**Jan Rotmans**

## Part I: Curriculum Vitae

### Personal Details

| | |
|---|---|
| Title and full name: | Prof.dr.ir. Jan Rotmans |
| Date of birth: | 29-03-1961 |
| Nationality: | Dutch |
| Employed by: | Erasmus University Rotterdam |
| Address (work): | Burgemeester Oudlaan 50<br>3000 DR Rotterdam |
| Postal Code: | P.O. Box 1738 |
| Telephone number: | +31 (0)10 4088775 |
| Email address: | Rotmans@fsw.eur.nl |
| Personal Webpage: | www.janrotmans.nl |

### University Education

| | |
|---|---|
| 30 May 1986 | M.Sc., Mathematics, University of Delft, The Netherlands |

### Doctorate

| | |
|---|---|
| Title Thesis: | IMAGE: an integrated model to assess the greenhouse effect |
| Supervisor: | Prof. O.J. Vrieze |
| Date PhD-award: | 20 september 1990 |
| University: | Maastricht University |
| Publisher: | Kluwer Academic Publishers |
| Year of publication: | 1990 |

**Academic/Research Career**

| | |
|---|---|
| 1986-1989 | Researcher, Centre of Mathematics at RIVM |
| 1989-1996 | Researcher at the Environmental<br>Assessment Department at RIVM<br>Project Leader of the IMAGE project,<br>Escape project and the TARGETS<br>Project |
| 1992 | Part-time Professor at Maastricht<br>University in 'Mathematical Simulation<br>of Human-Environment Relations'<br>within the Faculty of Natural Sciences |
| 1994-1998 | Vice-chairman of the Scientific Advisory Board of the Potsdam Institute for Climate Impact Research (PIK) in Germany. |
| 1995-1997 | Department of Policy Coordination and Sustainable Development (Division for Sustainable Development), United Nations, New York. |
| 1997 | Founder and Director of ICIS (International Centre for Integrative Studies) at Maastricht University |
| 1997 | Full Professor at Maastricht University in 'Integrated Environmental Assessment' within the Faculty of Natural Sciences |
| 1997-2002 | Member of the Steering Committee of the European Forum on Integrated Environmental Assessment (EFIEA) |
| 2000- | Founder of the Dutch Network KSI: Knowledge Network on System Innovation, Transition towards a Sustainable Society |
| 2002-2005 | Vice-Chair of the European Forum on Integrated Environmental Assessment (EFIEA-2), under auspices of the European Commission in Brussels |
| 2003-2006 | Vice-President of the Integrated Assessment Society (TIAS) |
| 2003-2008 | Founder of the European Sustainability Network, MATISSE |

| | |
|---|---|
| 2004 | Full Professor at Erasmus University Rotterdam in 'Sustainable Transitions and System Innovations' within the Faculty of General Sciences |
| 2004 | Top-advisor of TNO (The Netherlands Organization for Applied Scientific Research |
| 2004 | Founder and Director of DRIFT (Dutch Research Institute For Transitions) at Erasmus University Rotterdam |
| 2004-2010 | Member of the Supervisory Board of the Tyndall Institute, University of East Anglia, Norwich |
| 2007 | Initiator and Chairman of URGENDA |
| 2012 | Independent Researcher within DRIFT and full professor affiliated to the Faculty of General Sciences and the Faculty of Business Administration |
| 2012 | Inítiator and Co-Founder of the Sustainability Transitions Research Network |
| 2013 | Director of Rotradamus BV |
| 2015 | Co-Founder of Nederland Kantelt |
| 2016 | Member and vice-chairman of the Review Board of the Potsdam Institute of Climate Research |
| 2017 | Co-Founder of Zorgeloos |

**Part II: Professional Achievements**

Jan Rotmans is a typical interdisciplinary scholar. He started his career within the natural sciences as an integrated climate modeller and was worldwide the first one that developed an integrated climate assessment model, IMAGE (Integrated Model to Assess the Greenhouse Effect) that modelled both the causes, impacts and biogeochemical/physical mechanisms of climate change induced by human activities. The IMAGE model was during the 80s of the last century considered as a breakthrough model, that has led to hundreds of similar integrated climate assessments model in the decades thereafter. The IMAGE model has been used extensively within the IPCC (Intergovernmental Panel on Climate Change) for scenario development and impact assessment, and within the context of the negotiations of the Kyoto-protocol. The IMAGE model is still being further developed at RIVM (the National Institute of Public Health and the Environment), almost 30 years after its initiation, where it has been used within numerous European and Global environmental assessments for the EC, EEA, UNEP, Worldbank, etc. This has evoked an international school of integrated assessment and integrated assessment modellers, with its own society and journal.

Over the last 15 years, Jan Rotmans acted more with the social sciences. He started studying transitions (complex transformative societal changes) and developed the concept of transition management that has been used widely within the Netherlands, but also abroad, both in European countries but also in countries like Japan and Australia. Transition management is considered as a breakthrough concept, a new form of governance that influenced the thinking on how to influence transitions in an innovative and creative manner. He was the founder of the field of transition studies, or transition science, in the Netherlands, and co-founder of the European Transition network.

International reputation

Jan Rotmans is an international authority in the areas of transitions and integrated environmental assessment. That is marked by the scientific initiatives that he took that has led to new interdisciplines, societies, networks, journals, etc. Below a short list that illustrates his international authority:

- In 1986 he started with the development of the very first Integrated Climate Assessment model in the world, IMAGE, which is still being developed, and has been used in international climate negotiations. Hundreds of people have worked on the IMAGE model, which became famous within the global climate scenery.
- In 1991 he won the SNS-prize for the best thesis of Maastricht University
- In 1993 he received a Dutch Pioneer nomination by NWO
- In 2002 he received an award on behalf of the International Institute for Advanced Studies in Systems Research and Cybernetics
- In 2002 he received a 10 million Euro grant for the Dutch Transition Research Programme KSI (Knowledge and competences of Sustainable System Innovations and Transitions)
- He was founder of two scientific journals: Environmental Modelling and Assessment; and Integrated Assessment
- He co-founded The Integrated Assessment Society (TIAS)
- From 1994-1998 he was vice-chairman of the Scientific Advisory Board of the Potsdam Institute for Climate Research (PIK) in Germany
- From 2004-2010 he was member of the Supervisory Board of the Tyndall Institute, in Norwich UK
- From 2002-2005 he was vice-chair of the European Forum on Integrated Environmental Assessment under auspices of the European Commission
- From 2003-2006 he was vice-president of the Integrated Assessment Society (TIAS)
- From 2003-2008 he was founder of the European Sustainability Network, MATISSE
- In 2007 he founded the NGO Urgenda, that won the climate lawsuit against the Dutch State
- In 2009 he was co-founder of the Sustainable Transitions Research Network (STRN)
- In 2014 he founded the NGO 'Nederland Kantelt'.

Contacts and connections with researchers of standing in the Netherlands and abroad

Jan Rotmans participates in a wide range of national and international networks, varying from assessment networks, modelling networks, environmental networks, economic networks, sustainability networks, governance networks, transition networks and policy advisory networks. Over the past 25 years he has worked together with numerous researchers of standing, both in the Netherlands and abroad. Almost all of them are full professors, and many of them are global leaders in their disciplines.

