

#SCI4NET0

3 November 2022

# INTERDISCIPLINARITY FOR THE NET-ZERO TRANSITION

Online Symposium

COP27 LEAD-UP EVENT

**CESAER**  
The strong and united voice of universities  
of science and technology in Europe

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UNIVERSITY  
ASSOCIATION

**ISCN**  
International Sustainable Campus Network

**SCIENCE  
EUROPE**  
Shaping the future of research

**UNICA**  
Network of Universities  
from the Capitals of Europe

University of  
**Strathclyde**  
Glasgow



## INTRODUCTION

### ABOUT COP27

Egypt hosts the twenty-seventh United Nations Climate Change Conference of the Parties (COP27) in Sharm El-Sheikh from 6 to 18 November 2022. This annual climate conference brings together over 30,000 delegates, including heads of state, climate experts and campaigners to agree co-ordinated action to tackle climate change. The vision of Egypt's presidency of COP27 is to move from negotiations and planning to implementation through full, timely, inclusive, and at-scale action on the ground.

### ABOUT THE SYMPOSIUM

At the United Nations Climate Change Conference of the Parties (COP26), which took place in Glasgow (UK) in 2021, [CESAER](#), the [International Sustainable Campus Network \(ISCN\)](#), [Science Europe](#) and the [University of Strathclyde](#) in Glasgow organised a joint Symposium on 'Science for Net-Zero Transition' and launched a call for collective global action to tackle climate change.

These four partners aim to boost the contributions of universities, research funding and performing organisations, and the whole research and higher education system towards the world's aims of hitting emissions reduction targets. They share a vision of a collaborative, systems-based approach, where research and education systems work together and in conjunction with industry and society at large, engaging in, and contributing to this crucial societal challenge. This commitment aligns with the UN Sustainable Development Goal 13: "Climate Action: take urgent action to combat climate change and its impacts."

The Call to Action is for universities and research funding and performing organisations to assess how their actions and ambitions around climate change can collectively be upgraded.

Six key areas for the Net-Zero Transition were identified:

1. Responding to the Net-Zero challenges' complexity by addressing them in an interdisciplinary way.
2. Developing the next generation of students and researchers for the Net-Zero Transition.
3. Reducing our own organisational carbon footprint.
4. Supporting the Net-Zero Transition in policymaking at all levels.
5. Improving the shared understanding of what needs to be done.
6. Facing the challenges together.

The partners committed to reconvening at every COP to take stock of the progress made towards achieving the Net-Zero Transition. They published [a full report](#) on this challenge in March 2022, elaborating this vision. The promoters also engaged in seeking more partners to join the cause.

With this spirit, CESAER and [UNICA](#) (the Network of Universities in Capitals) published a [joint open letter](#) with recommendations on effective funding for inter- and trans-disciplinary research; while, CESAER, EUA, Science Europe and UNICA joined forces and released [a call to policy makers](#) to emphasise the vital importance of supporting inter- and trans-disciplinary research.

Given the strong link between interdisciplinarity and the Net-Zero Transition, which requires mobilising multiple scientific backgrounds, [EUA](#) and UNICA committed to co-organising the 2022

symposium, and are currently considering formally joining the Call to Action. These steps are part of a broader process in combining forces of the research and higher education sectors to tackle the climate crisis.

## VISION

The Call to Action is framed around a vision based on systems thinking integrating with different research and higher education actors: only by acting together, we can address the climate crisis. Based on this vision, the promoting organisations call on other partners in the research and higher education communities to mobilise to achieve Net-Zero Transition.

## GOALS AND FORMAT

This joint event aims to take stock of past year and achievements towards the Call to Action and show that only by 'acting together' can the research and higher education systems contribute to the goals of the Net-Zero Transition. For this purpose, the chosen topic is 'interdisciplinarity' to foster, underpin and encourage cooperation between the various actors. The event aims to focus on the concrete actions for the Net-Zero Transition, as performed by the different types of actors of the research system (universities, research funding and performing organisations, and policymakers).

This open, online event has the following objectives:

- Present the engagement of the promoting organisations for the Net-Zero Transition to their memberships/constituencies.
- Take stock of the progress of the Call to Action and the partners' commitment to its cause.
- Engage other actors of the (European) research and higher education systems for the Net-Zero Transition.
- Advocate with stakeholders the importance of acting together.

