

References

- United Nations. (2024a). Causes and Effects of Climate Change. United Nations. <https://www.un.org/en/climatechange/science/causes-effects-climate-change>
- United Nations. (2024b). Renewable Energy – Powering a Safer Future. United Nations. <https://www.un.org/en/climatechange/raising-ambition/renewable-energy>
- IRENA. (2018). GLOBAL ENERGY TRANSFORMATION About IRENA. https://www.irena.org/-/media/Files/IRENA/Agency/Publication/2018/Apr/IRENA_Report_GET_2018.pdf
- IRENA. (2018). GLOBAL ENERGY TRANSFORMATION About IRENA. https://www.irena.org/-/media/Files/IRENA/Agency/Publication/2018/Apr/IRENA_Report_GET_2018.pdf
- EU Joint Research Center. (2022). EU climate targets: how to decarbonise the steel industry. EU Science Hub. Retrieved from https://joint-research-centre.ec.europa.eu/jrc-news-and-updates/eu-climate-targets-how-decarbonise-steel-industry-2022-06-15_en#_ftn1
- EU Joint Research Center. (2022). EU climate targets: how to decarbonise the steel industry. EU Science Hub. Retrieved from https://joint-research-centre.ec.europa.eu/jrc-news-and-updates/eu-climate-targets-how-decarbonise-steel-industry-2022-06-15_en#_ftn1
- IRENA. (2019). FUTURE OF WIND Deployment, investment, technology, grid integration and socio-economic aspects A Global Energy Transformation paper About IRENA. https://www.irena.org/-/media/Files/IRENA/Agency/Publication/2019/Oct/IRENA_Future_of_wind_2019.pdf
- Ørsted. (2024a). Our green energy transformation. Orsted.com. <https://orsted.com/en/who-we-are/our-purpose/our-green-energy-transformation>
- Ørsted. (2017, October 02). DONG Energy to change company name to Ørsted. Retrieved from <https://orsted.com/en/company-announcement-list/2017/10/02/3554>
- Ørsted. (2019). Annual Report. Ørsted. Retrieved from <https://orsted.com/-/media/annual2019/annual-report-2019.pdf>
- McKinsey & Company. (2020). Ørsted's renewable-energy transformation. McKinsey Sustainability. Retrieved from <https://www.mckinsey.com/capabilities/sustainability/our-insights/orsteds-renewable-energy-transformation#/>
- Anthony, S. D., Trotter, A., & Schwartz, E. I. (2019). The Top 20 Business Transformations of the Last Decade. Harvard Business Review. Retrieved from <https://hbr.org/2019/09/the-top-20-business-transformations-of-the-last-decade>
- Ørsted. (2024b). 2023 Annual Report. Ørsted. Retrieved from <https://orstedcdn.azureedge.net/-/media/annual-report-2023/orsted-ar-2023.pdf?rev=526307f68e2047b3a1df8dd2cdf719ec&hash=E6069E12C1792AD-620FA12898587394C>
- Ørsted. (2021). Ørsted becomes first energy company in the world with a science-based net-zero target. Retrieved from [www.Ørsted.com: https://orsted.com/en/who-we-are/sustainability/our-stories/orsted-becomes-first-energy-company-in-the-world-with-a-science-based-net-zero-target](https://orsted.com/en/who-we-are/sustainability/our-stories/orsted-becomes-first-energy-company-in-the-world-with-a-science-based-net-zero-target)
- Energy Transitions Commission. (2023). The Barriers to Clean Electrification Series: Material and Resource Requirements for the Energy Transition. Energy Transitions Commission. Retrieved from <https://www.energy-transitions.org/publications/material-and-resource-energy-transition/#download-form>
- Jethwa, J., Mathes, C., Hill, B. C., Sandbrook, L., Orbant, M., Walrecht, A., . . . Wouters, L. (2024, February 21-28). Webinar series: Raw materials for the energy transition (Webinars). ipieca. Retrieved from <https://www.ipieca.org/events/webinar-raw-materials>
- Johannsen, V. K., Szilas, K., Jensen, K. Ø., & Christoffersen, J. H. (2024, April 9). SCIENCE for breakfast: Critical Raw Materials (Seminar). Festauditoriet, Bülowsvej 17, 1870 Frederiksberg C, Denmark: University of Copenhagen. Retrieved from <https://medialib.cmcdn.dk/medialibrary/A3D1D49E-E7E1-4632-9C2F-575167DED2CC/85769268-CCF8-EE11-84CC-00155DoB0940.pdf>
