

Sustainable horizons: Does our future depend on science?

The public SciencelBusiness Annual Network Conference February 7, 2023, 09:00 – 17:30 CET

Sponsor



Context

Behind the buzzwords that frame policy agendas for sustainability – net zero, pandemic preparedness, green deal, circular economy, etc – lies a wealth of opportunity for research and innovation (R&I) communities. Even before the COVID and Ukraine crises, governments, companies and others were pouring money into addressing the most "wicked problems" of our age, ranging from climate change and plastics to industrial decarbonisation and food production. In parallel, Horizon Europe – the EU's flagship €95.5 billion R&I programme – will commit half of its budget to tackling global challenges through to 2030, in direct support of the United Nations Sustainable Development Goals (UN SDGs).

There are plenty of indicators from the R&D world to suggest this level of commitment is justified. From atmospheric carbon removal, nuclear fusion and quantum computing to lab-created meat, hydrogen-fuelled vehicles and cell- and gene-based therapies, the narrative is one of breakthroughs, "game changers" and huge potential. Even though some of these technologies may take years to reach the mainstream, the drumbeats of positive expectation grow louder.

And yet. In the rush to champion the role of technology in delivering more sustainable futures, there is a sense that potential downsides are often overlooked. According to the International Energy Agency, the clean energy transition may require a six-fold increase in mining rare earth minerals and precious metals. Digital transformation continues to drive up emissions and carbon footprints in the ICT sector (without factoring in the energy needs of cryptocurrencies). Biofuel production continues to negatively affect food supply, forests and biodiversity. Meanwhile, the continued wrangling over COVID vaccine rights and distribution illustrates the tenuous nature of global health tech pledges.

So what does all of this imply for the worlds of research, industry and policy? On 7 February 2023, the Science Business Network and international R&I leaders will convene for a unique set of debates: first, to explore the science and tech agendas to bring planetary sustainability goals within reach, and second, to address some of the fundamental tensions at the interface between the two, including:

Which role for R&I in pursuit of the 2030 UN Sustainable Development Goals?

Will Horizon Europe make a tangible difference, and how will today's crises influence the rest of its strategic agenda?

Are the green and digital transitions truly compatible, and how to manage potential risks and unintended consequences of pursuing both in parallel?

Where will boundary lines be drawn between international cooperation and national interests in sustainability-related domains, not least around technology sovereignty?

Can foresight help R&I decision makers agree on what to prioritise, and how to align investment with longer term impacts and outcomes?



08:15 Registration and coffee

09:00 Welcome and opening remarks

• Maryline Fiaschi – Chief Executive, Science Business

09:05 Crystal balls: Can we anticipate the science and technology we need for a sustainable planet?

Opening remarks (live from Stockholm):

• Romina Pourmokhtari – Minister for Climate and the Environment, Government of Sweden Featured speakers:

- Sari Arho Havrén Counsellor and Foresight Advisor, Business Finland
- **Peter Bauer** Director, Destination Earth
- Robert-Jan Smits President of the Executive Board, Eindhoven University of Technology

Moderated by Maryline Fiaschi

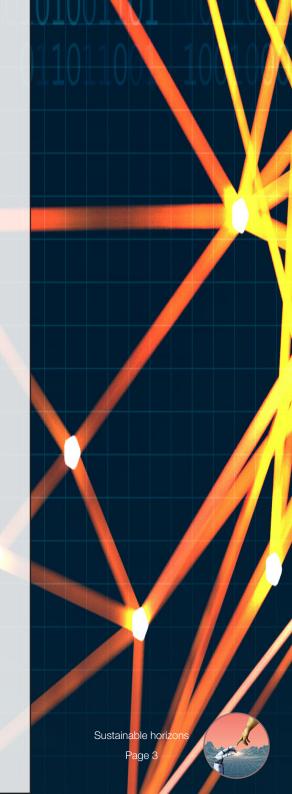
Supported by the European Centre for Medium-Range Weather Forecasts

10:05 Coffee break

10:30 The science of sustainability: A new paradigm for research and innovation?

Featured speakers:

- Ed Brinksma President of the Executive Board, Erasmus University Rotterdam
- Maria Leptin President, European Research Council
- Antoine Petit Chairman and Chief Executive, CNRS
- Anders Söderholm President, KTH Royal Institute of Technology



13:30 A "wicked problem": As trade tensions rise, how can we keep cooperating on green technology?

A panel discussion on whether the principles of technology sovereignty and strategic autonomy can be reconciled with the global nature of the sustainable development agenda.

14:15 Ticking clock: What role for research and innovation in achieving the UN Sustainable Development Goals?

The opening afternoon session of the conference will explore the ways in which R&D and innovation can fuel a renewed 'push' to achieve the UN targets by the end of this decade – and in particular the role of industry as a driver of breakthrough innovation and progress.

15:00 Coffee break

15:20 PARALLEL SESSIONS – Improved outcomes: Strengthening innovation strategy and performance

Parallel town hall debates looking at ways in which two key components of the R&I landscape can drive a new wave of industrial competitiveness, breakthrough innovation and business models linked to global sustainability challenges:

Session 1 – Technology infrastructures

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- Session 2 Big data for sustainability: Will new approaches and analytics change the game?
- **16:20** Transition break
- 16:30 Impact Horizon: Will Europe's flagship ultimately help to solve global challenges?

A closing session to address the contribution that Europe's science and technology capabilities can realistically make to the global sustainability agenda going forward.

17:30 Close of conference and networking reception



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Speakers



Sari Arho Havrén, Senior Advisor, Foresight, Business Finland

Dr Arho Havrén is a certified futurist, and she leads the Team Finland strategic and participatory foresight work in Europe since summer 2020. Her substance expertise lies within the future of geopolitics and its impacts on other foresight verticals, including technology and innovations. She has been co-developing Business Finland's global foresight model and processes and facilitates multiple foresight design workshops around Europe or elsewhere annually. Based on the future signals, trends and scenarios, she advises multiple organisations in Finland. She is also a popular speaker on

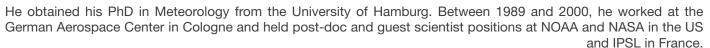
Toomas Asser, Rector, University of Tartu





Márcia Balisciano, Chief Sustainability Officer, RELX Group









Christoph Beuttler, President and Co-Founder, Net-Zero Emissions Platform Bio

Speakers



Sergio Bertolucci, Chair, R&D&I Committee (IC), ATTRACT & Former Scientific Director, CERN

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Bio





Maria da Graça Carvalho, Member, European Parliament Bio

Ole Petter Ottersen, President, Karolinska Institutet

Bio







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Astrid Söderbergh Widding, President, Stockholm University

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