In this framework, the proposed format for the event is as follows:

1. A first panel discussion with experts from universities and Research Funding Organisations presenting practical examples of interdisciplinary projects for the Net-Zero Transition from a researcher perspective.
2. A second panel discussion with policy experts reflecting and discussing how results of interdisciplinary projects shared with policymakers and wider society leads to the Net-Zero Transition at the national, regional and global level.
3. A final panel discussion with the Presidents of each partner organisation. In this session, a keynote speaker will present the Sci4NetZero Call to Action and the new partners involved. Then, the moderators of the first two sessions will report key messages from the first two panels. Finally, the Presidents will take stock of the progress made towards the Call to Action and present concrete exemplars of how they (can) act together to enhance the Net-Zero Transition.

The objective is to show the importance of acting together presenting concrete interdisciplinary actions for the Net-Zero Transition.

## PARTICIPANTS

This open, online event is intended to act as a catalyst for universities, university leaders, Research Funding and Performing Organisations, researchers, and policymakers on how to effectively contribute to ecological, economic and social sustainability through global collaboration.

# PROGRAMME

THURSDAY 3 NOVEMBER 2022

All times are in CET.

14.00–14.05

## OPENING AND WELCOME

- Lidia BORRELL-DAMIÁN, Secretary General of Science Europe

14.05–14.50

## First Panel

### INTERDISCIPLINARY ACTIONS FOR THE NET-ZERO TRANSITION: THE VIEWS OF RESEARCH FUNDERS AND UNIVERSITIES

#### Moderator

- Douglas HALLIDAY, Durham University & EUA Green Deal task-and-finish group

#### Speakers

- Melissa BROWN GOODALL, Senior Director of the Environmental Innovations Initiative at the University of Pennsylvania and member of the International Sustainable Campus Network, ISCN
- Alberto GARRIDO, Vice-Rector for Quality and Efficiency at Universidad Politécnica de Madrid & Secretary of CESAER Task Force Sustainability
- Matthew LAWSON, University of Edinburgh & Coordinator of the UNICA Green and SDGs working group
- Malin MOBJÖRK, Senior Research Officer at Formas & Chair of the Science Europe's working group on the Green and Digital Transition

14.50–15.00

## Break

15.00–15.45

## Second Panel

### INTERDISCIPLINARY ACTIONS FOR THE NET-ZERO TRANSITION: THE POLICY AND INTERNATIONAL PERSPECTIVES

#### Moderator

- Peter KADERJAK, Head of Zero Carbon Hub (ZKK), Budapest University of Technology and Economics (BME)

#### Speakers

- Sam BARRATT, Chief of Youth, Education and Advocacy of United Nations Environment Programme (UNEP)
- Pablo DEL RÍO, Researcher at CSIC (Spain) and member of Science Europe Working Group for the Green and Digital Transition
- Matt DOLF, Co-Chair of the International Health Promoting Universities and Colleges Network & University of British Columbia
- Luis Alberto SERRA-BARRAGÁN, Associate Dean of Research and Executive Director of the Energy Initiative at Tecnológico de Monterrey

15.45–16.00	<b>Break</b>
16.00–17.00	<p><b>Third Panel</b> <b>ACTING TOGETHER FOR THE NET-ZERO TRANSITION</b></p> <p>Opening Remarks &amp; Moderator</p> <ul style="list-style-type: none"><li>▪ Tim BEDFORD, Associate Principal for Research and Innovation at University of Strathclyde</li></ul> <p>Rapporteurs from First and Second Panels</p> <p>Speakers</p> <ul style="list-style-type: none"><li>▪ Angelika KALT, Vice-President of Science Europe</li><li>▪ Michael MURPHY, President of EUA</li><li>▪ Luciano SASO, President of UNICA</li><li>▪ Gisou VAN DER GOOT, President of International Sustainable Campus Network</li><li>▪ Rik VAN DE WALLE, President of CESAER</li></ul>
17.00–17.05	<p><b>CONCLUDING REMARKS AND NEXT STEPS</b></p> <ul style="list-style-type: none"><li>▪ Lidia BORRELL-DAMIÁN, Secretary General of Science Europe</li></ul>



# BIOGRAPHIES OF SPEAKERS AND MODERATORS

Speakers and moderators are listed in order of appearance on the programme.



