

Energy and Transportation in the Atlantic Basin

Paul Isbell and Eloy Álvarez Pelegrý
Editors

Center for Transatlantic Relations
The Paul H. Nitze School of Advanced International Studies
Johns Hopkins University



Co-funded by the
Erasmus+ Programme
of the European Union

Paul Isbell and Eloy Álvarez Pelegry, eds., *Energy and Transportation in the Atlantic Basin*

© Center for Transatlantic Relations, 2017. All rights reserved. Licensed to the European Union under conditions.

Distributed and available via Brookings Institution Press
<https://www.brookings.edu/press/>

Center for Transatlantic Relations

The Paul H. Nitze School of Advanced International Studies

The Johns Hopkins University

1717 Massachusetts Ave., NW, 8th Floor

Washington, DC 20036

Tel: (202) 663-5880

Fax: (202) 663-5879

Email: transatlantic@jhu.edu

<http://transatlantic.sais-jhu.edu>

ISBN 13: 978-1-947661-01-1

Cover Photograph: AKaiser, shutterstock.com

Contents

Preface	v
<i>Daniel S. Hamilton and Renato G. Flôres Jr.</i>	
Introduction	vii
<i>Paul Isbell and Eloy Álvarez Pelegry</i>	
Part I: Innovative Perspectives on Energy and Transportation in the Atlantic Basin	
Chapter 1	3
The Co-Transformation of Energy and Transport: Outlook for the Wider Atlantic	
<i>R. Andreas Kraemer</i>	
Chapter 2	17
Electrification, Collaboration and Cooperation: Managing the Future of Energy and Transportation Systems in the Atlantic Basin	
<i>Martin Lowery and Michael Leitman</i>	
Part II: Energy and Land Transportation in the Atlantic Basin	
Chapter 3	55
Sustainable Mobility in the European Union: Alternative Fuels for Passenger Transport	
<i>Eloy Álvarez Pelegry, Jaime Menéndez Sánchez, and Macarena Larrea Basterra</i>	
Chapter 4	91
The Energy of Transportation: A Focus on Latin American Urban Transportation	
<i>Lisa Viscidi and Rebecca O'Connor</i>	
Chapter 5	127
Prospects for Decarbonization of African Transport	
<i>Roger Gorham</i>	
Part III: Energy and Transportation in the Maritime Realm of the Atlantic Basin	
Chapter 6	153
Atlantic Maritime Transportation: Impacts of the Atlantic Trade on Shipping Transport Emissions and International Regulation	
<i>Jordi Bacaria and Natalia Soler-Huici</i>	

Chapter 7 181
**The Greening of Maritime Transportation, Energy and
Climate Infrastructures in the Atlantic Basin:
The Role of Atlantic Port-Cities and Maritime Policy**
João Fonseca Ribeiro

Conclusion and Recommendations 227
Paul Isbell and Eloy Álvarez Pelegry

About the Authors 245

Preface

We are pleased to present the book *Energy and Transportation in the Atlantic Basin: Implications for the European Union and Other Atlantic Actors*, a collaboration among member institutions of the Jean Monnet Network on Atlantic Studies and the first tangible output of the Network's research efforts.

The Jean Monnet Network on Atlantic Studies is an initiative across the four Atlantic continents by 10 leading centers—many with Jean Monnet professors and in countries identified by the EU as key strategic partners—aimed at the interdisciplinary exploration of three pan-Atlantic themes of particular relevance to the EU: energy, commercial interactions, and challenges to human security.

The objective of the project is to create and develop a pan-Atlantic research network, to contribute to a nascent epistemic community in New Atlantic Studies and to offer strategic perspectives for the design of energy, trade and security policies in the countries of the Atlantic world. The Jean Monnet Project is also supported and co-funded by the Erasmus+ Program of the European Union.

The institutions involved in the Network consortium are each vibrant centers of EU-related studies in their respective regions. Most have collaborated—recently as part of the FP 7 project Atlantic Future—on themes related to Atlantic issues and the role of the EU as a key actor in this space.

Fundação Getulio Vargas, through its International Intelligence Unit, based in Rio de Janeiro, leads the consortium; its members are:

- Fundação Getulio Vargas (FGV), Brazil
- Johns Hopkins University SAIS (the Center for Transatlantic Relations, CTR), United States
- University of Pretoria, South Africa
- Universidade Nova de Lisboa (IPRI: Instituto Português de Relações Internacionais), Portugal
- CIDE (Centro de Investigación y Docencia Económicas), Mexico
- Roskilde University, Denmark

- Orkestra-Basque Institute for Competitiveness, University of Deusto, Spain
- CIDOB (Barcelona Centre for International Affairs), Spain
- Universidad Autónoma de Madrid, Spain
- OCP Policy Centre (OCP Foundation), Morocco

The Center for Transatlantic Relations of Johns Hopkins University SAIS led the first year's agenda on energy, and placed the focus on the nexus between energy and transportation. On July 20–21, 2017, the Jean Monnet Network's first research conference (Energy and Transportation in the Atlantic Basin) took place at the John Hopkins University's Paul H. Nitze School of Advanced International Studies (SAIS) in Washington, D.C. Together with work leading up to and following it, the conference catalyzed the research and insights that have produced the book in hand.

We wish to show our appreciation to the European Commission, that provided the funding which has made this research and related book publication possible. We are especially grateful to the team at the leading institution, in Rio de Janeiro, and to all partners in the Network who have participated in the energy cycle, as well as the outside collaborators who have contributed to the conference and the book.

It is our hope that the present work will successfully propel this Jean Monnet Project into its next annual cycle, dealing with trade. In addition, that the Network will position its members individually and together as a go-to resource on the contemporary role of the EU in the wider Atlantic space, advancing the comparative knowledge of integration processes in Europe and other Atlantic regions.

Daniel S. Hamilton
Johns Hopkins University SAIS

Renato G. Flôres Jr.
International Intelligence Unit
Fundação Getulio Vargas