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Sustainable finance supply needs industrial strategy demand



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In mobilizing the economy for climate action, most recent progress has been incremental. The pace and scale of what we need to see this decade to come close to the goals of the Paris Agreement is much more radical. The scaling up we need is not simply a matter of dialing up what we have already begun. What we now need is qualitatively different, and today's approach won't get us there.

Merely strengthening disclosure requirements on climate-related data and information may increase regulatory burdens with little productive impact. Regulation needs to be partnered with industrial strategy to create the commercial demand for climate action at scale and for the sustainable finance that is increasingly available. Japan is seeking to do this, with a balanced mix of sticks and carrots that is in marked contrast to both the United States (mostly carrots) and the European Union (mostly sticks).

Business needs a business case

Today we expect companies to act on climate change without a financial case for doing so. Their non-financial rationales may be moral (the right thing to do); to satisfy the ESG interests of investors; to instil pride and commitment among workers; and to keep options open in the face of uncertainty. These are all sound motivations, but they rarely add up to a solid financial case in which cash investments predictably generate surplus cash returns. As a result, they drive incremental commitments but can't drive action at scale.

For example, take the steel industry, which currently accounts for around 8% of global greenhouse gas emissions. There are multiple technological approaches to decarbonizing steel production, but they are all difficult, speculative, and hugely expensive. As Japan's Ministry of Economy, Trade and Industry (METI) observes in its Iron and Steel Roadmap, 'replacing the existing process with a new one... will require a huge amount of capital investment, resulting in large capital and operating costs. But these additional costs are only for decarbonization and contribute neither to improving the performance of steel nor increasing its productivity.'¹

In Europe, the 'green premium' for low-carbon steel is expected to be above €250 per ton – that is a premium of upwards of 25% on today's cost. How many customers would choose to pay this premium for a product with no difference in performance? Some car makers and building constructors will pay a bit more for the ESG benefit of using green steel, but they can't afford to pay much because the consumers at the end of the value chain are not choosing to pay more for green steel. And if customers won't choose to pay the premium, how can the steel makers afford the huge investment required? The availability of sustainable finance doesn't solve that problem if steelmakers have no financial case for making the investment.

To drive climate action at the scale we need, companies cannot work only on non-financial incentives. Reliance on non-financial incentives will limit us to non-material, incremental outcomes and also leave the whole climate effort vulnerable to changes in senti-

ment – a real risk we're already seeing in the backlash against ESG in the United States. For material, transformational outcomes, companies need financial incentives to act, with financial returns that justify the costs and risks involved. That is the only way that enough companies will choose to invest at scale.

Creating demand for sustainable finance

Where will these financial incentives come from? Today, to shape the availability and focus of sustainable finance, we use scenarios for how different industries need to transition. The International Energy Agency, the Transition Pathway Initiative, the Science-Based Targets Initiative, the Glasgow Financial Alliance for Net Zero, and others all set out such 'sectoral pathways'. These scenarios illustrate what is needed, but they don't make it happen. They are descriptive, not prescriptive. Using these scenarios we can see what changes an industry needs to make, and what an optimal path might be--but describing this path does not move an industry along it.

The challenge is not about finding the money. The supply of sustainable finance is impressive. The challenge is to create the demand for that finance, in step with the growing supply. Today, providers of sustainable finance lament that take-up of the money they have to offer is low, because potential borrowers 'don't have the risk appetite': in other words, they are not sufficiently confident of a return.

For governments, directly paying the green premium through subsidies would be hugely expensive. Fortunately, that is not necessary. What is needed is to create conditions in which companies are motivated to invest the money themselves and are rewarded for doing so.

There are good examples of this happening. The automotive industry, particularly in the US and European Union, has invested in the transformational shift to electric vehicles, anticipating a near future in which they will not be allowed to sell vehicles powered by internal combustion engines. The World Economic Forum describes the Inflation Reduction Act as 'a compelling nudge' from the US government to private sector and investors to decarbonize hard-to-abate sectors.²

American carrots, European sticks

In the US, the approach has been to rely heavily on incentives – the proverbial carrot – which means that companies' participation is voluntary. This reflects what is politically most feasible in the US: it is hard to impose constraints on business, especially at a Federal level, in the Land of the Free. Incentives are targeted at strengthening the technology leadership of the US economy, playing to a nationalist as well as environmental agenda. The problem: the incentives needed to kick-start investment in some industries may be very high, and may depend in practice on enabling initiatives that cannot be solved with money only, such as the permitting to build new long-distance grids for wind and solar power.

The EU, by contrast, relies principally on regulation – the proverbial stick. This reflects what is politically most feasible; it is hard to offer incentives at the EU level without favouring national target industries and getting into divisive politics. But regulation is unifying, and has been the core of the EU's supranational toolkit. It uses the EU's market power, a market too big for global players to miss out on. The problem: It may impose unquantified and hidden costs on industry, without creating the political acceptance of them. That is the background to Germany's recent wobble about protecting its internal-combustion-based car industry from the forced move to electric vehicles.

The power of an industrial strategy

The American and European approaches are hugely different, but each reflects its respective self-image and values. Where politics allow, a more balanced mix of sticks and carrots can provide the most effective incentives for companies to progress along their transition pathway. Building up the initiatives in an advertised sequence can provide strong incentives for early action, if companies are confident of the policy environment to come and motivated to position themselves for it.