## **Sam BARRATT**

**CHIEF OF YOUTH, EDUCATION AND ADVOCACY OF UNITED NATIONS ENVIRONMENT PROGRAMME (UNEP)**

Sam Barratt is Chief of Youth, Education and Advocacy at UN Environment Programme (UNEP). At UNEP, he co-founded the Playing for the Planet Alliance, a collaboration with the videogaming industry to nudge gamers' behaviour and for the industry to use cleaner energy. He also oversees the work of UNEP's to support Higher Education to decarbonise and shift the mindsets towards sustainability in universities across the world. Previously, Sam worked as Chief of Public Advocacy for UNEP where he ran all of the global campaigns on the issues of air quality, marine litter and wildlife crime. Before joining the UN, Sam was Director of Communications for Avaaz and Head of Press for Oxfam. He has a degree in Politics from Liverpool University and is on Twitter at @samdbarratt.



## **Tim BEDFORD**

**ASSOCIATE PRINCIPAL FOR RESEARCH AND INNOVATION AT UNIVERSITY OF STRATHCLYDE (UK)**

Tim Bedford is Associate Principal for Research and Innovation at the University of Strathclyde in Glasgow (UK) and Professor of Risk and Decision Analysis. He is one of the Executive leads for the University net zero strategy and a member of the board of Sustainable Glasgow, the partnership organisation which brings together major city organisations to coordinate and support the city's work on climate action. He is also a member of the Board of Directors of CESAER and has been Chair of its Taskforce on Innovation for more than five years with a particular focus on the anchor role of universities in innovation ecosystems. He is also a Fellow of the Royal Society of Edinburgh, Scotland's National Academy.



## **Lidia BORRELL-DAMIÁN**

**SECRETARY GENERAL OF SCIENCE EUROPE**

Dr Lidia Borrell-Damián has been Secretary General of Science Europe since 2019. Previously, she worked at the European University Association (EUA), where she was Director for Research and Innovation. Her areas of expertise cover a wide range of European and global R&I policies, including business R&I and energy. Prior to that she worked as Director of Research at Pompeu Fabra University, and as an assistant professor and visiting scholar in USA and Canada universities. She contributes to several international advisory committees including the Global Research Council. She holds a Doctorate in Chemistry, with a specialty in Chemical Engineering from the University of Barcelona.



## **Melissa BROWN GOODALL**

**SENIOR DIRECTOR OF THE ENVIRONMENTAL INNOVATIONS INITIATIVE AT THE UNIVERSITY OF PENNSYLVANIA**

Melissa Brown Goodall is joined the Environmental Innovations Initiative in 2021. In this role, she is developing a strategic vision to leverage Penn's academic strengths and foster collaboration across disciplines to address the most pressing global environmental challenges of our time. Before coming to Penn, Melissa was at Yale University. Melissa is the Director of the Global University Climate Forum and a Strategic Advisor to the Centre for Governance and Sustainability at the University of Massachusetts Boston. She earned her Ph.D. in Environmental Studies in 2015 from Antioch University.



## **Pablo DEL RÍO**

**RESEARCHER AT CSIC (SPAIN) & MEMBER OF THE SCIENCE EUROPE WORKING GROUP FOR THE GREEN AND DIGITAL TRANSITION**

Dr Pablo del Río is a senior (tenured) researcher and the head of the Environmental Economics Group at the Institute for Public Policies and Goods at the Spanish National Research Council (CSIC). He is a renowned economist and scholar who spent more than 20 years looking particularly at renewable energy policies, eco-innovation and the circular economy. He has 100 international publications in world class journals.



## **Matt DOLF**

**CO-CHAIR OF THE INTERNATIONAL HEALTH PROMOTING UNIVERSITIES AND COLLEGES NETWORK & UNIVERSITY OF BRITISH COLUMBIA**

Matt is the Director for the Office of Wellbeing Strategy at the University of British Columbia (Vancouver, Canada) which is situated on the traditional, ancestral, and unceded territory of the Musqueam people. In this role, Matt provides strategic direction and capacity-building support for UBC Wellbeing - a collaborative effort across UBC to become a health promoting campus where all people, places, and communities can flourish. He currently co-chairs both the Canadian & International Health Promoting Campus Networks. Matt holds a Doctorate in the field of sport and sustainability from the UBC School of Kinesiology and a Master in Sports Administration from the Swiss Federal Institute of Technology – Lausanne. Matt has researched and published in the areas of health promotion, environmental impact assessment, sustainability, and sport management.



