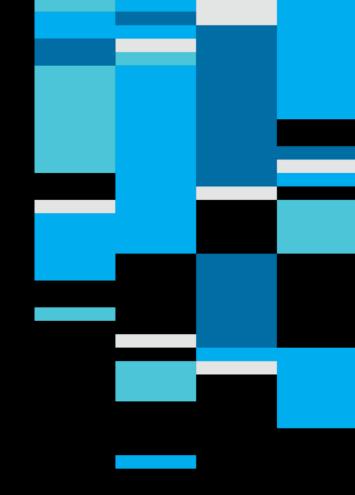


# IEEE STANDARDS ASSOCIATION

RAISING THE WORLD'S STANDARDS

IEEE SA Standards Board (SASB) New Member Orientation February 2025

Dr. Lei Wang, SASB Chair 2025







# ADVANCING TECHNOLOGY FOR HUMANITY

### **ABOUT IEEE**

- Inspiring a global community of innovation
- Where forward-thinking professionals collaborate to:
  - Discover what's next in tech innovation
  - Build technical communities
  - Shape and share research
  - Engage in Humanitarian activities
  - Create global standards



### **STANDARDIZATION**

Creating markets and protecting public safety and well-being through standards development.



#### **OVERVIEW**

2100+ standards in a broad range of industries—artificial intelligence systems, power and energy, consumer electronics, biomedical and healthcare, information technology, telecommunications, transportation, and more.

 Over 35,000 participants from over 160 countries

#### **PROVIDING**

- Development of globally open, market-driven standards that are voluntarily adopted, based on merit
- Collaboration and consensusbuilding platforms that adhere to fair and equitable practices, proven policies and procedures
- Two methods of standards development:
  - Individual
  - Entity

#### **SOME EXAMPLES**

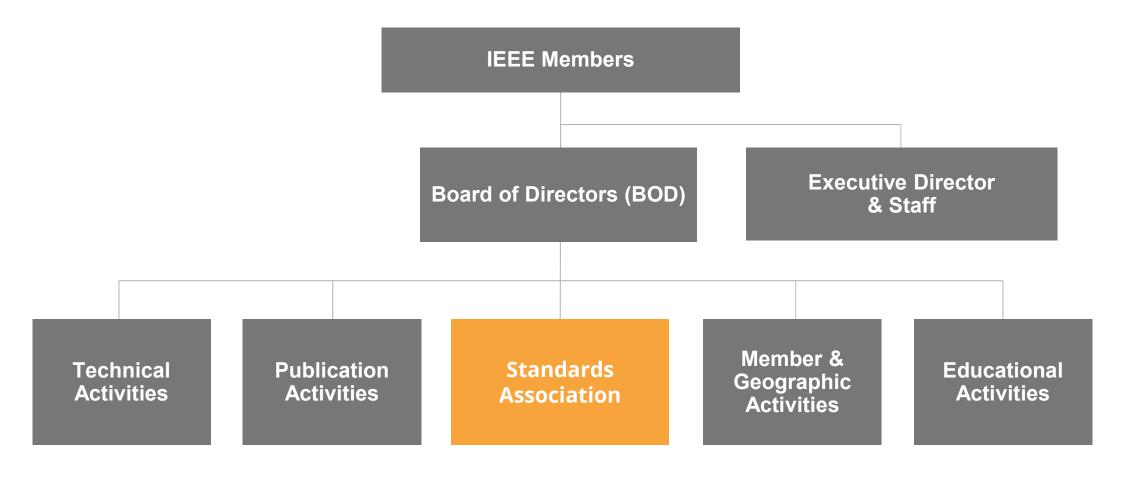
- Distributed Energy Resources IEEE 1547™ enabling smart interconnection and interoperability with the electricity grid
- Ethernet IEEE 802.3® & Wi-Fi IEEE 802.11® standards – keeping the world connected
- AI Systems—IEEE 7000™ standards addressing ways to protect personal data and help ensure safety in AI systems





