Oral Program

Sunday 1st November 2015											
10:00-12:30	**Registration I Auditorium Foyer**										
Auditorium											
12:30-13:00	**Conference Opening and Welcome**										
13:00-13:45	**K01: Transforming global societies with the aid of the Sustainable Development Goals: Realistic vision or impossible dreams?** **Kitty van der Heijden,** *Director, World Resources Institute Europe Office, The Netherlands*										
13:45-14:30	**K02: Bending the GHG emission curve and achieving wide-scale cleaner production benefits by 2025** **Warren Evans,** *Former Director, Environment Department, World Bank, USA*										
14:30-15:00	**Refreshment Break |Auditorium Foyer**										
Rooms	*Auditorium*	*Garbi*	*Llevant 1*	*Llevant 2*	*Llevant 3*	*Llevant 4*	*Mestral 1*	*Mestral 2*	*Mestral 3*	*Mestral 4*	*TBC*
15:00-17:30	**Session 1: Corporate Sustainability**	**Session 2: Manu-facturing**	**Session 3: Construction**	**Session 4: Energy**	**Session 5: Paradigm Change**	**Workshop 1: Sustainability in Higher Education: The Mid-Career**	**Workshop 2: Bioeconomy**	**Workshop 3: Sustainable Enterprise Business Models in Emerging Markets**	**Session 6: Waste Management**	**Workshop 4: Making next steps in Getting Product Prices Right**	
15:00-15:15	**[O1.01] Emerging sustainable practices in the context of Industry 4.0** A.Y.S. Duarte*[1,2], F.G. Dedini[1], A. Reiner[2], *[1]State University of Campinas, Brazil, [2]Technische Universität Darmstadt, Germany*	**[O2.01] Go-green anemone: an intelligent manu-facturing system's engineering method that fosters sustainability** A. Giret*[1], D. Trentesaux[2], *[1]Universidad Politecnica de Valencia, Spain[2] University of Valenciennes and Hainaut-*	**[O3.01] Harnessing the motivations of architectural designers to engage with sustainable construction** N. Murtagh*, A.H. Roberts, R. Hind, *UCL, UK*	**[O4.01] Multi-criteria methodology for evaluation of the power plants with carbon dioxide capture process** C. Dinca, *University POLITEHNICA of Bucharest, Romania*	**[O5.01] Bring your passion to business** N.L. Schumm, *Schumm Consulting LLC, USA*		**[WS2.01] Mapping biobased development pathways by a new approach** E.G. Koukios, *NTU Athens, Greece*	**[WS3.01] Business models for the diffusion of climate smart agricultural technological innovations: Critical issues and considerations** V. Blok*, T. Long, *Wageningen University, The Netherlands*	**[O6.01] Waste management: Relevance to environmental sustainability** B. Abila*, J. Kantola, *University of Vaasa, Finland*	**[WS4.01] Choice experiment to assess consumer's attitude toward "climate neutral" food: the interaction between food environmental labels** G.V. Lombardi*, R. Berni, B. Rocchi, *University of Florence, Italy*	**Empirical analysis of public's cognition and willingness to adopt solar power generation facilities based on SEM – a case in China** L.P. Ding*, C.M. Shuai, W.J. Li, J. Shuai, *China University of Geosciences (Wuhan), China*

		Cambrésis, France									
15:15-15:30	**[O1.02] Industry 4.0 in a sustainable society: Challenges, competencies and opportunities** F. Stiel*, F. Teuteberg, *Osnabrück University, Germany*	**[O2.02] Extending product life through additive manu-facturing: The sustainability implications** S.J. Ford*[1], M. Despeisse[1], A.M. Viljakainen[2], *[1] University of Cambridge, UK, [2]VTT Technical Research Centre of Finland, Finland*	**[O3.02] Properties of cement concrete with waste tyre rubber as an ingredient** B.S. Thomas*, R.C. Gupta, *MNIT Jaipur, India*	**[O4.02] Exploring methods to assess the impact of low carbon electricity generation on the embodied carbon of electricity network assets** L.A. Daniels*, B.A. Potter, P.J. Coker, *University of Reading, UK*	**[O5.02] Woven strategies for sustainable change** M. Salo*[1,3], H. Vanharanta[2], J. Kantola[1], E. Markopoulos[1], *[1]University of Vaasa, Finland, [2]Tampere University of Technology, Finland, [3]Valmet Technologies, Finland*	**WS1**	**[WS2.02] Life cycle assessment of biomass-based electricity generation in China** C. Xu, J. Hong*, *Shandong University, China*	**[WS3.02] Optimization of heterogenous catalytic synthesis of biodiesel from melon seed oil using chitosan** I.A. Mohammed*, U. Musa, B. Suleiman, A.G. Isah, I.H. Akor, *Federal University of Technology Minna, Nigeria*	**[O6.02] Beyond incineration? Representing gasification for municipal solid waste (MSW) treatment** P.J. Upham*[1,3], L. Levidow[2], *[1]University of Leeds, UK, [2]Open University, UK, [3]Leuphana Universitat, Germany*	**[WS4.02] Monetization of the environmental external costs (eco-costs) and of the social external costs (s-eco-costs) of industrial production in third world countries: A LCA-based case of clothing production in India and Bangladesh** N.M. van der Velden*, J.G. Vogtländer, *Delft University of Technology, The Netherlands*	**Multi-objective optimization model for supply chain sustainability policy impact assessment** B. Mota[1], A. Carvalho*[1], I. Gomes[2], A. Barbosa-Póvoa[1], *[1]Instituto Superior Técnico, Portugal, [2]Nova University of Lisbon, Portugal*
15:30-15:45	**[O1.03] Does it affect the environ-mental behaviour in the economic performance of the company? Empirical study in two phases.** S. Scarpellini[1,2], J. Valero-Gil*[1,2], P. Rivera-Torres[1],	**[O2.03] Life cycle engineering and evaluation of hybrid products and manufacturing processes** C. Symmank[1], W. Zorn[2], A. Albert[2], A. Schmidt[1], U. Götze*[1], W-G. Drossel[2],	**[O3.03] Performance improvement in cement production** D.L. Summerbell*, J. Cullen, C. Barlow, *University of Cambridge, UK*	**[O4.03] Carbon performance in energy intensive industries: a comparative case study** A. Paul*, R.J. Baumgartner, *University of Graz, Austria*	**[O5.03] Crafting collaboration: a conceptual exploration of strategizing by constituents in Hubs** M.A.A. Kamm*[1,2], N.F. Faber[2], J. Jonker[1], *[1]Saxon University of Applied*	**WS1**	**[WS2.03] Palm oil mill effluent (POME) and municipal wastewater co-treatment by zeolite augmented sequencing batch reactors (SBR): Turbidity removal** H. Farraji*, N.Q. Zaman, H.A.	**[WS3.03] Sustainable businesses in Latin America as hybrid organizations** V. Faber*[1], N. Franco[2], G. Berger[3], B. Van Hoof[2], *[1]Pacific University, Peru, [2]Universidad de Los Andes,*	**[O6.03] Proposed solutions in municipal solid waste management** B. Abila*, J. Kantola, *University of Vaasa, Finland*	**[WS4.03] Compre-hensive LCA for true pricing of products** P.R. Croes*, W.J.V. Vermeulen, *Utrecht University, The Netherlands*	**Multi-viewpoint sustainability assessment of a biogas plants installed in piggeries-A case study in Jintan, Jiangusu, China-** T. Hayashi[1], D. Kunii*[1], Y. Takahashi[2],

	C. Garcés-Ayerbe[1], *[1]University of Zaragoza, Spain, [2]CIRCE Foundation, Spain*	*[1]Technische Universität Chemnitz, Germany, [2]Fraunhofer Institute for Machine Tools and Forming Technology, Chemnitz/Dresden, Germany*			*Sciences, The Netherlands, [2]Radboud University Nijmegen, The Netherlands*		Aziz, P. Mohajeri, A. Mojiri, *Universiti Sains Malaysia (USM), Malaysia*	*Colombia, [3]Universidad de San Andres, Argentina*			*[1]Ministry of Agriculture, Forestry and Fisheries, Japan, [2]Kyushu University, Japan*
15:45-16:00	**[O1.04] Corporate social performance: inter-industry and international differences** H. Arminen*, K. Puumalainen, S. Pätäri, *Lappeenranta University of Technology, Finland*	**[O2.04] Machine scheduling with energy consumption consideration** W.L. Xue*, S.J. Li, H.Y. Wang, *Southeast University, China*	**[O3.04] Reducing greenhouse gasses emissions in cement industry by fostering the wider deployment of alternative materials and alternative energy sources in the cement manufacturing process** H. Mikulcic[1], J.J. Klemeš[2], M. Vujanovic[1], K. Urbaniec[3], N. Duic*[1], *[1]University of Zagreb, Croatia, [2]University of Pannonia, Hungary, [3]Warsaw*	**[O4.04] Carbon structural adjustment: Designing, motivating, and delivering an economy wide low carbon transition** K. Hargroves, *Curtin University, Australia*	**[O5.04] Sustainable business experimentation capability - an in-depth case** I. Weissbrod*[1], N. Bocken[2,3], *[1]Imperial College London, UK, [2]Delft University of Technology, The Netherlands, [3]University of Cambridge, UK*	**WS1**	**[WS2.04] Eco-efficient biorefineries: Techno-fix for resource constraints?** L. Levidow, *Open University, UK*	**[WS3.04] Value creation and distribution through sustainable enterprise** E. Reficco, R. Gutiérrez*, B. Van Hoof, *Universidad de Los Andes, Colombia*	**[O6.04] Exploring linkages between sustainable consumption and prevailing green practices in reuse and recycling of waste: a case of Bhopal city in India** R.U. Pandey*[1], A. Surjan[2], M. Kapshe[3], *[1]School of Planning and Architecture Bhopal, India, [2]Charles Darwin University, Australia, [3]Maulana Azad National Institute of Technology Bhopal, India*	**[WS4.04] The social footprint: Combining impacts of bad governance, income inequality and shared value** B.P. Weidema*[1], M. de Sacxé[2], *[1]Aalborg University, Denmark, [2]2.-0 LCA Consultants, Denmark*	**Systems thinking for sustainable textiles in the automotive sector** P. Sinha*[1], I.R. Taylor[2], *[1]University of Leeds, UK, [2]Sage AI, UK*

			University of Technology, Poland								
16:00-16:15	**[O1.05] The dark side of sustainability: Potential negative consequences that result from sustainable business practices** N. Tervonen, J. Keränen, S. Patala*, *Lappeenranta University of Technology, Finland*	**[O2.05] A capacitated plant location model for reverse logistic activities** E.K.F. Coelho*, G.R. Mateus, *Universidade Federal de Minas Gerais, Brazil*	**[O3.05] Future of residential wood construction in Europe: Participatory backcasting approach** E. Hurmekoski*[1], J. Pykäläinen[2], *[1]European Forest Institute, Finland, [2]University of Eastern Finland, Finland*	**[O4.05] How will emissions trading scheme affect China's long-term evolution of energy technologies?** H.B. Duan*[1,2], L. Zhu[2], G. Kumbaroglu[3], Y. Fan[2], *[1]University of Chinese Academy of Sciences, China, [2]Institute of Policy and Management, China, [3]Bogazici University, Turkey*	**[O5.05] By any other name: perspectives on restoration design and regenerative design at the (sub/peri)urban interface of nature and culture** R.L. France, *Dalhousie University, Canada*	**WS1**	**[WS2.05] Current status, development and perspective of biogas industrialization in China** R.L. Gao*, Z.F. Li, S.K. Cheng, H.P. Mang, F.B. Yin, X.M. Wang, *University of Science and Technology Beijing, China*	**[WS3.05] Stakeholder engagement and business model innovations in Latin-American sustainable enterprises** N. Auletta[1], G.M. Comini[2], R.M. Fischer[2], R. Gutierrez[3], M.H. Jaen[1], E. Reficco*[3], *[1]IESA, Venezuela, [2]Universidade de São Paulo, Brazil, [3]Universidad de Los Andes, Colombia*	**[O6.05] Consumer behaviors towards electronic waste in Brazil: an application of the theory of planned behavior** F. Echegaray*[1], F. Hansstein[1], *[1]Market Analysis, Brazil, [2]Shanghai University of Finance and Economics, China*	**[WS4.05] Tackling corporate hypocrisy: The facts panel on Corporate Social and Environmental Behavior (CSEB facts panel) and its effects on consumer response** A. Plank*, K. Teichmann, *University of Innsbruck, Austria*	**Implementation of the EU sustainable consumption and production policy in terms of carbon footprint** G. Liobikiene*, R. Dagiliute, R. Juknys, *Vytauta s Magnus University, Lithuania*
16:15-16:30	**[O1.06] Barriers to industrial sustainability measures: a proposal for a novel integrated framework** A. Trianni*, E. Cagno, A. Neri, *Politecnico di Milano, Italy*	**[O2.06] Decision autonomy on sustainability in international manufacturing networks** T. Fagerlund, M. Stefanicki, A. Feldmann*, *Royal Institute of Technology, Sweden*	**[O3.06] Natural ventilation improvement to reach a better indoor air quality in office rooms in Madrid** S. Hormigos-Jiménez*, R.A. González-Lezcano, *Universidad CEU San Pablo, Spain*	**[O4.06] Reducing solar power investment risks in rapidly developing countries: The impact of domestic policy and development finance** L. Carafa[1], *[1]Barcelona Centre for International*	**[O5.06] An offering's occurrence at multiple points on a linear scale of product and service** B. Deo*[1], T. Short[1], M. Li[1,2], R. Sutton[1], S. Ahmadi[1], *[1]University of Liverpool, UK, [2]Dalian University of Technology, China*	**WS1**	**[WS2.06] Bio-based industry development model** A. Blumberga, I. Muizniece, D. Blumberga, A. Kubule*, *Riga Technical University, Institute of Energy Systems and Environment, Latvia*	**[WS3.06] Theoretical foundations of sustainable business models** B. Van Hoof*[1], N. Bocken[1], *[1]Universidad de los Andes, Colombia, [2]Cambridge University, UK*	**[O6.06] Utilisation trends of fat, oil and grease (FOG) waste from food service outlets (FSOs) in Ireland** T. Wallace*[1], M. O'Dwyer[2], T.P. Curran[1], *[1]University College Dublin, Ireland, [2]Evolution Environmental*	**[WS4.06] An industrial water management value system framework** B.P. Walsh*, J. McCarthy, D.T.J. O'Sullivan, *University College Cork, Ireland*	**Transferring practices from various industries to extend and improve garment life-cycle** S.H. Khajavi*, T.R. Nyberg, *Aalto University, Finland*

				Affairs, Spain, [2]University of Cambridge, UK					*Services Ltd in partnership with Noonan Services Group, Ireland*		
16:30-16:45	**[O1.07] One by one: How social enterprises manage competing demands** M. Siegner*[1], R. Panwar[1], J. Pinkse[2], *[1]University of British Columbia, Canada, [2]The University of Manchester, UK*	**[O2.07] Estimating energy consumption of injection moulding for environmental-driven mould design** P. Matarrese, A. Fontana*, M. Sorlini, L. Diviani, *SUPSI, Switzerland*	**[O3.07] Implementing green city management: A comparative study on three continents** C.N. Madu[1,2], C. Kuei*[1], P. Lee[1], *[1]Pace University, USA, [2]University of Nigeria, Nigeria*	**[O4.07] Overview of technologies for improving energy efficiency from energy intensive industries derived from the Italian national experience in IPPC permit licensing** C. Mazziotti*, D. Fiore, M. Favaroni, A. Fardelli, *Italian National Research Council (CNR) - Institute of Atmospheric Pollution Division at MATTM, Italy*	**[O5.07] Arts for environmental qualities** Y. Krozer, *University Twente and Sustainable Innovations Academy, The Netherlands*	**WS1**	**[WS2.07] From waste treatment to resource efficiency -An analysis of EU funded research projects** F. Montevecchi*, A. Martinuzzi, *WU Vienna University of Economics and Business, Austria*	**[WS3.07] An innovation system perspective on the drivers of cost reduction for emerging energy technologies: The case of photovoltaic deployment in Germany** L. Strupeit*, L. Neij, *International Institute for Industrial Environmental Economics, Lund University, Sweden*	**[O6.07] Recommendations for minimizing the environmental impacts associated to the end-of-life of gypsum plasterboard** A. Jiménez-Rivero*, M. Rodríguez-Quijano, J. García-Navarro, *Research Group Sustainability in Construction and Industry giSCI - UPM, Universidad Politecnica de Madrid, Spain*	**[WS4.07] Global resource accounting to "get product prices right": Improved life-cycle inventories and data quality based on the myEcoCost framework** J.K.J. von Geibler*[1], K. Wiesen[1], L. Echternacht[1], R.S. Mostyn[2], *[1]Wuppertal Institute, Germany, [2]Robert Stewart Mostyn, UK*	**Standards in public procurement – A preliminary conceptual framework for enhancing eco-innovation** A. Rainville, *Technical University Berlin, Germany*
16:45-17:00	**[O1.08] Insights into how to influence systems change whilst creating system change knowledge: A case study of**	**[O2.08] Using patented parallel wire cables (PWC) and related sustainable design to revolutionize the wind and**	**[O3.08] Contribution of urban rehabilitation to Lisbon built environment system resilience**	**[O4.08] Effect of real time pricing on residential electricity consumption: Evidence from China** H. Wang, H. Fang, X. Yu*,	**[O5.08] Planning for sharing- How local authorities may encourage ecological citizenship** K. Bradley*, A. Hult,	**WS1**	**[WS2.08] Chemicals from biomass: A feasible option or a chimera? A review** G. Fiorentino*, M. Ripa, S. Ulgiati,	**[WS3.08] Trade-offs of scaling sustainable business models** A. Vernis*[3], V. Faber[1], A. Prado[2],	**[O6.08] Liquid whey recycling within the traditional dairy chain, as a sustainable alternative for whey waste management**		**Environmental Purchasing in Emerging Markets – insights from Colombia** B. Van Hoof, M. Thiell*, *Universidad de Los Andes, Colombia*

	an academic-industry consortium researching industrial sustainability I. Weissbrod*[1], G. Brennan[1], D. Morgan[2], *[1]Imperial College London, UK, [2]University of Cambridge, UK*	**transmission industries** C.A. Craig*[1], A. Lambert[2], *[1]University of Arkansas, USA, [2]Efficient Structural Solutions LLC, USA*	P.F. Pereira*, M.R. Partidário, *University of Lisbon, Portugal*	*Beihang University, China*	*KTH Royal Institute of Technology, Sweden*		*University of Naples Parthenope, Italy*	*[1]Universidad del Pacifico, Peru, [2]INCAE Business School, Costa Rica, [3]ESADE Business School, Spain*	N. Palmieri*[1], M.B. Forleo[2], E. Salimei[3], *[1]University of Molise, Italy, [2]University of Molise, Italy, [3]University of Molise, Italy*		
17:00-17:15	**[O1.09] The impact of gender, education and age on employee attitudes towards corporate social responsibility** F. Rosati*[1], A. Calabrese[2], R. Costa[2], E.R.G. Pedersen[3], *[1]Technical University of Denmark, Denmark, [2]University of Rome Tor Vergata, Italy, [3]Copenhagen Business School, Denmark*	**[O2.09] Using of vetiver grass for feldspar replacement in ceramic processing** T. Threrujirapapong*, W. Khanitchadecha, A. Nakaruk, *Naresuan University, Thailand*	**[O3.09] Modelling emergy-based urban dynamic sustainability: Considering pollution damages to human health, environment and resources** X.Y. Liu, P. Antonio, G.Y. Liu*, *Beijing Normal University, China*	**[O4.09] Utilization of asphalt heat energy in the frozen ground conditions** A. Mäkiranta*, E. Hiltunen, *University of Vaasa, Finland*		**WS1**	**[WS2.09] Biological methods for odor control-A review** K. Barbusinski[1], D. Kasperczyk[2], K. Urbaniec*[3], K. Kalemba[2], V. Kozik[4], *[1]Silesian University of Technology, Poland, [2]Ekoinwentyka Ltd.,, Poland, [3]Warsaw University of Technology, Poland, [4]University of Silesia, Poland*	**[WS3.09] Local factors influencing PV diffusion** A. Palm, *Lund University, Sweden*			**Circular economy – A review of the concept and examples of emerging practices** T.B. Christensen*, H. Hauggaard-Nielsen, *Roskilde University, Denmark*

