



Humanitarian Activities  
Committee

## IEEE HAC Third Quarter Report 2021

*IEEE HAC Inspires, Connects, and Empowers IEEE Volunteers*

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# Sustainably Speaking: A Note from the IEEE HAC Chair

## *Celebrating IEEE HAC Accomplishments from July – September 2021*

Dear IEEE Colleagues,

I'm excited to share the major milestones that IEEE HAC/SIGHT have accomplished in the third quarter. Of special interest is that IEEE SIGHT now has over 20,000 individual members and more than 200 SIGHT Groups. I'm thrilled to see these milestones reached in SIGHT's 10<sup>th</sup> anniversary year. SIGHT members and Groups are the heart and soul of IEEE HAC activities, and these accomplishments are due to their engagement – thank you! To support the growing network of SIGHT Groups, the SIGHT Steering Committee has finalized the IEEE SIGHT Group Operations Handbook to promote consistency in Group reporting, structure, and activities. The Handbook was approved by IEEE HAC and will be publicized through the end of the year.

Another HAC achievement of which I am very proud is the success of our 2021 Projects programs. HAC received 385 project proposals from 45 countries through the HAC/SIGHT Calls for Proposals and the joint Calls for Proposals with IEEE Region 10 and the IEEE Electron Devices Society (EDS). So far, 74 projects have been awarded funding. There will be one more Call for Proposals with the IEEE Antennas and Propagation Society (AP-S) starting in November. I consider the successful joint programs with IEEE Societies a major “win” of 2021 and look forward to seeing this model continue into 2022.

HAC continues to plan more ways in which we can empower volunteers at a grassroots level. Discussions are underway with leadership from the IEEE China Council, IEEE Japan Council, and IEEE Africa Council. In this report, you will learn more about the collaborations HAC is fostering across the board – within and beyond IEEE. For example, HAC-hosted a panel at [The Global Sustainable Technology & Innovation Community \(G-STIC\) Conference](#). I'd like to thank those programs for investing in a shared future, as we work together to make IEEE a world leader in the sustainable development space.

On a related note, I'm thrilled to invite you to the [IEEE HAC Global Summit 2021](#). I am confident this will be a meaningful time to learn from leaders such as our IEEE President Ms. Susan K. Land; Mr. Houlin Zhao, the International Telecommunication Union (ITU) Secretary-General; Dr. Paola Vega Castillo, Minister of Science, Technology and Telecommunications, Costa Rica; Dr. Vint Cerf, Vice President and Chief Internet Evangelist, Google; and Ms. Iana Aranda, President, Engineering for Change. [Registration](#) is free for all SIGHT members.

I've received the wonderful news that I will continue in 2022 as the HAC Chair. I am humbled and honored to be re-appointed and look forward to continuing this journey with you to offer meaningful, impactful programs to build a better future for marginalized communities around the world.

Stay safe and healthy,  
Sampathkumar Veerarahavan, 2021 - 2022 HAC Chair



# IEEE HAC Global Summit 2021

*9 – 10 November 2021*

*Registration is Now Open!*



# ***IEEE HAC Strategic Objectives and Major Programs***

# IEEE HAC Strategic Objectives & Major Programs for 2021

- Increase engagement with IEEE Societies: pilot **IEEE Society project co-funding program**
- Strengthen involvement with IEEE Regions: pilot **IEEE Region project co-funding program**
- **Activate collaborations with MGA, EAB, TAB, and Standards**: pilot joint strategic initiatives
- Host at least **two humanitarian technology and sustainable development project Calls for Proposals**
- Offer **professional skill development and education materials** on humanitarian technology and sustainable development topics
- Grow recognition of a **coordinated HAC/SIGHT Brand**
  - Host first-ever IEEE HAC Global Summit (virtual in 2021)
  - Launch IEEE HAC/SIGHT Sustainable Development Newsletter (achieved in January)
  - Publish IEEE HAC reports for the IEEE Board of Directors and other external stakeholders
- Lead **global collaboration efforts** with international agencies and industry: joint programs with United Nations agencies
- Implement **operational and process excellence** to align with best practices
  - Update the HAC Operations Manual
  - Formalize SIGHT Group Operations Handbook

# IEEE HAC Collaboration Efforts from the Third Quarter



IEEE Japan Council



**IEEE SA**  
STANDARDS  
ASSOCIATION

IEEE Foundation



IEEE Ithaca Section



Science Summit at UNGA76

IEEE China Council



IEEE Antennas and  
Propagation Society

# IEEE HAC & IEEE MGA Entity Collaborations

HAC is engaging with all IEEE Regions and several additional Member & Geographic Activities (MGA) entities to strategically nurture grassroots humanitarian technology and sustainable development volunteer efforts in their respective areas.

