

Why Cities?

John Schellnhuber

*Director General, International Institute for Applied Systems Analysis (IIASA);
Founder, Bauhaus Earth gGmbH*

2017 Blue Planet Prize Awards Ceremony



Audience with Present Crown Prince and Crown Princess Akishino

Japan host G7 Summit Hiroshima in 2023



As of 15 September 2022

Tentative Programme

GEA International Conference 2022

Challenges and Opportunities for Sustainable Societies:

Climate Change, Energy and Food Security

Venue: "Ho-O-no-Ma" and "Providence Hall", Tokyo Prince Hotel, 2F, Tokyo Japan

Day 1: Thursday, 27 October 2022

8:00~ 9:00 Registration, Entrance and Seating

10:00~11:50 Opening Ceremony, "Ho-O-no-Ma" 2F

- Opening Speech: **YAMAGUCHI Shunichi** Chairman of Global Environmental Action (GEA), Member of the House of Representatives, Former Minister of State, Japan
- Address: His Majesty the Emperor
- Guest Speech : **KISHIDA Fumio** Prime Minister of Japan
- Keynote Speech: **John Schellnhuber** Professor, Germany
- Video Message : **Fatih BIROL** Executive Director, International Energy Agency (IEA)

12:00~12:50 Luncheon, "Magnolia" 2F (assigned seats)

- Speeches: **NISHIMURA Akihiro** Minister of the Environment, Japan

**GEA International Conference 2022,
Tokyo, 27 October 2022**

How to Preserve a Livable Planet

**Professor Hans Joachim Schellnhuber CBE;
Director Emeritus, Potsdam Institute for Climate Impact Research PIK e.V.;
*Founder and Managing Director, Bauhaus Earth gGmbH***



BAUHAUS ● EARTH

IIASA Foundation



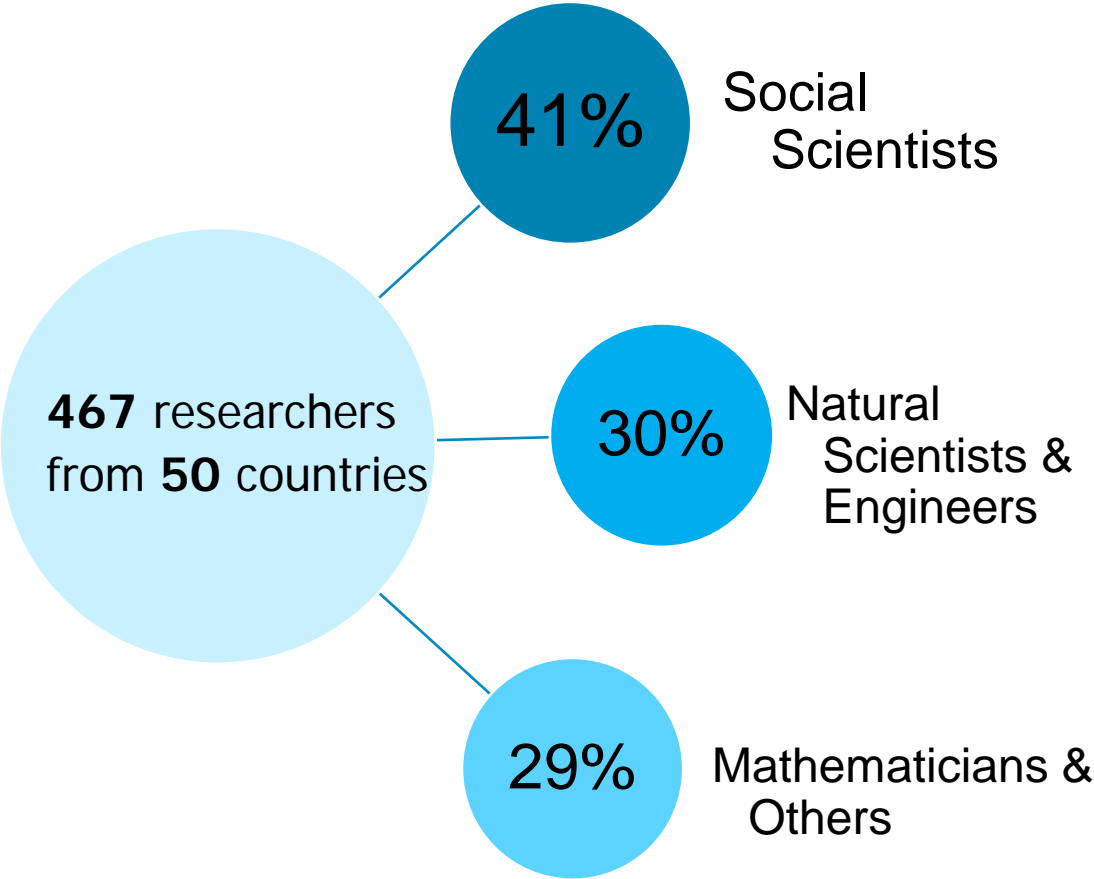
USSR Premier Alexei Kosygin and US President Lyndon B. Johnson at a summit in Glassboro in 1967. Public Domain: https://de.wikipedia.org/wiki/Konferenz_von_Glassboro#/media/Datei:Glassboro-meeting1967.jpg



