

MARIËSSE VAN SLUISVELD

Dr. Mariësse van Sluisveld is a researcher with extensive knowledge of energy and climate policy assessment in line with global climate agreements. She has expertise in quantitative computational modelling, scenario and data analysis and data visualization. Her specialty is defining and testing the plausibility of quantitative scenarios and metrics on systems change.



🎓 EDUCATION

2017
|
2012

- **PhD Macro-energy systems and future change**
Utrecht University & PBL Netherlands Environmental Assessment Agency 📍 Utrecht/ Bilthoven, The Netherlands
 - Thesis title: "[2C through different lenses](#)"
- **MSc Environmental Sciences**
Utrecht University 📍 Utrecht, The Netherlands
 - Thesis title: Paradox in Packaging Optimization
- **BSc Environmental Sciences**
Utrecht University 📍 Utrecht, The Netherlands
 - Thesis title: Olivine: The underdog in climate mitigation

[Download a PDF of this CV](#)

2011
|
2009

💻 RESEARCH EXPERIENCE

current
|
1/1/2020

- **Researcher Industry Decarbonization**
Lund University 📍 Lund, Sweden
 - Developing decarbonization pathways for carbon intensive industries in Europe
- **Researcher Climate and Energy**
PBL Netherlands Environmental Assessment Agency 📍 The Hague, The Netherlands
 - Working on decarbonization strategies for heavy industry under the auspices of the European Union funded H2020 REINVENT project

CONTACT INFO

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- +46 46 222 91 40

ONLINE VENUES

- [mariesevansluisveld/](#)
- [marieyesse.github.io](#)
- [twitter.com/marieyesse](#)
- [github.com/marieyesse](#)
- [ORCID](#), Google Scholar
- [Impactstory](#)

SKILLS

- Scenario evaluation
- Data analytics
- Science Communication
- Event planning
- R, HTML, CSS

LANGUAGES

- Dutch
- English
- German
- French

2016
|
2014

- **Researcher Climate and Energy**
PBL Netherlands Environmental Assessment Agency
📍 Bilthoven, The Netherlands
 - Working on long-term implications of diverging actor behaviours on meeting the 2C climate objective under the auspices of the European Union FP-7 funded PATHWAYS project
- **Junior Researcher Global Change Modelling**
Utrecht University
📍 Utrecht, The Netherlands
 - Working on regional decarbonization strategies in line with the 2C climate objective under the auspices of the European Union funded FP-7 LIMITS and AMPERE projects

2014
|
2012



EXTRACURRICULAR

current
|
2019

- **Member of the scientific working group on Evaluation and Diagnostics**
Integrated Assessment Modelling Consortium
📍 International
 - The SWG Evaluation and Diagnostics fosters activities that help describe, document and understand the performance of integrated assessment models.

2019
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2017

- **PBL Academy**
PBL Netherlands Environmental Assessment Agency
📍 The Hague, The Netherlands
 - PBL Academy is the organisation at PBL that develops trainings and organizes events and lectures around the interface between science and policy

2016
|
2014

- **Board member PBL Young**
PBL Netherlands Environmental Assessment Agency
📍 Bilthoven, The Netherlands
 - PBL Young is the young department at PBL representing the interest and development of young employees at PBL

2014
|
2013

- **Board member YES-DC**
📍 Utrecht, The Netherlands
 - YES-DC is the Young Professionals network on Energy & Development Cooperation

RESEARCH PAPERS

2020

- **Aligning integrated assessment modelling with socio-technical transition insights: An application to low-carbon energy scenario analysis in Europe**
Technological Forecasting and Social Change 📍 Cited: 17x
• MAE van Sluisveld, AF Hof, S Carrara, FW Geels, M Nilsson, K Rogge, ...

2020

- **Actors, decision-making, and institutions in quantitative system modelling**
Technological Forecasting and Social Change 📍 Cited: 10x
• E De Cian, S Dasgupta, AF Hof, MAE van Sluisveld, J Köhler, B Pfluger, ...