- HAC met with the IEEE China Council and the IEEE Japan Council to explore collaboration opportunities.
- IEEE HAC met with the IEEE Africa Council to discuss how to best foster opportunities in their area. The Africa Council is also offering guidance and structure for an IEEE Student Branch in Ethiopia. The Student Branch recently formed a SIGHT Group, but as Ethiopia does not have an IEEE Section, the Africa Council volunteered to act as its parent entity for the time being. Upon request of HAC, the Chair of the Africa Council is providing mentorship for the new SIGHT Group as they revise a project proposal that was submitted to the second IEEE HAC/SIGHT Call for Proposals of 2021.
- Regions 1 – 6 have historically had far fewer humanitarian and sustainable development activities than other IEEE Regions. As such, HAC has been seeking out interest and aiming to cultivate new activities and the recognition that one does not need to leave the country in order to make a difference. Rather, there are plenty of local opportunities, no matter where you live. The Ithaca Section in Region 1 is one such Section that is interested but has been trying to determine what to do. HAC connected them with IEEE Standards & Projects for Agriculture (SA Ag) (see more on slide 9) for a potential collaboration and project with a local organization training the next generation of sustainable farmers – many of whom are women and refugees.



# IEEE HAC & IEEE Society Collaborations

HAC is fostering stronger collaboration with IEEE Societies to build complementary avenues to engage with Society members and utilize best-in-class technology to address sustainable development challenges.

- The **IEEE Antennas and Propagation Society (AP-S)** made a contribution of **US\$25,000** to the IEEE SIGHT Fund of the Foundation in order to collaborate with HAC and conduct a [special Call for Proposals](#) this year. The Call will solicit projects from AP-S chapters that utilize AP-S-relevant technology to address local community challenges and will be open to receive submissions from 15 November 2021 through 15 January 2022. Awards of up to US\$3,000 will be made to selected projects that present a convincing plan to a) understand the real needs of a local community or local stakeholder organization and b) complete in no more than six months' time a pilot project utilizing AP-S-relevant technology to address those local community challenges.
- The **IEEE Electron Devices Society (EDS)** and HAC held a special Call for Proposals to support projects in EDS chapters that utilize EDS-relevant technology to address local community challenges. **Eleven proposals** from six countries and three IEEE Regions were submitted, and four proposals have been awarded funding so far. The remaining funding decisions will be made in November.
- HAC hosted two sessions at the **2021 IEEE PES/IAS PowerAfrica conference**. One keynote session, "Frontiers of Sustainable Technologies," was delivered by the HAC Chair, and the other was a workshop, "Best Practices to Design and Deliver High-Impact IEEE HAC/SIGHT Sustainable Development Projects."

Special Call for Proposals on AP-S-Relevant Technology for Local Community Challenges

IEEE AP-S and IEEE HAC Projects

Open Submission  
15 November 2021 - 15 January 2022

IEEE Antennas and Propagation Society

IEEE Humanitarian Activities Committee

2021

IEEE HUMANITARIAN ACTIVITIES COMMITTEE

Panel

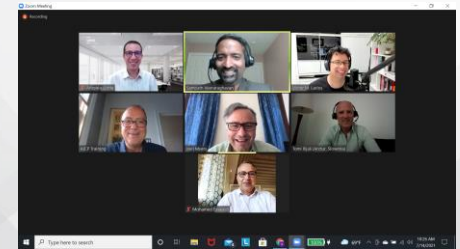
Topic: Best Practices to Design and Deliver High-Impact IEEE HAC/SIGHT Sustainable Development Projects

Description:  
In this workshop, participants will learn about the best practices and strategies to design and deliver successful IEEE Humanitarian Activities Committee (HAC) projects. Specifically, we will draw on elements of successfully funded projects, resources available to formulate an effective proposal, and various aspects of program management to drive HAC projects from design to launch. We will share lessons learned from recently completed HAC projects. Further, we will explore how best-in-class technologies can be leveraged to solve pressing global humanitarian challenges.

