

# **ON SUSTAINABLE DEVELOPMENT: NORTH AMERICAN AND EUROPEAN PERSPECTIVES ON SUSTAINABILITY IN HIGHER EDUCATION**

**MASSACHUSETTS INSTITUTE OF TECHNOLOGY  
CAMBRIDGE, MA, UNITED STATES**

**2<sup>nd</sup>-4<sup>th</sup> OCTOBER 2023**



### BACKGROUND

The scientific, cultural, and diplomatic relations between Europe and its partners in North America are very strong. From a scientific point of view, this long-lasting cooperation has been taking place across a wide range of areas. This also includes the field of sustainability, where North America and Europe are working hand in hand, seeking solutions to the many regional and global problems currently being faced.

Against this background and in order to cater for a wide discussion on the contribution of higher education institutions from both sides of the Atlantic, towards a more sustainable future, the **"Transatlantic Symposium on Sustainable Development: North American and European Perspectives on Sustainability in Higher Education"** is being organised.

The Symposium will provide an opportunity for North American and European sustainability experts to meet, present their work, interact, and network. As a long-lasting documentation of their works, the experiences of the presenters will be documented and promoted in the book "North American and European Perspectives on Sustainability in Higher Education", to be published by Springer Nature. This is part of the World Sustainability Series, the leading peer-reviewed book series on matters related to sustainable development. All submitted papers will be subject to the standard peer-review procedures.

The Symposium is an unprecedented event, mobilising the scientific communities in North America and Europe working on sustainable development in higher education.

### AIMS

The meeting aims to congregate representatives from universities and research organisations on the one hand and from companies and enterprises on the other, from Europe and North America, working on matters related to sustainable development in a higher education context. It also aims at providing a platform for the exchange of information, paving the way for technology transfer and networking. Furthermore, the Symposium intends to provide a fertile basis for European and North American organisations to cooperate more closely in this key area.

# TRANSATLANTIC SYMPOSIUM ON SUSTAINABLE DEVELOPMENT

## PARTICIPANTS

Delegates come from a cross-sectoral range of areas. They are:

- members of university administrations;
- teaching staff
- research staff;
- students;
- campus facilities and operations staff;
- project officers and consultants;
- other people interested in the field.

## THEME CLUSTERS

The Symposium is divided into four tracks dealing with strategic issues for sustainability in higher education:

- Theme Cluster 1: Sustainable Campus Operations
- Theme Cluster 2: Sustainability and the Curriculum: teaching on, about and for sustainable development
- Theme Cluster 3: Sustainability research
- Theme Cluster 4: Community engagement, cooperation

***\* Each Plenary Session Presentation will take 20 minutes, with 10 additional minutes of Q&A.***

***\* Each Parallel Session Presentation will take 15 minutes, with 5 additional minutes of Q&A.***

## LOCATION

The Symposium will be held in two different venues, as follows:

### **Venue on 2nd October 2023:**

Wong Auditorium, Tang Center Bldg E51, 2 Amherst Street, Cambridge, MA 02139

Please note that the official address of the Tang Center is 70 Memorial Ave, but the main entrance is located at 2 Amherst Street

### **Venue on 3rd and 4th October 2023:**

La Sala de Puerto Rico, 2nd Floor, Stratton Student Center, Bldg W20, 84 Massachusetts Avenue, Cambridge, MA 02139

