

EPOL | **Economia
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Journal of Analytical and Institutional Economics

INNOVATION, SUSTAINABILITY, AND INSTITUTIONS.

A POLITICAL ECONOMY APPROACH

EPOL'S 40TH ANNIVERSARY CONFERENCE

Rome, Accademia Nazionale dei Lincei



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ACCADEMIA NAZIONALE DEI LINCEI

14-15 NOVEMBER 2024

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THURSDAY, 14 NOVEMBER 2024

PROGRAMME

14.30 REGISTRATION

15.00 INSTITUTIONAL WELCOMES

Roberto Antonelli, President, Accademia Nazionale di Lincei

Alberto Quadrio Curzio, Founder and Editor-in-Chief, EPOL

Amartya Sen, EPOL Advisory Board, Nobel Prize in Economics, Harvard University

THE INSTITUTIONS WE NEED (recorded message)

15.45 INSTITUTIONS AND ECONOMIC TRANSFORMATION

Chair **Alberto Quadrio Curzio**, Editor-in-Chief, EPOL

John Eatwell, EPOL Advisory Board, former President of Queen's College, Cambridge (UK)

TIPPING POINTS AND INSTITUTIONAL INNOVATIONS

Bina Agarwal, EPOL Co-Editor, Balzan Prize (2017), GDI, University of Manchester (UK), Institute of Economic Growth (Delhi, IN)

COOPERATIVE CULTIVATION: A TRANSFORMATIVE INSTITUTION?

Joel Mokyr, EPOL Advisory Board, Balzan Prize (2015), Northwestern University (Evanston, USA)

ECONOMIC PROGRESS AND ITS DISCONTENTS

FRIDAY, 15 NOVEMBER 2024

PROGRAMME

8.45 REGISTRATION

9.00 CONFLICTS AND SUSTAINABILITY

Chair **Bina Agarwal**, EPOL Co-Editor, Balzan Prize (2017)

Prabhu Pingali, Founding Director, Tata-Cornell Institute, Cornell University (Ithaca, USA)

CONFLICTING SOCIETAL GOALS AND THE SUSTAINABILITY CHALLENGE

Joan Martinez Alier, EPOL Advisory Board, Balzan Prize (2020), Universitat Autònoma de Barcelona (ES)

ECOLOGICAL DISTRIBUTION CONFLICTS AND MULTI-DIMENSIONAL POVERTY

Maryam Rahmanian, ex-Vice Chair, High Level Panel of Experts on Food

Security and Nutrition of the UN Committee on World Food Security (HLPE/CFS) (Rome, IT)

CONFLICTS, INEQUALITIES AND THE RIGHT TO FOOD: A CIVIL SOCIETY PERSPECTIVE [**Absent**]

Ragupathy Venkatachalam, EPOL Co-Editor, Goldsmiths, University of London (UK)

CLOSING REMARKS

10.15 COFFEE BREAK

11.10 INNOVATION AND DEVELOPMENT

Chair **Floriana Cerniglia**, EPOL Co-Editor, Università Cattolica, Milan

Phoebe Koundouri, Chair World Council of Environmental and Natural Resource Economists Associations; Chair SDSN Global Climate Hub; Chair AE4RIA (Athens, GR)

SYSTEMS APPROACH TO SUSTAINABILITY: IF YOU CAN'T MEASURE IT, YOU CAN'T IMPROVE IT

Fu Jun, EPOL Advisory Board, Founding Director, Peking University Public Policy Forum International (PRC)

MIND'S HEAVEN AND CLIMATE CHANGE: A UNIFIED MODEL TO EXPLAIN SUSTAINED GROWTH

Roberto Zoboli, EPOL Advisory Board, Università Cattolica, Milan (IT)

WHEN POLICIES MATTER: LEVERAGING NET ZERO FOR STRUCTURAL CHANGE IN THE EU

Marcela Villarreal, Ex-Director of Partnerships and UN Collaboration Division, FAO (Rome, IT)

THE POLITICAL CENTRALITY OF AGRICULTURE FOR HUMAN DEVELOPMENT

Sandro Montresor, EPOL Co-Editor, Università di Trento (IT)

CLOSING REMARKS

13.15 LUNCH

14.30 COOPERATION FOR PEACE AND DEVELOPMENT

Chair **Alberto Quadrio Curzio**, President Emeritus, Accademia Nazionale dei Lincei

Berit Reiss-Andersen, Co-Chair in the Nobel Foundation, former Chair of the Norwegian Nobel Committee
WORKING FOR PEACE IS WORKING FOR FOOD

Fabiola Gianotti, Director-General, CERN

SCIENCE FOR PROGRESS AND PEACE: CERN'S EXAMPLE

Romano Prodi, former President of the European Commission

EUROPE: A BRIDGE IN A BROKEN WORLD?

16.30 GRAZIE E ARRIVEDERCI

Marco Fortis, EPOL Co-Editor and Co-President of the Edison Foundation

EPOL'S HISTORY AND THIS CONFERENCE FOR THE FUTURE

Preface by Alberto Quadrio Curzio

The 40th celebratory conference of *Economia Politica. Journal of Analytical and Institutional Economics* has a very effective title: «*Innovation, Sustainability, and Institutions: A Political Economy Approach*». It bridges the past and the future, offering a glimpse into the journal's potential trajectory. To introduce it, I will present three brief reflections on Epol 40: a historical perspective, an assessment of the present, and a vision for the future.

1) EPOL'S HISTORICAL BACKGROUND

EPOL was established in 1984, a result of my proposal approved by top representatives of "Il Mulino," a cultural community for humanities professors to of which I was a part and to which I still belong. I founded "*Political Economy. Journal of Theory and Analysis*" as a comprehensive and pluralist project encompassing micro and macroeconomics, theory and history. Its inspiration was a "Political Economy" focused on the present and future, valuing not only analytical complexity but also the relevance of topics in a long-term perspective. The editorial and scientific contributions of many senior and junior Italian economists were important, and I am writing an essay on them.

Initially, the journal was published only in Italian. Later, it included English articles, and in 2008, we decided to publish only in English to facilitate the international circulation of essays by young Italian economists.

In 2015, we introduced an important innovation. An agreement between Il Mulino and Springer, aided by the support of the Edison Foundation and its director Marco Fortis, led to the rebranding of the journal. The journal was launched with two logos, "Mulino and Springer," and the Edison Foundation's logo was also added, reflecting its commitment to applied economics studies and its sponsorship of the journal.

2) EPOL'S COMPLETE INTERNATIONALISATION

EPOL is now considered a fully international journal. Its Italian flair is important and is reflected in the membership of the Associate Editors (10 of 28 are Italian) and the co-editors (3 of 5 are Italian). The Advisory Board is also fully international (only 2 of 21 members are Italian).

