



CONFERENCIA SOBRE LA AVIACIÓN Y LOS COMBUSTIBLES ALTERNATIVOS

Ciudad de México, México, 11-13 de octubre de 2017

**Cuestión 3 del
orden del día: Retos y formulación de políticas**

ORIENTACIÓN SOBRE POSIBLES POLÍTICAS Y ENFOQUES COORDINADOS PARA LA INTRODUCCIÓN DE COMBUSTIBLES SOSTENIBLES PARA LA AVIACIÓN

(Nota presentada por la Secretaría de la OACI)

RESUMEN

La presente nota describe los avances en el desarrollo de una “*Orientación sobre posibles políticas y enfoques coordinados para la introducción de combustibles alternativos sostenibles para la aviación*” del Comité sobre la protección del medio ambiente y la aviación (CAEP) de la OACI e invita a los Estados miembros a valorar la metodología cualitativa propuesta para la evaluación de la efectividad de las políticas sobre combustibles alternativos.

Las medidas propuestas a la Conferencia figuran en el párrafo 4.

1. INTRODUCCIÓN

1.1 Desde la primera Conferencia sobre la aviación y los combustibles alternativos (CAAF/1) celebrada en 2009, la OACI ha alentado activamente a los Estados miembros y a la industria a promover y armonizar iniciativas que estimulen el desarrollo de combustibles sostenibles para la aviación (SAF).

1.2 La Resolución A39-2 del 39º período de sesiones de la Asamblea de la OACI pidió a los Estados miembros que “apliquen un enfoque coordinado en las administraciones nacionales respecto a medidas en materia de políticas e inversión destinadas a acelerar el desarrollo, introducción y uso apropiados de fuentes de energía nuevas y renovables para la aviación, incluido el uso de combustibles alternativos sostenibles, de acuerdo con sus circunstancias nacionales”.

1.3 A los efectos de esta petición, se entiende que son deseables *enfoques coordinados* para armonizar las políticas mediante elementos comunes y requisitos generales similares, sobre la base de las lecciones aprendidas y las mejores prácticas derivadas de las políticas aplicadas hasta la fecha que hayan demostrado su viabilidad, efectividad y economía.

1.4 Diversos Estados miembros y autoridades han desarrollado, están desarrollando o posiblemente desarrollarán, instrumentos de apoyo a la introducción y uso de SAF.

1.5 Algunos de dichos instrumentos y políticas podrán servir de referencia a otros Estados miembros, una vez demostrada su efectividad, con vistas a la aplicación de políticas similares. Las lecciones aprendidas, tanto positivas como negativas, en la aplicación de los marcos existentes pueden ayudar al establecimiento de medidas políticas adicionales adecuadas relacionadas con los SAF.

2. LABOR DEL CAEP DE LA OACI EN MATERIA DE POLÍTICAS

2.1 La 10ª reunión del CAEP (CAEP/10) celebrada en febrero de 2016, encargó al Equipo especial del CAEP sobre combustibles alternativos (AFTF) una nueva línea de trabajo relacionada con el desarrollo de una “*Orientación sobre posibles políticas y enfoques coordinados para la introducción de combustibles alternativos sostenibles para la aviación*” (en adelante “*Orientación sobre posibles políticas*”). El objetivo es elaborar principios de orientación y recomendaciones que apoyen la adopción de políticas nacionales y regionales.

2.2 Esta labor proporcionará específicamente información sólida sobre la eficacia de diversos mecanismos en materia de política, incluidos beneficios y externalidades, al reconocer que es improbable que la aplicación de una política determinada proporcione exactamente el mismo resultado en distintos Estados miembros.

2.3 Un primer objetivo de esta labor es identificar instrumentos políticos que incentiven el desarrollo de combustibles alternativos sostenibles (no sólo para la aviación), así como barreras o mecanismos de carácter desincentivador, agrupados en diferentes tipos o categorías, con características y naturaleza similares.

