Joey O'Brien is the founder and CEO of the sustainability consulting firm [SustainDriven](#) and a member of ESRAG's Board of Directors. The graphics in this article are adapted from [Efficiency Vermont](#).*

[Read More](#)

## On and Off Grid With Small Wind

**Aug. 19 1:45 - 2:45 pm UTC, 8:45 - 9:45 am US Central Time**

**By Timothy Conners**

Discover the benefits of small wind (10-15 KW), and why it's the one to watch in the

renewable energy area. Two seasoned renewable energy experts will discuss the applications of small wind, as well as its benefits in increasing resiliency of local power generation. Here is the [Zoom link](#).

The material will be presented by Mike Bergey, president of [Bergey Windpower](#), the manufacturer of small (10-15 KW) wind turbines, and Alice Hoffman (MIT BS '82 and MS '83) who owns a farm that is off grid and powered by a combination of wind, solar, and battery storage. Bergey Windpower's [Wind School link](#) includes a primer on small wind systems.



This program is sponsored by ESRAG's Renewable Energy Task Force and RCAT (Rotary Climate Action Team Network).

Photo: [Bergey Windpower](#)

[Read More](#)

## How to Submit a Successful Environmental Global Grant

**Aug. 20, 12-2 pm UTC**

ESRAG's Projects Division is teaming up with the Rotary Foundation to offer a Zoom workshop Aug. 20 on how to develop a successful environmental global grant proposal. Keith Madden, the Rotary Foundation's Environment Area of Focus Manager, and an ESRAG team with wide-ranging expertise will advise you on how to go from an idea to a completed proposal.

The presenters are Dr. Nilam Bedi, Dr. Christopher Puttock, Dr. Mina Venkatamaran, May Yoneyama O'Brien, and Salvador Rico, who have completed an array of successful projects in habitat restoration and

climate action. This workshop has 20 spaces and costs \$50 as a donation to ESRAG's Project Division Club Projects Fund. A club can send a team of up to three people for one seat!

Participants should have some experience with District Grants, and readiness to participate either as a Host Club or an International Partner. The workshop includes breakout sessions on doing a community needs assessment, since the Area of Focus includes many different categories of eligible projects.

[Register here](#).



## Jennifer Jones Delighted by D 3232 Bee Hotels

**By Mina Venkataraman, PhD**

ESRAG South Asia has started collaborating with the environmental NGO [ATREE](#) on their citizen science program to increase the numbers of urban pollinators by establishing bee hotels. To our delight, this brought our pollinator project face-to-face with Rotary International President Jennifer Jones when she attended a town hall meeting in District 3232 on July 26, 2022. Her enthusiastic response inspired RID A. S. Venkatesh, currently RI Treasurer, to call the District Governor, Rtn. Nandakumar, the next day to suggest that he double the scale of our project.



Pollination – an essential ecosystem service - is imperiled by the loss of insect populations due to the use of pesticides and other anthropogenic activities. Studies in Europe have shown that the decline in pollinator populations is affecting crop yield. We have reached a point where hand pollination, which used to be a pastime for kitchen gardeners, has become a paid job in vegetable farms across India in the quest to increase yield. But bees are doing extremely well in urban areas with multiple garden sources.

The majority of the solitary bees roost in small cavities. ATREE consulted with Rotarians in Rotary District 3291 on how to design bee hotels and get data sent to them. We decided to expand this program to D 3232, and proposed a memorandum of understanding between the Districts and ATREE in which Rotarians would help document the kinds and numbers of pollinators in our city.

*Photo courtesy of D 3232. In the center, from left: RIP Jennifer Jones, ESRAG Director Dr. Mina Venkatamaram explaining the bee hotels, and ESRAG South Asia Chapter Chair Arun Vaddi*

[Read More](#)

## Rotarians Rallying Communities to Rescue Monarchs

**By Ariel Miller**



Club Rotario Monterrey Metropolitano (D 4130) invites you to join Rotary clubs from Canada to México in a multinational campaign to restore pollinator habitats throughout North America. Please share the Club's [wonderful video call to action en español](#).

The Save the Monarch Butterfly 60,000 Tree Challenge North American Boxcar Tour will make nine stops along a major Monarch migration route from Canada to Mexico, with Rotary clubs at every stop rallying their communities to create pollinator gardens and donate money. The goal to raise

\$100,000 to plant 60,000 oyamel trees in El Rosario Butterfly Sanctuary in Michoacán, Mexico, and provide two years of follow-up care for the seedlings. You can contribute to the [challenge at this link](#).

In July the International Union for Conservation of Nature red-listed the migratory Monarch as endangered. Rotary clubs at each stopover are organizing events to raise awareness of the importance of pollinators, encouraging the public to avoid pesticides and create pollinator-friendly habitats. Visit [Operation Pollination](#) to discover how your club or district can rebuild the drastically declining populations of pollinators, who are essential to the human food supply.

*Photo: President Jennifer Jones championing the Monarch boxcar tour in a video with Monterrey Rotarians Rogelio Carranza and David Evans*

[Read More](#)

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## Rotary Environmental Summits Sept. 10: Water, Healthy Soils, and Green Transportation

Rotarians in the Western United States welcome you to three inspiring and informative environmental forums on Sept. 10:

1. **Water, from Source to Sea**, Newport Beach, California
2. **Healthy Soils**, Colorado
3. **Green Transportation and Clean Energy**, San Jose, California



All will be broadcast virtually. Two offer an in-person option. Rotary Zones 26/27 (Big West) are presenting the Water and Healthy Soils conferences as part of their 2022 People of Action Summit series. ESRAG's Big West Chapter is hosting the Green Transportation conference. Click "read more" for details on the speakers (including several ESRAG members), topics, times for each event, and how to register for the virtual or in-person events.

