

## Dr. Roland Kupers

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### Personal data

Born Nov. 26 1959 in The Hague, Netherlands

### Work experience

#### 2010 – INDEPENDENT ADVISOR – COMPLEXITY, RESILIENCE, ENERGY TRANSITION

**Global Advisor – International Methane Emissions Observatory UNEP – 2021-**

**Visiting Researcher - Institute for Advanced Studies University of Amsterdam 2018 –**

**Professor of Practice Thunderbird School of Global Management Arizona State University- Executive Master of Arts in Global Affairs & Management- 2020-**

**Visiting Professor Singapore Management University – Master of Tri-sector collaboration 2013 - 2018**

**Global Methane Policy Advisor – Environmental Defense Fund – 2013 - 2020**

**Senior lecturer Strategy at Nijenrode University – Complexity, Strategy and Sustainability for MBA and New Board programmes – 2003 – 2019**

**Associate Fellow Oxford University Smith School of Enterprise and the Environment 2010 – 2017**

**Guest Researcher at the Potsdam Institute for Climate Impact Research – Economic policy for climate impact mitigation for EU27 - 2010-2012**

**Associate Professor, Master of Public Affairs, Sciences Po, Paris, France – Complexity and Public Policy 2010-2012**

**Research Director THINK – The Amsterdam School for Creative Leadership 2012-2013**

#### 1999 - 2009 ROYAL DUTCH SHELL

Various positions at Shell, including:

##### Vice President Global LNG

- Head of LNG Business Unit. With 14% annual growth, no.1 market share and over \$2 bln profit, it was one of RDS' key business units.
- As the LNG business is fundamentally a rare "network" business, where the elements are critically interdependent, the central function adds unique value and perspective.

##### Vice President Sustainable Development

- Group responsibility for the implementation, learning and communication of Shell's commitment to contribute to sustainable development. Budget € 50m.
- Publication of the annual sustainability report and management of the Group's Corporate Identity Programme. Relationship management with key external stakeholders, internal change management programs, new social performance discipline.
- Operationalising of \$250 mln Shell Foundation, a new registered charity in 2001.

#### 1998 SABBATICAL YEAR

- Capita Selecta in Complexity and management (ref. Santa Fe Institute)
- Organizational Learning and Transformation Management
- Lectured at Nijenrode business school, McKinsey, Monitor, KPMG etc..

#### 1986 - 1997 AT&T

Various positions in research and management, with as final position:

### **Regional Managing Director Northern Europe**

- As MD for AT&T Communications Services Nederland, responsibility for 80 AT&T staff and activities in the Netherlands, from six different divisions.
- Responsible for the AT&T business in the Benelux, Switzerland, Austria, Nordics and Baltic's. Shared revenue responsibility \$300 million.

### **Degrees**

[PHD THESIS](#) -The complexity frame for public policy and management – Nyenrode Business University - 2014

[MASTERS DEGREE](#) in Theoretical Physics and Computer Science - State University Groningen 1988

[BACHELORS DEGREE](#) – Physics and Philosophy - State Univ. Groningen 1982

[LIBERAL ARTS](#) - Vrije Hoge School –1978

[BACCALAUREAT C](#) - Lycée Français in Wash. DC, Bonn, The Hague - 1977

### **Languages**

Fluent in English, French, German, Italian and Dutch

### **Books**

[A CLIMATE POLICY REVOLUTION – WHAT THE SCIENCE OF COMPLEXITY REVEALS ABOUT SAVING THE PLANET](#), Roland Kupers, Harvard University Press 2020

[COMPLEXITY AND THE ART OF PUBLIC POLICY: SOLVING SOCIETY'S PROBLEMS FROM THE BOTTOM-UP](#), with David Colander, PRINCETON UNIVERSITY PRESS 2014

[THE ESSENCE OF SCENARIOS: LEARNING FROM THE SHELL EXPERIENCE](#), with Angela Wilkinson, AMSTERDAM UNIVERSITY PRESS 2014

[TURBULENCE – A CORPORATE PERSPECTIVE ON COLLABORATING FOR RESILIENCE](#), Roland Kupers (Ed.), AMSTERDAM UNIVERSITY PRESS 2014

### **Book chapters**

[COMPLEXITY, CULTURE AND BANK PRIVITISATIONS](#) - IN FINANCE AND THE COMMON GOOD

Roland Kupers  
Amsterdam University Press (2019)

[A RESILIENCE FRAME FOR SMART CITIES](#) – IN 'CREATING, ANALYSING AND SUSTAINING SMARTER CITIES: A SYSTEMS PERSPECTIVE (EDITORS: IAN ABBOTT-DONNELLY AND HAROLD 'BUD' LAWSON  
Roland Kupers and Hsi Ching Song  
College Publications (2017)

