

Proceedings  
9<sup>th</sup> International Conference  
On  
Sustainable Development  
**ICSD 2021, Rome, Italy**  
*Book of Abstracts*



European Center of  
Sustainable Development  
Rome, 2021

*Proceedings of the 9<sup>th</sup> International Conference on Sustainable Development*

*9<sup>th</sup> ICSD 08-09 September 2021, Rome, Italy*

*Book of Abstracts*

Editing: Pierangelo Magnini

Scientific Coordinator: Gihan Diab

Editorial Coordinator: Cesare Anselmi

Editorial Managing: Diamantina Allushaj

ISBN 979-12-200-9520-4

***Doi: 10.14207/icsd.2021***

Publisher: European Center of Sustainable Development

© 2021 by ECSDEV All rights reserved. This work may not be translated or copied in whole or in part without the written permission of the publisher (ECSDEV, Via dei Fiori, 34, 00172 Rome, Italy), except for brief excerpts in connection with reviews or scholarly analysis. Use in connection with any form of information storage and retrieval, electronic adaptation, computer software, or by similar or dissimilar methodology now known or hereafter developed is forbidden.

The use in this publication of trade names, trademarks, service marks and similar terms, even if they are not identified as such, is not to be taken as an expression of opinion as to whether or not they are subject to proprietary rights.

Printed by Gruppo Atena.net Srl Via del Lavoro, 22, 36040, Grisignano VI, Italy

Tel: 0039/0444613696 Web: <http://www.atena.net>

# Contents

<b>Contents</b>	<b>3</b>
<b>Introduction</b>	<b>7</b>
<b>International Steering Committee:</b>	<b>9</b>
<b>Conference Program</b>	<b>11</b>
<b>1. Challenges for Wave Energy in the Pacific: A PESTEL and SWOT Analysis Approach</b>	<b>13</b>
Jessica Borges Posterari, Takuji Waseda	13
<b>2. Design of Sustainable Coastal Holiday Resorts by Means of Sea Energy</b>	<b>14</b>
Asier Ibeas, Pedro Arnau, Carlos José Pantaleón Pérez, Jorge Herrera, Silvia Hildebrandt	14
<b>3. Addressing Climate Change and Disaster Risk Reduction through Information and Communication Technology (ICT): The Case of Philippine Local Governance</b>	<b>16</b>
Ma. Divina Gracia Z. Roldan	16
<b>4. SDGs in the Covid 19 Storm (Example on Climate Pact Ambassadors Role)</b>	<b>17</b>
Marija Jevtic, Catherine Bouland	17
<b>5. The Global Green New Deal: The New Norm?</b>	<b>19</b>
Injy Johnstone	19
<b>6. Sustainable Development of Agriculture in Poland – Towards Organization and Biodiversity Improvement?</b>	<b>20</b>
Wioletta Wrzaszcz, Marek Zieliński	20
<b>7. The Impact and Importance of Communication Within the Agricultural Units in Romania in the Digital Era</b>	<b>22</b>
Raluca-Elena Ghinea, Alina Nicoleta Birsan, Lorian Vintila, Cristina State	22
<b>8. Limitation of Water Footprint Sustainability Assessment: A Review</b>	<b>23</b>
Libor Ansorge, Lada Stejskalová, Dagmar Vološinová, Jiří Dlabal	23
<b>9. Economic Performance of the ISO 14001 Standard in the Olive Oil Production Industry in Spain</b>	<b>25</b>
Rocío Carrillo Labella, Fatiha Fort, Manuel Parras Rosa	25
<b>10. Formation of Ukraine's Climate Policy in the Context of European Integration</b>	<b>27</b>
Liudmyla Golovko, Olena Yara, Olena Uliutina, Andrii Tereshchenko, Andrew Kudin	27
<b>11. Sustainable Development and Protected Natural Areas: The Case of the Tunkinsky National Park in Russia</b>	<b>28</b>
Sergey Kirillov, Mikhail Slipenchuk, Elena Vorobyevskaya, Viktor Zhuravlev	28
<b>12. Malaysian Utility Companies' Commitment toward Biodiversity Conservation: Do Social and Institutional Pressures Matter?</b>	<b>30</b>
Norhayati Mat Husin, Nur Fathanah Shamsol Kamal, Bakhtiar Alrazi	30
<b>13. A Country of Bricks – How to Transform Waste into Viable Products for Construction</b>	<b>31</b>
Constantin-Iulian Tănaşcu, Robert Andrei Costache, Lorin Ovidiu Vintilă	31

<b>14. Street Tree Plans to Reduce Particulate Matter and Protect Species Diversity in Suwon, South Korea</b>	<b>32</b>
Youngsun Seok, Hyosook Yim, Taehyeon Moon, Jinhyung Chon	32
<b>15. An Assessment of Orientation on Effective Natural Ventilation for Thermal Comfort in Primary School Classrooms in Enugu City, Nigeria</b>	<b>33</b>
Emeka Joseph Mba, Sam-Amobi Chinwe, Francis Ogochukwu Okeke	33
<b>16. Linking Sustainable Urban Development with Town Planning Through Proximity Trade</b>	<b>35</b>
Jose Manuel Diaz Sarachaga	35
<b>17. Improvement Proposals for the Machining Production Process in the Environmentally Responsible Manufacturing Perspective</b>	<b>36</b>
Güzide Karakuş, Feridun Karakuş, Ozan Koçak	36
<b>18. The Impacts of Sustainable Energy Development on Economic Growth of Sistan and Baluchestan in Iran</b>	<b>38</b>
Sepideh Azizi	38
<b>19. Increase in the Use of Distributed Renewable Energy Sources in Wroclaw City - Opportunities, Obstacles</b>	<b>39</b>
Małgorzata Pietras-Szewczyk	39
<b>20. Green Packaging: Which Are the Attributes Consumers Perceive Most?</b>	<b>40</b>
Alberto Bertossi	40
<b>21. Business Readiness to Implement AI to Prevent Potential Risks in Natural Gas Transmission and Storage</b>	<b>41</b>
Petya Biolcheva	41
<b>22. Building Consensus for Sustainable Development</b>	<b>42</b>
Demetrio Bova	42
<b>23. Waste Footprint of Selected City Districts of Prague</b>	<b>43</b>
Dagmar Vološinová, Libor Ansoerge, Lada Stejskalová	43
<b>24. Getting Used to Reusing: A Quantitative Analysis of Field Data on Frequent and Reliable Use of a Reusable Food Container System</b>	<b>44</b>
Christoph Ratay	44
<b>25. Collective Management of Natural Resources Based on Traditional Values in West Sumatera Indonesia</b>	<b>45</b>
Ami Sukma Utami, Hiroki Oue	45
<b>26. Cultural Heritage and Nation Branding: A Marketing Driver for Sustainable Development</b>	<b>46</b>
Calin Veghes	46
<b>27. The Significance of Demographics in Consumer Materialism</b>	<b>47</b>
Rosita Lekavičienė, Dalia Antinienė, Beata Šeinauskienė, Aušra Rūteliionė, Shahrokh Nikou	47
<b>28. Entrepreneurship Education Inside the Japanese Biosphere Reserves to Trigger Work Opportunities for Youth</b>	<b>49</b>
Aida Mammadova	49
<b>29. Enhancement of Polyethylene Terephthalate Bottles Recycling in Mauritius Through the Creation of a Mobile Application</b>	<b>50</b>
Karishma Jankee	50
<b>30. The Contributing Factors of Carbon Footprints Among Hotels on the Island of Mauritius: A Comparative Analysis</b>	<b>51</b>
Toshima Makoondlall-Chadee, Naadir Goolamally, Preeya Ramasamy Coolen, Chandradeo Bokhoree, Ravi Foogooa	51
<b>31. Investigating Composting as a Mitigation Strategy for Climate Change Using a Modelling Approach</b>	<b>53</b>
Preeya Ramasamy Coolen, Toshima Makoondlall-Chadee, Chandradeo Bokhoree, Ravi Foogooa	53

<b>32. Research Informed Teaching for Socio-Cultural Sustainability</b>	<b>55</b>
Larry W. Riggs, Sandra Hellyer-Riggs	55
<b>33. Building Upon Service-Learning in Higher Education: Lessons Learned and Future Recommendations</b>	<b>56</b>
Zamira Hyseni Duraku, Mirjeta Nagavci	56
<b>34. Higher Education for Sustainable Development: South African Perspective</b>	<b>57</b>
Ewelina K. Niemczyk	57
<b>35. Knowledge, Attitude, and Practices (KAP) about Sexual Harassment at Workplace: A Roadmap for Sustainable Workplaces</b>	<b>58</b>
Upma Gautam, Deeksha Bajpai Tewari	58
<b>36. Unifying Sustainable Development Goals: How Cultural and Creative Engagement are the Missing Links to Advancement</b>	<b>60</b>
Jayanna Killingsworth	60
<b>37. Consideration(s) of the Consequential Effects of Quality Indicators for Sustainable Development in Healthcare Practice and Delivery</b>	<b>61</b>
Karina Palkova, Roger Fisher, Viktor Justitsky	61
<b>38. Female Entrepreneurship Model, A Viable Solution for Crisis Resilience</b>	<b>63</b>
Alina Nicoleta Birsan, Raluca-Elena Ghinea, Lorian Vintila, Cristina State	63
<b>39. Sustainable Development Prospects of Socio-Cultural Environment in the Context of Economic Crime Enforcement</b>	<b>64</b>
Andrejs Vilks, Aldona Kipane	64
<b>40. The Securing a Claim in the Context of the Sustainable Development of this Institute of Law: An Evaluation of the Latvian Experience</b>	<b>65</b>
Andrejs Gvozdevičs	65
<b>41. Theoretical Aspects of the Legislation Dealing with Proceedings Regarding Criminal Property</b>	<b>66</b>
Sandra Kaija, Inga Kudeikina	66
<b>42. Managerial and Legal Peculiarities of Leadership Development in a Statutory Institution</b>	<b>68</b>
Aurelija Pūraitē, Rūta Adamonienē, Jekatarina Kartasova	68
<b>43. Exploring the Role of Corporate Social Responsibility in Community Development and Achieving the SDGs</b>	<b>70</b>
Taryn Ralph, Stanley Liphadzi	70
<b>44. The Role of Corporate Governance in Achieving Sustainable Development Goals (SDGs) among Malaysian Companies</b>	<b>71</b>
<b>45. Sustainability Reporting: Case of European Stock Companies</b>	<b>73</b>
Adrian Gawęda	73
<b>46. Do SDGs Really Matter for Business? Using GRI Sustainability Reporting to Answer the Question</b>	<b>74</b>
Roberta Costa, Tamara Menichini, Gennaro Salierno	74
<b>47. Does Mandatory Requirement Enhance Corporate Environmental Sustainability Reporting? A Case of Electricity Companies in Malaysia</b>	<b>75</b>
Bakhtiar Alrazi, Norhayati Mat Husin	75
<b>48. Trends in Global Infrastructure Investment and Financial Consequences</b>	<b>76</b>
Selin Gundes	76
<b>49. The Sustainable Project Management Concept is Necessarily Utilizing in French Wineries While Adapting to Climate Change</b>	<b>78</b>
Ruixin Zhang, Joel Carboni	78

<b>50. Aid Effectiveness of Aid-for-Trade: An Empirical Analysis on the International Trade Environment of Developing Nations</b>	<b>79</b>
Kunhyui Kim	79
<b>51. Impact of COVID-19 Public Measures on Country-level Trade Flows: A Global Panel Data Analysis</b>	<b>80</b>
Sylvia Szabo, Worawat Srisawasdi, Takuji W. Tsusaka, Reuben M.J. Kadigi, James Vause, Neil D. Burgess	80
<b>52. Changes in Shopping Behavior Under the Aspect of Sustainability and the COVID-19 Pandemic</b>	<b>81</b>
Daniela Ludin, Wanja Wellbrock, Erika Müller, Wolfgang Gerstlberger	81
<b>53. Lowering Distribution Costs: The Key to Sustainable Health Development?</b>	<b>83</b>
Cole Webber	83
<b>54. Advancing and Evaluating Performance of SME-s from the Relationship of Strategic Human Resource Management Practices</b>	<b>84</b>
Osman Sejfijaj, Ermira Shehu, Fisnik Morina, Fatmir Mema	84
<b>55. Ensuring Sustainable Development of Local Self-Government: Foreign Experience for Ukraine</b>	<b>86</b>
Viktor Ladychenko, Olena V. Gulac, Karim O. Yemelienenko, Volodymyr I. Kurylo	86
<b>56. Digital Public Administration for Sustainable Development</b>	<b>87</b>
Sorin Burlacu, Maria Loredana Popescu, Amelia Diaconu, Maria Alexandra Sârbu	87
<b>57. Climate Change and Health Protection in European Union</b>	<b>88</b>
Radu Ioan Mogos, Mihaela Diana Negescu Oancea, Victor Adrian Troaca, Sorin Burlacu	88
<b>58. The Assessment of Companies and Organizations that Have Outstanding Results in the Field of Sustainability</b>	<b>89</b>
Carmen Valentina Radulescu, Raluca Georgiana Ladaru, Iulian Gole, Carol Cristina Gombos	89
<b>59. Online Education During Pandemic Times, Advantages and Disadvantages</b>	<b>90</b>
Daniel Moise, Amelia Diaconu, Mihaela Diana Oancea Negescu, Carol Cristina Gombos	90
<b>60. Aspects of the Circular Economy in the Member States of the European Union</b>	<b>91</b>
Florina Bran, Dumitru Alexandru Bodislav, Svetlana Platagea Gombos, Petrică Sorin Angheluță	91
<b>61. The Recent Evolution of Global Tourism. Study Case - Switzerland</b>	<b>92</b>
Iulian Gole, Raluca Georgiana Ladaru, Carmen Valentina Radulescu, Svetlana Platagea Gombos	92
<b>62. Aspects of the Evolution of Enterprises in Member States of the European Union</b>	<b>93</b>
Petrică Sorin Angheluță, Dumitru Alexandru Bodislav, Maria Loredana Popescu, Florina Bran	93
<b>63. Impact of Digital Performance in Growing Businesses (Case Study Republic of Kosovo)</b>	<b>94</b>
Ermira Shehu, Osman Sejfijaj, Fisnik Morina, Fatmir Memaj	94
<b>Index of Authors</b>	<b>95</b>

## Introduction

On behalf of the European Center of Sustainable Development, I am very pleased to present the 9<sup>th</sup> ICSD Online Conference, despite the challenge posed by the COVID-19 pandemic.

We are facing a global health crisis, one that is spreading human suffering, infecting the global economy and upending people's lives.

We would like to express our profound gratitude to all those people who are serving so selflessly on the front lines of this health crisis.

Along with our colleagues at the European Center of Sustainable Development, we are humbly set to make the ICSD Conference part of the global response to this extraordinary challenge.

On a brighter note, it was gratifying to learn of the great number of excellent presentations – many recording important efforts in their respective fields of research, despite the various limitations and threats due to the global pandemic emergency.

The 9<sup>th</sup> ICSD 2021 is organized by the European Center of Sustainable Development, from:

### Wednesday 08 to Thursday 9 September, 2021

9<sup>th</sup> ICSD2021 is an excellent opportunity to present your projects and discuss the latest results in the field of Sustainability Science. The general aim of the conference is to promote international collaboration in Sustainability Science and related disciplines.

The Conference theme is *Creating a unified foundation for the Sustainable Development: research, practice and education*. This theme emphasizes the strong foundation that is provided by using research to inform our everyday practices, policies, and research approaches.

On behalf of the Scientific Program Committee, I have great pleasure in presenting this important event of the Scientific Community.

The Conference topics are distributed in the range of the following streams within the ICSD2021 program:

- 1. Economic Sustainability:**
- 2. Environmental Sustainability:**
- 3. Socio-Cultural Sustainability:**

All abstracts were reviewed by members of the ICSD2021 Steering Committee for rating of abstract quality and presentation content.

Selected papers are also published at the European Journal of Sustainable Development.

Further details in accordance with the instructions of the ICSD2021 are provided on the [Call for Papers](http://www.ecsdev.org) page at: [www.ecsdev.org](http://www.ecsdev.org)

I would like to thank you for your scientific contribution to the International Conference on Sustainable Development and look forward to having the opportunity to showcase and disseminate your research.

I am hopeful and confident that a good number of colleagues will return next year in person to continue our well settled tradition.

Special thanks also to the organizing committee, and all the people that worked hard, to bring in light this considerable event.

Yours sincerely

[Professor Gian Paolo Caselli](#)

Chair, 9<sup>th</sup> ICSD2021 Steering Committee



## International Steering Committee:

Gian Paolo Caselli, Chair  
*University of Modena and Reggio Emilia*

Aranit Shkurti, Canadian  
*Institute of Technology.*

Roberto Bianchini, CIRPS,  
*Sapienza University of Rome, Italy*

Emilia Conte,  
*Politecnico di Bari, Italy*

Vladimiro Pellicciardi,  
*Econdynamics, University of Siena,  
Italy*

Filippo Pericoli, Sapienza,  
*University of Rome, Italy.*

Leonardo Varvaro,  
*University of Tuscia, Viterbo, Italy.*

Cristina Giosuè,  
*Istituto per l'Ambiente Marino  
Costiero (CNR-IAMC).*

Gihan Diab, Sapienza, University  
*of Rome, Italy.*

Ante Galich, *Université du  
Luxembourg, Luxembourg.*

Konrad Prandecki,  
*National Research Institute, IAFE-  
NRI, Poland*

Kaizar Hossain, GITAM  
*University, Hyderabad Campus,  
India.*

Makoto Usami,  
*University of Kyoto, Japan.*

Sophia Kassapi,  
*University of Patras, Greece.*

Abdullah Karatas, Ömer  
*Halisdemir University, Turkey.*

Anil K. Choudhary,  
*IAR Institute, New Delhi, India.*

Giuseppe Motta, Sapienza,  
*University of Rome, Italy.*

Dr. Yee Keong Choy,  
*Keio University, Tokyo, Japan.*

Dr. Wioletta Wrzaszcz,  
*National Research Institute,  
IAFE-NRI, Poland.*

Alessandro Pistecchia, Sapienza,  
*University of Rome, Italy.*

Oana-Ramona Socoliuc, A. Ioan  
*Cuza University of Iași, Romania.*



# Conference Program



# 1. Challenges for Wave Energy in the Pacific: A PESTEL and SWOT Analysis Approach

Jessica Borges Posterari, Takuji Waseda

## ABSTRACT:

Wave energy resources have been studied and quantified for the Pacific Region in the past. It is recognized that several Pacific Island Countries have the potential to adopt wave energy as an alternative to fossil fuels. Nevertheless, the potential challenges for harnessing wave energy remain unknown, whilst being particularly important for island environments with unique characteristics. This study applies the PESTEL (Political, Economic, Social, Technological, Environmental and Legal) approach to create a framework that identifies potential challenges for wave energy in the Pacific Island Countries. Through literature review, technology review and regional reports, thirty-one potential challenges were found for all categories combined, which are then assorted into a cluster diagram. Lastly, the resulting framework is combined with the SWOT (Strengths, Weaknesses, Opportunities and Threats) approach to create a SWOT matrix that identifies relevant internal and external factors for a wave energy project in the Pacific region scope. Three Pacific Islands were analyzed through the framework to elucidate the distinct environments and distinct challenges for wave energy; selected islands were Tubuai (French Polynesia), Viti Levu (Fiji) and Rarotonga (Cook Islands). The outputs from this study can be utilized by project developers and decision-makers during the pre- feasibility assessment stage of a wave energy project in the Pacific Island Countries.

*Keywords: Pacific, wave energy, island environment, PESTEL, framework, SWOT*

**Jessica Borges Posterari** is a PhD student at the Graduate Program in Sustainability Science at The University of Tokyo, Japan. Academic background includes a Master's degree in Sustainability Science at The University of Tokyo as well as a Bachelor's degree on Environmental Engineering by Universidade Federal do Rio Grande do Sul, Brazil. Past studies include the assessment of wave energy in the Pacific Island Countries, as well as a Political-Economic-Social-Technological-Environmental-Legal approach to wave energy. Current research explores the opportunities for Ocean Thermal Energy Conversion in the Pacific environment considering a sustainable development context. Additional interests are Sustainable Development Goals, marine energy technologies, and Small Island Developing States.

**Takuji Waseda** is a Professor at the Ocean Technology, Policy and Environment department at The University of Tokyo, Japan. Academic background includes a PhD in Mechanical and Environmental Engineering from University of California, Santa Barbara. Prof. Waseda is the head of the Applied Physical Oceanography Laboratory. The research contents of the students in the laboratory are broad; they consist of clarifying the mechanism of freak waves and the Kuroshio, the assessment on the ocean renewable energy, the forecast and hindcast of ocean waves and ocean currents, and the development of a new ocean observation buoys. Recent research focuses include wave-ice interaction, Arctic sea route, ocean data assimilation, and radar remote sensing. He is also engaged in various projects on green technology such as renewable energy (wave, current, and thermal) and wind assisted cargo ship.

