

## F&S January 2021

As always, many commentators have come up with their predictions for the year, tempered this year by what a shocking time 2020 was. Here's the [Atlantic Council's top ten risks](#):

- The COVID-19 crisis deepens amid a slow vaccine rollout
- Trump remains a thorn in Biden's side, as many of his supporters continue to believe his rule is illegitimate
- Massive global debt causes another financial crisis
- Western countries' economic growth is stultified
- North Korea pressures Biden with new missile tests
- Iran remains recalcitrant despite Biden overtures
- US and China clash over Taiwan
- Disrupted food chains causes food crisis
- Expansion of global middle class comes to an end
- Turkey goes more rogue.

Surprisingly, the Atlantic Council list does not identify the political and economic impacts of climate change. For the UK, Brexit continues to be a disruptor, and not in a good way – logistics chains are under strain, the introduction of the new trading arrangements with Europe seems confused and administratively burdensome, particularly with respect to Northern Ireland – and, of course, the pressure on the fabric of the Union itself is only increasing.

Patricia Lustig and Jonathan Blanchard Smith ran “Gaming the Future - Scenario Game Play” based on SAMI's work for EC Research and Innovation exploring how Trends can play out across four different scenarios as a demonstration for [Futures Space](#), an online futurists community. For further information contact [patricia.lustig@samiconsulting.co.uk](mailto:patricia.lustig@samiconsulting.co.uk).

SAMI Associate Keith Leslie's new book “[A Question of Leadership](#)” is to be launched on the 18<sup>th</sup> February. He provides a wide range of illustrative case studies

derived from both research and his first-hand experience in the public and private sectors as a former partner at both Deloitte and McKinsey. Each chapter first provides an engaging narrative that presents a relatable leadership dilemma, before an analysis of what works and when (often reaching seemingly counterintuitive solutions), followed by a selection of research which supports this thesis and, finally, actionable advice for leaders who find themselves in comparable circumstances (or may do so in the future).

The [Future-Proof Cities](#) theme at the Manchester Urban Institute, led by [Joe Ravetz](#), explores the dynamics of change: how to understand and analyse it, how to manage and plan, how to experiment and learn, how to build capacity, and how to look ahead and envision viable futures.

Joe is also putting together the 2021 program of "[Synergistic Conversations](#)"

- Jan 22<sup>nd</sup>: **Peri-urban-resilience 3.0:** (with the Peri-cene at KTH Stockholm & IIT Madras)
- Jan 29<sup>th</sup>: **Green-Local-onomics-3.0:** (with the EC-JRC 'Industrial transitions' program).
- Feb 26<sup>th</sup>: **Smart-wise-3.0:** (with Shanghai Smart City Development Institute).
- Mar 26<sup>th</sup> (tbc): **Food 3.0:** (on-site with Camley St Community Land Trust, London)

Our **SAMI Cohort** programme is half-way through. It is proving to be a valuable resource for Cohort members, enabling them to improve their foresight activities by sharing experiences with others. We are now recruiting for a second cohort – please contact [Jane.Dowsett@samiconsulting.co.uk](mailto:Jane.Dowsett@samiconsulting.co.uk) if you are interested.

### **Executive Education**

Our online course "Understanding the Future" will be run again on 22<sup>nd</sup> to 26<sup>th</sup> March 2021. The course fee is £490 + VAT, and discounts may be available for self-funded individuals. For more information, please email us at [training@samiconsulting.co.uk](mailto:training@samiconsulting.co.uk).

A range of information on various [futures techniques](#) is available on our website.

### **Futures Issues**

Google's Deepmind AI program Alphafold was used to determine the [3D shapes of proteins](#). Many commentators suggest this would vastly accelerate efforts to understand the building blocks of cells and enable quicker and more advanced drug discovery.

Gene-editing tool CRISPR has been used to make cattle more [resistant to climate change](#), which causes increasing problems with heat stress and fertility. Scientists sought to lighten the coats of cattle to make them more resilient to heat, because darker-coloured animals absorb more heat from sunlight, and so are more affected by warmer temperatures than lighter-coloured ones.

China plans to massively expand an [experimental weather modification program](#) to cover an area more than 1.5 times the total size of India. In the next five years, the total area covered by artificial rain or snowfall will reach 5.5 million sq km, while over 580,000 sq km will be covered by hail suppression technologies. The program will help with disaster relief, agricultural production, emergency responses to forest and grassland fires, and dealing with unusually high temperatures or droughts.

Researchers have discovered a cost-effective and efficient way of producing [jet fuel from carbon dioxide](#). The method involves using CO<sub>2</sub> captured from the air, which is converted with hydrogen (H<sub>2</sub>) using a process called hydrogenation and a catalyst made from a compound of iron, manganese and potassium to produce specific hydrocarbons.

[Veebot](#), the “first robot phlebotomist”, uses a combination of infrared light and image analysis to detect a suitable vein, and then applies ultrasound to see if the vessel has sufficient blood flow. While it’s still in development, it can correctly identify the best vein with [an accuracy of about 83%](#); comparable to an experienced technician. This means less room for painful errors and less time spent on the procedure.

### **Our Blogs**

If you’d like to receive reminders when our blogs are published, then [check the link on our website](#) or if you would like to write a blog for us, then please [contact us here](#).