Such an industrial strategy is not about picking winners and losers but about recognizing and accepting the idea of winners and losers, and playing to win – or not to lose. The incentives work by creating risk that companies are

motivated to avoid. Some of the financial case for VW's early investment to take a leading share in the electric vehicle market comes from the opportunity to win share from its biggest rival, Toyota. Some of the financial case for Toyota's recent investment in electric vehicles is to defend that share. Both are strongly incentivized by the threat from the new breed of electric car makers from China. Similarly, carbon capture and storage is expensive and still speculative, but the financial case to industrialize it could be strong for a fossil fuel company concerned about future prohibitions against extracting and selling its mineral assets.

This insight aligns well with the way political power sits largely at the national level (or regional, in the case of the EU). Governments can stimulate climate action in ways that favour their companies and their economy. The incentives in the Inflation Reduction Act are attracting corporate investment, skilled jobs and technology innovation to the US. Japan's steelmakers are looking to lead the world in new technology solutions for high-end steel, using hydrogen rather than carbon to reduce iron ore to iron. This is a battle for competitiveness at both a national and company level, and is how we can drive climate action at scale in the short time we have.

Creating and destroying

The transition we are describing is the creative destruction³ and value migration⁴ that have always fueled innovation and investment in a capitalist economy. In this important sense, climate change is not a collective action problem: for system-wide transformations in which nobody loses, the transition will be practically unaffordable. We need winners and losers – or at least, the real prospect of winners and losers – to provide the competitive pressure and financial incentive for companies to act.

The practical task for policymakers is not just to correct for the externalized costs of pollution but to facilitate the dynamic transition to this new state. They need to “simultaneously and successfully navigate two distinct but interrelated dynamics: the creation and mass commodification of new green energy technologies on the one hand, and the destruc-

tion of powerful, fossil fuel incumbencies on the other.”⁵

The American and European approaches do not provide this navigation. The carrots of America’s Inflation Reduction Act help to create the new, without constraining the old. The sticks of EU’s regulation constrain the old, without solving the technological or economic challenge of substituting with the new.

What would a more balanced and dynamic, sequenced approach look like?

Paths to Green Transformation

Japan’s approach to ‘Green Transformation’, or ‘GX’, involves a mix of carrots and sticks to drive both parts of the creative destruction required, sequenced over time. The explicit goal is to deliver ‘both emission reduction and economic growth’, without sacrificing either. At the highest level, Japanese corporate and government interests are aligned: ‘Successful GX initiatives enhance competitiveness of companies and nations.’⁶

The immediate carrot is the commitment of 20 trillion yen (\$140 billion) of Government support for ‘bold upfront investment’ over the next ten years, and an envisaged 150 trillion yen (\$ 1 trillion) of public and private investment. The principal stick is a future industrial price of carbon, in trial now and to be phased in from 2026. The plan includes both a European-style emissions trading scheme for high-emission industries, and a surcharge on the supply of fossil fuels.

Announcing the stick now but phasing it in later in the decade creates the immediate incentive for companies to make the technology investments in their transitions, without penalizing them financially before they have had the opportunity to adapt.

Japanese companies are partners in this effort as well as counterparties. The intent is not just to reduce Japan’s own emissions, which account for 3% of the world total, but to position Japanese companies as service providers helping to reduce other countries’

emissions too, through the green technology solutions they will offer.

Companies worked with METI – or with the Ministry of Land, Infrastructure, Transport and Tourism in the case of maritime transport and aviation – to develop technology roadmaps for ten sectors that collectively cover 80% of the country’s carbon emissions. In the technology roadmap for iron and steel, for example, the specialist committee advising METI included representation from The Japan Iron and Steel Federation, credit analysts and the Development Bank of Japan, as well as professors in engineering and technology. The METI roadmap illustrates its general framework with a specific example of JFE Steel; JFE Steel in turn presents its corporate roadmap as an application of the METI framework. This collaboration helps companies to commit to ambitious transition plans with the confidence that the government is doing its part in creating the conditions that will make them viable, in terms of research and development, energy infrastructure, finance, carbon pricing and more. The GX plan is as much about enabling these roadmaps as it is about mandating them.

The plans are not rigid. Different technologies may win out in the future than what today’s plans project. Both government and industry know the technology assumptions the plans are based on, so are able to adapt as needed, not be locked in. Pluralism is celebrated: The cover image of METI’s strategy document shows multiple paths up a mountain to the 2050 carbon-neutral summit.

Creating the conditions for corporate investments in this way is the role for governments’ industrial strategy, in partnership with sustainable finance. Without such coordinated industrial policies, merely strengthening disclosure requirements on climate-related data and information may increase regulatory burdens unproductively. Government efforts to step up sustainability-related reporting frameworks need to be matched by government actions on the industrial strategy front.

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Zero Ideas is challenging leadership thinking on climate action. We seek to accelerate and deepen the approaches that businesses and governments take to tackling climate change by stimulating a curious and visionary mindset among leaders, encouraging them to go beyond today's focus on carbon accounting and reporting.

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¹ Ministry of Economy, Trade and Industry, *Technology Roadmap for "Transition Finance" in Iron and Steel Sector*, 2021, p14 at www.meti.go.jp/english/press/2021/pdf/1027_002a.pdf

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