[A COMPLEXITY LENS ON THE DUTCH ENERGY TRANSITION](#) - IN 'GOVERNING IN AN INTERCONNECTED DYNAMIC' (IN DUTCH)

Roland Kupers  
Netherlands Ministry of Economic Affairs (2017)

[IS THE CIRCLE REALLY ROUND?](#) - CHAPTER 11 IN REFLECTIONS ON THE TRANSITION TO A CIRCULAR ECONOMY (IN DUTCH)

Roland Kupers  
Netherlands School for Public Policy (NSOB) (2015)

[WHEN FUTURES LOCK-IN THE PRESENT: TOWARDS A NEW GENERATION OF CLIMATE SCENARIOS](#)

D. Mangalagiu, A. Wilkinson and R. Kupers  
Reframing the Problem of Climate Change - From Zero Sum Game to Win-Win Solutions Chapter 8 - Routledge 2011

[ASSESSING GREEN GROWTH: THE CASE OF EUROPE](#)

C. Jaeger, L. Paroussos, D. Mangalagiu, R. Kupers, A. Mandel, J. Tàbara.  
Reframing the Problem of Climate Change –From Zero Sum Game to Win-Win Solutions Chapter 5- Routledge 2011

## **Selected Papers**

### [GREENING SCHOOLYARDS – AN URBAN RESILIENCE PERSPECTIVE](#)

Leah Flax, Renet Korthals Altes, Roland Kupers and Brett Mons  
Cities 106 (2020) 102890

### [COMPLEXITY – A BIG IDEA FOR EDUCATION?](#)

Jane Drake, Roland Kupers and Rose Hipkins  
International Schools Magazine, Spring 2017

### [A RESILIENCE FRAMEWORK FOR SMART CITIES](#)

Roland Kupers, Song Hsi Ching  
Civil Service College Singapore, Nov. 2016

### [A CASE STUDY FOR A NEW METRICS FOR ECONOMIC COMPLEXITY: THE NETHERLANDS](#)

A. Zaccaria, M. Cristelli, R. Kupers, A. Tacchella and L. Pietronero  
Journal of Economic Interaction and Coordination (2015)

### [THRESHOLD MODELS OF TECHNOLOGICAL TRANSITIONS](#)

P. Zeppini, K. Frenken, R. Kupers  
Environmental Innovation and Societal Transitions (Accepted – October 2013)

### [LIVING IN THE FUTURES: HOW SHELL'S SCENARIO PLANNING APPROACH DELIVERS BETTER LEADERSHIP](#)

A. Wilkinson and R. Kupers  
Harvard Business Review (May 2013)

### [HOW PLAUSIBILITY-BASED SCENARIO PRACTICES ARE GRAPPLING WITH COMPLEXITY TO APPRECIATE AND ADDRESS 21ST CENTURY CHALLENGES](#)

Wilkinson, R. Kupers, D. Mangalagiu  
Forecasting & Social Change 80 (2013) 699–710

### [TRANSFORMATIVE TARGETS IN SUSTAINABILITY POLICY-MAKING: THE CASE OF THE 30 PERCENT EU MITIGATION GOAL](#)

J. D. Tabara, D. Mangalagiu, R. Kupers, C. Jaeger, A. Mandel, L. Paroussos  
Journal of Environmental Planning and Management 2012, 1–12

### [REINTEGRATING THE SOCIAL SCIENCES](#)

The Dahlem Group, David Colander & Roland Kupers & Thomas Lux & Casey Rothschild, 2010. Middlebury College Working Paper Series 1033, Middlebury College

### [CLIMATE CHANGE POLICY. POSITIVE OR NEGATIVE ECONOMIC IMPACT?](#)

Roland Kupers, Diana Mangalagiu  
European Climate Forum Working Paper, (1/2010)

### [WHAT ORGANISATIONAL LEADERS SHOULD KNOW ABOUT THE NEW SCIENCE OF COMPLEXITY](#)

R. Kupers  
Complexity, Wiley (2001)

### [A STOCHASTIC APPROACH TO LARGE SCALE CLUSTERING OF MATTER IN THE UNIVERSE](#)

L. Pietronero, R. Kupers  
Fractals in Physics, North Holland Publishing, (1986) p.319

## **Selected Reports**

### [RESILIENCE IN COMPLEX ORGANISATIONS](#)

Roland Kupers  
World Economic Forum – Global Risk Report (2018)

### [LEARNING FOR RESILIENCE AND COMPLEX SYSTEMS THINKING](#)

Roland Kupers and Mark Foden  
The Resilience Shift (2017)

