



Digital Platforms and Societal Harm

Introduction to IEEE's European Public Policy

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IEEE Strategic Plan

2020-2025

OUR MISSION

We foster technological innovation and excellence for the benefit of humanity.

OUR VISION

We will be essential to the global technical community and to technical professionals everywhere, and be universally recognized for the contributions of technology, and of technical professionals in improving global conditions.

CORE VALUES



IEEE WILL:

- Drive global innovation through broad collaboration and the sharing of knowledge
- Enhance public understanding of engineering and technology and pursue standards for their practical application
- Be a trusted source of educational services and resources to support life-long learning
- Provide opportunities for career and professional development
- Inspire a worldwide audience by building communities that advance technical interests, inform public policy, and expand knowledge for the benefit of humanity

IEEE will foster a collaborative environment that is open, inclusive, and free of bias and will continue to sustain the strength, reach, and vitality of our organization for future generations.

www.ieee.org/strategic-plan

Approved by the IEEE Board of Directors, November 2019

IEEE Policy 15 – list of IEEE public policy documents

Position Statements:

- Definitive statements of IEEE's (or OU's) position on a matter of public policy
- They aim to provide policy-makers and legislators with specific recommendations on a specific matter of public policy
- Position Statements shall be prepared with appropriate consideration of the diverse perspectives of IEEE members (IEEE Policy 15)

Technology Policy Whitepapers:

- Provide sound and balanced information relevant to public policy issues, but no recommendations are issued
- They aim to educate and inform policy makers about technological implications of policy options, showing the pros and cons associated with each of them

Other Policy Communications:

- Public statements (e.g., letter, testimony, speech or public remarks, media release, or response to a request for public comment) that discuss or describe the position of IEEE on a matter of public policy.



IEEE European Public Policy Programme (EU + EFTA + UK)

Mission

To pool and leverage IEEE's knowledge and expertise to provide European institutions and bodies with independent and unbiased advice and recommendations to address technology-related public policy issues from a global perspective

Vision

To become, and to be recognized as, the globally relevant and trusted resource and voice for the policy and technical communities in Europe with respect to technology policy issues

Some Objectives

1. To inform European policymaking
2. To facilitate collaboration between the IEEE technology communities and European public authorities and other organizations
3. To increase visibility of IEEE's technology expertise and knowledge

History

1. Public policy efforts in Europe since 2011, with a more formalized approach in 2014 (WGs creation) and in 2018 (EPPC creation)
2. IEEE public policy initiative very much appreciated by EU officials – “Farmers come to Brussels every day, we are pleased to also see engineers and technologists” (former Director in DG Energy)

IEEE Members have been part of:

1. High-Level Expert Group on Artificial Intelligence
2. Stakeholder Cybersecurity Certification Group
3. ENISA Advisory Group
4. EU Expert Group(s) on Smart Buildings
5. EU Expert Group on Climate Change Policy
6. EU Expert Group on Smart Energy

Areas of work

1. Energy: Renewables | E-mobility & Smart Charging | Grid Stability | Green Hydrogen | Smart Buildings | Smart Ports | Electrification and the Grid of the Future | Digitalization of the Energy System | Energy Storage
2. ICT: AI | Cybersecurity | Digital Health | Mobility | Telco | Metaverse

<https://www.ieee.org/about/ieee-europe/publications.html>



IEEE European Public Policy Committee (EPPC)

Dates: Established in 2018, with an ad-hoc Committee/Initiative created in 2011

Membership: 13 Voting Members (Chair: Magdalena Salazar Palma) appointed by the N&A Committee

Purpose:

- Coordinate IEEE public policy activities in Europe
- Identifying technology areas where input for policy makers is needed and developing a prioritized agenda for the EPPC
- Facilitate collaboration between the IEEE tech communities and European public authorities and other organizations
- Give IEEE members a voice and means necessary to engage in public policy discussions
- Provide independent and unbiased inputs to address technology-related public policy issues from a global perspective
- Advocate public policies, inform European policymaking, and shape policy options
- Increase visibility of IEEE's technology expertise and knowledge

EPPC Work:

- Technical work is carried out by two working groups on Energy (Ch: Costas Vournas) and ICT (Ch: Giambattista Grusso)
- Develop written materials and policy documents (including responses to EU consultations)
- Meet and build relations with policy makers and other policy stakeholders (e.g., participation in EU expert groups)
- Organize and contribute to events (e.g., EPPC Summits) and provide other services (e.g., policy webinars)

Resources:

- <https://www.ieee.org/about/ieee-europe/index.html> | <https://www.ieee.org/about/ieee-europe/publications.html>



EPPC Working Groups on Energy and ICT

Dates: Created in 2014, compositions renewed in 2017, 2019, 2021, 2023 (and in 2025)

Selection Procedure (2025): <https://www.ieee.org/about/ieee-europe/new-working-group-members-form.html>

Membership: 12 IEEE Members each (plus 2-3 Liaisons), chaired by Costas Vournas (Energy WG) and Giambattista Grusso (ICT WG)

Support: Provided by the IEEE Global Office in Vienna (supported, in turn, by NOVE, a public affairs firm in Brussels)

Meetings: Monthly calls and in-person meetings

Purpose:

- To inform and contribute to the formulation of legislation and policy in Europe through the provision of impartial technical and policy advice

Deliverables (The Working Groups are responsible for):

- Preparing written materials on topical Energy and ICT issues (e.g., position statements, white papers, and other policy communications)
- Responding to public policy consultations by the European Union
- Meeting and sharing technology expertise with policy- and decision-makers at all levels
- Engaging with the broader policy community and like-minded associations on technology policy issues
- Participating and representing IEEE in EU expert groups
- Organizing and attending specific events on behalf of IEEE



EPPC Policy Documents

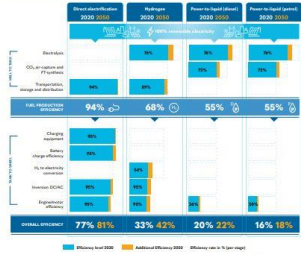
GREEN HYDROGEN: WHAT IS IT GOOD FOR?