These structured collaborations have been and remain crucial for the journal's success. What about EPOL's "success index" – it is recognized as a Q1 economics journal. For someone these indexes are not always indicative of individual author quality – some prefer to write books, others may have pathbreaking ideas but remain among the unorthodox – they remain a useful general benchmark. Co-editors Floriana Cerniglia, Sandro Montresor, and Ragupathy Ventkatachalam have been pivotal in building each issue of EPOL.

Bina Agarwal as co-editor, providing crucial support to the special issue "Women, Pandemic, and the Global South (1/2022)".

This Special Issue stressed the urgency of considering women's roles and rights in the Global South within broader political economy.

3) INNOVATION, SUSTAINABILITY AND INSTITUTIONS

The conference is also a program for EPOL's future, emphasizing the relationship between the past and the future in three sessions: *Institutions and Economic Transformation* (Eatwell, Agarwal, Mokyr), *Conflicts and Sustainability* (Pingali, Martinez Alier, Rahmanian), and *Innovation and Development* (Koundouri, Fu Jun, Zoboli, Villarreal). The speaker lineup reflects scientific excellence and professional experience. The session titles and speaker names require further comment. The role of introducing or commenting the session will be done by the co-editors Bina Agarwal, Floriana Cerniglia, Sandro Montresor, and Ragupathy Ventkatachalam.

These sessions bear witness to an evident sense of urgency in identifying policies to prevent the 21st century from being marked by polarization between underdevelopment and development, resource scarcity and overreliance on innovation, perhaps interpreted by sectoral and increasingly powerful economic agents. It is noteworthy that many speakers are on EPOL's advisory board, Lincoi Academy foreign fellows, or Balzan Prize recipients. Overall, this conference brings together economists with strong relationships, which is significant.

4) COOPERATION FOR PEACE AND DEVELOPMENT

This is the title of the fourth session, featuring three complementary lectures by experts from diverse fields.

Berit Reiss-Andersen, Chair of the Nobel Prize Committee from 2017 to 2023, will discuss different approaches to peace, emphasizing the distinction between preserving peace and post-conflict peacebuilding. She will analyse the economic dimension of peace, focusing on Nobel Peace Prize winners such as Lord Boyd Orr, Lèon Jouhaux, Norman Borlaug, the ILO, the EU, and the WFP.

Fabiola Gianotti, as Director General of CERN since 2016, has been at the helm of a high-science centre dedicated to peaceful progress. CERN stands as a unique example of constructive coexistence among scientists from a multitude of countries, often with differing geopolitical interests.

Romano Prodi, as President of the European Commission (1999 - 2004), oversaw the launch of the euro and, following the collapse of the USSR, promoted the inclusion of 10 states into the EU. Since stepping down as Prime Minister of the Italy in 2008, he has devoted himself to issues of Global South development, holding official appointments in international organisations.

I conclude the *Preface* by mentioning Amartya Sen, Nobel laureate in Economics and a long-time member of EPOL's Advisory Board. His analysis, «The Institution We Need» (presented in a recorded video at the beginning of the conference), serves as a bridge between the themes covered in the three sessions, with different approaches, and the crucial importance of institutions for sustainable development.

SPEAKERS - SHORT BIOGRAPHY AND PRESENTATION SUMMARY

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Bina Agarwal

Short Biography

Bina Agarwal is Professor of Development Economics and Environment at the Global Development Institute, University of Manchester, UK. Earlier, she was Director and Professor of Economics at the Institute of Economic Growth, Delhi, where she is still affiliated.

She has been President, International Society for Ecological Economics; President, International Association for Feminist Economics; Vice-President, International Economic Association; and held distinguished visiting positions at Harvard, Princeton, Cambridge, Minnesota, and other universities. She has taught law at the NYU School of Law. She is also a member of the Accademia dei Lincei, the International Science Council, and The World Academy of Sciences.

Agarwal's books and academic papers cover diverse subjects in agriculture, environmental change, land rights and law, especially from a gender and political economy perspective. Her writings on gender inequality in property and on environmental governance have had global impact. Her prize-winning book, *A Field of One's Own* (Cambridge University Press, 1994), opened up new research pathways and placed the issue of women's land rights centrally on the global policy agenda. Her subsequent books include *Gender and Green Governance* (Oxford University Press (OUP), 2010); *Gender Challenges* (OUP, 2016) a three volume compendium of her selected papers, and *Gender Inequality in Developing Economies* (2021) translated into Italian. She combines theory and empirical analysis, and academic excellence with policy advocacy. In 2005 she led a successful civil society campaign to make the Hindu Inheritance law gender equal, benefitting over 550 million Indian women and girls.

Agarwal's many awards include a Padma Shri from India's President in 2008; three book prizes; the Leontief Prize "for advancing the frontiers of economic thought"; the Louis Malassis International Scientist Prize (France) for "an outstanding career in agricultural development"; the Order of Agricultural Merit (France); and the International Balzan Prize 2017, "for challenging established premises in economics and the social sciences by using an innovative gender perspective". In 2023 she won the Kenneth Boulding award in Ecological Economics; and in 2024, the first Global Inequality Research Award, France.

Presentation Summary

Cooperative Cultivation: a Transformative Institution? -- In the global concern with food security, poverty, and sustainable livelihoods, little attention has been paid to the institutional transformation of agriculture.

Today 84% of farms across 111 countries cultivate under 2 ha, and are seriously resource constrained. Dominated by small family farms, agriculture faces multiple crises that cannot be resolved without institutional reform.

Is there an alternative model of farming that could provide sustainable livelihoods to millions of these smallholders (an increasing proportion being women) especially in developing countries? Could group farming constitute such an alternative, wherein smallholders voluntarily pool land, labour and capital to create medium-sized

farms that they manage collectively? Notwithstanding the scepticism embedded in economic theory regarding the ability of self-interested actors to cooperate, historically, farmers have always cooperated, typically for labour sharing, machine purchase, or marketing, but often even for joint farming.

Is there still a case for such cooperation today? Potentially, joint farming could bring scale economies, cost reduction and risk spreading, and help farmers tackle climate change.

Drawing on extensive research in India, Europe, and beyond, this presentation will bring ground evidence on how a new model of cooperative cultivation could transform lives and livelihoods in many regions.



Floriana Cerniglia

Short Biography

Floriana Cerniglia is a Full Professor of Political Economy at the Political and Social Sciences Faculty of Università Cattolica, Milan. She currently serves as the Director of CRANEC, the Research Centre for Economic Analysis and International Economic Development at the university. Prior to her current position, she held the role of Associate Professor of Economics at the Faculty of Economics of Università degli

Studi di Milano Bicocca (October 2006 to October 2015).

Professor Cerniglia earned her Bachelor's degree in Political Science from Università Cattolica in 1994, she graduated summa cum laude and wrote her thesis under the supervision of Professor Alberto Quadrio Curzio. She furthered her studies at the University of Exeter (UK), earning a Master of Science in Economics in 1996. In 2001, she completed her Ph.D. in Economics at the University of Warwick (UK).

