

**AMERICAN SOLAR ENERGY SOCIETY
TECHNICAL DIVISIONS HANDBOOK**

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ASES Technical Divisions Overview

Purpose of the Technical Divisions Program

ASES Technical and Topical Divisions bring together members with similar interests in order to exchange information and ensure that ASES programs and publications are technically accurate.

Membership Eligibility

Membership in ASES Divisions is a benefit at the Life, Professional, Student and Business Membership levels. Members have the opportunity to choose division affiliation when signing up for membership, on their membership renewal notice, and by logging into the online membership account. Basic members are not eligible for division membership. Division membership expires with ASES membership.

Division Activities

Mandatory Activities:

- Communicating between division leadership and division members
- Maintaining appropriate content on the Division portion of the ASES website
- Developing content for an area track of the Annual Conference (organizing conference sessions)
- Supporting the Technical Review Committee of the Annual Conference (reviewing conference abstracts and papers)
- Conducting an annual meeting at the Annual Conference

Voluntary Activities:

- Publishing newsletters
- Writing articles for ASES publications such as *Solar Today* magazine and the Solar@Work online newsletter
- Contributing technical expertise as needed to other ASES programs and projects
- Presenting webinars
- Addressing issues of topical interest using a threaded conversation on the ASES website
- Submitting award recommendations (as appropriate)

Current Divisions

There are currently eight Technical Divisions:

Sustainability Division

Promotes the development, exchange, and use of information on the multiple environmental and societal benefits of renewable energy when combined with energy efficiency and conservation.. Promotes interconnection between renewable energy and other environmental issues and aspects of sustainability, and addresses socioeconomic and advocacy aspects of renewable energy and sustainable living. <http://www.ases.org/sustainability>

Solar Buildings Division

Covers passive solar heating and cooling, daylighting, building-integrated photovoltaics (BIPV), site design, energy efficiency, building science, building design tools and case studies.

Solar Thermal Division

Concerned with methods and processes that utilize solar flux for heat driven applications. Applications may include desalination of water, agricultural drying, process heat for industry, photo-enhanced processes (hazardous waste treatment), high temperature solar enhanced processes (water decomposition to form hydrogen), materials processing (high tensile strength fiber production by chemical vapor deposition), solar pumped laser, district heating and cooling, and solar cookers. In addition, the division supports the deployment of concentrating solar power systems for utility-scale solar electric power. These systems use concentrated sunlight to create and store solar thermal energy for the purpose of driving a heat engine to produce electric power during times of peak utility demand.

Photovoltaics Division

Addresses direct energy conversion of the sun's rays to electricity. Areas covered include photovoltaic (PV) energy technology, concentrating photovoltaic (CPV), and photovoltaic thermal (PV/T) technologies.

Resource Applications Division

Covers the development and acquisition of renewable-energy resource data and dissemination to the end user.

Energy Economics Division

Addresses the interaction between electric grid operations, renewable energy economics and the financial industry. This Division addresses issues that may be linked to individual or multiple technologies.

Grid Modernization and Storage Division

Focuses on the municipal grids, national connections, microgrids, and storage. Grid modernization can deliver energy with more reliability and security, handling variable renewables like wind and solar power. The grid infrastructure must be updated to increase resilience and adapt to the changing sources of energy. It can spread economic opportunity in rural and urban communities through electricity and transportation infrastructure investment and upgrades. This Division encourages research and education in the field, and promotes widespread development and use of renewable energy, with an emphasis on residential-scale applications.

Policy Division

Provides information on local, state, and federal policy as it relates to solar energy and the renewable energy landscape.