2020

- **From global to national scenarios: Bridging different models to explore power generation decarbonisation based on insights from socio-technical transition case studies**
Technological Forecasting and Social Change 📍 Cited: 3x
• AF Hof, S Carrara, E De Cian, B Pfluger, MAE van Sluisveld, HS de Boer, ...

2020

- **A European industrial development policy for prosperity and zero emissions**
ECEEE 2020 📍 Under review
• Nilsson, L.J., Ahman, M., Andersson, F.N.G., Bataille, C., Bauer, F., De La Rue de Can, S., Ericsson, K., Hansen, T., Johansson, B., Lechtenboehmer, S., Schiro, D., Van Sluisveld, M.A.E., Vogl, V.

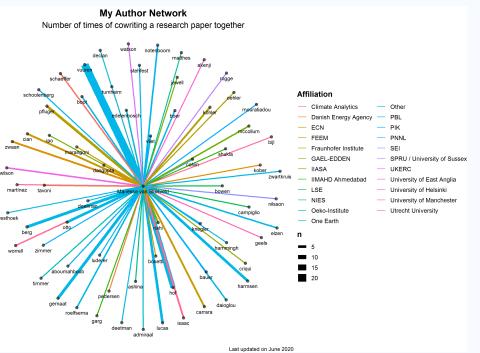
2019

- **Improved modelling of lifestyle changes in Integrated Assessment Models: Cross-disciplinary insights from methodologies and theories**
Energy Strategy Reviews 📍 Cited: 1x
• NJ van den Berg, AF Hof, L Akenji, OY Edelenbosch, MAE van Sluisveld, ...

2018

- **Alternative pathways to the 1.5 C target reduce the need for negative emission technologies**
Nature climate change 📍 Cited: 159x
• DP van Vuuren, E Stehfest, DEHJ Gernaat, M Van Den Berg, DL Bijl, ...

NOTE: I have collaborated with experts in the field working on energy modelling, socio-technical studies, system dynamics, social sciences. My coauthor network consists of 23+ different research affiliations (see final page for big view)



Several studies have also been picked up in more popular writing and policy relevant reports:

- ✓ Sluisveld et al (2018) in [Carbon Brief](#)
- ✓ Sluisveld et al (2018) in [EnergiePodium](#)
- ✓ Sluisveld & Worrell in [IPCC AR5](#)

- 2018
- **Comparing future patterns of energy system change in 2° C scenarios to expert projections**
Global environmental change 📍 Cited: 4x
 - MAE Van Sluisveld, MJHM Harmsen, DP Van Vuuren, V Bosetti, C Wilson, ...
- 2017
- **Open discussion of negative emissions is urgently needed**
Nature energy 📍 Cited: 59x
 - DP Van Vuuren, AF Hof, MAE Van Sluisveld, K Riahi
- 2017
- **Low-carbon strategies towards 2050: Comparing ex-ante policy evaluation studies and national planning processes in Europe**
Environmental Science & Policy 📍 Cited: 3x
 - MAE van Sluisveld, AF Hof, DP van Vuuren, P Boot, P Criqui, FC Matthes, ...
- 2016
- **Exploring the implications of lifestyle change in 2 C mitigation scenarios using the IMAGE integrated assessment model**
Technological Forecasting and Social Change 📍 Cited: 48x
 - MAE van Sluisveld, SH Martínez, V Daioglou, DP van Vuuren
- 2015
- **Post-2020 climate agreements in the major economies assessed in the light of global models**
Nature Climate Change 📍 Cited: 132x
 - M Tavoni, E Kriegler, K Riahi, DP Van Vuuren, T Aboumabhoub, A Bowen, ...
- 2015
- **Comparing future patterns of energy system change in 2 C scenarios with historically observed rates of change**
Global Environmental Change 📍 Cited: 33x
 - MAE van Sluisveld, JHM Harmsen, N Bauer, DL McCollum, K Riahi, ...
- 2015
- **Impact of fragmented emission reduction regimes on the energy market and on CO₂ emissions related to land use: a case study with China and the European Union as first movers**
Technological Forecasting and Social Change 📍 Cited: 18x
 - SAC Otto, DEHJ Gernaat, M Isaac, PL Lucas, MAE van Sluisveld, ...