https://ieee-powerafrica.org | info@ieee-powerafrica.org

# IEEE HAC & IEEE Entity Collaborations

- HAC is developing an exciting new collaboration with [IEEE Standards & Projects for Agriculture](#) (SA Ag) that pairs grassroots HAC/SIGHT agriculture-related projects with relevant SA standards and resources.
- Planning for the IEEE HAC pilot with IEEE Women in Engineering (WIE) is well underway, as volunteer leaders determine affinity groups that will take part.
- HAC continues to foster a strong partnership with the IEEE Foundation, as we find complementary avenues to meet the emerging needs of IEEE members.
- The HAC Chair joined the [7th IEEE World Forum on the Internet of Things](#) to speak about “Advancing AI-Driven Social Innovations.”
- The HAC Chair is a mentor for the IEEE Future Networks’ (FNI) [Connecting the Unconnected](#) (CTU) Challenge, and will be a speaker at the CTU Summit in November.



# ***IEEE HAC Third Quarter 2021 Highlights***

# Projects



**HAC fosters opportunities for hands-on, career-relevant experience through projects**





# IEEE HAC/SIGHT Second Call for Proposals of 2021

Call for Proposals: COVID-19 Response & Pressing Community Needs

IEEE HAC/SIGHT Projects

Rolling Submission  
12 July - 16 August 2021

IEEE Humanitarian Activities Committee | IEEE SIGHT Special Interest Group on Humanitarian Technology

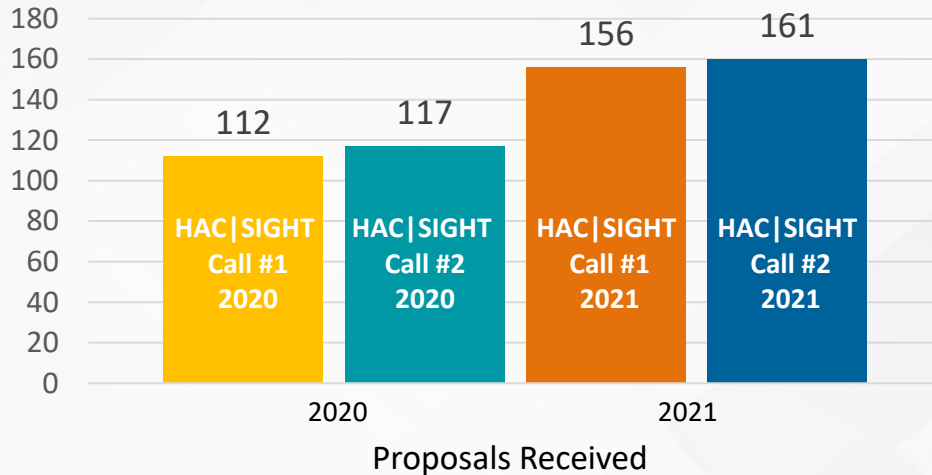
Find all the details at:  
[hac.ieee.org/funding-opportunities/covid-19-projects](https://hac.ieee.org/funding-opportunities/covid-19-projects)

- The second HAC/SIGHT Call for Proposals to support projects that address local realities of the COVID-19 situation, or other issues of pressing community need was open from 12 July – 16 August.
- A record-breaking **161 proposals** were submitted from **26 countries and six IEEE Regions**, including the first proposals received from:
  - China
  - Ethiopia
  - Fiji
  - Hungary
  - Italy
  - Spain
- So far, **22 projects** from four IEEE Regions have been awarded funding and will be implemented in twelve different countries. More funding decisions will be made in November.