2.4 En una segunda fase, la labor debería identificar “posibles políticas” que hayan demostrado ser viables, efectivas y prácticas. El CAEP realizará dicha identificación mediante la evaluación de las mejores prácticas, lecciones aprendidas y resultados positivos de eficacia probada consecuencia de la aplicación de dichos instrumentos políticos, que podrían incluir políticas desarrolladas para otros sectores y que sean aplicables al transporte aéreo.

2.5 Finalmente, dicho análisis identificará elementos que puedan beneficiarse de una coordinación mejorada entre Estados y del desarrollo de “principios de orientación” que faciliten la aplicación de esas políticas e incentiven la puesta en marcha de mecanismos por los Estados o las regiones, utilizando enfoques de política efectivos cuando convenga.

3. AVANCE DE LOS TRABAJOS

3.1 Análisis bibliográfico:

3.1.1 Se realizó una recopilación inicial de bibliografía, compuesta por 57 artículos de investigación de diversas fuentes. De ellos, 23 se centran en los Estados Unidos de América o en la Unión Europea, y la mayoría del resto de artículos hacen referencia a Brasil, Australia, China y Canadá. Doce (12) de los 57 artículos abordan específicamente políticas en materia de combustibles, y los restantes se centran en el transporte por carretera o en todos los medios de transporte. En el Apéndice C se recoge la lista de los documentos incluidos en el análisis bibliográfico.

3.2 Categorías de políticas:

3.2.1 Las opciones en materia de políticas se han agrupado inicialmente en las siguientes categorías:

- Apoyo vinculado al volumen
- Subsidios
- Ayudas a la producción
- Ayudas a la investigación y desarrollo

3.2.2 Las medidas políticas que se centran básicamente en una macrocategoría se han agrupado en torno a ella y se han añadido descripciones conexas. En total, se han descrito 14 medidas políticas. Se considera una evaluación inicial y en ningún modo una lista exhaustiva. En el Apéndice A se describe el tipo de mecanismo de apoyo, la medida política y su descripción.

3.3 Métricas cualitativas:

3.3.1 El Grupo de expertos en políticas del AFTF propone el siguiente conjunto de métricas cualitativas a modo de instrumento de “lista de comprobación” para los Estados miembros que prevean analizar o aplicar medidas políticas en materia de combustibles sostenibles para la aviación, tal como pide la Resolución A39-2 de la Asamblea. Cada uno de los elementos se describe en el Apéndice B.

- Flexibilidad
- Certidumbre
- Costos y beneficios financieros
- Sensibilidad del precio a las externalidades
- Facilidad de aplicación
- Contribución a la introducción de combustibles aeronáuticos sostenibles y a la reducción de los GEI
- Consecuencias indeseadas
- Robustez de la política

3.3.2 Por lo tanto, los Estados pueden disponer, por un lado, de un repositorio de opciones políticas identificadas que han sido aplicadas en distintos contextos/regiones, y por otro, de un conjunto de métricas cualitativas que sirvan de herramienta para evaluar la viabilidad, efectividad y practicidad de la aplicación de dichas opciones a sus contextos y condiciones nacionales.

3.3.3 Como paso siguiente, se propone “verificar” su aplicabilidad, solicitando la participación de expertos de diferentes Estados miembros que evalúen la eficacia de políticas existentes en sus propios Estados/regiones, no sólo en la industria de la aviación sino también en otros sectores del transporte.

3.3.4 En paralelo, los expertos del AFTF del CAEP también tienen previsto identificar posibles estudios de caso regionales específicos sobre la aplicación de políticas que serán evaluados mediante modelos económicos a fin de extraer posibles lecciones aprendidas que se incluyan en la versión final de la orientación.