- 2015
- **Impact of fragmented emission reduction regimes on the energy market and on CO₂ emissions related to land use: a case study with China and the European Union as first movers**
 Technological Forecasting and Social Change 📍 Cited: 18x
 • SAC Otto, DEHJ Gernaat, M Isaac, PL Lucas, MAE van Sluisveld, ...
- 2013
- **The paradox of packaging optimization—a characterization of packaging source reduction in the Netherlands**
 Resources, Conservation and Recycling 📍 Cited: 28x
 • MAE Van Sluisveld, E Worrell
- 2013
- **A multi-model analysis of post-2020 mitigation efforts of five major economies**
 Climate Change Economics 📍 Cited: 22x
 • MAE Van Sluisveld, DEHJ Gernaat, S Ashina, KV Calvin, A Garg, M Isaac, ...
- 2013
- **Material efficiency in Dutch packaging policy**
 Philosophical Transactions of the Royal Society A: Mathematical, Physical ... 📍 Cited: 10x
 • E Worrell, MAE van Sluisveld



RESEARCH REPORTS

- 2018
- **European decarbonisation scenarios for industry**
 EU H2020 deliverable (REINVENT) 📍 Published deliverable
 • van Sluisveld, M.A.E., de Boer, H.S., Hof, A.H., van Vuuren, D.P., Schneider, C., Lechtenboehmer, S.
- 2017
- **Existing visions and scenarios for European industry decarbonisation**
 EU H2020 deliverable (REINVENT) 📍 Published deliverable
 • Schneider, C., Friege, J., Samedi, S., Lechtenboehmer, S., van Sluisveld, M.A.E., de Boer, H.S., Hof, A.H., van Vuuren, D.P.
- 2016
- **Low-carbon energy scenarios in six north-west European countries**
 PBL Netherlands Environmental Assessment Agency 📍 Report
 • Mariesse van Sluisveld, Pieter Boot, Pieter Hammingh, Jos Notenboom, Detlef van Vuuren

NOTE: I have worked on commissioned work on a national or international level. Next to research reports I have also contributed to other materials:

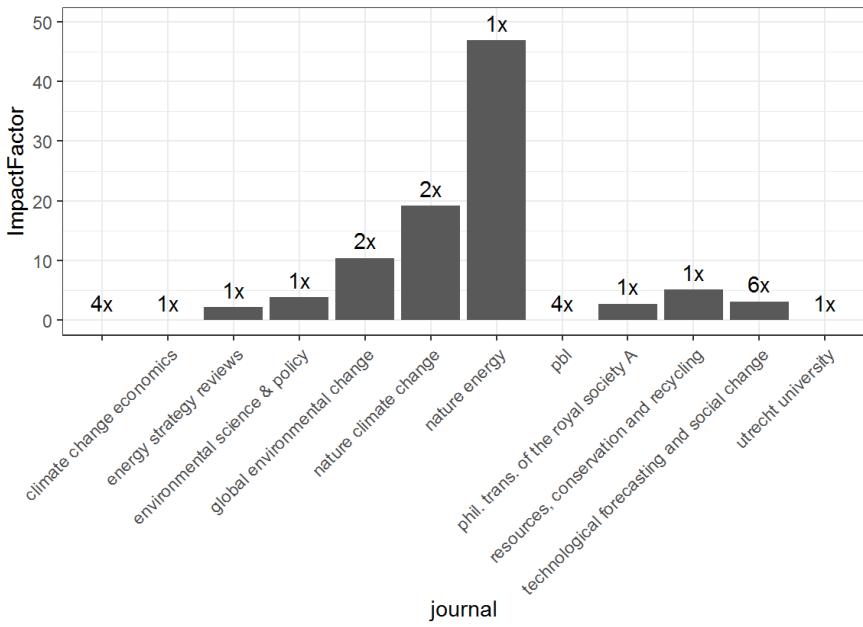
- Interactive on [Energetransitie: Joulebak 2050](#)
- Editor of the biannual newsletter of the IAMC (2016-2018)

