

The industry network for future energies



Renewable Energy Hamburg Cluster

ANNUAL REPORT 2020

RENEWABLE ENERGY HAMBURG CLUSTER ANNUAL REPORT 2020

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OUTLOOK

RENEWABLE ENERGY HAMBURG CLUSTER WELCOME

2020, the year of the pandemic, had a positive impact on climate protection and energy policy in Germany. Thanks to reduced economic activity, the Federal Republic of Germany unexpectedly achieved its 2020 target of 40% fewer carbon emissions. The share of renewable energy in the electricity sector was able to grow to 50%. However, when things return to normal in 2021, as we hope they will, we will notice that these were only temporary, rather than lasting, effects.

The effects of the pandemic represented the focus of Renewable Energy Hamburg Cluster Agency's (EEHH) efforts in 2020. Many activities that had been planned did not go ahead

or took place in a different format. Although there was a steep learning curve involved, we succeeded in converting many planned events into a digital format. Renewable Energy Hamburg held 30 web seminars and reached participants beyond the Hamburg metropolitan region. The uncertain situation provided us with clear digital momentum. Membership remained gratifyingly high despite the pandemic.

We held several events in person during the summer of 2020: the general meeting, the summer festival and 10th anniversary celebration, as well as the "German Renewables Award". The vibrancy of agency life was de-



Renewable Energy Hamburg Managing Director Jan Rispens in conversation with Board Chairman Sebastian Averdung and moderator Andrea Thilo at the German Renewables Award 2020

monstrated at the general meeting, at which seven candidates put themselves forward for two positions on the board. Active participation at the summer festival despite the pandemic highlighted the considerable interest in “genuine” networking. The “German Renewables Award” paid testament to the sector’s innovative strength with winners in offshore wind, heating concepts and hydrogen.

The northern German energy transition project “Norddeutsche EnergieWende – NEW 4.0” was delivered at the end of 2020. NEW 4.0 underlined how decisive statutory regulations are in translating a successful electricity transition into a holistic energy transition. In terms of technology, it was possible to implement many demonstration projects successfully. Today’s raft of regulations makes most of them uneconomical.

Political activities in energy policy continued to deliver at full digitalised speed. Renewable

Energy Hamburg made inroads into the discussion surrounding Hamburg’s ambitious climate protection legislation. In connection with the ongoing revision of the Renewable Energy Act (EEG), the board and members also developed a position to indicate where the most urgent need for action lies in the draft legislation from the cluster agency’s perspective.

2020 was a challenging year and one of mixed fortunes for Renewable Energy Hamburg. The digital learning curve contributed to greater engagement on the part of our members. But a cluster agency lives through networking, which was only possible to a very limited extent. We very much hope that we will be able to utilise the digital learning effect in a “normal year” in 2021, but also that many in-person meetings can take place too. We look forward to a lively exchange with you.

Yours, Jan Rispens



INTERACTIVE AND CLIMATE-FRIENDLY:

Read the Renewable Energy Hamburg Annual Report 2020 as an online magazine on your smartphone, tablet or desktop PC. Simply scan the QR code or enter the link in the browser.

<https://content.erneuerbare-energien-hamburg.de/en/annual-report-2020/>



NEW 4.0 – FOUR YEARS OF SUCCESSFUL PROJECT WORK COME TO AN END

2020 heralded the closing phase of the innovative Northern German Energy Transition project 4.0 (NEW 4.0). Renewable Energy Hamburg explored the project’s many facets. NEW 4.0 – Final Brochure, in particular - published in October 2020 - gets to the heart of the core findings.

Final brochure

The final brochure offers an overview of the four years of intensive research conducted by the consortium, which brings together 60 project partners from business, science and politics in Hamburg and Schleswig-Holstein. It presents a selection of the huge range of individual projects. The focus areas of the research and work carried out as part of the individual projects are diverse and pursue an interdisciplinary approach: from

the testing of innovative technologies in networks, load management, storage, generation and system service, to the development of new market models with the help of ICT solutions and the analysis of the regulatory framework, right through to measures promoting acceptance and the creation of new concepts for education and training.

Digital “coffee talks”

Of course, NEW 4.0 could not escape the coronavirus pandemic. Instead of a third in-person BarCamp in May, B2B marketing held five digital NEW 4.0 coffee talks. The showcase’s key sub-projects were presented in a compact format and discussed with other colleagues in the industry. An average of ninety-five people attended the web seminars. The coffees talks were particularly appreciated by **Tim Brandt**, managing director of Wind to Gas Energy GmbH & Co. KG, which produces hydrogen in Brunsbüttel for use in the heating and transport sector, and Oliver Antoni, Stiftung Umweltenergierecht, the foundation for environmental energy law, which analyses and evaluates the existing legal barriers to the market ramp-up of sector coupling technologies as part of NEW 4.0.