She is a Co-editor of *Economia Politica. Journal of Analytical and Institutional Economics*, published by Il Mulino and Springer.

Professor Cerniglia has contributed to public policy through her involvement in various ministerial committees. She served on the Standard Requirements Committee (CTFS) at the Ministry of Economy and Finance, representing the Minister for Regional Affairs and Autonomies from June 2021 to May 2023. Additionally, she was a member of the Women for a New Renaissance Task Force established by Elena Bonetti, Minister for Family and Equal Opportunities.

Her academic and professional affiliations include the Edison Foundation's Scientific Committee, the Observatory of Italian Public Accounts' Steering Committee at Università Cattolica, Milan, the Ambrosianeum Foundation's Board of Directors, and the Luigi Sturzo Institute in Rome.

She has authored numerous books and articles published by both national and international publishers.



John Eatwell

Short Biography

John Eatwell taught economics at Cambridge where he was Professor of Financial Policy. He was President of Queens' College 1997-2020.

His earliest interests were in economic theory. However, from the early 1980s onwards his work included policy issues related to employment, growth and finance.

His publications include *Global Finance at Risk* (2000), *Global Governance of Financial Systems: The Legal and Economic Regulation of Systemic Risk* (2006), and *The Fall and Rise of Keynesian Economics* (2011). He co-edited *The New Palgrave; A Dictionary of Economics* (1987). Together with Murray Milgate and Giancarlo de Vivo he has written recently a substantial appreciation of the life and works of Luigi Pasinetti (to appear in the *Cambridge Journal of Economics*).

From 1985 to 1992 he was an economic adviser to Neil Kinnock, then Leader of the Labour Party. In 1992 he entered the House of Lords and has served a number of terms as Principal Opposition Spokesman on Treasury and Economic Affairs. He has also been a financial services regulator in London and was chair of the Jersey Financial Services Commission (2010-20).

Presentation Summary

Tipping Points and Institutional Innovations -- This paper seeks to establish an approach to the analysis of events that (in our estimation) resulted in fundamental changes to the institutions and operation of world markets in the modern era; i.e. changed how the global economy operated in the period since the end of the Second World War.

Three seminal moments/events, their origins and consequences, are examined: the Atlantic Charter of 1941, Richard Nixon's decision to "close the gold window" in August 1971, and Deng Xiaoping's assumption of power in the People's Republic of China in 1978.

Changes in the direction and operation of the global economy are not, of course, determined by a single event or individual, and certainly not at a single moment in time. They are the outcome of a complex of factors of which the "event" is but one product.

But the event is also symbolic. It embodies the intention and substance of change. It may or may not be specifically directed at a well-defined institutional failure.

Nonetheless, its consequences are far-reaching, and typically exceed the expectations held at the time.

The analytical framework applied will be an adaptation of Alexander Gershenkron's characterisation of economic backwardness (Gershenkron, 1962).

Gershenkron's analysis is of industrialisation, i.e. of the process of transformation from a pre-industrial society to an industrial economy, the defining experience of the nineteenth century.

However, the concept is adapted here to backwardness (in the sense of economic failure) in already developed industrial societies. It might be argued that this does violence to Gershenkron's original conception. However, we hope to demonstrate that Gershenkron's framework of institutional innovation and substitution stimulated by backwardness is useful in this rather different environment from that in which it was developed.

Gershenkron, A. 1962. *Economic Backwardness in Historical Perspective*. Harvard UP, Cambridge, Mass.



Marco Fortis

Short Biography

Marco Fortis is Vice-President of Edison Foundation and Co-President of the Scientific Committee of the Edison Foundation.

He is President of the Scientific Committee of the Confindustria Research Center.

Until recently he was a Professor in Industrial Economy and Foreign Trade at the Faculty of Political and Social Sciences of Università Cattolica, Milan, where he taught

since 1989. He was awarded the Commander and Grand Officer of Merit of the Italian Republic.

He is co-editor of *Economia Politica*, *Journal of Analytical and Institutional Economics*. He writes leading articles for *Il Sole 24 Ore* and *Il Mattino*. He was an economic advisor to Matteo Renzi, the Italian Prime Minister from 2014 to 2016. He was member of the RAI (Italian National Television) Board of Directors from 2015 to 2018. He was a member of the Board and Vice-President of Banca Popolare di Intra from 2006 to 2007.

Presentation Summary

Marco Fortis and the Edison Foundation, both directly and indirectly, have collaborated in different forms with Alberto Quadrio Curzio and the *Economia Politica*, *Journal of Analytical and Institutional Economics* (EPOL). At the start of the conference, Alberto Quadrio Curzio illustrated EPOL's history. Now, I will delve into the origins of our collaboration and our convergent views on political economy. The collaboration between Quadrio Curzio and Fortis originated in the late 1970s when Fortis was a student of Quadrio Curzio's, graduating from Università Cattolica in 1980.

Our current "political economy" framework is rooted in the complementarity of our research. That is: Quadrio Curzio's work in the 1960s on "structural dynamics", focusing on innovation fostered by resource scarcity, and rents, and Fortis's research in applied economics, which introduced a series of novelties focusing on sectoral aspects like industry, innovation, development, and international trade, particularly within the Italian context and its global positioning.

Since 1981, this complementarity has been woven into various joint initiatives both academic and non-academic, in the industrial context. This has been most useful in bringing economic theory and production systems closer together.

From 1999 to the present, thanks to the activities of the Edison Foundation under Fortis's leadership and Quadrio Curzio as Chair of its Scientific Committee, the collaboration has led to publishing important research.

The first book was a crucial starting point for both scientific research and practical applications. *Complexity and Industrial Clusters. Dynamics and models in theory and practice*, published by Springer in 2002, opened with an introductory article by Nobel Laureate Murray Gell-Mann on the applied analysis of industrial 'clusters' of which the Italian system was and still remains a leading model. It was followed by the Mulino Series and several Springer books, totalling 46 publications.

The topics covered include applied sectoral research, comparisons between economic systems, and conference proceedings featuring international speakers shared with the Accademia Nazionale dei Lincei.

Notably, the complementary themes and expertise provided by the Mulino Series have been instrumental in disseminating knowledge on the crucial impact of innovation and institutions in shaping Italy's economic dynamics.

The Edison Foundation's support of EPOL means honouring the legacy of its founder, Lincei Fellow Giuseppe Colombo, who established the Edison Company in 1883.

EPOL's and the Edison Foundation's commitment to scientific independence underscores the power of science as a compass to the future without forsaking the present.

Therefore, I conclude with a heartfelt GRAZIE-THANK YOU to all the speakers and, I am sure, with an ARRIVEDERCI which means UNTIL NEXT TIME.



