

# CURRICULUM VITAE

# PROF DR ROBERT MALINA

CURRENT AS OF JANUARY 16, 2019

## EDUCATION:

- 2001-2005 Dr. rer. pol. in Economics (equivalent to Ph.D. in Economics),  
University of Muenster, Germany
- 1996-2001 Diplom Economist (equivalent to M.Sc. in Economics),  
University of Muenster, Germany

## ACADEMIC WORK EXPERIENCE:

- since 12/2017 Vice-Director, Centre for Environmental Sciences, Hasselt University, Belgium
- since 08/2016 Professor (Hoogleraar) for Environmental Economics, Faculty for Business  
Economics, Hasselt University, Belgium
- since 08/2016 Head, Environmental Economics Research Group, Centre for Environmental  
Sciences, Hasselt University, Belgium
- since 08/2016 Research Affiliate, Department of Aeronautics and Astronautics,  
Massachusetts Institute of Technology, Cambridge, MA, USA
- 08/2012-07/2016 Associate Director, Laboratory for Aviation and the Environment,  
Massachusetts Institute of Technology, Cambridge, MA, USA
- 08/2012-07/2016 Research Scientist, Department of Aeronautics and Astronautics,  
Massachusetts Institute of Technology, Cambridge, MA, USA
- 01/2011-07/2012 Visiting Research Scientist, Department of Aeronautics and Astronautics,  
Partnership for Air Transportation Noise and Emissions Reduction, Massachusetts  
Institute of Technology, Cambridge, MA, USA
- 2005-2012 Lecturer/Senior Lecturer (Akademischer Rat / Oberrat), Muenster School of  
Business and Economics, University of Muenster, Germany
- 2005-2012 Associate Director, Institute of Transport Economics, University of Muenster,  
Germany
- 2001-2005 Research and Teaching Assistant, Muenster School of Business and Economics,  
University of Muenster, Germany

**PROFESSIONAL SERVICE:**

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since 2019	Member, Research Council, Hasselt University
since 2017	Associate Editor, BioEnergy Research (ISSN: 1939-1242)
since 2017	Member, Policy Group Cleantech Antenne Flanders
since 2016	Member, Professor Evaluation Commission, Faculty of Business Economics, Hasselt University
since 2016	Task-leader, Core lifecycle GHG emission analysis, International Civil Aviation Organization (ICAO), Alternative Fuels Task Force
2016	Technical advisor and member of US Delegation, International Civil Aviation Organization (ICAO), Committee on Aviation Environmental Protection
2016	Expert, EU Strategic Transport Research and Innovation Agenda Thematic Area: Alternative Fuels
2016	Judge, MIT Climate CoLab Aviation Contest
2016	Organization Committee Member and Judge, MIT Singapore Environmental Health Hackathon
2014-2016	Task-leader, Fuel Production Assessment, International Civil Aviation Organization (ICAO), Alternative Fuels Task Force
since 2014	Delegate, International Civil Aviation Organization (ICAO), Alternative Fuels Task Force
since 2014	Member, Editorial Board, Zeitschrift für Verkehrswissenschaft
2014	Expert, US National Alternative Jet Fuel Strategy
2013	Session Chair, SAE 2013 Aerospace Alternative Fuels and Associated Environmental Impacts Symposium
2011	Expert, Sustainable Transportation Ecosystem Report, World Economic Forum
2009-2010	Member of Examination Board, VWA Muenster
2006-2010	Workshop Chair, Aviation Research Seminar for Graduate Students
2008	Expert, Future of Mobility, Scenarios for the year 2030, IFMO Institute for Mobility Research
2006-2010	Member, Committee for Transport and Technology, ADAC Westfalen
2001-2005	Secretary, List Gesellschaft e.V. (List Society)

**AWARDS/FELLOWSHIPS:**

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2016	Best Paper of the year 2015, Environmental Research Letters, awarded to article "Impact of the Volkswagen emissions control defeat device on US public health"
2014	Outstanding Faculty of the Year, Partnership for Air Transportation Noise and Emissions Reduction (PARTNER) Center of Excellence
2011	Fellowship of the Erich-Becker-Foundation for research stay at MIT

## **PUBLICATIONS AND PRESENTATIONS:**

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### **Peer-reviewed publications in journals of the Social Science Citation Index (SSCI) and Science Citation Index (SCI):**

