Overview of posters

Monday, September 6th

*titles and authors as submitted in the abstract submission tool
MO.1.A Life Cycle Approaches in the Raw Materials Sector

Prospective analysis of supply and reserve of critical raw materials in photovoltaic solar energy
Tornero, Pablo; Garraín, Daniel

Life Cycle Assessment of silicon metal by aluminothermic reduction
Pastor Vallés, Elisa; Ma, Yan; Pettersen, Johan Berg

Socio-Environmental Capacity Building in Coal Mining Concession Area During Pandemic COVID-19: A Sharing From Trubaindo Coal Mining, East Borneo, Indonesia
Permatasari, Dewi; Herlambang, Sony; Cahyono, Budhi; Rahadin, Puji; Messias, Fx Firman; Sugiharto, Deddy

Introducing H2020 project 'ReCreate': Reusing precast concrete for a circular economy
Huuhka, Satu

Life cycle assessment applied to exploration tools for pegmatites
Smith, Kate; Pell, Robert; Yan, Xiaoyu; Wall, Frances

Life Cycle Assessment of the modified Pedersen method – challenges of an alternative alumina production route
Preveniou, Athina; Ma, Yan; Pettersen, Johan Berg; Kladis, Anastasios; van der Eijk, Casper

Circular Economy of phosphorus – challenges and findings in performing comparable LCA-studies of phosphorus-recycling
Meyer, Roland; Luthin, Anna

Environmental and economic analyses to support the sustainable valorisation of sulphidic mine residues
Di Maria, Andrea; Khoshkloo, Mohammad; Berse, Richard; Teigler, Ernst; Sand, Anders

Environmental Impacts of Novel Routes for Sc Production From Bauxite Residues and TiO2 Production Wastes
Hengevoss, Dirk; Lenz, Markus; Misev, Victor; Feigl, Vitoria
MO.1.B Transformation Towards Future Mobility

Developing a Framework for Life Cycle Assessment of Green Transportation Infrastructure (Railway and Super pavements)
Shokri, Manouchehr; Nangah Mankaa, Rose

LCA of vehicle components: how weight reduction could influence the environmental impact
Gerbinet, Saïcha; Groslambert, Sylvie; Fraselle, Justin; Koutla, Ioanna; Stroobants, Jan; Effing, Michael; de Bruijn, Freek; Heijster, Jean-Pierre; Eyckens, Philip; Cambier, Frédérik; Duysinx, Pierre

Comparison of conventional and electric aircraft for short-haul flights regarding environmental and socio-economic impacts - A cradle-to-grave assessment
Barke, Alexander; Thies, Christian; Spengler, Thomas S.

Evaluating circularity potential of various recycling technologies for biocomposites waste from the aircraft industry
Mehta, Rajesh; Lardiés Miazza, Nora; van Harmelen, Toon; Ferrero Aguar, Pablo

Design and material based Sustainable Mobility
Tikana, Ladji; Nuno, Fernando; Jezdinsky, Tomas; Gonzales, Manuel

SE:Kond2Life - ecosystem for reuse of automotive components
Lindén, Hanna; Mackrisson, Mats; Hildenbrand, Jutta; Jonasson, Christian; Schaller, Vincent; Sundin, Erik; Kurilova, Jelena; Kowalkowski, Christian; Lundin, Peter
MO.1.C Achieving Sustainability Goals on the Regional, National and International Level

Eco-efficiency Assessment of Pork production through Life Cycle Assessment and Product System Value in South Africa
Qalase, Chule; Harding, Kevin

Sustainability assessment of a more efficient concentrated solar power plant: CAPTure project
Banacloche, Santacruz; Garraín, Daniel; Lechón, Yolanda

Investigating the integration between life cycle thinking, green chemistry principles and sustainability policies
Camana, Daniela; Toniolo, Sara; Manzardo, Alessandro

Responsibility for regional sustainability of water resources – Findings from the national water footprint analysis of Japan
Motoshita, Masaharu; Pfister, Stephan; Sasaki, Takao; Nansai, Keiuke; Hashimoto, Seiji; Yokoi, Ryosuke; Finkbeiner, Matthias