Among many names here only a few with whom he has worked together:

prof. John Schellnuber (PIK, Germany), prof. Steve Schneider (Stanford University, passed away), prof. Carlo Jaeger (AEWAG, Switzerland, later PIK), prof. Jill Jaeger (IIASA, Austria), prof. Hadi Dowlatabadi (Carnegie Mellon University, later University of British Columbia in Vancouver), prof. John Robinson (UBC Vancouver), prof. Jerzy Filar (Adelaide, Australia), prof. Morita (Japan, passed away), prof. Pahl-Wostl (Osnabrück), prof. Tom Wigley (NCAR, Boulder and later Australia), prof. O'Riordan (East Anglia, Norwich), prof. Olson (Lund), prof. Fischer-Kowalski (Austria), prof. Funtowicz (Ispra, Italy), prof. Ravetz (retired, UK), prof. Whiteman (Rotterdam), prof. Braungart (Rotterdam) and prof. Rayner (Oxford, UK). And in the Netherlands with a range of researchers of standing: prof. Rik Leemans (Wageningen), prof. Johan Schot (Eindhoven), prof. John Grin (Amsterdam), prof. Jeroen van den Bergh (Amsterdam en Barcelona), prof. Leen Hordijk (Wageningen, met emeritaat), prof. Pim Martens (Maastricht), prof. van Asselt (Maastricht), prof. vd Laan (Leiden, met emeritaat), prof. Vrieze (Maastricht, met emeritaat), prof. Kleijnen (Tilburg), prof. Rip (Twente), prof. Geels (Manchester), prof. Geurts (Tilburg), prof. Teisman (Rotterdam), prof. Kemp (Maastricht), prof. Mommaas (Tilburg), prof. Spaargaren (Wageningen), prof. Thissen (TUDelft) and prof. Hekkert (Utrecht).

Ability to attract and inspire young researchers

Jan Rotmans is a passionate and inspiring researcher. One of his abilities is to give inspiring and motivational lectures and colleges that attract many people. Because of his moving style his colleges are quite popular among students, not only in the Netherlands but also abroad. During his career he has established several multi- and interdisciplinary research groups consisting of young, talented researchers. His first multidisciplinary research group was at RIVM around the IMAGE model that has been co-developed by dozens of young researchers from a variety of disciplines, among which several PhD-students. His second multidisciplinary research group was also at RIVM focused on the TARGETS model, a global integrated model for assessing sustainability dynamics and projecting long-term trends in global dynamics. A group of about 15 young researchers, including both natural and social scholars, developed together the TARGETS model. Some of these young researchers were very talented and got their PhDs on parts of this global dynamics research and became even a full professor, such as: Pim Martens, Arjen Hoekstra, Marjolein van Asselt and Frank Geels.

The third interdisciplinary research initiative was the ICIS institute at Maastricht University, established by Jan Rotmans. ICIS stands for Integrated Centre for Integrative Studies, that since 1997 has hosted more than 150 in particular young researchers from all over the world. The ICIS institute is still prospering and rooted in the education system at Maastricht University, with its own Master programme on sustainability science.

And the fourth interdisciplinary research institute was the DRIFT institute at Erasmus University in Rotterdam, where a group of about 30 mostly young researchers investigate various aspects of transitions and transition governance.

In total Jan Rotmans has supervised 21 PhD-researchers among which 5 became already a full professor.

Contribution to research valorisation

Jan Rotmans is not only science driven but also society driven. One of his driving forces is to improve functioning of society by making transition knowledge widely available. There is an increasing demand within society for transition knowledge. Not only within the public domain, in sectors like energy, health, water, mobility, agriculture and food; but also in the private sector there is a growing interest and demand, varying from multinationals to small and medium

enterprises, many of which are in a transitional stage and want to apply insights from transition science within their companies.

Jan Rotmans is top advisor of the Dutch government and cabinet, in particular in guiding transition trajectories, of which the energy transition and the health care transition are the best known examples. He is also advising foreign governments, such as the Finnish, Belgian and German and is advisor of international agencies as the UN, where he worked two years for the Commission on Sustainable Development, OECD, the European Commission and the World Bank.

In order to accelerate the transition to a more sustainable Dutch society he established Urgenda, an action group that is quite successfully working according to the principles of transition management and has had quite some impact in the Netherlands.

By writing numerous articles in Dutch newspapers and magazines on sustainability transitions Jan Rotmans is reaching a wide audience. He has also written multiple Dutch books on transitions for a broad audience, including his last book 'In the eye of the hurricane' which was very well received and around which a documentary has been made (Tegenlicht documentary).

He is often appearing in the regular media (television and radio) to spread transition thinking, but he is also using social media, in particular twitter in an effective way (more than 13.000 followers) to popularize transition thinking among a broad audience.

**QUANTITATIVE INFORMATION**

1. Total number of articles in refereed journals

Jan Rotmans has published 95 peer reviewed publications in journals

2. Total number of books in entire academic career

Jan Rotmans has published 21 books in his career, both English and Dutch books (11 in English and 10 in Dutch)

3. Total number of chapters in books

Jan Rotmans has published 50 chapters in books

4. Total number of PhD-these supervised as principal supervisor

Jan Rotmans has supervised 15 PhD-students so far, 5 PhD's are underway

5. Selection of grants awarded to nominee in the past 10 years

- 10 million Euro grant for the Dutch transition network KSI in 2003, for a period of 6 years, from 2004-2010, provided by The Dutch Ministry of Economic Affairs, within the framework of ICES-KIS fund, after peer review selection of the KNAW.

- 6 million Euro grant for MATISSE, provided by the European Commission, for a period of 3 years, for the coordination of a European project MATISSE, from 2004-2007.

6. Hirsch-index

The Hirsch-index of Jan Rotmans is 60

**PART III: ADDITIONAL INFORMATION**

**Summary**

Jan Rotmans is a scientific entrepreneur, a visionary researcher in both natural sciences and sciences. During his career he switched from the natural scientific community to the social science community, but deep-down he is a typical interdisciplinary scholar. He has three major 'break through' innovations on his name. He started as a modeller, in particular an integrated assessment modeller, and was the first in the world who developed an integrated assessment model for global climate model, IMAGE. This was an unique model at that time, mid-eighties of the last century, because, as his supervisor once described 'this model contains both molecules and guilders'. First the model was criticized but later the model has been mimicked numerously by other modellers and turned into a landmark for a whole new generation of climate assessment models. Also, the fact that the IMAGE model has been used frequently in policy circles in a practical manner is exceptional.

His second major innovation was the TARGETS model, by which he 'opened' models by making the uncertainties within integrated assessment models explicit. That was done by 'colouring' these uncertainties according to different perspectives, using basics of the Cultural Theory. At that time, the mid-nineties of the last century, that was considered as controversial and criticized by both modellers and social scientists. Years later, driven by a ground breaking article on modelling uncertainties, much more attention is devoted to different kinds and sources of uncertainties in any kind of model.

And his third major scientific achievement was his interdisciplinary research into transitions. At the time he started studying transitions, about 15 years ago, there was hardly any attention in social sciences for transitions, especially not for the governance of transitions. Through the innovative concept of transition management, also criticized first, there is worldwide scientific attention for the governance of complex transformative changes.

**International Referees**

1. Professor John Schellnhuber, Potsdam Institute for Climate Impact Research, emailaddress: John@pik-potsdam.de
2. Professor Hadi Dowlatabadi, University of British Columbia, Vancouver, emailaddress: Hadi.d@ubc.ca
3. Professor Steve Rayner, University of Oxford, emailaddress: steve.rayner@insis.ox.ac.uk

4. Professor Bill Clark, Harvard University, emailaddress: william_clark@harvard.edu
5. Professor Lennart Olsson, University of Lund, lennart.olsson@lucsus.lu.se

**PART IV: CROSS DOMAIN**

## 1. Cross-domain activities

Jan Rotmans is an exceptional scientist because he more or less created his own cross-domain disciplines or interdisciplines. The field of integrated assessment modelling contains various disciplines, because it combines economic models and ecological models. Later these integrated assessment models were extended with knowledge pieces from other disciplines, both from social sciences (such as social psychology, cultural anthropology and socio-technical theory) and from natural sciences (such as biogeochemistry, climatology and ecosystem theory).