## 2. Design of Sustainable Coastal Holiday Resorts by Means of Sea Energy

Asier Ibeas, Pedro Arnau, Carlos José Pantaleón Pérez, Jorge Herrera, Silvia Hildebrandt

### ABSTRACT:

This paper describes the utilization of the water, energy and temperature of the Sea for desalination, energy harvesting and refrigeration use in facilities near the coast (especially, holiday resorts). To this end, we combine the use of three technologies: (i) the use of Wave Energy Converters (WEC) that obtain the energy of waves that is used for pumping colder seawater of deeper layers, (ii) the use of this cold water from the sea for refrigeration with Seawater Air Conditioning (SWAC) technology and, (iii) the use of the gradient of temperature between colder pumping water and the heated water for their use in COOL STEAM, near vacuum, desalination technology. A storage system is also used to store the extra energy and retrieve this energy in periods when the renewable ones cannot fulfill the demand. This paper describes the conceptual design and pre-feasibility analysis of the entire system proposing a sustainable way to satisfy the resort requirements from the huge and green resources contained in the ocean.

*Keywords: Sustainability; Desalination; Sea energy; Seawater Air Conditioning (SWAC); COOL STEAM; Wave Energy Converters (WEC)*

**Asier Ibeas** was born in Bilbao, Spain, on July 7, 1977. He received his MSc degree in Applied Physics and his PhD degree in Automatic Control from the University of the Basque Country, Spain, in 2000 and 2006, respectively. He is currently Associate Professor of Systems Engineering at Autonomous University of Barcelona, Spain. His research interests include time-delayed systems, robust adaptive control and applications of control to renewable energies, fields where he has published more than 130 contributions in international journals and conferences.

**Pedro Arnau** holds a Ph.D. in Physical Oceanography by the Politechnical University of Catalonia. Since 2010, he is coordinator of Natura department at the International Center for Numerical Methods in Engineering (CIMNE). He has participated in numerous oceanographic campaigns aboard the ships Hespérides, Vizconde de Eza and García del Cid, among others. In CIMNE, he directs a research unit called CIMNENatura where he is the principal investigator. He is one of the promoters of the development of technology for the purification of Cool Steam seawater in CIMNE, being coinventor in the patents that defend this technology.

**Carlos José Pantaleón Pérez** is professor in the Pontificia Universidad Católica Madre y Maestra (PUMM). He is Master of Science in Mechanical Engineering, Thermal/Fluids concentration by the Rochester Institute of Technology, RIT. Rochester, NY, USA, and Bachelor of Science in Electromechanical Engineering by the Pontificia Universidad Católica Madre y Maestra, PUCMM. Santiago, D.R. He has lead multiple research projects in Thermal and Environmental Engineering as PI.

**Jorge Herrera** graduated as electronic engineer from the University of Quindío, Colombia, in 2004. He received the PhD in Industrial Computing and advanced techniques of production from the Universidad Autonoma de Barcelona, Spain, in 2011. He is currently full Professor in the Engineering department at the University Jorge Tadeo Lozano in Bogotá, Colombia. He is the director of the Industrial Engineering program and director of the Master in Engineering Management. His active research lines are the design of WEF (Water, Energy and Food) systems in Colombia and the control of renewable energy systems.

**Silvia Hildebrandt** is project manager at the Plataforma Oceánica de Canarias (PLOCAN). She is graduated in Oceanography by the University of Las Palmas. She is specialized in the management of projects related to marine technologies and marine renewable energy systems.

### 3. Addressing Climate Change and Disaster Risk Reduction through Information and Communication Technology (ICT): The Case of Philippine Local Governance

Ma. Divina Gracia Z. Roldan

**ABSTRACT:**

Developing countries are gravely challenged by the adverse effects of climate change and natural disasters. The Philippines is considered as one of the most vulnerable and disaster-prone countries in the world. The European Union (EU) as a development partner extends support to the Philippines on climate change. While there are global and national initiatives to take action on these issues, the challenge is how local governments can engage communities to address these environmental threats. The paper poses the following questions: (1) What is the policy framework that guides government actions to address climate change and disaster risk reduction and management in the Philippines? (2) What assistance does the EU provide to the Philippines in tackling climate change? (3) How can ICT be effectively used as a mechanism by local governments to engage their constituents in addressing climate change and disaster risk reduction? Documentary analysis of Philippine laws on ICT, climate change, and disaster risk reduction and management are employed to determine the policy framework of the Philippines as a case. Desktop research is undertaken to identify forms of EU technical assistance to the Philippines on climate change. A content analysis of local government websites shall be made on selected cities in the National Capital Region and in Bicol province which were hardest hit during recent natural calamities. While national policies exist to deal with climate change and disaster management, initiatives may take a backseat given the current pandemic.

*Keywords: climate change, disaster risk reduction and management, Philippines, information & communication technology, local governance, EU assistance*

**Ma. Divina Gracia Z. Roldan** is a professor at the Political Science Department, College of Liberal Arts, De La Salle University in Manila, Philippines. She obtained her Ph.D. in Philippine Studies (specializing in bureaucracy and external relations) at the University of the Philippines Asian Center. Her research interests include governance and information and communications technology (ICT), development issues, policy and organizational analysis. She has done interdisciplinary research and has managed projects with internationally-trained professional teams from Europe and Asia.



## 4. SDGs in the Covid 19 Storm (Example on Climate Pact Ambassadors Role)

Marija Jevtic, Catherine Bouland

### ABSTRACT:

The Climate Pact was launched in December 2020 with hope that the vaccine which was coming would help us overcome the COVID-19 pandemic “storm”. Even though the humans are in the middle of Covid pandemic storm, it is yet important not to forget the climate change challenge, and it is a very active “factory”. Unfortunately for the climate change process and biodiversity crises, there is no vaccine. The Climate Pact is the opportunity to create a European-wide movement that supports, encourages and acknowledges individual climate achievements. According to SDG 13 (climate action), Climate Pact encourages actions such as: green areas, green transport, green buildings and green skills. Also, it is important to expand sustainable consumption and production, the quality of soils, healthy food and sustainable diets, oceans, and rural and coastal areas. So, Climate Pact is a driver for Sustainable Development Goals, and it is based on the ideas and contributions of all interested individuals and different organisations. Climate Pact Ambassadors are representatives of civil society and citizens with the strength for action (despite the Covid 19 pandemic “storm”) and collaboration among themselves as well as with researchers, academia and policy decisions to beat climate change and give contribution to SDG 13.

*Keywords: Sustainable Development Goals, Covid 19, Climate change*

**Marija Jevtic** is a full professor at the University of Novi Sad, Medical Faculty. Specialist in Hygiene, Subspecialisation: Medical Ecology. Scientific collaborator - Université Libre de Bruxelles (ULB), Research centre on Environmental and Occupational Health, School of Public Health. Master degree in the field of Air pollution and health, University of Belgrade, Centre of Multidisciplinary studies (1999). PhD in the field of Environment and Health, University of Novi Sad, Faculty of Medicine (2001). Academic Master Degree in Health Management, University of Belgrade (2011). Group analyst (2009). System psychodynamic organisational consultant (Psycho-social Section of the Group Analytic Society Belgrade) (2018). President of EUPHA ENV Section, Climate Pact Ambassador EU (2020). Field of interest and work: public health, environment and health, SDGs, mental health, migration, climate change, food safety, nutrition, health management, group psychotherapy, organizational consulting. Previous position: Assistant minister, Director of Institute of Public Health of Vojvodina. Membership: Serbian Medical Association, European Public Health Association, Serbian Public Health Association. IPPF Serbia, Group Analytic Society Belgrade (GAS Belgrade); Group Analytic Society GAS International Member, International Society for Psychoanalytic Study of Organizations (ISPSO), Scientific-Professional Society for Disaster Risk Management - Serbia, European Health Management Association (EHMA). Associate member of Academy of Medical Sciences Serbian Medical Doctors.

**Catherine Bouland** graduated Zoological Sciences in 1979 with great distinction. In 1988, she became a doctor in Zoological Sciences with great distinction. She obtains a Postgraduate Certificate in Community Health at the ULB. She started at the Brussels Institute for Environmental Management (IBGE) from 1999 to 2010 in various positions of responsibility of the departments of Health and Internal Pollution, eco-construction and health and she launched a health and environment interface as a decision aid. Since 2010 and to date, the Prof. Bouland becomes a chair at the School of Public Health of the Université Libre de Bruxelles where she teaches a master's degree in environmental health and a doctorate in public health. In addition to teaching, she adds research and community services to this activity. She was vice-president of the national environmental cell and then become President. She works in the field of environmental exposures and effects on health, air quality, indoor pollution, low doses and cumulative exposure, air pollution and epidemiology, noise, development and management of new systemic approaches to environment and health. Since April 2012, Professor Bouland has been head of the Environmental Health and Occupational Health Research Center and at this moment she is director.

## 5. The Global Green New Deal: The New Norm?

Injy Johnstone

### ABSTRACT:

Current headlines suggest that the world at large has missed the opportunity to ‘build back better’ post COVID-19. This ignores the subtle yet important fact that all OECD countries have incorporated green policies in their rebuild; a pursuit overwhelmingly led by the European Union. Only by pairing examples of general practice and *opinio juris* with meta-analysis of relevant states’ stimulus packages can the true normative potential of the global green new deal (GGND) be recognised for Europe and beyond. In particular, the GGND’s status as a potential customary norm and the role it could play in shaping the future of the trade-climate nexus. The link between industrialised status and green recovery also speaks to the GGND being part of the longer-term economic transition of states in line with the environmental Kuznets curve. Accordingly, assessments that the world has missed an opportunity to ‘build back better’ are not only premature but potentially damaging to the prospects of the same. Conceiving the GGND as a potential customary norm shows that it is highly possible the world can ‘build back better’. However, integral to this, is an understanding of the differing ‘construction’ times in the global economy today.

*Keywords: Green economy, Climate Change, International Trade, G7, OECD*

**Injy Johnstone** is a PhD candidate at Victoria University of Wellington’s Faculty of Law whose research focuses on the legal formations and implications of the Global Green New Deal. As a former Fulbright Scholar and Young Leader at the Global Center on Adaptation, Injy’s research explores international environmental law and policy with a particular emphasis on its implications on the trade-climate nexus. Injy’s experience stems from four continents and from within a variety of Government, NGO and IGO settings. Including time with the United Nations Major Group for Children and Youth and United Nations Sustainable Development Solutions Network. Injy holds an LLM in Natural Resources, Environmental and Energy Law from the University of Colorado-Boulder, LLB(Hons) from Victoria University of Wellington and a BSc in Physical Geography and Economics from the University of Otago.

## 6. Sustainable Development of Agriculture in Poland – Towards Organization and Biodiversity Improvement?

Wioletta Wrzaszcz, Marek Zieliński

### ABSTRACT:

Poland's accession to the European Union in 2004 resulted in introduction of many programs into agricultural sector to support widely understood sustainable development. Those instruments, on the one hand, promoted farms' reorganization towards environmental direction, on the other, improved their economic situation, which largely determines their innovation and competitiveness. Identification and evaluation of progress in the field of agriculture sustainability is particularly important in the context of future policy effectiveness. Agriculture sustainability takes into account different aspects. In agriculture sustainability evaluation, holistic approach is needed, that determine the selection of different indicators and important farms' group for the assessment. The aim of the paper is to present the scope of progress in environmental agriculture sustainability in Poland. Using public statistics for 2005, 2007 and 2016 of Statistics Poland and data about areas with high nature value, the direction in which tends Polish agriculture was indicated, putting particular attention to agriculture production organization and biodiversity protection. There was used a set of indicators that enable to evaluate the analysed phenomenon, based on uniform, national data and legal documents. Research results indicated that Poland has a great potential of valuable natural farming areas. Environmental development of agriculture is observed.

*Keywords: agriculture sustainability evaluation, farms' sustainability, Statistics Poland data, indicators, biodiversity protection, areas with high nature value*

**Wioletta Wrzaszcz**, PhD. is a researcher at the Institute of Agricultural and Food Economics – National Research Institute, in the General Economics. She is doing research into agricultural holdings sustainability. She is focused on key issues of the environmental, production and economic aspects of farms' management. Her key qualifications: a knowledge of the agri-environmental topics; measurement of farms' sustainability; farms' analysis, knowledge of the Farm Accountancy Data Network. She was the main research project manager (2010-2012): "Level of sustainability of the individual farms in Poland (on the basis of the FADN data). During 2012-2013, she was the member of experts' team, that was responsible for the evaluation of agriculture sustainability in Poland on the basis of Statistics Poland data. She was involved in the realization of International 7 FP (2013-2016): "Farm-level Indicators for New Topics in Policy Evaluation (FLINT)". 12.2015-04.2016: the member of experts' team preparing the opinion for the European Parliament; "The Post-Quotas EU Sugar Sector", contract No: IP/B/AGRI/IC/2015-159. From 05.2016 – the member of the OECD Network for Farm-Level Analysis. Dr Wioletta Wrzaszcz is the author of about 80 reviewed scientific papers. She is the reviewer of scientific national and international journals, e.g., USA Journal: "Economic World".

**Marek Zieliński**, PhD. is a researcher at the Institute of Agricultural and Food Economics - National Research Institute (IAFE-NRI) in the Department of Economic of Agricultural and Horticultural holdings. The main area of his analysis is focused on economic effects of adjustments actions of farms to climatic change and the changes in the agricultural policy, especially economic effects of farms from Natura 2000 and High Nature Value farmland (HNVf) areas. Moreover, he is a member of team from IAFE-NRI preparing domestic payment rates for Less Favored Areas (LFA), organic farming measure, Agri-environmental and climate measure and Afforestation measure under the CAP 2014-2020 and new CAP after 2020. Currently he is involved in the research under BioEastsUp project of Horizon 2020. Besides he was involved in a few projects from Polish Ministry of Agriculture and Rural Development and European Commission: (1) Potential of reduction of emission greenhouse gases in polish agriculture including effects of Common Agricultural Policy (2015), Evaluation of Polish Rural Development Program 2014-2020 (2017) (3) Description of the fine-tuning method in Poland under the new delimitation of LFA areas in Poland from 2019 (2019), (4) Preparing method of delimitation High Nature Value farmland in Poland (2019)

## 7. The Impact and Importance of Communication Within the Agricultural Units in Romania in the Digital Era

Raluca-Elena Ghinea, Alina Nicoleta Birsan, Lorian Vintila, Cristina State

### ABSTRACT:

The main objective of this paper is to analyse the degree of importance that the staff carrying out their activity within agricultural units in Romania gives to both internal and external organizational communication, and the impact, along with the implementations made, of the transition to the digital age. The research was quantitative, in the form of an online questionnaire, placed in a crowdsourcing system, distributed to the staff operating in agricultural units, holding both execution and management positions. It was filled in by 996 people, and the research started from the main idea that at local level, as well as institutional (ministry) level, there is still no concern for improving and enhancing professionalism and communication development, both externally as well as internally, in the context of the digital age we are experiencing. For an accuracy of the information, our analysis was based on 3 hypotheses. Testing the hypotheses based on obtained results led to the validation thereof and allowed us to draw up appropriate conclusions.

*Keywords: organizational communication, digital age, agriculture, strategy*

**Raluca-Elena Ghinea** is a PhD Student at the Bucharest University of Economic Studies in the field of Management. Her main research interests are related with Management, Organizational Communication and investments financed by European Funds. Her Doctoral Thesis is about Opportunities to Stimulate Investments Financed by European Funds.

**Alina Nicoleta Birsan** is a PhD Student at the Bucharest University of Economic Studies in the field of Management. Her main research interests are related with Management, Social Economy and Organizational Communication. Her Doctoral Thesis is about Social economy enterprise - vector of European integration.

**Lorian Vintila** is a PhD Student at the Bucharest University of Economic Studies in the field of Management. His main research interests are related with Management and Organizational Communication. His Doctoral Thesis is about Improving Organizational Communication as a result of dominant change of global players in the telecommunications industry.

**Cristina State** is a Lecturer at the Bucharest University of Economic Studies. Her main research interests are related with Business Communication, Organizational Communication and Human Resource Management.

## 8. Limitation of Water Footprint Sustainability Assessment: A Review

Libor Ansorge, Lada Stejskalová, Dagmar Vološinová, Jiří Dlabal

### ABSTRACT:

Water is nature resource that is essential for all life, for the functioning of ecosystems, and also for the human society. Sustainable use of water resource is important for sustainable development of human society. Water scarcity can lead to conflicts between different water users. Therefore, several sustainability assessment tools were developed in recent years. Water Footprint Sustainability Assessment, which is a part of Water Footprint Assessment methodology, is one of them. Each sustainability assessment tool has its own limitations. It is important to know these limitations because incorrect application of sustainability assessment can lead to erroneous or improper decisions. In this article, risks connected to the Water Footprint Sustainability Assessment are reviewed and discussed in several examples. Individual parts are focused on blue, green, and grey water sustainability assessment. The article contributes to the scientific debate on limits of Water Footprint Sustainability Assessment as the key element of everyday applications, identification of needs of future research and subsequent development of new or improved procedures of sustainability assessment in the framework of Water Footprint Assessment.

*Keywords: volumetric water footprint; sustainability assessment; sustainable development; limitation of methodology*

**Libor Ansorge**, from Výzkumný ústav vodohospodářský T. G. Masaryka in Praha, Czech Republic, is a researcher and deputy director for research. He is member of Scientific Board of the University of Chemistry and Technology, Prague. His research interest covers the water footprint assessment and water use issues. He is listed among professionals of Water Footprint Network. In last years, he published several articles focused on the water footprint of hydroelectricity and grey water footprint of Wastewater treatment plans. He is active reviewer for several scientific journals. He had several lectures on the water footprint for Czech professionals and university students.

**Lada Stejskalová**, from Výzkumný ústav vodohospodářský T. G. Masaryka in Praha, Czech Republic, is a researcher and Head of the Water Supply and Wastewater Treatment Department. She deals with topics concerning the wastewater treatment plants evaluation, environmental sustainability assessment, use of Water Footprint for water use evaluation. She also focuses on topics of sewage wastewater segregation, including effective management of wastewater treatment technologies for wastewater reuse; water reclamation, methods of decentralized wastewater treatment and methods of rainwater capture, treatment and use.

**Dagmar Vološinová**, from Výzkumný ústav vodohospodářský T. G. Masaryka in Praha, Czech Republic, is a researcher and head of the Center of Waste Management. She is a member of the Waste Management Council of the Ministry of the Environment. Her research interest is focused on waste production and waste treatment methods. Her research is also focused on the evaluation of water and waste footprints. She is currently collaborating on the project "Sustainable Plastic Recycling in Mongolia". She has published several articles on waste management.

**Jiří Dlabal**, from Výzkumný ústav vodohospodářský T. G. Masaryka in Praha, Czech Republic, is a researcher and head of Department of Summary Water Management Information and Water Quality Protection. His research interest is focused on the issue of water use and water balance. He collaborates on many projects using his knowledge in this area. In recent years he has published together with Dr. Libor Ansoerge several articles focused on the water footprint. He also deals with information systems in water management and database data processing.



## 9. Economic Performance of the ISO 14001 Standard in the Olive Oil Production Industry in Spain\*

Rocío Carrillo Labella, Fatiha Fort, Manuel Parras Rosa

### ABSTRACT:

The need for environmental protection through waste minimization, pollution prevention and energy efficiency, among other actions, has resulted in a shift in awareness for Government institutions, businesses and consumers. Now more than ever, there is an increase in sustainable consumption, a greater care for the environment and a global effort to mitigate climate change. This paper examines the Agro-food Industry, where food production and consumption is one of the major causes of global environmental degradation. Our study focuses on olive oil production and its high contamination levels due to the large quantities of waste it generates, affecting both terrestrial and aquatic ecosystems. Within the Agro-food Industry, the olive oil producers are realizing the negative impact and consequences that this activity has on the environment. Consequently, the olive oil industry has decided to make some changes in order to tackle those environmental problems. One example of these efforts is the adoption of environmental standards, specifically, ISO 14001 standard, which is the most widely accepted by the olive oil production industry. This paper analyses the implementation of volunteer environmental standards by distributors and consumers, such as the adoption of ISO 14001 standard, as well as the impact of this conduct on the outcomes of the Spanish olive oil producing companies. The following variables have been considered: sales on domestic markets, export rate, volume of cross-frontier business, and the results of operating profits and attributable income of such companies. We carried out a panel study through ANOVA analysis in repeated samples that were based on objective data such as the accounting status of the companies during the 2013-2015 fiscal years. Initially, a telephone survey was conducted between the months of September and December 2019 in order to determine if the companies had adopted the ISO 14001 standard as well as their export data. By the end of this survey, we obtained a sample of 377 companies. The results suggest that the adoption of ISO 14001 standard can meet the preferences of the consumers and therefore improve the sales revenue of the companies. Regarding the exportation markets, the study shows that this standard can help to enhance their brand image and reputation, strengthen their competitiveness, and increase customer satisfaction among retailers and finally may result in higher sales. However, no positive benefits or results on the company's activity have been identified yet. \* This work has been prepared in the framework of the materialization of the research activity corresponding to the Research Project called "Eco-innovation in the Andalusian olive oil sector: situation, driving factors and strategies" with reference: 1264899-FEDER-UJA (Resolution of 17th of January 2020, of the Rector of the University of Jaén, by which the Definitive Resolution of allocation of financial support for R&D&I projects -Andalusia. Operational programme: Andalusia ERDF 2014-2020, in an open and competitive selection process is made public. Call 2018).