### **IEEE STANDARDS ASSOCIATION**

### AN OU INSIDE OF IEEE





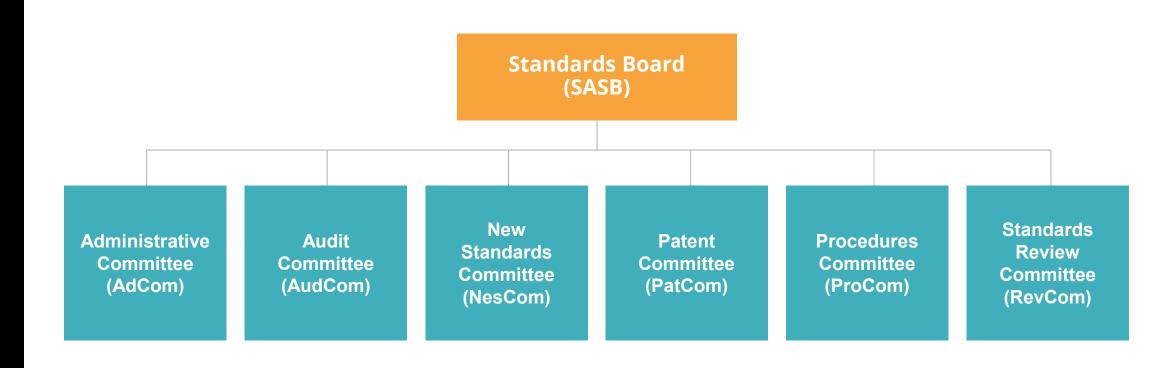
#### **IEEE SA Board of Governors (BOG)**

**IEEE SA Standards Board Entity Collaborative** (SASB) **Activities Governance Board (CAG)** Strategic and Emerging Nominations and Standards Conduct Appointments Committee Standards Committee Committee (N&A) (SESCom) Industry Connections Committee (ICCom) Registration Authority IEEE SA Finance Committee **NESC Main Committee** Committee (RAC) (SA FinCom) Open Source {Ad Hoc} IEEE SA Fellow Nominations Awards and Recognition Committee (OSCom) Support Committee (FelCom) Committee (ArCom)





# **COMMITTEES OF THE SASB**(ITSELF A COMMITTEE OF THE IEEE SA BOG)







## **IEEE SA Standards Board Scope**

The IEEE SA Board of Governors (BOG) established and appointed a Standards Board to:

- Encourage and coordinate the development and revision of IEEE standards
- Approve the initiation of IEEE standards projects
- Review them for consensus, due process, openness, and balance
- Give final approval to IEEE standards prior to publication and
- Process all necessary appeals.

See: https://standards.ieee.org/about/policies/sa-opman/sect5.html



### **IEEE SA Values**

# Five principles guide the IEEE standards development process

Consensus

**Due process** 

**Openness** 

Right of appeal

**Balance** 

#### This ensures:

- Collaboration and community building
- Global reach and timely market relevance
- Technical integrity and excellence by the Volunteers that participate in our process

See: <a href="https://standards.ieee.org/develop/">https://standards.ieee.org/develop/</a>



# **A Large and Diverse Ecosystem**

#### 110 Standards Committees in 35 Societies / Councils

IEEE Computer Society (C )	18	IEEE Electromagnetic Compatibility Society (EMC)	1
IEEE Power and Energy Society (PES )	15	IEEE Geoscience and Remote Sensing Society (GRSS)	1
IEEE Instrumentation and Measurement Society (IM )	11	IEEE Industrial Electronics Society (IES )	1
IEEE Communications Society (COM )	9	IEEE Intelligent Transportation Systems Society (ITS)	1
IEEE Vehicular Technology Society (VT)	7	IEEE Magnetics Society (MS )	1
IEEE SA Board of Governors (BOG )	6	IEEE Microwave Theory and Techniques Society (MTT)	1
IEEE Consumer Technology Society (CTS)	6	IEEE Nanotechnology Council (NTC )	1
IEEE Industry Applications Society (IAS )	6	IEEE Oceanic Engineering Society (OES)	1
IEEE Circuits and Systems Society (CASS )	4	IEEE Photonics Society (PHO )	1
IEEE Aerospace and Electronic Systems Society (AES )	2	IEEE Power Electronics Society (PEL )	1
IEEE Engineering in Medicine and Biology Society (EMB)	2	IEEE Reliability Society (RS )	1
IEEE Antennas and Propagation Society (APS)	1	IEEE Robotics and Automation Society (RAS)	1
IEEE Broadcast Technology Society (BTS )	1	IEEE Sensors Council (SEN )	1
IEEE Computational Intelligence Society (CIS )	1	IEEE Signal Processing Society (SPS )	1
IEEE Council on Electronic Design Automation (CEDA )	1	IEEE Society on Social Implications of Technology (SSIT)	1
IEEE Council on RFID (CRFID )	1	IEEE Systems, Man, and Cybernetics Society (SMC)	1
IEEE Dielectrics and Electrical Insulation Society (DEI )	1	IEEE Ultrasonics, Ferroelectrics and Frequency Control Society (UFFC)	1
IEEE Education Society (EDU )	1		



# Important to Remember

- Please keep in mind: All Standards Committees have their own culture, and it is not necessarily the same as your "Home" Standards Committee
- They may conduct business differently and that is not necessarily a bad thing
- When you take part in any IEEE SA governance activity, please remember that you are to act in the best interest of the IEEE SA and not your "Home" Standards Committee or your affiliation





### You and the IEEE SASB

## 1. Call for volunteers by IEEE SA Nominations and Appointments Committee (N&A)

 N&A recommends appointments of SASB Members to the IEEE SA Board of Governors (BOG)