Signing of IIASA Charter in the Royal Society, London, in 1972. © IIASA



IIASA today



* Based on Annual Report 2022



IIASA – Japan cooperation: Summary 2019-2023

The Japan Committee for IIASA (1972)

Research publications with Japan

514 publications have resulted from IIASA-Japanese research collaborations
34 publications focused on Japan
260 publications by Japanese researchers at IIASA

Knowledge exchange

Researchers, advisors, and diplomats from Japan have:

Visited IIASA **51** times and participated in IIASA events **72** times
IIASA researchers participated **114** times in meetings in Japan (both in-person and virtually)

Building capacity with Japan

5 YSSPers and postdoctoral researchers
12 staff
191 alumni from or affiliated to Japan

Top 3 co-author collaborators in Japan



National Institute for Environmental Studies, Japan



東京大学
THE UNIVERSITY OF TOKYO

Japan's Contribution to the 7th Assessment Cycle of IPCC and Collaboration with IIASA on "Climate Change and Cities"

- IIASA and the Japan Committee for IIASA: Joint Research Project on **City Transformation** in support of the Ministry of the Environment Japan to contribute to the **IPCC Special Report on Cities**.
- Announced at COP28 in 2023
- Symposium and Project launch **28 February 2024**



Presentation of the joint research project: City Transformation at COP28
<https://x.com/IIASAVienna/status/1732325900090298776?s=20> ©Yoshiki Yamagata



Japanese Team members and Zig Klimont (IIASA) met for discussions on a joint research project on climate Change and cities on 20th July 2023 at IGES Office, Tokyo © IGES



How and why do spectacular buildings get commissioned and procured? What are their visible urban effects? What can urban planners, architects, and policymakers learn in order to engage in more successful citymaking?