*\*This work has been prepared in the framework of the materialization of the research activity corresponding to the Research Project called "Eco-innovation in the Andalusian olive oil sector: situation, driving factors and strategies" with reference: 1264899-FEDER-UJA (Resolution of*

*17th of January 2020, of the Rector of the University of Jaén, by which the Definitive Resolution of allocation of financial support for R&D&I projects -Andalusia. Operational programme: Andalusia ERDF 2014-2020, in an open and competitive selection process is made public. Call 2018)*

*Keywords: Economics Performance, Environmental Management Certification, ISO 14001, Exportation, Sustainability, Olive Oil Industry*

- Rocío Carrillo Labella**, Dra. in Business Administration specialized in olive oils and Agri-food marketing. Dra. in management sciences from the Institut Agro / SupAgro, Montpellier, France. Master in Marketing and Consumer Behavior from the University of Granada and Jaen, Spain. Graduate in Economic and Business Sciences from the University of Jaen, Spain. Currently Associate Professor in the Department of Business Organization Marketing and Sociology in the area of Marketing and Market Research at the University of Jaen, Spain. I have attended more than 10 international congresses to highlight the 5th International Conference on Sustainable Development Rome, Italy. I have publications in indexed journals such as Sustainability or European Journal of sustainable development. Priority Research lines: Agri-food Marketing, Eco-innovation Agri-food sustainability.
- Fatiha Fort**, Professor in Agri-business Marketing Management. Institut Agro/SupAgro Montpellier (France). Teaching food marketing, new product marketing, entrepreneurship and management in food sector. Main Research activities: sustainable food consumption, territorial marketing linked with traditional local food and innovation adoption processes in SME's related to sustainable development.
- Manuel Parras Rosa**, Professor of marketing. University of Jaén, Spain. Author of 17 books, 40 chapters of books, 80 articles in journals and 85 papers presented to congresses. Researcher in 63 projects and R & D + I research contracts of which in 22 he has been Researcher Responsible. National Prize of Agricultural, Fishery and Food Publications (1996). Jaen Essay Prize, 1998, granted by the General. UNICAJA Prize for Research on Economic Development and Agrarian Studies, in 2000. Arco Iris Prize for Cooperatives 2005. Priority research lines: Agri-food marketing. Behavior of the supply and demand of olive oils. Agri-food cooperatives. Agro-food sustainable.

## 10. Formation of Ukraine's Climate Policy in the Context of European Integration

Liudmyla Golovko, Olena Yara, Olena Uliutina, Andrii Tereshchenko, Andrew Kudin

### ABSTRACT:

It is an indisputable fact that one of the most important problems today is global climate change. Climate change affects everyone and requires a concerted effort at regional, national and international levels. The most intensive legal regulation of environmental protection, including climate change, which has an extremely negative impact on the environment, is carried out on the European continent. The European Union is a leader in climate change prevention and an example for other countries. The state policy of Ukraine on legislative adaptation is formed as an integral part of legal reform in Ukraine and is aimed at ensuring common approaches to rule-making, mandatory consideration of European Union legislation in rule-making, training of qualified specialists, creating appropriate conditions for institutional, scientific, educational, technical, financial support of the process of adaptation of the legislation of Ukraine. In the scholarly work global and European trends in climate change prevention policy were revealed. The adaptation of Ukrainian legislation in the field of climate change to EU law was analyzed. The conceptual foundations of the environmental policy of Ukraine in the context of climate change were considered. The challenges and problems on the way to the implementation of climate policy were determined.

*Keywords: climate change, environmental protection, legal regulation, adaptation of Ukrainian legislation to EU climate change law, the right to a fair trial*

**Liudmyla Golovko** is associate professor of the Department of International Law and Comparative Law of the National University of Life and Environmental Sciences of Ukraine, Kyiv, Ukraine. Co-executor of the programs Erasmus + "EU Food Policy and Law":620340-EPP-1-2020-1-UA-EPPJMO-MODULE and "EU Environmental, Climate Change and Energy Law": 620353-EPP-1-2020-1-UA-EPPJMO-CHAIR. Co-executor of the research program № 110/3 "Development of the concept of legal support of ecological safety of Ukraine by public authorities and local governments in the context of European integration" funded by the Ministry of Education and Science of Ukraine.

**Olena Yara** is dean of the National University of Life and Environmental Sciences of Ukraine, professor of the Department of Administrative and Financial Law of the National University of Life and Environmental Sciences of Ukraine, academician of the National Academy of Sciences of Higher Education of Ukraine and the Academy of Administrative and Legal Sciences.

**Olena Uliutina** is professor of the Department of Administrative and Financial Law of the National University of Life and Environmental Sciences of Ukraine, Deputy Dean of the Faculty of Law of the National University of Life and Environmental Sciences of Ukraine.

**Andrii Tereshchenko** is director of Institute of Law and Social Relation, Open International University of Human Development "Ukraine".

**Andrew Kudin**, Doctor of Law, General Director of the State Enterprise "Ukrainian Institute of Intellectual Property".

## 11. Sustainable Development and Protected Natural Areas: The Case of the Tunkinsky National Park in Russia

Sergey Kirillov, Mikhail Slipenchuk, Elena Vorobyevskaya, Viktor Zhuravlev

### ABSTRACT:

The creation of rational nature management systems that meet the needs of society and the necessary level of reproduction of natural resources and environmental protection is the main goal of the strategies for sustainable development of the regions. An integrated approach to assessing the natural resource potential, which includes an ecological and economic assessment of the maximum possible number of environmental services, constitutes the basis of territorial and sectoral planning. Protected natural areas have not only valuable biosphere resources, but also unique natural, historical and cultural opportunities for recreational activities. The territory of the Tunkinsky National Park, located in the Republic of Buryatia in Russia, completely coincides with the borders of the Tunkinsky administrative region of the Republic of Buryatia. Conflicts in the use of natural resources occur between the need to ensure the protection of nature and the development of economic activities. Using the example of the Tunkinsky National Park, the role of a territory that is hardly affected by human economic activity, which provides ecologically important conditions for the life of society, is determined in monetary terms.

*Keywords: Sustainable development, environmental management, ecosystem services, protected areas, national park, Russia*

**Sergey Kirillov** is Professor at the Department of Environmental Management at the Faculty of Geography, Lomonosov Moscow State University, Russia. He is a corresponding member of the Russian Ecological Academy (REA), a member of the International Society of Ecological Economics (ISEE), a member of the New Economic Association (NEA), a member of the Association of Russian Social Geographers (ARGO), a member of the Russian Geographical Society (RGO). In 2007 he defended his thesis on the topic: "The Ecological-Economic System of Urban Land Use: Management Mechanism and Regulation Tools" with the award of the degree of Doctor of Economics. His research interests are related to the economic mechanism of environmental management, urban land tenure, the development of regional ecological and economic systems, recreational environmental management.

**Mikhail Slipenchuk** is the Head of Department of Environmental Management, Lomonosov Moscow State University, Russian Federation. His major area of research is Russian Arctic and Baikal region. He is a laureate of the Prize of the Government of the Russian Federation in the field of science and technology for 2012, a member of the editorial boards of the encyclopedia "Baikal. Nature and People", atlas "Sustainable Development of the Baikal Region", journals "Arctic: Society and Economics" and "World of Baikal", member of the Russian Geographical Society since 1985, Chairman of the Board of Trustees of the Buryat Branch of the Russian Geographical Society.

**Elena Vorobyevskaya** is senior researcher at Department of Environmental Management, Lomonosov Moscow State University, Russian Federation. Her major area of research is sociological and geoecological studies. She underwent further training on the topic "Ensuring General Safety by the Heads and Specialists of Environmental Services and Environmental Control Systems" in 2013. She participated in the projects of the Russian Foundation for Basic Research "Features of nature management in the central ecological zone of Lake Baikal" and "Assessment of the ecological status of recreational zones of the Republic of Buryatia".

**Viktor Zhuravlev** graduated from Lomonosov Moscow State University master's degree program in ecology and nature management. He takes part in scientific expeditions, field research, scientific seminars and conferences. The area of his scientific interests is the study of ecological and economic systems of nature management, especially protected natural areas, the Baikal natural territory. The future topic of his Ph.D. thesis is Landscape and Ecological Optimization Nature Management of National Parks of the Republic of Buryatia.

## 12. Malaysian Utility Companies' Commitment toward Biodiversity Conservation: Do Social and Institutional Pressures Matter?

Norhayati Mat Husin, Nur Fathanah Shamsol Kamal, Bakhtiar Alrazi

### ABSTRACT:

Malaysian forest reserves have decreased significantly due to rapid economic development triggering biodiversity loss. Consequently, companies categorized as most risky industries of endangering biodiversity (red zone), including utility companies, are now facing pressure from social and institutional context to legitimize their operation. Despite burgeoning literature on environmental reporting, specific evidence on biodiversity conservation has often been neglected and little is known on how companies are using biodiversity reporting to preserve their credibility. This study, therefore, strives to provide evidence on how Malaysian utility companies are using reporting to respond to institutional pressures stemming from social demand for biodiversity conservation. Interpretive textual analysis is applied to discuss how Malaysian utility companies' reporting on biodiversity developed during the period of five years (2016-2020) and are reflected against changing social and institutional pressures. The results show during the five years period, only nine companies have started to specifically adhere to the pressure by reporting their commitment to biodiversity conservation in their areas of operation. Additionally, two of these companies have used a more defensive legitimacy strategy in year 2020 in response to biodiversity-based concern raised by society on one of their projects. The findings shed light on how corporate reporting evolve over time due to social and institutional pressure and will continue to evolve if new environmental concern being raised.

*Keywords: Biodiversity, Legitimacy, Utility, Institutional*

**Norhayati Mat Husin** is currently working as senior lecturer (Accounting) at the Universiti Tenaga Nasional (The Energy University), Malaysia. Assoc. Prof. Dr. Norhayati teaches, researches, and supervises undergraduate and postgraduate students in the area of accounting theory, management accounting and financial reporting. She has presented and published several papers particularly in the area of sustainability accounting. With her research experience, Assoc. Prof. Dr. Norhayati has also led several research/consultancy projects in the area of renewable energy, biodiversity, and socio-economic impact studies.

**Nur Fathanah Shamsol Kamal** is a postgraduate student under the Department of Accounting, Universiti Tenaga Nasional (The Energy University), Malaysia. She is currently pursuing her MSc. in Accounting focusing on research related to biodiversity reporting.

**Bakhtiar Alrazi** is a senior lecturer at the Department of Accounting, Universiti Tenaga Nasional (The Energy University), Malaysia. Assoc. Prof. Dr. Bakhtiar teaches accounting research method, financial accounting, integrated case study, and Islamic accounting courses. He has a deep research interest in the areas of environmental reporting, corporate governance, and accounting from the Islamic perspective. He has published in journals including Accounting and Business Research, Journal of Cleaner Production, and Asian Journal of Business and Accounting.

## 13. A Country of Bricks – How to Transform Waste into Viable Products for Construction

Constantin-Iulian Tănașcu, Robert Andrei Costache, Lorin Ovidiu Vintilă

### ABSTRACT:

We live in complex times, in a world where the difference between rich and poor people is enormous. The distance between the two social categories increases from year to year, especially when in a certain year, events appear that can be included in the category of natural disasters and that have a very big impact on the security and well-being of the population. The study we propose considers two elements: an analysis of poor people, who do not have a stable shelter and who suffer greatly from it, but also a product we are working on and which could have a positive impact, both on them, as well as on the environment. The study we propose is based on data provided by EUROSTAT and the National Institute of Statistics (NSI), in order to determine the number and distribution of people who do not have a house or have a disused building in which they live. Based on the values obtained in the period 2000-2019 we can determine, equally, the dynamics of declining population security (lack of housing or improper housing), as well as the positive impact on the environment, if this product will be implemented nationally. Attention must be focused on how to make the future product, brick. This attention is necessary because we use, in the construction of future bricks, raw material that may contain various bacteria that can, in turn, endanger the lives of the population, if the construction process is not checked at any time and if certain are not used. substances intended to destroy bacteria before the actual composition of the product and its assembly. On the one hand, the realization of this product will offer an extra chance in the fight against poverty by ensuring an optimal living environment. Building a house for people in the social category of poor people is a chance for them to start a new life. Every individual needs the security of a place to consider at home. On the other hand, the realization of this product has certain benefits for the environment. Based on the principle of the circular economy, the waste that currently pollutes most surfaces in Romania can be transformed into bricks and used to build houses or sell them to our neighbors. In this way, the quantities of waste stored in landfills can be reduced by up to 60-70%. At the end of the analysis and description of the product, we formulated certain courses of action in order to streamline the selective collection and increase the number of bricks, as well as certain courses of action that may be the basis of a future regional development strategy.

*Keywords: Social Security, Circular economy, Ecology, Regional development*

**Constantin-Iulian Tănașcu** is a PHD Student at Academy of Economic Studies from Bucharest where investigates european and romanian migration and other negative and positive social and economic events.

**Robert Andrei Costache**, Affiliated Organization Academy of Economic Studies (ASE) from Bucharest.

**Lorin Ovidiu Vintilă**, Affiliated Organization Academy of Economic Studies (ASE) from Bucharest.

## 14. Street Tree Plans to Reduce Particulate Matter and Protect Species Diversity in Suwon, South Korea

Youngsun Seok, Hyosook Yim, Taehyeon Moon, Jinhyung Chon

### ABSTRACT:

Particulate Matter (PM) pollution threatens healthy life in cities. Previous research has highlighted some of the ecological measures taken to combat it such as presenting tree species with high PM reduction ability and increasing street trees to reduce PM in areas with high population density and high road traffic. On the other hand, the low diversity of street trees in cities is also a severe problem. Therefore, it is a challenge for cities to solve these two problems at once, reducing PM by planting more trees and improving the species diversity of street trees. This study explores possible alternatives of street tree plans for absorbing PM in the air with the goal of improving the species diversity. Suwon, South Korea, was selected as a study site. First, the study analyzed the current status of street trees in Suwon: how much PM could be eliminated annually by street trees. Second, the study developed tree planting scenarios composed of two criteria: the rate of increase of the trees and the selection of tree species. Lastly, the study tested these alternatives using system dynamics model simulations, presenting future trends of PM absorption by street trees. These analyses showed that street trees could effectively reduce PM in the future, indicating a possible planting plan for street trees with excellent PM reduction and species diversity results. This study contributes to street tree plans in the urban environment with the guidance of species selection to reduce PM and protect biodiversity.

*Keywords: Particulate matter, Resilience, Species diversity, Sustainability, System dynamics*

**Youngsun Seok** is a Ph.D. student in the Department of Environmental and Ecological Engineering, Korea University. Her research interest is landscape planning, ecological restoration and resilient Landscape.

**Hyosook Yim** is a Research Professor at BK21 FOUR Research & Education Center for Environmental Science and Ecological Engineering, Korea University.

**Taehyeon Moon** is a M.S. student in the Department of Environmental and Ecological Engineering, Korea University. Her research interest is Ecological restoration and resilience landscape planning.

**Jinhyung Chon** is a Professor in the Division of Environmental and Ecological Engineering at Korea University. He is the Director of the Ecological Landscape Architecture Program of Korea University. He is also the Deputy Director at OJErI Resilience Institute (OJERI).



## 15. An Assessment of Orientation on Effective Natural Ventilation for Thermal Comfort in Primary School Classrooms in Enugu City, Nigeria

Emeka Joseph Mba, Sam-Amobi Chinwe, Francis Ogochukwu Okeke

### ABSTRACT:

The current harsh climatic and high thermal conditions observed across the globe due to climate change is a challenge for indoor thermal comfort in buildings. In most developing nation, educational buildings where formal teaching and learning is conducted are designed to function without mechanical ventilation in an attempt to save energy costs thereby depending solely on Natural ventilation, identified as one of the sustainable strategies to achieve indoor thermal comfort. However, the effects of orientation on effective natural ventilation in educational buildings in the hot-humid tropical environments have not been adequately explored. The aim of this study was to investigate the effect of orientation of the classroom buildings with respect to cardinal and wind directions on effective natural ventilation desired for thermal comfort in buildings of public primary schools in the colonial city of Enugu, Nigeria. It adopted a combination of experimental and descriptive survey research design. Instrument for data collection was two thermo-anemometer data logging device (AZ 9871) for determining both indoor and outdoor temperature, wind velocity and relative humidity of classroom of selected 60 public primary school building in the metropolis based on stratified sampling technique. Data analysis was done using linear regression analysis, the global coefficient of ventilation and building orientation standards. The research results reveals that there was a correlation between classroom building orientations and effective natural ventilation coefficient and that the mean natural ventilation efficiency of 80% above the 60% global ventilation efficiency standard was achieved. In addition, orientation of classroom buildings in terms of inlet window planes to the dominant wind direction had positive significant effect on natural ventilation efficiency, invariably influencing the thermal comfort conditions of the investigated classrooms. The research concludes that adequate attention should be given to the orientation in classroom buildings especially in the hot humid tropical environments by architects and building designers to ensure thermal comfort is achieved for effective teaching and learning in classrooms.

*Keywords:*

**Emeka Joseph Mba**, is the associate dean faculty of environmental studies, university of Nigeria Enugu campus. He holds a Bachelor and Masters of science degree in the field of architecture both from University of Nigeria, and a PhD in architecture from University of Nigeria. He is a senior Lecturer with research interest in building construction, maintenance and management. He has published many journal articles and presented papers in international conference.

**Sam-Amobi Chinwe**, is the Chairman Nigerian institute of architects, Enugu state chapter. She is a lecturer in the Department of Architecture, University of Nigeria Enugu Campus. She received her B.Sc. and M.Sc. in University of Nigeria and a Ph.D. in Environmental management and control, University of Nigeria Enugu. Her research interest includes environmental management, energy efficient buildings and subsumable architecture. She is a seasoned researcher and has published papers in several international journals and awarded research grants. Member, of the Architects registration council of Nigerian have been in the field of practice for many years.

**Francis Ogochukwu Okeke**, is a lecturer in the Department of Architecture, University of Nigeria, Enugu Campus. He holds a Bachelor of Science (BSc) Degree in Architecture with First Class Honours and a Master of Science (MSc) in Architecture with a Distinction both from the University of Nigeria. He has been in the field of practice of building and construction for over 8years. He is currently a Ph.D. candidate in Sustainable Architecture and the built environment (DMU Leicester, UK) and has published many journal articles and presented papers in numerous International conferences. He enjoys travelling and watching documentary as hobbies and has served in review and editorial panels for many Journals.

## 16. Linking Sustainable Urban Development with Town Planning Through Proximity Trade

Jose Manuel Diaz Sarachaga

### ABSTRACT:

Losses from commercial activities reflect the decline and deterioration of the downtown, the urban fabric and the social structure of cities. The dependence on motorized vehicles has grown significantly among consumers who must move to meet their daily needs. Such a process marginalizes vulnerable populations by promoting urban lifestyles less sustainable. Proximity trade is thus becoming increasingly important for those groups because it encourages dynamism between distinct urban areas and reduces the use of vehicles. That urban model addresses a relevant issue as universal accessibility that allows residents to enjoy an accessible city and move freely without encountering obstacles. The major role which trade is playing in the creation of wealth and urban fabric in cities demands the integration of commercial areas provisions into urban policy guidelines. This study aims at developing a set of indicators that link proximity trade with the promotion of sustainable urban development and the model of a compact city to be included in the urban planning guidelines. Seven teen indicators were formulated around five areas of action: urban morphology, urban complexity, sustainable mobility, urban metabolism and social cohesion.

*Keywords: Proximity Trade; Sustainable Urban Development; Town Planning; Sustainable Mobility; Urban Metabolism; Social Cohesion; Urban Morphology*

**Jose Manuel Diaz Sarachaga** is a National Researcher (SNI I) of Mexican CONACYT who works in the application of a holistic and integrated approach of Sustainable Development to provide effective solutions in diverse fields such as metrics and frameworks to assess sustainability, urban sustainable development, smart cities, business sustainability management, rural revitalization, adaptive capacity, urban resilience, social hazards, sustainable construction and development of policies towards sustainability.

## 17. Improvement Proposals for the Machining Production Process in the Environmentally Responsible Manufacturing Perspective

Güzide Karakuş, Feridun Karakuş, Ozan Koçak

### ABSTRACT:

In today's world, where we are experiencing the fourth industrial revolution, technological change and transformation cause significant changes in human life. Information, technology, and industrialization are the most critical issues for a sustainable life and are also crucial for an efficient supply chain. However, global environmental problems and new epidemic diseases cause significant damage to life quality. Although the individual impact on environmental pollution is known, it cannot be compared with industrial impact. Commercial activities cause high levels of environmental damage. Unfortunately, the environmental aspect of sustainability does not receive the necessary attention, and practices do not go beyond legal frameworks. Businesses are reluctant to engage in environmentally friendly activities due to the belief that they will not increase profitability. However, the destruction caused by industrialization to the environment can no longer be left to the initiative of the companies. Businesses should evaluate their manufacturing processes by considering environmental impacts and reorganize within the framework of cleaner production methodology. This study aims to develop suggestions for improving the machining production process, one of the most used manufacturing methods worldwide, from an environmentally friendly perspective. The authors' expertise was used in the study with the experimental research technique based on observation, expert interviews, and document review. In consequence of the study, suggestions for reducing emissions, waste sawdust, wastewater, waste oil, and energy consumption to minimize the environmental damage of the machining production process were presented.