Prospective LCA for energy scenarios with parameterized models adapted to isolated territories.
Besseau, Romain; Perez-Lopez, Paula; Blanc, Isabelle

Comparative Life Cycle Assessment of Direct Air Capture Technologies
Madhu, Kavya; Pauliuk, Stefan; Dhathri, Sumukha; Creutzig, Felix

Modelling material flows from the end of life of wind turbine blades in Denmark through the year 2050
Sohn, Joshua; Govindan, Kannan; Birkved, Morten

A Water Footprint Assessment for Determining the Best-regionalized Strategies for Food Loss and Waste Management in Spain
Hoehn, Daniel; Margallo, Maria; Laso, Jara; Ruiz-Salmón, Israel; Días, Ana-Cláudia; Bala, Alba; Batlle-Bayer, Laura; Fullana-i-Palmer, Pere; Aldaco, Rubén; Quinteiro, Paula

Sustainable urban wastewater treatment incorporating LCA
Pesqueira, Joana; Silva, Adrián M. T.; Pereira, Manuel F. R.
Biodiversity Impacts of Integrated Pest Management (IPM) solutions – a life cycle based assessment comparing two approaches
Lindner, Jan Paul; Kirchdorfer, Roman; Maier, Stephanie

Can biodynamic wines become even more sustainable? The eco-efficiency evaluation based on LCA and LCC analysis.
Wojnarowska, Magdalena; Muradin, Magdalena; Pink, Małgorzata

Ocean renewable energies and their potential impacts on marine biodiversity
Ruiz Méndez, Dora Yesenia; Güereca Hernández, Leonor Patricia

Comparison of the biodiversity impact of natural and synthetic production of vanilla flavor
Karg, Jonas; Stellmach, Kimberly; Lindner, Jan Paul
MO.1.E and MO.2.E
What Gets Measured, Gets Improved – Impact Assessment
and Environmental Labeling Along the Production Chain I & II

Climbing Ropes - Environmental Hotspots in Their Life Cycle and Potentials for Optimization
Bradford, Sebastian; Rupf, Reto; Stucki, Matthias

Certifications in circularity: Practices and perceptions on ecolabel use by circular economy frontrunners in Finland
Suikkanen, Johanna; Saarinen, Iina; Näyhä, Annukka

Impacts on fuel producers and customers of conflicting rules for LCA
Poulakidou, Sofia; Rydberg, Tomas; Wikström, Anna; Ekvall, Tomas; Nojpanya, Pavinee; Jogner, Carolina; Ekman Nilsson, Anna; Davis, Jennifer; Brandão, Miguel; Nilsson, Johan

Co-Creating a Standard for Circularity: An iterative, collaborative approach.
Vanacore, Emanuela; Boyer, Robert H. W.; Carlsson, Raul; Diener, Derek; Lindahl, Mattias; Carlson, Annelie

Introductory analysis for conducting Life Cycle Assessment of Brazilian silk yarn
Bortoloto Damasceno Barcelos, Silvia Mara; Oiko, Olívia
Sustainable Intelligent Mining Systems
Gustafsson, Jan; Dahlström, Niclas

From cradle to grave - a sustainable approach to recover critical raw materials applying the concept of circular economy
Arias, Andrea; Fierro, Julio; Loureiro-Gammarriello, Noelia; Martínez, Cristina; Ruíz, Maite

Sustainability Assessment of an Innovative Flotation Technology for Recovering Valuable Fine Particles
Rigamonti, Lucia; Cecere, Giuseppe

Sustainability of newly developed recovery routes for steel slags
Boonen, Katrien; Vercalsteren, An; Buyle, Matthias; Christis, Maarten; Nys, Charlotte; Oorts, Koen

ERA-MIN 3: Raw Materials for the Sustainable Development and the Circular Economy
Marchamalo, Julio; Carrilho, Dina; Sotelo, Jorge; Gómez, Beatriz
MO.2.B Decarbonized Mobility Along the Value Chain