# TRANSATLANTIC SYMPOSIUM ON SUSTAINABLE DEVELOPMENT

## SCHEDULE

MONDAY	2nd OCTOBER 2023
	<b>MIT Stratton Student Center – 84 Massachusetts Ave, Cambridge</b>
14:00 – 15:30	<b>Arrival and Registrations</b>
15:30 – 16:00	<b>Welcome notes</b>  <b>Walter Leal</b> , Hamburg University of Applied Sciences (Germany) and Manchester Metropolitan University (UK)  <b>Julie Newman</b> , Director of Sustainability & Lecturer Department of Urban Studies and Planning, MIT
16:00 – 17:00	<b>Joe Higgins</b> , VP Campus Services and Stewardship – MIT's Commitment to Decarbonizing the Campus <b>Brent Ryan</b> , Associate Provost Faculty of Urban Studies and Planning, MIT
17:00-18:00	<b>The Transformative Power of Networking for Sustainable Development: North American and European Perspectives</b>  <b>Debra Rowe</b> , President, U.S. Partnership for Education for Sustainable Development <b>Walter Leal</b> , European School of Sustainability Science and Research, Hamburg University of Applied Sciences (Germany) and Manchester Metropolitan University (UK)
18:00-20:00	<b>Welcome Reception with light refreshments</b>
TUESDAY	3rd OCTOBER 2023
	<b>MIT Stratton Student Center – 84 Massachusetts Ave, Cambridge</b>
9:00 – 11:00	<b>Plenary presentations</b>
11:00 – 11:30	<b>Break</b>
11:30 – 13:00	<b>Parallel Sessions</b>
13:00 – 14:00	<b>Lunch</b>
14:00 – 15:30	<b>Parallel Sessions</b>
15:30 – 16:00	<b>Break</b>
16:00 – 17:30	<b>Parallel Sessions</b>
WEDNESDAY	4th OCTOBER 2023
	<b>MIT Stratton Student Center – 84 Massachusetts Ave, Cambridge</b>
09:00 – 10:30	<b>Plenary presentations</b>
10:30 – 11:00	<b>Break</b>
11:00 – 13:00	<b>Parallel Sessions</b>
13:00 – 14:00	<b>Lunch</b>
14:00 – 15:30	<b>Parallel Sessions</b>
15:30 – 16:00	<b>Break</b>
16:00 – 17:30	<b>Hand-over of the best papers awards &amp; closing remarks</b>  <b>Julie Newman and Walter Leal</b>

# TRANSATLANTIC SYMPOSIUM ON SUSTAINABLE DEVELOPMENT

## PRESENTATIONS PROGRAMME

Activity	Room	Moderator	Time	Presentation
03.10.2023 (Tuesday)				
Plenary presentations (20 min + 10 min Q&A)	Auditorium	Meghan Chapple	09:00-09:15	Welcome: Julie Newman and Walter Leal
			09:15-10:30	<ul style="list-style-type: none"><li>Towards Just Transitions: Bridging leadership and research on Climate Justice and Equity (Meghan Chapple)</li><li>Principles for Climate Justice Action Planning (Camille Washington-Ottombre - Smith College)</li><li>Driving Just Transitions within higher education. Individual and institutional transformations using relational and justice-oriented learning at the Universitat Politècnica de València (Spain) (Pablo Aranguiz Mesias, Jordi Peris-Blanes, and Guillermo Palau Salvador - Universitat Politècnica de València)</li><li>Reimagining Universities as Change Agents for Climate &amp; Economic Justice and Ecological Health (Jennie C. Stephens, Northeastern University)</li><li>Launch of the book "Sustainability Science in the Future: Policies, Technologies and Education by 2050" (Walter Leal)</li></ul>
			Break	
Parallel Sessions (15 min + 5 min Q&A)	Room 1  Discussion: 12:50-13:00 Lunch break at 13:00-14:00	Laura Corazza	11:00-11:30	Break
			11:30-11:50	Interdisciplinary, Team-taught Urban Sustainability Pedagogy in a Stove-piped University (Melissa Keeley - George Washington University)
