



January 2021

Upcoming Events!

Monthly Meeting - Jan 12th

### SWFL ASHRAE Chapter Meeting Announcement \*\*\*Membership Promotion Night\*\*\*

**Date:** Tuesday, January 12th, 2021  
**Location:** Crown Plaza at Bell Tower Shops (13051 Bell Tower Road, Ft. Myers)  
**Start Time:** 5:30 - 6:45 - Networking  
6:45 - 8:00 - Dinner and Main Program  
**Cost:** COST: \$35.00 PER ATTENDEE – RESERVATIONS ARE A MUST  
NO COST FOR COLLEGE STUDENTS WITH A VALID STUDENT I.D.  
Pre-Pay via [www.paypal.com](https://www.paypal.com) to [swfl.ashrae@gmail.com](mailto:swfl.ashrae@gmail.com)  
[Please click here to RSVP!](#) [Register for \(1\) PDH Credit](#)

#### Pandemic Precautions

SWFL ASHRAE is committed to the health and safety of its members and their families. For the foreseeable future masks will be a requirement for all meetings in accordance with CDC recommendations.

SWFL ASHRAE will be adhering to social distancing guidelines by increasing table spacing, serving individual meals, and having hand sanitizer available.

We ask if you are feeling under the weather or have recently traveled out-of-state or out of the country that you please participate remotely.

#### Membership Promotion - Bill Boga

Happy New Year everyone! This past year was fraught with many challenges but the SWFL Chapter was able to overcome, maintaining strong membership numbers by offering multiple ways to participate in our monthly meetings. It is my goal to continue that momentum and grow our chapter. If you have an associate, coworker, or friend you think might be interested, I encourage you to reach out and offer an invitation. We have several events coming up this year including our annual fishing tournament, I hope to see you all there as well as some new faces.

### Main Program: Space HVAC

A webinar on the Present State and Future of Environmental Control Systems in Space as seen in the ASHRAE Journal, vol. 62, no.7, July 2020 by John Constantinide, P.E.; Hamidreza Najafi Ph.D. "Space is becoming the next medium for business opportunities, advancements in technologies and exploration for inhabiting planets, moons and areas outside our planet. Companies are developing systems that would permit short-term and, eventually long-term inhabitation of the moon, Mars and other extraterrestrial bodies; start-up firms are focusing on capsules and rockets for human spaceflight. With regulations relating to space launch and travel established and continually being reviewed in numerous countries, ASHRAE has an opportunity to propose standards, guidelines, and codes relating to the indoor environment of extraterrestrial transport vessels, waypoint stations and building."

#### Guest Speaker #1: John Constantinide, P.E.

John Constantinide is a Florida-licensed mechanical engineer, with experience on energy management, design, and design-build projects for the U.S. Eastern Range supporting the space mission. He also has extensive experience on design and design-build projects of industrial, institutional, and commercial facilities for government, aviation, and health care entities. John is also a Certified Energy Manager, Certified Fire Protection Specialist, and LEED AP with a BD+C specialization. In ASHRAE, he is currently serving as Chair of the Building EQ Committee, Vice Chair of TC 5.2 Duct Design, and Handbook Subcommittee Chair for TC 7.6 Building Energy Performance.

#### Guest Speaker #2: Hamidreza (Hamid) Najafi, Ph.D.

Dr. Hamidreza Najafi is an Assistant Professor of Mechanical Engineering and the Director of the Heat Transfer Lab at Florida Institute of Technology. He conducts research and teaching in the areas of design and optimization of thermal/energy systems, renewable energy, and computational heat transfer. His past experiences include working as a lead engineer in Alabama Industrial Assessment Center under a 2011-2015 U.S. Department of Energy grant, where he was focused on improving efficiency in industrial energy systems and conducted assessments for more than fifty manufacturing companies located in Alabama, Mississippi, and Georgia. In ASHRAE, Dr. Najafi is the Student Branch Advisor for the ASHRAE Florida Institute of Technology Student Branch and member of Technical committees 6.7 Solar and Other Renewable Energies and 7.6 Building Energy Performance. He is also the Co-Chair of the Renewable Energy and Energy Conversion Technical Committee of ASME Advanced Energy Systems Division.

A message from Mr. James Martin

SWFL ASHRAE President

Greetings SWFL Chapter,

I hope everyone had a great New Year and Holiday Season!