*Keywords: Environmentally responsible manufacturing, green production, cleaner production, environmentally friendly perspective, machining production.*

**Güzide Karakuş** is an Assistant Professor at Necmettin Erbakan University, department of Aviation Management. He holds a bachelor's degree in Industrial Engineering from Kocaeli University (1999) and an MBA degree from Gebze Institute of Technology. (2002). She completed her PhD in Production Management and Marketing at Selçuk University 2014. Prior joining academia, she worked in consulting about quality management systems, CE marking and project management. She teaches Innovation Management, Technology Management, Project Management, Quality Management, Decision Making Techniques, Supply Chain Management, both undergraduate and graduate level.

- Feridun Karakuş** graduated from the Mechanical Engineering Department at Selcuk University in 2001. After working as a production manager for four years in the hydraulic construction machinery sector, he has worked as a factory manager for 14 years in the milling sector. He has become one of the leading names in the production of roller mill machines as well as in machine manufacturing in Turkey. He has made improvements in machining and welded manufacturing processes by carrying out R&D activities for product development. His areas of expertise include machine and bench design and manufacturing, hydraulic equipment manufacturing.
- Ozan Koçak** is an environmental engineering graduate with a grounding in climate change and sustainability. He graduated from Dokuz Eylül University with a bachelor's degree. After graduation in 2019, he has been involved in several national and international projects in Italy and Turkey in the field of environmental protection, climate change and youth rights. He is currently studying for a master's degree in Sustainable Development at Ca' Foscari University of Venice in Italy.

## 18. The Impacts of Sustainable Energy Development on Economic Growth of Sistan and Baluchestan in Iran

Sepideh Azizi

### ABSTRACT:

Among renewable energy sources, Iran has a high solar energy potential. Considering only 1% of the total area with 10% system efficiency for solar energy harness, about 9 million MW h of energy can be obtained in a day. In this study we specifically perused Sistan and Baluchestan province which is highly suitable for the various forms of renewable energies technologies, especially solar energy. due to its geography and locating in the low latitudes, it has Plenty of sunshine hours Over the year. despite all these environmental capacities, Poverty and deprivation in this province and its underdevelopment have left the people of this area facing exhausting difficulties economically and socially. By investing on sustainable energy development, we could make an enhancement in standards of living in this part and upgrade it from low income province to a wealthier one. The methodology adopted here is expressing descriptive and comparative information from different sources and documentaries to reveal the chief factors are implied in this situation. Some images, diagrams and charts have been used as well to integrate this lecture and make it more illustrative.

*Keywords: Sustainability, Energy Development, Solar Energy, Economical Development, Poverty*

**Sepideh Azizi**, Undergraduate Student in Urban and Regional Planning, Shiraz University, Iran. My research areas are Sustainable Energy Development, Economical Studies, and Urban and Environmental Planning. Some of my key proficiency include: 1. Highly innovative and accomplished researcher extensive understanding of SUSTAINABILITY in different areas. 2. Expert in study design, conducting research in the above area, analyze and interpret research results from various study types. 3. Very good knowledge of performing and developing analytical methods in Sustainable Development. 4. Experience in using different programing and non programing software necessary for the above area. 5. Continued learning new topics in my field by joining different research groups, attending in different seminars, workshops and course design programs, and improving the communication skills by attending in Science Communication Fellowship. 6. Eager to learn new techniques/software to keep in pace with current research trends and to perform duties effectively.

## 19. Increase in the Use of Distributed Renewable Energy Sources in Wroclaw City - Opportunities, Obstacles

Małgorzata Pietras-Szewczyk

### ABSTRACT:

The main goal of this study is to analyse possibilities to increase the percentage of energy produced in energy mix by small generators like PV panels in Wroclaw. Poland is one of the countries whose energy is produced mainly from coal. Due to international obligations and the rising cost of coal mining, Polish government have to face a challenge of energy transition. The document The Energy Policy of Poland until 2040 takes into account a few scenarios. Unfortunately, renewable energy sources are treated as an addition to natural gas and nuclear energy in that document. Nevertheless, Polish citizens are interested in the increase in the use renewable energy sources. Mostly, due to rising costs of energy but also their care about the environment. Without government support the process of green transformation in Poland will be ineffective. There is necessity to educate and support society. Reliable information on the profitability of investments in renewable energy sources is support for residents as well as decision-makers.

*Keywords: Renewable energy sources; energy transition, energy mix; citizens participation; smart city*

**Małgorzata Pietras-Szewczyk** is Professor Assistant and Director of IT Faculty at University of Lower Silesia, Wroclaw Poland. Her research are dedicated to the issue of renewable energy production in city as an element of Polish energy transformation.

## 20. Green Packaging: Which Are the Attributes Consumers Perceive Most?

Alberto Bertossi

### ABSTRACT:

Green packaging is designed both to minimize environmental impacts along its life cycle, and to communicate its eco-friendliness to consumers via its attributes. However, green packaging is often not the first choice of consumers, and the reason is that they cannot perceive its eco-friendliness. Only by making green packaging attributes more salient is it possible to “nudge” individuals to make sustainable consumption choices. But which are the green attributes that attract consumers' attention? The main aim of this research is to talk about the role of attributes in shaping consumers' perceptions over green packaging, and to present the results of an experiment performed within the University of Udine (Italy). In particular, the research study makes use of a Choice Experiment (CE) both to examine how students perceive several plastic cups for hot beverages with different combination of attributes, and to investigate on which of these attributes they focus most. The research study contributes to the advancement of the scientific literature on the importance of green products attributes for sustainable consumption. Moreover, the experiment provides valuable results to be used for the development of green marketing strategies within vending sector to make plastic items perceived as eco-friendly.

*Keywords: Green Packaging; Perceptions; Choice Experiment; Plastic cup; Vending*

**Alberto Bertossi** is a PhD student enrolled at the “Economics and management of innovation” course at the University of Udine. His research topic is about environmental and social sustainability within university environments. During his last year of PhD, Alberto has approached the vending topic, focusing on sustainable aspects of the sector. He is now conducting several studies to deeply explore how vending sector can contribute to the sustainable development of universities.



## 21. Business Readiness to Implement AI to Prevent Potential Risks in Natural Gas Transmission and Storage

Petya Biolcheva

### **ABSTRACT:**

Despite the high rates that AI is entering all possible areas of business, there are still controversial issues that are imposing limitations. This article examines the opinion of experts in the field of risk prevention natural gas transmission and storage, and the introduction of AI. To achieve this goal, the following main tasks have been fulfilled: The importance and place of natural gas in the economy has been established; Risk identification about the transmission and storage of natural gas has been performed; It is defined where the AI could be applied in risk prevention; The opinion of the specialists in the network has been studied. All this aims at reducing the risk of explosion and all related negative results.

*Keywords: Natural Gas, Risk Prevention, Gas Explosions, Artificial Intelligence, Applied to AI*

**Petya Biolcheva** works in the Department of Industrial Business at the University of National and World Economy, Sofia, Bulgaria. Dr. Biolcheva works in the field of business risk management and innovation. Her interests are focused on innovations in risk management and increasing its effectiveness in business organizations and. She is a member of a number of non-governmental organizations, including: Bulgarian Risk Management Association, Bulgarian Association for Corporate Security, Association of Teachers of Economics and Industry Management. Currently, she is the head of a project for Integration of risk in the management of business processes in organizations, where the main object of study are organizations involved in the transmission and storage of natural gas, oil, and petroleum products.

## 22. Building Consensus for Sustainable Development

Demetrio Bova

**ABSTRACT:**

The sustainable development goals oriented the development path for each country by defining goals, sub-goals, and indicators for programming and control. The goals achievement is conditioned to the consensus of the populations involved; indeed, politicians cannot or do not want to implement projects without gathering the necessary consensus. To achieve the demanded transition, tools evaluating a set of projects achieving targets, well-being, and consensus simultaneously are required. This paper enquires the generation of such tools by extensively debating willingness to pay and related techniques by seeking a theory bridging the actual value and actual consensus of projects. The outcome is a theoretical base useful to design surveys or other evaluations helping to move toward sustainable development goals with consensus.

*Keywords: Sustainable development; Consensus; Multidimensional evaluation, Willingness to pay*

**Demetrio Bova** is a Ph.D. student at the university of Warsaw in economics. His work focuses on sustainable development by the standpoints of measurement and policies. Among his achievement, he published "Guida al rapporto BES organico per comuni", a system of indicators to evaluate the sustainable and equitable wellbeing of towns in Italy, and many other contributes addressing the measurement of sustainability and wellbeing useful for policy maker and communities.

## 23. Waste Footprint of Selected City Districts of Prague

Dagmar Vološinová, Libor Ansorge, Lada Stejskalová

### ABSTRACT:

The growing population, thriving economy, rapid urbanisation significantly accelerate the generation of municipal waste. Tightening conditions for waste management are a challenge for all stakeholders to comply with the law and, at the same time, motivate them to reduce waste production. The knowledge of the biosphere's assimilation capacity can quantify the environmental impact of waste in an understandable and popular form to better understand the human need to assimilate the waste produced. Utilising the waste footprint indicator and anthropogenic emissions in the form of waste are converted into soil adsorption capacity. The article compares the waste footprints of different areas of the city of Prague. It quantifies the influence of living and waste services on the waste footprints of the capital inhabitants. This article also discusses the relationship of the waste footprint with other footprints and is intended to inform future debate on trace accounting.

*Keywords: waste; footprint; waste management; sustainable development*

**Dagmar Vološinová**, from Výzkumný ústav vodohospodářský T. G. Masaryka in Praha, Czech Republic, is a researcher and head of the Center of Waste Management. She is a member of the Waste Management Council of the Ministry of the Environment. Her research interest is focused on waste production and waste treatment methods. Her research is also focused on the evaluation of water and waste footprints. She is currently collaborating on the project "Sustainable Plastic Recycling in Mongolia". She has published several articles on waste management.

**Libor Ansorge**, from Výzkumný ústav vodohospodářský T. G. Masaryka in Praha, Czech Republic, is a researcher and deputy director for research. He is member of Scientific Board of the University of Chemistry and Technology, Prague. His research interest covers the water footprint assessment and water use issues. He is listed among professionals of Water Footprint Network. In last years, he published several articles focused on the water footprint of hydroelectricity and grey water footprint of Wastewater treatment plans. He is active reviewer for several scientific journals. He had several lectures on the water footprint for Czech professionals and university students.

**Lada Stejskalová**, from Výzkumný ústav vodohospodářský T. G. Masaryka in Praha, Czech Republic, is a researcher and Head of the Water Supply and Wastewater Treatment Department. She deals with topics concerning the wastewater treatment plants evaluation, environmental sustainability assessment, use of Water Footprint for water use evaluation. She also focuses on topics of sewage wastewater segregation, including effective management of wastewater treatment technologies for wastewater reuse; water reclamation, methods of decentralized wastewater treatment and methods of rainwater capture, treatment and use.

## 24. Getting Used to Reusing: A Quantitative Analysis of Field Data on Frequent and Reliable Use of a Reusable Food Container System

Christoph Ratay

### ABSTRACT:

To reduce plastic pollution recent regulatory efforts aim to replace single-use plastic containers for food and beverages with reusable alternatives. Network systems allowing consumers to obtain and return containers at many different participating partners are a promising way to tackle this issue, but require users' frequent and reliable use. This paper investigates how motivational, contextual, and habitual factors influence individuals' use of systems for reusable food containers by analyzing field data of a digital network system comprising more than 40,000 registered users who joined the system between September 2019 and April 2021. Based on a negative binomial mixed-effects model it is concluded that moral and normative motivational factors, a stable context and past use behavior have the strongest effects on frequency of use - measured by individuals' weekly takeouts - whereas network effects are not significant on the individual user level. A logit model demonstrates that reliability - measured by individuals' containers returns - is most strongly influenced by affective motivations and a stable context. These findings help system providers and policymakers to design and promote effective systems for reusable containers with frequent and reliable user engagement.

*Keywords: Field data, frequency of use, pro-environmental behavior, return rates, reusable food containers*

**Christoph Ratay** is a doctoral researcher at the Chair of Corporate Management at Technical University of Munich, Germany. Supported by a doctoral scholarship of the German Federal Environmental Foundation his research focuses on consumer behavior in the circular economy. Prior to his doctoral research Christoph Ratay completed a BA in Politics with International Relations at the University of York and an MSc in Nature, Society and Environmental Governance at the University of Oxford.

## 25. Collective Management of Natural Resources Based on Traditional Values in West Sumatera Indonesia

Ami Sukma Utami, Hiroki Oue

### ABSTRACT:

Collective management of natural resources based on local values and practices is essential for sustainable management of natural resources. This study reassesses traditional collective management of natural resources related to agriculture in West Sumatera. Descriptive analysis was used to evaluate the Adat (culture) of Minangkabau in natural resources management. The results showed that forest and stream (river) are essential to the community as they provide ecosystem services such as agroforestry and irrigation water. In managing natural resources, Adat and Islam's values are fundamental principles. Based on these values, the traditional practices to protect and utilize nature such as Rimbo Ulayat (agroforestry), Tanah Ulayat (communal land), and Alek Banda (harvest ceremony) are the collective management of natural resources related to agriculture. These traditions and practices are based on fundamental principles, which are; (1) collective knowledge and mutual understanding of Adat; (2) role of indigenous leader to maintain the Adat; (3) Mufakat (consensus) as a principle in the decision-making process. Based on these traditional practices, the community can utilize the natural resources fairly and sustain the nature. Thus, this study suggests that the Adat Minangkabau in natural resource management needs to be conserved and assessed the possibilities for conserving the natural resources.

*Keywords: Culture, traditional practices, indigenous knowledge*

**Ami Sukma Utami** is a PhD student at United Graduate School of Agricultural Science, Ehime University. Her study is focusing on natural resources management in particular water based on traditional value in West Sumatera.

**Hiroki Oue** is a professor at Graduate School of Agriculture, Ehime University and Dean of United Graduate school of Agricultural Science, Ehime University. His Present research activities are Earth and planetary science, Meteorology/Physical oceanography/Hydrology and natural resources management.

## 26. Cultural Heritage and Nation Branding: A Marketing Driver for Sustainable Development

Calin Veghes

### ABSTRACT:

Until recently, brands and branding were used almost exclusively in a commercial context as tools employed in the promotion and sales of different goods and services. The extension of the scope of marketing to the societal level has expanded the area of branding applicability from economic to social, from profit to non-profit, and from individuals to nations. Valuable elements, an important part of them having a solid cultural background, can be identified and employed nowadays to build and capitalize on brands not only for products and services but also for individuals and communities, respectively organizations and nations. Does cultural heritage matter, and if so, to what extent, in the endeavors of building, promoting, and capitalizing on a nation's brand? Can cultural heritage contribute to the nation's branding effort and act together as a marketing driver to enable a country's sustainable development? These are the questions this paper aims to answer from a marketing perspective, after assessing the secondary data on cultural heritage, nations' branding, and dimensions of sustainable development for a group of selected countries.

*Keywords: Cultural heritage, nation branding, cultural marketing, sustainable development*

**Calin Veghes** is Professor of Direct Marketing and Cultural Marketing at the Bucharest University of Economic Studies, Romania. He carries out teaching and research in the area of Cultural Marketing aiming to substantiate that arts become culture through marketing and that cultural resources, properly preserved, restored, promoted and capitalized, can be successfully employed to support the sustainable development of the local communities. He is a member of EMAC (European Marketing Association), AMA (American Marketing Association) and ARMAD (Romanian Direct Marketing Association) and has a strong passion for history, cultural tourism and football (as a devoted fan of UTA Arad).

## 27. The Significance of Demographics in Consumer Materialism

Rosita Lekavičienė, Dalia Antinienė, Beata Šeinauskienė, Aušra Rūtelionė, Shahrokh Nikou

### ABSTRACT:

This paper aims to investigate the effects of personal characteristics such as gender, income, education and age on consumer materialism. Research hypotheses are based on both existing marketing literature and an additional integration of gender studies literature in order to further the study of materialism. By using random sampling and surveying 1000 respondents living across different regions in Lithuania, the results show significant differences along gender, age, self-perceived relative income and education in terms of consumers' materialistic dispositions. The study confirms that younger consumers are more inclined to materialistic values than older ones. Women differ from men on materialism centrality, as well as happiness and success measures. Regarding consumers' self-perceived relative income, Lithuanians with low income are more prone to aspire to material possessions. Furthermore, research indicates higher rates of consumer materialism to appear among less educated individuals. This is one of the first representative studies in Lithuania revealing what effects different demographic consumer characteristics have on materialistic behaviour. Our findings have some practical implications; for example, they show that vulnerable segments of the population are more susceptible to materialism, necessitating educational policies to reduce such behavior and encourage a more responsible approach. As a result, these educational programs should be tailored to these individuals, with a greater emphasis on the risks associated with overconsumption.

*Keywords: consumer materialism; age, gender, income, education*

**Rosita Lekavičienė** is a professor at Faculty of Social Sciences, Humanities and Arts, Kaunas University of Technology, expert at Research Council of Lithuania, Public Institution Lithuanian Business Support Agency, and other. Currently she conducts research and creates psychodiagnostic methodologies in the field of emotional intelligence, social competence and national identity. She has published two monographs, two research studies, more than 40 scientific articles, and regularly participates in international conferences. R. Lekavičienė is a co-author of several psychology textbooks and other study literature.

**Dalia Antinienė** is a Ph.D. in social sciences and is a professor at the Lithuanian University of Health Sciences, Department of Health Psychology. She is the author of three monographs and two research studies. She has published her work in national and international conferences and research papers. Her spheres of research interest include emotional intelligence, social competence, ego identity, cognitive abilities, etc.

**Beata Šeinauskienė** is an Associate Professor in Marketing at Kaunas University of Technology, School of Economics and Business. Her research interests focus on the effect of cognitive coping strategies on consumer materialism. She has been leading an interdisciplinary research group that focuses on the subject of consumer materialism since 2016. She serves as a reviewer for AMA, AIB CEE, EURAM, EMAC regional conferences and international scientific journals.

**Aušra Rūtelionė** is Associate Professor at Sustainable Management Research Group, School of Economics and Business at Kaunas University of Technology. Her research interests focus on consumer materialism, subjective well-being, sustainable consumer behavior, pro-environmental and pro-social engagement in sustainable consumption, and green consumption. She has been involved in more than 30 R&D and other projects in recent ten years. She works as an expert in European Commission H2020, Eurostars and EIT programmes.

**Shahrokh Nikou** is a Docent of Information Systems and a senior lecturer in Information Studies at Åbo Akademi University in Finland. His primary areas of research include information and knowledge management, literacy, digitalisation, digital platforms, and information practices. The context of his research ranges from consumer behaviour, creative economy, social media, and business model innovation.



## 28. Entrepreneurship Education Inside the Japanese Biosphere Reserves to Trigger Work Opportunities for Youth

Aida Mammadova

### **ABSTRACT:**

Entrepreneurship education is defined as the process of providing students with an enhanced capacity to create the ideas and the skills which will be applicable for the future career. From 2018-2019, for four semesters, we have created the regional activities to create the capacity building training program for the exchange students, inside the UNESCO Mount Hakusan Biosphere Reserve (BR) of Japan. Our purpose was to encourage the students to create their own “eco-business projects”, and not to search for the jobs provided from the outside. More than 140 students have attended the course, which was divided into volunteering practices, homestay activities and hands-on practices. After the course completion more than 86% of the students have indicated the willingness to create their own business and some of the students after course completion started their small businesses and worked as freelancers. BR provided the unique platform to conduct the entrepreneurship education, and interacting with local villagers helped the students to re-evaluate the values needed for the sustainable development.

*Keywords: Entrepreneurship education, Biosphere Reserve, Capacity-Building, Regional sustainable development*

**Dr. Aida Mammadova** is an Associate Professor for Organization of Global Affairs, Kanazawa University, Japan. Her research is focused on the environmental education and sustainable development in rural and urban areas.

## 29. Enhancement of Polyethylene Terephthalate Bottles Recycling in Mauritius Through the Creation of a Mobile Application

Karishma Jankee

### **ABSTRACT:**

One million plastic bottles is currently consumed every minute in the world. This consumption trend is expected to further increase thereby worsening the problem of plastic pollution across the globe. Mauritius is also not left unaffected by plastic pollution and an increase in consumption of plastic bottles. Although plastic recycling is encouraged on the island, low recycling rate has been recorded (40%). In this context, this research attempts to enhance the solid waste management methods of Mauritius, more specifically in terms of PET beverage bottles, by creating a persuasive technological tool that promotes recycling behavior among the citizens of Mauritius. The persuasive technological tool developed is a mobile application which allows its users to locate their nearest recycling bins while also providing them with facts about the effects and significance of plastic pollution and recycling respectively. The tool also included a survey page for gathering data on demographic, the recycling attitude/ behavior of the users prior to and after the introduction of the tool and on the functionalities of the tool itself. The results showed that the tool helped 80% of the users in initiating their recycling activities while the rest reported that the tool helped them increase those activities.