1. Vreys, K. / Lizin, S. / van Dael, M. / Tharakan, J. / Malina, R. (asap): Exploring the future of carbon capture and utilisation by combining an international Delphi study with local scenario development, accepted for publication in *Resources, Conservation & Recycling*.
2. Van Schoubroeck, S/ Springael, J. / Van Dael, M. / Malina, R./ Van Passel, S. (asap): Sustainability indicators for biobased chemicals: a Delphi study using Multi-Criteria Decision Analysis, accepted for publication in *Resources, Conservation & Recycling*.
3. Suresh, P. / Malina, R. / Staples, M. / Lizin, S. / Olcay, H. / Blazy, D. / Pearlson, M. / Barrett, S. (2018): Life cycle greenhouse gas emissions and costs of production of diesel and jet fuel from municipal solid waste, in: *Environmental Science and Technology*, Vol. 52, 52 (21), pp. 12055-12065.
4. De Jong, S. / Staples, M. / Grobler, C. / Daioglou, V. / Malina, R/ / Barrett, S. / Hoefnagels, R. / Junginger, H. (2018): Using Dynamic Relative Climate Impact curves to quantify the climate impact of bioenergy production systems over time, *GCB Bioenergy* 2018, pp. 1-17.
5. Chossière, G. / Malina, R. / Allroggen, F. / Eastham, S. / Speth, R. / Barrett, S. (2018): Country- and manufacturer-level attribution of air quality impacts due to excess NO<sub>x</sub> emissions from diesel passenger vehicles in Europe, in: *Atmospheric Environment*, Vol. 189, pp. 89-97.
6. Olcay, H. / Malina, R. / Upadhye, A. / Hileman, J. / Huber, G. / Barrett, S. (2018): Techno-economic and environmental evaluation of producing chemicals and drop-in aviation biofuels via aqueous phase processing, in: *Energy and Environmental Science*, Vol 11. pp. 2085-2101.
7. Staples, M. / Malina, R. / Suresh, P. / Hileman, J. / Barrett, S. (2018): Aviation CO<sub>2</sub> emissions reductions from the use of alternative jet fuels, in: *Energy Policy*, Vol. 114, pp. 342-354.
8. Kidd P. S./ Bani, A. / Benizri, E. / Gonnelli, C. / Hazotte, C. / Kissler, J. / Konstantinou, M. / Kuppens, T. / Kyrkas, D. / Laubie, B. / Malina, R. / Morel, J. / Olcay, H. / Pardo, T. / Pons, M. / Prieto-Fernández, A. / Puschenreiter, M. / Quintela-Sabaris, C. / Ridard, C. / Rodríguez-Garrido, B. / Rosenkranz, T. / Rozpądek, P. / Saad, R. / Selvi, F. / Simonnot, M. / Tognacchini, A. / Turnau, K. / Ważny, R. / Witters, N. / Echevarria, G. (2018): Developing sustainable agromining systems in agricultural ultramafic soils for nickel recovery, in: *Frontiers in Environmental Science*, Vol. 6, Article 44.
9. Van Schoubroeck, S. / Van Dael, M. / Van Passel, S. / Malina, R. (2018): A Review of Sustainability Indicators for Biobased Chemicals, : in *Renewable and Sustainable Energy Review*, Vol. 94, pp. 115-226.
10. Moretti, M. / Van Dael, M. / Malina, R. / van Passel, S. (2018): Environmental assessment of waste feedstock mono-dimensional and bio-refinery systems: Combining manure co-digestion and municipal waste anaerobic digestion, in: *Journal of Cleaner Production*, Vol. 171, p. 954-961.
11. Chossière, G. / Malina, R. / Ashok, A. / Dedoussi, I. / Eastham, S. / Speth, R. / Barrett, S. (2017): Public health impacts of excess NO<sub>x</sub> emissions from Volkswagen diesel passenger vehicles in Germany, in: *Environmental Research Letters*, Vol. 12, 034014.
12. Staples, M. / Malina, R. / Barrett, S. (2017): The limits of bioenergy use for greenhouse gas emissions mitigation, in: *Nature Energy*, Vol. 2, 16202.
13. Bann, S. / Malina, R. / Staples, M. / Suresh, P. / Pearlson, M. / Tyner, W. / Hileman, J. / Barrett, S. (2017): The costs of production of alternative jet fuel: a harmonized stochastic assessment, in: *Bioresource Technology*, Vol. 227, pp. 179-187.