Next Level Lightweight Production (NeLiPro)
Jurgeleit, Eva Sophie; Meilinger, Stefanie; Stieglitz, André

Environmental assessment of weight-optimized components with complex geometries for trucks and other heavy machinery in the transport sector.
Arcos, Raul; Berzosa, Joan; Espí, José Jorge; Parareda, Sergi; Claren, Frederic; Larsson, Jan; Sieurin, Henrik

An integrated method to assess the environmental sustainability of gasification catalytic conversion process for the bioethanol production from sugarcane bagasse based on a life cycle perspective: a case of study for Mexico.
Zurita-Garcia, Lizbeth; Santoyo-Castelazo, Edgar; Camacho-Luengas, Dumar Andres

Life-cycle Assessment of different power system configurations to decarbonise inland ship: A case study of sightseeing barge
Wang, Yifan; Wright, Laurie

Towards Sustainable Cruise Ships – Accompanying Socio-Ecological Assessment of Innovative Ship Cabins
Tippe, Mareike; Brand, Urte; Vogt, Thomas

Assessing the Applicability of Battery Electric Vehicles in Indonesia Based on Life Cycle Assessment
Soehardinata, Ruth; Nugroho, Rizqi; Tiogana, Vincent; Hanafi, Jessica; Jobiliong, Eric

Methane from renewable energies for the transportation sector – an environmental analysis of the crucial value chain
Lozanovski, Aleksandar; Graf, Roberta; Held, Michael

Comparison of cost and GHG emissions of various hydrogen import pathways to Germany from various European countries and overseas
Schwenk, Markus; Faltenbacher, Michael
Valuation of energy transition: development of a methodology from life cycle assessment to a multi-criteria approach
Hartmann, Didier; Teixeira, Maxime

Green Steel LCA - Direct Reduction
Möller, Lisa; Schwalb, Michael; Garvens, Hans J.; Wohlgemuth, Volker

Prospective life cycle assessment of European cement industry
Georgiades, Maria; Shah, Izhar Hussain Myers, Rupert J.
MO.2.D Carbon Inventory and Management of Bio-Based Materials for a Post-Fossil Bioeconomy

Techno-economic and life cycle assessment of a wood chips-based organosolv biorefinery concept for the production of value-added phenolic monomers from lignin using an optimized base-catalysed-depolymerisation (BCD) approach.
Zeilerbauer, Lukas; Lindorfer, Johannes; Suess, Raphaella; Kamm, Birgit

Novel carbonate production process designed in the light of a life cycle assessment
Sparenberg, Marie-Charlotte; Sangsefidi, Vida; Luis, Patricia

Carbon Footprint of Japanese professional football team in 2020
Takahashi, Kiichiro; Itsubo, Norihiro; Sakuma, Satoru; Sawada, Haruki

Life cycle assessment of Austrian and Slovenian raw wood production
Schau, Erwin M.; Asada, Raphael; Slavec, Ana; Cardellini, Giuseppe

The use of green roofs to improve wood buildings for a future bioeconomy
Brunklaus, Birgit; Schade, Jutta; Mikkavaara, Jani

Balances of biogenic carbon accounting within and across lives of polymer product systems: A case study approach towards standardization of LCA and GHG accounting frameworks
Sekar, Ananda

Carbon footprint of soybean products in the Brazilian context - a business case
Novo Fernandes, Matheus Henrique; Scachetti, Michelle

Elbasdi, Gulay; Blok, Rijk; Teuffel, Patrick
MO.1.E and MO.2.E
What Gets Measured, Gets Improved – Impact Assessment and Environmental Labeling Along the Production Chain I & II

Climbing Ropes - Environmental Hotspots in Their Life Cycle and Potentials for Optimization
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Vanacore, Emanuela; Boyer, Robert H. W.; Carlsson, Raul; Diener, Derek; Lindahl, Mattias; Carlson, Annelie

