



Hydrogen in Canada and Germany



Expert Delegation Trip to Germany and Knowledge Exchange for Stakeholders from Canada

May 6-8, 2024





In cooperation with:





May 6-8, 2024



2

Content

| WELCOME | 3 |
|---------------------------|----|
| YOUR CONTACT PERSONS | 4 |
| DELEGATION TRIP PROGRAM | 5 |
| CANADIAN DELEGATION | 13 |
| GERMAN SPEAKER PROFILES | 14 |
| YOUR PARTICIPATION | 29 |
| IMPORTANT CONTACT NUMBERS | 30 |
| NOTES | 31 |
| | |





May 6-8, 2024

3



WELCOME

DEAR DELEGATES,

emerged.

Welcome to the expert delegation trip on hydrogen to Germany!

Only in March of this year, Federal Minister for Economic Affairs and Climate Action Robert Habeck and his Canadian counterpart, Jonathan Wilkinson, Minister of Energy and Natural Resources, met with Canadian hydrogen project developers and German offtakers in Hamburg and signed a Memorandum od Understanding (MoU) on the establishment of a joint H2Global funding window. The funding window aims to support commercial offtake agreements, thereby accelerating the hydrogen ramp-up. It marks another important milestone in the cooperation between the two countries since the establishment of the Canada-Germany Hydrogen Alliance in August 2022. Since then, various new hydrogen partnerships between German and Canadian states and provinces, ports, and companies have



With the aim of further enhancing and fostering discussions and cooperation between key players of the German and Canadian hydrogen sector, the German Federal Ministry for Economic Affairs and Climate Action is pleased to welcome you

During the three days, you can expect:

- Presentations on the regulatory, technical, and economic issues of hydrogen in Germany
- Meetings with key stakeholders from the German hydrogen sector including federal and state ministries, technology providers, offtakers, traders and infrastructure/logistical operators
- Site visits to electrolyzer facilities, port in Hamburg, and steel making plant aiming to produce green steel with hydrogen in the future

to this delegation trip and bilateral knowledge exchange organized within the Canada-Germany Energy Partnership.

- Peer-to-peer knowledge exchange and networking opportunities with stakeholders from policymaking and industry seeking to advance the hydrogen market ramp-up
- **Discussions** aiming 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 before, during and after the delegation trip.

We wish you a productive and enriching experience during your three days in Germany.

Yours faithfully,

Tell Brid

Berthold Breid CEO RENAC

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YOUR CONTACTS

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



Ms. Cecilia StrandbergProject Director

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May 6-8, 2024

5



DELEGATION TRIP PROGRAM

Monday, May 6, 2024

| Introducti | ion & meeting with government agencies & stakehol | ders / Berlin |
|----------------------|----------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Time CEST/ UTC +2 | Тор | Venue/ Speaker |
| | | Meeting point for walk to meeting venue: |
| 08:45 am | Meeting point at hotel reception & walk to venue * | Hotel Motel One Berlin-Hauptbahnhof (hotel reception) Invalidenstraße 54 10557 Berlin |
| | | Hotel – BMWK 1 km, 15 min (by foot) |
| | | Meeting venue: |
| 09:15 am | Registration and welcome | German Federal Ministry for Economic Affairs and Climate Action (BMWK) Scharnhorststraße 34-37 10115 Berlin Entrance: Tor 2 Room: G 3.021 (Saal 4) www.bmwk.de |
| | Welcome and intro | duction |
| | | Ms. Cecilia Strandberg |

Welcome and introduction

- 09:30 am
- Welcome & introduction of the week's program
- Introduction round participants

Project Director

Renewables Academy AG

www.renac.de

Mr. Jens Honnen

Consultant

Adelphi

www.adelphi.de

All participants







May 6-8, 2024



6

Welcome and introduction to the international energy policy agenda by the Federal Ministry for Economic Affairs and Climate Action (BMWK) (1)

10:00 am

- Welcome and introduction to the international energy policy agenda
- Energy partnership with Canada (goals)
- Snapshot German Energy transition (drivers, milestones, what has worked, what did not)
- Role of offshore wind for the German energy transition

Dr. Falk Bömeke

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

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

The German hydrogen strategy (2)

10:15 am

- Hydrogen strategy, hydrogen import strategy and current developments on legislation, promotion of hydrogen projects and industry nationally/ EU and certification
- Expansion & promotion of hydrogen (import) infrastructure
- International support instruments for hydrogen: H2Global