- Energy Transitions Commission. (2023). The Barriers to Clean Electrification Series: Material and Resource Requirements for the Energy Transition. Energy Transitions Commission. Retrieved from <https://www.energy-transitions.org/publications/material-and-resource-energy-transition/#download-form>
- McKinsey & Company. (2022). The raw-materials challenge: How the metals and mining sector will be at the core of enabling the energy transition. Retrieved from [www.mckinsey.com: https://www.mckinsey.com/industries/metals-and-mining/our-insights/the-raw-materials-challenge-how-the-metals-and-mining-sector-will-be-at-the-core-of-enabling-the-energy-transition](https://www.mckinsey.com/industries/metals-and-mining/our-insights/the-raw-materials-challenge-how-the-metals-and-mining-sector-will-be-at-the-core-of-enabling-the-energy-transition)
- Energy Transitions Commission. (2023). The Barriers to Clean Electrification Series: Material and Resource Requirements for the Energy Transition. Energy Transitions Commission. Retrieved from <https://www.energy-transitions.org/publications/material-and-resource-energy-transition/#download-form>
- MIT Technology Review. (2023). Yes, we have enough materials to power the world with renewable energy. Retrieved from MIT Technology Review: <https://www.technologyreview.com/2023/01/31/1067444/we-have-enough-materials-to-power-world-with-renewables/>
- Jethwa, J., Mathes, C., Hill, B. C., Sandbrook, L., Orbant, M., Walrecht, A., . . . Wouters, L. (2024, February 21-28). Webinar series: Raw materials for the energy transition (Webinars). ipieca. Retrieved from <https://www.ipieca.org/events/webinar-raw-materials>
- Johannsen, V. K., Szilas, K., Jensen, K. Ø., & Christoffersen, J. H. (2024). SCIENCE for breakfast: Critical Raw Materials (Seminar). Festauditoriet, Bülowsvej 17, 1870 Frederiksberg C, Denmark: University of Copenhagen. Retrieved from <https://medialib.cmcdn.dk/medialibrary/A3D1D49E-E7E1-4632-9C2F-575167DED2CC/85769268-CCF8-EE11-84CC-00155DoB0940.pdf>
- Rambøll. (2022). The new rush for clean energy minerals. Retrieved from [www.ramboll.com: https://www.ramboll.com/insights/decarbonise-for-net-zero/the-new-rush-for-clean-energy-minerals](https://www.ramboll.com/insights/decarbonise-for-net-zero/the-new-rush-for-clean-energy-minerals)
- Johannsen, V. K., Szilas, K., Jensen, K. Ø., & Christoffersen, J. H. (2024, April 9). SCIENCE for breakfast: Critical Raw Materials (Seminar). Festauditoriet, Bülowsvej 17, 1870 Frederiksberg C, Denmark: University of Copenhagen. Retrieved from <https://medialib.cmcdn.dk/medialibrary/A3D1D49E-E7E1-4632-9C2F-575167DED2CC/85769268-CCF8-EE11-84CC-00155DoB0940.pdf>
- International Energy Agency. (2022). The Role of Critical Minerals in Clean Energy Transitions. International Energy Agency. Retrieved from <https://iea.blob.core.windows.net/assets/ffd2a83b-8c30-4e9d-g80a-52b6d9a86fdd/TheRoleofCriticalMineralsinCleanEnergyTransitions.pdf>
- Johannsen, V. K., Szilas, K., Jensen, K. Ø., & Christoffersen, J. H. (2024, April 9). SCIENCE for breakfast: Critical Raw Materials (Seminar). Festauditoriet, Bülowsvej 17, 1870 Frederiksberg C, Denmark: University of Copenhagen. Retrieved from <https://medialib.cmcdn.dk/medialibrary/A3D1D49E-E7E1-4632-9C2F-575167DED2CC/85769268-CCF8-EE11-84CC-00155DoB0940.pdf>
- International Energy Agency. (2022). The Role of Critical Minerals in Clean Energy Transitions. International Energy Agency. Retrieved from <https://iea.blob.core.windows.net/assets/ffd2a83b-8c30-4e9d-g80a-52b6d9a86fdd/TheRoleofCriticalMineralsinCleanEnergyTransitions.pdf>
- Brinckmann. (2023). GLOBAL WIND MARKET AND SUPPLY CHAIN DEVELOPMENTS. Brinckmann Group.