14. Yao, G. / Staples, M. / Malina, R. / Tyner, W. (2017): Stochastic Techno-Economic Analysis of Alcohol-to-Jet Fuel Production, in: *Biotechnology for Biofuels*, Vol. 10, 18.
15. Azadi, P. / Malina, R. / Krafft, M. / Barrett, S. (2017): The Evolution of the Biofuel Science, in: *Renewable and Sustainable Energy Reviews*, Vol. 76, pp. 1479-1484
16. Wittman, M. / Allroggen, M. / Malina, R. (2016): Public Service Obligations for Air Transport in the United States and Europe: Connectivity Effects and Value for Money, in: *Transportation Research Part A: Policy and Practice*, Vol. 94, pp. 112-128.
17. Wolfe, P. / Malina, R. / Barrett, S. / Waitz, I. (2016): Costs and Benefits of US Aviation Noise Land-Use Policies, in: *Transportation Research Part D: Transport and Environment*, Vol. 44, pp. 147-156
18. Barrett, S. / Speth, R. / Eastham, S. / Dedoussi, I. / Ashok, A. / Malina, R. / Keith, D. (2015): Impact of the Volkswagen emissions control defeat device on US public health, in: *Environmental Research Letters*, Vol. 10, 114005
19. Withers, M. / Malina, R. / Barrett, S. (2015): Carbon, climate, and economic breakeven times for biofuel from woody biomass from managed forests, in: *Ecological Economics*, Vol. 112, pp. 45-52
20. Winchester, N. / Malina, R. / Staples, M. / Barrett, S. (2015): The impact of advanced biofuels on aviation emissions and operations in the United States, in: *Energy Economics*, Vol. 49, pp. 482-491
21. Allroggen, F. / Wittman, M. / Malina, R. (2015): How air transport connects the world - A new metric of air connectivity and its evolution between 1990 and 2012, in: *Transportation Research Part E: Logistics and Transportation Review* 80, pp. 184-201
22. Trivedi, P. / Malina, R. / Barrett, S. (2015): Environmental and economic tradeoffs of using corn stover for liquid fuels and power production, in: *Energy and Environmental Science*, Vol. 8, pp. 1428-1437
23. Klein, K. / Albers, S. / Allroggen, F. / Malina, R. (2015): Serving vs. settling: What drives the establishment of Low Cost Carriers' foreign bases, in: *Transportation Research Part A: Policy and Practice* 79, pp.17-30
24. Yim, S. / Lee, G. / Lee, L. / Allroggen, F. / Ashok, A. / Caiazzo, F. / Eastham, S. / Malina, R. / Barrett, S. (2015): Global, regional and local health impacts of civil aviation emissions, in: *Environmental Research Letters*, Vol. 10, 034001.20
25. Speth, R. / Rojo, C. / Malina, R. / Barrett, S. (2015): Black carbon emissions reductions from combustion of alternative jet fuels, in: *Atmospheric Environment*, Vol. 105, pp. 37-42
26. Trivedi, P. / Olcay, H. / Staples, M. / Withers, M. / Malina, R. / Barrett, S. (2015): Energy return on investment for alternative aviation fuels, in: *Applied Energy*, Vol. 141, pp. 167-174
27. Baumgarten, P. / Malina, R. / Lange, A. (2014): The impact of hubbing concentration on flight delays within airline networks – An empirical analysis of the U.S. domestic market, in: *Transportation Research Part E, Logistics and Transportation Review*, Vol. 66, pp. 103-114
28. Allroggen, F. / Malina, R. (2014): Do the regional growth effects of air transport differ among airports? *Journal of Air Transport Management*, Vol. 37, May 2014, pp. 1-4
29. Staples, M. / Malina, R. / Olcay, H. / Pearlson, M. / Hileman, J. / Boies, A. / Barrett, S. (2014): Lifecycle greenhouse gas footprint and minimum selling price of renewable diesel and jet fuel from fermentation and advanced fermentation production technologies, in: *Energy and Environmental Science*, Vol. 7, pp. 1545-1554
30. Seber, G. / Malina, R. / Pearlson, M. / Olcay, H. / Hileman, J. / Barrett, S. (2014): Environmental and economic assessment of producing hydroprocessed jet and diesel fuel from waste oils and tallow, in: *Biomass and Bioenergy* Vol. 67, pp. 108-118
31. Speth, R. / Chow, E. / Malina, R. / Barrett, S. / Heywood, J. / Green, W. (2014): Economic and Environmental Benefits of Higher-Octane Gasoline, in: *Environmental Science and Technology* Vol. 48 (12), pp. 6561-6568
32. Bond, J. / Upadhye, A. / Olcay, H. / Tompsett, G. / Jae, J. / Xing, R. / Alonso, D. / Wang, D. / Zhang, T. / Kumar, R. / Foster, A. / Sen, S. / Maravelias, C. / Malina, R. / Barrett, S. / Lobo, R. / Wyman,

- C. / Dumesic, J. / Huber, G. (2014): Production of renewable jet fuel range alkanes and commodity chemicals from integrated catalytic processing of biomass, In: *Energy and Environmental Science*, Vol. 7, pp. 1500-1523
33. Withers, M. / Malina, R. / Gilmore, C. / Gibbs, J. / Trigg, C. / Wolfe, P. / Trivedi, P. / Barrett, S. (2014): Economic and Environmental Assessment of Liquefied Natural Gas as a Supplemental Aircraft Fuel. in: *Progress in Aerospace Sciences*, Vol. 66, pp. 17-36 (2013 Impact-Factor: 2.127).
34. Caiazza, F. / Malina, R. / Staples, M. / Wolfe, P. / Yim, S. / Barrett, S. (2014): Quantifying the climate impacts of albedo changes due to biofuel production: a comparison with biogeochemical effects. in: *Environmental Research Letters* Vol. 9, 024015
35. Staples, M. / Olcay, H. / Malina, R. / Trivedi, P. / Pearson, M. / Strzepek, K. / Paltsev, S. / Wollersheim, C. / Barrett, S. (2013): Water consumption footprint and land requirements of large-scale alternative diesel and jet fuel production, in: *Environmental Science and Technology*, Vol. 47 (21), pp. 12557-12565
36. Allroggen, F. / Malina, R. / Lenz, A.-K. (2013): Which factors impact on the presence of incentives for route and traffic development? Econometric evidence from European airports. in: *Transportation Research Part E: Logistics and Transportation Review*, Vol. 60, December 2013, pp.49-61
37. Scheffler, R. / Hartwig, K.-H. / Malina, R. (2013): The effects of ownership structure, competition and cross-subsidisation on the efficiency of public bus transport: Empirical evidence from Germany, in: *Journal of Transport Economics and Policy*, Vol. 47 (3), September 2013, pp. 371-386
38. Malina, R. / Albers, S. / Kroll, N. (2012): Airport Incentive Programs, A European Perspective, in: *Transport Reviews*, Vol. 32 (4), pp. 435-453
39. Malina, R. / McConnachie, D. / Winchester, N. / Wollersheim, C. / Paltsev, S. / Waitz, I. (2012): The Impact of the EU Emissions Trading Scheme on US Aviation, in: *Journal of Air Transport Management*, Vol. 19, March 2012, pp. 36-41
40. Barrett, S. / Yim, S. / Gilmore, C. / Murray, L. / Kuhn, S. / Tai, A. / Yantosca, R. / Byun, S. / Ngan, F. / Li, X. / Levy, J. / Ashok, A. / Koo, J. / Wong, H. / Dessens, O. / Balasubramanian, S. / Fleming, G. / Pearson, M. / Wollersheim, C. / Malina, R. / Arunachalam, S. / Binkowski, F. / Leibensperger, E. M. / Jacob, D. / Hileman, J. / Waitz, I. (2012): Public Health, Climate and Economic Impacts of Desulfurizing Jet Fuel, in: *Environmental Science and Technology*, Vol. 46, pp. 4275-4282

