



Offshore Wind Deployment in the US and Germany



Expert Delegation Trip to Germany and Knowledge Exchange for Stakeholders from the US

September 23-26, 2024

Organized by:







Sep 23-26, 2024



2

Content

WELCOME	3
YOUR CONTACT PERSONS	4
DELEGATION TRIP PROGRAM	5
US DELEGATION	16
GERMAN SPEAKER PROFILES	17
YOUR PARTICIPATION	28
IMPORTANT CONTACT NUMBERS	29
NOTES	30





Sep 23-26, 2024

3



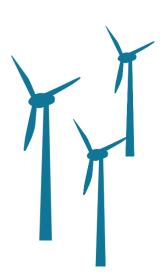
WELCOME

DEAR DELEGATES,

Welcome to the expert delegation trip on offshore wind deployment in the US and Germany!

With over 8 GW of offshore wind capacity in operation and deployment targets of 40 GW of offshore wind power capacity by 2035 and 70 GW by 2045, German policy makers and energy players have a successful history of developing, installing, operating, and maintaining offshore wind projects. The United States, on the other hand, is poised to accelerate its offshore wind deployment on two coasts and is in a favorable position to take advantage of substantial technology learnings, economies of scale and cost reductions achieved in Germany and in Europe.

With the goal to better understand and navigate a constantly evolving landscape of offshore wind farm needs, the German Federal Ministry for Economic Affairs and Climate Action is pleased to welcome you to this transatlantic knowledge exchange. This delegation trip is part of a broader scale effort to strengthen the energy and climate cooperation between Germany and the United States, encourage the exchange of ideas, and promote policy and technology expertise.



During the four days, you can expect:

- **Presentations** on the regulatory, technical, and economic issues facing the offshore wind market in Germany. You will meet and visit relevant key stakeholders.
- ▶ **Meetings** with major offshore wind energy executives from Germany.
- ▶ **Site visits.** You will visit the trade fair WindEnergy Hamburg, a premier international trade fair for the wind energy sector drawing over 40,000 participants from more than 100 countries.
- ▶ Peer-to-peer **knowledge exchange and networking opportunities** with stakeholders from policymaking and industry seeking to advance the offshore wind deployment.
- Group discussions aiming to identify actions for continuing cooperation and to turn learnings into actionable items.

To ensure that you get the most from taking part, we have prepared this small information booklet containing important information that you will find useful during the delegation trip.

We wish you an enriching experience during your four days here in Germany!

Yours faithfully,

Berthold Breid CEO RENAC

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1.



YOUR CONTACTS

For questions during the delegation trip, please reach out to us:



Ms. Cecilia Strandberg
Project Director

Renewables Academy (RENAC) AG

Schönhauser Allee 10-11 10119 Berlin Germany

E-Mail: strandberg@renac.de Phone: 0049 30 58 70870 42



Ms. Jana DetmeringProject Assistant

Renewables Academy (RENAC) AG

Schönhauser Allee 10-11 10119 Berlin Germany

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Phone: 0049 30 58 70870 70





Sep 23-26, 2024

5



DELEGATION TRIP PROGRAM

Monday, September 23, 2024

Meeting with government agencies & stakeholders, transfer to Hamburg / Berlin, Hamburg

Time CEST/ UTC +2	Тор	Venue/ Speaker
08:15 am	Meeting point at hotel reception & walk to meeting venue	Meeting point for walk to meeting venue: InterCity Hotel (hotel reception) Katharina-Paulus-Straße 5 10557 Berlin Hotel – BMWK 1 km, 15 min (by foot)
08:30 am	Registration and welcome	Meeting venue: German Federal Ministry for Economic Affairs and Climate Action (BMWK) Scharnhorststraße 34-37 10115 Berlin Entrance: Tor 2 Room: G 3.021 (Saal 5) www.bmwk.de

Welcome and introduction

Welcome and introduction

Welcome

• welcome

- Introduction to the energy and climate partnership between the US and Germany
- Presentation of the week's program
- Introduction sessions & speaker day 1

Renewables Academy (RENAC) AG

www.renac.de

Adelphi

www.adelphi.de

All participants

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08:45 am







Sep 23-26, 2024

6



	Welcome and introduction to the international
	energy policy agenda by the Federal Ministry for Economic Affairs and Climate Action (BMWK) – Keynote
09:00 am	 Welcome and introduction to the international energy policy agenda US-German bilateral working group on offshore wi (goals, activities, outlook)

Dr. Falk Bömeke

Head of Division "General issues of bilateral climate and energy cooperation; Cooperation in North America, East Asia, Oceania and Turkey"

German Federal Ministry for Economic Affairs and Climate Action (BMWK) www.bmwk.de

The German energy transition and the role of
offshore wind

09:15 am

- Introduction to the German energy transition (targets, drivers, milestones, what has worked, what did not)
- Role of offshore wind for the energy transition in Germany and expansion targets (70 GW until 2045)
- Q&A

Dr. Anchali Stapornwongkul

Policy Officer Division "General issues of bilateral climate and energy cooperation; Cooperation in North America, East Asia, Oceania and Turkey"