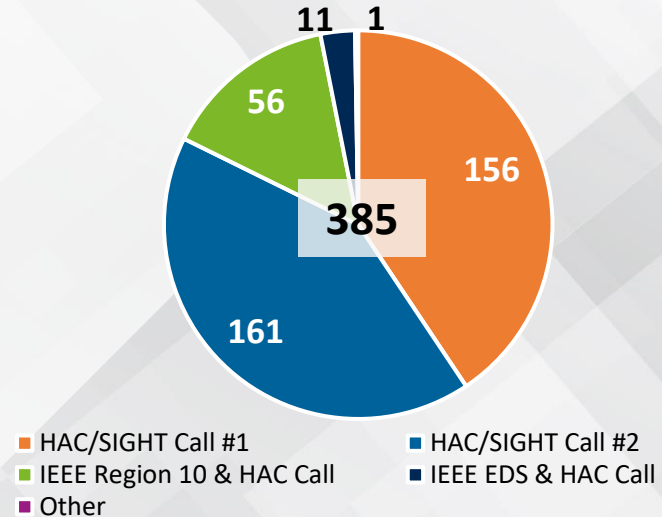


# Comparison of 2020 – 2021 IEEE HAC Calls for Proposals

### IEEE HAC/SIGHT Calls for Proposals (2020 – 2021) Comparison



### Total HAC Projects Proposals Received 2021 Year-to-Date\*



\*This includes the 2021 HAC partnership programs

# Collaboration

**HAC collaborates across and  
beyond IEEE to increase sustainable  
development innovation**



*\*picture from 2019*

# HAC's Collaboration Efforts Beyond IEEE

Sharing what IEEE HAC/SIGHT are doing with an international audience of sustainable development changemakers is an invaluable opportunity to forge new connections and develop collaborations.



- HAC was represented at the official launch event of the [WSIS Stocktaking Repository of Women in Technology](#). The event, and ongoing efforts, concentrate on engaging women leaders in the sustainable development space. More than 160 global leaders attended the event. The recording can be found [here](#).



- The HAC Chair participated in the [Science Summit at UNGA76](#), a major contribution to advancing Science for the United Nations Sustainable Development Goals (SDGs). He spoke about the role of professional organizations like IEEE in the panel, “[Future Frontiers of the Global Economy and Society: the Role of Science and Collaborative Research.](#)”
- HAC-hosted a panel at [The Global Sustainable Technology & Innovation Community \(G-STIC\) Conference](#). The session, “Leveraging a Global Network of Technologists to Address Local Challenges in the Face of a Pandemic” brought together key IEEE leaders to demonstrate how technology plays a vital role in achieving the United Nations Sustainable Development Goals (UN SDGs).



# IEEE HAC Collaboration Efforts in 2021 So Far



EPICS IN IEEE



IEEE Region 2



IEEE SA  
STANDARDS  
ASSOCIATION



IEEE China Council



IEEE Ithaca Section

Humanitarian Activities  
Committee



IEEE Region 5



IEEE students



IEEE Japan Council



IEEE Foundation



IEEE TRANSMITTER™

## Achieving Shared Goals Through Collaboration

Working groups with representatives from IEEE HAC and IEEE Societies, Regions, IEEE programs and organizational units (OUs), and external organizations continue to define plans for collaborative engagement. These collaboration efforts will be coming to fruition in the coming months, and news of further developments will be shared in the next quarterly report.

If you have an idea for how your Region, Society, or other IEEE OU can partner with IEEE HAC, write to [hac-office@ieee.org](mailto:hac-office@ieee.org).

# Education & Training



HAC provides educational resources on the role of engineering and technology in sustainable development



*\*picture from 2019*



## Recent IEEE HAC & SIGHT Webinars

- The IEEE HAC Education Committee held a webinar on 15 September called, “Clochard Alert’ an Alert System for the Homeless - From Student Project to Industrialization.” The session featured the work of the IEEE SIGHT Germany Section who developed the alert system that started as a practical lecture and became a product that could be mass produced and marketed. The [recording](#) is available on demand on the HAC website.
- The IEEE HAC Education Committee held a webinar on 12 October to inform people about the free, interactive IEEE HAC/SIGHT courses on the IEEE Learning Network and how they can impact an individual's life. The [recording](#) is available on demand on the HAC website.
- The IEEE SIGHT Operations Subcommittee hosted a webinar on 01 October to provide guidance on the recent updates to the SIGHT Group Petition Form and cover the characteristics of a strong petition. The [recorded session](#) is available on the SIGHT website.
- In addition, the HAC Assessment Committee is working closely with the HAC Education Committee to better assess the educational outputs and outcomes of the webinars.

IEEE  
Humanitarian Activities Committee

IEEE SIGHT  
Special Interest Group on Humanitarian Technologies  
Advancing Technology to Help

“Clochard Alert” an Alert System for the Homeless - From Student Project to Industrialization

Date & Time: 15 September 2021 at 10:00am EDT

Presenter: Dr. Christoph Baer, IEEE Germany Section Vice Chair and IEEE SIGHT Germany Section Founder

Join this session hosted by the HAC Education Committee to learn deeper insights of the technology developed, and the project flow from the involvement of students in a lecture to a final product.