#### **Books, book chapters and other archival publications:**

41. Van Fossen / Lewis, K. / Malina, R. / Olcay, H. / Hileman, J. (2017): Overview of Alternative Fuel Drivers, Technology Options and Demand Fulfillment, in: NASA (Ed): *GREEN AVIATION: Reduction of Environmental Impact Through Aircraft Technology and Alternative Fuels*, CRC Press, Chapter 9.
42. Olcay, H. / Malina, R. / Lewis, K., Papazian, J. / van Fossen, K. / Gilette, W. / Staples, M. / Stratton, R. / Barrett, S. / Hileman, J. (2017): Environmental Performance of Alternative Fuels, in: NASA (Ed): *GREEN AVIATION: Reduction of Environmental Impact Through Aircraft Technology and Alternative Fuels*, CRC Press, Chapter 13.
43. Malina, R. (2009): Competition in the German airport market - An empirical Investigation, in: P. Forsyth, D. Gillen et al. (Ed.), *Airport competition, The European experience*, pp. 239-260.
44. Malina, R. (2009): Liberalisierung und Re-Regulierung im europäischen Luftverkehr, in: U. Jens, H. Romahn (Ed.), *Wirtschaftliche Macht - politische Ohnmacht? Zur Liberalisierung und Reregulierung von Netzindustrien*, pp. 179-195.
45. Bockmühl, E. / Holzhey, M. / Malina, R. / Rückert, M. (2009): Bundesauftragsverwaltung im Bereich Bundesfernstraßen – Quo vadis?, in: *Internationales Verkehrswesen*, Vol. 61 (4), pp. 106-114.
46. Malina, R. / Michels, W. (Ed.) (2008): *Die Regionalwirtschaftlichen Effekte von TechnologieZentrum und TechnologiePark Dortmund, Materialien zum Siedlungs- und Wohnungswesen*, Issue 42, Münster.

47. Malina, R. (2007): Aktuelle Bedeutung des Luftverkehrs für Westfalen und zukünftige Einflussfaktoren, in.: R. Malina / S. Peltzer (Ed.): Luftverkehr in Westfalen - Bedeutung und Chancen, Tagungsband zur gleichnamigen Veranstaltung des Verkehrsverbandes Westfalen am 5. September 2007 in Dortmund, Dortmund, pp. 11-26.
48. Malina, R. (2006): Potenziale des Wettbewerbs und staatlicher Regulierungsbedarf von Flughäfen in Deutschland, Göttingen.
49. Malina, R. (2005): Wettbewerbspotenziale im deutschen Flughafenmarkt am Beispiel der Berliner Flughäfen, in: Hartwig, K.-H. (Ed.): Themen der Studienkreistagung 2005, Vorträge und Studien aus dem Institut für Verkehrswissenschaft, Issue 42, Göttingen, pp. 47-81.
50. Hassheider, H. / Malina, R. (2004): Die Genesis des Metrorapid. Eine ökonomische Analyse, in: Hartwig, K.-H. (Ed.): Verkehrsmärkte im Spannungsfeld zwischen Reformdruck und Interessenpolitik: Luftverkehr und Metrorapid, Vorträge und Studien aus dem Institut für Verkehrswissenschaft, Issue 40, Göttingen, pp. 69-108.
51. Hassheider, H. / Malina, R. (2003): Durchsetzung von Partialinteressen auf politischen Märkten am Beispiel Metrorapid, in: Wirtschaftsdienst, Vol. 83(2), pp. 108-115.
52. Allemeyer, W. / Knitschky, G. / Kotte, S. / Malina, R. (2002): Stärkung von Innenstädten durch City-Service Center (CSC), Vorträge und Studien aus dem IVM, Issue 37, Göttingen.