### [ECONOMIC COMPLEXITY](#)

Luciano Pietronero, Masud Cader, Andrea Gabrielli, Matthieu Cristelli, Roland Kupers, Emanuele Pugliese, Andrea Tacchella, Andrea Zaccaria,

Università La Sapienza – World Bank Group (June 2017)

[THE OTHER KNOB: TACKLING METHANE EMISSIONS](#)

Roland Kupers  
Veolia Institute contribution to COP21 (2015)

[ENABLING BUSINESS DECISIONS THAT INTEGRATE NATURAL CAPITAL – LEARNING FROM A COMPLEX SYSTEMS PERSPECTIVE](#)

Roland Kupers, Mark Gough, Martin Lok, Filipa Saldanha, Richard Spencer  
Institute of Chartered Accountants of England and Wales (2015)

[A NEW GROWTH PATH FOR EUROPE](#)

C. Jaeger, L. Paroussos, D. Mangalagiu, R. Kupers, D. Tàbara and A. Mandel  
German Federal Ministry for Environment, Nature Conservation and Nuclear Safety, European Climate Forum (2011)

[THE OXFORD SCENARIOS: BEYOND THE FINANCIAL CRISIS](#)

B.S. Flowers, R. Kupers, R., D. Mangalagiu, R. Ramirez, J. Ravetz, J., J. Selsky, C. Wasden, A. Wilkinson  
Institute for Science, Innovation and Society – University of Oxford (2010)

[RE|SOURCE 2050 FLOURISHING FROM PROSPERITY: FASTER AND FURTHER](#)

Wilkinson, B.S. Flowers (editor), W. Thomas, N. Davis, A. Litovsky, R. Kupers, J. Hudson, and F. Thompson.  
Smith School of Enterprise and the Environment, University of Oxford (2012)

**Videos**

[RESILIENCE ENGINEERING EDUCATION](#)

Roland Kupers, Mark Foden  
The Resilience Shift, 2017

[RESILIENCE AND COMPLEXITY ARE CONNECTED - AN INTRODUCTION TO RESILIENCE](#)

Roland Kupers, Mark Foden and Mark Hainge  
Rockefeller Foundation 100 Resilient Cities, 2017

**Selected speeches**

[COMPLEXITY IN PRACTICE: FIVE POLICY EXAMPLES](#)

Netherland America Foundation  
New York City, November 15th, 2017

[COMPLEXITY AND RESILIENCE IN CITIES](#)

Future Resilient Systems programme - Singapore-ETH Centre,  
Singapore, October 13th, 2017

[APPRENDRE LA RESILIENCE AVEC LE JEU NEXUS](#)

Villes et territoires résilient - Les colloques de Cerisy  
Cerisy la Salle, July 26th, 2017

[RESILIENCE GARAGE - FOUR TASTER SESSIONS WITH SEOUL, GLASGOW, PANAMA CITY AND DALLAS](#)

100RC Global Resilience Summit  
New York City, July 26th, 2017

[A RESILIENT APPROACH TO INNOVATION](#)

COTEC annual meeting  
Porto, May 15th, 2017

[RESILIENCE AND RISK MANAGEMENT - A PRACTICAL TOOL](#)

International Risk Governance Council  
IASS Potsdam, March 16th, 2017

[REDUCING METHANE EMISSIONS FROM THE OIL AND GAS INDUSTRY](#)

COP22 and the Climate and Clear Air Coalition  
Marrakech, November 16th, 2016

[MEXICO CITY RESILIENCE GARAGE](#)

Rockefeller Foundation 100 Resilient Cities  
Laboratorio para la ciudad, Mexico City, April 19-22, 2016

[MITIGATING METHANE EMISSIONS](#)  
COP21 and the Veolia Institute  
Le Bourget Paris, December 8th, 2015

[NATURE AND THE ART OF POLICY MAKING](#)  
World Forum on Natural Capital  
Edinburgh, November 23rd, 2015

[SUSTAINABILITY – NARRATIVES AND POLICY](#)  
OECD - Complexity of the Economy: Research and Policy Implications  
Paris, October 26th, 2015

[TOWARDS AN ADAPTIVE GOVERNMENT](#)  
Ministry of Internal Affairs and Kingdom Relations  
Amersfoort, August 31st, 2015

[COMPLEXITY, ETHICS AND ABNAMRO](#)  
The Hague Symposium on Ethics & Finance  
Senate Chamber - The Hague, April 15th, 2015

[ENERGIEWENDE: INCREMENTAL CHANGE OR SYSTEM TRANSITION?](#)  
A joint event of the Hertie School of Governance and TU-Campus EUREF  
Berlin, November 14th, 2014