Dr. Christine Falken-Grosser

Head of Division, Hydrogen Coordination

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

| 11:30 am | Hydrogen in Canada (3)Canadian hydrogen strategy | Mr. Amandeep Garcha Deputy Director – Hydrogen team, Hydrogen and Natural Gas Division, Operations and Analysis Branch, Fuel Sector | |
|----------|-------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|--|
| | Activities and relevant stakeholders German-Canadian cooperation opportunities | Natural Resources Canada (NRCan) https://natural-resources.canada.ca/ | |
| 12:00 pm | Q&A and open discussion on bilateral cooperation opportunities | All participants | |
| 12:15 | Mall, to wester went t | BMWK – restaurant | |

| 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 | Transfer to meeting venue * | Restaurant – Siemens Energy 5 km, 15 min (by taxi) |





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7

01:45 pm Welcome and registration

Meeting venue:

Siemens Energy

Huttenstraße 12 10553 Berlin

www.siemens-energy.com

Site Visit: Gigawatt Electrolyser Factory (4)

- Welcome and introduction
- Presentation, discussion & networking

02:00 pm

- Site visit to the Siemens Energy-gigawatt (GW) proton exchange membrane (PEM) electrolyser factory for green hydrogen
- Site visit to the gas turbine assembly plant to get to know the production process of turbines already capable of operating with up to 50 percent hydrogen
- Conclusion of meeting and outlook

Mr. Chris Norris

Director, Business Development for the New Energy Business unit of Siemens Energy Canada

Mr. Harald Fruhstorfer

Senior Vice President of Power System Sales at Siemens Energy Canada

Mr. Philipp Konkel

Sales Enablement & Marketing professional at Siemens Energy in Berlin

Mr. Thomas Bagus

General Manager of Siemens Energy Electrolyzer Manufacturing

Siemens Energy www.siemens-energy.com

| 05:30 pm | Transfer to hotel* | Siemens Energy – hotel 5 km, 15 min (by taxi) |
|----------|-------------------------------------------------------|--------------------------------------------------|
| 05:00 pm | Time for quick refresh | |
| 05:15 pm | Meeting point at hotel reception & transfer to venue* | Hotel – Embassy 5 km, 15 min (by taxi) |

Embassy Reception *

05:30 pm

Embassy reception on the occasion of the offshore delegation from Canada

Embassy of Canada to Germany

Leipziger Platz 17 10117 Berlin

End of day 1







May 6-8, 2024



8

Tuesday, May 7, 2024

Transfer to Hamburg, meeting with stakeholders / Hamburg, Bremen

| Transfer to Hamburg, meeting with stakeholders / Hamburg, Bremen | | | | |
|------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
| Time CEST/ UTC +2 | Тор | Venue/ Speaker | | |
| 05:45 am | Check-out hotel in Berlin and walk to Berlin Central Station * | Meeting point for walk to central train station: Hotel Motel One Berlin-Hauptbahnhof (hotel reception) Invalidenstraße 54 10557 Berlin Hotel – Central train station 500 m, 10 min (by foot) | | |
| 06:38 am | Train transfer from Berlin to Hamburg with breakfast lunch boxes on the train * | Berlin HBF – Hamburg train station ~2 h (by train) | | |
| 08:30 am | Arrival in Hamburg, pick up by bus to store luggage and walk/ transfer to meeting venue * | Hamburg train station – hotel 4 km, 20 min (by foot) | | |
| 09:15 am | Welcome and registration | Meeting venue: Mabanaft Deutschland GmbH Koreastraße 7 20457 Hamburg https://www.mabanaft.de/en/ | | |
| 09:30 am | Site Visit: Green ammonia import & distribution infrastructure in the Port of Hamburg (5) Welcome and introduction to Mabanaft Presentation & discussion on collaboration between Germany and Canada Presentation of import terminal for green ammonia (start of operation: Jan 2026) located at Mabanaft's existing tank terminal in the Port of Hamburg. Mabanaft takes a leading role in the energy transition by repurposing one of Germany's leading storage terminals for conventional energy products to import clean ammonia and hydrogen in future. Conclusion of meeting and outlook | Mr. Philipp Kroepels Director New Energy, Supply & Infrastructure Mr. Volker Ebeling Senior Vice President New Energy, Supply & Infrastructure Mabanaft Deutschland GmbH https://www.mabanaft.de/en/ Mr. Detlev Wösten CSO H&R Group & CEO P2X-Europe GmbH & Co. KG P2X-Europe GmbH & Co. KG www.p2x-europe.com | | |
| 11:30 pm | Walk to dock for harbor tour * | Mabanaft – dock 500 m, 5 min (by foot) | | |
| 12:00 pm | Harbor tour with representatives from the Hamburg Port Authority (HPA) and networking lunch The Hamburg Port Authority (HPA) is driving the port's transition to clean energy by establishing Hamburg as a hub for a green value chain based on hydrogen in the port. | Mr. Ingo Fehrs Lead New Energy and Hydrogen Mr. Fredrik Hoffman Business Development Manager Hamburg Port Authority www.hafen-hamburg.de/en | | |