- 2015
- ***Implications of Long-Term Scenarios for Medium-Term Targets (2050)***
 PBL Netherlands Environmental Assessment Agency  Report
 · van Vuuren, DP, van Sluisveld, M, Hof, AF
- 2014
- ***Long-term climate policy targets and implications for 2030***
 PBL Netherlands Environmental Assessment Agency  Report
 · van Vuuren, DP; Elzen; M. den, Hof; A, Roelfsema; M, Lucas; PL, van Sluisveld; M.A.E., Gernaat; DEHJ, Otto; AAC, Berg; M van den, Harmsen; JHM, Schaeffer; M, Admiraal, A,

↗ SCIENCE IMPACT

Journals and publications

Number of publications per journal and their impact factors



NOTE I have published in a diverse range of (interdisciplinary) academic journals with various impacts

Last updated on June 2020



PRESENTATIONS & INVITED TALKS

2020-
06-17

- **How to jump start industry decarbonization in the wake of the corona crisis?**
ECEEE/RENEW industry 📍 Zoom
 - Discussion leader on the effects on “negative emissions”

2020-
04-08

- **Futuring application: The mystique of crunching numbers**
Lund University 📍 Zoom
 - Guest lecture for “FMIN05 Climate as science and politics” (Environmental and Energy Systems course)

2020-
03-04

- **Lifestyle narratives in model-based scenarios**
The Green House 📍 Utrecht, The Netherlands
 - Invited talk at the Storyworlds of Decarbonization seminar

2019-12-
02

- **Comparing quantitative industry decarbonization perspectives towards 2050 for Europe**
Tsukuba International Congress Center 📍 Tsukuba, Japan
 - Invited talk at the 12th Integrated Assessment Modeling Community 2019 meeting

2019-06-
03

- **To invest in lock-in or in structural change? Analysis of decarbonization strategies for heavy industry**
UIC-P Espaces Congrès 📍 Paris, France
 - Invited talk at the 38th International Energy Workshop 2019 meeting

2019-05-
07

- **Pathways & global sustainability science**
Utrecht University 📍 Utrecht, The Netherlands
 - Invited guest lecture at the BSc Global Sustainability Science course 'Global Integration Project GEO2-2417'

2019-03-
29

- **Session: The time and speed of the transition and policy instruments to support the transition and local versus global participation**
NTNU 📍 Trondheim, Norway
 - Invited talk at the Industry Decarbonization Stakeholder workshop during the Energy Transition Week 2019

NOTE: Here follows a list of performed research dissemination activities and further activities relating to gaining feedback from peers and the broader audiences.



(EUCalc Stakeholder Workshop @ Vienna)

In some cases I have been rewarded external funding to disseminate results:

- ✓ European Commissions & ICF travel funding for IAMC2019

2018-11-
29

● ***Industry decarbonization by 2050***

Representation of the State of North Rhine-Westphalia to
the European Union

📍 Brussels, Belgium

- Poster Presentation REINVENT scenarios at the
*Understanding Innovation Dynamics for Low-Carbon
Transitions in Resource-Intensive Industries* stakeholder
workshop

2018-07-
10

● ***Scenarios for Decarbonising European Industries***

Haus der Industrie

📍 Vienna, Austria

- Invited talk at the European Calculator Expert Consultation

2016-11-
22

● ***National energy roadmaps towards 2050 and model input for
analysis***

European Environmental Agency (EEA)

📍 Copenhagen, Denmark

- Roundtable meeting

2015-11-
16

● ***Comparing future patterns of energy system change in 2C
scenarios with historically observed rates of change***

Seminaris SeeHotel

📍 Potsdam, Germany

- Invited talk at the 8th Annual Meeting of the Integrated
Assessment Modeling Consortium

2015-11-
16

● ***Comparing future patterns of energy system change in 2C
scenarios with historically observed rates of change***