Register to attend at <http://bit.ly/HACWebinar>

www.ieee.org

IEEE  
Humanitarian Activities Committee

IEEE  
Advancing Technology to Help

IEEE HAC/SIGHT Courses on the IEEE Learning Network

Join this webinar to learn about the impact that the humanitarian technology and sustainable development courses developed by IEEE HAC/SIGHT and hosted on the IEEE Learning Network can have on the life of an individual. Hosted by the IEEE HAC Education Committee.

Date & Time: 12 October 2021 at 10:00 am (EDT)  
Duration: 60 minutes

<https://bit.ly/HACWebinarLLN>

Ms. Sarah Williams, IEEE Learning Network Programs, @sarahwilliams

Ms. Ugurcan Sahinbas, IEEE Learning Network, @ugurcansahinbas

www.ieee.org

# IEEE SIGHT

Special Interest Group on  
Humanitarian Technology



Through its global network, HAC  
creates impact in underserved  
communities around the world





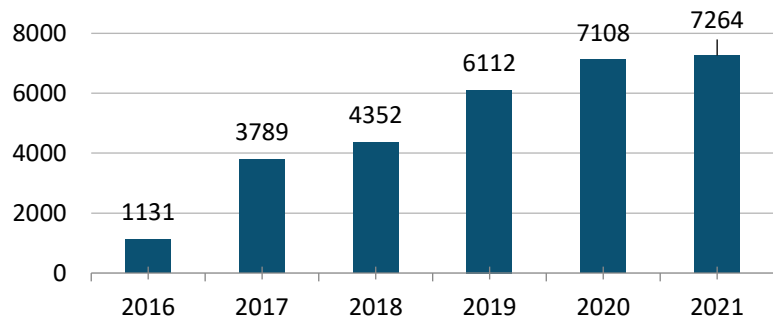
## IEEE SIGHT – Celebrating 10 Years of IEEE SIGHT



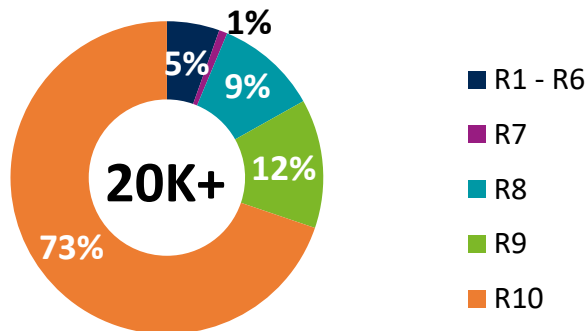
- IEEE SIGHT continues to set new records for the program with over **20,000 individual members** as of 07 October 2021
- **Eight** new SIGHT Groups established in the third quarter of 2021, including the first SIGHT Group to be established in South Africa (South Africa Section SIGHT). There are now a total of **202 SIGHT Groups** that have been established.
- Implementing Operational and Process Excellence:
  - The SIGHT Steering Committee finalized the **SIGHT Group Operations Handbook** to promote consistency in Groups across the world, provide guidelines to help Groups form and stay active, and ensure correct information about Group structure is readily available. The Handbook has been approved by IEEE HAC.
  - The SIGHT Operations Subcommittee updated the **SIGHT Group petition form** and created supporting materials to coordinate with existing HAC/SIGHT educational resources on the ILN.
  - The SIGHT Steering Committee has made improvements to the **IEEE SIGHT Awards** nomination and evaluation process. The Awards nomination period will be open from 15 October – 08 November. See the [SIGHT website](#) for more details.

