

2022

INTERNATIONAL HYBRID POWER SYSTEMS

WORKSHOP

VIRTUAL
& ON-SITE!

26 - 27
APRIL 2022



Madeira, Portugal



BACKGROUND INFORMATION

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STRATEGIC PARTNER





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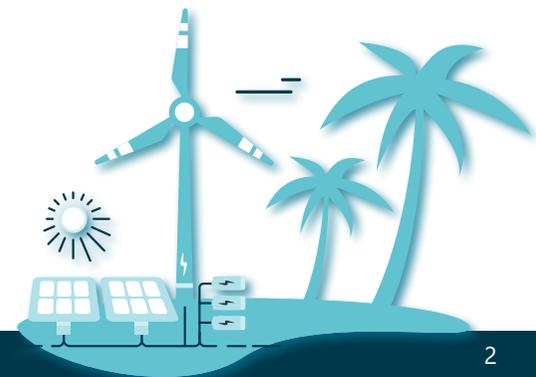
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6th International Hybrid Power Systems Workshop

After five successful workshops in Hawaii (2013), Puerto Rico (2016), Tenerife (2018), Crete (2019) and virtual (2021) we would like to introduce you to the 6th International Hybrid Power Systems Workshop.

Purpose

The main objective of the workshop is to discuss the challenges that arise with the integration of high shares of renewables (wind, solar, hydro) into isolated power systems and micro-grids in combination with batteries/flywheels and conventional power generators.

Finding viable combinations of conventional and renewable energy is one key solution for the efficient and sustainable running of these types of power systems. International experts will convene for the 5th International Hybrid Power Systems Workshop to share their project experiences and to detect areas in need of improvement.

Background

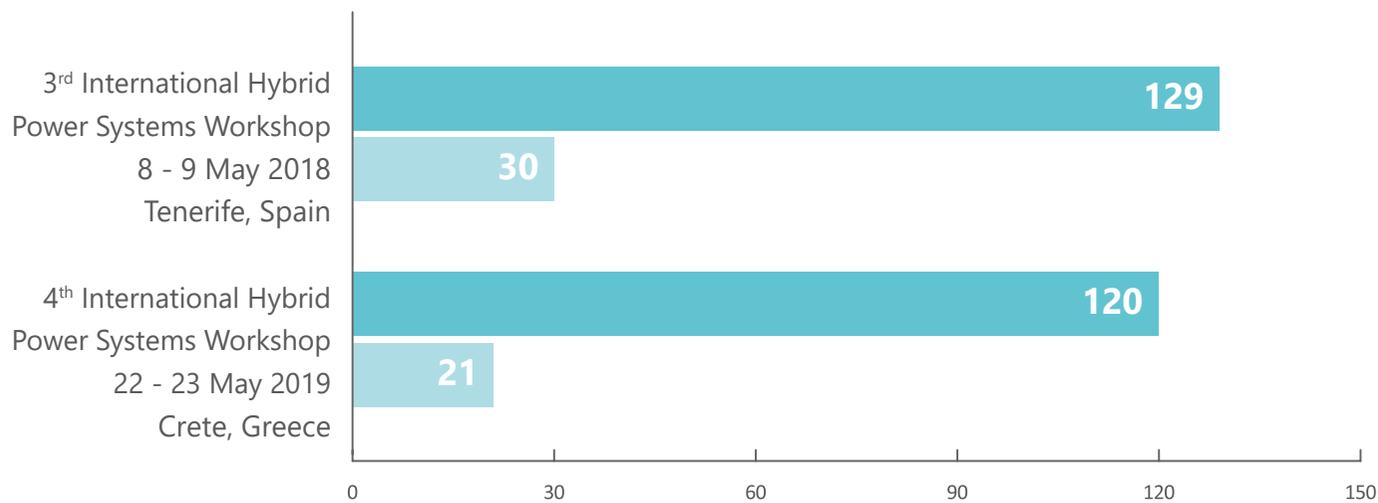
One challenge of island grids and micro-grids is to maintain the balance between production and consumption. Diesel generators are still frequently used for this task. Due to the unavoidable dependence on fuel price and delivery options, and the environmental impact, alternatives are being sought. Wind and solar power are independent of imported fuels and environmentally friendly, and therefore the logical choice for island and micro-grids. However, these renewable energies are dependent on variable resource availability; hence their maximum production capacity is subject to natural fluctuations. It is therefore important to develop strategies for how to align production and consumption in the best possible way and to find the perfect combination of conventional and renewable energy.