## **Alberto GARRIDO**

**VICE-RECTOR FOR QUALITY AND EFFICIENCY AT UNIVERSIDAD POLITÉCNICA DE MADRID & SECRETARY OF CESAER TASK FORCE SUSTAINABILITY**

Professor of Agricultural and Natural Resource Economics and Vice-Rector for Quality and Efficiency of Universidad Politécnica de Madrid (UPM). He is the coordinator of the European University Alliance EELISA, and in charge of the Sustainability Policy of UPM. Trained in UPM as an Agricultural Engineer, got a Master in Agricultural and Natural Resource Economics from the University of California (David), and a Doctoral degree in Agricultural and Natural Resource Economics from UPM. His academic career includes several appointments in boards, and in academic and administrative positions of increasing relevance and responsibility. Presently, he serves in the Advisory Board of the prestigious Rosenberg International Forum on Water Policy (since 1996), in the Board of Directors of IMDEA-Food, and in the Board of the Fundación General de la UPM.



## **Douglas HALLIDAY**

**DURHAM UNIVERSITY & EUA GREEN DEAL TASK-AND-FINISH GROUP**

Professor Douglas Halliday is the Chair of the European University Association Green Deal Task and Finish Group, developing a roadmap for universities to realise the aims of the Green Deal. Previously, he was Chair of the EUA Energy and Environment Platform representing European universities in EU energy-related research, education and innovation activities facilitating the energy transition. He is the Director of the Durham Global Challenges Centre for Doctoral Training supporting international candidates undertaking multidisciplinary doctoral research projects exploring solutions to UN Sustainable Development Goals. Douglas is Professor of Physics and researches new materials for the next generation of photovoltaics. Previously, he was Dean of Durham's Graduate School. Previously, he was Dean of Durham's Graduate School. He is Fellow of the Institute of Physics, Senior Fellow of the Higher Education Academy, and Fellow of the Energy Institute.



## **Peter KADERJAK**

**HEAD OF ZERO CARBON HUB (ZKK), BUDAPEST UNIVERSITY OF TECHNOLOGY AND ECONOMICS (BME)**

Dr Péter Kaderják has a long-standing academic and decision-making experience in the fields of energy sector regulation, and energy and climate policy. Formerly he served as Secretary of State for Energy and Climate Policy at the Ministry of Innovation and Technology in Hungary. He has been President of the Hungarian Energy Office, and Chief of Cabinet for Hungary's Minister of Economic Affairs. His past and current activities are strongly linked to the liberalisation, European integration and diversification of the Hungarian electricity and natural gas sectors and the creation of national strategies to meet climate neutrality by 2050. Today he is busy with the design and implementation of policies, programs, research and education that promote Hungary towards climate neutrality.





## Angelika KALT

### VICE-PRESIDENT OF SCIENCE EUROPE

Angelika Kalt is currently the Director of the Swiss National Science Foundation (SNSF), Switzerland's main research funding organisation. Before this, Angelika was professor of petrology and internal geodynamics at the University of Neuchâtel (CH). Since taking over the helm at the SNSF, she has focused her efforts on modernising SNSF research funding in line with international trends – promoting cross-border collaboration, implementing the DORA Declaration and facilitating open access publishing. She is dedicated to improving conditions for researchers in Switzerland, particularly young researchers, and women.



## Matthew LAWSON

### UNIVERSITY OF EDINBURGH & CO-ORDINATOR OF THE UNICA GREEN AND SDGs WORKING GROUP

Matthew Lawson is currently Senior SRS Learning, Teaching and Reporting Manager at the University of Edinburgh (UK). He is responsible for leading the department's efforts to embed climate and sustainability into the academic curriculum and student experience. He leads the University's reporting on sustainability, social and civic responsibility issues. His role also includes oversight of department operations. He is the Co-ordinator of the UNICA Green and Sustainable Development Goals Working Group and an alumnus of the EAUC Leadership Academy Programme. Matthew has worked for the University since 2011 in various sustainability roles in Estates and Transition Edinburgh University.



## Malin MOBJÖRK

### SENIOR RESEARCH OFFICER AT FORMAS & CHAIR OF THE SCIENCE EUROPE WORKING GROUP ON THE GREEN AND DIGITAL TRANSITION

Dr Malin Mobjörk is Senior Policy Officer at the Swedish Research Council for Sustainable Development, Formas. Malin is coordinating the Swedish national research programme on climate, and she is engaged in Formas international climate work. Before joining Formas in March 2021, Malin was the Director of the Climate Change and Risk programme at Stockholm International Peace Research Institute, SIPRI. During the past decade, her research focused on different aspects of the climate change and security debate: the linkages between climate change and violent conflict, and how policy organisations frame and respond to climate-related security risks. Additionally, she is interested in interdisciplinary and transdisciplinary research. She has a PhD in Environmental Change, Linköping University, Sweden.