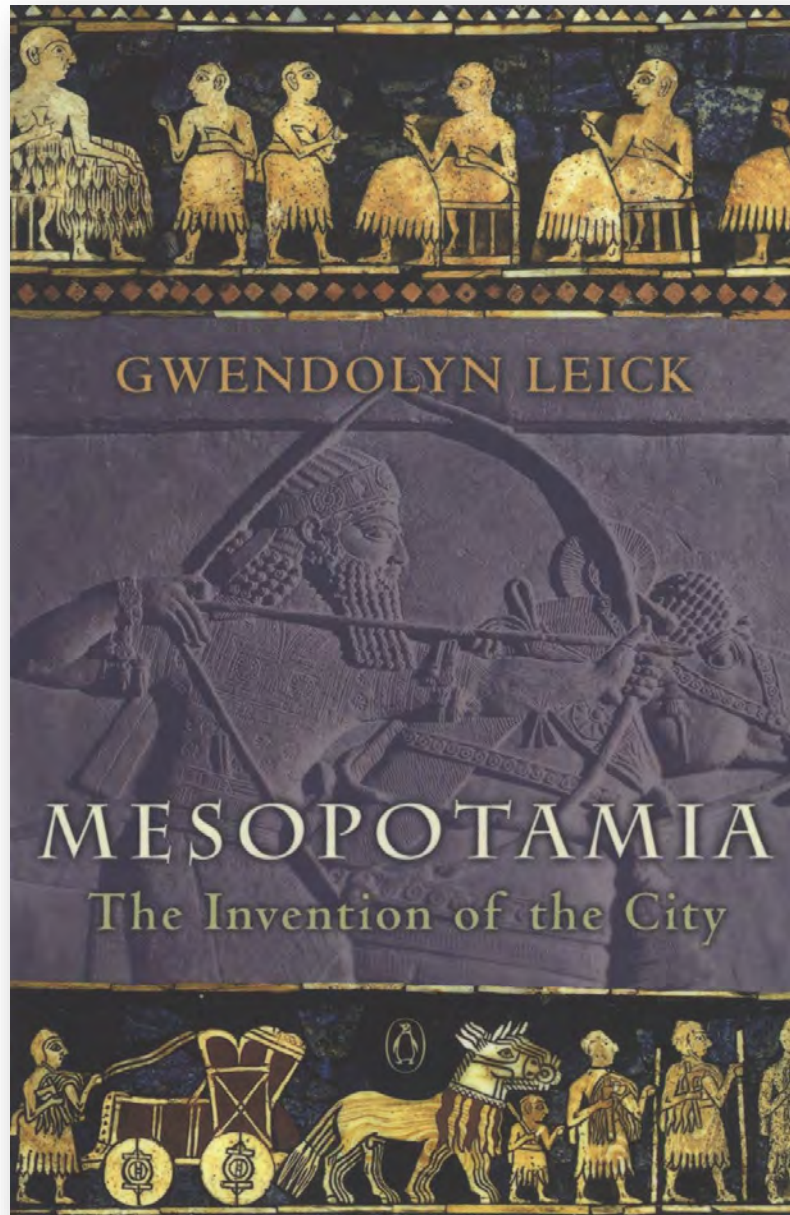
In recent years, media and critical attention has been lavished on famous architects, and the contributions of their designs to the branding of cities. The post-“Bilbao effect” global landscape is one where cities compete for the highest-profile skyscrapers, cultural projects, and high-profile developments designed by star architects whom even casual readers know by first name: Frank Gehry, Bjarke Ingels, Jean Nouvel, Zaha Hadid, Norman Foster, Rem Koolhaas.

Far less is known about the decision-making processes behind these projects and their subsequent urban effects. A unique combination of urban studies and photography, *Starchitecture* investigates projects designed by star architects in cities including Paris, New York, Abu Dhabi, Bilbao, and the architectural microcosm of the Vitra campus in Weil am Rhein, Germany. Author Davide Ponzini and photographer Michele Nastasi seek to explain and critique a growing global condition by revealing how starchitecture has been and continues to be deployed in cities around the world. The arguments they raise are vital to understanding the urban landscapes of today, and tomorrow.



Contemporary Cairo: Sustainable, Inclusive, Beautiful?