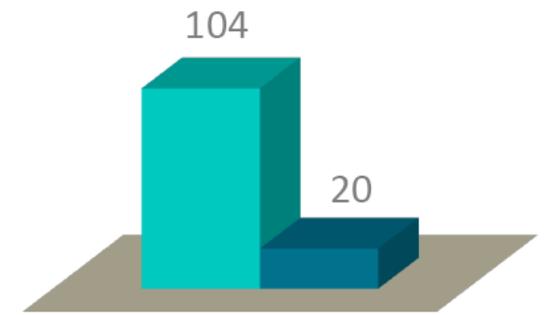
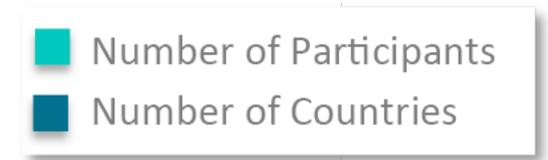
Development of the Hybrid Power Systems Workshop

Energynautics has organized the International Hybrid Power Systems Workshop since 2018. The Workshop has developed into an excellent platform for discussing the subject of grid integration of hybrid power into power systems.



*Data for the first and second Workshop not available due to change of organizer.

Number of Participants & countries

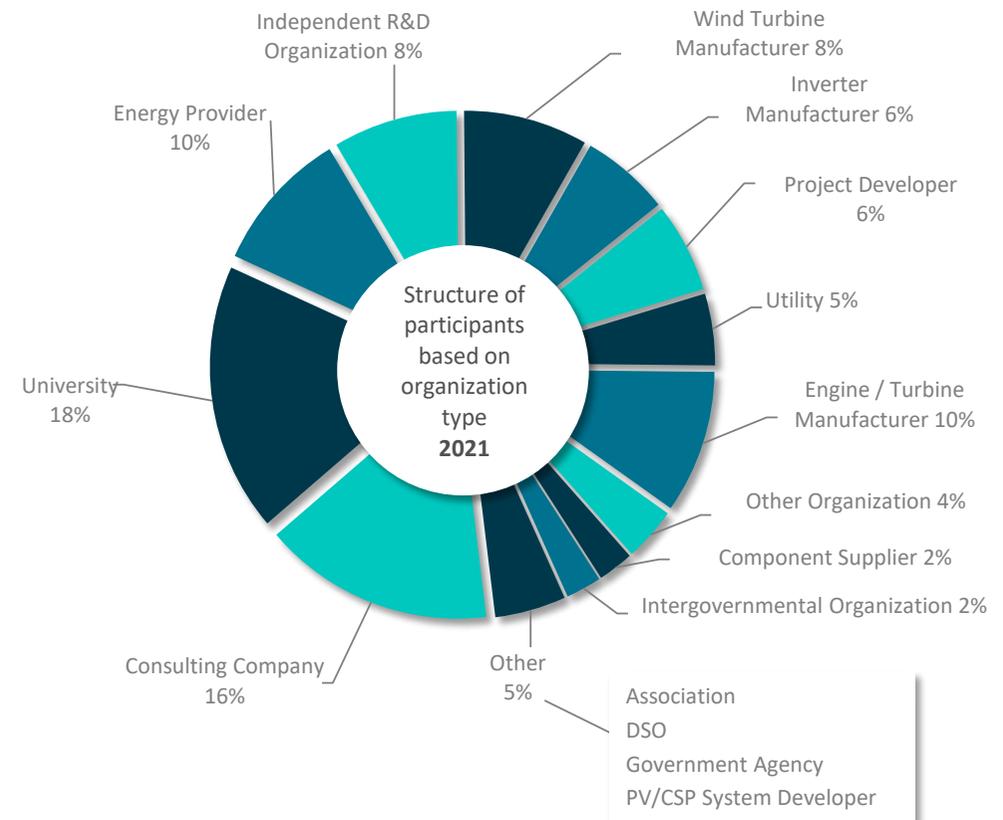
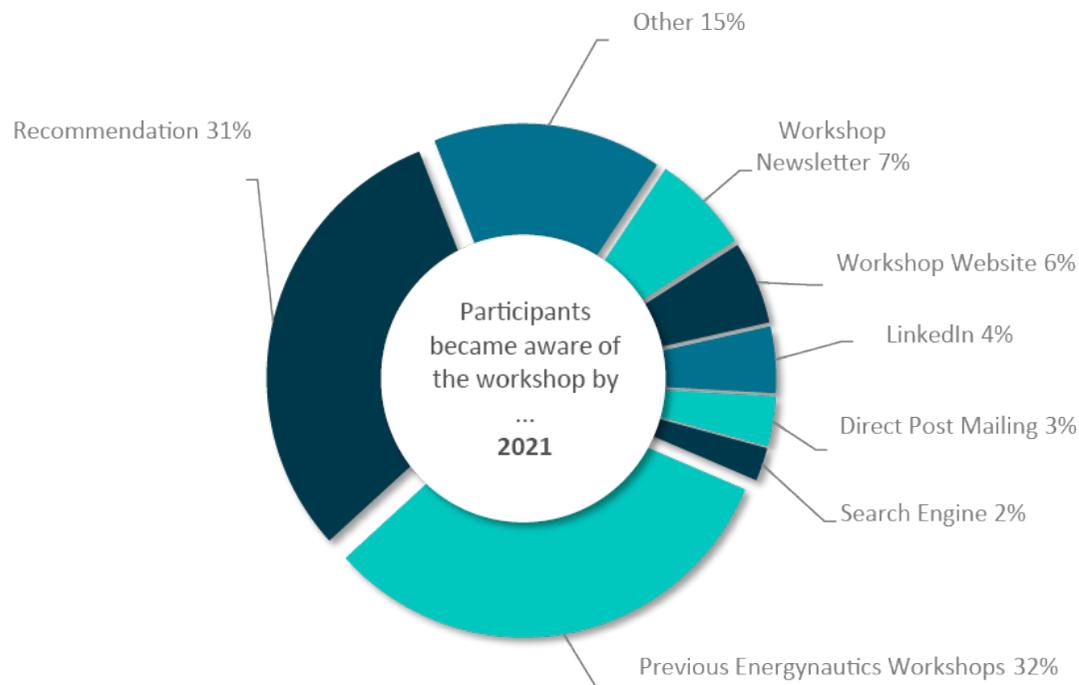