#### **Conference proceedings:**

53. Wittmann, M. / Allroggen, F. / Malina, R. (2016): Public Service Obligations for Air Transport in the United States and Europe: Connectivity Effects and Value for Money, 5th hEART conference, September 14-16, 2016, Delft, Netherlands.
54. Allroggen, F. / Wittman, M. / Malina, R. (2015): How air transport connects the world - A new metric of air connectivity and its evolution between 1990 and 2012. 2015 Annual Conference of the International Transport Economics Association, June 17-19, 2015, Oslo, Norway.  
Also presented at: Conference „Verkehrsökonomik und -politik“, Technical University Berlin/ German Institute for Economic Research, June 11-12, 2015, Berlin Germany
55. Allroggen, F. / Scheffler, R. / Malina, R. (2013): The effects of transport on regional production frontiers and regional economic efficiency. 2013 Annual Conference of the International Transport Economics Association, July 10-12, 2013, Evanston/IL, USA.  
Also accepted at: 13th World Conference on Transportation Research, July 15-18, 2013, Rio de Janeiro, Brazil.
56. Klein, K. / Albers, S. / Malina, R. (2013): Low fare airlines' choice of foreign market entry mode. 17th ATRS world conference, June 26-29 2013, Bergamo, Italy.
57. Allroggen, F. / Malina, R. / Lenz, A.-K. (2013): Why Do Airports Apply Incentive Schemes? An Empirical Analysis. 17th ATRS world conference, June 26-29 2013, Bergamo, Italy.
58. Allroggen, F. / Scheffler, R. / Malina, R. (2012): The Effects of Air Transport on the Level of Productive Capacity and its Utilization, Proceedings of the 16th Annual Conference of the Air Transport Research Society, June 27-30, 2012, Tainan, Taiwan.
59. Baumgarten, P. / Malina, R. / Lange, A. (2012): Determinants of Air Traffic Delays – Empirical Evidence on the Influence of U.S. Airlines' Network Concentration, Proceedings of the 16th Annual Conference of the Air Transport Research Society, June 27-30, 2012, Tainan, Taiwan.
60. Allroggen, F. / Malina, R. (2011): The Generation of Accessibility by Air Traffic and its Economic Effects: Causality and Spatial spread, Proceedings of the 15th Annual Conference of the Air Transport Research Society, June 29-July 2, 2011, Sydney, Australia.

61. Allroggen, F. / Malina, R. (2010): Market Power of Hub Airports: The Role of Lock-In Effects and Downstream Competition, Proceedings of the 14th Annual World Conference of the Air Transport Research Society, Porto, Portugal.
62. Allroggen, F. / Malina, R. (2010): Causal Relationships between Airport Provision, Air Traffic and Economic Growth: An Econometric Analysis, paper presented at the 12th World Conference on Transport Research, July 11-14 2010, Lisbon, Portugal.
63. Malina, R. / Scheffler, R. (2010): Measuring efficiency in German public bus transport, paper presented at the 12th World Conference on Transport Research, July 11-14 2010, Lisbon, Portugal.
64. Allroggen, F. / Malina, R. (2009): Economic growth effects of airport capital and air traffic: The case of German Airports, Proceedings of the 14th Conference of the Hong Kong Society for Transportation Studies, December 10-12, Hong Kong.
65. Malina, R. / Schwab, M. / Wollersheim, C. (2008): Using a contingent-valuation approach for evaluating the benefits of airports for regional economies, Proceedings of the 12th Annual World Conference of the Air Transport Research Society, Athens / Greece, July 6-10 2008, also published in: Proceedings of the 8th Conference on Applied Infrastructure Research, October 10-11 2008, Berlin, Germany.
66. Malina, R. / Wollersheim, C. (2007): Measuring the regional economic impact of airports: a comparative analysis of different methodological approaches, Proceedings of the 11th Annual World Conference of the Air Transport Research Society, Berkeley, USA., June 21-24 2007, CD-ROM.
67. Malina, R. (2006): Market Power of German Airports: A substitution coefficient analysis, Proceedings of the 10th Annual World Conference of the Air Transport Research Society, Nagoya, Japan, May 26-May 28 2006, CD-ROM.
68. Malina, R. (2005): Market Power and the Need for Regulation in the German Airport Market, Paper presented at the 4th conference on applied infrastructure research, Regulation and Organizational Models in Infrastructure Sectors, Berlin, Germany.

**Selected reports:**

69. Malina, R. / Staples, M. / Suresh, P.: Alternative Fuels Task Force (AFTF) Final report on 2050 fuel production assessment, International Civil Aviation Organization, Committee on Aviation Environmental Protection, CAEP/2016-IP/01, Montreal.
70. Malina, R. / Staples, M. (2015): Alternative Fuels Task Force (AFTF) Methodology report on 2050 fuel production assessment, International Civil Aviation Organization, Committee on Aviation Environmental Protection, CAEP-SG/2015-IP/04, Montreal.
71. Allroggen, F. / Wittman, M. / Malina, R. (2015): How air transport connects the world - A new metric of air connectivity and its evolution between 1990 and 2012, MIT ICAT Report 1/2015, Massachusetts Institute of Technology, Cambridge, MA
72. Malina, R. / Boyd, R. (2014): Alternative Fuels Task Force (AFTF) Fuel production assessment progress, International Civil Aviation Organization, Committee on Aviation Environmental Protection, CAEP-SG/2014-WP/23, Montreal.
73. Staples, M. / Trivedi, P. / Battaglia, D. / Malina, R. (2014): Alternative Fuels Production Assessment, Review on Global Bioenergy Potential, International Civil Aviation Organization, Committee on Aviation Environmental Protection, CAEP-SG/2014-IP/8, Montreal.
74. Withers, M. / Malina, R. / Trigg, C. / Gibbs, J. / Trivedi, P. / Gilmore, C. / Barrett, S. (2013): Economic and environmental assessment of LNG as a supplemental fuel for the Lockheed Martin C-130, report submitted to Lockheed Martin Company.
75. Olcay, H. / Seber, G. / Malina, R. (2013): Life Cycle Analysis for Fully-Synthetic Jet Fuel Production, Report submitted to Honeywell UOP under the FAA CLEEN Program.