He also set up an interdisciplinary research programme on sustainable development, bot for modelling the phenomenon and for assessing it. Assessing sustainable development in an integrative and reflexive manner was new at that time and combined the knowledge of several disciplines: macro- and micro-economy, complex systems theory, ecosystem theory, ecological economics, etc.

Similarly, he set up an interdisciplinary research programme on transitions, starting in the Netherlands, involving a wide range of scientific disciplines. Out of this arose the concept of transition management, a blending concept that merges basic insights from complex systems science with key elements from sociology and governance studies. This unique endeavour led to a new interdisciplinary concept for studying transitions in an analytical manner (such as transition patterns) and for governing transitions (such as transition management).

## 2. Contribution to science in general

Jan Rotmans has influenced and inspired many researchers all over the world. His innovative concepts turned into cornerstones that also influenced knowledge development within several disciplines. His transition endeavour influenced the scientific agenda, first in the Netherlands and later in Europe and also outside Europe. One of his basic scientific contributions has been 'agenda setting'. Modelling and assessing climate change in an integrated manner was set on the agenda from the mid-eighties, also thanks to his pioneering efforts in this field. Later on, integrated assessment was extended to other environmental problems (other than climate change) and turned into assessing sustainable development, namely Integrated sustainability assessment that entered the research agenda in Europe during the nineties, where the influence of Jan Rotmans was noticeable.

And the last remarkable example of agenda setting is the transition research, as a result of the pioneering transition activities that started in the Netherlands. Nowadays it has extended to a fast growing research field in itself, with three key domains, among which transition management (governance) is an important one.

In each of these research agenda setting activities this was illustrated by key publications that influenced researchers and research community. The key publications on the IMAGE model (1990), on Integrated Assessment (1998), and on transition management (2001) turned into corner stones.

**3. Miscellanea**

- One of the pioneers in the emerging scientific field of Integrated Assessment, which tries to build a bridge between complex scientific problems and decision-making.

- The founder of the field of transition studies, or transition science, and initiator of the the Dutch Transition Network (KSI) and the European Transition Network (www.transitionsnetwork.org).

- Participated in more than 1000 national and international conferences, workshops and seminars, predominantly by giving lectures, demonstrations or presentations. Also organized national and international conferences on Integrated Assessment, Integrated Assessment Modelling and sustainability Transitions in the Netherlands and in foreign countries.

- During the first decade of my career I have been involved in IPCC-work: developing the IPCC-scenarios, doing model calculations, and lead author of several chapters within different working groups.

- Lead author of the book entitled 'Human Choice and Climate Change', an initiative by the Human Dimensions of Global Change Research Programme.

- Co-author of two influential UN assessment reports: 'Critical Trends: Global Change and Sustainable Development' from UNDPCSD, and the 'Global Environmental Outlook' from UNEP, which both appeared in 1997.

- Coordinator of the UN Global Modelling Forum on Sustainable Development, which functions under the auspices of DESA, UNEP, and UNU.

- Founded the scientific journal 'Environmental Modelling and Assessment', together with Professors Filar (Australia) and Vrieze (The Netherlands), of which the first issue appeared in June 1996.

- Founded the scientific journal 'Integrated Assessment', together with Professor Hadi Dowlatabadi of University of British Columbia (UBC), Canada, of which the first issue appeared in March 2000.

- Main editor together with Hadi Dowlatabadi of an Electronic Scientific Journal: the Electronic Series on Integrated Assessment Modelling, published by Baltzer Science Publishers, Amsterdam, The Netherlands.

- Founded The Integrated Assessment Society (TIAS), together with Prof. Claudia Pahl-Wostl (University of Osnabruck) and Prof. Hadi Dowlatabadi of UBC, Canada.

- Advisor of the Dutch Government on sustainability transition processes in the fields of energy, mobility, agriculture, biodiversity and the biobased economy. Advisor of Dutch provinces and municipalities on sustainability transition processes in the fields of regional sustainable development in relation to spatial planning, economic development, mobility, energy use and agriculture.

- Advisor of Foreign Governments on sustainability transition processes, such as the Governments in Belgium, Austria, Germany, UK, but also outside Europe, such as in Canada, Japan and Australia.

- Advisor of International Bodies as the United Nations: Commisson on Sustainable Development (CSD), United Nations Environment Programme (UNEP), European Commission (EC) and the European Environment Agency (EEA).

- Supported a variety of regional sustainability transition processes in the Netherlands and in Europe. In the Netherlands in regions as Zeeland, Limburg, Texel, Friesland, Noord-Holland, Haarlemmermeer, het Groene Hart en de Zuidvleugel and in cities as Rotterdam, Maastricht and Almere. Outside the Netherlands in cities and regions as Venice, Manchester and Gent

- A major task is to promote and perform integrated assessment and sustainability transitions research, and guide researchers and PhD students how to do this. Have had 15 PhD-students so far, who produced PhD-theses on: Integrated Assessment Modelling, Human Health Modelling, Modelling Complex Systems, Integrated Model-based Water Assessment, and an Integrated Approach towards Uncertainty & Risk. I have guided the following PhD-students on various aspects of Integrated Assessment and Sustainability Transitions Science: Michel den Elzen; Marco Janssen; Pim Martens; Arjen Hoekstra; Marjolein van Asselt; Bas Amelung; Philip van Notten; Derk Loorbach; Jasper Grosskurth; Pieter Valkering; Saartje Sondeijker; Rutger van de Brugge; Suzanne van den Bosch; Hans de Haan; Flor Avelino (cum laude). Mattijs Taanman; Nele d'Haese; Roel van Raak.

I speak and write Dutch, English fluently and German reasonably

Research Interests:

- Integrated Sustainability Assessment
- Transitions and System Innovation
- Sustainability Science
- Global Change Research
- Multi-Inter-Transdisciplinary research
- Leading interdisciplinary research teams
- Innovative, applied research
- Policy advising

General Interests:

- Sports
- Literature
- Music
- Art

Key Words:

- Pioneer
- Innovator
- Go-getter
- Creativity
- Energetic
- Team-builder

**Publications**

1.

**BOOKS**

1. Rotmans, J. (1990), 'IMAGE: an Integrated Model to Assess the Greenhouse Effect', PhD.Thesis, published by Kluwer Academic Publishers, Dordrecht, The Netherlands.

2. Rotmans, J. (1990), 'IMAGE: an Integrated Model to Assess the Greenhouse Effect, Book, ISBN 0-7923-0957-X, Kluwer Academic Publishers, Dordrecht, The Netherlands.

3. Rotmans, J. and de Vries, H.J.M. (1997), 'Perspectives on Global Change: the TARGETS approach', Cambridge University Press, Cambridge, U.K.

4. Rotmans, J. (1998), 'Geïntegreerd denken en handelen: een noodzakelijk goed', Universiteit Maastricht, Oratie, 18 september 1998.

5. Martens, W.J.M.. and Rotmans, J. (1999), 'Climate and environment: an integrated perspective', Kluwer Academic Publishers, Dordrecht, The Netherlands.