*Keywords: Plastic pollution; Recycling; Persuasive technology; Pro-recycling attitude/behavior*

**Karishma Jankee**, a passionate of Sustainable Development, is the Safety, Health, Environment & Quality Coordinator at a bottling company, namely Phoenix Beverages Ltd in Mauritius. She graduated from Monash University, Malaysia with a Bachelor of Science in Environmental Management and University of Technology, Mauritius with Masters in Sustainability for Business, Society and Environment.

## 30. The Contributing Factors of Carbon Footprints Among Hotels on the Island of Mauritius: A Comparative Analysis

Toshima Makoondlall-Chadee, Naadir Goolamally, Preeya Ramasamy Coolen, Chandradeo Bokhoree, Ravi Foogooa

### ABSTRACT:

The tourism and hospitality industry is a worldwide known trillion-dollar industry and a major economic generator for several economies. Despite a positive economic contributor, the challenges of the tourism industry cannot be overlooked. The tourism industry is right now definitely more involved on the broader aspects of sustainable tourism but nevertheless still contributes 8% of the GHG emissions globally. This work aims at identifying and addressing the main contributing areas responsible for the greenhouse gas emissions for the hotel industry in Mauritius. A quantitative approach based on an adapted framework of the hotel carbon measurement initiative (HCMI) was used to collect data from four hotels with different ratings and which were selected through convenience sampling. Land use for buildings, energy consumption and emissions, refrigerants being used in the hotel, water consumption and wastes being produced are researched as major contributors of GHG from the hotels and these were captured and analyzed. Comparatively, the findings revealed that the carbon footprint for 4-star, 5-star and 5-star plus hotels were found to be lower than the average carbon footprint of other hotels of similar categories worldwide. However, for 3-star hotels, the latter was found to be higher. Plausible recommendations were made accordingly to reduce carbon emissions for each hotel type.

*Keywords: Tourism Sustainability Assessment, Greenhouse gas emissions (GHG), hotel carbon measurement initiative (HCMI)*

**Toshima Makoondlall-Chadee**, as lecturer within the School of Sustainable Development and Tourism at the University of Technology, Mauritius, Toshima is empowered with necessary teaching, learning and research skills and shares her contributions collectively and individually. At the UTM Toshima had the opportunity to design undergraduate and postgraduate programs with a sustainability focus and she has also brought her contributions to national projects towards a more sustainable Mauritius. She focuses her technical expertise in Tourism Management, Public Relations and Sustainable Tourism and her PhD focuses on an assessment and implementation of the Ecological Footprint Analysis of the Mauritian Tourism sector, to help devise to better planning policies and measurement practices for an environmentally sensitive island.

**Naadir Goolamally** is a graduate in Sustainability. With more than 10 years' experience, Naadir's research work is mainly focused on sustainability assessment tools, climate change and Circular economy for Small Island Developing States. As a Sustainability Manager in one of the most prestigious hotel groups in Mauritius, Naadir is further involved in the implementation of all the theory aspects into practice and in reviewing the strategies in terms of both planning, policies and fieldwork needed to ensure a Sustainable hospitality industry.

**Preeya Ramasamy Coolen** is a lecturer in the School of Sustainable Development and Tourism of the University of Technology, Mauritius. Her main research interest is waste management as a pathway to environmental sustainability and in the context of climate change. She developed computational models of waste volume reduction during the composting process for her doctoral research thesis.

**Chandradeo Bokhoree** is an Associate Professor and Head of the School of Sustainable Development and Tourism at the University of Technology, Mauritius (UTM). His research interests include sustainability assessment, environmental health analysis, climate analytics and pro-environmental behaviour focusing on sustainability research in business practices, environmental and energy modelling. He has worked on several research projects in collaboration with a wide range of local and international stakeholders. He has also been the principle investigator of numerous consultancy projects geared towards sustainability assessment in Mauritius and other African countries. His research has been published in well-known high impact factor journals such as *Journal of Cleaner Production* and *Renewable and Sustainable Energy Reviews*. He holds a PhD degree from Loughborough University in the UK and a first-class Bachelor's degree from the University of Mauritius. At the UTM, he has also been the Programme Director for the MSc Climate Change, Health and Disaster Management and the MSc Sustainability for Business, Society and Environment.

**Ravi Foogooa** is interested in the role Information and Communication Technology (ICT) can play to make the world more sustainable. He is a computer engineer and has worked as an IT professional for eight years before joining academia. He has worked as a lecturer for nineteen years at the University of Technology, Mauritius. He has published research in the field of Sustainable ICT and in the use of ICT in education. He is passionate about adding value to the lives around him with the help of ICT applications. He is currently pursuing his PhD at the Open University of Mauritius where he is investigating the factors affecting the adoption of Sustainable Software Engineering practices by software engineers.

## 31. Investigating Composting as a Mitigation Strategy for Climate Change Using a Modelling Approach

Preeya Ramasamy Coolen, Toshima Makoondlall-Chadee, Chandradeo Bokhoree, Ravi Foogooa

### ABSTRACT:

The waste management sector accounts for 19% of greenhouse gases produced by the island of Mauritius, and is second to the energy sector which contributes about 77% of total emissions. Significant mitigating measures are being sought to reduce the impact of the waste sector. The main greenhouse gas produced from waste in Mauritius is methane from landfill disposal. Among the different alternate waste management scenarios proposed, home composting is one strategy to achieve carbon reductions in the sector. However, this target can only be achieved if the composting process is properly controlled. Objectively, a lumped parameter model was used to analyse the set of variation parameters to achieve greatest reduction in methane through optimal composting. The composting matrix was modelled as a point source. Mass balance equations were coupled with heat transport equations and reaction kinetics equations to determine the optimal set of parameters for efficient composting of yard waste and vegetable waste. The simulations demonstrated that bulking of vegetable waste prior to composting is required to prevent production of methane.

*Keywords: composting, distributed model, climate change mitigation*

**Preeya Ramasamy Coolen** is a lecturer in the School of Sustainable Development and Tourism of the University of Technology, Mauritius with nine years' experience. Her main research interest is waste management as a pathway to environmental sustainability and in the context of climate change. She developed computational models of waste volume reduction during the composting process for her doctoral research thesis to enhance the practice of composting as a sustainable waste management option. She is the head of the Department of Environment, Science and Social Sustainability within her School.

**Toshima Makoondlall-Chadee** is a lecturer within the School of Sustainable Development and Tourism at the University of Technology, Mauritius. Toshima is empowered with necessary teaching, learning and research skills to her contributions collectively and individually. She focuses her technical expertise in Tourism Management, Public Relations and Sustainable Tourism and her PhD focuses on an assessment and implementation of the Ecological Footprint Analysis of the Mauritian Tourism sector, to help devise to better planning policies and measurement practices for an environmentally sensitive island.

**Chandradeo Bokhoree** is an Associate Professor and Head of the School of Sustainable Development and Tourism at the University of Technology, Mauritius (UTM). His research interests include sustainability assessment, environmental health analysis, climate analytics and pro-environmental behaviour focusing on sustainability research in business practices, environmental and energy modelling. He has worked on several research projects in collaboration with a wide range of local and international stakeholders. He has also been the principle investigator of numerous consultancy projects geared towards sustainability assessment in Mauritius and other African countries. His research has been published in well-known high impact factor journals such as Journal of Cleaner Production and Renewable and Sustainable Energy Reviews. He holds a PhD degree from Loughborough University in the UK and a first-class Bachelor's degree from the University of Mauritius. At the UTM, he has also been the Programme Director for the MSc Climate Change, Health and Disaster Management and the MSc Sustainability for Business, Society and Environment.

**Ravi Foogooa** is interested in the role Information and Communication Technology (ICT) can play to make the world more sustainable. He is a computer engineer and has worked as an IT professional for eight years before joining academia. He has worked as a lecturer for nineteen years at the University of Technology, Mauritius. He has published research in the field of Sustainable ICT and in the use of ICT in education. He is passionate about adding value to the lives around him with the help of ICT applications. He is currently pursuing his PhD at the Open University of Mauritius where he is investigating the factors affecting the adoption of Sustainable Software Engineering practices by software engineers.

## 32. Research Informed Teaching for Socio-Cultural Sustainability

Larry W. Riggs, Sandra Hellyer-Riggs

### ABSTRACT:

Our purpose is to show how making sustainability central to college/university pedagogy can provide a powerful focus to teaching for socio-psychological, cognitive change and can reduce the dissonance between thinking about sustainability and developing sustainable behaviors. Our hypothesis is that building on and going beyond eco-psychology and phenomenology to incorporate research on the verifiable benefits of immersion in nature will enrich the courses we teach and challenge students to think critically about sustainability. Our method is to review literature on the psychological benefits of immersion in nature, to reflect on the implications of that literature for the urgency of sustainability, and to apply these insights to specific courses that we teach. Our contributions are a more acute appreciation of the urgency of socio-cultural change for sustainability and some specific strategies for a sustainability-oriented pedagogy. Teaching childhood development is enriched by awareness of studies showing that children exposed to nature and encouraged to feel connected with nature are more likely to exhibit and value sustainable attitudes and actions. By the same token, college courses which cover the Enlightenment, and modern Western history overall, can be organized around awareness of the exploitative attitude toward nature and non-European peoples that characterized mainstream epistemology and imperialism.

*Keywords: Socio-cultural sustainability, phenomenology, mindfulness, eco-psychology, development, alienation from nature*

**Larry W. Riggs** is Professor of French at Butler University in Indianapolis, Indiana. He received his Ph.D. in French literature from the University of California at Santa Barbara. Among Dr. Riggs's scholarly and teaching interests are early modern literature and culture, eco-criticism and eco-psychology, sustainability, imperialism/colonialism and neo-colonialism, critical thinking and transformative learning, globalization, and green cultural studies. He has published books and articles and presented papers on literature, drama, film, the culture of modernity, global and historical studies, and a variety of pedagogical issues including transformative and contemplative learning, teaching for diversity, and online teaching. His current projects focus on the uses of phenomenology and cognitive science for appreciating modern literature and culture.

**Sandra Hellyer-Riggs** teaches at IUPUI, which is a large, diverse, urban university. Sandra earned her Ph.D. at Indiana University. She is a Licensed Clinical Social Worker and has been a mental health therapist for at risk teenagers at a local hospital and at a clinic for disadvantaged children. She teaches various Psychology courses including Child Development, Social Psychology, Intro Psychology, and Human Development. Her research and presentation interests are Sustainability, Critical thinking, Transformative Learning, Pedagogy, Online pedagogy, Qualitative Approaches to Psychology, and Diversity.

### 33. Building Upon Service-Learning in Higher Education: Lessons Learned and Future Recommendations

Zamira Hyseni Duraku, Mirjeta Nagavci

**ABSTRACT:**

Service-learning is an educational approach proven to cultivate public conscience by combining learning objectives of curriculum content with student involvement in community service. The current study explores the multiple effects of a service-learning project of psychology students tutoring children with disabilities during the COVID-19 pandemic. The results show the perspective of 114 Kosovar students and 20 parents of children with disabilities involved in the project, and a positive effect of service-learning on family support and student development. The results show the pandemic amplified the challenges that families of children with disabilities face. The tutoring sessions had a positive effect on family well-being and children's academic achievements. Students reported improved attitudes towards children with disabilities, and increased self-efficacy and motivation for community engagement. Service learning is promoted as a teaching method that attends to societal needs; helps students reflect on their lives, facilitates a better understanding of the consequences of public policy and contributes to responsible citizens and compassionate professionals. This study adds to the literature by highlighting substantial results from and the potential benefits of service learning and individualized support for children with disabilities and their parents by discussing the implications for practice as well as future research.

*Keywords: Service-Learning, Student development, Disability, Family support, COVID-19, Social sustainability*

**Zamira Hyseni Duraku** is an Associate Professor and the Head of the Department of Psychology at the University of Prishtina "Hasan Prishtina." Her research interests include multilevel factors that influence the quality of education and wellbeing of Kosovar citizens, from preschool to higher education. Within the past several years, she has been continuously engaged in researching and identifying multilevel factors that influence the mental health and wellbeing of Kosovar citizens, including children, youth, parents and teachers. Her research interests also include assessing the impact of the interaction between mental health and academic factors that influence the quality of education in Kosovo.

**Mirjeta Nagavci** monitored the students involved in the In Your Shoes service-learning project. She holds a MSc Degree in Pedagogical Sciences from Utrecht University in the Netherlands. Her interest lays on how development and learning are formed and transformed by the environment and the wider socio-cultural conditions. She was involved in project management, policy-making and research, and has addressed issues relating to critical pedagogy, social inclusion, educational partnership, virtual learning environment, professional development and intercultural competence in a local and international context.



## 34. Higher Education for Sustainable Development: South African Perspective

Ewelina K. Niemczyk

### ABSTRACT:

In times of constant changes, there is a growing urgency to reflect on a vision of universities and learning needs to be promoted for the benefit of creating sustainable societies. In recent years, focus on education for sustainable development (ESD) in universities has gained ground, however, most studies focus on primary and secondary education levels. With the aim to address this gap within the literature, this qualitative research employed document analysis of selected publicly funded universities in South Africa. Gathered documents are from the past five years and include the universities' mission and vision statements, annual reports, strategic plans and other relevant reports. The three main questions addressed in this work are: 1. What is the status and role of ESD in South African universities? 2. To what extent is sustainable development on the agenda of universities in South Africa? 3. What are the main challenges associated with the implementation of ESD in South African universities? The findings which emerged through content analyses indicate that universities focus on several aspects of sustainable development, namely: sustainable education, sustainable relationships, sustainable initiatives, and financial sustainability. These elements will be discussed within the paper. Although the findings of this work cannot be generalized, they can be informative for other universities and contexts and contribute to the body of knowledge about education for sustainable development in higher education.

*Keywords: sustainability, sustainable development, sustainable development goals, education for sustainable development, higher education*

**Ewelina K. Niemczyk** is a scholar in Comparative & International Education and a member of Education and Human Rights in Diversity Research Unit at North-West University, South Africa. Her research interests focus on higher education with specific attention to higher education for sustainable development, research capacity building, and BRICS education. In terms of the latter, Prof. Niemczyk explores current research realities associated with the demands of research productivity and sustainable research capacity building. The line of research across the BRICS (Brazil, Russia, India, China and South Africa) member states examines sustainable educational practices that can be shared to maximize quality of education in BRICS countries and beyond.

## 35. Knowledge, Attitude, and Practices (KAP) about Sexual Harassment at Workplace: A Roadmap for Sustainable Workplaces

Upma Gautam, Deeksha Bajpai Tewari

### ABSTRACT:

**Background:** Globalization, its corollaries -increased female literacy levels and rapid urbanization, has brought a radical change in women worldwide. However, with the more significant influx of women in India's mainstream workforce, sexual harassment at the workplace has assumed more critical dimensions. **Aim:** Assessment of the awareness, attitudes, and perception of colleagues towards the victim, victimization, and the wrongdoer through a KAP research methodology which is meant to be a representative survey of a target population, forms the central focus of the study. **Methodology:** The sample size was 512 respondents from public and private sector undertakings. The structured questionnaire consisted of four core sections ranging from including respondents socio-demographic characteristics to including questions regarding the assessment of respondents' knowledge of sexual harassment at the workplace and committee to address the issue, their attitudes towards sexual harassment at the workplace, and inquiries about practice towards sexual harassment at workplace. **Findings:** The study affirms, firstly, both public and private sector organizations lack in their rehabilitative approach towards the victim. Secondly, the co-workers' approach both in the private and public sector lacks sensitivity and includes victim-blaming. Thirdly, there is a need for sensitization training of ICC members. **Recommendations:** Building Safe workplaces is a prerequisite to building sustainable workplaces.

*Keywords: Sexual harassment at workplace, KAP, Sustainable workplaces, gender equality, women workforce participation*

**Upma Gautam** is Assistant Professor, University School of Law and Legal Studies, Guru Gobind Singh Indraprastha University, Delhi, India. She is also the founding General Secretary, Asian Association of Law Professors (AALP). The association is a consortium of institutions and professors from around the world connected with Asia. Over the span of her extensive teaching career of more than 17 years, Dr. Gautam has been a visiting guest faculty at distinguished institutes of the country such as Indian Law Institute, National Institute of Criminology and Forensic Sciences amongst others and has undertaken various training modules for officers of Central Bureau of Investigation, Union Territory Civil Services. Her articles, comments and contributions have been published in acclaimed law journals of national and international repute and in various edited books. The areas of interest include but not limited to criminal law, criminal procedural laws, criminology, victimology and penology, gender studies, development issues and law, social impact assessment.

**Deeksha Bajpai Tewari** has an experience of 20 years of undergraduate and postgraduate teaching. She is a recipient of All India Graduate Scholarship, All India Post Graduate Scholarship. Her areas of research interest are human development, social impact assessment, development and gender issues in South Asia. She has been associated with various social impact assessments of National Highway Authority of India eight- laning of National Highways Projects. Her research has been in Urban India and mostly regarding Urban displacement of communities and development induced displacement.

## 36. Unifying Sustainable Development Goals: How Cultural and Creative Engagement are the Missing Links to Advancement

Jayanna Killingsworth

### **ABSTRACT:**

The United Nations Conference on Trade and Development (UNCTAD) named 2021 as the Year of the Creative Economy. While symbolically significant, the designation does a disservice to Cultural and Creative Industries (CCIs) by dismissing their intrinsic and societal value. It also perpetuates a myth that these industries have only economic viability as their sole contribution for advancing the United Nations Sustainable Development Goals (UN SDGs). By triangulating psychological underpinnings, established methodologies, and recommendations from leading organizations this paper challenges the contemporary siloed assumption of CCIs advancement through commodification alone. It has been shown that exposure to culture and creativity is vital for psychological wellbeing in individuals and society, while simultaneously eliciting abilities to garner new perspectives towards issues such as the climate crisis. These characteristics are fundamental for advancing sustainable development at broader levels and there are numerous underpinnings within the UN SDGs that corroborate the need to move beyond antiquated ways of doing and thinking. By looking at recommendations through the lenses of wellbeing and new perspectives, it is possible to create a roadmap that strengthens the 2030 Agenda by utilizing intrinsic values and practices from the CCIs.

*Keywords: Sustainable, Development, Cultural, Creative, Wellbeing, United Nations, Industries*

**Jayanna Killingsworth** is a Ph.D. candidate of Sustainable Education with Prescott College in Arizona. She is currently living in Berlin where she is working with Art/Science Exhibits investigating the ways Cultural and Creative Industries (CCI) can have positive impacts on the climate crisis. For the last 20 years she has worked in various roles throughout the visual arts sector in the United States. These include consultation, teaching, custom picture framing, gallery owner and manager, and manufacturing representative. Her enduring passion for both creating and protecting the Earth propels all that she does personally, academically, and professionally.

## 37. Consideration(s) of the Consequential Effects of Quality Indicators for Sustainable Development in Healthcare Practice and Delivery

Karina Palkova, Roger Fisher, Viktor Justitsky

### ABSTRACT:

Indicators play a major role in organizing, monitoring, and evaluating quality improvement in health care. They reflect the existing and desired level of service delivery, making it possible to define measures to achieve the desired level, monitoring their implementation and the success of the programme. The idea of the usefulness of accurate indicators in ensuring sustainable development is currently beyond doubt and acts as a paradigm (generally accepted truth) in the ideology of sustainable development. The purpose of this article is to demystify this paradigmatic status and draw attention to the important side effect of their use. It is the phenomenon of an alternative way to improve indicators (AWII) - identifying and using opportunities to improve indicators without improving the quality of medical services. The article discusses the prevalence of this phenomenon, its main types, the dependence of the type AWII on the characteristics of a used quality indicator, their role in distorting the link between quality indicator readings and actual quality, the conditions stimulating the use of AWII, and barriers that oppose its use. A system of measures aimed at the timely prevention of AWII is discussed.

*Keywords: Health care, medical services, improving the quality of medical services, quality indicators, side effects of indicators*

**Karina Palkova** is Asst. Prof., Head of the Doctoral study programme "Law" and leading researcher at the Project Development and Research Laboratory at Riga Stradins University, Latvia. The main research focuses are Medical Law, Biomedical Law, and International Health Law. Karina Palkova is a Member of the Research Ethics Committee and Attorney-at-law (The Latvian Collegium of Sworn Advocates). From 2020, Karina Palkova is the Expert of the Latvian Council of Science in Social Sciences - Law, and evaluation expert of the Quality Agency for Higher Education (Latvia). From 2020, Karina Palkova is the supervisor of doctoral theses related to health law issues. In 2020, Karina Palkova became the scientific editor of the Electronic Scientific Journal of Law Socrates (ISSN 2256-0548). Karina Palkova is a member of the European Association for Health Law, the World Association for Medical Law, and the European Association for Artificial Intelligence.

**Roger Fisher** was a member of the UK Chartered Institute of Marketing. His early career was in the application of the marketing discipline to the commercial sale of a range of consumer and industrial products. On joining the Civil Service, he directed these skills towards issues of community benefits and improvements. His last role was in the Home Office where he delivered a significant reduction in the measured fear of crime. During this time, he also provided input to PM Blair' "nudge" unit which was designed to move people and communities to deliver individual and community social improvements. Since retiring he has continued to seek ways to apply his marketing skillset to social developments by his continuing elected roles in UK Local Administrations, where he has been the elected chair of his tier 3 Local Administration for 26 years.