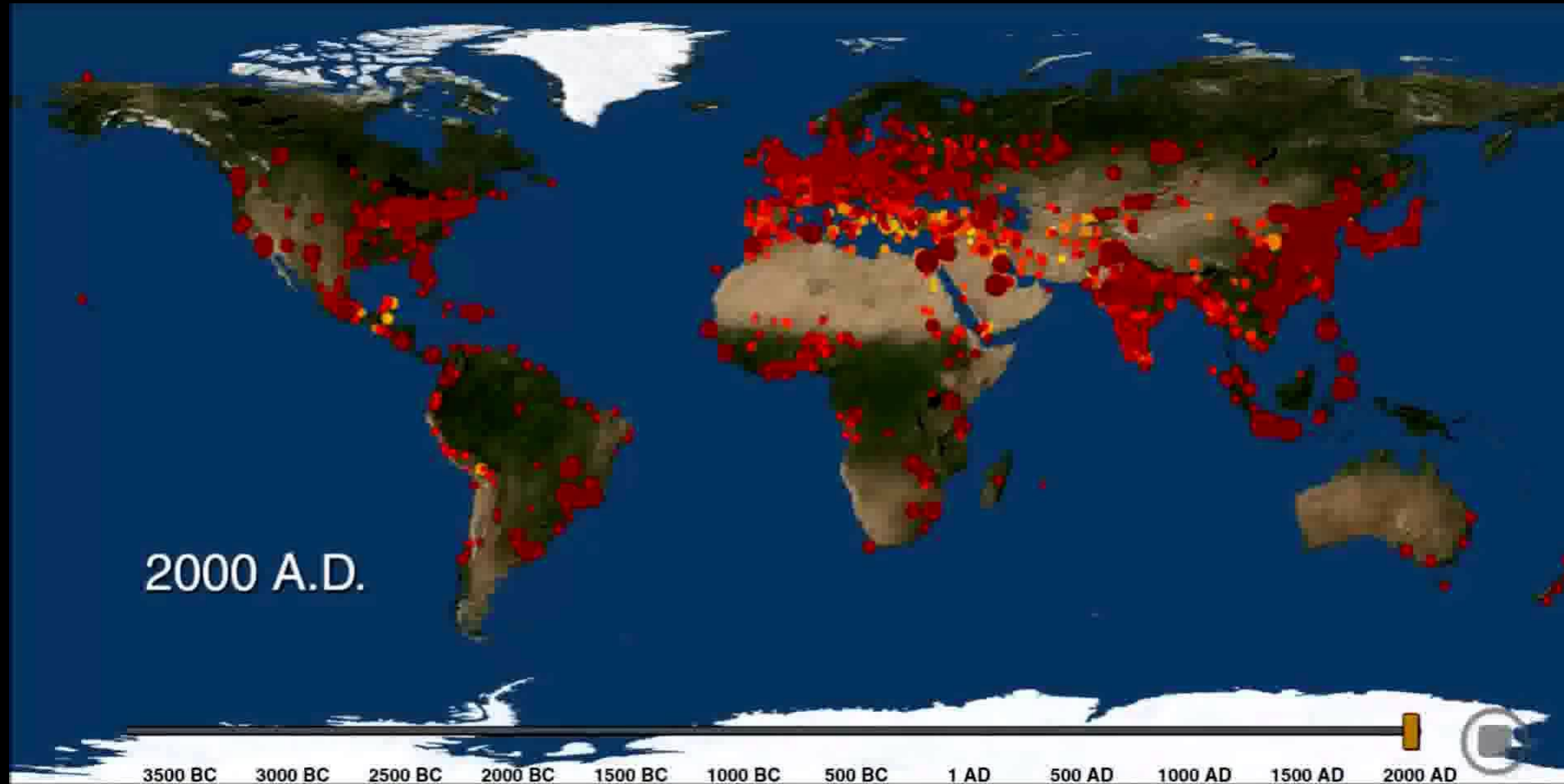


Situated in an area roughly corresponding to present-day Iraq, Mesopotamia is one of the great, ancient civilizations, though it is still relatively unknown. Yet, over 7,000 years ago in Mesopotamia, the very first cities were created. This is the first book to reveal how life was lived in ten Mesopotamian cities: from Eridu, the Mesopotamian Eden, to that potent symbol of decadence, Babylon - the first true metropolis: multicultural, multi-ethnic, the last centre of a dying civilization.