FU Jun

Short Biography

FU Jun is Professor of Political Economy and Public Policy at Peking University. Graduated with a PhD from Harvard University, he has held joint appointments at the School of Government, the National School for Development, the School of Art, and the Yenching Academy at Peking University. He is an Aspen fellow, a Lincean fellow of Accademia Nazionale dei Lincei, and a member of the Academy of Sciences of Bologna. He has served, inter alia, as Advisor to President of the Executive Board of UNESCO, as Vice Chair, with Michael Spence as Chair, of the World Economic Forum's Global Agenda Council on New Growth Models, and co-directed the EU-China Forum on Global Governance between Peking University Public Policy Forum International and Aspen Institute Italia. His recent publications include *Climate Mitigation and Adaptation in China, Policy, Technology and Market* (Springer 2021), and *China's Pathways to Prosperity, Abductive Reflections on Reforms and Opening-Up* (Palgrave Macmillan 2024, forthcoming).

Presentation Summary

Mind's Heaven and Climate Change: A Unified Model to Explain Sustainable Growth -- The talk has three parts. (1) I start with a brief discussion on the Chinese Taoist philosophy on the transcendental nature of the human mind, highlighting the perennial tensions between constant truth (being) and instant truth (becoming). (2) Combining the logic of justification and the context of discovery, I then construct what I call meta-heuristic growth theory, a high-dimensional unified framework between reductionist approach and holistic approach

to explain the dynamics of economic growth in the non-ergodic world of complex ecosystems ultimately constrained by the physical laws of thermodynamics. (3) Highlighting the tensions in the institutional matrix between state, market, and society as the playing field with curvatures in which economic activity takes place, I show the imperatives of decarbonization, sources of sustained growth, and the challenges that lie ahead in light of AI as new forms of exosomatic human evolution.



Fabiola Gianotti

Short Biography

Fabiola Gianotti is the Director-General of CERN, the European laboratory for particle physics.

She received a Ph.D. in experimental particle physics from the University of Milan, Italy, in 1989. Since 1994 she is a research physicist at CERN. She has worked on several CERN experiments, covering detector R&D and construction, software development and data analysis. She devoted a large part of her career to developing the experimental strategies and tools for the search and detection of the Higgs boson. From March 2009 to February 2013, she was the head of the ATLAS experiment at the Large Hadron Collider (LHC). It was during this period that ATLAS and CMS experiments announced the discovery of the Higgs boson.

She served on several international committees and received fifteen honorary doctoral degrees from universities across the world. She is a foreign member of eight academies of science worldwide, including the Accademia Nazionale dei Lincei.

She was awarded the honor of “Cavaliere di Gran Croce dell’Ordine al Merito della Repubblica Italiana”, the Special Breakthrough Prize in Fundamental Physics, the Enrico Fermi Prize of the Italian Physical Society, the Medal of Honor of the Niels Bohr Institute in Copenhagen, and the Tate Medal of the American Institute of Physics for International Leadership. She was ranked 5th Personality of the Year 2012 by Time magazine.

Appointed Director-General of CERN in November 2014 for the period 1 January 2016 to 31 December 2020, in November 2019 she was appointed for a second term, from 1 January 2021 to 31 December 2025. This is the first time in CERN’s history that a Director-General is reappointed for a full second term. She is the first woman in this role.

Presentation Summary

Science for Progress and Peace: CERN’S Example – CERN, the European Laboratory for particle physics, based in Geneva, is the world’s leading research centre for high-energy physics. Its primary mission is to study the smallest constituents of matter and the universe and the laws of physics at the most fundamental level. CERN is also a driver of innovation because its ambitious physics goals require the development of cutting-edge technologies in many domains. Some of these technologies, such as the World Wide Web and accelerators to treat cancer, have had a profound impact on society and every day life.

Last but not least, CERN is a brilliant example of collaboration on a global scale, attracting a community of more than 17,000 people across more than 110 nationalities.

This presentation illustrates how institutions like CERN can contribute to progress and peace through the pursuit of scientific knowledge and technological innovation; training and education; collaboration across borders, diversity and inclusion; and knowledge, technology and education accessible to everyone at no cost.



Phoebe Koundouri

Short Biography

Professor Phoebe Koundouri is a pioneer human-centric, interdisciplinary system for sustainable interaction between nature, society, and the economy. With an MPhil and PhD from Cambridge, she has held academic positions at Cambridge, UCL, LSE, University of Reading, and is now an Economics Professor at the Athens University of Economics and Business and Technical University of Denmark. She is the founder of

AE4RIA (with 200 researchers involved) and is included in the Stanford University list of the top 2% of world scientists (17 books, 650 published papers, 100 projects, 120 countries). She has held prominent roles, including President of EAERE, chairing the World Council of Environmental Resource Economists Association and SDSN Global Climate Hub, and advising major global organizations (such as the UN, G20, World Bank, EC, EIB, OECD, WHO, and Lancet COVID-19 Commission). Her honors include the ERC Synergy Grant and membership in prestigious academies (World Academy of Art and Science, Nobel Prize Committee).

Presentation Summary

Systems Approach to Sustainability: If You Can't Measure It, You Can't Improve It -- Professor Koundouri will present the Global Climate Hub (GCH), an innovative initiative under the United Nations Sustainable Development Solutions Network (SDSN). GCH provides a holistic, interdisciplinary, and intra-disciplinary approach to deriving science-based solutions and creating regional, national, and sub-national pathways for transitioning to a climate-neutral and resilient world.

Her talk will cover the use of extensive data and technologies from experts to create tailored action plans for countries. She will detail the nine units of the Hub, explaining the stages for achieving climate goals, and showcase some energy-climate neutral and resilient pathways developed for the EU-27. This was presented at COP28 during the official launch of the UN SDSN Global Climate Hub Energy Decarbonization Pathways - Europe and the Balkans.



Joan Martinez Alier

Short Biography

Joan Martinez Alier (born in 1939) is a Catalan economist, Emeritus Professor of Economics and Economic History and researcher at ICTA at the Autonomous University of Barcelona. He has made important contributions to agrarian studies, ecological economics and political ecology, which he synthesises in his work on the environmentalism of the poor.

He was awarded the Balzan prize in 2020 and the Holberg prize in 2023. His last book is *Land, Water, Air and Freedom. The Making of World Movements for Environmental Justice* (2023). He is a co-founder and co-director of the Atlas of Environmental Justice (ejatlas.org) that started in 2012 and has gathered 4,200 entries of what he calls “ecological distribution conflicts” from around the world. The analysis of the materials of this archive has produced many doctoral theses, academic articles and some books in comparative, statistical political ecology. The EJAtlas is an open access tool not only available for research but also for teaching and for advocacy for environmental justice. (Interview with Lorenzo Pellegrini, Joan Martinez-Alier - Pellegrini - 2012 - Development and Change - Wiley Online Library) (Interview with Tone Smith.<https://ecolecon.eu/joan-martinez-alier-receives-the-2023-holberg-prize-interview-by-tone-smith/>).

