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Luonnon monimuotoisuuden huomioivat toimitusketjut ja luontopohjaiset ratkaisut: katsaus nykytutkimukseen

Liite I. Kirjallisuuskatsauksen artikkelien perustiedot

Appendix 1. Basic information about reviewed articles

Tekijät ja vuosi	Otsikko	Lehti,* vol, sivut	Fokus/tavoite**	Metodo- logia	Toimiala
Van Amstel, M., Driessen, P., & Glasbergen, P. (2008)	Eco-labeling and information asymmetry : a comparison of five eco-labels in the Netherlands	JCP, 16, 263-276	This paper analyzes five food labels with respect to the reliability of their information.	Oma analyysi- kehikko	Ruoka- teollisuus
Barbosa, F.S., Scavarda, A.J., Sellitto, M.A., & Marques, D.I.L. (2018)	Sustainability in the winemaking industry: An ana- lysis of Southern Brazilian compa- nies based on a literature review	JCP, 192, 80-87	This research aims to analyze how the deployment of the sustainable management practices fosters the competitiveness of businesses located in tourist destination producers of wines from Southern Brazil.	Tapaus- tutkimus	Ruoka- teollisuus (viini)
Battini, F., Agostini, A., Tabaglio, V., & Amaducci, S. (2016)	Environmental impacts of different dairy farming systems in the Po	JCP, 112, 91-102	An environmental Life Cycle Assessment (LCA) was perfor- med to compare four typical milk production systems of the Po Valley: drinking milk (A); Parmigiano-Reggiano more intensive (B); ParmigianoReg- giano less intensive (C) and Grana Padano (D).	Kysely ja elinkaari- arviointi	Ruoka- teollisuus (maitotuot- teet)
Betancur- Corredor, B., Loaiza-Usuga, J.C., Denich, M. & Borgemeiste, C. (2018)	Gold mining as a potential driver of development in Colombia: Challenges and opportunities	JCP, 199, 538-553	This literature review analyzes the main challenges of the gold mining sector in Colombia from the environmental and social perspective, as well as initiatives developed to cope with these challenges and the opportunities to carry out more sustainable gold mining activities in the country.	Kirjallisuus- katsaus	Kaivos- teollisuus
Boiral, O. & Heras- Saizarbitoria, I. (2017)	Corporate commitment to biodiversity in mining and forestry: identifying drivers from GRI reports	JCP, 162, 153-161	The objective of this article is to contribute to this under- researched issue by shedding light on the drivers for biodi- versity conservation of mining and forestry companies whose operations pose high risks to biodiversity.	Sisällön- analyysi vastuulli- suus- raporteista	Metsä- ja kaivos- teollisuus

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Boiral, O., Heras- Saizarbitoria, I., & Brotherton, MC. (2018)	Corporate biodiversity management through certifiable standards	BSE, 27(3), 389-402	This article analyzes the motivations, internalization challenges and outcomes of implementing certifiable standards for corporate biodiversity management.	Ankkuroitu teoria perustuen haastattelu- materiaaliin	Kaivos-, energia ja autoteol- lisuus, julkinen sektori
Bragaglio, A., Napolitano, F., Pacelli, C., Pirlo, G., Sabia, E., Serrapica, F., Serrapica, M., Braghieri, A. (2018)	Environmental impacts of Italian beef production: A comparison between different systems	JCP, 172, 4033-4043	Thus, this study aimed to compare the cradle-to-farm gate sustainability of four different Italian beef production systems, in terms of land occupation (LO, m2/year), global warming (GWP, kg CO2 -eq), water depletion (WD, m3), acidification (AP, g SO2 -eq) and eutrophication (EP, g NO3 -eq) potentials by using the LCA methodology (SimaPro 8.01 PhD, PR~e Consultants).	Elinkaari- arviointi	Ruoka- teollisuus (liha)
Brown, G., & Stone, L. (2007)	Cleaner production in New Zealand: taking stock	JCP, 15,716-728	This paper attempts to establish a context for, and provide an overview of what is occurring in New Zealand (NZ) with regard to aspects of business sustainability.	Kuvaileva, ei selkeää metodiva- lintaa	Useita
Correll, D., Suzuki, Y., & Martens, B. (2014)	Biorenewable fuels at the intersection of product and process flexibility: A novel modeling approach and application	IJPE, 150, 1-8	This paper proposes novel supply chains and land use plans for advanced biorenewable fuels which are measured for cost and environmental impact.	Mate- maattinen optimointi- mallinnus	Biopoltto- aineet
Crenna, E., Sala, S., Polce, C., & Collina, E. (2017)	Pollinators in life cycle assessment : towards a frame- work for impact assessment	JCP, 140, 525-536	In order to devise a pathway towards the inclusion of impacts on pollinators in LCIA, we conducted a literature review of environmental and anthropogenic pressures acting on insect pollinators, potentially threatening pollination services.	Kirjallisuus- katsaus	Maatalous
Dissanayake, D., Tilt, C., & Xydias-lobo, M. (2016)	Sustainability re- porting by publicly listed companies in Sri Lanka	JCP, 129,169- 182	This study empirically examines sustainability reporting in publicly listed companies in Sri Lanka, its extent, nature and possible drivers, specifically considering the use of key performance indicators.	Moni-me- netelmä- tutkimus: Sisällön- analyysi ja regressio	Useita
Ely, A., Geall, S., & Song, Y. (2016)	Sustainable maize production and consumption in China: practices and politics in transition	JCP, 134, 259-268	Applying a 'food practices in transition' framework (Spaargaren et al., 2012), this paper discusses the technological, political and socio-cultural factors central to such systemic changes, with a focus on maize as a core case study.	Tapaus- tutkimus	Maatalous (maissi)