Introductory analysis for conducting Life Cycle Assessment of Brazilian silk yarn
Bortoloto Damasceno Barcelos, Silvia Mara; Oiko, Olívia
MO.3.A Developing Sustainable Chemicals and Materials Based on Innovation and Digitalization

Environmental comparison of hydrogen production technologies
Schropp, Elke; Gaderer, Matthias

Conducting the Product Carbon Footprint of the steel industry
Scharpenberg, Christina; Dumeier, Marcel; Zacharopoulos, Leon; Sprecher, Marten; Geldermann, Jutta; Janz, Andreas

Allocating Recycling Benefits in Lifecycle Assessment for Plastics: Categorization and Use of Product Property Specifications as per Value Chain
Golkaram, Milad; Mehta, Rajesh

Life cycle assessment of laminated glass recycling into high added-value products
Arias, Andrea; Fierro, Julio; Martínez, Cristina
MO.3.B Prospective Life Cycle Sustainability Assessment of Energy Technologies

Using sunlight for high-value chemicals production: Sustainability analysis of FlowPhotoChem System from a life cycle perspective
Leão, Susana; Escamilla, Marta

Development of Hybrid Cooling System with Thermoelectric Coolers and Phase Change Material for Solar Module and to Study its Effects on Module Efficiency
Singh, Deeksha; Monga, Aditi; Parvez, Yusuf

Prospective life-cycle assessment of geothermal district heating and cooling networks
Pratiwi, Astu Sam; Trutnevyte, Evelina

Combined Prospective Economic and Environmental Assessment of Energy Technologies Using the Example of Hybrid Battery Storage Systems
Willenbrock, Clemens; Draheim, Patrick; Wigger, Henning; Gomez Trillos, Juan Camilo; Brand, Urte; Vogt, Thomas

Using industrial default values for prospective modeling of new materials production – the case of photon upconversion materials for solar modules
Arvidsson, Rickard; Wickerts, Sanna; Sandén, Björn; Peters, Gregory

Life-cycle economic impacts of geothermal district heating networks: a decision tree analysis
Pratiwi, Astu Sam; Trutnevyte, Evelina

Sustainability risks and consequences of innovative redox flow battery electrolytes
Mair-Bauernfeind, Claudia; Schlemmer, Werner; Rudelstorfer, Georg; Spirk, Stefan; Stern, Tobias

How to assess ecological impacts of energy storage integration to the grid – the example of stationary battery systems
Göllner-Völker, Laura; Schebek, Liselotte

Life Cycle Assessment (LCA) of Wind Energy Systems Considering Current Technology Developments
Hengstler, Jasmin
MO.3.C Circularity and Life Cycle Aspects of Recycling Technologies

Sustainability and circularity indexes of end-of-life scenarios of photovoltaic modules
Garraín, Daniel

A Life Cycle based approach for the assessment of Circular Economy strategies for Composite Construction Materials
Bayram, Berfin

Life Cycle Management of Advanced Wastewater Recycling Technology in Textile Industry
Sieti, Natalia; Vlysidis, Anestis; Gkika, Anastasia; Petrakli, Foteini; Walser, Tobias; Studer, Christoph; Braun, Gregor; Hischier, Roland; Koumoulos, Elias

Plastic packaging waste recycling in Finland now and in the carbon-neutral future: a scenario analysis
Judl, Jáchym; Horn, Susanna

Life Cycle Environmental Impacts and Circularity on a Product Level: The Case of Metal and Carton Food Packaging
Furberg, Anna; Lyng, Kari-Anne; Raadal, Hanne Lerche

Recycling of platinum group metals from spent auto-catalyst using “dry aqua regia”
Yoshimura, Akihiro; Matsuno, Yasunari

Benefits of Retaining Materials and Their Quality in a Circular Economy
Adibi, Naeem; Lapalus, Stella; Szablewski, Carolina; Andrews, Deborah; Carpentier, Victor; Traisnel, Christian; Pereira, Soline; Schrijvers, Dieuwertje; Kerwin, Kristina; Thomas, Christian
MO.3.D Addressing Marine Litter Within Life Cycle Assessment and Management