© Goran tek-en via [Wikimedia Commons](#)

The rise and fall of great world cities



The History of
Urbanization,
3700 BC - 2000 AD

© Max Galka 2016

**Wood4Bauhaus Virtual Conference,
8 April 2021**

Reforesting the Planet, Retimbering the City

Professor H. J. Schellnhuber CBE
Director Emeritus, Potsdam Institute for Climate Impact Research



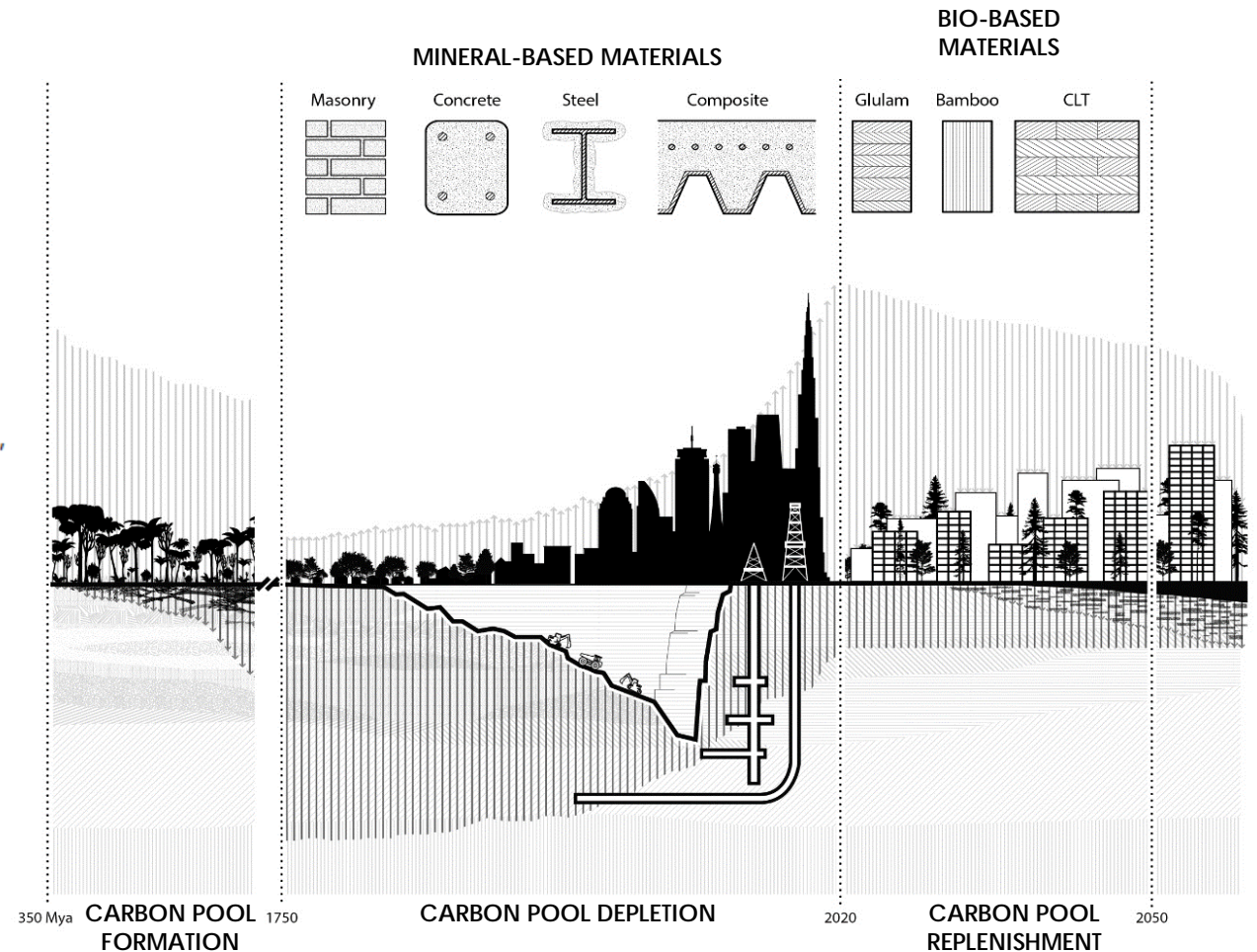
Cities in the Evolution of the Carbon Cycle

nature
sustainability

Perspective | Published: 27 January 2020

Buildings as a global carbon sink

Galina Churkina , Alan Organschi, Christopher P. O. Reyer, Andrew Ruff, Kira Vinke, Zhu Liu, Barbara K. Reck, T. E. Graedel & Hans Joachim Schellnhuber
<https://doi.org/10.1038/s41893-019-0462-4>