5th Hybrid Workshop virtual 2021

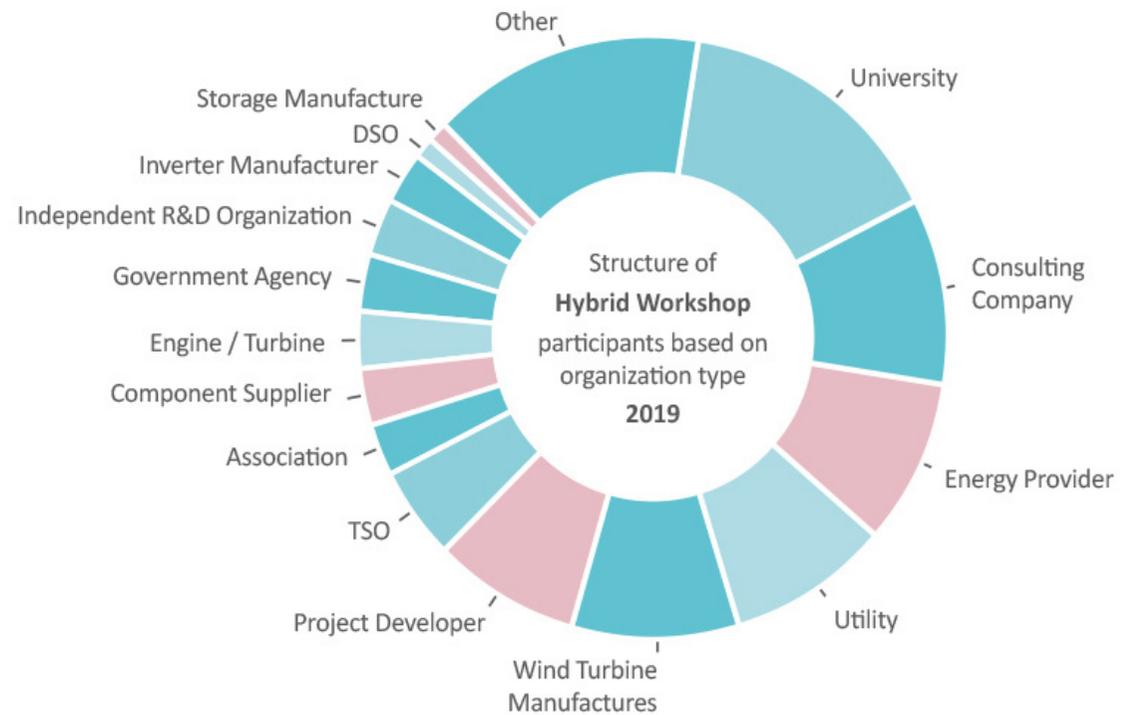
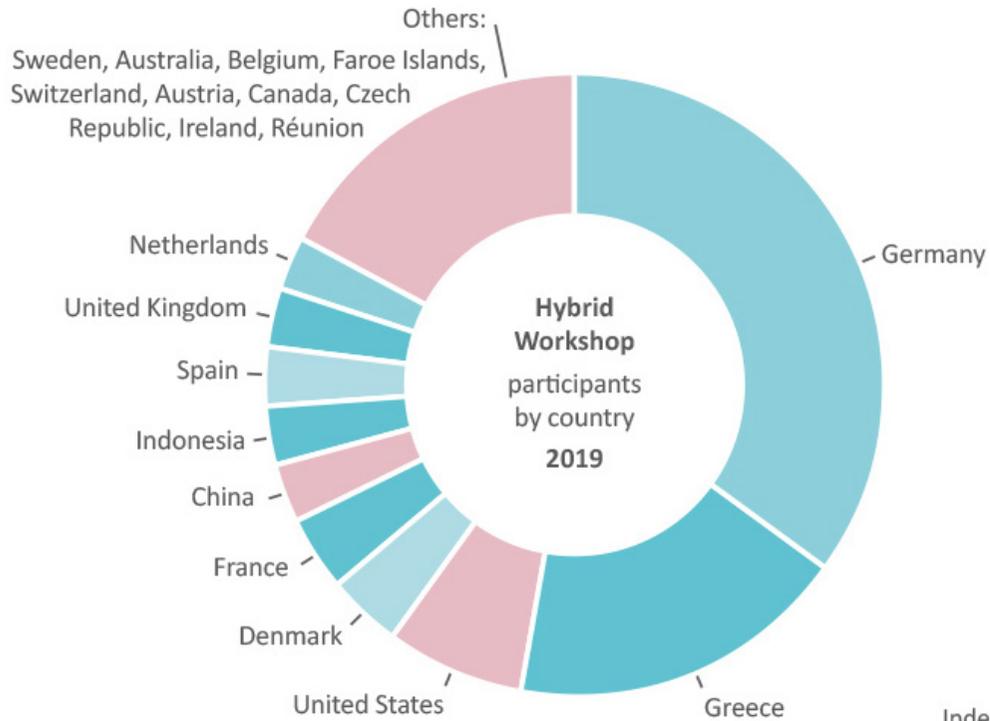
Hybrid Power Systems Workshop 2021, Virtual Event

The following charts about our previous workshops show the origin of the participants in relation to their country and the type of organization/company they work for.

Regardless of whether the workshops have taken place on-site or virtually, the mix of participant types is a unique advantage for networking and exchange as it does not only appeal to academic participants.



Hybrid Power Systems Workshop 2019,
Crete, Greece



Advisory Committee of the Hybrid Power Systems Workshop

The Workshop Advisory Committee consists of currently 41 members. Besides giving general advice for content and topics of the workshop, and working as reviewers of submitted abstracts during the Call for Paper process, they are acting as multipliers for the workshop idea and date.