Presentation Summary

Ecological Distribution Conflicts And Multi-dimensional Poverty -- There is an affinity or resemblance between the work that experts on Multidimensional Poverty do and the work we do as political ecologists collecting and analysing Ecological Distribution Conflicts (EDC) in the EJAtlas (ejatlas.org).

The MDP index represents a measure of poverty that captures the multiple deprivations poor people experience with respect not so much to income as to health, education, and living standards. While the MDP approach counts the poor, we in comparative political ecology show that sometimes people get impoverished by land

grabbing and displacements caused by economic growth and the concomitant changes in the social metabolism. The poor complain and sometimes they coalesce in movements for environmental justice against the deprivations they suffer. Such EDC are “valuation contests”, i.e., the social protagonists of the conflicts display different valuation languages.

This paper therefore brings together ecological economics, political ecology and development economics accepting that there is a clash between conventional economic growth and the preservation and enhancement of the social and natural environment.



Joel Mokyr

Short Biography

Joel Mokyr is the Robert H. Strotz Professor of Arts and Sciences and Professor of Economics and History at Northwestern University and Sackler Professor (by special appointment) at the Eitan Berglas School of Economics at the University of Tel Aviv. He specializes in economic history and the economics of technological change and population change. He has served as the senior editor of the *Journal of Economic History* from 1994 to 1998, and was editor in chief of the *Oxford Encyclopedia of Economic History* (published in July 2003), and serves as editor in chief of a book series, the Princeton University Press *Economic History of the Western World*. He served as President of the Economic History Association 2003–04, President of the Midwest Economics Association in 2007/08, President of the Atlantic Economic Association (2015/16), and is a director of the National Bureau of Economic Research. He serves as chair of the advisory committee of the *Institutions, Organizations, and Growth* program of the Canadian Institute of Advanced Research. He served as chair of the Economics Department at Northwestern University between 1998 and 2001 and was a fellow at the Center for Advanced Studies in the Behavioral Sciences at Stanford between Sept. 2001 and June 2002.

Professor Mokyr has an undergraduate degree from the Hebrew University of Jerusalem and a Ph.D. from Yale University. He has taught at Northwestern since 1974, and has been a visiting Professor at Harvard, the University of Chicago, Stanford University, the Hebrew University of Jerusalem, the University of Tel Aviv, University College of Dublin, and the University of Manchester. In 2006 he was awarded the biennial Heineken Prize by the Royal Dutch Academy of Sciences for a lifetime achievement in historical science. In 2015 he was awarded the Balzan Prize for Economic History awarded once every twenty years. He is a fellow of the American Academy of Arts and Sciences, a foreign fellow of the Royal Dutch Academy of Sciences, the Accademia Nazionale dei Lincei, a corresponding fellow of the British Academy, and a Fellow of the Econometric Society and the Cliometric Society. In 2018 he was elected as a distinguished fellow of the American Economic Association. His books have won a number of important prizes including the Joseph Schumpeter memorial prize, the Ranki prize for the best book in European Economic history, the Donald Price Prize of the American Political Science Association, and the Allan Sharlin Prize of the Social Science History Association. He was made a doctor honoris causa by the National University of Uruguay in 2018 and by the University of Lyon II in 2020. He was awarded the Jonathan Hughes Prize for excellence in the teaching of economic history by the Economic History Association in 2019.

Presentation Summary

Economic Progress and Its Discontents -- The idea that material progress, driven by increases in useful knowledge, would be the main engine of improvement in the human condition flourished during the Enlightenment. But it has always had sceptics and detractors, culminating in the current anti-growth literature.

What is driving this critical movement? One important element is that technological progress has almost

always had unanticipated and unmeasured bite-back effects, meaning social costs and negative externalities that are only recognized later. These effects mean that historical productivity growth has been overstated.

All the same, such bite-back effects mean that to maintain economic welfare, more, not less innovation and growth *are needed*.



Sandro Montresor

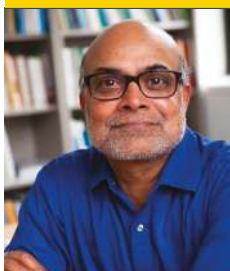
Short Biography

Sandro Montresor - MA in Economics (University of Manchester, UK) and Ph.D in Economic Structures and Behaviours (University of Bologna, IT) - is full professor of Applied Economics at the Department of Economics and Management of the University of Trento.

He has previously served as full professor of Applied Economics at the Gran Sasso Science Institute (GSSI) of L'Aquila, full professor of Economic Policy at the Kore University of Enna, assistant and associate professor at the University of Bologna, and senior research grant holder at JRC-European Commission (on-leave), with different research and institutional engagements and positions. He is currently co-editor in chief of the Journal of Analytical and Institutional Economics, *Economia Politica*, associate editor of *Industry and Innovation*, and member of the Editorial Board of *Eurasian Business Review*. He has been member of the Directive Board of the Association of Italian Economists (Società Italiana di Economia, SIE) and of the Evaluation Committee for the attribution of the National Scientific Qualification for professorship in Applied Economics within the Italian University System (Abilitazione Scientifica Nazionale, ASN)

His main research interests are in the economics of innovation and cover, among others, at the micro level, eco-innovations, intangibles and other innovation determinants, innovation policy and its effects, at the regional level, geography of innovation and eco-innovation, regional technological diversification and KETs, at the country level, systems of innovation and innovation policy. On these and other research topics, Sandro Montresor has published extensively in leading international journals, like *Research Policy*, *Industrial and Corporate Change*, *Small Business Economics*, *Cambridge Journal of Economics*, *Economic Geography*, and *Regional Studies*. On the same topics, he has coordinated and participated to a number of international and nation-wide, peer-reviewed research projects, and supervised PhD theses in both Italian and international doctoral programs. He regularly participates to international conferences and workshops of his reference associations (e.g. DRUID, International Schumpeter Association, Geolnno, and European Network of the Economics of the Firm, ENEF).

He received the Best Paper Award of the Uddevalla Symposium in 2019 and won of the *Industry and Innovation Award* for the Best Paper 2013-2014.



Prabhu Pingali

Short Biography

Prabhu Pingali is a Professor in the Charles H. Dyson School of Applied Economics and Management, Cornell University, with a joint appointment in the Department of Global Development, and the Founding Director of the Tata-Cornell Institute for Agriculture and Nutrition (TCI).

He is Chair of the Governing Board of ICRISAT, a CGIAR Center focused on dryland agricultural systems. Prior to joining Cornell, he was Deputy Director, Agricultural Development at the Bill & Melinda Gates Foundation (2008–13), and Director of the UN Food and Agriculture Organization's Agriculture and Development Economics Division (2002–08). In addition, he worked with the CGIAR for 15 years from 1987–2002, first with IRRI in the Philippines and then with CIMMYT in Mexico.