May 6-8, 2024



9

| 02:15 pm | Transfer to meeting venue * | Dock – EEHH/HK HH 2 km, 30 min (by public transport) |
|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|
| 02:45 pm | | Meeting venue: |
| | Welcome and registration | Renewable Energy Hamburg (EE.HH.) Wexstrasse 7 20355 Hamburg www.h2-hh.de/en/ |
| 03:00 pm | | Mr. Sebastian Topp Department Hydrogen Economy - Deputy Head of Division International Affairs and Networking |
| | Hydrogen initiatives and activities in the Northern part of Germany (6) | Free and Hanseatic City of Hamburg, Ministry of Economy and Innovation (BWI) www.hamburg.de/bwi |
| | Role of hydrogen to decarbonize the industry in the region Political hydrogen strategies, planned and ongoing initiatives in the region Overview industrial network along the entire value chain of hydrogen (production, transport and distribution, use cases, etc.). Importance of international cooperation Open discussion | Ms. Sibyl Scharrer International Cooperation Hydrogen |
| | | Renewable Energy Hamburg (EE.HH.) www.h2-hh.de/en/ |
| | | Mr. Olaf Krawczyk Director Investment Promotion Energy, Invest in Niedersachsen |
| | | Niedersachsen Ministry of Economic Affairs, Transport, Housing and Digitalisation |
| | | Hy-5 – The Green Hydrogen Initiative of Northern Germany www.hy-5.org/en |
| 05:30 pm | Transfer to networking event * | EE.HH. – Business Club Hamburg 5 km, 15 min (by taxi) |
| 06:30 pm | Networking Reception with BBQ Dinner at the Business Club Hamburg * | Business Club Hamburg |
| | Networking opportunity with high-level representatives from the German hydrogen sector. Organized as part of the <u>Hydrogen</u> <u>Business Conference</u> (3rd National Economic Forum Hydrogen) | Elbchaussee 43 22765 Hamburg |
| 09:00 pm | Bus transfer to hotel in Bremen* | Business Club Hamburg – hotel 120 km, 1,5 hrs (by bus) |
| 11:00 pm | Check-in hotel Bremen | ATLANTIC Grand Hotel Bremen Bredenstraße 2 28195 Bremen |

End of day 2







May 6-8, 2024



10

Wednesday, May 8, 2024 Site visit and meeting in Duisburg / Duisburg

| Time CEST/ UTC +2 | Тор | Venue/ Speaker | | |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|--|--|
| | | Meeting point for train transfer to Duisburg: | | |
| 08:00 am | Check-out hotel Bremen & transfer to Bremen Central Station * | ATLANTIC Grand Hotel Bremen Bredenstraße 2 28195 Bremen | | |
| | | Hotel – Central train station 2,5 km, 15 min (by taxi) | | |
| 08:52 am | Train transfer from Bremen to Duisburg; pick up in Duisburg by bus & transfer to meeting venue * | Bremen – Duisburg (thyssenkrupp) ~3 h (by train & bus) | | |
| | | Meeting venue: | | |
| 11:45 pm | Welcome and registration | thyssenkrupp Steel Europe AG Kaiser-Wilhelm-Straße 100 47166 Duisburg www.thyssenkrupp-steel.com | | |
| 12:00 pm | Networking lunch at thyssenkrupp premises * | | | |
| | | Mr. Paul Dainora Head of Business Development | | |
| | Meeting with and site visit at thyssenkrupp (7) | Mr. Dougal McArthur Senior Business Development | | |
| | Green steel – tkH2Steel project (production of premium steel with green electricity and hydrogen in the direct reduction plant) Carbon2Chem project (use of emissions from steel production as raw material for chemicals) Electrolyser production by thyssenkrupp nucera Q&A and open discussion Guided tour at the thyssenkrupp steel plant | Mr. Leif Kröger Senior Business Development | | |
| 01:00 pm | | Thyssenkrupp nucera https://thyssenkrupp-nucera.com/ | | |
| | | Mr. Henning Weege Head of Hydrogen & Green Energy | | |
| | | thyssenkrupp Steel Europe AG www.thyssenkrupp-steel.com | | |
| 05:00 pm | Bus transfer to hotel in Duisburg * | Thyssenkrupp – hotel 10 km, 30 min (by bus) | | |
| 05:30 | Check-in hotel in Duisburg | Mercure Hotel Duisburg City Landfermannstraße 20 47051 Duisburg | | |
| 06:00 | Meeting point hotel reception and walk to restaurant | Hotel – restaurant 500 m, 5 min | | |