**Viktor Justitsky** is a Visiting Professor at Riga Stradins University (Latvia), Professor at the Mykolas Romeris University (Vilnius, Lithuania), advisor to the Director of the Centre for Medical Diagnostics (Vilnius, Lithuania). His main research areas are European and Medical Law, Healthcare Management, and Psychology.

## 38. Female Entrepreneurship Model, A Viable Solution for Crisis Resilience

Alina Nicoleta Birsan, Raluca-Elena Ghinea, Lorian Vintila, Cristina State

### ABSTRACT:

As society evolved, social as well as entrepreneurial behaviour patterns have been redefined, so that we are now able to analyze the impact that gender can have on leadership and its sustainability. When would it be more appropriate to analyze sustainability than in times of crisis? That is exactly why now, one year of COVID-19 pandemic, we conducted a questionnaire based research that was used as a tool addressed to Romanian entrepreneurs, in order to help us outline the analysis and its conclusions regarding the business model that supports sustainable development, especially in times of crisis. Therefore, with its help we have analyzed the impact that COVID-19 pandemic had on entrepreneurial activities and managed to extract a 'pattern' for alterations entrepreneurs undertook to reach resilience during the crisis. We were inspired by Zenger Folkman - „Research: Women Are Better Leaders During a Crisis” published in Harvard Business Review, a 360-degree analysis of answers gathered March to June 2020. This research's conclusion stated that women were considered more efficient and showed that women managed to perform even better than their opposite gender. Our March 2021 research showed that the majority of impacted entrepreneurs implemented various changes to their pre-pandemic entrepreneurial model (85%) and helped us extract specific traits for women entrepreneurial models.

*Keywords: resilience, crisis resilience, female entrepreneurship, sustainable model, leadership*

**Alina Nicoleta Birsan** is a PhD Student at the Bucharest University of Economic Studies in the field of Management. Her main research interests are related with Management, Social Economy and Organizational Communication. Her Doctoral Thesis is about Social economy enterprise - vector of European integration.

**Raluca-Elena Ghinea** is a PhD Student at the Bucharest University of Economic Studies in the field of Management. Her main research interests are related with Management, Organizational Communication and investments financed by European Funds. Her Doctoral Thesis is about Opportunities to Stimulate Investments Financed by European Funds.

**Lorian Vintila** is a PhD Student at the Bucharest University of Economic Studies in the field of Management. His main research interests are related with Management and Organizational Communication. His Doctoral Thesis is about Improving Organizational Communication as a result of dominant change of global players in the telecommunications industry.

**Cristina State** is a Lecturer at the Bucharest University of Economic Studies. Her main research interests are related with Business Communication, Organizational Communication and Human Resource Management.

### **39. Sustainable Development Prospects of Socio-Cultural Environment in the Context of Economic Crime Enforcement**

Andrejs Vilks, Aldona Kipane

**ABSTRACT:**

Different approaches can be distinguished in ensuring the sustainable development of the socio-cultural environment. At present, the socio-cultural environment is significantly influenced by COVID-19, the consequences of which will be felt by society for a long time to come. In the context of pandemic both traditional and new forms and manifestations of economic crime are being faced. The state of crime, including criminal offenses committed in the economic area, is linked to the general economic situation of the country and the socio-cultural environment. Economic crime not only causes great and difficult-to-quantify damage to the global, regional and national economic environment, but also transforms social and legal norms, changes the patterns of behaviour of social groups and individuals, and transforms beliefs and traditions. The aim of the article is to study the impact of economic crime on the sustainable development of the socio-cultural environment, to analyze its evolution prospects. Descriptive and analytical methods are used by the authors of the study. The theoretical and empirical basis of the article is composed of research results, statistical data, publications and summaries in this field.

*Keywords: COVID-19; economic crime; sustainable development; socio-cultural environment*

**Andrejs Vilks** dean Faculty of Law Riga Stradins university, Dr. iur., professor. Research interests - Criminology, devianthology, crime policy. Publications 236, monographs 10.

**Aldona Kipane** is lector of Riga Stradiņš University Faculty of Law (Latvia). Research interests: Criminal Justice, Criminal law, Criminology, Victimology.



## 40. The Securing a Claim in the Context of the Sustainable Development of this Institute of Law: An Evaluation of the Latvian Experience

Andrejs Gvozdevičs

### **ABSTRACT:**

Article 6 of the Convention for the Protection of Human Rights and Fundamental Freedoms provides for the right of everyone to a fair and public hearing by an independent and impartial tribunal established by law. An important guarantee, such as the enforcement of a court judgment, is also enshrined in human rights theory and practice, as unenforced judgments pose a threat to legal stability, which is one of the fundamental basis for the sustainable development of society. The institute of law of the securing a claim serves in cases where execution of the future judgment may be impossible or made substantially more difficult. The aim of the research is to study the legal framework, which determines the regulations of the securing a claim in Latvia in order to make proposals for enhancement of the legal framework. The research deployed descriptive, analytical and deductive-inductive methods as well as the methods of interpretation of legal norms. Using these methods, legal acts, views of legal scientists and case law were reviewed and analyzed, and subsequently conclusions and recommendations were made. Analyzing the development of the securing a claim it can be admitted that this institute of law in Latvia has problems as the application of the securing a claim in court practice within the framework of limited adversarial and dispositivity principles, as well as shortcomings in the theoretical foundations of the securing a claim which are based on the findings of legal scientists of the last century. As a result of the research, the author drew the conclusions, that Latvia does not make sufficient use of the long-standing successful procedural solutions for securing a claim in others states, such as court mortgages, bank guarantee or mortgage of the plaintiff to secure the defendant's losses, defendant's protection letter to protect against unjustified securing a claim, a possibility to secure a claims which are not financial in nature and many more that can make legal regulation of the securing a claim more modern and effective.

*Keywords: civil proceedings, securing a claim, sustainable development of law*

**Andrejs Gvozdevičs** is a doctoral student of law at Riga Stradins University, Latvia and candidate of Ph.D. in law. Focuses as the specialist in the civil law, commercial law and civil procedure law. The range of interests includes civil law, civil procedure law and philosophy.

## 41. Theoretical Aspects of the Legislation Dealing with Proceedings Regarding Criminal Property

Sandra Kaija, Inga Kudeikina

### **ABSTRACT:**

Introduction. Crime is a factor jeopardising the evolution of society. This assertion is beyond question. That is why the detection of offences and the punishment of offenders are key measures promoting public safety. At the same time, sustainability of the state is also facilitated by bringing economic relationships affected by an offence to the original state. The share of property crimes is extremely high. It is unacceptable that an offender gains benefits from criminal property, while the victim, who is the lawful owner of the property, loses its title illegally, thus not benefitting from the property owned. It should be emphasised that this legal basis comprises not only the criminal aspect but also constitutional and civil aspects. The right to property is a basic human right, which is why ensuring and protecting this right is a primary task of the state. In addition, it is property relationships that form the economic basis of the state. Returning criminal property to its lawful owner within the shortest possible time restores legal balance, stabilises civil circulation and, in general, ensures the rule of law in the state. A type of special property forfeiture – proceedings regarding criminal property according to Chapter 59 of the Criminal Procedure Law – is intended for the above purpose. This chapter lays down the procedure for forfeiting criminal property before a court judgment becomes final. The research deals with problems relating to proceedings regarding criminal property, as a result of which property may be recognised as criminally derived and be forfeited. It should be noted that matters at hand are interdisciplinary and require a systemic approach. The research focuses on procedural aspects of criminal property forfeiture in the context of an individual's right to property. Objective and methodology of the research. The objective of the research is to examine the legislation dealing with proceedings regarding criminal property, analysing the scope of criminal property in the context of the protection of ownership, in order to formulate suggestions for improving the legislation governing the forfeiture of criminal property. The research has employed descriptive and analytical, deductive and inductive methods. These methods have been used to analyse laws and the opinions of legal scholars and formulate conclusions and suggestions. Results. As a result of the research, the authors have arrived at the following: 1) the forfeiture of criminal property by means of special proceedings reflects a state's duty to ensure the transparent and lawful transfer of ownership and is an effective means of protecting property rights; 2) the legislation dealing with the forfeiture of criminal property before a court judgement becomes final has to secure the rights of both the acquirer and the lawful owner of criminal property; 3) in assessing how property has been acquired, criminal proceedings should take into account also civil legislation concerning the acquisition of property. Conclusions. The forfeiture of criminal property by way of special proceedings before a court judgement resulting in criminal conviction becomes final is an adequate means of criminal proceedings, whose main goal is to restore justice between parties to criminal proceedings by returning criminal property to the lawful owner as soon as possible. However, it should be considered that this type of property forfeiture has a dual nature, namely: the legislation should also secure the rights of persons having opposite interests,

such as the alleged offender, the property owner affected by criminal proceedings and the victim. It should be stressed that the protection of the right to property as a basic right refers also to the alleged offender whose property is recognised as criminally derived. Hence, the effective work of those applying laws is the cornerstone of justice in specific circumstances. The forfeiture of criminal property cannot become an aim in itself in proceedings regarding criminal property. Assessing how property has been acquired leads to a collision quite often. The civil understanding of the acquisition of ownership of property is broader than the criminal understanding. In the context of criminal procedure legislation, usually those applying laws are cautious about the acquisition of property based on an oral transaction, which is not extraordinary in civil relationships. Therefore, without assessing the acquisition of property based on an interdisciplinary approach, the process may be fundamentally flawed and property may be forfeited illegally, thereby causing material damage to an individual's right to property.

*Keywords: criminal property, proceedings regarding criminal property, basic right, sustainable development*

**Sandra Kaija**, Riga Stradiņš University, the Faculty of Law, Latvia  
**Inga Kudeikina**, Riga Stradiņš University, the Faculty of Law, Latvia

## 42. Managerial and Legal Peculiarities of Leadership Development in a Statutory Institution

Aurelija Pūraitė, Rūta Adamonienė, Jekatarina Kartasova

### ABSTRACT:

In an ever-evolving and more innovative world, it is important for institutions to take a leading position among other institutions in a constantly competitive market and in their search for adaptability in an innovative society. Research has shown that the development of leadership in an institution helps to implement changes more effectively, reduce stress at work, improve employee job satisfaction, employee willingness to improve, and reduce staff turnover. Leadership development in statutory institutions is one of the most important components of an effective institution. Their development requires continuous self-improvement, knowledge of the latest technologies, strategic and systemic thinking, innovative and critical approach and other elements. The general definition of leadership development is analyzed in the scientific literature, but not enough attention is paid to the specific leadership development of statutory institutions, therefore, both theoretically and practically, this object of research is a rather rare phenomenon. Therefore, it is important to note that there is still no consensus among the authors, what are the factors that determine the effectiveness of a leader in an organization, what training tools are most appropriate for leadership development, what should be the theoretical model of leadership development and how it can be applied in a particular institution? Given that the needs listed above are not specifically defined, it is necessary to conduct a thorough and consistent theoretical analysis of leadership development in order to answer the essential question raised in the article - whether statutory institutions have a well-formed leadership development model, attention to the formation of goals and values, thinking, behavior and attitude, what directions of leadership development exist at the theoretical and practical level in statutory institutions. In the context of sustainable development this research topic highlights the necessity to investigate managerial and legal peculiarities of leadership development in statutory institutions. Sustainable approach toward decision-making and social responsibility become crucial under the uncertainty of current management environment.

*Keywords: Leaders, education, statutory institution, competence, leadership development model*

**Aurelija Pūraitė** is an Associate professor in Mykolas Romeris University and a Vice-Dean for Science at Mykolas Romeris university Academy of Public Security. She is the head of the Master study Programme "Law and Police activities" Study Programme Committee. Fields of scientific interests of Assoc. prof. dr. Aurelija Pūraitė is connected with public security and human rights issues. Assoc. prof. dr. Aurelija Pūraitė is Deputy-Editor-in-Chief of the scientific journal "Public Security and Public Order", which is published by Mykolas Romeris university and is included in the EBSCO Publishing, International Security & Counter Terrorism Reference Center, Index Copernicus, Google Scholar databases.

**Rūta Adamonienė** is a Professor at Mykolas Romeris university Academy of Public Security. She is the Editor-in-Chief of the scientific journal “Public Security and Public Order”, which is published by Mykolas Romeris university and is included in the EBSCO Publishing, International Security & Counter Terrorism Reference Center, Index Copernicus, Google Scholar databases. Fields of scientific interests of Prof. dr. Rūta Adamonienė are management presumptions and possibilities of human resources formation.

**Jekatarina Kartasova** is a principal researcher in Vilnius University, Lithuania, where together with co-authors she implemented research project “Model for Assessing the Impact of COVID-19 Pandemic on Financial System and Sustainable Economic Growth and the Effectiveness of Mitigation Measures”. She is also an author of several scientific monographs and scientific study, has international research and teaching experience and disseminate its results in practical and scientific conference. Fields of scientific interests of assoc. prof. dr. Jekatarina Kartasova includes, but not limited to behavioural finance, decision-making, leadership, corporate finance and corporate responsibility, business ethics.

## 43. Exploring the Role of Corporate Social Responsibility in Community Development and Achieving the SDGs

Taryn Ralph, Stanley Liphadzi

### ABSTRACT:

Water remains one of the most at-risk natural resources, yet serves as the foundation for many of the sustainable development goals (SDGs). Community-based projects (CBPs) of the Water Research Commission of South Africa (WRC) provide a platform for actioning corporate social responsibility (CSR) concerns. This study sought to explore the achievements and efficacy of using CBPs for community development and, in so doing, the SDGs. The CBPs are implemented in collaboration with various institutes, each with their associated area(s) of expertise, thus covering a wide range of research themes and water-related categories. The data was categorised according to number of projects, project collaborators, research foci, water categories, project participants and beneficiaries, project investments, and resulting outcomes. Implementation of these projects enabled various forms of community investment, including Human Capital Development, and resulted in the creation of new knowledge and products for community betterment. Results and outcomes from project interventions were utilised by relevant stakeholders to address community-related challenges, i.e. social, economic and environmental, which speaks to realising the SDGs by using a “think global, act local” approach. The CSR strategy used by the WRC demonstrates the potential for application across organisations, which can contribute additional knowledge, capacity development, and interventions to address community challenges and help realise the SDGs.

*Keywords: sustainable development goals; corporate social responsibility; community development; water and sanitation; Water Research Commission*

**Taryn Ralph**, Water Research Commission (WRC), is a postdoctoral research fellow at the WRC. She is currently engaged in projects within the Research and Development, and Impact and Innovation branches of the WRC, which include a focus on capacity development, community development, and graduate employment among others. Prior to working for the WRC, Taryn worked in the academic research sector and was involved in the field of molecular ecology and biodiversity conservation. She holds a PhD in Biological Sciences from the University of KwaZulu-Natal (South Africa) and has authored and co-authored molecular ecology and taxonomy-related journal papers. She now aims to expand and build on her career potential by widening her field(s) of knowledge and expertise through her role at the WRC.

**Stanley Liphadzi**, Water Research Commission (WRC), is a Group Executive Manager in the WRC and the Adjunct Professor at the University of Venda. He leads the WRC’s Research & Development portfolio that produces new knowledge and innovation for the water and sanitation sector. Stanley has worked in academic and agricultural sectors before joining the WRC. He has held various positions in local and international organisations; and has authored and co-authored several journal publications and book chapters. Stanley received his academic qualifications from the University of Venda (RSA), University of Pretoria (RSA), University of South Africa (RSA), and Kansas State University (USA). Dr Liphadzi admires authentic and transformational leadership.

## 44. The Role of Corporate Governance in Achieving Sustainable Development Goals (SDGs) among Malaysian Companies

Sharifah Buniamin, Romlah Jaffar, Norkhazimah Ahmad, Nor Hasimah Johari

### ABSTRACT:

The Sustainable Development Goals (SDGs) agenda is not only exclusively relevant to the governments of UN member states, but it also involves many players. Corporations ultimately and explicitly play a vital role in achieving SDGs through their business operations and their agenda in the core and business value chain. In the Malaysian context, studies on the involvement of corporations in achieving SDGs remain very limited. Therefore, the aim of this study is to investigate the involvement of corporations in reaching SDGs. Specifically, the study investigates whether good corporate governance mechanisms can influence corporate involvement in SDGs. Data was gathered by conducting a content analysis of 320 randomly selected annual company reports from Malaysian publicly listed companies for the year 2019. Corporate governance mechanisms comprise board independence, board size, number of board meetings and board diversity. The SDGs reporting in an annual corporate report is a proxy for corporate involvement in SDGs. The finding shows that only 87 of the sample companies reported their SDGs commitment in their annual reports. The results provide an insight into the nature of corporate involvement in SDGs. The most frequently reported SDG is SDG 8 - Decent work and economic growth - and the least frequently reported SDG is SDG 2 - Zero Hunger. The results show that corporate governance mechanisms, especially the number of board meetings, are positively associated with companies' involvement in SDGs. Additionally, the results provide input for regulators and policy-makers on the importance of good corporate governance in any business organisation to achieve a better and more sustainable future for all by addressing the challenges the world and its people face on a daily basis.

*Keywords: Sustainable Development Goals (SDGs), corporate governance, Malaysia, companies, content analysis*

**Sharifah Buniamin** is a senior lecturer in the Accounting and Finance Department, The Energy University (UNITEN), Malaysia, with over 15 years' experience. She teaches accounting and finance subjects such as Financial Accounting, Costing, Information Technology and Accounting Application, Corporate Governance, and Integrated Case Studies. In addition to her role as a senior lecturer, she is also Head of the Research and Publication Unit at the College of Business Management and Accounting, UNITEN. She is also an Associate Member of the Malaysian Institute of Accountants (MIA). Her areas of research include accounting education, corporate social reporting, corporate governance, environmental, social and governance (ESG), and Sustainable Development Goals (SDGs).

**Romlah Jaffar** is currently attached to the Centre for Governance Resilience and Accountability Studies, Faculty of Economics and Management, Universiti Kebangsaan Malaysia. Romlah has more than 20 years of research experience in the area of corporate reporting quality, corporate governance, and social and environmental disclosures. Her current research project is to explore Islamic corporate governance mechanisms and corporate reputations via media coverage. She has contributed more than 90 publications, in books (including chapters in books), articles and conference papers. She has also successfully supervised over 20 Masters' and PhD theses and is currently supervising about 10 students. In her free time, Romlah enjoys travelling and gardening.

**Norkhazimah Ahmad** is a senior lecturer in the Accounting and Finance Department, The Energy University (UNITEN), Malaysia, with over 15 years' experience. An Associate Member of the Malaysian Institute of Accountants (MIA), she is currently the Head of Department, supervising around 30 staff members. She is a subject matter expert for taxation subjects and normally teaches specialised taxation. Her areas of research are tax compliance, whistleblowing, green procurement and Sustainable Development Goals (SDGs).

**Nor Hasimah Johari** is a senior lecturer at The Energy University (UNITEN). As a lecturer at the College of Business and Management, she holds a Master's Degree in Accounting from the National University of Malaysia (UKM). She has 20 years of experience in the academic field and is currently teaching the Business Ethics and Corporate Governance subject for accounting students. She has also been an Associate Member of the Malaysian Institute of Accountant since 2009. She has published and presented papers in both international and local journals. Her research interests cover the areas of financial reporting, corporate governance, earnings management and sustainable reporting.



## 45. Sustainability Reporting: Case of European Stock Companies

Adrian Gawęda

### ABSTRACT:

Sustainability reporting regulations defined within NFRD (Non-Financial Regulation Directive) allow different stakeholders to assess ESG (Environmental, Social and Governance) performance of companies and their impact on people and environment. ESG data is increasingly used in strategy definition of entities, investment decision-making process and valuation of stock companies. ESG information is also reflected in ESG ratings which create comprehensive measure of ESG performance of specific entity. It outlines the need for dissemination of true and fair corporate sustainability reporting system. The main purpose of undertaken work is to evaluate the trend and evolution of sustainability reporting and ESG ratings of European listed companies in 2000-2020 period. In order to deliver results comparative analysis is used. Research proves that vast majority of European stock companies do not provide enough ESG performance which does not allow to assign them with appropriate ESG rating. Findings of analysis indicate the size of sustainability reporting accountability gap and confirm that wider group of public interest entities should be subject of NFRD.

*Keywords: sustainability reporting, ESG rating, stock companies*

**Adrian Gawęda** graduated MA studies in the field of finance and accountancy in parallel at two different departments of University of Lodz. Currently he is Ph.D. student at Doctoral School of Social Sciences of University of Lodz, Poland. His doctoral thesis is "Sustainable finance impact on stock companies valuation". What is more, undertaken research in doctoral dissertation will be focused on identification of sustainability premium recognized in higher market valuation of European public companies' which fulfil assumptions of sustainable development. Also Mr. Gawęda's fields of interest are corporate finance, financial analysis and valuation of listed companies.