76. Malina, R. / McConnachie, D. / Winchester, N. / Wollersheim, C. / Paltsev, S. / Waitz, I. (2011): The Impact of the EU Emissions Trading Scheme on US Aviation, PARTNER Project 31 report, prepared for the Federal Aviation Administration.
77. Malina, R. / Allroggen, F. (2010): Prognose der regionalwirtschaftlichen Effekte des Flughafens Dortmund für das Jahr 2025, im Auftrag der Flughafen Dortmund GmbH.
78. Malina, R. / Müller, G. / Rommerskirchen, S. / Scheffler, R. / Stefan, K. (2009): Volkswirtschaftliche Auswirkungen der Binnenschiffabgaben, im Auftrag des Bundesministeriums für Verkehr, Bau und Stadtentwicklung, Basel/Münster/Bad Honnef.
79. Malina, R. / Allroggen, F. (2009): Volkswirtschaftliche Effekte deutscher Verkehrsflughäfen, im Auftrag der ADV, Münster.
80. Malina, R. / Bockmühl, E. / Rückert, M. / Holzhey, M. (2007): Neuordnung der Infrastrukturverantwortung bei den Bundesfernstraßen, Gutachten im Auftrag des Bundesverbandes der Deutschen Industrie, des Hauptverbandes der Deutschen Bauindustrie, Pro Mobilität - Initiative für Verkehrsinfrastruktur, des Bundesverbandes der Deutschen Zementindustrie, Autobahn Tank & Rast Holding, des Bundesverband Baustoffe - Steine und Erden, Münster/Berlin.
81. Malina, R. / Schwab, M. / Wollersheim, C. (2007): Die regionalwirtschaftliche Bedeutung des Flughafens Münster/Osnabrück, eine empirische Bedeutung der Angebots- und Nachfrageeffekte.
82. Malina, R. / Wollersheim, C. (2006): Die regionalwirtschaftlichen Effekte des Dortmund Airport, Dortmund.
83. Allemeyer, W. / Malina, R. / Peistrup, M. (2003): Leitfaden City-Logistik: Erfahrungen mit Aufbau und Betrieb von Spediteurskooperationen, Ed. by Deutscher Städtetag, Berlin.
84. Allemeyer, W. / Knitschky, G. / Malina, R. (1999): Einrichtung eines kombinierten Verkehrs im nordwestdeutschen Raum, Abschlußbericht, Münster.

#### **INVITED TALKS**

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- 14/12/2018: Public health effects of road transportation in Europe, FWO Kennismakers, Antwerp, Belgium.
- 01/22/2018: Economic and environmental considerations concerning the performance of alternative fuels in the aviation industry, Fuels of the Future Conference, Berlin, Germany.
- 05/12/2017: Moving from regional to global sustainability rules: The proposed global sustainability regulation for biomass-derived jet fuel, 2nd Applied Biobased Materials Conference, Maastricht, Netherlands.
- 04/05/2017: Nachhaltigkeitsanrechnung für erneuerbares Kerosin, Aktueller Stand für die Implementierung in der Praxis im internationalen Kontext, DEMO-SPK Workshop „Nachhaltigkeit - Dokumentation und Anrechnung“, Berlin, Germany.
- 02/23/2017: Economic and environmental performance perspectives of alternative aviation fuels, Klangbordgroep Biomassa Limburg, Diepenbeek, Belgium
- 11/23/2016: Sustainable alternative jet fuels and CORSIA: Getting the incentives right, AIREG Member Meeting, Berlin, Germany
- 11/09/2016: Economic and environmental performance perspectives of alternative aviation fuels, International Energy Agency Bioenergy Workshop: Drop-in biofuels for international marine and aviation markets, Rotorua, New Zealand.
- 10/26/2016: Evaluating Techno-Economic Viability: Kickoff remarks, Commercial Aviation Alternative Fuels Initiative (CAAFI) Bi-Annual General Meeting, Washington, DC.
- 10/13/2016: Dynamic cost-benefit assessment of aviation biofuels, Greener Aviation Conference, Brussels, Belgium.
- 05/10/2016: Panel statement on sustainable alternative jet fuels, ATAG Global Sustainable Aviation Forum, Montreal, Canada.



