

Natural Gas: An Overview of a Lower-Carbon Transformation Fuel

[Get access >](#)

Anne Neumann , Christian von Hirschhausen

Review of Environmental Economics and Policy, Volume 9, Issue 1, Winter 2015,
Pages 64–84, <https://doi.org/10.1093/reep/reu022>

Published: 24 January 2015

Abstract

This article provides an overview of the natural gas industry, which we view as a bridge fuel toward a lower-carbon energy system in many countries and regions around the world. Based on a review of the literature, an econometric analysis of natural gas prices and contracts, and the authors' experience with the natural gas industry, this introductory article to the symposium on the *Prospects for Natural Gas in a Lower-Carbon Context* provides an overview of research on natural gas markets over the last decade and examines various features of the natural gas industry, including its technical structure, activities in the value-added chain, trade and market trends, short- and long-term price developments, and the geopolitical landscape. More specifically, we describe the natural gas sector and provide an overview of production, reserves, and consumption. We also examine the evolution of long-term contracts between producers and large-scale buyers of natural gas and present some recent empirical evidence. Finally, we discuss the changing geopolitics of natural gas, focusing in particular on the future roles of the United States as a potential natural gas exporter and Asia as the major importing region. (JEL: L11, L95, Q49)

[L11](#), [L95](#), [Q49](#)

[natural gas](#), [low-carbon economy](#), [global markets](#), [prices](#), [contracts](#)

© The Author 2015. Published by Oxford University Press on behalf of the Association of Environmental and Resource Economists. All rights reserved. For Permissions, please email: journals.permissions@oup.com

JEL: [L11 - Production, Pricing, and Market Structure; Size Distribution of Firms](#), [L95 - Gas Utilities; Pipelines; Water Utilities](#), [Q49 - Other](#)

Issue Section: [Symposium: Prospects for Natural Gas in a Low-Carbon Context](#)

Sign in

 [Get help with access](#)

Association of Environmental and Resource Economists members

[Sign in through society site >](#)



European Association of Environmental and Resource Economists members

[Sign in through society site >](#)



Personal account

- Sign in with email/username & password
- Get email alerts
- Save searches
- Purchase content
- Activate your purchase/trial code
- Add your ORCID iD

[Sign in >](#)

[Register](#)

Institutional access



[Sign in through your institution](#)

[Sign in through your institution](#)

[Sign in with a library card](#)

[Sign in with username/password](#)

[Recommend to your librarian](#)

Institutional account management

[Sign in as administrator](#)

Purchase

[Subscription prices and ordering for this journal](#)

[Purchasing options for books and journals across Oxford Academic](#)