Dr. Pingali is a member of the U.S. National Academy of Sciences, and the Indian National Academy of Sciences; a Fellow of the American Association for the Advancement of Science (AAAS), the American Agricultural Economics Association (AAEA), and the African Association of Agricultural Economists; and a former President of the International Association of Agricultural Economists (IAAE).

He is globally recognized for his research and policy contributions focused on the nexus of hunger, poverty and environmental sustainability. Prof. Pingali has written 14 books and over 200 refereed journal articles and book chapters.

Presentation Summary

Conflicting Societal Goals and the Sustainability Challenge – eliminating hunger vs climate mitigation -- The quest for eradicating global hunger through agricultural productivity growth has come at the cost of environmental degradation. At the same time, the independent pursuit of environmental and climate mitigation goals risk slowing progress on hunger reduction. There is a surprising lack of global attention to addressing the synergies and trade-offs between agriculture, environment, climate, human wellbeing, and other societal goals. While the 17 SDGs have been designed to comprehensively address global sustainability challenges,

the sectoral silos in which they are designed and operationalized has reduced the opportunities for enhancing complementarities and minimizing conflicts between them. This paper presents the challenge of seeking a nexus across the SDGs with particular reference to hunger and climate mitigation. It emphasizes that the objectives of eradicating hunger and combatting climate change are not mutually exclusive but rather deeply interconnected imperatives. Examples are presented of high payoff interventions and policies that can help in the convergence of societal goals to achieve a carbon-neutral and hunger-free food system.



Romano Prodi

Short Biography

President Romano Prodi was born in Scandiano (Reggio Emilia, Italy) in 1939. He is married with Flavia Franzoni. They have two sons, Giorgio and Antonio.

After graduation at the Faculty of Law of the Catholic University in Milan and at the London School of Economics, his academic career began at the Department of Economics and at the Faculty of Political science of the University of Bologna, where he

worked as an assistant professor (1963), associate professor (1966) and lastly full professor (1971-1999) of industrial organisation and industrial policy.

In 1974 he was a visiting professor at Harvard University and at the Stanford Research Institute. He helped establish the "Italian school of industrial policy", and acted for several years as the editor of its quarterly journal, *L'Industria, Rivista di Economia e Politica Industriale*. In 1981 he founded Nomisma, the largest Italian institute of economic studies, whose scientific committee he chaired until 1995.

From November 1978 to March 1979, Romano Prodi was Minister of Industry. From November 1982 to October 1989, he was chairman and CEO of the Institute for Industrial Reconstruction (IRI), which was the largest Italian public holding. Recalled to head the Institute in 1993, he saw through the privatization of a number of industrial, banking and service companies. In February 1995 he founded the "Olive tree" centre-left coalition, which designated him as its candidate for premiership. The coalition won the 1996 election and, in May 1996, he was appointed Prime Minister. He remained in office until October 1998. The bold measures introduced by his Cabinet enabled Italy to meet the Maastricht criteria for joining the Euro zone. From 1999 to 2005 he was President of the European Commission.

During his presidency, the euro was successfully introduced, the Union was enlarged to 10 new countries from Central, Eastern and Southern Europe and the treaty establishing a Constitution for Europe was signed.

In 2006 Romano Prodi was elected leader of the centre-left coalition in Italy and after a victory in the 2006 elections he became Prime Minister, until May 8, 2008. He is, since then, President of the Foundation for Worldwide Cooperation and in July 2008 to 2010 he has been named Chairman of the United Nations-African Union High-level Panel for Peacekeeping in Africa. From February 2009 to December 2013 he was Professor at-large at Brown University (USA).

From 2010 to November 2015 he was Professor of CEIBS (China Europe International Business School) in Shanghai and now he is Member of the Board of the same School. From October 2012 to January 2014 he was Special Envoy of the Secretary-General for the Sahel.

From March 2021 to February 2023 he was President of the Italy-Asean Association. During his academic and institutional career, Romano Prodi has been awarded a number of recognitions and he also holds various honorary degrees.



Alberto Quadrio Curzio

Short Biography

Alberto Quadrio Curzio was Professor of Political Science at Bologna University (1968-1975). At the Catholic University of Milan, he was Professor of Political Economy (1976-2010) and Dean of the Faculty of Political Science (1989-2010).

In 1977, he founded the Research Centre for Economic Analysis (CRANEC) and was its director (1977-2010).

He was President of the Società Italiana degli Economisti (1995-1998). He is President Emeritus of the Accademia Nazionale dei Lincei and was President of its Class of Moral, Historical and Philological Sciences (2009-2015) and President of the Academy (2015-2018).

He founded the journal «*Economia Politica. Rivista di Teoria e Analisi*» with Il Mulino (1984); since then, he has been the Editor-in-Chief also of the renamed journal «*Economia Politica. Journal of Analytical and Institutional Economics*» (Il Mulino and Springer, 2015).

His research is mainly concerned with structural economic dynamics, technological change, scarcity of resources and the consequent relations with investments, rents, profits and innovation.

Hence, he stresses the discontinuity of structural change. He has also analysed geo-economic and institutional problems, mainly those of the EU, and relations between development and underdevelopment.

His scientific works have been thoroughly examined in the Festschrift edited by Gilberto Antonelli, Mario Maggioni, Giovanni Pegoretti, Fausta Pellizzari, Roberto Scazzieri, and Roberto Zoboli titled «*Economia come scienza sociale. Teoria, istituzioni, storia. Studi in onore di Alberto Quadrio Curzio*» – published by Il Mulino in 2012 with contributions from 32 of his colleagues. His work has been also assessed in a volume dedicated to him that was edited by Mauro L. Baranzini, Claudia Rotondi, Roberto Scazzieri titled «*Resources, Production and Structural Dynamics*» – published by Cambridge University Press in 2015. Lastly, other scholarly contributions were assessed in «*A compendium of Italian economists at Oxbridge*» edited by Mauro L. Baranzini and Amalia Mirante (Palgrave MacMillan, 2016).

It offers a particularly insightful evaluation of his research in the first (a) stream of analysis. He is a member of the Edison Foundation, Balzan Foundation, Aspen Institute Italia, The Organization for Women in Science for the Developing World (OWSD-UNESCO), and Academia Europaea.



Maryam Rahmanian [Absent]

Short Biography

Maryam Rahmanian began her career at the Centre for Sustainable Development and Environment, an NGO in her native Iran, where she initiated an ongoing national programme on Participatory Plant Breeding, facilitating co-creation of knowledge between farmers and plant breeders to develop varieties locally adapted to climate change. She also has extensive experience at the international policy level, specifically as Vice Chair of the High Level Panel of Experts of the Committee on World Food Security and co-Chair of the International Panel of Experts on Sustainable Food Systems.