- Financial Times. (2023). Soaring costs threaten offshore wind farm projects. Retrieved from [www.ft.com: https://www.ft.com/content/8b8aaa67-0c9c-47a6-949d-09bd79a5241d](https://www.ft.com/content/8b8aaa67-0c9c-47a6-949d-09bd79a5241d)
- World Economic Forum. (2023). The wind power industry is facing major cost headwinds. What's going on (and what can be done)? Retrieved from [www.weforum.com: https://www.weforum.org/agenda/2023/11/why-off-shore-wind-cost-pressures-rising/](https://www.weforum.org/agenda/2023/11/why-off-shore-wind-cost-pressures-rising/)
- IRENA. (2019). Future of Wind: Deployment, investment, technology, grid integration and socio-economic aspects. International Renewable Energy Agency. Retrieved from https://www.irena.org/-/media/Files/IRENA/Agency/Publication/2019/Oct/IRENA_Future_of_wind_2019.pdf

33. The Wall Street Journal. (2023). Wind Industry in Crisis as Problems Mount. Retrieved from [www.wsj.com: https://www.wsj.com/articles/wind-industry-hits-rough-seas-as-problems-mount-5490403a](https://www.wsj.com/articles/wind-industry-hits-rough-seas-as-problems-mount-5490403a)
34. World Economic Forum. (2023). The wind power industry is facing major cost headwinds. What's going on (and what can be done)? Retrieved from [www.weforum.com: https://www.weforum.org/agenda/2023/11/why-offshore-wind-cost-pressures-rising/](https://www.weforum.org/agenda/2023/11/why-offshore-wind-cost-pressures-rising/)
35. Jethwa, J., Mathes, C., Hill, B. C., Sandbrook, L., Orbant, M., Walrecht, A., . . . Wouters, L. (2024, February 21-28). Webinar series: Raw materials for the energy transition (Webinars). ipieca. Retrieved from <https://www.ipieca.org/events/webinar-raw-materials>
36. Lunde, N., & Veile, C. (2024). Mads Nipper erkender ledelsessvigt i Ørsted. Børsen. Retrieved from <https://borsen.dk/nyheder/perspektiv/mads-nipper-erkender-ledelsessvigt-derfor-gik-det-galt-i-orsted>
37. IRENA. (n.d.). Geopolitics of the Energy Transition. Retrieved from [www.irena.org: https://www.irena.org/Digital-Report/Geopolitics-of-the-Energy-Transition-Critical-Materials](https://www.irena.org/Digital-Report/Geopolitics-of-the-Energy-Transition-Critical-Materials)
38. European Commission. (n.d.). [www.commission.europa.eu](https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/european-green-deal/green-deal-industrial-plan/european-critical-raw-materials-act_en). Retrieved from Sustainable supply of raw materials: https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/european-green-deal/green-deal-industrial-plan/european-critical-raw-materials-act_en
39. Kim, J., Sovacool, B., Bazilian, M., Griffiths, S., Lee, J., Yang, M., & Lee, J. (2022). Decarbonizing the iron and steel industry: A systematic review of sociotechnical systems, technological innovations, and policy options. *Energy Research & Social Science*, 89, 2-32. doi:10.2565
40. Ellen MacArthur Foundation. (2013). Towards the Circular Economy: Economic and business rationale for an accelerated transition (p. 2). Retrieved from <https://emf.thirdlight.com/file/24/xTyQj3oxiYNM0xTFsgxT5LF3C/Towards%20the%20circular%20economy%20Vol%201:%20an%20economic%20and%20business%20rationale%20for%20an%20accelerated%20transition.pdf>
41. Ellen MacArthur Foundation. (2013). Towards the Circular Economy: Economic and business rationale for an accelerated transition (p. 2). Retrieved from <https://emf.thirdlight.com/file/24/xTyQj3oxiYNM0xTFsgxT5LF3C/Towards%20the%20circular%20economy%20Vol%201:%20an%20economic%20and%20business%20rationale%20for%20an%20accelerated%20transition.pdf>