#### 2. BOG appoints:

- Chair of Standards Board
- Members of Standards Board

#### 3. Chair of Standards Board appoints:

- Chairs of SASB Standing Committees
- Members of SASB Standing Committees
- SASB appeals pool

#### 4. SASB Members

- have full voting rights for SASB matters
- serve on at least one of SASB's Standing Committees, and
- are Ex-Officio Members (without voting rights, if not serving as a member) of NesCom and RevCom





# **Standing Committee Members**

- 1. You have been selected by the SASB Chair to participate in:
  - AudCom: Audit Committee
  - NesCom: New Standards Committee
  - RevCom: Standards Review Committee
  - ProCom: Procedures Committee (reserved for SASB Members only)
  - PatCom: Patent Committee (reserved for SASB or BOG Members only)
- 2. As a Standing Committee Member:
  - You have full voting rights in the committees you serve
  - You can participate in other Standing Committee and SASB meeting discussions, but you have no vote
- 3. For next year's appointments, if you are interested in serving on the SASB, please note this on your candidate form





### IEEE SA STANDARDS BOARD ROSTER

#### **2025 ROSTER:**

• Lei Wang: Chair

To be appointed by SASB: Vice Chair

• David Law: Past Chair

Alpesh Shah: Secretary, non-voting

#### **MEMBERS**

- Edward Au [TAB Rep.]
- Ted Burse
- Xiaofeng (Alfred) Chen
- Doug Edwards
- Nehad El-Sherif
- Travis Griffith
- Deborah Hagar
- Guido Hiertz
- Ron Hotchkiss
- Tyler Jaynes
- Thomas Koshy
- Howard Li

- Xiaohui Liu
- Kevin Lu
- Hiroshi Mano
- Daleep Mohla
- Annette Reilly
- Robby Robson
- Jon Rosdahl
- Dan Sabin
- Keith Waters
- Sha Wei
- Luyang (Eric) Zhang

#### **ADMINISTRATOR**

Dave Ringle





## **Audit Committee (AudCom)**

- Maintains baseline P&P documents
- Reviews and recommends SASB action on acceptance of procedures of <u>Standards Committees</u> and recognition of them as official Standards Committees if accepted, per IEEE SASB Bylaws 5.2.2.
  - Accept, visibly under development, not accepted
  - May be on SASB Consent Agenda or for individual action
- Will review selected Working Group (WG) P&P
- Goal: that all Standards Committees have fair and open processes and procedures, and that they comply with them





## **AudCom Members**

#### **2025 ROSTER:**

• Doug Edwards: Chair

#### **MEMBERS**

- Xiaofeng (Alfred) Chen
- Darren Galpin
- Travis Griffith
- Guido Hiertz
- Tyler Jaynes
- Thomas Koshy
- Joseph Levy
- Howard Li

- Johnny Lin
- Haiying (John) Lu
- Kevin Lu
- Daleep Mohla
- Annette Reilly
- Jon Rosdahl
- Donnie Swing
- Daidi Zhong

#### **ADMINISTRATOR**

Teresa Belmont





# **New Standards Committee (NesCom)**

- Makes recommendations to the SASB regarding approval of the Project Authorization Requests (PARs)
- Reviews Project Authorization Requests (PARs) to ensure that proposed projects are within the scope and purpose of IEEE, that standards projects are assigned to a proper Society or other organizational body, and that interested parties are appropriately represented in the development of IEEE standards
  - New standards, revisions, amendments, corrigenda
  - PAR content per requirements of NesCom Conventions
- Reviews PAR actions
  - PAR modifications, PAR extension requests, and withdrawal requests
- Meets during SASB meeting series and Continuous Processing





### **NesCom Members**

#### **2025 ROSTER:**

• Ted Burse: Chair

• Guido Hiertz: Vice Chair

• Xiaofeng (Alfred) Chen: Vice Chair

#### **MEMBERS**

- Edward Au
- Kit August
- Periklis Chatzimisios
- Yuan Chi
- Darren Galpin
- Amit Kumar
- Howard Li
- Johnny Lin

#### **ADMINISTRATOR**

Teresa Belmont

- Hiroshi Mano
- Daleep Mohla
- N. Kishor Narang
- Ramesh S.
- Dan Sabin
- Luyang (Eric) Zhang
- Daidi Zhong





# **Patent Committee (PatCom)**

- Provides oversight for use of patents in IEEE Standards
  - Letter of assurance form
  - Patent slide set
- Provides archive of patent letters of assurance
- May develop updates to patent policy for review by the SASB and BOG
- IEEE Legal Counsel provides legal support to PatCom