17:15-17:30	**[O1.10] Gender approach for cleaner technologies transfer into micro, small and medium enterprises (MSMEs) and high priority industries** P. Vasquez*, I. Restrepo, *University of Valle/Cinara Institute, Colombia*			**[O4.10] Embodied energy vs. operating energy in dwellings façade: A case study of Spain** J. Sierra-Pérez[1,2], J. Boschmonart-Rives[1], X. Gabarrell*[1], S. Guillén-Lambea[2,3], B. Rodríguez-Soria[2], *[1]Universitat Autònoma de Barcelona (UAB), Spain, [2]Centro Universitario de la Defensa de Zaragoza, Spain, [3]University of Zaragoza, Spain*		**WS1**	**[WS2.10] Utilizing agro-industrial residues with a low carbon content for bioplastic production** C. Haas*, T. El-Najjar, L. Burgstaller, M. Smerilli, M. Neureiter, *University of Natural Resources and Life Sciences, Vienna (BOKU), Austria*	**[WS3.10] Do sustainable enterprises contribute to sustainable development in emerging markets?** C. Martí-Ballester, *Universitat Autónoma de Barcelona, Spain*			**Conceptualising strategic environmental assessment for privatized strategic sectors** A.R. Domingues*, A. Polido, *CENSE, Center for Environmental and Sustainability Research, Departamento de Ciências e Engenharia do Ambiente, Faculdade de Ciências e Tecnologia, Universidade Nova de Lisboa, Portugal*
17:30-18:30	**Welcome drinks & Poster viewing I Auditorium Foyer and Tramuntana**										

Monday 2nd November 2015											
07:00-07:45	**Meditation**										
Auditorium											
08:00-08:45	**K03: Our greatest sustainability problem is leadership that doesn't lead** **Karl-Henrik Robèrt,** *Blekinge Institute of Technology, Sweden*										
Rooms	*Auditorium*	*Garbi*	*Llevant 1*	*Llevant 2*	*Llevant 3*	*Llevant 4*	*Mestral 1*	*Mestral 2*	*Mestral 3*	*Mestral 4*	
08:50-09:20	**Workshop 5: Education for Sustainable Development Workshop**	**Session 7: Energy**	**Workshop 6: Remanufacturing, marketing and sustainable consumption**	**Session 8: Corporate Sustainability**	**Session 9: Supply Chain**	**Workshop 2: Bioeconomy Workshop**	**Workshop 9: Climate Smart Agriculture: Multi-disciplinary approaches now and in the future**	**Workshop 10: From Green Chemistry and Engineering to a Holistic Sustainable Chemical Industry**	**Workshop 11: The Financial sector and Environmental Sustainability solutions**	**Workshop 13: Wine Talks of Sustainability**	**TBC**
08:50-09:05	**[WS5.01] 50 Shades of green: An examination of sustainability policy on canadian campuses** T. Wright*[1], P. Vaughter[2], Y. Herbert[3], *[1]Dalhousie University, Canada, [2]York University, Canada, [3]Sustainability Solutions Group, Canada*	**[O7.01] What are the determinants of renewable energy use in localities? The Japanese case** K. Fujii*[1], H. Yamashita[1], T. Yoshimura[1], S. Okushima[2], *[1]Hitotsubashi University, Japan, [2]University of Tsukuba, Japan*	**[WS6.01] Testing a conceptual model of circular clothing value chain with product reuse in Swedish contest** M.K. Paras*, D. Ekwall, R. Pal, *University of Borås, Sweden*	**[O8.01] The influence of corporate social responsibility practices on organizational performance: evidence from eco-responsible Spanish firms** C. Reverte*, E. Gomez-Melero, J.G. Cegarra-Navarro, *Technical University of Cartagena, Spain*	**[O9.01] Impact of sustainable supplier selection on the performance of service supply chains** M. Hussain*, R. Al-Aomar, *Abu Dhabi University, United Arab Emirates*	**[WS2.11] Future consumers' and industry experts' perceptions of sustainability within the forest industry** S. Pätäri*[1], H. Arminen[1], A. Tuppura[1], A. Toppinen[2], K. Puumalainen[1], T-L. Pekkanen[1], *[1]Lappeenranta University of Technology, Finland, [2]University of Helsinki, Finland*	**[WS9.01] Advancing soil management in a changing climate: A recent UK experience** K. Rial-Lovera*, W.P. Davies, N.D. Cannon, J.S. Conway, *The Royal Agricultural University, UK*	**[WS10.01] Environmental assessment of chemical products from a Norwegian biorefinery** I.S. Modahl*, A. Brekke, C. Valente, E. Soldal, *Ostfold Research, Norway*	**[WS11.01] Multidimensional trade and sustainable growth: theory and evidence** K-E. Edgeweblime, *Lome University/ Millenium University, Togo*	**[WS13.01] Transformations of winegrowing systems beyond the audit: Guideline-based sustainability programs and their radical potential** M. Sautier*[1,2], K. Legun[2], H. Campbell[2], *[1]INRA, France, [2]University of Otago, New Zealand*	**A voluntary tool on relational accessibility of natural parks** M.B. Forleo[1], N. Palmieri*[2], *[1]University of Molise, Italy, [2]University of Molise, Italy*

09:05-09:20	**[WS5.02] What role can "the Arts" play in achieving the goals of education for sustainable development?** T. Wright*, C. Kent, *Dalhousie University, Canada*	**[O7.02] Geothermal use of abandoned, flooded mines - a review and preliminary case study of an old lead mine in Korsnäs, Finland** J.B. Martinkauppi* E. Hiltunen, *University of Vaasa, Finland*	**[WS6.02] Towards sustainable consumption through remanufacturing activities: Some insights from a case study** B. Jiménez-Parra*[1], S. Rubio[1], M.A. Vicente-Molina[2], *[1]Universidad de Extremadura, Spain, [2]Universidad del País Vasco, Spain*	**[O8.02] Understanding corporate sustainability integration; a framework based on theory and practice** S. Witjes*, W.J.V. Vermeulen, J.M. Cramer, *Utrecht University, The Netherlands*	**[O9.02] Sustainable and green supply chain management: Literature review** A. Rajeev*, R.K. Pati, S.S. Padhi, *Indian Institute of Management Kozhikode, India*	**[WS2.12] Implementing the bioeconomy strategy: Challenges from a regional perspective** A. Bezama*[1], A. Siebert[1], J. Hildebrandt[1], N. Szarka[2], S. O'Keeffe[1], D. Thrän[1,2], *[1]Helmholtz Centre for Environmental Research, Germany, [2]Deutsches Biomasseforschungszentrum, Germany*	**[WS9.02] Characterisation of technological innovations for climate smart agriculture in South Africa: Prospects and challenges for adoption** M.P. Senyolo*[1,2], T.B. Long[1], V. Blok[1], O. Omta[1], *[1]Wageningen University, The Netherlands, [2]University of Limpopo, South Africa*	**[WS10.02] Process development for the production of a novel protein source** P. Geerdink*, C. van den Berg, A. de Jong, P. Bussmann, *TNO, The Netherlands*	**[WS11.02] Roadmap towards environmental sustainability: A case study of Nordic insurers** L. Johannsdottir, *University of Iceland, Iceland*	**[WS13.02] Carbon footprint management of the aggregated wine production process** M. Marco-Fondevila*, E. Llera, S. Scarpellini, *University of Zaragoza, Spain*	**Are critical raw materials really critical for sustainable production? Empirical evidence from manufacturer's perspective** Y. Lapko*[1,2], A. Trianni[1], C. Nuur[2], P. Trucco[1], A. Feldmann[2], *[1]Politecnico di Milano, Italy, [2]KTH-Royal Institute of Technology, Sweden*
Rooms	*Auditorium*	*Garbi*	*Llevant 1*	*Llevant 2*	*Llevant 3*	*Llevant 4*	*Mestral 1*	*Mestral 2*	*Mestral 3*	*Mestral 4*	
09:20-09:50	**Workshop 5: (Continued)**	**Session 7: (Continued)**	**Workshop 6: (Continued)**	**Session 8: (Continued)**	**Session 9: (Continued)**	**Workshop 2: (Continued)**	**Workshop 9: (Continued)**	**Workshop 10: (Continued)**	**Workshop 11: (Continued)**	**Workshop 6: Remanufacturing, marketing and sustainable consumption (Continued)**	**New Workshop**
09:20-09:35	**[WS5.03] Sustainability assessment in higher education: first application and evaluation of AISHE 2.0 in Belgium**	**[O7.03] Sugar beets for biogas production? – a choice experiment approach** S. Sauthoff*, F. Anastassiadis, O.	**[WS6.03] Emerging business models in instrument reuse and remanufacturing: The case of the biotech**	**[O8.03] Organizational learning for cleaner technologies transfer into micro, small and medium enterprises (MSMEs) in**	**[O9.03] From sustainable design to sustainable implementation: Knowledge supply chains for a green economy**	**[WS2.13] Sustainability assessment of existing and emerging biowaste management systems - a Danish case study**	**[WS9.03] Methods to quantify GHG emissions to assess sustainability of cropping systems: A LCA perspective**	**[WS10.03] Strategic and preventative concept and approach of End of Life Tyre recycling via pyrolysis, for sustainable**	**[WS11.03] The degree of corporate social responsibility disclosure and its impact on banking performance: UAE Islamic versus**	**[WS6.05] Evaluating critical factors in the successful implementation of remanufacturing in Indian**	**Sustainability performance assessment of public sector organisations by external stakeholders: A participatory approach**

	W. Lambrechts[1,2], S. Rymenams*[3], *[1]University of Antwerp, Belgium, [2]Research Foundation - Flanders (FWO), Belgium, [3]University Colleges Leuven-Limburg, Belgium*	Musshoff, *Georg-August-University Goettingen, Germany*	**industry in the U.S** V.R. Veleva*, S. Gummadi, *University of Massachusetts Boston, USA*	**developing countries: An integrative framework** P. Vasquez*[1], I. Restrepo[1], A. Lauzon[2], *[1]University of Valle, Colombia, [2]University of Guelph, Canada*	T. Holm*, P. Vennervirta, E. Hämeenoja, N. Teirasvuo, *Syk li Environmental School of Finland, Finland*	M. Thomsen*, M. Seghetta, M.H. Mikkelsen, M. Scotti, *Aarhus University, Denmark*	P. Goglio*[1], W.N. Smith[1], B.B. Grant[1], R.L. Desjardins[1], X. Gao[2], K. Hanis[2], M. Tenuta[2], C.A. Campbell[1], B.G. McConkey[1], T. Nemecek[3], *[1]Agriculture and Agri-Food, Canada, [2]University of Manitoba, Canada, [3]Agroscope, Switzerland*	**implementation (The DEPOTEC LIFE+ project)** A. Zabaniotou*, A. Oniszk-Poplawska, *Prof, Greece*	**conventional banks** H. Nobanee[1,2], N. Ellili*[1], *[1]Abu Dhabi University, United Arab Emirates, [2]The University of Liverpool, UK*	**automotive firms** K. Govindan*[1], S. Luthra[2], S.K. Mangla[3], *[1]University of Southern Denmark, Denmark, [2]Government Polytechnic, India, [3]Indian Institute of Technology Roorkee, India*	A.C. Mendes[1], A.R. Domingues[1], S. Caeiro[1,2], N. Videira[1], P. Anunes[1], R. Santos[1], T.B. Ramos*[1], *[1]Universidade Nova de Lisboa, Portugal, [2]Universidade Aberta, Portugal*
09:35-09:50	**[WS5.04] An exploration of the pro-environmental awareness and behavior of various stakeholders on campus: An evidence in Tianjin, China** L.P. Fu, Y. Zhang*, Y. Bai, *Tianjin University, China*	**[O7.04] Comparative energy life cycle assessment model of multiple biomass briquetting** R.I. Muazu*, A.L. Borrion, J.A. Stegemann, *University College London, UK*	**[WS6.04] Green purchase in Austria and Lithuania: the Structural Equitation Modelling approach** G. Liobikiene*[1,3], S. Grinceviciene[1], V. Vaitkevicius[2], J. Grincevicius[1], A. Savickas[1], J. Bernatoniene[1], *[1]Lithuanian University of Health Sciences, Lithuania,*	**[O8.04] The role of contingency factors on the relationship between sustainability practices and organizational performance** M. Maletic*[1], D. Maletic[1], B. Gomiscek[2], *[1]University of Maribor, Slovenia, [2]University of Wollongong in Dubai, United Arab Emirates*	**[O9.04] Information sharing in a sustainable supply chain with schemes for disposing defectives** M. Khan, M. Hussain*, M.M. Malik, *Abu Dhabi University, United Arab Emirates*		**[WS9.04] Flouring Farmers: A systemic approach to climate smart agriculture transition** T.B. Long*, V. Blok, K. Poldner, *Wageningen UR, The Netherlands*	**[WS10.04] Improving the environmental profile of the enzymatic production of cellulose nanofibers by using sugarcane bagasse as feedstock** A.M. Jiménez*[1], Q. Tarrés[1], G. Arbat[1], J. Pujol[1], G. Quintana[3], P. Fullana-i-Palmer[2], *[1]Universitat de Girona, Spain,*	**[WS11.04] Barriers to low-carbon innovation and consequences for finance in innovation studies literature** F. Polzin, *Sustainable Business Institute (SBI), Germany*	**[WS6.06] Material recovery and energy savings from c-Si PV panels end-of-life. Life Cycle Assessment of PV panels thermal treatment.** F. Corcelli[1], M. Ripa[1], E. Leccisi[1], V. Cigolotti[2], V. Fiandra[2], M. Tammaro[2], L. Sannino[2], G. Graditi[2], S. Ulgiati*[1,3],	**Environmental assessment of EPS Bio-based alternatives in transportation packaging** D. Mosna*, G. Vignali, *University of Parma, Italy*

			[2]Klaipeda University, Lithuania, [3]Vytautas Magnus University, Lithuania					*[2]Universitat Pompeu Fabra, Spain, [3]Universidad Pontificia Bolivariana, Colombia*		*[1]Parthenope University of Naples, Italy, [2]ENEA, Italian National Agency for New Technologies, Energy and the Environment - Portici Research Centre,Naples, Italy, [3]Beijing Normal University, China*	
09:50-10:20	**Refreshment Break I Auditorium Foyer**										
Rooms	*Auditorium*	*Garbi*	*Llevant 1*	*Llevant 2*	*Llevant 3*	*Llevant 4*	*Mestral 1*	*Mestral 2*	*Mestral 3*	*Mestral 4*	
10:20-10:50	**Workshop 5: (Continued)**	**Session 7: (Continued)**	**Workshop 7: Sustainability and Social Manu-facturing**	**Session 8: (Continued)**	**Session 9: (Continued)**	**Workshop 8: Theory and Applications of Operations Research for Sustainability**	**Session 10: Agriculture and Food**	**Workshop 10: (Continued)**	**Workshop 11: (Continued)**	**Workshop 14: The business case of sustainability**	**TBC**
10:20-10:35	**[WS5.05] Introducing sustainability competences in engineering education through life cycle assessment** J. Segalas*[1], O. Enfont[2], *[1]Universitat Politècnica de Catalunya, Spain,*	**[O7.05] Product passport-A tool towards sustainable resource use** J.P. Jensen*, K. Skelton, *Aalborg University, Denmark*	**[WS7.01] Lean application: Case Study on removing wastes of non-manufacturing process-order handling process** G.Y. Xiong*[1], T.R. Nyberg[2], J. Gao[3], G. Xiong[4],	**[O8.05] Values in sustainability problem framing** T. Loskutova, *University of Witwatersrand South Africa*	**[O9.05] The effects of supply chain position and institutional environment on corporate climate change strategies** M. Damert*, R.J. Baumgartner, *University of Graz, Austria*	**[WS8.01] Clean technology: Hype or a need to have ???** D.V.H.K. Franco, *Uhasselt, Belgium*	**[O10.01] Corporate social responsibility reporting: the case of agri-food sector** V. Sodano, *University of Naples Federico II, Italy*	**[WS10.05] Delphi on the definition of chemical leasing** I. Kaltenegger*[1], R. Lozano[2], *[1]JOANNEUM RESEARCH, Austria, [2]Organisational Sustainability, UK, [3]Utrecht University, The Netherlands*	**[WS11.05] Financial incentives to promote citizen engagement and investment in sustainable development - Policy insights based on selected case studies**	BROMAN AND ROBERT	**Sustainability reporting and strategic aspects in oil & gas industry: The case of repsol** D.A. Gallardo-Vázquez*[1], M.I. Sánchez-Hernández[1], F. Hourneaux Junior[2,3], B. Galleli[3], *[1]University of Extremadura, Spain, [2]Nove de*

	[2]*REPSOL Oil Research S.A., Spain*		[1]*North Asia Region, ABB (China) Limited, China,* [2]*Aalto University, Finland,* [3]*China United Engineering Cost Consulation CO, Ltd, China,* [4]*Aalto University, Finland*						C. McInerney*[1], J. Curtin[2], [1]*University College Cork, Ireland,* [2]*Institute of International and European Affairs, Ireland*		*Julho University, Brazil,* [3]*University of São Paulo, Brazil*
10:35-10:50	**[WS5.06] Universities and our common future: Exploring faculty conceptualizations of sustainability in higher education at the University of Limpopo (South Africa)** T. Waas*[1], J. Hugé[1,2], T. Wright[3], M. Themane[4], [1]*Ghent University, Belgium,* [2]*Université Libre de Bruxelles, Belgium,* [3]*Dalhousie*	**[O7.06] Stochastic simulation of photovoltaic costs and deployment** I.D. Mauleón, *Universidad Rey Juan Carlos, Spain*	**[WS7.02] Transition to Social Manufacturing: Applications of Additive Manufacturing in consumer products** B. Mohajeri*, T. Nyberg, *Aalto University, Finland*	**[O8.06] Sustainability gains through inter-organizational collaborations in bio-based businesses: A systematic literature review** G. Nuhoff-Isakhanyan*, E. Wubben, O. Omta, *Wageningen UR, The Netherlands*	**[O9.06] Pushing carbon reduction along supply chains with consumers' willingness to pay consideration** S.N. Sun*[1], X.P. Wang[1], Y. He[1], H.Y. Wang[1], J.X. Chen[2], [1]*South east University, China,* [2]*Nantong University, China*	**[WS8.02] Multicriteria assessment of short life-cycle materials within the context of sustainable development and energy efficiency** B. Mareschal[1], J.L. Tejera Oliver*[2,3], [1]*Université Libre de Bruxelles, Belgium,* [2]*Fundación Gómez Pardo, Spain,* [3]*Universidad Politécnica de Madrid, Spain*	**[O10.02] A new approach to the environment assessment and ecolabeling of the canning industry in the north of Spain** J. Laso*, M. Margallo, R. Aldaco, A. Irabien, J. Celaya, *University of Cantabria, Spain*	**[WS10.06] Chemical Leasing - How can a new business model provide more sustainability to chemical industry?** I. Kaltenegger, *Joanneum Research Forschungsgesellschaft mbH, Austria*	**[WS11.06] Mapping the governance network of climate finance policies in the Eurozone** I. Monasterolo*[1], S. Battiston[2], [1]*Boston University, USA,* [2]*University of Zurich, Switzerland*	BROMAN AND ROBERT	**Integrated multicriteria methodology for the sustainability and the prevention of energy vulnerability in the European households** S. Scarpellini*[1], P. Rivera-Torres[2], I. Zabalza-Bribián[1], J.A. Aranda-Usón[2], T. Arciñega[2], [1]*CIRCE - University of Zaragoza, Spain,* [2]*University of Zaragoza, Spain*