Division Operational Procedures

Minimum Activities for "ACTIVE" ASES Divisions

Active Divisions provide service to their members and to the society through up to date information, technical expertise, conference programming assistance, etc. Their activities should include:

1. Elect Officers according to division by-laws
2. Communicate with division members at least twice per year
3. Participate in the Divisions Committee conference calls
4. Send a representative to the Divisions Caucus at the annual conference
5. Hold a meeting during the National Solar Conference. Submit meeting minutes to ASES Headquarters (HQ).
6. If requested, provide at least one Technical Review Committee member
7. Maintain content for all Division web pages
8. Submit a Division Annual Report

Sending Notices to Members

Division Leaders may want to send notices to Division members asking for newsletter articles, notifying members of meetings or webinars, etc. Because Division membership changes with time, Division membership lists can quickly become outdated. ASES HQ, which will maintain and update lists of Division members twice per year. The ASES Executive Director will designate a procedure for sending division-wide correspondence, to include acceptable software formats (.pdf, .docx, etc.)

Division Newsletters

Division Chairs may designate a newsletter editor. The division is responsible for providing ASES HQ with a correspondence/newsletter ready to be sent to Division membership. The Division should also consider posting newsletters on the division's webpage.

Division Representation on the ASES Board of Directors

Divisions shall nominate and elect representatives to the ASES Board of Directors when required by the ASES bylaws.

Division Leadership Elections

Current Division Chairs are responsible for ensuring that leadership elections adhere to the bylaws. Elections may be conducted electronically. When more than one candidate is running, the candidate with the most votes is the winner (even if this does not reach a majority of voters).

Leadership Turnover Procedure

When new leaders are elected, they shall conduct a formal turnover with their predecessor BEFORE taking office. The incoming and outgoing chairs should do the following:

Conduct a discussion between the outgoing and incoming chairs, and any other leaders deemed necessary, of at least the following items:

- Upcoming Division events already planned
- Upcoming Division plans in the works (and who's responsible)
- Interactions with other Divisions and state chapters
- Current Division policies in place
- Policy changes that have been recommended to ASES via your Division.

Turn over the following documents:

- Division Bylaws
- Minutes of all meetings from the last 2 years
- Treasurer's Report, including all existing/outstanding income and obligations.
- Past Division Board meeting minutes (if provided to you)

Turn over

- Passwords (ASES website and other passwords needed to do the job)
- Date and time of next Divisions Conference Call
- Points of Contact (including key ASES staff, other division chairs, Division Rep on the Board, etc.)
- Names and positions of division officers, and what they do
- Professional links (useful to the division)
- List of “active members” of the division

Discuss Procedures to:

- Establish a blog on the ASES website
- Establish a webinar
- Set up a conference call for division use
- Set up an online video conference
- Submit newsletters
- Submit web pages
- Conduct technical paper reviews
- Report “in-kind” expenses
- Provide awards inputs (turnover template if one is established)
- Review and approve awards (how the awards committee works)

Discuss upcoming ASES conference:

- How to prep for the annual conference
- Existing forum topics
- Theme or problem statement you want the division to address at the conference
- Technical paper review process
- Commitments made to you for papers or topics
- Commitments made by you to others

When the turnover is completed, make the turnover official by:

- 1) The incoming chair tells the outgoing chair: “I relieve you” (or something similar) to denote the exact point when official responsibility turns over.
- 2) The incoming chair writes a letter (or e-mail) to the Divisions Chair, Cc to the Chair of the Board of Directors, the Executive Director, and all incoming and outgoing officers of the division stating: “On <date> I relieved <outgoing Chair> as the Chair of the <division name> Division.”
- 3) Provide the designated person at ASES, and your divisional officers, with your contact details.

Congratulations, you’re now in charge.

Divisions Annual Report

Each Division will submit an annual report to the ASES Executive Director to arrive at least 15 days before the Annual Conference. If no conference is held during a year, reports shall be submitted on or before June 30th. Reports should be addressed to the Executive Director, with copy to the Chair of the Board of Directors and the Division’s Liaison to the Board. Reports cover the period starting the day after the previous report ended. Annual reports are free-form, but should include the following:

- Number of ACTIVE members (members actually involved in division activities)

- Amount and type of correspondence sent to/from division members.
- Contact information for division officers (name, phone number, e-mail address)
- Name of person(s) scheduled to attend the Divisions Caucus at the upcoming Annual Conference
- Division activities (calls, blogging, forums, newsletters, conferences, webinars, etc.)
- Attendance and action items from the division meeting at the last ASES Annual Conference.
- A discussion of major activities during the year.