She is currently a member of the Scientific Council of the Institut du développement durable et des relations internationales (IDDRI). Maryam is an independent expert and consultant on issues related to agrifood systems, food security and nutrition.

She is currently a member of the Scientific Council of the Institut du développement durable et des relations internationales (IDDRI). Maryam is an independent expert and consultant on issues related to agrifood systems, food security and nutrition.

Presentation Summary

Conflicts, Inequalities and the Right to Food: a Civil Society Perspective -- Violence and armed conflict are principal drivers of acute hunger in many parts of the world and are expected to increase, with food insecurity now recognized as both a cause and an effect of armed conflict. The effects of armed conflict on food security and nutrition are both direct and indirect, immediate and protracted, and, as with most crises, have the greatest impact on the most vulnerable, thus exacerbating existing inequalities.

As the world faces multiple and growing crises, civil society organizations are at the forefront of global efforts

to bring attention to, and take action against, rising inequalities and conflicts. Civil society organizations have insisted on the need to look at the intersection of inequalities and conflicts.

For instance, they have pointed to conflicts as a structural cause of gender inequalities. Further, they insist on the need to understand both conflicts and inequalities in their historical context. While underlining that lack of progress on multiple crises threatens the credibility of the entire UN system, they emphasize human rights as a fundamental approach to address both of these global challenges.



Berit Reiss-Andersen

Short Biography

Berit Reiss-Andersen has a law degree from the University of Oslo (1981), with international law as her speciality. Throughout her career, she has mostly been in private practice as a lawyer, focusing predominantly on criminal law, human rights, compliance and risk evaluation. She has litigated a vast number of civil and criminal cases and was called to the Supreme Court of Norway as special counsel and has litigated

more than 120 cases in front of Supreme Court. She has for decades also served as public defender.

1996/97, she was Deputy Minister of Justice. She has been President of the Norwegian Bar Association 2008-2014, and she has served on numerous committees in the Bar, such as Human Rights, Rule of Law and the Committee for Criminal and Procedural Law. She was for 12 years a delegate to CCBE; The Organization of European Bars and Law Societies. She is currently an officer in the International Bar Association (IBA) and Co-Chair of the Bar Issues Commission. She has been on several public assignments and committees, as special advisor to the Ministry of Foreign Affairs on human rights developments in Indonesia and been a state representative on the Board of Administration of the territory of Spitsbergen and several human rights and humanitarian projects and investigations.

In 2012 she was appointed by the Norwegian Parliament to be a member of the Norwegian Nobel Committee, and since 2017 served as Chair. She has since 2024 stepped down from the position. Since 2016 she has been a member of the Swedish Nobel Foundation and is currently the Co- Chair.

Berit Reiss- Andersen is now in the process of closing down her legal practice and has joined the Norwegian Red Cross as a special advisor. In this role she will work on strategic issues, promoting Red Cross values and International Humanitarian Law.

Presentation Summary

Working for Peace is Working for Food -- This intervention will explore different approaches in understanding the concept of Peace, including the difference in preserving peace and the challenge of obtaining peace subsequent to an armed conflict.

The approach to peace may play out differently depending on the nature of the conflict, that might be historical grievances, religious conflict, land claims, minority conflicts or ideological differences.

The approach to peace must take into consideration the nature of the conflict.

Regardless, there will always be an economical dimension of accesses to resources or social justice.

My point of view will be how peace and the economic aspect is understood in the context of the Nobel Peace Prize. The terms of the Peace Prize will be explained, and particular Peace Prizes will be analyzed from an economic perspective. *Inter alia* the Peace Prizes to Lord Boyd Orr (1949), Léon Joauhaux (1951), Norman Borlaug (1970), ILO (1969), EU (2012) and WFP (2020).



Amartya Sen

Short Biography

Amartya Sen is Thomas W. Lamont University Professor and Professor of Economics and Philosophy at Harvard University. Until 2004 he was Master of Trinity College, Cambridge.

He has served as President of the American Economic Association, the Indian Economic Association, the International Economic Association, and the Econometric Society. His awards include Bharat Ratna (India); Commandeur de la Legion d'Honneur (France); the National Humanities Medal (USA); Honorary Companion of Honour (UK); Ordem do Merito Cientifico (Brazil); the Aztec Eagle (Mexico), and the Nobel Prize in Economics.

Sen's books, on economics, philosophy, decision theory, and social inequalities, have been translated into more than forty languages.



Ragupathy Venkatachalam

Short Biography

Ragupathy Venkatachalam is a Professor of Economics at the Institute of Management Studies, Goldsmiths, University of London, UK. He has previously taught economics at the Centre for Development Studies, Trivandrum, India and was a research fellow at the Artificial Intelligence Economics Research Center at the National Chengchi University, Taiwan. He obtained his PhD from the University of Trento, Italy.

His research interests span across different disciplines and lie broadly at the intersection of economic dynamics, computation and human behaviour. He has published his research in areas that include Computable Economics, Macroeconomic Dynamics, Behavioural Economics, History/Methodology of Economics, and Discrimination. He serves as a co-editor of *Economia Politica*.

Presentation Summary

Conflicts and Sustainability: A Political Economy Viewpoint -- Conflicts and notions of sustainability are deeply intertwined, both with a potential to exacerbate or vitiate the other. Conflicts, whether they are social, religious, political, gender, environmental, intergenerational, economic or resource conflicts, often have long lasting and profound impacts on sustainable development trajectories. In fact, among the sustainable development goals adopted by the United Nations, goal 16 (achieving Peace, Justice and Strong Institutions) can be seen as fundamental to realizing any of the other goals. The scope of sustained development certainly has the potential to mitigate conflicts.

This talk will explore the link between conflicts and sustainability from a Political Economy perspective.

The principal problem of Political Economy, as argued by David Ricardo, concerns the issue of distribution. Most conflicts that we encounter in our time can be seen as distributional conflicts at their core.

Sustainability becomes elusive in the face of persistent issues concerning distribution (of resources, access, power and so on within various groups and individuals) that remain unresolved. Institutional arrangements that ensure fair distribution, foster cooperation and reduce conflict risks have an important role in mediating causal effects. Research on designing and implementing strong institutions that promote resilience, reducing vulnerability in both natural and human systems is more crucial than ever.



Marcela Villarreal

Short Biography

Marcela Villarreal is the former director of the Partnerships and UN Collaboration Division of the Food and Agriculture Organization of the United Nations (FAO). She has a Ph.D. in Rural Sociology from Cornell University and a BA/MA in Systems and Computing Engineering from the University of Los Andes in Bogotá. She served as Director of Gender, Equality and Rural Employment Division, Chief of the Population

and Development Service and Senior Socio-cultural research officer at FAO.