A variety of established digital communication tools contributed to the excellent visibility of the B2B activities of NEW 4.0. It would not have been possible to provide a coherent overall picture of the project without good communications work. Despite contact restrictions and lockdown, the project network was able to be maintained, in particular, through the project’s own blog, the monthly newsletter as well as Twitter and LinkedIn.

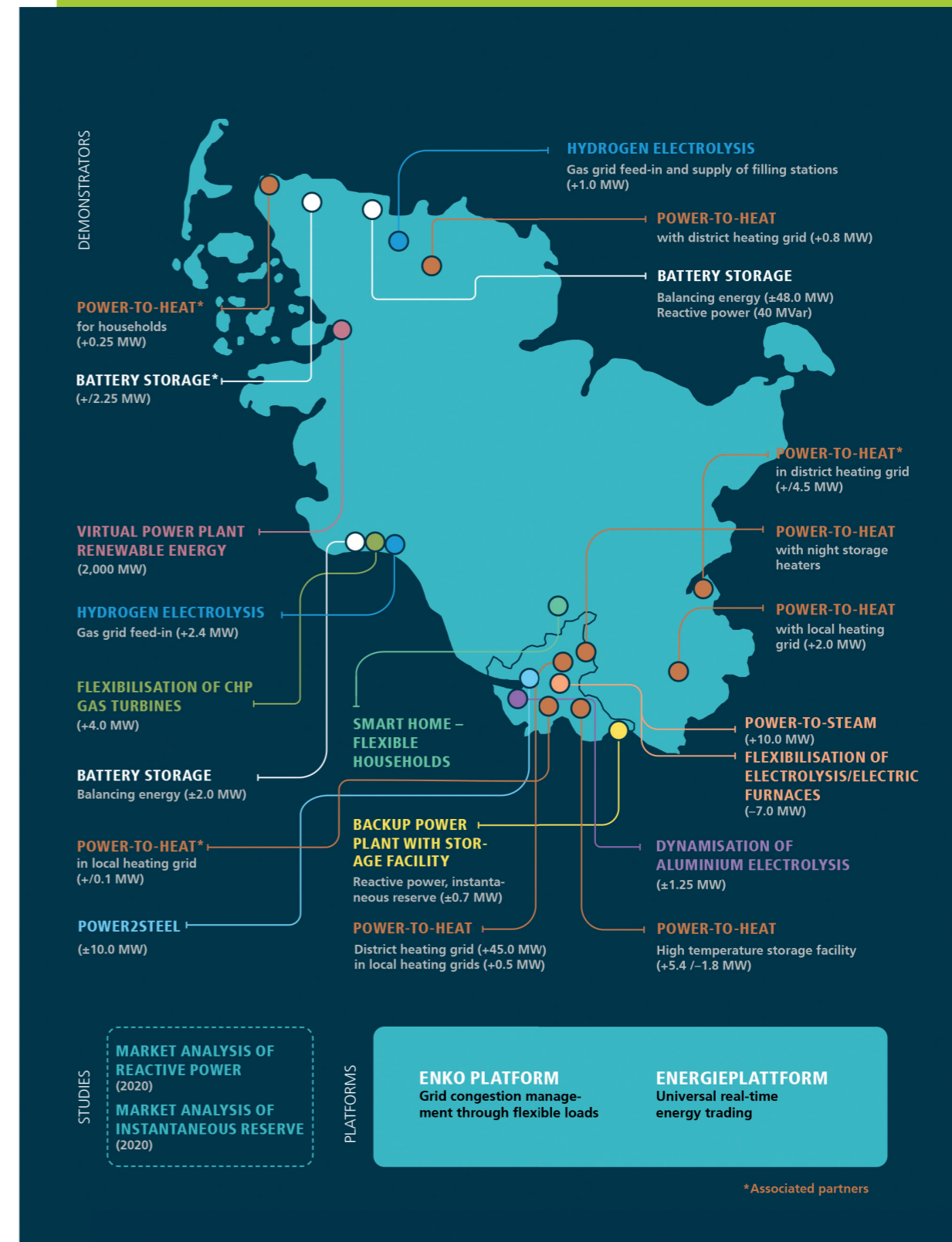
The period of funding for NEW 4.0 will end in March 2021. Renewable Energy Hamburg will remain in contact with partners and report on future ideas and projects beyond this period.