Procedure for Formation and Approval of ASES Divisions

1. A member who wishes to initiate the formation of a new Division should first contact the Division's Liaison to the Board of Directors. The Divisions Liaison will send the New Division Initiator (NDI) information of the procedure to form a Division that contains the following items:
 - a. Explanation of the role and activities of an ASES Division
 - b. List of all Current ASES Divisions with Mission Statements
 - c. ASES Board Member Job Description
 - d. Checklist of all forms to be completed and submitted prior to consideration of the new Division
 - e. ASES Division Petition
 - f. Sample Division Documents (Mission Statement, Sample Division Newsletter, Sample Division Annual Report)
2. The Division's Liaison to the Board and NDI shall review the merits of initiating the new Division and identify any possible areas of overlap with an existing division
3. If, following this conversation/meeting, the NDI determines that it is appropriate to move forward, the NDI generates a Division Proposal for the new division. When the Division Proposal is complete, the NDI sends it to the Division's Liaison to the Board.
4. The Division's Liaison reviews the proposal and if deemed complete invites the NDI to present them to the Divisions Committee, either during a regular Divisions Committee conference call or at the annual Divisions Caucus.
5. After the presentation, the Divisions Committee discusses any issues or problems with the formation of the new division, and then votes to recommend to the ASES Board that the new division be approved, or not approved.
6. Once the Divisions Committee votes for the formation of a new Division, the Division's Liaison informs the NDI. At this point the NDI may decide to abandon the proposal, or the NDI may proceed to gather names for the ASES Division Petition.
7. Once the ASES Divisions Petition has at least 20 eligible signatures, it is submitted to the Division Liaison, along with all of the other documents listed on the required documents checklist.
8. The Division Liaison sends a copy of the petition to the ASES Office. ASES checks to make sure that all signers are eligible to be members of a Technical Division.
9. The Division Liaison also checks the other documents to make sure they are prepared properly and are complete.
10. The Division Liaison continues to work with the NDI to make sure the petition has the required number of eligible signers and that all of the documentation is in order.
11. When all of the documentation is in order, the Division Liaison compiles it into a package and submits it, along with the recommendation of the Divisions Committee developed in step 5 above, to the ASES Executive Director for dissemination to the Board of Directors.
12. At their next Board Meeting, the Board of Directors shall consider the New Division Formation Package and the recommendation of the Divisions Committee.

13. If the Board does not approve the new Division, the board will give the applicant an explanation and recommendation, if applicable, as to how to strengthen and re-submit the proposal.
14. If the Board approves formation of the new Division, the petitioners become charter members.
15. New divisions have one year from their approval date to elect officers and otherwise begin to engage in all of the activities required of an active ASES Division. The NDI should report progress to the Divisions Committee at its periodic conference calls.

Procedure for Disbanding an ASES Division

1. If the Annual Report is not submitted by a Division, or if the report indicates that the division did not conduct the minimum level of activities for the year, the Divisions Liaison to the Board contacts the Division leadership to discuss the cause(s) and outlook for the future.
2. If, as a result of the discussion, the Divisions Liaison determines that a change of leadership is required, the Divisions Liaison notifies the division members that the Division is in danger of becoming inactive and requests nominations for new division officers.
 - a. If new Division Leaders step forward, the Divisions Liaison works with them to ensure a smooth transition and that they understand all of the expectations of an active ASES Division.
 - b. If no new Leadership steps forward, the Divisions Liaison makes a recommendation to the Board that the Division be declared “inactive”.
3. If, under new leadership the Division continues to not meet the requirements of an “Active” division, the Divisions Liaison may return to paragraph 2, or may make a recommendation to the Board that the Division be declared “inactive”.
4. If the Board approves the recommendation for inactivation, the members of the division are notified that the division is no longer active.
5. All documentation of the division is to be retained at the ASES office. If someone steps forward to re-activate the Division they must follow the procedure for formation and approval of ASES Divisions.
6. All funds under control of the Division shall be returned to the ASES office.