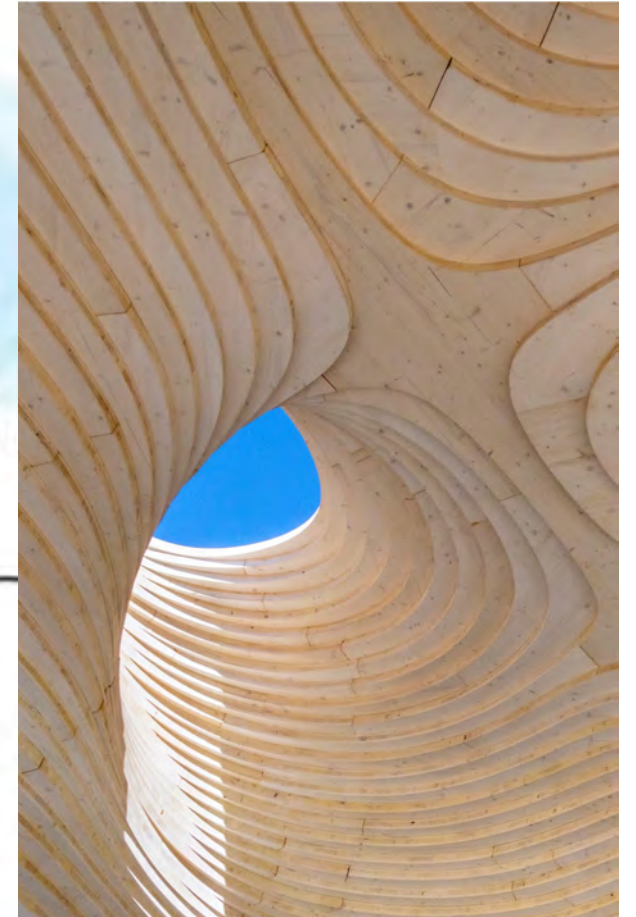
Original Bauhaus



The New European Bauhaus



Bauhaus Earth



Reconstructing the Future for People and Planet – a New Bauhaus Initiative

PAS Conference, 9-10 June 2022



© Gabriella Clare Marino



By Lily Kuo July 24, 2017

A minimalist Japanese architect is designing homes for refugees that they can build themselves

Original article: [here](#)



Shigeru Ban



SHIGERU BAN ARCHITECTS

After a 2011 earthquake in Christchurch, New Zealand, Ban designed a temporary replacement for the church made out of cardboard.



SHIGERU BAN ARCHITECTS

Ban's houses for victims of the Nepal 2015 earthquake use wood as the main frame of the shelter. Bricks are used for the enclosure.



Traditional Japanese Architecture

Hōryū-ji, completed in 607



© Wikimedia Commons



United Nations
Educational, Scientific and
Cultural Organization




Intangible
Cultural
Heritage

Intangible
cultural
heritage

2020

Representative List of the Intangible Cultural Heritage of Humanity

Traditional skills, techniques and knowledge for the conservation and transmission of wooden architecture in Japan