4. **MEDIDAS PROPUESTAS A LA CAAF/2**

4.1 Se invita a la CAAF/2 a que:

- a) pida a los Estados miembros que proporcionen ejemplos de estudios de casos sobre la aplicación satisfactoria de políticas en materia de bioenergía y combustibles aeronáuticos sostenibles, así como resultados y posibles lecciones aprendidas que puedan ser de utilidad a otros Estados miembros y para la actual labor del CAEP; y
- b) aliente a los Estados miembros a verificar la aplicabilidad de las métricas cualitativas propuestas en el párrafo 3.3.1 como instrumento de “lista de comprobación”.

APPENDIX A

POLICY OPTION TYPE OF MEASURES

Types of Support	Measures	Description
Volume-linked support	Import tariff	Duties levied on imported biofuels. Lowering import tariff will increase import volume, whereas increasing tariff will reduce import volume. Tariff affects domestic price elasticity and market distribution (boosting domestic producer).
	Target	Percentage or volume of renewable energy (or biofuels) consumption (for all sector/ for specific sector) set to be achieved at specific timeframe. The amount indicated as a target is used as reference only. It may be gradually increased over time.
	Mandate	Mandatory consumption of a fixed amount of specific biofuel type (e.g. 2nd generation biofuels). The amount indicated (either percentage or volumetric) in a mandate is binding.
	Blending obligation	Obligation for fossil fuel producer to blend xx% of biofuels content to convention fuel (e.g diesel) sold in the market. It is also possible for a country to apply an indicative blending obligation (more flexible in its application and less binding).
	Quota Mechanism	A cap or minimum level of biofuels that must be used in a specific sector (e.g. road transport).
Subsidy	Excise tax credit	Excise taxes are taxes paid when purchases are made on a specific good, such as fuel. Excise taxes are often included in the price of the product. As for biofuels, blenders benefitting from excise tax credit for each unit produced (in gallons).
	Input subsidy (e.g. feedstock)	Payment made to feedstock farmers aimed at incentivizing production. Subsidy may also be given in a form of fertilizer supplies, water supplies, etc.
	Output based subsidy	Payment made to producer based on how many gallons of biofuels they produced (also called as per gallon subsidy).
	GHG emission level based subsidy	Financial incentive given on a basis of GHG unit displaced
	Green vehicles subsidy	Tax credit for consumers purchasing eco-friendly vehicle (applicable to road transport)
Assistance for Establishment of Production	Capital grant	Subsidy given to biofuel-specific capital supporting a range of production facilities, re-fuelling or blending infrastructure, or purchase of alternative fuelled vehicles.
	Loan guarantees	A loan guaranteed by a third party in the event that the borrower defaults. The loan is often guaranteed by a government agency which will purchase the debt from the lending financial institution and take on responsibility for the loan. Loan guarantees are given mainly for production facilities.
	Crop insurance	Crop insurance contract is a commitment between insured farmers and their insurance providers. Under the contract, the insured farmer agrees to insure all the eligible acreage of a crop planted in a particular region. The insurance provider agrees to indemnify (that is, to protect) the insured farmer against losses that occur during the crop year.
Assistance for R&D	Tax credit for investment in technology	Tax credit given to total investment made in research and development technology. It is applicable to technological goods specified by the government (usually comes in a form of a list). Government may set the eligibility criteria for this, e.g. minimum and maximum costs for the projects, project timeline, etc.

APPENDIX B

QUALITATIVE METRICS AS A “CHECK-LIST” INSTRUMENT

Flexibility:

Characteristics of this style of policy will demonstrate scope for adjustment to different situations and priorities. Policies with higher flexibility may be able to evolve or adapt quickly. It is possible special authority may be assigned to monitor and evaluate the policy on an on-going basis

Certainty:

These characteristics relate to the time frame, legal conditions and/or political decisions. Greater policy certainty can be associated with more economic value being ascribed to a particular policy. In some cases policy certainty can be linked to the security level for investors. Lower certainty policies may have the inverse effect for investors and provide less incentive for capital investment.

Financial costs and benefits:

Policy effectiveness should consider costs and benefits (including social costs). Policies that rely on government financial support should be assessed on the benefits they deliver towards the stated policy objective or for the government.