All members receive the paper/digital leaflets and support the workshop communication.

- Tom Acker | Northern Arizona University, USA
- Thomas Ackermann | Energynautics, Germany
- Thorsten Althaus | BayWa r.e. Solar Projects, Germany
- Peter W. Christensen | Atkins SNC-Lavalin, Denmark
- Kaushik Das | Technical University of Denmark – DTU, Denmark
- Martin Dennenmoser | BayWa r.e. Power Solutions, Germany
- Ana Estanqueiro | LNEG, Portugal
- Alain Forcione | Hydro Québec/IREQ, Canada
- Jens Fortman | HTW Berlin, Germany
- Daniel Fraile | WindEurope, Belgium
- Michael Nørtoft Frydensbjerg | Vattenfall, Denmark
- Paul Gardner | Paul Gardner Energy Consulting Ltd., United Kingdom
- Jutta Hanson | Technical University of Darmstadt, Germany
- Hannele Holttinen | Recognis, Finland
- Dimitris Al. Katsaprakakis | Hellenic Mediterranean University, Greece
- Philipp Kunze | BayWa r.e. Projects, Greece
- Peter Lilienthal | HOMER Energy, USA
- Frank Martin | Siemens Gamesa, Denmark
- Julija Matevosyan | ESIG, USA
- Nickie Menemenlis | Hydro Québec/IREQ, Canada
- Mahesh Morjaria | FirstSolar, USA
- Terji Nielsen | SEV, Faroe Islands
- Lise Nielson | Linie P, Denmark
- Joao A. Peças Lopes | FEUP – University of Porto, Portugal
- Eckard Quitmann | ENERCON, Germany
- Nigel Schofield | University of Huddersfield, United Kingdom
- Charles Smith | ESIG, USA
- Lennart Söder | KTH – Royal Institute of Technology, Sweden
- Jian Sun | Rensselaer Polytechnic Institute, USA
- Emanuele Taibi | IRENA, Germany
- Nuno Taveira | ENERCON, Germany
- Pieter Tielens | Engie Impact, Belgium
- Helge Urdal | Urdal Power Solutions, United Kingdom
- Éric Vales | Vergnet, France
- Costas Vournas | NTUA, Greece
- Yoh Yasuda | Kyoto University, Japan



Focus of the Conference

The 6th International Hybrid Power Systems Workshop offers a prime opportunity to discuss the future of hybrid power systems. Participants will look at applications in a variety of locations and operating environments with a focus on system design, operating experience, business models, economics, and implementation issues.

Workshop Target Groups

- System planners and designers
- Operators of small systems
- Project developers and consultants
- Universities and research institutes
- Regulators and NGOs
- Technology vendors of distributed variable generation & storage technology

Proposed Preferential Topics of the Workshop

Hybrid Power Systems Design Options (Island Power Systems)

- » Hybrid Power System Technologies
- » Project Experience and Case Studies: Hybrid Power Systems
- » System Modelling and Simulation: Hybrid Power Systems
- » Pico-/Mini-/Micro-Grid Systems Design
- » Intelligent Control and Grid Stabilization
- » Managing Variability and Uncertainty
- » Load Assessment Strategies
- » Standards and relevant Grid Codes for Hybrid Power Systems
- » Regulatory Challenges related to Hybrid Power Systems
- » Protection Issues for Hybrid Power Systems
- » Design of Energy Management Systems for Hybrid Power Systems
- » Economic Evaluation of Hybrid Power Systems
- » Ancillary Services in Hybrid Power Systems

Hybrid Power Plant Design Options (Combined Wind & Solar plus may be storage as a power plant connected to a grid)

- » Project Experience and Case Studies: Hybrid Power Plants
- » System Modelling and Simulation: Hybrid Power Plants
- » Storage Design and Sizing
- » Standards and relevant Grid Codes for Hybrid Power Plants
- » Intelligent Control and Grid Stabilization
- » Resource Assessment and Forecasting
- » Managing Variability and Uncertainty
- » Remote Mining and Tourist Applications

About the Organizer

The Hybrid Power Systems Workshop has been organized by Energynautics, Germany since 2018. It is a partner event of the renowned Solar & Storage and Wind Integration Workshops and the E-Mobility Power Systems Integration Symposium organized annually by Energynautics as well.