© Agency for Cultural Affairs, Japan, 2019

Evidence for the earliest structural use of wood at least 476,000 years ago

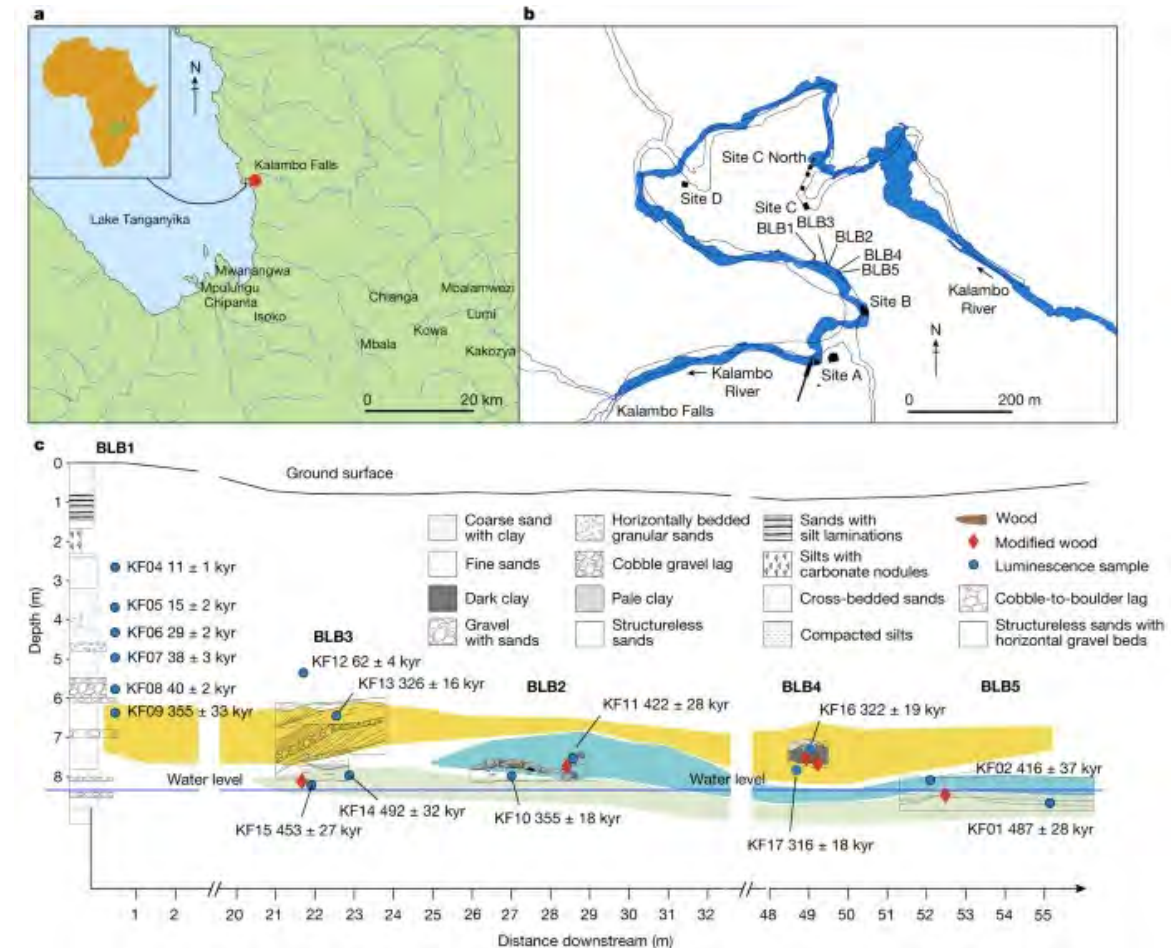
nature

20 September 2023

Full paper: [here](#)