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May 6-8, 2024



11

06:30 pm Joint Final Dinner at "Palazzo" (\$)

Restaurant "Palazzo | Ristorante & Pizzeria" Königstraße 39 47051 Duisburg

End of day 3 and expert delegation trip







May 6-8, 2024



12

Foot note:

- * Arranged and costs covered by hosts
- (*) Transfer options and site visit will depend on weather conditions. In case of unfavorable weather, the program organizer reserves the right to plan an alternative to the site visit proposed in the program on short notice.
- (\$) Costs to be borne by participant

Please note:

The program organizer may change the content and schedule of the agenda according to availability of the proposed organizations, their speakers and site visits on short notice.





May 6-8, 2024





CANADIAN DELEGATION

| # | Title | First Name | Last name | Position | Institution |
|----|-------|------------|------------|-------------------------------------------------------|---------------------------------------------------------------------------------------------------|
| 1 | Ms. | Lynn | Adams | Director | Green Economy Policy at Atlantic Canada Opportunities Agency |
| 2 | Ms. | Maike | Althaus | Executive Director | Hydrogen Ontario (and also represents the Canadian Hydrogen and Fuel Cell Association (CHFCA)) |
| 3 | Mr. | Toby | Balch | Director, Business Investment & Export Development | Nova Scotia Department of Natural Resources & Renewables |
| 4 | Mr. | Matthew | Borys | Vice President Corporate Development | EverWind Fuels |
| 5 | Mr. | David | Coburn | Director, BC Hydrogen Office | BC Ministry of Energy, Mines, and Low Carbon Innovation |
| 6 | Mr. | Amandeep | Garcha | Deputy Director - Hydrogen Strategy Secretariat | Natural Resources Canada |
| 7 | Mr. | Kieran | Hanley | CEO | Econext |
| 8 | Mr. | Richard | Hugh | Chief Financial Officer | World Hydrogen G2H |
| 9 | Mr. | Rishun | Jain | Managing Director | Cross River Infrastructure Partners |
| 10 | Ms. | Michelle | Lethbridge | Senior Project Manager | ABO Wind Canada |
| 11 | Mr. | Alisdair | McLean | Executive Director | Net Zero Atlantic |
| 12 | Mr. | Paul | McLean | Managing Director | Bear Head Energy Inc |
| 13 | Mr. | Chris | Owttrim | Executive Director for Technology and Innovation | Emissions Reduction Alberta |
| 14 | Ms | Susan | Wilkins | Executive Director, Renewable Energy | Department of Industry, Energy and Technology, Government of Newfoundland and Labrador |





May 6-8, 2024

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14

GERMAN SPEAKER PROFILES

By order in the program:

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)



Dr Falk Bömeke is currently heading the division "General issues of bilateral climate and energy cooperation; Cooperation in North America, East Asia, Oceania and Turkey" at the Federal Ministry for Economic Affairs and Climate Action.

Previously he worked as Head of the Economic and Energy Division at the German Embassy in Pretoria, as Economic Counselor at the German Embassy in Washington and in the European Department of the Federal Foreign Office in Berlin as well as in the Parliamentary and Cabinet Division, the Automobile and Electric Vehicle Division and the European Law Division at the Federal Ministry for Economic Affairs.