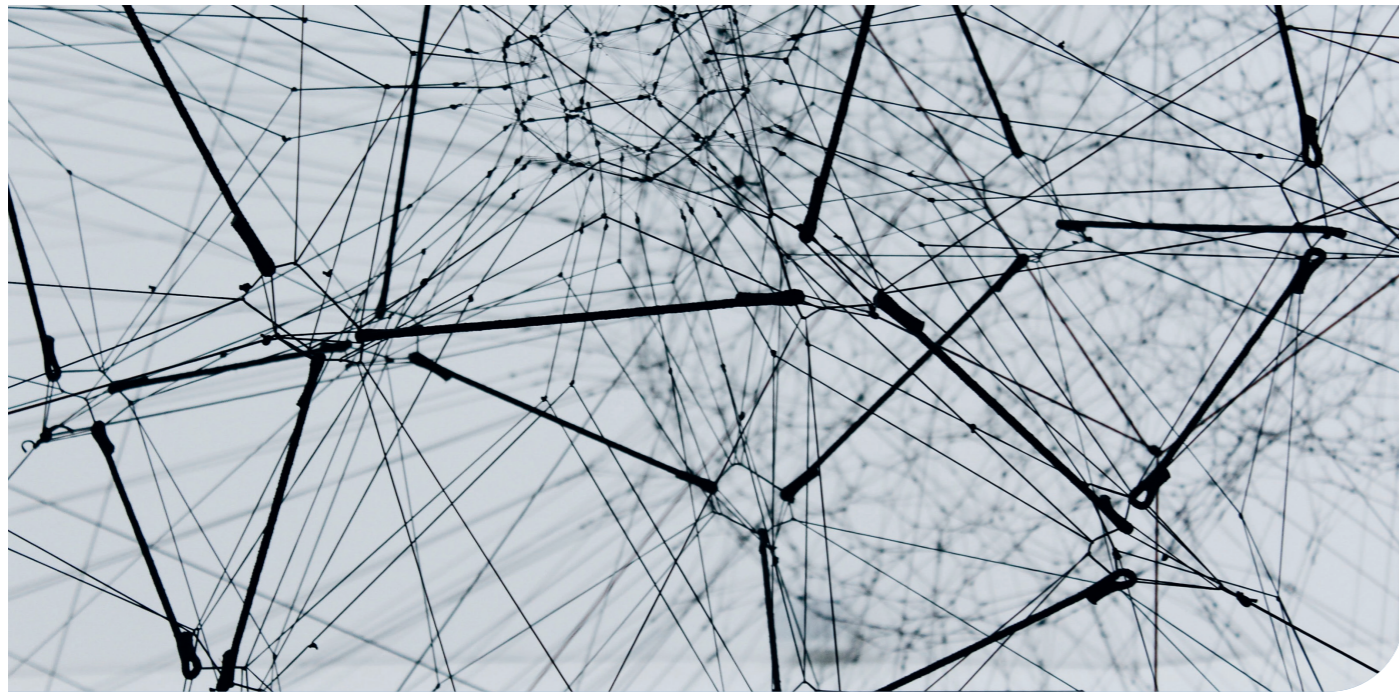
NEW 4.0
Norddeutsche EnergieWende

FINAL BROCHURE

Find out more about four years of intensive research in our final brochure.

<https://new4-0.erneuerbare-energien-hamburg.de/en/service/downloads.html>





NETWORKING BY RENEWABLE ENERGY HAMBURG IN 2020: TOPICAL FORA

Given the contact restrictions in place due to the coronavirus pandemic, the cluster agency offered fora sessions in 2020, in most cases, in an online format

FINANCE AND LAW FORUM

Renewable Energy Hamburg's first web seminar took place in April as part of the Finance and Law Forum. In terms of content, the web seminar focused on Hamburg's climate protection law. **Christian Maaß**, HIC, **Dr Ursula Prall**, BeckerBüttnerHeld, and **Anselm Sprandel**, BUKEA, were on hand as speakers. Another web seminar in November tackled the issue of revised offshore wind energy legislation. As our speakers we once again welcomed **Dr Ursula Prall**, BBH, and **Ruben Reiber**, Commerzbank, for the section on finance. Furthermore, in October, the Renewable Energy Hamburg cluster agency put together a statement on the draft Renewable Energy Act on the basis of the Finance and Law Forum.