Grigg, A. (2005)	Biodiversity and the extractive industry: innovative practices and re- maining challenges	GMI, (52), 63-76	A number of companies are developing tools and approaches aimed at avoiding and minimizing impact on biodiversity. This paper examines a number of these initiatives and barriers to their effectiveness.	Konsep- tuaalinen	Biopoltto- aineet
Holma, A., Koponen, K., Antikainen, R., Lardon, L., Les- kinen, P., Roux, P. (2013)	Current limits of life cycle assessment framework in evaluating environmental sustainability – case of two evolving biofuel technologies	JCP, 54, 215-228	This study focuses on life cycle impact categories still under methodological development, namely resource depletion, land use and land use change, water use, soil quality impacts and biodiversity.	Elinkaari- arviointi	Biopoltto- aineet
Kobayashi, H., Watando, H., & Kakimoto, M. (2014)	A global extent site-level analysis of land cover and protected area overlap with mining activities as an indicator of bio- diversity pressure	JCP, 84, 459-468	In this study, we focus on base metals that affect biodiversity through mining. This paper presents a new quantitative index, MiBiDTM, which is based on the geographic relationship among land cover, protected areas, and mining operations.	Indeksien muodosta- minen tieto- kannoista saaduista datoista	Kaivos- teollisuus
Mahlangu, N., & Thopil, G. A. (2018)	Life cycle analysis of external costs of a parabolic trough Concent- rated Solar Power plant	JCP, 195, 32-43	The presented research aims to evaluate the external cost associated with a solar CSP plant using life cycle analysis.	Elinkaari- arviointi	Aurinko- energia
Marzullo, R.D.C.M., dos Santos Matai, P.H.L. and Mori- ta, D.M. (2018)	New method to calculate water ecotoxicity footprint of products: A contribution to the decision-making process toward sustainability	JCP, 188, 888-899	Since water is an essential resource for life, this study proposes a method for calculating the Water Ecotoxicological Footprint of products and presents an illustrative example of application to achieve a single indicator that can be used in comparative assessments or benchmarking.	Elinkaari- arviointi ja vesijalan- jälki	Etanolin tuotanto
Meester, G. A., Mehrotra, A., Ault, J. S., Baker, E. K. (2004)	Designing Marine Reserves for Fis- hery Management Designing Marine Reserves for Fishe- ry Management	MS, 50(8), 1031-1043	In this paper, we propose an integrated sequence of methodologies that provides an objective, quantitative framework for the design of marine reserves in spatially heterogeneous coastal ocean environments.	Klusteroiva algoritmi, monitavoit- teellinen optimointi- malli	Kalastus
Musella, F., Bramati, M.C., & Alleva, G. (2016)	Mapping resource conflicts with pro- babilistic network models	JCP, 139, 1463-1477	This paper aims at proactive approaches to prevent, manage, and lead to a solution conflicts related to the use of land and water, nowadays spread throughout society.	Moni- muuttuja- malli	N/A