Dr Falk Bömeke has studied law at the Universität zu Köln (University of Cologne), the Université de Paris 1 Panthéon Sorbonne (University of Paris) and the University of Sydney. He holds a law degree and PhD of the University of Cologne and an LL.M. (Master of Law) of the University of Sydney.

Dr. Christine Falken-GrosserHead of Division, Hydrogen Coordination

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



Dr. Christine Falken-Grosser is heading the Hydrogen coordination division within the Federal Ministry for Economic Affairs and Climate Action of Germany and with this oversees the development and implementation of the National Hydrogen Strategy. She coordinates the links, sequence and synergies between the German initiatives on hydrogen market development, European and international cooperation, infrastructure development and hydrogen use in all sectors, as well as regulatory issues and certification.

Previously she headed the bilateral energy cooperation and developed bilateral and international hydrogen initiatives in Germany. Before that she headed the German Delegation to the Paris Club and worked in the field of foreign investment finance policies and with multilateral development banks. For four years Christine served as the Economic Counsellor in the Embassy of Germany in Bangkok, Thailand, where she supported German Companies abroad and coordinated German bilateral industry, energy, climate and

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May 6-8, 2024



15

scientific cooperation. Before she went abroad, Christine took part in several bilateral trade negotiations for services and investment issues. A former responsibility included also the negotiation of the 3rd trading period of the Emissions Trading Scheme in Brussels. Christine holds degrees in Economics and Business Studies and a doctorate in Public Finance. She was born in Leipzig.

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











May 6-8, 2024



16

Chris Norris

Director, Business Development for the New Energy Business unit of Sie-mens Energy Canada Siemens Energy Canada



Contact

E-Mail: christopher.norris@siemens-energy.com

Phone: +1 (647) 308-9346

Chris Norris is Director, Business Development for the New Energy Business unit of Siemens Energy Canada with a focus on growing the green hydrogen economy in Canada.

In a career spanning 25 years, Chris has been with Siemens Energy for 10 years and prior to his current role was with the Energy Business Advisory, advising utilities and municipalities on modernization strategies to achieve key objectives in the energy transition.

Prior to Siemens Energy, Chris worked at a boutique consulting firm in Toronto with clients in gas and electric distribution after working in operations strategy for one of Canada's largest financial institutions. He began his career in the gas distribution utility industry before transitioning into detailed engineering design at one of Canada's largest aircraft engine manufacturers.

Chris is currently the Board Chair of the Canadian Hydrogen Association, has a B. Sc. from Queen's University, an M. Eng. from McMaster University, an MBA from the Schulich School of Business and an LL.M. in energy and infrastructure law from Osgoode Hall Law School. He is a licensed professional engineer.

Harald Fruhstorfer Senior Vice President of Power System Sales at Siemens Energy Canada Siemens Energy Canada



Contact

E-Mail: harald.fruhstorfer@siemens-energy.com

Harald Fruhstorfer is the Senior Vice President of Power System Sales at Siemens Energy Canada. He has a wealth of experience in the energy sector, with a particular focus on the energy transition. Harald's role involves driving business development and initiatives for decarbonizing power systems across all energy sectors.

Before his current role, Harald has held various positions within Siemens Energy in Germany and Asia, demonstrating a strong track record in business development and sales. His expertise spans across different aspects of the energy business, including power generation, transmission, and distribution.

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May 6-8, 2024



17

Philipp KonkelSales Enablement & Marketing professional at Siemens Energy in Berlin Siemens Energy Germany



Contact

E-Mail: philipp.konkel@siemens-energy.com

Philipp Konkel, currently a Sales Enablement & Marketing professional at Siemens Energy in Berlin, is focusing on advancing the green hydrogen economy. Having spent over three years at Siemens Energy, Philipp has been instrumental in shaping business development and marketing strategies.

He has earned a Master of Science degree in Industrial Engineering and Management from FAU Erlangen-Nürnberg, with a specialization in the energy sector. His professional journey also includes internships at Krones and BMW Group, where he honed his skills in corporate development and quality management.

Philipp's educational qualifications, coupled with his practical experiences, have provided him with a robust foundation in both the technical and business facets of the energy industry. This makes him an invaluable asset in the transition towards sustainable energy solutions, especially in the rapidly growing field of hydrogen energy.