			11:50-12:10	Transitional Tensions: Observations from Engineering Education Researchers (Brad Tabas, Klara Kovesi, Linda Gardelle, and Una Beagon - ENSTA Bretagne and TU Dublin)
			12:10-12:30	Major Challenges To Education For Sustainable Development (Nicholas A Ashford - MIT)
	12:30-12:50	Multisystem Partnerships to Advance and Sustain Climate Change Literacy and Action in PK-12 (Kelley Lê - ECCLPs)		
	Room 2  Discussion: 12:50-13:00 Lunch break at 13:00-14:00	Thomas Skou Grindsted	11:30-11:50	Commoning towards Sustainability and the Common Good: Between Epistemic Strategy and Visual Boundary Object (Susanne Maria Weber - University of Marburg)
			11:50-12:10	A systematic approach to repositioning the focus of research centers toward sustainability – A case study from a Dutch University of Applied Sciences (Amir Moradi, Nikos Misirlis, and Anna Sabidussi - International School of Business at HAN University of Applied Sciences)
			12:10-12:30	Elements of a Constructivist Teaching Environment: A Living Practice Teaching Approach to promote Research Methodology Teaching in Institutions of Higher Learning (George Okello Candiya Bongomin, John C Munene, Daniel Nkaada, Emmily Sophie Aber, and Medard Kabasha Balinda - Makerere University Business School, Kampala Uganda and Kigali Independent University)
			12:30-12:50	Sustainable Futures – Collaborating on Education for a Sustainable and Net Zero Economy Through Inter-Institutional and Enterprise-Informed Curriculum Development and Delivery (Marguerite Nyhan, John Cullen, Frances Lucy, and Kevin Marshall - National University of Ireland, University College Cork, Maynooth University, Atlantic Technological University, Microsoft Ireland)
	Room 3  Discussion: 12:50-13:00 Lunch break at 13:00-14:00	Klaus Helling	11:30-11:50	Sustainability labelling of courses and study programs – experiences, dilemmas and possible way forward. A case-study from University of Gothenburg (Johan Boman, Eddi Omrcen, and Kassahun Weldemariam - University of Gothenburg)
			11:50-12:10	How to bridge the science practice gap for sustainable development: An integrated educational approach to boost regional hydrogen use in Austria (Ronald Deckert, Daniel Otto, Dominik Kreil, David Menzel, Michelle Schulze, and Jürgen Wolf - Hamburger Fern-Hochschule, Municipality of Linz, Institute for vocational education and training)
			12:10-12:30	Understanding value co-creation in higher education institutions to support Arab-Israeli shared efforts towards the development of innovation tackling sustainability impacts in the MENA region (AI-CoSUSTAIN) (Alberto Peralta, Yifat Hayek, Susan Young, and Abdulkader Aljandali - University of Alcalá, Ben Gurion University, Kennesaw University, University Mohammed VI Polytechnic, Africa Business School)
			12:30-12:50	Exploring Sustainable Development from a Social-Ecological Perspective: A Tri-Nation Study (Jan Brown, Kent Williams, and Jessica Lichy - Liverpool John Moores University, Dalhousie University, IDRAC Business School)
Room 4	Laís Trevisan	11:30-11:50	Design Thinking in the Context of Education for Sustainable Development in Higher Education in	