We are starting the year off with our very first trip into outer space (HVAC). We are lucky enough to have the engineers who wrote the latest update on the Present State and Future of Environmental Controls in Space to present to us virtually on this exciting topic. I am sure this presentation is going to be out of this world!

Be on the look out for updates about future meetings as well as our annual backwater fishing tournament. We are excited to leave 2020 in the dust as we blast off into 2021.

Thanks,  
James Martin  
SWFL Chapter President 2020-2021

SWFL ASHRAE Chapter

|                     |                |                 |                  |
|---------------------|----------------|-----------------|------------------|
| President:          | James Martin   | Newsletter:     | Tony Amitia      |
| President Elect:    | James Martin   | Webmaster:      | TBD              |
| Vice President:     | David Moorhead | Sustainability: | David Jaworski   |
| Secretary:          | David Moorhead | Golf Chair:     | TBD              |
| Treasurer:          | Woody Wilson   | Fishing Chair:  | TBD              |
| Research Promotion: | David Moorhead | Reception:      | Tony Amitia      |
| Historian:          | John Stischok  | BOG 1:          | Kathleen Simpson |
| Membership:         | Bill Boga      | BOG 2:          | Pat Graef        |
| CTTC:               | Trey Dougherty | BOG 3:          | Bill Malphus     |
| YEA:                | Gates Ivy      | BOG 4:          | Jason Hardman    |
| Electronic Comm.    | William Mejia  | BOG 5:          | Ashley Fernandez |
| Programs:           | Trey Dougherty |                 |                  |
| Refrigeration:      | William Mejia  |                 |                  |
| Honors and Awards:  | Kathy Schmidt  |                 |                  |
| GAC Chair:          | Gena Knight    |                 |                  |

For Chair and Officer contact information, please visit [www.SWFLASHRAE.org](http://www.SWFLASHRAE.org)

Government Activities - Gena Knight

Building sector emissions hit record high, but low-carbon pandemic recovery can help transform sector – UN report

- CO2 emissions increased to 9.95 GtCO2 in 2019. The sector accounts for 38% of all energy-related CO2 emissions when adding building construction industry emissions
- Direct building CO2 emissions need to halve by 2030 to get on track for net zero carbon building stock by 2050
- Governments must prioritize low-carbon buildings in pandemic stimulus packages and updated climate pledges

**Nairobi, 16 December 2020** – Emissions from the operation of buildings hit their highest-ever level in 2019, moving the sector further away from fulfilling its huge potential to slow climate change and contribute significantly to the goals of the Paris Agreement, according to a new report released today. However, pandemic recovery packages provide an opportunity to push deep building renovation and performance standards for newly constructed buildings, and rapidly cut emissions. The forthcoming updating of climate pledges under the Paris Agreement – known as nationally determined contributions or NDCs – also offer an opportunity to sharpen existing measures and include new commitments on the buildings and construction sector.

The 2020 Global Status Report for Buildings and Construction, from the Global Alliance for Buildings and Construction (GlobalABC), found that while global building energy consumption remained steady year-on-year, energy-related CO2 emissions increased to 9.95 GtCO2 in 2019. This increase was due to a shift away from the direct use of coal, oil and traditional biomass towards electricity, which had a higher carbon content due to the high proportion of fossil fuels used in generation.

When adding emissions from the building construction industry on top of operational emissions, the sector accounted for 38 per cent of total global energy-related CO2 emissions.

Full Article



## Government Activities - Gena Knight

### Department of Energy Releases Energy Storage Grand Challenge Roadmap

WASHINGTON, D.C. – Today, the U.S. Department of Energy (DOE) released the Energy Storage Grand Challenge Roadmap, the Department’s first comprehensive energy storage strategy. Announced in January 2020 by U.S. Secretary of Energy Dan Brouillette, the Energy Storage Grand Challenge (ESGC) seeks to create and sustain American leadership in energy storage. In addition to concerted research efforts, the Roadmap’s approach includes accelerating the transition of technologies from the lab to the marketplace, focusing on ways to competitively manufacture technologies at scale in the United States, and ensuring secure supply chains to enable domestic manufacturing. The Roadmap includes an aggressive but achievable goal: to develop and domestically manufacture energy storage technologies that can meet all U.S. market demands by 2030.

“Energy storage has an important role to play in our Nation’s energy future,” said Secretary Brouillette. “DOE worked closely with a wide range of stakeholders and partners to develop this actionable Roadmap to help bring promising energy storage technologies to market and position the United States as a global leader in energy storage solutions.”