6. Rotmans, J., Kemp, R., van Asselt, M.B.A., Geels, F., Verbong, G. en Molendijk, K. (2000), 'Transities & Transitiemanagement: de casus van een emissiearme energievoorziening', ICIS-boek, Maastricht, December 2000.

7. Van Asselt, M.B.A., Rotmans, J. and Greeuw, S. (2001), 'Puzzle-solving for Policy: a Provisional Handbook for Integrated Assessment', ICIS, Maastricht, The Netherlands.

8. Martens, W.J.M. and Rotmans, J. (2002), 'Transitions in a Globalising World', 2001, Swets & Zeitlinger, Lisse, The Netherlands.

9. Rotmans, J. and Rothman, D. (eds.) (2003), 'Scaling Issues in Integrated Assessment', 2003, Swets & Zeitlinger, Lisse, The Netherlands.

10. Rotmans, J. (2003), 'Transitiemanagement: sleutel naar een duurzame samenleving', van Gorcum Uitgeverij, Assen.

11. Van Asselt, M.B.A., Rotmans, J. and Rothman, D.S. (2005), 'Scenario Innovation: Experiences from a European Experimental Garden', Taylor & Francis, U.K.

12. Rotmans, J. (2005), 'Maatschappelijke innovatie: tussen droom en werkelijkheid staat complexiteit', Erasmus Universiteit Rotterdam, Oratie, 3 juni 2005.

13. Rotmans, J. (2005), 'Societal Innovation: between dream and reality lies complexity', Shortened inaugural speech, Rotterdam School of Management, ERIM, Erasmus University Rotterdam.

14. Valkering, P., Amelung, B., van der Brugge, R., Rotmans, J. (2006), 'More puzzle-solving for policy: Integrated Assessment from theory to practice', ICIS, Maastricht.

15. Rotmans, J. (2007), 'Duurzaamheid: van onderstroom naar draaggolf: op de rand van een doorbraak', DRIFT, Erasmus Universiteit Rotterdam.

16. Van den Bosch, S. and Rotmans, J. (2009), 'Deepening, broadening and scaling up: a framework for steering transition experiments', Knowledge Centre for Sustainable System Innovations and Transitions (KCT), Delft/Rotterdam.

17. Grin, J., Rotmans, J. and Schot, J. (2010), Transitions towards sustainable development', KSI-book series part I, Routledge Publishers, UK.

18. Rotmans, J. and Loorbach, D. (2010), 'Towards a better understanding of transitions and their governance: a systemic and reflexive approach', Part II in Grin, J., Rotmans, J. and Schot, J. (2010), 'Transition towards sustainable development', KSI-book series part I, Routledge Publishers, UK.

19. Rotmans, J. (2010), 'Transitieagenda voor Nederland: investeren in duurzame innovatie', Kennisnetwerk Systeem Innovaties (KSI), Amsterdam, Nederland.

20. Rotmans, J. (2011), Krosse, P. en Roorda, C. (2011), 'Merwe-Vierhavens: van Woestijn naar Goudmijn', DRIFT boekje, in opdracht van Stadshavens Rotterdam

21. Rotmans, J. en Krosse, P. (2011), 'Drijvend Ontwikkelen: een unieke kans', DRIFT boekje, in opdracht van Stadshavens Rotterdam

22. Rotmans, J. (2012), 'In het oog van de orkaan, Nederland in transitie', Aeneas Uitgeverij, Boxtel

23. Rotmans, J. (2013), 'In tijden van transitie: waarom angst voor verandering', AEDES Uitgeverij, Boxtel.

24. Loorbach, D., Rotmans, J. en Lijnis-Huffenreuter (2014), 'Ondernemen in transitie. Bedrijfstransties als innovatief model voor duurzaam ondernemen'. Stichting Maatschappij en Onderneming, SMO, Den Haag.

25. Rotmans, J. (2014), 'Een verandering van tijdperk: Nederland kantelt', AEDES Uitgeverij, Boxtel.

26. Rotmans, J. (2017), 'Omwenteling van mensen, organisaties en samenleving', Arbeiderspers, Amsterdam.

27. Rotmans, J. (2017), 'Change of Era: our world in transition', Boom Uitgeverij, Amsterdam.

**NATIONAL & INTERNATIONAL PUBLICATIONS**


1. Rotmans, J., Boois, H. de, and Swart, R.J. (1990), 'An integrated model for the assessment of the greenhouse effect: the Dutch approach', Climatic Change 16, no.3, 331-356, 1990.

2. Rotmans, J., Swart, R.J., and Vrieze, O.J. (1990), 'The role of the CH4-CO-OH cycle in the greenhouse problem', Science of the Total Environment 94, no.3, 233-252, 1990.

3. Rotmans, J., and Swart, R.J., 'The gloomy greenhouse: should the world phase out fossil fuels?', Environmental Management 14, no.3, 291-296.

4. Rotmans, J. and Vrieze, O.J. (1990), 'Metamodelling and experimental design: case study of the greenhouse effect', European Journal of Operations Research 47, 317-329.

5. Rotmans, J., Ham, G. van, Kleijnen, J.P.C. (1990), 'Sensitivity analysis by metamodels and experimental designs, applied on a simulation model of the greenhouse effect (in Dutch), Kwantitatieve Methoden Nr. 35, 51-86.

6. Swart, R.J., Boois, H. de, and Rotmans, J. (1990), 'Targeting climate change', International Environmental Affairs, A Journal for Research and Policy 1, no.3, 222-234.

7. Swart, R.J., Den Elzen, M.G.J., and Rotmans, J. (1990), 'Emissions scenarios for the Intergovernmental Panel on Climate Change' (in Dutch), Milieu 5, no.3, 82-90.

8. Swart, R.J., and Rotmans, J. (1990), 'Deforestation and the Greenhouse Effect' (in Dutch), Milieu 5, no.5., pag. 104-110.

9. Den Elzen, M.G.J., and Rotmans, J. (1992), 'A scenario study on the socio-economic consequences of a sea level rise for the Netherlands', Climatic Change 20, no. 3, 169-195.

10. Rotmans, J. and Swart (1991), 'Modelling tropical deforestation and its consequences for global climate', Ecological Modelling 58, 217-248.

11. Kleijnen, J.P.C., Rotmans, J. and Van Ham, G. (1992), 'Techniques for sensitivity analysis of simulation models: a case study of the greenhouse effect', Simulation, Vol. 58, no. 6., 410-417.

12. Rotmans, J. and Den Elzen, M.G.J. (1992), 'A Model-Based Approach to the Calculation of Global Warming Potentials', The International Journal of Climatology, vol. 12, 865-874.

13. Den Elzen, M.G.J., Swart, R.J. and Rotmans, J. (1992), 'Strengthening the Montreal Protocol: does it cool down the greenhouse?', The Science of the Total Environment 113, 229-250.

14. Rotmans, J., Swart, R.J. and Den Elzen, M.G.J. (1992), 'Stabilizing atmospheric concentrations: Towards international methane control', AMBIO vol. 21, no. 6, September 1992.

15. Den Elzen, M.G.J., Janssen, M.A., Rotmans, J., Swart, R.J. and De Vries, H.J.M. (1992), 'Allocating the remaining global carbon budget based on international and intergenerational equity throughout a sustainable world', the International Journal of Global Energy Issues vol. 4, no. 4, 287-302.

16. Rotmans, J. and Den Elzen, M.G.J. (1992), 'The role of the IMAGE-model in the climate problem' (in Dutch), Milieu 8, no. 2, 49-56.