Technical Divisions Bylaws

Divisions of the American Solar Energy Society
(The U.S. Section of the International Solar Energy Society)
(updated June 16, 2020)

Preamble:

These Bylaws are the basis of organization and function of each Technical Division of the American Solar Energy Society (ASES). The bylaws of ASES shall take precedence in case of conflict between the ASES bylaws and the bylaws and operation of this Division.

ARTICLE I – NAME

Technical Division names shall be as follows:

- Sustainability Division
- Solar Buildings Division
- Solar Thermal Division
- Photovoltaics Division
- Resource Applications Division
- Energy Economics Division
- Grid Modernization Division
- Policy Division

ARTICLE II – PURPOSES AND ACTIVITIES

Section 1: Purposes.

The purpose of the **Sustainability Division** will be to promote the development, exchange, and utilization of information on the sustainability attributes (i.e., the multiple environmental and societal benefits) of renewable energy combined with energy efficiency and conservation, to encourage research and education in the field, and to promote widespread development and use of renewable energy particularly in architecture, construction, design, engineering, planning, transportation, research and policy making. The scope of the Sustainability Division is to organize, develop and distribute important information and to initiate and support work aimed at accelerating steps toward renewable energy futures. As part of its mission, the division will examine and promote the development, exchange, and utilization of information concerning the use of clean, renewable energy to supply clean water for drinking, agriculture, and other beneficial uses.

The purpose of the **Solar Buildings Division** will be to address issues of passive solar heating and cooling, daylighting, Building Integrated Photovoltaics (BIPV), site design, energy efficiency, building science, building design tools and case studies.

The purpose of the **Solar Thermal Division** will be to address methods and processes which utilize solar flux for heat driven applications. Applications may include desalination of water, agricultural drying,

process heat for industry, photo-enhanced processes (hazardous waste treatment), high temperature solar enhanced processes (water decomposition to form hydrogen), materials processing (high tensile strength fiber production by chemical vapor deposition), solar pumped laser, district heating and cooling, and solar cookers. In addition the division addresses the design and deployment of concentrating solar power systems for utility-scale solar electric power. These systems use concentrated sunlight to create and store solar thermal energy for the purpose of driving a heat engine to produce electric power during times of peak utility demand.

The purposes of the **Photovoltaics Division** will be to promote the development, exchange, and utilization of information on solar electric technologies, to encourage research and education in the field, and to promote widespread development and use of renewable energy. The Solar Electric Division includes photovoltaic energy technology, wind energy technology, ocean thermal energy conversion, and solar thermal electric technology with special emphasis on the energy systems and their applications.

The purposes of the **Resource Applications Division** will be to promote the development, exchange, and utilization of information of interest to the membership, to encourage research and education in the field, and to promote widespread development and use of renewable energy.

The purpose of the **Energy Economics Division** will be to address the interaction between electric grid operations, renewable energy economics and the financial industry. This division addresses issues that may address individual or multiple technologies.

The purposes of the **Grid Modernization and Storage** Division will be to focus on the municipal grids, national connections, microgrids, and storage. Grid modernization can deliver energy with more reliability and security, handling variable renewables like wind and solar power. The grid infrastructure must be updated to increase resilience and adapt to the changing sources of energy. It can spread economic opportunity in rural and urban communities through electricity and transportation infrastructure investment and upgrades. This Division encourages research and education in the field, and promotes widespread development and use of renewable energy, with an emphasis on residential-scale applications.

The purposes of the **Policy Division** will be to provide information on local, state, and federal policy as it relates to solar energy and the renewable energy landscape.