	University, Canada, [4]University of Limpopo, South Africa										
Rooms	*Auditorium*	*Garbi*	*Llevant 1*	*Llevant 2*	*Llevant 3*	*Llevant 4*	*Mestral 1*	*Mestral 2*	*Mestral 3*	*Mestral 4*	
10:50-12:20	**Workshop 5: (Continued)**	**Session 7: (Continued)**	**Workshop 7: (Continued)**	**Session 8: (Continued)**	**Session 9: (Continued)**	**Workshop 8: (Continued)**	**Session 10: (Continued)**	**Workshop 10: (Continued)**	**Session 12**	**Workshop 14: (Continued)**	**New Workshop**
10:50-11:05	**[WS5.07] Transforming academic systems and life-long learning towards more sustainability by means of systemic structural constellations** M.G. Arnold, *University of Oldenburg, Germany*	**[O7.07] Analysing the greenhouse gas sensitivity of distribution networks** F.K. Kellner, *University of Regensburg, Germany*	**[WS7.03] Addressing the challenges of sustainable apparel industry with social manufacturing** B. Mohajeri*, T. Nyberg, *Aalto University, Finland*	**[O8.07] Interdependency of project orientation and environmental behavior in organizations** S. Marsina*[1], A. Hamranova[1], T. Hrivikova[1], F. Okruhlica[2], V. Bolek[1], *[1]University of Economics in Bratislava, Slovakia, [2]Pan-European University, Slovakia*	**[O9.07] Impact of additive manufacturing on supply chain management and sustainability** M. Jin[1,2], *[1]The University of Tennessee, USA, [2]Zhejiang Univeristy, China*	**[WS8.03] A common strategy for harmonising environmental sustainability skills in European SMEs** S.C.L. Koh*[1], L. Lazuras[2], T.B. Kalinowski[3], A. Genovese[1], G. Bruno[4], C. Piccolo[4], G. Wieteska[3], A. Rudnicka-Reichel[3], J. Morris[1], A. Solomon[1], *[1]University of Sheffield, UK, [2]South East European Research Centre, Greece, [3]University of Lodz, Poland, [4]University of Naples Federico II, Italy*	**[O10.03] Environmental concerns in the global honey chain: evidence from Uruguay** A. Malkamäki*[1], A. Toppinen[1], M. Kanninen[2], *[1]University of Helsinki, Finland, [2]Viikki Tropical Resources Institute, 00014 University of Helsinki, Finland*	**[WS10.07] Comparing industrial performance of oil refineries in OECD countries: Development of a normalised indicator of emissions performance for benzene releases from the refining process** A. Carpenter, *University of Leeds, UK*	**[O12.01] Assessing the degrowth discourse - From theory to policy** I. Cosme*[1], R. Santos[1], D.W. O'Neill[2,3], *[1]CENSE - Center for Environmental and Sustainability Research, University NOVA of Lisbon, Portugal, [2]University of Leeds, UK, [3]Center for the Advancement of the Steady State Economy, USA*	BROMAN AND ROBERT	**Floristic biomonitors and bioindicators of riparian vegetation as a tool for environmental management: Study in brazil's semiarid** S.M.G. Pinheiro, A.M. Melo, R.A.J. Silva, A.E. Alves, S.G. El-Deir*, *UFRPE, Brazil*

11:05-11:20	**[WS5.08] Greening the global classroom: Experiences using MOOCs to advance sustainability education** J.L. Richter*, C. Leire, P. Arnfalk, K. McCormick, H. Rodhe, *IIIEE, Sweden*	**[O7.08] Green community energy in Lebanon: a new structure toward sustainable electricity** S. Rakha*, A. Houri, *Lebanese American University, Lebanon*	**[WS7.04] The least energy demand method as a tool for a unique evaluation and cross-assessment of the energy efficiency in the production** S. Kreitlein*, F. Ultsch, M. Scholz, J. Franke, *Institute for Factory Automation and Production Systems Friedrich-Alexander-University of Erlangen-Nuremberg, Germany*	**[O8.08] Scaling up social businesses in developing markets** N.M.P. Bocken*[1,2], A. Fil[2], J. Prahbu[2], *[1]TU Delft, Industrial Design Engineering, The Netherlands, [2]University of Cambridge, UK*	**[O9.08] Freshwater resources and wood-energy supply chain design: Life cycle assessment versus water footprint assessment** E. Melis*[1], P.F. Orrù[1], C. Pilo[2], G. Uras[1], *[1]University of Cagliari, Italy, [2]Ente Foreste della Sardegna, Italy*	**[WS8.04] Education for sustainable development in policies and strategies of public Portuguese higher education institutions** C. Farinha*[1], U. Azeiteiro[1,2], S. Caeio[1,3], *[1]Universidade Aberta, Portugal, [2]University of Coimbra, Portugal, [3]New University of Lisbon, Portugal*	**[O10.04] Overview and comparative assessment of Canada's volunteer 'Alternative land use services' programs for protecting and restoring the natural capital of agro-ecosystems** J. Campbell, R. France*, K. Sherran, *Dalhousie University, Canada*	**[WS10.08] Lessons from Pfizer's green chemistry journey: Emerging drivers, barriers and opportunities for advancing a more sustainable pharmaceutical industry** V.R. Veleva, *University of Massachusetts Boston, USA*	**[O12.02] Good or bad energy? - Market reactions to electric utilities' strategic investments** A. Kuitunen*, I. Korpivaara, S. Patala, K. Puumalainen, A. Jalkala, *Lappeenranta University of Technology, Finland*	BROMAN AND ROBERT	**Changes in environmental attitudes among Norwegian consumers - Implications for consumption of materials and energy** T. Tangeland*, G. Vittersø, *National Institute for Consumer Research (SIFO), Norway*
11:20-11:35	**[WS5.09] Building sustainable development with bottom-up initiatives: The role of schools, universities and local communities** E.C. Ricci, *Università degli Studi di Milano, Italy*	**[O7.09] Speeding up power efficiency on household level - A comparative feedback approach** I. Stieß[1], M. Kunkis*[1], C. Fischer[2], *[1]ISOE-Institute for Social-Ecological*	**[WS7.05] Social manufacturing: A novel view to contribute to sustainable development** B. Mohajeri*, I. Kauranen, M. Hamalainen, *Aalto University, Finland*	**[O8.09] Environmental strategies in a developing economy: the role of managers' mind-set, firms' capabilities and institutional pressure in the adoption of a strategy**	**[O9.09] Life cycle assessment to measure the environmental sustainability of a leather shoes productive supply chain** M. Germani, M. Marconi, E. Marilungo, A. Papetti*, *Università*	**[WS8.05] Assurance and sustainability of electric energy systems** C. Lyra*[1], C. Cavellucci[1], J.F. Vizcaino[2], F.L. Usberti[1], *[1]University of Campinas (UNICAMP), Brazil,*	**[O10.05] The slaughter house industry in Egypt: The challenges and innovative cleaner production solutions-carbon footprint minimization pathways**	**[WS10.09] Atomically dispersed silver catalysts for formaldehyde oxidation** Y. Chen*, Z. Huang, P. Hu, X. Tang, *Fudan University, China*	**[O12.03] Investigating resource efficiency, environmental tax and subsidy effect in an agent-based macro-economic framework (eurace)** G. Fadiran*, M. Raberto, S. Cincotti, T.	BROMAN AND ROBERT	**Decision making challenges and software solutions in automotive recycling** C. Burger*, A. Pelken, M. Kalverkamp, *Carl von Ossietzky Universität Oldenburg, Germany*

		Research, Germany, [2]Oeko Institut e.V., Germany		C.E. Fuquene-Retamoso, *Pontificia Universidad Javeriana, Colombia*	*Politecnica delle Marche, Italy*	*[2]Universidade Estadual Paulista (UNESP), Brazil*	Y. Askar*[1], D. Huisingh[1], A.A Raouf[1], *[1]Erasmus University Rotterdam, The Netherlands, [2]University of TN, USA, [3]Basateen National Slaughterhouse, Egypt*		Flavio, *University of Genoa, Italy*		
11:35-11:50	**[WS5.10] A sustainability assessment system for university campus of Latin American** L.P. Güereca*[1], D. Henao[2], A. Noyola[1], *[1]Universidad Nacional Autónoma de México. Coyoacán, 04510 Mexico City, Mexico, [2]Universidad de Cartagena, Colombia*	**[O7.10] Communication strategy promoting energy-efficient refurbishment during the home purchasing process ("Guideline for home purchase")** M. Kunkis*[1], I. Stieß[1], J. Weiß[2], *[1]ISOE-Institute for Social-Ecological Research, Germany, [2]Institute for Ecological Economy Research, Germany*	**[WS7.06] An analysis of energy consumption saving of machining workshop** Q.Q. Zhong[1], R.Z. Tang*[1], M.Z. Jin[2,1], *[1]Zhejiang University, China, [2]The University of Tennessee, USA*	**[O8.10] Eco-efficiency maturity assessment and improvement methodology in the apparel industry** L. Litos*[1], D. Morgan[1], B. Johnston[2], R. Miltenburg[2], S. Evans[1], *[1]University of Cambridge, UK, [2]Asics Europe B.V., The Netherlands*	**[O9.10] Sustainability performance in the supply chain: A study in the food supply chain in Italy** V. León Bravo*, F. Caniato, M. Caridi, *Politecnico di Milano, Italy*	**[WS8.06] Multiple criteria framework for the sustainability risk assessment of a supplier portfolio** A. Torres*, A. Ravi Ravindran, *The Pennsylvania State University, USA*	**[O10.06] LCA-type for environmental and economic analysis of technical innovation in protected crop growing** M.T. Gorgitano, M. Pirilli*, *University of Napoli Federico II, Italy*	**[WS10.10] In-situ Raman study of Ceria-based catalysts towards diesel soot combustion** M. Fu*[1,2], Z. Wu[1], X. Lin[1], D. Ye[1,2], *[1]South China University of Technology, China, [2]Guangdong Provincial Key Laboratory of Atmospheric Environment and Pollution Control, China, [3]Guangdong High Education Engineering Technology Research Center for Air*	**[O12.04] Exploring the impact of power-dynamics on sustainable value creation in a business ecosystem** G. Brennan*[1,2], M. Tennant[1], *[1]Imperial College London, UK, [2]EPSRC Centre for Industrial Sustainability, UK*	BROMAN AND ROBERT	**Governance challenges and approaches to the circular economy** J.A. de Bruijn, E.M. van Bueren, E.H.W.J. Cuppen*, *Delft University of Technology, The Netherlands*

								Pollution Control, China			
11:50-12:05	**[WS5.11] Development of students´ sustainability knowledge, awareness and actions during university education** K. Sammalisto*, A. Sundström, Z. Yao, *University of Gävle, Sweden*	**[O7.11] Energy choice, saving energy and risk perception** M. Aoyagi, *National Institute for Environmental Studies, Japan*	**[WS7.07] Cost-benefit analysis of including prosumers in the power grid system** A. Liu*[1], B. Mohajeri[1], E. Saarijarvi[2], *[1]Aalto University, Finland, [2]Tekla Corporation, Finland*	**[O8.11] Global sustainability megaforces in shaping the future of European pulp and paper industry: Results using a Delphi approach** J. Korhonen*[1], S. Pätäri[2], A. Tuppura[2], A. Toppinen[1], *[1]University of Helsinki, Finland, [2]Lappenranta University of Technology, Finland*	**[O9.11] Opportunities for research in sustainability performance measurement in the food supply chain: A systematic literature review** V. Leon Bravo*, F. Caniato, M. Caridi, *Politecnico di Milano, Italy*	**[WS8.07] Priority assessment of the Hyogo framework for action (HFA): A case study of Nigeria** C.N. Madu*[1,2], C-H. Kuei[2], I.E. Madu[2], H.I. Eze[1], U. Odionokigbo[1], I. Ezeasor[1], E. Ogbuene[1], J. Ewoh[1], V. Nnadi[1], B.C. Ozumba[1], *[1]University of Nigeria, Nigeria, [2]Pace University, USA*	**[O10.07] Utilization of agro-industrial and urban waste as fuel in Microbial Fuel Cells (MFCs)** R.A. Nastro*[1], G. Falcucci[1], M. Minutillo[1], M. Trifuoggi[1], M. Guida[1], C. Avignone-Rossa[2], S. Dumontet[1], E. Jannelli[1], S. Ulgiati[1], *[1]University of Naples, Italy, [2]University of Surrey, UK*	**[WS10.11] Catalytic oxidation of soot over CeO_2-MnO_x: solid solution and activity correlation** M.L. Fu*[1,2], Z. Wu[1], X.T. Lin[1], H. He[1], J.M. Lin[1], D.Q. Ye[1,2], *[1]South China University of Technology, China, [2]Guangdong Provincial Key Laboratory of Atmospheric Environment and Pollution Control, China, [3]Guangdong High Education Engineering Technology Research Center for Air Pollution Control, China*	**[O12.05] Not just economics: Revisiting stakeholder engagement via a longitudinal study of S&P500 firms** P. Ritala*[1], L. Albareda[2], P. Huotari[1], K. Puumalainen[1], *[1]Lappeenranta University of Technology, Finland, [2]Deusto University, Spain*	BROMAN AND ROBERT	**A game theoretic approach on designing software quality for environmental sustainability** S.A. Kocak*[1], F. Firouzi[1], G.I. Alptekin[2], A.B. Bener[1], *[1]Ryerson University, Canada, [2]Galatasaray University, Turkey*

12:05-12:20	**[WS5.12] A theoretical holistic self-assessment framework for sustainability of universities** G. Arcese*, L. Di Pietro, R. Guglielmetti Mugion, M.C. Lucchetti, M.F. Renzi, *University of Roma Tre, Italy*	**[O7.12] Behavioral patterns of individual energy use in public buildings** C. Reischl*, S. Hatzl, E. Fleiß, S. Seebauer, A. Posch, *University of Graz - Institute of Systems Sciences, Innovation and Sustainability Research, Austria*	**[WS7.08] Social manufacturing: When mass customization meets the maker movement** M. Hamalainen*, T. Nyberg, *Aalto University, Finland*	**[O8.12] Sustainable development and corporate social responsibility: An Indian scenario** M. Sharma, *Central University of Jammu, India*	**[O9.12] Integrated hybrid lifecycle assessment and supply chain environmental profile evaluations of solid state perovskite solar cells** I. Mohammed*[1], S.C.L Koh[1], I.M. Reaney[1], A. Acquaye[1,2], G. Schileo[1], R. Greenough[3], *[1]University of Sheffield, UK, [2]University of Kent, UK, [3]De Montfort University, UK*	**[WS8.08] The Management of Greenhouse Gas Emission and its Effects on Firm Performances** M. Gastaldi*[1], F. Cucchiella[1], M. Miliacca[2], *[1]University of L'Aquila, Italy, [2]University of Rome "Tor Vergata", Italy*	**[O10.08] Lignocellulose-containing materials efficiently provide carbon for the composting process of broiler industry residues** M.S.S.M. Costa*, F.H. Bernardi, L.A.M. Costa, D.C. Pereira, L.J. Carneiro, H.D.F. Lorin, *Western Parana State University, Brazil*	**[WS10.12] Characterization of highly dispersed MnO_x/SAPO-34 catalyst for low-temperature SCR of NO with NH_3** C.L. Yu*[1], B.C. Huang[1], *[1]School of Environment and Energy, South China University of Technology, China, [2]he Key Lab of Pollution Control and Ecosystem Restoration in Industry Clusters, Ministry of Education, South China University of Technology, China*	**[O12.06] Understanding the hidden cost and identifying the root causes of changeover impacts** Z.E. Gungor*, S. Evans, *University of Cambridge, UK*	BROMAN AND ROBERT	**From excess to access: The role of sharing economy** Y. Voytenko*, O. Mont, P. Dlugosz, *Lund University, Sweden*
12:20-13:20	Lunch Break										
13:20-14:05	K04: Hans Schnitzer I Auditorium										
Rooms	*Auditorium*	*Garbi*	*Llevant 1*	*Llevant 2*	*Llevant 3*	*Llevant 4*	*Mestral 1*	*Mestral 2*	*Mestral 3*	*Mestral 4*	
14:10-15:10	**Workshop 5: (Continued)**	**Session 7: (Continued)**	**Workshop 7: (Continued)**	**Session 8: (Continued)**	**Session 9: (Continued)**	**Workshop 8: (Continued)**	**Session 10: (Continued)**	**Session 11**	**Workshop 12: Cleaner production in China: 20 years' experience and visions**	**Workshop 15: EMAN workshop**	**New Workshop**

14:10-14:25	**[WS5.13] Human factors in current approaches for integrating sustainable development in higher education** E. Verhulst*[1], W. Lambrechts[2], *[1] Norwegian University of Science and Technology, Norway, [2]University Colleges Leuven-Limburg, Belgium*	**[O7.13] Development of a global energy management system for the life sciences industry : an energy management maturity model implementation** N. Finnerty*[1,2], D. Coakley[1], M. Keane[1], R. Sterling[1], *[1]National University of Ireland, Ireland, [2]Boston Scientific Corporation, USA*	**[WS7.09] Social manufacturing : What it is and what it could be** M. Hamalainen*, T. Nyberg, *Aalto University, Finland*	**[O8.13] Evaluation of effective strategies for the expansion of the green sector at regional levels: Assessment methodology in a case study** E. Llera*[1,2], M. Marco[1], S. Scarpellini[1,2], J. Aranda[1], A. Aranda-Usón[2], *[1]CIRCE, Spain, [2]University of Zaragoza, Spain*	**[O9.13] Lessons learned from the Serbian cleaner production implementation** M. Jovanovic*, R. Pesic, *University of Belgrade, Serbia*	**[WS8.09] Optimization-oriented Material and Energy Flow Analysis of a Metallurgic Production Process** H. Lambrecht*[1], H. Hottenroth[1], T. Schröer[2], F. Schulenburg[2], *[1]Pforzheim University, Germany, [2]H.C. Starck GmbH, Germany*	**[O10.09] Upcycling poultry co-streams: results emerging from the bioeconomic frontier** H. Egelyng[1], S. Adler[2], E. Bar*[3], H.O. Hansen[1], *[1]University of Copenhagen, Denmark, [2]Bioforsk, Norway, [3]SINTEF Fisheries and Aquaculture, Norway*	**[O11.01] Status of life cycle assessment and management in achieving environmental sustainability** M.A. Curran, *BAMAC, Ltd., USA*	**[WS12.01] From cleaner production to circular economy: more economic and feasible technology innovation of the whole chain** H. Li*, Q. Li, X. Guan, *Institute of Process Engineering, Chinese Academy of Sciences, China*	**[WS15.01] Bioindicador for environmental management in environments island: Mangrove study Fernando de Noronha archipelago (Brazil)** A.M. Melo, R.A.J. Silva, A.E. Alves, S.M.G. Pinheiro, S.G. El-Deir*, *UFRPE, Brazil*	**Using the multilevel design model to increase sustainability in the Province of Friesland** T. Gorter[1], A. Börü[1,3], U. Obinna*[1,3], A. Singh[1,3], S. Çelik[1,3], J. Stelpstra[1,2], P. Joore[1,3], *[1]NHL University of Applied Sciences, The Netherlands, [2]Rijksuniversiteit Groningen, The Netherlands, [3]Delft University of Technology, The Netherlands*
14:25-14:40	**[WS5.14] Teaching life cycle thinking to agronomists: Didactical problems and opportunities for their curriculum** A.K. Cerutti*[1,2], D. Padovan[1], D. Donno[1], G.M. Mellano[1], G.L. Beccaro[1], *[1]University of*	**[O7.14] Is clean energy always sustainable? Exploring growth rates of technology, raw materials, and production capacity** S. Davidsson*, M. Höök, *Uppsala University, Sweden*	**[WS7.10] Relevancy of Institutional Social Manufacturing in High-end Fashion Apparel Industry: Evidence From the Paris Fashion Week** J.H.E. Karjalainen, *Aalto University, Finland*	**[O8.14] Improving the corporate sustainable development in hotels: using an interdependence hierarchical framework** M.L. Tseng*, M. Lim, A. Chiu, *Lunghwa University of Science and Technology, Taiwan*	**[O9.14] Moves towards more sustainable production using 'leagile' principles** P. Nieuwenhuis, *Cardiff University, UK*	**[WS8.10] Determinants of social discount rate for power plant project assessment** A.J. Chua*, W.W. Choong, *Universiti Teknologi Malaysia, Malaysia*	**[O10.10] Agro-food MNCs in Africa, a chance for human development? examples and scientific challenges** C. Macombe*[1], D. Loeillet[1], *[1]IRSTEA, France, [2]CIRAD, France*	**[O11.02] An improved social life cycle assessment methodology: The case study of a kitchen sink** M. Germani, F. Gregori*, A. Luzi, M. Mengarelli, *Università Politecnica delle Marche, Italy*	**[WS12.02] Reducing carbon emissions through cleaner production technology: a case study of an enterprise that produces large amounts of biomass waste** X. Meng*[1], Z. Wen[1], H. Yu[2], *[1]Tsinghua University, China, [2]Nankai University, China*	**[WS15.02] Triple bottom line accounting for optimizing a natural gas sustainable supply chain: A statistical linear programming approach for bootleggers, beings and biologists**	**Alkali-resistant mechanism of a hollandite deNOx catalyst** P.P. Hu*, Z.W. Huang, J.Y. Gao, Y. Wang, Y.X. Chen, X.F. Tang, *Fudan University, China*