University of Sussex

📍 Brighton, United Kingdom

- Invited talk at the International Sustainable Transitions
Conference 2015

2015-04-
21

● ***The feasibility of alternative mitigation scenarios***

The Senate House

📍 London, United Kingdom

- Invited talk at the WholeSEM, BE4 workshop

2014-
06-04

● ***The feasibility of technological change - preliminary results***

Xijiao Hotel

📍 Beijing, China

- FP-7 LIMITS project meeting talk

2013-09-
27

● ***The potential of lifestyle and lifestyle change in 2 degree
scenarios - preliminary results***

IIASA

📍 Laxenburg, Austria

- FP-7 LIMITS project meeting talk

2013-02-
12

- **A multi-model analysis of post-2020 mitigation efforts of five major economies**

The Royal Netherlands Academy of Arts and Sciences
📍 Amsterdam, The Netherlands

- FP-7 LIMITS project meeting talk



EVENT PLANNING

2019-03-
27

- **Stakeholder workshop Heavy industry in climate change mitigation scenarios**

PBL Netherlands Environmental Assessment Agency
📍 The Hague, The Netherlands

- 20 participants, organized on behalf of the H2020 project REINVENT, inviting stakeholders from CEFIC, VNP, World Steel Association, IEA, Fraunhofer-ISI, FfE, Wuppertal Institute

2018-11-
15

- **PBL Academy Lecture World Energy Outlook 2018**

PBL Netherlands Environmental Assessment Agency
📍 The Hague, The Netherlands

- 200 participants, inviting Fatih Birol (IEA) & Dutch Minister of Economic Affairs and Climate Policy Eric Wiebes (Min EZK) to talk

2018-11-
09

- **IMAGE 3.2 advisory board meeting**

PBL Netherlands Environmental Assessment Agency
📍 The Hague, The Netherlands

- With Jae Edmonds (PNNL), Bert Metz, Marcel Berk (Dutch Ministry of Economic Affairs and Climate Policy), Keywan Riahi (IIASA), Dolf Gielen (IRENA) and Rob Dellink (OECD) as part of the advisory committee, 16 participants

2018-11-
09

- **Symposium Changes in the interaction between science and policy, focusing on the development of energy and climate sciences and the application of modelling tools**

PBL Netherlands Environmental Assessment Agency
📍 The Hague, The Netherlands

- inviting Jae Edmonds (PNNL), Leen Hordijk, Marcel Berk (Dutch Ministry of Economic Affairs and Climate Policy), Keywan Riahi (IIASA), Dolf Gielen (IRENA) and Rob Dellink (OECD) for a talk, (90 participants) PBL, Den haag

NOTE: I have also been very keen on bringing people and places together, to get some real-world insights on the subjects at hand. The following list elaborates on the platforms that I have helped to create.



(IEA WEO event 2018 @ PBL)

I have organized many of the activities under the banner of:

- ✓ FP7 and H2020 EU projects
- ✓ YES-DC (board 2013-2014)
- ✓ PBL Young (board 2014-2016)
- ✓ PBL Academy (commission 2018-2019)

2016-06-10

- PBL round table *Low-carbon energy scenarios in NW European countries*
Hotel Karel V  Utrecht, The Netherlands
 - Participants from UK (UKERC), Germany (Oko-Institut, Fraunhofer- ISI), France (UPMF Grenoble), Denmark (Danish Energy Agency), Belgium (Federal Planning Bureau), the Netherlands (PBL) and the European Commission, 21 participants

2015-04-01

- Symposium *The road to Paris <U+o096> Climate Change Policy & Practice*
Academy Hall  Utrecht, The Netherlands
 - 65 participants, organized on behalf of Young Energy Specialists and Development Cooperation (YES-DC)

2015-04-01

- Symposium *'Successes and failures in the dialogue between science and policy'*
Leeuwenberg church  Utrecht, The Netherlands
 - 120 participants, organized by PBL Netherlands Environmental Assessment Agency for Leo Meyer

2014-11-15

- Congress *The new world order - shifting geopolitics*
Academy Hall  Utrecht, The Netherlands
 - 60 participants, organized on behalf of Young Energy Specialists and Development Cooperation (YES-DC)