Thomas Bagus *General Manager of Siemens Energy Electrolyzer Manufacturing*Siemens Energy Germany



Contact

E-Mail: thomas.bagus@siemensenergy.com Thomas Bagus, currently serving as the General Manager of Siemens Energy Electrolyzer Manufacturing, has been a key figure in the energy sector. He successfully led the operations of the New Energy Business at Siemens Energy for a year before taking up his current role. The production hall in Berlin, under his leadership, is now fully operational and commenced its operations in 2023.

Prior to these roles, Thomas spent over eight years at Siemens, where he was the Head of Steam Turbines in Mülheim and was responsible for Order Management of Siemens Steam Turbines. These roles have contributed to his comprehensive understanding of the energy business, from power generation to transmission and distribution.

Thomas's academic background in engineering equips him with the technical expertise needed to understand the complexities of power systems.







May 6-8, 2024

18

Siemens Energy

Siemens Energy, a global energy leader for over 150 years, offers a comprehensive portfolio across the entire energy value chain with solutions for today's energy needs. Committed to a sustainable future, Siemens Energy is a frontrunner in green hydrogen. Leveraging their expertise in electrolysis, they develop clean hydrogen production solutions for industry, transportation, and power generation. With their new gigawatt-scale electrolyzer facility in Berlin, Siemens Energy aims to play a key role in ramping up green hydrogen production. Through collaborations, they drive research to make green hydrogen efficient, affordable, and scalable, solidifying their role in a sustainable energy future.

www.siemens-energy.com











May 6-8, 2024



19

Philipp Kroepels *Director New Energy, Supply & Infrastructure*Mabanaft



Philipp Kroepels has 20 years of experience in operations, commercial and finance in the energy business including infrastructure, trading and logistics for liquid and dry bulk commodities. He joined Marquard & Bahls in 2004 and has held various positions in Marquard & Bahls' subsidiaries. In 2022, he joined Mabanaft in its Business Unit New Energy, Supply & Infrastructure. Mr. Kroepels studied International Business Studies and Strategy & Innovation in London, Paris and Oxford.

Contact

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philipp.kroepels@mabanaft.com Phone: +49 (0) 160 1643221

Volker Ebeling Senior Vice President New Energy, Supply & Infrastructure Mabanaft



Contact

E-Mail:

volker.ebeling@mabanaft.com Phone: +49 (0) 173 3426201 Volker Ebeling – Senior Vice President New Energy, Supply & Infrastructure has worked his entire career in energy commodities trading, starting in 1987. Before joining Mabanaft he held trading and management positions in international commodities trading companies including JP Morgan, Sempra Energy, Cargill and BP. Mr. Ebeling graduated in Business Administration at Hamburg Business School (Wirtschaftsakademie Hamburg) in 1990.









renewables academy

May 6-8, 2024

20

Mabanaft

Mabanaft is a family-owned subsidiary of the Marquard & Bahls Group and a leading independent energy company actively engaged in the energy transition towards cleaner sources. Based in Hamburg, they have been operating for 75 years and are globally represented. Mabanafts primary business is importing and distributing approximately 16 million tons of energy products annually across various sectors including aviation, shipping, road transportation, heating and industrial needs. With a network of owned storage terminals, truck stops, and fuel stations across five countries, Mabanaft ensure efficient energy product movement.

Mabanaft forward-looking initiatives include building infrastructure for green hydrogen and ammonia, exemplified by projects like the "New Energy Gate" in Hamburg. Mabanaft is actively investing in innovative projects like the world's largest ammonia plant in Texas City and repurposing existing terminals for clean ammonia and hydrogen importation. They also engage with national and international associations to promote sustainability standards in the industry.

Mabanaft is particularly interested in sourcing clean energy and chemical products like low or zero carbon hydrogen, ammonia, and efuels from producers in the US and Eastern Canada.

www.mabanaft.com













May 6-8, 2024



21

Detley Woesten

CSO H&R Group & CEO P2X-Europe GmbH & Co. KG P2X-Europe GmbH & Co. KG



Coming from Germany, with over two decades of experience in the engineering, chemical and oil & gas industry Detlev Woesten is deeply immersed in the intricate dynamics of one of the leading markets for hydrogen technology and the transition to sustainability. With nearly 18 years of involvement in the H&R Group and the establishment of P2X- Europe GmbH & Co. KG, an autonomous joint venture, striving to become a leader in the global renewable hydrogen industry, Mr Woesten is at the forefront of pioneering sustainable solutions.