	Turin, Italy, [2]Interdisciplinary Research Institute of Sustainability, Italy									J. Rodger, *IUP, USA*	
14:40-14:55	**[WS5.15] Sustainability reporting in higher education: Interconnecting the reporting process and organisational change management for sustainability** K. Ceulemans*[1], R. Lozano[2], M. Alonso-Almeida[3], *[1]KU Leuven - University of Leuven, Belgium, [2]Utrecht University, The Netherlands, [3]Autonomous University of Madrid, Spain*	**[O7.15] A holistic view on cloud computing and energy consumption - Outcomes and experiences of using participatory system mapping with researchers, policy makers and companies** M. Sedlacko[1], A. Martinuzzi*[2], K. Dobernig[2], *[1]University of Applied Sciences FH Campus Wie, Austria, [2]WU Vienna University of Economics and Business, Austria*	**[WS7.11] Socioeconomic and ecological carbon metabolism in Jing-Jin-Ji metropolitan area: A LCA-based element flow analysis perspective** F-X. Meng*[1], G-Y. Liu[1], Z-F. Yang[1], S. Ulgiati[1,2], *[1]Beijing Normal University, China, [2]Parthenope University of Naples, Italy*	**[O8.15] Factors influencing companies to withdraw or renew EMAS registration in Italy: An in-depth statistical analysis** M. Preziosi*, R. Merli, *Roma Tre University, Italy*	**[O9.15] Empirical approaches to development and sharing of eco-efficiency best-practice within multi-site manufacturing configurations** L. Litos*[1], P. Lunt[2], S. Hope[3], S. Evans[1], *[1]University of Cambridge, UK, [2]Airbus Operations Ltd., UK, [3]Toyota Motor Europe, Belgium*	**[WS8.11] Urban metabolism evaluation for independent system of macao from 2003 to 2013** L. Kampeng[2,1], L. Lu*[1], L. Inchio[1,2], *[1]The university of Macao, China, [2]Macau Science and Technology Association, China*	**[O10.11] Food cycling for planet earth - Towards total utilisation of rest raw materials in Norway** M. Aursand*[1], H. Egelyng[2], A. Løes[3], E. Misimi[1], R. Lantto[4], O. Strandhagen[5], G. Vittersø[1], *[1]SINTEF Fishery and aquaculture, Norway, [2]University of Copenhagen, Denmark, [3]Bioforsk, Norway, [4]VTT, Finland, [5]NTNU, Norway, [6]SIFO, Norway*	**[O11.03] Assessment of woody biomass life cycle by an ecological footprint-like index** M. Ooba*, T. Fujita, M. Fujii, T. Togawa, *National Institute for Environmental Studies, Japan*	**[WS12.03] Industrial cleaner production: China overview and perspective** L. Shi*, X. Li, L. Ma, *Tsinghua University, China*		**Improving the Sustainability of Supply Chains in Fashion Industry: The Role of Social Manufacturing and Business Intelligence** E.I. Elina Ilen*[1], J.K. Jesse Karjalainen[2], T.N. Timo Nyberg[2], *[1]Planno Oy, Finland, [2]Aalto University, Finland*
14:55-15:10	**[WS5.16] Sustainability reporting in higher education and**	**[O7.16] Learning the lessons from a regional industrial**	**[WS7.12] Worse than imaged: The unidentified virtual**	**[O8.16] Leading by example in encouraging sustainability**	**[O9.16] Mathematical optimization tools in the service of**	**[WS8.12] The impact of green buildings accreditation**	**[O10.12] Life cycle engineering of production, use and**	**[O11.04] Assessing the environmental benefits of industrial**	**[WS12.04] A study of heavy-metal-containing wastewater source reduction**		**Catalytic activity and stability of hierarchical Fe-ZSM-11 catalysts for N2O**

	organisational change potential: A case study in the University of British Columbia K. Ceulemans*[1], C. Scarff Seatter[2], I. Molderez[1], L. Van Liedekerke[1,3], *[1]KU Leuven - University of Leuven, Belgium, [2]University of British Columbia, Canada, [3]University of Antwerp, Belgium*	**energy efficiency initiative** R. Allarton*[1], G. Locatelli[2], *[1]University of Lincoln, UK, [2]University of Leeds, UK*	**water flow in China** B-M. Cai*, B. Zhang, *Nanjing University, China*	**in the workplace:The role of institutional support and leadership behaviour in enhancing pro-environmental behaviour** J. Ringersma*, V. Blok, R. Wesselink, *Wageningen University, The Netherlands*	**cleaner production** M.J. Fernández-Torres*, R. Ruiz-Femenia, J.A. Caballero, *University of Alicante, Spain*	**on construction and demolition waste minimization: A study of Hong Kong building environment assessment method using big data** X. Chen*, W.S. Lu, H.D. Wang, *The University of Hong Kong, Hong Kong*	**recovery of self-chilling beverage cans** N. Arena, R. Clift, J. Lee*, *University of Surrey, UK*	**symbosis through LCA: The case of leather products** T. Daddi*[1], B. Nucci[1], F. Iraldo[1,2], F. Testa[1], *[1]S.Anna School of Advanced Studies, Italy, [2]Bocconi University, Italy*	**technology for cellhouse of electrolytic zinc industry** J.H. Li[1], H.H. Zhou[2], L.H. Jiang*[1], F.Y. Xu[1], C. Zhou[1], Z.H. Sun[1], G.M. Han[1], N. Duan[1], *[1]Chinese Research Academy of Environmental Sciences, China, [2]Anhui University of Science and Technology, China*		**decomposition in the presence of H2O** P.F. Xie*[1], Z. Ma[2], W.M. Hua[1], *[1]Department of Chemistry, Fudan University, China, [2]Department of Environmental Science and Engineering, Fudan University, China*
15:10-15:40	Refreshment Break										
Rooms	*Auditorium*	*Garbi*	*Llevant 1*	*Llevant 2*	*Llevant 3*	*Llevant 4*	*Mestral 1*	*Mestral 2*	*Mestral 3*	*Mestral 4*	
15:45-18:00	**Workshop 5: (Continued)**	**Session 7: (Continued)**	**Workshop 7: (Continued)**	**Session 8: (Continued)**	**Session 9: (Continued)**	**Workshop 8: (Continued)**	**Session 10: (Continued)**	**Session 11: (Continued)**	**Workshop 12: (Continued)**	**Workshop 15: (Continued)**	**New Workshop**
15:45-16:00	**[WS5.17] Embedding sustainability competences in engineering education by the cradle to cradle methodology** J. Segalas*, J.J. Aliau, *Universitat Politècnica*	**[O7.17] Actions for better ecological status at small scale hydropower plants - ecosystem service assessment**	**[WS7.13] Application of life cycle engineering in technology selection: A case study on conformal cooling channels production in**	**[O8.17] Replacing subsidies by intelligence - design, implementation and impacts of publicly funded consulting programs for**	**[O9.17] Development of an algorithm for a set-up process analysis: A proposal of a sus-smed method** D. Stadnicka, *Rzeszow*	**[WS8.13] On the road to a resource efficient Europe: Insights from applications of a global simulation model** M. Meyer*, M. Distelkamp, G.	**[O10.13] Formulating common understanding ground on beverage container deposit-refund systems in Europe**	**[O11.05] Inter-organizational collaborations for sustainability in agro-industrial parks** G. Nuhoff-Isakhanyan*, E. Wubben, O.	**[WS12.05] An objective indices based cleaner production technology determining method and its application at national and industrial sector levels**	WeValue Workshop – from values to indicators (2 hrs).	**Values-based management - A stronger option with new indicators that can measure its effectiveness** M.K. Harder*[1,3], G. Burford[1], L.M. Stapleton[1], D. Podger[1], I. Velasco[1], S.

	de Catalunya, Spain	S. Tellström*, E. Grönlund, M. Fröling, *Mid Sweden University, Sweden*	**injection moulds** A. Raposo, I. Ribeiro*, P. Peças, E. Henriques, *Universidade de Lisboa, Portugal*	**corporate sustainability** A. Martinuzzi*, F. Findler, *WU Vienna University of Economics and Business, Austria*	*University of Technology, Poland*	Ahlert, *GWS (Gesellschaft fuer Wirtschaftliche Strukturforschung mbH), Germany*	D.N. Numata*[1], T.L. Lindhqvist[2], N.T. Tojo[2], *[1]Fukushima University, Japan, [2]Lund University, Sweden*	Omta, S. Pascucci, *Wageningen UR, The Netherlands*	P.L. Zhang[1], Z.Z. Wang[2], Z.G. Dan*[2], F.F. Shi[2], H.Y. Zhang[2], N. Duan[2], *[1]Tsinghua University, China, [2]Chinese Research Academy of Environmental Sciences, China*		Janoušková[2], M. Zahradnik[2], E. Hoover[1], *[1]University of Brighton, UK, [2]Charles University Environment Center, Czech Republic, [3]Fudan University, China*
16:00-16:15	**[WS5.18] Evolution and progression of education for sustainable development programmes in Ireland: From the kindergarten to the operating theatre** Y. Ryan-Fogarty*, B. O'Regan, *University of Limerick, Ireland*	**[O7.18] The green economy zeitgeist and environmental conflicts - the political ecology of germany's energy transition** G.W. Weber, *Essca Angers, France*	**[WS7.14] Improvement on environmental pollution in latex processing factory via membrane filtration** M.Y. Khairul Muis*[1], A.S. Maizatul Putri[1], V. Veellu[1], A. Asis[1], A.M. Kheireddine[2], N.S. Nik Meriam[2], *[1]Sime Darby Research Sdn. Bhd., Malaysia, [2]University of Malaya, Malaysia*	**[O8.18] Competences for sustainable development needed by industry: Aspirations and reality** E. Katiliute*, J.K. Staniškis, *Kaunas University of Technology, Lithuania*	**[O9.18] Energy, water and footprints interactions: Implications for the european and worldwide industry, service and civic sectors and agriculture** J.J. Klemeš*[1], P.S. Varbanov[1], A. Mészáros[2], X. Liu[3], *[1]University of Pannonia, Hungary, [2]Slovak University of Technology in Bratislava, Slovakia, [3]South China University of Technology, China*	**[WS8.14] An optimization model for the planning of the supply chain management in the mining industry** E. Santibañez-González*[1], C. Vergara[1], L. Canales[1], B. Pimentel[2], A. Candia-Véjar[1], *[1]Universidad de Talca, Chile, [2]Vale do Rio Doce, Brazil*	**[O10.14] Sustainable catering service: social empowerment and waste management integrated within an Italian rehabilitation facility** N. Moreira*[1], T. Wood-Harper[1], S. Sousa[2], *[1]University of Manchester, UK, [2]University of Passo Fundo, Brazil*	**[O11.06] Polycentric governance in eco-industrial networks** S. Patala*[1], S. Hämäläinen[2], M. Oinonen[1], A. Salmi[1], *[1]Lappeenranta University of Technology, Finland, [2]University of Jyväskylä, Finland*	**[WS12.06] Amended Life Cycle Assessment on Co-Benefits of Recycling Organic Wastes for Practice** Y. Qi*[1], X.D. Chen[2], W. Wang[3], *[1]Nankai University, China, [2]Dalian Dongtai Industrial Waste Treatment Co., Ltd., China, [3]Tianjin University of Technology, China*	WeValue Workshop – from values to indicators (2 hrs).	**Recycling of Construction and Demolition Waste (CDW) Towards Sustainable Beneficial Outcomes** A.E. Emmanuel*, A.O. Clinton, *University of Johannesburg, South Africa*
16:15-16:30	**[WS5.19] Embedding**	**[O7.19] A systemic**	**[WS7.15] Indoor**	**[O8.19] Competencies**	**[O9.19] Organic and**	**[WS8.15] Eco-efficiency**	**[O10.15] Flexible ethics**	**[O11.07] Industrial**	**[WS12.07] Retrospective**	WeValue Workshop –	**Research on the sustainable**

	education for sustainable development in healthcare: Opportunities for long range environmental impact mitigation from the maternity service to the home Y. Ryan-Fogarty*[1], B. O'Regan[1], R. Moles[1], G. Becker[1], *[1]University of Limerick, Ireland, [2]BEST Services, Galway, Ireland*	**approach to energy management and use in non-residential buildings in Norway** E. Verhulst*, I.N. Pettersen, R. Valle, *Norwegian University of Science and Technology, Norway*	**positioning system in sustainable manufacturing** A. Mehtälä[1], A. Ryu*[2], *[1]Nokia, Finland, [2]Aalto University, Finland*	**framework to shift to a more sustainable industrial system** L.D. Fernando*, S. Evans, *University of Cambridge, UK*	**inorganic trace pollutants in mosques carpet-dust of Riyadh, Saudi Arabia** A.H. El-Mubarak*, A.I. Rushdi, K.F. Al-Mutlaq, F.Z. Al-Mdawi, K.A. Al-Hazmi, R.S. Dumenden, R.A. Pascua, *King Saud University, Saudi Arabia*	**assessment of the Chilean fruit and vegetable production with the joint use of life cycle assessment and data envelopment analysis** L. Angulo Meza*[1], M.C. Gonzalez-Araya[2], A. Iriarte[2], R. Rebolledo[2], *[1]Universidade Federal Fluminense, Brazil, [2]Universidad de Talca, Chile*	**across space and place: a study of tourist food consumption** J. Lazell*, C. Bosangit, M. Carrigan, *Coventry University, UK*	**ecology in nitrogen fertilizer production: Reducing dependency on fossil fuel supply by increasing resource efficiency** J.K. Staniškis*, I. Kliopova, M. Malinauskiene, *Kaunas University of Technology, Lithuania*	**analysis of cleaner production construction of Shandong province in China** Y. Liu, F. Han, Q.C. Ma, Y. Li, Z.J. Cui*, *Shandong University, China*	from values to indicators (2 hrs).	**operations and management of supply chain firms'intellectual property rights - Based on the empirical analysis of chinese firms** L. Jieming, T. Mengjin, L. Shishi*, *Wuhan University of Technology, China*
16:30-16:45	**[WS5.20] An organisational model on the core components of embedding education for sustainable development within higher education** G. Cebrián[1,2], *[1]Camilo José Cela University, Spain, [2]Universidad Internacional*	**[O7.20] Dark skies: A comparative discussion of projects to reduce light pollution and preserve darkness in jurisdictions in West Virginia (USA) , Fryslan province and Texel Island (The Netherlands)** C.A. Wilt[1], H. Brezet*[2], I.	**[WS7.16] Sustainability in open social manufacturing systems** F. Cerdas*, M. Juraschek, G. Posselt, S. Thiede, C. Herrmann, *Technische Universität Braunschweig, Germany*	**[O8.20] Engineers' perceptions of 'green' in the changes towards sustainability in China** C. Zhou*[1], H. Chen[2], J. Zhou[2], *[1]Aalborg University, Denmark, [2]Northeastern University, China*	**[O9.20] Development and characterization of biomass briquettes for iron ore reduction** G.R. Byamugisha*, J.K. Byaruhanga, B. Kariko-Buhwezi, *Makerere University, Uganda*	**[WS8.16] Sustainability: A tool of supply chain risk management?** G. Zilahy, *Corvinus University of Budapest, Hungary*	**[O10.16] Vulnerability matrix of the food system: addressing food security and sustainability** A. Paloviita*, A. Puupponen, T. Kortetmäki, T. Silvasti, *University of Jyväskylä, Finland*	**[O11.08] Industrial symbiosis solutions for recycling of biosludge from the pulp industry** R. Norgren*, M. Fröling, O. Björkqvist, *Mid Sweden University, Sweden*	**[WS12.08] Cleaner production research in China: a comprehensive review** Y.T. Wang, *Shandong University, China*	WeValue Workshop – from values to indicators (2 hrs).	**Hope for a celestial city - A triptych** M. Casazza*[1], C. Ferrari[1], G. Liu[1], S. Ulgiati[1], *[1]University 'Parthenope' of Naples, Italy, [2]Hebei Normal University, China, [3]Beijing Normal University, China, [4]Beijing Engineering Research Center for Watershed Environmental Restoration &*

	de la Rioja, Spain	Dijkstra[3], *[1]Univ. of Tennessee-Knoxville, USA, [2]Delft University of Technology, The Netherlands, [3]Bureau Licht & Kleur Rotterdam, The Netherlands*									*Integrated Ecological Regulation, China*
16:45-17:00	**[WS5.21] Continue making sustainable development the golden thread throughoutall levels of education** K. Sammalisto[1,2], *[1]Essential Maintenance Service Unit (EMSU), USA, [2]The Environmental Association for Universities and Colleges, USA*	**[O7.21] An optimal design framework for distributed energy system corresponding to regional characteristics : Decarbonizing planning system for Fukushima revitalization** T. Togawa*, M.O. Makoto, M. Fujii, T. Fujita, *National Institute for Environmental Studies, Japan*	**[WS7.17] Human centric and socially sustainable Manufacturing : Challenges, stakeholder views and research gaps** M. Pinzone*, P. Fantini, M. Taisch, *Politecnico di Milano, Italy*	**[O8.21] Sustainable production adoption by surface treatment SMEs: Challenges and enablers** C. Alayón*[1], A. Sannö[2], K. Säfsten[1], G. Johansson[1], *[1]Jönköping University, Sweden, [2]Mälardalen University, Sweden*	**[O9.21] Technologies in the frame of Degrowth - Recent debates and new visions** L. Nierling*[1], M-H. Ehlers[2], C. Kerschner[3], P. Wächter[4], *[1]Karlsruhe Institute of Technology, Germany, [2]James Hutton Institute, UK, [3]Masaryk University, Czech Republic, [4]University of Vienna, Austria*	**[WS8.17] What is resilience? Presenting a conceptual framework combined with an analysis of the ibero-american countries** D.M. Conti*, A.J.H. Guevara, L.F. Silva, *PUC - SP, Brazil*	**[O10.17] Decreasing greenhouse gas emissions of meat products through food waste reduction - Framework for a sustainability assessment approach** T. Winkler*, R. Aschemann, *University of Graz, Austria*	**[O11.09] What explains the decrease of EMAS registrations at the European level?** T. Daddi*[1], M.R. De Giacomo[1], M. Frey[1], F. Iraldo[1], *[1]S.Anna School of Advanced Studies, Italy, [2]Bocconi University, Italy*	**[WS12.09] The evolution of cities: "brains" or "parasites" of sustainable production and consumption processes in China** X.Y. Liu[1], G.Y. Liu*[1], F.X. Meng[1], S. Ulgiati[1,2], *[1]Beijing Normal University, China, [2]Parthenope University of Naples, Italy*	WeValue Workshop – from values to indicators (2 hrs).	**The importance of appropriate interaction with stakeholders towards environmentally sensitive policies** C. Vassillo*[1], C. Hornsby[1], M. Ripa[1], S. Ulgiati[1], *[1]Parthenope University of Napoli, Italy, [2]RWTH Aachen University, Germany*
17:00-17:15	**[WS5.22] The role of transdisciplinarity in**	**[O7.22] The design of distribution of carbon**	**[WS7.18] Energy efficiency in the**	**[O8.22] Corporate sustainability index in**	**[O9.22] Food preservation by evaporative cooling in**	**[WS8.18] Global risks and resilience**	**[O10.18] Food leftovers in canteens-determinants**	**[O11.10] Paradoxes of EMAS performance:**	**[WS12.10] Where does cement go?-an analysis of**	WeValue Workshop – from values to	**How flexible institutions fostered anomalous**