## TRANSATLANTIC SYMPOSIUM ON SUSTAINABLE DEVELOPMENT

	Discussion: 12:50-13:00 Lunch break at 13:00-14:00			Germany (Iris Schmidberger, Ulrich Müller, and Sven Wippermann - Ludwigsburg University of Education)
			11:50-12:10	Active Learning to Raise Sustainability Awareness (Javier Sierra and Ángela Suárez-Collado - University of Salamanca)
			12:10-12:30	From subject matter experts to problem solving experts for sustainable development: The challenge of higher education (Vélez-Ramos, J., Tovar-Garrido, L., and Narváez-Altamiranda, J. - University of Cartagena)
			12:30-12:50	Education for Sustainable Development: Sustainability Teaching at Canadian Business Schools (Eduardo Ordonez-Ponce and Mehran Nejati - Athabasca University Edith Cowan University)
Lunch			13:00-14:00	Lunch
Parallel Sessions (15 min + 5 min Q&A)	Room 1  Discussion: 15:20-15:30  Break at 15:30-16:00	Meghan Chapple	14:00-14:20	A green community for change, through sustainable development and entrepreneurship in the fashion business curriculum (Naomi Braithwaite and Lisa Trencher - Nottingham Trent University and Manchester Metropolitan University)
			14:20-14:40	Transformative learning for a sustainable world. European case studies in higher education (Belen Lopez, Mariano Mendez, Abel Monfort, María Vaquero, and Celia Rangel - ESIC University and Complutense University of Madrid)
			14:40-15:00	Reflexive Praxis in Curriculum Transformation in Engineering Education in Global South (Dillip Kumar Das - The University of KwaZulu-Natal)
			15:00-15:20	Challenges of integrating sustainability into software engineering education – experiments on building European Software Engineers for the Green Deal programme (Jari Porras, Ashok Tripathi, and Shola Oyedele - LUT University)
	Room 2  Discussion: 15:20-15:30  Break at 15:30-16:00	Laís Trevisan	14:00-14:20	“Everything Everywhere All at Once”: A Methodological Framework Proposal to Ensure No One Is Left Behind in the Ecological Transition Pathway. Lessons from the PHOENIX H2020 project (Fátima Alves, Diogo Guedes Vidal, and Helena Freitas - Universidade Aberta and University of Coimbra)
			14:20-14:40	Sustainable Development from Research and Outreach: contributions from a sustainability research center in southern Brazil (Felipe Teixeira, Manoel Honorato Filho, Ana Paula da Silva, Valdemiro da Rocha Junior, Nei Antonio Nunes, Ana Regina de Aguiar Dutra, and José Baltazar Salgueirinho Osório de Andrade Guerra - University of Southern Santa Catarina)
			14:40-15:00	The positive impact on undergraduate scholars and communities through engagement in environmental sustainability design research projects funded through UK HEI (Alexander Heathcliff Reed, Andrew Lee Stanton, and Avika Sood - Sheffield Hallam University)
			15:00-15:20	Playponics- A UK HEI initiative to enable a holistic approach to problem solving and sustainability education (Avika Sood and Alexander Heathcliff Reed - Sheffield Hallam University)
	Room 3  Discussion: 15:20-15:30  Break at 15:30-16:00	Jan Brown	14:00-14:20	Nexus@TUM: TUM as frontrunner university with a targeted research and teaching agenda on Water-Energy-Food (WEF) Nexus as means of forging international sustainability (Daphne Gondhalekar - Technical University of Munich)
			14:20-14:40	Sustainable campus operation in University of Delaware, United State of America: Preliminary studies on concept, values and operation (Warjo Lemane, Nurhayati - Universitas Sumatera Utara, Universitas Islam Negeri Sumatera Utara)
			14:40-15:00	Crowd-mapping Building Porosities (Mayank Ojha, Aditya S Barve, Miho Mazereeuw, Brian Goldberg, Kenneth Marc Strzepek – MIT)
			15:00-15:20	Expanding Sustainability to Include our Non-Human Partners: The Role of College Campuses in Supporting Wildlife Habitat (Kelly Ashcraft Pearce, Rich Bowden, Beth Choate, Kelly Boulton, Kaitlyn Royal, Ava Lock, Beatrice Foley, and Emily Tecklenberg - Allegheny College and Watershed Conservation Research Center)
	Room 4  Discussion: 15:20-15:30  Break at 15:30-16:00	Philipp Weber	14:00-14:20	Sustainable Development Research as a Driver for Collaboration: A faculty database at the University of Pennsylvania (Ximena Trujillo and Melissa Brown Goodall - University of Pennsylvania)
			14:20-14:40	Converging around the United Nations Sustainable Development Goals by integrating Sustainability Science and Innovations in the Anthropocene (Nirav S. Patel - Binghamton University, State University of New York)
			14:40-15:00	Formal and informal education in Institutes of Higher Education positively impact sustainability knowledge and attitudes (Bailey Chandler, Michelle Cawthorn, Lacey Huffling, and Lissa M. Leege - Georgia Southern University)
			15:00-15:20	Driving forward the UN Sustainable Development Goals through transatlantic collaborations (Carlos Areia, Ann Campbell, and Shannon O'Reilly)
Break			15:30-16:00	Break
Parallel Sessions (15 min + 5 min Q&A)	Room 1	Julie Newman	16:00-16:20	Social sustainability in human habitats: educating the future generation of architects and urban professionals on the social dimension of sustainable development (Darinka Czischke, Ellen Geurts, and Boram Kim - Delft University of Technology)