Price sensitivity to externalities:

The sensitivity of a policy to externalities should be understood before implementation to ensure unintended impacts are not experienced. Price based policy can be less volatile if a floor and ceiling price is established. The higher the sensitivity to externalities, the more potential unintended consequences.

Ease of implementation:

Policy implementation can be affected by administrative, governance and procedural issues. The number of agencies involved in implementing or administering a policy can impact effectiveness. States should be conscious of the relationship within their State of local, regional and national jurisdictions.

Contribution to Sustainable Alternative Fuel deployment and GHG reduction:

Contribution to deployment will be higher if a policy is designed to ensure a specific quantity of biofuels are delivered into a system and if it is supported by a set of legal instruments. Contribution to deployment will be lower if no specific amount of deployment is targeted or mandated; and not supported by any legal basis. Policy that incentivises higher verified GHG achievement relative to the conventional fuels that is being replaced may be more effective. Similarly, policy that considers, respects and addresses social and economic consequences may deliver broader economic benefit relative to policies that focus singularly on environmental achievement.

Unintended consequences:

Effective policies need to address the risk that implementation of the policy could lead to unintended consequences. These consequences can be economic, environmental or social. The most effective policy will have mechanisms to recognise and mitigate the impact of unintended consequences.

Robustness of policy:

Effectiveness of a policy can be influenced by how robust the policy is. Robust policies are ones, that once implemented, have a regulating system to ensure that its objectives are achieved and appropriate procedures have been followed.

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APPENDIX C

POLICY MEASURES LITERATURE REVIEW

No	Title	Author	Year of Publication	Journal Title/ Publisher
1	Development of renewable energy in Australia and China: A comparison of Policy and Status	Yaping Hua, Monica Oliphant, Eric Jing Hu	2015	Renewable Energy 85
2	Prospect of Biofuels as an Alternative Transport Fuel in Australia	A.K.Azad n, M.G.Rasul,M.M.K.Khan,SubhashC .Sharma,M.A.Hazrat	2014	Renewable and Sustainable Energy Reviews 43
3	Towards a Sustainable Strategy For Road Transportation in Australia: The Potential Contribution of Hydrogen	Paul Maniatopoulos, John Andrews, Bahman Shabani	2015	Renewable and Sustainable Energy Reviews 52
4	Assessing the impact of environmental innovation in the airline industry: An empirical study of emerging market economies	Wei Yan, Zhijian Cui, María José Álvarez Gil	2016	Environmental Innovation and Societal Transition
5	Aviation Biofuel From Renewable Resources: Routes,opportunities, and challenges	Thushara Kandaramath Hari, Zahira Yaakob, Narayanan N. Binitha	2014	Renewable and Sustainable Energy Reviews
6	Biomass Production for Sustainable Aviation Fuels: A regional case study in Queensland	Helen T.Murphy, Deborah A.O'Connell, R. John Raison, Andrew C.Warden, Trevor H. Booth, Alexander Herr, Andrew L. Braid, Debbie F. Crawford, Jennifer A.Hayward, Tom Jovanovic, John G. McIvor , Michael H. O'Connor, Michael L. Poole, Di Prestwidge, Nat Raisbeck-Brownf, Lucas Rye	2015	Renewable and Sustainable Energy Reviews 44
7	Lead markets in 2nd generation biofuels for aviation: A comparison of Germany, Brazil and the USA	Jonathan Köhler, Rainer Walz, Frank Marscheder-Weidemann, Benjamin Thedieck	2013	Environmental Innovation and Societal Transitions 10
8	A review on present situation and development of biofuels in China	Hao Chen, Meng-long Xu, Qi Guo, Lu Yang, Yong Ma	2015	Journal of the Energy Institute 89
9	Scenario analysis of CO2 emissions from China's civil aviation industry through 2030	Wenji Zhou, Tao Wang, Yadong Yu, Dingjiang Chen, Bing Zhu	2016	Applied Energy 175
10	An overview of biofuels policies and industrialization in the major biofuel producing countries	Yujie Su, Peidong Zhang, Yuqing Su	2015	Renewable and Sustainable Energy Reviews 50
11	Biofuel subsidies versus the gas tax: The carrot or the stick?	Diya B. Mazumder	2014	Energy Economics 44
12	Global Scenarios for Biofuels: Impacts and Implications	Mark W. Rosegrant, Tingju Zhu, Siwa Msangi and Timothy Sulser	2008	Review of Agricultural Economics 30
13	International trade in biofuels: an introduction to the special issue	Rainer Zah, Thomas F. Ruddy	2009	Journal of Cleaner Production 17
14	Second-best biofuel policies and the	Harvey Lapan,Gian Carlo Moschini	2011	Journal of