	engineering education for sustainability J. Segalas*, G. Tejedor, M. Rosas, *Universitat Politècnica de Cataluna, Spain*	**emission rights in the area of Qinba mountains, China** L. Xu, K. Wang*, *Beijing Normal University, China*	**petrochemical industry in China: Lessons for future improvements** N. Masroori, *Fudan University, China*	**Portugal: A systemic concept** M.R. Partidario*[1,2], J. Lima[1], *[1]Instituto Superior Tecnico, Portugal, [2]CEG-IST, Portugal*	**developing countries and the challenges of energy sustainability** I.U. Hussaini*[1], N.H. Abdul Majid[2], A.Z. Jibril[1], S.K. Ibrahim[1], *[1]Abubakar Tafawa Balewa University Bauchi, Nigeria, [2]International Islamic University Malaysia, Malaysia*	D. Gasperin*[2], A.J.H. Guevara[1], *[1]PUC - SP, Brazil, [2]NEF PUC - SP, Brazil*	**of consumer behavior and options for intervention** B.A. Lorenz*, N. Langen, *Rheinische Friedrich-Wilhelms-Universität Bonn, Germany*	**A configurational approach** T. Daddi*[1], F. Testa[1], O. Boiral[2], F. Iraldo[1], *[1]Sant' Anna School of Advanced Studies, Italy, [2]University of Laval, Canada*	**cement metabolism in a rapid urbanizing city, China** W. HUANG*[1], Y. HUANG[2], Z. CHEN[2], S. CUI[1], *[1]Institute of Urban Environment, Chinese Academy of Sciences, China, [2]Jimei University, China*	indicators (2 hrs).	**success in food waste sorting** Z.Y. Lin*, M.K. Harder, *Fudan University, China*
17:15-17:30	**[WS5.23] How to assess sustainability competences in engineering education. A conceptual framework and methodology.** J. Segalas*, A. Hernandez, *Universitat Politècnica de Catalunya, Spain*	**[O7.23] A methodology integrating Taguchi, RSM and MOPSO to CNC machining parameters optimization for energy saving** Q.G. Xiao[1], C.B. Li[1], Q.L. Wang*[2], Y. Tang[3], L. Li[1], *[1]Chongqing University, China, [2]Rowan University, USA, [3]Southwest*		**[O8.23] Corporate environmental strategies and actions in the D. Pedro I road axis, São Paulo, Brazil** J.L. Hoefel*[1], S.R. Seixas[2], M.S. Simões[1], R. Manabe[1], M.K. Machado[1], *[1]Faculdades Atibaia, Brazil, [2]NEPAM/UNICAMP, Brazil*	**[O9.23] Addressing the slow progress of cleaner production through insights of technology diffusion theories: A proposed integrated model** D. Sakr, *Universiteit Rotterdam, The Netherlands*	**[WS8.19] The southern Brazil environmental industry contribution to the sustainability of waste management in the industry** M.K. Santos*, A.M.F. Danilevicz, V.R. Piazza, C. Cavalli, R.M.C. Tubino, *Universidade Federal do Rio Grande do Sul - UFRGS, Brazil*	**[O10.19] A smart system to support users in reducing food waste** A. Papetti*, L. Salladini, M. Germani, *Università Politecnica delle Marche, Italy*	**[O11.11] Streamlining environmental management systems: An assessment of alternative EMS certification schemes** P. Tourais*, N. Videira, *Universidade Nova de Lisboa, Portugal*	**[WS12.11] Dynamic analysis of urban water footprints: A case study of Xiamen city, China** J. Lin, J. Kang*, S. Cui, Q. Zhang, *Chinese Academy of Sciences, China*	WeValue Workshop – from values to indicators (2 hrs).	**The shift of agricultural production in South Yangtze river and the environmental effects submission to the climate smart agriculture workshop** L.P. Yang, *Fudan University, China*

		University, China									
17:30-17:45	**[WS5.24] Navigating diversity in universities** N. Tojo, B. Kiss*, *Lund University, Sweden*			**[O8.24] Values-led organisational change - Overview of findings and outline of a project for a large hospital** F. Firoozmand[1], G. Burford[1], M.K. Harder*[1,2], *[1]University of Brighton, UK, [2]Fudan University, China*	**[O9.24] Mass customization and sustainability for consumer electronics: a case study of Google's modular smartphone concept** S. Hankammer*[1], R. Kleer[1], M. Schymanietz[2], *[1]RWTH Aachen, Germany, [2]Friedrich-Alexander-University Erlangen-Nuremberg, Germany*	**[WS8.20] Management of response operations in humanitarian logistic after an earthquake** G. Del Rio, L. Pradenas*, J. Carrasco, *Universidad de Concepción, Chile*	**[O10.20] Sustainable Nutrition - Transformation potentials and barriers in the hospitality sector** M. Lukas*[1], N. Langen[1], *[1]Wuppertal Institute, Germany, [2]University of Bonn, Germany*		**[WS12.12] Analysis on the state of cleaner production development in China** C.B. Zhou*, H.J. Yu, J.J. Liu, Z. Li, Y.Y. Bai, *Chinese Research Academy of Environmental Sciences, China*	WeValue Workshop – from values to indicators (2 hrs).	**Designing Localisable Frameworks as Powerful Behaviour Change Tools** M.K. Harder*[1], M. Gordon[1], D.Y. Xu[1], Y.C. Dai[1], *[1]Fudan University, China, [2]University of Brighton, UK*
17:45-18:00									**[WS12.13] Research on cleaner production in China during the 1985-2015 period : A bibliometric analysis** C-B. Zhou*, Z-Y. Zhao, Z. Li, J-J. Liu, H-J. Yu, *Chinese Research Academy of*		**Application of Dielectric Barrier Discharge Process in Microorganism Removal from Water** Y.Zhang, *Fudan University, China*

									Environmental Sciences, China		
Tuesday, 03rd November 2015											
07:00-07:45	Meditation I Auditorium										
08:00-08:45	K05: Yvo de Boer I Auditorium										
08:45-09:30	K06: Angela Mason I Auditorium										
09:30-10:00	Refreshment Break										
Rooms	*Auditorium*	*Garbi*	*Llevant 1*	*Llevant 2*	*Llevant 3*	*Llevant 4*	*Mestral 1*	*Mestral 2*	*Mestral 3*	*Mestral 4*	
10:05-11:05	**Workshop 5: Education for Sustainable Development Workshop (continued)**	**Session 13**	**Workshop 16: Climate change: Carbon Budgets, Energy Efficiency Improve-ments, Renewable Energy Systems and Policy Approaches Designed to Reduce Industrial CO2 Emissions**	**Session 14**	**Session 15**	**Workshop 19: Corporate impact measurement and management at the dawn of a new global sustainable development agenda**	**Workshop 21: Urban Mining**	**Workshop 24: Eco-design and PSS**	**Workshop 25: Awakening the Dreamer Symposium**	**Workshop 28: New policy approaches for Eco-design**	
10:05-10:20	**[WS5.25] The INDICARE-model – measuring and caring about participation in higher education's sustainability assessment** A. Disterheft*[1,2], U.M. Azeiteiro[1,2], W. Leal Filho[4], S.S. Cairo[1]	**[O13.01] How national environmental proactiveness can exert influence on the appeal of investing in a country? Environmental performance indicators as predictors of country risk**	**[WS16.01] Revenue-based transmission network expansion planning** A. Arabali[1], M. Ghofrani*[1,2], J. Fisher[1,3], *[1]NEC Lab Americas, Inc, USA, [2]University of Washington, USA,*	**[O14.01] Energy businesses from re-used electric vehicle batteries** L. Canals Casals*[1], B. Amante García[1], S. Castellà Dagà[2], M. Cruz-Zambrano[3], *[1]U niversitat Politècnica de*	**[O15.01] Deceleration of economic growth as a regular trend in developed countries: holistic approach** R. Juknys*, G. Liobikiene, R. Dagiliute, *Vyta utas Magnus university, Lithuania*	**[WS19.01] EY Austria's approach to corporate impact measurement** C. Jasch, C. Saleta*, *EY Austria, Austria*	**[WS21.01] Consumer behavior concerning spent battery collection and recycling in China: a case study** M. Sun*[1,2], X. Yang[1], D. Huisingh[3], Y. Wang[1], R. Wang[1], *[1]Shan dong*	**[WS24.01] Eco-Co-Design - Ecodesign with Communicatio n, Cooperation, and Co-creation: A preliminary report** T. Sakao, *Linköpi ng University, Sweden*	**WS25**	**[WS28.01] Sustainable production through innovation in the wood and furniture sector: Promoting policy-making and eco-design tools from a joint administratio n-research-**	**Recycling and recovery of NOM saturated GAC by persulfate oxidation** X. Huang, D. An*, *Fudan University, China*

	[,3], [1]*Universidade Aberta, Portugal,* [2]*Universidade Coimbra, Portugal,* [3]*Universidade Nova de Lisboa, Portugal,* [4]*Manchester Metropolitan University, Portugal*	R. Cervello-Royo*, A. Peiro-Signes, M. Segarra-Oña, *Polytechnic University of Valencia, Spain*	[3]*University of Washington, USA*	*Catalunya, Spain,* [2]*Centro Técnico SEAT, Spain,* [3]*Institut de Recerca en Energia, Spain*			*University, China,* [2]*Lund Universty, Sweden,* [3]*University of Tennessee, USA*			**industry project** A. Petit-Boix*[1], E. Sanyé-Mengual[1], P. Llorach-Massana[1,2], J. Rieradevall[1,3], X. Gabarrell[1,3], R.G. Lozano[4], C.M. Gasol[1,4], V. Vázquez[5], G. Rodríguez[5], R. Rodríguez-Acuña[5], [1]*Universitat Autònoma de Barcelona (UAB), Spain,* [2]*ELISAVA Barcelona School of Design and Engineering, Spain,* [3]*Universitat Autònoma de Barcelona (UAB), Spain,* [4]*Inèdit Innovació SL, Spain,* [5]*Instituto Andaluz de Tecnología (IAT), Spain*	
10:20-10:35	**[WS5.26] Implementing Integrative Approaches to Sustainability in Higher**	**[O13.02] A hub is a hub not a network towards a typology of hubs framed**	**[WS16.02] CO_2 emission and mitigation potential simulation of China's**	**[O14.02] Electric taxi transformation in Beijing and its**	**[O15.02] Optimizing well-being through systems reorientation**	**[WS19.02] Grand challenges in measuring and managing sustainable**	**[WS21.02] Substance flow analysis as a tool for improving resource**	**[WS24.02] Provider value - more than profit: A comprehensive concept to**	**WS25**	**[WS28.02] IES Industrial equipment symbiosis, the future of sustainable**	**A rare thing: What can we learn from a long-term successful incentives-based recycling scheme?**

	Education: the role of project-oriented learning W.L. Filho*, C. Shiel, A. Paco, *HAW Hamburg, Germany*	**as a transferor for sustainable development** N.R. Faber*[1], J. Jonker[2], *[1]Saxion, The Netherlands, [2]Roadbed University Nijmegen, The Netherlands*	**primary aluminum industry** Q. Li, W.J. Zhang, H.Q. Li, P. He*, *Chinese Academy of Sciences, China*	**environmental impacts** X.Q. Shi*, Z.X. Sun, J.X. Yang, *Research center for eco-environmental sciences, China*	**to sustainable consumption** K.M. Kevany*, G. Baur, *Dalhousie University, Canada*	**development impacts - A comparative review across communities of practice** N. Schoenherr, A. Martinuzzi*, *Vienna University of Economics and Business, Austria*	**efficiency of pre-processing of WEEE** M. Ueberschaar*[1], J. Geiping[2], V.S. Rotter[1], S. Flamme[2], *[1]Technische Universität Berlin, Germany, [2]FH Münster, Germany*	**assess value generation in Product/Service Systems** J. Matschewsky*, T. Sakao, M. Lindahl, *Linköping University, Sweden*		**industrial equipment design** G. Ridaura*, C. Riba-Romeva, *Polytechnic University of Catalonia, Spain*	C.J. Li*, M.K. Harder, *Fudan University, China*
10:35-10:50	**[WS5.27] Energy research area and energy academic content in curricula for sustainable development** F.J. Lozano*, I. Studer, G. Ortiz, A. Mendoza, *Tecnológico de Monterrey, Mexico*	**[O13.03] Rethinking the social contract: measuring and reporting sustainability in context** N.R. Faber*[1], H. Hadders[2], *[1]Saxion University of Applied Sciences, The Netherlands, [2]University of Groningen, The Netherlands*	**[WS16.03] Differences of the emission coefficients of China's cement clinkers and selection method for regional emission reduction** L. Shen*, T.M. Gao, J.A. Zhao, L.M. Wang, L.T. Liu, *Institute of Geographic Sciences and Nature Resources Research (IGSNRR),CAS, China*	**[O14.03] Portfolio Optimization for Clean Energy Vehicles in UK considering Life Cycle CO_2 of Electricity Generation** H. Nakamura*[1], M. Despeisse[2], M. Nakano[1], S. Evans[2], *[1]Keio University, Japan, [2]University of Cambridge, UK*	**[O15.03] Bridging the attitude-behavior gap in sustainable consumption: the role of environmental governance** Y. Wang, *Nankai University, China*	**[WS19.03] Assessing the impacts of multinational corporations on global development and value creation: The role of systems of governance for responsible business conduct** F. Wolff*[1], C. Brunn[1], W. Chapple[2], S. Pouryousefi[2], W. Meyer[4], J. Rech[4], A. Jenkins[3], *[1]Oeko-Institute e.V., Germany, [2]University of Nottingham, UK, [3]BRAC, Bangladesh,*	**[WS21.03] Potential of urban mining from the reverse logistics electronics equipment in BRICS and G7 countries** J.S.G. Santos*, S.G. El-Deir, *UFRPE, Brazil*	**[WS24.03] Evaluating the environmental performance of product/service-systems - a systematic literature review** L.L. Kjaer, A. Pagoropoulos, D.C.A. Pigosso*, T.C. McAloone, *Technical University of Denmark, Denmark*	**WS25**	**[WS28.03] Horizontal standards: The missing link to ensure minimum performances of products from a material efficiency perspective?** C. McAlister*[1], F. Mathieux[2], F. Ardente[2], *[1]Seagreentree/ECOS, Spain, [2]European Commission, Joint Research Centre, Italy*	

						[4]*Saarland University, Germany*					
10:50-11:05	**[WS5.28] University networks for sustainability-A review of contributions, opportunities and challenges from a COPERNICUS alliance perspective** J. Dlouhá*[1], C. Mader[2], D. Kapitulinová[1], L.M. Henderson[1], J. Benayas del Alamo[3], *[1]Charles University, Czech Republic, [2]Leuphana University Lüneburg, Germany, [3]Universidad Autónoma de Madrid, Spain*	**[O13.04] The assessment of overall SCP state of the company: New integrated sustainability index ISCP and the results of its application in two enterprises** J.K. Staniškis*, G. Jonkute, *Kaunas University of Technology, Lithuania*	**[WS16.04] Carbon footprint as an indicator of environmental effectiveness: A case study of biological and chemical technologies for in-situ soil remediation** M.J. Fernandez*[1], S. Alvarez[1], L. Gomez[1], O. Escolano[2], A. Rubio[1], *[1]Technical University of Madrid, Spain, [2]Centre for Energy, Environmental and Technological Research, Spain*	**[O14.04] A multi-criteria analysis model for socio-economic and environmental evaluation of renewable energies: Case study of Shanghai** H.T. Ren*[1], Y.D. Yu[1], T.J. Ma[1], M. Makowski[2], A. Kharrazi[3], *[1]East China University of Science and Technology, China, [2]International Institute for Applied Systems Analysis, Austria, [3]University of Tokyo, Japan*	**[O15.04] A study of awareness level of environmentally sustainable consumption issues among children** L. Rani, M. Sharma*, *Birla Institute of technology and Sciences, India*	**[WS19.04] Development of non-material sustainability indicators through a community based-approach: The brazilian case of Maceió and Alagoas** O. Viégas*[1,2], S. Caeiro[2], T.B. Ramos[3], *[1]Universidade Federal de Alagoas, Brazil, [2]Universidade Aberta, Portugal, [3]Universidade Nova de Lisboa, Portugal*	**[WS21.04] Assessing future domestic E-waste flows from electrification in developing countries** A. Batteiger*[1,2], V.S. Rotter[1], *[1]Technische Universität Berlin, Germany, [2]Technische Universität Berlin, Germany*	**[WS24.04] Supporting the development of sustainable PSS by means of a maturity model** D.C.A. Pigosso*, T.C. McAloone, *Technical University of Denmark, Denmark*	**WS25**	**[WS28.04] Is SEA an effective tool for promoting policy making on social eco-design** Z.G. Wang*, J.Y. Yu, *Sun Yat-sen University, China*	

Rooms	*Auditorium*	*Garbi*	*Llevant 1*	*Llevant 2*	*Llevant 3*	*Llevant 4*	*Mestral 1*	*Mestral 2*	*Mestral 3*	*Mestral 4*
11:05-12:05	**Workshop 5: (Continued)**	**Session 13: (Continued)**	**Workshop 16: (Continued)**	**Workshop 17: Energy Transitions in the Nordic Countries**	**Session 15: (Continued)**	**Session 16**	**Workshop 21: (Continued)**	**Workshop 24: (Continued)**	**Workshop 25: (Continued)**	**Workshop 28: (Continued)**
11:05-11:20	**[WS5.29] A whole of program approach to developing understanding of sustainability in chemical engineering undergraduates** M.C. Jollands*, E. Baez, *RMIT University, Australia*	**[O13.05] Measuring corporate social responsibility in SMEs** N. Bellantuono*, P. Pontrandolfo, B. Scozzi, *Politecnico di Bari, Italy*	**[WS16.05] How to reduce energy and water consumption in the preparation of raw materials in the ceramic tile manufacturing: Dry versus wet route** A. Mezquita[1], E. Monfort[1], S. Ferrer[1], D. Gabaldón-Estevan*[2], *[1]University Jaume I, Spain, [2]University of Valencia, Spain*	**[WS17.01] Can disruptive knowledge brokerage trigger energy transitions? The case of a high-level expert group on Finnish energy policy** J.I. Hukkinen*[1], P.D. Lund[1], *[1]University of Helsinki, Finland, [2]Aalto University, Finland*	**[O15.05] Greening the construction chain through pollution prevention actions: a case study in a developing country** S. Vasquez*[1], J. Gaitan[2], I. Restrepo[4], P.A. Vásquez[3,4], *[1]Constructora El Castillo S.A, Colombia, [2]Construcciones Vitruvio S.A.S, Colombia, [3]University of Guelph, Canada, [4]Universidad del Valle/Cinara Institute, Colombia*	**[O16.01] Consumption-based versus production-based approaches in international climate change policy** S. Afionis[1], M. Sakai*[1], K. Scott[1], J. Barrett[1], A. Gouldson[2], *[1]University of Leeds, UK, [2]University of Bristol, UK*	**[WS21.05] Life cycle assessment of waste mobile phone recycling** H. Xu*[1], J.H. Bian[1], W.C. Li[1], J.F. Yin[2], *[1]Nankai University, China, [2]Academy of planning and design Ministry of Agriculture, China*	**[WS24.05] Economic and environmental evaluation of design for demanufacturing** J.R. Peeters*[1], P. Vanegas[1,2], W. Dewulf[1], J.R. Duflou[1], *[1]KU Leuven-University of Leuven, Belgium, [2]University of Cuenca, Ecuador*	**WS25**	**[WS28.05] Assessing the ecodesign review process** D.R. Hinchliffe, *BAM Federal Institute of Materials Research and Testing, Germany*
11:20-11:35	**[WS5.30] Global dimension in engineering research: A characterization of the scientific profile of GDEE community** B. Lazzarini*, A. Pérez-	**[O13.06] Sustainability reporting and value relevance: Empirical evidence from the beverage industry**	**[WS16.06] Investigating resource efficiency and environmental policy effect in the eurace framework** G.O. Fadiran*, M. Raberto, S.	**[WS17.02] Creating indicators of sustainable energy development: L earning from experience in Iceland, New**	**[O15.06] Social labelling: a study of consumer confusion in the UK market** M. Carrigan, C. Bosangit*, A. Kumar, G.	**[O16.02] Toward an effective implementation of a method for the calculation of Emission Limit Values by Competent Authorities in**	**[WS21.06] Text quantitative research on China's urban mining policy development** C. Wang, H.J. Geng, H.L. Yao*, L.S. Zuo, *Central*	**[WS24.06] Using agent-based modelling to explore the potential of servicising in product-oriented markets**	**WS25**	**[WS28.06] Regulating complex products: The policy mix for product and building energy efficiency** C.J. Dalhammar*, B.