German Federal Ministry for Economic Affairs and Climate Action (BMWK)

www.bmwk.de

Offshore wind in the US

09:45 am

- US power system infrastructure
- Role of offshore wind in the US
- Development and outlook
- Q&A

Mr. Nathan McKenzie

Technology Manager for Offshore Wind R&D

US Department of Energy (DOE), Wind Energy Technologies Office

Offshore wind power sector in Germany

- Regulatory framework & subsidy schemes
- Permitting, spatial planning & grid connection
- EU framework for offshore wind development

Offshore wind supply chain 10:15 am

- Further aspects of offshore wind development (e.g. floating, hydrogen, defense)
- Challenges for the offshore wind sector development to reach 70 GW until 2045

Mr. Andreas Mummert

Head of Politics

German Offshore Wind Energy Foundation (SOW) https://www.offshore-stiftung.de/en

Offshore wind energy in Germany - Planning and licensing

11:00 am

- Maritime spatial planning
- Site development plan and site investigations
- Approval procedure
- Identification of suitable areas for 70 GW offshore wind until 2045
- Q&A

Dr. Kai Trümpler

Head of Division "Spatial Planning"

Federal Maritime and Hydrographic Agency (BSH) www.bsh.de/EN/

11:45 am

Q&A and open discussion on bilateral cooperation opportunities

All participants

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Sep 23-26, 2024



7

12:15 pm	Walk to restaurant	BMWK – restaurant 850 m, 15 min (by foot)
12:30 pm	Lunch break at restaurant Reinhard Bär *	Restaurant "Reinhard Bär" Am Hamburger Bhf 4, 10557 Berlin
01:30 pm	Walk to meeting venue	Restaurant – 50Hertz 250 m, 5 min (by foot)
		Meeting venue:
01:45 pm	Welcome and registration	50Hertz Heidestraße 2 10557 Berlin
		www.50hertz.com
	Meeting with TSO and site visit of reserve control center	Ms. Nadja Ballauf Head of Offshore Operations, 50Hertz
	 Presentation of 50Hertz - Role and responsibilities of the transmission grid operator to connect offshore wind to grid (historical & outlook) Investment in infrastructure: Grid extension planning – how much grid will be needed? Cross national offshore wind projects and grid connection Activities of WindGrid and EGI in the US Outlook 	Mr. Markus Laukamp CEO WindGrid
02:00 pm		Mr. Frederic van Cauteren Head of Business Development, EGI
02.00 pm		50 Hertz www.50hertz.com
		WindGrid – Elia Group www.windgrid.com
	Q&A, open discussionVisit of the reserve control center	Elia Grid International (EGI) htpps://eliagrid-int.com/
04:00 pm	Walk to hotel and pick-up luggage	50Hertz – hotel 850 m, 15 min (by foot)
05:00 pm	Transfer from Berlin to Hamburg *	Berlin – Hamburg ~ 3 h (by bus)
08:00 pm	Arrival in Hamburg check-in hotel & quick refresh	Hotel Hafen Hamburg Seewartenstraße 9 20459 Hamburg
08:15 pm	Meeting point at hotel reception and walk to restaurant	Hotel – restaurant 250 m, 5 min (by foot)
08:30 pm	Optional – Joint Dinner at restaurant Blockbräu (\$)	Restaurant "Blockbräu" Bei d. St. Pauli-Landungsbrücken 3 20359 Hamburg

End of day 1











Sep 23-26, 2024



8

Tuesday, September 24, 2024 WindEnergy Hamburg / Hamburg

Time CEST/ UTC +2	Тор	Venue/ Speaker
08:15 am	Meeting point at hotel reception & transfer to RWE *	Meeting point for transfer to RWE: Hotel Hafen Hamburg Seewartenstraße 9 20459 Hamburg Hotel – RWE 3 km, 20 min (by public transport)
08:45 am	Welcome and registration	Venue: RWE Drehbahn 47 20354 Hamburg https://www.rwe.com/en/
09:00 am	Meeting with RWE Offshore Wind GmbH Introduction to RWE Offshore Wind GmbH Offshore wind portfolio Targets and challenges (skilled workforce, supply chain, etc.) Q&A	Dr. Thomas Michel Chief Operating Officer (COO) RWE Offshore Wind GmbH https://www.rwe.com/en/
10:15 am	Transfer from RWE to WindEnergy *	RWE - WindEnergy 2 km, 15 min (by public transport)
10:30 am	Registration at WindEnergy Hamburg	Venue: WindEnergy Hamburg Messeplatz 1 20357 Hamburg www.windenergyhamburg.com

Visit of "WindEnergy Hamburg"

WindEnergy Hamburg stands as a premier international trade fair for the wind energy sector. Drawing over 40,000 participants from more than 100 countries, it unites professionals, stakeholders, and companies to present cutting-edge advancements, technologies, and solutions within the industry. The event serves as a pivotal platform for networking, cultivating business opportunities, and facilitating knowledge exchange. By fostering innovation and collaboration, WindEnergy Hamburg plays a crucial role in propelling the sustainable growth of the wind energy sector.

US participants will have the unique opportunity to meet, discuss and network with key stakeholders from the German offshore wind sector. See schedule below.