17. Rotmans, J. (1992), 'ESCAPE: an integrated climate model for the EC', CHANGE 11, October 1992, 1-4.

18. Den Elzen, M.G.J. and Rotmans, J. (1993), 'Modelling feedback processes in the carbon cycle: balancing the carbon budget', Tellus 45B, 301-320.

19. Den Elzen, M.G.J. and Rotmans, J. (1993), 'Modelling climate related feedback processes', the

Journal of Environmental Science and Health A28, no. 9, 2095-2153.

20. Braddock, R., Filar, J., Rotmans, J. and Den Elzen, M.G.J. (1994), 'The IMAGE greenhouse model as a mathematical system', Applied Mathematical Modelling18, 234-254, May 1994.

21. Rotmans, J., Hulme, M. and Downing, T. (1994), 'Climate change implications for Europe: an application of the ESCAPE model', Global Environmental Change 4, no. 2, 97-124.

22. Martens, W.J.M., Niessen, L.W., Rotmans, J., Jetten, T.H. and McMichael, A.J. (1995), 'Potential impact of global climate change on malaria risk', Environmental Health Perspectives, 103, no. 5, 458-464, May 1995.

23. Janssen, M.A. and Rotmans, J. (1995), 'Allocation of fossil $CO_2$-emission rights quantifying cultural perspectives', Ecological Economics 13, 65-79, 1995.

24. Janssen, M.A., Rotmans, J. and Vrieze, O.J. (1995), 'Climate change: optimization of response strategies', International Transactions in Operations Research 2, no. 1, 1-15.

25. Kwadijk, J. and Rotmans, J. (1995), 'The impact of climate change on the river rhine: a scenario study', Climatic Change 30, 397-425, August 1995.

26. Martens, W.J.M., Jetten, T.H., Rotmans, J. and Niessen, L.W. (1995), 'Climate change and vector-borne diseases: a global modelling perspective', Global Environmental Change 5, no. 3, 195-209, September 1995.

27. Martens, W.J.M., Rotmans, J. and Vrieze, O.J. (1995), 'Global atmospheric change and human health: more than merely adding up the risks', World Resource Review 7, no. 3, 404-416.

28. Asselt, M.B.A. van and Rotmans, J. (1995), Science and Public Policy 22, no. 6, 414-415.

29. Weyant, (convening lead author), J., Davidson, O., Dowlatabadi, H., Edmonds, J., Grubb, M., Richels, R., Rotmans, J., Shukla, P. and Tol, R. (principal lead authors), Cline, W. and Frankhauser, S. (lead authors) (1996), 'Integrated Assessment of Climate Change: an Overview and Comparison of Approaches and Results', In the Economic and Social Dimensions of Climate Change, Cambridge University Press, Cambridge, U.K.

30. Asselt, M.B.A. van and Rotmans, J. (1996), 'Uncertainty in perspective', Global Environmental Change 6, no. 2, 121-157,

31. Rotmans, J. and Asselt, M.B.A. van (1996), 'Integrated assessment: a growing child on its way to maturity', Climatic Change 34, 327-336.

32. Rotmans, J., Beusen, A.W.H., Elzen, M.G.J. den, Hilderink, H.B.M., Hoekstra, A.Y., Niesen, L.W., Strengers, B.J., de Vries, H.J.M. (1996), 'The integrated assessment model for global change: TARGETS', In: Integrated Assessment of Global Change: Science & Policy, R.S. Chen, D. Tuttle, and C. Linville (eds.), Springer Verlag, Berlin.

33. Den Elzen, M.G.J., Beusen, A. and Rotmans, J. (1997), 'Modelling the global carbon and nitrogen cycle and their interactions: an integrated modelling approach', Global Biogeochemical Cycles 11, no. 2, 191-215.

34. Jaeger, C.C., Barker, T., Edenhofer, O., Faucheux, S., Hourcade, J-C, Kasemir, B., O'Connor, M., Parry, M., Peters, I., Ravetz, J., and Rotmans, J. (1997), 'Procedural leadership in Climate Policy: a European task', Global Environmental Change 7, no. 3, 195-203, November 1997.

35. Rotmans, J., and Dowlatabadi, H. (1998), 'Integrated assessment of climate change: evaluation of models and other methods', in Rayner, S. and Malone, E.(eds.), Human choice and climate change: an international social science assessment, Batelle Press, USA.

36. Rotmans, J. (1998), 'Global change and sustainable development: towards an integrated conceptual model', 421-449, In: Schellnhuber, H.J. and Wenzel, V. (eds.), 'Earth Systems Analysis: integrating science for sustainability', Springer Verlag, Berlin, Germany.

37. Rotmans, J. (1998), 'Methods for Integrated Assessment: the challenges and opportunities

ahead', Environmental Modelling and Assessment, Vol. 3, no. 2, 155-179.

38. Rotmans, J. (1998), 'Integrated thinking and acting: a necessary good' (in Dutch), Inaugural Speech, 18 September 1998, Maastricht University, ICIS, Maastricht.

39. Jager, W., van Asselt, M.B.A., Rotmans, J. and Vlek, C.A.J. (1999), 'Consumer behaviour, a modeling perspective in the context of integrated assessment of global change', In: Sustainability in Question: the search for a conceptual framework, Kohn, J., Gowdy, J., and Hinterberger, F. (eds.), 229-247, Edward Elgar, Cheltenham, U.K.
40. Rotmans, J. and van Asselt, M.B.A. (1999), 'Perspectives on a sustainable future', International Journal for Sustainable Development, Vol. 2 no. 2, 201-230.

41. Rotmans, J., van Asselt, M.B.A., and Vellinga, P. (2000), 'An Integrated Framework for Sustainable Cities', Environmental Impact Assessment Review 20, 265-276, Special Issue on 'Assessment Methods for Urban Planning'.

42. Rotmans, J. and van Asselt, M.B.A. (2000), 'Towards an Integrated Approach for Sustainable City Planning', Journal on Multi-Criteria Decision Analysis 9, 110-124, Special Issue on 'Decision-Support in the Public Sector'.

43. Rotmans, J., Anastasi, C., van Asselt, M.B.A., Greeuw, S., Mellors, J., Peters, S., Rothman, D. (2000), 'VISIONS for a Sustainable Europe', Futures 32, 809-831.

44. Rotmans, J. and van Asselt, M.B.A. (2001), 'Uncertainty Management in Integrated Assessment Modelling: towards a pluralistic approach', Environmental Monitoring and Assessment, Vol. 69, no.2, 101-130, June 2001.

45. Rotmans, J., Kemp, R. and van Asselt, M.B.A. (2001), 'More evolution than revolution: transition management in public policy', Foresight 3, no. 1, 15-32, April 2001.

46. Van der Veen, A. and Rotmans, J. (2001), 'Dutch perspectives on Agents, Regions and Land Use Change', Environmental Modeling and Assessment Vol. 6, no.2, 83-86.

47. Notten, P. van and Rotmans, J. (2001), 'The Future of Scenarios', Scenario & Strategic Planning, Vol.3, no. 1, 4-8, April/May 2001.

48. Molendijk, K., Grosskurth, J., Grevers, W. en Rotmans, J. (2001), 'Van Voorspellen naar Verkennen: Prognoses onder de loep', Arena, June 2001.

49. Rotmans, J. and van Asselt, M.B.A. (2001), 'Uncertainty and Integrated Assessment Modeling: a Labyrinthic Path', Integrated Assessment Vol. 2, no. 2, 43-57.