No	Title	Author	Year of Publication	Journal Title/ Publisher
	welfare effects of quantity mandates and subsidies			Environmental Economics and Management 63
15	The Taxation of Fuel Economy	James M. Sallee	2011	Tax Policy and the Economy 25
16	Biofuel futures in road transport – A modeling analysis for Sweden	Martin Börjesson, Erik O. Ahlgren, Robert Lundmark, Dimitris Athanassiadis	2014	Transportation Research Part D 32
17	Biofuels in Brazilian Aviation: Current scenario and prospects	Paulo André Cremonez, Michael Feroldi, Amanda Vianade Araújo b, Maykon Negreiros Borges, Thompson Weiser Meier, Armin Feiden, Joel Gustavo Teleken	2014	Renewable and Sustainable Energy Reviews 43
18	Biofuels: Opportunities and Challenges in India	Mambully Chandrasekharan Gopinathan and Rajasekaran Sudhakaran	2009	In Vitro Cellular & Developmental Biology Plant
19	Economy-wide impacts of biofuels in Argentina	Govinda R. Timilsina, Omar O. Chisari, Carlos A. Romero	2013	Energy Policy 55
20	Jet biofuels in Brazil: Sustainability challenges	Marcia A.F.D. Moraes, Andre M. Nassar, Paula Moura, Rodrigo L.V. Leal, L.A.B. Cortez	2014	Renewable and Sustainable Energy Reviews 40
21	Promoting Biofuels Use in Spain: A cost-benefit analysis	Marta Santamaría, Diego Azqueta	2015	Renewable and Sustainable Energy Reviews 50
22	Comparison of fixed versus variable biofuels incentives	Wallace E. Tyner, Farzad Taheripour, David Perkis	2010	Energy Policy 38
23	Targets and Mandates: Lessons Learned from EU and US Biofuels Policy Mechanisms	Jadwiga Ziolkowska, William H. Meyers, Seth Meyer, and Julian Binfield	2011	Agrobiotechnology Management and Economics
24	Biofuels in aviation: Fuel demand and CO2 emissions evolution in Europe toward 2030	Marina Kousoulidou, Laura Lonza	2016	Transportation Research Part D 46
25	Study of the current incentive rules and mechanisms to promote biofuel use in the EU and their possible application to the civil aviation sector	Hazariah M. Noh, Arturo Benito, Gustavo Alonso	2016	Transport Research Part D 46
26	Distributional Implications of U.S. Ethanol Policy	Bruce A. Babcock	2008	Review of Agricultural Economics, Vol. 30
27	Second generation biofuels and bioinvasions: An evaluation of invasive risks and policy responses in the United States and Canada	A.L. Smith, N. Klenk, S. Wood, N. Hewitt, I. Henriques, N. Yana, D.R. Bazely	2013	Renewable and Sustainable Energy Reviews 27
28	The Impact of advanced biofuels on aviation emissions and operations in the U.S.	Niven Winchester, Robert Malina, Mark D. Staples, Steven R.H. Barrett	2015	Energy Economics 49
29	US biofuels subsidies and CO2 emissions: An empirical test for a weak and a strong green paradox	R. Quentin Grafton, Tom Kompas, Ngo Van Long, Hang To	2013	Energy Policy 68
30	Climate-neutrality versus carbon-neutrality for aviation biofuel policy	Philip Krammer, Lynnette Dray, Marcus O. Köhler	2013	Transportation Research Part D 23