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Sep 23-26, 2024

9



Meeting with Renewable Energy Hamburg (EE.HH.)

Introduction to the energy cluster and its activities

 Role of offshore wind in the northern part of Germany

- Why Hamburg is called "Germany's Offshore Wind Capital" (Arkona, Dan Tysk, Global Tech I, Gode Wind I to III, Sandbank and Kaskasi)
- Q&A

Mr. Jan Rispens

Managing Director (tbc)

Ms. Astrid Dose

Head of Public Relations and International Relations (tbc)

Mr. Jingkai Shi

International Cooperation Renewables (tbc)

Renewable Energy Hamburg (EE.HH.) www.eehh.de

Location: Hall A4, booth 301

12:00 pm

11:00 am

Lunch break at restaurant **Harbour Light** with further US delegates from Louisiana *

Restaurant "Harbour Light"

Location: Main entrance, 1st floor, between Hall A1 & A4

Panel Discussion with US participation

Offshore Wind in the USA

Welcome by:

• Martin Skiba, World Forum Offshore Wind

Key notes:

- David Linden, Westwood Global Energy
- Nathan McKenzie, US Department of Energy

02:00 pm

Panelists:

- Commissioner Davante Lewis, Louisiana Public Service Commission
- Kerry Schlichting, ISO New England
- Liz Burdock. Oceantic Network
- Necy Sumait, Bureau of Ocean Energy Management

Moderated by:

Bastian Stenzel, adelphi

Panel hosted by:

World Forum Offshore Wind www.wfo-global.org

Location: Hall B5, Offshore Stage

Guided Round Tour Part I

03:00 pm

- Visits to various stands of German offshore sector stakeholders: Siemens Energy, Fraunhofer IWES, TÜV Nord, VDMA
- Note: Visits may partly take place in two groups

Guided Round Tour Part I

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Sep 23-26, 2024





10

Conference Session

German Offshore Wind Expansion until 2030 & Beyond: Opportunities and Challenges

Panelists:

.

- Jost Backhaus, Steelwind Nordenham
- Ina Kamps, BP

04:00 pm

- Till Schwarzlose, RWE
- Antoine Becker, TotalEnergies
- Holger Matthiesen, Luxcara
- Peter Kærgaard Jensen, Vestas

Moderated by:

 Hans Sohn, Federal Association of Offshore Wind Energy eV Location: Hall B5, Offshore Stage

05:30 pm	Free time for networking	Networking
07:30 pm	Walk to restaurant	WindEnergy– restaurant 500 m, 5 min (by foot)
08:00 pm	Optional – Joint dinner at restaurant Altes Mädchen (\$)	Restaurant "Altes Mädchen" Lagerstr. 28 B 20357 Hamburg

End of day 2







Sep 23-26, 2024



11

Wednesday, September 25, 2024 WindEnergy Hamburg / Hamburg

Time			
CEST/ UTC +2	Тор	Venue/ Speaker	
		Meeting point for transfer to boat dock:	
10:00 am	Meeting point at hotel reception & walk to boat dock *	Hotel Hafen Hamburg Seewartenstraße 9 20459 Hamburg	
		Hotel – Landungsbrücken 250 m, 5 min (by foot)	
	Harbor Energy tour (*)		
10:30 am	On this guided harbor boat tour, you will learn how the city of Hamburg is working to achieve its climate targets by 2030. The city and many companies in the Port of Hamburg are actively involved and you will learn about ongoing and planned activities to realize the energy transition. The boat tour lasts around 3 hours and includes lunch.		
01:30 pm	Transfer to WindEnergy Hamburg *	Dock – WindEnergy Hamburg 4 km, 20 min (by public transport)	
		Venue:	
01:45 pm	Registration at WindEnergy Hamburg	WindEnergy Hamburg Messeplatz 1 20357 Hamburg www.windenergyhamburg.com	
	Guided Round Tour Part II		
02:00 pm	 Visits to various stands of German offshore sector stakeholders: Skyborn Renewables offshore solutions GmbH, DNV, Windea Offshore, Steelwind, EEW Special Pipe Constructions GmbH, and Schmidbauer Note: Visits may partly take place in two groups 	Guided Round Tour Part II	

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Sep 23-26, 2024

12



Conference Session: Expanding markets to achieve the energy transition

03:00 pm

To deliver the ambitious targets required for the energy transition, the offshore wind industry needs to tap into new markets and supply chains. This session will start with a high-level perspective from Corio Generation on how developers and governments can support the expansion of offshore wind markets before opening into a panel discussion on how to build and strengthen a sustainable supply chain.

Location: Hall B1.UF, Global Markets Theatre

	M	eeting with Oceantic Network	Ms. Liz Burdock President & CEO
04:30 pm	•	Introduction to the Oceantic Network and its activities	Oceantic Network https://oceantic.org/
			Location: Hall B1.OG, Booth 300.1

05:00 pm

Networking Happy Hour at the US pavilion hosted by Oceantic Network

Opportunity for US delegation to network with key stakeholders from the German offshore sector.