50. Rotmans, J. en Loorbach, D. (2001), 'Transitiemanagement: een nieuw sturingsmodel', Arena 6, pag. 5-8, Dossier, Oktober 2001.

51. Rotmans, J. en Loorbach, D. (2001), 'Nieuwe mantra of oude wijn in nieuwe zakken?', Arena 6, pag. 7, Oktober 2001.

52. Rotmans, J. (2001), 'Transitiespel: alternatief voor het Poldermodel?', Publiek Management 5, 36-40, November 2001.

53. Kwadijk, J., van Gemert, N., van Asselt, M.B.A., van Deursen, W., Middelkoop, H, Buitenveld, H., Haasnoot, M. en Rotmans, J. (2001), 'Maatgevende afvoeren, onzekerheden en wereldbeelden', Stromingen, vol. 7, no. 2, 5-17.

54. Rotmans, J., R. Kemp and M.B,A, van Asselt (2001), 'Transition Management: a Promising Perspective', Chapter in Decker, M. (Ed.), Interdisciplinarity in Technology Assessment: Implementation and its Chances and Limits, 165-197, Springer-Verlag, Berlin.

55. Rotmans, J. and van Asselt, M.B.A. (2001), 'Integrated Visions for a Sustainable Europe', Update, Newsletter of the International Human Dimensions Programme on Global Environmental Change 4/01, 9-11.

56. Amelung, B., Groot, D. de en Rotmans, J. (2002), 'Kosten en Baten van OEEI', Arena, November 2002.

57. Rotmans, J. (2002), 'Scaling in Integrated Assessment: Problem or Challenge?', Integrated Assessment vol. 3, no. 2-3, 266-279.

58. Rotmans, J. and van Asselt, M.B.A. (2002), 'Integrated Assessment: Current Practises and Challenges for the Future', in Abaza, H. and Baranzini, A. (2002), Implementing Sustainable Development: Integrated Assessment and Participatory Decision-making Processes, 78-118, UNEP, Edward Elgar Publishing, USA.

59. Van Asselt, M.B.A. and Rotmans, J. (2002), 'Uncertainty in Integrated Assessment Modeling: from Positivism to Pluralism', Climatic Change 54, no. 1-2, 75-105.

60. Bouwmans, R., Costanza, R., Farley, J., Wilson, M., Portela, R., Villa, F., Rotmans, J. and Grasso, M. (2002), 'Modeling the Dynamics of the Integrated Earth System and the Value of Global Ecosystem Services using the GUMBO model', Ecological Economics 41, 529-560.

61. Rotmans, J., van Asselt, M.B.A. and van Notten, P. (2002), 'VISIONS scenarios on the future of Europe', in: Ringland, G., Scenarios in Public Policy, Wiley & Sons, UK.

62. Krywkow, J., Valkering, P., Van der Veen, A. Rotmans, J. (2002). "Agent-based and integrated assessment modelling for incorporating social dynamics in the management of the meuse in the dutch province of limburg." Proceedings of the First biennial meeting of the International Environmental Modelling and Software Society, Lugano, Switzerland.

63. Rotmans, J. (2003), 'Scaling in Integrated Assessment: Problem or Challenge?', in Rotmans, J. and Rothman, D.S., Scaling in Integrated Assessment, 328-254, Swets & Zeitlinger Publishers, Lisse, The Netherlands.

64. Rotmans, J. (2003), 'Geïntegreerde Milieumodellen', in Boersema, J.J. et al. (2003), De Oogst van het Milieu, Uitgeverij Boom, Amsterdam.

65. Martens, W.J.M., Rotmans, J. and de Groot, D. (2003), 'Biodiversity: luxury or necessity?, Global Environmental Change 13, 75-81.

66. Walker, W.E., Harremoes, P., Rotmans, J., van der Sluijs, J.P., van Asselt, M.B.A., Janssen, P and Krayer van Krauss, M.P. (2003), 'Defining Uncertainty: a conceptual basis for uncertainty

management in model-based decision support', Integrated Assessment 4, no. 1, 5-17.

67. Van Notten, P., Rotmans, J., van Asselt, M.B.A. and Rothman, D. (2003), 'An updated scenario typology', Futures 35, no. 5, 423-445, June 2003.

68. Van Asselt, M.B.A. and Rotmans, J. (2003), 'From projects to program in Integrated Assessment research', in Public Participation in Sustainability Science, Kasemir, B., Jäger, J., Jaeger, C.C. and Gardner, M.T. (eds.), Cambridge University Press, U.K.

69. Loorbach, D., Brugge, R. en Rotmans, J. (2003), 'Op naar synthese tussen sturen en monitoren van maatschappelijke veranderingsprocessen', Arena, januari 2003.

70. Kemp, R. and Rotmans, J. (2004), 'Managing the Transition to Sustainable Mobility', in: Elzen, B., Geels, F. and Green, K. (eds.) (2004), System Innovation and the Transition to Sustainability: Theory, Evidence and Policy, Edward Elgar Publishers, Camberley, UK.

71. Amelung, B. en Rotmans, J. (2003), 'Op de markt is uw transitie geen stuiver waard: over de rol van marktwerking in transitieprocessen', in Duurzame Marktmeesters, Publicatiebundel uitgegeven door Natuur en Milieu.

72. Loorbach, D. and Rotmans, J. (2003), 'Managing the transition to sustainable development', Chapter 5 in IHDP-book Disciplinary viewpoints on Transformation Science.

73. Amelung, B., Rotmans, J., Loorbach, D. en Martens, P. (2004), 'Welvaartstheorie zorgt voor loopgravenperspectief op duurzaamheid', ESB, September 2004.

74. Valkering, P., Krywkow, J., Rotmans, J., Van der Veen, A. (2004). "Simulating stakeholder support for river management." In Pahl, C., Schmidt, S. and Jakeman, T. (eds) iEMSs 2004 International Congress: "Complexity and Integrated Resources Management". International Environmental Modelling and Software Societey, Osnabrueck, Germany, June 2004.

75. Kemp, R. and Rotmans, J. (2005), 'The Management of Co-evolution of Technical, Environmental and Social Systems', in Weber, M. and Hemmelskamp, J. (2004), Towards Environmental System Innovations, Springer-Verlag, Heidelberg, New York, pag. 33-55.

76. Grosskurth, J. and Rotmans, J. (2005), 'The SCENE Model: getting a grip on sustainable development in policy making', Environment, Development and Sustainability, vol. 7, no. 1, 135-151.

77. Martens, W.J.M. and Rotmans, J. (2005), 'Transitions in a Globalising World', Futures 37, 1133-1144.

78. Brugge, R. v/d, Rotmans, J., and Loorbach, D. (2005), 'The transition in Dutch water management', Regional Environmental Change, Vol. 5, no. 2, 113-135.

79. Rotmans, J., Loorbach, D. en van der Brugge, R. (2005), 'Transitiemanagement en duurzame ontwikkeling: co-evolutionaire sturing in het licht van complexiteit', Beleidswetenschap 2, vol. 19, 3-23.

80. Valkering, P., J., Rotmans, J., Krywkow, J. and Van der Veen, A. (2005), 'Simulating stakeholder support in a policy process: an application to river management', Simulation Vol. 81, no. 10, 701-718.

81. Krayer von Krauss, M.P., Walker, W.E., van der Sluijs, J.P., Janssen, P., van Asselt, M.B.A. and Rotmans, J. (2006), 'Response to: "to what extent, and how, might uncertainty be defined" by Norton, Brown and Mysiak, Integrated Assessment, Vol. 6, no. 1, 89-94.