Finding its Role in a Low Carbon Future

Decarbonizing the Transport Sector – Will Hydrogen be Efficient Enough?

The use of hydrogen for fuel cell vehicles has been shown to be much less efficient, and the use of hydrogen to produce liquid fuels is much worse. Even heavy transport now appears to be leaning to battery powered vehicles for many applications.

Cars: Direct Electrification Most Efficient



EFFICIENCY
Using hydrogen made from electricity is always less efficient than using electricity directly. Hydrogen storage is not easy or cheap. Battery storage is more effective for many applications, such as automobiles.

FEEDSTOCK
Hydrogen is the key feedstock for fertilizer that our food supply depends on. 10 million tons of hydrogens are made each year in the EU from natural gas, producing 100 million tons of CO2 annually.

Potential use of e-fuels will likely be limited to aviation and long-distance shipping, and will result in significant cost increases for these sectors.

IEEE • European Public Policy Committee (EPPC) • Energy Working Group
www.ieee.org/about/ieee-energy

RENEWABLE ENERGY SYSTEMS (RES) IN THE EU

ACHIEVING CLIMATE AND ENERGY GOALS



WHAT CAN BE DONE TO CUT GREENHOUSE GAS EMISSIONS AT LEAST 55% BY 2030 COMPARED TO 1990?

Grid integration over multiple time zones with the Member States lagging behind.

Sector Coupling & Energy System Integration

Grid-scale energy storage

Distorted side flexibility

IEEE European Public Policy Committee Recommendations

- Grid integration over multiple time zones - benefits from the inherent time shift between different power consumption profiles, with a beneficial effect on required local storage capacity.
- Sector coupling & energy system integration - among energy sectors, including electricity, transportation and water/Space Heating and Cooling (SH&C), can help provide flexibility and price responsiveness that is required for integration of inherently variable RES.
- Storage technologies - at different power scales, are instrumental in exploiting renewable energy not only for shaving peaks in power production.
- Demand side flexibility - requires dedicated technology, regulation, markets and practices.

To read the full document, go to: <https://www.ieee.org/about/ieee-europe/energy.html>

IEEE European Public Policy Committee (EPPC) • Energy Working Group

- **Repository for Policy Documents:**
 - <https://www.ieee.org/about/ieee-europe/publications.html>
- **Approved:**
 - “Smart Ports”
 - “Intelligent, Connected and Autonomous Mobility”
 - “Smart Buildings”
 - “Grid Stability”
 - “Green Hydrogen”
 - “E-mobility: Smart Charging”
 - “Cybersecurity”
- **Under development:**
 - “Digital Health”
 - “Artificial Intelligence”
 - “Telco Infrastructure”
 - “ICT & Energy”
 - “The Grid of the Future”
 - “Emission Trading System”



Engagement with public authorities



- Meetings with policy makers and other policy stakeholders
 - In-person meetings (ca. 50 EU officials, MEPs, and representatives of associations)
 - High-Level Meetings with the European Commission
- Representation of IEEE in EU expert or stakeholder groups
 - Expert Groups (e.g., Artificial Intelligence, Smart Buildings, Climate Change Policy, Smart Energy)
 - Stakeholder Groups (e.g., Smart Readiness Indicator for Buildings, Cybersecurity Certification Group)
- Participation in stakeholder meetings and policy platforms
 - EU Stakeholder Meetings on the Smart Readiness Indicator for Buildings
 - Events by the European Internet Forum (EIF)
- Response to stakeholder consultations
 - European Commission consultations requesting inputs by the stakeholder community (e.g., renewable, cybersecurity, AI, e-health)
- Organization and participation in events in collaboration with EU bodies and policy stakeholders
 - Five IEEE Summit in cooperation with major EC DGs - <http://ieee-summit.org>
 - IEEE panels at EU events (e.g., ICT Day, EU Digital Assembly) and IEEE members on EU panels (e.g. EUSEW)
 - IEEE panels at policy stakeholder events (e.g., G-Stic)
- Organise and participate in policy panels with policy makers at major IEEE events



Engagement with IEEE members and Organisational Units (OUs)

- European Public Policy e-Newsletter
 - Sign-up - <https://engage.ieee.org/EPPC-Newsletter-SignUp.html>
- Calls for Engagement
 - Create IEEE topical policy expert groups to inform policymaking from a technology policy perspective
 - Develop EPPC policy documents in a collaborative manner
 - Promoted via different channels, including the e-newsletter and direct emails to section chairs and key OU leads
- Policy Webinars & News/Bulletins
 - Educate and inform IEEE members of major energy and ICT policy issues in Europe
 - Focus on the EU machinery, policymaking process, and specific policy areas (e.g., Buildings, e-Mobility, Cyber, AI)
 - Delivered by IEEE members with the participation of policy makers
 - <https://www.ieee.org/about/ieee-europe/public-policy-webinars.html>
 - <https://www.ieee.org/about/ieee-europe/europe-news.html>
- Contribution to EU-level publications and events
 - IEEE members contributed to several IEEE supplements to the Parliament Magazine
 - <https://www.ieee.org/about/ieee-europe/publications.html>
 - IEEE sponsor of the MEP Awards (Digital Single Market category)
- Support public policy objectives of IEEE Organizational Units (OUs)
 - Review of other OU policy documents and suggestion of speakers for events