Location: Hall B1.OG, Booth 300.1

Wine c'clock - Networking Event

05:30 pm

Hosted and sponsored by: EEHH, Energieküste, EESH, IHK Cottbus, Stiftung Offshore-Windenergie, The Blue, WAB und WEN

Opportunity for US delegation to network with key stakeholders from the German offshore sector.

Location: Hall 5, Offshore Stage

07:00 pm	Transfer to restaurant *	WindEnergy– restaurant 1,5 km, 20 min (by public transport)
07:30 pm	Dinner at restaurant Wallter's Wine & Beef Kontor Sponsored by RWE.	Restaurant "Wallter's Wine & Beef Kontor" Alter Wall 12 20457 Hamburg

End of day 3







Sep 23-26, 2024



13

Thursday, September 26, 2024 Site visit Cuxhaven / Cuxhaven, Hamburg

Time CEST/ UTC +2	Тор	Venue/ Speaker
07:30 am	Meeting point at hotel reception & bus transfer to Cuxhaven *	Meeting point for bus transfer to Cuxhaven: Hotel Hafen Hamburg Seewartenstraße 9 20459 Hamburg Hamburg – Cuxhaven 150 km, ~2,5 h (by bus)
10:00 am	Welcome & registration	Venue: Cuxhaven's Economic Development Agency (AfW) Kapitän-Alexander-Straße 1 27472 Cuxhaven www.afw-cuxhaven.de/en/
10:15 am	Meeting with Cuxhaven's Economic Development Agency (AfW) Introduction to Cuxhaven's Economic Development Agency (AfW) Role of offshore wind for Cuxhaven Q&A	Cuxhaven's Economic Development Agency (AfW) www.afw-cuxhaven
11:00 am	Visit of the German Offshore Industry-Centre Cuxhaven and meeting with local industry Due to its central location on the river Elbe where the river is deep enough for sea-going vessels and its proximity to offshore wind farms, Cuxhaven has developed into a high-priority location for the national & international offshore industry. The offshore port of Cuxhaven operates heavy-duty-capable offshore & heavy-duty terminals, a multifunctional terminal, heavy-duty storage & logistics areas, accessible heavy-duty connecting routes between the production facilities & quay facilities as well as an offshore	Guided visit (by bus) of the German Offshore Industry-Centre Cuxhaven by: Cuxhaven's Economic Development Agency (AfW) www.afw-cuxhaven.de/en/ German Offshore Industry-Centre Cuxhaven (DOIZ) https://en.offshore-basis.de/

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safety training center.





Sep 23-26, 2024

14



For more information:

https://www.youtube.com/watch?v=wNEL5OPmCRo

During a half day trip, participants:

- will visit the Cuxhaven Offshore Wind Port & discover its critical role in supporting the offshore wind industry in terms of logistics and services.
- will gain an overview of the port's layout & different sections, companies operating within the port, & see specialized facilities like cranes & equipment, as well as wind turbine components.

12:30 pm	Transfer to restaurant *	DOIZ – restaurant 2 km, 10 min (by bus)
01:00 pm	Lunch break restaurant Seeterrassen *	Restaurant "Seeterrassen" Am Seedeich 38 27472 Cuxhaven
01:45 pm	Transfer to German Offshore Industry-Center (DOIZ) Cuxhaven *	Restaurant – Siemens Gamesa 5 km, 15 min (by bus)
02:00 pm	 Visit of Siemens Gamesa factory Welcome & Housekeeping Introduction Siemens Gamesa About the Cuxhaven Factory Factory Visit Glimpse of Finished Nacelle, Group Photo Wrap-Up, Q&A & Conclusion 	Siemens Gamesa Nacelle Manufacturing Plant, Cuxhaven www.siemensgamesa.com
05:00 pm	Transfer to Hamburg *	Cuxhaven - Hamburg 150 km, ~2,5 h (by bus)
	During transfer Feedback by US participants on lessons learnt from the expert delegation trip meetings and site visits Final Session: Feedback round and evaluation • Feedback round, Evaluation and official closing of expert delegation trip	All participants
08:00 pm	Optional – Joint dinner at restaurant Fischerhaus (\$)	Restaurant "Fischerhaus" St. Pauli Fischmarkt 14 20359 Hamburg Germany

End of day 4 and expert delegation trip









Sep 23-26, 2024



15

Foot note:

- Arranged and costs covered by hosts
- Transfer options and site visits are subject to weather conditions. In the event of unfavorable weather, the program organizer reserves the right to cancel the site visit. If feasible, an alternative activity may be arranged as a substitute for the scheduled site visit, with short notice.
- Costs to be borne by participant

The expert delegation trip will take place in Germany from September 23-26, 2024. The trip will start in Berlin on September 23, 2024 and will end in Hamburg on September 26, 2024.

Please note:

Kindly be aware that the program is subject to modifications based on factors such as the availability of participating organizations, logistical considerations, and other relevant factors. The program organizer reserves the right to make adjustments to the content and schedule of the agenda with short notice.