Myllyviita, T., Holma, A., Antikainen, R., Lähtinen, K., & Leskinen, P. (2012) Paula Pinheiro, M.A., Jugend, D., Filho L.C.D., & Armellini, F. (2018)	Assessing environmental impacts of biomass production chains e application of life cycle assessment (LCA) and multi-criteria decision analysis (MCDA) Framework proposal for ecodesign integration on product portfolio management	JCP, 29-30, 238-245 JCP, 185, 176-186	The purpose of this paper is to describe a process of assessing environmental impacts of two alternative raw materials and to present the problems related to it. This article proposes a theoretical framework that integrates ecodesign practices, methods, and tools with portfolio management during the product	Elinkaari- arviointi, Multi- Criteria Decision Analysis (MCDA)	Ruoka- teollisuus, Puutavara- teollisuus
Primmer, E. (2011)	Analysis of institutional adaptation: integration of biodiversity conservation into forestry	JCP, 19, 1822-1832	planning stage. This article combines these two approaches (policy implementation and organizational adaptation) by reviewing them, and their caveats, and by summarizing empirical analyses of organizational competences, specialization, professional judgment, and organizational networks in the organizational field of non-industrial private forestry in Finland.	Yhteenveto aikaisem- mista tutkimuk- sista, mm. kysely- ja haastatte- luaineisto	Metsä- talous
Reale, R., Magro, T.C., & Ribas L.C. (2018)	Measurement and analyses of biodiversity conservation actions of corporations listed in the Brazilian stock exchange's corporate sustainability index	JCP, 170, 14-24	Are sustainable companies developing sufficient actions to preserve and/or conserve biomes where they are installed? To answer, we estimated the biodiversity impacts on the Brazilian biomes developed by 11 companies which's participated, uninterruptedly, in all ISE portfolios between 2005 and 2014.	Tapaus- tutkimus	Useita
Rueda, X., Paz, A., Gibbs-plessl, T., Leon, R., Mo- yano, B., Lambin, EF. (2018)	Smallholders at a Crossroad: Intensify or Fall behind? Exploring Alternative Liveli- hood Strategies in a Globalized World	BSE, 27, 215-229	Here we assess whether these alternative configurations of the global value chain truly offer smallholders new opportunities, beyond the traditional intensification or marginalization pathways that are generally offered to them.	Kysely- tutkimus	Kaakaon- viljely
Salim, H. K., Padfield, R., Yuzir, A., Mohamad SE., Kaida, N., Papargyropou- Iou, E., Nakamu- ra, S. (2018)	Evaluating the organizational intention to implement an Environmental Management System: evidence from the Indonesian food and beverage industry	BSE, 27, 1385–1398	This research investigates the drivers, barriers and incentives for implementing EMS and their causal relationships.	Kysely- tutkimus	Ruoka- ja juoma- teollisuus

Sozinho, D.W.F., Gallardo, A.L.C.F., Duarte C.G., Ramos, H.R., Ruiz, M.S. (2018)	Towards strengthening sustainability instruments in the Brazilian sugarcane ethanol sector	JCP, 182, 437-454	The objective of this research is to analyze the environmental, social and economic issues addressed in the Bonsucro certification that could be included in Environmental Impact Statement (EIS) – the technical report of EIA process – in order to extend EIA to the non-environmental dimensions and thus strengthen its contribution for sustainability in the sugarcane ethanol sector.	Tapaus- tutkimus	Etanolin tuotanto (sokeri- ruoko)
Teixeira, R.F., de Souza, D.M., Curran, M.P., Antón, A., Michelsen, O. and i Canals, L.M., (2016)	Towards consensus on land use impacts on biodiversity in LCA: UNEP/SETAC Life Cycle Initiative preliminary recommendations based on expert contributions	JCP, 112, 4283-4287	The United Nations Environment Programme/Society of Environmental Toxicology and Chemistry (UNEP/SETAC) Life Cycle Initiative organized two consensus-building workshops regarding Life Cycle Assessment (LCA) models and indicators for land use impacts on biodiversity. This article presents a synthesis of the main recommendations drawn from the opinions of the experts present, from the Initiative's perspective.	Työpaja- työskentely elinkaari- arviointia varten, ei tarkempaa kuvausta analyysista	N/A
Whiteman, G., Vos, D. R. De, Iii, F. S. C., Yli-pelko- nen, V., Niemelä, J., Forbes B.C. (2011)	Business Strategies and the Transition to Low-carbon Cities	BSE, 20, 251-265	Taking a multi-disciplinary systems approach, we present a conceptual model of the role of companies in managing urban interactions with the climate system.	Tapaus- tutkimus	Liikenne
Wilting, H. C., & Van Oorschot, M.M.P. (2017)	Quantifying biodiversity footprints of Dutch economic sectors: A global supply-chain analysis	JCP, 156, 194-202	This study is the first that systematically quantifies supply-chain-related environmental pressures and terrestrial biodiversity losses in relation to sectoral production by presenting so-called biodiversity footprints for 47 sectors in the Dutch economy.	Kvanti- tatiivisia malleja biodiversi- teetti- jalanjälkeen	Useita
Wolff, A., Gondran, N., & Brodhag, C. (2017)	Detecting unsustainable pressures exerted on biodiversity by a company . Application to the food portfolio of a retailer	JCP, 166, 784-797	This paper presents a method to assess whether the pressures exerted by a business and its value chain on biodiversity are compatible with biodiversity conservation.	Elinkaari- arviointi	Maatalous

^{*}Lehtien nimien lyhenteet: BSE = Business Strategy and the Environment, GMI= Greener Management International, IJPE= International Journal of Production Economics, JCP = Journal of Cleaner Production, MS= Management Science

^{**}Sarakkeen "Fokus/Tavoite" sisällöt ovat suoria lainauksia artikkeleista.