- 06/16/2016: Production pathways for short- and long-term availability of alternative jet fuel and their performance perspectives, Core-Jet Fuel Final International Conference, Brussels, Belgium
- 11//2014: Costs and benefits of aviation biofuels (given in German: “Sinn und Unsinn von alternativen Kraftstoffen fuer den Luftverkehr”), Muenster School of Business and Economics, Muenster University, Germany.
- 10/20/2014: Innovative technologies for aviation biofuels, “Sustainable Alternative Fuels Forum”, Madrid, Spain.
- 04/04/2014: Environmental and economic sustainability of aviation biofuels, Workshop “Aviation and climate change”, German Aviation Research Society, Worms, Germany.
- 04/01/2014: A quantitative comparison of LC GHG accounting for alternative fuels in the US and EU, International Civil Aviation Administration (ICAO), Inaugural Meeting of the Alternative Fuels Task Force, Montreal, Canada.
- 02/12/2014: Incentives for route and traffic development – Econometric evidence from European airports, Research Seminar, Department of Border Region Studies, University of Southern Denmark, Sonderborg, Denmark.
- 01/28/2014: A quantitative comparison of LC GHG accounting for alternative fuels in the US and EU, CAAFI Bi-Annual General Meeting, Washington, DC.
- 11/22/2013: The economics of aviation biofuels, MIT Center for Energy and Environmental Policy Research (CEEPR) Fall Workshop, Cambridge, MA.
- 11/05/2013: Incentives for route and traffic development –Econometric evidence from European airports, MIT Global Airline Consortium Annual Research Meeting, Cambridge, MA.
- 06/14/2013: Economic impacts of biofuels, SAE 2013 Aerospace Alternative Fuels and Associated Environmental Impacts Symposium, Brussels, Belgium.
- 06/04/2013: Economics of alternative fuels, Bauhaus Symposium 2013: Future of Aviation – perspectives for 2050, Munich, Germany.
- 04/04/2013: The water footprint of biofuels, LAE/ICAT Seminar Series, Cambridge, MA.
- 01/28/2013: Recent advances in alternative jet fuel lifecycle greenhouse gas emissions analysis, CAAFI Environment Team Meeting, Washington, D.C.
- 11/27/2012: HEFA and F-T jet cost analyses, US Department of Energy / CAAFI Costing workshop, Washington, D.C.
- 06/18/2012: The impact of the EU Emissions trading Scheme on US Aviation, Presentation at MIT’s Global Airline Industry Consortium’s Executive Education Course, Cambridge, MA.
- 06/01/2012: Water footprint of alternative fuels for aviation, Seminar Series of the Joint Program on the Science and Policy of Global Change, Cambridge, MA.
- 11/24/2011: Environmental and economic sustainability of alternative fuels for aviation, FRAPORT and Erich-Becker-Stiftung Conference, Frankfurt, Germany.
- 5/27/2010: Messung der regionalwirtschaftlichen Bedeutung von Innovationszentren, Frühjahrstagung des ADT, Bundesverband deutscher Innovations-, Technologie- und Gründerzentren, Dortmund.
- 05/06/2010: Finanzierung des deutschen Fernstraßennetzes, Optionen aus volkswirtschaftlicher Sicht, Tiergartengespräche der Landesvertretung Baden-Württemberg, Berlin.
- 05/06/2010: Modernes Steuerungsinstrument oder Wegelagerei – Die PKW-Maut, Mobilitätskolloquium der TU Berlin, des Wissenschaftszentrum Berlin für Sozialforschung sowie des Zentrum Technik und Gesellschaft, Berlin, Germany.
- 02/18/2010: Mobilität fördern – Wege aus dem Stau, IHK Nord Westfalen, Münster.
- 02/10/2010: Some new evidence on the capacity utilisation at German airports, Discussant, GARS Work-shop New issues in aviation economics, Bremen.
- 01/28/2009: Stellungnahme zur Situation des Flughafens Münster/Osnabrück, 28. Sitzung des Rates der Stadt Greven, Greven, Germany.
- 06/06/2008: Flughafenwettbewerb in Deutschland, eine empirische Analyse, Konferenz Kommunales Infrastrukturmanagement, Berlin, Germany.
- 06/06/2008: Die ökonomischen Effekte eines Ausbaus des Flughafens Dortmund, Dialogveranstaltung Entwicklungsplanung 2020, Dortmund, Germany.

- 03/05/2008: Die regionalwirtschaftlichen Effekte des TechnologieZentrum/Tech-no-lo-giePark Dortmund, Wirtschaftsförderungsausschuss des Rates der Stadt Dortmund, Dortmund, Germany.
- 02/28/2008: Liberalisierung und Re-Regulierung im Luftverkehr, Tagung Macht und Moral, Netzindustrien in der Diskussion, Gerhard-Weisser-Institut, Bochum, Germany.
- 09/05/2007: Aktuelle Bedeutung des Luftverkehrs für Westfalen und zukünftige Einflussfaktoren, Workshop Luftverkehr in Westfalen – Bedeutung und Chancen, Verkehrs-verband Westfalen, Dortmund, Germany.
- 03/20/2007: Stellungnahme im Rahmen der öffentlichen Anhörung zum Antrag der Fraktion BÜNDNIS 90/Die Grünen im Landtag NRW: „Kleinstaaterei beim Flughafenausbau in NRW stoppen – Subventionslöcher schließen“, Düsseldorf, Germany.
- 11/10/2006: The Development of Low Cost Carrier Services in Germany, Combined GARS Workshop EU Liberalization of Air Transport – Experiences and Next Steps Forward and Current Developments in Airport Benchmarking, Frontier Economics, London, Great Britain.
- 11/12/2003: Die Magnetschwebbahn für NRW – Chronik eines Scheiterns, Vortrag an der Fachhochschule für Ökonomie und Management, Essen, Germany.