No	Title	Author	Year of Publication	Journal Title/ Publisher
31	Stepping Up but Back : How EU policy reform fails to meet the needs of RE actors	Evanthie Michalena and Jeremy M. Hills	2016	Renewable and Sustainable Energy Reviews
32	Biofuel Development in China and Its Potential Impact	Tian Fuqiang	Not specified	International Commission on Irrigation and Drainage
33	Biofuels - At What Cost? Government support for ethanol and biodiesel in China		2008	IISD Paper
34	The effects of China's biofuel policies on agricultural and ethanol markets	Shuyang Si, James A. Chalfant, C.-Y. Cynthia Lin Lawell, and Fujin Yi	2015	University of California Davis Faculty Paper
35	Biofuel Economics in a Setting of Multiple Objectives & Unintended Consequences	William K. Jaeger and Thorsten M. Egelkraut	2011	Renewable and Sustainable Energy Reviews. 15(9)
36	Analysis of Biofuels Policy in the Nordic Countries	Dorothy Sutherland Olsen, Antje Klitkou and Annele Eerola & VTT colleagues		TOP NEST
37	Aviation Biofuel Production in Sweden	Ben Fethers	2014	IIIEE
38	Biofuels in Canada: Tracking progress in tackling greenhouse gas emissions from transportation fuels	Jeremy Moorhouse and Michael Wolinetz	2016	Clean Energy Canada
39	Cellulosic biofuels market uncertainties and government policy	Wallace E Tyner	2010	Future Science
40	Biofuels, Policy Options, and Their Implications: Analyses Using Partial and General Equilibrium Approaches	Farzad Taheripour and Wallace E. Tyner	2008	Journal of Agricultural and Food Industrial Organization
41	Policy Options for Integrated Energy and Agricultural Markets	Wallace E. Tyner and Farzad Taheripour	2008	Purdue University Paper
42	Renewable Fuel Standard: Potential Economic and Environmental Effects of U.S. Biofuel Policy		2011	The National Academy of Sciences
43	The Integration of Energy and Agricultural Markets	Wallace E. Tyner	2009	International Association of Agricultural Economists
44	The US Ethanol and Biofuels Boom: Its Origins, Current Status, and Future Prospects	Wallace E. Tyner	2008	BioScience
45	Transatlantic Platform For Action On The Global Environment	Catherine Bowyer, Malcolm Fergusson, Christine Erickson, Melanie Nakagawa	2008	IIEP and NRDC
46	Growing Complexities: A Cross-Sector Review of U.S. Biofuels Policies and Their Interactions	Joshua A. Blonz, Shalini P. Vajjhala, and Elena Safirova	2008	Resource for the Future
47	Options to increase EU biofuels volumes beyond the current blending limits	Bettina Kampman, Ruud Verbeek, Anouk van Grinsven, Pim van Mensch, Harry Croezen, Artur	2013	TNO Innovation