Section 2: Activities.

Divisions will provide support to ASES by: (1) developing and coordinating workshops, symposia, sessions, forums on the subjects listed in Section 1 for the ASES annual conference (2) electing and recommending representatives to serve on the Annual Conference Technical Review Committee and on the National Organizing Committee. (3) Providing guidance and review of articles published in Solar Today magazine and other publications on the area of the division's expertise. (4) providing sound technical and scientific information to interested persons on the subjects listed in Section 1 using a

variety of media.(5) providing counsel and assistance to the ASES Board and administrative staff on all matters relating to subjects listed in Section 1.(6) promoting the overall social and environmental benefits of efficient use of renewable energy.

ARTICLE III – MEMBERSHIP

Membership shall be open to any ASES Professional, Life, Business, or Student member who shares the aims of the Division as specified in Article II.

ARTICLE IV – DUES

Section 1: Dues, if any, shall be assigned by each Division’s Board (as defined in Article V), subject to the approval of the ASES Board of Directors.

Section 2: Dues, if assigned by the Board, shall cover one calendar year.

Section 3: Membership in this Division carries no liability other than payment of such dues.

ARTICLE V – GOVERNMENT

Each Division shall be governed by its individual Division Board.

Section 1: Officers: The Officers of the Division shall serve as the Division Board. Officers shall consist of a Chair, and optionally also a Vice Chair, and a Secretary/Treasurer. Division officers shall be elected by the full Division membership, according to the procedures specified in Article VII. The term of office shall be one year, the term beginning as soon as election results are known. No officer shall serve in the same office for more than four consecutive years. Division Officers shall be voting members of the Division Board.

Section 2: Additional Division Board Members: A favorable vote of the Division Board may increase the size of the Board to 5 or 7 members. Additional Division Board Members are filled using the Vacancy procedure (Section 3).

Section 3: Vacancies: The Division Board may fill any vacancies in the elective offices from the Division membership, including the present Board, with the person so named to hold office until the expiration of the normal term of office. The Division Board may replace any Board member who misses three consecutive meetings. The Vice Chair will become the Chair if the Chair resigns within his/her term. If both the Chair and Vice-Chair positions are vacated during the same year, then the Secretary/Treasurer will assume the role of Chair until the next division election at which new officers will be elected. Vacancies are filled based on a favorable vote of the Division Board, an invitation, an acceptance, and an appointment (in writing) by the Chair.

Section 4: Board Meetings: As a minimum, an annual meeting of the Division Board (by conference call or in person) shall be held prior to the annual Division meeting at the annual ASES conference. Participation by a majority of the members of the Board shall constitute a quorum. Reasonable notice of

the time and contact information (location/phone number) shall be given to members of the Division Board. The secretary shall record minutes of each such meeting and communicate them to the entire Division Board. These minutes shall record meeting participants, votes and action items agreed to by the participating board members. Additional meetings of the Division Board are encouraged as needed to guide and carry out the business of the division.

Section 5: Meeting Rules: Robert's "Rules of Order" shall be parliamentary authority for procedure in all meetings and in all matters not covered in the Bylaws.

ARTICLE VI – OFFICERS' DUTIES

Section 1: Duties of the Chairperson:

- A. The Chairperson will normally preside at all general meetings of this Division; chair the Division Board; maintain communications with the ASES Divisions Committee Chair and the Division's representative to the ASES Board of Directors (when applicable); and participate in ASES Division activities. The Chairperson (or designate) shall be the principal official Division contact with the ASES staff.
- B. The Chairperson shall represent the Division in dealing with outside agencies, serve as an ex-officio (non-voting) member of all Division committees, communicate to the Division such matters and such suggestions as may tend to promote the mission of the Division, and transact business on behalf of the Division. If the Chairperson is different from the Division member elected to the ASES Board of Directors, then the Chairperson will also provide information to the ASES Board representative prior to each ASES Board meeting.