HEAT FORUM

The Heat Forum kicked off in May with a web seminar which also examined Hamburg's Climate Protection Act, with a focus the heating sector. **Kerstin Walberg**, BUKEA and **Dr Matthias Sandrock**, HIC took part as speakers. Another web seminar in September was dedicated to presenting **Nina Kicherer's** master's thesis, CC4E/HAW, in which she tackled the topic "strategies for the long-term transformation of Hamburg's heating network". In addition, a working party was set up as part of the Heat Forum, which authored a position paper on Hamburg's heat transition, as well as the climate plan and Climate Protection Act, and submitted it to the coalition negotiations of the Hamburg City Parliament. BUKEA, the City of Hamburg's authority for the environment, climate, energy and agriculture, explicitly requested and welcomed the forum participants' input into refining the details of the climate plan. The Heat Forum was therefore successful in establishing a direct exchange between politics, administration and practice.



**INGE MALTZ-
DETHLEFS**
Forum management

SOLAR FORUM

Last but not least, a new forum was established in October 2020. As the inaugural meeting was called off several times due to the coronavirus pandemic, its inception officially took place in October as part of a live event at the "House of the Patriotic Society" in Hamburg. Around 40 people attended the event, at which stringent hygiene measures were observed. During the course of the inaugural meeting, the participants decided to divide the forum into four working parties: trade and industry, housing industry, public properties and private consumers. The forum's work is to be carried out in working parties and will be communicated and discussed in quarterly, full-plenary sessions.



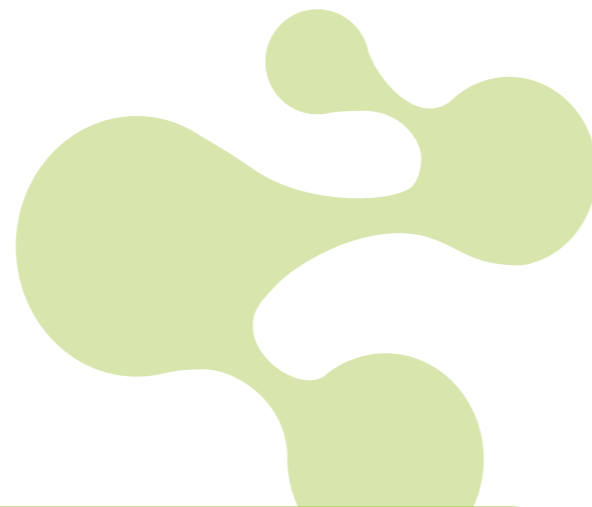
PAOLA PIGNATELLI
Forum management



CHRISTIAN MARCKS
Forum management



**BERNHARD WEYRES-
BORCHERT**
Forum management



AROUND THE WORLD IN 80 MINUTES – RENEWABLE ENERGY HAMBURG CLUSTER AGENCY ON THE INTERNATIONAL STAGE

They still existed in January and February – Renewable Energy Hamburg’s exciting international plans for 2020: a trip by a delegation focusing on wind energy to South Korea and to the Tokyo World Smart Energy Week in Japan, a Canadian-German workshop on artificial intelligence in Hamburg, the closing conference of the EU project Northern Connections in Gothenburg, participation in the German-Norwegian energy dialogue in Oslo and assisting international visitors at the WindEnergy Hamburg 2020 exhibition.

International exchange despite the coronavirus pandemic

The visit by the company’s partners to South Korea and Japan, accompanied by the Hamburg officials responsible for business and innovation, did take place. The Renewable Energy Hamburg Cluster Agency’s future plans were thwarted by the pandemic a short while later. Despite this bitter blow, the international division looks back on an eventful year in which, thanks to digital technology, it was possible to enter into an exchange with numerous stakeholders and successful-

ly represent the renewable energy location of Hamburg on the world stage. In the course of this we tackled topics such as renewable energy, offshore wind energy, sector coupling and hydrogen in a variety of in-house web seminars and digital workshops together with Renewable Energy Hamburg cluster members and partners from China, Denmark, France, Iceland, Japan, Morocco, the Netherlands, Norway and South Korea to name some examples.



