



Transitioning from Fossil Fuel to Clean Energy

Suggested Readings

Below is a list of studies, reports, books, and articles related to the low-carbon pathways and deep decarbonization, current as of April 2017.

Low-Carbon Pathways Overview

- Heinberg, Richard and David Fridley. 2016. ***Our Renewable Future***. Post Carbon Institute, Island Press, Introduction, pp. 1-11
- Near-Term Strategies for Achieving Greenhouse Gas Emissions Reduction in the Pacific Northwest: Lessons from Existing Literature and Models,” October 19, 2016. Energy + Environmental Economics
- Rockstrom, Johan, Owen Gaffney, Joeri Rogelj, Makta Meinshausen, Nebojsa Nakicenovic, Hans Joachim Schellnhuber. March 24, 2017. *Science*, Vol 355. Issue 6331. p. 1269-1271
- Horn, Heather. *The Atlantic*. December 18, 2015. [The Race to Remake the World's Energy](#)
- Hawken, Paul. 2017. ***Drawdown***. Penguin Books. Chapter—Energy pp. 2-36, 222-225.
- Heinberg, Richard and David Fridley. 2016. ***Our Renewable Future***. Post Carbon Institute, Island Press, Chapter 1—A Quick at Our Current Energy System, pp. 13-34
- Kolbert, Elizabeth. November 20, 2017. *The New Yorker*. [Can Carbon-Dioxide Removal Save the World?](#)
- Romm, Joseph J. and Amory B. Lovins. Foreign Policy, 1992/Winter. [Fueling a Competitive Economy](#)

Low-Carbon Pathways Electricity

- Heinberg, Richard and David Fridley. 2016. ***Our Renewable Future***. Post Carbon Institute, Island Press, Chapter 3—Renewable Electricity: Falling Costs, Variability, and Scaling Challenges p. 48-80
- Roberts, David. October 27, 2017. Vox. [The key to tackling climate change: electrify everything](#)
- Adams, Rod. November 21, 2017. The Energy Collective. [Consumers Win if Electricity Production Capacity Remains High](#)
- Johnson, Kirk. December 11, 2017. *The New York Times*. [Rethinking Electric Power, Prompted by Politics and Disaster.](#)
- Heerema, Dylan. Pembina three-part series on the Electrifying Path to Decarbonization. [Part 1 Electric heat pumps are key to low-carbon homes and buildings](#) January 4, 2018; [Part 2: Unleashing the benefits of electrification for utilities and customers](#) January 8, 2018; [Part 3: Electrification of buildings: A cornerstone of Canada's low-carbon future](#) January 10, 2018.
- [Op-ed battle](#) re: Columbia Generating Station between Brent Ridge, CFO of Energy Northwest and Robert McCullough. Oregon Live. August 3, 2016.

Low-Carbon Pathways-Transportation

- Heinberg, Richard and David Fridley. 2016. ***Our Renewable Future***. Post Carbon Institute, Island Press, Chapter 4—Transportation: The Substitution Challenge p. 81-95
- Ghosh, Indradeep. May 23, 2016. CleanTechnica. [Fuel Switching: An Essential Step to a Decarbonized Future](#).
- Saxon, Steve and Matt Stone. November 1, 2017. McKinsey & Company. [How Container Shipping could reinvent itself for the digital age](#)
- Vinsel, Lee and Constantine Samaras. September 19, 2017. The Conversation. [Some of the best parts of autonomous vehicles are already here](#).
- Mims, Christopher. August 28, 2016. *Wall Street Journal*. [Why EVs will be here sooner than you think](#)
- Milman, Oliver. January 1, 2018. *The Guardian*. [Vehicles are now America’s biggest CO2 source, but EPA is tearing up regulations](#).
- Williams, Eric. January 11, 2018. The Conversation. [Autonomous Vehicles help millions catch up on sleep and work](#).
- Soudi, Abdesalam. January 7, 2018. The Conversation. [Driverless cars might follow the rules of road but what about language of driving?](#)
- Barkenbus, Jack. January 3, 2018. The Conversation. [To get most out of self-driving cars, tap brakes on rollout](#)
- Erriquez, Mario, Thomas Morel, Pierre-Yves Mouliere, and Philip Schafer. October 2017. McKinsey & Company. [Trends in electric-vehicle design](#)
- Mitchell, Russ. June 16, 2017. *Los Angeles Times*. [Why electric buses juice California’s economy? Start-up Proterra thinks so](#).
- Conca, James. March 23, 2017. Forbes. [Charged Up: Electric Cars Are Morphing into Many Species](#).
- Cheung, Albert. July 31, 2017. Bloomberg New Energy Finance. [The EV Bandwagon is Accelerating, but is it unstoppable?](#)
- July 14, 2017. Bloomberg New Energy Finance. [Big Oil Just Woke Up to Threat of Rising Electric Car Demand](#)

Low-Carbon Pathways-Transportation-Aviation, Freight, & Marine

- Berg, Nate. January 5, 2016. GreenBiz. [The Future of Freight: More Shipping, Less Emissions?](#)
- Clauber, Adam and Isaac Toussie. October 19, 2017. GreenBiz. [Why the Time Is Right for Aviation Biofuels to Take Off](#).
- Pyper, Julia. November 16, 2017. GreenTech Media. [Why Tesla’s Electric Truck is the Toughest Thing Elon Musk Has Attempted Yet](#).
- Ghosh, Indradeep. May 23, 2016. CleanTechnica. [Fuel Switching: An Essential Step Toward A Decarbonized Future](#)

- Hawken, Paul. 2016. Drawdown. Chapters on Ships, p. 140-141, Airplanes, 150-151, Trucks, 152-153, Trains, 156.
- Zuckerman, Seth. 2015. Climate Solutions. [Toward Sustainable Aviation Fuels: A Primer and State of the Industry.](#)
- Climate Solutions et al., May 25, 2011. [Sustainable Aviation Fuels Northwest.](#)
- Rocky Mountain Institute – Carbon War Room and SkyNRG. July 2017. [Innovative Funding for Sustainable Aviation Fuel at US Airports: Explored at SeaTac International.](#)
- Natural Resources Defense Council. January 2015. Issue Brief: [National Freight Pathways.](#)
- Rocky Mountain Institute/UMAS. February 20, 2017. [Navigating Decarbonization.](#)

Deep Decarbonization Pathways

- Sickinger, Ted February 17, 2018. *Oregon Business Review*. [PGE study: low-carbon grid is doable, affordable.](#)
- Energy Northwest. January 2, 2018. [Reducing carbon emissions at the lowest cost.](#)
- Evolved Energy Research. February 7, 2018. [Decarbonization Study for Portland General Electric Integrated Resource Plan.](#)
- Haley, Ben; Gabe Kwok; Ryan Jones; Jim Williams. April 2017. [Deep Decarbonization Pathways Analysis for Washington State: Executive Summary.](#) [Deep Decarbonization Pathways Analysis for Washington State.](#)
- Energy +Environmental Economics. December 15, 2017. [Greenhouse Gas Reduction Study for Public Generating Pool.](#)
- Bloomberg, Michael R.; Henry M. Paulson, Jr.; Thomas F. Steyer. Risky Business Project. 2016. [From Risk to Return: Investing in a Clean Energy Economy.](#)
- Mahone, Amber; Elaine Hart; Ben Haley; Jim Williams; Sam Borgeson; Nancy Ryan; Snuller Price. Energy + Environmental Economics. April 6, 2015. [California PATHWAYS: GHG Scenario Results.](#)