	Foguet, *Universitat Politècnica de Catalunya, Spain*	F. Doni*[1], A. Gasperini[2], *[1]Milano-Bicocca University, Italy, [2]Italian Network of Business Reporting & Association of Italian Financial Analysts (AIAF), Italy*	Cincotti, *University of Genoa, Italy*	**Zealand and Kenya** R. Shortall*[1], B. Davidsdottir[1], G. Axelsson[1,2], *[1]University of Iceland, Iceland, [2]Iceland Geosurvey, Iceland*	Bebek, *Coventry University, UK*	**the permitting procedure of the Industrial Emissions Directive.** V.L. Vázquez*[1], G. Giner-Santonja[2], G. Rodríguez[1], *[1]Andalusian Institute of Technology-IAT, Spain, [2]Institute for Prospective Technological Studies (JRC-IPTS), Spain*	*South University, China*	R.A.C. van der Veen*, I. Nikolic, K.H. Kisjes, *Delft University of Technology, The Netherlands*		Kiss, *Lund University, Sweden*
11:35-11:50	**[WS5.31] Promoting global learning in engineering curricula: Lessons learnt from the global dimension in engineering education initiative** A. Pérez-Foguet[1], B. Lazzarini*[1], R. Giné[1], E. Velo[1], A. Boni[1], M. Sierra[1], G. Zolezzi[1], R. Trimingham[1], N. Noble[1], F. Mongera[1], *[1]Universitat Politècnica de Catalunya, Spain, [2]Universidad*	**[O13.07] Bioindicators for water quality monitoring of industrial activity, in differents types of industrial: Study of jeans wash sector** R.A.J. Silva, A.E. Alves, S.M.G. Pinheiro, A.M. Melo, S.G. El-Deir*, *UFRPE, Brazil*	**[WS16.07] Analysis of coal oxidation factor and estimation of CO2 emissions from the iron and steel industry in China** W. Xu*, B. Wan, M. Shao, T. Zhu, *Chinese Academy of Sciences, China*	**[WS17.03] Energy performance of housing stock in Iceland: System dynamics approach** R. Fazeli*, B. Davidsdottir, *University of Iceland, Iceland*	**[O15.07] Is my consumption sustainable? Integrating benchmarks for sustainable resource use in consumer communication** L. Echternacht[1], J.K.J. von Geibler*[1], K. Wiesen[1], S.E. Björling[2], S. Kresse[3], M. Hähn[3], *[1]Wuppertal Institute for Climate, Environment, and Energy, Germany, [2]Enviro Data, Sweden, [3]GS1 Germany, Germany*	**[O16.03] From land to sea: governance and management insights from terrestrial research useful for developing and expanding socio-ecological marine restoration** R.L. France, *Dalhousie University, Canada*	**[WS21.07] Textual and quantitative research on China's urban mining policies** Y.F. Xiang, H.L. Yao*, C. Wang, *Central South University, China*	**[WS24.07] Ecodesign transition framework toward companywide sustainable product innovation** F.A. Brones*, M.M. Carvalho, E.S. Zancul, *Polytechnic School of the University of São Paulo, Brazil*	**WS25**	**[WS28.07] Regulatory inheritance and the designs for nanosafety and circular economy** P. Kautto*, J. Kauppila, *Finnish Environment Institute, Finland*

	Politécnica de Valencia, Spain, [3]Universidad Politécnica de Madrid, Spain, [4]Università di Trento, Italy, [5]Loughborough University, UK, [6]Practical Action, UK, [7]Training Centre for International Cooperation, Italy									
11:50-12:05	**[WS5.32] Integration of sustainability issues into product development: Example of a holistic project-based approach for management engineering curricula** D. Corti, G. Mattei, A. Fontana*, L. Canetta, *University of Applied Sciences and Arts of Southern Switzerland - SUPSI, Switzerland*		**[WS16.08] A novel approach for spatial integration of CO2 emissions in Chinese cement industry** L.M. Wang*, Y. Yang, L. Shen, J.A. Zhao, C.F. Mou, Y.B. Fang, *Institute of Geographic Sciences and Nature Resources Research (IGSNRR),CAS, China*	**[WS17.04] Hydrogen transition and prospects for greenhouse gas mitigation in Iceland** E. Shafiei*[1], B. Davidsdottir[1], J. Leaver[3], H. Stefnansson[2], E. Asgeirsson[2], *[1]University of Iceland, Iceland, [2]Reykjavik University, Iceland, [3]Unitec Institute of Technology, New Zealand*	**[O15.08] The moderating effects of age and income on the determinants of responsible consumption: Evidence from France** J. Flores, S. Ivanaj, O. Ivanova*, I. Khelladi, *ICN Business School, France*	**[O16.04] The political ecology of environmental conflicts in Germany (1990-2014)** G.W. Weber, *ESSCA Angers, France*	**[WS21.08] The empirical analysis of evaluating the effect of China's urban mining policy based on the enterprise perspective** Q. Sun[1], H.L. Yao[1], C. Wang*[1], L.H. Zhang[2], *[1]Central South University, China, [2]Liverpool John Moores University, UK*	**[WS24.08] KPIs for measuring the sustainability performance of ecodesign implementation into product development and related processes: A systematic literature review** V.P. Rodrigues*, D.C.A. Pigosso, T.C. McAloone, *Technical University of Denmark, Denmark*	**WS25**	**[WS28.08] Looking for incentives in the ecodesign directive** E. Maitre-Ekern, *University of Oslo, Norway*
12:05-13:05	Lunch Break									
13:05-13:50	K07: Dominique Hes I Auditorium									

Rooms	*Auditorium*	*Garbi*	*Llevant 1*	*Llevant 2*	*Llevant 3*	*Llevant 4*	*Mestral 1*	*Mestral 2*	*Mestral 3*	*Mestral 4*
13:55-14:55	**Workshop 5: (Continued)**	**Session 13: (Continued)**	**Workshop 16: (Continued)**	**Workshop 17: (Continued)**	**Session 15: (Continued)**	**Workshop 20: Accelerating sustainable transitions via creative approaches**	**Workshop 22: Call for Papers for A Special Workshop on Preventing Smog Crises in China and Globally**	**Workshop 24: (Continued)**	**Workshop 26: Educational Strategies for the Sustainable Fashion Consumption Imperative: An Interactive Workshop**	**Workshop 10: (continued)**
13:55-14:10	**[WS5.33] Alternative learning activities that foster competences for sustainable development in higher education** I. Molderez*, E. Fonseca, *University of Leuven, Belgium*	**[O13.08] Towards sustainable drinking water treatment - The application of natural coagulants in the removal of emerging contaminants** V. Serrão Sousa*, M. Ribau Teixeira, *University of Algarve, Portugal*	**[WS16.09] Calculation and evaluation of carbon emission factors based on three new dry cement production lines in China** J.A. Zhao*, D.Q. Wei, T.M. Gao, X. Zhou, *Institute of Geographic Sciences and Nature Resources Research (IGSNRR),CAS, China*	**[WS17.05] Potential contribution of biofuels to greenhouse gas mitigation in Iceland** E. Shafiei*[1], B. Davidsdottir[1], J. Leaver[3], H. Stefansson[2], E. Asgeirsson[2], *[1]University of Iceland, Iceland, [2]Reykjavik University, Iceland, [3]Unitec Institute of Technology, New Zealand*	**[O15.09] Households and sustainable technologies: the future is now** S. Bigerna[1], C.A. Bollino[1], S. Micheli*[2], P. Polinori[1], *[1]University of Perugia, Italy, [2]Guglielmo Marconi University, Italy*	**[WS20.01] Experimenting and communicating sustainable lifestyles to promote energy autonomy (EKO-LIFE)** D. Grabher*[1], R. Steinparzer[1], K. Feurstein[1], *[1]Austrian Institute of Ecology, Austria, [2]Energieinstitut Vorarlberg, Austria*	**[WS22.01] Tackling smog pollution in China: From both top-down and bottom-up perspectives** Y.T. Wang*, M.X. Sun, *Shandong University, China*	**[WS24.09] Evaluation and comparison of two CAD-integrated SLCA tools with dedicated LCA software to assist in early stage product development environmental evaluation** J.M. Van Der Bank*, J. Braet, R. Linders, *University of Antwerpen, Belgium*	**[WS26.01] DIY in fashion: An opportunity for social manufacturing and system change?** K. Niinimäki*[1], C.M. Armstrong[2], A.L. Hirscher[1], *[1]Aalto University, Finland, [2]Okhaloma State University, USA*	**[WS10.13] Benchmarking green chemistry adoption by "big pharma" and generics manufacturers: Drivers, Barriers and Opportunities** V.R. Veleva*, B. Cue, *University of Massachusetts Boston, USA*
14:10-14:25	**[WS5.34] Assessing sustainability competence** J. Segalàs*, A. Hernández, *University Research Institute for Sustainability Science and Technology. UPC., Spain*	**[O13.09] An emerging urban contamination: Ultraviolet filters in water** L. Hongjing, *Fudan Unive, China*	**[WS16.10] How did we assess the outcomes of tradable green certificates? A review** A. Darmani*[1,2], A. Rickne[1], A. Hidalgo[2], N. Arvidsson[1], *[1]Royal Institute of Technology,*	**[WS17.06] Onshore wind energy in forested areas in Northern Europe: Reviewing the risks** P. Enevoldsen[1,2], *[1]Aarhus University, Denmark,*	**[O15.10] A guided product label design for effective sustainability communication** S. Menato, A. Fontana*, P. Innocenti, P. Pedrazzoli, M. Sorlini, *University of Applied*	**[WS20.02] Redefining the role of the designer in the development of sustainable urban futures** H.D. Lester, *Stevens Institute of Technology, USA*	**[WS22.02] Improvement of the sulfur resistance of Nb-modified Cu-SAPO-34 catalysts** C. Niu*, X.Y. Shi, K. Liu, H. He, *State Key Joint Laboratory of Environment*	**[WS24.10] Rebound effects: Opportunities for their assessment and minimization based on user integration in living Labs** J. Buhl, J.K.J. von Geibler*, L.	**[WS26.02] Educational strategies for the sustainable fashion consumption imperative: A panel discussion** C.M. Armstrong*[1], K. Niinimäki[1], A. Hirscher[1], W.	**[WS10.14] IAMC Toolkit: Innovative Approaches for the Sound Management of Chemicals and Chemical Waste**

			Sweden, [2]Universidad Politécnica de Madrid, Spain	*[2]Siemens Wind Power, Denmark*	*Sciences and Arts of Southern Switzerland, Switzerland*		*Simulation and Pollution Control, Research Center for Eco-Environmental Sciences,Chinese Academy of Sciences, China*	Echternacht, M. Linder, *Wuppertal Institute for Climate, Environment and Energy, Germany*	Gwozdz[1], K. Laitala[1], T. Cooper[1], *[1]Oklahoma State University, USA, [2]Aalto University, Finland, [3]Copenhagen Business School, Denmark, [4]National Institute for Consumer Research, Norway, [5]Nottingham Trent University, UK*	C.W. Hawthorne*, S. Bauer, R. Joas, *ISSPPRO Gmbh, Germany*
14:25-14:40	**[WS5.35] Education as initiation in a disciplinary paradigm. Paradigmatic pressures as an obstacle to integrated problem solving** K.F. Mulder*[1], J. Segalas-Coral[2], G. Tejedor-Papell[2], *[1]Delft University of Technology, The Netherlands, [2]UPC, Spain*	**[O13.10] Water management for military deployed operations: Balancing different values of stakeholders** K. Chelkowska-Risley*, J-J. Bouma, *Erasmus University of Rotterdam, The Netherlands*	**[WS16.11] Expanding the scope of climate change mitigation practices in energy-intensive industry** C. Malmgren*, T. Zobel, *Luleå University of Technology, Sweden*	**[WS17.07] Commercialization of renewable energy technologies in Finland: Prospects and challenges** S.R. Shakeel*, J. Takala, *University of Vaasa, Finland*	**[O15.11] Consumer valuation of energy-saving features of residential air conditioners with hedonic and choice models** S.M. Matsumoto, *Aoyama Gakuin Univeristy, Japan*	**[WS20.03] The Creative Imperative: The Role of Creativity, Creative Problem Solving and Insight as Key Drivers for Sustainability** I. Kajzer Mitchell*, J. Walinga, *Royal Roads University, Canada*	**[WS22.03] The selective catalytic reduction of NO by NH3 over one-pot synthesized Cu-SSZ-13: post-treatment and monolith catalysts** X. Shi*, L. Xie, C. Niu, H. He, *Research Center for Eco-Environmental Sciences, Chinese Academy of Sciences,, China*	**[WS24.11] Are energy saving companies helping to promote the LED luminaries? Lessons from the experiences of servitising LED luminaries in South Korea** J.S. Baek*, S-J. Kim, *UNIST, Republic of Korea*	**WS26 ARMSTRONG**	**[WS10.15] Transformation toward sustainable production of non-ferrous industry in China: Driving forces and perspective** H. Ling, *Peking University, China*
14:40-14:55	**[WS5.36] Students' perceptions on sustain-ability at university**	**[O13.11] Seawater desalination as a climate change adaptation**	**[WS16.12] Characterization of industrial energy management**		**[O15.12] Configuration model of consumer driven framework: A**	**[WS20.04] An investigation of core competency of university**	**[WS22.04] Impact of aerosol pollution on precipitations**	**[WS24.12] Circular economy from a business perspective**	**WS26 ARMSTRONG**	

	A. Minelgaite, R. Dagiliute, G. Liobikiene*, *Vyt autas Magnus university, Lithuania*	**strategy; An insight on its impacts on urban water consumption and sustainability** M.C. Fragkou, *Univers idad de Chile, Chile*	**practices – Ten case studies of swedish foundry** A-B. Sa*[1], B. Thollander[2], A. Cagno[2] [,1], *[1]Politecnico di Milano, Italy, [2]Linkoping University, Sweden*		**case of automobile industry in Italy** J. Shao*[1,2], M. Taisch[1], M. Ortega Mier[2], *[1]Politecnico di Milano, Italy, [2]Universidad Politécnica de Madrid, Spain*	**laboratories in China** C. Zhou, *Aalborg University, Denmark*	**and the related consequences on soil erosivity** M. Casazza*[1], J. Liu[2,3], S. Ulgiati[1] [,2], *[1]University 'Parthenope' of Naples, Italy, [2]Beijing Normal University, China, [3]Beijing Engineering Research Center for Watershed Environmental Restoration & Integrated Ecological Regulation, China*	L.J. de Olde, *Philips International, The Netherlands*		
14:55-15:25	Refreshment Break									
Rooms	*Auditorium*	*Garbi*	*Llevant 1*	*Llevant 2*	*Llevant 3*	*Llevant 4*	*Mestral 1*	*Mestral 2*	*Mestral 3*	*Mestral 4*
15:25-17:25	**Workshop 5: (Continued)**	**Session 13: (Continued)**	**Workshop 16: (Continued)**	**Workshop 18: SUBJECT EDITORS' MEETING**	**Session 15: (Continued)**	**Workshop 20: (Continued)**	**Workshop 23: Pathway to preventative and regene-rative Eco-industrial development – lessons from around the world**	**Workshop 24: (Continued)**	**Workshop 27: Sustainable primary metal supply from mining in a carbon constrained future**	**Workshop 29: Regenerative Sustainability - research and practice toward urban vitality & Eco-town workshop**
15:25-15:40	**[WS5.37] Adapting organisational change management for sustainability frameworks to universities' context**	**[O13.12] Comparative environmental assessment of intermodal transport systems** A. Fenollar Solvay*[1], K. Tarnacki[2], S.	**[WS16.13] A different way to measure industrial transition** C.H. Huang*, C.W. Yang, T.W. Lin, T.T. Lin, *Taiwan*	**WS18 SUBJECT EDITORS' MEETING**	**[O15.13] Region of origin information's influence on taste perception and consumer choice** C-H. Yeh*, N. Langen, B. Lorenz, J.		**WS23**	**[WS24.13] Product/Service Systems in Emerging Markets - Case and Implications** T. Sakao*[1], N. Kebir[2], *[1]Linköpin g University, Sweden,*	**WS27**	**[WS29.01] Smart cities: A review of current definitions, theories, implementat ions and future challenges**

	A. Ulz*[1], R.J. Baumgartner[1], R. Lozano[2], *[1]University of Graz, Austria, [2]Utrecht University, The Netherlands*	Jeschke[1], *[1]IMA of the RWTH Aachen University, Germany, [2]Forschungszentrum Jülich GmbH, Germany*	*Research Institute, Taiwan*		Klink, *University of Bonn, Germany*			*[2]MicroEnergy International GmbH, Germany*		R. Lukman[1,2], P. Glavic*[1], K. Pogacnik[2], F. Rihl[1], P. Virtic[1], *[1]University of Maribor, Slovenia, [2]Envirodual Ltd, Slovenia*
15:40-15:55	**[WS5.38] From the profit of one to the benefit of many - On path towards regenerative business in built environment** J. Matinheikki*, R. Rajala, A. Peltokorpi, *Aalto University, Finland*	**[O13.13] The impact of emerging technologies on the whole life carbon footprint of cars and it's implication for the length of car lifetimes** J. Rogers[1], *[1]University of Bath, UK, [2]Nottingham Trent University, UK*	**[WS16.14] The role of technological changes, international trade and consumption behaviour in CO2 emissions from industry: A case study of the Southern Europe countries** D. Kopidou*, D. Diakoulaki, *National Technical University of Athens, Greece*	**WS18 SUBJECT EDITORS' MEETING**	**[O15.14] Is family seasonal consumption good for the environment? Monthly domestic and international trade using multiregional input-output data** M.A. Tobarra*, L.A. López, M.A. Cadarso, N. Gómez, *Universidad de Castilla-La Mancha, Spain*	**[WS20.06] Becoming land - Regenerative creative action** A. Dulic*, K. Newby, J. Angel, *University of British Columbia, Canada*	**WS23**	**[WS24.14] Presenting the design for individuals and practices (DIP) toolkit** M.A. Moreno*[1], L. Piscicelli[2], T. Cooper[2], T. Fisher[2], *[1]Cranfield University, UK, [2]Nottingham Trent University, UK*	**WS27**	**[WS29.02] Challenges to the Promotion of Sustainable Mobility in Europe: examples from the North Sea Region** W. Leal Filho, *HAW Hamburg, Germany*
15:55-16:10	**[WS5.39] Researching the role of mindfulness in promoting sustainable consumption: A review of methodological approaches and challenges** D. Fischer*[1], S. Geiger[2], J.	**[O13.14] How R&D promotes the development of clean energy vehicles in China: Exploring the roles of government advance subsidies and government reimbursement**	**[WS16.15] Better interpreting studies and improving scientific policy advice for decisions on energy system investments** B. Droste-Franke, *EA European*	**WS18 SUBJECT EDITORS' MEETING**	**[O15.15] Sustainable consumption and production: The genesis and challenges of successful retail & industry joint projects** A. Vargas, G.M. Pereira*, M. Borchardt, J.U. Gustavo	**[WS20.07] Applying playful modeling for sustainable change: Collective development of energy efficient production** K-P. Schulz*[1], D. Jentsch[2], S. Geithner[3], *[1]ICN Business School,*	**WS23**	**[WS24.15] Supporting ISO 14.001:2015 implementation based on the ecodesign maturity model** D.C.A. Pigosso*, T.C. McAloone, *Technical University of Denmark, Denmark*	**WS27**	**[WS29.03] Upgrade use of wastes, biomass and waste heat in industries** M. Fujii*, L. Dong, T. Fujita, T. Togawa, M. Ooba, *National Institute for*