DOE is also releasing two companion ESGC reports: the 2020 Grid Energy Storage Technology Cost and Performance Assessment and the Energy Storage Market Report 2020. These reports provide data that informed the Roadmap and provide accessible and easily referenced information for the entire energy stakeholder community.

The Roadmap outlines a Department-wide strategy to accelerate innovation across a range of storage technologies based on three concepts: Innovate Here, Make Here, Deploy Everywhere. Recognizing the breadth of storage technologies and the ambitious nature of the goal, DOE has identified initial cost targets focused on user-centric applications with substantial growth potential. With six use cases that identify energy storage applications, benefits, and functional requirements for 2030 and beyond, the ESGC has identified cost and performance targets.

[Full Article](#)

## Sustainability - Dave Jaworski

### Farm of the Future

A new automated farm at Babcock Ranch is designed to produce fresh lettuces and herbs for more than a million Southwest Floridians — and if that works out, to expand this business model across the world as an alternative to traditional open field farming and a part of the answer to the harsh growing conditions that climate change promises to intensify in the sub-tropics or locations across the globe.

If all that sounds like a lofty goal, then the country’s “first solar-powered town” would seem to be an apt location for this ambitious but practical-minded, eco-friendly pilot project, Finn Farms. Its owner, founder and CEO Oskari Kariste, spoke with Babcock Ranch Telegraph about the progress of the 110,000-square-foot greenhouse on a call from his native Finland. Construction set to be finished by the end of the year.

While Finn Farms is expected to have a high yield, the initial start-up costs are more than \$10 million, its owner said. Starting early next year, this hydroponic and — as you might expect— solar-powered greenhouse will begin production that will continue every day. The farm will produce basil, cilantro, mint and thyme, as well as green, red and baby leaf lettuces.

[Full Article](#)

## Webmaster - William Mejia

Our Website has a new face. With the purpose to make our website more flexible and integrated with other platforms. We switch from GoDaddy to Wix. We still in construction phase.

Please remember that domain is [www.swflashrae.org](http://www.swflashrae.org)

2020-2021 ANNUAL SPONSORS  
THANK YOU FOR YOUR SUPPORT!



## DIAMOND LEVEL

***Southwest Florida Trane***



## GOLD LEVEL

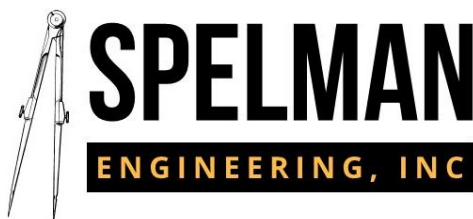


## SILVER LEVEL



turn to the experts™ 

## BRONZE LEVEL





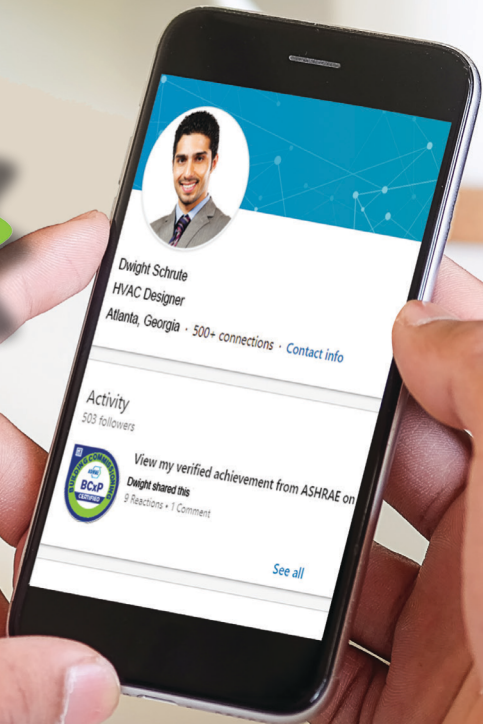
Certified

# ASHRAE Certification

Advance Your Career Today!

**NEW!**  
**DIGITAL BADGING**

Helps you get the recognition  
you've earned.



With already more than 3,000 certifications earned to-date, ASHRAE programs were founded to meet the industry needs of today and provide value to thousands of built-environment professionals, employers and building owners.

[ashrae.org/certification](http://ashrae.org/certification)