82. Sondijker, S., Geurts, J., Rotmans, J. and Tukker, A. (2006), 'Imagining sustainability: the added value of transition scenarios in transition management', Foresight 8, no.5, 15-30.

83. Rotmans, J. (2006), 'Tools for Integrated Sustainability Assessment: a two-track approach', Integrated Assessment vol. 6, no.4, 35-57.

84. Rotmans, J. (2006), 'A complex systems approach for sustainable cities', in Ruth, M. (ed.), Smart Growth and Climate Change, 155-181, Edward Elgar, Cheltenham, UK.

85. Weaver, P. and Rotmans, J. (2006), 'Integrated Sustainability Assessment: why, how and what', International Journal of Innovation and Sustainable Development, vol. 1, no. 4, 284-303.

86. Loorbach, D. and J. Rotmans. (2006), 'Managing transitions for sustainable development'. In Understanding Industrial Transformation: views from different disciplines, edited by Oslthoorn, X. and Wieczorek, A., 187-206, Springer Netherlands

87. Van der Brugge, R. and Rotmans, J. (2007), 'Towards transition management in European water resources', Water Resource Management 21, 249-267.

88. Grosskurth, J. and Rotmans, J. (2007), 'Qualitative System Sustainability Index: a New Type of Sustainability Indicator', in Hak, T., Moldan, B. and Lyon Dahl, A. (2007), Sustainability Indicators: a Scientific Assessment, SCOPE 67, Island Press, Washington, USA.

89. Weaver, P., Rotmans, J., Turnpenny, J., Haxeltine, A. and Jordan, A. (2007), 'Methods and tools for integrated sustainability assessment: a new European project', in George, C. and Kirkpatrick, C. (2007), Impact Assessment and Sustainable Development: European Practice and Experience, Edward Elgar, Cheltenham, UK.

90. Kemp, R., Loorbach, D. and Rotmans, J. (2007), 'Transition management as a model for managing processes of co-evolution towards sustainable development', special issue of The International Journal of Sustainable Development and World Ecology, 14, 1-15.

91. Kemp, R., Rotmans, J. and Loorbach, D. (2007), 'Assessing the Dutch energy transition policy: how does it deal with dilemmas of managing transitions?', Journal of Environmental Policy and Planning 9 (3-4), 315-331.

92. Van der Brugge, R. and Rotmans, J. (2007), 'Towards transition management of European water resources', in Craswell, E., Bonell, M., Bossio, D., Demuth, S. and van de Giesen, N. (2007), Integrated Assessment of Water Resources and Global Change: a North-South Analysis, Springer, Germany.

93. Rotmans, J. and Loorbach, D. (2008), 'Transition management: reflexive governance of societal complexity through searching, learning and experimenting', in: vdBergh, J.C..J.M. and Bruinsma, F.R. (eds.), Managing the Transition to Renewable Energy, Edward Elgar, 2008, Chapter 2, 15-46.

94. Rotmans, J. and Kemp, R. (2008), 'Detour Ahead: a response to Shove and Walker about the perilous road of transition management, Environment and Planning A, vol.. 40, 1006-1014.

95. Bergman, N., Haxeltine, A., Whitmarsh, L., Köhler, J., Schilperoord, M. and Rotmans, J. (2008), 'Modelling socio-technical transition patterns and pathways', Journal of Artificial Societies and Social Simulation (JASS) 11, no. 3, 7, June 2008.

96. Schilperoord, M., Rotmans, J. and Bergman, N. (2008), 'Modelling societal transitions with agent transformation', Computational and Mathematical Organization Theory 14, 283-301, December 2008.

97. Weaver, P., Jäger, J. and Rotmans, J. (eds.) (2008), 'Integrated Sustainability Assessment: concept, process and tools', Special Issue of the International Journal of Innovation and Sustainable Development, vol. 3, no. 1, 1-162.

98. Rotmans, J., Jäger, J. and Weaver, P. (2008), Editorial for the special issue on MATISSE, International Journal on Innovation and Sustainable Development, vol. 3, no. 1, 1-8.

99. Haxeltine, A., Whitmarsh, L., Rotmans, J., Schilperoord, M., Bergman, N. and Köhler, J. (2008), 'A conceptual framework for transition modelling', International Journal on Innovation and Sustainable Development, vol. 3, no. 1, 93-114.

100. Kemp, R. and Rotmans, J. (2008), 'Environmental protection through technological regime shifts', In Martinez-Allier, J. and Ropke, I. (eds.), Recent developments in Environmental Economics, Vol. II, Edward Elgar, Cheltenham, U.K., 455-486.

101. Fischer-Kowalski, M. and Rotmans, J. (2009), ''Conceptualizing, observing and influencing socio-ecological transitions', Ecology and Society 14, no. 2, art. 3, online

102. Rotmans, J. and Loorbach, D. (2009), 'Complexity and Transition Management', Journal of Industrial Ecology, vol. 13, no.2, 184-196, Special Issue on Complexity and Industrial Ecology

103. Kemp, R. and Rotmans, J. (2009), 'Transitioning policy: co-production of a new strategic framework for energy innovation in the Netherlands', Policy Sciences 42, no. 4, 303-322.

104. Avelino, F. and Rotmans, J. (2009), 'Power in transitions', European Journal of Social Theory 12, no. 4, 543-569.

105. Loorbach, D., van Bakel, J., Whiteman, G. and Rotmans, J. (2009), 'Business strategies for transitions towards sustainable systems', Business Strategy and the Environment 19, 133-146, published online 16 February 2009.

106. Loorbach, D. and Rotmans, J. (2009), 'Transition Management and Strategic Niche Management: seemingly similar but different approaches', accepted by Technology Analysis and Strategic Management.

107. Loorbach, D. and Rotmans, J. (2009), 'Research and practice of sustainability transitions in the Netherlands', Soziale Technik, Zeitschrift für social-und umweltverträgliche Technikgestaltung, no.4, 13-16.

108. Loorbach, D. and Rotmans, J. (2010), 'The practice of transition management: examples and lessons from four distinct cases', Futures 42, no. 3, 237-246.

109. Loorbach, D. and Rotmans, J, (2010) 'Transitiebeleid voor een energierevolutie', Milieu 2010-3.

110. De Haan, H. and Rotmans, J. (2011), 'Patterns in transitions: understanding complex patterns of change', Technological Forecasting and Social Change, vol. 78, no. 1, 90-102.

111. Avelino, F. and Rotmans, J. (2011), 'Power and sustainability', Journal of Cleaner Production, vol. 19, no. 8, 796-804..

112. Loorbach, D. Rotmans, J. and Kemp, R. (2011), 'complexity and transition management', book contribution to Complexity and the Planning of the Physical Environment, edited by De Roo, G., Hiller, J. and van Wezemael, J.

113. Rotmans, J. (2011), 'Duurzaam versnellen en opschalen in Drenthe', boek bijdrage aan 'Energielandschappen, de derde generatie', van Klaas Jan Noorman en Gert de Roo

114. Grin, J., Schot, J. and Rotmans, J. (2011), 'On patterns and agency in transition dynamics: some key insights from the KSI programme', Journal of Environmental Innovation and Sustainability Transitions', vol. 1, no.1

115. Rotmans, J. (2011), 'Methodiek voor Duurzame Gebiedsontwikkeling: een wenkend perspectief', in Goedman, J., Zonneveld, W. en Houtsma, W.H. (2011), Ruimtelijke Ontwikkeling in Drievoud', SDU Uitgevers

116. Roorda, C., Buiter, M., Rotmans, J., Bentvelzen, M., Tillie, N. and Keeton, R. (2011), 'Urban Development: the State of the Sustainable Art: an international benchmark of sustainable urban development', DRIFT Report, Rotterdam

117. Yarime, M., Trencher, G., Mino, T., Scholz, R.W, Olson, L., Ness, B., Frantzeskaki, N. and Rotmans, J. (2012), 'Establishing sustainability science in higher education institutions: towards an integration of academic development, institutionalization, and stakeholder collaborations', Sustainability Science 7, 101-113.