Measurement of controlled release fertilizers rice farming in Japanese water environment
Suzuki, Hayato; Abeynayaka, Amila; Fukunaga, Yuu; Kojima, Fujio; Itsubo, Norihiro
Life cycle assessment for green bond certified office buildings
Kitami, Tomoya

Towards Country Wide Circular Economy
Salminen, Vesa; Ruohomaa, Heikki

Defining Sustainable Business Models – a qualitative approach towards a multi-criteria canvass
Mancinelli, Raimondo; Wehrmeyer, Walter; Lee, Jacquetta; Arena, Noemi; Reeves, Kevin; Embley, Tim
Overview of posters

Tuesday, September 7th

*titles and authors as submitted in the abstract submission tool
TU.1.A Circular Economy Buildings – from Research to Practice

Circular economy in the construction sector. Advancing environmental performance through systemic and holistic thinking
Sparrevik, Magnus

How circular can we get? Technical and regulatory challenges for the implementation of Circular Economy strategies for timber construction
Göswein, Verena; Zea Escamilla, Edwin; Habert, Guillaume

Challenges to use the harmonized EPDs in the European market
Szablewski, Carolina; Bolle, Clément; Adibi, Naeem

Circular Economy Buildings - BIM-based life cycle concepts in planning practice
Meier, Klara

Material characterization allowing the realization of multi-scale circular economy studies: from research to practice
Tirado, Fabian; Deanira, Rafaela
TU.1.B Future Sustainable Lifestyles – Urban Structure and Individual Choices

Tools to improve the carbon footprint of individuals living in Germany
Jungbluth, Niels; Meili, Christoph

Decisional units allow life cycle-based decision making for consumer choices
Jungbluth, Niels; Meili, Christoph

Substituting traditional foods and beverages with innovative legume-based alternatives: a consequential life cycle assessment of diet change in Europe.
Saget, Sophie; Porto Costa, Marcela; Williams, Michael; Styles, David
Evaluation of Circular Economy implementation in a Research and Technology Organization: The Indicator Circular Economy Tool (ICE-T) - Methodology and Application
Cor, Emmanuelle; Guerid, Josua; Desrousseaux, Stéphanie; Monnier, Elise

LCA of a coated textile: conventional production and new process developments
Gerbinet, Saïcha; Groslambert, Sylvie; Justin, Fraselle; Ghislad, Olivier; Bruneel, Jan; Léonard, Angélique

Life Cycle Emissions of Natural Gas Transported via TurkStream
van Rootselaar, Sander; Hengstler, Jasmin

Assessment of Life Cycle Management Maturity and Priorities in Latin American Companies
Wiche, Pia; Granato, Danilo
Digital Ecosystems as a Basis for Circular Business Networks
Braun, Anja-Tatjana; Steinbiß, Kristina

A data-driven approach to support the remanufacturing of automotive parts from end-of-life vehicles
Schaller, Vincent; Jonasson, Christian; Engblom, Tom; Bogert, Björn; Lindén, Hanna

A Knowledge-based Product Design Assistance for the Advanced Circular Economy
Wallat, Phillip; Lawrenz, Sebastian; Lohrengel, Armin

Environmental Life Cycle Assessment of Variable Rate Nitrogen Application Using a Ground-Based Optical Crop Sensor
Medel Jimenez, Francisco
ENPERAS – innovative LCA tool for EPDs development customized to specific PCRs and for exploratory environmental assessment of products

Plancke, Luc; Thuring, Mihaela
Science-Practice collaboration as leverage for Green Hospitals
Keller, Regula; Stucki, Matthias; Abplanalp, Jan-Reto

Impact of E-scooter on Sustainable Transportation in a German Student community: A Cohort Investigation
Jose, Davis; Nangah Mankaa, Rose

Improving runoff water quality through an innovative and sustainable drainage system
Arias, Andrea; Arufe, Sainza; Recarey, Montse; Fierro, Julio; Martínez, Cristina; Fernández, Isaac
Understanding the role of disruptions in the assessment of the sustainability of a supply network: a case of study on the Peruvian fishmeal production sector