Behind the Scenes of the political part of the NorCon closing conference

Northern Connections project successfully completed

Renewable Energy Hamburg was able, together with 20 project partners from the North Sea region, to successfully complete the EU project Northern Connections at the end of 2020. Innovations from small and medium-sized companies in the field of renewable energy supply and resource use were linked with project initiatives in the North Sea area over the course of the four-year project. A total of three living-lab events took place to this end in 2020. At the start of the year,

the participants met in person in Edinburgh to explore the issue of carbon capture, storage and utilisation. Further living labs in central Denmark and Malmo tackling sustainability in hospitals and climate-neutral building were held digitally. The politically supported closing conference also moved to the digital realm and was streamed live from Gothenburg. Worthy of particular mention are the excellent relationships between northern European clusters, cities and regions, which created this project and firmly established it for future initiatives.



Delegations from Hamburg and Groningen meet with Fukushima in Tokyo



SOCIAL MEDIA AS THE WINNER IN THE CRISIS: EEHH-MEDIEN RENEWABLE ENERGY HAMBURG'S MEDIA WORK IN 2020

Blog, LinkedIn, Vimeo, podcasts – the many social media channels of Renewable Energy Hamburg proved themselves to be suitable platforms for maintaining and enhancing the public image of the renewable energy network, despite conferences and other events being called off in the year of crisis, 2020.

2020: Renewable Energy Hamburg celebrates its 10th anniversary

The Renewable Energy Hamburg Cluster Agency proudly celebrated its tenth anniversary in September 2020. Despite the pandemic, the cluster agency managed to organise a small anniversary celebration with 120 guests, including the Hamburg Senator for Economics **Michael Westhage-**

mann, as part of the summer festival. The video campaign “10 Jahre EEHH Cluster – Mitglieder erzählen” [Renewable Energy Hamburg 10 years on – members tell their stories], in which time-served members reported on their involvement, was already running on Renewable Energy Hamburg's website and on social media channels ahead of the event.

2020 media campaign: blog

Security of supply in times of coronavirus, many promising international markets, offshore trends 2020 – the Renewable Energy Hamburg blog, in particular, enjoyed a significant boost. Thanks to the tremendous dedication and the willingness of many members to be interviewed, Renewable Energy Hamburg managed to expand its broad range of topical issues and provide the renewable energy community with exhaustive information. As part of the 2020 media campaign, several guest authors provided exciting articles, such as **Prof. Dr Claudia Kemfert**, head of the department of energy, transport and the environment at the German Institute for Economic Research, **Dr Simone Peter**, President of Bundesverband Erneuerbare Energien e.V. and **Dr Julia Verlinden**, Alliance 90/The Greens. Individual articles achieved more than 4,000 likes – a top rating!

2020 media campaign: events

Vera Events – a problem child in the year of coronavirus. Hamburg's Offshore Wind Conference 2020, HOW for short, was held in an alternative short-video format. Renewable Energy Hamburg did, however, physically hold the hydrogen-themed press trip in September with 15 journalists from the industry, visiting Hamburg's “MySmart-Life” project in Bergedorf, Orsted's real-world laboratory Westküste 100 and the Heide refinery, and exploring Arcelor Mittal's planned hydrogen-based steel production facility. An impressive response was reflected in trade publications, such as “Energie & Management” and “Tagesspiegel”. A total of 15 journalists submitted entries for the

journalist prize – **Stefan Hajek**, journalist at Wirtschaftswoche, won with “Total unabhängig? Geht doch”, in which he explored whether it was possible to be totally independent. Thanks to a report by the German news agency dpa, the German Renewables Award 2020 enjoyed an excellent overall number of clippings in the online media, such as sueddeutsche.de und welt.de.



Press trip 2020

Outlook for 2021: “New Energy from Hamburg” podcast

Taking a risk and trying out something new was more important than ever in 2020. This is how the idea for the new podcast format “New Energy from Hamburg” came about at the end of the year, in which guests from business, politics and science speak about developments in Hamburg and northern Germany with national and European-wide appeal. **Sven Utermöhlen**, COO RWE Renewables, kicked this off with an interview on hydrogen projects and the political challenges facing energy transition.



EEHH GOES DIGITAL – WEB SEMINARS ARE HUGELY POPULAR

Workshops, conferences, exhibitions – a network thrives on exchange with its members. This hardly seemed possible at the end of February 2020, with one major event after another being called off because of the coronavirus pandemic. The Renewable Energy Hamburg Cluster Agency also cancelled many of the events it had planned. The digital twist became a success in a very short space of time. Back in spring, Renewable Energy Hamburg’s office developed various digital series: “Renewable Energy Hamburg Digital Meeting Places”, “Digital Open Days”, “Examples of Projects from Northern German Energy Transition 4.0 (NEW 4.0)”, and “Offshore Trends 2020”.