[COMPLEXITY AND THE ART OF PUBLIC POLICY](#)  
Harvard Kennedy School  
Cambridge, MA, September 16th, 2014

[COMPLEXITY AND THE ART OF PUBLIC POLICY](#) - with Eric Beinhocker, INET  
Blavatnik School of Government and the Smith School of Enterprise and the Environment  
Oxford, May 8th, 2014

[A GREEN GROWTH PATH FOR EUROPE](#)  
7th European Conference on Sustainable Cities and Towns, April 2013  
Vienna, January 2013

[UNE NOUVELLE VOIE DE CROISSANCE POUR L'EUROPE](#)  
Comité Scientifique et Industriel des TABLES RONDES DE L'ARBOIS, Aix-en-Provence, April 2013

[CROISSANCE VERTE: LES ALLEMANDS SAVENT-ILS QUELQUECHOSE QUE NOUS NE SAVONS PAS?](#)  
Office Cheroufiens des Phosphates  
Paris, December 2012

[ECONOMIC MODELS AND GLOBAL CHALLENGES](#)  
BEPA, the Bureau of European Policy Advisors, European Commission,  
Brussels, October 2011

[LEARNING WITH FUTURES](#) (with Angela Wilkinson)  
WRR - Scientific Council for Government Policy  
The Hague, June 2010

[THE OXFORD SCENARIOS: BEYOND THE FINANCIAL CRISIS](#)  
Cambridge Sustainability Programme,  
Cambridge, May 2010

[THE ENERGY AND ENVIRONMENT POLICY PROCESS](#)  
GSD BIG STEP conference  
Brussels, April 2010

[HOW DO COMPANIES MAKE DECISIONS UNDER UNCERTAINTY](#)  
Certain or uncertain: an adventure around uncertainty and science -  
Netherlands Royal Academy of Science (KNAW)  
Amsterdam, April 2008

[THE FUTURE OF ENERGY – SHELL SCENARIOS](#)  
Honours Class Erasmus University Economics Faculty

Rotterdam, December 2006

[THE CRITICAL ROLE OF GLOBAL CORPORATIONS – HOW DOES GLOBAL BUSINESS IMPACT SOCIETY?](#) Dräger Foundation – VII Zavikon Conference, Dresden, Feb 2003

[SCENARIOS FOR PROTECTED AREAS](#)

International Union for the Conservation of Nature  
Gland – April 2003

["THE EARTH SUMMIT LISTENED TO THE VOICES OF BIG BUSINESS, NOT THE NEEDS OF THE PLANET"](#)

Oxford Union  
Oxford, October 2002

[A CORPORATE PERSPECTIVE ON SUSTAINABLE DEVELOPMENT](#)

World Summit on Sustainable Development (WSSD) - Johannesburg, September 2002

[CORPORATE SOCIAL RESPONSIBILITY](#)

ACDE Christian Employers  
Buenos Aires, May 2002

## **Governance**

- [MIGRANT NATION](#) – global migration – Board member – 2020 -
- [ENVIRONMENTAL DEFENSE FUND EUROPE](#) – Board member – 2018 -
- [DE GIDS](#) – Literary magazine - Board member – 2018 -
- [TOMOKO MUKAIYAMA FOUNDATION](#) – Cultural foundation - Board member – 2017-
- [NEW ECONOMICS METRICS](#) – fintech company – Managing Director – 2015-
- [HESTER VAN EEGHEN BV](#) (design company) – Director – 1988-
- [NETHERLANDS ORGANISATION FOR SCIENTIFIC RESEARCH \(NWO\)](#) - Advisory Board Complexity – 2011-2018
- [LEAD INTERNATIONAL](#) - Chairman of the board of Trustees – 2010-2014
- [GLOBAL SYSTEM DYNAMICS & POLICY](#) - Advisory Board - 2010-2012
- [SHELL GAS AND POWER INT'L BV](#) - Managing Director - 2005-2010
- [ERASMUS UNIVERSITY ROTTERDAM](#) - Member Business Advisory Council IBEB – 2005-2007
- [STICHTING BEELDENDE KUNST](#) (art foundation) -Board member -1998-2005
- [ROYAL DUTCH/SHELL GROUP COMMITTEES](#) - Secretary of Sustainable Development, Brand and reputation, Social Investment - 2001-2003
- [SHELL SERVICE INTERNATIONAL](#) - Executive Committee -1999-2001
- [AT&T COMMUNICATIONS SERVICES BV](#) - Managing Director-1995-1997

## **Other interests**

- Carpentry, yoga, sculpture, literature, theater, ski-trekking, reading The Economist