IIII renac renewables academy





Sep 23-26, 2024





US DELEGATION

#	Title	First Name	Last name	Position	Institution
1	Mr.	Mark	Abraham	State Senator	Louisiana State Senate
2	Mr.	Blake	Canefield	Executive Council	Louisiana Department of Energy and Natural Resources
3	Mr.	Franklin	Foil	Senator	Louisiana State Senate
4	Ms.	Jian	Fu	Systems Integration Program Manager	U.S. Department of Energy, Wind Energy Technologies Office
5	Mr.	Davante	Lewis	Commissioner	Louisiana Public Service Commission
6	Ms.	Camille	Manning-Broome	President & CEO	Center for Planning Excellence
7	Mr.	Nathan	McKenzie	Technology Manager for Offshore Wind R&D	US Department of Energy Wind Energy Technologies Office
8	Mr.	Patrick	McMath	Senator, District 11	Louisiana Senate
9	Mr.	Mike	Reese	Senator	Louisiana State Senate
10	Ms.	Laura	Robbins	Deputy Director, Gulf of Mexico Region	US Department of Interior, Bureau of Ocean Energy Management
11	Mr.	Kerry	Schlichting	Lead State Policy Advisor External Affairs	ISO New England
12	Ms.	Necy	Sumait	Regional Supervisor, Office of Strategic Resources, Pacific Region	Bureau of Ocean Energy Management







Sep 23-26, 2024

17

GERMAN ORGANISATIONS - PROFILES

German Organisations - By order in the program:

German Federal Ministry for Economic Affairs and Climate Action (BMWK)

Responsibilities within the field of energy and climate policy are being pooled in the BMWK. This is enabling an "energy policy from one source" and offers the advantage of covering the energy market in its entirety.

The BMWK is responsible for all issues relating to the Energiewende. Its goal is a secure, environmentally friendly and affordable energy supply.

Thanks to appropriate framework conditions, the BMWK will ensure that the Energiewende becomes a driver for investment and modernization that contribute to innovation, economic growth and employment.



www.bmwk.de

Foundation OFFSHORE WIND ENERGY (SOW)

The German Offshore Wind Energy Foundation was founded in 2005 on the initiative of the industry and under the moderation of the German Federal Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection (BMUV).

It has established itself as a non-partisan, supra-regional and independent ThinkTank for the development of offshore wind energy in Germany and Europe. It serves as a communication platform for stakeholders from the political, industrial and research sector, enables knowledge exchange and serves as driver of ideas.

The foundation's board of trustees includes key federal and state ministries for offshore wind as well as operators, manufacturers, transmission system operators, suppliers, banks and insurance companies.

www.offshore-stiftung.de/en













Sep 23-26, 2024



18

Federal Maritime and Hydrographic Agency (BSH)

The BSH is a higher federal authority within the portfolio of the Federal Ministry for Digital and Transport (BMDV). It is the public institution for maritime tasks. The Management of the Sea Department's overriding goal is to implement the climate policy guidelines of the German government, to contribute to energy system transformation and the coordinated expansion of offshore wind energy and the necessary grid connection in the German EEZ in a way that is compatible with nature and space.

On the basis of the spatial development plans and the technical planning specifications, the use and protection of the oceans must be balanced under the condition of sustainable development. Tasks include: Preparation of the site development plan; Development of the spatial development plan with definition of priority and reserved areas for various use/functions; Preliminary investigation of areas and checking the suitability of these areas for offshore wind energy; Management of planning approval and approval procedures for offshore wind farms, converters, power cables and pipelines; Approval of research activities, environmental audits & plausibility check of technical documents; Construction and operation



https://www.bsh.de/EN

50Hertz Transmission GmbH

50Hertz operates the electricity transmission system in the north and east of Germany, which it expands as needed for the energy transition. Its extra high voltage grid has an electrical circuit length of more than 10,000 kilometres, or the distance between Berlin and Rio de Janeiro. The 50Hertz control area covers the Länder of Brandenburg, Mecklenburg-Western Pomerania, Saxony, Saxony-Anhalt, and Thuringia, as well as the city states of Berlin and Hamburg. Within these regions, 50Hertz and its around 1,400 employees ensure that 18 million people are supplied with electricity around the clock.

50Hertz is a forerunner in the field of secure integration of renewable energy. In its grid area, 50Hertz wants to integrate 100 percent renewable energies securely into the grid and system by 2032 - calculated over the year.

The shareholders of 50Hertz are the Belgian holding Elia Group (80 percent), which is listed on the stock exchange, and the KfW bank group with 20 percent. As a European TSO, 50Hertz is a member of the European Network of Transmission System Operators for Electricity (ENTSO-E).



www.50hertz.com

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Sep 23-26, 2024



19

WindGrid

WindGrid is a subsidiary of ELIA Group, one of the top 5 transmission utilities in Europe. ELIA Group main subsidiaries, Elia and 50Hertz, are regulated entities in charge of designing, developing, owning and operating the onshore and offshore transmission grids in Belgium and in the eastern part of Germany.

ELIA Group created WindGrid in 2022 to support governments, utilities and/or generators in the efficient integration of offshore wind to onshore grid. Indeed, WindGrid can invest outside of Belgium and Germany in the development, construction and operation of offshore transmission infrastructures, and bring Elia and 50Hertz decades of experience developing, owning and operating offshore transmission infrastructures in the North and Baltic seas.