## TRANSATLANTIC SYMPOSIUM ON SUSTAINABLE DEVELOPMENT

			16:20-16:40	Systematic Integration of Sustainable Development into Curriculum; Insights from a Baseline Study at the University of Gothenburg (Kassahun Weldemariam, Eddi Omrcen, and Johan Boman - University of Gothenburg)
			16:40-17:00	Integrating environmental justice and sustainability into social work education and professional training: Case studies of pedagogical initiatives from Western and Eastern Canada (Julie Drole and Haorui Wu - University of Calgary and Dalhousie University)
			17:00-17:20	Understanding Social Sciences Students' Perceptions of Environment and Nature: Implications for Critical Thinking and to Reimagine Socioecological Futures (Fátima Alves, Vanda Viegas, and Diogo Guedes Vidal - Universidade Aberta and University of Coimbra)
	Room 2	Laura Corazzo	16:00-16:20	How to transform: Social and Ecological Responsibility of Life Science Universities (LSUs) (Philipp Weber, Melina Kerou, Shiladitya DasSarma, and Christa Schleper - University of Vienna and University System of Maryland)
			16:20-16:40	The social impact of research: third mission assessment and evaluation in an Italian university (Laura Corazza and Francesco Marengo - University of Turin)
			16:40-17:00	Be the change – how peer-to-peer and project-based seminars foster transformative learning and enable education for sustainable development (Hannah Prawitz, David Verdugo-Raab, Veronika Pinzger, and Camilla Geiger - Humboldt-Universität zu Berlin)
			17:00-17:20	Multinational and Local Perspectives in University Sustainability Offerings (Warren G. Lavey and Holly A. Rosencranz - University of Illinois at Urbana-Champaign and Carle Illinois College of Medicine Champaign)
	Room 3	Laís Trevisan	16:00-16:20	Adoption of ChatGPT and other AI practices for teaching sustainable practices: what's in it for Higher Education Institutions course designers and managers (Alberto Peralta - University of Alcalá)
			16:20-16:40	Campus operations: towards a conceptual framework aligned with the Sustainable Development Goals (Alessandra Migliori do Amaral Brito, Luiz Carlos Pinto da Silva Filho, Carla Schwengber ten Caten, and Andrea Parisi Kern - Federal University of Rio Grande do Sul)
			16:40-17:00	Investigating the Potential of Informal Student-Led STE(A)M Learning Spaces within Higher Education Institutions to Develop Students' Competencies for Sustainable Development Goals (Midhat Noor Kiyani - McGill University)
			17:00-17:20	Curriculum Design and the Integration of Sustainability - the Case of the reorganised Master in Business Management (Regina Hahn and Martin Wenke - Hochschule Niederrhein University of Applied Sciences)
	Room 4	Michael Bossert	16:00-16:20	Providing environmentally responsible design experience in architecture education with the integration of multiple courses: A holistic curriculum study for teaching on, about and for sustainable development of built environment (Belgin Terim Çavka - Yasar University)
			16:20-16:40	Nudging as a tool to increase ESD competencies among distance learning students (Vera Lenz-Kesekamp and Lamia Arslan - Euro-FH, Hamburg)
			16:40-17:00	Connecting sustainability and culture: Building competencies through virtual exchange (Jodie Birdman, Anne Barron, Torben Schmidt, Nora Benitt, and Handan Çelik - Leuphana University Lüneburg)
			17:00-17:20	Practising Students' SDG Strategies through Fieldwork: – Conflictual landscapes or sustainable land transformations in a Nature Park? (Thomas Skou Grindsted - Roskilde University)