42. Natarajan, A., Dimitrov, N. K., William Peter, D. R., Bergami, L., Madsen, J., Olesen, N., Krogh, T., Nielsen, J., Sørensen, J. D., Pedersen, M., Ohlsen, G., Lauritsen, J. L., Daub, P., Steiniger, M., Jørgensen, E., Vives, X., Skriver, S., Simmons, G., Ahmadikordkheili, R., ... Bruun, S. (2020). Demonstration of Requirements for Life Extension of Wind Turbines Beyond Their Design Life. DTU Wind Energy. DTU Wind Energy E No. E-0196
43. Ørsted. (2023). Ørsted Wind Technology. Orsted.com. <https://orsted.com/en/what-we-do/renewable-energy-solutions/offshore-wind/technology>
44. Baltic Wind. (2023). Unlocking the Power of the Wind: Denmark's Push for Green Energy Beyond Planned Lifetimes - Baltic Wind. Baltic Wind. <https://balticwind.eu/unlocking-the-power-of-the-wind-denmarks-push-for-green-energy-beyond-planned-lifetimes/>
45. Baltic Wind. (2023). Unlocking the Power of the Wind: Denmark's Push for Green Energy Beyond Planned Lifetimes - Baltic Wind. Baltic Wind. <https://balticwind.eu/unlocking-the-power-of-the-wind-denmarks-push-for-green-energy-beyond-planned-lifetimes/>
46. Ellen MacArthur Foundation. (2013). Towards the Circular Economy: Economic and business rationale for an accelerated transition (p. 2). Retrieved from <https://emf.thirdlight.com/file/24/xTyQj3oxiYNM0xTFsgxT5LF3C/Towards%20the%20circular%20economy%20Vol%201:%20an%20economic%20and%20business%20rationale%20for%20an%20accelerated%20transition.pdf>
47. <https://orsted.com/en/what-we-do/renewable-energy-solutions/offshore-wind/technology#what>
48. Ørsted. (2024c). [www.Ørsted.com](https://orsted.com/en/who-we-are/sustainability/climate/decarbonisation-of-supply-chain-and-natural-gas-wholesale#latest-updates). Retrieved from Decarbonising our supply chain and natural gas wholesales: <https://orsted.com/en/who-we-are/sustainability/climate/decarbonisation-of-supply-chain-and-natural-gas-wholesale#latest-updates>
49. Ørsted. (2024d). Five ways we're partnering for net-zero offshore wind farms. Retrieved from [www.or.sted.com: https://orsted.com/en/who-we-are/sustainability/climate/decarbonisation-of-supply-chain-and-natural-gas-wholesale/taking-action-towards-net-zero-wind-farms#turbine-towers](https://orsted.com/en/who-we-are/sustainability/climate/decarbonisation-of-supply-chain-and-natural-gas-wholesale/taking-action-towards-net-zero-wind-farms#turbine-towers)
50. Ørsted. (2024e). Ørsted secures first access to lower-emission heavy plate steel through MoU with Dillinger. Retrieved from [www.orsted.com: https://orsted.com/en/media/news/2024/03/orsted-secures-first-access-to-low-emission-steel-13791769](https://orsted.com/en/media/news/2024/03/orsted-secures-first-access-to-low-emission-steel-13791769)
51. Wind Europe. (2022). New Dutch offshore auctions focus heavily on non-price criteria. Retrieved from [www.windeurope.org: https://wind-europe.org/newsroom/news/new-dutch-offshore-auctions-focus-heavily-on-non-price-criteria/](https://wind-europe.org/newsroom/news/new-dutch-offshore-auctions-focus-heavily-on-non-price-criteria/)
52. Bahr. (2023). Offshore wind – Tender rules for Norway's first offshore wind licensing round. Retrieved from [www.bahr.no: https://bahr.no/newsletter/offshore-wind-tender-rules-for-norways-first-offshore-wind-licensing-round-2](https://bahr.no/newsletter/offshore-wind-tender-rules-for-norways-first-offshore-wind-licensing-round-2)



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Christine Klara and Johan met at Copenhagen Business School (CBS) while pursuing their Master's degree in Finance & Strategic Management in 2021. During their studies, they both worked at Ørsted as student assistants. Christine Klara worked in Global Sustainability and Johan worked in Global Operations. In 2024, they graduated from CBS, and today, Christine Klara is on the PwC Graduate Programme while Johan is on the ATP Graduate programme.