Larrea Gallegos, Gustavo; Benetto, Enrico; Marvuglia, Antonino; Navarrete Gutiérrez, Tomás
TU.2.D Sustainability Assessments in Industry Creating Meaningful Information

Life cycle environmental analysis and life cycle costing of high wear-resistant rubber hoses
*Dong, Yahong; Zhao, Yating; Liu, Peng*

LCA results profiling and visualization applied to R&D in the Powder Metallurgy sector to facilitate information assimilation and eco-design actions
*Cor, Emmanuelle; Baffie, Thierry; Monnier, Elise*

Environmental and economic performance of Swiss farming products can be simultaneously improved
*Pedolin, Dario; Six, Johan; Nemecek, Thomas*

Prospective LCA of innovative pharmaceuticals using transgenic silkworms
*Nakamura, Hiroyuki; Sezutsu, Hideki; Itsubo, Norihiro*

Use of LCSA for analysing potential sustainability impacts related to circular use of wood
*Pihkola, Hanna; Pajula, Tiina; Järnefelt, Vafa; Garcia Uriarte, Ainara; Bianchi, Marco; Recio Paule, Raquel; Räty, Tarmo; vom Berg, Christopher; Kähler, Ferdinand*
TU.2.E Tools, Metrics and Labels for a Circular Economy

Energy foot-printing of seafood products based on the Water-Energy-Seafod Nexus
Villanueva Rey, Pedro; Poceiro, Lucia; Quiñoy, Diego; Perez, Concepcion; Rodriguez, Eduardo

Identifying Product Life Cycle Stage of Hard Carbon Anode Materials
Liu, Huiting

Designing of Circular Economy solutions and sustainability of agricultural products with life cycle assessment
Nitkiewicz, Tomasz; Cappelletti, Giulio Mario; Russo, Carlo

Assessing Circularity Potentials and Customer Education to Drive Ecologically and Economically Effective Materials Design for Circular Economy - A Case Study
Wielopolski, Mateusz; Guereschi, Asia

The Packaging-Index (PIX) for industry
Scagnetti, Carla; Lorenz, Manuel; Albrecht, Stefan

Mass balance approach for chemical processes
Bechtle, Miriam; Himmelreich, Birgit

Future availability of secondary raw materials for alternative concrete production in a circular economy
Komkova, Anastasija; Andersen, Birgitte Holt; Habert, Guillaume

Life cycle assessment and circularity indicators
Rigamonti, Lucia; Mancini, Eliana; Bellan, Martina

Method for strategic design in the food packaging system
Huerta, Oscar; Melo, Carolina
TU.3.A Building Information Modeling (BIM) and Life Cycle Assessment

greenBIM, a BIM-based LCA integration using a dynamic approach based on the example of the Swiss sustainability standard Minergie-ECO
Naneva, Anita; Sintzel, Barbara

Investigation of the Environmental Impacts of a Tiny House
İlípinar, Damlanur; Yazıcıoğlu, Gülin

Parametric Building Life-Cycle Assessment and multi-objective design optimization
Kalfountzos, Vasilis; Pasanen, Panu

A workflow to integrate operational and embodied aspects when implementing Life Cycle Sustainability Assessment in Building Information Modelling
Soust-Verdaguer, Bernardette; Llatas, Carmen; Ayala Carmona, Alejandro
Interpretation of Prospective LCA - a non-linear Distance to Target Approach
Garvens, Hans J.; Garvens, Hans J.