Section 2: Duties of the Vice-Chair

The Vice Chair shall perform such functions as may be delegated by the Chair and to act in the place of the Chair in the event of the Chair's resignation or inability to act.

Section 3: Duties of the Secretary/Treasurer

- A. The Secretary/Treasurer shall be responsible for issuing notices; keeping minutes of meetings and maintaining financial records as needed; and performing such administrative duties as the Division Board shall specify.
- B. If requested, the Secretary/Treasurer shall prepare an annual financial statement which shall be submitted to the ASES Treasurers (via the Division Chair).

ARTICLE VII – NOMINATIONS AND ELECTIONS

Section 1: Frequency: Elections shall be held every year.

Section 2: Nominating Committee: A nominating committee of not fewer than three members, and chaired by the Past Chair of the Division, shall be appointed by the Division Board from the members of the Division.

Section 3: Nominating procedures: Nominations for any Division Officer or ASES Board of Directors representative may be submitted via e-mail to any member of the Nominating Committee or member of the existing Board. The Nominating Committee will present the slate of nominees at the annual Division meeting at the ASES conference. At this time, additional nominations can be put forth by the membership at the meeting. The slate of candidates for Division Officers, and ASES Board of Director Representative will be submitted to the ASES staff immediately following the Annual Meeting at the ASES Conference. If ASES does not hold an Annual Conference during a year, the Annual Meeting of the division may be held by conference call.

Section 4: Election Protocol: The Secretary shall provide the ASES staff with an electronic statement of background/resume (<400 words), and a position statement (<100 words) by each nominee to be included in an electronic Division ballot. To be valid, ballots must be returned (by mail or e-mail) no later than the time indicated by ASES Executive Director. The individuals receiving the largest number of votes shall be deemed elected.

Section 5: Resolution of Tie Votes: In the case of a tie vote for a Division office, the Division Board shall resolve the tie.

ARTICLE VIII – COMMITTEES

Section 1: Divisions Committee: The Divisions Committee consists of the Chairs of the Technical and Topical Committees. The Divisions committee shall be responsible for amending these Division Bylaws. In addition, the Divisions Committee shall meet (normally monthly) to discuss issues relating to Division resources, activities, issues, or other topics of concern to the Division Chairs. The Chair of the Division's Committee shall be appointed by the Chairman of the ASES Board of Directors.

Section 2: Other Committees: Each Division Chair may appoint standing and ad-hoc committees as required to carry out the mission of the Division. A nominating committee must be established. Committees that administer any funds shall also have an audit committee consisting of at least 3 or more division members. All other committees are optional.

ARTICLE IX – MEETINGS

Section 1: Annual Meeting: There shall be a general meeting of Division members during, and at the location of each ASES Annual conference. At this meeting, the Officers of the Division shall report to the Division membership the activities and state of affairs of the Division, including a financial statement (if applicable).

Section 2: Other Division Meetings: The Division Board may call other business meetings of the Division upon email notice to all members, distributed at least 10 days before the meeting date. These meetings shall be by conference call.

Section 3: Division Board Meetings: Meetings of the Division Board may be called at the request of the Chair or upon a request by a majority of the members of the Board. Such meetings may be accomplished by conference call.

ARTICLE X – AMENDMENTS

Section 1: Changing the Bylaws: After 30 days' notice, amendments to these Bylaws may be made by a majority vote of the Divisions Committee.

ARTICLE XI – AFFILIATION REQUIREMENTS

Section 1: Affiliation With ASES: All Technical Divisions shall be affiliated as a Division of the American Solar Energy Society. Each Division shall meet the requirements for such affiliation as prescribed in the Bylaws of the American Solar Energy Society.

Section 2: Dissolution: Upon dissolution of a Division, any funds under control of the Division shall be returned to the ASES office.

Section 3: Resolution of Conflicts: If these bylaws are found to be in conflict with the ASES bylaws, the ASES bylaws will prevail. Division related conflicts shall be resolved by the ASES Ethics Committee.