Renewable Energy Hamburg Digital Meeting Places

“Public Utilities on the Rise – Thüga Renewables”, “Corporate PPAs as a Business Model with Potential – Despite Coronavirus? – Chatham Partners”, “Trigeneration with SunOyster – SunOyster Systems GmbH” – the digital “Renewable Energy Hamburg Meeting Places” did an outstanding job of illustrating the cluster agency’s wide range of renewable energy topics and garnered audiences of up to 100 people who enthusiastically took part.

“Offshore Trends 2020” series of web seminars

“Automatic Corrosion Management (Global Tech One and SemcoMaritime)”, “Contracts for Difference – a Glimmer of Hope or Misconception for the Offshore Sector?”, “Hydrogen and Offshore”, “The Tetra Spa Concept – Floating Wind Turbines” and the “National Test Field Offshore Wind Energy” – in collaboration with the Offshore Wind Energy Foundation, the Renewable Energy Hamburg Cluster Agency held this series of “Offshore Trends in 2020” web seminars for an international audience back in autumn. With each event at-

tracting up to 150 participants, it was possible to successfully convert the content originally planned for the Hamburg Offshore Wind Conference 2020 into short and snappy web seminars. Top experts from, for example, the Federation Association of Wind Farm Operators BWO, the certification organisation DNV GL, the wind turbine manufacturer Siemens Gamesa Renewable Energy or the project developer RWE Renewables, enthralled the digital public and strengthened the offshore community in Hamburg and beyond.



Hybrid GRA (2020)

With 40 spectators on site at the Opernloft theatre in Hamburg’s Altona district and 300 following the live stream, the ninth German Renewables Awards enjoyed its highest attendance to date. This year’s winners **Global Tech One/Semco Maritime** in the category “Product Innovation of the Year”, **GP Joule** in the category “Project of the Year”, **Nina Kicherer**, HAW

Hamburg with the “Student Thesis of the Year”, **Reinhard Christiansen** with “Lifetime Achievement Award” and **Stefan Hajek**, Wirtschaftswoche, in the category “Journalist Prize”, demonstrated just how impressive the innovative power of the renewable energy sector is.

<https://www.erneuerbare-energien-hamburg.de/de/service/video-datenbank.html>



OUTLOOK 2021

The outlook for 2021 is, of course, beset with extreme uncertainty given the difficult conditions we currently face with regard to public health. Nevertheless, we are hopeful that life will gradually return to normal over the course of the year and we, as Renewable Energy Hamburg, will once again be able to hold more in-person events for our members in the second half of the year, alongside the many digital offerings.

2021 is, of course, an election year in Germany, and for us as a cluster agency, this means sending out a continuous signal to help steer the future direction of energy policy. Firstly, a reasonable price must be put on carbon emissions, cli-

mate protection must be effective, and a level of competition must emerge with which renewable energy can absolutely keep pace. Secondly, everything must be done to ensure that the various renewable energy sectors are expanded ambitiously enough that future climate protection targets are achieved.

Even though the climate protection plan of Germany's federal government, which entered into force at the end of 2019, provides for a cautious start with regard to carbon pricing, and the Renewable Energy Act was revised at the end of 2020, significant improvements are necessary. This is the only way to push ahead with the coupling of different energy sectors. Increasing quantities of green electricity must also be available in the future to take over industry, mobility and

the supply of heating. Carbon pricing must lead to a concurrent reduction in the green energy levy and increase in the costs of fossil-fuel-based energy supplies. Until now, sector coupling has been made uneconomical, in most cases, by the unequal cost burden. This is where the work of Renewable Energy Hamburg as a cluster agency comes in: from lobbying work, to projects, to events in which this issue plays a significant role.

The development of a hydrogen industry will also become key for Renewable Energy Hamburg as part of sector coupling. Even if hydrogen is not the "panacea", the conversion of green energy to hydrogen may stabilise the fluctuations in the electricity system that are experienced with the increasing proportion of green electricity and

supply consumers, particularly in industry and heavy goods mobility, with carbon-free energy. Another particular focus of our work lies in renewable energy plants, which no longer receive any subsidy under the Renewable Energy Act after 20 years, but which could often continue to generate green electricity for many years to come.

Last but not least, we look forward to holding more individual meetings and networking events in person once again, alongside all the digital offerings that our members are able to enjoy. We hope, in the second half the year, during the run-up to the parliamentary elections, to use our member events to convey a powerful message in support of an ambitious and successful sustainable energy supply!





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