L. Barham , G. A. T. Duller, I. Candy, C. Scott, C. R. Cartwright, J. R. Peterson, C. Kabukcu, M. S. Chapot, F.

Melia, V. Rots, N. George, N. Taipale, P. Gethin & P. Nkombwe



The Great 21st-Century Transformation

Dumb Divisive Linear Petro-Economy



ENERGY & MATERIALS FROM FINITE SOURCES



**Green
Business
Or
No Business!**

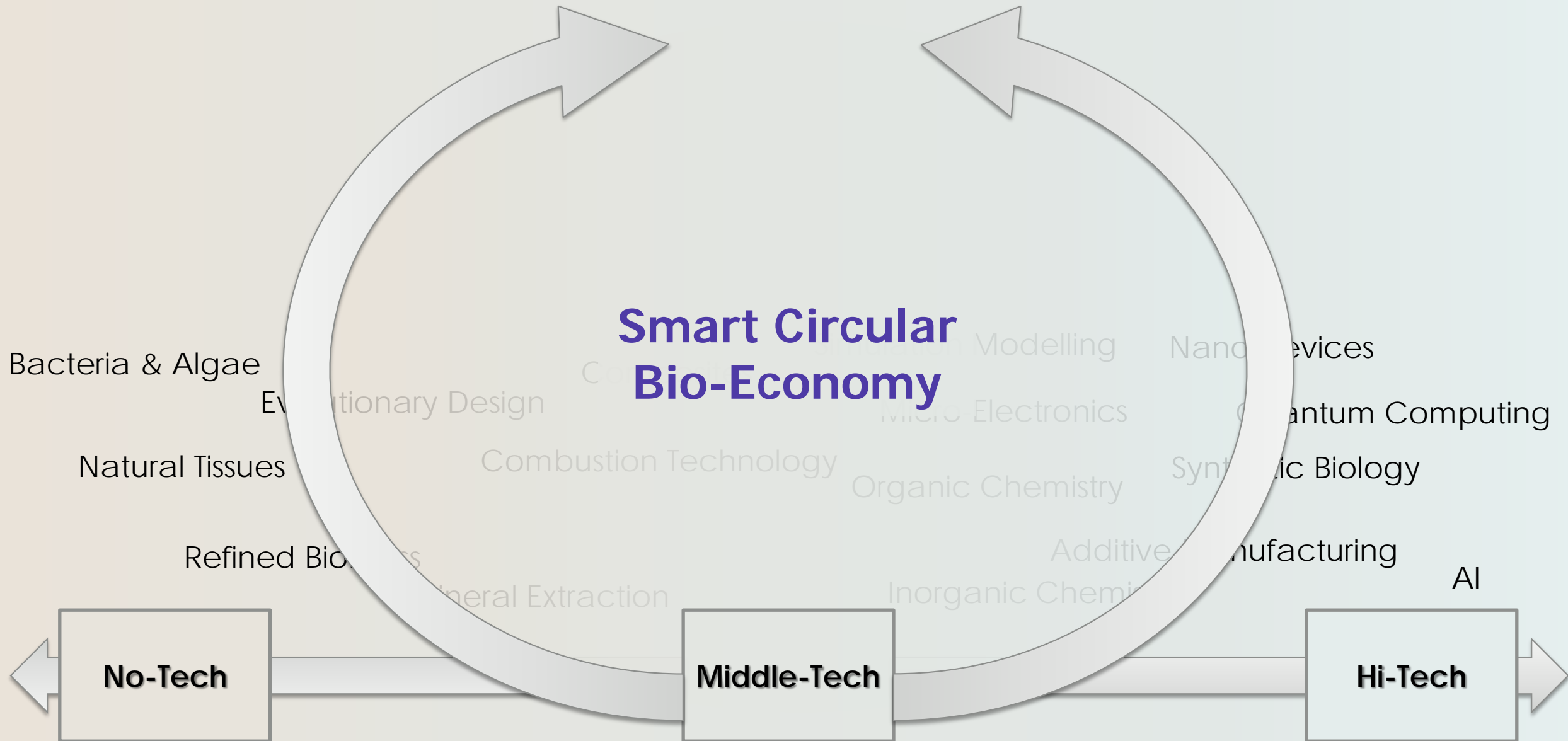


ENERGY & MATERIALS FROM RENEWABLE SOURCES



Smart Inclusive Circular Bio-Economy

No-Tech meets Hi-Tech!



Means & Methods for Civilization

No-Tech meets Hi-Tech!

The Observer
Medical research
4 Feb 2024 full article

First UK patients receive experimental messenger RNA cancer therapy

The British clinical trial of the revolutionary new mRNA treatment will test its effectiveness in combating a range of cancers

Science

Mar 2018 full article

REVIEW

Personalized vaccines for cancer immunotherapy

Ugur Sahin^{1,2,3*} and Özlem Türeci^{4*}

Juan Gärtner / stock.adobe.com / Journal Onkologie

Markus Spiske / Unsplash