

## Reforms on Regulatory Frameworks are Necessary to Boost Innovation and Accelerate the Transition to Net-Zero

During a lively conversation, speakers from across the globe discussed the importance of collaboration between the public and the private sectors to advance regulatory approaches

Regulatory frameworks can be a powerful tool to spur innovation, promote the energy transition, and tackle climate change. History has multiple examples of when forward-looking legislation unleashed innovation in price competition, research, financial systems, biotechnology, and digital information. During the Frame the Future of Regulation, on September 8, panelists from Argentina, Malaysia, Switzerland, the United Kingdom, and the United States debated the importance of collaboration between governments, businesses, and societies to promote regulation that catalyzes breakthrough creations, boosts sustainable solutions, and protects customers' and citizens' rights.

The Frame the Future of Regulation gathered insights from Dr. Roberto Alvarez, Executive Director, GFCC; Mr. Ts. Tengku Azrul Tengku Azhar, Head of Innovation Ecosystem, Futurise; Mr. Juan Pedro Córca, Co-Founder & Executive Director, QMAX Energías Renovables; Ms. Margareta Drzeniek, Distinguished Fellow, GFCC, and Managing Partner, Horizon Group; Mr. Chad Evans, Treasurer, GFCC, and Executive Vice-President, Council on

Competitiveness; and Ms. Laura Sandys CBE, Distinguished Fellow, GFCC, and Chair, Energy Digitalization Task Force.

Today's pace of technological change poses a challenge to local, national, and international regulators. New technologies reach the market every day, enabling the creation of new business models. Different industries are also emerging, and there is a growing blurring across traditional sectoral boundaries. These changes have accentuated the systemic nature of the issues faced by regulators and highlighted disputed interests of different stakeholders and social groups. This is happening in a moment when governments are struggling to keep up with the pace of technological change, leaving available technologies uncovered. For instance, in many nations, there is no enforceable mechanism that properly oversees the use of drones and autonomous vehicles, which can hinder innovation and the development of new industries.

Only a reform of regulatory approaches can close the gap between the speed of technological advancements and the creation of new legal mechanisms. Governments need to update regulatory

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**Mr. Chad Evans**  
Treasurer, GFCC  
Executive Vice President, Council on Competitiveness

## Participants

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**Mr. Chad Evans**  
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**Ms. Margareta Drzeniek**  
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**Ms. Laura Sandys CBE**  
Chair, BEIS/Ofgem Energy  
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## Hosts

**The Hon. Deborah L. Wince-Smith**  
President, GFCC  
President & CEO, Council on  
Competitiveness

**Dr. Roberto Alvarez**  
Executive Director, Global Federation  
of Competitiveness Councils (GFCC)



**WATCH THE CONVERSATION**

"Regulation is not only in the realm of government, and it hasn't been for a long time. It is a process that needs to involve all stakeholders and enable public-private cooperation."

**Ms. Margareta Drzeniek**  
Managing Partner, Horizon Group  
Distinguished Fellow, GFCC

approaches and design future-ready systems that anticipate trends and leverage new opportunities. A focus on risk assessment as an alternative to process compliance can help to boost innovation. "The design of flexible, responsive, technology-neutral, and performance-oriented standards that accommodate rapid innovation is one step in this direction," pointed out Mr. Evans.

## Regulation in the Age of Digitalization and Climate Change

Rapid technological change in the context of the global economy has accentuated the systemic nature of regulatory processes. Regulating a single issue often involves negotiating the interests of multiple industries and segments of society. The case of autonomous vehicles, for example, touches at least three different sectors: automotive, electronics, and insurance. It also concerns consumers and possible victims of car accidents.

Ms. Drzeniek defends that regulatory processes must become more collaborative to cover areas beyond product use. "Regulation is not only in the realm of

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**Mr. Juan Pedro Córca**  
Co-Founder & Executive Director, QMAX Energías  
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government, and it hasn't been for a long time," she argued. "This process needs to involve all stakeholders and enable public-private cooperation."

Regulators also face the challenge of simultaneously addressing the threats of climate change to their societies, and delivering on the promises of a better quality of life and improved economic opportunities. Rising temperatures, ocean acidification, air pollution, biodiversity loss — among other environmental and social problems — are putting pressure on traditional legislative processes and driving a cultural and industrial shift.