## 46. Do SDGs Really Matter for Business? Using GRI Sustainability Reporting to Answer the Question

Roberta Costa, Tamara Menichini, Gennaro Salierno

### ABSTRACT:

The Sustainable Development Goals (SDGs) present an opportunity for companies to address the world's biggest sustainable development challenges. In doing so, SDGs require companies to integrate sustainability into their strategic decisions, making stakeholders aware about the corporate contribution to SDGs. To this aim, according to Global Reporting Initiative (GRI) guidelines, corporate sustainability reporting is a powerful tool to explain if SDGs really matter to the private sector and in what ways companies effectively contribute to them. The paper analyses SDG reporting practices of a sample of companies of different sizes operating in the tourism sector. The aim of the analysis is to seize how companies identify relevant sustainability challenges and set SDGs priorities. Findings reveal that despite companies cite SDGs in their reports, they do not explain how significant sustainability initiatives shape the business contribution to SDGs. The study adds to the literature on corporate SDGs reporting by highlighting the need for a practical approach to guide companies towards transparency in sustainability reporting about their relevant contribution to the Agenda 2030.

*Keywords: Sustainable Development Goals (SDGs), Global Reporting Initiative (GRI) guidelines, Sustainability reporting, Tourism Sector*

**Roberta Costa**, Ph.D., is an Associate Professor at the Department of Enterprise Engineering of the University of Rome 'Tor Vergata', Italy. Her current research interests include: Corporate Sustainability, Corporate Social Responsibility (CSR), Sustainability Reporting, Stakeholder Engagement, CSR communication, green marketing, Knowledge Management.

**Tamara Menichini**, Ph.D., is an Associate Professor of Economic and Management Engineering at the University of Rome "Niccolò Cusano". Her current research interests regard: Corporate Sustainability, Corporate Social Responsibility (CSR), Sustainability Reporting, SDGs reporting, Eco-Innovation, Circular Economy, Gender Equality.

**Gennaro Salierno** is graduated in mechanical engineering. He is a scholarship researcher in economic and management engineering at the University of Rome "Niccolò Cusano", Italy. His current research interests are: Corporate Sustainability, Corporate Social Responsibility (CSR), Sustainability Reporting, SDGs reporting.

## 47. Does Mandatory Requirement Enhance Corporate Environmental Sustainability Reporting? A Case of Electricity Companies in Malaysia

Bakhtiar Alrazi, Norhayati Mat Husin

### ABSTRACT:

The annual surveys conducted by the World Economic Forum (WEF) unveil the predominance of environmental issues in the top global risks list in terms of likelihood and impact. As one of the most open economies in the world, Malaysia continues its commitment towards the 2030 Agenda for Sustainable Development and its 17 Sustainable Development Goals (SDGs). On 8 October 2015, the Bursa Malaysia Listing Requirements were amended to take into effect the publication of Sustainability Statement in the annual reports of publicly listed companies. This research examines the extent of environmental sustainability reporting among companies with significant environmental impact, namely the electricity industry. Content analysis of the annual/integrated reports and stand-alone sustainability reports for the year 2012 until 2020 was conducted, taking the 41 recommendations of Bursa Malaysia Sustainability Guide as the benchmark. Overall, there had been an increasing trend of disclosures, particularly after the Sustainability Amendment became effective in year 2016. Nevertheless, the extent of disclosures was still low. The findings highlight the imperative of government intervention in enhancing corporate reporting practices and provide evidence for companies using disclosure for legitimacy reason.

*Keywords: Environmental sustainability, listing requirements, electric utilities, content analysis, legitimacy theory, Malaysia*

**Bakhtiar Alrazi** works at the Department of Accounting and Finance, Universiti Tenaga Nasional (The Energy University), Malaysia and currently leads the Global Sustainability and Climate Change research cluster. He holds a PhD in Accounting from the University of Auckland, New Zealand. He teaches business research method and financial accounting courses. His research interests are in the areas of climate change and sustainability reporting, corporate governance, and accounting education. He has published in international refereed journals including Accounting and Business Research, Journal of Cleaner Production, Asian Journal of Business and Accounting, and Institutions and Economies.

**Norhayati Mat Husin** is currently working as senior lecturer (Accounting) at the Universiti Tenaga Nasional (The Energy University), Malaysia. Assoc. Prof. Dr. Norhayati teaches, researches, and supervises undergraduate and postgraduate students in the area of accounting theory, management accounting and financial reporting. She has presented and published several papers particularly in the area of sustainability accounting. With her research experience, Assoc. Prof. Dr. Norhayati has also led several research/consultancy projects in the area of renewable energy, biodiversity, and socio-economic impact studies.

## 48. Trends in Global Infrastructure Investment and Financial Consequences

Selin Gundes

### ABSTRACT:

Governments all around the world are faced with economic and social problems borne from the need for modern and reliable infrastructure. Rapid urbanization, increasing population size and economic growth are the main causes of increasing infrastructure investment needs in the world. While the need is growing, government budgets are increasingly squeezed by demands for healthcare improvements, defence, education and many others. The problems in the provision of finance for these investments are aggravated with the new Covid crisis, as the funds reserved for infrastructure investments are now likely to be allocated to urgent needs such as healthcare and unemployment benefits. In such a volatile environment, identifying future investment needs and discussing how these needs will be met is important and timely more than ever. This paper, introduces the global infrastructure investment trends in the future and discusses the use of public and private finance for infrastructure spending. In this concept, the following questions are explored, (1) What is the volume and future trends in global infrastructure investment needs? (2) How do infrastructure investment needs differ among regions? (3) How will this infrastructure investment needs be financed? and (4) What may be some of the future issues to be solved? To find out future infrastructure investment needs and trends, reports outlining the future prospects of the infrastructure sector are examined and trends are revealed. Then, a review of financing mechanisms is introduced in the light of the main procurement systems used by governments for realizing infrastructure projects. In this concept, design-bid-build, design-build, mediated routes and project finance models are explored in terms of their organizational and financial structure. Future issues to be solved are mainly derived from a cross examination of concerns raised in published infrastructure investment case studies and of future trends. Results reveal that the need for investment in infrastructure is growing steadily. As a response to this growth, the use of private finance is increasingly being encouraged by governments all over the world and a variety of international organizations. However, it appears that long-standing private finance issues predominantly observed in demand-based projects will continue to be discussed over the coming years by policy-makers, scholars and communities. Indeed, many governments and organizations are already speeding up research efforts into ensuring the resilience of public private partnerships (PPP) in infrastructure projects. The insights from this research are expected to revive interest and research efforts into the potential future challenges for infrastructure financing and options available for governments.

*Keywords: Infrastructure investments; public projects; private projects; public private partnership (PPP); Covid-19; megaprojects*

**Selin Gundes** is a Professor in the Department of Architecture and the head of Construction Project Management Postgraduate Programme at Mimar Sinan Fine Arts University (MSFAU) in Istanbul. She holds a bachelor's degree in Architecture (Yildiz Technical University), a MSc

degree in Construction Economics and Management (University College London, the Bartlett Faculty of the Built Environment) and a PhD in Construction Economics and Management (Politecnico di Milano, Dipartimento di Scienza e Tecnologie dell'Ambiente Costruito). Professor Gundes has taught and currently teaches at several universities including Politecnico di Milano and École Polytechnique Fédérale de Lausanne (EPFL). She has published numerous research papers in the area of construction economics, project finance, public-private-partnerships (PPPs) for infrastructure and the sustainability of the built environment. She has also contributed chapters to a number of books including *La Finanza di Progetto, Transport and the City*, and *Approaches and Perspectives towards Sustainability*.

## 49. The Sustainable Project Management Concept is Necessarily Utilizing in French Wineries While Adapting to Climate Change

Ruixin Zhang, Joel Carboni

### **ABSTRACT:**

Nowadays, the change of climate has had a great impact on environment and human life. The planting of vineyards and the production of wine have also been greatly affected. Since the Sustainable Development Goals (SDGs) officially became the 17 development goals set by the United Nations in 2015, sustainable project management development is the forefront globally. Therefore, in order to cope with the impact of climate change on wine, wineries have begun to implement sustainable project management in all aspects. Especially French wineries that make much account of Sustainability in this respect. This paper proposes the one aspect – Wine Production of CWW Conceptual model that can be used in the French wineries, the new framework should be used in wineries to interpret the main drivers that impact project management implementation. Interview based analysis is the primary method to interpret how Sustainable project management concept is necessarily utilizing in French wineries that would help them to achieve green growth.

*Keywords: Climate changes, sustainable project management, French wineries, Green growth, project management, Sustainability*

**Ruixin Zhang** from Skema Business School in France has some studies on Sustainable project management in the wine industry due to climate change.

**Joel Carboni** is Professor in Skema Business School and President in International Project Management Association in USA, President and Founder of GPM Global in USA, he has some studies on Sustainable project management in environment and organization area.

## 50. Aid Effectiveness of Aid-for-Trade: An Empirical Analysis on the International Trade Environment of Developing Nations

Kunhyui Kim

### ABSTRACT:

Paris Declaration on Aid Effectiveness held in 2005 emphasized the role of Aid-for-Trade on capacity building of developing nations. Past literature showed mixed results regarding the aid effectiveness of foreign aid both theoretically and empirically; unlike the common knowledge, an increase in untied aid may lower the welfare of aid-recipients and raise the welfare of aid-donors. To test the impact of foreign aid thoroughly, we first focus on the Aid-for-Trade which not only incurs the volume of trade flow, but also facilitates the construction of robust infrastructure to participate in the global economy independently. We focus on the foreign aid that intends to edify international trade as taking part in the global economy facilitates economic growth faster. Second, we employ the extensive and intensive margins of international trade to examine whether Aid-for-Trade affect more on the incumbent goods or new products. Lastly, we conduct Poisson pseudo maximum likelihood to control for zero-value observations and possible heteroskedasticity using different samples; different sample groups for the aid-donors, such as DAC, EU, Japan, etc. The results indicate that Aid-for-Trade, especially those from EU, benefits the extensive margin of international trade outflow from the developing nations, implying that each government encourage new exporters.

*Keywords:*

**Kunhyui Kim** is Ph.D. Candidate at the Graduate School of Asia-Pacific Studies, Waseda University, focusing on international economics and international trade. He achieved his BA and MA in international studies also at Waseda University in 2016 and 2018. Mr. Kim is currently working for the Asian Development Bank Institute (ADBI) in Tokyo, Japan, as Research Associate. His professional focus is the impact of COVID-19 on the households of ASEAN. He served as a translator between the American army and the Korean army in the Korean Augmentation Troops to the United States Army (KATUSA), and as a Research Associate at the Economic Research Institute for ASEAN and East Asia (ERIA). He contributed on the working papers such as "Adoption of Standards and Quality of Traded Goods," "NTMs and the Margins of International Trade," and "Aid for Trade and the Extensive Margin of International Trade."

## 51. Impact of COVID-19 Public Measures on Country-level Trade Flows: A Global Panel Data Analysis

Sylvia Szabo, Worawat Srisawasdi, Takuji W. Tsusaka, Reuben M.J. Kadigi, James Vause, Neil D. Burgess

### ABSTRACT:

As of 12 May 2021, over 158 million people worldwide were infected with COVID-19 and almost 3.3 million died as a result of the disease. The COVID-19 outbreak has also contributed to tremendous global decline in trade flows. The rapid spread of COVID-19 and the measures implemented by governments to contain the pandemic have had serious consequences for the world's economies. While the pandemic has affected the international movement of people, goods and services, there is still limited systematic research regarding the possible associations between the COVID-19 measures and countries' international trade flows. To fill this gap, we conducted regression analysis based on country level time series data from the United Nations and World Bank datasets. The results of the random effects panel regression models show that, the country import and export values are positively affected by health-related policies, while there is a negative association between stringency measures and import and export values. More specifically, school closing, stay-at-home requirements, and testing policy measures were found to have significant negative effects on countries' trade values. In contrast, facial covering policies were found to have significant positive effects on countries' import, export and total trade values.

*Keywords: trade flows, COVID-19, UKRI GCRF Trade Hub, panel regression, random effects model, COVID-19 policies*

**Sylvia Szabo** works as Research Professor at Dongguk University, South Korea. She is a graduate of University of Southampton, London School of Economics, and Sorbonne University.

**Worawat Srisawasdi** is a PhD Candidate in Natural Resources Management at the Asian Institute of Technology, Thailand.

**Takuji W. Tsusaka** is Development Economist and Co-Director of the Ostrom Center for Advanced Studies of Natural Resource Governance, the Asian Institute of Technology in Thailand.

**Reuben M.J. Kadigi**, Sokoine University of Agriculture, Tanzania

**James Vause**, WCMC-UNEP, United Kingdom

**Neil D. Burgess**, WCMC-UNEP, United Kingdom



## 52. Changes in Shopping Behavior Under the Aspect of Sustainability and the COVID-19 Pandemic

Daniela Ludin, Wanja Wellbrock, Erika Müller, Wolfgang Gerstlberger

### ABSTRACT:

Since the beginning of 2020, governments around the world have taken measures to contain the novel COVID-19 pandemic. These measures have changed many aspects of public life. The introduction of mask requirement in points of sale and the call for social distancing raises the question of how these conditions affect the shopping behavior of consumers. As part of this study, a written online survey was carried out with students from the Schwäbisch Hall campus of Heilbronn University. The aim is to research the adapted purchasing behavior under the new situation towards increased online shopping as well as the inclusion of sustainability aspects in the purchase decision. In summary, it can be stated that consumers mainly order clothing, electronics and books online. Since the beginning of the COVID-19 pandemic, more and more online purchases have been made across all product groups, with those articles that were previously in greater demand online recorded the greatest relative growth in the pandemic situation. The main reasons for this are the fact that shopping is simple and uncomplicated as a hybrid between the advantages of online trading and COVID-19 related measures. The willingness to support the local brick-and-mortar retailers who switched to online sales in the wake of the pandemic is only present to a limited extent.

*Keywords: Sustainability, COVID-19, retailer, customer behavior, empirical study*

**Daniela Ludin**, since 2015, holds the professorship for general business administration at the Heilbronn University of Applied Sciences. The principle of sustainability is a central moment in all her courses. Since 2017, Prof. Dr. Daniela Ludin leads the study programme B. A. Management & Procurement Management (MBW); since 2019 also the study programme B. A. Sustainable Procurement Management (NBW). Since 2015 Prof. Dr. Daniela Ludin is also a member of the Council for Sustainable Development at Heilbronn University, which she chairs as Sustainability Officer at Heilbronn University since 2019. Before her time at Heilbronn University, Prof. Dr. Daniela Ludin worked from 2009 to 2015 at the Rottenburg University of Applied Sciences with a professorship for law, environmental and forest policy. The main research areas of Prof. Dr. Daniela Ludin are Sustainable Procurement Management, Sustainable Mobility, Sustainable Consumption, Sustainable Financial Products and Sustainable Data Management.

**Wanja Wellbrock** holds a professorship for procurement management at Heilbronn University. His main research areas are supply chain management, strategic procurement management, sustainability management and big data applications in cross-company value chains. He is the author of various English and German-language publications and project manager of several practice-oriented research projects in these areas. Prof. Dr. Wanja Wellbrock gained practical experience in management positions in the automotive and aviation industries as well as in management consulting.

**Erika Müller** holds a Master of Science degree in forest sciences and looks back on ten years of professional experience with a non-governmental organization. She is currently working as a sustainability officer at Heilbronn University and is doing her doctorate in the field of sustainability and innovation at both Heilbronn University and Tallinn University of Technology.

**Wolfgang Gerstlberger** is currently Professor of Operations Management at the Tallinn University of Technology (Estonia). Before that he was Associate Professor for Innovation Management at the University of Southern Denmark in Odense and Endowed Professor for Innovation Management and SME Research at the International University Institute of the Technical University of Dresden. Professor Gerstlberger received his doctorate from the University of Kassel as well as his habilitation in the field of general business administration. In addition, he has led and carried out numerous innovation and sustainability projects for companies, the EU, associations and public administration organizations as a freelance worker. His current research interests are in the areas of sustainable innovation and operations management, digitization and sustainable logistics.

## 53. Lowering Distribution Costs: The Key to Sustainable Health Development?

Cole Webber

### ABSTRACT:

Recently selected as a winner of the government of Canada's COVID-19: Digital clearinghouse challenge, our background work has uncovered that the cost of distribution can often be 8-10x the cost of manufacture for high consumable medical supplies, like personal protective equipment (PPE). What's worse, all of these costs are often not realized in suppliers' pricing schedules, as further 'hidden costs' are incurred when governments procure centrally but use locally, demanding after the fact 'sub distribution'. As the public and private sector alike look to rebuild stockpiles, how can we rethink the supply chain to maintain domestic production without simple subsidization? Conventionally, domestic suppliers have been unable to compete with overseas counterparts on price point. If distribution costs can be lowered, domestic supplies could become cheaper overall, more ethical and more sustainable. The key is in circumventing the architecture of a supply chain altogether – which is only as strong as its weakest link – and enabling an adaptive net that can match suppliers and distributors to users, enabling centralized procurement and direct, shortest path distribution at the same time. This strategy can improve the reliability, efficiency and resiliency of supply chains with impact on health costs.

*Keywords: Distribution, Supply Chain, Lean, Domestic Industries, Healthcare*

**Cole Webber** is an inventor, as well as founder and CEO of Betterfit. At 22, he is the author of three books and holds patents in 35 countries. He has spoken internationally at over 30 events in 4 countries, including as keynote and at a TEDx event. He has served on scientific advisory boards to international organizations, and his work on design, anthropology, construction, and education has been published. He started Betterfit at 19 and has grown it through the pandemic, developing technology to improve lean resiliency to supply chain and scheduling issues, and winning the Canadian federal government's COVID-19 Digital Clearinghouse challenge.

## 54. Advancing and Evaluating Performance of SME-s from the Relationship of Strategic Human Resource Management Practices

Osman Sejfiqaj, Ermira Shehu, Fisnik Morina, Fatmir Mema

### ABSTRACT:

**Purpose:** This research reflects the advancement and evaluation of the relationship between strategic human resource management practices and the performance of SMEs in Kosovo. **Main research question of this study is:** What can we learn and improve on in the entrepreneurial strategic human resource management practices of Kosovo SME-s and what are the implications for organizational performance? **And following research questions that will enable the realization of the purpose of the research:** What is the impact of the development of human resources on the performance of Kosovar enterprises? How much of an effect has the involvement in management processes and the evaluation system of their performance? **Methodology:** This research study has used the statistical methods of regression and Pearson correlation coefficient to find the correlation between organizational performance elements and SHRM in Kosovo organizations and the role and effectiveness of SHRM. The magnitude of the correlation coefficient indicates the degree of relationship between the two sets of variables. Also, the study was followed by the identification of research gaps, the development of research questions, the formulation of research hypotheses and the construction of a hypothetical conceptual model, from primary data. Several linear regression models and ANOVA variance analysis have been used in this paper to analyze the reliability and the model's sustainability with the data collected. **Findings:** The results revealed a positive correlation, meaning that with the improvement in strategic human resource practices, organizational performance also increased. Thus, the findings support the resourced based view - universalistic perspective. The role and importance of strategic management in the organization's performance is crucial and irreplaceable for Kosovar SMEs. **Practical implications:** The empirical results of this study may recommend that given the dynamics of developments, these businesses need to adapt to change quickly in order to preserve their values, competitive advantage and strategic management principles. **Originality:** The study is conducted with primary and secondary data and all the empirical analysis are original based on the authors' calculations through econometric models. Through the results of this study, we aim to provide additional empirical evidence on the performance of small and medium enterprises in Kosovo, recommending that managers/owners in Kosovo need to understand that investing in their employees and applying modern practices of strategic human resource management enables the realization of the vision and adds value to the organization.

*Keywords: strategic HRM, sme-s, development, relations, performance*

**Osman Sejfiqaj**, (Doctor of Entrepreneurship and SME management- Faculty of Economics Prilep-Macedonia, Regional Joint Doctoral Programme in Entrepreneurship and SME Management- (European Commission-Tempus Program) and Doctorate in Busines Administration- Universite-NICE, Sophia Antipolis, iae-Nice, Graduate Scholl of management) is a professor in UBT-kolege in Pristina, and direcror of administration and general services in University "Haxhi Zeka" in

Peja. With work experience: UNMIK-Joint Interim Administration; Government of Kosovo, Ministry of Transport and Telecommunications, Vehicle Department, Regional Unit; University "HAXHI ZEKA" - Manager of Humane Resource

**Ermira Shehu**, (Doctor of Entrepreneurship and SME management- Faculty of Economics Prilep-Macedonia, Regional Joint Doctoral Programme in Entrepreneurship and SME Management- (European Commission-Tempus Program) and Doctorate in Business Administration- Université-NICE, Sophia Antipolis, France-Nice, Graduate School of management) is a professor in UBT-kolege in Pristina.

**Fisnik Morina**, Professor in University "Haxhi Zeka" in Peja. Post Doctorate in University of Malta. Member of the University Board of Directors in University of "Haxhi Zeka" in Peja

**Fatmir Mema**, Prof. Dr. Lecturer of statistics, demography and research methods Faculty of Economics, University of Tirana, Doctoral thesis in Economics & Statistics. Membership of professional bodies: • Member of International Association for Surveys Statisticians (IASS), Paris 2000 • Member of Association of Balkan Statisticians, 2000.