## **Michael MURPHY**

### **PRESIDENT OF EUA**

Michael Murphy is President of European University Association (EUA). He graduated in Medicine from University College Cork (UCC) and received his doctorate from the National University of Ireland. He held faculty positions in Pharmacology and Medicine at The University of Chicago before returning to Cork as Professor of Clinical Pharmacology and Therapeutics in 1992. An expert in drug therapy for cardiovascular disease, he has led several large international clinical trials of interventions to reduce cardiovascular mortality. Michael Murphy has held a variety of leadership roles including President of UCC, Vice-Chancellor of the National University of Ireland, Chair of the Irish Universities Association, Chair of the Permanent Working Group of European Hospital Doctors. He has been active in many academic organisations in Europe and the United States.



## **Luciano SASO**

### **PRESIDENT OF UNICA**

Luciano Saso is Professor at the Faculty of Pharmacy and Medicine of Sapienza University in Rome, Italy. He is author of more than 300 scientific articles and coordinated several research projects in the field of pharmacology. He has been the referee for many national and international funding agencies and international scientific journals in the last 30 years. Professor Saso has extensive experience in international relations, and he is currently Vice-Rector for the European University Networks UNICA and CIVIS at Sapienza University of Rome. Prof. Saso assumed the role of Member of the Steering Committee of UNICA for two mandates (2011-2015). In October 2015, he was elected President for a first term (2016-2019), and he was re-elected President for a second term (2020-2023) in 2019.



## **Luis Alberto SERRA-BARRAGÁN**

### **ASSOCIATE DEAN OF RESEARCH AND FACULTY DEVELOPMENT, AND EXECUTIVE DIRECTOR OF THE ENERGY INITIATIVE AT TECNOLÓGICO DE MONTERREY**

Luis Alberto Serra-Barragán is the Associate Dean of Research and Faculty Development, as well as Executive Director of the Energy Initiative at Tecnológico de Monterrey. Over the last decade, Luis has led multidisciplinary teams to conduct applied research and consulting projects for firms and federal government agencies in North America in energy, economic development, and sustainability themes. He is a member of the Energy Taskforce of Agenda 2030 of the UN Global Compact's Mexico Chapter. He is also a member of the group of experts of the Sustainable Development Solutions Network in Mexico. He holds a Ph.D. in Economics from The University of Warwick, an MSc in Applied Economics with a concentration in Environmental Economics from the Universidad de Alcalá de Henares, and a bachelor's degree in Economics from ITAM.



## **Gisou VAN DER GOOT**

### **PRESIDENT OF INTERNATIONAL SUSTAINABLE CAMPUS NETWORK**

Gisou van der Goot is the Head of the Laboratory of Cell and Membrane Biology and founding member of the Global Health Institute (GHI) of the School of Life Sciences at the Swiss Federal Institute of Technology Lausanne (Ecole Polytechnique Fédérale de Lausanne, EPFL). She is currently Vice President for Responsible Transformation, in charge of reinforcing values such as inclusion and sustainability. From 2014 to 2020, she was Dean of the School of Life Sciences. She obtained an EMBO Young Investigator award in 2001, a Howard Hughes International Scholar award in 2005 and the Swiss Prix Marcel Benoist in 2009, Professor van der Goot was a member of the Swiss National Science Foundation (SNSF), the Conseil Suisse de la Science et de la Technologie (CSST) and the European Research Council (ERC).



## **Rik VAN DE WALLE**

### **PRESIDENT OF CESAER**

Rik Van de Walle has been Rector at Ghent University since October 2017. In 2018, he became a Member of the Board of Directors of CESAER, and has served as President since January 2020. Rik holds a Master of Science in Engineering Physics and a PhD in Engineering from Ghent University and was a visiting postdoctoral fellow at the University of Arizona (Tucson, USA). He returned to Ghent University to set up the Internet and Data Lab (IDLab) which became one of the founding research groups of iMinds, now part of imec – a world-leading R&D and innovation hub in nanoelectronics and digital technologies. Before being Rector, he was Dean of Ghent University's Faculty of Engineering and Architecture.



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