**Evening: free**

# TRANSATLANTIC SYMPOSIUM ON SUSTAINABLE DEVELOPMENT

04.10.2023 (Wednesday)				
Plenary presentations (20 min + 10 Q&A)	Auditorium	Julie Newman	09:00-09:15	Welcome: Julie Newman and Watler Leal
			9:15–10:30	<ul style="list-style-type: none"><li>Leveraging campuses as test beds and living labs towards transformation, Julie Newman (MIT)</li><li>A tool to develop a governance structure to support universities' transformation from living labs on campus to the campus as a living lab (Annika Herth, Nina Vogel, and Michael Bossert - Delft University of Technology, Swedish University of Agricultural Sciences, Concordia University)</li><li>The Integration of Sustainability into Teaching - Findings and Best Practice from a Study on the Implementation of Sustainability at Universities in Rhineland-Palatinate (Klaus Helling - Trier University of Applied Sciences)</li><li>Advancing Sustainable Development: Transformative Higher Education (Wendy M. Purcell - Rutgers University)</li></ul>
Break			10:30-11:00	Break
Parallel Sessions (15 min + 5 min Q&A)  Discussion: 12:40-13:00 Lunch break at 13:00-14:00	Room 1	Avika Sood	11:00-11:20	Creating an interprofessional consortium on climate and health for higher education (Shiladitya DasSarma, Karin Gunther Russ, Timothy Canty, Robyn Gilden, Shailvi Gupta, Nicole Mattocks, Snehal T. Patel, William Piermattei - University of Maryland)
			11:20-11:40	Role of Higher Education Institutions in the Implementation of Sustainable Development Goals in Latin America (Antonio Emmanuel Pérez Brito, Martha Isabel Bojórquez Zapata, and Ileana del Socorro Vázquez Carrillo - Universidad Autónoma de Yucatán)
			11:40-12:00	Enhancing Community Engagement and Understanding of SDGs through Student-Led Sustainability Clubs: A Case Study in Zayed University (Vasila AlKhaldi and Suzanna Elmassah - Zayed University)
			12:00-12:20	Franco-Quebec collaboration in the maritime sector – The Institut France Quebec Maritime and the ARICO coastal risk program (Sebastian Weissenberger - Université TÉLUQ)
			12:20-12:40	National collaboration guiding the higher education institutions in Finland to a more sustainable and responsible future (Joshi, M., Konst, T. & Krappe, J. - Turku University of Applied Sciences)
	Room 2	Julie Newman	11:00-11:20	India's liberal arts renaissance and its perspective on Sustainability (Chaitanya Ravi - FLAME University)
			11:20-11:40	Exploring Climate Change and Emotions on Campus: From Distress to Action (Christopher Rabe and Susy Jones - MIT)
			11:40-12:00	Broadband thermal management using smart cooling technologies (Chang Liu, Xuanhe Zhao, and Nicholas X. Fang - MIT)
			12:00-12:20	Developing effective strategies for carbon accountability within university management to mitigate the impact of GHG emissions (Pere Losantos, Didac Ferrer, Josefina Antonijuan, Helena Martinez, Lourdes Reig, and Eva Vidal - Technical University of Catalonia)
			12:20-12:40	Small-town Climate Action: Establishing a Climate Action Plan in Meadville, PA (Matthew Bethurem and George Ackerman - Allegheny College)
	Room 3	Laís Trevisan	11:00-11:20	Creative learning for sustainability (Kay Emblen-Perry - Worcester Business School)
			11:20-11:40	Organizational Educational Potentials for Regional Sustainable Development: A Transatlantic Comparative Perspective on Multi-Stakeholder-Partnerships, Networking and Consulting (Tobias Klös and Marc-André Heidelmann - Philipps-Universität Marburg and IU International University of Applied Sciences)
			12:00-12:20	Parallels Among STEM Education and Education for Sustainability (Jessica Cordaro - University of Wisconsin-Stevens Point)
			12:20-12:40	Eco-centered Design - Academic Projects for Efficiency, Consistency and Sufficiency (Matthias Held - Hochschule für Gestaltung Schwäbisch Gmünd)
	Room 4	Susanne Maria Weber	11:00-11:20	Towards more sustainable means to handle local wool: a research initiative at the University of Quebec in Montreal (Bellemare Jocelyn, Fontaine Richard, Faust Marie-Eve, and Mardirossian Vanessa - University of Quebec in Montreal)
			11:20-11:40	North-South Cooperation, the Benefits of Contrast (Timothy Gutowski, Paula Hernández Díaz, Jonathan R. Barton, Jorge Andrés Robalino, Gabriela Araujo, and Catalina Rojas - MIT, Universidad EAFIT, Pontificia Universidad Católica, Escuela Politécnica Nacional)