Ms. Sandys has been an advocate for regulators to be net-zero compliant in the United Kingdom. She stressed that although national processes have established clear climate targets, legislators are drowning in cultural biases towards fossil fuels and do not embed climate goals into regulations. For her, consumers, and particularly the young generation, will be the ones driving change, exercising their power through purchase preferences and robust discourse against big polluter industries. Technology will power this transition in the energy sector, allowing consumers to meet their domestic energy needs using renewable sources.

"If you look at regulation across the board, you start to see and understand the fossil fuel bias, because that has been the response in the past," highlighted Ms. Sandys. "We have been calling for all regulators to audit their processes and pivot away from fossil fuels."

## The Public-Private Interface

Operating regulatory systems conducive to innovation depend on strengthening dialogues between the public and the private sectors, and facilitating institutional and business learning. Government bodies and regulators can learn a lot about new technologies through the business sector. But for that to happen, it is essential to develop and implement suitable capabilities.

Improved communication channels and strengthened transparency in formulating new regulations are two measures that could help to build trust among investors, the government, and the population. "Innovation depends on funding, and investors will place money where they trust institutions. Therefore, transparency in the process of creating new regulations is fundamental," argued Mr. Córca.

In many cases, however, regulatory processes still operate under siloed structures. "Communication across sectors shouldn't be a stumbling block. It should be a facilitating factor to get things done," warned Mr. Azrul. Ms. Sandys shared a similar vision. For her, the fact that legislators ignore the systemic nature of today's issues and do not engage in discussions about integration and the conflation of infrastructures poses a real problem for entrepreneurs and innovators. "Innovations are not siloed. They put together various dimensions and industries. There is a real need for regulation to start to understand the innovation experience and break down barriers," she said.

The restructuring of the energy sector in Denmark provides examples of joint efforts between the public and private sectors. The country has invested in

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renewable energy through partnerships between businesses and the government to accelerate the transition to a net-zero economy. The government uses the 21st Century Power Partnership platform to foster multilateral engagements and dialogues with multiple stakeholders. They coordinate activities between utilities, system operations, technology suppliers, investors, project developers, and financial services through the platform. The cooperative scheme has successfully reduced greenhouse gas emissions, provided energy security, and boosted economic development.

## New Models

In the face of today's challenges, there is a call for regulators to issue new guidelines and principles, and try new risk-oriented models. Moving the focus from the regulatory process to risk-orientation would allow regulators to define possible risks, unlocking innovation and new opportunities for entrepreneurs.

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Head of Innovation Ecosystem, Futurise

For instance, in public procurement processes, there is room for improvement that could allow for innovative practices and entrepreneurship. Restructuring public procurement systems to foster value creation instead of budgeting based on risk-averse criteria can create new markets, build competitiveness, and facilitate business development.

In Malaysia, Futurise, a national company under the Ministry of Finance, leads the National Sandbox Initiative, which expedites regulatory intervention and deploys innovation and technology solutions. The agency uses "testing zones," which are risk-controlled environments, to try new technologies that have not been regulated or authorized for use in the country. They demonstrate how, for instance, drones and autonomous vehicles can be deployed safely with an accurate risk assessment, while also allowing for learning and the design of future regulatory frameworks. Futurise has applied this approach to advising the government on public policy in transportation, SportsTech, Unmanned Aerial Vehicles (UAV), and Autonomous Vehicles (AV).

In May 2021, the UK took an innovative approach launching the Energy Digitalization Taskforce, which operates at the intersection of policy, regulation, and innovation. The project, chaired by

Ms. Sandys, is a partnership between the UK Department for Business Energy and Industrial Strategy and two public agencies, Ofgem and Innovate UK. The task force brings together multiple industries (telecommunications, logistics, change management, internet, and manufacturing) and community stakeholders around five main goals:

- Identify opportunities for digitalization in the energy sector;
- Accelerate digitalization in energy systems in the United Kingdom;
- Develop roadmaps that draw experiences from other sectors;
- Identify digitalization gaps; and
- Mitigate governance risks.

These are a few examples of regulatory models used by governments to advance relevant socio-economic agendas for the future. Public-private partnerships and sustained collaboration across sectors are essential to spur innovation, facilitate the energy transition, and boost economic development. A regulatory approach based on risk assessment supported by data analysis can track the progress of new initiatives and measure the impact of any damaging effects from the use of new technologies.