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TECHNOLOGY

Sustainability is the new space race

By [Olivia Solon](#)

05 March 13

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The next golden age of growth will depend on whether we are able to innovate sufficiently to face environmental challenges, according to [Carlota Perez](#), Visiting Scholar, London School of Economics.

"The planet is no longer a place to store our waste. It must be protected to guarantee healthy lives if we want to be able to incorporate hundreds of millions of new consumers. That is the new space race.

Growth will depend on whether we are able to stretch the frontiers of knowledge to successfully face the environmental limits," she said, speaking at the *Economist's* [Technology Frontiers conference](#).

This means we need to increase the productivity of all resources "enormously", eliminate waste and pollution, build closed-loop systems, design for durability and rethink our built environment. "This will be essential for healthy lives and economic development," she added.

Perez argues that we need "bold and imaginative institutional innovation" to drive that "green growth", just as we had after the Second World War. "The truth is technology has been so impressive that we have become convinced that it's disruptive innovation that brings growth and success. It does and yet it doesn't. History can teach us a lot. Innovation has always been the driver of growth and the main source of productivity and wealth. But bubble prosperities polarise incomes."

She said that in every growth cycle there is an experimental phase where people test new technologies, industries and infrastructures. During this time there is an intense process of creative destruction of the old systems. This happened in the post-war golden age, where the huge innovation potential of the mass production revolution of the 20s and 30s led to an enormous boom from the mid-40s through until the 60s. At the centre of this was the suburban home. "The automobile made it possible to build cheap houses on cheap land between expensive cities and isolated countryside. There was less work in the kitchen, more leisure in the living room, vacuum cleaners, detergents and insecticides."

"The Cold War and the Space Race funded and stimulated high tech innovation. This institutional innovation was based on taxation. It was about joining business strategy, consumer values and government policy." Perez said.

We are now at a similar point but with "completely different potential", where we are turning products into services and local into global. "We need a different guiding vision and another set of institutional innovations. How can we unleash a global golden age?"

Perez argues that in the early 20th Century it was this "wonderful, horrific war that taught business how to work with government". However, now we must be driven by environmental stimuli. For example, New York City is looking for imaginative ways to save the city from flooding. Elsewhere there are issues of rising food prices and scarcity of resources that will drive innovation.

"Government can be as nimble as business but governments need to learn from businesses how to be agile," by changing the relative cost structures and tax systems. She argued that we shouldn't be increasing the taxation of salaries and profits, but energy and materials. "The revolution in taxation needs to be profound."

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