	Harfensteller[2], U. Schrader[2], L. Stanszus[2], *[1]Leuphana Universität Lüneburg, Germany, [2]Technische Universität Berlin, Germany*	H. Peng, *Wuhan University of Technology, China*	*Academy of Technology and Innovation Assessment GmbH, Germany*		Junior, *Universidade do Vale do Rio dos Sinos - UNISINOS, Brazil*	*France, [2]TU Chemnitz, Germany, [3]TU Dresden, Germany*				*Environmental Studies, Japan*
16:10-16:25	**[WS5.40] Experimentation in environmental education using social technologies, a new proposal for enviromental education** C.L.M. Carrasco[1], L.A. Santos[2], S.G. El-Deir*[1,2], *[1]ITEP, Brazil, [2]UFRPE, Brazil*	**[O13.15] How cleaner are electric engine solutions? A life cycle assessment comparison between battery and Hydrogen-FC powered electric bikes** S. Mellino*[1], A. Petrillo[1], V. Cigolotti[2], C. Autorino[1], E. Jannelli[1], S. Ulgiati[1,3], *[1]University of Naples, Italy, [2]ENEA Portici Research Centre, Italy, [3]Beijing Normal University, China*	**[WS16.16] A critical review of industrial management approaches for climate change mitigation** T. Zobel, *Luleå University of Technology, Sweden*	**WS18 SUBJECT EDITORS' MEETING**	**[O15.16] Exploring the role of moral norms and neutralisation in environmentally conscious behaviour: The case of UAE consumers** S. Iyanna*[1], C. Bosangit[2], M. Carrigan[2], *[1]Abu Dhabi University, United Arab Emirates, [2]Coventry University, UK*	**[WS20.08] Free to think: Participatory and creative methodologies for imagining a sustainable commodity discourse** I. Kajzer Mitchell*[1], M. Saren[1], *[1]Royal Roads University, Canada, [2]Leicester University, UK*	**WS23**		**WS27**	**[WS29.04] Regenerative sustainability from the inside out: A values-based approach** J. Moreno*, E. Hoover, M.K. Harder, *Fudan University, China*
16:25-16:40	**[WS5.41] Preparing designers for a circular economy goldrush; Exploring the implications for education**	**[WS3.11] The Malawian Agricultural Commodity Exchange: A business model for market support &**	**[WS16.17] Towards a 90% reduction of the fossil energy footprint, a case study of a wood panels factory** E. Popovici*[1], E. Benetto[1], E.	**[WS5.46] Making a difference in higher education for sustainable development** C.E. Scarff Seatter, *University of British*		**[WS20.09] (Sustainable) universities go Dragon Dreaming – learning for transition** A. Disterheft[1], *[1]Uni*			**WS27**	**[WS29.05] Exploring the role of lean thinking in sustainable business practice** H.T.S. Caldera*, C.

	R. Wever*[1,2], F. Charnley[3], C. Brass[4], L. Harrison[4], *[1]Linköping University, Sweden, [2]Delft University of Technology, The Netherlands, [3]Cranfield University, UK, [4]Royal College of Art, UK*	**institutional development** D. Dentoni*, L. Dries, *Wageningen University, The Netherlands*	Igos[1], M. Becker[2], *[1]Luxembourg Institute of Science and Technology (LIST), Luxembourg, [2]Kronospan Luxembourg S.A., Luxembourg*	*Columbia, Canada*		*versidade Aberta, Portugal, [2]Centre of Functional Ecology, Universidade de Coimbra, Portugal, [3]CENSE, Universidade Nova de Lisboa, Portugal*				Desha, L. Dawes, *Queensland University of Technology, Australia*
16:40-16:55	**[WS5.42] Getting to cleaner production by educating engineers** C. Haskins*, A.M. Fet, *Norwegian University of Science and Technology, Norway*	**[WS3.12] 2MB: A novel metamodel to enhance creativity and sustainabilityin participatory conceptual design of bioenergy systems** R. Martins*[1], J. Cherni[1], N. Videira[2], *[1]Imperial College London, UK, [2]Universidade Nova de Lisboa, Portugal*	**[WS16.18] Carbon integration in industrial parks to reduce GHG emissions** D.M. Al-Mohannadi*[1], S.K. Binshu[1], S.Y. Alnouri[1], P. Linke[1], *[1]Texas A&M University at Qatar, Qatar, [2]Texas A&M University at Qatar, Qatar, [3]QEERI, Qatar*	**[WS5.47] Bridging aims and delivery of higher education for sustainable development: connecting competences to pedagogical approaches** M.Y. Merrill*[1], R. Lozano[2], *[1]Nanyang Technological University, Singapore, [2]Utrecht University, The Netherlands*		**[WS20.10] From moral to aesthetic knowledge, and back again: Creative arts-based ways to elicit shared values** G. Burford*[1], E. Hoover[1], M.K. Harder[1], *[1]University of Brighton, UK, [2]Fudan University, China*			**WS27**	**[WS29.06] Harnessing the motivations of architectural designers to engage with sustainable construction** N. Murtagh*, A.H. Roberts, R. Hind, *UCL, UK*
16:55-17:10	**[WS5.43] Life cycle assessment and life cycle cost of university dormitories in China** L. Huang*[1], Y. Liu[2], G.	**[WS3.13] Market approaches of sustainable business models in latin america** G. Lozano*, I. Palomares, F. Layrisse, *EGADE*	**[WS16.19] Emergy-based sustainability assessment of a biomass-electricity-spirulina linked carbon-negative**	**[WS5.48] Values as the golden thread? Integrating sustainability from within education institutions**					**WS27**	

	Krigsvoll[1], F. Johansen[1], *[1]Gjøvik University College, Norway, [2]Fuzhou University, China*	*Business School, Mexico*	**economy model in China** M.Y. Pang*, L.X. Zhang, C.B. Wang, S.J. Tang, *Beijing Normal University, China*	E. HOOVER*[1,2], G. BURFORD[1], M.K. HARDER[1,2], *[1]Fudan University, China, [2]University of Brighton, UK*						
17:10-17:25	**[WS5.44] Network collaborations in education for sustainable development as a social innovation for societal transformation** M. Hasselkuß*, C. Baedeker, *Wuppertal Institute for Climate, Environment, and Energy, Germany[1]*	**[WS3.14] Eco-innovation: Developing and implementing sustainable business models in the chemical & metal products value chains in emerging markets** C.W. Hawthorne*, S. Bauer, R. Joas, *ISSPPRO Gmbh, Germany*	**[WS16.20] Policy intervention mechanism to implement industrial symbiosis in China: Experience and new insights** Y. Tao*, S. Evans, *University of Cambridge, UK*	**[WS5.49] The campus as living learning lab at Dr. Martin Luther King Jr. library, San Jose state university, USA** E. Consavari, *San José State University, USA*					**WS27**	
	[WS5.45] A case study of integrating sustainability in fashion marketing education E.S. Hur, *University of Leeds, UK*									

Wednesday, 04th November 2015										
07:00-07:45	Meditation I Auditorium									
08:00-08:45	K08: Prasad Modak I Auditorium									
08:45-09:30	K09: Bill McKibben I Auditorium									
09:30-10:00	Refreshment Break									
Rooms	*Auditorium*	*Garbi*	*Llevant 1*	*Llevant 2*	*Llevant 3*	*Llevant 4*	*Mestral 1*	*Mestral 2*	*Mestral 3*	*Mestral 4*
10:05-12:05	**Workshop 30: Towards Smart urban systems**	**Session 17**	**Workshop 32: Social Entrepreneurship as a Vehicle for Sustainability**	**Session 18**	**Workshop 28: (continued)**	**Workshop 33: Innovation and Sustainable Development**	**Workshop 34: Urban Ecological Infrastructure for Healthier Cities**	**Session 19**	**Workshop 36: Improved Resource Efficiency and Cascading Utilization of Renewable Materials**	**Workshop 37: Design Approaches to Sustainability**
10:05-10:20	**[WS30.01] Dwelling: A shelter or inclusion to citizenship in Ibero-american countries?** A.J.H. Chevara[1], L.F. Silva[1], D.M. Conti*[1], P.S.G. Oliveira[2], *[1]PUC - SP, Brazil, [2]Universidade Ibirapuera, Brazil*	**[O17.01] Country-of-origin and chemical residue test determine consumers' preferences for sweet peppers in Taiwan: A discrete choice experiment** C-H. Yeh*, N. Langen, M. Hartmann, *University of Bonn, Germany*		**[O18.01] Integrated scenarios in the scope of the german national sustainability strategy** A. Fink*, H. Rammig, *ScMI Scenario Management International AG, Germany*	**[WS28.09] Environmental and economic assessment of durability of vacuum cleaners** S. Bobba*[1,2], F. Ardente[1], F. Mathieux[1], *[1]Joint Research Centre, Italy, [2]Politecnico di Torino, Italy*	**[WS33.01] A study on renewable energy potential based on the global atmospheric data** W. Yang[1], Y. Liu*[2,1], *[1]University of Vaasa, Finland, [2]Vaasa University of Applied Sciences, Finland*	**[WS34.01] Urban symbiosis as a strategy for sustainable cities: Management and policy-making** K.F. Mulder, *Delft University of Technology, The Netherlands*	**[O19.01] Developing a holistic framework to understand the contribution of sustainable public procurement to the development of more sustainable business models** S. Witjes*, R. Lozano, *Utrecht University, The Netherlands*	**[WS36.01] Planning of Location, Capacity and Configuration of Biorefineries in a Continuous Solution Space** T. Schröder*, L-P. Lauven, J. Geldermann, *Georg-August-University Göttingen, Germany*	**[WS37.01] A strategic approach in designing sustainable products for multiple life cycles** T.F. Go, D.A. Wahab*, H. Hishamuddin, *Universiti Kebangsaan Malaysia, Malaysia*
10:20-10:35	**[WS30.02] How to construct a new urban future? Toward the sustainable and smart cities** D.M. Conti*, L.F. Silva, P.F. Saad, V.L.R.	**[O17.02] Green consumption - Way to a sustainable agriculture in Romania** M.I. Aceleanu[1], D.M. Pociovalisteanu[2], I. Novo-Corti*[3],	**[WS32.02] Social entrepreneurship, sustainability, tetrad-value theory** J.M.S. Carvalho*[1,2], C.A.A. Sousa[1]	**[O18.02] Identification of key sustainable development goals and indicators: results of a questionnaire survey conducted**	**[WS28.10] The Danish voluntary agreement on WEEE** U. Sønderhousen[1], M. Larsen[1], E. Öhlander[1], C. Busk*[2], *[1]NIRAS*	**[WS33.02] Sustainable innovation for system transition: a dynamic capabilities approach** E.A. Iñigo*, L. Albareda, *Deus*	**[WS34.02] Urban Ecological Infrastructure: An integrated network for eosystem services and sustainable urban systems**	**[O19.02] Inserting Product-Service Systems in Sustainable Public Procurement** C.M. van Geet*[1], R. Lozano[1], *[1]Ministr*	**[WS36.02] Environmental impacts of wood based products under consideration of cascade utilization - a systematic**	**[WS37.02] Exploring end user perspectives in the practice of staying warm at home.** A.M. de Jong*[1,2], M. Denward[1], D.J.

	Vieira, *PUC - SP, Brazil*	A.C. Serban[1], C. Burghelea[1], *[1]The Bucharest University of Economic Studies, Romania, [2]University of Târgu-Jiu, Romania, [3]University of A Coruna, Spain, [4]Hyperion University, Romania*	[,3], *[1]University Institute of Maia, Portugal, [2]Universidade do Minho, Portugal, [3]NECE-UBI, Portugal*	**in the US, Japan and Thailand** M. Suzuki*[1], T. Kusago[2], K. Ikeda[3], K. Hara[4], M. Uwasu[4], O. Tyunina[5], *[1]Sophia University, Japan, [2]Kansai University, Japan, [3]Japan Women's University, Japan, [4]Osaka University, Japan, [5]Tokyo University, Japan*	*A/S, Denmark, [2]Confederation of Danish Industry, Denmark*	*to Business School, Spain*	F. Li*[1], C.B. Zhou[1], D. Zhao[2], *[1]Research Center for Eco-Environmental Sciences, Chinese Academy of Sciences, China, [2]Beijing Municipal Institute of City Planning & Design, China*	*y of Infrastructure and the Environment, The Netherlands, [2]Utrecht University, Copernicus Institute of Sustainable Development, The Netherlands*	**literature review** N. Thonemann, *University of Göttingen, Germany*	Oogjes[1] *[,3], [1]Interactive Swedish ICT, Sweden, [2]Technische Universiteit Delft, The Netherlands, [3]Technische Universiteit Eindhoven, The Netherlands*
10:35-10:50	**[WS30.03] Policies and procedures for smart cities and the roles of funding instruments and implementation processes** M. Paula[1], J. Fuerst*[1], C. Dankl[2], *[1]Federal Ministry for Transport, Innovation and Technology, Austria, [2]Austrian Society for Environment and Technology, Austria*	**[O17.03] Local as the new green: Exploring new possibilities for sustainable fashion** I.G. Klepp, K. Laitala, G. Vittersø*, *National Institute for Consumer Research (SIFO), Norway*	**[WS32.03] Ecopreneurship and business model formation: A theoretical framework** M. Paulsson*, A. Gabrielsson, *Umeå University, Sweden*	**[O18.03] Urban densification as a strategy for sustainability** A. Palm, *Lund University, Sweden*	**[WS28.11] Desired and undesired effects of energy labels—An eye-tracking study** S. Waechter*, B. Sütterlin, M. Siegrist, *ETH Zurich, Switzerland*	**[WS33.03] Ex-ante evaluation of responsible innovation in research networks** M. Schilperoord*[1], B. Schrempf[1], P. Ahrweiler[1], M. Müller[2], A. Pyka[2], N. Gilbert[3], *[1]EA European Academy of Technology and Innovation Assessment GmbH, Germany, [2]Hohenheim University, Germany, [3]University of Surrey, UK*	**[WS34.03] Design research for city futures: Framing the emerging area of design for system innovations and transitions** A.I. Gaziulusoy*, C. Ryan, *University of Melbourne, Australia*	**[O19.03] Exploiting the potential of public procurement - Opportunities for cleantech diffusion** K. Alhola, A. Nissinen*, *Finnish Environment Institute, Finland*	**[WS36.03] Increasing the resource efficiency within the value chain of low-value sorts for chosen hardwoods from sustainable managed mixed stands** W. Hesselbach, *Georg-August-University of Göttingen, Germany*	**[WS37.03] Research through Design as space for spawning** M.K. Harder*[1 ,2], G. Burford[2], E. Hoover[1 ,2], *[1]Fudan University, China, [2]University of Brighton, UK*

10:50-11:05	**[WS30.04] A methodology to design models of urban energy systems** L.M. Agudin, *Ramon Llull University, Spain*	**[O17.04] Applicability of social practice theory to sustainable clothing consumption research** K. Laitala, *National Institute for Consumer Research (SIFO), Norway*	**[WS32.04] How the efficiency of household waste management can be improved: Case studies of Belgium and Bulgaria** I.A. Bozhikin*[1,2], N.A. Dentchev[1,3], *[1]VUB, Belgium, [2]UNWE, Bulgaria, [3]KU Leuven, Belgium*	**[O18.04] Balancing private and public interests in societal decision-making: A case study of estuarine protection** L.R. Martin, *Erasmus University, USA*	**[WS28.12] Innovative eco-design tools for electronic devices end-of-life emerging from producer responsibility system** T. Van Nieuwenhuyse*, P-M. Assimon, *Eco-systèmes, France*	**[WS33.04] Frugal and reverse innovation as novel business models having diverse sustainability impact** E. Rosca[1], J. Bendul[1], M.G. Arnold*[2], *[1]Jacobs University Bremen, Germany, [2]University of Oldenburg, Germany*	**[WS34.04] Beyond waste – an examination of municipal waste management practices in the Maltese Islands using comparative material flow accounting and carbon footprint assessment to analyse current and the future planned scenarios** M. Camilleri*[1,2], X. Gabarrell[2], R. Farreny[2], J. Oliver-Sola[2], *[1]University of Malta, Malta, [2]Universitat Autonoma de Barcelona, Spain*	**[O19.04] Sustainable public food procurement: a systematic literature review** G. Stefani, M. Tiberti, G.V. Lombardi*, *university of Florence, Italy*	**[WS36.04] Peat and pots: A new concept for regularization robustness in multi-objective optimization and its application** C. Krüger*, F. Castellani, J. Geldermann, A. Schöbel, *University of Göttingen, Germany*	
11:05-11:20	**[WS30.05] Where does participation happen? Citizens' values in future Smart cities** F. Hoover*, P. Graham, M.K. Harder, *Fudan University, China*	**[O17.05] Entrepreneurship support and sustainability focus within business incubators – a European study** D. Bienkowska*, M. Klofsten, *Linköping University, Sweden*	**[WS32.05] Tax and social entrepreneurship: evidence from Ireland creating principles for sustainable taxation** S. Killian, *University of Limerick, Ireland*	**[O18.05] Evaluating subjective welfare - a systematic review of subjective well-being indicators** G. Harangozo, *Corvinus University of Budapest, Hungary*	**[WS28.13] Life cycle assessment of ceramic tiles manufactured in Sri Lanka** A.R.M. Rikkas*, A.K. Kulatunga, P.B.R. Dissanayake, J. Gowrynathan, C. Chandrakumar, *University of*	**[WS33.05] Measuring resources, capacities and competences for eco-innovation in firms** C.P. Kiefer*[1], J. Carrillo-Hermosilla[1], P. Del Río[2], F.J. Callealta[1],	**[WS34.05] Life cycle-based energy consumption and economic cost of typical wastewater treatment systems in Shenzhen, China** W.J. Li*[1], L.J. Li[1], G.Y. Qiu[1], X.F.	**[O19.05] Navigating the circular economy: The particle-versus-product debate** F. Blomsma[1,2], *[1]Imperial College London, UK, [2]UK Centre for Sustainable Manufacturing, UK*	**[WS36.05] IT-based value co-creation in inter-organizational networks for the utilization of renewable resources** M. Mandrella, *University of Goettingen, Germany*	

					Peradeniya, Sri Lanka	*[1]University of Alcalá (UAH), Spain, [2]CSIC, Spain*	Hao[1], Q. Luo[1], *[1]Peking University, China, [2]Shenzhen State High-tech Industrial Innovation Centre, China, [3]Shenzhen Second Senior Technical School, China*			
11:20-11:35		**[O17.06] Organizational sustainability transformation: The role of institutional intra-preneurship** L. Albareda*[1], D. Ernst[2], R. Adams[3], *[1]Deusto Business School, Spain, [2]Celviva Sustainable Innovation Services, Germany, [3]Surrey University Business School, UK*	**[WS32.06] Conflicting logics and hybridity: A look at social enterprises** S. Hai*[1], M. Struminska[2], R. von Wittken[3], *[1]ESADE Business School, Ramon Llull University, Spain, [2]Kozminski University, Poland, [3]TUM School of Management, Germany*	**[O18.06] Diverse religions on the global stage for climate change: a comparison of real-world actions** J. Stubblefield*[1], J. Watkins[2], D. Huisingh[1], J.J. Bouma[1], *[1]Erasmus University, The Netherlands, [2]United Methodist Church, USA*	**[WS28.14] Public policy models that strengthen circular economy: A study applied to the consolidation of vehicle recycling process in Brazil** N.S. Coimbra*[1,2], A.M.F. Danilevicz[1], *[1]Universidade Federal do Rio Grande do Sul, Brazil, [2]Departamento Estadual de Trânsito do Estado do Rio Grande do Sul, Brazil*	**[WS33.06] Sustainable innovations for economic growth** Y. Krozer[1,2], *[1]University Twente, The Netherlands, [2]Sustainable Innovations Academy, The Netherlands*	**[WS34.06] Design criteria for urban ecological infrastructure: The case for just city metrics** H.D. Lester*, W.B. Rouse, W.J. Braida, *Stevens Institute of Technology, USA*	**[O19.06] Conceptual framework for shared value creation based on value mapping** N.M.P. Bocken[1,2], *[1]TU Delft, Industrial Design Engineering, The Netherlands, [2]University of Cambridge, UK*	**[WS36.06] Multi-objective robust flow problems in resource utilization networks** L. Thom*, A. Schöbel, *Georg-August-University Göttingen, Germany*	
11:35-11:50		**[O17.07] A Corporate Social Entrepreneurship Tool to Kickstart Social**	**[WS32.07] From risky innovation to socially responsible**	**[O18.07] Towards synergies between local repairers,**	**[WS28.15] Building the bridge between innovative recycling**	**[WS33.07] The driving forces of process eco-innovation and their impact on**	**[WS34.07] Infrastructure ecology: An evolving paradigm for**	**[O19.07] Implementation of circular economy in**	**[WS36.07] An application of agent-based modelling for**	