In total, ELIA Group is operating >5GW of offshore transmission infrastructures and currently developing >10GW of additional capacities, connecting offshore wind farms, multiple States (and a combination of both), with both HVAC and HVDC technologies.

WindGrid current regional focus is Europe (including the UK) and the US. In the US, WindGrid has established an office in 2023 and established first partnerships with utilities on the East Coast.

www.windgrid.com



Elia Grid International (EGI) is a global engineering consultancy company specializing in complex power system challenges.

Its multidisciplinary team of experts offers strategic, technical and regulatory advice in all fields related to power transmission, as well as a range of specialist solutions. EGI is an international company with offices in Brussels, Berlin, Dubai, Abu-Dhabi, Riyadh, Singapore and Bangkok, and carries out projects in over 20 countries worldwide.

EGI is part of Elia Group, one of Europe's top five transmission system operators and a key player in the European energy market and interconnected electricity system. Elia Group is also an industry-renowned specialist in building interconnectors and integrating renewable energy generation.

https://eliagrid-int.com/













Sep 23-26, 2024



20

RWE Offshore Wind GmbH

RWE Offshore Wind GmbH is a global energy company for sustainable power generation based on offshore wind power.

The portfolio of RWE Offshore Wind GmbH covers wind turbines that are installed on the seabed as well as modern floating wind turbines. In terms of the total capacity of offshore wind power, the company ranks second worldwide.

RWE Offshore Wind GmbH operates as a direct subsidiary of RWE AG. The company emerged from the former RWE Renewables GmbH, which was founded in 2019 and later split up into separate companies for each of the renewable technologies.

www.rwe.com/en/the-group/rwe-offshore-wind/



Renewable Energy Hamburg (EE.HH.)

The industry network Renewable Energy Hamburg (REH) offers its 260+ members and interested stakeholders the ideal platform for networking and information.

Core sectors are offshore and onshore wind energy together with solar energy, renewable heat, sector coupling and storage, and hydrogen since 2021.

The international team of REH supports not only REH members to build and expand their international business but is also the first contact point for international business and other stakeholder who would like to get into contact with the regional renewable energy and hydrogen community.

www.erneuerbare-energien-hamburg.de/en/



World Forum Offshore Wind (WFO)

WFO (World Forum Offshore Wind) is the leading global business platform for the offshore wind industry. By connecting and supporting its members, WFO is helping to make offshore wind one of the world's leading sources of renewable energy.

WFO acts as an independent non-profit business platform. Its members from around the world cover the complete offshore wind value chain.

https://wfo-global.org/











Sep 23-26, 2024



21

Siemens Energy Global GmbH

Located in 90 countries, Siemens Energy operates across the whole energy landscape. From conventional to renewable power, from grid technology to storage to electrifying complex industrial processes.

Its mission is to support companies and countries with what they need to reduce greenhouse gas emissions and make energy reliable, affordable, and more sustainable.



https://www.siemens-energy.com/global/en/home.html

Fraunhofer IWES

Fraunhofer IWES secures investments in technological developments through validation, shortens innovation cycles, accelerates certification procedures, and increases planning accuracy by means of innovative measurement methods in the wind energy and hydrogen technology sectors. At present, there are more than 300 scientists and employees as well as more than 100 students employed at the nine sites: Bochum, Bremen, Bremerhaven, Görlitz, Hamburg, Hannover, Leer, Leuna, and Oldenburg. Its operating budget in 2023 was €46.6 million.

Extensive funding policy support has made it possible to set up unique test benches, for example for rotor blades, drive trains and support structures, bearings, and main shafts as well as a measurement infrastructure and laboratories since the institute's foundation in 2009. In addition, Fraunhofer IWES systematically researches the interaction of wind energy and hydrogen production, reconversion, and grid integration as well as generating extensive synergies.

The test portfolio was developed in close cooperation with leading industrial players, who have also accompanied the development of the test methods and processes right from the design stage. The combination of a globally unique testing infrastructure with methods expertise distinguishes the IWES as a research partner for companies all over the world. Participation in international expert committees makes the institute an active trailblazer for technological developments and quality assurance in the wind industry.

www.iwes.fraunhofer.de/en.html













Sep 23-26, 2024



22

TÜV Nord

With comprehensive services in the areas of certification, type approval, site assessment and inspections TÜV NORD is dedicated nationally and internationally to this future-oriented and environmentally-friendly form of energy generation.

TÜV NORD is legitimized by the German Government as Authorized Body ("Prüfamt") for DIBt Type Approvals according to the German Building Law ("Typenprüfungen"). Its customers are turbine and component manufacturers or designers, project developers and planners, operators or owners of wind farms along with financiers or insurers.

TÜV Nord employs specialized and qualified engineers for all technical disciplines surrounding wind turbines. Regular audits by the DAkkS provide evidence for the competence of its personnel and the high quality of its services.

https://www.tuev-nord.de/en/company/energy/renewables/wind-energy/

TUVNORD

WINDEA Offshore GmbH & Co. KG

Founded in 2011, WINDEA Offshore GmbH & Co. KG is a joint venture between Bernhard Schulte Offshore GmbH, Buss Offshore Solutions GmbH & Co. KG, and Ems Maritime Offshore GmbH. WINDEA provides comprehensive logistics and supply solutions for offshore wind farms, serving major clients like Siemens Gamesa, GE Renewable Energy, and EnBW.