### **PatCom Members**

#### **2025 ROSTER:**

• David Law: Chair

#### **MEMBERS**

- Yvette Ho Sang (non-voting)
- Joseph Levy
- Kevin Lu
- Hiroshi Mano
- Robby Robson
- Dan Sabin

#### **ADMINISTRATOR**

Dave Ringle





# **Procedures Committee (ProCom)**

- Drafts refinements to procedures and proposes new procedures as necessary and submits its recommendations to the SASB
  - IEEE Standards Association Operations Manual
  - IEEE SA Standards Board Bylaws
  - IEEE SA Standards Board Operations Manual
- Work is in response to:
  - Changing Standards Board requirements
  - Directions from the Board of Governors
- Recommended changes are approved by SASB or BOG as required by the document being changed





### **ProCom Members**

#### **2025 ROSTER:**

• Robby Robson: Chair

#### **MEMBERS**

- Edward Au
- Ted Burse
- Doug Edwards
- Ron Hotchkiss
- David Law
- Xiaohui Liu
- Keith Waters
- Sha Wei

#### **ADMINISTRATOR**

Dave Ringle





# **Standards Review Committee (RevCom)**

- Makes recommendations on standards submitted for SASB approval or adoption
- Ensures that consensus has been achieved and due process has been followed
  - Ballot conduct, comment consideration
  - Mandatory coordination, legal review, copyright permissions
- Does not make formal technical judgments on content of proposed standard
- Meets during SASB meeting series and Early Consideration





### **RevCom Members**

#### **2025 ROSTER:**

• Keith Waters: Chair

#### **MEMBERS**

- Nehad El-Sherif
- Travis Griffith
- Deborah Hagar
- Ron Hotchkiss
- Yousef Kimiagar
- Thomas Koshy
- Rui Li

- Xiaohui Liu
- Haiying (John) Lu
- Annette Reilly
- Santhosh Sivasubramani
- Donnie Swing
- Sha Wei

#### **ADMINISTRATOR**

Karen Evangelista





# **Administrative Committee (AdCom)**

- Comprised of Standards Board Officers (Chair, Past Chair, Vice Chair) and Chairs of each standing committee
  - Senior IEEE SA staff and legal counsel also attend
- Reviews SASB agendas and recommends operational plan for the SASB meeting
- Meets when needed as a subset of the SASB to discuss important issues affecting the SASB
- Meets in Executive Session





# GOVERNMENT ENGAGEMENT PROGRAM ON STANDARDS (GEPS) REPRESENTATIVES

- IEEE Government Engagement Program on Standards (GEPS)
  - Helps government bodies meet their technology, standards, and policy goals—from enabling technical excellence and global interoperability to promoting safety, sustainability and innovation to foster economic growth and society prosperity.
  - Please see more information at <u>https://standards.ieee.org/about/intl/government-engagement-program/</u>
- In GEPS, Government Body Representatives:
  - Are recognized by IEEE as having official Observer Status on the IEEE SA Standards Board
  - Has about 85 participants from 51 countries around the world, as listed at <a href="https://standards.ieee.org/about/sasb/#geps">https://standards.ieee.org/about/sasb/#geps</a>

Currently there are over 85 participants from 51 countries





### **SASB Outreach Activities**

- IEEE SA conducts outreach and engagement activities to increase awareness of IEEE SA, its processes, programs, and paradigms both regionally and globally.
- The IEEE SASB meetings, held in different parts of the world, present an opportunity to engage with new stakeholders.
- SASB outreach will center on a Stakeholder Engagement Event format, which provides an opportunity for SASB members to share their experience and promote the value of participation in IEEE standardization. We will promote this event through select IEEE groups (e.g., IEEE Young Professionals, IEEE Women in Engineering, etc.) and via local contacts to engage new communities.
- IEEE SASB outreach activities are coordinated by IEEE SA staff and invite participation of IEEE SA volunteers and staff.





### **Reference materials**

Develop Standards:

https://standards.ieee.org/develop/index.html

 IEEE Standards Association Operations Manual: <a href="https://standards.ieee.org/about/policies/sa-opman/index.html">https://standards.ieee.org/about/policies/sa-opman/index.html</a>

 IEEE SA Standards Board Bylaws: <a href="https://standards.ieee.org/about/policies/bylaws/index.html">https://standards.ieee.org/about/policies/bylaws/index.html</a>

• IEEE SA Standards Board Operations Manual: https://standards.ieee.org/about/policies/opman/index.html

IEEE SA Antitrust and Competition Policy:
<a href="https://standards.ieee.org/wp-content/uploads/2022/02/antitrust.pdf">https://standards.ieee.org/wp-content/uploads/2022/02/antitrust.pdf</a>





# QUESTIONS?





# Thank You

Lei Wang

Email: lei.wang1@futurewei.com

Phone: +1 858 205 7286



445 Hoes Lane, Piscataway, NJ 08854 USA



+1 732 981 0060