No	Title	Author	Year of Publication	Journal Title/ Publisher
		Patuleia		
48	Biofuels—At What Cost? A review of costs and benefits of Spain's biofuel policies	Chris Charles, Alicia Natalia Zamudio, Tom Moerenhout	2013	IISD
49	Inventory of Biofuel Policy Measures and their Impact on the Market	Luc Pelkmans, Leen Govaerts, Kris Kessels	2008	ELOBIO
50	Cautionary Tales for Biofuel Policy Reformer	Ivetta Gerasimchuk, Richard Bridle, Chris Charles and Tom Moerenhout	2012	IISD
51	State and federal subsidies to biofuels: magnitude and options for redirection	Doug Koplouw	2009	International Journal of Biotechnology
52	Marginal abatement costs for greenhouse gas emission reduction in transport compared with other sectors	Richard Smokers, Ab de Buck, Margaret van Valkengoed	2009	CE Delft
53	Regional differences in China's CO2 abatement cost	Xiaoping He	2015	Energy Policy Journal 80
54	Integrated assessment of energy efficiency technologies and CO2 abatement cost curves in China's road passenger car sector	Bin-Bin Peng, Ying Fan, Jin-Hua Xu	2016	Energy Conversion and Management 109
55	The Cost of Abating CO2 Emissions by Renewable Energy Incentives	Claudio Marcantonini and A. Denny Ellerman	2013	European University Institute
56	A Marginal Abatement Cost Curve Model For The UK Aviation Sector	Mike Holland, Mike Mann, Malcolm Ralph, Bethan Owen, David Lee, Gareth Horton, Neil Dickson, Sujith Kollamthodi	2009	EMRC and AEA
57	Sectoral Emission Reduction Potentials and Economic Costs for Climate Change	Bart Wesselink, Yvonne Deng	2009	Ecofys
58	Government policies and drivers of world biofuels, sustainability criteria, certification proposals and their limitations	Timothy D. Searchinger	2009	Biofuels: Environmental consequences and interactions with changing land use
59	Are technology myths stalling aviation climate policy?	Paul Peeters, James Higham, Diana Kutzner, Scott Cohen, Stefan Gössling	2016	Transportation Research Part D: Transport and Environment
60	Assumptions in the European Union biofuels policy: frictions with experiences in Germany, Brazil and Mozambique	Jennifer Franco, Les Levidow, David Fig, Lucia Goldfarb, Mireille Hönicke, Maria Lusía Mendonça	2010	The Journal of peasant studies
61	Globiom, the basis for biofuel policy post-2020	Jos Dings	2016	Transport & Environment
62	The land use change impact of biofuels consumed in the EU Quantification of area and greenhouse gas impacts	Hugo Valin, Daan Peters, Maarten van den Berg, Stefan Frank, Petr Havlik, Nicklas Forsell, Carlo Hamelinck, Johannes Pirker, Aline	20105	Transport & Environment

No	Title	Author	Year of Publication	Journal Title/ Publisher
		Mosnier, Juraj Balkovic, Erwin Schmid, Martina Dürauer and Fulvio di Fulvio		
63	The EU system for the certification of sustainable biofuels	European Court of Auditors	2016	European Court of Auditors
64	Three routes forward for biofuels: Incremental, leapfrog, and transitional	Geoff M. Morrison, Julie Witcover, Nathan C. Parker, Lew Fulton	2016	Energy Policy
65	Finding effective pathways to sustainable mobility: bridging the science-policy gap	Scott A. Cohen, James Higham, Stefan Gössling, Paul Peeters	2016	Journal of Sustainable Tourism
66	Eco-skies, the global rush for aviation biofuel	Lukas Ross, Anuradha Mittal, Frederic Mousseau	2013	The Oakland Institute
67	Agrofuels in planes, heating the climate at a higher level	Evert Hassink, Christopher Whelehan, Iris Maher	2012	Friends of the Earth Netherlands
68	Biokerosene : take-off in the wrong direction	Geert Ritsema, Claudia Theile, Arief Zayyin, Fitri Anya, Helen Burley, Agnes de Rooij	2012	Friends of the Earth Netherlands
69	Flying in the face of the facts	Friends of the Earth Europe	2011	Friends of the Earth Europe
70	Study of the current incentive rules and mechanisms to promote biofuel use in the EU and their possible application to the civil aviation sector	Hazariah M. Noh, Arturo Benito, Gustavo Alonso	2016	Transport & Environment
71	Climate-neutrality versus carbon-neutrality for aviation biofuel policy	Philip Krammer, Lynnette, Marcus O. Köhler	2013	Transportation Research Part D: Transport and Environment