The company has expanded its services internationally, including entering the U.S. offshore wind market in 2019 through the joint venture WINDEA USA. It also developed the WINDEAcare product, offering holistic medical care for offshore wind farms in collaboration with NHC Northern Helicopter and Johanniter-Unfall-Hilfe.

https://windea.com/













Sep 23-26, 2024



23

DNV

DNV is the independent expert in risk management and assurance, operating in more than 100 countries. Through its broad experience and deep expertise DNV advances safety and sustainable performance, sets industry benchmarks, and inspires and invents solutions.

Whether assessing a new ship design, optimizing the performance of a wind farm, analyzing sensor data from a gas pipeline or certifying a food company's supply chain, DNV enables its customers and their stakeholders to make critical decisions with confidence.

Driven by its purpose, to safeguard life, property, and the environment, DNV helps tackle the challenges and global transformations facing its customers and the world today and is a trusted voice for many of the world's most successful and forward-thinking companies.

DNV provides assurance to the entire energy value chain through its advisory, monitoring, verification, and certification services. As the world's leading resource of independent energy experts and technical advisors, the assurance provider helps industries and governments to navigate the many complex, interrelated transitions taking place globally and regionally, in the energy industry. DNV is committed to realizing the goals of the Paris Agreement, and supports customers to transition faster to a deeply decarbonized energy system.



www.dnv.com

Skyborn Renewables offshore solutions GmbH

As a dedicated partner in offshore wind, Skyborn Renewables' capabilities span the entire offshore wind value chain, including greenfield development, engineering and design, procurement, financing, corporate power purchase agreements, construction, and operations and asset management.

With extensive experience as a greenfield developer, they have a proven track record in developing and preparing leases for land and seabed, as well as designing offshore wind power plants in compliance with national and international standards. Skyborn Renewables secures permits, arrange financing, procure equipment, and oversee projects that are built and operated to the highest industry standards, with a strong focus on health and safety performance.



https://www.skybornrenewables.com/

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Sep 23-26, 2024



24

Steelwind Nordenham GmbH

Steelwind Nordenham is a high-tech company of the Offshore Wind Industry and one of the worldwide leading manufacturers of Mega Monopiles.

Since 2014 Steelwind is producing complete foundations for Offshore Wind Power Stations at its Fabrication Yard in Nordenham/Germany with direct access to the North Sea.

Steelwind Nordenham is a 100% Subsidiary of Dillinger which is our reliable supplier for highest quality heavy steel plates..



www.steelwind-nordenham.de

EEW Special Pipe Constructions GmbH

EEW Special Pipe Constructions GmbH (EEW SPC), located in Rostock/Germany, is one of the leading manufacturers for offshore foundations as well as the associated pile components.

The company with about 1,000 employees has its roots in the Erndtebrücker Eisenwerk (EEW) which was founded in 1936. The EEW Group has 2,000 employees worldwide with production facilities in Germany, South Korea, Malaysia and the US as well as several sales offices in every continent.

Since 2008 EEW SPC produces thick-walled, longitudinally welded large pipes for foundations, with currently diameters of up to 12 m, lengths of up to 120 m and up to 2,500 t piece weights with an annual capacity of approx. 200,000 t. EEW SPC has a total of 32,000 $\rm m^2$ fabrication capability under roof and 262,000 $\rm m^2$ of storage area. The own quay guarantees direct access to the Baltic Sea.

With their current order intake included, EEW SPC has participated, as foundation manufacturer, in the installation of over 2,300 monopiles or OWF projects in Europe, Asia and the USA.

https://eew-group.com/













Sep 23-26, 2024



25

Schmidbauer GmbH & Co. KG

Schmidbauer is a leading provider in Germany for mobile crane services and specialized transport of all sizes, offering a comprehensive full-service concept that combines state-of-the-art technology with sophisticated engineering and human expertise.

Founded in 1932, this traditional company serves as an innovative partner for lifting and moving heavy loads across various industries, including construction, energy, chemicals, as well as plant and machinery construction.

The Schmidbauer Group, headquartered in Gräfelfing near Munich, employs around 600 people and, through its subsidiary Fricke-Schmidbauer Schwerlast GmbH, offers a large specialized fleet across more than 20 locations nationwide. The company also operates internationally with branches and sales offices in Estonia, Finland, France, and Poland.



www.schmidbauer-group.com

Oceantic Network

At the Oceantic Network (formerly the Business Network for Offshore Wind), their driving purpose is to inform, coordinate, and mobilize human ingenuity, enterprise, and labor to take advantage of the urgent need to tap the vast renewable energy resources that lie offshore in the world's oceans. The collective, coordinated efforts of its members equip communities and nations to accelerate the transition to clean energy and create economic opportunities.