Green and circular procurement in public organizations – from single use to reuse of furniture and prolonging lifetime of electronics
Brunklaus, Birgit; Börjesson, Emma; Pedersen, Lisa

A Procurement Tool for streamlined Input-Output Sustainability Assessment
Quell, Antonia; Scholz, Richard; Forin, Silvia
Towards integration of LCA and LCC as a driver for decision-making by municipalities for sustainable renovation of existing buildings
AbuGhaida, Haitham; Andersen, Lars Vabbersgaard; Wandahl, Søren; Kamari, Aliakbar

A framework for Sustainability Assessment of Road Pavements in Europe
Lo Presti, Davide; Buttitta, Gabriella; Jiménez del Barco Carrión, Ana; Parry, Tony; Keijzer, Elisabeth; Kalman, Bjorn; Mantalovas, Konstantinos

Different perspectives on human toxicity assessment for LCA with the ProScale approach
Saling, Peter

Towards an Integrated Approach for Life Cycle Sustainability Assessment
Di Carolo, Francesca; Lagioia, Rocco

Integration of distributive justice into LCA - the foundation
Ko, Nathanael
TU.3.D Life Cycle Innovation to Drive Sustainability and Business Performance

Developing a Circular Economy for the Data Centre industry – how the CEDaCI project contributes to sustainable decision making
Kristina, Kerwin; Andrews, Deborah; Adibi, Naeem; Whitehead, Beth; Bienge, Katrin; Szablewski, Carolina; Chenadec, Julie; Ponugubati, Manoj

Rapid environmental footprint calculation of animal production using the new tool “APS Footprint”
Létinois, Ulla; Durlinger, Bart; Kok, Bjorn

People-centred Ecodesign in Latin America
Suppen, Nydia; Ariza, Raquel; Chacón, Alejandro
Overview of posters

Wednesday, September 8th

*titles and authors as submitted in the abstract submission tool
Sørensen, Lise Hvid Horup; Ryberg, Morten Walbech; Birgisdóttir, Harpa

Schnell, Peter

Syu, Fu-Siang

Schwede, Dirk; Ruf, Lavinia; Bui, Quoc-Bao; Stergiaropoulos, Konstantinos

Eloranta, Vilppu; Woszczek, Aleksandra; Grönman, Aki

Bendahmane, Nada

Geiselmann, Dietmar; Braune, Anna; Kreißig, Johannes; Quante, Kathrin
WE.1.B SDG as a Basis for Sustainability Assessments of Products and Companies

Practical guideline for cities and municipalities on an SDG-based assessment of innovations for urban surfaces using life cycle thinking

Henzler, Kristina; Maier, Stephanie; Jäger, Michael
WE.1.C Methodological Approaches to Assess Life Cycle Consequences

A proposal for the derivatization of characterization factors for CdTe Quantum dots that integrates changing particle sizes throughout their life cycle
Blázquez Sánchez, Maria; Ligthart, Tom; Corral, Beatriz; Rosenbaum, Ralph; Cajaraville, Miren P.

The risk of Product Environmental Footprints incorrectly recommending energy recovery
Ekvall, Tomas; Gottfridsson, Marie; Nilsson, Johan; Nellström, Maja; Rydberg, Maria; Rydberg, Tomas

New methods for understanding uncertainty in life-cycle assessment: Application to geothermal heating in Geneva, Switzerland
Jaxa-Rozen, Marc; Pratiwi, Astu Sam; Trutnevyte, Evelina

A methodology to evaluate the sustainability of equipment lifecycle extension strategies
Fontana, Alessandro; Barni, Andrea; Rossi, Ludovica; Leone, Deborah

A framework for linking the planetary boundaries to organizational LCAs
Oosterhoff, Hendrik; Golsteijn, Laura; Blondel, Elise; Gavrila, Ionela

Product performance and functionality: LCA’s perspective
Motta, Wladmir; Xavier, Amanda; Mangia, Leonardo

Are thermodynamic based indicators the silver bullet for assessing circularity?
Bizarro, Diana; Hauck, Mara; van Harmelen, Toon
Life cycle management in the bakery sector
Monteiro, Nathalie Barbosa Reis; Moita Neto, José; Silva, Elaine Aparecida

The WiTra web platform – Efficient knowledge transfer for sustainable innovation in industry
Pfeuffer, Simon; Wehner, Daniel; Lenz, Katrin; Borschewski, David