## 55. Ensuring Sustainable Development of Local Self-Government: Foreign Experience for Ukraine

Viktor Ladychenko, Olena V. Gulac, Karim O. Yemelianenko,  
Volodymyr I. Kurylo

### ABSTRACT:

In order to build effective democratic governance under the Council of Europe Action Plan for Ukraine, local governments and elected representatives must have the knowledge and tools to manage modern and efficient resources and local governments in general must increase their transparency, activities to strengthen citizens' trust in local political institutions. In its ambitious plans to implement effective governance, the Government of Ukraine is working to create a modern system of local self-government that promotes the dynamic development of regions and transfers as much power as possible to the level closest to citizens - communities. The article is devoted to the issue of ensuring the sustainable development of local self-government in Ukraine on the basis of the experience of building the system of local self-government in the European countries. Foreign experience with the existing system of local governments of Ukraine is compared. Local governments are classified into representative and executive. The practice of organizing their activities is studied. Both regional and local representative bodies and municipalities were studied. Different types of individual and collegial executive bodies of local self-government of foreign countries, methods of their formation, management models are given. The real state of the results of the reform of local self-government and decentralization, as well as the administrative-territorial system in Ukraine has been established. The main positive features of the system of local self-government bodies of foreign countries are identified and options for implementing sustainable development methods for self-government of Ukraine are proposed, including through effective state control, election of key local government officials, codification of local self-government legislation and balancing the status and powers of representatives and executive bodies of local self-government.

*Keywords: local government, representative body, executive authority, municipality, local deputies, mayor, state power, local election*

**Viktor Ladychenko**, Doctor of Law, professor, head of the Department of International Law and Comparative Law of the National University of Life and Environmental Sciences of Ukraine. Head of the programmes Erasmus + "EU Food Policy and Law":620340-EPP-1-2020-1-UA-EPPJMO-MODULE and «EU Environmental, Climate Change and Energy Law»: 620353-EPP-1-2020-1-UA-EPPJMO-CHAIR. Expert of the National Agency for Quality Assurance in Higher Education.

**Olena V. Gulac**, Doctor of Law, Associate Professor, Associate Professor of the Department of administrative and financial law of the National University of Life and Environmental science of Ukraine.

**Karim O. Yemelianenko**, PhD in Law, Senior Lecturer of the Department of Theory and History of State and Law of the National University of Life and Environmental science of Ukraine.

**Volodymyr I. Kurylo**, Doctor of Law, professor, head of the Department of administrative and financial law of the National University of Life and Environmental science of Ukraine

## 56. Digital Public Administration for Sustainable Development

Sorin Burlacu, Maria Loredana Popescu, Amelia Diaconu,  
Maria Alexandra Sârbu

### ABSTRACT:

The aim of our research is to highlight the main features and mechanisms of the digitalization of a public administration that would allow the promotion of a sustainable development and a more inclusive society. The proliferation of information and communication technologies in all fields along with the reporting of both economic and social benefits give us hope that these technologies will also find a role in the transformation, efficiency or progress of public administration. The main research method was the bibliographic study, both descriptive and analytical. Through specialized software tools we highlighted the relationships and correlations between various concepts. The results obtained are encouraging and have highlighted the future courses of action, both theoretical approaches and the exchange of good practices.

*Keywords: Digital public administration, sustainable development, bibliographic study*

**Sorin Burlacu** is a PhD Lecturer at the Bucharest University of Economic Studies, Romania. He is the holder of the university courses of e-Administration, Digital Systems for Human Resources, Office and Computer Systems applied in Human Resources management, courses in the bachelor's and master's degree programs at the Faculty of Public Administration and Management. He has published as an author or co-author 4 books and over 90 articles in scientific journals included in prestigious international databases.

**Maria Loredana Popescu**, PhD Lecturer, Bucharest University of Economic Studies, Romania.

**Amelia Diaconu**, PhD, Artifex University, Romania.

**Maria Alexandra Sârbu**, PhD Student, Bucharest University of Economic Studies.

## 57. Climate Change and Health Protection in European Union

Radu Ioan Mogos, Mihaela Diana Negescu Oancea, Victor Adrian Troaca, Sorin Burlacu

### **ABSTRACT:**

Climate change (CC) represents a real fact with consequences that start to be seen more and more often and that is why it cannot be ignored anymore. It affects many domains of the human activities and also the health of the people. Climate-specific actions are needed to be taken in order to protect the people and to save the environment. For each affected domain, new regulations and actions regarding climate change prevention must be designed, promoted and implemented. Besides phenomena like heat waves, storms, increased temperature, forest fires, floods, etc. which represent direct results of the CC, also indirect results like human health may be encountered. Human health is affected by elements that are having a big impact over the environment of the people and over the resources that they need (resources like water, food, air, natural resources, etc.). CC has also implications on people migration, the fight over the natural resources, political and economic environments. This paper offers an overview of the most important factors that are affecting the health of the people from the CC point of view and which are the main challenges that most affected countries from EU are dealing with.

*Keywords: Climate change, health, environment*

**Radu Ioan Mogos**, associate professor to Bucharest University of Economic Studies, Faculty of Economic IT and Cybernetics where teaches and does research using systems and platforms for data analysis from several domains (egg. economic, social, etc.).

**Mihaela Diana Negescu Oancea,**  
**Victor Adrian Troaca,**  
**Sorin Burlacu,**



## 58. The Assessment of Companies and Organizations that Have Outstanding Results in the Field of Sustainability

Carmen Valentina Radulescu, Raluca Georgiana Ladaru, Iulian Gole,  
Carol Cristina Gombos

### ABSTRACT:

Some multinational companies have obtained great results in the field of environmental protection, their business model being worldwide recognised. There is a permanent concern to promote sustainable policies, their efforts being unanimously appreciated. We will start our analysis from the results of an international survey, assuming that in order to develop a strategy to increase the efficiency of communication in the field of environmental protection we should establish what the ingredients of a successful recipe are, in term of sustainability. In this paper we will also analyse the views of experts on companies that are considered being able to integrate sustainable development into their business strategy, as well as on NGOs that contribute most to positive advancement of the sustainability agenda. We will see that some companies or organizations are perceived as being leaders of these rankings, years in row, but there are also newcomers, a sign that there is a constant focus on this goal.

*Keywords: Environment protection, sustainability, multinational companies, survey*

**Carmen Valentina Radulescu** is a PhD Associate Professor at the Bucharest University of Economic Studies, Romania. She is the holder of the university courses of Entrepreneurship, Management of food organizations, Management of European projects, courses in the bachelor's and master's degree programs at the Faculty of Faculty of Agri-Food and Environmental Economics. She has published as an author or co-author 20 books and over 200 articles in scientific journals included in prestigious international databases.

**Raluca Georgiana Ladaru**, PhD Associate Professor, Bucharest University of Economic Studies, Romania.

**Iulian Gole**, PhD Student, Bucharest University of Economic Studies, Romania.

**Carol Cristina Gombos**, PhD Student, Bucharest University of Economic Studies, Romania.

## 59. Online Education During Pandemic Times, Advantages and Disadvantages

Daniel Moise, Amelia Diaconu, Mihaela Diana Oancea Negescu,  
Carol Cristina Gombos

### ABSTRACT:

The latest Pandemic changed not only our lifestyle behavior but in the same manner how we work, study, and evolve. We witnessed not only work from home or remote working as well as learn from home changes. The shift from the physical classroom to the online classroom came with advantages but also at the same time with some disadvantages. In this article, we conducted research to discover undergraduate and graduate students perceptions towards online education. Students and professors are detached from the time being from their universities into online education platforms and video conference rooms, but not without other difficulties and challenges for the academic community. Some universities already had some practice and knew how to manage and use online platforms for different cycle types like: part-time or distance learning programs. Other universities appealed to platforms offered by international organizations like Microsoft or Google. The novelty was that not only the courses and seminars are held online as well as exams, proving to be a provocative issue, both for students and professors. We discovered different factors that influence online education and learning satisfaction. One of the main discoveries was that the future seems to be towards a blended learning system combining physical and online teaching.

*Keywords: blended learning, online education, obstacles, online platforms*

**Daniel Moise** is Associate Professor PhD., Marketing Faculty, Bucharest University of Economic Studies. In 2004 he graduated from the Faculty of Commerce, Marketing Specialization, and in 2006 he graduated from the Marketing Faculty from the "Public Relations in Marketing" masters program and in 2010 he defended the Doctoral Thesis entitled "Communication Strategies in Marketing Events ". During the Doctoral School he conducted a 3-D research, both among the event audience, organizations that communicate with the help of the event, and event organizing companies. His post-doctorate was at the Romanian Academy where he held the dissertation titled "Impact of Events on Local and Regional Sustainable Development". Author of Books: "Marketing and Event Management" appeared in 2014 and "Event Marketing: Fairs and Exhibitions" appeared in 2015 at ASE Bucharest. The area of research and interest are especially corporate and non-corporate events, but also the events that appeal to the stakeholders of the internal and external environment of the organization.

**Amelia Diaconu**, Senior Lecturer, Artifex University, Romania.

**Mihaela Diana Oancea Negescu**, Associate Professor PhD.

**Carol Cristina Gombos**, Bucharest University of Economic Studies, Romania

## 60. Aspects of the Circular Economy in the Member States of the European Union

Florina Bran, Dumitru Alexandru Bodislav, Svetlana Platagea Gombos,  
Petrică Sorin Angheluță

### ABSTRACT:

The interest in having a low-carbon economy has led to transformations in the economies of all countries. New economic models are being put into practice. New jobs are being created. Sustainable use of resources is becoming more important. The article presents an analysis of waste generation in the member countries of the European Union. The study of the possibility of reusing certain materials started from the design phase of the finished product. Production processes can also contribute to saving natural resources. This can create new business opportunities and avoid inefficient waste management. The article also analyzes the degree of municipal waste collection, as well as the share of recycled municipal waste. In the production process, the recovery of certain materials and then their use can lead to savings in the use of raw materials. This reduces the pressure exerted by the extraction of raw materials on the environment. Further investments in green technologies will contribute to the efficient use of natural resources, restore biodiversity and reduce pollution.

*Keywords: circular economy, waste management, European Union*

**Florina Bran**, Bucharest University of Economic Studies, Romania.

**Dumitru Alexandru Bodislav**, Bucharest University of Economic Studies, Romania.

**Svetlana Platagea Gombos**, Bucharest University of Economic Studies, Romania.

**Petrică Sorin Angheluță**, Bucharest University of Economic Studies, Romania.

## 61. The Recent Evolution of Global Tourism. Study Case - Switzerland

Iulian Gole, Raluca Georgiana Ladaru, Carmen Valentina Radulescu, Svetlana Platagea Gombos

### **ABSTRACT:**

Among other negative economic and health outcomes, the global tourism industry is one of the most affected areas by the recent pandemic. A recent estimation shows that USD 1.3 trillion were lost in revenues, in 2020 only – which represent more than 11 times the loss suffered during the 2009 global economic crisis. It is by far the most the worst year in tourism history. As a direct consequence, many jobs are at risks, especially in small and medium-sized enterprises, in countries where the tourism is the main economic component, the situation is quite dramatic. In this paper we will analyse what happened in world large regions in the sector, what the perspectives to recovery are and what are the rebound expectations and consumer confidence. We will also investigate the specificity of tourism situation in Switzerland, where since the beginnings of the pandemic, the big cities and tourist locations have suffered greatly from the absence of foreign tourists. The cities close to the airports showed the strongest decreases in attendance. In contrast, those which are traditionally very touristy were only slightly affected by the decline in the number of foreign visitors.

*Keywords: Tourism evolution, pandemic effects, international tourism arrivals*

**Iulian Gole** is a PhD Student at the Bucharest University of Economic Studies, Romania. He has published as an author or co-author over 20 articles in scientific journals included in prestigious international databases.

**Raluca Georgiana Ladaru**, PhD Associate Professor, Bucharest University of Economic Studies, Romania.

**Carmen Valentina Radulescu**, PhD Associate Professor, Bucharest University of Economic Studies, Romania.

**Svetlana Platagea Gombos**, PhD Student, Bucharest University of Economic Studies, Romania.

## 62. Aspects of the Evolution of Enterprises in Member States of the European Union

Petrică Sorin Angheluță, Dumitru Alexandru Bodislav,  
Maria Loredana Popescu, Florina Bran

### ABSTRACT:

A solid industrial base positively influences society as a whole. Business development is favored by the degree to which companies are active in the market. The article presents an analysis of employment in companies active in the Member States of the European Union. The evolution of the establishment of active enterprises according to their branches of activity is also addressed. Openness to local markets can lead to successful business activities. Cooperation between different companies can also be facilitated by new technologies. From the point of view of mobility, employment in foreign affiliates of domestic enterprises is another subdomain analyzed in the article. The way in which companies approach the field of expenditure can influence their activity. Thus, by increasing technological capacities and promoting innovation, technological development measures lead to the development of enterprises. The article presents an analysis of the way in which expenditure is shared at the level of enterprises in the Member States of the European Union.

*Keywords: enterprises, development, European Union*

**Petrică Sorin Angheluță**, Bucharest University of Economic Studies, Romania.  
**Dumitru Alexandru Bodislav**, Bucharest University of Economic Studies, Romania.  
**Maria Loredana Popescu**, Bucharest University of Economic Studies, Romania.  
**Florina Bran**, Bucharest University of Economic Studies, Romania.

## 63. Impact of Digital Performance in Growing Businesses (Case Study Republic of Kosovo)

Ermira Shehu, Osman Sejfijaj, Fisnik Morina, Fatmir Memaj

### ABSTRACT:

**Purpose:** The aim of this Article is related to the impact that digital performance exerts on development of countries in transition. The data for this article were extracted from a wider survey conducted in the Republic of Kosovo. **Methodology:** A large number of factors were analyzed in this paper, with a view of presenting the whole impact of digital performance and importance of business development in continuity. This survey includes businesses and employees. A special focus was made on management of digital transformation, value chains and a strategic aspect which result to be among major factors influencing the business performance. The paper includes a methodology of research, research questions and hypotheses, survey data report divided into two sections (viewpoint of company and employees), and a final chapter of the paper relates to the presentation of conclusions and recommendations of the study. **Findings:** Results of this paper show that there is a positive correlation between digital performance and business growth, however a special impact is made by human resources in establishing and implementing functional strategies, based on market demands and technological development trends. **Practical implications:** The digital transformation is a MUST for all business types. The Covid 19 situation approve the importance of business digitalization and benefits of this investment. **Originality:** The study is conducted with primary and secondary data and all the empirical analysis are original based on the authors' calculations through econometric models.

*Keywords: digital performance, growing business, managing digital transformation, value chain, strategic management, human resource*

**Ermira Shehu**, (Doctor of Entrepreneurship and SME management- Faculty of Economics Prilep-Macedonia, Regional Joint Doctoral Programme in Entrepreneurship and SME Management- (European Commission-Tempus Program) and Doctorate in Business Administration- University-NICE, Sophia Antipolis, IAE-Nice, Graduate Scholl of management) is a professor in UBT college in Pristina.

**Osman Sejfijaj**, (Doctor of Entrepreneurship and SME management- Faculty of Economics Prilep-Macedonia, Regional Joint Doctoral Programme in Entrepreneurship and SME Management- (European Commission-Tempus Program) and Doctorate in Business Administration- University NICE, Sophia Antipolis, IAE-Nice, Graduate Scholl of management) is a professor in UBT college in Pristina, and director of administration and general services in University "Haxhi Zeka" in Peja. With work experience: UNMIK-Joint Interim Administration; Government of Kosovo, Ministry of Transport and Telecommunications, Vehicle Department, Regional Unit; University "HAXHI ZEKA"- Manager of Humane Resource.

**Fisnik Morina**, Professor in University "Haxhi Zeka" in Peja. Post Doctorate in University of Malta. Member of the University Board of Directors in University of "Haxhi Zeka" in Peja.

**Fatmir Memaj**, Prof. Dr. Lecturer of statistics, demography and research methods Faculty of Economics, University of Tirana, Doctoral thesis in Economics & Statistics. Membership of professional bodies: • Member of International Association for Surveys Statisticians (IASS), Paris 2000 • Member of Association of Balkan Statisticians, 2000.

## Index of Authors

Adrian Gawęda, 73	
Aida Mammadova, 49	
Alberto Bertossi, 40	
Aldona Kipane, 64	
Alina Nicoleta Birsan, 22, 63	
Amelia Diaconu, 87, 90	
Ami Sukma Utami, 45	
Andrejs Gvozdevičs, 65	
Andrejs Vilks, 64	
Andrew Kudin, 27	
Andrii Tereshchenko, 27	
Asier Ibeas, 14	
Aurelija Pūraitė, 68	
Aušra Rūtelionė, 47	
Bakhtiar Alrazi, 30, 75	
Beata Šeinauskienė, 47	
Calin Veghes, 46	
Carlos José Pantaleón Pérez, 14	
Carmen Valentina Radulescu, 89, 92	
Carol Cristina Gombos, 89, 90	
Catherine Bouland, 17	
Chandradeo Bokhoree, 51, 53	
Christoph Ratay, 44	
Cole Webber, 83	
Constantin-Iulian Tănașcu, 31	
Cristina State, 22, 63	
Dagmar Vološinová, 23, 43	
Dalia Antinienė, 47	
Daniel Moise, 90	
Daniela Ludin, 81	
Deeksha Bajpai Tewari, 58	
Demetrio Bova, 42	
Dumitru Alexandru Bodislav, 91, 93	
Elena Vorobyevskaya, 28	
Emeka Joseph Mba, 33	
Erika Müller, 81	
Ermira Shehu, 84, 94	
Ewelina K. Niemczyk, 57	
Fatiha Fort, 25	
Fatmir Mema, 84, 94	
Feridun Karakuş, 36	
Fisnik Morina, 84, 94	
Florina Bran, 91, 93	
Francis Ogochukwu Okeke, 33	
Gennaro Salierno, 74	
Güzide Karakuş, 36	
Hiroki Oue, 45	
Hyosook Yim, 32	
Inga Kudeikina, 66	
Injy Johnstone, 19	
Iulian Gole, 89, 92	
James Vause, 80	
Jayanna Killingsworth, 60	
Jekatarina Kartasova, 68	
Jessica Borges Posterari, 13	
Jinhyung Chon, 32	
Jiří Dlabal, 23	
Joel Carboni, 78	
Jorge Herrera, 64	
Jose Manuel Diaz Sarachaga, 35	
Karim O. Yemelianenko, 86	
Karina Palkova, 61	
Karishma Jankee, 50	
Kunhyui Kim, 79	
Lada Stejskalová, 23, 43	
Larry W. Riggs, 55	
Libor Ansorge, 23, 43	
Liudmyla Golovko, 27	
Lorian Vintila, 22, 31, 63	
Ma. Divina Gracia Z. Roldan, 16	
Małgorzata Pietras-Szewczyk, 39	
Manuel Parras Rosa, 25	
Marek Zieliński, 20	
Maria Alexandra Sârbu, 87	
Maria Loredana Popescu, 87, 93	
Marija Jevtic, 17	
Mihaela Diana Oancea Negescu, 88, 90	
Mikhail Slipenchuk, 28	
Mirjeta Nagavci, 56	
Naadir Goolamally, 51	
Neil D. Burgess, 80	
Norhayati Mat Husin, 30, 75	
Nur Fathanah Shamsol Kamal, 30	
Olena Uliutina, 27	
Olena V. Gulac, 86	
Olena Yara, 27	
Osman Sejfijaj, 84, 94	
Ozan Koçak, 36	

- Pedro Arnau, 14  
Petrică Sorin Anghelută, 91, 93  
Petya Biolcheva, 41  
Preeya Ramasamy Coolen, 51, 53  
Radu Ioan Mogos, 88  
Raluca Georgiana Ladaru, 89, 92  
Raluca-Elena Ghinea, 22, 63  
Ravi Foogooa, 51, 53  
Reuben M.J. Kadigi, 20  
Robert Andrei Costache, 31  
Roberta Costa, 74  
Rocío Carrillo Labella, 25  
Roger Fisher, 61  
Rosita Lekavičienė, 47  
Ruixin Zhang, 78  
Rūta Adamonienė, 68  
Sam-Amobi Chinwe, 33  
Sandra Hellyer-Riggs, 55  
Sandra Kaija, 66  
Selin Gundes, 76  
Sepideh Azizi, 38  
Sergey Kirillov, 28  
Shahrokh Nikou, 47  
Silvia Hildebrandt, 14  
Sorin Burlacu, 87, 88  
Stanley Liphadzi, 70  
Svetlana Platagea Gombos, 91, 92  
Sylvia Szabo, 80  
Taehyeon Moon, 32  
Takuji W. Tsusaka, 80  
Takuji Waseda, 13  
Tamara Menichini, 74  
Taryn Ralph, 70  
Toshima Makoondlall-Chadee, 51, 53  
Upma Gautam, 58  
Victor Adrian Troaca, 88  
Viktor Justitsky, 61  
Viktor Ladychenko, 86  
Viktor Zhuravlev, 28  
Volodymyr I. Kurylo, 86  
Wanja Wellbrock, 81  
Wioletta Wrzaszcz, 20  
Wolfgang Gerstlberger, 81  
Worawat Srisawasdi, 80  
Youngsun Seok, 32  
Zamira Hyseni Duraku, 56