2013-11-19

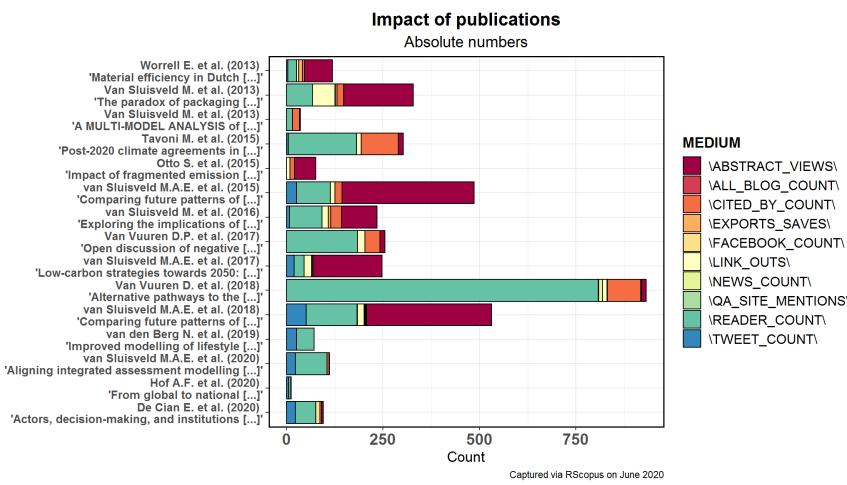
- Symposium *The role of materials in the energy transition*
Academy Hall  Utrecht, The Netherlands
 - 40 participants, organized on behalf of Young Energy Specialists and Development Cooperation (YES-DC)

2012-09-25

- Workshop *The feasibility of transitions in 2 degree scenarios*
Pietershof  Utrecht, The Netherlands
 - 25 participants, organized on behalf of the FP-7 projects RESPONSES/LIMITS

↗ OUTREACH

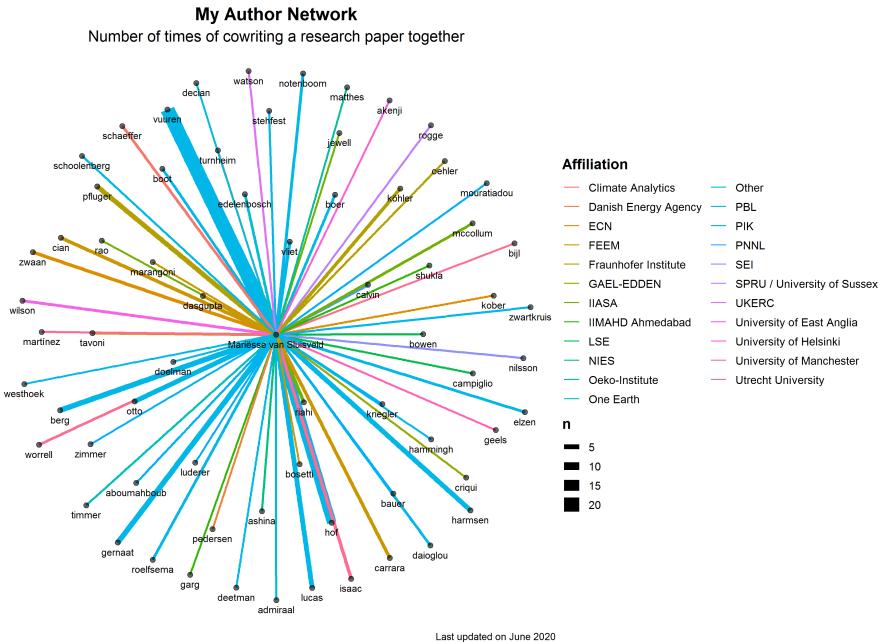
Publications



MEDIUM

- ABSTRACT_VIEWS
- ALL_BLOG_COUNT
- CITED_BY_COUNT
- EXPORTS_SAVES
- FACEBOOK_COUNT
- LINK_OUTS
- NEWS_COUNT
- QA_SITE_MENTIONS
- READER_COUNT
- TWEET_COUNT

↗ AUTHOR NETWORK



NOTE: I have enjoyed collaborating with 23 different kinds of research institutes all over the globe.