# SIGHT Membership – Indicators of Engagement and Growth

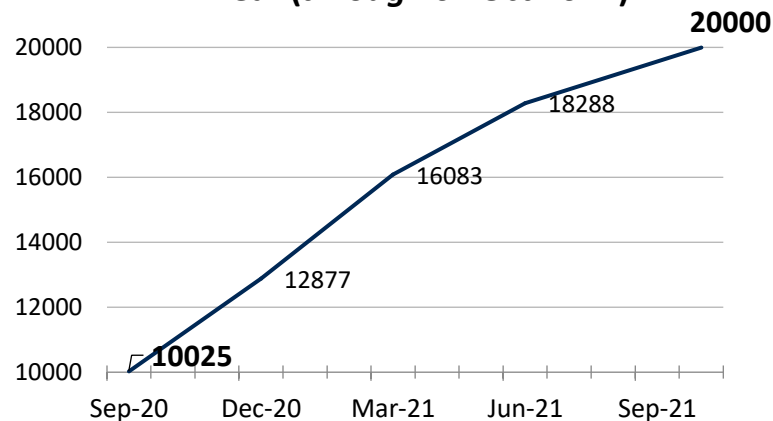
### New SIGHT Members by year



### Active Members by Region



### SIGHT Membership Growth Year over Year (through 07 Oct 2021)



# *Looking Ahead*



# Upcoming Events, Funding Opportunity, and the Inaugural HAC Global Summit

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- **4 November** – HAC participation in the [IEEE Future Networks' \(FNI\) Connecting the Unconnected Summit](#)
- **9 November** – IEEE HAC Global Summit Icebreaker
- **10 November** – [IEEE HAC Global Summit](#) – The first-ever IEEE HAC Global Summit 2021 will be a platform to bring together IEEE members, leaders from a variety of IEEE entities, and representatives from external partners in the sustainable development space to exhibit the breadth and width of HAC engagement, showcase grassroots HAC/SIGHT projects, and contribute to the global discussion on the application of humanitarian technology to address local challenges. [Registration](#) is open!
- **15 November** – the joint [IEEE AP-S and IEEE HAC Special Call for Proposals](#) begins accepting submissions
- **05 – 11 December** – 2021 SIGHT Week Celebration

# Opportunities with HAC/SIGHT

- **Identify** potential opportunities for collaboration and joint programs
- **Publicize** HAC/SIGHT opportunities
- **Add** free [SIGHT membership](#) to your IEEE membership
- **Form** [a SIGHT Group](#) to assess needs in your local community, apply for financial resources, and implement a sustainable technological solution
- **Take part** in the free, online courses on the [IEEE Learning Network \(ILN\)](#) that equip participants with a basic understanding of humanitarian technology and sustainable development topics
- **Read and share** this report and the other [2021 Quarterly Reports](#)



Write to us with your ideas at

[hac-office@ieee.org](mailto:hac-office@ieee.org)

# *Thank You*



# *Appendix*

# *HAC Unique Offerings & Benefits*

# About the IEEE Humanitarian Activities Committee

The IEEE Humanitarian Activities Committee (HAC) provides leadership as well as a suite of resources that inspire and enable IEEE volunteers around the world to carry out and support impactful humanitarian technology and sustainable development activities at the local level.

HAC's work focuses on:

- Raising **awareness** – HAC provides programs that engage over 19,700 members in **123 countries** and all **10 IEEE Regions**
- Providing **training** – **540+ individuals** have participated in HAC/SIGHT courses on the IEEE Learning Network
- Supporting humanitarian technology and sustainable development **activities** – **385 project proposals** from **45 countries** received so far in 2021; **74 projects awarded funding**
- Creating **sustainable development community** through collaborations within and beyond IEEE - Pilots in progress with IEEE Regions, IEEE Societies, other IEEE entities, and external organizations

# Benefits to Engaging in Humanitarian Technology Activities with IEEE HAC/SIGHT

Training and  
Awareness

Professional  
Development

Greater  
Purpose

Project Funding

Connection to a  
Global Network  
(IEEE SIGHT)

Sustainable  
Development  
Community

# IEEE Societies Collaborating with IEEE HAC/SIGHT – a Win-win Model

**Individuals: Enrich their volunteer experience** when they join a diverse community of locally-focused engineers to leverage technology for the benefit of those who need it most

**Chapters: Develop engineering skills** by implementing an IEEE HAC/SIGHT project to allow Society members to apply their engineering skills in real world, humanitarian technology and sustainable development settings

**Society: Collaborate for exponential impact.** Choosing to partner with IEEE HAC/SIGHT to jointly fund projects or rollout other initiatives means engaging existing members and creating a mechanism to attract potential members to get involved with Society activities.

“[EDS and HAC] jointly funded a very successful irrigation project in Nicaragua. Thanks to this partnership EDS was able to enhance the allocated funds and benefit from the vast expertise of HAC in managing projects and leveraging their local volunteer pool. It was a real win-win proposition that I can strongly recommend to other societies.” – *Fernando Guarin, IEEE Electron Devices Society (EDS) Past President, IEEE Fellow*