Innovation through design of more sustainable systems: LCA and the use of TRIZ
Motta, Wladmir; Fandiño, Sergio; Maruyama, Úrsula; Xavier, Narjara

Environmental life cycle assessment (LCA) of innovative advanced material solutions in Concentrated Solar Thermal technology as a tool for decision making and to drive sustainability
Claret, Ariadna; Escamilla, Marta

LCA: Convergences with Eco-Innovation and Ecodesign
Motta, Wladmir; Prado, Patricia
An extended maturity model to integrate digitization and sustainability-related measures in small and medium-sized manufacturing enterprises
*Süße, Marian; Münnich, Marc; Stange, Maximilian; Roth, Lukas; Ihlenfeldt, Steffen*

LCA of cognitive manufacturing applied to energy-intensive industries
*Fernández Astudillo, Miguel*
Life Cycle Sustainability Assessment in the construction sector – actual application and future outlook
Backes, Jana Gerta; Traverso, Marzia

Ex-ante LCA on an emerging electro-mass separation technology:
The importance of the background system
Maes, Ben; Audenaert, Amaryllis; Craeye, Bart; Buyle, Matthias
WE.2.B Social Life Cycle Assessment of Products

The social life cycle assessment applied to the production of sustainable synthetic fuel products
Claret, Ariadna; Escamilla, Marta

Managing the Environmental and Societal Life as Part of the Cement-Padang Manufacturing’s Contribution in West Sumatra amid the COVID-19 Pandemic
Permatasari, Dewi; Nasra, Musytaqim; Delfa, Andria; Firdaus

Towards social sustainability effective supply chains of innovative and established products: defining the human wellbeing to support
Lindkvist, Mathias; Ekener, Elisabeth

Social Life Cycle Assessment: a forecasting approach to assess the socio-economic improvement potential during the R&D phase. A case study on agricultural wood-based innovations
Fürtner, Daniela; Hesser, Franziska

Social life cycle assessment of renewable natural gas
Martín-Gamboa, Mario; Dufour, Javier; Iribarren, Diego

Socioeconomic Life Cycle Assessment of the Food Loss and Waste Management Strategies in Spain: A Regionalized Approach
Hoehn, Daniel; Margallo, María; Laso, Jara; Ruiz-Salmón, Israel; Bala, Alba; Batlle-Bayer, Laura; Fullana-i-Palmer, Pere; Aldaco, Rubén

Towards Social Life Cycle Assessment of Energy Systems: case study on offshore wind farms from companies’ perspective
Lehmann, Jérémie; Fofack-Garcia, Rhoda; Perez-Lopez, Paula

Social impacts in the transition to Single-Use Plastics’ alternatives in a circular economy system: An international airline case
Ligthart, Tom; Mesa Alvarez, Catalina
WE.2.D Business Life Cycle Networks

Matching the Supply and Demand within the Circular Economy for Used Electrical and Electronic Equipment Applying Condition Assessment
Rudolf, Sina; Lawrenz, Sebastian; Blömeke, Steffen; Mennenga, Mark; Herrmann, Christoph; Rausch, Andreas

Supporting start-ups and SME with life cycle assessment – network based information and planning for change
Tellnes, Lars G. F; Friedrich, Mathilde Fogh; Kjøniksen, Anna-Lena; Koch, Christian

Matchmaking for constructing circular value chains
Diener, Derek; Vanacore, Emanuela; Fallahi, Sara; Nyström, Thomas; Sallén, Josefina
WE.2.E Mobilizing LCA Resources Through Digital Collaboration

Improvement of Reliability of LCA for Air Conditioners Using HEMS Data and Artificial Intelligence
Sugiyama, Genta; Honda, Tomonori; Itsubo, Norihiro

Automated Data Acquisition for farm LCA
Weik, Jan

5D+: BIM-based integrated carbon and cost estimation for construction projects
Papakosta, Athina; Kindler, Maciej; Dorrell, Peter
Future of Plastic: Analysis of material issues and strategic action among stakeholders
Silva, Max

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