Workshop Organizer

As an expert in isolated power systems with a high share of renewable energies, Energynautics brings extensive knowledge and project experience to the table.

Island	Client	Grid Code	Grid Study	Microgrid Development
Guyana	Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)		x	
Indonesia	Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)	x	x	
Dominican Republic	Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)		x	x
Bahamas	United Nations Industrial Development Organization (UNIDO) & Inter-American Development Bank (IDB)		x	
Trinidad & Tobago	Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)		x	
Galápagos Islands	Inter-American Development Bank (IDB)		x	
Barbados	Barbados Light & Power Company (BLPC)	x		
Republic of Seychelles	World Bank & the Government of the Seychelles		x	

Review previous workshops

Review Crete, Greece 2019



Virtual Event 2021



The 6th International Hybrid Power Systems Workshop

- Date: 26 - 27 April 2022
- Madeira, Portugal
- Expected number of participants: 110 +

Preliminary Timetable 2022:

Agenda	
Tuesday, 26 April 2022	<p>Hybrid Power Systems Workshop – Day 1</p> <p>09:00 - 17:30 Keynote Session & Parallel Sessions</p> <p>All Day: Poster Session during Breaks (TBC)</p> <p>Evening: Networking Session</p>
Wednesday, 27 April 2022	<p>Hybrid Power Systems Workshop – Day 2</p> <p>09:00 - 16:00 Parallel Sessions & Closing Session</p> <p>All Day: Poster Session during Breaks (TBC)</p>

Study Trip

Study Trip to power system facilities on Madeira planned for Wednesday afternoon or Thursday morning.



Your Benefits as Sponsor

Being sponsor of the Hybrid Power Systems Workshop not only raises awareness for your company among participants but also gives you the following two main advantages:

PROFESSIONAL TRAINING FOR YOUR TEAM



- Train your employees on specific topics about the integration of RE
 - Share & receive fresh ideas about current issues
- Find solutions for your ongoing projects in industry & academia
 - Have serious discussions with worldwide experts

MEET YOUR FUTURE EMPLOYEES & PARTNERS



- Find highly qualified students & professionals among participants
 - Network with potential candidates
- Display your job announcements in our workshop material
 - Meet potential partners for new projects



Your Sponsoring Package

Put together your package according to your wishes and your budget.

Combine on-site options and virtual options to create your individual workshop sponsoring package.

€ 1,500.00

MEGA
SPONSOR

GIGA
SPONSOR

TERA
SPONSOR

€ 6,000.00

On-site Options

- Your company logo on on-site banners and screens, printed flyers, printed conference agenda
- Your company leaflets for distribution
- Your corporate roll-up banner in coffee break area
- Upgrade your roll-up banner to a display banner in the coffee break area (size and format to be discussed)
- Corporate roundtable in coffee break area for technical discussions, networking during breaks and poster sessions
- Special additional logo arrangement (coffee break sponsor, dinner sponsor, ...)
- Study trip sponsor and/or host (either sponsor the field trip or host a trip to your on-site facilities)
- **Free participants** for the on-site conference (number of tickets depends on the amount of your sponsoring)
- **Free dinner tickets** (number of tickets depends on the amount of your sponsoring)

Virtual Options

- Your company logo on conference website, newsletters, digital proceedings (incl. link to your website) and sponsor overview slides during the conference
- Your ad in digital proceedings
- Dedicated social media post announcing you as a conference sponsor
- Your dedicated company slide before two selected sessions
- Content box in one newsletter issue
- Your company video before a selected session/ selected breaks (max 30 s/5 min)
- Host a discussion during the evening networking event
- Dedicated social media post announcing your activities during the conference
- **Free participants** for the virtual conference (number of tickets depends on the amount of your sponsoring)

Embedding your Logotype

See here some examples from the 3rd and 4th International Hybrid Power System Workshops on where your logotype could be positioned.

Website

Flyer

Newsletter



Sponsors & Ambassadors of previous Hybrid Power Systems Workshops
organized by Energynautics

Previous
Sponsors &
Ambassadors



Sponsors & Ambassadors of previous Partner-Workshops:



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