#### **PEER-REVIEWING:**

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Nature Climate Change, Environmental Science and Technology, Climate Policy, BioEnergy Research, Sustainable Chemistry & Engineering, Waste Management, Journal of Transport Economics and Policy, Transportation Research Part E, Fuels, Biotechnology for Biofuels, Transportation Research Part A, Journal of Air Transport Management, Transport Policy, European Journal of Transport and Infrastructure Research, List Forum für Wirtschafts- und Finanzpolitik

#### **RESEARCH GRANTS:**

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- BASTA: Biochar's Added value in Sustainable land use with Targeted Applications in processes, substrate and (future proof) open-field cultivation, funded by FWO SBO, 2019-2022.
- Ecocities: Green roofs and walls as a source for ecosystem services in future cities, funded by FWO SBO, 2018-2021
- The effect of proximity to nature, biodiversity and climate change on the spread of tick-borne diseases and associated health costs, funded by BOF special research fund and Namur University
- Valuation of the reanimation of Urban Spaces using Virtual Reality as an innovative visualization tool, funded by CMK structural funding, 2017-2021
- The impact of climate change on ecosystem services provided by dry heathland, funded by CMK structural funding and FWO, 2017-2021
- Developing a sustainability framework for the green chemistry, funded by VITO, 2016-2020
- Social acceptance of carbon capture and utilization, funded by the BOF special research fund 2016-2018
- Alternative Jet Fuel Sustainability, funded by US Federal Aviation Administration, 2014-2018
- EnOp: CO2 voor energieopslag (CO2 conversion technologies), funded by INTERREG, 2017-2019
- Global analysis of lifecycle greenhouse gas emissions of petroleum-based jet fuel funded by US Federal Aviation Administration, 2015-2016.
- Sustainability of alternative aviation fuels, funded by US Federal Aviation Administration and DLA Energy, 2012-2014

- Regional economic effects of airports: The case of Muenster Osnabruck Airport, funded by FMO Airport, 2008-2010
- Airport capital, air transport and economic growth, funded by German Airports Association (ADV), 2008-2009

#### **INDEPENDENT CONSULTING:**

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- 2017: German Air Transport Research Program, Reviewer for the German Federal Ministry for Economic Affairs and Energy
- 2017: Senate of Berlin, Expert advice on economic aspects of continued operations at TXL airport after opening of BER airport

#### **CURRENT PHD STUDENTS:**

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- Lore van Welde (U Hasselt / U Namur): The effect of proximity to nature, biodiversity, climate change on the spread of tick-borne diseases and associated health costs, expected completion 2022, PhD promoter.
- Pieter Fonteyn (U Hasselt): Valuation of ecosystem services provided by green infrastructure in cities, expected completion 2022, PhD co-promoter.
- Anne Nobel (U Hasselt): The impact of climate change on ecosystem services provided by dry heathland, expected completion 2021, PhD promoter.
- Ilias Mokas (U Hasselt): Valuation of the reanimation of Urban Spaces using Virtual Reality as an innovative visualization tool, expected completion 2021, PhD promoter.
- Bert Lenaerts (U Hasselt): Air Connectivity and Economic Growth, expected completion 2021, PhD promoter.
- Hajar Lamhamedi (U Hasselt): Environment and Territory - analysis and costs assessment of environmental degradation, expected completion 2021, PhD promoter
- Sophie van Schoubroeck (U Hasselt / U Antwerp): Developing a sustainability framework for the green chemistry, expected completion 2020, PhD promoter

#### **TEACHING:**

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- At Hasselt University, Belgium
  - 2018,2019 Economic Policies for Technological Development
  - 2017, 2018 Sustainable Tourism Management
  - 2017, 2018 Technological Innovation
  - 2016-2018 Transport Economics
  - 2016 Environmental Economics
  - 2016 Intermediate Microeconomics
- at Muenster University, Germany
  - 2012 Advanced Economic Policy
  - 2005-2012 Transport Economics
  - 2005-2010 Transport Markets
  - 2006-2010 Regulatory economics
  - 2007-2010 Competition policy
  - 2009 Transport Policy
  - 2005-2011 Environmental economics
  - 2005-2010 Economic policy
  - 2006-2011 Transport Economics
  - 2008 Air Transport Economics and Management
- at Massachusetts Institute of Technology, USA
  - 2013 Transportation and the Environment (2 lectures on valuation of environmental goods and on cost-benefit analysis)

- 2014 Sustainability  
(1 lecture on lifecycle analysis)
- 2014 Climate: Science, Technology and Policy  
joint MIT / Harvard University class  
(1 lecture on environmental cost-benefit analysis)
- at University of Bonn, Germany
  - 2008-2011 Specific Economics of the Air Transport Industry
- at Warsaw School of Economics, Poland
  - 2009 Air Transport Economics
  - 2009 International Transport Markets
- at Technical University Sofia, Bulgaria
  - 2009-2010 International Economics
- - at Université Moulay Ismail, Morocco
  - 2018 Environmental and Natural Resource Economics
- at International School of Management Dortmund, Germany
  - 2007 General Economics
- at Rheinisch-Westfälische Genossenschaftsakademie, Germany
  - 2001-2008 General Economics