		Intrapreneurship N.M.P. Bocken[1,2], T.H.J. Geradts*[3,4], *[1]TU Delft, The Netherlands, [2]The University of Cambridge, UK, [3]Erasmus Universitty, The Netherlands, [4]Nyenrode Business Universiteit, The Netherlands*	**innovation - Key stakeholder influences on social ventures in product innovation management** F. Polzin*[1], D. Langer[2], *[1]Sustainable Business Institute (SBI), Germany, [2]EBS Business School, Germany*	**citizens, designers, and public actors: The REVALUE project** B. Tyl*[1], R. Allais[2], N. Bocken[3], P.P. Pichler[5], F. Lüdeke-Freund[6], F. Berlingen[7], M. Len[8], V. Fernani[9], C. Baldacchino[1], M. Hamwi[1], D. Lévi Alvarès[7], A. Gheorghica[10], G. Masson[11], B. Kubbinga[12], S. Prendeville[3,4], K. Kruk[12], K. Whalen[12], J. Gobert[2], C. Brass[4], *[1]Apesa, France, [2]CNRS-University of technologie of Troyes, France, [3]TU Delft, The Netherlands, [4]Royal College of Art, UK, [5]Potsdam University, Germany, [6]University of Hamburg, Germany, [7]Zero Waste Europe, The Netherlands, [8]RREUSE, Belgium, [9]ApiUP, France, [10]Mai Bine, Romania, [11]MetaIT, France,*	**technologies and recycling-friendly product design - The example of technology metals** M. Marwede*[1], P. Chancerel[1], M. Ueberschaar[1], V.S. Rotter[1], N.F. Nissen[2], K-D. Lang[1,2], *[1]Technische Universität Berlin, Germany, [2]Fraunhofer Institute for Reliability and Microintegration IZM, Germany*	**performance: Insights from Slovenia** J. Hojnik*, M. Ruzzier, *University of Primorska, Slovenia*	**sustainable urban development** A. Pandit*[1], E.A. Minne[1], F. Li[4], H. Brown[3], H. Jeong[1], J.C. James[1], J.P. Newell[2], M. Weissburg[1], M.E. Chang[1], M. Xu[2], *[1]Georgia Institute of Technology, USA, [2]University of Michigan, USA, [3]City University of New York, USA, [4]Chinese Academy of Sciences, China*	**Danish companies** E. Guldmann*, J.P. Jensen, *Aalborg University, Denmark*	**gauging the wood market** A. Becker, *University of Göttingen, Germany*	

				[12]*Circle Economy, The Netherlands*						
11:50-12:05		**[O17.08] The hidden link in sharing economy models: How does the organization influence its users' behavior?** P. Sevikul*, D. Dentoni, *Wageningen University, The Netherlands*	**[WS32.08] Social innovation and collective entrepreneurship: A brazilian case** J.A.R. Sarate[1], J. Macke*[1,2], [1]*Faculdade Meridional (IMED), Brazil,* [2]*Universidade de Caxias do Sul (UCS), Brazil*	**[O18.08] Explaining differences in citizens' appraisals of externalities associated with polluting industrial agglomerations: The case of two petrochemical complexes on the Spanish Mediterranean coast** M.A. López-Navarro[1], V. Tortosa-Edo*[1], V. Castán Broto[2], [1]*Universitat Jaume I, Spain,* [2]*University College London, UK*	**[WS28.16] Designing out waste - Experiences from Bang & Olufsen** A. Bundgaard*[1], A. Remmen[1], B. Vroue[2], [1]*Aalborg University, Denmark,* [2]*Bang & Olufsen, Denmark*	**[WS33.08] Industry eco-innovation strategies for process upgrading: Systemic limits of internalising externalities** L. Levidow, *Open University, UK*	**[WS34.08] POCACITO – Foresight for sustainable pathways towards liveable, affordable and prospering cities in a world context** I. Kaltenegger, *Joanneum Research Forschungsgesellschaft, Austria*		**[WS36.08] Uncertain bottleneck problems in the cascade utilization of biomass** M. Garbs*, J. Geldermann, *University of Göttingen, Germany*	
12:05-13:05	Lunch									
Rooms	*Auditorium*	*Garbi*	*Llevant 1*	*Llevant 2*	*Llevant 3*	*Llevant 4*	*Mestral 1*	*Mestral 2*	*Mestral 3*	*Mestral 4*
13:05-14:05	**Workshop 31: CUT Through**	**Session 17: (Continued)**	**Workshop 32: (Continued)**	**Session 18: (Continued)**	**Workshop 28: (Continued)**	**Workshop 33: (Continued)**	**Workshop 34: (Continued)**	**Workshop 35: From Farm to Fork**	**Workshop 36: (Continued)**	**Workshop 38: NETWORK OF NETWORKS**
13:05-13:20	**[WS31.01] The power of cities: Exploring institutional change in leading sustainable cities**	**[O17.09] Interpretations of sustainable development in business models for sustainability - evidence from**	**[WS32.09] Social entrepreneurship in start-ups: Challenges and obstacles for training programmes**	**[O18.09] Promoting social development in Brazil's semiarid region through solar-thermal power plants** L. Couto*, R. Soria, J. Portugal-	**[WS28.17] DESIGN for environment and lean manufacturing: A relationship in product development cycle**	**[WS33.09] Sustainability diffusion: Maximising the rate of sustainability adoption** K. Hader*, J.A. Garza-Reyes,	**[WS34.09] Urban brownfield regeneration and energy transition in the built environment**	**[WS35.01] Towards a business driven sourcing model for sustainable smallholder supply:The case of black soybeans in Indonesia**	**[WS36.09] Life cycle assessment of a packaging recovery process from collected food waste**	**NETWORK OF NETWORKS**

	R. Huxley*, R. Gillard, *University of Leeds, UK*	**Austrian companies** R.J. Baumgartner*, R. Rauter, *University of Graz, Austria*	I. Molderez, *University of Leuven, Belgium*	Pereira, A. Szklo, A. Lucena, *Universidade Federal do Rio de Janeiro, Brazil*	M.J.A. Pinto Junior*, J.V. Mendes, *UFSCAR - Federal University of São Carlos - Campus Sorocaba, Brazil*	M.K. Lim, *The University of Derby, UK*	A. Mahzouni, *EPFL Institute of Technology and Public Policy, Switzerland*	A.R. Sjauw-Koen-Fa*, V. Blok, S.W.F. Omta, *Wageningen UR, The Netherlands*	D. Mosna, S. Spanu, G. Vignali*, *University of Parma, Italy*	
13:20-13:35	**[WS31.02] Individual and organizational drivers of entrepreneurship in consumption: novel mental models to catalyze urban transformations** D. Dentoni*[1], G. Migliore[2], *[1]Wageningen University, The Netherlands, [2]University of Palermo, Italy*	**[O17.10] An integrated perspective on sustainable business models and supply chains - applied to closed-loop models** F. Lüdeke-Freund*[1], S. Gold[2], N.M.P. Bocken[3], *[1]University of Hamburg, Germany, [2]University of Nottingham, UK, [3]TU Delft, The Netherlands*	**[WS32.10] Addressing social issues in limited resourced townships of South Africa: The case of Hubspace Khayelitsha** A. Mpeqa[1], *[1]University of Applied Sciences Northwestern Switzerland (FHNW), Switzerland, [2]University of Hohenheim, Germany*	**[O18.10] Sustainable small-scale development collaboration in West Kenya - the case study of Imani Belgium** L.L. Versteynen, *Imani Belgium, Belgium*	**[WS28.18] Better cooperation for circular economy through ecodesign** L. Blomqvist*[1], A. Carlén[1], C. Lopes[1], S. Elfving[1], C. Mattsson[1], E. Simonsson[1], *[1]Swedish Energy Agency, Sweden, [2]Swedish National Board of Housing Building and Planning, Sweden, [3]Swedish Environmental Protection Agency, Sweden, [4]Swedish Chemicals Agency, Sweden*	**[WS33.10] Sustainability implementation - an innovation diffusion perspective** K. Hader*, J.A. Garza-Reyes, M.K. Lim, *The University of Derby, UK*	**[WS34.10] Visions become reality - Smart City areas in Vienna** B. Lubitz-Prohaska, *Austrian Institute of Ecology, Austria*	**[WS35.02] Food Scares: Modelling Information Flows to Reduce their Frequency and Severity?** E.H. York*, A. Woodward, A. Druckman, *university of Surrey, UK*	**[WS36.10] Potential of X-ray micro-computed tomography in the field of resource efficiency of wood** T. Koddenberg*, H. Militz, *University of Göttingen, Germany*	**NETWORK OF NETWORKS**
13:35-13:50	**[WS31.03] Governance of Urban Sustainability Transitions**	**[O17.11] Sourcing strategy in multinational enterprises An innovative**	**[WS32.11] The emergence of social business incubators: Evidences from the Italian case**	**[O18.11] Economic impact of different DHW alternatives on isolated micro-communities**		**[WS33.11] A function of innovation system approach for analysing the**	**[WS34.11] Assessing the environmental sustainability with a co-benefits**	**[WS35.03] Food-print, the environmental cost of food: Conceptual contributions**	**[WS36.11] Resource recovery from high alkaline wastes: A multi-disciplinary**	**NETWORK OF NETWORKS**

	K. McCormick*, Y. Voytenko, O. Mont, *Lund University, Sweden*	**business model for sustainable agroforestry** C. Mark-Herbert*, B. Prejer, *Swedish University of Agricultural Economics, Sweden*	F. Giordano*[1,2], A. Lanteri[3], L. Michelini[1], *[1]LUMSA University in Rome, Italy, [2]SDA Bocconi School of Management in Milan, Italy, [3]Hult International Business School in London, UK*	D. Neves*[1], C.A. Silva[2], *[1]Universidade de Lisboa, Portugal, [2]Universidade de Lisboa, Portugal*		**roles of intermediaries in eco-innovation** W. Kanda*[1], P.D.R. Gonzaléz[2], O. Hjelm[1], D. Bienkowska[1], *[1] Linköping University, Sweden, [2]Institute for Public Policy and Goods, Spain*	**approach: A study of industrial sector in Baoshan District in Shanghai** D. Wenbo, *Fudan University, China*	**from an EXPO 2015 scientific conference** E. Vagnoni, E. Campus, C. Serra, P. Duce*, *CNR IBIMET, Italy*	**study of technical possibilities and political economic constraints** P. Deutz*, H. Baxter, H.I. Gomes, D. Gibbs, W. Mayes, M. Rogerson, J.P. Atkins, A.J. Gregory, G. Midgley, *University of Hull, UK*	
13:50-14:05	**[WS31.04] Getting to Post-carbon Resilient Cities through New Urban aimaginaries: Lessons from 2 international design visioning projects.** C. Ryan*, I. Gaziulusoy, M. Trudgeon, *University of Melbourne, Australia*	**[O17.12] Value creation and appropriation in economic, social and environmental domains** L. Albareda*[1], P. Ritala[2], N. Bocken[3], *[1]Deusto University, Spain, [2]Lappeenranta University of Technology, Finland, [3]Delft University of Technology, The Netherlands*	**[WS32.12] Social Entrepreneurship and Sustainability: State of the art and future research** J. Macke*[1,2], J.A.R. Sarate[1], J. Domeneghini[1], *[1]Faculdade Meridional (IMED), Brazil, [2]Universidade de Caxias do Sul (UCS), Brazil*	**[O18.12] Bioeconomy in Region Zealand, Denmark - approaches, challenges and perspectives** B. Rasmussen, *Region Zealand, Denmark*		**[WS33.12] Firm's technological trajectory as a driver for eco-innovation in young SMEs** F.J. Sáez-Martínez*, C. Díaz-García, A. González-Moreno, *University of Castilla-La Mancha, Spain*	**[WS34.12] Effect of urea on growth and microcystins production of Microcystis aeruginosa** R. Dai*, P. Wang, X. Wu, Y. Yan, *Fudan University, China*	**[WS35.04] An infographic tool to promote healthier and sustainable food consumption: The nutritional and environmental double pyramid** L.F. Ruini*[1], R. Ciati[1], L. Principato[2], M. Antonelli[3], *[1]Barilla G.e R. Fratelli S.p.A, Italy, [2]La Sapienza University, Italy, [3]Roma Tre University, Italy*	**[WS36.12] Inter organizational is adoption in the wood industry: Examining the role of industry characteristics** S. Zander[1], *[1]University of Göttingen, Germany, [2]Research Training Group 1703, Germany, [3]Chair of Information Management, Germany*	**NETWORK OF NETWORKS**
14:05-14:35	Refreshment Break									
Rooms	*Auditorium*	*Garbi*	*Llevant 1*	*Llevant 2*		*Llevant 4*	*Mestral 1*	*Mestral 2*	*Mestral 3*	*Mestral 4*
14:35-15:35	**Workshop 31: (Continued)**	**Session 17: (Continued)**	**Workshop 32: (Continued)**	**Session 18: (Continued)**		**Workshop 33: (Continued)**	**Workshop 34: (Continued)**	**Workshop 35: (Continued)**	**Workshop 36: (Continued)**	**Workshop 38: (Continued)**

14:35-14:50	**[WS31.05] Zabrze - In transition from most polluted to a green showcase** M. Backman, *The Swedish-Polish Sustainable Energy Platform C/o IIIEE at Lund University, Sweden*	**[O17.13] Product-service systems as sustainable business models: Theoretical and empirical findings** M. Yang*, S. Evans, D. Vladimirova, M. Holgado, P. Rana, *University of Cambridge, UK*	**[WS32.13] Social entrepreneurship - Why yes? Why not?** E. García-Uceda, J.L. Murillo-Luna*, *University of Saragossa, Spain*	**[O18.13] A corridor striving for sustainability - Reflecting upon PhD education at a Swedish university** R. Feiz, P. Fenton, P. Frändegård, N. Johansson, W. Kanda, J. Matschewsky*, S. Mejía Dugand, S. Päivärinne, B. Wallsten, *Linköping University, Sweden*		**[WS33.13] Measuring the Coordinated Development of Economy, Society, and Environment in Municipalities and Provinces of China** Y. Ding*, Q. Yang, *Wuhan University of Technology, China*	**[WS34.13] The importance of inter-personal interaction in successful behaviour change programs - A study of six recycling schemes** Y.Y. Huang*[1], M.K. Harder[1], *[1]Fudan University, China, [2]University of Brighton, UK*	**[WS35.05] The Barilla Sustainable Farming project - Promoting more sustainable durum wheat production through crop rotation and the use of a Decision Support System** C. Ronchi[1], E. Ferrari[1], P. Meriggi[2], L.F. Ruini*[1], M. Antonelli[3], *[1]Barilla G.e R. Fratelli S.p.A., Parma, Italy, [2]Università Cattolica del Sacro Cuore, Italy, [3]Roma Tre University, Italy*	**[WS36.13] Resource efficiency of bio-composite materials: Sustainability assessment of agricultural supply chain-A case study in central Italy** F. Castellani*, J. Geldermann, *Georg-August-Universität Göttingen, Germany*	**NETWORK OF NETWORKS**
14:50-15:05	**[WS31.06] Cultural Capital Europe as a transformative agent for a city** L. Lijzenga, J. Eijssen*, *University of Melbourne, Australia*	**[O17.14] Emerging business models for strong sustainable consumption in the fashion industry** C. Lozano-Gómez*, M.A. López-Navarro, *Universitat Jaume I, Spain*	**[WS32.14] A non-governmental organization leading the path to green industry** S. Elouardighi, *Virginia Tech, USA*	**[O18.14] Accelerating transitions to equitable and sustainable societies: Towards ethical existence for long term happiness** L.P. Batuwitage*[1], T. Sugathapala[2], S. Peiris[3], N. Cooray[4], G. Batuwitage[5], D. Huisingh[6], *[1]University of*		**[WS33.14] The role of purchase tendencies data in the transformation of consumption in China** C. Koch, *Wuhan University of Technology, China*	**[WS34.14] Investigating urban resource metabolism at different scales towards cleaner and more sustainable consumption patterns** D.F. Civitillo, S. Viglia*, G. Cacciapuoti, S. Ulgiati, *Parthenope University of Naples, Italy*	**[WS35.06] Healthy nutrition fuelling healthy business: A literature review of nutritional intervention with sustainable business models** K. Van Fossen*, S. Evans, *University of Cambridge Centre for Industrial Sustainability, UK*	**[WS36.14] Reducing product returns in online retail - the contribution of machine learning techniques** P. Urbanke, *University of Göttingen, Germany*	**NETWORK OF NETWORKS**

				Colombo, Sri Lanka, [2]University of Moratuwa, Sri Lanka, [3]Consultant-Sustainable Consumption and Production, Sri Lanka, [4]Business & Industry Development Services (Pvt) Ltd, Sri Lanka, [5]Sri Lanka Institute of Development Administration, Sri Lanka, [6]University of TN, USA						
15:05-15:20	**[WS31.07] Linking localised action to theoretical constructs: the design of a powerful practical planning tool for community-led recycling** D.Y. Xu*, M.K. Harder, *Fudan University, China*	**[O17.15] Business model of WEEE recycling based on internet: Typical cases in China** L.S. Zuo[1], C. Wang*[1], L.H. Zhang[1], H.L. Yao[1], *[1]Central South University, China, [2]University of Liverpool, UK*	**[WS32.15] Community-based business modeling on the level of industry stakeholders: The case of sustainability reporting** M. Langenus*, M. Dooms, *Vrije Universiteit Brussel, Belgium*	**[O18.15] Visions and actions to support societal transitions from being unsustainable to being sustainable: How can we build upon our diversity to achieve our common future?** D. Huisingh*[1], R. Lozano[1], *[1]University of Tennessee, USA, [2]Utrecht University, The Netherlands*		**[WS33.15] A system dynamics analysis of crowdfunding for sustainable entrepreneurial projects under Chinese context** L. Chen*[1], J. Chen[1], K. Xie[2], *[1]Wuhan University, China, [2]Wuhan University of Technology, China*		**[WS35.07] Sustainable Smallholder Sourcing Models: Lessons from black soybeans in Indonesia and tomatoes in India'** A.R. Sjauw-Koen-Fa*, V. Blok, S.W.F. Omta, *Wageningen UR, The Netherlands*	**[WS36.15] Generating electricity from slaughtery residues. An environmental assessment.** R. Santagata[1], M. Ripa*[1], S. Ulgiati[1,2], *[1]Parthenope University of Naples, Italy, [2]Beijing Normal University, China*	**NETWORK OF NETWORKS**
15:20-15:35	**[WS31.08] Highlighting urban**	**[O17.16] Niche development in market-based**		**[O18.16] On the use of the 5D-sustainability**				**WS35**		**NETWORK OF NETWORKS**

	transformation possibilities with commuter buses in Shanghai H. Chen, *Fudan University, China*	**vs. grassroots citizen participation initiatives in photovoltaics** S. Hatzl*[1], S. Seebauer[2], E. Fleiss[1], A. Posch[1], *[1]Institute of Systems Sciences, Innovation & Sustainability Research, Austria, [2]Wegener Center for Climate and Global Change, Austria*		**transition method - a case study** R. Allais, *CNRS - Université de technologie de Troyes, France*						
15:35-16:05	**Close of Conference**									