118. Grafakos, S., Ensenado, E.M., Flamos, A., Rotmans, J, (2015), 'Mapping and Measuring European Local Governments' Priorities for a Sustainable and Low-Carbon Energy Future', Energies 2015, 8(10), 11641-11666.

119. Bosman, R. and Rotmans, J. (2016), 'Transition governance towards the bioeconomy: a comparison of Finland and the Netherlands', Sustainability 2016, 8(10), 1017; doi:10.3390/su8101017.

120. De Haan, F. and Rotmans, J. (2017), 'A proposed theoretical framework for actors in transformative change', Technological Forecasting and Social Change, January 2018, online.

121. De Haan, F. and Rotmans, J. (2016), 'They make the change: role of actors in transitions', MSSI Research Paper, Melbourne University, Australia.

122. Lodder, M., Rotmans, J., Braungart, M. and Loorbach, D. (2017). The Dutch Spatial Planning System in Transition: towards Beneficial Area Development, submitted to International Journal of Urban and Regional Research.

123. Rotmans, J. (2017), The Roadmap Next Economy for the region Rotterdam-The Hague: an example of transition governance, submitted.

- **SCIENTIFIC WORKING PAPERS**

1. Rotmans, J. (1989), 'A scenario study of the greenhouse effect', in Atmospheric Ozone Research and its Policy Implications, (eds. T. Schneider, S.D. lee, G.J.R. Wolters, L.D. Grant), 377-384, Elsevier Amsterdam, The Netherlands.

2. Swart, R.J., and Rotmans, J. (1989), 'IMAGE: a tool for long-term global greenhouse policy analysis', in Climate and Energy: the feasibility of controlling $CO_2$ emissions, (eds. P.A. Okken, R.J. Swart, and S. Zwerver),18-27, Kluwer Academic Publishers, Dordrecht, The Netherlands.

3. Okken, P.A., Rotmans, J. and Swart, R.J. (1989), 'The greenhouse effect: uncertainty dilemma between science and policy and its effect on scenario development', presented at IEA/IPCC expert group meeting on methodologies and analytical tools, Paris, 10-11th April 1989.

4. Rotmans, J., Lashof, D.A. and Den Elzen, M.G.J. (1990), 'Global Warming Potentials, F.R. Rijsberman and R.J. Swart (eds.) in Targets and Indicators, Report of Working Group II of the Advisory Group on Greenhouse Gases (AGGG), UNEP/WMO, 106-124.

5. Rotmans, J. (1990), 'Sea-level Rise Potentials', F.R. Rijsberman and R.J. Swart (eds.) in Targets and Indicators, Report of Working Group II of the Advisory Group on Greenhouse Gases (AGGG), UNEP/WMO, 125-135.

6. Swart, R.J., and Rotmans, J. (1990), 'Food or forest? Can the tropical forests survive along with continuing growth of population and economy?', In Soils and the Greenhouse Effect, (ed. A.F. Bouwman), 431-439, John Wiley and Sons, Chichester.

7. Den Elzen, M.G.J., Swart, R.J., and Rotmans, J. (1990), 'Developmemt of emissions scenarios for the IPCC Response Strategies Working Group', Appendix to the report of the Expert Group on Emission Scenarios of the Response Strategies Working Group of the Intergovernmental Panel on Climate Change, UNEP/WMO.

8. Lashof, D.A. and Rotmans, J. (1990), 'Evaluation of methods for estimating Global Warming Potentials (GWPs) of greenhouse gases', paper presented at the workshop on the scientific basis of Global Warming Potentials (GWPs), Boulder, Colorado, USA, November, 1990.

9. Rotmans, J., de Vries, H.J.M. and Den Elzen, M.G.J. (1991), 'A system dynamics approach for the greenhouse problem', paper presented at the International System Dynamics Conference, Bangkok, 1991.

10. Rotmans, J. (1991), 'Current issues of methane: scenario and control options', Khalil (ed.) in The Atmospheric Methane Cycle: Sources, sinks, distributions and role in Global Change, Proceedings of the NATO Advanced Research Workshop on Methane, Oregon, 6-11 October 1991.

11. Rotmans, J. (1991), 'De rol van IMAGE in de klimaatproblematiek', Paper presented at the Symposium about Global Change, Mol, Belgium, 19 December 1991.

12. Vries, H.J.M. de, Rotmans, J., Den Elzen, M.G.J., Leemans, R. and Swart, R.J. (1991), 'Climate Change', in the Second National Environmental Forecasting 1990-2100, Chapter 4.3., Samson H.D. Tjeenk Willink, RIVM, Bilthoven, The Netherlands.

13. Rotmans, J. and Den Elzen, M.G.J. (1993), 'Halting global warming: should fossil fuels be phased out?' In Lal, M. (ed.), 'Global Warming: Concern for Tomorrow', Tata McGraw-Hill Publishing Company Limited, New Delhi, India, 240-280.

14. Jager, W., van Asselt, M.B.A., Rotmans, J. and Vlek, C. (1996), 'Modelling consumptive behaviour in the context of integrated assessment of global change', Paper presented at the HDP-symposium 20-22 September 1995, Geneva.

15. Matthews, E., Rotmans, J., Ruffing, K., Waller-Hunter, J. and Zhu, J. (1997), 'Global Change and Sustainable Development: Critical Trends', United Nations, Department for Policy Cordination and Sustainable Development, U.N. Press.

16. Swart, R.J. and Rotmans, J. (1997), 'Social and economic development and protection of environmental resources: the core questions and how to address them', In Swart and Van Woerden (eds.), 'The future of the global environment: a model-based analysis supporting UNEP's first Global Environmental Outlook', RIVM/UNEP.

17. Rotmans, J. (1998), 'Global Change and Sustainable Development: Towards an Integrated Conceptual Model', in Earth System Analysis: Integrating Science for Sustainability, Springer Verlag, Heidelberg, Germany.

18. Jager, W., Vlek, C., van Asselt, M.B.A. and Rotmans, J. (1999), 'Comsumer behaviour: a modelling perspective in the context of Integrated Assessment of Global Change', In: Sustainability in question, the research for a conceptual framework, J. Kohn, J. Gowdy, F. Hinterberger and J.v.d. Straaten (eds.), Advances in Ecological Economics Series, Edward Elgar Publishing, UK.

19. Rotmans, J. (2001), 'Integrated Assessment: a Bird's Eye View', in Puzzle Solving for Policy: a Provisional Handbook for Integrated Assessment, ICIS, Maastricht, The Netherlands.

20. Rijkens-Klomp, N., van de Lindt, M., van Asselt, M.B.A. and Rotmans. J. (2003), Íntegrative Policy Making for the improvement of the quality of urban life', in The Human Sustainable City: challenges and perspectives from the habitat agenda, Girard, L.F., Forte, B., Cerreta, M., de Toro, P. and Forte, F. (eds.).

Not updated, hundreds of reports since 2003, too many for a CV

Also hundreds of conferences attended as key note speaker, too many to mention in a CV