Contact

E-Mail: <u>Detlev.Woesten@p2x-europe.com</u>

P2X-Europe GmbH & Co. KG

P2X-Europe GmbH & Co. KG is an independent Power-to-Liquid (PtL) project development joint-venture, backed by two Hamburg-based German companies; the Mabanaft GmbH & Co. KG, a leading independent and integrated energy company, and the H&R Group, which develops and manufactures specialty chemical and pharmaceutical products. P2X-Europe develops, builds and invests in vertically integrated end-to-end Power-to-Liquid technology solutions to enable the market introduction of synthetic net-zero chemicals and fuels.

Based in Hamburg, P2X-Europe has set the ambition to become a global leader in renewable hydrogen and green synthetic hydrocarbons with a focus on sustainable aviation fuels, and the company is building a strong and diverse portfolio of large-scale Power-to-X projects across industries and geographies.

P2X Europe

www.p2x-europe.com









May 6-8, 2024



22

Ingo Fehrs *Lead New Energy and Hydrogen*Hamburg Port Authority



Contact

E-Mail:

<u>Ingo.Fehrs@hpa.hamburg.de</u> Phone: +49 (0) 40 42847 3019 Ingo Fehrs is an economist with more than 25 years of professional experience in the field of strategic port development and sustainability. 2006, he joined Hamburg Port Authority. Since 2023 he leads a team for New Energy and Hydrogen in the Port Energy Solutions Section.

Ingo was involved in international projects dealing with collaboration of ports, strategic port planning, hydrogen, green cruise industry and logistics.

Fredrik Hoffman *Business Development Manager*Hamburg Port Authority



Contact

E-Mail:

Fredrik.Hoffman@hpa.hamburg.de Phone: +49 (0) 40 42847 3896 Fredrik Hoffman is an experienced professional with several years of expertise in the energy sector, specializing in the development of renewable energy initiatives. He has a proven track record of establishing renewable energy divisions. Since early 2024, Fredrik has been working at HPA, spearheading the implementation of renewable energy projects for the organization and its joint venture with a local energy provider.

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May 6-8, 2024



23

Hamburg Port Authority (HPA)

The Hamburg Port Authority (HPA) oversees operations at the Port of Hamburg, a major hub for international trade in Europe. Responsible for managing infrastructure, ensuring navigational safety, and promoting sustainable practices, the HPA plays a pivotal role in facilitating maritime commerce. Moreover, the HPA is leading the port's transition to clean energy, positioning Hamburg as a key hub for a hydrogen-based green value chain within the port.



www.hamburg-port-authority.de/en/







May 6-8, 2024



24

Sebastian Topp

Department Hydrogen Economy - Deputy Head of Division International Affairs and Networking Free and Hanseatic City of Hamburg, Ministry of Economy and Innovation (BWI)



Contact

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Department Hydrogen Economy, Free and Hanseatic City of Hamburg, Ministry of Economy and Innovation (BWI)

The Hydrogen Department supports the development of a self-sustaining hydrogen economy in Hamburg. We network the actors along the entire value chain and support the development and implementation of projects.



www.hamburg.de/bwi









May 6-8, 2024



25

Sibyl Scharrer *International Cooperation Hydrogen*Renewable Energy Hamburg (EE.HH.)



Sibyl works at Renewable Energy Cluster Agency (REH) in Hamburg. She is responsible for international cooperation in the field of hydrogen. Before joining REH, she worked for several years in the regional development bank IFB functioning as Hamburg node in the Enterprise Europe Network of the European Commission. At the beginning of her career, Sibyl worked several years in Brussels as project officer for innovation in the European Commission.

Contact

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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/









May 6-8, 2024



26

Olaf Krawczyk

Director Investment Promotion Energy

Invest in Niedersachsen, Niedersachsen Ministry of Economic Affairs, Transport, Housing and Digitalisation / Hy-5 – The Green Hydrogen Initiative of Northern Germany



Contact

E-Mail: o.krawczyk@nds.de Phone: +49 (0) 172 6299803 Olaf Krawczyk is responsible for the Investment promotion in the Energy Industry in Niedersachsen, which is Germany's second largest federal state.

As Energy State No. 1 in Germany, Niedersachsen has everything for a successful hydrogen economy: wind for the production of green hydrogen, underground Saltcaverns for storage, industrial users and experienced researchers, and, of course, the ports which play an important role for import and export to make the energy transition in Germany a reality.