[Read More](#)

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## September is Platy-Project Month of Action in Australia



**Submitted by the Australian Conservation Foundation**

The Australian Conservation Foundation (ACF) invites Rotarians in Australia to be People of Action through citizen science for the Platy-Project Month of Action this September. We're trying to get as many people as we can to head down to their local creek or river, find a quiet place on the bank, try to spot a platypus and record what they see (or don't see). How does this help the platypus? Even though the platypus is one of our most unique and iconic animals, there are big gaps in our knowledge about the creature, including

where it lives and how big platypus populations are.



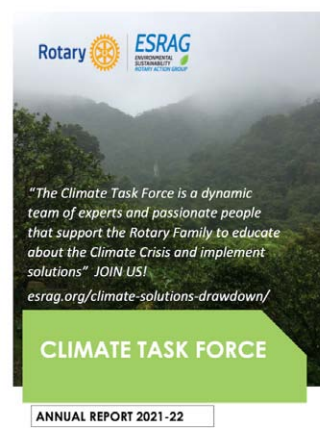
With platypus numbers declining, the lack of existing platypus data is a huge barrier to getting the protection it needs from extinction. The Australian Conservation Foundation has been working with researchers at the University of New South Wales to try to fill this data gap along the east coast of Australia, but we really need help from lots of people in the community. We invite your club or district to schedule platypus surveying events sometime in September. Surveying can also be done individually or in a small group. We have developed toolkits and an interactive map to make the process really simple. Not only would it be helping nature, but it's an easy, and relaxing activity that can bring the community together. You can check out more about the Platy-Project and [sign up to help here](#).

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## ESRAG Climate Task Force Ready to Equip You

ESRAG has a Memorandum of Understanding (MOU) with [Project Drawdown](#) to educate Rotarians to implement Drawdown Solutions to reverse climate change as quickly, safely, and equitably as possible. ESRAG's Climate Task Force is ready and eager to help your Club, community, or District choose and implement significant climate solutions.

The Task Force includes four different teams ready to share their expertise with you on specific strategies Rotarians are advancing across the globe: Food Waste Solutions, Cleaner Cookstoves, Plant-Rich Diet, and Renewable Energy. The 2021-22 Annual Report includes the monthly meeting dates and contact information for the leaders of each team. To get a copy, [email Climate Task Force Co-Chair Doug White](#).



When you visit [ESRAG's Climate theme](#), you'll find additional resources including Refrigerant Solutions, Food Systems, and RCAT (Rotary Climate Action Teams).

[Read More](#)

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## Environmental Projects Showcased in August Rotary Magazine



The August issue of Rotary Magazine starts with letters to the editor about a rhino preservation project in South Africa, and continues with several exciting articles on environmental projects, two of them led by ESRAG members. Here's the lineup:

“[Made for the Shade](#),” an irresistible first-hand report by Rotarian Shahzad Qureshi on the success of his urban forest projects in Karachi, Pakistan. He uses the Miyawaki method of planting a mix of native species that grow to various heights - from shrub to canopy - on small plots of land.

“[Rock the Boat](#),” How Galveston Texas Rotarian Karla Klay spearheaded the nonprofit Artist Boat, which has already saved 800 acres of wetlands originally earmarked for industrial development. She and community partners have turned the land into a Coastal Heritage Preserve with eco-tours and outdoor art adventures involving over 80,000 school-age children.

“[Eco Club draws 'members of the future](#),” on the Rotary Club of Eco Milano. This article features



ESRAG members Olderico Caviglia and Franz Müller (who was just elected to the ESRAG Board). The article includes tips for founding an eco-club, with advice from past ESRAG director and membership chair Steve Solbrack of Twin Cities Eco Club, Minnesota, US.

[“It’s Easy Being Green.”](#) How ski resort manager Joey O’Brien heeded the signs of global warming through its devastating impact on his industry. Now a member of the Rotary Club of Canmore near beautiful Lake Louise in western Canada, he went on to create his own environmental consulting firm, [SustainDriven](#), and to prove that major sporting events like the Banff Marathon can be run with zero or minimal environmental impact. Joey is now also an ESRAG director. The article includes several actions he recommends to reduce carbon emissions and other pollution generated by clubs and individuals. Take action now, he recommends, or “you will be looking at your grandchildren in 20 years and trying to explain why you chose to do nothing.”

[Past Rotary President Ian Riseley’s message](#) as Rotary Foundation Chair on the impact of giving to The Rotary Foundation. As an example, he cites Foundation grants to aid the economic recovery of farmers from the devastating bushfires in Australia in 2019-20, “the result of extreme drought, global warming, and adverse weather conditions.” Kudos to *Rotary Magazine* for the kind of reporting Rotarians relish: projects you can replicate with your club or community.

*Photo by Ariel Miller: Franz Müller, RC of Milano Eco, chatting with ESRAG Board Chair Pat Armstrong at the Rotary International Convention in Houston.*

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## **The Environmental Sustainability Rotary Action Group**

operates in accordance with Rotary International policy,  
but is not an agency of, or controlled by, Rotary International.

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