She previously worked with other UN organizations and for the Colombian Government. Throughout her 34 year-long career at the UN, she led missions and provided technical assistance to more than 40 countries in Africa, Asia and Latin America. She has worked and published extensively in the areas of poverty reduction, gender issues, rural employment, social inequalities, land tenure and food security. She currently collaborates with several universities in Italy, Spain and Latin America.

Presentation Summary

The Political Centrality of Agriculture for Human Development -- A well-established albeit outdated view of the development process sees human societies evolving from depending on agriculture as the main means of survival, shifting to industrial production and ultimately to a service-oriented economy that replaces the agricultural sector. Many international development cooperation agencies have espoused this view and international development assistance has significantly reduced its share of support to agriculture over many decades. Investment in the agricultural sector, both domestic and international, has dwindled.

However, agriculture continues to be the mainstay of many developing countries' economies and overwhelmingly the main employer of their population. Evidence shows that investment in agriculture is one of the most efficient leverages for sustainable poverty reduction, especially when it targets the needs of small holders and family farmers (both women and men).

The advantages of adequate policy support for the agricultural sector extend well beyond economic considerations, encompassing societal gains in political stability, food security, reduced inequalities, and enhanced nutrition and health. These factors constitute the fundamental pillars of human development and are inherently interconnected. However, the sector confronts numerous challenges and trade-offs, including the significant environmental impact, as agriculture contributes approximately 30% of global greenhouse gas emissions. This paper analyzes the multifaceted dimensions of agriculture's political relevance for human development, addressing both its primary benefits and challenges.

It particularly focuses on the currently pertinent relationship between armed conflict and food insecurity, recognizing that conflict engenders hunger and instability, exacerbates inequalities, and poses a long-term threat to the benefits of a robust agricultural sector.



Roberto Zoboli

Short Biography

Roberto Zoboli is Full Professor of 'Economic Policy' at the Università Cattolica del S. Cuore, Milan. He is Corresponding Fellow of the Accademia Nazionale dei Lincei. At Università Cattolica, he was Vice-rector for Research and Sustainability and Director of ASA - Graduate School on the Environment. In the past, he was a researcher at Nomisma S.p.A., Cariplo Foundation for Scientific Research, and at the Research

Office of Montedison S.p.A.

For twelve years, Roberto was the Research Director at the National Research Council, where, at present, he is a Research Associate at IRCrES – Research Institute on Sustainable Economic Growth. He is a Board member of SEEDS, the inter-university centre on 'Sustainability, Environmental Economics and Dynamics Studies' that gathers environmental and innovation economists from twelve Italian universities. He was the project leader of about 70 research projects at the international, national, and regional level including European projects in FP7, Horizon 2020 and Horizon Europe programmes.

Since 2001, he has been the Task leader in different Topic Centres of the EEA – European Environment Agency, and at present he leads the Task on 'Macroeconomics of sustainability transition' of the ETC CE – European Topic Centre on Circular Economy and Resource Use (2022–2026). He is author/co-author of about 140 publications in peer-reviewed journals and edited books, and about 60 research papers and published research reports in the areas of environmental and resource economics, sustainable development, environmental policy, and the economics of eco-innovation. He is a member of the Advisory Board of *Economia Politica - Journal of Analytical and Institutional Economics*.

Presentation Summary

When Policies Matter: Leveraging Net Zero for Structural Change in the EU -- The presentation addresses the structural change of the EU economy induced by climate and sustainability policies. Climate science triggered a process of global governance for climate change, which translated into high level, long-term commitments of major actors of the international system to achieve Net Zero of greenhouse gas emissions.

In the EU, this policy process materialized through the European Green Deal (EGD, 2019). The EGD is pushing a grand transition that, by leveraging climate, energy and the environment, is inducing a fundamental change of the structure of the EU economy. The transition includes the diffusion of available technologies, like renewable energy substituting for fossil-based technologies, as well as radical innovations like CCUS and nuclear fusion. It is also forcing organizational and strategic innovations in industrial companies and the financial system, like the adoption of ESG criteria.

The presentation gives an account of this dynamic by highlighting the fundamental mechanisms at work towards induced green structural change and innovation. It also highlights the major existing barriers, in particular the gap between the estimated investment needs to achieve Net Zero and the present investment trends, the issue of consensus by industrial actors and households, the risks of the international system that, on the one hand, make the EGD transition a component of the EU's 'open strategic autonomy' and, on the other hand, are possibly limiting the development of clean EU tech value chains in the short-to-medium term. Rethinking a 'New EGD' as an EU industrial policy can overcome some of these barriers. The presentation will propose a conceptual model for this process of policy-induced structural change, in particular about the cumulative interaction between policies and industrial responses as mutually necessary components of the transition dynamics.



Economia Politica

Journal of Analytical and Institutional Economics

Founded by Alberto Quadrio Curzio in 1984, since then Editor-in-Chief of *Economia Politica*

Published by il Mulino since 1984, and published by Springer in copublication with il Mulino since 2015

This journal publishes peer-reviewed articles that link theory and analysis in political economy, promoting a deeper understanding of economic realities and more effective courses of policy action. Established in 1984, the journal has kept pace with the times in disseminating high-quality and influential research aimed at establishing fruitful links between theories, approaches and institutions. With this relaunch (which combines Springer's worldwide scientific scope with the Italian cultural roots of il Mulino and Fondazione Edison, whose research has been published by the two mentioned publishers for many years), the journal further reinforces its position in the European and international economic debate and scientific community. Furthermore, this move increases its pluralistic attention to the role that – at the micro, sectoral, and macro level – institutions and innovation play in the unfolding of economic change at different stages of development.

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The Accademia Nazionale dei Lincei



Corsini Palace
(XVIII Century) seat
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The Lincei's history is four centuries-long; it was founded in 1603, at the end of the Rinascimento, by Prince Federico Cesi. Soon after it welcomed the genius Galileo Galilei who provided it with everlasting fame. In 1633, after Galileo was condemned by the Papal Inquisition for his discoveries, the Lincei Academy fell into silence. In 1873 it was *re-founded* by Quintino Sella (1827-1884) one of the towering personalities of the *Risorgimento*. It was later shut down by the fascist dictatorship in 1939, but again *re-founded* under the *Republic* in 1946 by two key public-figures, Benedetto Croce (1866-1952),

and Luigi Einaudi (1874-1961) who while serving as Vice President of the Lincei Academy in 1948 became the first President of the Italian Republic. Since then, Accademia Nazionale dei Lincei has received the Patronage of the President of the Italian Republic and is considered the most important expression of Italian science and culture. Moreover, its crucial links with the "Foreign Lincei Fellows" in te sciences and humanities transcend all boundaries. The Lincei's founders based the Academy on the principle of: "freedom to philosophize in naturalibus" a tenet that has never been forgotten.

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Since its establishment in 1999, it has published 40 volumes in the Edison Foundation Series published by il Mulino and 6 books with Springer. It has co-sponsored 15 conferences at the Accademia Nazionale dei Lincei.

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