The Niedersachsen Ministry of Economic Affairs, Employment, Transport and Digitalisation - Invest in Niedersachsen - is supporting companies from abroad to take part in Niedersachsen's Hydrogen Ecosystem.

HY-5 from Northern Germany - The Green Hydrogen Initiative from **Northern Germany**

The economic development organisations of the northern German states of Bremen, Hamburg, Mecklenburg-Vorpommern, Niedersachsen and Schleswig-Holstein have joined forces to form the green hydrogen alliance HY-5. The initiative, promoting the states as an economic stronghold, aims to make Northern Germany the leading future region for green hydrogen in Europe and to complete the value chain for green hydrogen.



www.nds.de/en/









May 6-8, 2024

27

Thyssenkrupp steel

thyssenkrupp Steel is one of the leading manufacturers of quality flat steel and stands for innovations in steel and high-quality products for the most advanced and demanding applications - such as economic lightweight construction, high-quality surfaces, and efficient steels for the energy and mobility transition. Steel employs around 26,000 people and, with an annual production volume of approximately 11 million tons of crude steel, is the largest flat steel producer in Germany. As a pioneer in climate transformation, thyssenkrupp Steel has set itself the goal of avoiding more than 30% of CO2 emissions annually by 2030. An important milestone for this is the construction of a 100% hydrogencapable direct reduction plant in conjunction with two downstream melters. This technologically new plant combination will be integrated into the largest European steelworks, with all subsequent process steps able to be retained from the steelworks. The direct reduction plant has a production capacity of 2.5 million tons of direct reduced iron per year. A first use of hydrogen in the plant combination is planned for 2028, with the ramp-up to full hydrogen operation expected to be completed in 2029. Thereafter, with the use of around 143,000 tons of hydrogen, up to 3.5 million tons of CO2 per year can already be saved. As the largest German hydrogen consumer, thyssenkrupp Steel is thus an initiator and driver of a hydrogen economy, paving the way for the decarbonization of the entire steel value chain. By 2045 at the latest, steel production is to be completely climate-neutral.

www.thyssenkrupp-steel.com/en/

Thyssenkrupp nucera

thyssenkrupp nucera, a global leader in electrolysis technology, empowers industrial-scale green hydrogen production. Leveraging their 50+ years of experience and over 10 GW of installed systems, they design, engineer, and supply complete electrolysis plants and after-sales services. With an order backlog of more than 3 GW in the water electrolyser business, thyssenkrupp nucera is well positioned as a key player in the global green hydrogen transformation. Their commitment to sustainability extends beyond green hydrogen. thyssenkrupp nucera contributes to the Carbon2Chem initiative. This initiative utilizes electrolysis technology to convert CO2 emissions from steel production into valuable chemicals and fuels. This collaboration exemplifies their dedication to developing innovative solutions for a clean and sustainable future.

https://thyssenkrupp-nucera.com/

















IIII renac renewables academy

May 6-8, 2024



28

This delegation trip is organized by the Renewables Academy (RENAC) AG in cooperation with its partners adelphi, the German Canadian Chamber of Industry and Commerce (AHK) as part of the Canada-Germany Energy Partnership.





May 6-8, 2024

29

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!







May 6-8, 2024

Bilateral Knowledge om Canada





IMPORTANT CONTACT NUMBERS

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

| Emergency Number | 112 |
|-------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|
| Canadian Embassy Germany | Leipziger Platz 17, 10117 Berlin Phone: +49 (0) 30 203120 Website: https://kanadaindeutschland.ca/en_EN/home |
| Hotel Berlin Motel One am Hauptbahnhof (Berlin) | Invalidenstraße 54, 10557 Berlin Phone: +49 (0) 30 364 10 05-0 Website: <u>www.motel-one.com</u> |
| Hotel ATLANTIC Grand Hotel Bremen (Bremen) | Bredenstrasse 2, 28195 Bremen Phone: +49 (0) 421 62062 547 Website <u>www.atlantic-hotels.de</u> |
| Mercure Hotel Duisburg City (Duisburg) | Landfermannstraße 20, 47051 Duisburg Phone: +49 (0) 203 30 00 3660 Website: www.mercure-duisburg-city.de |







May 6-8, 2024



31







May 6-8, 2024



32





May 6-8, 2024



33





May 6-8, 2024



34





May 6-8, 2024



35





May 6-8, 2024



36







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Impressum

Content and Layout:

Renewables Academy (RENAC)