Over the past ten years, the Network has grown along with the industry, changing its name to expand and include industry sectors. At its ten-year mark, the Network continues to look forward and set the pace for the industry; that includes an expanded view of what offshore wind can provide the energy mix. Offshore wind is the gateway to other ocean renewables, including green hydrogen, wave energy, and more. Offshore wind as an industry will remain the main focus of the Network; however, we are expanding our scope to grow and adapt as the industry does the same. With this enlarged focus, the Network changed its name from the Business Network for Offshore Wind to the Oceantic Network.

https://oceantic.org/













Sep 23-26, 2024



26

Cuxhaven's Economic Development Agency (AfW)

The Cuxhaven Agency for Economic Development is the regional point of contact for businesses and start-ups for all matters concerning funding programs and business and economic development.

Its areas of expertise cover traditional sectors of industry such as the port & logistics, fisheries and the food industry but also innovative fields such as the pharmaceutical and biotechnology sectors.

In the new energy sector, AfW has successfully overseen the German Offshore Industry Centre in Cuxhaven as it has positioned itself as one of the pioneering locations of its kind in Europe.

https://www.afw-cuxhaven.de/en



Siemens Gamesa

Siemens Gamesa Renewable Energy is a global leader in the wind power industry, specializing in the design, manufacturing, and servicing of wind turbines for both onshore and offshore applications. Formed in 2017 through a merger between Siemens Wind Power and Gamesa, the company leverages its strong engineering expertise and innovation to advance clean energy solutions worldwide.

The company offers a broad range of wind turbines, tailored solutions for various environments, and comprehensive services that maximize efficiency and performance. Its offshore wind division is particularly recognized for pioneering large-scale offshore wind projects, enhancing energy security and sustainability globally.

www.siemensgamesa.com





renewables academy





Sep 23-26, 2024



27

This delegation trip is organized by the Renewables Academy (RENAC) AG in cooperation with its partners adelphi and the German American Chambers of Commerce (AHK) as part of the US Germany Climate and Energy Partnership.

About the Renewables Academy (RENAC) AG

The Renewables Academy AG (RENAC) is a leading international provider of training, educational programs and capacity building services in the field of renewable energy and energy efficiency.

Since its foundation in 2008, RENAC has trained over 30,000 professionals from more than 160 countries in the use and implementation of different renewable energy technologies covering technical aspects, policy, regulatory framework, project development, and financial aspects. As part of its service portfolio, RENAC also offers support to major private and public organizations, international agencies, universities and governments in setting up and developing own in-house training portfolios, drawing on its extensive experience in training material development and training delivery.



Since 2016, RENAC is part of a consortium supporting the German Federal Ministry for Economic Affairs and Climate Action (BMWK) in its endeavor to strengthen its bilateral energy cooperation initiatives with the United States, Canada, Australia, and New Zealand. Within this consortium, RENAC organizes high-level expert exchanges between Germany and the partner countries.

Contact: Cecilia Strandberg, Project Director Energy and Climate Policy, strandberg@renac.de, +49 30 58 70870 42





Sep 23-26, 2024

28



YOUR PARTICIPATION

The aim of this delegation trip is to provide a space for exchange and discussion, and everyone present brings a wealth of experience to the table. In order for everyone to benefit the most from taking part we encourage you to actively participate in the activities and discussions.

During the four days of the delegation trip, we ask you to please consider the following in order to make the exchange as interactive and fruitful as possible for all of you:

- Contribute to the discussion. We want you to be involved, so please do not hesitate to ask your questions or contribute to the discussion.
- **Be on time.** Please be on time at the meeting points at the times indicated in the agenda and let your hosts know immediately in case of any urgency matters arising throughout the four days.
- ▶ **Participate in all sessions.** We all count on your participation in every session throughout the four days of the delegation trip.
- Agree to disagree (if necessary) and be respectful of others. Please consider the discussions as exchanges between experts for the purpose of learning. During the sessions, participants are free to express their opinions and concerns. Differences in approaches and strategies are more than welcome. Everyone should contribute to a calm, non-judgemental and sharing environment.

We look forward to a fruitful four-day exchange with you!







Sep 23-26, 2024

29



IMPORTANT CONTACT NUMBERS

During your stay here in Germany, please find below important contact numbers:

Emergency Number	112		
U.S. Embassy Germany	Clayallee 170 14191 Berlin Phone: +49-30-8305-0 Website: https://de.usembassy.gov/		
InterCityHotel Berlin Hauptbahnhof (Berlin)	Katharina-Paulus-Straße 5, 10557 Berlin Phone: +49 30 288 755 825 or 826 Website: https://intercityhotelberlin.com/		
Hotel Hafen Hamburg (Hamburg)	Seewartenstraße 9, 20459 Hamburg Phone: + 49 40 31113 - 0 Website: <u>www.hotel-hafen-hamburg.de</u>		

renewables academy





Sep 23-26, 2024



30

NOTES





Sep 23-26, 2024



31

NOTES



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iiii renac renewables academy

Sep 23-26, 2024



32

NOTES







Sep 23-26, 2024



33

NOTES





Sep 23-26, 2024



34

NOTES







Sep 23-26, 2024



35

NOTES





Sep 23-26, 2024



36

NOTES





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