## TRANSATLANTIC SYMPOSIUM ON SUSTAINABLE DEVELOPMENT

		Lunch break at 13:00-14:00	11:40-12:00	The validation of a framework for meta-competences across disciplines teaching for the Sustainable Development Goals (Romana Bates - University for Continuing Education Krems)
			12:00-12:20	Integrating Sustainability into the Curriculum: A Case Study of Higher Education in the UAE (Vasilia Al Khaldi - Zayed University)
Lunch			13:00-14:00	Lunch
Parallel Sessions (15 min + 5 min Q&A)	Room 1  Discussion: 15:20-15:30  Break at 15:30-16:00	Laís Trevisan	14:00-14:20	The contribution of university economics teaching to sustainability (María Semitiel-García, Lourdes Molera-Peris, Pedro Noguera-Méndez - University of Murcia)
			14:20-14:40	Sustainability competence at BarcelonaTECH university (Josefina Antonijuan, Didac Ferrer, Eva Vidal - Universitat Politècnica de Catalunya)
			14:40-15:00	Introducing Participatory Design Elements into Secondary Classroom Assessment through a University Engineering and Education Collaboration (Timothy G. Thomas and Adebayo Ogundipe - James Madison University)
			15:00-15:20	Education for Sustainable Development: Role-Playing Business Transformation in Fast Fashion (Jeremy Williams, and Suzanna Elmassah - Zayed University)
	Room 2  Discussion: 15:20-15:30  Break at 15:30-16:00	Ronald Deckert	14:00-14:20	Transition teams as an innovative tool in higher education institution on the road to sustainability: A case study in Belgium (Dirk V. Franco, Jean Pierre Segers, Peter Wollaert, and Maya De Deyn - Hasselt University, Riga Technical University, CIFAL Flanders Hoveniersstraat)
			14:20-14:40	Deep Listening - A Framework for Collaborative Adaptation (Yihyun Lim, James Paradis, and Eric Gordon - University of Southern California and MIT)
			14:40-15:00	Measuring & Mitigating Scope 3 Emissions at a Research University (Maira Zbella - Stanford University)
			15:00-15:20	Differential characterizations of reputational risk associated with a net-zero commitment in a US Higher Education Institution (Leela Velautham - MIT)
	Room 3  Discussion: 15:20-15:30  Break at 15:30-16:00	Julie Newman	14:00-14:20	Circular Economy Implementation: From Selective Measures to Absolute Environmental Sustainability (Vytaute Dlugoborskyte - Hamburg University of Technology)
			14:20-14:40	Certified B Corporations as a Driver for Sustainable Development: An Analysis of Innovative Sustainable Business Models in the US (Eundeok Kim - Florida State University)
			14:40-15:00	Occupants Perception of Indoor Environmental Quality Factors: A Comparison of a LEED versus Non-LEED Certified Campus Building (Abimbola Asojo and Jing Tian - University of Minnesota)
			15:00-15:20	Review of Italian higher education energy consumption: Towards an Energy Plan (Michele Meoli, Matteo Mura, and Stefano Paleari - University of Bologna and University of Bergamo)
	Room 4  Discussion: 15:20-15:30  Break at 15:30-16:00	Michael Bossert	14:00-14:20	Designing Collaborative European Projects for Remanufacturing Education: Lessons Learned from Experimentation with Universities and Companies (Helmi Ben Rejeba, David Peckb, Jyri Hanskic, Denis Dowlingd, Jouko Heikkiläc, Jan-Henk Welinke, and Peggy Zwolinskia - Grenoble INP, Delft University of Technology, VTT Technical Research Centre of Finland Ltd, University College Dublin)
			14:20-14:40	From theory to practice: the importance of implementing sustainable practices by students at universities (Margarita Ferat - National Autonomous University of Mexico)
			14:40-15:00	Creating curricula for competence: Findings from a comparison of three sustainability graduate programs (Jodie Birdman and Daniel J. Lang - Leuphana University Lüneburg, Institut für Technikfolgenabschätzung und Systemanalyse (ITAS)
			15:00-15:20	Sustainability Education in Software Engineering: Experiences from Requirement Engineering Curriculum (Shola Oyedeji, Mikhail Ola Adisa, and Jari Porras - LUT University)
Closing remarks			16:00-17:00	Hand-over of the best papers awards & closing remarks  Julie Newman and Walter Leal

# TRANSATLANTIC SYMPOSIUM ON SUSTAINABLE DEVELOPMENT

## ORGANISERS

- Massachusetts Institute of Technology (MIT), Office of Sustainability
- Manchester Metropolitan University
- Hamburg University of Applied Sciences Research and Transfer Centre "Sustainable Development and Climate Change Management"

## INTERNATIONAL PARTNERS

- Association for the Advancement of Sustainability in Higher Education (AASHE)
- European School of Sustainability Science and Research (ESSSR)
- Inter-University Sustainable Development Research Programme (IUSDRP)
- UK Consortium of Sustainability Research (UK-CSR)
- German Consortium of Sustainability Research (DEKONA)

## SCIENTIFIC COMMITTEE

### CHAIRPERSONS

**PROF. WALTER LEAL** (BSc, PhD, DSc, DPhil, DEd, DLitt, FSB, FRGS, FLS)

HAW Hamburg, Germany, & Manchester Metropolitan University, UK  
E-mail: walter.leal2@haw-hamburg.de

**DR JULIE NEWMAN**

Director, Office of Sustainability Massachusetts Institute of Technology  
Lecturer, Urban Studies and Planning  
E-mail: j\_newman@mit.edu

## CONTACT PERSONS

**All questions related to the papers and registrations should be sent to:**

**LAÍS TREVISAN**

HAW Hamburg  
E-mail: Laís.VieraTrevisan@haw-hamburg.de or FTZ-Events@hamburg.de

**All logistical questions related to the Symposium should be sent to:**

**REBECCA FOWLER**

Office of Sustainability  
Massachusetts Institute of Technology  
E-mail: rfowler@mit.edu